City of Bristol
Zoning Commission

REGULAR MEETING - MONDAY, SEPTEMBER 16, 2024
CITY HALL COUNCIL CHAMBERS
111 NORTH MAIN STREET
6:00 P.M.

INFORMATION FOR THE PUBLIC TO ACCESS THIS MEETING:
Zoom Meeting link:
https://bristolct-gov.zoom.us/j/86130151480?pwd=aA8glMIsLbXrn2SgN7kaH3agioMAaW.1
Meeting ID:
861 3015 1480
Meeting Passcode:
123456
Join by phone
1-929-205-6099

AGENDA

1. Call to Order

2. Approval of Minutes

   a. Special Meeting - August 15, 2024

   b. Special Meeting of August 19, 2024

3. ZEO Report

   a. August 2024

4. Receipt of New Applications

   a. Application #2507 **-** Special Permit for earth removal and processing of earth materials between south of Barnum Road, north of Farrell Avenue and east of Arcadia Rd. ; Assessor's Maps 67, Lot 78 (Farrell Ave.), Lot 57 (Arcadia Rd.) and Lot 43 (Barnum Rd.); R-15 (Single-Family Residential) zone; Willow Materials, LLC, applicant.

b. Application #2508 – Special Permit for the adaptive re-use of an existing non-residential principal building to add dwelling units at 92 Jeanette Street; R-10 (Single-Family Residential) zone; Assessor's Map 39, Lot 57; Paul J. Laferriere, applicant.

5. Public Hearings

a. Application #2494 – Special Permit for a Unified Residential Development (15 units) at Earl Street, east of Crown Street and west of Melrose Street; Assessor's Map 14, Lots 72/71, 73/70, 74/69, 75/68 & 76/67 Earl Street; R-15/RM (Single-Family Residential/Mixed Residential Overlay) zone; DGG Development, LLC, applicant – Public Hearing Closed; Deliberations continued from August 19, 2024.

b. Application #2495 – Site Plan for a Unified Residential Development (15 units) at Earl Street, east of Crown Street and west of Melrose Street; Assessor's Map 14, Lots 72/71, 73/70, 74/69, 75/68 & 76/67 Earl Street; R-15/RM (Single-Family Residential /Mixed Residential Overlay) zone; DGG Development, LLC, applicant – Public Hearing continued from August 19, 2024.

c. Application #2498 – Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone at east of Old Wolcott Road and south of Wolcott Street; Map 7, Lot 45 (Old Wolcott Road) and Assessor's Map 7, Lots 44-2, 44-1 & 44 (Wolcott Street); Crown Estates, LLC, applicant – Public Hearing continued from July 8, 2024.

d. Application #2504 – Special Permit for a Civic Facility at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single-Family Residential) zone; New Britain Water Department, applicant.

e. Application #2505 – Site Plan for a Civic Facility at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single-Family Residential) zone; New Britain Water Department, applicant.

f. Application #2506 – Special Permit for Earth Removal at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single-Family Residential) zone; New Britain Water Department, applicant.

6. Old Business

7. New Business

8. Communications

9. Adjournment

REMINDER: The next Regular Meeting of the Zoning Commission is Monday, October 21, 2024

BRISTOL ZONING COMMISSION
MINUTES
SPECIAL MEETING OF THURSDAY AUGUST 15, 2024

1. Call to Order

By: Chairman White Time: 5:00 P.M. Place: City Hall
111 North Main St.
Council Chambers
First Floor

ROLL CALL:

MEMBERS	NAME	PRESENT	ABSENT
REGULAR MEMBERS:	David White (Chairman)	X	
	Thomas Marra (Vice Chairman)	X	
	Richard Harlow	X	
	Richard Goodwin (Secretary)	X	
	John LaFreniere		X
ALTERNATE MEMBERS:	Michael DeRoehn	X	
	Sara Mangiafico		X
	Peter Caruso	X	
STAFF:	Robert M. Flanagan, AICP, City Planner	X	

Per the order of Chairman White, the meeting was called to order at 5:00 P.M.

Mr. Flanagan reminded the Commission the next special meeting was on Monday September 16, 2024.

2. Public Participation
There was no public participation.

3. New Business

Mr. Gomes reviewed the Commission's meeting schedule and discussed the virtual meeting from July 11, 2024. He next wanted to review the recommendations for the environmental Regulation amendments for a total of three months. Then Mr. Gomes would then discuss the commercial and the industrial districts. He drafted the recommendations from last month's meeting for the Commission to consider. He suggested that review of the recommendations be discussed before they are discussed with the public.

a. Review Phase 3 schedule

Mr. Gomes noted the Commission is on schedule for environmental Regulations. In September Mr. Gomes advised the Commission to review the commercial and the industrial districts for three months. Mr. Gomes noted if there is a Regulation the Commission wanted to vote on sooner, he would work with Mr. Flanagan. He is going to work with Mr. Flanagan and the communications director of the City to promote the virtual meetings for after Labor Day.

b. Discuss feedback received from virtual public presentation of recommended parking amendments

Mr. Gomes noted there were few people were at the parking Regulations presentation so there were no recommendations from the public. Therefore, Mr. Gomes suggested the Commission would go forward with those Regulations. Mr. Gomes confirmed ten recommendations for the parking amendments are in the PDF document. However, during the process the Commission may revise recommendation later if necessary. He explained the survey is currently on the City's Website

c. Discuss recommendations based upon preliminary findings from review of environmental regulations

Mr. Gomes reviewed recommendations #11 through #18 line by line with the Commission. Mr. Gomes detailed two recommendations 11A and 11B regarding the Aquifer Protection Agency areas (APA.) He pointed out these APA areas are not referenced in the Zoning Regulations. He simplified a way to revise the Regulations to add language to Article 3, Section 15.7 to reference the APA Areas and Regulations. Mr. Gomes suggested adding language to Section 16 for Site Plans to identify any APA areas.

Mr. Gomes recommended that the ground mounted solar structure height be increased from 14 ft. to maximum height of 20 ft. to allow for truck clearance, as suggested by the ZBA Chairman. Commission inquires: Mr. Gomes would re-review if controlling the minimum height would be done by the Building Code, Fire Marshal and the applicant's opinion.

Regarding the protection, planting and re-planting of trees, Mr. Gomes explained there was no enforcement in the Regulations. He reviewed an easier way to improve trees not being replaced. He elaborated on the amendments to have for tree-to-tree replacements. Mr. Gomes detailed the required payments in lieu of trees that would require the approval of the City Council. Mr. Gomes suggested a tree removal permit be a requirement for plans. He reasoned why the preservation of the trees was important for the City. Commission inquiries: Mr. Gomes clarified this amendment was for Site Plan projects. He noted for very large projects there may be 100 acres with 1,000 trees that may be a $500,000 payment.

Mr. Gomes would provide a detailed invasive species list from UCONN. He suggested the applicant be required to provide an inventory of trees by a professional for an application.

Next, Mr. Gomes reviewed the sustainability incentive for sustainable development activities and features. Mr. Gomes recommended any incentive was required to give something away. Mr. Gomes suggested the applicant would request the incentives and the points earned for plans. The Commission would check the data for the requests.

Commission inquiries: Mr. Gomes reviewed the list of allowed uses in the riparian flowing water zone. Mr. Gomes noted the existing uses within a riparian flowing water zone would become non-conforming uses and cannot expand in the zone. Mr. Gomes would clarify segments of the Pequabuck River that are underground. He would draft a buffer for the Pequabuck River for urban Bristol. He would analyze the impacts on buildings in the riparian flowing zone for 25 ft. and 50 ft. setbacks.

Mr. Gomes next reviewed recommendation #16 of the updating of cross references for the updated 2024 manual. He reasoned why the soil erosion and sedimentation control should be deleted because this was no longer in the CT Storm Water Quality Manual. Regarding recommendation #17, earth material removals and filling of land, the language should be rewritten to be clarified.

Regarding Section 15.2.5.b. (items 1 through 4), buffers for earth removals, he reviewed need to be renamed "buffer area requirement for earth removal operations." Mr. Gomes reviewed two sentences that needed more defining for filling of land approvals by the Commission. He wanted to change the special permit reporting from 6 months to 1 year. Mr. Gomes suggested to make clearer the storm water quality manual and specific sections to provide a long-term maintenance and City inspections.

d. Next steps

Mr. Gomes noted the next steps would be to start the discussions in September for commercial and the industrial districts for three months. He explained the next steps would be to discuss the items reviewed this evening that needed additional review. He explained these items would be reviewed at the September meeting. Mr. Gomes would like to present these items at a public hearing. He would review these items with the Commission at a meeting on September 26, 2024, at 6:00 P.M. He reminded the Commission the next special meeting is on September 12, at 5:00 P.M.

Commission inquiries, Mr. Gomes explained the clear cutting would be placed under the environmental Regulations. Mr. Gomes would review the clear cutting with Attorney Peter Olson.

4. Adjournment

Chairman White designated regular Commissioners Marra, Harlow, Goodwin and White to vote on the adjournment. He also designated alternate Commissioner DeRoehn to vote in place of Commissioner LaFreniere with his absence this evening.

MOTION: Move to adjourn at 6:45 P.M.

By: White Seconded: Marra.

For: Marra, Harlow, Goodwin, DeRoehn and White.
Against: None.
Abstained: None.

This meeting was taped.

Respectfully submitted,

Nancy King
Recording Secretary

David White, Chairman Richard Goodwin, Secretary

DRAFT

BRISTOL ZONING COMMISSION
MINUTES
SPECIAL MEETING OF MONDAY AUGUST 19, 2024

1. Call to Order

By: Chairman White 6:00 P.M. Place: City Hall
111 North Main St.
Council Chambers
First Floor

MEMBERS	NAME	PRESENT	ABSENT
REGULAR MEMBERS:	David White (Chairman)	X	
	Thomas Marra (Vice Chairman)	X	
	Richard Harlow	X	
	Richard Goodwin (Secretary)	X	
	John LaFreniere	X	
ALTERNATE MEMBERS:	Michael DeRoehn	X	
	Sara Mangiafico	X	
	Peter Caruso	X	
STAFF:	Robert M. Flanagan, AICP, City Planner	X	
	Andrew Armstrong, Assistant City Planner	X	

Per the order of Chairman White, the meeting was called to order at 6:00 P.M.

PLEDGE OF ALLEGIANCE:
Chairman White reminded the Commission the next regular meeting was Monday September 16, 2024.

2. Approval of Minutes

a. Regular Meeting - July 8, 2024
b. Special Meeting of July 11, 2024
c. Special Meeting of July 25, 2024

Chairman White designated regular Commissioners Marra, Goodwin, LaFreniere and White to vote on the July 8, 2024, regular minutes. He also designated alternate Commissioner Mangiafico to vote in place of Commissioner Harlow with his absence at the July 8, 2024, regular meeting.

MOTION: Move to approve the minutes of the July 8, 2024, regular meeting.

By: White Seconded: Marra.

For: Mangiafico, Marra, Goodwin, LaFreniere and White.
Against: None.
Abstained: None.

Chairman White designated regular Commissioners Marra, Goodwin and White to vote on the July 11, 2024, special minutes. He also designated alternate Commissioner Mangiafico to vote in place of Commissioner Harlow with his absence at the July 11, 2024, special meeting. He also designated alternate Commissioner Caruso to vote in place of Commissioner LaFreniere with his absence at the July 11, 2024, special meeting.

MOTION: Move to approve the minutes of the July 11, 2024, special meeting.

By: White Seconded: Marra.

For: Mangiafico, Marra, Goodwin, Caruso and White.
Against: None.
Abstained: None.

Chairman White designated regular Commissioners Marra, Harlow, LaFreniere and White to vote on the July 25, 2024, special minutes. He also designated alternate Commissioner Caruso to vote in place of Commissioner Goodwin with because of his absence at the July 25, 2024, special meeting.

MOTION: Move to approve the minutes of the July 25, 2024, special meeting.

By: White Seconded: Marra.

For: Harlow, Caruso, Marra, LaFreniere and White.
Against: None.
Abstained: None.

3. ZEO Report
a. July 2024

The Commission reviewed the Zoning Enforcement Officer report dated August 1, 2024, from Mr. Brown.

4. Receipt of New Applications
There was no receipt of new applications.

5. Public Hearings

a. Application #2494 – Special Permit for a Unified Residential Development (15 units) at Earl Street, east of Crown Street and west of Melrose Street; Assessor's Map 14, Lots 72/71, 73/70, 74/69, 75/68 & 76/67 Earl Street; R-15/RM (Single-Family Residential/Mixed Residential Overlay) zone; DGG Development, LLC, applicant – Public Hearing continued from the July 8, 2024, meeting.

b. Application #2495 – Site Plan for a Unified Residential Development (15 units) at Earl Street, east of Crown Street and west of Melrose Street; Assessor's Map 14, Lots 72/71, 73/70, 74/69, 75/68 & 76/67 Earl Street; R-15/RM (Single-Family Residential /Mixed Residential Overlay) zone; DGG Development, LLC, applicant – Public Hearing continued from the July 8, 2024, meeting.

Chairman White designated regular Commissioners, Marra, Goodwin, and White to vote on Applications #2494 and #2495. He also designated alternate Commissioner Mangiafico to vote on Applications #2494 and #2495 in place of Commissioners Harlow with his absence at the July 8, 2024, meeting. Chairman White designated Commissioner Caruso to vote on Applications #2494 and #2495 in place of Commissioner LaFreniere with his recusal on Applications #2494 and #2495 to avoid a conflict of interest.

Chairman White explained that Applications #2494 and #2495 would be heard concurrently but voted on separately.

Attorney Timothy Furey, 43 Bellevue Ave., representing the applicant, reviewed the process he worked with the Staff to develop the site. Attorney Furey verified that five 3-family houses may be constructed on each lot by right without the Commission's approval. He reviewed the approval received to amend the Zoning Regulations for Unified Residential Developments.

He noted the neighbors did not like the plan at the first public hearing because of traffic safety and occupancy density. He specified the Engineering Dept.'s. main concerns of the retaining wall and the site lines. He reviewed the concerns with the recently submitted traffic report provided for the plan.

Attorney Furey noted the site was lowered 2 ft. to replace the retaining wall with sidewalks in front of the buildings. He said a separate retaining wall would screen the dumpster for the neighbors. Attorney Furey represented the application this evening was a reduction of 15 bedrooms to a two-story building. Attorney Furey summarized the total of 13 two-bedroom units and 2 three-bedroom units (handicapped accessible.)

He clarified each unit had 6 parking spaces for a total of 31 parking spaces to be controlled by the owner. He requested the Commission's view of which plan they preferred for feasibility reasons. Attorney Furey added the applicant's staff was able to resolve comments to comply with the Regulations.

Mr. Flanagan inquiry: Attorney Furey represented the plans were reduced from 47 bedrooms to 32 bedrooms.

Commission inquiries: Attorney Furey indicated as many bedrooms as possible would be constructed on each floor for the plan presented this evening. He was told there would be 3 bedrooms on each floor. He commented the property was very small for a play area. He noted the fence was 8 ft. away from the two existing houses.

Mr. Flanagan clarified the Commission should vote on the pending plan and not the alternative plan presented this evening. He commented that the plans this evening were not reviewed by Staff or by the public.

Chairman White's view was there was insufficient parking particularly for visitors with the narrow streets for on street parking. Chairman White recommended the parking Regulation be reviewed for rewriting.

No one else spoke in favor of the applications.

The following persons spoke against the applications: Donald Weeks, 105 Earl St.; Elizabeth Beattie, 17 Crown St.; Daniel Bailey 64 Earl St. and Sharon Niemann Testa, 19 Melrose St.

Mr. Weeks was concerned of where the RM zone came from in the residential zones. He had concerns of kids potentially playing in his front yard. He hoped this would be a safe area for Bristol.

Ms. Beattie was concerned about not being able to review the recent traffic report. She was concerned for the neighbor's feasibility. Ms. Beattie noted she had planted the trees mentioned. She inquired about the construction schedule. She was uncertain in the applicant maintaining the site. Ms. Beattie was not against the construction, but preferred single-family houses.

Mr. Bailey restated the neighbors were concerned and not upset. He had concerns of the one parking space per unit. Mr. Bailey agreed with the feasibility concerns, but the applicant would be making income. He was concerned for the neighbor's house values. He had traffic safety concerns for the area children.

Ms. Neiman-Testa was concerned of inclement weather and no parking data provided during inclement weather. With the combination of the building, traffic safety and inclement weather, Ms. Neiman-Testa's view was this was unacceptable for the children's safety. She requested the Commission to listen to the neighbor's including the submitted letters and petition.

Chairman White reported the traffic study was received this afternoon.

Attorney Furey said the traffic amounts would be the same with either plan but there were concerns with the driveway safety. He stated if the Commission does not like the plans, the applicant would construct a standard development. He commented that people in the area go to parks for recreation. Attorney Furey agreed to the extension of State time for the plans.

Mr. Flanagan reviewed the documents for the prior presentation and not the items received for plans presented this evening. He noted a 28-day extension was allowed for the plans. Mr. Flanagan commented Staff needed to provide response comments to the applicant.

The hearing #2494 is closed.

By: Marra Seconded: Goodwin.

For: Marra, Goodwin, Mangiafico, Caruso and White.
Against: None.
Abstained: None.

The Commission gave their views on Application #2494. Commissioner Caruso had concerns of one parking space per unit and no visitor parking spaces. He had concerns with the recent documents submitted for applications. Commissioner Mangiafico liked the reduced bedrooms and less construction on the site. However, this was a lot of construction for a small site.

Commissioner Goodwin usually was against these units in residential zones but complied with the Regulations. He was concerned with no available data for the plan this evening. He was unsure of his vote. Commissioner Marra's view was the Commission needed due process. He liked the profile on the Unified Residential Development but it was a dense occupancy. Commissioner Marra emphasized his view was that the on-street parking would affect the area and the rear buildings do not meet the 20' ft. buffer. He requested more time to review the data. Chairman White needed more time to review the data.

Chairman White requested to continue the deliberations to the September 16, 2024, regular meeting.

MOTION: Move to close Application #2494 – Special Permit for a Unified Residential Development (15 units) at Earl Street, east of Crown Street and west of Melrose Street; Assessor's Map 14, Lots 72/71, 73/70, 74/69, 75/68 & 76/67 Earl Street; R-15/RM (Single-Family Residential/Mixed Residential Overlay) zone; DGG Development, LLC, applicant, and continue the deliberations on this application to the next Regular Meeting of September 16, 2024.

By: Marra Seconded: Mangiafico.

For: Caruso, Mangiafico, Goodwin, Marra and White.
Against: None.
Abstained: None.

The application #2494 is public hearing closed and the deliberation is continued.
Attorney Furey agreed to grant a 28-day extension for Application #2495 and send it in writing to Mr. Flanagan.

MOTION: Move that the Public Hearing on Application #2495 be continued to the September 16, 2024, Regular meeting of the Zoning Commission.

By: Marra Seconded: Mangiafico.

For: Caruso, Mangiafico, Goodwin, Marra and White.
Against: None.
Abstained: None.

The application #2495 is continued.

c. Application #2501 – Site Plan for a Community Youth Organization (addition of 1350 s.f. outdoor pavilion area) at 255 West Street, Assessor's Map 28, Lot 115; R-15/RM (Single-Family Residential /Mixed Residential Overlay) zone; Bristol Boys and Girls Club Association, Inc., applicant – Public Hearing continued from the July 8, 2024, meeting.

Chairman White designated regular Commissioners Marra, Goodwin and White to vote on Application #2501. He also designated alternate Commissioners Mangiafico and Caruso to vote on Application #2501. Mr. Flanagan indicated Attorney James Ziogas granted a 7-day extension at the July meeting with 58 days remaining.

Attorney James Ziogas, 104 Bellevue Ave., representing the applicant, noted the application was continuing to address the comments. Attorney Ziogas confirmed revised plans were submitted in response to the comments. He stated the main concern was the neighbor's boundary.

He detailed the applicant's property was to be developed as a field and pavilion. He noted the applicant surrounded their property with a fence and landscaping. Attorney Ziogas described the concern if the applicant constructed a fence there would be a double fence. He would speak to the neighbors to demolish the existing fence. If there is an agreement, the fence would be on the applicant's site up to the property line and around the corner. Attorney Ziogas added a gate and security camera would be on the property.

Brian Panico of Cole Civil and Survey, 876 South Main St., Plantsville, representing the applicant, stated Mr. Armstrong had sent the plan with additional comments from the Water and Sewer Department. Mr. Panico noted the comments were not addressed for the water lateral in the restrooms for the pavilion. He indicated there is an existing sanitary sewer lateral near the house that is less than 1 ft. from the manhole. He put a note on the revised plans for his evening for the Sewer Dept. to review this area. He noted if this was not possible, he has an alternative design.

Commission inquiries: Attorney Ziogas indicated a 6 ft. building construction setback was allowed in this zone that may not permit a 20 ft. setback near this neighbor's property. But Regulation 11.1.5.e. would resolve the concern for the fence and landscaping.

Chairman White compared the differences of the prior application on the agenda. His view was this was a 3-season facility. The fence was appropriate with the Regulation mentioned.

No one else spoke in favor of the application.
No one spoke against the application.

The hearing is closed.

By: Marra Seconded: Mangiafico.

For: Marra, Mangiafico, Goodwin, Caruso and White.
Against: None.
Abstained: None.

MOTION: Move to approve Application #2501 – Site Plan for a Community Youth Organization (addition of 1350 s.f. outdoor pavilion area) at 255 West Street, Assessor's Map 28, Lot 115; R-15/RM (Single-Family Residential /Mixed Residential Overlay) zone; Bristol Boys and Girls Club Association, Inc., applicant, with the following stipulations.

1. The site plan shall not be signed off until all remaining comments have been addressed and the plan revised accordingly.

2. The landscape buffer shall be modified as shown on the site plan as revised dated August 6, 2024.

3. All site improvements which have not been satisfactorily completed by the time a Certificate of Occupancy is applied for shall be bonded in accordance with Article 4, Section 16.3.16. of the Zoning Regulations.

By: Marra Seconded: Mangiafico.

For: Marra, Mangiafico, Goodwin, Caruso and White.
Against: None.
Abstained: None.

The application is approved with stipulations.

6. Application #2503 – Special Permit for removal and processing of earth materials at south and southeast of Barlow Street, south and west of Martin Road, south of Arcadia Road, and north of Farrell Avenue; Assessor's Map 67, Lots 20, 21, 22, 23, 24, 25, 85, and all paper roads shown on Assessor's Map; R-15/OSD (Single-Family Residential/Open Space Development Overlay) zone; Trademark Acquisitions, LLC, Arcadia Group, LLC and Arcadia Acres LLC, applicants.

Chairman White designated regular Commissioners Marra, Goodwin, LaFreniere, Harlow and White to vote on Application #2503.

Attorney Mark Ziogas, 88 Valley St., representing the applicant, reviewed the request for Special Permit for the removal and processing earth materials. Attorney Ziogas stated the work has been ongoing since 2018 with renewals in 2020 and 2022. He offered that Phase 1 was finished with the earth removal, loam and seeding of the property. Attorney Ziogas approximated the remaining removal activities would take 2 years.

Attorney Ziogas emphasized the applicant inspected the erosion controls and they are working correctly. He stressed if the trucks buying the sand do not follow the regulations, the trucks are not filled. Regarding the turnaround, Attorney Ziogas mentioned it was not being used. He informed the BOE director of transportation aware of the turnaround.

Attorney Ziogas added there were screening and crushing permits. However, this portion of the permit has not been needed yet. He noted the applicant uses the elevations screen the operations from the neighbors. Attorney Ziogas said the applicant was responsive to the neighbors.

Commission inquiries: Gino Troiano, P.E., Trademark Acquisitions, LLC, 175 Lake Ave., representing the applicant, clarified 100,000 cu. yds. of materials remained to be removed for a total of 336,000 cu. yds.
Mr. Flanagan cited the new Regulations allow 3-year permits for earth removal permits so an additional permit may not be needed.

The following persons were not against the application, but had inquiries: Sylvia Roy, 170 Martin Rd. and Josephine Ramondetta, 200 Martin Rd.

Ms. Roy inquired what would be done with the debris on Farrell Ave. She noted there was run off on Farrell Ave. because there is a lot of mud. She requested wildflowers or something be planted at the end of Arcadia Rd. She requested the tall grass on Barlow St. be trimmed in the open space.

Ms. Roy inquired if their company has ever blasted because their foundations are cracking. Ms. Roy inquired if the berm would remain permanent.

Ms. Ramondetta inquired if their company had ever blasted because she heard loud noises at the operation. She inquired if any of the earth removal, screening or crushing permits would ever be do any blasting. She had concerns for the area wells. Ms. Ramondetta inquired if any of the earth removal permit would go below Martin Rd. at the end of the turnaround in the open area. She inquired if any additional paper roads would be opened on Martin Rd. She noted Martin Rd. has a lot of debris. Ms. Ramondetta inquired if houses would be constructed behind her property on the corner.

Attorney Ziogas stated some of the questions pertained to the subdivision. Attorney Ziogas represented the berms would remain until the sand removal permit is finished. He explained the berm would help construct a street. Attorney Ziogas noted open space was part of the subdivision and usually is left as it exists. He clarified Martin Rd. would not be opened.

Mr. Troiano reviewed the blasting on the property. He clarified there was no blasting for the earth removal permit. In February 2022 there was some blasting for 150 ft. of sewer line that was not part of the earth removal permit. He explained to Ms. Ramondetta Phase 6 was part of the earth removal permit but this was to grade the street for houses.

He noted the remaining paper road stub would not be used for the houses. He noted one paper road stub was used for a house that was already sold. Mr. Troiano reviewed the additional houses in the upper section to be constructed on the existing cul-de-sac.

Ms. Roy mentioned there was an overhang area in the mining area.

No one else spoke in favor of the application.
No one spoke against the application.

Mr. Flanagan reviewed the documents for the application. Mr. Flanagan briefly reviewed the Planning Commission application that requested the 4 lots be relocated from Phase 5 to Phase 3.

The hearing is closed.

By: Marra Seconded: Harlow.

For: LaFreniere, Goodwin, Marra, Harlow and White.
Against: None.
Abstained: None.

MOTION: move that Application #2503 - Special Permit for removal and processing of earth materials be approved with the following stipulations:

1. The Site Plan shall not be signed off until all remaining staff comments have been addressed and the plan revised accordingly.
2. The operation shall be conducted in accordance with the following drawings, including all sedimentation and erosion control measures shown thereon: "Earth Removal Plan for Laurentide Glen – A Residential Open Space Subdivision" dated October 1, 2018 with a last revision date of August 5, 2024 consisting of the following sheets

a. Cover
b. EX-1 – Existing Conditions Plan
c. G1, G2 & G3 – Proposed Grading Plan – Phases 1, 2 & 3
d. SCT-1 – Cross Section Layout Plan and Cross Sections
e. SCT-2,3 & 4 – Cross Sections
f. DET-1 – Soil Erosion and Sedimentation Control Notes & Details
g. DET-2 – Site Details and Phasing Plan

3. A $68,000 performance bond shall be posted by the applicant with the City during the operations.
4. The Special Permit shall be good for a period of three years from the date of issuance.
5. The hours of operation shall be Monday through Friday between 7:00 A.M. and 4:00 P.M for the site work, and 7:30 AM and 4:00 PM for the trucking operations.
6. There shall be no operation on Saturdays, Sundays or holidays.
7. Measures to control dust from the operation shall be applied as needed.
8. The applicant shall sweep and remove the sand from Farrell Avenue along the frontage of the property on an as-needed basis.
9. The maximum allowable slope of 3-to-1 shall be modified in accordance with Article III Section 15.2.5 of the Zoning Regulations and a maximum allowable slope of 2:5-to-1 permitted in its place, as shown on the approved map.
10. The required 100-foot buffer shall be reduced as per the approved map in accordance with Article III Section 15.2.5.B.3 of the Zoning Regulations, inasmuch as the lesser buffer is warranted in order to match proposed contours to the existing contours of the adjoining land.
11. The screening process shall be conducted at the point of removal where the difference in elevation and physical barriers on site will shield adjacent residential properties from the processing operations.
12. The crushing process shall be conducted on a twice annual basis and shall not exceed a duration of two weeks for each event. Advance notice of at least 7 business days shall be provided to the CBO (Chief Building Official) CBO and the ZEO (Zoning Enforcement Officer) prior to crushing operations commencing. Once the crushing process begins, the ZEO (Zoning Enforcement Officer) shall confirm that the operations are being conducted in accordance with the approved plan. Hour of operation are 8:00 AM to 4:00 PM, Monday through Friday.
13. The ZEO (Zoning Enforcement Officer through the Chief Building Official) will report monthly to the Zoning Commission

By: Marra Seconded: Harlow.

For: LaFreniere, Goodwin, Marra, Harlow and White.
Against: None.
Abstained: None.

The application is approved with stipulations.

6. Old Business

There was no old business.

7. New Business
a. #2502 – Revision to an Approved Site Plan for a Restaurant at 1249 Farmington Avenue; Assessor's Map 49; Lot 29A; BG (General Business) zone; Bristol Endurance, applicant.

Chairman White designated regular Commissioners Marra, Goodwin, LaFreniere, Harlow and White to vote on Application #2502.

Kevin Hixson, P.E., of BL Companies, 355 Research Parkway, Meriden, representing the applicant, reviewed the request for a prospective tenant for a fast-food restaurant on schematic lot 2 with 1.50 acres. Mr. Hixon gave a brief summary of the prior

approval for the total 8.96-acre property. Mr. Hixson stated there would be a different request if this tenant does not fit the property. Mr. Hixon described the changes to the plan. He noted the building was reduced to 5,376 sq. ft.

He stated two drive-thru canopies were added to the plan. He indicated an additional drive-thru lane was added with distance from the existing drive-thru lane. Mr. Hixon reviewed the 15-vehicle queuing stacking lanes.

He noted there were 55 parking spaces for the lot and 203 total parking spaces for the site. Mr. Hixon outlined the storm water detention system. Mr. Hixon had submitted a response comment letter but there were some outstanding comments.

Mr. Armstrong was confident the applicant was able to resolve the outstanding comments.

Commission inquiries: Mr. Hixon verified the lot size was the same size. He reviewed the outdoor seating and the drive-thru area on the west side of the property.

MOTION: Move that Application #2502 – Revision to an Approved Site Plan for a Restaurant at 1249 Farmington Avenue; Assessor's Map 49 Lot 29A; BG (General Business) zone; Bristol Endurance, applicant, be approved with the following stipulations.

1. The site plan shall not be signed off until all remaining comments have been addressed and the plan revised accordingly.

2. All site improvements which have not been satisfactorily completed by the time a Certificate of Occupancy is applied for shall be bonded in accordance with Article 4, Section 16.3.16. of the Zoning Regulations.

By: Marra Seconded: Harlow.

For: LaFreniere, Goodwin, Marra, Harlow and White.
Against: None.
Abstained: None.

The application is approved with stipulations.

8. Communications

Chairman White noted there were 5 meetings in the last 30 days. He thanked the Commission for all their efforts.

9. Adjournment

Chairman White designated regular Commissioners Harlow, Marra, Goodwin, LaFreniere and White to vote on the adjournment.

MOTION: Move to adjourn at 8:30 P.M.

By: Goodwin Seconded: Marra.

For: LaFreniere, Goodwin, Marra, Harlow and White.
Against: None.
Abstained: None.

This meeting was taped.
Respectfully submitted,

Nancy King
Recording Secretary

David White, Chairman Richard Goodwin, Secretary

2024 ZONING ENFORCEMENT REPORT

For August 2024, the following complaints were investigated by the Chief Building Official. This report also includes the number of abatements, citations, and permits issued by the Bristol Building Department for the current month. For comparison, data from the previous year is also listed for each complaint type and category.

COMPLAINT TYPE:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Motor Vehicle:	**2**	**2**	**0**	**4**	**8**	**10**	**5**	**10**					**41**
Year (23):	*3*	*1*	*3*	*0*	*4*	*3*	*1*	*12*					*27*
Illegal Business:	**0**	**1**	**1**	**4**	**2**	**2**	**0**	**4**					**14**
Year (23):	*1*	*0*	*2*	*2*	*0*	*0*	*0*	*2*					*7*
Lack of Permit:	**3**	**0**	**0**	**0**	**2**	**1**	**1**	**2**					**9**
Year (23):	*1*	*0*	*1*	*1*	*4*	*2*	*3*	*3*					*15*
Accessory Structure:	**1**	**0**	**1**	**0**	**1**	**2**	**0**	**1**					**6**
Year (23):	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*					*1*
Illegal Fence:	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**0**					**5**
Year (23):	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*2*					*4*
Illegal Sign:	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**					**2**
Year (23):	*1*	*1*	*1*	*3*	*0*	*2*	*0*	*0*					*8*
Fowl:	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**5**					**8**
Year (23):	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*1*					*2*
Blight:	**2**	**2**	**0**	**6**	**1**	**1**	**0**	**5**					**17**
Year (23):	*9*	*6*	*6*	*3*	*6*	*1*	*1*	*9*					*41*
Sightline:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**					**2**
Year (23):	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					*0*
Lighting:	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**					**4**
Year (23):	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*1*					*2*
Site Plan:	**1**	**15**	**7**	**6**	**3**	**3**	**0**	**1**					**36**
Year (23):	*3*	*1*	*1*	*0*	*2*	*4*	*0*	*0*					*11*
Illegal Rentals:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**					**0**
Year (23):	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					*0*
Miscellaneous:	**3**	**0**	**1**	**4**	**4**	**0**	**0**	**5**					**17**
Year (23):	*2*	*6*	*1*	*1*	*1*	*2*	*0*	*5*					*18*
2023 TOTAL:	**13**	**21**	**11**	**28**	**18**	**20**	**6**	**36**					**153**
Year (23):	*20*	*16*	*15*	*15*	*19*	*14*	*5*	*36*					*140*
ABATEMENTS:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**					**0**
Year (23):	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					*0*
CITATIONS:	**6**	**2**	**3**	**0**	**3**	**0**	**1**	**1**					**16**
Year (23):	*11*	*10*	*7*	*4*	*8*	*13*	*3*	*6*					*62*
PERMITS ISSUED:	**275**	**234**	**250**	**300**	**351**	**335**	**339**	**296**					**2380**
Year (23):	*256*	*273*	*351*	*321*	*363*	*371*	*321*	*404*					*2660*

Respectfully submitted,

R.J. Brown

Richard J. Brown
Chief Building Official
September 1, 2024

For Office Use Only	
APPLICATION NO.	2507
DATE FILED:	9-4-2024
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SPECIAL PERMIT

The undersigned Applicant hereby applies to the Bristol Zoning Commission for approval under Section(s) Article III Section 15.2.4 of the Bristol Zoning Regulations for the following Special Permit use: EARTH REMOVAL AND PROCESSING OF EARTH MATERIALS

Address or Location of the Property: South of Barnum Road, North of Farrell Ave, East of Arcadia

Assessor's Map No.: 67 Assessor's Lot No.(s): 78,57, and 43

Zone of the Property: R-15 Size of the Property (in acres or square feet): 46.65 acres

Reason for the Special Permit: Special Permit for Earth Removal; Special Permit for processing of earth material

Does this application involve an activity regulated by the Inland Wetlands Agency? ☑ yes [ ] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? ☑ yes, on 2-5-2020 [ ] no

Other comments: Area of active earth removal continues to be 11.79 acres with approximately 52,551.72 c.y. of material to be removed

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: Willow Materials, LLC

Address: 101 North Riverside Ave City: Terryville State: CT Zip: 06786

Telephone No.: 860-302-3261 E-Mail: kyles@schultzcorp.com

Signature: *[signature]* *Signature – (Printed/Typed)* Bill Schultz

CHECK ONE: ☑ owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* _____

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2507

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: South of Barnum Road, North of Farrell Ave, East of Arcadia

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

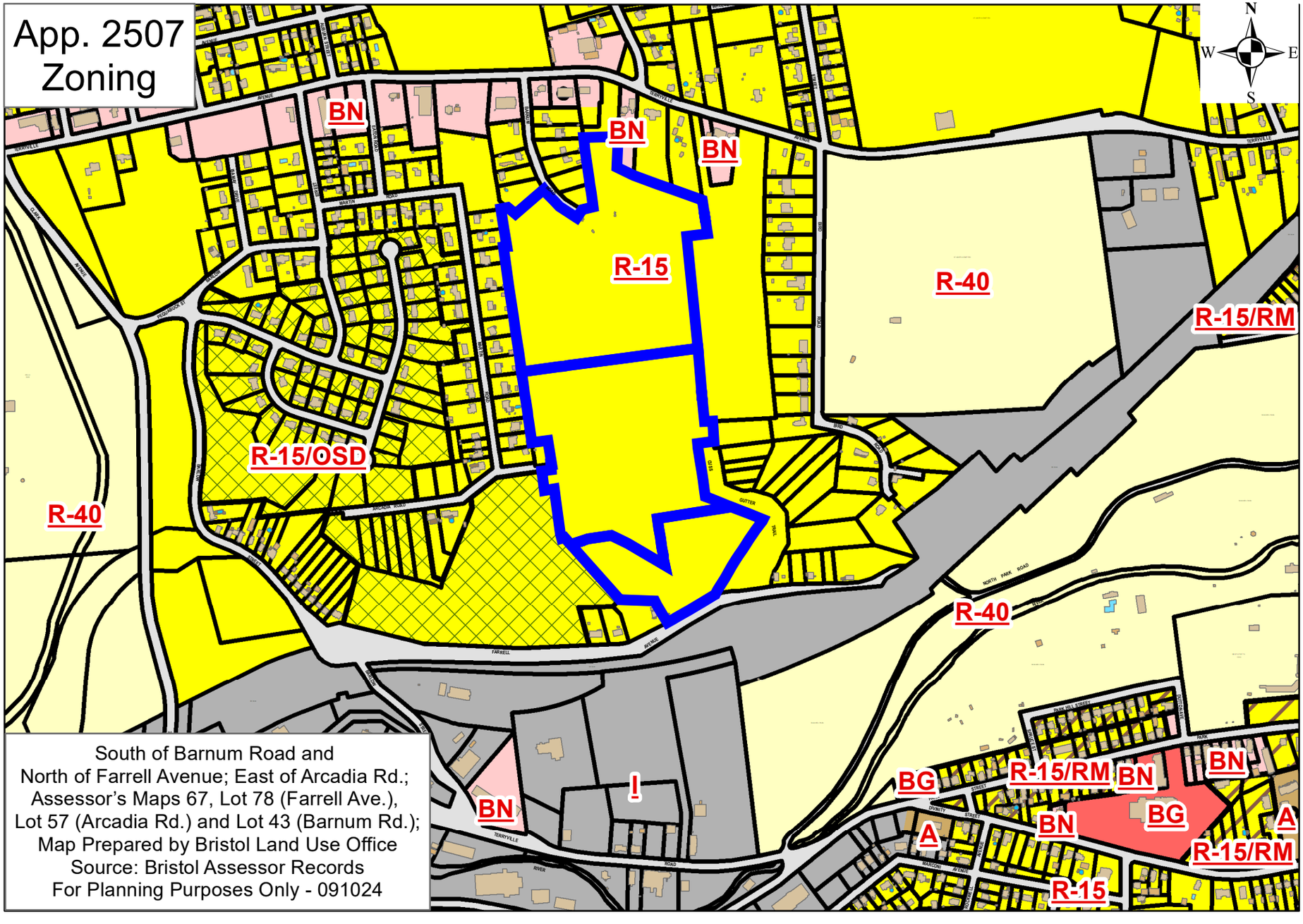
(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

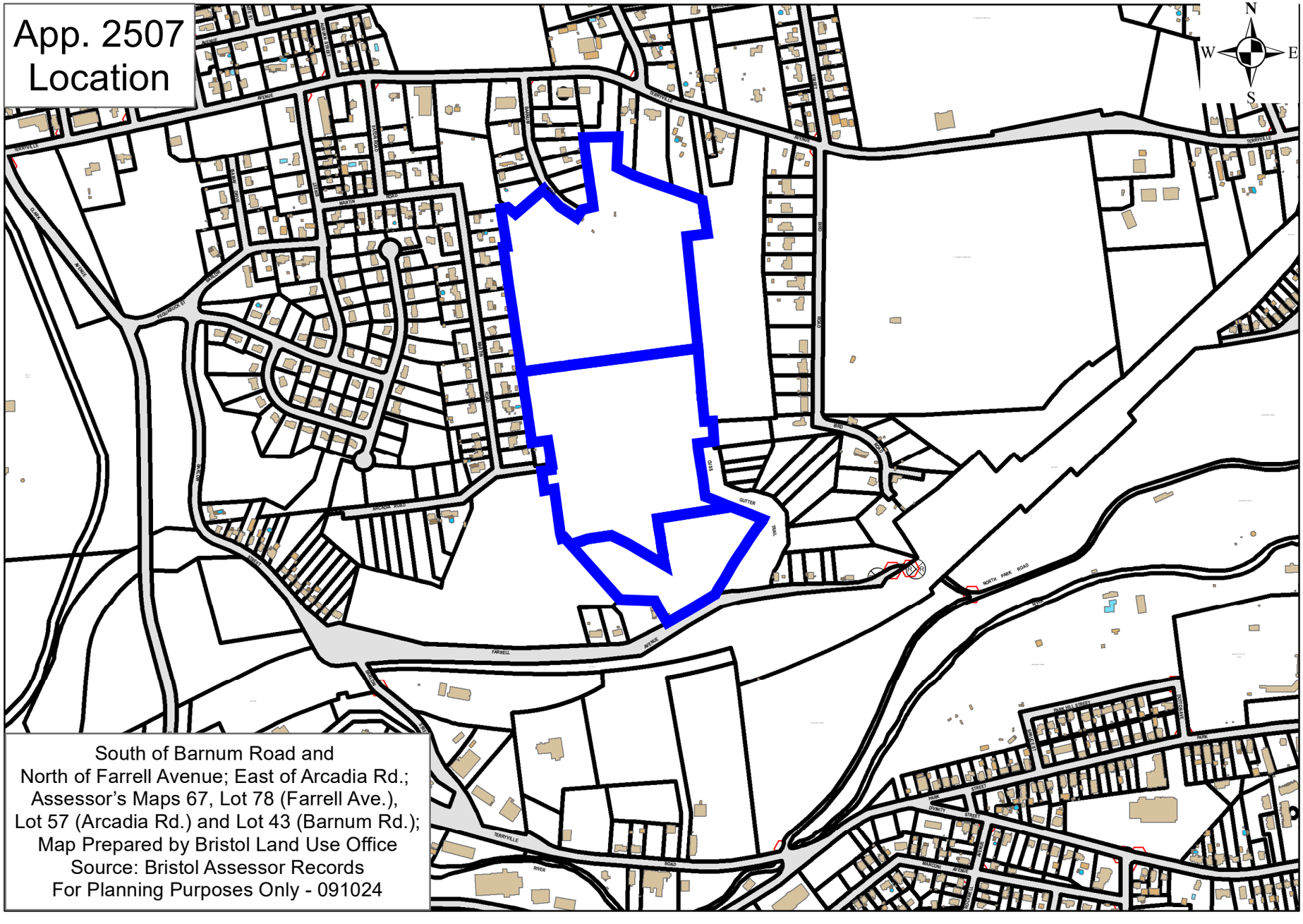
Name: Mark Ziogas

Address: 88 Valley St City: Bristol State: CT Zip: 06010

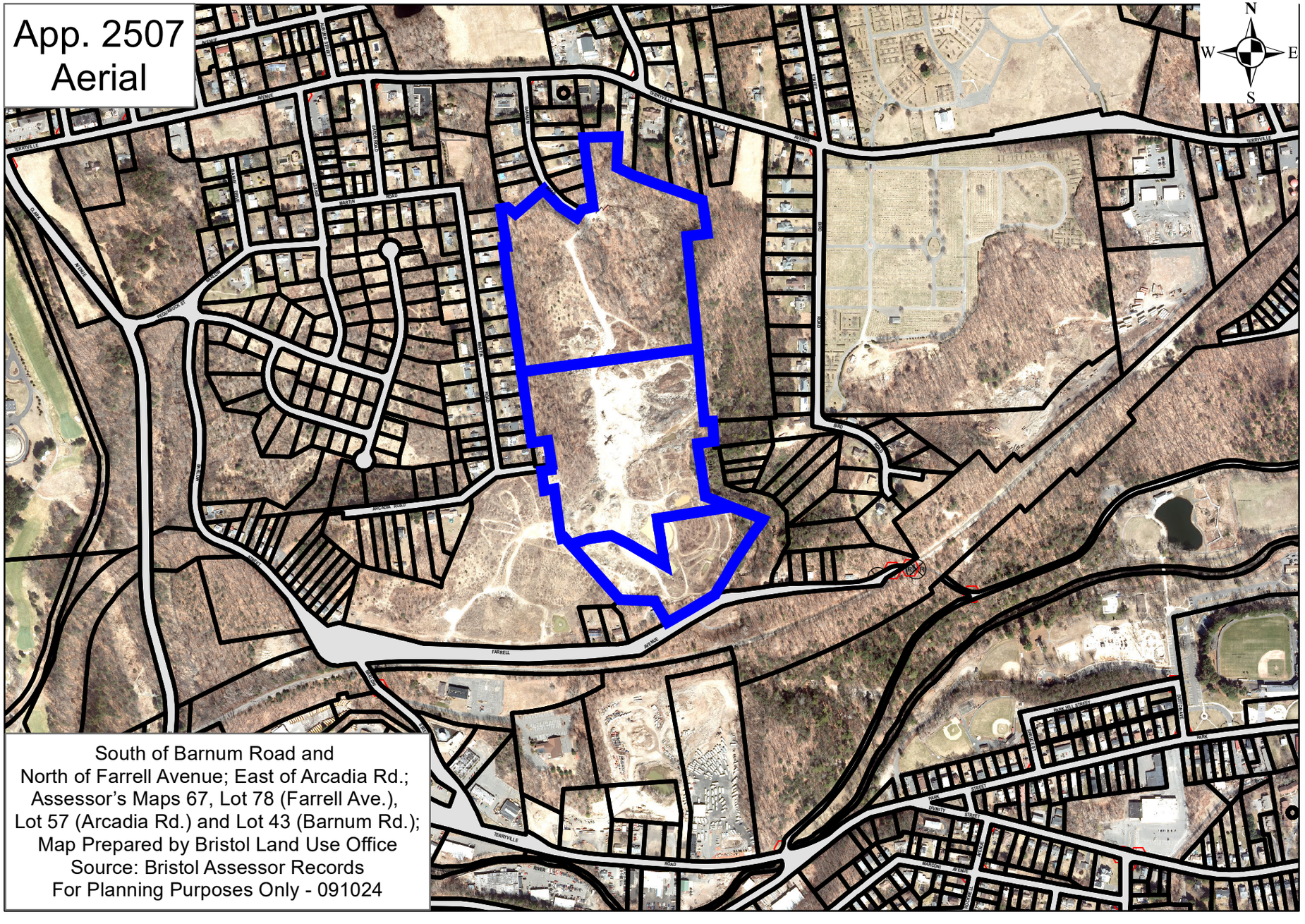
Telephone No.: 860-589-4121 E-Mail: mziogas@csmzllc.com

08/17 - LUO

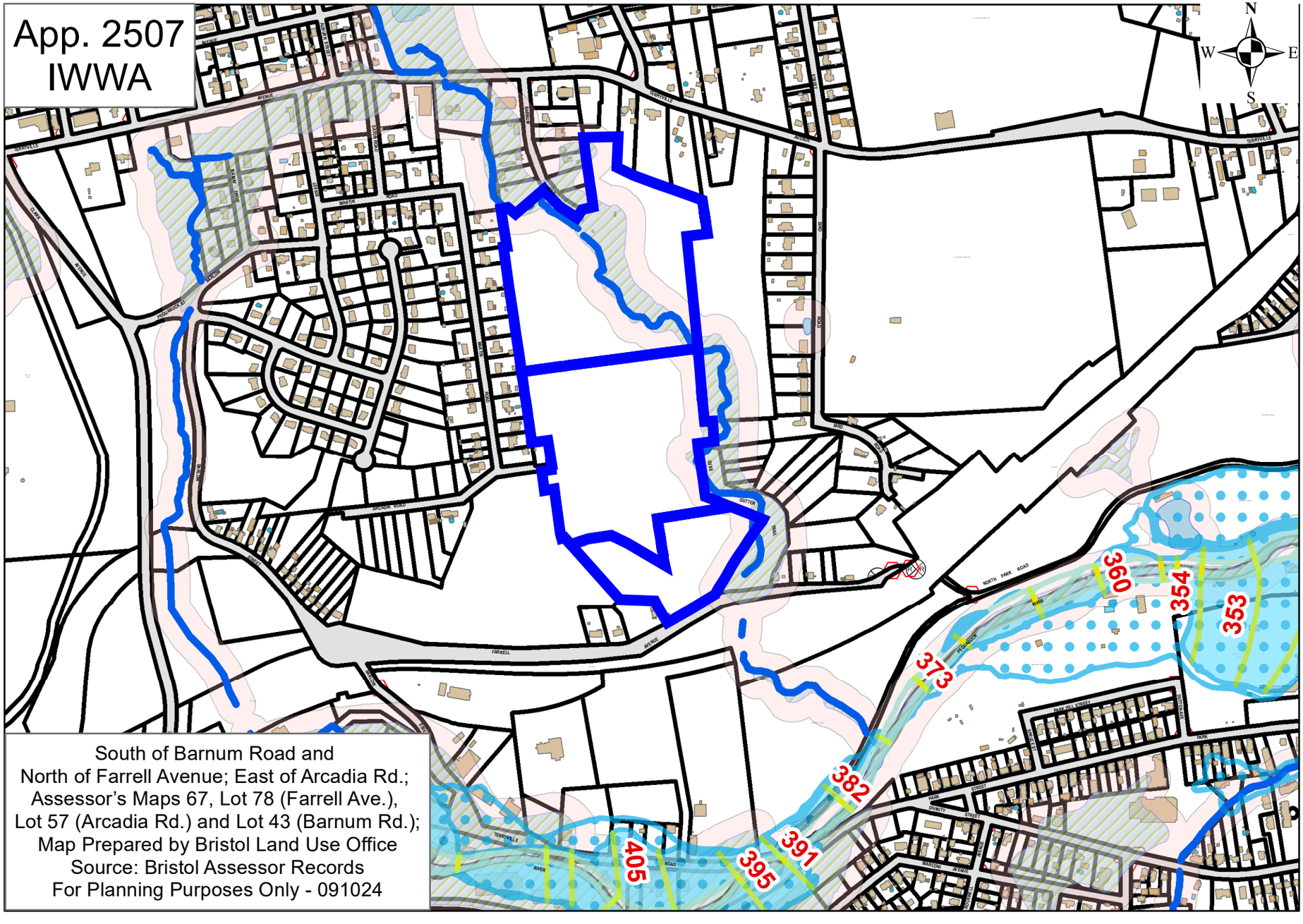

App. 2507
Zoning
N
W
E
S
BN
BN
BN
R-15
R-40
R-15/RM
R-15/OSD
R-40
R-40
I
BN
BG
R-15/RM
BN
BN
BG
A
BN
A
R-15/RM
R-15
South of Barnum Road and
North of Farrell Avenue; East of Arcadia Rd.;
Assessor's Maps 67, Lot 78 (Farrell Ave.),
Lot 57 (Arcadia Rd.) and Lot 43 (Barnum Rd.);
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024


App. 2507
Location
N
W
E
S
South of Barnum Road and
North of Farrell Avenue; East of Arcadia Rd.;
Assessor's Maps 67, Lot 78 (Farrell Ave.),
Lot 57 (Arcadia Rd.) and Lot 43 (Barnum Rd.);
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024

App. 2507
Aerial



South of Barnum Road and
North of Farrell Avenue; East of Arcadia Rd.;
Assessor's Maps 67, Lot 78 (Farrell Ave.),
Lot 57 (Arcadia Rd.) and Lot 43 (Barnum Rd.);
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024


App. 2507
IWWA
N
W
E
S
360
354
353
373
382
391
395
405
South of Barnum Road and
North of Farrell Avenue; East of Arcadia Rd.;
Assessor's Maps 67, Lot 78 (Farrell Ave.),
Lot 57 (Arcadia Rd.) and Lot 43 (Barnum Rd.);
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024

2022 Signed Earth Removal -- Approved on October 17, 2022:

Application #2445 - Special Permit for removal and processing of earth materials between south of Barnum Road and north of Farrell Avenue; Assessor's Maps 67, Lot 78 (Farrell Ave.), Lot 57 (Arcadia Road) and Lot 43 (Barnum Rd.); R-15 (Single-Family Residential) zone; Willow Materials, LLC, applicant:

Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47454/App-2445_2022Renewal_Barnum-Rd_Farrell-Ave-Earth-Removal---Approved-Plan-Set

****

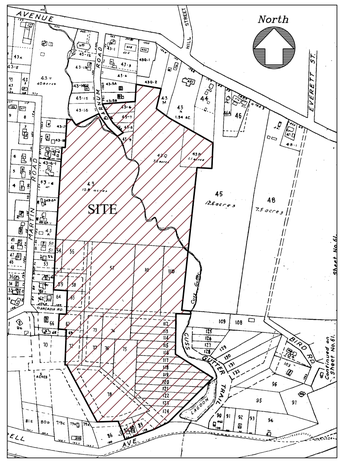
2020 IWWA Application – Approved on February 5, 2020:

Application #1891 – Wetlands Application to clean up piles left by previous owner and clean out the detention ponds; Barnum Rd. and Farrell Ave., Lots 54, 56, 57, 58, 65, 67, 69, 72, 73, 74, 75, 76, 77 and 78; Assessor's Map 50, Lots 134; Willow Industries, applicant.

Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47455/IWWA_2020-Approval_App-1891_Combined

Narrative



SITE LOCATION PLAN
SCALE: 1"=500'±

PROPOSED EARTH REMOVAL PLAN

Barnum Road & Farrell Avenue
Bristol, Connecticut
Mav 20. 2020
(Updated August 15, 2024)

North



REVISIONS:

07-23-20; Revised as per Staff Comments Dated July 9, 2020
03-04-21; Revised to show Lot Merger
10-14-22; Updated Topography for Permit Renewal
8-15-2024; *Updated Topography for Permit Renewal*

APPROVALS:

Special Permit Application #2374 - Removal and Processing of Earth Materials
Approved: September 9, 2020

PREPARED FOR: *WILLOW MATERIALS LLC*
107 North Riverside Avenue
Terryville, Connecticut
06786

ENGINEER:

ROBERT R. HILTBRAND – P.E. # 17025

R. R. Hiltbrand Engineers & Surveyors
575 North Main Street
Bristol, Connecticut
06010
Phone: (860) 582-4548

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
80 40 0 80 160
1 Inch = 80 Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
100 NORTH ELEVENTH AVE
TERRYVILLE, CT 06786

OVERALL PHASE MAP

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: P
PHASE MAP

MAP NOTES:

1. Total Lot Area = 46.65 Acres
2. Area of Wetlands = 1.25 Acres Total
3. Area of Active Earth Removal = 11.79 Acres
   Area of Active Restoration = 3.62 Acres
4. Horizontal Datum - Connecticut Grid System
5. Vertical Datum - NAVD88

MAP REFERENCE:

1. Proposed Grading Plan
   For Earth Removal
   Land of Jay Dee Realty
   Bristol, Connecticut
   Scale: 1" = 40' Date: November 11, 1996
   Prepared By: Roderick D. Hewitt

SEE SHEET E2

N/F
DEMARK
TIONS, LLC
3 - P:739

EXISTING CONCRETE BLOCKS

RIP-RAP/STONE BERM
TOP = 502.00 (SEE DETAIL)

TSB "A"
15" CPP PERF. RISER
TOP 498.56
FL 496.14

40' - 15" CPP
@ 2.3%

15" CPP
FLARED END
FL 495.24

GRASS ACCESS ROAD TO REMAIN

344.73'
S70°22'43"E

TSB "C"
NATURAL SAND BOTTOM
TO PROMOTE INFILTRATION

10' WIDE EARTH
BERM WITH RESTORED
GRASS COVER

EXISTING
CPP FLARED END
FL 494.13

EXISTING
40' - 15" CPP
@ 2.0%

EXISTING RIP-RAP
EMERGENCY SPILLWAY
INTERMEDIATE GRADE
ELEV. 501.50

EXISTING DETENTION BASIN
FOR FUTURE RESIDENTIAL SUBDIVISION
TO BE TEMPORARY INFILTRATION BASIN
FOR EARTH REMOVAL OPERATION
(APPROVED BY CITY OF BRISTOL WETLANDS)

COARSE SEDIMENT
POOL

EXISTING
STONE CHECK DAM
TOP ELEV. 491.00
(SEE DETAIL)

100' UPLAND
REVIEW AREA

TSB "B"

EXISTING
15" CPP
PERF. RISER
TOP 498.41
FL 494.94

536.00'
S 38°13'15" W

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

N 01°29'01" W
232.34'

N 01°29'03" W
25.24'

38.55'

9.74'

34°32'10"

N 41°46'46" W
47.32'

142.27'
S 73°13'15" W

N 37°46'36" W
128.92'

LOT 79A
N/F
WILCOX, DAN
V:1922 - P:915
#135 FARRELL AVE.

LOT 86
N/F |
PAGE, KYLE L.
V:2124 - P:609
#169 FARRELL AVENUE

FARRELL AVENUE

EXISTING
125 - 24" RCP
@ 6.7%

EXISTING 60" ø
STORM MANHOLE
TF - 481.10
FL - 475.00 (24" RCP)
FL - 471.50 (24" RCP)

EXISTING
16' - 24" RCP
WITH FLARED END
@ 2.5%
FL - 471.10

EXISTING MULTI-STAGE
OUTLET STRUCTURE
TF - 493.52
FL - 484.42 (24" RCP)
FL - 491.52 (8" PVC PORT)
FL - 491.02 (8" PVC PORT)

EXISTING ¾" CRUSHED STONE
FILTER 2FT HIGH AROUND
OUTLET STRUCTURE

EXISTING
BITUMINOUS
DRIVEWAY

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
576 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 0 20 40 80
1 Inch = 40 Feet

R. R. HILTBRAND
Engineers
and
Surveyors
Bristol, Conn.

OWNER/APPLICANT:
WILLOW MATERIALS LLC
17 LOCKWOOD AVE.
TERRYVILLE, CT 06786

EXISTING CONDITIONS PLAN

EARTH REMOVAL PLAN

BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020

SCALE: As Noted

DRAWN BY: SMP

CHECKED BY: RRH

SHEET NO.: E1

SEE SHEET E3

SEE SHEET E1

LOT 50-1
(ORS LOTS 50 & 51)
N/F
VIN, CYNTHIA L.
1301 - P:173
MARTIN ROAD

LOT 53-2
SSORS LOTS 52 & 53)
N/F
RON, MICHAEL G. &
SUE ELLEN A.
V:1532 - P:156
85 MARTIN ROAD

N 08°02'28" W
360.00'

LOT 60
N/F
DEKOW, ROCHELLE B.
V:1613 - P:571
#195 MARTIN ROAD

LOT 61
N/F BROCHU
ROLAND P. & KAREN C.
V:680 - P:784
#201 MARTIN ROAD

POOL

LOT 62
N/F PAGE
DAVID L. & NELLIE VON S.
V:644 - P:152
#205 MARTIN ROAD

100.00'
S 81°55'05" W

LOT 64
N/F
PAGE, DAVID L.
& NELLIE VON S.
V:955 - P:946

N 08°02'54" W
99.91'

N 08°02'54" W
50.00'

ARCADIA ROAD

N81°50'27"E
50.00'

N 08°04'48" W
100.02'

50.64'
S 81°54'32" W

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

N 07°30'01" W
232.24'

S 12°48'11" E
380.65'

S04°20'47"E

LOT 109
N/F
WYREBEK, SETH
V:1664 - P:961
#140 BIRD ROAD

N 85°01'56"E (85.00')

S 58°36'56" W
37.23'

S.81°54'32" W (105.00')

S 08°05'28" E
282.00'

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

344.73'
S70°22'43"E

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Engineers and Land Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

EXISTING CONDITIONS PLAN

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: E2

SEE SHEET E4

V:1626 - P:248

LOT 43-17
N/F
FEDERAL NATIONAL
MORTGAGE ASSOCIATION
V:2109 - P:143
#81 MARTIN ROAD

LOT 43-18
N/F
SCHIAVONE, ANTHONY J.
V:722 - P:155
#91 MARTIN ROAD

LOT 43-6-2
N/F
MATTIOLO, ANTHONY M.
& MICHAEL J.
V:2014 - P:908
#103 MARTIN ROAD

LOT 43-6-1
N/F
JOHNSON, DUSTIN J. &
PRELI, BETHANY R.
V:2029 - P:199
#121 MARTIN ROAD

LOT 43-6
N/F
PERREAULT, GILLES
V:1998 - P:95
#127 MARTIN ROAD

LOT 43-6A
N/F
AMATO, LISA B.
V:1992 - P:588
#147 MARTIN ROAD

LOT 43-6A-1
N/F
AYOTTA, LISA ANN
V:2120 - P:737
#157 MARTIN ROAD

LOT 43R
N/F
LEVASSEUR, PETER J.
V:1707 - P:1266
#165 MARTIN ROAD

LOT 43-9

LOT 43

LOT 43P

LOT 43Q

LOT 45
N/F
MINOR, GEORGE L.
V:1194 - P:252

LOT 45
N/F
MINOR, GEORGE L.
V:1194 - P:252

N82°04'39"E 25.00'
S68°27'41"E 38.26'
N 07°55'30" W 200.38'
N82°02'32"E 29.98'
S 32°00' W
S55°19'17"E 92.11'
N48°59'00"E 52.00'
S 80°53'26" W 99.50'
S08°54'49"E 176.12'
S05°10'13"E 599.62'
S12°28'13"E 75.00'
N 07°55'30" W 259.59'

ROCKS

SEE SHEET E2

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Engineers and Land Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE
TERRYVILLE, CT 06786

EXISTING CONDITIONS PLAN

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: E3

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

OWNER/APPLICANT:
WILLOW MATERIALS LLC
1000 TERRYVILLE AVE.
TERRYVILLE, CT 06786

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

EXISTING CONDITIONS PLAN

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: E4

BARNUM ROAD
MARTIN ROAD
PARKING
POOL
FB
CB
LOT 43-4 N/F ROBILLARD, JEFFREY M. V:2087 - P:169 #29 BARNUM ROAD
LOT 43Q-2 N/F MALJEVIC, JORDJE D. & PAULINE V:1459 - P:753
N88°07'18"E 435.33'
LOT 43-5A N/F ROY, LISA A. V:1696 - P:282 #37 BARNUM ROAD
LOT 43-5B N/F MIRON, COREY M. & PABST, AMANDA R. V:1971 - P:607 #47 BARNUM ROAD
N 16°08'10" W 179.11'
LOT 43-6 N/F JAY-DEE REALTY & DEV CO V:2126 - P:1168
N 36°39'00" W 75.00'
LOT 43M N/F MALJEVIC, JORDJE D. & PAULINE V:956 - P:10 #627 TERRYVILLE AVENUE
S 02°25'19" W 141.89'
S63°08'14"E 90.00'
LOT 43N N/F JACK AND MICHAEL'S, LLC V:1339 - P:939 #621 TERRYVILLE AVENUE
S71°30'21"E 142.10'
S71°28'33"E 75.00'
LOT 44 N/F GIGUERE, DAVID V:886 - P:217 #595 TERRYVILLE AVE.
S71°30'34"E 154.18'
S05°54'49"E 176.12'
99.50' S 80°53'26" W
LOT 43-16 N/F KELLY, SCOTT P. V:1791 - P:1172
LOT 43-8 N/F JAY-DEE REALTY & DEV CO V:2126 - P:1168
N 43°47'14" W 174.64'
N 55°32'00" W 100.00'
N48°59'00"E 52.00'
S36°19'38"E 29.07'
S43°44'13"E 82.75'
S55°19'17"E 92.11'
LOT 43T-1 N/F DAAR UL EHSAAN USA INC. V:1626 - P:248
N63°01'46"E 192.98'
N82°04'38"E 25.00'
S69°21'44"E 35.58'
LOT 43-17 N/F FERDERAL NATIONAL MORTGAGE ASSOCIATION V:2109 - P:143 #81 MARTIN ROAD
N 07°56'30" W 206.38'
LOT 43-18 N/F SCHIAVONE, ANTHONY J. V:722 - P:155 #91 MARTIN ROAD
N82°02'32"E 29.98'
LOT 43-6-2 N/F MATTIOLO, ANTHONY M. & MICHAEL J. V:2014 - P:908 #103 MARTIN ROAD
LOT 43-6-1 N/F
SEE SHEET E3

Site Stormwater Quality and Erosion Control Design Notes

The system consists of two temporary sediment basins and a detention basin that was designed to be in place for a future R-15 Residential development. The basin is to be utilized as a storm water quality basin to infiltrate any flows exiting the Temporary Sediment Basins (A, B & C) with the goal of no outflows to the Cuss Gutter Brook. Monitoring since 2012± indicates no overflows from the detention basin to date. The stormwater quality basin has a storage volume of 2.9 Ac. Ft.

Temporary Sediment Basin "C" was not part of the original design and was constructed to help mitigate the effects of sedimentation from a large screened sand stockpile that was located west of TSB "C". That stockpile has since been removed, but TSB "C" has remained in place.

The following tables depict design parameters for the storm water quality system based on various site conditions. This can be found in the Drainage Report by R.R. Hiltbrand Engineers & Surveyors dated March 10, 2009, as submitted for a Wetlands Permit Application.

Proposed Storm Water Quality Basin - Active Earth Removal Operation

Storm	Routed Outflow	Inflow	Peak Flow Diff.	Water Surface Elevation
(yr.)	(CFS)	(CFS)	(CFS)	(FT)
2	2.62	11.25	-8.63	491.80
5	6.32	23.01	-16.69	493.31
10	14.16	32.01	-17.85	493.93
25	27.10	44.99	-17.89	494.35
50	32.78	57.04	-24.26	494.76
100	37.17	69.78	-32.61	495.19

Proposed Storm Water Quality Basin – Earth Removal Complete Everything Stabilized

Storm	Routed Outflow	Inflow	Peak Flow Diff.	Water Surface Elevation
(yr.)	(CFS)	(CFS)	(CFS)	(FT)
2	0.00*	0.00	0.00	489.00
5	0.00*	0.11	-0.11	489.00
10	0.00*	0.40	-0.40	489.00
25	0.00*	1.19	-1.19	489.00
50	0.00*	3.43	-3.43	489.78
100	0.51	6.89	-6.38	491.14

*No Outflow through the outlet structure due to infiltration in basin bottom.

Proposed Storm Water Quality Basin – Future R-15 Subdivision Feasibility

Storm	Routed Outflow	Inflow	Peak Flow Diff.	Water Surface Elevation
(yr.)	(CFS)	(CFS)	(CFS)	(FT)
2	0.00*	0.90	-0.90	489.00
5	0.00*	5.16	-5.16	490.44
10	1.84	9.76	-7.92	491.61
25	5.04	17.73	-12.69	492.72
50	7.77	25.88	-18.11	493.62
100	17.28	35.20	-17.92	494.04

*No Outflow through the outlet structure due to infiltration in basin bottom.

TSB "A"
Drainage Area = 12.7 Acres
Dry Volume Sediment Storage Required = 0.06 Ac. Ft.
Wet Volume Storage Required = 0.12 Ac. Ft.
Total Basin Storage Provided = 0.25 Ac. Ft.

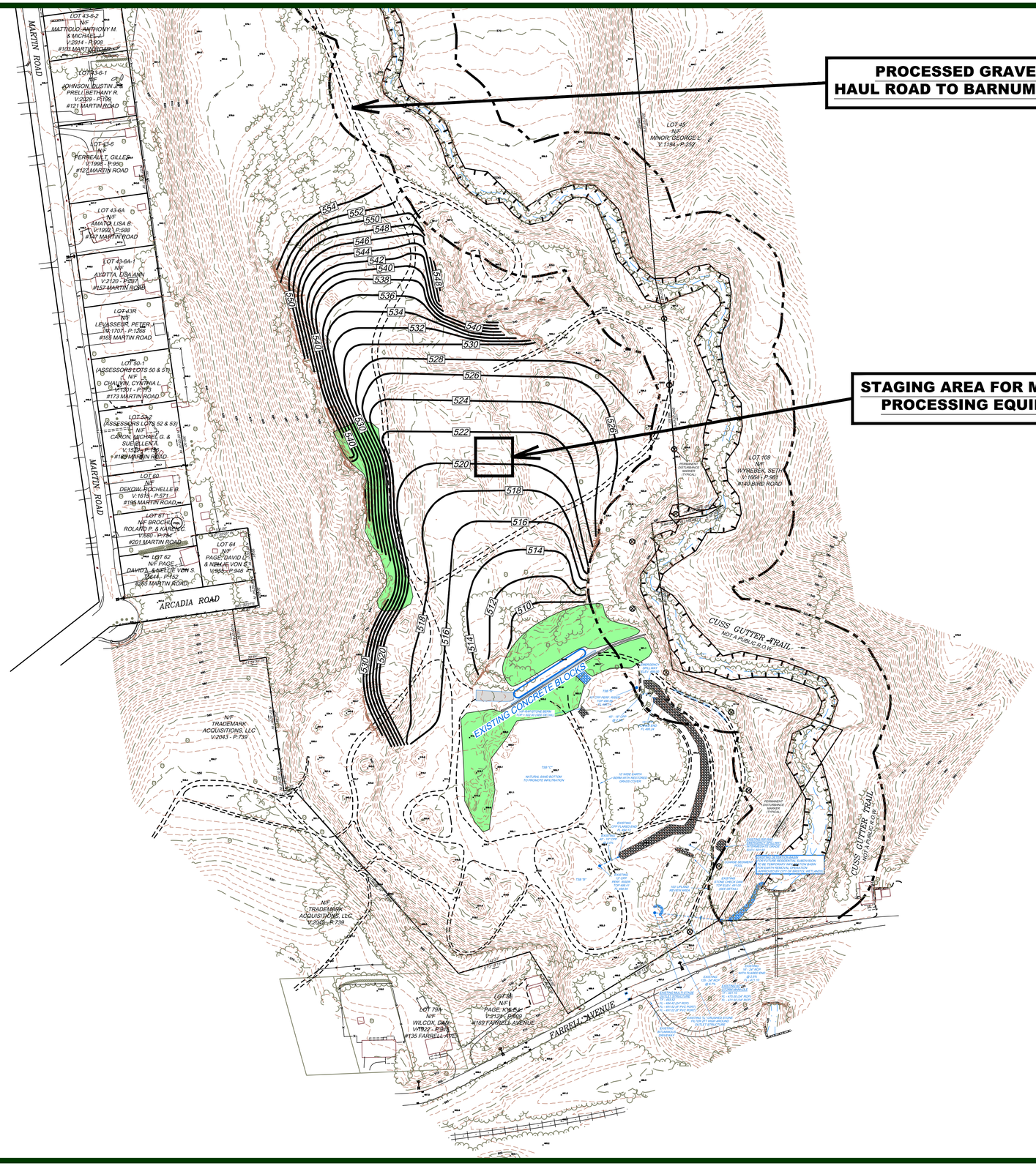
TSB "B"
Drainage Area = 17.6 Acres
Dry Volume Sediment Storage Required = 0.08 Ac. Ft.
Wet Volume Storage Required = 0.16 Ac. Ft.
Total Basin Storage Provided = 0.25 Ac. Ft.

TSB "C"
No Design Requirement
Temporary implementation to handle sediment from a stockpile that no longer exists.
Estimated Volume Provided = 0.75 Ac. Ft.

EARTH REMOVAL QUANTITIES

EARTH CUTS = 55,101.72 C.Y.
EARTH FILLS = 2,550 C.Y.
TOTAL EARTH REMOVAL = 52,551.72 C.Y.

AREA OF ACTIVE EARTH REMOVAL = 11.79 ACRES



DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
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North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
100 50 0 100 200
1 Inch = 100 Feet

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

OVERALL GRADING PLAN

BARNUM ROAD, FARRELL AVENUE

DATE: NOV 22, 2019
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: OG
OVERALL GRADING

SEE SHEET G2

EXISTING CONCRETE BLOCKS

RIP-RAP/STONE BERM
TOP = 502.00 (SEE DETAIL)

TSB "A"
15" CPP PERF. RISER
TOP 498.56
FL 496.14

40' - 15" CPP
@ 2.3%

15" CPP
FLARED END
FL 495.24

DIRT ACCESS ROAD TO REMAIN

344.73'
S 70°22'43" E

TSB "C"
NATURAL SAND BOTTOM
TO PROMOTE INFILTRATION

10' WIDE EARTH
BERM WITH RESTORED
GRASS COVER

PERMANENT
DISTURBANCE
MARKER
(TYPICAL)

536.00'
S 35°13'15" W

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

EXISTING
CPP FLARED END
FL 494.13

EXISTING
40' - 15" CPP
@ 2.0%

EXISTING RIP-RAP
EMERGENCY SPILLWAY
INTERMEDIATE GRADE
ELEV. 501.50

EXISTING DETENTION BASIN
FOR FUTURE RESIDENTIAL SUBDIVISION
TO BE TEMPORARY INFILTRATION BASIN
FOR EARTH REMOVAL OPERATION
(APPROVED BY CITY OF BRISTOL WETLANDS)

COARSE SEDIMENT
POOL

EXISTING
STONE CHECK DAM
TOP ELEV. 491.00
(SEE DETAIL)

100' UPLAND
REVIEW AREA

TSB "B"

EXISTING
15" CPP
PERF. RISER
TOP 498.41
FL 494.94

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

N 0°29'01" W
232.34'

N 0°29'03" W
25.24'

38.55'

S 74°34'32" E
9.74'

N 41°46'46" W
47.32'

142.27'
S 73°13'15" W

N 37°46'46" W
128.52'

LOT 79A
N/F
WILCOX, DAN
V:1922 - P:915
#135 FARRELL AVE.

LOT 86
N/F |
PAGE, KYLE L.
V:2124 - P:609
#169 FARRELL AVENUE

FARRELL AVENUE

EXISTING
125 - 24" RCP
@ 6.7%

EXISTING 16' - 24" RCP
WITH FLARED END
@ 2.5%
FL - 471.10

EXISTING 60" STORM MANHOLE
TF - 481.10
FL - 475.00 (24" RCP)
FL - 471.50 (24" RCP)

EXISTING MULTI-STAGE
OUTLET STRUCTURE
TF - 493.52
FL - 484.42 (24" RCP)
FL - 491.52 (8" PVC PORT)
FL - 491.02 (8" PVC PORT)

EXISTING ¾" CRUSHED STONE
FILTER 2FT HIGH AROUND
OUTLET STRUCTURE

EXISTING
BITUMINOUS
DRIVEWAY

EARTH REMOVAL QUANTITIES

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GRAPHIC SCALE
40 0 20 40 80
1 Inch = 40 Feet

R. R. HILTBRAND ENGINEERS and SURVEYORS
576 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

R. R. HILTBRAND
Engineers
and
Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
1070 MATERIALS AVE.
TERRYVILLE, CT 06786

PROPOSED GRADING PLAN

EARTH REMOVAL PLAN

BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: G1

SEE SHEET G3

SEE SHEET G1

EARTH REMOVAL QUANTITIES

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GRAPHIC SCALE
1 Inch = 40 Feet

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

OWNER/APPLICANT:
WILLOW MATERIALS, LLC
1000 FARREL AVENUE
TERRYVILLE, CT 06786

EARTH REMOVAL PLAN

PROPOSED GRADING PLAN

BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: G2

LOT 109
N/F
WYREBEK, SETH
V:1664 - P:961
#140 BIRD ROAD

LOT 50-1
ORS LOTS 50 & 51)
N/F
VIN, CYNTHIA L.
1301 - P:173
MARTIN ROAD

LOT 53-2
SSORS LOTS 52 & 53)
N/F
RON, MICHAEL G. &
SUE ELLEN A.
V:1532 - P:156
85 MARTIN ROAD

LOT 60
N/F
DEKOW, ROCHELLE B.
V:1613 - P:571
#195 MARTIN ROAD

LOT 61
N/F BROCHU
ROLAND P. & KAREN C.
V:680 - P:784
#201 MARTIN ROAD

LOT 62
N/F PAGE
DAVID L. & NELLIE VON S.
V:644 - P:152
#205 MARTIN ROAD

LOT 64
N/F
PAGE, DAVID L.
& NELLIE VON S.
V:955 - P:946

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

ARCADIA ROAD

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

PERMANENT DISTURBANCE MARKER (TYPICAL)

EMERGENCY SPILLWAY ELEV. 499.00

TSB "A"
15" CPP PERF. RISER
TOP 498.56
FL 496.14

EXISTING CONCRETE BLOCKS

RIP-RAP/STONE BERM
TOP = 502.00 (SEE DETAIL)

40' - 15" CPP
@ 2.3%

15" CPP
FLARED END
FL 495.24

S12°48'15"E

S04°20'47"E
380.65'

S69°05'24"E
282.00'

344.73'
S70°22'43"E

N75°01'56"E (85.00')
S 58°36'56" W
57.25'
S.81°54'32" W (105.00')

100.00'
S 81°55'05" W
99.91'
N 08°02'21" W
50.00'
N 81°50'27" E
50.00'
N 08°02'48" W
100.02'
50.64'
S 81°54'32" W
N 08°02'48" W
360.00'
N 07°30'01" W
232.24'

SEE SHEET G4

LOT 43-17
N/F
FEDERAL NATIONAL
MORTGAGE ASSOCIATION
V:2109 - P:143
#81 MARTIN ROAD

LOT 43-18
N/F
SCHIAVONE, ANTHONY J.
V:722 - P:155
#91 MARTIN ROAD

LOT 43-6-2
N/F
MATTIOLO, ANTHONY M.
& MICHAEL J.
V:2014 - P:908
#103 MARTIN ROAD

LOT 43-6-1
N/F
JOHNSON, DUSTIN J. &
PRELI, BETHANY R.
V:2029 - P:199
#121 MARTIN ROAD

LOT 43-6
N/F
PERREAULT, GILLES
V:1998 - P:95
#127 MARTIN ROAD

LOT 43-6A
N/F
AMATO, LISA B.
V:1992 - P:588
#147 MARTIN ROAD

LOT 43-6A-1
N/F
AYOTTA, LISA ANN
V:2120 - P:737
#157 MARTIN ROAD

LOT 45
N/F
MINOR, GEORGE L.
V:1194 - P:252

LOT 45
N/F
MINOR, GEORGE L.
V:1194 - P:252

V:1626 - P:248

N82°04'35"E 25.00'
S68°27'41"E 38.26'
S 32°00' W
S55°19'17"E 92.11'
N48°59'00"E 52.00'
S08°54'49"E 176.12'
99.50' S 80°53'26" W
N 07°55'30" W 200.38'
N82°02'32"E 29.98'
S05°01'15"E 596.62'
S12°48'19"E 75.00'

LOCKS

EARTH REMOVAL QUANTITIES

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EARTH FILLS = 2,550 C.Y.
TOTAL EARTH REMOVAL = 52,551.72 C.Y.

AREA OF ACTIVE EARTH REMOVAL = 11.79 ACRES

SEE SHEET G2

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North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Engineers and Land Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

PROPOSED GRADING PLAN

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: G3

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EARTH REMOVAL QUANTITIES

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EARTH FILLS = 2,550 C.Y.
TOTAL EARTH REMOVAL = 52,551.72 C.Y.

AREA OF ACTIVE EARTH REMOVAL = 11.79 ACRES

LOT 43-4
N/F
ROBILLARD, JEFFREY M.
V:2087 - P:169
#29 BARNUM ROAD

LOT 43Q-2
N/F
MALJEVIC, JORDJE D. & PAULINE
V:1459 - P:753

LOT 43-5A
N/F
ROY, LISA A.
V:1696 - P:282
#37 BARNUM ROAD

LOT 43-5B
N/F
MIRON, COREY M. & PABST, AMANDA R.
V:1971 - P:607
#47 BARNUM ROAD

LOT 43-6
N/F
JAY-DEE REALTY & DEV CO
V:2126 - P:1168

LOT 43M
N/F
MALJEVIC, JORDJE D. & PAULINE
V:956 - P:10
#627 TERRYVILLE AVENUE

LOT 43N
N/F
JACK AND MICHAEL'S, LLC
V:1339 - P:939
#621 TERRYVILLE AVENUE

LOT 44
N/F
GIGUERE, DAVID
V:886 - P:217
#595 TERRYVILLE AVE.

LOT 43-16
N/F
KELLY, SCOTT P.
V:1791 - P:1172

LOT 43-8
N/F
JAY-DEE REALTY & DEV CO
V:2126 - P:1168

LOT 43T-1
N/F
DAAR UL EHSAAN USA INC.
V:1626 - P:248

LOT 43-17
N/F
FERDERAL NATIONAL MORTGAGE ASSOCIATION
V:2109 - P:143
#81 MARTIN ROAD

LOT 43-18
N/F
SCHIAVONE, ANTHONY J.
V:722 - P:155
#91 MARTIN ROAD

LOT 43-6-2
N/F
MATTIOLO, ANTHONY M. & MICHAEL J.
V:2014 - P:908
#103 MARTIN ROAD

LOT 43-6-1
N/F

BARNUM ROAD

MARTIN ROAD

PARKING

POOL

CB

N88°07'18"E 435.33'

N 16°08'10" W 179.11'

N 36°39'00" W 75.00'

N 43°47'14" W 174.64'

N 55°32'00" W 100.00'

S 02°25'19" W 141.89'

S63°08'14"E 90.00'

S71°30'21"E 142.10'

S71°28'33"E 75.00'

S71°30'34"E 154.18'

S25°54'49"E 176.12'

99.50' S 80°53'26" W

S36°19'38"E 29.07'

S43°44'13"E 82.75'

S55°19'17"E 92.11'

N48°59'00"E 52.00'

N53°01'46"E 192.98'

N82°04'38"W 25.00'

S69°21'44"E 35.58'

N 07°56'30" W 200.39'

N82°02'32"E 29.98'

SEE SHEET G3

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
1 Inch = 40 Feet

OWNER/APPLICANT:
WILLOW MATERIALS LLC
1001 TERRYVILLE AVE.
TERRYVILLE, CT 06786

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE
PROPOSED GRADING PLAN

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: G4

LOT 43-6
N/F
PERREAULT, GILLES
V:1998 - P:95
#127 MARTIN ROAD

LOT 43-6A
N/F
AMATO, LISA B.
V:1992 - P:588
#147 MARTIN ROAD

LOT 43-6A-1
N/F
AYOTTA, LISA ANN
V:2120 - P:737
#157 MARTIN ROAD

LOT 43R
N/F
LEVASSEUR, PETER J.
V:1707 - P:1266
#165 MARTIN ROAD

LOT 50-1
(ASSESSORS LOTS 50 & 51)
N/F
CHAUVIN, CYNTHIA L.
V:1301 - P:173
#173 MARTIN ROAD

LOT 53-2
(ASSESSORS LOTS 52 & 53)
N/F
CARON, MICHAEL G. &
SUE ELLEN A.
V:1532 - P:156
#185 MARTIN ROAD

LOT 60
N/F
DEKOW, ROCHELLE B.
V:1613 - P:571
#195 MARTIN ROAD

LOT 61
N/F BROCHU
ROLAND P. & KAREN C.
V:680 - P:784
#201 MARTIN ROAD

LOT 62
N/F PAGE
DAVID L. & NELLIE VON S.
V:644 - P:152
#205 MARTIN ROAD

LOT 64
N/F
PAGE, DAVID L.
& NELLIE VON S.
V:955 - P:946

MARTIN ROAD

ARCADIA ROAD

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

LOT 45
N/F
MINOR, GEORGE L.
V:1194 - P:252

LOT 109
N/F
WYREBEK, SETH
V:1664 - P:961
#140 BIRD ROAD

PERMANENT
DISTURBANCE
MARKER
(TYPICAL)

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

DATE:	REVISION
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North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
60 30 0 60 120
1 Inch = 60 Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS, LLC
110 NORTHFIELDSIDE AVE.
TERRYVILLE, CT 06786

CROSS SECTION PLAN VIEW

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

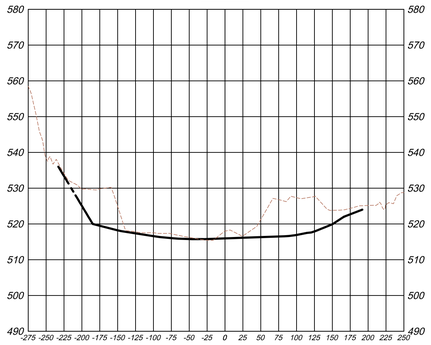
DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH

SHEET NO.:
OS
OVERALL SECTION

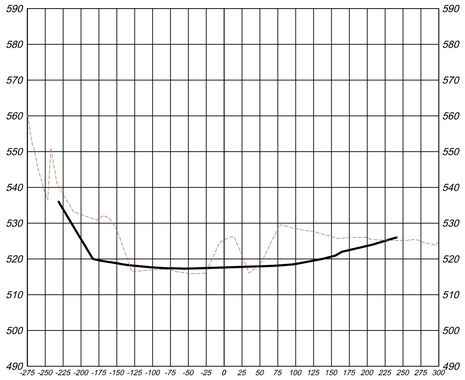
SECTIONS
EXISTING vs. PROPOSED
SOUTH TO NORTH

SCALE: 1"=100' HOR.
1"=20' VERT.

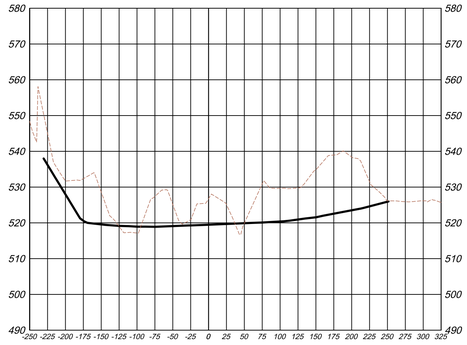
4+00
SL-30



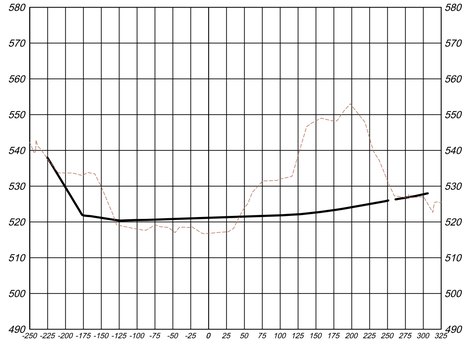
4+50
SL-31



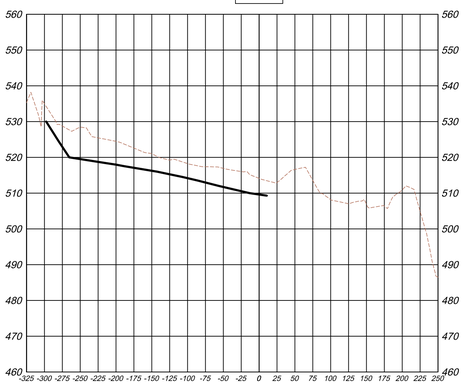
5+00
SL-32



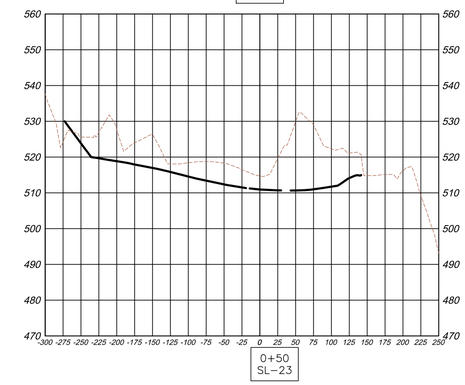
5+50
SL-33



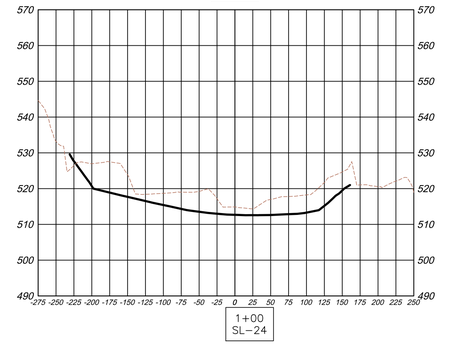
2+00
SL-26



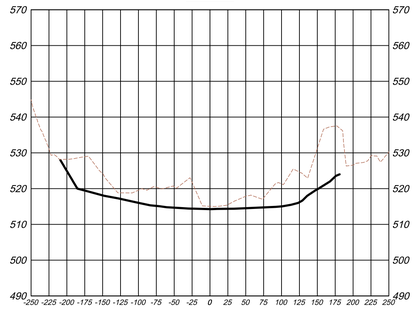
2+50
SL-27



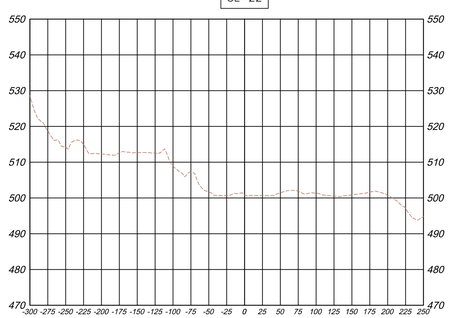
3+00
SL-28



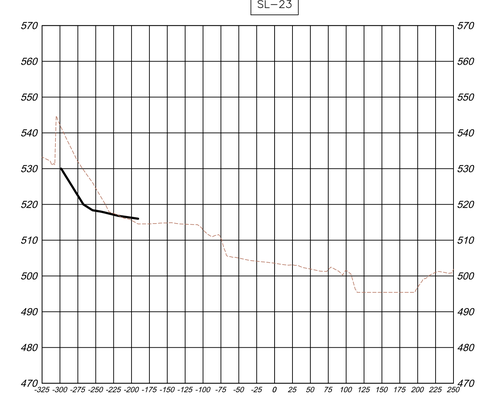
3+50
SL-29



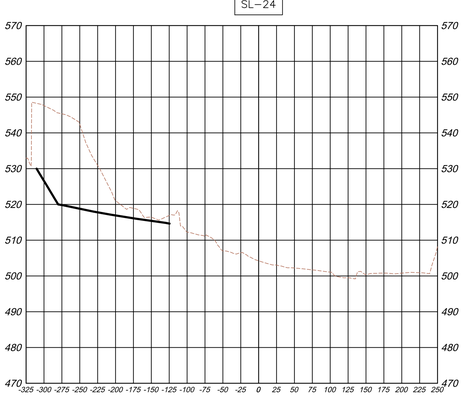
0+00
SL-22



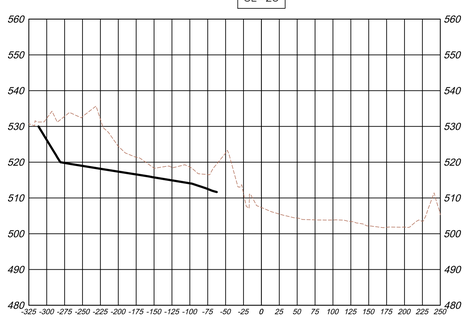
0+50
SL-23



1+00
SL-24



1+50
SL-25



DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
N/A N/A 0 N/A N/A
1 Inch = N/A Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC.
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

CROSS SECTION PROFILES

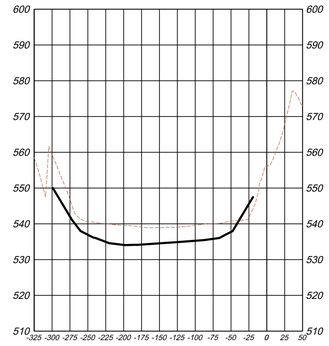
EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: S1

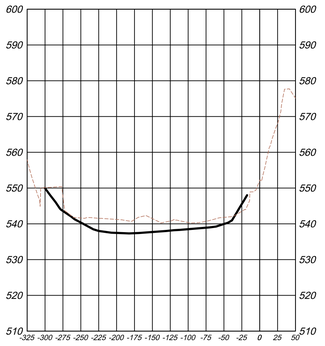
SECTIONS
EXISTING vs. PROPOSED
SOUTH TO NORTH

SCALE: 1"=100' HOR.
1"=20' VERT.

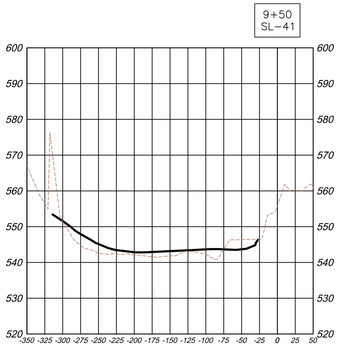
8+50
SL-39



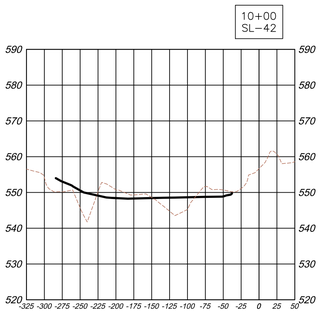
9+00
SL-40



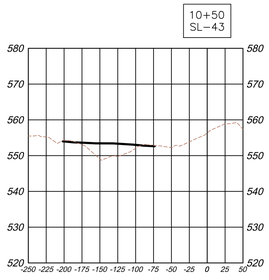
9+50
SL-41



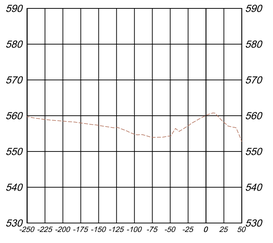
10+00
SL-42



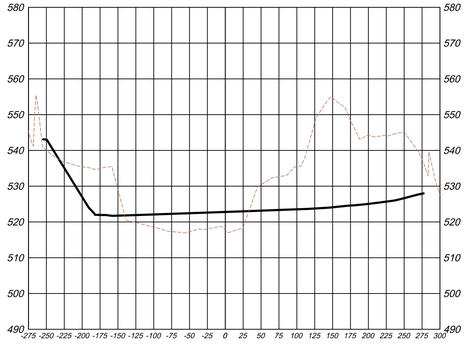
10+50
SL-43



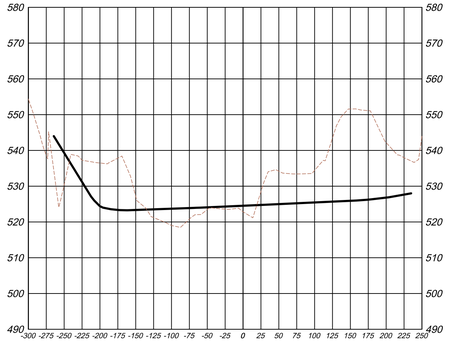
11+00
SL-44



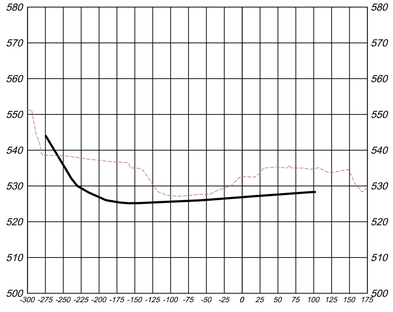
6+00
SL-34



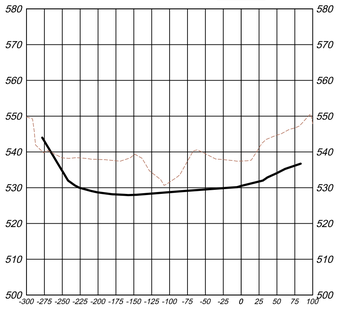
6+50
SL-35



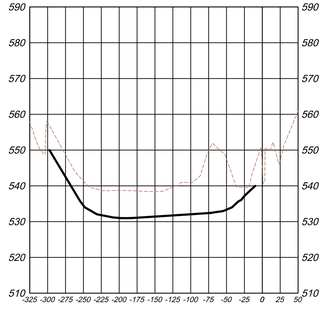
7+00
SL-36



7+50
SL-37



8+00
SL-38



DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
N/A N/A 0 N/A N/A
1 Inch = N/A Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
100 NORTH MAIN STREET
TERRYVILLE, CT 06786

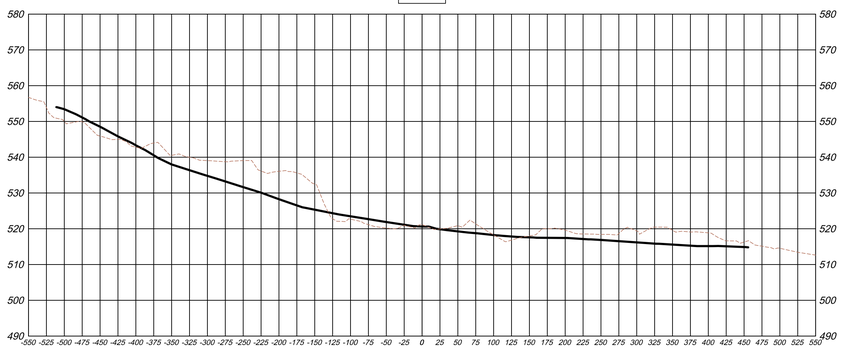
CROSS SECTION PROFILES

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

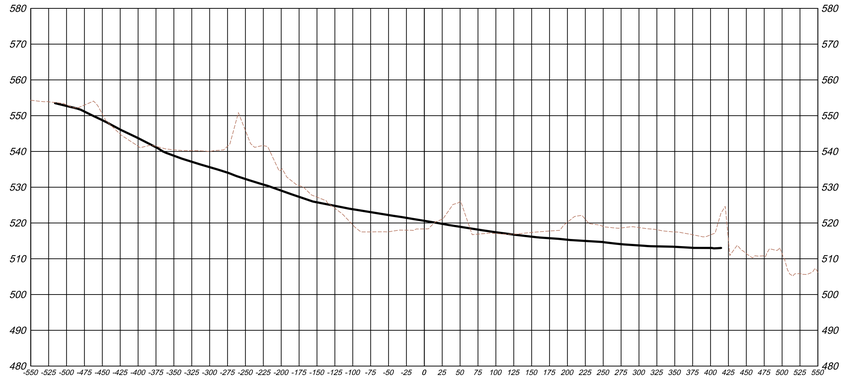
DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: S2

SECTIONS
EXISTING vs. PROPOSED
WEST TO EAST
SCALE: 1"=100' HOR.
1"=20' VERT.

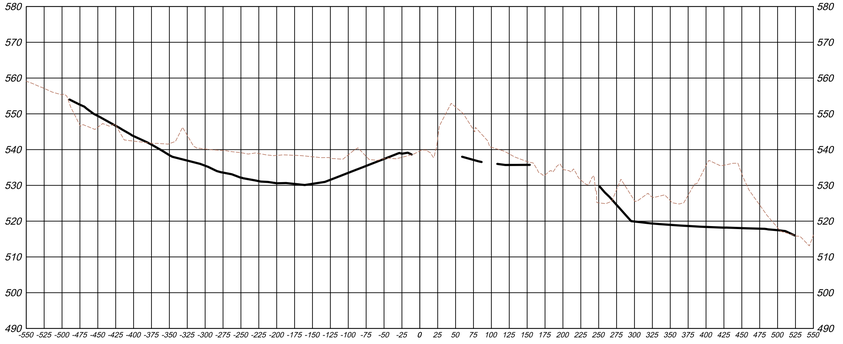
2+00
SL-49



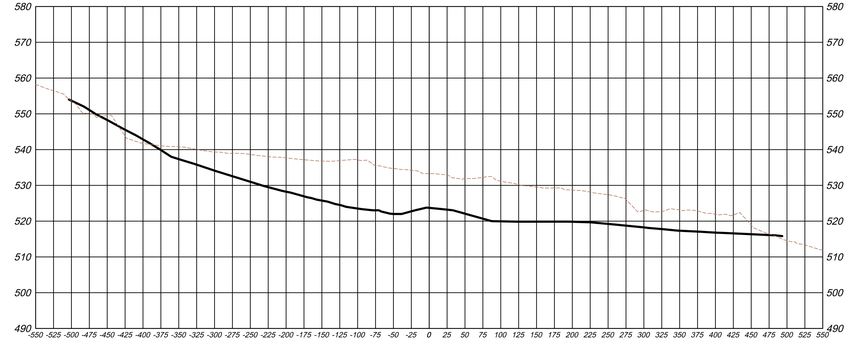
2+50
SL-50



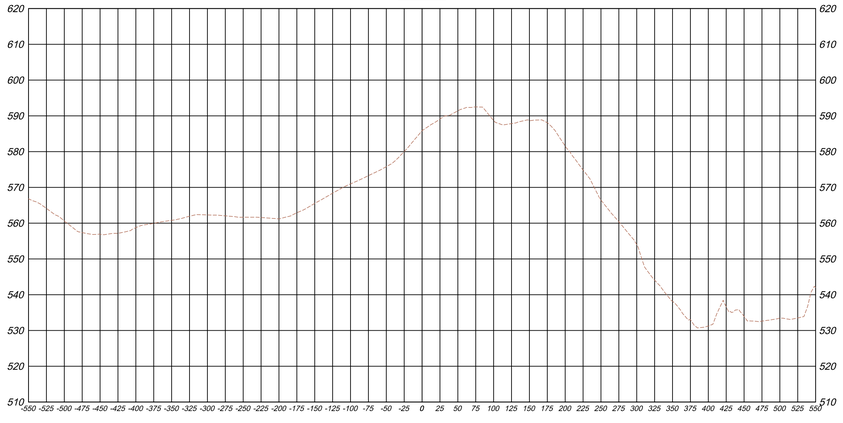
1+00
SL-47



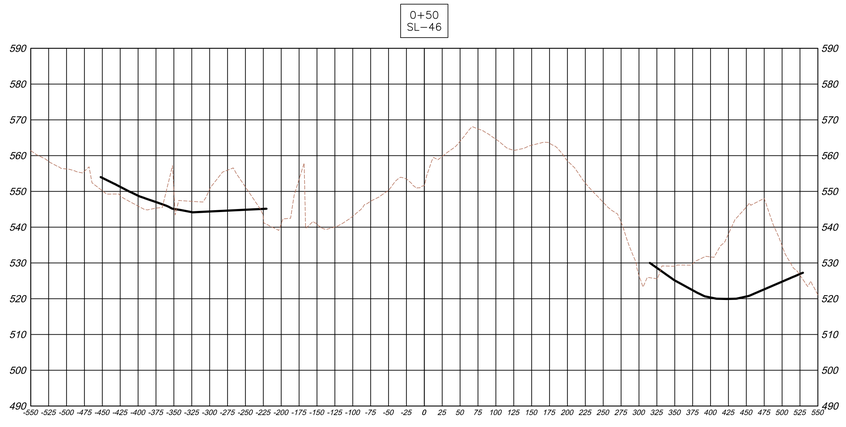
1+50
SL-48



0+00
SL-45



0+50
SL-46



DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
N/A N/A 0 N/A N/A
1 Inch = N/A Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS, LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

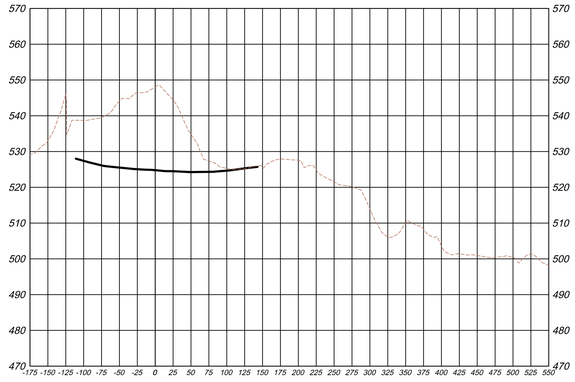
CROSS SECTION PROFILES

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

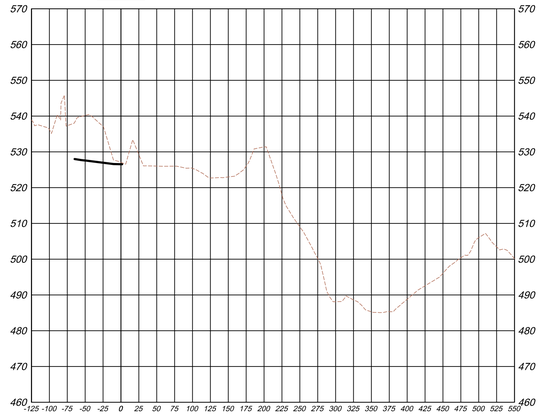
DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: S3

SECTIONS
EXISTING vs. PROPOSED
WEST TO EAST
SCALE: 1"=100' HOR.
1"=20' VERT.

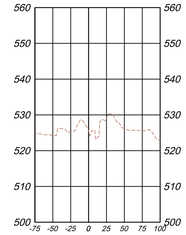
5+50
SL-56



6+00
SL-57



6+50
SL-58



4+00
SL-53

4+50
SL-54

5+00
SL-55

3+00
SL-51

3+50
SL-52

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
N/A N/A 0 N/A N/A
1 Inch = N/A Feet

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

CROSS SECTION PROFILES

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: S4

SEE SHEET SE2

N/F
DEMARK
TIONS, LLC
3 - P:739

N 07°29'01" W 232.34'

N 07°29'03" W 25.24'

38.55'

S 74°34'32" E 9.74'

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

N 41°46'46" W 47.33'

142.27'
S 73°13'15" W

N 37°46'36" W 128.82'

LOT 79A
N/F
WILCOX, DAN
V:1922 - P:915
#135 FARRELL AVE.

LOT 86
N/F |
PAGE, KYLE L.
V:2124 - P:609
#169 FARRELL AVENUE

FARRELL AVENUE

EXISTING CONCRETE BLOCKS

RIP-RAP/STONE BERM
TOP = 502.00 (SEE DETAIL)

TSB "A"
15" CPP PERF. RISER
TOP 498.56
FL 496.14

40' - 15" CPP
@ 2.3%

15" CPP
FLARED END
FL 495.24

TSB "C"
NATURAL SAND BOTTOM
TO PROMOTE INFILTRATION

10' WIDE EARTH
BERM WITH RESTORED
GRASS COVER

EXISTING
CPP FLARED END
FL 494.13

EXISTING
40' - 15" CPP
@ 2.0%

TSB "B"

EXISTING
15" CPP
PERF. RISER
TOP 498.41
FL 494.94

100' UPLAND
REVIEW AREA

EXISTING
STONE CHECK DAM
TOP ELEV. 491.00
(SEE DETAIL)

COARSE SEDIMENT
POOL

EXISTING RIP-RAP
EMERGENCY SPILLWAY
INTERMEDIATE GRADE
ELEV. 501.50

EXISTING DETENTION BASIN
FOR FUTURE RESIDENTIAL SUBDIVISION
TO BE TEMPORARY INFILTRATION BASIN
FOR EARTH REMOVAL OPERATION
(APPROVED BY CITY OF BRISTOL WETLANDS)

PERMANENT
DISTURBANCE
MARKER
(TYPICAL)

344.73'
S 70°22'43" E

536.00'
S 38°13'15" W

EXISTING
125 - 24" RCP
@ 6.7%

EXISTING 60" ø
STORM MANHOLE
TF - 481.10
FL - 475.00 (24" RCP)
FL - 471.50 (24" RCP)

EXISTING
16' - 24" RCP
WITH FLARED END
@ 2.5%
FL - 471.10

EXISTING MULTI-STAGE
OUTLET STRUCTURE
TF - 493.52
FL - 484.42 (24" RCP)
FL - 491.52 (8" PVC PORT)
FL - 491.02 (8" PVC PORT)

EXISTING ¾" CRUSHED STONE
FILTER 2FT HIGH AROUND
OUTLET STRUCTURE

EXISTING
BITUMINOUS
DRIVEWAY

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

EXISTING ACCESS ROAD TO REMAIN

SR PS TSB LS SCD SQB

SOIL TYPES:

Uplands Soil:
Hinckley - Gravelly Sandy Loam

Wetlands Soil:
Raypole - Silt Loam

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
576 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 SOUTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

SEDIMENT AND EROSION CONTROL PLAN
EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: SE1

SEE SHEET SE3

SEE SHEET SE1

LOT 109
N/F
WYREBEK, SETH
V:1664 - P:961
#140 BIRD ROAD

LOT 50-1
ORS LOTS 50 & 51)
N/F
VIN, CYNTHIA L.
1301 - P:173
MARTIN ROAD

LOT 53-2
SSORS LOTS 52 & 53)
N/F
RON, MICHAEL G. &
SUE ELLEN A.
V:1532 - P:156
85 MARTIN ROAD

LOT 60
N/F
DEKOW, ROCHELLE B.
V:1613 - P:571
#195 MARTIN ROAD

LOT 61
N/F BROCHU
ROLAND P. & KAREN C.
V:680 - P:784
#201 MARTIN ROAD

LOT 62
N/F PAGE
DAVID L. & NELLIE VON S.
V:644 - P:152
#205 MARTIN ROAD

LOT 64
N/F
PAGE, DAVID L.
& NELLIE VON S.
V:955 - P:946

N/F
TRADEMARK
ACQUISITIONS, LLC
V:2043 - P:739

ARCADIA ROAD

CUSS GUTTER TRAIL
NOT A PUBLIC R.O.W.

PERMANENT DISTURBANCE MARKER (TYPICAL)

EXISTING CONCRETE BLOCKS

RIP-RAP/STONE BERM
TOP = 502.00 (SEE DETAIL)

EMERGENCY SPILLWAY
ELEV. 499.00

TSB
TSB "A"

15" CPP PERF. RISER
TOP 498.56
FL 496.14

40' - 15" CPP
@ 2.3%

15" CPP
FLARED END
FL 495.24

S 12°48'15" E
380.65'
S04°20'47"E
344.73'
S70°22'43"E
S 81°54'32" W (105.00')
N 08°05'28" W
100.00'
S 81°55'05" W
99.91'
N 08°02'54" W
50.00'
N81°50'27"E
50.00'
N 08°07'48" W
100.02'
50.64'
S 81°54'32" W
N 07°30'01" W
232.34'
N 08°05'28" W
360.00'
S 58°36'56" W
57.25'
N75°01'56"E (85.00')
S 89°05'28" E
282.00'

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC.
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

SEDIMENT AND EROSION CONTROL PLAN

EARTH REMOVAL PLAN
BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: SE2

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

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OWNER/APPLICANT:
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WOODWARD AVE.
TERRYVILLE, CT 06786

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SEE SHEET SE2

Maintenance of Erosion and Sediment Controls

1. **Construction Entrance (CE)**
   Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Repair any measures used to trap sediment as needed. Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces. Roads adjacent to a construction site shall be left clean at the end of each day. If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then either (1) increase the length of the construction entrance, (2) modify the construction entrance road surface.

2. **Geo-textile Silt Fence (GSF)**
   Inspect the silt fence at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater. Inspection of silt fence prior to large anticipated storms is also recommended.

3. **Temporary Seeding (TS)**
   Inspect temporary seeding at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion. Repair eroded areas as needed to control erosion with existing erosion controls or add additional erosion controls.

4. **Permanent Seeding (PS)**
   Inspect permanent seeding at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater during the first growing season. Repair eroded areas as needed to control erosion with existing erosion controls or add additional erosion controls.

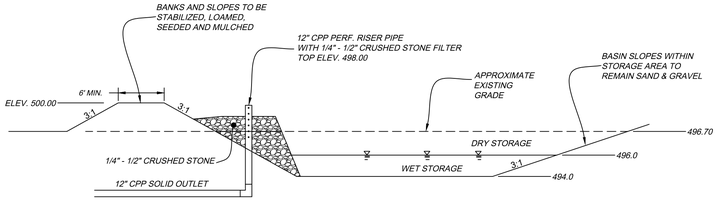
5. **Temporary Erosion Control Blanket (ECB)**
   Inspect temporary Erosion Control Blanket at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for failures. Repair washout, erosion or blanket displacement within one week maximum or prior to next anticipated rainfall.

6. **Vegetated Waterway (VW)**
   Inspect vegetated waterway at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater until vegetation becomes well established and the contributing areas are stabilized.

7. **Permanent Lined Waterway (PW) (ie. Rip-Rap Swale)**
   Inspect permanent lined waterway at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for sediment accumulation and determine maintenance needs and / or addition of upslope erosion controls to protect lining.

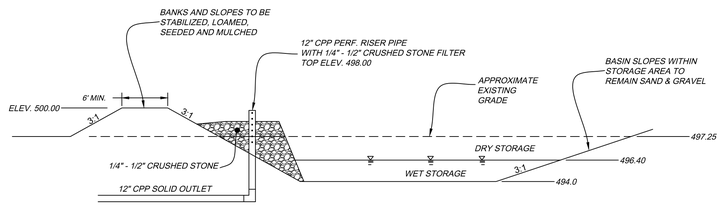
8. **Temporary Sediment Basin**
   a. Inspect the sediment basin at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater.
   b. Clean when sediment has accumulated one half of the wet storage.
   c. Inspect the slotted riser, rip-rap channel / level spreader and emergency spillway for debris and / or erosion at least biannually and after a major storm event.
   d. Clean sediment basin of silt and debris annually or as needed. If frequent maintenance or cleaning is required check condition / application of upslope erosion controls.

9. **Entrance and Dust Control Maintenance**
   a. Sweep paved apron at entrance to site weekly or as required. Any spillage on Barnum Road by truck wheels shall be removed daily.
   b. Dust control measures will be a daily activity when required.



TEMPORARY SEDIMENT TRAP/WATER QUALITY & INFILTRATION BASIN "A"

N.T.S.



TEMPORARY SEDIMENT TRAP/WATER QUALITY & INFILTRATION BASIN "B"

N.T.S.

Site Description

The project site is located on the north side of Farrell Avenue, to the south of the terminus of Barnum Road. An existing residential subdivision along Martin Road borders the western edge of the site which generally consists of a restored slope from previous earth removal operation. The Cuss Gutter Brook borders a portion of the site on the southeasterly boundary and then bisects the site to the south of Barnum Road. The site is 46.65 acres in total with an active earth removal operation of 11.79 acres of the site. Inland wetlands are located along the brook corridor and were survey located as a portion of previous application in 2002.

Narrative

The project consists of a 11.79 acre earth removal operation of the 46.65 acre site. A final grading plan for the site has been prepared to accommodate a possible future residential development. In order to accomplish final grading and provide long term sediment and erosion control 3 each temporary sediment basins and a stormwater quality basin have been built and are currently being maintained on a regular basis. Where possible, self contained excavation is utilized to filtrate storm water and trap eroded sediments. The stormwater quality basin and outfall were designed and located to be utilized as a portion of stormwater management for future development. The remaining earth removal operation consists of 73,738 c.y. of material.

Erosion Control Goals

Site specific erosion control goals are to protect Cuss Gutter Brook and associated wetland areas from erosion or deposition of eroded soils from the earth removal operation.

Design Criteria

Connecticut Guidelines for Erosion and Sediment Control (2002), Conn. DEP Bulletin 34.

a. Sediment/Water Quality Basin SCS TR55- 2,5,10,25,50, 100 year 24 hour storms. The basin outfall is designed for location, sizing and elevation to be utilized as an outfall for final stormwater design of the site. The purpose is to minimize future disturbance in this area relating to final land use.

b. Temporary Sediment Basins – sediment storage wet and dry based on upslope drainage area in accordance with DEP Bulletin 34.

c. Permanent lined water way – SCS TR55- 50 year design stormwater quality basin outfall. SCS TR55 – 2 year design on low flow channel temporary sediment pond to stormwater quality basin.

Permits and Application Information

a. Property is located in Zone R-15.
b. Wetlands application #1260 Removal of Earth Materials, June 17,2002.
c. Zoning Permit #1949 Special Permit to Remove Earth Materials, Oct. 11, 2006.
d. Project is not located within a FEMA Flood Zone.

Lots 110, 112, 113, 114, 115, 119, 120 & 121 have inland wetlands and are associated with this application totaling 1.24 acres.

Documents and Support Information

a. Inland wetlands flagged as part of previous applications and were mapped on a map entitled "Proposed Grading Plan for Earth Removal, Land of Jay Dee Realty, Bristol, CT., Roderick D. Hewitt Consulting Engineers and Land Surveyors, Revised to 10/19/98. Scale 1" – 40 ft., Certified A-2.

b. Aerial topography based on new flight data dated 3/02/2020 and mapping by Golden Aerial Surveys – 2 foot contour interval, scale 1"= 40 ft. Topography was updated in September 2022 by J. Edwards & Associates LLC.

Conservation Practices

a. Keep land disturbances to a minimum by stabilizing portions of the project.
b. Install perimeter controls.
c. Install sediment ponds and stormwater quality features to treat stormwater prior to discharge to Cuss Gutter Brook.
d. Utilize dust control measures.
e. Utilize depressed excavation method to contain sediment from removal operation and promote infiltration of surface flows.

GSF **Geotextile Silt Fence.**
See Detail Sediment and Erosion Control Detail Sheet.
See Maintenance Notes for inspection requirements.

TS **Temporary Seeding.**
Seeding for temporary slope conditions.
Apply 6" topsoil and dozer track for surface roughening.
Seed Mix: Flatpea 10 lb. / acre
Perennial 2 lb. / acre
Crown Vetch 10 lb. / acre
Tall Fescue 2 lb. / acre
Total: 24 lb. / acre
Mulch for seed cover.
See Maintenance Notes for inspection requirements.
Optimum seeding dates 3/1 to 6/15 and 8/1 to 10/15.

PS **Permanent Seeding.**
Seeding for final graded areas.
Apply 6" topsoil and dozer track for surface roughening.
Apply fertilizer and lime as soil testings by UCONN Soil Testing Laboratory.
Mulch for seed cover.
Seed mix: Northern Wildflower Mix 16 lb. / acre.
Discovery Hard Fescue 25 lb. / acre.
Total: 40 lb. / acre.

SR **Surface Roughening.**
Dozer track slopes by tracking up and down the slope.

MS **Mulch for Seed.**
Application of mulch to protect soil surface and promote the establishment of seeding.
See Maintenance Notes for inspection requirements.

ECB **Temporary Erosion Control Blanket.**
A manufactured blanket utilized to provide temporary surface protection to newly seeded and / or disturbed soils. Follow manufacturer's recommendations for installation and stapling patterns. ECB to be installed after mulch for seed.

PW **Permanent Lined Waterway.**
Permanent Lined Channel with rip-rap lining to convey concentrated flows from the earth removal operation.
See Detail Sheet.
See Maintenance Notes for inspection requirements.

TSB **Temporary Sediment Basin.**
A temporary excavated pit or pond area placed directly below disturbed areas to collect sediment as a primary treatment. To provide ease in maintenance / access on a daily / weekly basis if needed. Wet and dry storage is provided.
See Maintenance Notes for inspection requirements.

SCD **Stone Check Dam.**
A temporary stone dam placed across a drainage way where concentrated flows are expected to cause erosion.

LS **Level Spreader.**
An outlet for water conveyance at a discharge point with a zero percent grade.

OP **Outlet Protection.**
Structurally lined apron for energy dissipation.

SQB **Storm Water Quality Basin.**
An impoundment made to store stormwater to achieve storm water quality, groundwater infiltration and prevent downstream erosion and flooding.
See Maintenance Notes for inspection requirements.

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DESIGN REFERENCE:

SEDIMENT & EROSION CONTROL BASED ON 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL D.E.P. BULLETIN 34 BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

Erosion & Sediment Controls and Stabilization Practices

a. Temporary seeding.
b. Mulching.
c. Stone Rip-rap.

During construction, sheet runoff from the site will be filtered through hay bale barriers and silt fences. All storm drain inlets shall be provided with barrier filters. Stone rip-rap shall be provided at the outlets of drainage pipe in which erosive velocities are encountered.

Off Site Vehicle Tracking

Stabilized construction entrances will be installed at all proposed entrances.

Installation, Maintenance and Inspection Procedures of Erosion & Sediment Controls

A. General-

These are the general inspection and maintenance practices that will be used to implement the plan.

- The smallest practical portion of the site will be denuded at one time.

- All erosion control measures will be inspected at least once a week and following any storm event of 0.25 inches or greater.

- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of the report.

- Built up sediment will be removed from the silt fence or hay bale barriers when it has reached one third the height of the of the fence or barrier.

- A maintenance inspection report will be made after each inspection.

- The contractor's site superintendent will be responsible for inspections, maintenance and repair activities, and completing the inspection and maintenance report.

- R.R. Hiltbrand Engineers & Surveyors shall inspect the site on a periodic basis to assure compliance with the plan.

B. Filters -

1. Straw/ hay bales
   a. Sheet Flow Applications
      1. Bales shall be placed in a single row , lengthwise on the contour, with the ends of the adjacent bales tightly abutting one another.
      2. All bales shall be either wire bound or string tied. Bales shall be installed so that the bindings are oriented around the sides rather than along the tops and bottoms of the bales to prevent deterioration of the bindings.
      3. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of (4) inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built-up to (4) inches against the uphill side of the barrier. Ideally, bales should be placed ten (10) feet away from the toe of slope.
      4. Each bale shall be securely anchored by at least two (2) stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes and rebars shall be driven deep enough into the ground to securely anchor the bales.
      5. The gaps between bales shall be chinked (filled by wedging) with straw/hay to prevent water from escaping between the bales.
2. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements.

Physical Property Test Requirements

Filtering Efficiency ASTM 5.41 75% minimum

Grab Tensile Strength ASTM D4632 100lbs.

Elongation & Failure ASTM D4632 15%

Puncture Strength
ASTM 4833 50 lbs.

Flow Rate ASTM D4491 0.2gal./ft2/min.

Ultra-Violet Radiation Stability % ASTM D4355 70% after 500 hours of exposure

b. The height of a silt fence shall not exceed thirty (30) inches above grade.

c. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at the support posts, with a min. six (6) inch overlap, and securely sealed.

d. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and driven securely into the ground (min. of 12 inches).

e. A trench shall be excavated approximately six (6) inches wide and six (6) inches deep along the line of posts and upslope from the barrier.

f. When 'standard strength' filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one inch long, tie wires or hog rings. The wire shall extend no more than 30 inches above the original ground surface.

g. The 'standard strength' filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 30 inches above the original ground surface.

h. When 'extra strength' filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case the filter fabric is stapled or wired directly to the posts with all other provisions of item 'g' applying.

i. The trench shall be backfilled and the soil compacted over the filter fabric.

j. Silt fences shall be removed when they have served their useful purpose, but not before the upslope areas have been permanently stabilized.

Sequence of Installation

Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.

Maintenance

a. Straw/ hay bale barrier and silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the ends, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.

b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.

c. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately (1/3) the height of the barrier.

d. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

C. Mulching

1. Timing

In order for mulch to be effective, it must be in place prior to major storm events There are two (2) types of standards which shall be used to assure this.

a. Apply mulch prior to any storm event.

This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Massachusetts (508- 822- 0634), to have adequate warning of significant storms.

b. Required mulching within a specified time period.

The time period can range from 14 to 21 days of inactivity on an area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

2. Guidelines for winter mulch application.

When mulch is applied to provide protection over winter (past the growing season) it shall be at a rate of 6000 lb. of hay or straw per acre. A tackifier may be added to the mulch.

3. Maintenance

All mulches must be inspected periodically, in particular after rain storms, to check for erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

D. Temporary Grass Cover

1. Seedbed Preparation

Apply fertilizer at the rate of 300 lb. / acre of 10-10-10. Apply limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of (1) tons/ acre.

2. Seeding

a. Utilize annual rye grass at a rate of 40 lb./ acre.

b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.

c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

3. Maintenance

Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface shall be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

E. Permanent Grass Cover

1. Seedbed Preparation

Apply fertilizer at the rate of 300 lb. / acre of 10-10-10. Apply limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of (1) tons/ acre.

2. Seeding

	Lbs./1,000 Sq. Ft.
a. Utilize Creeping Red Fescue (Pennlawn, Wintergreen)	.45
Redtop (Streeker, Common)	.10
Tall Fescue (Kentucky 31 or Smooth Bromegrass (Saratoga, Lincoln)	.45
	1.00

b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.

c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

F. Storm Drain Inlet Protection

1. Straw Bale Inlet Structure

a. Bales shall be either wire bound or string tied with the bindings oriented around the sides rather than over and under the bales.

b. Bales shall be placed lengthwise in a single row surrounding the inlet, with the ends of adjacent bales pressed together.

c. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of a bale to a minimum depth of four (4) inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier.

d. Each bale shall be securely anchored and held in place by at least two (2) stakes or rebars driven through the bale.

e. Loose straw shall be wedged between bales to prevent water from entering between bales.

F. Stabilized Construction Entrance

1. Specifications

a. Aggregate Size: Use two (2) inch stone. (Gradation Shall Be D.O.T. No. 3)

b. Aggregate thickness: Not less than six (6) inches.

c. Width: Ten (10) foot minimum, but not less than the full width of points where ingress or egress occurs.

d. Length: As required, but not less than one hundred (50) feet.

e. Geotextile: To be placed over the entire area to be covered with aggregate. Piping of surface water under entrance(s) shall be provided as required.

f. Criteria for Geotextile: The fabrics shall be Trevia Spunbound 1135, Mirafi 6000x, or equal.

2. Maintenance

The entrance(s) shall be maintained in a condition which will prevent tracking of sediment onto the public right-of-way. When washing is required, it shall be completed on an area stabilized with aggregate which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches or waterways.

Timing of Controls/ Measures

As indicated in the sequence of Major Activities the hay bales and silt fences shall be installed prior to commencing any clearing, demolition or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Area(s) where construction activity temporarily ceases for more than twenty one (21) days will be stabilized with a temporary seed and mulch within fourteen (14) days of the last disturbance. Once construction activity ceases permanently in an area, silt fences and hay bale barriers will be removed once permanent measures are established.

Waste Disposal

A. Waste Materials

All waste materials will be collected and stored in securely lidded receptacles. All trash and construction debris from the site will be deposited into a dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal by the superintendent.

B. Hazardous Waste

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in the practices by the superintendent.

C. Sanitary Waste

All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor.

Spill Prevention

A. Material Management Practices

The following are the materials management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances during construction to storm water runoff:

Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

-An effort will be made to store only sufficient amounts of products to do the job.

-All materials stored on site will be stored in a neat, orderly manner in their proper (original if possible) containers and, if possible, under a roof or other enclosure.

-Manufacturer's recommendations for proper use and disposal will be followed.

-The site superintendent will inspect daily to ensure proper use and disposal of materials.

-Substances will not be mixed with one another unless recommended by the manufacturer.

-When ever possible all of a product will be used up before disposing of the container.

Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

-Products will be kept in their original containers unless they are not re-sealable

-Original labels and material safety data will be retained for important product information.

-Surplus product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. Product Specific Practices

The following product specific practices will be followed on site:

Petroleum Products:

All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt based substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts directed by the specifications. Once applied, fertilizer will be worked into the soil to limit exposure to storm water Storage will be in a covered shed or enclosed trailers. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will discharge and wash out surplus concrete or drum wash water in a contained area on site..

C. Spill Control Practices

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

-Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

-Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic or metal trash containers specifically for this purpose.

-All spills will be cleaned up immediately after discovery.

-The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

-Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.

-The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.

-The site superintendent responsible for day to day operations will be the spill prevention and cleanup coordinator.

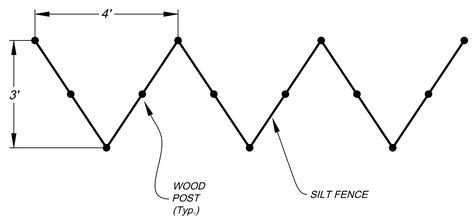
The General Contractor(s) and/or Project Owner(s)

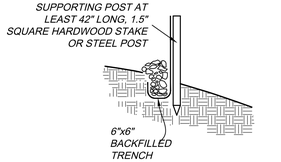
are assigned the responsibility for implementing this erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan, notifying the Planning and Zoning office of any transfer of this responsibility, and for conveying a copy of the Sediment & Erosion Control Plan if the title to the land is transferred.

RESPONSIBLE PERSON:
KYLE SHULTZ
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786
860-302-3261

Contingency Erosion Plan

Should unforeseen erosion or sedimentation problems arise, the design engineer of record. (R.R. Hiltbrand Engineers & Surveyors) and the local enforcement agent shall be notified immediately. An inspection of the affected area(s) shall be promptly performed. A remedial action plan shall be formulated with the local enforcement agent's approval. The site contractor shall then implement the recommended course of action which has been determined by both the engineer and local enforcement agent.





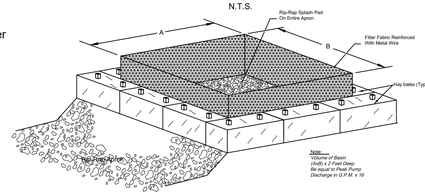
INSTALL SILTFENCE BEYOND 10' RIP-RAP BERM IN SAWTOOTH CONFIGURATION AND BACKFILL FENCE WITH CRUSHED STONE

SAWTOOTH SILT FENCE DETAIL

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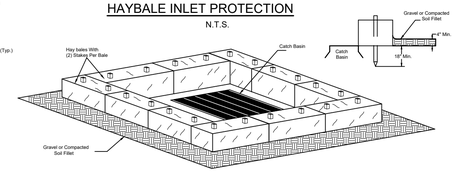
TEMPORARY SEDIMENT BASIN FOR DEWATERING DISCHARGE

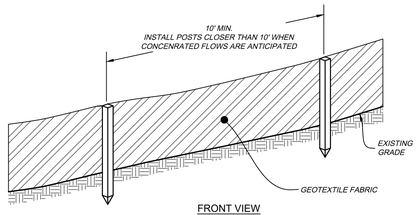
N.T.S.



HAYBALE INLET PROTECTION

N.T.S.



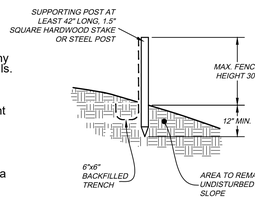


FRONT VIEW

DETAIL FOR FENCE JOINT

* POSITION POSTS TO OVERLAP AS SHOWN ABOVE, MAKING CERTAIN THAT THE FABRIC FOLDS AROUND EACH POST ONE FULL TURN

* DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OF BUILT-UP SEDIMENT AT JOINT.

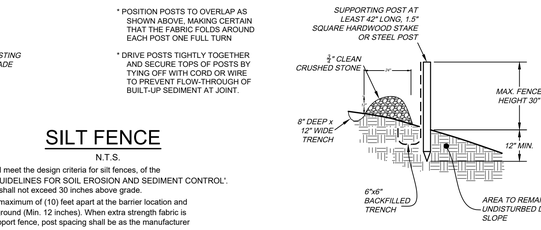


SIDE VIEW

SILT FENCE

N.T.S.

1. The geotextile fabric shall meet the design criteria for silt fences, of the '2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL'.
2. The height of the barrier shall not exceed 30 inches above grade.
3. Posts shall be spaced a maximum of (10) feet apart at the barrier location and driven securely into the ground (Min. 12 inches). When extra strength fabric is used without the wire support fence, post spacing shall be as the manufacturer recommends.
4. A trench shall be excavated approx.. (6) inches wide by (6) inches deep along the line of the posts and upslope from the barrier in accordance with recommendations.
5. The fabric shall not extend more than (30) inches above the original ground surface, and will extend a minimum of (8) inches into the trench. Filter fabric shall not be stapled to existing trees.
6. The trench shall be backfilled and soil compacted over the filter fabric.
7. Filter barriers shall be removed when the have served their useful purpose. But not before the uphill surface has been permanently stabilized.
8. Filter barriers shall be inspected immediately after each rainfall, and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
9. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
10. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier.
11. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required, shall be dressed to conform to the existing grade, prepared and seeded.



SIDE VIEW

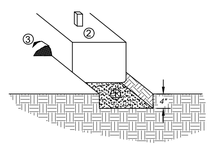
CRUSHED STONE DAM WITH SILTFENCE

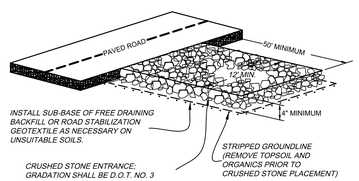
N.T.S.

PLACEMENTand CONSTRUCTION OF HAY BALE BARRIER

N.T.S.

1. EXCAVATE TRENCH 4" AND PLACE FILL UP-SLOPE OF TRENCH. PLACE HAYBALE & STAKE FIRST STAKE AT ANGLE TOWARDS
2. FIRST HAYBALE. STAKES ARE 18" MIN. INTO GROUND.
3. BACKFILL & COMPACT EXCAVATED FILL ALONG HAY BALE.
4. WEDGE LOOSE HAY BETWEEN BALES.





CONSTRUCTION ENTRANCE n.t.s.

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal

North

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

GRAPHIC SCALE
40 20 0 40 80
1 Inch = 40 Feet

R. R. HILTBRAND Registered Professional Engineers and Surveyors

OWNER/APPLICANT:
WILLOW MATERIALS LLC
107 NORTH RIVERSIDE AVE.
TERRYVILLE, CT 06786

SEDIMENT AND EROSION CONTROL DETAILS SHEET

BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020

SCALE: As Noted

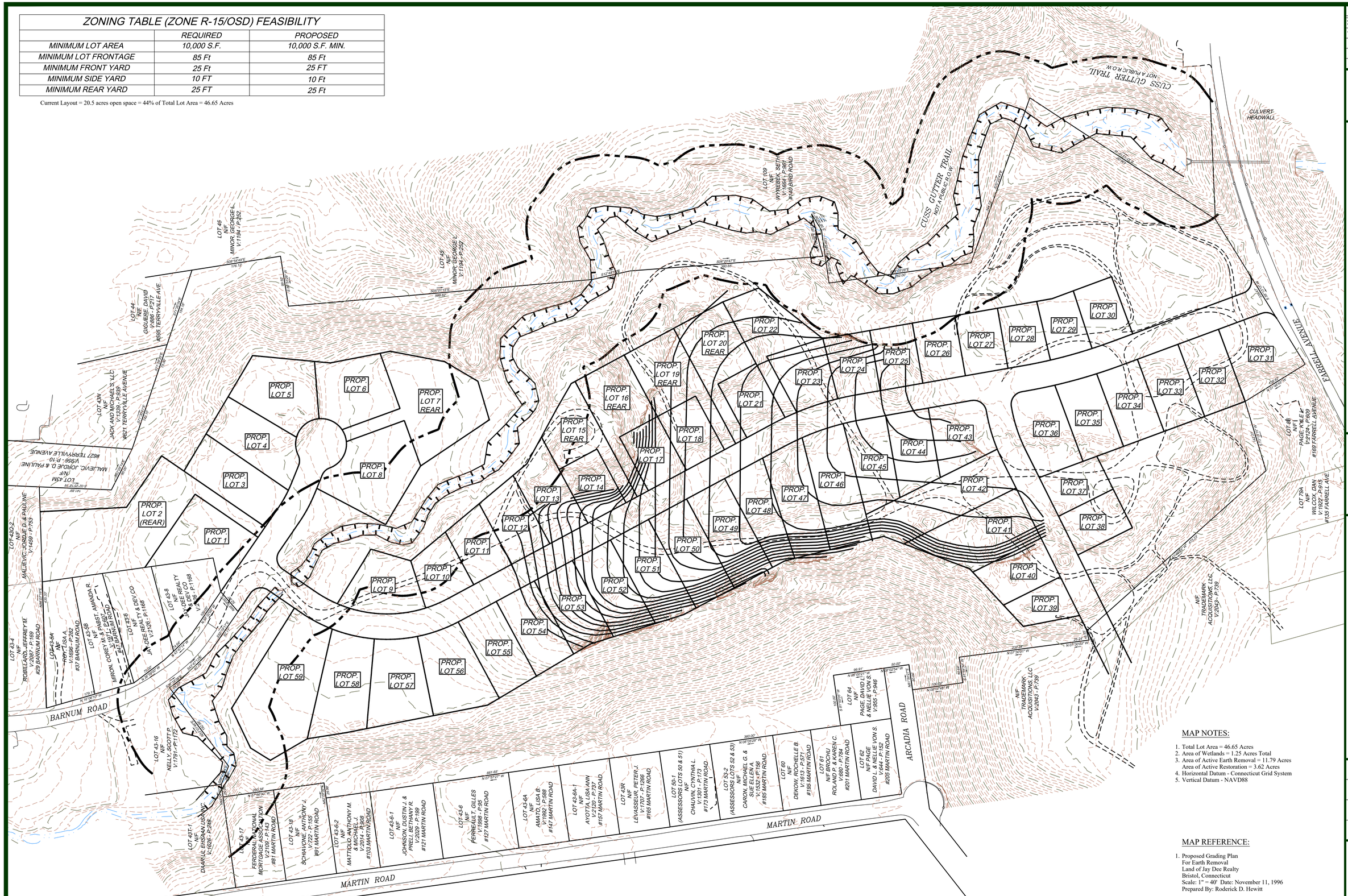
DRAWN BY: SMP

CHECKED BY: RRH

SHEET NO.: SE

ZONING TABLE (ZONE R-15/OSD) FEASIBILITY		
	REQUIRED	PROPOSED
MINIMUM LOT AREA	10,000 S.F.	10,000 S.F. MIN.
MINIMUM LOT FRONTAGE	85 Ft	85 Ft
MINIMUM FRONT YARD	25 Ft	25 FT
MINIMUM SIDE YARD	10 FT	10 Ft
MINIMUM REAR YARD	25 FT	25 Ft

Current Layout = 20.5 acres open space = 44% of Total Lot Area = 46.65 Acres



MAP NOTES:

1. Total Lot Area = 46.65 Acres
2. Area of Wetlands = 1.25 Acres Total
3. Area of Active Earth Removal = 11.79 Acres
   Area of Active Restoration = 3.62 Acres
4. Horizontal Datum - Connecticut Grid System
5. Vertical Datum - NAVD88

MAP REFERENCE:

1. Proposed Grading Plan
   For Earth Removal
   Land of Jay Dee Realty
   Bristol, Connecticut
   Scale: 1" = 40' Date: November 11, 1996
   Prepared By: Roderick D. Hewitt

DATE:	REVISION
7-23-20	COB STAFF COMMENTS DATED JULY 9, 2020
10-14-22	Update Topography for Permit Renewal.

R. R. HILTBRAND ENGINEERS and SURVEYORS
575 NORTH MAIN STREET BRISTOL, CONNECTICUT 06010 (860) 582 4548

OWNER/APPLICANT:
WILLOW MATERIALS, LLC
100 LAKE MARIENSIDE AVE
TERRYVILLE, CT 06786

FUTURE SUBDIVISION FEASIBILITY

EARTH REMOVAL PLAN

BARNUM ROAD, FARRELL AVENUE

DATE: MAY 20, 2020
SCALE: As Noted
DRAWN BY: SMP
CHECKED BY: RRH
SHEET NO.: SUB FEASIBILITY

Cut/Fill Report

Generated: 2024-08-13 18:23:49
By user: jasone
Drawing: K:\PROJECTS\2972-SCHULTZ-BARNUM AVE-BRISTOL\SURVEY\K:\PROJECTS\2972-SCHULTZ-BARNUM AVE-BRISTOL\SURVEY\2972-JEA-BASE-2024.dwg

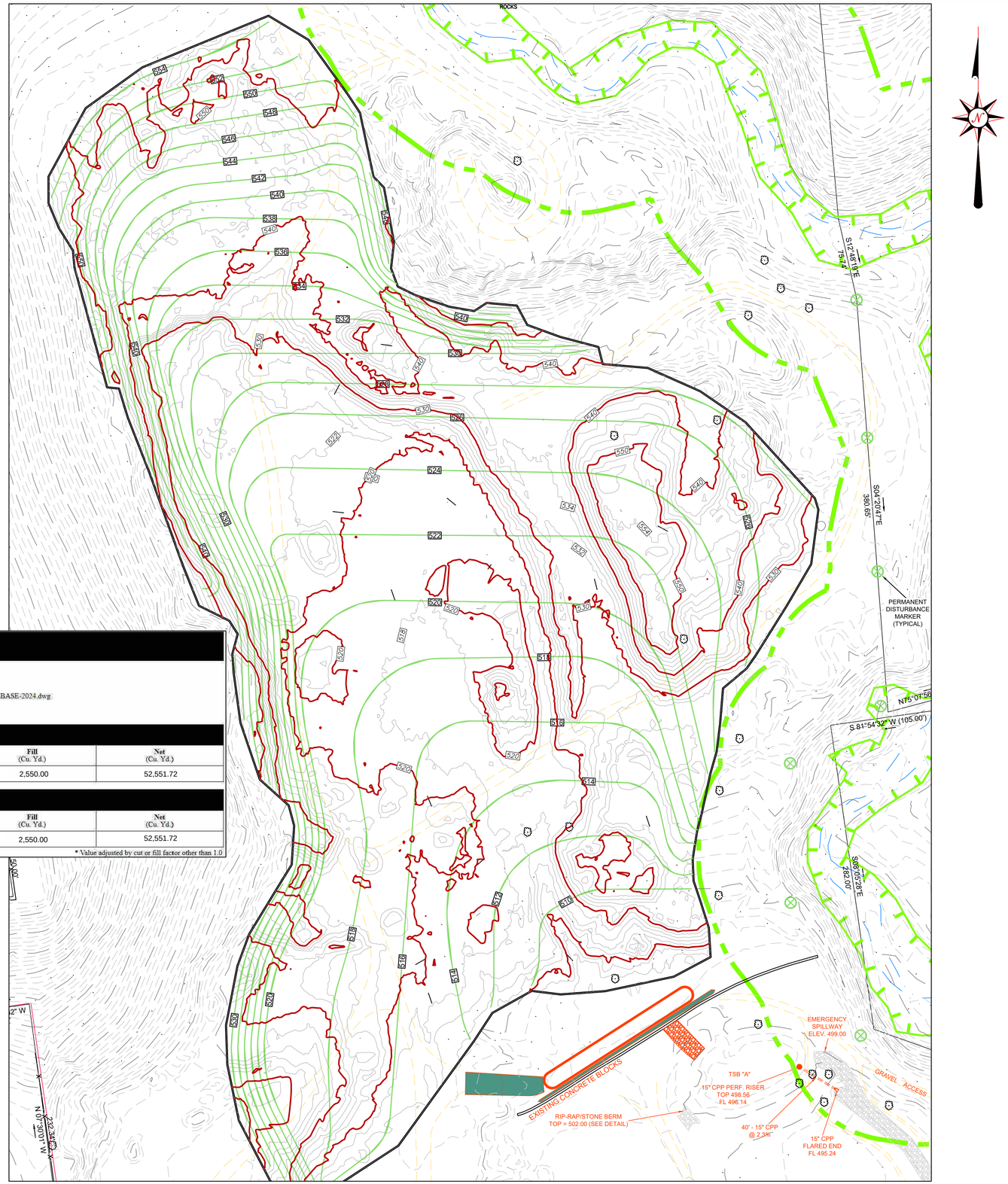
Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
2024-2022	full	1.00	1.00	397,021.64	55,091.72	2,550.00	52,551.72

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	397,021.64	55,091.72	2,550.00	52,551.72

* Value adjusted by cut or fill factor other than 1.0



J. EDWARDS & ASSOCIATES LLC
ENGINEERING • SURVEYING • SITE PLANNING

227 Stepney Road Easton, CT 06612
Phone:203.268.4205 Fax: 203.268.5604
www.jedwardsassoc.com

WILLOW INDUSTRIES
BARNUM ROAD
BRISTOL, CONNECTICUT

REVISIONS

#	DATE	DESCRIPTION
1	XXXX	XXXX

DATE: AUGUST 13, 2024
PROJECT #: 2972
DRAWING FILE: 2972-BASE
DRAWN BY: JSE
SCALE: 1"=50'

TITLE

EXCAVATION ANALYSIS

SHEET NUMBER

1

FILE NO. XXXXX

For Office Use Only	
APPLICATION NO.	2508
DATE FILED:	09-05-2024
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SPECIAL PERMIT

The undersigned Applicant hereby applies to the Bristol Zoning Commission for approval under Section(s) Article II Section 4.3.1 of the Bristol Zoning Regulations for the following Special Permit use: Adaptive Reuse of Existing Non-Residential Principal Buildings

Address or Location of the Property: 92 Jeanette Street

Assessor's Map No.: 39 Assessor's Lot No.(s): 57

Zone of the Property: R-10 Size of the Property (in acres or square feet): .19 Acre

Reason for the Special Permit: To convert an existing industrial building containing 2772 useable square feet to two residential units (1 unit existing, 1 proposed)

Does this application involve an activity regulated by the Inland Wetlands Agency? [ ] yes [✓] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [ ] yes, on _____ [ ] no

Other comments: _____

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: Paul J Laferriere

Address: 150 Lynn Road City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 877-6368 E-Mail: gaskienergymech@gmail.com

Signature: _____ *Signature – (Printed/Typed)* Paul J Laferriere

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: Same as Applicant

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* _____

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2508

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: 92 Jeanette Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

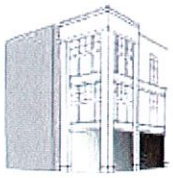
Name: Development Planning Solutions LLC

Address: 225 North Main Street Suite 207 City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 506-4268 E-Mail: charlie@developmentplanningsolutions.com

08/17 - LUO

Narrative



D P S

DEVELOPMENT PLANNING SOLUTIONS LLC.

Project Narrative

Project Title: 92 Jeanette Street

General Information

Project Name: 92 Jeanette Street **Project Location:** 92 Jeanette Street **Zone:** R-10 **Project Type:** Adaptive Reuse of Non-Residential Structure **Date Submitted:** 9-5-2024 **Variances Required:** No **Wetlands Approval Required:** No **Special Permit Required:** No **Site Plan Approval Required:** No	**Developer:** Paul Laferriere **Surveyor:** Gary B. LeClair **Architectural Design:** Development Planning Solutions LLC **Landscape Design:** N/A **Lighting Design:** N/A **Project Consultant:** Development Planning Solutions LLC **Legal Representative:** N/A

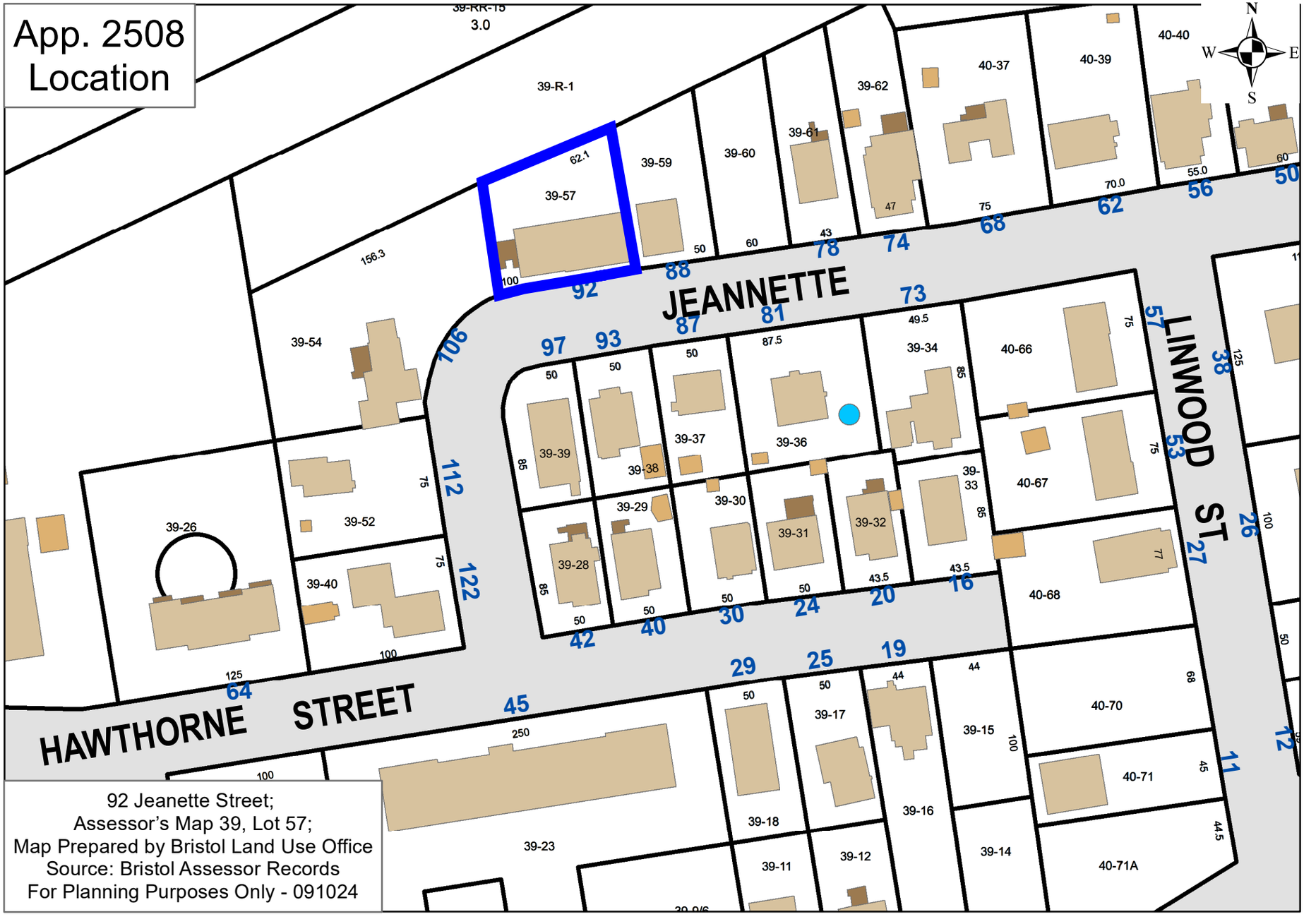
Project Overview

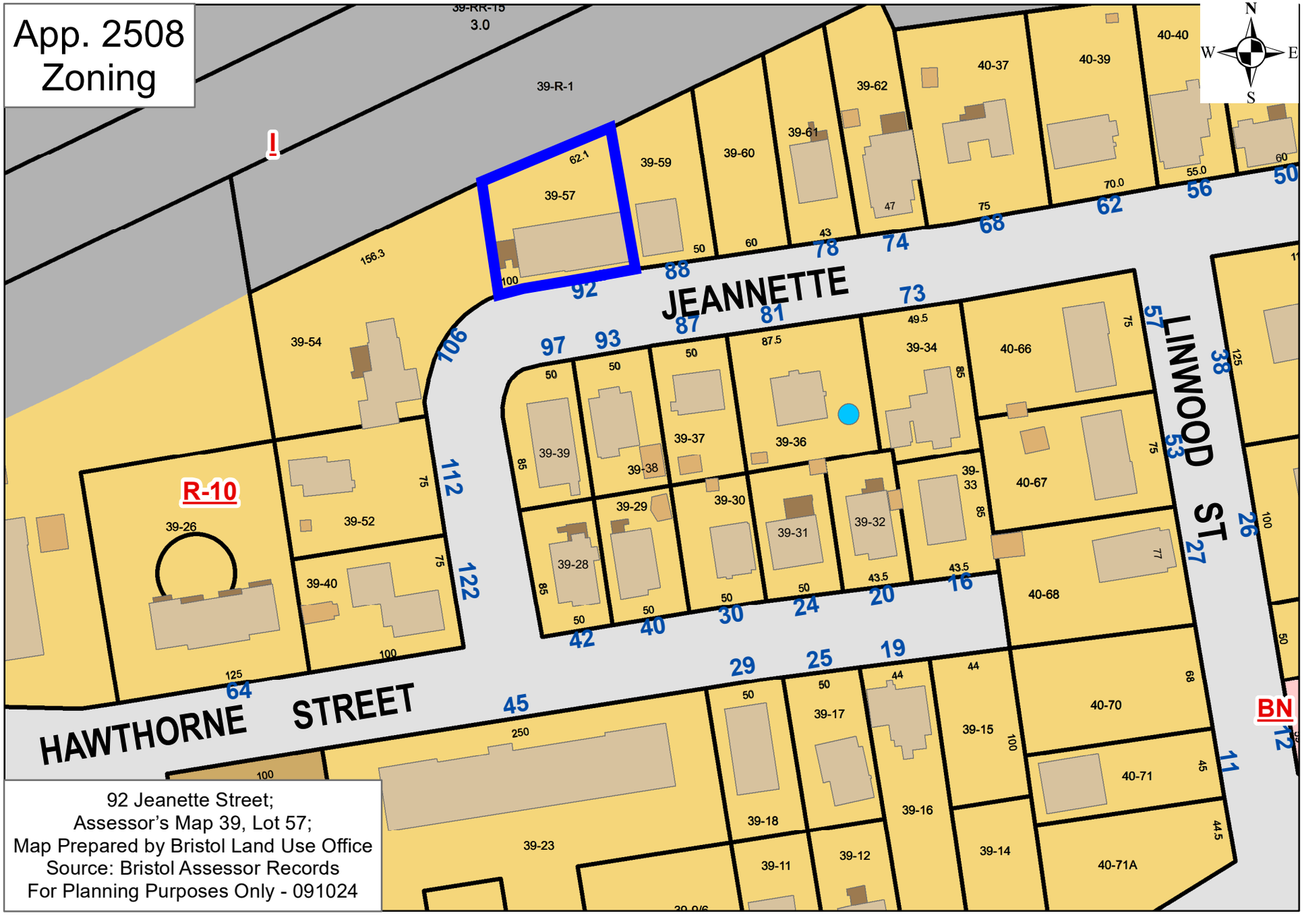
This Project is being proposed under Article II Section 4.3.1. of the City of Bristol Zoning Regulations and is the adaptive reuse of a non-residential principal structure. The building was built as a light manufacturing / service shop in the 1930's and has remained that way ever since. Originally, the second floor was proposed as office space but was converted to an apartment some time ago.

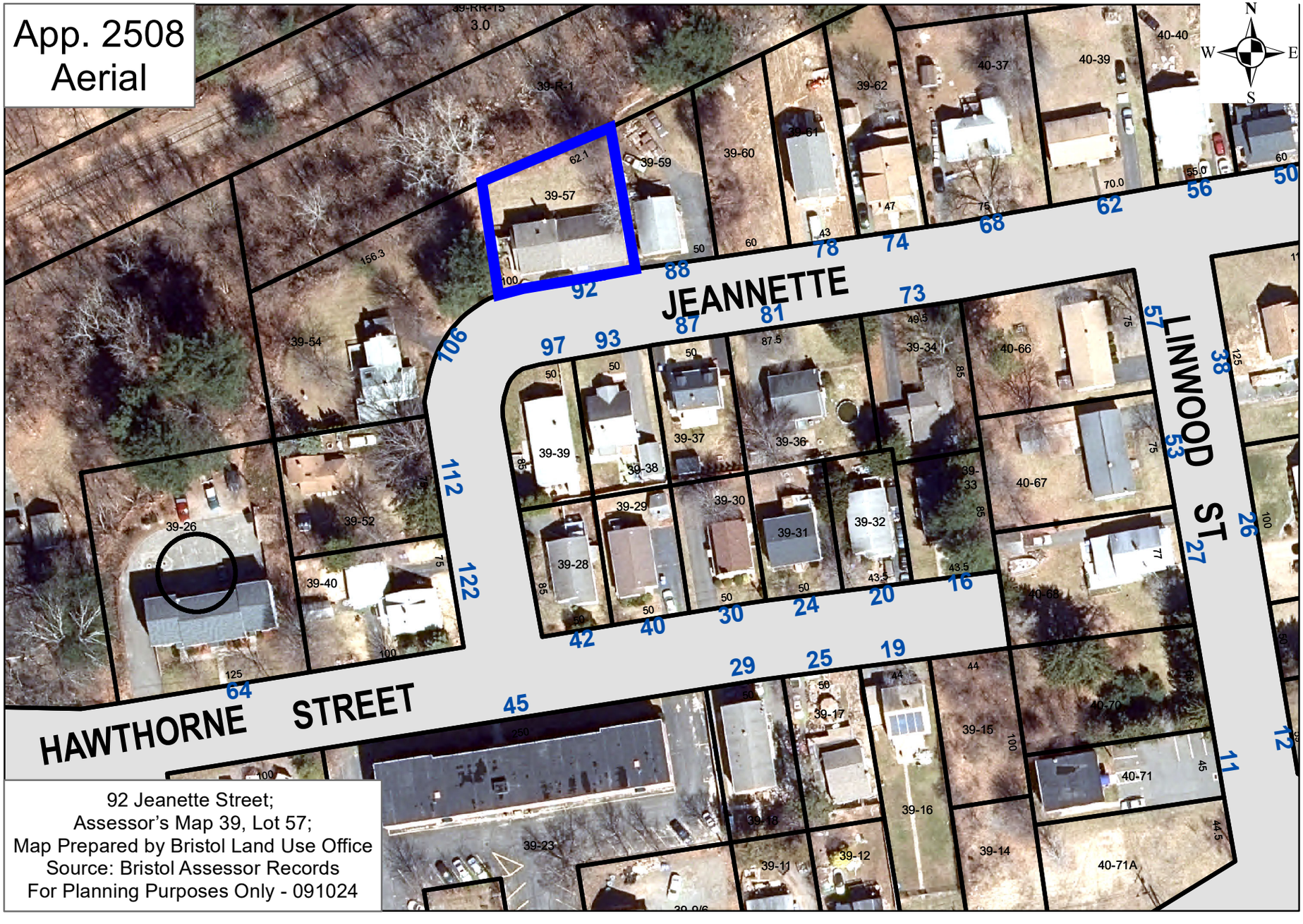
This application is seeking to "formalize" the existing apartment and convert the first-floor shop area into a second apartment effectively changing the use from an industrial property to a two-family residential property. The applicant feels that this conversion to strictly residential use is more appropriate for the neighborhood which is made up of predominately single-family dwellings.

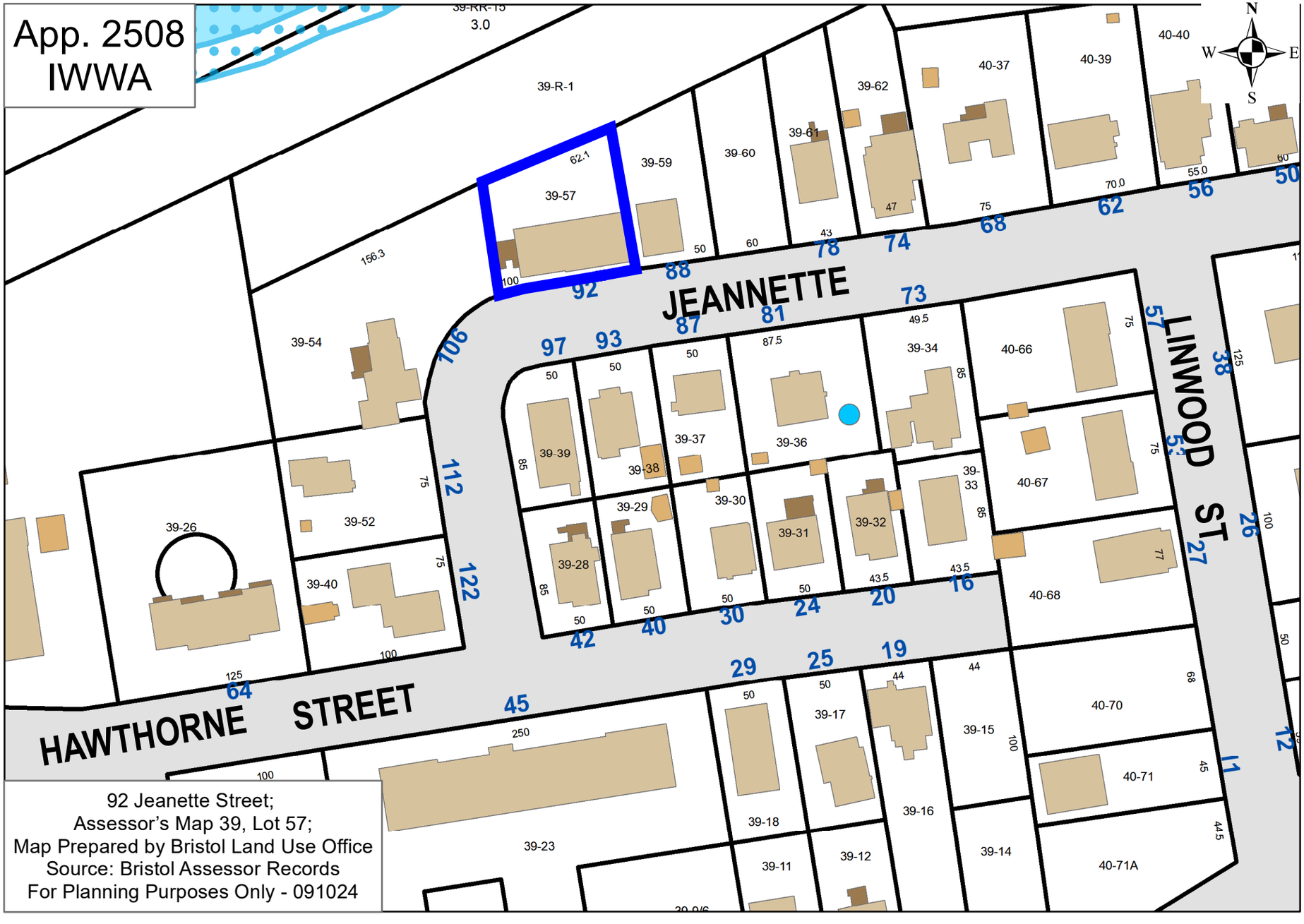
Two of the three existing, street-facing, overhead doors will remain as part of this project, preserving two garage bays and the spaces directly in front of them for resident parking. The remaining asphalt area provides for two visitor parking spaces.

Since no exterior work is proposed as part of the application the request is for a special permit only.


App. 2508
Location
JEANNETTE
LINWOOD ST
HAWTHORNE STREET
39-R-1
39-57
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92 Jeanette Street;
Assessor's Map 39, Lot 57;
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024

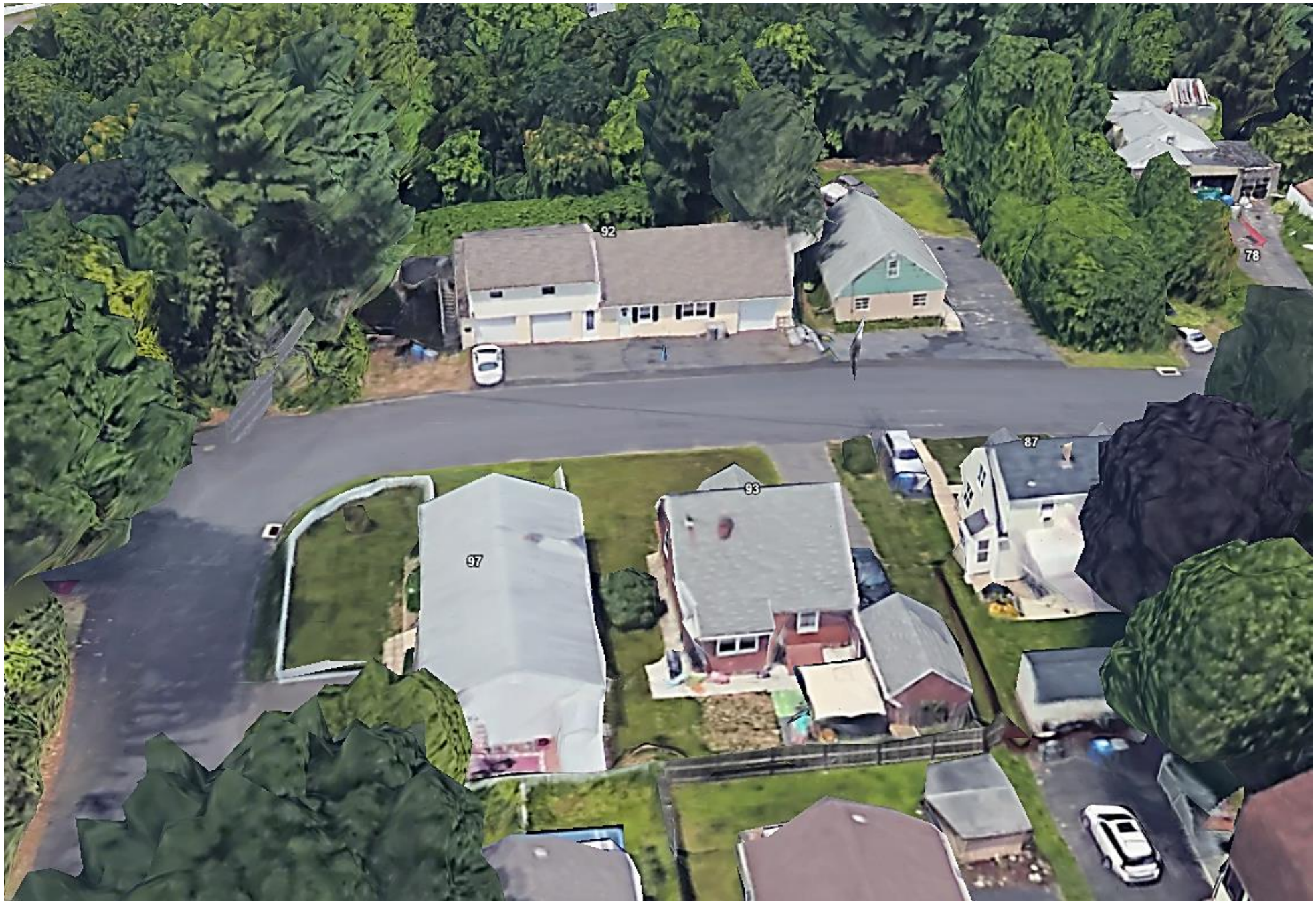

App. 2508
Zoning
39-RR-15
3.0
39-R-1
I
R-10
BN
JEANNETTE
HAWTHORNE STREET
LINWOOD ST
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92 Jeanette Street;
Assessor's Map 39, Lot 57;
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024


App. 2508
Aerial
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JEANNETTE
LINWOOD ST
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92 Jeanette Street;
Assessor's Map 39, Lot 57;
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024

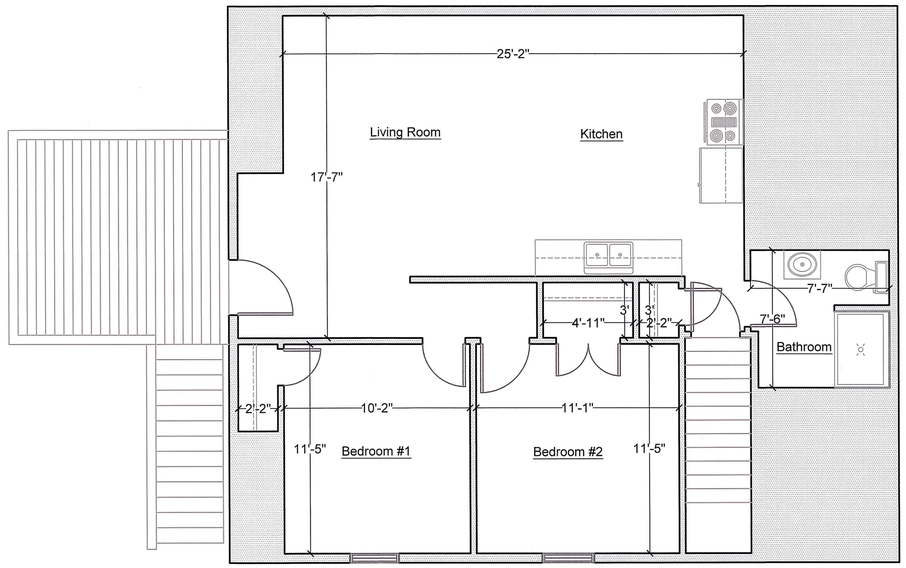

App. 2508
IWWA
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92 Jeanette Street;
Assessor's Map 39, Lot 57;
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 091024

Google Earth

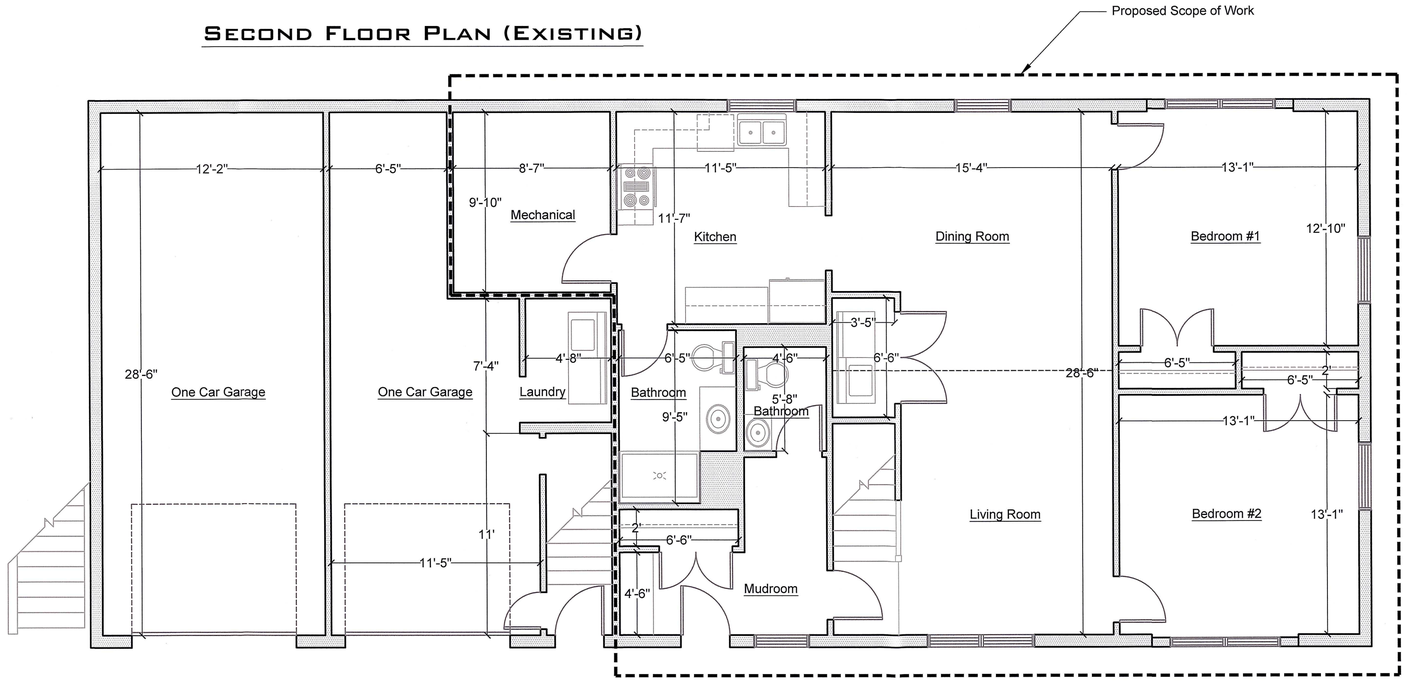

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Floor Plan and Survey



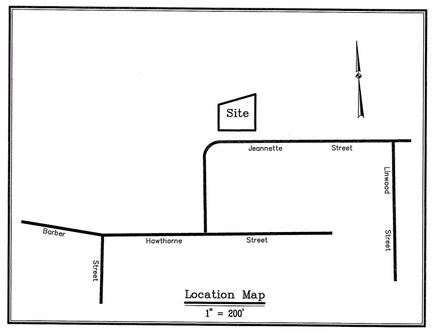
Second Floor Plan (Existing)



First Floor Plan (Proposed)

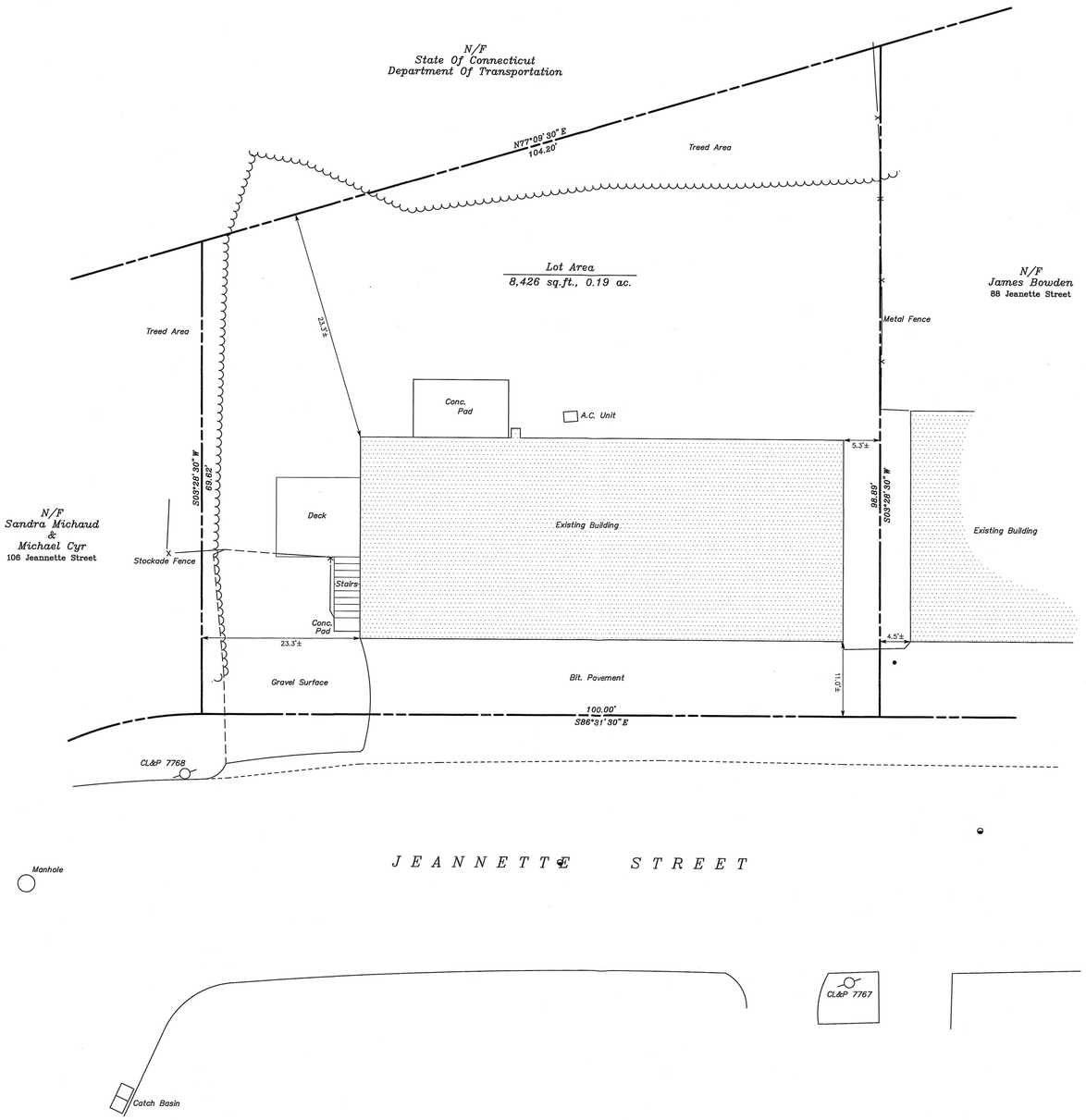
Drawing Title	Scale
Adaptive Reuse of Existing Structure **92 Jeanette Street Bristol Ct**	$\frac{1}{4}$" = 1' - 0"
DPS_CLIENTS_LAFERRIERE_BRISTOL_92 JEANETTE	Project Number 2024-15

D|P|S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



Legend:

- Existing IP
- IP (To Be Set)
- Existing Monument
- Monument (To Be Set)
- Drill Hole
- Utility Pole
- Wire On Ground
- Water Gate
- Gas Gate
- Signs
- Bollard
- Hydrant
- Light
- Handhole
- Mail Box
- Monitor Well
- Existing Trees
- Stonewall
- Fence
- Guide Rail
- Tree Line
- Existing Contour Line
- Existing Spot Elevation
- Approx. Location Of Water Main
- Approx. Location Of U.G. Telephone Line
- Approx. Location Of U.G. Electric Line
- Approx. Location Of U.G. Communications Line
- Approx. Location Of Gas Main



Map References:

1. "Pinehurst Owned By Jordan And Selleck Inc. Land Home Office Bridgeport, Conn. Scale 50ft. 1919".
2. "Todd Heights Property Of The Title Realty And Development Co–Inc, New Britain, Conn. Located On Todd Homestead Off Pine Street Bristol, Conn. Scale 50ft. Aug–1917 David F. Crowley Civil Engineer".
3. "Street Line Map Of Streets Pinehurst & Todd Homestead Tracts Bristol, Conn. Nov. 1930 Scale 1" = 50' Carleton W. Buell, City Engineer".
4. "Map Of Boundary Line Agreement Between Egidio & Theodore L. Baraglia Forestville, Conn. Sept. 1953 Scale 1" = 40' W.C. Lefevre, C.E.".
5. "Map Of Property Owned By Arrow Manufacturing Company Jeanette, Ann & Broad Streets Bristol, Connecticut Scale 1" = 40' Date 12–27–85 By A.F. Lepore, Jr. Associates P.C.".
6. "Compilation Plan City Of Bristol Map Showing Land Acquired From Broad Street, LLC By The State Of Connecticut Deqartment Of Transportation Relocation Of Route 72 February 2003".

General Notes:

1. Bearings based on reference map #5.
2. Underground utility, structure and facility locations noted hereon have been compiled, in part, from record mapping supplied by the respective utility companies or governmental agencies, from parol testimony and from other sources. These locations must be considered as approximate in nature. Additionally, other such features may exist on the site, the existence of which are unknown to this surveyor. The size, location and existence of all such features must be field determined and verified by the appropriate authorities prior to construction. Call Before You Dig 1–800–922–4455.
3. This survey and map has been prepared in accordance with Sections 20–300b–1 through 20–300b–20 of the Regulations of Connecticut State Agencies – "Standards for Surveys and Maps in the State of Connecticut" as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a Limited Property Survey based on a Resurvey conforming to Horizontal Accuracy Class A–2.

ZONING INFORMATION BULK CHART:		
ZONE: R–10	REQUIRED	EXISTING
MINIMUM LOT AREA	10,000 sq.ft.	8,426 sq.ft., 0.19 ac.
MIN. LOT FRONTAGE	85'	100.00'
MIN. FRONT YARD	20'	11.0'
MIN. SIDE YARD	8'	5.3'
MIN. REAR YARD	20'	23.3'
MAX. BUILD. COVERAGE	35%	25.1%

These drawings are the property of the Surveyor and have been prepared specifically for the owner of the Project at this site. They are not to be used for any other purpose, location, or person without the written consent of the Surveyor.

No declaration is expressed or implied unless these plans bear the live signature and embossed seal of the Surveyor whose name appears hereon.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1 inch = 10 ft.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Progress Print
(For Review & Comment Only)
6-19-2024

Gary B. LeClair, L.S. #70017

Zoning Location Survey

Prepared For

Paul J. Laferriere

92 Jeannette Street
Bristol, Connecticut

Map: 39 Lot: 57 Zone: R–10

Gary B. LeClair, LLC
Licensed Land Surveyors
57 ACORN DRIVE
WINDSOR LOCKS, CONNECTICUT 06096
(860) 627–8200

BY	SCALE	DATE	SHEET	CHECKED	NO.
A.B.L.	1" = 10'	6–19–24	1 OF 1	G.B.L.	224011

Public Hearing Extension Request to August 19, 2024

LAW OFFICES

FUREY, DONOVAN, COONEY & DYER P. C.

Timothy W. Furey
Patrick J. Cooney
Matthew D. Dyer

Molly Plante

Charles L. Furey (1923-2004)
Theodore M. Donovan (1932-2020)
William Tracy Jr. (ret)

43 Bellevue Avenue
P. O. Box 670
Bristol, Connecticut 06011-0670
(860) 589-4343

www.fureydonovan.com
Fax No. (860) 583-8674
tfurey@fureydonovan.com

July 8, 2024

City of Bristol Zoning Commission
C/O Robert Flanagan, City Planner
111 North Main Street
Bristol Ct, 06010

RE: Continuance request for Public Hearings on Applications #2494 and #2495

Dear Sirs,

Please accept this letter as a written request on behalf of Applicant, DGG Development, LLC for the continuance of the public hearings for Applications #2494 and #2495 presently scheduled for July 8, 2024 until your August 19, 2024 meeting. In making this request the applicant hereby waives all statutory timeframe requirements until the finalized date of your August meeting. The Commission indicated a traffic study would be helpful and we have engaged Hesketh Associates to prepare a traffic study unfortunately it could not be completed in time for this meeting. Further we are making other site plan adjustments based on the comments received from the Commission and the public.

Respectfully submitted,

Very Truly Yours,

Timothy W. Furey

For Office Use Only	
APPLICATION NO.	2494
DATE FILED:	5/2/24
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SPECIAL PERMIT

The undersigned Applicant hereby applies to the Bristol Zoning Commission for approval under Section(s) Article 2 - Section 9.2.3 of the Bristol Zoning Regulations for the following Special Permit use: Unified Residential Development

Address or Location of the Property: Earl Street, east of Crown Street and West of Melrose Street

Assessor's Map No.: 14 Assessor's Lot No.(s): 72, 73, 74, 75, and 76

Zone of the Property: R-15 / RM Size of the Property (in acres or square feet): .96 acres

Reason for the Special Permit: To construct a Unified Residential Development containing 15 Residential Dwelling Units and associated site improvements

Does this application involve an activity regulated by the Inland Wetlands Agency? [ ] yes [✓] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [ ] yes, on _____ [ ] no

Other comments: _____

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: DGG Development LLC

Address: 21 Cobbs Road City: West Hartford State: Ct Zip: 06105

Telephone No.: (860) 841-6008 E-Mail: nimanjeff@icloud.com

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: Same as applicant

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2494

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Attorney Timothy Furey

Address: 43 Bellevue Avenue City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 589-4343 E-Mail: tfurey@fureydonovan.com

08/17 - LUO

For Office Use Only
APPLICATION NO. 2494

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Development Planning Solutions LLC

Address: 225 North Maon Street Suite 207 City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 506-4268 E-Mail: charlie@developmentplanningsolutions.com

08/17 - LUO

For Office Use Only
APPLICATION NO. 2495
DATE FILED: 5/2/24
DECISION DATE:
DECISION:

CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SITE PLAN APPROVAL

The undersigned Applicant hereby applies for approval of a Site Plan for the following use:

Unified Residential Development, a [ ] permitted use [✓] Special Permit use

under Section(s) Article 2 - Section 9.2.3 of the Bristol Zoning Regulations.

Address or Location of the Property: Earl Street, east of Crown Street and West of Melrose Street

Assessor's Map No.: 14 Assessor's Lot No.(s): 72, 73, 73, 75, and 76

Zone of the Property: R-15 / RM Size of the Property (in acres or square feet): .96 acres

Does this application involve an activity regulated by the Inland Wetlands Agency? [ ] yes [✓] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [ ] yes, on _____ [ ] no

Other comments: _____

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: DGG Development LLC

Address: 21 Cobbs Road City: West Hartford State: Ct Zip: 06010

Telephone No.: (860) 841-6008 E-Mail: nimanjeff@icloud.com

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: Same as Applicant

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

The following shall be included as part of this application:

- filing fee – $310 (includes $60 State fee) *plus* $50 per dwelling unit *plus* $10 per 1,000 sq. ft. or portion thereof of proposed non-residential building (make checks payable to "City of Bristol")
- six paper copies and one digital copy of a Site Plan containing all information required on the Site Plan Requirements Checklist
- a written narrative and any other data and drawings as may be required (e.g., drainage calculations, exterior building elevations)

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

LUO – 01/24

For Office Use Only
APPLICATION NO. 2495

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Attorney Timothy Furey

Address: 43 Bellevue Avenue City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 589-4343 E-Mail: tfurey@fureydonovan.com

1/24 - LUO

For Office Use Only
APPLICATION NO. 2495

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

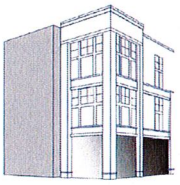
Name: Development Planning Solutions LLC

Address: 225 North Maon Street Suite 207 City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 506-4268 E-Mail: charlie@developmentplanningsolutions.com

08/17 - LUO

Narrative



D | P | S

DEVELOPMENT PLANNING SOLUTIONS LLC.

Project Narrative

Project Title: ECM Gardens

General Information

Project Name: ECM Gardens **Project Location:** Earl Street between Crown and Melrose **Zone:** R-15 / RM **Project Type:** Unified Residential Development **Date Submitted:** May 2, 2024 **Variances Required:** None **Wetlands Approval Required:** No **Special Permit Required:** Yes **Site Plan Approval Required:** Yes	**Developer:** DGG Development LLC **Site Engineer:** Robert Green Associates LLC **Architectural Design:** Development Planning Solutions LLC **Landscape Design:** Development Planning Solutions LLC **Lighting Design:** Wattsaver Lighting Products **Project Consultant:** Development Planning Solutions LLC **Legal Representative:** Attorney Timothy Furey

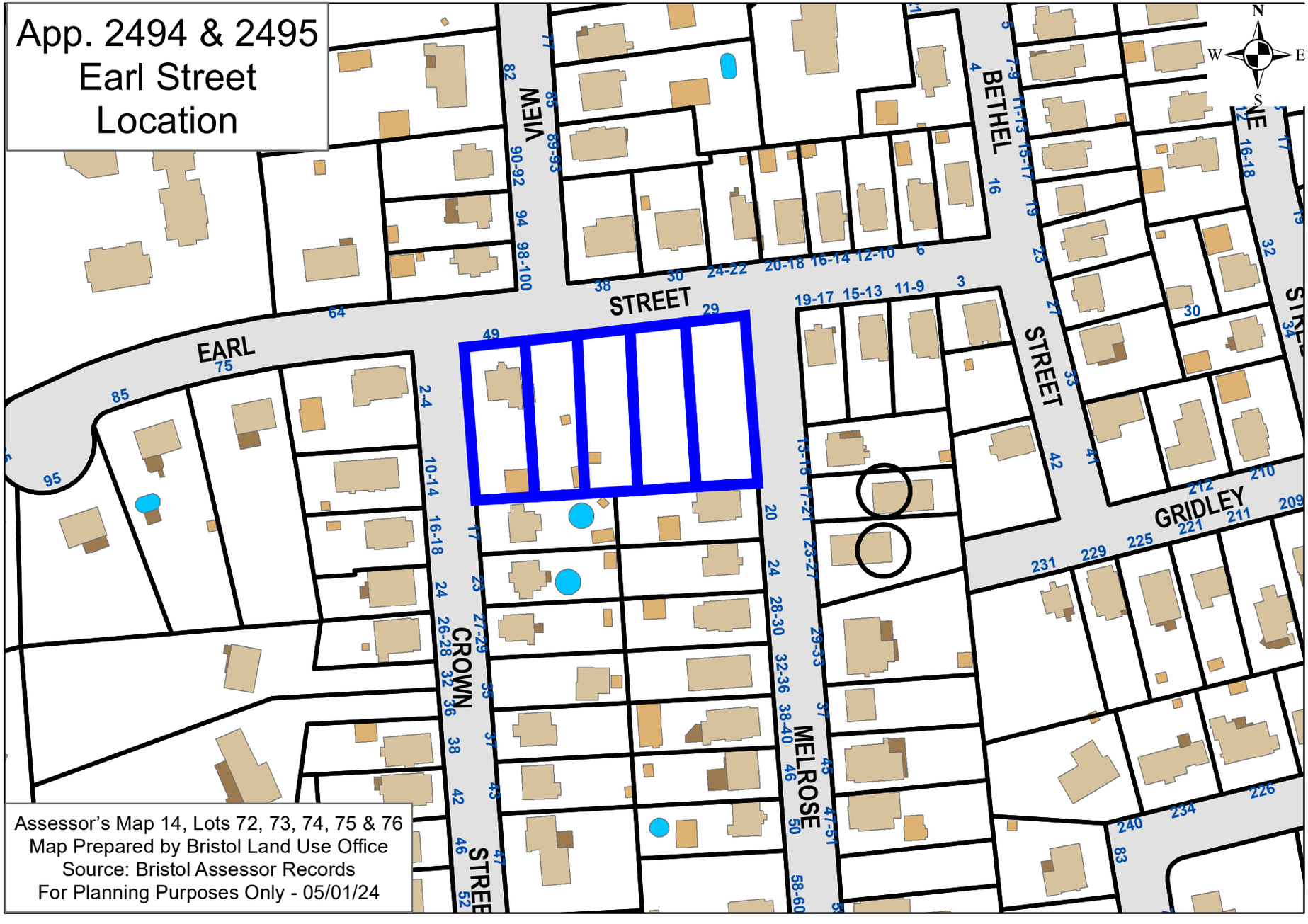
Project Overview

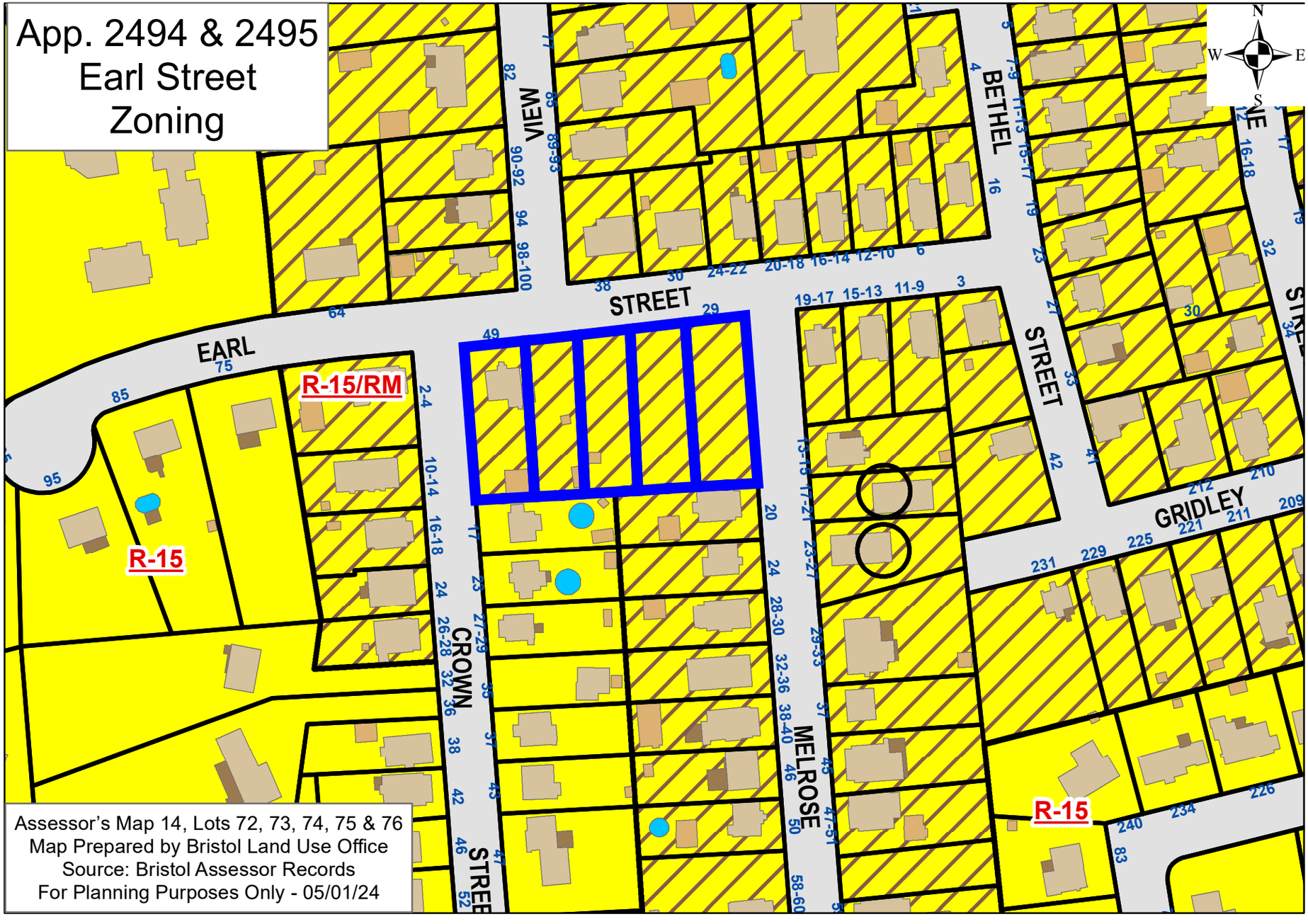
This project calls for the development of a Unified Residential Development containing 15 dwelling units and the associated site improvements. In the current condition, the project area is made up of five building lots which will be merged into a single parcel if approved. The site is uniquely situated within the RM Overlay zone and provides a tremendous opportunity to develop new and modern housing units.

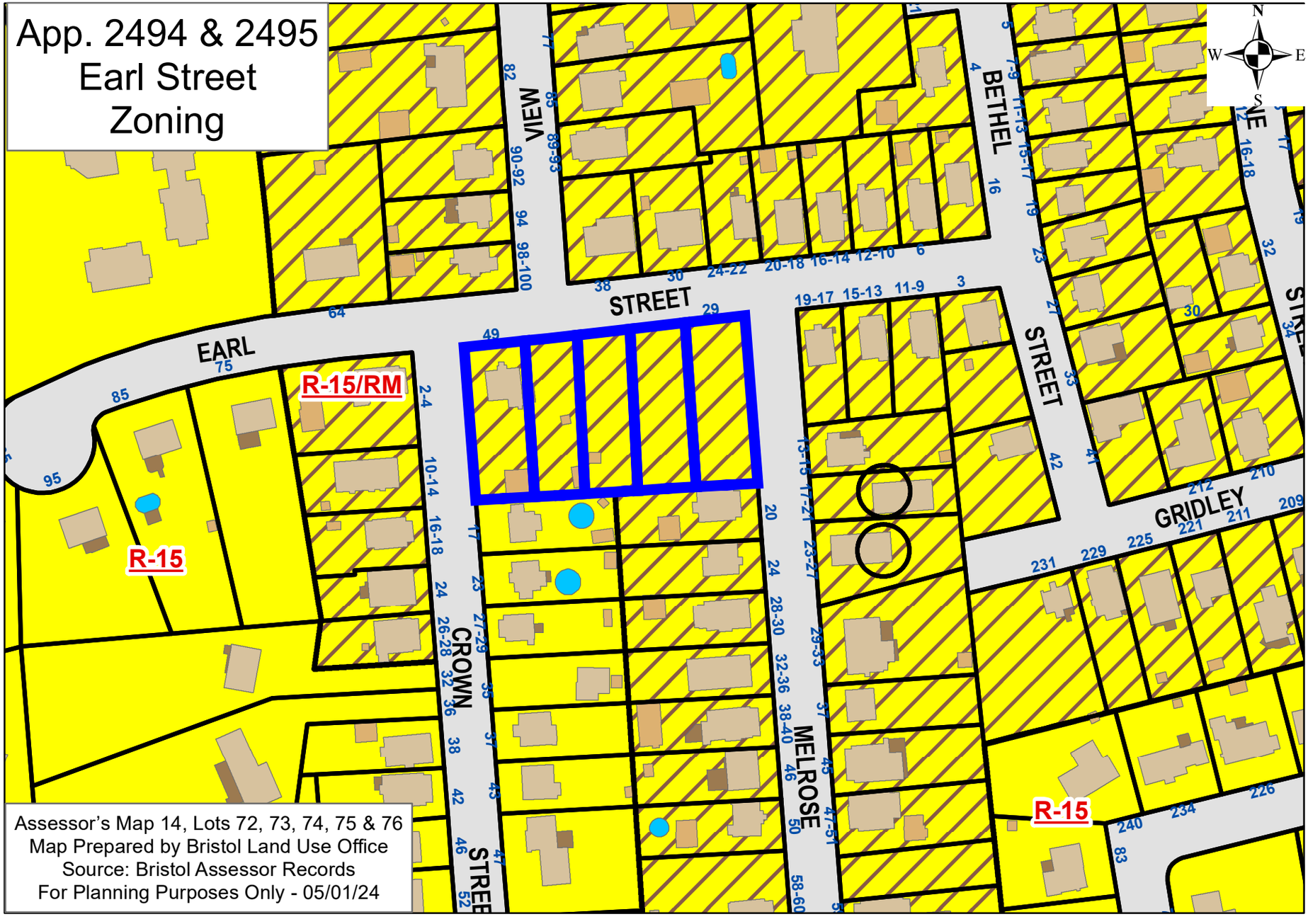
Since the fall of 2023, DGG Development LLC and their design team have been working with the city departments and staff on text amendments to allow Unified Residential Developments in the RM Zone. This plan takes into account all of the provisions of the new regulations and makes efficient use of the property.

The development provides 15 dwelling units, 2 of which are developed as handicapped adaptable units, and 31 parking spaces all on a unified site plan. The site is also served by public water and sewer.

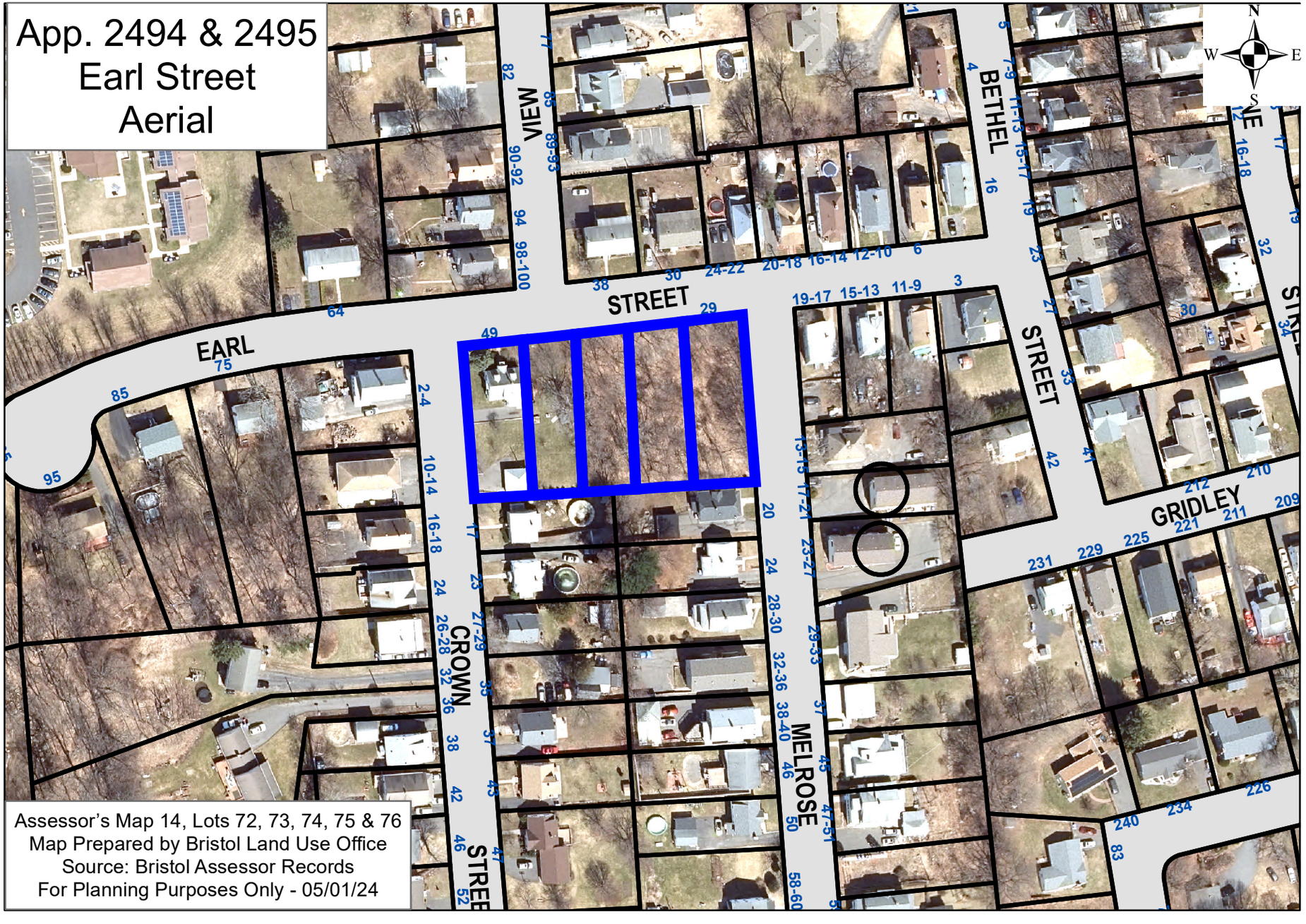
This project will be a phased development beginning in 2024 and have a total construction time of 3 years for all phases.


App. 2494 & 2495
Earl Street
Location
EARL
STREET
VIEW
BETHEL
NE
STREET
GRIDLEY
CROWN
MELROSE
N
W
E
S
Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24

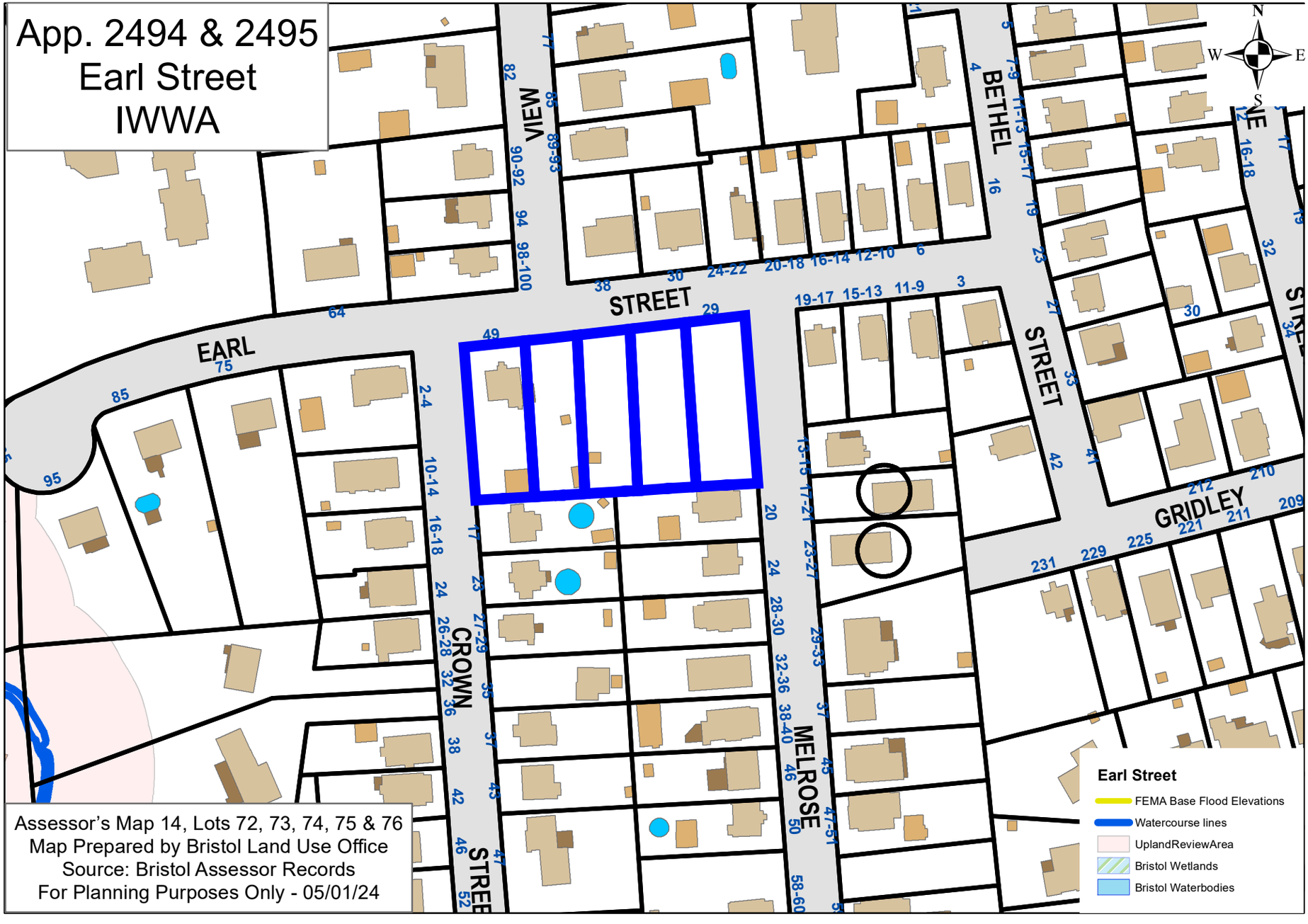

App. 2494 & 2495
Earl Street
Zoning
N
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S
EARL
STREET
VIEW
BETHEL
STREET
NE
STREET
GRIDLEY
CROWN
MELROSE
STREET
R-15/RM
R-15
R-15
Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24


App. 2494 & 2495
Earl Street
Zoning
N
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EARL
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STREET
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R-15
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Assessor's Map 14, Lots 72, 73, 74, 75 & 76
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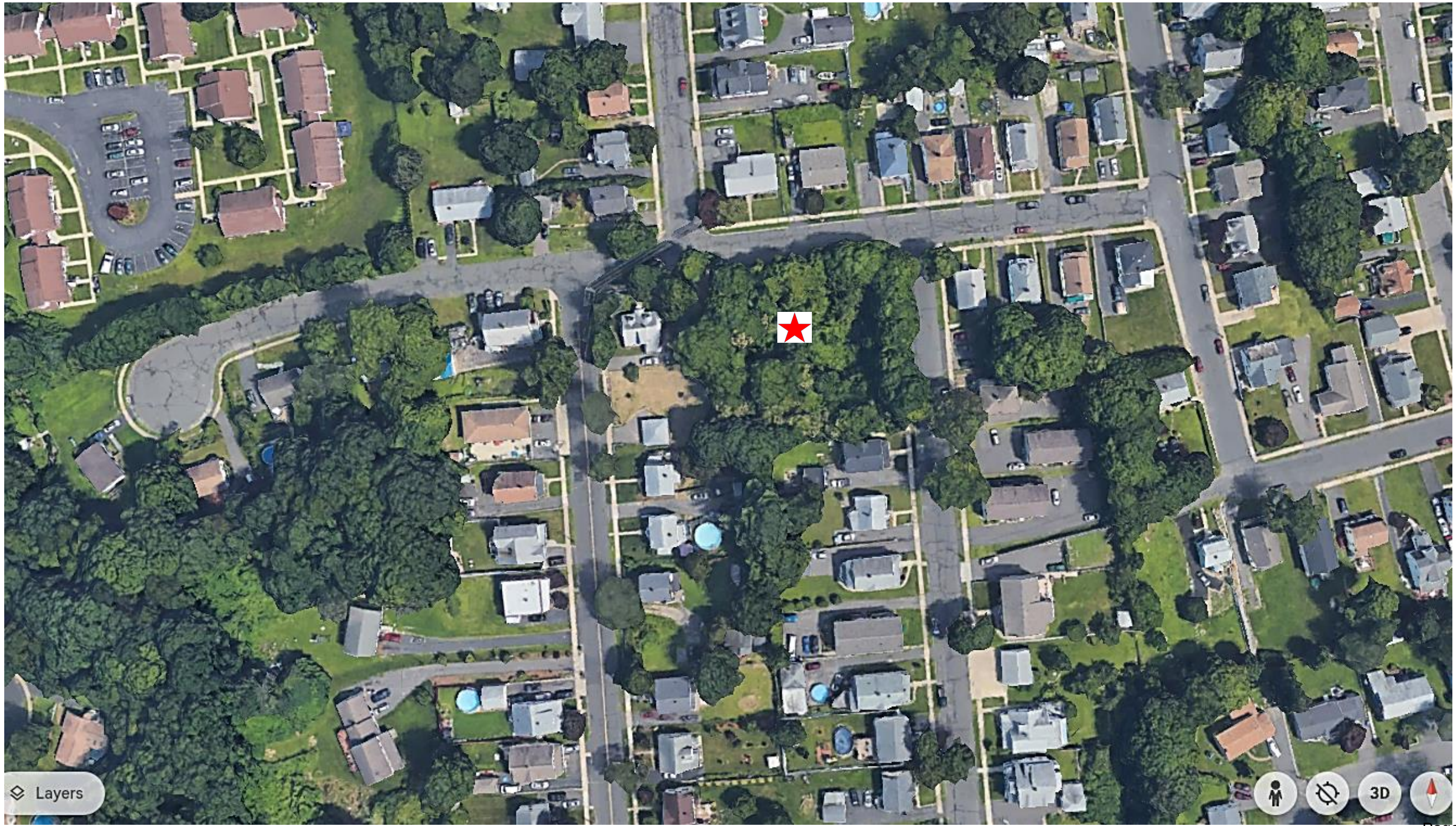
App. 2494 & 2495
Earl Street
Aerial

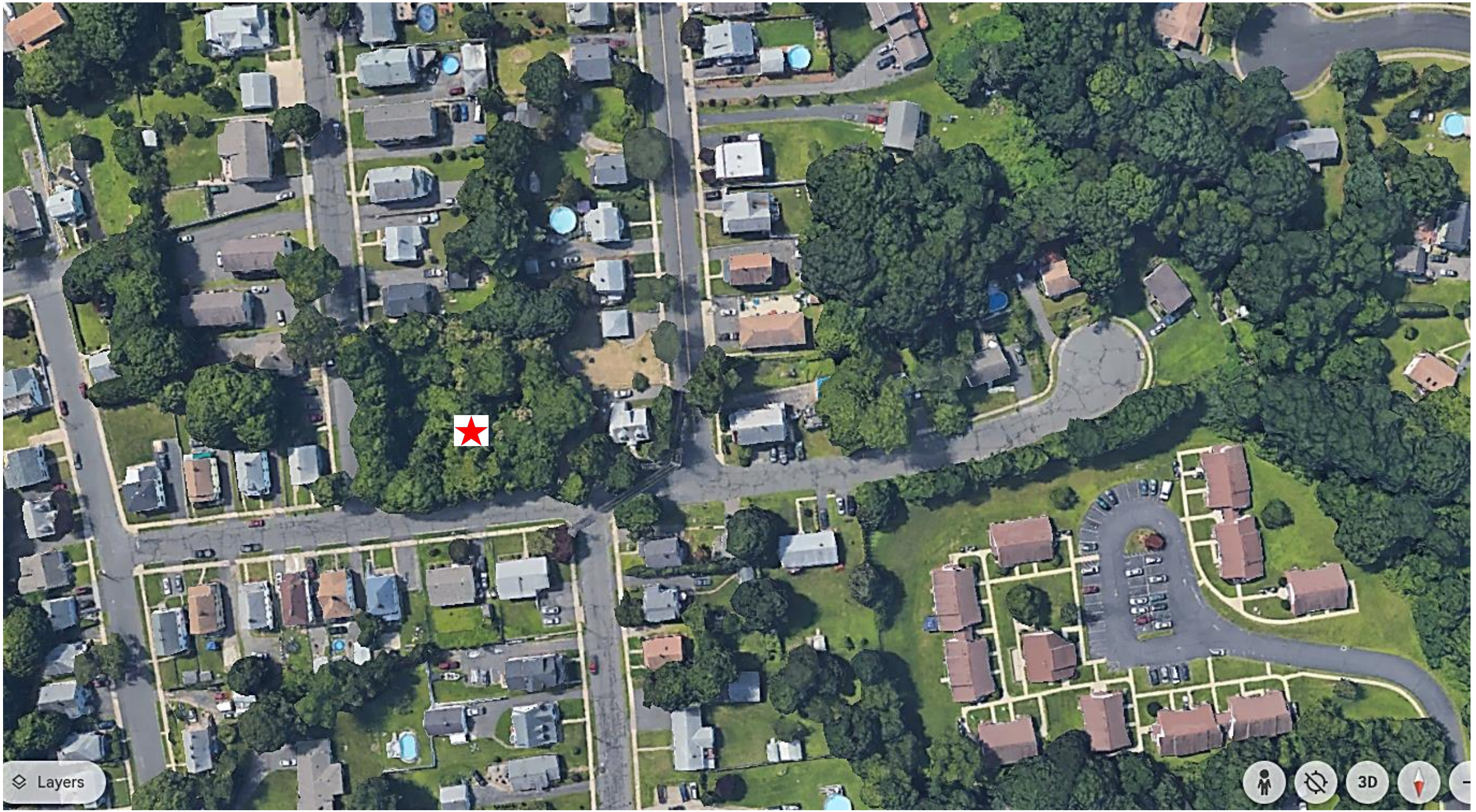


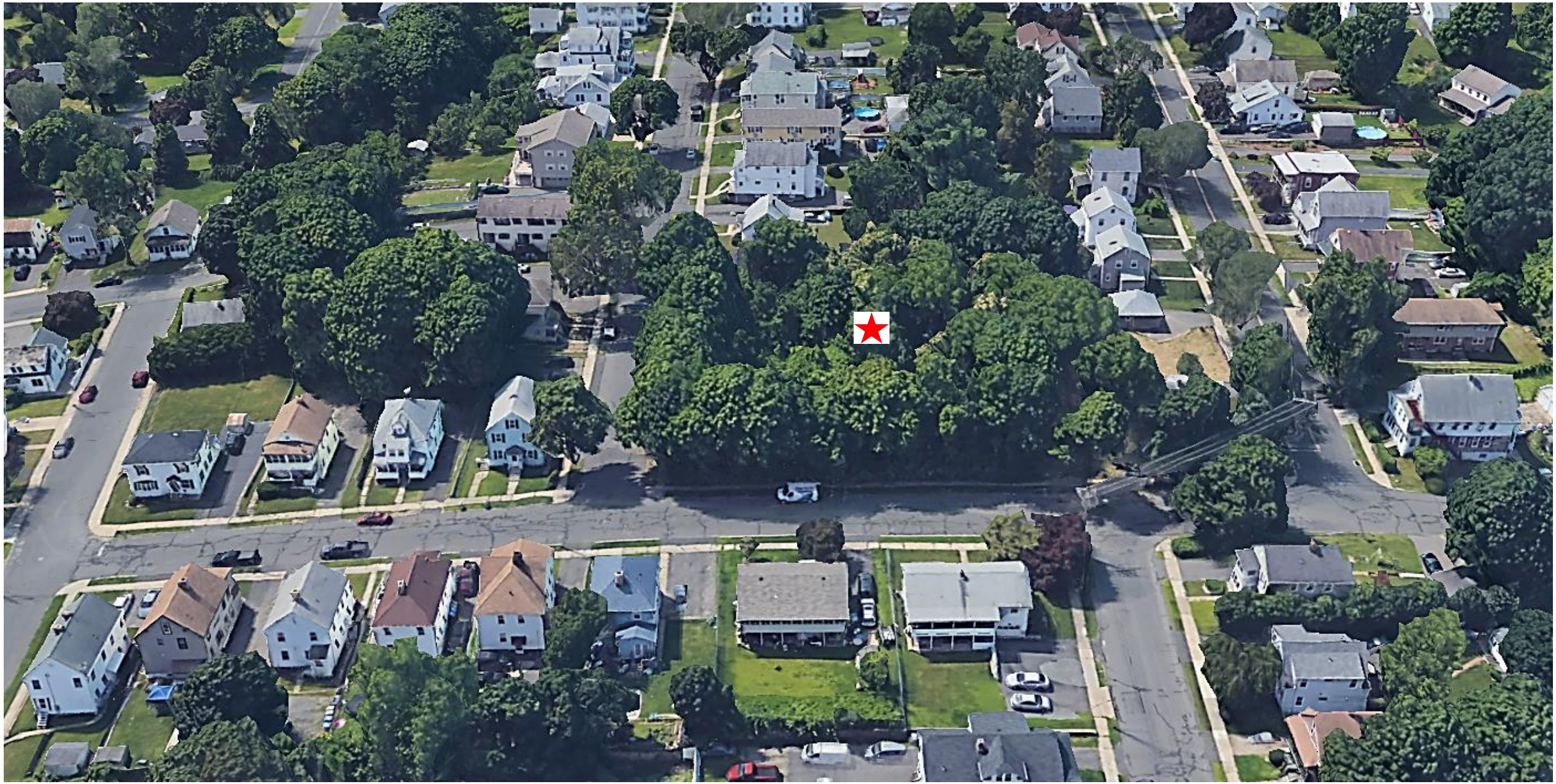
Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24


App. 2494 & 2495
Earl Street
IWWA
EARL
STREET
VIEW
BETHEL
NE
STREET
GRIDLEY
CROWN
MELROSE
Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24
Earl Street
FEMA Base Flood Elevations
Watercourse lines
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies

Google Earth


Layers
3D


Layers
3D



Stormwater Report

SUPPORTING DOCUMENTS

MAP 14, LOTS 72/71, 73/70, 74/69, 75/68, 76/67

EARL STREET, MELROSE STREET AND CROWN STREET

BRISTOL, CONNECTICUT

May 1, 2024



Robert Green Associates, LLC
6 Old Waterbury Road
Terryville, Connecticut 06786

Joseph M. Green P.E.
Reg. No. 0026292

Hyperlink for Stormwater Report:

https://www.bristolct.gov/DocumentCenter/View/46670/2024_05_01_Supporting-Documents-Report_Total

Site Plan Comments

CITY OF BRISTOL
SITE PLAN REVIEW COMMITTEE
SECOND REVIEW STAFF
COMMENTS - 2495

SITE PLAN: "ECM Gardens" Unified Residential Development (15 Units) at Earl Street, East of Crown Street and West of Melrose Street; *Plans Dated: May 1, 2024; Date of Committee Review: 5/23/24 (first review); 8/12/24 (second review)* .

ENGINEERING/PUBLIC WORKS (Ray Rogozinski):

1. The proposed grading plans shows an elevation differential of over 6 feet between the finished floor on buildings 1-3 and Earl Street, please provide sections on how the grading will work in this area, along with how the base for the wall is being constructed along Earl Street as shown on the detail on sheet 11. Also, the northeast corner and southeast corner of the wall on Earl Street needs to be evaluated to determine the impact on intersectional sightline for the adjoining streets. This may require plan modifications. Verify whether fencing or railing is required on Top of the walls (elevation difference of up to 3.5 feet), While the placement of railings/fencing may not be required, consider adding some along the walls, due to the drop off risk and proximity to the buildings access points.

7/31/24 Applicant Response: The proposed retaining wall along the sidewalk has been eliminated from the proposed plan.

8/12/24 City Response:

2. Provide retaining wall detail along sidewalk. DPW Engineering concerned installation of retaining wall will undermine existing sidewalks. In addition, the detail also shows a drain on the backside of the wall. Show how the storm water in this area will be prevented from running over the wall.

7/31/24 Applicant Response: Buildings 1,2 and 3 were moved 7ft south to eliminate the need for a retaining wall and the ground will slope down to Earl Street. The wall and buildings have been removed from the 25' visibility arc at the intersections of the adjoining streets.

8/12/24 City Response:

3. In looking at the detail for the retaining wall it would appear that there will be approximately an additional foot needed to build it with the offset blocks, the wall should be shown the account for this.

7/31/24 Applicant Response: The proposed retaining wall along the sidewalk has been eliminated from the proposed plan.

8/12/24 City Response:

4. In accordance with City Ordinance maintenance of sidewalks are the responsibility of the property owner. Based on an inspection of the sidewalks by DPW Engineer, approximately 75% of the sidewalk is in need of replacement. Coordinate meeting with DPW Engineering Sidewalk Inspector and revise plans See plan marked up by DPW Engineering indicating existing sidewalk section in need of replacement as part of proposed project. The proposed plan also indicates roadway curbing replaced as part of driveway & closure utility. Due to limits of disturbance DPW Engineering plan indicates curbing to be replaced.

7/31/24 Applicant Response: See Sheet 3 "General Notes for Site Plans, City of Bristol", note #7.
"Any existing damaged sections of sidewalk and/or curbing as a result of construction along streets abutting the site shall be identified and replaced at the direction of the Bristol DPW Engineering Division. The Applicant shall contact the Bristol DPW Engineering Division to schedule inspection."

8/12/24 City Response:

5. Provide spot elevation along the southern property line to clarify limits of grading. Field locate stake property line prior to construction to avoid encroachment. In addition, provide spot elevations on the north and south edges of the entrance drive on Crown Street to verify that the standard city cross section is met for the sidewalk and driveway apron.

7/31/24 Applicant Response: Agreed, See Sheet 3 "Construction Sequence" item #4 requiring property line stakeout. See sheet 7 for additional spot elevations at the entrance drive and sheet 11 for the concrete apron detail.

8/12/24 City Response:

6. All yard drains/surface drains shall have a minimum 12 inch dia. Storm drainage piping within the roadway shall be 15 inches.

7/31/24 Applicant Response: Agreed. See sheet 6.

8/12/24 City Response:

7. To eliminate proposed patches of roadway curbing along Crown St due to driveway closures and utilities install new curbing along property frontage of Crown Street to Earl Street.

7/31/24 Applicant Response: See Sheet 3 "General Notes for Site Plans, City of Bristol", note #7.
"Any existing damaged sections of sidewalk and/or curbing as a result of construction along streets abutting the site shall be identified and replaced at the direction of the Bristol DPW Engineering Division. The Applicant shall contact the Bristol DPW Engineering Division to schedule inspection."

8/12/24 City Response:

8. Provide phasing plan (if applicable).

7/31/24 Applicant Response: Will do.

8/12/24 City Response:

9. Recommend increasing planting on proposed landscaping plan.

7/31/24 Applicant Response: Revised Landscaping Plan will comply with Section 11.1.3

8/12/24 City Response:

10. There are no plans included for buildings 4 and 5. Will these building have access on the south side. In this area put a note swale to drain along the southern border.

7/31/24 Applicant Response: Buildings 1, 2, and 3 are identical. Buildings 4 and 5 are mirrored. Floor Plans and Elevations have been submitted for each building type. Grade to Drain added, see sheet 7.

8/12/24 City Response:

11. Provide location for mail boxes.

7/31/24 Applicant Response: Done. Community mailbox provided on Interior Island, see sheet 5.

8/12/24 City Response:

12. On-site parking should be calculated based upon the new regulations in section 13.

7/31/24 Applicant Response: Parking Calculation for Unified Residential Developments in RM Zones is established in Section 9.2.3.b.6. 2 spaces per dwelling unit. Plan is compliant.

8/12/24 City Response:

13. Note section 13.3 EV parking requirements.

7/31/24 Applicant Response: Infrastructure for E.V. Chargers to be added, spaces to be identified.

8/12/24 City Response:

14. Drainage report, reduce indicate CN value for existing conditions for wooded areas. Provide test hold data to confirm the subsurface drainage will perform as designed. Calculated flows appear low, in part based on rainfall input being lower that CT DOT standards Contour Area of 1,264 appears higher than proposed plan. Contact DPW Director at 860-584-6113 to discuss.

7/31/24 Applicant Response: Will do.

8/12/24 City Response:

15. Provide Engineered design (PE) of retaining wall prior to final sign off (if approved).

7/31/24 Applicant Response: Will do.

8/12/24 City Response:

CITY PLANNER (Robert Flanagan/Andrew Armstrong):

1. Are there any designated visitor parking spaces?

7/31/24 Applicant Response: There is 1 visitor space.

8/12/24 City Response:

2. Label retaining wall height on site plan. Detail sheet says 6 feet. Please clarify.

7/31/24 Applicant Response: The proposed retaining wall has been eliminated from the proposed plan.

8/12/24 City Response:

3. Provide landscaping along Earl Street.

7/31/24 Applicant Response: Revised Landscaping Plan will comply with Section 11.1.3

8/12/24 City Response:

4. Provide details/height of retaining wall to South.

7/31/24 Applicant Response: Engineered design (PE) of retaining wall will be provided prior to final sign off (if approved).

8/12/24 City Response:

5. Provide landscape buffer per Article III, Section 11.1.5 & Article II, Section 9.E.(7).

7/31/24 Applicant Response: Applicant is proposing a 6-foot solid vinyl privacy fence in accordance with Section 11.1.5.E.

8/12/24 City Response:

6. Provide details of 4,800 square feet of functional open space.

7/31/24 Applicant Response: Will do. Compliant Table to be added to plan.

8/12/24 City Response:

7. Handicap parking spaces indicate a curb. Please show an accessibility ramp on both sides.

7/31/24 Applicant Response: See sheet 5 "Layout Plan" for ramp location. See sheet 7 "Grading Plan" for Top and Bot. of curb elevations for transitions between flush and full depth curb. See Misc. Notes and Details sheet #10 for isometric view of accessible parking area.

8/12/24 City Response:

8. How many stories is each building?

7/31/24 Applicant Response: Two stories.

8/12/24 City Response:

9. Will the internal pathway provide for accessibility to the sidewalk?

7/31/24 Applicant Response: Internal sidewalk from handicap parking area is accessible to a unit that is adaptable as required by the 2021 Connecticut State Building Code Section R320.3 – Multi-Story Townhouses.

8/12/24 City Response:

10. Buildings #4 & #5 have an associated accessible parking space nearby, and show stoops including stairs. Will these units be accessible?

7/31/24 Applicant Response: Internal sidewalk from handicap parking area is accessible to a unit that is adaptable as required by the 2021 Connecticut State Building Code Section R320.3 – Multi-Story Townhouses.

8/12/24 City Response:

11. Indicate the 6-foot-high fence at southern property line on the landscape sheet.

7/31/24 Applicant Response: Will revise.

8/12/24 City Response:

12. Solid fence screening for the dumpster is a Commission decision.

7/31/24 Applicant Response: See Misc. Notes and Details sheet #10 for dumpster enclosure detail. Dumpster enclosure provides chain link fence with black vinyl privacy slats.

8/12/24 City Response:

13. Indicate a "no-parking" sign along the internal accessway.

7/31/24 Applicant Response: Interior parking will be enforced by property management.

8/12/24 City Response:

14. Are any units planned to be "affordable"?

7/31/24 Applicant Response: No

8/12/24 City Response:

15. Where will mailboxes be located?

7/31/24 Applicant Response: Done. Community mailbox provided on Interior Island, see sheet 5

8/12/24 City Response:

16. Provide details of proposed stoops.

7/31/24 Applicant Response:

8/12/24 City Response:

17. Show corner lot visibility triangles on site plan.

7/31/24 Applicant Response: Porches shown on Submitted building plans.

8/12/24 City Response:

18. Parking of over 30 spaces requires a Level 2 EV charging station. Please provide this on the site plan.

7/31/24 Applicant Response: Will do. The wall and buildings have been removed from the 25' visibility arc at the intersections of the adjoining streets.

8/12/24 City Response:

19. Will this project be phased?

7/31/24 Applicant Response: Yes, Phasing Plan to be submitted.

8/12/24 City Response:

New Comments – 081224

20. What are the number of bedrooms proposed?

21. What are the number of parking spaces proposed?

22. Contrast and compare this development with the BT Unified Residential Development recently approved at the corner of Haviland and West; 22 bedrooms (11 unit's w/2 bedrooms per unit) and 28 parking spaces. The Haviland application used the standard parking requirement of Unified Residential Developments.

23. The existing parking requirements for a Unified Residential Development provide for adequate parking; the new Regulation in the RM calls out its own parking requirement and that is the basic error in this Regulation. You have 47 bedrooms and 32 parking spaces.

24. The 20' ft. landscape buffer has not been provided.

25. The proposed landscaping is totally inadequate from a design perspective given the number of mature trees that would be removed. Section 9.2.3.E.4 states "Site design should endeavor to preserve existing site characteristics including mature trees, rock outcrops, and significant views."

BUILDING/ZONING ENFORCEMENT (Richard Brown)

1. No comments from Building/Zoning Enforcement at this time.

POLICE DEPARTMENT (Lt. Krajewski/Sgt. Ouellette)

1. No comment at this time.

FIRE MARSHAL (Kristopher Lambert):

1. Is there an update on the fire hydrant placement?

WATER DEPARTMENT (Paul Keegan/Rob Longo)

1. (Sewer) Each individual unit will need its own sewer lateral to the sewer main. The current plan has 1 lateral per building.

7/31/24 Applicant Response: Plan to be revised per conversation with the Water Department 6-10-24.

8/12/24 City Response:

2. (Water) The plan does not show a Tee with a valve on Melrose Street or Crown Street.

7/31/24 Applicant Response: Acknowledged.

8/12/24 City Response:

3. The plan does not show curb stops to each unit, required.

7/31/24 Applicant Response: Acknowledged.

8/12/24 City Response:

4. Building #1 shows a water line from Earl Street?

7/31/24 Applicant Response: Acknowledged.

8/12/24 City Response:

Letters from Neighbors

From: David Cummings [mailto:dave.cummings81@gmail.com]

Sent: Saturday, June 8, 2024 10:41 PM

To: Andrew Armstrong <AndrewArmstrong@bristolct.gov>; Robert Flanagan <RobertFlanagan@bristolct.gov>

Subject: Earl, Crown and Melrose Streets (application numbers 2494 and 2495)

Town planning committee

My apologies that I could not be present for the meeting on Monday 6/10, due to a prior standing commitment every Monday evening that I have to attend. However, I ask that the committee please take into consideration some of the concerns and questions that I myself, and several neighbors, have regarding the proposed development at Earl, Crown and Melrose Streets (application numbers 2494 and 2495).

1.) Traffic issues:

With the proposed units being 3 bedroom units, the likelihood of each household having 2 or more vehicles is great, not to mention visitor's vehicles. The proposed area of development has 3 intersections in close proximity to each other (Crown St./Earl St., Earl St./View St., Melrose St./Earl St.). With the potential of an additional 30 vehicles coming in and out of this area, as well as added people using street parking, this would overly congest the area and make it more unsafe. This area already has a higher than normal car volume because of the nearby Bristol Central High School, of which Crown St. serves as an exit for. Added volume would no doubt make it more unsafe for the students walking to and from school, in addition to everyone else.

2.) Not consistent with housing in nearby community:

Most of the housing on these streets are single family or multi family houses. While there are some similar condominiums with 3 units to a building, there are none that bunch 5 buildings together, they are more evenly dispersed.

3.) Type of housing:

Will these be strictly rental properties or owner occupied? Or possibly subsidized? Again, keeping with the consistency of the housing nearby, single family homes and many of the condominiums are owner occupied. While there are some housing units being rented out, many of the multi family homes are owner occupied as well. A 100% rental property of 15 units would not be consistent with the area, likely having an impact on the dynamics of the area and devaluing nearby properties.

Being a resident of the neighborhood, I appreciate that this area is not strictly one-family residences. I myself live in a two family home on Melrose Street that I purchased with my wife in 2020. However, a project of the scale that is being proposed is what I would call very aggressive for the neighborhood it's going to be in. I think a scaled back version of this proposal would perhaps be more fitting for the area and would mitigate some of the problems I foresee.

In view of our concerns, we ask you consider the following adjustments to the project:

1.) Scale down the amount of units. This would lower traffic congestion and allow for more off street parking.

2.) Designate more areas on the nearby streets to No Parking areas. Particularly the property area bordering of Earl St., Crown St., and Melrose St.

3.) If this project is planned for rental property, limit that to no more than 50% of the units. We don't support subsidized / section 8 housing for this area. There are plenty of areas in the downtown that could be used for that and are more suitable.

Thank you for your consideration,

David & Erin Cummings

15 Melrose St, Bristol, CT 06010

City of Bristol Commissioners
Bristol City Hall
111 North Main Street
Bristol, CT 06010

June 15, 2024

RECEIVED
JUN 20 2024
MAYOR'S OFFICE
CITY OF BRISTOL, CT

Re: Empty Lot on Earl Street

Dear Commissioners,

This Letter is to address my concerns regarding the empty lot on the corners of Earl Street and Melrose Street, and Earl Street and Crown Street.

My first concern is the traffic, especially on Crown St. Traffic on Crown St. is already extremely dangerous because of the high school. Traffic is backed way up on Crown St. with cars bringing their kids to/from school. There are large school busses driving up and down this narrow road with multiple stops. There are also many cars that pull over to the side of the road to drop off/pick up their kids, forcing other cars and busses to go around them, and also making it very difficult for drivers to see children crossing the road. Quite a few times I've seen cars go speeding up on the LEFT side of the street to get passed the long line of traffic. Through all this, many children are walking to and from school in the road because there are no sidewalks in spots, especially near the school, or standing on the side or the road at their bus stops.

I feel that dumping 30 additional cars out on to Crown St. will make the situation so much worse. As mentioned by others at the June 10th meeting, there have already been many accidents in the neighborhood, including fatalities. It was mentioned at the meeting that the owner feels that having the one entrance/exit on Crown St. is better than having multiple entrances/exits on Melrose St., Earl St. and Crown St., but I disagree, and I believe the rest of the neighborhood feels the same way. As much as we don't want any additional traffic in the neighborhood, I believe that splitting up the cars onto multiple streets would be better than dumping all the cars out onto Crown St. Adding to our concerns, we were informed that there will only be 1 parking spot available to visitors of these 15 families, forcing the visitors of 14 families (or more, if 1 family has more than 1 visitor) to park along the sides of our narrow roads. I feel that having 5 separate multi-family houses would work out better, since there could be 5 long driveways along the sides of each house, providing enough room for tenants and visitors.

This is very much a residential neighborhood that unfortunately already has a lot of traffic. Cars trying to avoid the Route 69 and Route 72 traffic cut through our neighborhood, making Gridley St., Earl St., View St., Crown St. and Melrose St. extremely dangerous for our children in this residential neighborhood.

The attorneys mentioned at the meeting that they did the same thing at the bottom of Willis St. and it worked, but that is a completely different neighborhood. South St., which is at the bottom of Willis St., is a very busy, wide street designed for a lot of traffic. People moving into that neighborhood know to expect a lot of traffic. Our neighborhood is not designed for a large amount of traffic. At the June 10th meeting it was suggested that a traffic assessor (not sure of the title) could come out to assess the amount of traffic. I think that step should be mandatory, at the very least.

My other concern is the dumpsters. We were informed that there will be 2 large dumpsters with lids at these apartments, being emptied twice a week. Adding to an already problematic traffic situation, large trucks will be driving on our narrow streets twice a week to empty these dumpsters, causing loud noise from the crashing lids. I believe our neighborhood would prefer 15 garbage cans (5 per street) out on the roads instead of 2 large dumpsters.

The safety of our children is my main concern. Apparently these owners have owned this property for the last five years. Throughout this time there have been many issues. In the winter the sidewalks are ALWAYS a sheet of ice. On rainy days, and days following rainy days, the sidewalks are so full of mud that my son has actually slipped on the mud and fallen. Last summer he came home from school almost every day covered in ticks because the overgrowth grew out onto the sidewalks and, unless you walked in the road, there was no way to walk by and avoid ticks. I finally had to tell my son to cross over to the other side of the street before he gets to this property and to stay away from this property when he's walking home from school. If it was that bad over these last five years, how can we be sure it'll be properly maintained in the future? I certainly don't want to stereotype all landlords who don't live at their rental properties.....I'm sure there are many great ones.....but judging by these last five years, these owners appear to have the characteristics of slumlords. There are already a handful of multi-family houses in this neighborhood owned by landlords who don't live there and the tenants at these properties are always loud, throwing parties with a lot of drinking and drugs, with no respect for the neighborhood or the property. We certainly don't need more of this. A little over ten years ago I fought extremely hard to clean up our neighborhood from this type of behavior. We had one house on Earl St. (across from my house) who threw loud parties all day, every day, from about 7 a.m. to midnight. Earl St. looked like a McDonald's drive-thru with cars lined up in the road, waiting to pull into the driveway to buy drugs from this house. The loud yelling, foul language, drug use and drug dealing, and the overall environment forced our families to keep our children inside all the time, unable to go out and play. It took many years of working closely with the police chef to finally get this family to move out of our neighborhood. I absolutely LOVE our police department and I don't mean to speak negatively of them, but back when this was going on I once asked a police officer, after being told by him that there was nothing he could do, what he would do if he lived next to this person and his reply was "that's why I don't live in Bristol"! I don't want people to think of Bristol that way, and I especially don't want that for our quiet neighborhood again. And I feel that by allowing this complex into our neighborhood, which is owned by property owners who don't care about the neighborhood, we are just inviting families like this back into our family-oriented neighborhood.

I thank you for your time and attention to this matter.

Sincerely,

Tara Ilic
6 Earl Street
Bristol, CT
860-977-9111

Robert Flanigan

This petition aims to halt the proposed development of ECM Gardens on Earl, Melrose & Crown Street in Bristol, CT, by DGG Development LLC. The development plan has raised numerous concerns among local residents due to potential negative impacts on our community. These include increased traffic congestion, strain on local resources and infrastructure. The addition of this large-scale development could significantly distrupt our peaceful community life. This property was originally zoned for 5 single family dwellings. Who changed the zoning regulations. This parcel of land which is less than one acre would not support this property development.

Will it be owner occupied?

Who maintains the property?

Rubbish & Snow removal?

Drainage issues in this neighborhood?

Daily school buses and student traffic issues?

We urge city officials to reconsider this proposal and seek alternatives that will respect the needs and wishes of Bristol's residents while promoting sustainable growth for our city.

Please sign this petition if you agree that we should preserve our community's character and quality of life.

Petition

	Date	Name	Address
1.			72 View St
2.			51 View St
3.			57 View St.
4.			71 View ST.
5.		Eleanora Mercier	82 View St.
6.			90 View St.
7.			92 view St.
8.		Doris Pelletier	14 Field St.
9.	6/12/24	Taylor Mazelka	16 field st
10.	6/13/24	William Geary	26 Field St
11.		Kenneth C. Hawes	33 FIELD ST
12.		Angelina Furniss	19 Field St
13.		Hollis Laviero	239 Divinity St.
14.			29 MELROSE ST.
15.			38 Earl St.

Petition

Date 6/30 Name	Address
1. Elizabeth Beattie	17 Crown Street
2. Justine Pratt	23 Crown St
3. Gregory Weaver	24 Crown St
4. Grattan Farrell	29 Crown St
5. Rita Krugenberg	39 Crown ST
6. Amanda J. Weaver	38 Crown St
7. Brenda Dallaire	42 Crown St
8. Glenn Dallaire	42 Crown St.
9.	75 Crown St
10.	91 Crown St
11. Judy L. Palma	112 Crown St
12.	121 crown street
13.	148 Crown Street
14.	148 Crown St
15.	129 Crown St
16. John J. Scalia	33 Bethel St
17. Nancy J. Scalia	33 Bethel St

Petition

	Date	Name	Address
1.	6/24/24	Marybeth Kelm	17 Melrose St
2.	6-24-24	Lisa Selvaggi	23 Melrose St
3.	6-24-24	Corina White	23 Melrose ST
4.	6-27/24	Nick Perugini	27 Melrose ST
5.	6-27-24	Mackenzie Webber	27 Melrose St
6.	6-27	Arlene McCormick	21 melrose St
7.	6-28-2024	Lynn Mills	25 Melrose St
8.	6-30-2024	David Cummings	15 Melrose St.
9.	6/30/2024	Erin Cummings	15 Melrose St.
10.	6/30/2024	Farzeela Persaud	70 Melrose St
11.	6/30/2024	Ryan Persaud	70 Melrose St
12.	6/30/2024	[illegible]	58 Melrose St.
13.	6/30/2024	[illegible]	58 Melrose St
14.	6/30/24	Kari Hutgaard	65 Melrose St.
15.	6/30/24	Angela Gaeta	75 Melrose St 2nd

Petition

Date	Name	Address
1. 6/30/24	Melissa Tinder	80 Melrose St
2. 6/30/24	Jean Vanvee	71 Melrose St
3. 6/30/24	MyGreen Streeter	71 Melrose st.
4. 6/30/24	Karen Kellems	101 Melrose ST
5. 6/30/24	Sharon C. Niemann Testa	19 Melrose ST
6. 6/30/24	GARY Testa	19 Melrose ST
7. 6/30/24	Kris Bond	20 Melrose St
8. 6/30/24	Carmen	20 Melrose St.
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Petition

Date 6-14-2024	Name	Address
1.	Yolanda Duthiewicz	57 Atkins Ave.
2.	Nancy Laflamme	189 Park St
3.	Judith Delgado, A. Vincent Xd	
4.	Kendal Gibbs	43 Peggy Lane Farmington CT
5.	Zaida Santaye	157 P
6.	Sandra Cudney	30 Troutbrook Rd Bristol CT
7.	Janice Skulskey	34 Betts Ave Bristol CT
8.	Melissa Gunderson	6 Crown St Bristol, Ct
9.	Jocelyn Andersen	92 Round Hill Rd. Bristol, CT
10.	Sandra Edgerton	4 Crown Street. Bristol, Ct
11.		
12.		
13.		
14.		
15.		

Petition

Date	Name	Address
1. 6-15-24	Sandy michaud	23 view Street, Bristol
2. 6-15-24		23 view Street, Bristol
3. 6-16-24	Josephine S Marino	25 View St Bristol, CT
4. 6/17/24		24 View St Bristol CT.
5. 6/17/24	RYAN Lowe	28 View St BRISTOL CT
6. 6-25-24	Dave Greenleaf	255 Divinity St. bottom of View
7. 6-27-24	Ralph Lynn	90 view st
8. 6-27-24	Michael D Hoyt	89 View St
9. 6-28-24		22/24 Earl Street
10.		
11.		
12.		
13.		
14.		
15.		

Petition

Date	Name	Address
1. June 17, 2024	Dan Bailey	64 Earl St.
2. 6/17/24	Jessica Reklaitis	95 Earl St.
3.	Vianny Polanco	85 Earl st
4.	Matthew Bailey	64 Earl st
5.	MaryAnn Cabure	94 View St
6.	Gerard Cabure	94 View St
7.		
8.		
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13.		
14.		
15.		

Petition

	Date	Name	Address
1.	6-14-24		4 crown st Bristol
2.	6/14/24	David Dobrecki	14 CROWN ST. BRISTOL
3.	6/15/24		6 Crown St. Bristol
4.	6-15-24	Richard Aviles	75 EARL ST BRISTOL
5.	6/15-24	Richard A Aviles	75 Earl St. Bristol
6/14 6.		Christine Bird	2 Crown St Bristol
7.	6-15-2024	Antonio Bordoy	
8.	6/15/24		284 cherry St New Britain CT
9.	6/15/24	Danielle Johnson	12 CROWN ST BRISTOL CT
6-15-24 10.		Donald L. Weeks	105 EARL St. Bristol, Ct.
11.	6-15-24	Dwayne Parker	91 view St.
12.	6/15/24	Jeffrey Edgerton	13 Mare Rd, Bristol
13.			
14.			
15.			

Petition

Date	Name	Address
1.	Ledion Tito	100 view st
2.	Thanas Tito	98 view st
3.	Luljeta Tito	98 view st
4.	Klodjana Tito	100 view st
5.		
6.		
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10,		
11.		
12.		
13.		
14.		
15.		

Site Plan Revised 073124

Selected Sheets

GENERAL NOTES:

1. ASSESSORS MAP: 14
ASSESSEORS LOT'S: 72/71,73/70,74/69,75/68,76/67

2. PROPERTY ADDRESS: 29-49 EARL STREET

3. OWNER NAME: D.G.G.DEVELOPMENT LLC

4. PREPARED FOR: D.G.G.DEVELOPMENT LLC

5. ZONE: R-15/RM

6. ASSESSORS LOT 72/71 REVISED AREA * 7,341 S.F.
ASSESSORS LOT 73/70 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 74/69 REVISED AREA * 8,814 S.F.
ASSESSORS LOT 75/68 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 76/67 REVISED AREA * 7,983 S.F.

* SUBSEQUENT TO SITE PLAN APPROVAL BY LOCAL AGENCIES AND PRIOR TO ISSUANCE OF A ZONING PERMIT,THE OWNER SHALL COMBINE LOT'S 72/71,73/70,74/69,75/68,76/67

7. BASED ON THE CITY OF BRISTOL INLAND WETLAND AND WATER COURSES MAPS, THERE ARE NO WETLANDS ON THE SUBJECT PROPERTY.

8. BASED ON FLOOD INSURANCE RATE MAP,HARTFORD COUNTY,CONNECTICUT (ALL JURISDICTIONS), PANEL 468 OF 675,MAP NUMBER 09003C0468F,EFFECTIVE DATE:SEPTEMBER 26, 2008 THE PARCEL LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

9. THE PROPERTY IS "NOT" LOCATED WITHIN A AQUIFER PROTECTION AREA

10. EXISTING AND PROPOSED CONTOURS AT 2' INTERVALS

11. PROPOSED BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER

12. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION.THE LOCATIONS ARE APPROXIMATE, ALL UTILITIES MAY NOT BE SHOWN,THE CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" AT 811 PRIOR TO THE COMMENCEMENT OF ANY WORK.THE CONTRACTOR SHALL PERFORM CAREFUL EXPLORATORY EXCAVATIONS TO IDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ENCOUNTERED AND MAY INTERFERE WITH THE PROPOSED WORK, WHETHER SHOWN ON THE EXISTING CONDITIONS DRAWINGS OR NOT.

13. CONTRACTOR SHALL VERFIY ALL DIMENSIONS,ELEVATIONS,QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION

14. TECHNICAL SPECIFICATIONS ARE THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS,BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, INCLUDING ANY SPECIAL PROVISIONS.

PARKING CALCULATION:

PROPOSED USE: THREE FAMILY DWELLING

PARKING REQUIREMENT: 2 PER DWELLING UNIT
15 DWELLING UNITS x 2 PER = 30 SPACES

PARKING PROPOSED: 31 SPACES

SITE BASED AMENITIES:

1) ENERGY EFFICIENT LIGHTING

2) LOW-IMPACT STORMWATER MANAGEMENT: GROUNDWATER RECHARGE & STORMWATER QUALITY STRUCTURES

FUNCTIONAL OPEN SPACE CALCULATION:

REQUIRED: 250 S.F./ DWELLING UNIT
15 UNITS x 250 S.F.= 3,750 S.F.

PROVIDED: 4,800 S.F.

Unified Residential Developments (R15/RM)
Area and Dimensional Requirements

Standard		Proposed
a) Maximum Density (units per acre)	18	15.6
b) Minimum Lot Area (acres)	0.5	0.96
c) Minimum Lot Frontage (ft)	75	150
d) Minimum Front Yard (ft)	6	11.5
e) Minimum Side Yard (ft)	6	6.5
f) Minimum Rear Yard (ft)	15	NA
g) Maximum Building Height (ft)	35	25
h) Maximum Building Coverage (%)	40	25.6
i) Maximum Impervious Coverage (%)	80	67.6
j) Minimum Building Spacing (ft)	18	19.8

CONSTRUCTION SEQUENCE:

1. FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING.

2. HOLD PRECONSTRUCTION MEETING WITH THE OWNER,ENGINEER,CONTRACTOR AND APPROPRIATE TOWN STAFF. REVIEW FLAGGED CLEARING LIMITS AND DETERMINE TOPSOIL STOCKPILE AREA. (REMEMBER TO CALL BEFORE YOU DIG 1-800-922-4455.

3. FLAG REMAINDER OF THE LIMITS OF CONSTRUCTION AND TREE PROTECTION ZONES IF REQUIRED.

4. PROJECT SURVEYOR TO STAKE SOUTHERN PROPERTY LINE PRIOR TO THE START OF CONSTRUCTION.

5. INSTALL CONSTRUCTION ENTRANCE PAD.

6. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE E&S PLAN.

7. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD CHIP BRUSH AND SLASH,STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.

8. REMOVE ALL ITEMS PER REMOVALS PLAN.

9. STRIP AND STOCKPILE ALL TOPSOIL THAT IS WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE AND REFERENCE STOCKPILE MANAGEMENT FOR EROSION AND SEDIMENT CONTROLS. EITHER REMOVE TREE STUMPS TO AN APPROVED DISPOSAL SITE OR CHIP IN PLACE AS INDICATED ON THE PLANS.

10. MAKE ALL CUTS AND FILLS REQUIRED. ESTABLISH THE SUBGRADE FOR THE PARKING LOT AND DRIVEWAY AS REQUIRED AND BENCH THE BUILDING'S TO A SUBGRADE. ALLOW A REASONABLE AMOUNT OF AREA AROUND THE FOOT-PRINT OF THE PROPOSED BUILDING FOR THE CONSTRUCTION ACTIVITIES.

11. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING'S.

12. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES,INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE,REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.

13. INSTALL ALL UTILITIES AND DRAINAGE SYSTEMS TO WITHIN 5 FEET OF THE BUILDING OR AS OTHERWISE MODIFIED BY THE DESIGN ENGINEER TO ADJUST FOR UNFORESEEN SITE CONDITIONS.

14. PREPARE SUB-BASE,SLOPES,PARKING AREAS,SHOULDER AREAS,ACCESS DRIVES AND ANY OTHER DISTURBANCE FOR FINAL GRADING.

15. INSTALL PROCESS AGGREGATE IN PARKING AREAS.

16. PLACE TOPSOIL WHERE REQUIRED, COMPLETE THE PERIMETER LANDSCAPE PLANTINGS.

17. FINE GRADE,RAKE,SEED AND MULCH TO WITHIN 2 FEET OF THE CURBING.

18. UPON SUBSTANTIAL COMPLETION OF THE PROPOSED BUILDING'S,COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS. INSTALL FIRST COURSE OF PAVING.

19. WHEN ALL OTHER WORK HAS BEEN COMPLETED,REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.

20. INSTALL FINAL COURSE OF PAVEMENT.

21. AFTER THE SITE IS STABILIZED REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

OPERATION AND MAINTENANCE PLAN (POST CONSTRUCTION)

1. ALL DRAINAGE SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN 12 INCHES OF THE OUTLET PIPE INVERT,NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

2. ALL PAVED AREAS SHALL BE SWEPT TWICE ANNUALLY. TYPICALLY, SWEEPING SHOULD OCCUR IN THE SPRING, AFTER WINTER SANDING,AND IN THE FALL, AFTER ALL LEAVES HAVE FALLEN.

3. A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES. (USE ONLY ORGANIC FERTILIZER)

4. DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2 " OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

INSPECTION AND MAINTENANCE GUIDELINES STORMWATER QUALITY MEASURES AND UNDERGROUND DETENTION SYSTEMS

1. THE CATCHBASIN SYSTEM SHOULD BE INSPECTED MONTHLY IN THE FIRST YEAR AND TWICE-A-YEAR (APRIL AND OCTOBER) THEREAFTER TO CHECK INLETS AND OUTLETS FOR CLOGGING AND TO REMOVE ANY DEBRIS AS REQUIRED.

2. INSPECTION AND MAINTENANCE FOR THE STORMWATER QUALITY CHAMBER SHALL BE PER THE GUIDELINES PUBLISHED BY THE MANUFACTURER.

https://www.conteches.com/Portals/0/Documents/Maintenance%20Guides/CDS-Maintenance-Guide.pdf?ver=2018-05-31-143259-453

REMOVAL NOTES:

1. INFORMATION ON EXISTING UTILITIES AND UNDERGROUND FEATURES HAS BEEN COMPILED,IN PART,BASED UPON INFORMATION FURNISHED BY OTHERS AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE OF DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO THE START OF SITE REMOVALS OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG AT 811 AND RECEIVE REQUIRED FIELD MARKOUTS. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO INDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ECOUNTERED, WHETHER SHOWN ON AN EXISTING CONDITIONS DRAWING OR NOT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.

3. MANHOLES,CATCH BASINS,CLEANOUTS,VALVE BOXES,FRAMES,COVERS,GRATES,ETC.TO REMAIN IN USE, SHALL BE PROTECTED AND ADJUSTED TO PROPOSED GRADES AS NECESARY.

4. EXISTING BITUMINOUS PAVEMENT NOTED TO BE REMOVED SHALL BE DEMOLISHED,STOCKPILED,PULVERIZED AND INSPECTED BY A MATERIALS INSPECTOR PRIOR TO ANY USE AS RECLAIMED MATERIAL. RECLAIMED MATERIALS MEETING THE TESTING REQUIREMENTS MAY BE USED AS OR BE INCLUDED IN SUB-BASE MATERIALS FOR NEW PAVEMENTS. ALL REMAINING PAVEMENT MATERIAL THAT IS TO BE REMOVED SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

5. ANY SITE FEATURE NOT LABELED AS BEING REMOVED,REPLACED,ETC.IS INTENDED TO REMAIN.

6. DURING THE PRECONSTRUCTION MEETING, THE CONTRACTOR,ENGINEER AND CITY SHALL DETERMINE A SUITABLE STOCKPILE LOCATIONS.

7. SIDEWALKS TO BE REPLACED SHALL BE REPLACED TO THE NEAREST JOINT.

8. ALL ASPHALT AND CONCRETE MATERIALS SHALL BE REMOVED TO FULL DEPTH WHERE LANDSCAPED AREAS ARE PROPOSED OR WHERE NEW CONSTRUCTION IS PROPOSED.

9. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

SIGNING AND PAVEMENT MARKING NOTES:

1. SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO MUTCD OR CONNDOT STANDARDS AS DEPICTED.

2. SIGNS SHALL BE INSTALLED WITH A BREAKAWAY FEATURE.

3. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.

2. ALL ACCESSIBLE EGRESSES SHALL BE FLUSH WITH THE ADJOINING MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

3. WALKWAYS ALONG ACCESSIBLE ROUTES ARE NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

4. ALL RAMPS SHALL NOT EXCEED 1:12 OR 2% CROSS PITCH.

UTILITY AND DRAINAGE NOTES:

1. TOP OF FRAME ELEVATIONS SHOWN ON THESE PLANS REFLECT THE 2" STANDARD DEPRESSION FROM GUTTER LINE.

2. ALL CATCH BASINS SHALL HAVE A 2FT SUMP UNLESS OTHERWISE NOTED ON THE PLANS.

3. ALL YARD DRAINS SHALL BE "NYLOPLAST DRAIN BASINS"(OR APPROVED EQUAL)WITH THE STANDARD D.I.FRAME AND GRATE UNLESS OTHERWISE NOTED ON THE PLANS.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES REGARDING A FINAL DESIGN, MEANS OF CONSTRUCTION AND AN EXACT LOCATION AND SIZE OF THE UTILITY PRIOR TO THE START OF CONSTRUCTION.

5. ALL WATERMAIN AND SERVICE WORK TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS,INCLUDING BACKFLOW PREVENTION SPECIFICATIONS. PRIOR TO THE START OF CONSTRUCTION CONTACT PAUL KEEGAN FOR ALL WATERMAIN AND SERVICE WORK AND BRYAN ROBERTS FOR ALL SEWER MAIN AND SERVICE WORK,BOTH AT THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT (860) 582-7431.

6. FINAL WATER SERVICE SIZES TO BE DETERMINED BY THE OWNERS MECHANICAL ENGINEER ONCE ALL PERTINENT WATER FIXTURE DATA HAS BEEN RECEIVED.

7. ONCE THE OWNERS MECHANICAL ENGINEER HAS DETERMINED THE MAX GPM TO BE SUPPLIED TO THE BUILDING'S, THE BRISTOL WATER AND SEWER DEPARTMENT WILL THEN DETERMINE THE METER SIZE.

8. ALL SERVICE TAPS TO BE DONE BY THE BRISTOL WATER AND SEWER DEPARTMENT.

9. ALL FEES MUST BE PAID BEFORE ANY WORK CAN BE SCHEDULED. ALL WATER TAPS TO BE DONE BY BRISTOL WATER DIVISION.

10. WHEN SEWER AND WATER ARE WITHIN 10' HORIZONTALLY,THE WATER MAIN SHALL BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED SHELF AND AT LEAST 12" HORIZONTALLY (18" RECOMMENDED), MEASURED EDGE TO EDGE AND 18" ABOVE THE TOP OF THE SEWER, MEASURED FROM CROWN TO INVERT. FINAL LOCATIONS SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.

11. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

GENERAL NOTES FOR SITE PLANS "CITY OF BRISTOL" (AS APPLICABLE)

1. A SANITARY SEWER LATERAL PERMIT OBTAINED FROM THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT, WILL BE REQUIRED PRIOR TO CONNECTING INTO THE EXISTING SEWER SYSTEM. THE CONTRACTOR INSTALLING THE SEWERS/LATERALS SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE SANITARY SEWER INSTALLATIONS. NO SANITARY SEWER INSTALLATION SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR. ALL BUILDING SEWERS SHALL HAVE A GRAVITY BACK FLOW PREVENTER. (BUILDING SEWERS AND CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH SEC. 22-19(F) OF THE CODE OF ORDINANCES - CITY OF BRISTOL)

2. A STORM SEWER CONNECTION PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT. WILL BE REQUIRED PRIOR TO CONNECTING THE PROPOSED DRAINAGE SYSTEM(S) INTO THE CITY SYSTEM AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. THE CONTRACTOR MAKING THE STORM SEWER CONNECTION AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE STORM SEWER INSTALLATIONS. NO STORM SEWER SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR.

3. A DRIVEWAY APRON AND/OR SIDEWALK PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT. WILL BE REQUIRED PRIOR TO CONSTRUCTING ANY DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. THE CONTRACTOR CONSTRUCTING THE DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. SHALL NOTIFY THE CITY HIGHWAY INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH CONSTRUCTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF ANY DRIVEWAY APRON AND/OR SIDEWALK INSTALLATIONS. NO CONCRETE (PORTLAND CEMENT AND/OR BITUMINOUS) SHALL BE PLACED PRIOR TO AN INSPECTION BY THE CITY HIGHWAY INSPECTOR.

4. SEDIMENTATION AND SILTATION CONTROLS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEERING DIVISION/WEO.

5. GRADING AROUND THE PROPOSED IMPROVEMENTS SHALL BE PERFORMED IN A MANNER WHICH PREVENTS ALL RUNOFF FROM BEING DIRECTED ONTO ADJACENT PROPERTIES; BOTH DURING AND AFTER CONSTRUCTION.

6. AS-BUILT PLOT PLANS SHALL BE SUBMITTED FOR ENGINEERING DIVISION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE REQUIRED ENGINEERING SIGN-OFF FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.). AS-BUILT PLANS MUST INCLUDE AS-BUILT GRADING OF THE SITE.

7. ANY EXISTING DAMAGED SECTIONS OF SIDEWALK AND/OR CURBING AS A RESULT OF CONSTRUCTION ALONG STREETS ABUTTING THE SITE SHALL BE IDENTIFIED AND REPLACED AT THE DIRECTION OF BRISTOL DPW ENGINEERING DIVISION. THE APPLICANT SHALL CONTACT THE BRISTOL DPW ENGINEERING DIVISION TO SCHEDULE INSPECTION.

GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. THIS PLAN OF DEVELOPMENT PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE,CONTROL OF RUNOFF,SHIELDING OF THE SOILS AND BINDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE NEED FOR EXTENSIVE SEDIMENTATION CONTROLS.

2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

3. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND FOR A PERIOD AFTERWARDS UNTIL ALL AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AFTER EACH STORM EVENT (1/2" OR MORE) OR ONCE A WEEK AND IMMEDIATELY MAKE ANY CORRECTIVE ACTION REQUIRED.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.

5. RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE.

6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM AND RESTABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. THE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS,TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED OR AN APPROVED EQUAL.

A) SEED BED PREPARATION:
- REMOVE STONES LARGER THAN 2"
- APPLY LIMESTONE AT 90# / 1000 S.F.
- WORK LIME AND FERTILIZER INTO SOIL

B) SEED APPLICATION:
- APPLY GRASS MIXTURE BY HAND OR CYCLONE SEEDER,LIGHTLY DRAG OR ROLL THE SEED SURFACE TO COVER SEED. OPTIMAL SEEDING SEASON IS BETWEEN MARCH 15TH AND JUNE 30TH OR BETWEEN AUGUST 15TH AND OCTOBER 30TH.
- IF SEEDING CAN NOT BE DONE DURING THESE TIMES,REPEAT MULCHING PROCEDURE STATED BELOW UNTIL SEEDING CAN TAKE PLACE.

C) SEED MIX:
- CREEPING RED FESCUE 49# / ACRE
- TALL FESCUE 20# / ACRE

D) MULCHING:
- IMMEDIATELY FOLLOWING SEEDING,MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1-1/2 TONS / ACRE SPREAD MULCH BY HAND OR MULCH BLOWER.
- PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISK HARROW STRAIGHT UP. MULCH MATERIAL SHOULD BE "TUCKED" APPROXIMATELY 2" - 3" INTO SOIL SURFACE.

E) TREE PROTECTION:
- LIMIT CONSTRUCTION ACTIVITIES THAT MIGHT CAUSE DAMAGE TO TREES. THE AREA ADJACENT TO AND TREES THAT ARE TO BE PROTECTED,WILL BE IDENTIFIED AND CLEARLY MARKED. EXCAVATION SHOULD NOT OCCUR WITHIN THE ROOT ZONE OF THE TREES THAT ARE TO REMAIN. IN ADDITION,RAISING OR LOWERING THE GRADE NEAR REMAINING TREES SHOULD NOT OCCUR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY EROSION AND SEDIMENTATION CONTROL MEASURES DUE TO UNFORESEEN FIELD CONDITIONS. ADDITIONAL CONTROL MEASURES MAY ALSO BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER,ENVIRONMENTAL SUPERVISOR AND/OR TOWN ENGINEER.

8. ANY CHANGE TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN BY THE CONTRACTOR SHALL BE SUBMITTED BY THE CONTRACTOR IN WRITING AND APPROVED BY THE ENGINEER.

9. ANTI-TRACKING PADS SHALL BE INSTALLED WHERE CONSTRUCTION ACCESS MEETS A PAVED ACCESS POINT,OR AS DIRECTED BY THE ENGINEER.

10. STOCKPILE LOCATIONS SHALL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION AND IF A STOCKPILE IS LOCATED OFF-SITE,THE LOCATION SHALL HAVE EROSION CONTROL MEASURES IN PLACE AND MEET ALL LOCAL REQUIREMENTS.

11. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL TO 1' VERTICAL OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS. WHERE LEDGE IS ENCOUNTERED,THE MAXIMUM CUT SLOPE MAY BE INCREASED TO 1 HORIZ.: 1 VERT. A 4FT HIGH PERMANENT SAFETY FENCE (e.g.CHAIN LINK FENCE) SHALL BE ADDED TO ALL ROCK CUTS GREATER THAN 4FT HIGH.

12. ALL SLOPES OR DISTURBED AREAS (EXCEPT PAVED AREAS) ARE TO BE STABILIZED WITH 4" OF TOPSOIL AND TURF MUST BE ESTABLISHED UNLESS OTHERWISE NOTED ON THE PLANS. STABILIZATION SHALL INCLUDE INSTALLATION OF EROSION CONTROL MATTING WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

13. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE,OR APPROVED EQUAL. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.

14. TEMPORARY PERVIOUS BARRIERS,USING SILT FENCE AND HAYBALES HELD IN PLACE WITH WOODEN STAKES,SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF-SITE.

15. JEFFERY NIMAN OR HER DULY AUTHORIZED AGENT (860) 841-6008 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPAL PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE TO THE START OF ANY CONSTRUCTION ACTIVITY.

16. JEFFERY NIMAN OR HIS DULY AUTHORIZED AGENT (860) 841-6008 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES,INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN,NOTIFYING THE PLANNING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.

17. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, AS AMENDED. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION AND SEDIMENTATION CONTROL MAINTENANCE REQUIREMENTS

TOPSOIL STOCKPILES:

THE SIDE SLOPES SHALL NOT EXCEED A SLOPE GREATER THAN 2:1. STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHOULD BE SEEDED AND MULCHED. A SEDIMENTATION FENCE SHALL BE INSTALLED APPROX.10FT FROM THE TOE OF SLOPE.

IF THE TOPSOIL STOCKPILE LOCATION IS RELOCATED, IT SHALL BE LOCATED SO AS NOT TO OBSTRUCT THE NATURAL DRAINAGE PATTERN OF THE SITE. IT SHALL BE LOCATED AS FAR AS PRACTICAL FROM ANY WETLANDS,WATER COURSES DRAINAGE WAYS AND STEEP SLOPES. IF THE LOCATION IS DOWNGRADIENT FROM A LONG SLOPE,DIVERT RUNOFF AROUND THE STOCKPILE.

CONSTRUCTION ENTRANCE PAD / ANTI-TRACKING PAD:

THE CONSTRUCTION ENTRANCE SHALL BE KEPT CLEAN OF ANY DEBRIS OR CONSTRUCTION MATERIALS. A PERIODIC TOP DRESSING OF STONE SHALL BE ADDED AS MAY BE REQUIRED TO KEEP THE ENTRANCE PAD WORKING EFFECTIVELY. IF A SEDIMENT SPILL OCCURS ON THE ROAD, IT SHALL BE CLEANED UP IMMEDIATELY.

SEDIMENTATION CONTROL FENCE:

THE SEDIMENTATION CONTROL FENCE SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAIN EVENT OF 0.5 INCHES OR MORE. IF A FAILURE OCCURS,REPAIR OR REPLACE THE FENCE WITHIN 24 HRS. ANY SEDIMENT DEPOSITS THAT REACH HALF THE HEIGHT OF THE FENCE SHALL BE REMOVED.

DUST CONTROL:

PERIODICALLY MOISTEN THE EXPOSED SOIL SURFACE TO KEEP TRAVELWAYS DAMP. AFTER THE TRAVELWAY HAS BEEN PAVED,PERIODIC SWEEPING MAY BE REQUIRED TO REMOVE DUST AND FINE MATERIALS ACCUMULATED FROM TRUCK TRAFFIC.

TREE PROTECTION:

TREES TO BE PROTECTED WILL BE IDENTIFIED AND CLEARLY MARKED. CONSTRUCTION ACTIVITIES WITHIN THE ADJACENT AREA THAT MAY CAUSE DAMAGE TO THE TREE SHALL BE LIMITED AND TRUNK ARMORING PROVIDED.

REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

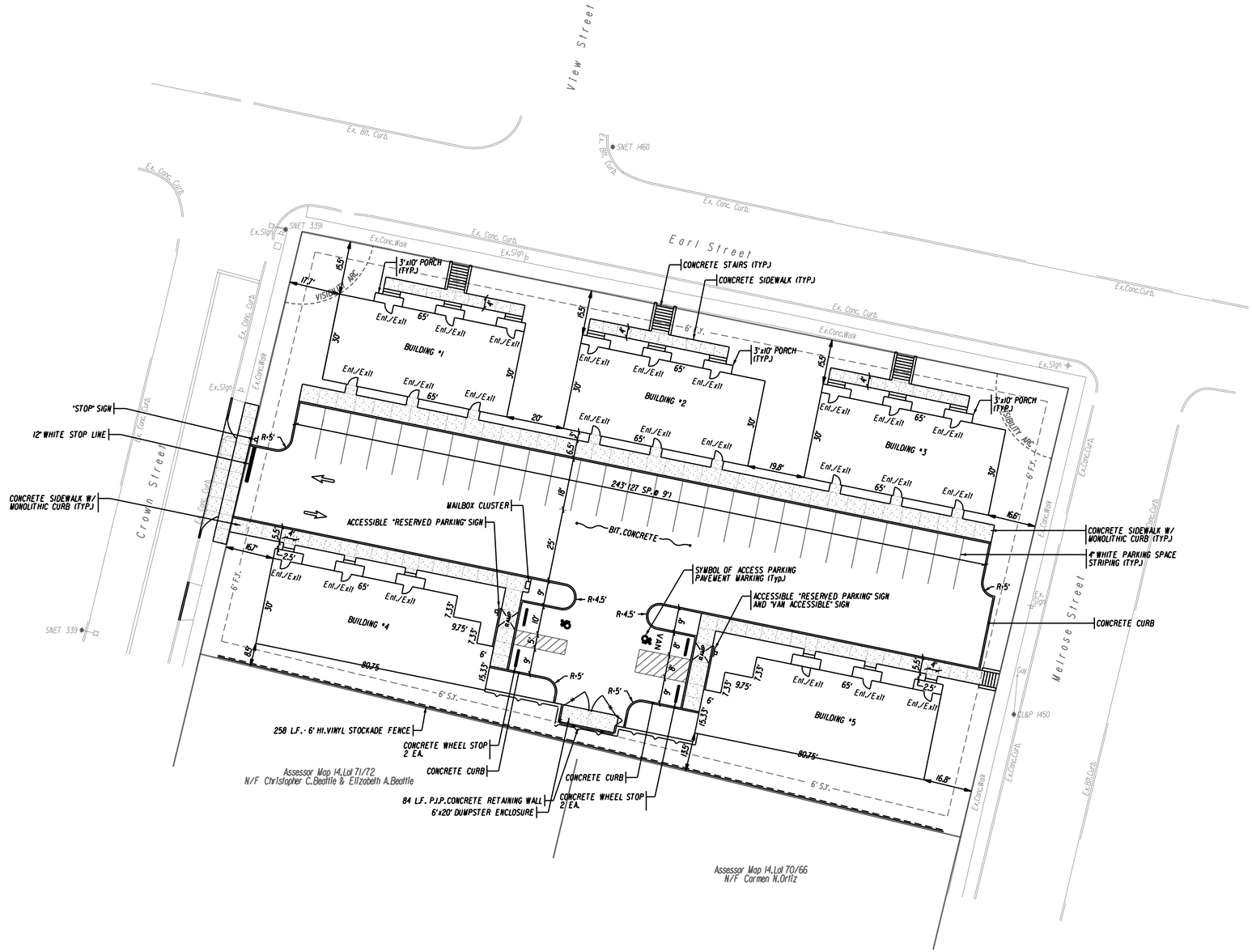
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING TITLE:
GENERAL NOTES

DRAWING NO.
NOTES-001

SHEET NO.
3



REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

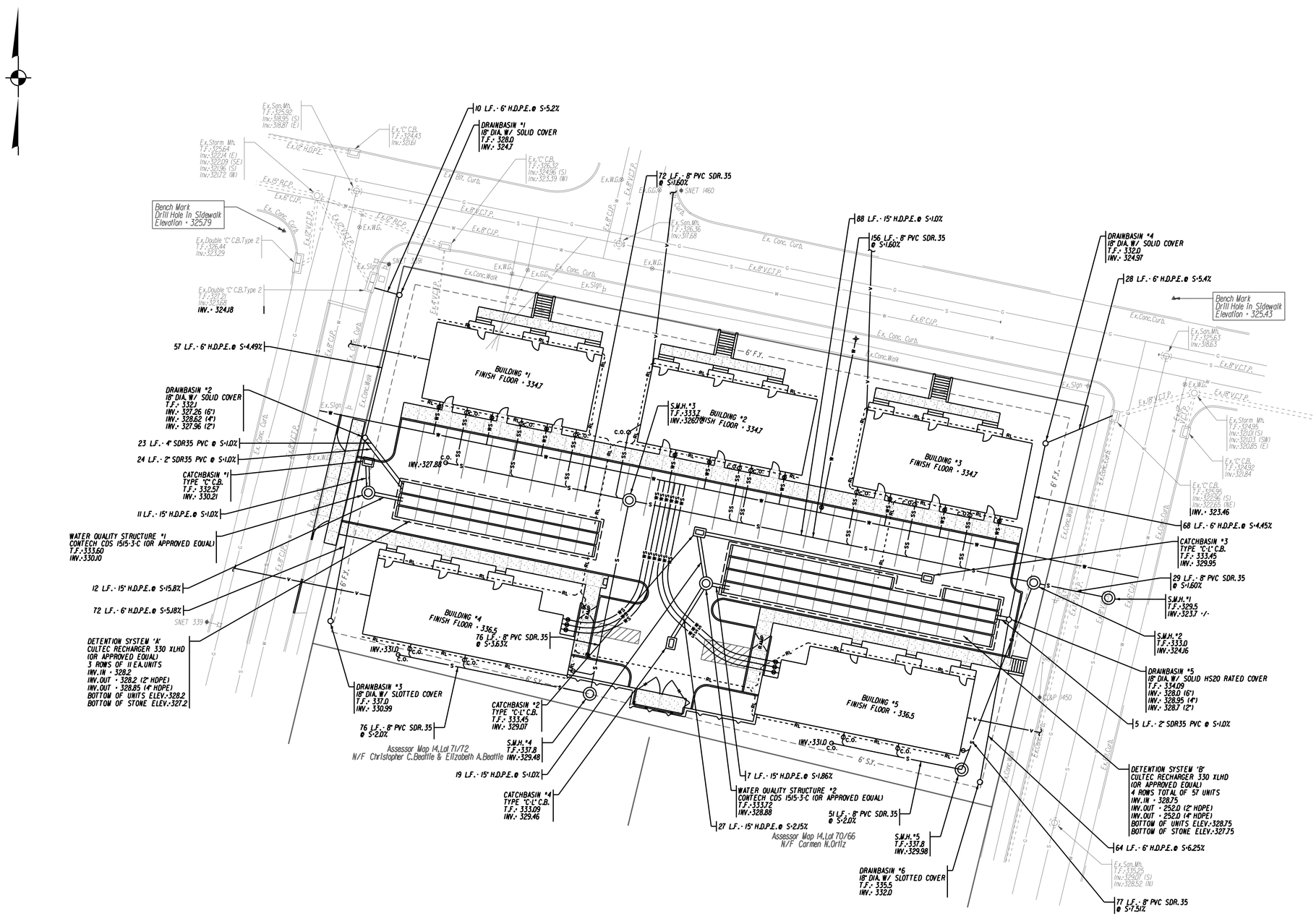
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.
PLN-001

DRAWING TITLE:
LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN

SHEET NO.
5



REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE:

SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

PROJECT TITLE:

SITE PLAN

ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:

14/72/71 , 14/73/70, 14/74/69,
14/75/68 & 14/76/67

DRAWING NO.

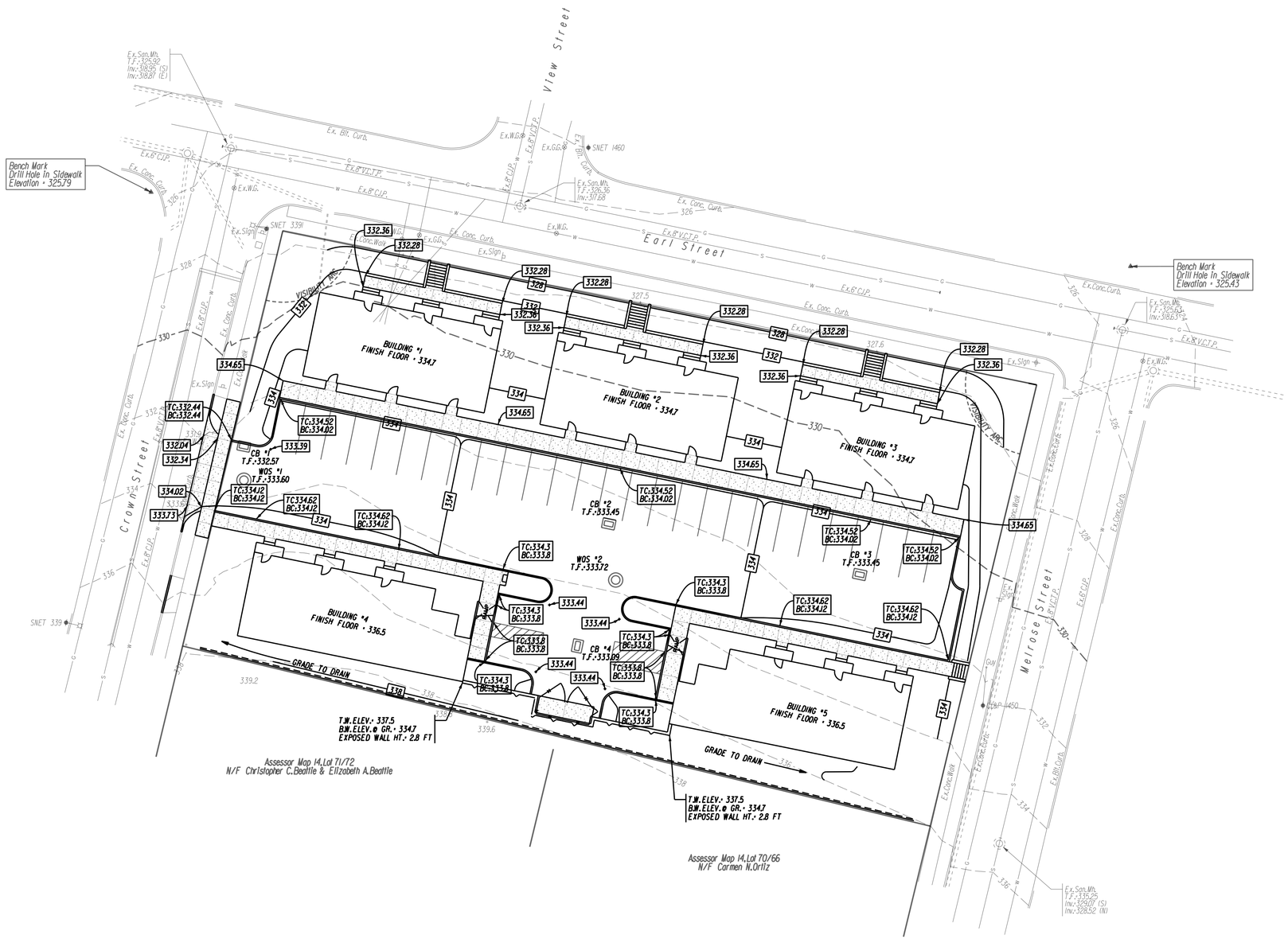
UTIL-001

DRAWING TITLE:

DRAINAGE AND UTILITIES PLAN

SHEET NO.

6



REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE:

SCALE IN FEET 0 20 40 SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

PROJECT TITLE:

SITE PLAN

ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: GRA-001

DRAWING TITLE: GRADING PLAN

SHEET NO.: 7

Site Plan

ECM GARDENS

ASSESSORS MAP: 14 LOT'S: 72/71, 73/70, 74/69, 75/68 & 76/67

EARL STREET, CROWN STREET & MELROSE STREET

BRISTOL, CONNECTICUT

MAY 1, 2024

APPLICATION: #

SPECIAL PERMIT FOR

GRANTED:

APPLICATION: #

SITE PLAN FOR

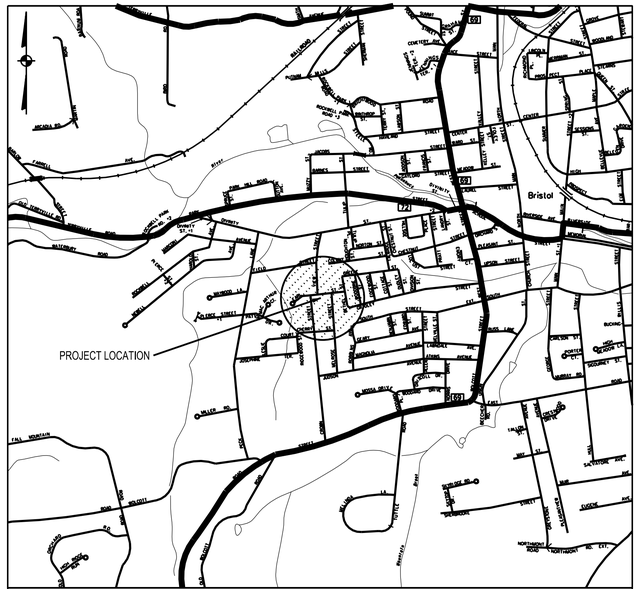
GRANTED:

LIST OF REVISIONS

REV.	DATE	REVISION DESCRIPTION

LEGEND

- NORTH ARROW
- UTILITY POLE
- UTILITY POLE W/ LUMINAIRE
- MANHOLE
- CATCH BASIN
- SIGN
- GATE VALVE (TYPE AS NOTED)
- HYDRANT
- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUB / BUSH
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- CURBING (TYPE AS NOTED)
- CHAIN LINK FENCE
- ZONING SETBACK LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- APPROX. LOCATION EXISTING SEWER MAIN
- APPROX. LOCATION EXISTING WATER MAIN
- APPROX. LOCATION EXISTING GAS MAIN
- PROPOSED 6" D.I.P. WATER MAIN
- PROPOSED 1" COPPER DOMESTIC WATER SERVICE
- PROPOSED 8" PVC SDR. 35 SEWER MAIN
- PROPOSED 6" PVC SDR. 35 SEWER CONNECTION
- PROPOSED OVERHEAD ELECTRIC CONNECTION
- PROPOSED ROOF LEADER CONNECTION
- SEDIMENTATION AND EROSION CONTROL FENCE
- WHITE PAINTED PAVEMENT ARROW



LOCATION MAP
(SCALE 1"=800')

LIST OF DRAWINGS

1	COVER SHEET
2	BOUNDARY AND TOPOGRAPHIC SURVEY
3	GENERAL NOTES
4	SITE REMOVALS PLAN
5	LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN
6	DRAINAGE AND UTILITIES PLAN
7	GRADING PLAN
8	EROSION AND SEDIMENTATION CONTROL PLAN
9-13	MISCELLANEOUS NOTES AND DETAILS
L1.0	LIGHTING PLAN
L2.0	LANDSCAPING PLAN

Applicant:

D.G.G. Development LLC
21 Cobbs Road
West Hartford, CT 06107
(860) 841-6008

Surveyor/Civil Engineer:

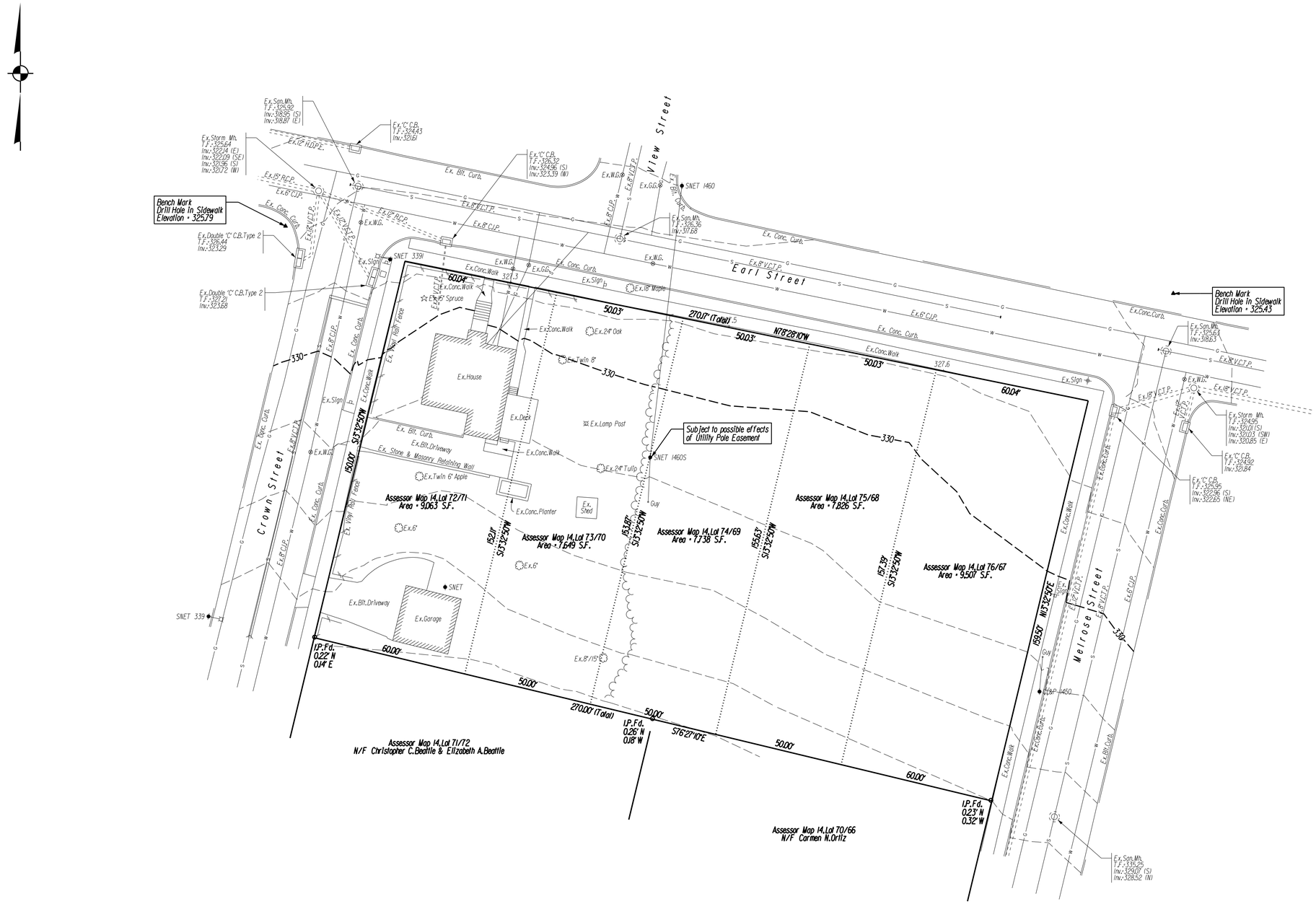
Robert Green Associates LLC
6 Old Waterbury Road
Terryville, CT 06786
(860) 589-0135

Landscaping:

Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
(860) 506-4268

Lighting:

Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
(860) 282-1822


Earl Street
Crown Street
Melrose Street
View Street
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Subject to possible effects of Utility Pole Easement
Ex.House
Ex.Deck
Ex.Shed
Ex.Garage
Ex.Bit.Driveway
Ex.Stone & Masonry Retaining Wall
Ex.Conc.Planter
Ex.Twin 6" Apple
Ex.24" Tulip
Ex.24" Oak
Ex.Twin 8"
Ex.Lamp Post
Ex.18" Maple
Ex.6" Spruce
Ex.Conc.Walk
Ex.Bit.Curb
Ex.Conc.Curb
Ex.Vinyl Rail Fence
Ex.Chain Link Fence
Ex.Wire Fence
Ex.Hedge
Ex.Sign
Ex.W.G.
Ex.G.G.
Ex.Utility Pole
Guy
SNET 1460
SNET 1460S
SNET 339
SNET
Ex.'C' C.B. T.F.=324.43 Inv.=321.61
Ex.'C' C.B. T.F.=326.32 Inv.=324.96 (S) Inv.=323.39 (W)
Ex.San.Mh. T.F.=326.36 Inv.=311.58
Ex.San.Mh. T.F.=326.92 Inv.=318.95 (S) Inv.=318.87 (E)
Ex.Storm Mh. T.F.=325.64 Inv.=322.14 (E) Inv.=322.09 (SE) Inv.=321.96 (S) Inv.=321.72 (W)
Ex.Double 'C' C.B.Type 2 T.F.=326.44 Inv.=323.29
Ex.Double 'C' C.B.Type 2 T.F.=327.21 Inv.=323.68
Ex.San.Mh. T.F.=325.63 Inv.=318.63
Ex.Storm Mh. T.F.=324.95 Inv.=321.01 (S) Inv.=321.03 (SW) Inv.=320.85 (E)
Ex.'C' C.B. T.F.=324.92 Inv.=321.84
Ex.'C' C.B. T.F.=325.95 Inv.=322.56 (S) Inv.=322.65 (NE)
Ex.San.Mh. T.F.=335.25 Inv.=329.07 (S) Inv.=328.52 (W)
Ex.12" H.D.P.E.
Ex.15" R.C.P.
Ex.8" C.I.P.
Ex.8" V.C.T.P.
Ex.12" R.C.P.
Ex.18" V.C.T.P.
Ex.6" C.I.P.
Ex.W.G.
Ex.W.G.
Ex.W.G.
Ex.W.G.
Ex.G.G.
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc.Walk
Ex.Conc.Walk

GENERAL NOTES:

1. ASSESSORS MAP: 14
ASSESSEORS LOT'S: 72/71,73/70,74/69,75/68,76/67

2. PROPERTY ADDRESS: 29-49 EARL STREET

3. OWNER NAME: D.G.G.DEVELOPMENT LLC

4. PREPARED FOR: D.G.G.DEVELOPMENT LLC

5. ZONE: R-15/RM

6. ASSESSORS LOT 72/71 REVISED AREA - 7,341 S.F.
ASSESSORS LOT 73/70 REVISED AREA - 8,822 S.F.
ASSESSORS LOT 74/69 REVISED AREA - 8,814 S.F.
ASSESSORS LOT 75/68 REVISED AREA - 8,822 S.F.
ASSESSORS LOT 76/67 REVISED AREA - 7,983 S.F.

* SUBSEQUENT TO SITE PLAN APPROVAL BY LOCAL AGENCIES AND PRIOR TO ISSUANCE OF A ZONING PERMIT,THE OWNER SHALL COMBINE LOT'S 72/71,73/70,74/69,75/68,76/67

7. BASED ON THE CITY OF BRISTOL INLAND WETLAND AND WATER COURSES MAPS, THERE ARE NO WETLANDS ON THE SUBJECT PROPERTY.

8. BASED ON FLOOD INSURANCE RATE MAP,HARTFORD COUNTY,CONNECTICUT (ALL JURISDICTIONS), PANEL 468 OF 675, MAP NUMBER 09003C0468F, EFFECTIVE DATE: SEPTEMBER 26, 2008 THE PARCEL LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

9. THE PROPERTY IS "NOT" LOCATED WITHIN A AQUIFER PROTECTION AREA

10. EXISTING AND PROPOSED CONTOURS AT 2' INTERVALS

11. PROPOSED BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER

12. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION.THE LOCATIONS ARE APPROXIMATE, ALL UTILITIES MAY NOT BE SHOWN,THE CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" AT 811 PRIOR TO THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL PERFORM CAREFUL EXPLORATORY EXCAVATIONS TO IDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ENCOUNTERED AND MAY INTERFERE WITH THE PROPOSED WORK, WHETHER SHOWN ON THE EXISTING CONDITIONS DRAWINGS OR NOT.

13. CONTRACTOR SHALL VERFIY ALL DIMENSIONS,ELEVATIONS,QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION

14. TECHNICAL SPECIFICATIONS ARE THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS,BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, INCLUDING ANY SPECIAL PROVISIONS.

PARKING CALCULATION:

PROPOSED USE: THREE FAMILY DWELLING

PARKING REQUIREMENT: 2 PER DWELLING UNIT
15 DWELLING UNITS x 2 PER = 30 SPACES

PARKING PROPOSED: 31 SPACES

SITE BASED AMENITIES:

1) ENERGY EFFICIENT LIGHTING

2) LOW-IMPACT STORMWATER MANAGEMENT: GROUNDWATER RECHARGE & STORMWATER QUALITY STRUCTURES

FUNCTIONAL OPEN SPACE CALCULATION:

REQUIRED: 250 S.F./ DWELLING UNIT
15 UNITS x 250 S.F.= 3,750 S.F.

PROVIDED: 4,800 S.F.

Unified Residential Developments (R15/RM)
Area and Dimensional Requirements

Standard		Proposed
a) Maximum Density (units per acre)	18	15.6
b) Minimum Lot Area (acres)	0.5	0.96
c) Minimum Lot Frontage (ft)	75	150
d) Minimum Front Yard (ft)	6	11.5
e) Minimum Side Yard (ft)	6	6.5
f) Minimum Rear Yard (ft)	15	NA
g) Maximum Building Height (ft)	35	25
h) Maximum Building Coverage (%)	40	25.6
i) Maximum Impervious Coverage (%)	80	67.6
j) Minimum Building Spacing (ft)	18	19.8

CONSTRUCTION SEQUENCE:

1. FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING.

2. HOLD PRECONSTRUCTION MEETING WITH THE OWNER,ENGINEER,CONTRACTOR AND APPROPRIATE TOWN STAFF. REVIEW FLAGGED CLEARING LIMITS AND DETERMINE TOPSOIL STOCKPILE AREA. (REMEMBER TO CALL BEFORE YOU DIG 1-800-922-4455.

3. FLAG REMAINDER OF THE LIMITS OF CONSTRUCTION AND TREE PROTECTION ZONES IF REQUIRED.

4. INSTALL CONSTRUCTION ENTRANCE PAD.

5. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE E&S PLAN.

6. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD CHIP BRUSH AND SLASH.STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.

7. REMOVE ALL ITEMS PER REMOVALS PLAN.

8. STRIP AND STOCKPILE ALL TOPSOIL THAT IS WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE AND REFERENCE STOCKPILE MANAGEMENT FOR EROSION AND SEDIMENT CONTROLS. EITHER REMOVE TREE STUMPS TO AN APPROVED DISPOSAL SITE OR CHIP IN PLACE AS INDICATED ON THE PLANS.

9. MAKE ALL CUTS AND FILLS REQUIRED, ESTABLISH THE SUBGRADE FOR THE PARKING LOT AND DRIVEWAY AS REQUIRED AND BENCH THE BUILDING'S TO A SUBGRADE. ALLOW A REASONABLE AMOUNT OF AREA AROUND THE FOOT-PRINT OF THE PROPOSED BUILDING FOR THE CONSTRUCTION ACTIVITIES.

10. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING'S.

11. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES,INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE,REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.

12. INSTALL ALL UTILITIES AND DRAINAGE SYSTEMS TO WITHIN 5 FEET OF THE BUILDING OR AS OTHERWISE MODIFIED BY THE DESIGN ENGINEER TO ADJUST FOR UNFORESEEN SITE CONDITIONS.

13. PREPARE SUB-BASE,SLOPES,PARKING AREAS,SHOULDER AREAS,ACCESS DRIVES AND ANY OTHER DISTURBANCE FOR FINAL GRADING.

14. INSTALL PROCESS AGGREGATE IN PARKING AREAS.

15. PLACE TOPSOIL WHERE REQUIRED. COMPLETE THE PERIMETER LANDSCAPE PLANTINGS.

16. FINE GRADE,RAKE,SEED AND MULCH TO WITHIN 2 FEET OF THE CURBING.

17. UPON SUBSTANTIAL COMPLETION OF THE PROPOSED BUILDING'S,COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS. INSTALL FIRST COURSE OF PAVING.

18. WHEN ALL OTHER WORK HAS BEEN COMPLETED,REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.

19. INSTALL FINAL COURSE OF PAVEMENT.

20. AFTER THE SITE IS STABILIZED REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

OPERATION AND MAINTENANCE PLAN (POST CONSTRUCTION)

1. ALL DRAINAGE SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN 12 INCHES OF THE OUTLET PIPE INVERT,NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

2. ALL PAVED AREAS SHALL BE SWEPT TWICE ANNUALLY, TYPICALLY, SWEEPING SHOULD OCCUR IN THE SPRING, AFTER WINTER SANDING,AND IN THE FALL, AFTER ALL LEAVES HAVE FALLEN.

3. A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES. (USE ONLY ORGANIC FERTILIZER)

4. DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2 " OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

INSPECTION AND MAINTENANCE GUIDELINES STORMWATER QUALITY MEASURES AND UNDERGROUND DETENTION SYSTEMS

1. THE CATCHBASIN SYSTEM SHOULD BE INSPECTED MONTHLY IN THE FIRST YEAR AND TWICE-A-YEAR (APRIL AND OCTOBER) THEREAFTER TO CHECK INLETS AND OUTLETS FOR CLOGGING AND TO REMOVE ANY DEBRIS AS REQUIRED.

2. INSPECTION AND MAINTENANCE FOR THE STORMWATER QUALITY CHAMBER SHALL BE PER THE GUIDELINES PUBLISHED BY THE MANUFACTURER.

https://www.conleches.com/Portals/0/Documents/Maintenance%20Guides/CDS-Maintenance-Guide.pdf?ver-2018-05-31-143259-453

REMOVAL NOTES:

1. INFORMATION ON EXISTING UTILITIES AND UNDERGROUND FEATURES HAS BEEN COMPILED,IN PART,BASED UPON INFORMATION FURNISHED BY OTHERS AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE OF DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO THE START OF SITE REMOVALS OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG AT 811 AND RECEIVE REQUIRED FIELD MARKOUTS. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO INDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ECOUNTERED, WHETHER SHOWN ON AN EXISTING CONDITIONS DRAWING OR NOT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.

3. MANHOLES,CATCH BASINS,CLEANOUTS,VALVE BOXES,FRAMES,COVERS,GRATES,ETC.TO REMAIN IN USE, SHALL BE PROTECTED AND ADJUSTED TO PROPOSED GRADES AS NECESARY.

4. EXISTING BITUMINOUS PAVEMENT NOTED TO BE REMOVED SHALL BE DEMOLISHED,STOCKPILED,PULVERIZED AND INSPECTED BY A MATERIALS INSPECTOR PRIOR TO ANY USE AS RECLAIMED MATERIAL. RECLAIMED MATERIALS MEETING THE TESTING REQUIREMENTS MAY BE USED AS OR BE INCLUDED IN SUB-BASE MATERIALS FOR NEW PAVEMENTS. ALL REMAINING PAVEMENT MATERIAL THAT IS TO BE REMOVED SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

5. ANY SITE FEATURE NOT LABELED AS BEING REMOVED,REPLACED,ETC.IS INTENDED TO REMAIN.

6. DURING THE PRECONSTRUCTION MEETING. THE CONTRACTOR,ENGINEER AND CITY SHALL DETERMINE A SUITABLE STOCKPILE LOCATIONS.

7. SIDEWALKS TO BE REPLACED SHALL BE REPLACED TO THE NEAREST JOINT.

8. ALL ASPHALT AND CONCRETE MATERIALS SHALL BE REMOVED TO FULL DEPTH WHERE LANDSCAPED AREAS ARE PROPOSED OR WHERE NEW CONSTRUCTION IS PROPOSED.

9. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

SIGNING AND PAVEMENT MARKING NOTES:

1. SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO MUTCD OR CONNDOT STANDARDS AS DEPICTED.

2. SIGNS SHALL BE INSTALLED WITH A BREAKAWAY FEATURE.

3. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.

2. ALL ACCESSIBLE EGRESSES SHALL BE FLUSH WITH THE ADJOINING MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

3. WALKWAYS ALONG ACCESSIBLE ROUTES ARE NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

4. ALL RAMPS SHALL NOT EXCEED 1:12 OR 2% CROSS PITCH.

UTILITY AND DRAINAGE NOTES:

1. TOP OF FRAME ELEVATIONS SHOWN ON THESE PLANS REFLECT THE 2" STANDARD DEPRESSION FROM GUTTER LINE.

2. ALL CATCH BASINS SHALL HAVE A 2FT SUMP UNLESS OTHERWISE NOTED ON THE PLANS.

3. ALL YARD DRAINS SHALL BE "NYLOPLAST DRAIN BASINS"(OR APPROVED EQUAL)WITH THE STANDARD D.I.FRAME AND GRATE UNLESS OTHERWISE NOTED ON THE PLANS.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES REGARDING A FINAL DESIGN, MEANS OF CONSTRUCTION AND AN EXACT LOCATION AND SIZE OF THE UTILITY PRIOR TO THE START OF CONSTRUCTION.

5. ALL WATERMAIN AND SERVICE WORK TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS.INCLUDING BACKFLOW PREVENTION SPECIFICATIONS. PRIOR TO THE START OF CONSTRUCTION CONTACT PAUL KEEGAN FOR ALL WATERMAIN AND SERVICE WORK AND BRYAN ROBERTS FOR ALL SEWER MAIN AND SERVICE WORK,BOTH AT THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT (860) 582-7431.

6. FINAL WATER SERVICE SIZES TO BE DETERMINED BY THE OWNERS MECHANICAL ENGINEER ONCE ALL PERTINENT WATER FIXTURE DATA HAS BEEN RECEIVED.

7. ONCE THE OWNERS MECHANICAL ENGINEER HAS DETERMINED THE MAX GPM TO BE SUPPLIED TO THE BUILDING'S, THE BRISTOL WATER AND SEWER DEPARTMENT WILL THEN DETERMINE THE METER SIZE.

8. ALL SERVICE TAPS TO BE DONE BY THE BRISTOL WATER AND SEWER DEPARTMENT.

9. ALL FEES MUST BE PAID BEFORE ANY WORK CAN BE SCHEDULED. ALL WATER TAPS TO BE DONE BY BRISTOL WATER DIVISION.

10. WHEN SEWER AND WATER ARE WITHIN 10' HORIZONTALLY,THE WATER MAIN SHALL BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED SHELF AND AT LEAST 12" HORIZONTALLY (18" RECOMMENDED), MEASURED EDGE TO EDGE AND 18" ABOVE THE TOP OF THE SEWER, MEASURED FROM CROWN TO INVERT. FINAL LOCATIONS SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.

11. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS.HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

GENERAL NOTES FOR SITE PLANS "CITY OF BRISTOL" (AS APPLICABLE)

1. A SANITARY SEWER LATERAL PERMIT OBTAINED FROM THE BRISTOL WATER AND SEWER DEPARTMENT WILL BE REQUIRED PRIOR TO CONNECTING INTO THE EXISTING SEWER SYSTEM. THE CONTRACTOR INSTALLING THE SEWERS/LATERALS SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE SANITARY SEWER INSTALLATIONS. NO SANITARY SEWER INSTALLATION SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR. ALL BUILDING SEWERS SHALL HAVE A BACK FLOW PREVENTER WILL BE REQUIRED ON THE SEWER LATERAL IN ACCORDANCE WITH BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS.

2. A TEST PIT SHALL BE REQUIRED TO DETERMINE WHERE THE 8" EXISTING SANITARY LINE TERMINATES ON THE PROPERTY. IT WILL BE CAPPED PRIOR TO THE INSTALLATION OF THE SUBSURFACE STORM DRAINAGE SYSTEM.

3. A STORM SEWER CONNECTION PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONNECTING THE PROPOSED DRAINAGE SYSTEM(S) INTO THE CITY SYSTEM AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. THE CONTRACTOR MAKING THE STORM SEWER CONNECTION AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE STORM SEWER INSTALLATIONS. NO STORM SEWER SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR.

4. A DRIVEWAY APRON AND/OR SIDEWALK PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONSTRUCTING ANY DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. THE CONTRACTOR CONSTRUCTING THE DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY HIGHWAY INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH CONSTRUCTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF ANY DRIVEWAY APRON AND/OR SIDEWALK INSTALLATIONS. NO CONCRETE (PORTLAND CEMENT AND/OR BITUMINOUS) SHALL BE PLACED PRIOR TO AN INSPECTION BY THE CITY HIGHWAY INSPECTOR.

5. SEDIMENTATION AND SILTATION CONTROLS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEERING DIVISION/INEO.

6. GRADING AROUND THE PROPOSED IMPROVEMENTS SHALL BE PERFORMED IN A MANNER WHICH PREVENTS ALL RUNOFF FROM BEING DIRECTED ONTO ADJACENT PROPERTIES; BOTH DURING AND AFTER CONSTRUCTION.

7. AS-BUILT PLOT PLANS SHALL BE SUBMITTED FOR ENGINEERING DIVISION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE REQUIRED ENGINEERING SIGN-OFF FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.). AS-BUILT PLANS MUST INCLUDE AS-BUILT GRADING OF THE SITE.

8. ANY EXISTING DAMAGED SECTIONS OF SIDEWALK AND/OR CURBING IDENTIFIED BY THE CITY ALONG STREETS ABUTTING THE SITE SHALL BE REPLACED AT THE DIRECTION OF THE CITY'S ENGINEERING STAFF.

GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. THIS PLAN OF DEVELOPMENT PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE,CONTROL OF RUNOFF,SHIELDING OF THE SOILS AND BINDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE NEED FOR EXTENSIVE SEDIMENTATION CONTROLS.

2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

3. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND FOR A PERIOD AFTERWARDS UNTIL ALL AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AFTER EACH STORM EVENT (1/2" OR MORE) OR ONCE A WEEK AND IMMEDIATELY MAKE ANY CORRECTIVE ACTION REQUIRED.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.

5. RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE.

6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM AND RESTABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. THE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS,TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED OR AN APPROVED EQUAL.

A) SEED BED PREPARATION:
- REMOVE STONES LARGER THAN 2"
- APPLY LIMESTONE AT 90# / 1000 S.F.
- WORK LIME AND FERTILIZER INTO SOIL

B) SEED APPLICATION:
- APPLY GRASS MIXTURE BY HAND OR CYCLONE SEEDER,LIGHTLY DRAG OR ROLL THE SEED SURFACE TO COVER SEED. OPTIMAL SEEDING SEASON IS BETWEEN MARCH 15TH AND JUNE 30TH OR BETWEEN AUGUST 15TH AND OCTOBER 30TH.
- IF SEEDING CAN NOT BE DONE DURING THESE TIMES,REPEAT MULCHING PROCEDURE STATED BELOW UNTIL SEEDING CAN TAKE PLACE.

C) SEED MIX:
- CREEPING RED FESCUE 49# / ACRE
- TALL FESCUE 20# / ACRE

D) MULCHING:
- IMMEDIATELY FOLLOWING SEEDING,MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1-1/2 TONS / ACRE SPREAD MULCH BY HAND OR MULCH BLOWER.
- PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISK HARROW STRAIGHT UP. MULCH MATERIAL SHOULD BE "TUCKED" APPROXIMATELY 2" - 3" INTO SOIL SURFACE.

E) TREE PROTECTION:
- LIMIT CONSTRUCTION ACTIVITIES THAT MIGHT CAUSE DAMAGE TO TREES. THE AREA ADJACENT TO AND TREES THAT ARE TO BE PROTECTED,WILL BE IDENTIFIED AND CLEARLY MARKED. EXCAVATION SHOULD NOT OCCUR WITHIN THE ROOT ZONE OF THE TREES THAT ARE TO REMAIN. IN ADDITION,RAISING OR LOWERING THE GRADE NEAR REMAINING TREES SHOULD NOT OCCUR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY EROSION AND SEDIMENTATION CONTROL MEASURES DUE TO UNFORESEEN FIELD CONDITIONS. ADDITIONAL CONTROL MEASURES MAY ALSO BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER,ENVIRONMENTAL SUPERVISOR AND/OR TOWN ENGINEER.

8. ANY CHANGE TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN BY THE CONTRACTOR SHALL BE SUBMITTED BY THE CONTRACTOR IN WRITING AND APPROVED BY THE ENGINEER.

9. ANTI-TRACKING PADS SHALL BE INSTALLED WHERE CONSTRUCTION ACCESS MEETS A PAVED ACCESS POINT,OR AS DIRECTED BY THE ENGINEER.

10. STOCKPILE LOCATIONS SHALL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION AND IF A STOCKPILE IS LOCATED OFF-SITE,THE LOCATION SHALL HAVE EROSION CONTROL MEASURES IN PLACE AND MEET ALL LOCAL REQUIREMENTS.

11. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL TO 1' VERTICAL OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS. WHERE LEDGE IS ENCOUNTERED,THE MAXIMUM CUT SLOPE MAY BE INCREASED TO 1 HORIZ.: 1 VERT. A 4FT HIGH PERMANENT SAFETY FENCE (e.g.CHAIN LINK FENCE) SHALL BE ADDED TO ALL ROCK CUTS GREATER THAN 4FT HIGH.

12. ALL SLOPES OR DISTURBED AREAS (EXCEPT PAVED AREAS) ARE TO BE STABILIZED WITH 4" OF TOPSOIL AND TURF MUST BE ESTABLISHED UNLESS OTHERWISE NOTED ON THE PLANS. STABILIZATION SHALL INCLUDE INSTALLATION OF EROSION CONTROL MATTING WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

13. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE,OR APPROVED EQUAL. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.

14. TEMPORARY PERVIOUS BARRIERS,USING SILT FENCE AND HAYBALES HELD IN PLACE WITH WOODEN STAKES,SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF-SITE.

15. JEFFERY NIMAN OR HER DULY AUTHORIZED AGENT (860) 841-6008 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPAL PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE TO THE START OF ANY CONSTRUCTION ACTIVITY.

16. JEFFERY NIMAN OR HIS DULY AUTHORIZED AGENT (860) 841-6008 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES,INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN,NOTIFYING THE PLANNING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.

17. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, AS AMENDED. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION AND SEDIMENTATION CONTROL MAINTENANCE REQUIREMENTS

TOPSOIL STOCKPILES:

THE SIDE SLOPES SHALL NOT EXCEED A SLOPE GREATER THAN 2:1. STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHOULD BE SEEDED AND MULCHED. A SEDIMENTATION FENCE SHALL BE INSTALLED APPROX.10FT FROM THE TOE OF SLOPE.

IF THE TOPSOIL STOCKPILE LOCATION IS RELOCATED, IT SHALL BE LOCATED SO AS NOT TO OBSTRUCT THE NATURAL DRAINAGE PATTERN OF THE SITE. IT SHALL BE LOCATED AS FAR AS PRACTICAL FROM ANY WETLANDS,WATER COURSES DRAINAGE WAY'S AND STEEP SLOPES. IF THE LOCATION IS DOWNGRADIENT FROM A LONG SLOPE,DIVERT RUNOFF AROUND THE STOCKPILE.

CONSTRUCTION ENTRANCE PAD / ANTI-TRACKING PAD:

THE CONSTRUCTION ENTRANCE SHALL BE KEPT CLEAN OF ANY DEBRIS OR CONSTRUCTION MATERIALS. A PERIODIC TOP DRESSING OF STONE SHALL BE ADDED AS MAY BE REQUIRED TO KEEP THE ENTRANCE PAD WORKING EFFECTIVELY. IF A SEDIMENT SPILL OCCURS ON THE ROAD, IT SHALL BE CLEANED UP IMMEDIATELY.

SEDIMENTATION CONTROL FENCE:

THE SEDIMENTATION CONTROL FENCE SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAIN EVENT OF 0.5 INCHES OR MORE. IF A FAILURE OCCURS,REPAIR OR REPLACE THE FENCE WITHIN 24 HRS. ANY SEDIMENT DEPOSITS THAT REACH HALF THE HEIGHT OF THE FENCE SHALL BE REMOVED.

DUST CONTROL:

PERIODICALLY MOISTEN THE EXPOSED SOIL SURFACE TO KEEP TRAVELWAYS DAMP. AFTER THE TRAVELWAY HAS BEEN PAVED,PERIODIC SWEEPING MAY BE REQUIRED TO REMOVE DUST AND FINE MATERIALS ACCUMULATED FROM TRUCK TRAFFIC.

TREE PROTECTION:

TREES TO BE PROTECTED WILL BE IDENTIFIED AND CLEARLY MARKED. CONSTRUCTION ACTIVITIES WITHIN THE ADJACENT AREA THAT MAY CAUSE DAMAGE TO THE TREE SHALL BE LIMITED AND TRUNK ARMORING PROVIDED.

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

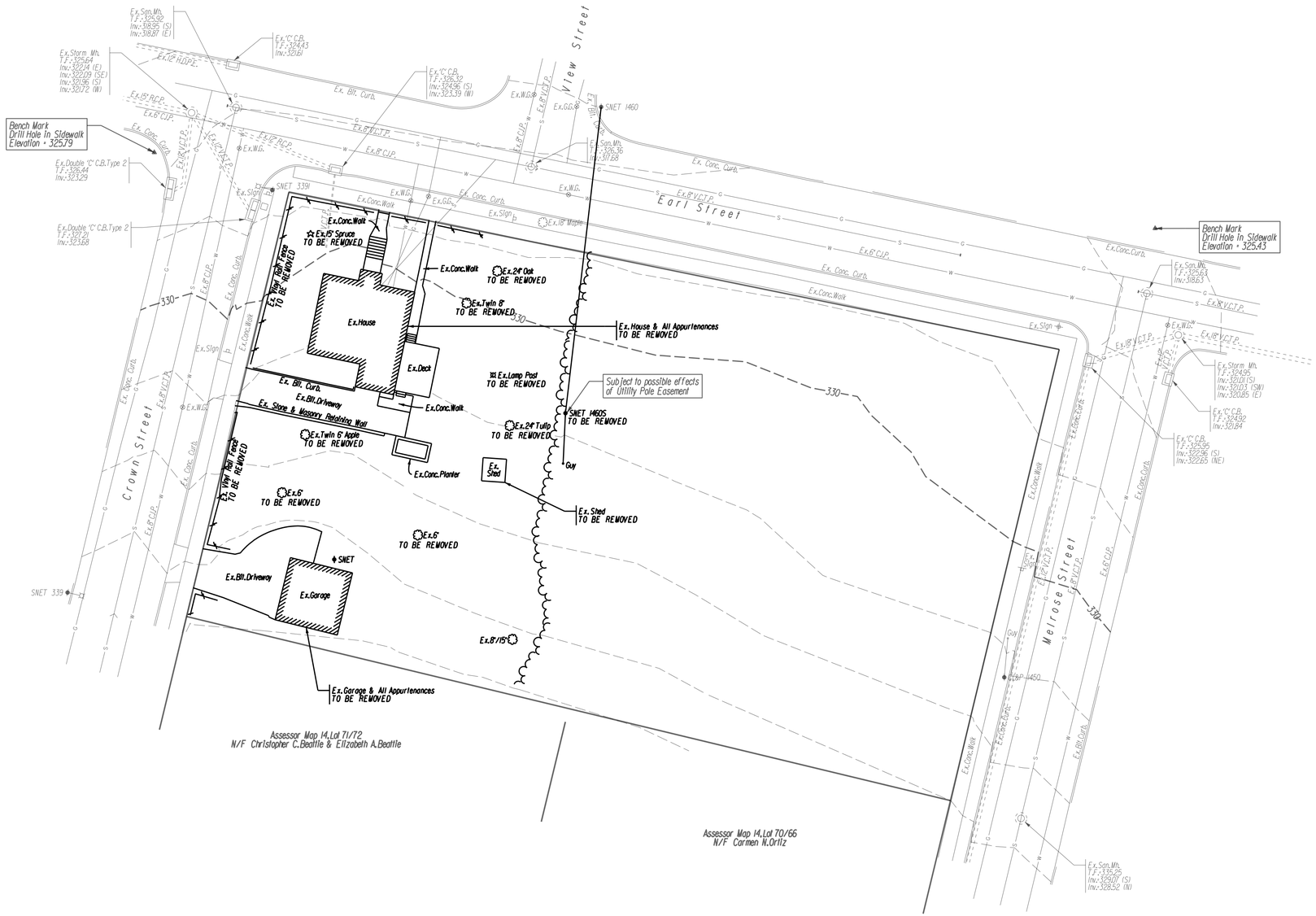
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

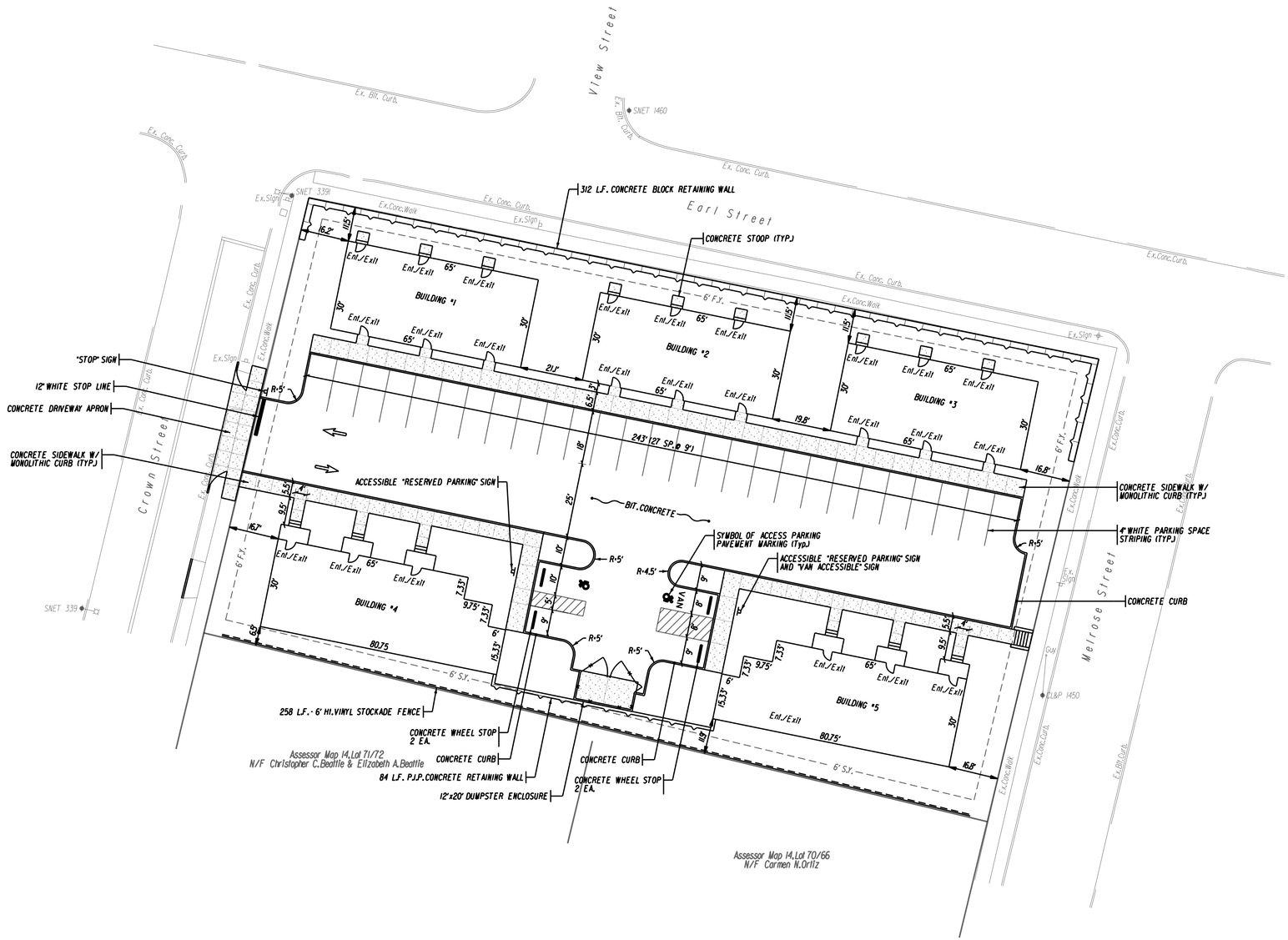
ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: NOTES-001

DRAWING TITLE: GENERAL NOTES

SHEET NO.: 3


Earl Street
Crown Street
Melrose Street
View Street
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Ex.House
Ex.Garage
Ex.Deck
Ex.Shed
Ex.Conc.Walk
Ex.Bit.Driveway
Ex.Bit.Curb.
Ex.Conc.Curb.
Ex.Conc.Planter
Ex.Stone & Masonry Retaining Wall
Ex.15" Spruce TO BE REMOVED
Ex.Twin Teak TO BE REMOVED
Ex.24" Oak TO BE REMOVED
Ex.Twin 8" TO BE REMOVED
Ex.House & All Appurtenances TO BE REMOVED
1Ex.Lamp Post TO BE REMOVED
Subject to possible effects of Utility Pole Easement
SNET 1460S TO BE REMOVED
Ex.24" Tulip TO BE REMOVED
Ex.Twin 6" Apple TO BE REMOVED
Ex.6' TO BE REMOVED
Ex.Shed TO BE REMOVED
Ex.Garage & All Appurtenances TO BE REMOVED
Ex.8"/15" TO BE REMOVED
Guy
SNET 1460
SNET 3391
SNET 339
Ex.Sign
Ex.W.G.
Ex.G.G.
Ex.Conc.Walk
Ex.Conc. Curb.
Ex.Bit. Curb.
Ex.8" V.C.T.P.
Ex.8" C.I.P.
Ex.12" R.C.P.
Ex.12" H.D.P.E.
Ex.15" R.C.P.
Ex.8" C.I.P.
Ex.18" Maple
Ex.San.Mh. T.F.=326.92 Inv.=318.95 (S) Inv.=318.87 (E)
Ex.'C' C.B. T.F.=324.43 Inv.=321.61
Ex.Storm Mh. T.F.=325.64 Inv.=322.14 (E) Inv.=322.09 (SE) Inv.=321.96 (S) Inv.=322.72 (W)
Ex.'C' C.B. T.F.=326.32 Inv.=324.96 (S) Inv.=323.39 (W)
Ex.San.Mh. T.F.=326.36 Inv.=311.28
Ex.Double 'C' C.B.Type 2 T.F.=326.44 Inv.=323.29
Ex.Double 'C' C.B.Type 2 T.F.=327.20 Inv.=323.68
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Sign
Ex.18" V.C.T.P.
Ex.W.G.
Ex.San.Mh. T.F.=325.63 Inv.=316.03
Ex.Storm Mh. T.F.=324.95 Inv.=321.01 (S) Inv.=321.03 (SW) Inv.=320.85 (E)
Ex.'C' C.B. T.F.=324.92 Inv.=321.84
Ex.'C' C.B. T.F.=324.95 Inv.=322.96 (S) Inv.=322.85 (NE)
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Curb.
Ex.Bit.Curb.
Ex.6" C.I.P.
Ex.W.G.
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Curb.
Ex.Bit.Curb.
Ex.6" C.I.P.
Ex.W.G.



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
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Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

Joseph M. Green

STATE OF CONNECTICUT — JOSEPH M. GREEN — No. PEN.0029232 — LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:

SITE PLAN

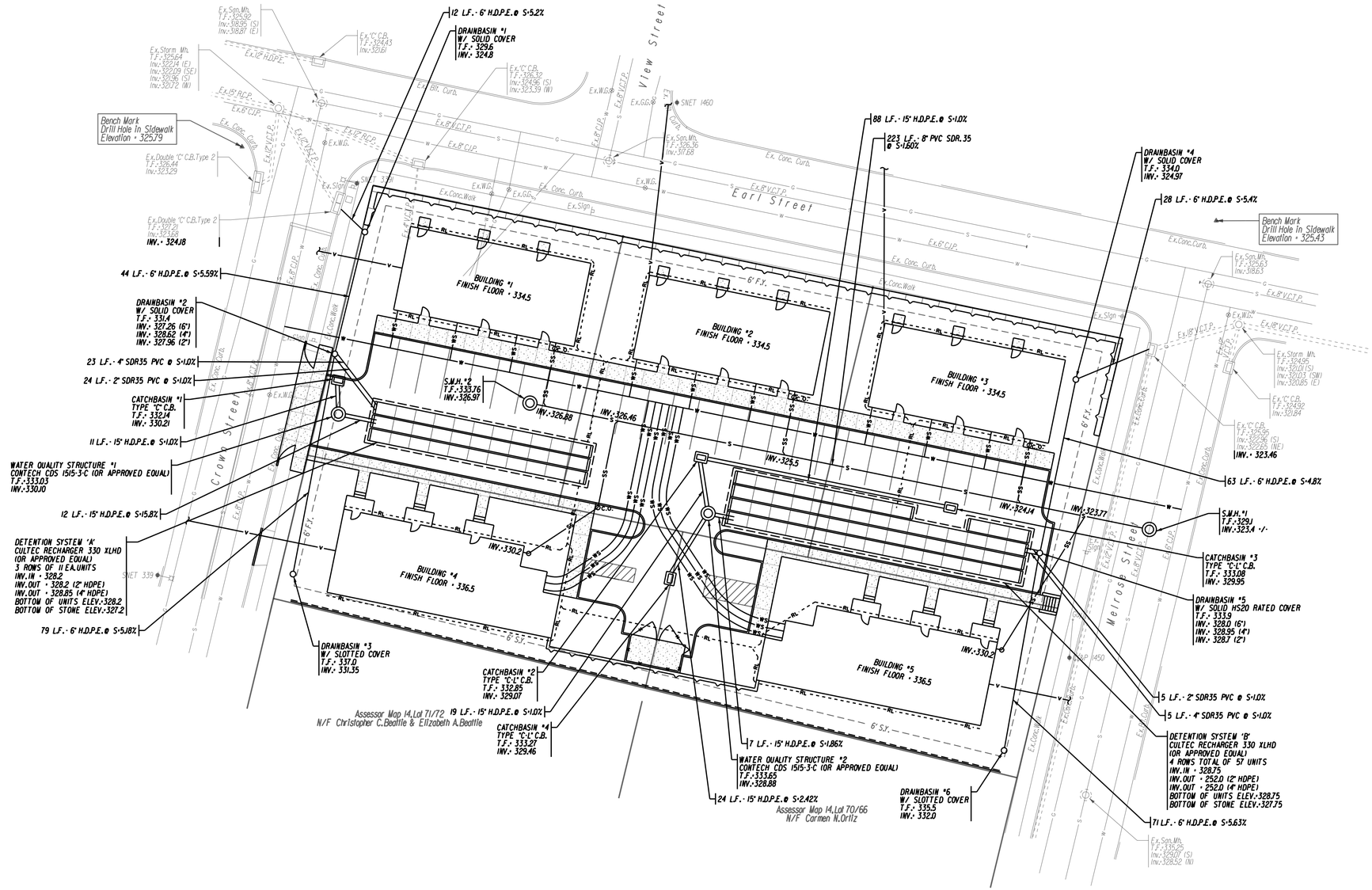
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: PLN-001

DRAWING TITLE: LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN

SHEET NO.: 5



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

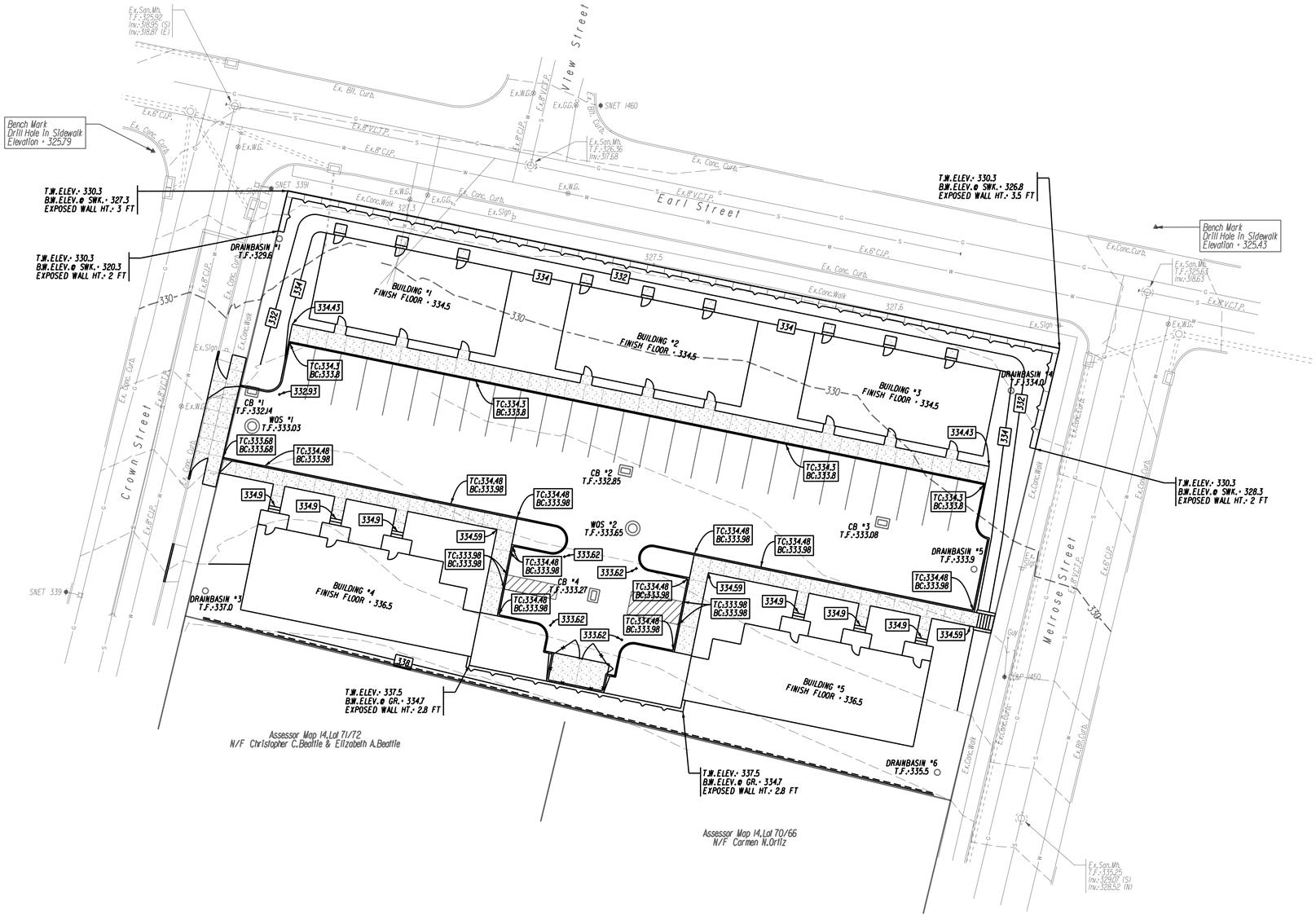
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

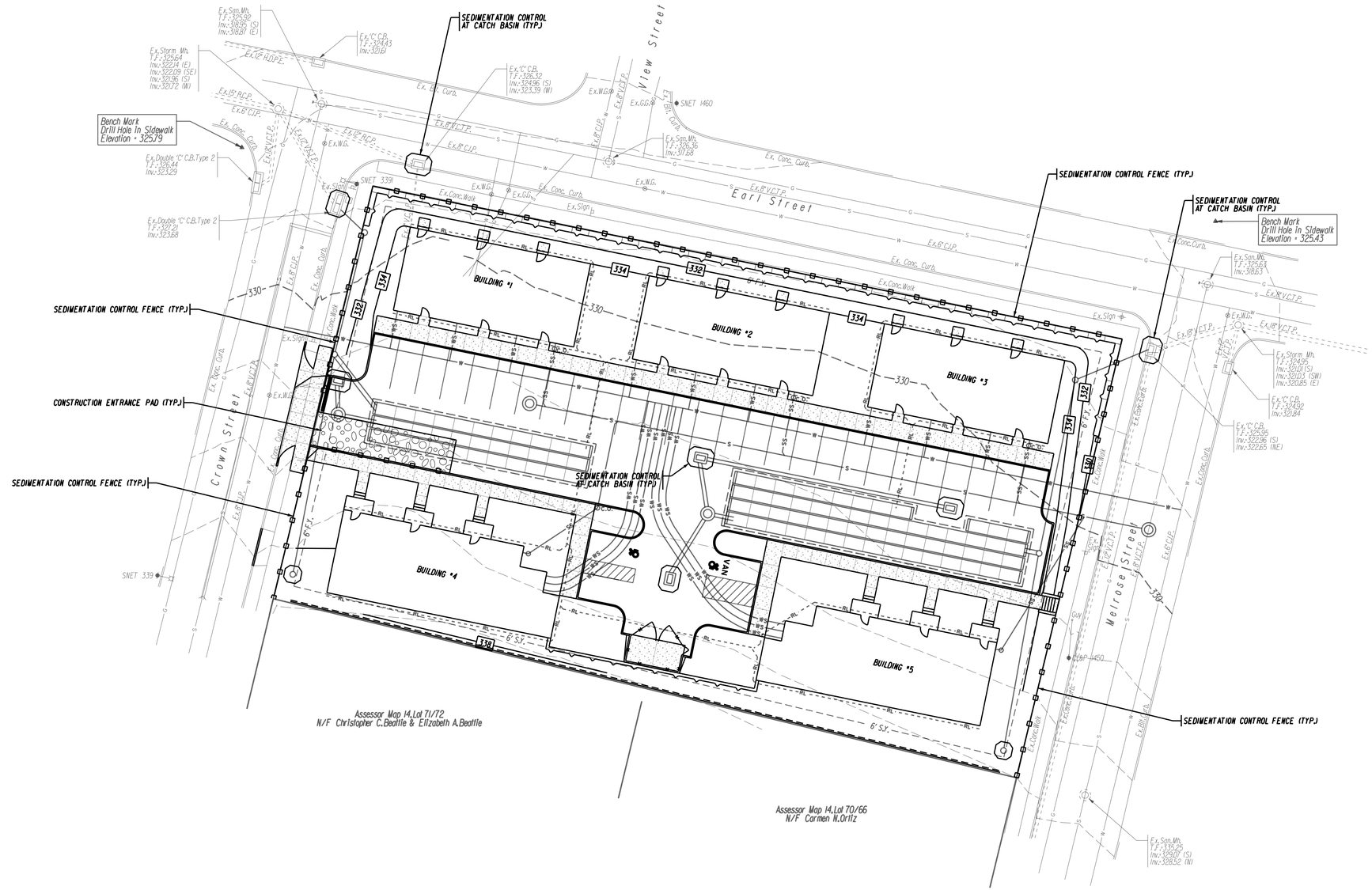
ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING TITLE: DRAINAGE AND UTILITIES PLAN

DRAWING NO. UTIL-001

SHEET NO. 6


Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Earl Street
View Street
Crown Street
Melrose Street
T.W.ELEV.= 330.3
B.W.ELEV.@ SWK.= 327.3
EXPOSED WALL HT.= 3 FT
T.W.ELEV.= 330.3
B.W.ELEV.@ SWK.= 320.3
EXPOSED WALL HT.= 2 FT
T.W.ELEV.= 330.3
B.W.ELEV.@ SWK.= 326.8
EXPOSED WALL HT.= 3.5 FT
T.W.ELEV.= 330.3
B.W.ELEV.@ SWK.= 328.3
EXPOSED WALL HT.= 2 FT
T.W.ELEV.= 337.5
B.W.ELEV.@ GR.= 334.7
EXPOSED WALL HT.= 2.8 FT
T.W.ELEV.= 337.5
B.W.ELEV.@ GR.= 334.7
EXPOSED WALL HT.= 2.8 FT
DRAINBASIN #1
T.F.=329.6
DRAINBASIN #3
T.F.=337.0
DRAINBASIN #4
T.F.=334.0
DRAINBASIN #5
T.F.=333.9
DRAINBASIN #6
T.F.=335.5
BUILDING #1
FINISH FLOOR = 334.5
BUILDING #2
FINISH FLOOR = 334.5
BUILDING #3
FINISH FLOOR = 334.5
BUILDING #4
FINISH FLOOR = 336.5
BUILDING #5
FINISH FLOOR = 336.5
CB #1
T.F.=332.14
CB #2
T.F.=332.85
CB #3
T.F.=333.08
CB #4
T.F.=333.27
WOS #1
T.F.=333.03
WOS #2
T.F.=333.65
Assessor Map 14,Lot 71/72
N/F Christopher C.Beattie & Elizabeth A.Beattie
Assessor Map 14,Lot 70/66
N/F Carmen M.Ortiz
Ex.San.Mh.
T.F.=326.92
Inv.=318.95 (S)
Inv.=318.87 (E)
Ex.San.Mh.
T.F.=326.36
Inv.=311.28
Ex.San.Mh.
T.F.=325.63
Inv.=316.3
Ex.San.Mh.
T.F.=335.25
Inv.=329.07 (S)
Inv.=328.52 (N)
SNET 1460
SNET 1450
SNET 3391
SNET 3391
Ex. Bit. Curb
Ex. Conc. Curb
Ex.Conc.Walk
Ex.Sign
Ex.W.G.
Ex.G.G.
Ex.8"C.I.P.
Ex.8"V.C.T.P.
Ex.6"C.I.P.
Ex.Bit.Curb
Ex.Conc.Curb
Ex.Gas
Ex.Elec.Box
Ex.Elec.Manh.
Ex.Elec.Line
Ex.Tel.Manh.
Ex.Tel.Line
Ex.Gas Line
Ex.Gas Valve
Ex.Gas Gate
Ex.Gas Box
Ex.Gas Marker
Ex.Gas Meter
Ex.Gas Vent
Ex.Gas Reg.
Ex.Gas Manh.



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0029232 LICENSED PROFESSIONAL ENGINEER

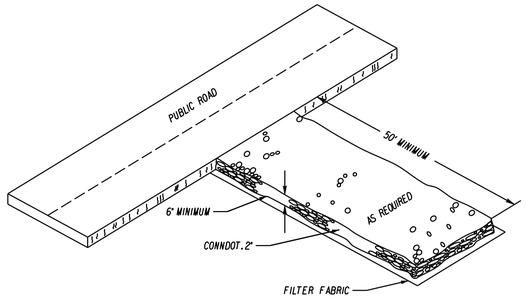
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

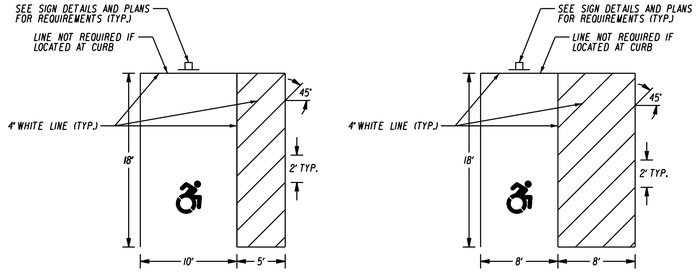
DRAWING NO.
E&S-001

DRAWING TITLE:
EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
8



CONSTRUCTION ENTRANCE PAD
NOT TO SCALE

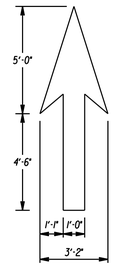


NOTE: IF A CAR AND VAN SPACE SHARE A COMMON ACCESS AISLE, THAT AISLE SHALL BE 96 INCHES MINIMUM IN WIDTH

PARKING STALLS FOR HANDICAPPED
NOT TO SCALE

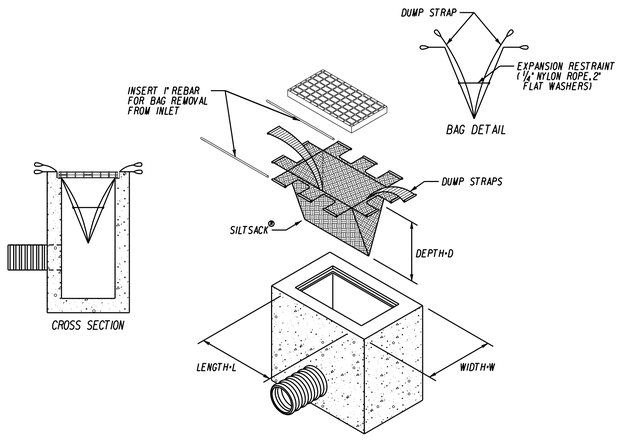


SYMBOL OF ACCESS PARKING SPACE MARKING
(TO COMPLY WITH CT.PA.#16-78)
NOT TO SCALE



PAVEMENT ARROW DETAIL (WHITE)
NOT TO SCALE

PLACEMENT AND CONSTRUCTION OF A SEDIMENTATION CONTROL FENCE
NOT TO SCALE



SEDIMENTATION CONTROL AT CATCH BASIN
NOT TO SCALE

SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS

RESERVED PARKING
PERMIT REQUIRED
VIOLATORS WILL BE TOWED AT OWNER'S EXPENSE

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
2.00	12X24		1	.080

VAN ACCESSIBLE

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
	12X6	31-0648		.080

R1-1

STOP

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
5.19	30	31-0552	1	.080

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

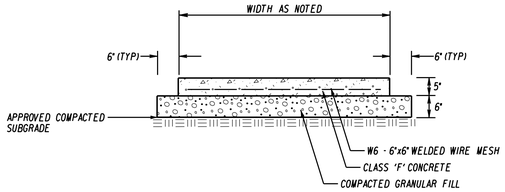
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.
MISC-001

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

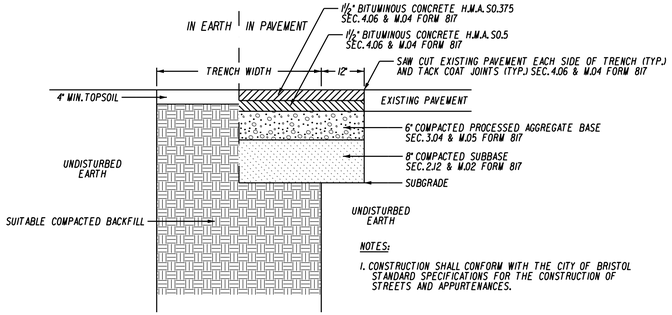
SHEET NO.
9



NOTES:

1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.
5. WHEN APPLICABLE, MAINTAIN ¼" PER 1'-0" MAX. CROSS SLOPE TOWARDS GUTTER.

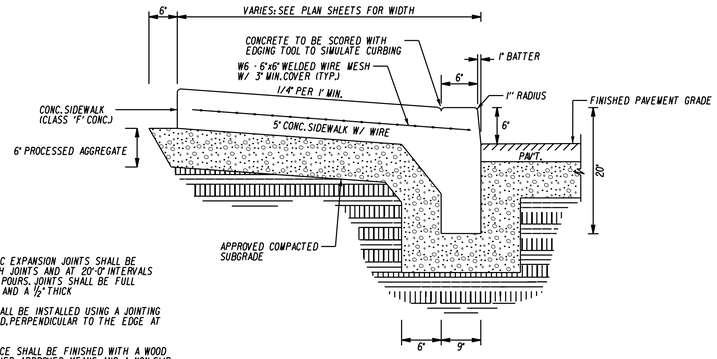
CONCRETE SIDEWALK SECTION
NOT TO SCALE



NOTES:

1. CONSTRUCTION SHALL CONFORM WITH THE CITY OF BRISTOL STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF STREETS AND APPURTENANCES.

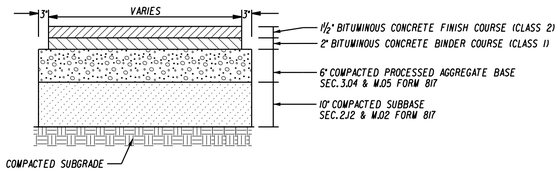
TRENCH RESTORATION DETAIL
NOT TO SCALE



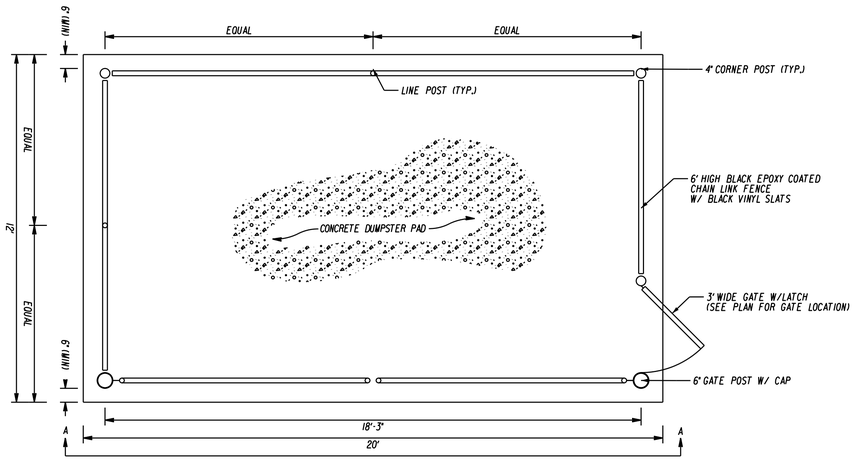
W/ 6" CURB REVEAL

NOTES:

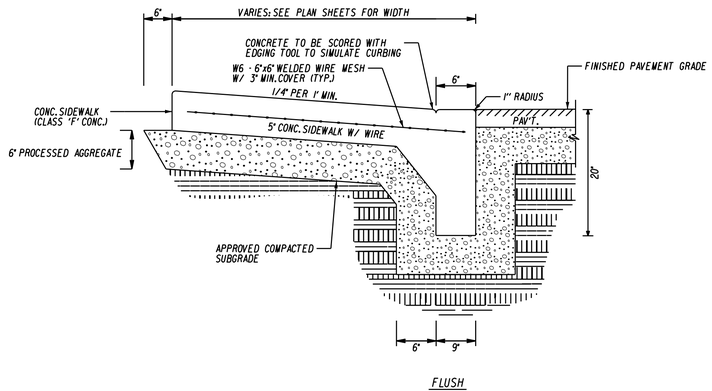
1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.



BITUMINOUS CONCRETE DRIVEWAY AND PARKING LOT PAVEMENT SECTION
NOT TO SCALE

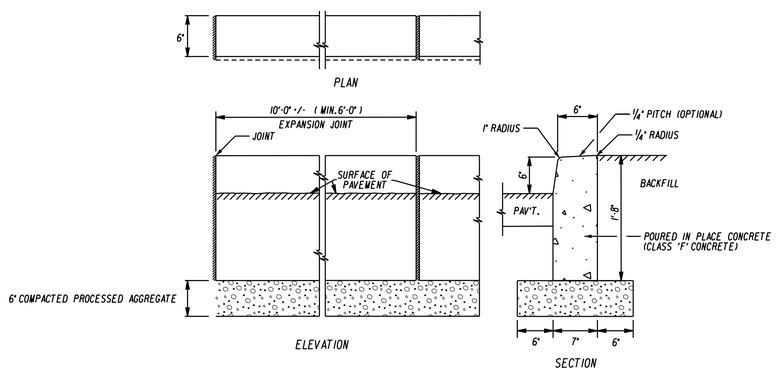


PLAN

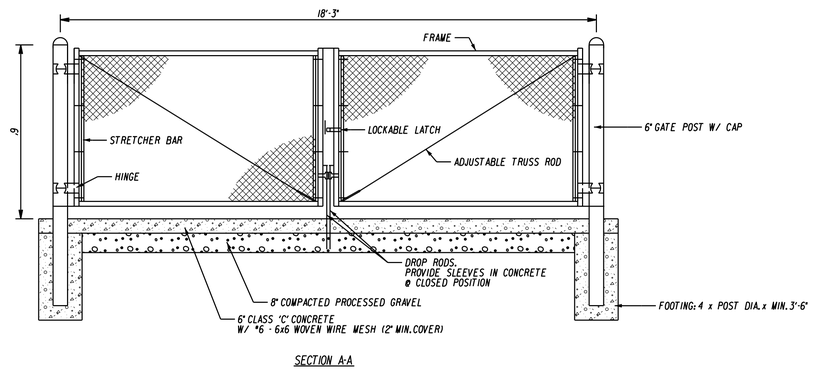


FLUSH

MONOLITHIC CONRETE CURB AND SIDEWALK
NOT TO SCALE



CONCRETE CURBING
NOT TO SCALE



SECTION A-A

DUMPSTER PAD DETAIL
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

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Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0020232 LICENSED PROFESSIONAL ENGINEER

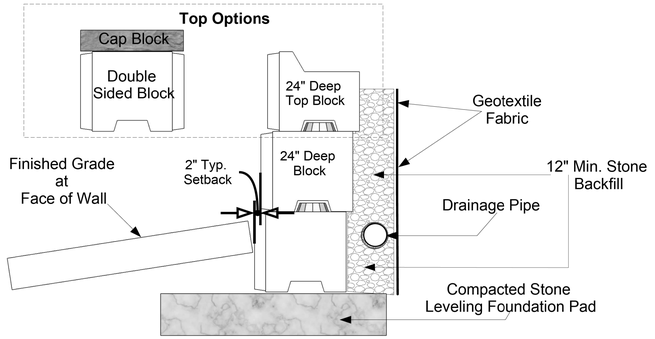
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-002

DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

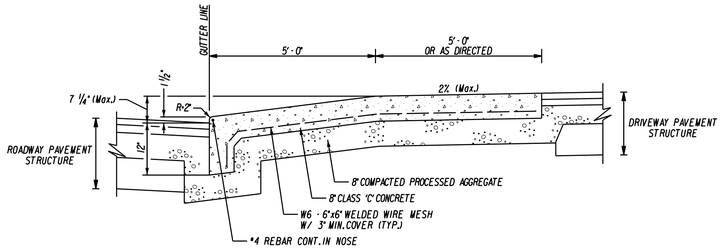
SHEET NO.: 10



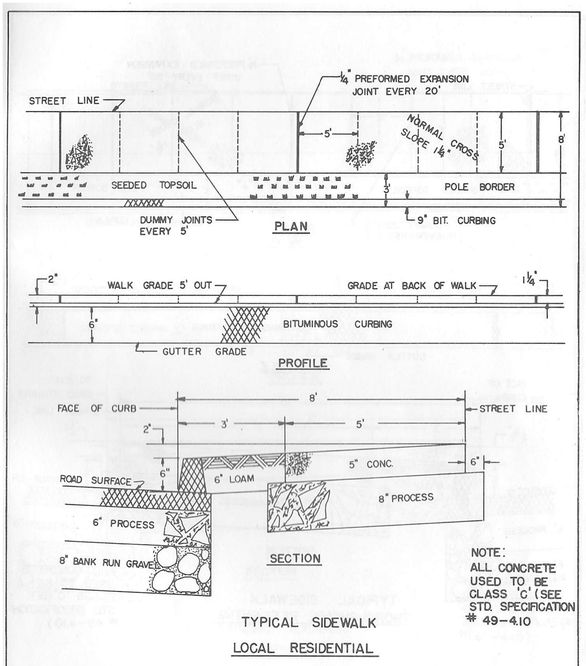
ATLAS CONCRETE PRODUCTS
www.AtlasConcrete.com
65 Burritt St. 800-774-1112
New Britain CT 06053 860-224-2244
860-224-2255 Fax

ATLAS CONCRETE PRODUCTS

Atlas Retaining Wall
Typical Section
6' Height Wall



CONCRETE APRON SECTION
(NOT TO SCALE)

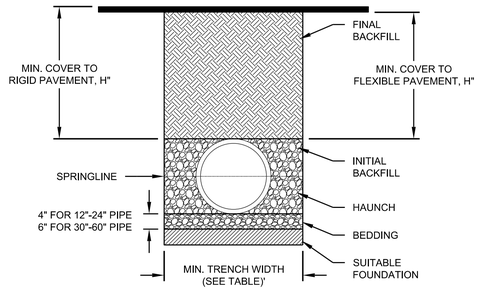


TYPICAL SIDEWALK
LOCAL RESIDENTIAL

PREPARED BY ENGINEERING DEPT.

5-10

STANDARD DETAIL FOR THE CONSTRUCTION OF STREETS & APPURTENANCES IN THE CITY OF BRISTOL, CONNECTICUT.
EFFECTIVE DATE 2/20/70



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
6" (150mm)	40 (12.2m)	19 (5.8m)	27 (8.2m)	19 (5.8m)	20 (6.1m)
8" (200mm)	30 (9.1m)	14 (4.3m)	21 (6.4m)	14 (4.3m)	15 (4.6m)
10" (250mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	18 (5.5m)
15" (375mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	19 (5.8m)
18" (450mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
24" (600mm)	27 (8.2m)	13 (4.0m)	19 (5.8m)	13 (4.0m)	14 (4.3m)
30" (750mm)	22 (6.7m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)
42" (1050mm)	24 (7.3m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
48" (1200mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

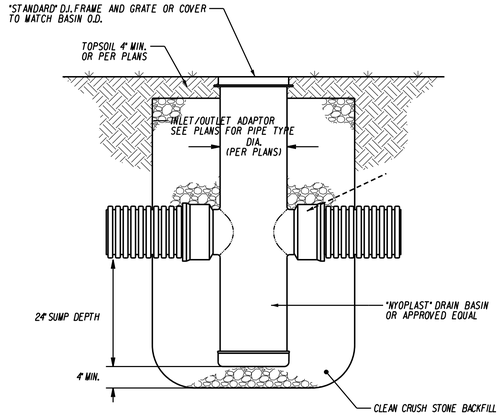
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDINGTO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

TYPICAL TRENCH DETAIL FOR HDPE PIPE
NOT TO SCALE



YARD DRAIN
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024
SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Phone: (860)-589-0135
Terryville, CT 06786 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-003

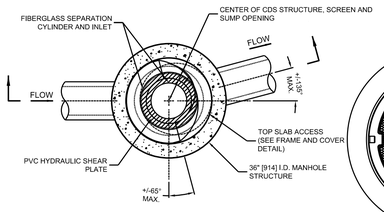
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 11

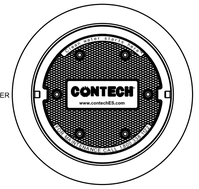
CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1,0 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.



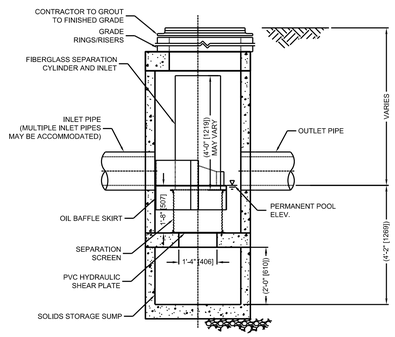
PLAN VIEW B-B
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #1
WATER QUALITY FLOW RATE (cfs [L/s])			0,08 cfs
PEAK FLOW RATE (cfs [L/s])			2,23 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			333,03
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	330,10	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	330,10	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #2
WATER QUALITY FLOW RATE (cfs [L/s])			0,31 cfs
PEAK FLOW RATE (cfs [L/s])			2,08 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			333,65
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	328,88	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	328,88	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			



ELEVATION A-A
N.T.S.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENTS 5,788,848; 6,406,617; 6,511,781; RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C
ONLINE CDS
STANDARD DETAIL

M:\STORMWATER\JOBS\CTOWN\SUBAMN_SDS\DESIGN TOOLS_STANDARD DETAILS\CDS\CDS1515-3-C-DTL.DWG 8/6/2018 4:16 PM

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN 17134 REGISTERED LAND SURVEYOR No. PE.N.01039232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-004

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 12

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATIONS

GENERAL

CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE JOINED CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m).
6. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE.
7. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
8. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
9. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT³ / FT (0.693 m³ / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT³ / UNIT (1.478 m³ / UNIT) - WITHOUT STONE.
10. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
11. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS.
13. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
14. THE RECHARGER 330XLRHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
15. THE RECHARGER 330XLSHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
16. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
18. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
19. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
20. THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
21. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
22. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
23. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION.
25. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m)
26. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL

CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

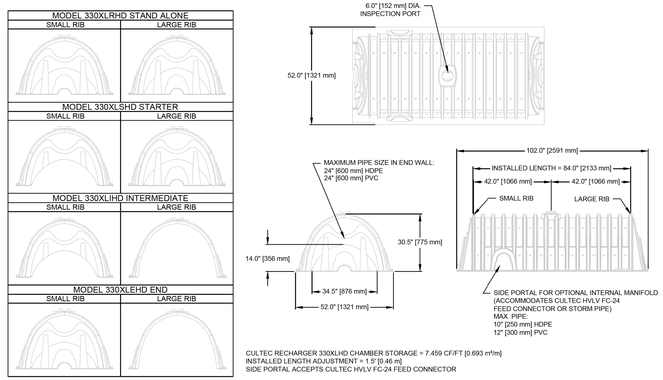
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

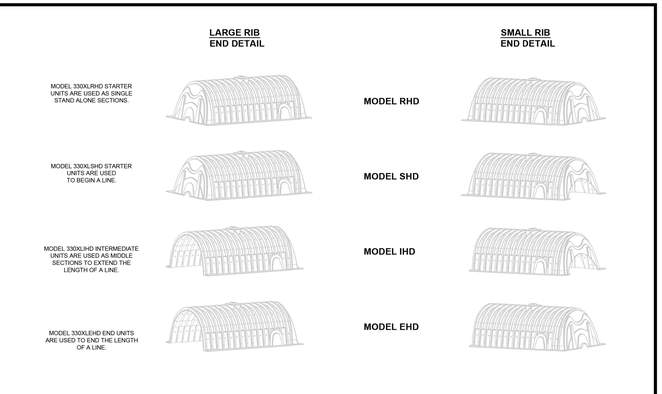
GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

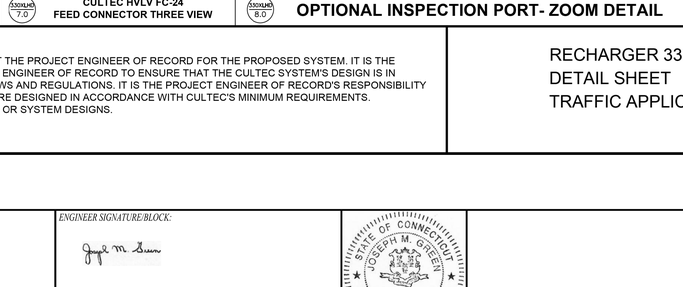


CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR

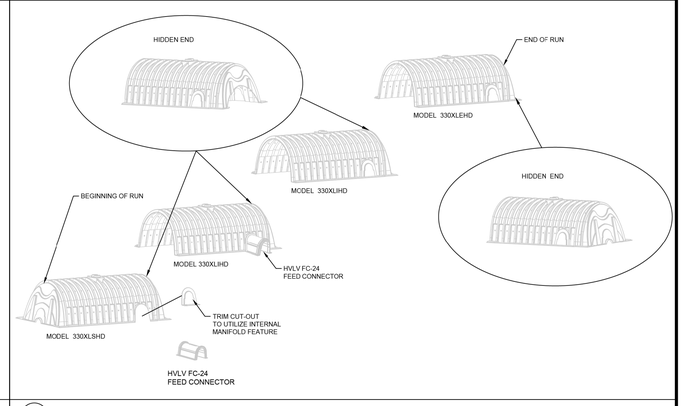
330XLHD 2.0 **CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW**



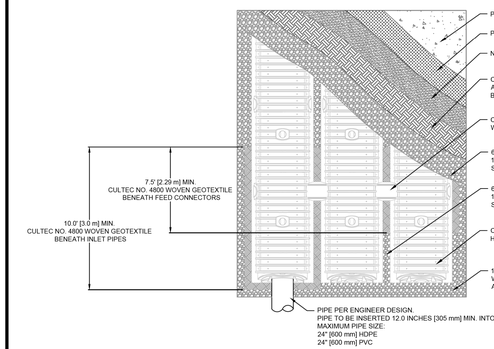
330XLHD 3.0 **CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION**



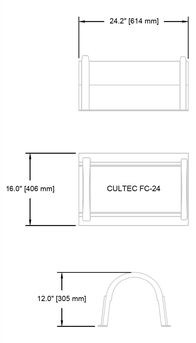
330XLHD 4.0 **CULTEC RECHARGER 330XLHD HEAVY DUTY CROSS SECTION**



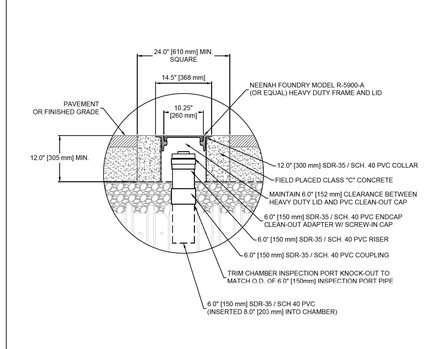
330XLHD 5.0 **CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK**



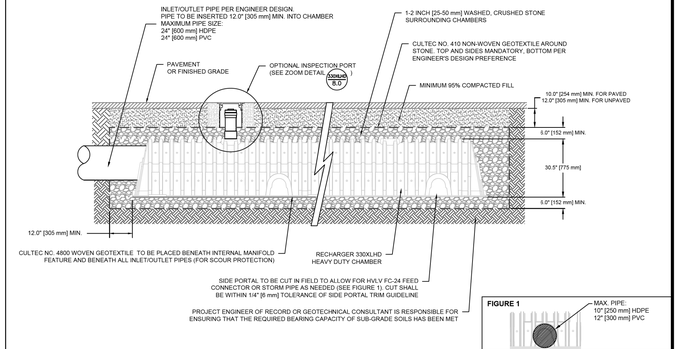
330XLHD 6.0 **CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW**



330XLHD 7.0 **CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW**



330XLHD 8.0 **OPTIONAL INSPECTION PORT- ZOOM DETAIL**



330XLHD 9.0 **CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL**

CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280
878 Federal Road
Brookfield, CT 06804
www.cultec.com
PH: (203) 775-4416
PH: (800) 4-CULTEC
FX: (203) 775-1462
tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER

PROJECT NO:		DATE:	2019
DESIGNED BY:	CULTEC, INC	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 1

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C. Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. P.E.N.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-005

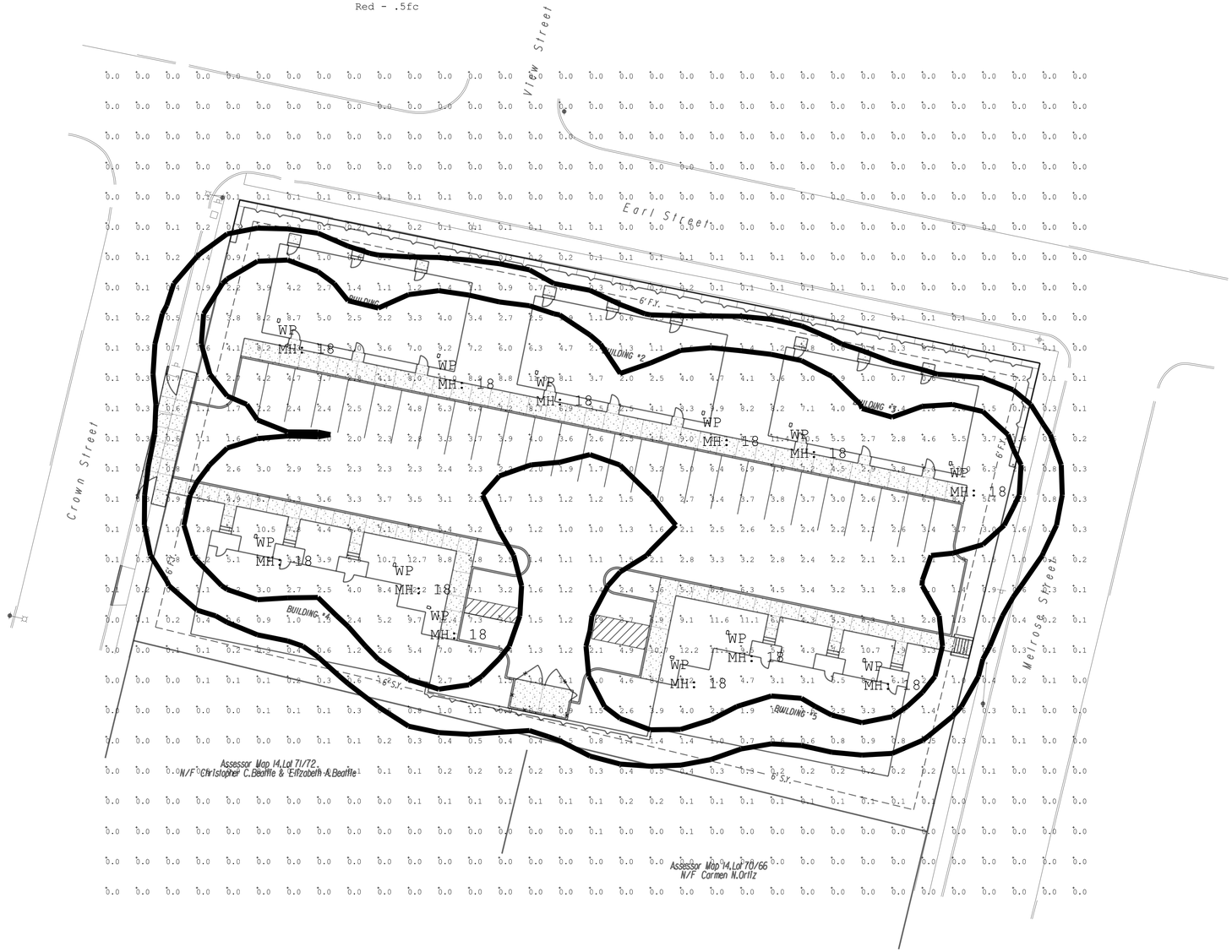
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 13

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	12	WP	SINGLE	WPC100UT4-WCSBPCCR

Designed by Wattsaver Lighting - JC

Blue - 2fc
Red - .5fc



LIGHTING NOTES:

1. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES WHICH WAY BE IN CONFLICT WITH THE INDICATED LAYOUT. ANY CONFLICTS WHICH WAY OCCUR SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE LOCATIONS CAN BE DETERMINED.
2. ALL LIGHTS WILL BE PROVIDED WITH INTERNAL CUTOFFS TO PREVENT LIGHT TRESSPASS ONTO ADJOINING PROPERTIES.

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Greg Cate
Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
Phone: 860-282-1818
Website: www.wattsaverlighting.com

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

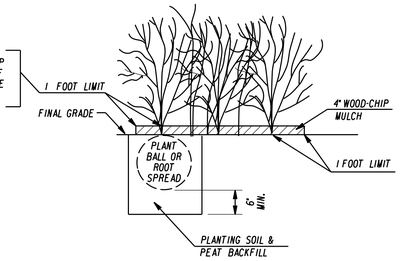
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DRAWING TITLE: LIGHTING PLAN

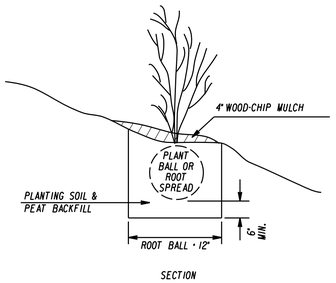
SHEET NO.: L1.0

MULCHING OF PLANT BEDS

UNLESS OTHERWISE DIRECTED WOOD-CHIP MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.



SHRUB PLANTING IN BEDS

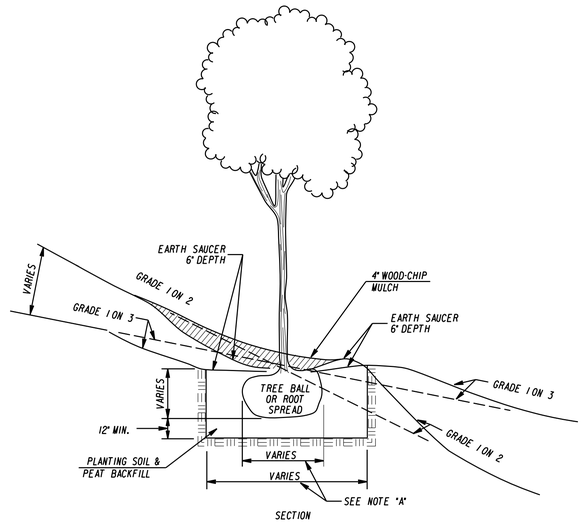


SECTION

SHRUB PLANTING

LANDSCAPE NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM AND SEED.
2. PROVIDE A APPROVED WEED BARRIER UNDER ALL BARK MULCH
3. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH WAY OCCUR BETWEEN PLANTING AND UTILITIES SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
4. PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND ACCEPTANCE AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.
5. FINAL QUANTITIES AND SPACING MAY BE MODIFIED AS NEEDED BY THE LANDSCAPE INSTALLER.
6. PLANT SPECIES MAY NEED TO BE SUBSTITUTED WITH AN EQUIVALENT SPECIES DUE TO AVAILABILITY AT THE TIME OF INSTALLATION.



SECTION

TREE PLANTING



Planting Key

Key	Quantity	Botanical Name Common Name	Size	Condition	Notes
AV	8	Thuja Occidentals Emerald Arborvitae	4 Foot	Height	
BP	4	Pyrus Calleryana "Bradford" Bradford Pear	2" - 2 1/2"	Caliper	
AZ	2	Rododendron / Robelzea Autumn Bonfire Azalea / Deleware Wine Valley Azalea	3	Gallon	
BW	8	Buxus Horizontalis Japonic Japanese Boxwood	#2	Container	

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

DPS DEVELOPMENT PLANNING SOLUTIONS LLC

Charlie Talmadge
Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
Phone: 860-506-4268
Website: www.developmentplanningsolutions.com

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

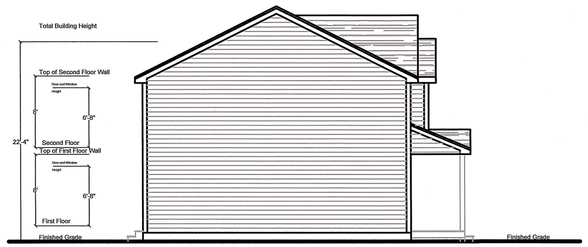
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DRAWING TITLE: LANDSCAPE PLAN

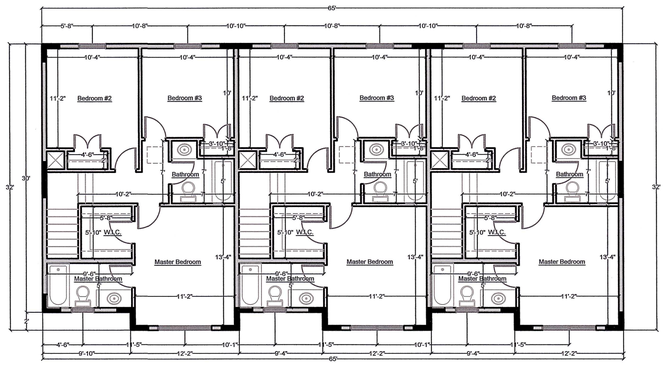
DRAWING NO.

SHEET NO. L2.0

Elevation Drawings and Floor Plans



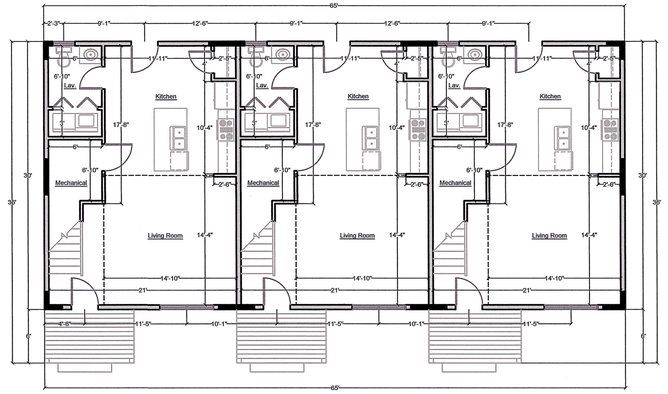
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 1
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET

Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
Jan. 16, 2023	
Mar. 14, 2023	

Drawing Index

A.1	Schematic Design	A.6	
A.2		A.7	
A.3		A.8	
A.4		A.9	
A.5		A.10	

Code Data

The basis for design is the following:

2021 International Residential Code for One and Two Family Dwellings
2022 CT Supplement
2021 IECC
(ResCheck Software Version 4.7.2.0)

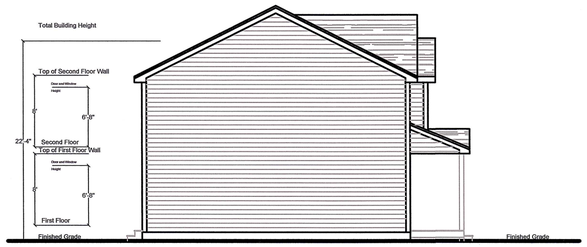
The General Contractor and all Sub Contractors shall comply with all Local, State, and Federal Building Codes and Regulations as applicable

Schematic Design

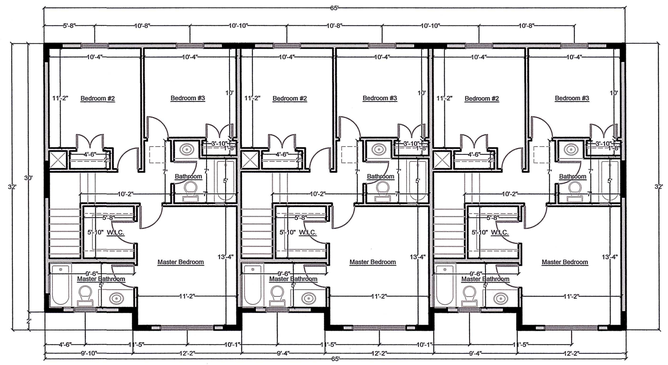
Scale
1/8" = 1'-0"

Sheet
A.1

D|P|S
Development Planning Solutions LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



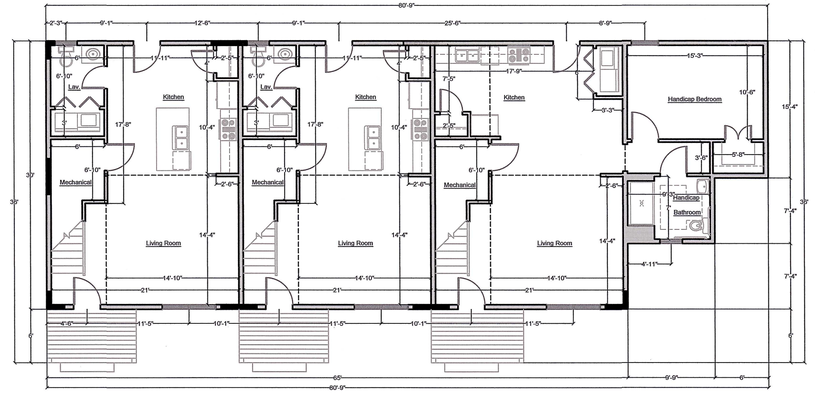
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 2
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET

Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
Jan. 16, 2023	
Mar. 14, 2023	
June 5, 2023	

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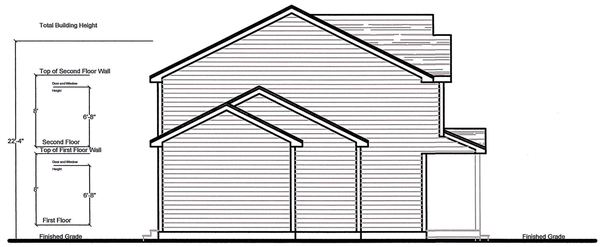
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Schematic Design

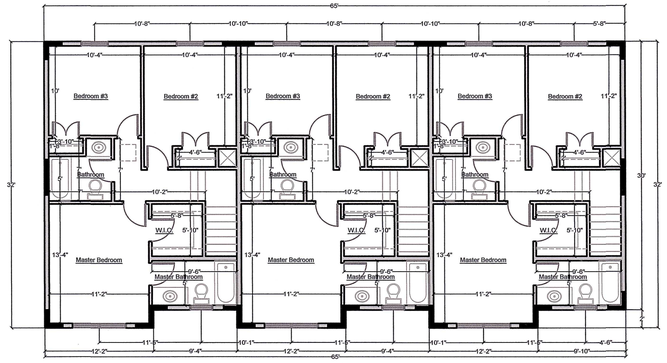
SCALE
$\frac{1}{8}" = 1'-0"$

SHEET
A.1

D|P|S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



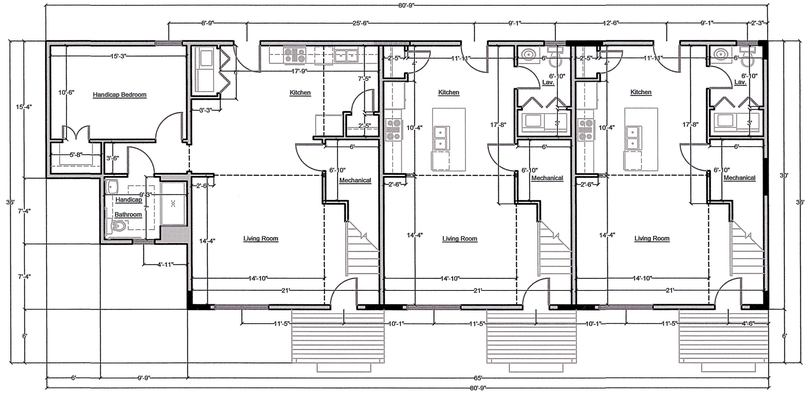
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 3
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET | Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
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Code Data

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2021 International Residential Code for One and Two Family Dwellings
2022 CT Supplement
2021 IECC
(ResCheck Software Version 4.7.2.0)

The General Contractor and all Sub Contractors shall comply with all Local, State, and Federal Building Codes and Regulations as applicable

Schematic Design

SCALE
$\frac{1}{8}$" = 1'-0"

SHEET
A.1

D|P|S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268

Public Hearing Extension Request to September 16, 2024

From: T. Furey [mailto:tfurey@fureydonovan.com]
Sent: Thursday, August 22, 2024 4:08 PM
To: Robert Flanagan <RobertFlanagan@bristolct.gov>
Cc: Andrew Armstrong <AndrewArmstrong@bristolct.gov>; Charlie Talmadge <Charlie@developmentplanningsolutions.com>
Subject: Time Frame Waivers

Robert,

Confirming as follows:

1. DGG Development LLC re: application for Site Plan Approval #2495 consents to extension of date to close the public hearing to the September 16, 2024 meeting.
2. Crown Estates, LLC re Zone Change Application 2498 consents to extension of date to close the public hearing to the September 16, 2024 meeting.

Let me know if you need more.

Timothy W. Furey
Furey, Donovan, Cooney & Dyer P.C.
43 Bellevue Ave
Bristol Ct 06010
(860) 589-4343

Public Hearing Extension Request to August 19, 2024

LAW OFFICES

FUREY, DONOVAN, COONEY & DYER P. C.

Timothy W. Furey
Patrick J. Cooney
Matthew D. Dyer

Molly Plante

Charles L. Furey (1923-2004)
Theodore M. Donovan (1932-2020)
William Tracy Jr. (ret)

43 Bellevue Avenue
P. O. Box 670
Bristol, Connecticut 06011-0670
(860) 589-4343

www.fureydonovan.com
Fax No. (860) 583-8674
tfurey@fureydonovan.com

July 8, 2024

City of Bristol Zoning Commission
C/O Robert Flanagan, City Planner
111 North Main Street
Bristol Ct, 06010

RE: Continuance request for Public Hearings on Applications #2494 and #2495

Dear Sirs,

Please accept this letter as a written request on behalf of Applicant, DGG Development, LLC for the continuance of the public hearings for Applications #2494 and #2495 presently scheduled for July 8, 2024 until your August 19, 2024 meeting. In making this request the applicant hereby waives all statutory timeframe requirements until the finalized date of your August meeting. The Commission indicated a traffic study would be helpful and we have engaged Hesketh Associates to prepare a traffic study unfortunately it could not be completed in time for this meeting. Further we are making other site plan adjustments based on the comments received from the Commission and the public.

Respectfully submitted,

Very Truly Yours,

Timothy W. Furey

For Office Use Only
APPLICATION NO. 2495
DATE FILED: 5/2/24
DECISION DATE:
DECISION:

CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SITE PLAN APPROVAL

The undersigned Applicant hereby applies for approval of a Site Plan for the following use:

Unified Residential Development, a [ ] permitted use [✓] Special Permit use

under Section(s) Article 2 - Section 9.2.3 of the Bristol Zoning Regulations.

Address or Location of the Property: Earl Street, east of Crown Street and West of Melrose Street

Assessor's Map No.: 14 Assessor's Lot No.(s): 72, 73, 73, 75, and 76

Zone of the Property: R-15 / RM Size of the Property (in acres or square feet): .96 acres

Does this application involve an activity regulated by the Inland Wetlands Agency? [ ] yes [✓] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [ ] yes, on _____ [ ] no

Other comments: _____

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: DGG Development LLC

Address: 21 Cobbs Road City: West Hartford State: Ct Zip: 06010

Telephone No.: (860) 841-6008 E-Mail: nimanjeff@icloud.com

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: Same as Applicant

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* Jeffrey Niman

The following shall be included as part of this application:

- filing fee – $310 (includes $60 State fee) *plus* $50 per dwelling unit *plus* $10 per 1,000 sq. ft. or portion thereof of proposed non-residential building (make checks payable to "City of Bristol")
- six paper copies and one digital copy of a Site Plan containing all information required on the Site Plan Requirements Checklist
- a written narrative and any other data and drawings as may be required (e.g., drainage calculations, exterior building elevations)

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

LUO – 01/24

For Office Use Only
APPLICATION NO. 2495

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Attorney Timothy Furey

Address: 43 Bellevue Avenue City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 589-4343 E-Mail: tfurey@fureydonovan.com

1/24 - LUO

For Office Use Only
APPLICATION NO. 2495

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Earl Street, east of Crown Street and West of Melrose Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

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Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

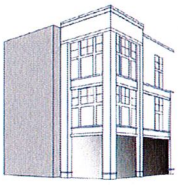
Name: Development Planning Solutions LLC

Address: 225 North Maon Street Suite 207 City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 506-4268 E-Mail: charlie@developmentplanningsolutions.com

08/17 - LUO

Narrative



D | P | S

DEVELOPMENT PLANNING SOLUTIONS LLC.

Project Narrative

Project Title: ECM Gardens

General Information

Project Name: ECM Gardens **Project Location:** Earl Street between Crown and Melrose **Zone:** R-15 / RM **Project Type:** Unified Residential Development **Date Submitted:** May 2, 2024 **Variances Required:** None **Wetlands Approval Required:** No **Special Permit Required:** Yes **Site Plan Approval Required:** Yes	**Developer:** DGG Development LLC **Site Engineer:** Robert Green Associates LLC **Architectural Design:** Development Planning Solutions LLC **Landscape Design:** Development Planning Solutions LLC **Lighting Design:** Wattsaver Lighting Products **Project Consultant:** Development Planning Solutions LLC **Legal Representative:** Attorney Timothy Furey

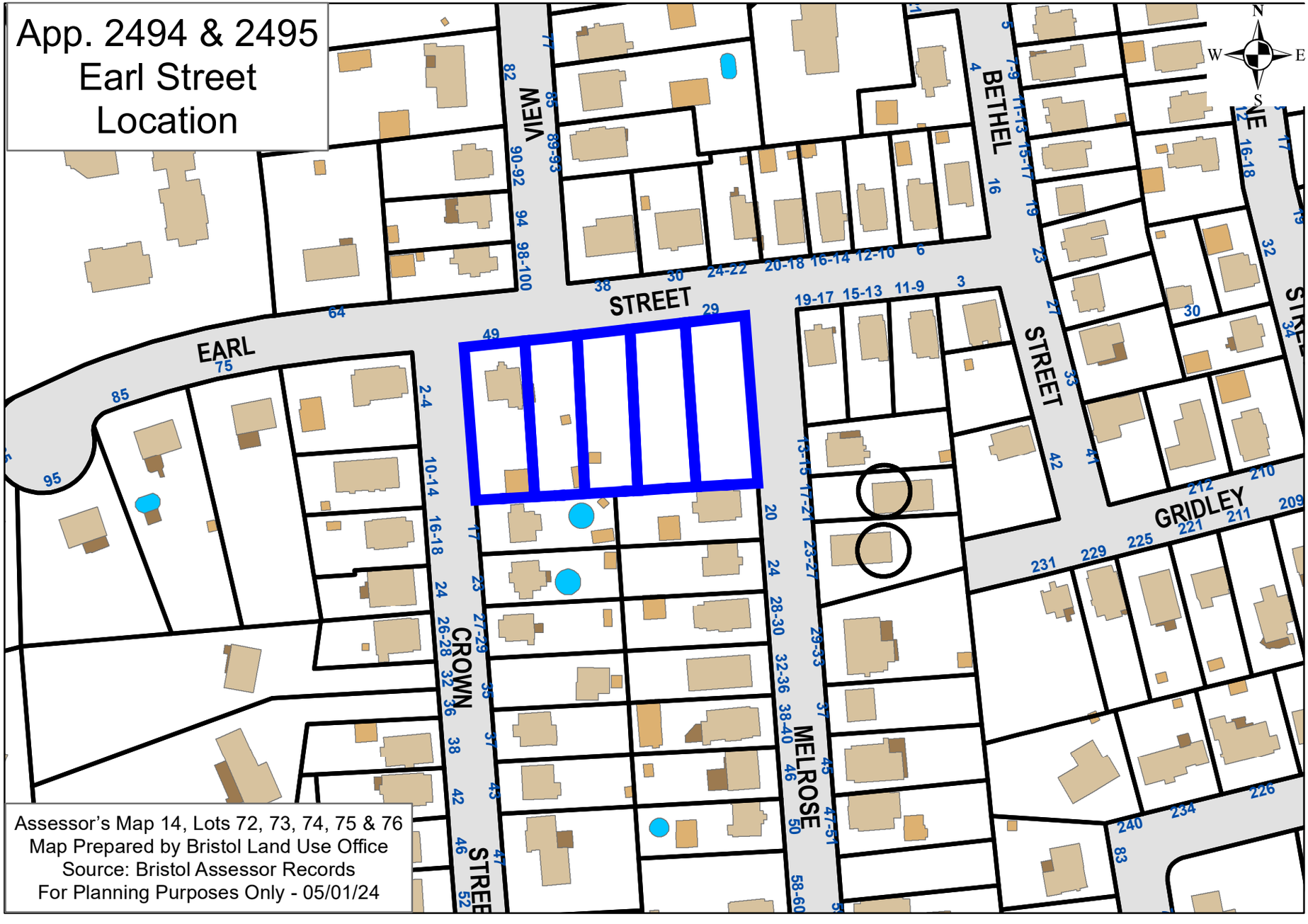
Project Overview

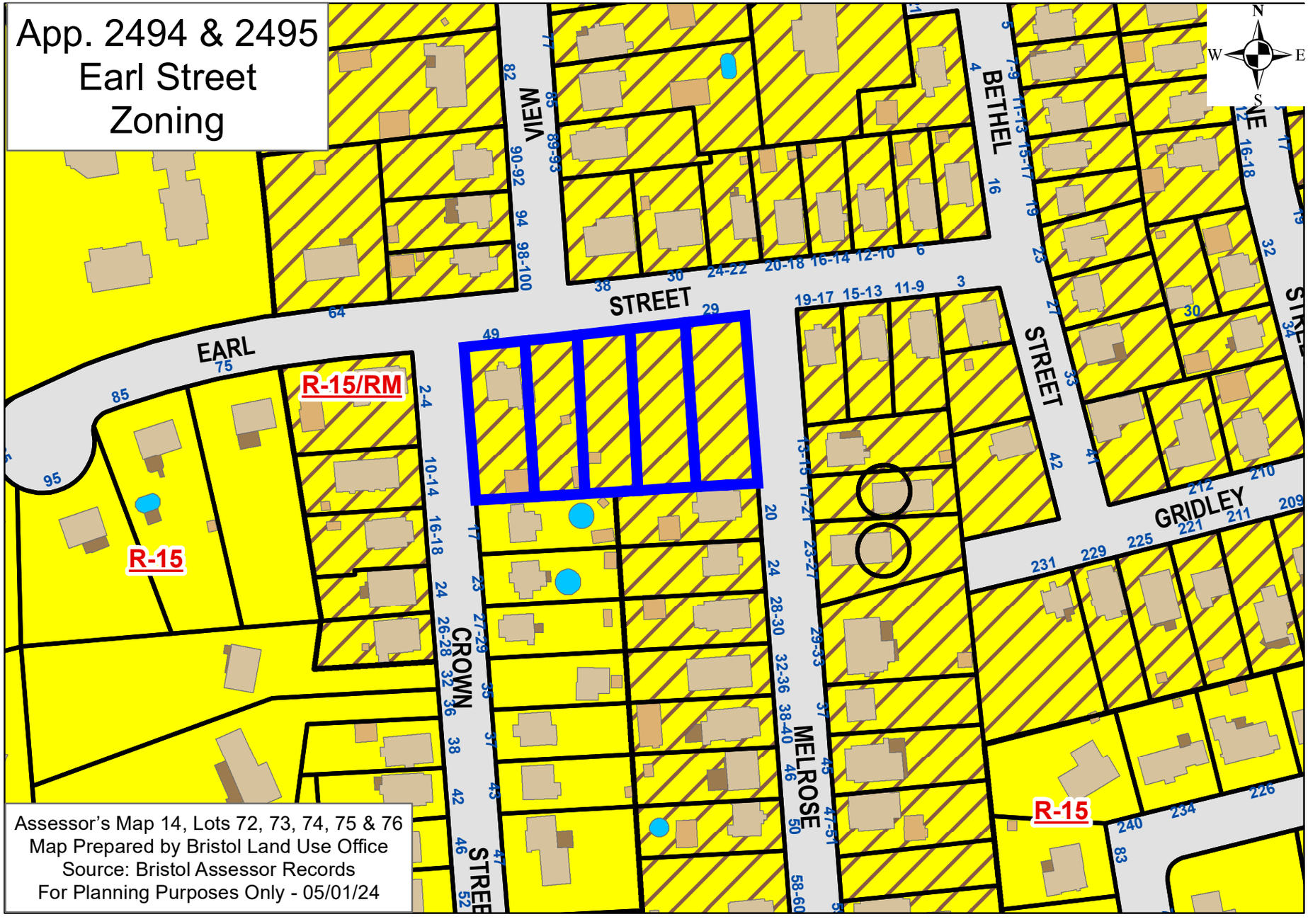
This project calls for the development of a Unified Residential Development containing 15 dwelling units and the associated site improvements. In the current condition, the project area is made up of five building lots which will be merged into a single parcel if approved. The site is uniquely situated within the RM Overlay zone and provides a tremendous opportunity to develop new and modern housing units.

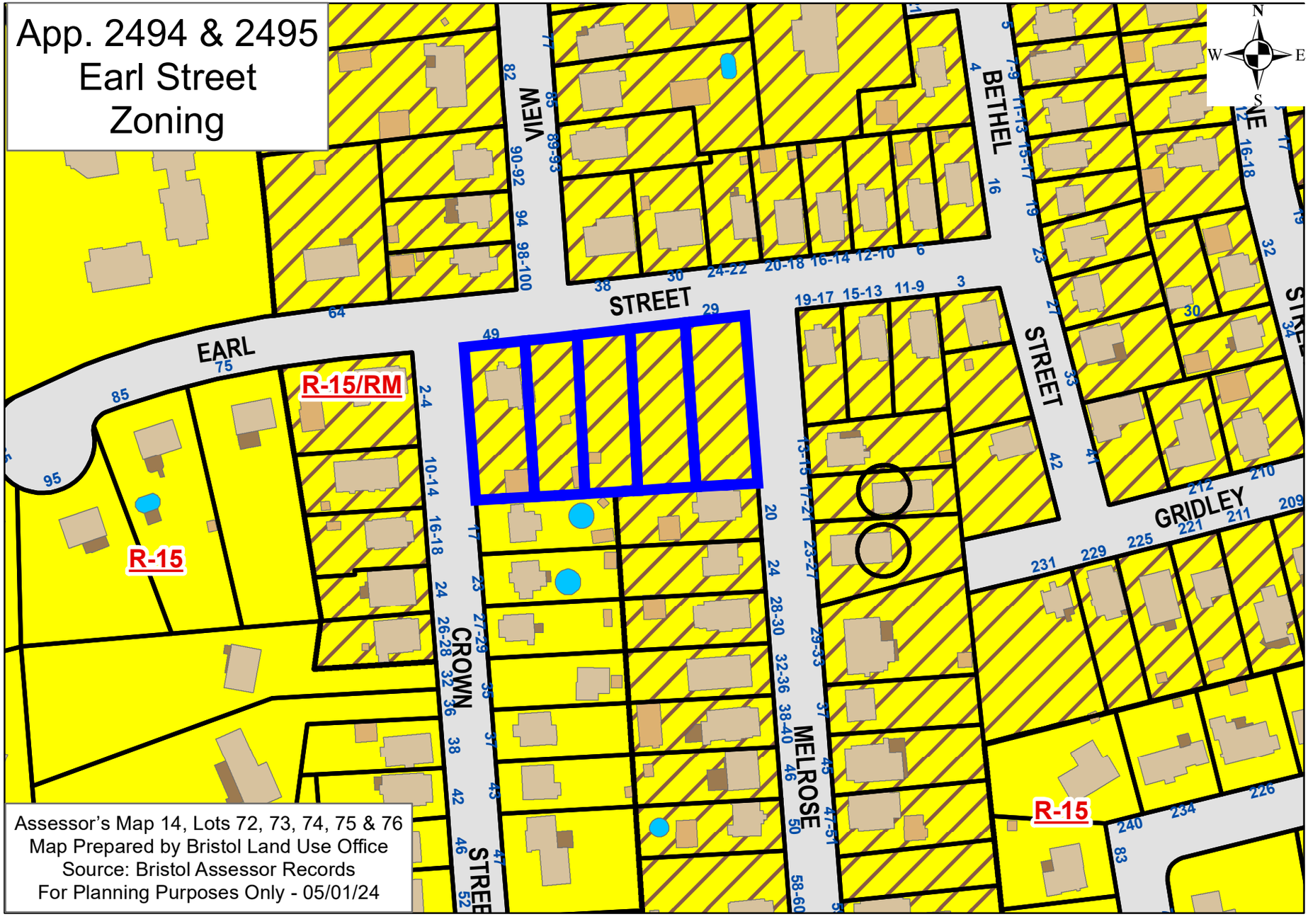
Since the fall of 2023, DGG Development LLC and their design team have been working with the city departments and staff on text amendments to allow Unified Residential Developments in the RM Zone. This plan takes into account all of the provisions of the new regulations and makes efficient use of the property.

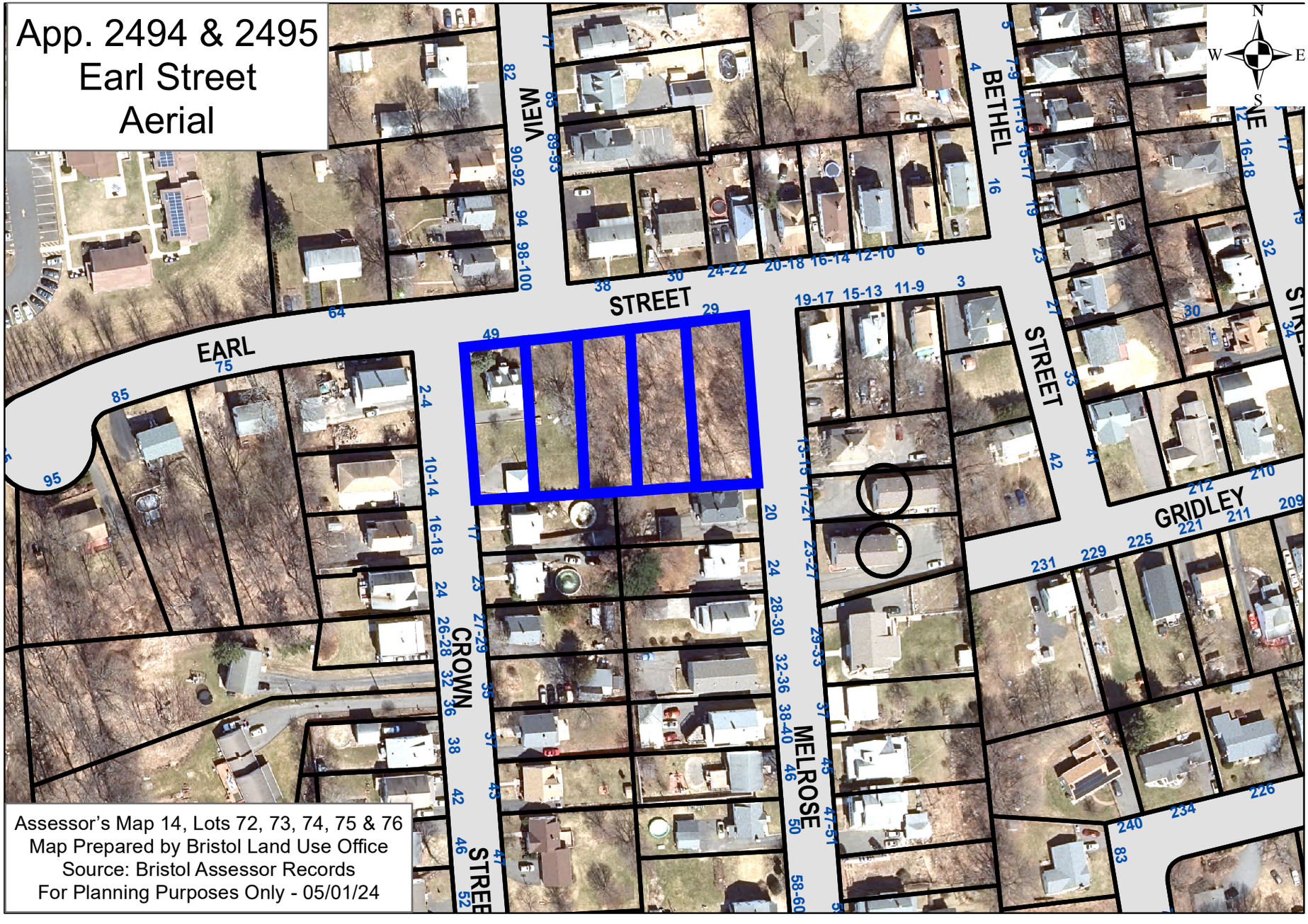
The development provides 15 dwelling units, 2 of which are developed as handicapped adaptable units, and 31 parking spaces all on a unified site plan. The site is also served by public water and sewer.

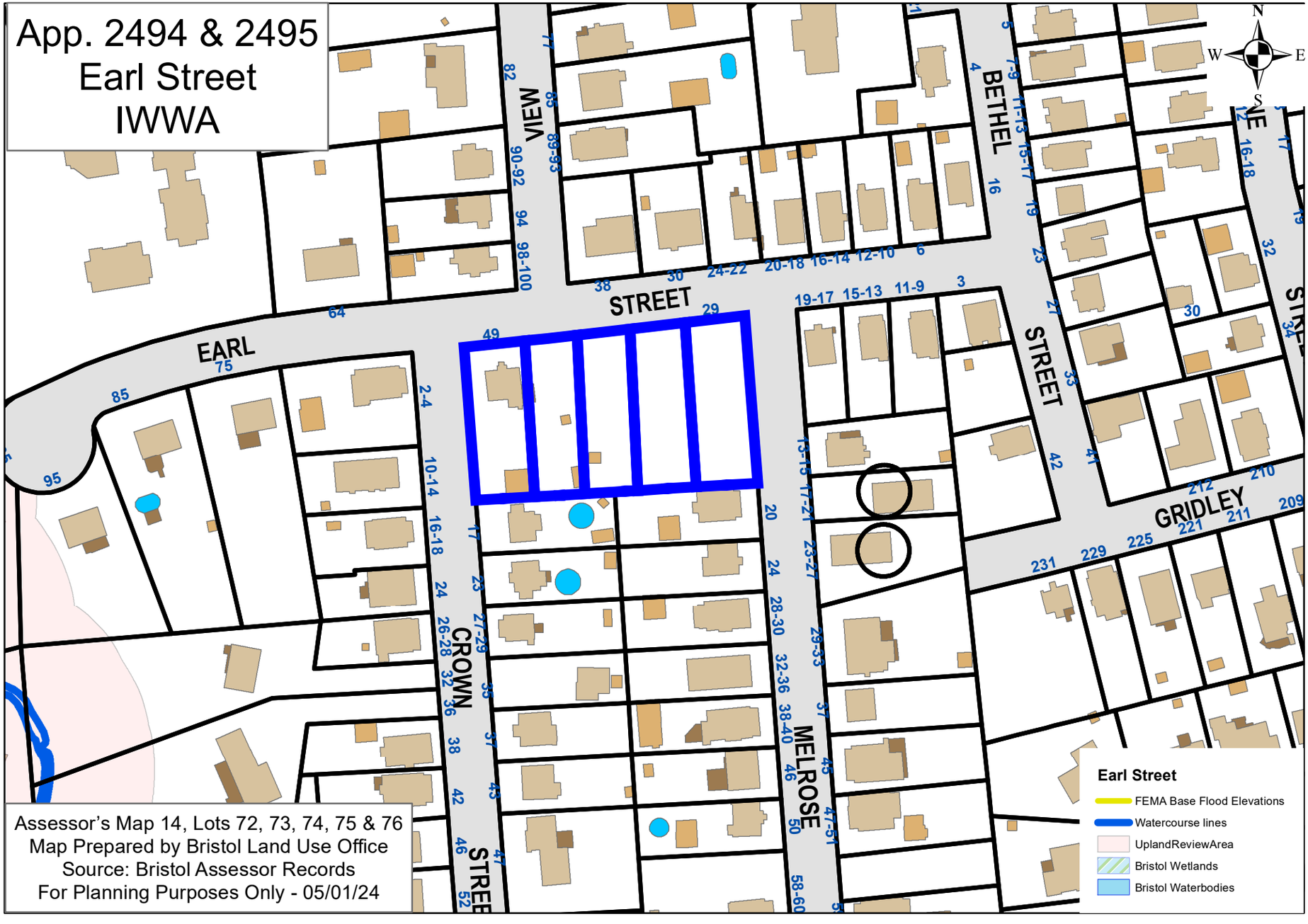
This project will be a phased development beginning in 2024 and have a total construction time of 3 years for all phases.


App. 2494 & 2495
Earl Street
Location
EARL
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VIEW
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STREET
GRIDLEY
CROWN
MELROSE
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Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24

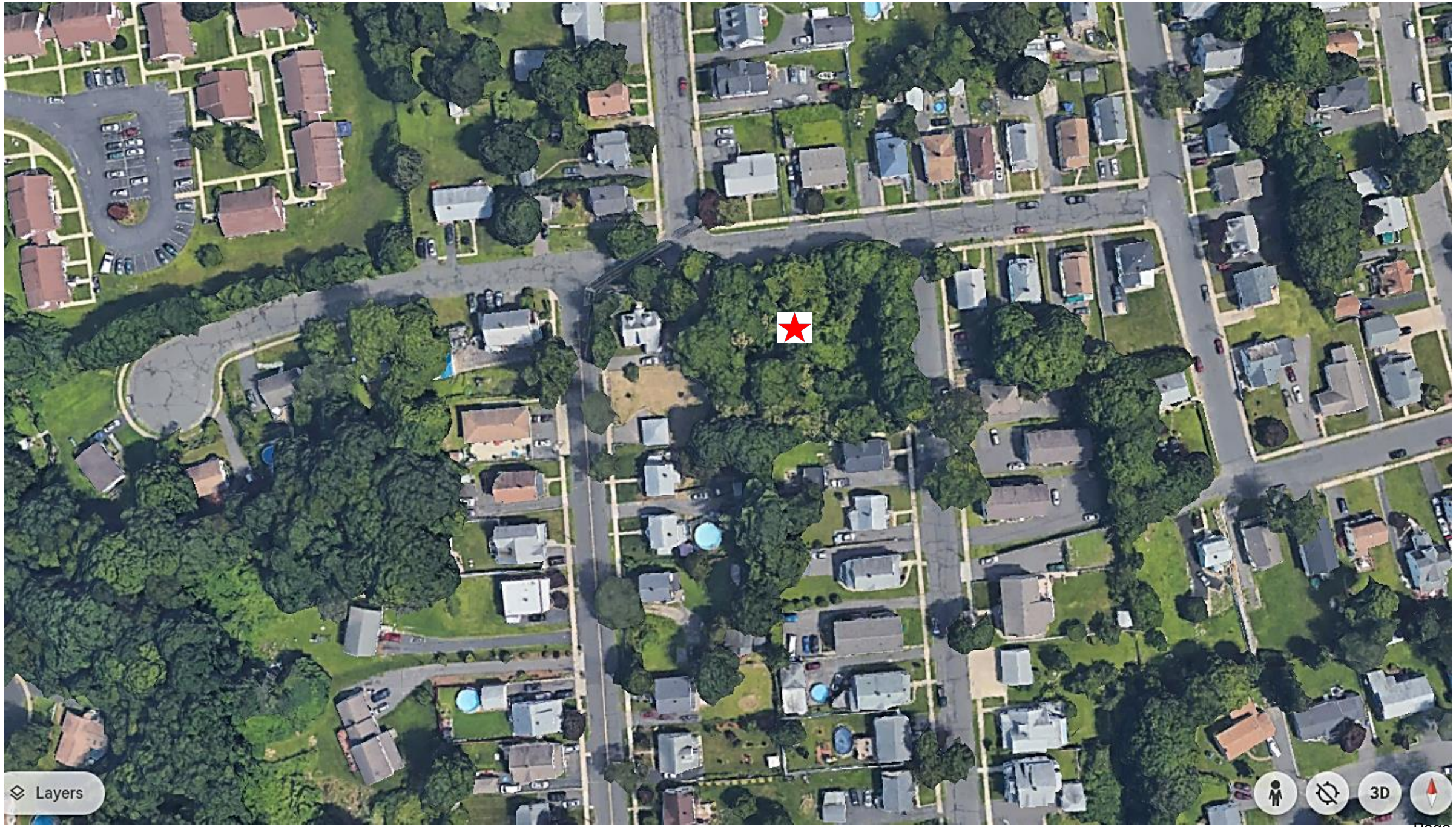

App. 2494 & 2495
Earl Street
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R-15/RM
R-15
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Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24

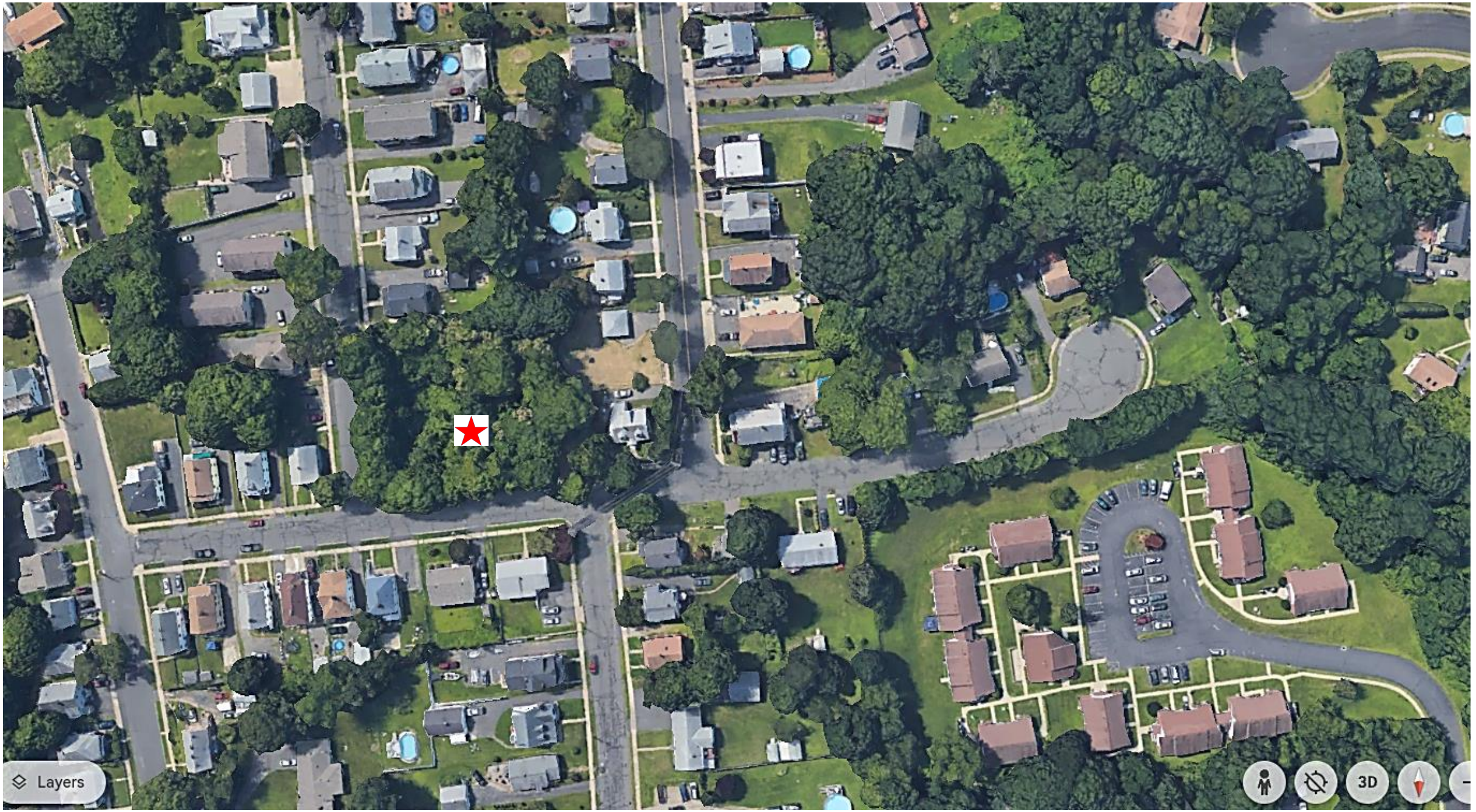

App. 2494 & 2495
Earl Street
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R-15/RM
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Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
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For Planning Purposes Only - 05/01/24

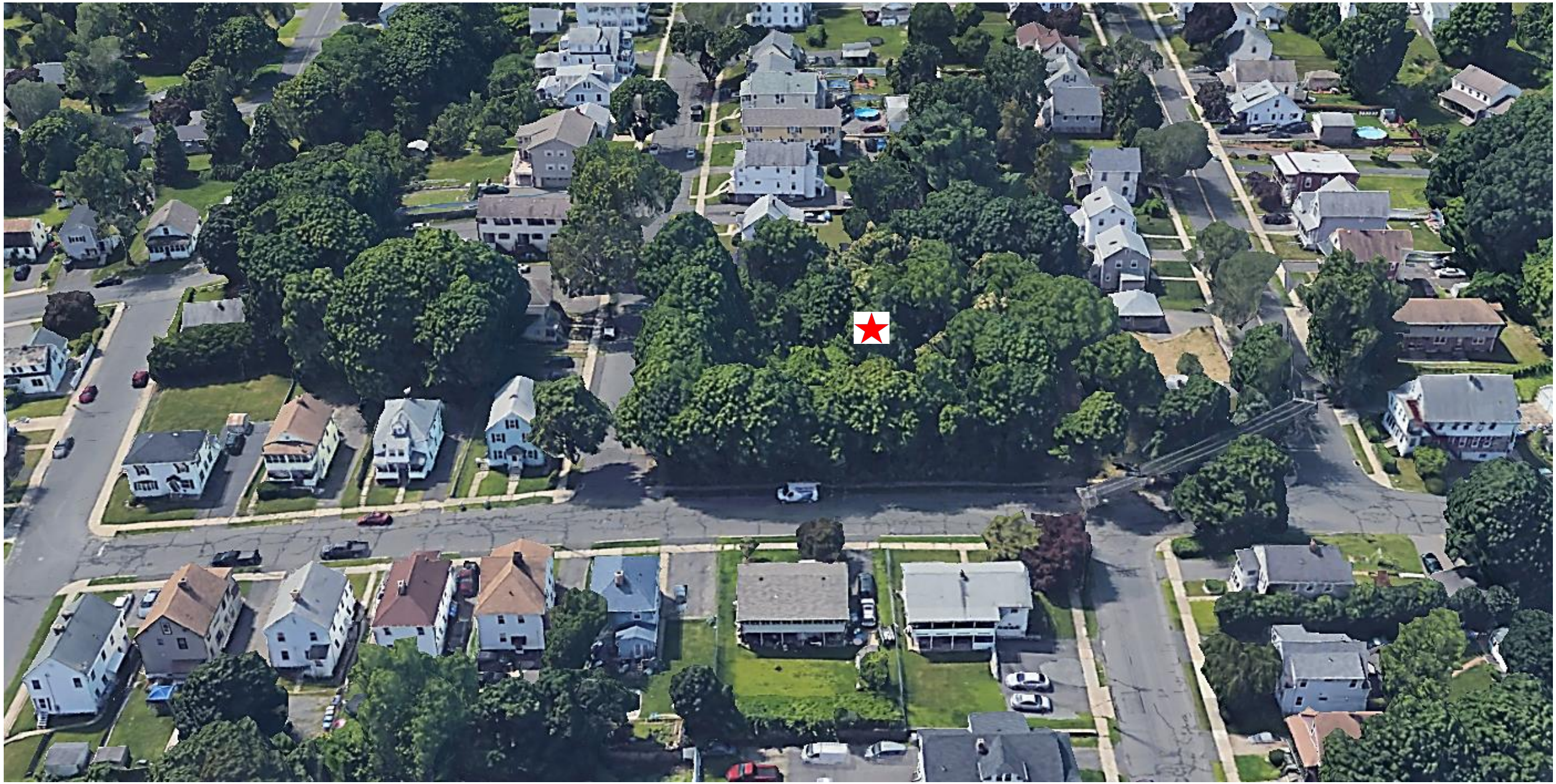

App. 2494 & 2495
Earl Street
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GRIDLEY
CROWN
MELROSE
Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24


App. 2494 & 2495
Earl Street
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Assessor's Map 14, Lots 72, 73, 74, 75 & 76
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 05/01/24
Earl Street
FEMA Base Flood Elevations
Watercourse lines
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies

Google Earth


Layers
3D


Layers
3D



Stormwater Report

SUPPORTING DOCUMENTS

MAP 14, LOTS 72/71, 73/70, 74/69, 75/68, 76/67

EARL STREET, MELROSE STREET AND CROWN STREET

BRISTOL, CONNECTICUT

July 29, 2023
Rev. July 1, 2024
Rev. August 12, 2024



Robert Green Associates, LLC
6 Old Waterbury Road
Terryville, Connecticut 06786

Joseph M. Green P.E.
Reg. No. 0026292

Hyperlink for Updated (081224) Stormwater Report:

https://www.bristolct.gov/DocumentCenter/View/47452/2024_08_12_Earl-Street-Report_Total

SUPPORTING DOCUMENTS

MAP 14, LOTS 72/71, 73/70, 74/69, 75/68, 76/67

EARL STREET, MELROSE STREET AND CROWN STREET

BRISTOL, CONNECTICUT

May 1, 2024



Robert Green Associates, LLC
6 Old Waterbury Road
Terryville, Connecticut 06786

Joseph M. Green P.E.
Reg. No. 0026292

Hyperlink for Stormwater Report:

https://www.bristolct.gov/DocumentCenter/View/46670/2024_05_01_Supporting-Documents-Report_Total

Traffic Impact Statement

Hyperlink for Traffic Impact Statement:

https://ct-bristol2.civicplus.com/DocumentCenter/View/47467/8--Hesketh-report-2024

Hesketh

Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh & Associates, Inc.

July 30, 2024

Development Planning Solutions, LLC
225 North Main Street, Suite 207
Bristol, CT 06010

Attn: Mr. Charlie Talmadge

RE: Traffic Impact Statement
Earl Street Residential
Bristol, CT
Our File: 24063

Dear Mr. Talmadge:

Pursuant to your request our office has prepared this statement outlining the potential traffic generation and potential impact of a proposed 15-unit single family attached residential development proposed for property on Earl Street between Crown Street and Melrose Street in the Town of Bristol, CT. The site location with respect to the surrounding roadway network is presented in Figure 1. This letter presents our findings.

The site proposed for development consists of five residential lots, only one of which is currently occupied by a single-family residence. The five properties front Earl Street and occupy the entire block between Crown Street and Melrose Street. Access to the singe residence is from Crown Street. The current proposal is to demolish the existing residential structure and to construct five new buildings with three single family units each. Three buildings will be constructed along Earl Street, and two buildings will be constructed across the rear of the parcel. A parking lot will be constructed in the center of the site with a total of 31 spaces, including four accessible spaces. Access to the site is proposed to Melrose Street, approximately 100 feet south of Earl Street.

The development site is located on the south side of Earl Street between Crown Street and Melrose Street. Earl Street originates at an unsignalized intersection with Bethel Street and extends in a westerly direction past Melrose Street, the subject site, and Crown Street then continues another 400 feet to its terminus at a cul-de-sac. Earl Street provides 30 feet of

6 Creamery Brook • East Granby, CT 06026

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Site Plan Comments

CITY OF BRISTOL
SITE PLAN REVIEW COMMITTEE
SECOND REVIEW STAFF
COMMENTS – 2495

SITE PLAN: "ECM Gardens" Unified Residential Development (15 Units) at Earl Street, East of Crown Street and West of Melrose Street; *Plans Dated: May 1, 2024; Date of Committee Review: 5/23/24 (first review); 8/21/24 (second review); 9/6/24 (additional second review)*

Review Timeline

First Review Comments:
5/23/24; plans dated 5/1/24
Crown Street as the ingress/egress

First Review Response from Applicant:
7/31/24; 4 sheets reviewed – dated 6/7/24
Crown Street as the ingress/egress

Second Review Comments:
8/21/24; 4 sheets reviewed – dated 6/7/24
Crown Street as the ingress/egress

Additional Second Review Comments:
9/6/24; 4 sheets submitted – dated 8/12/24
Melrose Street as the ingress/egress; revised bedroom count.

Note: A full plan set dated 8/12/24, was submitted to the office on 9/4/24.
This plan set will be part of a forthcoming Third Review by the Committee.

****

ENGINEERING/PUBLIC WORKS (Ray Rogozinski/Anthony Lorenzetti):

1. The proposed grading plans shows an elevation differential of over 6 feet between the finished floor on buildings 1-3 and Earl Street, please provide sections on how the grading will work in this area, along with how the base for the wall is being constructed along Earl Street as shown on the detail on sheet 11. Also, the northeast corner and southeast corner of the wall on Earl Street needs to be evaluated to determine the impact on intersectional sightline for the adjoining streets. This may require plan modifications. Verify whether fencing or railing is required on Top of the walls (elevation difference of up to 3.5 feet), While the placement of railings/fencing may not be required, consider adding some along the walls, due to the drop off risk and proximity to the buildings access points.

   7/31/24 Applicant Response: The proposed retaining wall along the sidewalk has been eliminated from the proposed plan.

   8/21/24 City Response: The removal of wall on Earl Street addressed several concerns, however the revised plans show sloping to the street at a four to one slope. While normally a four to one slope is not a huge concern, there are no provisions for how stormwater will be handled comping toward the street/sidewalk between buildings 1, 2 and 3 and along the edges of buildings 1and 3. Alternative landscaping to simply planting should be considered due to the relatively small grassed area between the proposed sidewalks and the street.

   9/6/24 Updated City Response: Comment partially addressed in revised plans and landscaping sheet, however have not seen revised sheet 6.

Site Plan – Application #2495 – "ECM Gardens" Unified Residential Development (15 Units) at Earl Street, east of Crown Street and West of Melrose Street 5/23/24 – First Review; 8/21/24 Second Review; 9/6/24 Updated Second Review.

2. Provide retaining wall detail along sidewalk. DPW Engineering concerned installation of retaining wall will undermine existing sidewalks. In addition, the detail also shows a drain on the backside of the wall. Show how the storm water in this area will be prevented from running over the wall.
   7/31/24 Applicant Response: Buildings 1,2 and 3 were moved 7ft south to eliminate the need for a retaining wall and the ground will slope down to Earl Street. The wall and buildings have been removed from the 25' visibility arc at the intersections of the adjoining streets.

   8/21/24 City Response: see response above.

   9/6/24 Updated City Response: Walls no longer on plan, comment addressed excluding revisions to drainage sheet 6.

3. In looking at the detail for the retaining wall it would appear that there will be approximately an additional foot needed to build it with the offset blocks, the wall should be shown the account for this.

   7/31/24 Applicant Response: The proposed retaining wall along the sidewalk has been eliminated from the proposed plan.

   8/21/24 City Response: There seems to be a missing 330 contour on the grading plan (sheet 7) along Earl Street, there also seems to be some drainage features along Earl Street that might have been turned off in the electronic document.

   9/6/24 Updated City Response: Partially addressed, need updated sheet 6.

4. In accordance with City Ordinance maintenance of sidewalks are the responsibility of the property owner. Based on an inspection of the sidewalks by DPW Engineer, approximately 75% of the sidewalk is in need of replacement. Coordinate meeting with DPW Engineering Sidewalk Inspector and revise plans See plan marked up by DPW Engineering indicating existing sidewalk section in need of replacement as part of proposed project. The proposed plan also indicates roadway curbing replaced as part of driveway & closure utility. Due to limits of disturbance DPW Engineering plan indicates curbing to be replaced.

   7/31/24 Applicant Response: See Sheet 3 "General Notes for Site Plans, City of Bristol", note #7.
   "Any existing damaged sections of sidewalk and/or curbing as a result of construction along streets abutting the site shall be identified and replaced at the direction of the Bristol DPW Engineering Division. The Applicant shall contact the Bristol DPW Engineering Division to schedule inspection."

   8/21/24 City Response: Repairing sidewalks is the property owner's responsibility per city ordinance. The response only addresses sidewalks that are damaged due to construction, the comment was not fully addressed.

5. Provide spot elevation along the southern property line to clarify limits of grading. Field locate stake property line prior to construction to avoid encroachment. In addition, provide spot elevations on the north and south edges of the entrance drive on Crown Street to verify that the standard city cross section is met for the sidewalk and driveway apron.

   7/31/24 Applicant Response: Agreed, See Sheet 3 "Construction Sequence" item #4 requiring property line stakeout. See sheet 7 for additional spot elevations at the entrance drive and sheet 11 for the concrete apron detail.

   8/21/24 City Response: OK

   9/6/24 Updated City Response: None

6. All yard drains/surface drains shall have a minimum 12 inch dia. Storm drainage piping within the roadway shall be 15 inches.

   7/31/24 Applicant Response: Agreed. See sheet 6.

   8/21/24 City Response: Not fully addressed there is still piping shown as smaller.

   9/6/24 Updated City Response: None

7. To eliminate proposed patches of roadway curbing along Crown St due to driveway closures and utilities install new curbing along property frontage of Crown Street to Earl Street.

   7/31/24 Applicant Response: See Sheet 3 "General Notes for Site Plans, City of Bristol", note #7.
   "Any existing damaged sections of sidewalk and/or curbing as a result of construction along streets abutting the site shall be identified and replaced at the direction of the Bristol DPW Engineering Division. The Applicant shall contact the Bristol DPW Engineering Division to schedule inspection."

   8/21/24 City Response: The proposed curbing replacement does not include the whole area.

   9/6/24 Updated City Response: Damaged city sidewalk is the responsibility of property owner, walks would still require repair on Crown Street.

8. Provide phasing plan (if applicable).

   7/31/24 Applicant Response: Will do.

   8/21/24 City Response: The revised submission includes a brief phasing narrative but does not does not include a phasing plan.

   9/6/24 Updated City Response: Comment remains.

9. Recommend increasing planting on proposed landscaping plan.

   7/31/24 Applicant Response: Revised Landscaping Plan will comply with Section 11.1.3

   8/21/24 City Response: Provide on plans.

   9/6/24 Updated City Response: Plans submitted Ok.

10. There are no plans included for buildings 4 and 5. Will these building have access on the south side. In this area put a note swale to drain along the southern border.

    7/31/24 Applicant Response: Buildings 1, 2, and 3 are identical. Buildings 4 and 5 are mirrored. Floor Plans and Elevations have been submitted for each building type. Grade to Drain added, see sheet 7.

    8/21/24 City Response: OK

    9/6/24 Updated City Response: None

11. Provide location for mail boxes.

    7/31/24 Applicant Response: Done. Community mailbox provided on Interior Island, see sheet 5.

    8/21/24 City Response: OK

    9/6/24 Updated City Response: None

12. On-site parking should be calculated based upon the new regulations in section 13.

    7/31/24 Applicant Response: Parking Calculation for Unified Residential Developments in RM Zones is established in Section 9.2.3.b.6. 2 spaces per dwelling unit. Plan is compliant.

    8/21/24 City Response: OK

    9/6/24 Updated City Response: None.

13. Note section 13.3 EV parking requirements.

    7/31/24 Applicant Response: Infrastructure for E.V. Chargers to be added, spaces to be identified.

    8/21/24 City Response: Not shown

    9/6/24 Updated City Response: Not shown.

14. Drainage report, reduce indicate CN value for existing conditions for wooded areas. Provide test hold data to confirm the subsurface drainage will perform as designed. Calculated flows appear low, in part based on rainfall input being lower that CT DOT standards Contour Area of 1,264 appears higher than proposed plan. Contact DPW Director at 860-584-6113 to discuss.

    7/31/24 Applicant Response: Will do.

    8/21/24 City Response: Provide updated drainage report and test hole data for installation of subsurface retention system.

    9/6/24 Updated City Response: Not included.

15. Provide Engineered design (PE) of retaining wall prior to final sign off (if approved).

    7/31/24 Applicant Response: Will do.

    8/21/24 City Response: NA

    9/6/24 Updated City Response: None.

New Comments 9/6/24

16. On sheet 5 the ramp locations are shown as blocked by the wheel stop's, the ramps should be placed in the hatched area.

17. Revisions are not stamped and sealed.

18. The revised has a revised retaining wall on the south side of the site between the buildings, there is no revised bottom grade and the wall has increased in height, based upon the lower wall elevation this wall may require fence or railings to prevent falls.

19. The traffic study recommends improvements, it is not clear who would be responsible for these improvements if the city accepts the recommendations in the report.

20. A revised drainage plan sheet 6 and drainage report have not been attached for review.

21. The revised site access onto Melrose Street is acceptable.

CITY PLANNER (Robert Flanagan/Andrew Armstrong):

1. Are there any designated visitor parking spaces?

   7/31/24 Applicant Response: There is 1 visitor space.

   9/6/24 City Response: Although the parking requirement has been met, it does not appear that visitor parking would be sufficient to accommodate the number of bedrooms proposed.

2. Label retaining wall height on site plan. Detail sheet says 6 feet. Please clarify.

   7/31/24 Applicant Response: The proposed retaining wall has been eliminated from the proposed plan.

   9/6/24 City Response: Comment addressed.

3. Provide landscaping along Earl Street.

   7/31/24 Applicant Response: Revised Landscaping Plan will comply with Section 11.1.3

   9/6/24 City Response: Comment remains.

4. Provide details/height of retaining wall to South.

   7/31/24 Applicant Response: Engineered design (PE) of retaining wall will be provided prior to final sign off (if approved).

   9/6/24 City Response: Comment remains.

5. Provide landscape buffer per Article III, Section 11.1.5 & Article II, Section 9.E.(7).

   7/31/24 Applicant Response: Applicant is proposing a 6-foot solid vinyl privacy fence in accordance with Section 11.1.5.E.

   9/6/24 City Response: Comment remains. Discuss with Commission.

6. Provide details of 4,800 square feet of functional open space.

   7/31/24 Applicant Response: Will do. Compliant Table to be added to plan.

   9/6/24 City Response: Provide details. Comment remains.

7. Handicap parking spaces indicate a curb. Please show an accessibility ramp on both sides.

   7/31/24 Applicant Response: See sheet 5 "Layout Plan" for ramp location. See sheet 7 "Grading Plan" for Top and Bot. of curb elevations for transitions between flush and full depth curb. See Misc. Notes and Details sheet #10 for isometric view of accessible parking area.

   9/6/24 City Response: Show ramp on site plan. Curb appears to still be shown across both ramp accessways on "Sheet 5". The detail sheets referenced were not included with the revised plan set.

8. How many stories is each building?

   7/31/24 Applicant Response: Two stories.

   9/6/24 City Response: Comment addressed.

9. Will the internal pathway provide for accessibility to the sidewalk?

   7/31/24 Applicant Response: Internal sidewalk from handicap parking area is accessible to a unit that is adaptable as required by the 2021 Connecticut State Building Code Section R320.3 – Multi-Story Townhouses.

   9/6/24 City Response: Noted. The question re-phrased is, does the internal pathway provide access to the public sidewalks?

10. Buildings #4 & #5 have an associated accessible parking space nearby, and show stoops including stairs. Will these units be accessible?

    7/31/24 Applicant Response: Internal sidewalk from handicap parking area is accessible to a unit that is adaptable as required by the 2021 Connecticut State Building Code Section R320.3 – Multi-Story Townhouses.

    9/6/24 City Response: Please indicate which units will be "Type B" accessible on the site plan. Will these units be adapted for accessibility at the time of construction? If not, can they be adapted years into the future if a new tenant necessitates the accessibility adaptability?

11. Indicate the 6-foot-high fence at southern property line on the landscape sheet.

    7/31/24 Applicant Response: Will revise.

    9/6/24 City Response: Comment remains. A revised Landscape plan was not submitted.

12. Solid fence screening for the dumpster is a Commission decision.

    7/31/24 Applicant Response: See Misc. Notes and Details sheet #10 for dumpster enclosure detail. Dumpster enclosure provides chain link fence with black vinyl privacy slats.

    9/6/24 City Response: Comment remains. No detail sheets were submitted with the revised plan set.

13. Indicate a "no-parking" sign along the internal accessway.

    7/31/24 Applicant Response: Interior parking will be enforced by property management.

    9/6/24 City Response: Comment remains.

14. Are any units planned to be "affordable"?

    7/31/24 Applicant Response: No
    9/6/24 City Response: Comment addressed.

15. Where will mailboxes be located?

    7/31/24 Applicant Response: Done. Community mailbox provided on Interior Island, see sheet 5

    9/6/24 City Response: Comment addressed.

16. Provide details of proposed stoops.

    7/31/24 Applicant Response: Porches shown on Submitted building plans.

    9/6/24 City Response: Comment remains.

17. Show corner lot visibility triangles on site plan.

    7/31/24 Applicant Response: *Will do. The wall and buildings have been removed from the 25' visibility arc at the intersections of the adjoining streets.*

    9/6/24 City Response: Comment addressed.

18. Parking of over 30 spaces requires a Level 2 EV charging station. Please provide this on the site plan.

    7/31/24 Applicant Response: Infrastructure for E.V. Chargers to be added, spaces to be identified.

    9/6/24 City Response: Comment remains. Show these changes on plan.

19. Will this project be phased?

    7/31/24 Applicant Response: Yes, Phasing Plan to be submitted.

    9/6/24 City Response: Comment remains.

New Comments 9/6/24

20. What are the number of bedrooms proposed?

21. What are the number of parking spaces proposed?

22. The existing parking requirements for a Unified Residential Development would potentially provide adequate parking; the new parking regulation in the RM calls out its own requirement.

23. Provide 20' ft. landscape buffer or request waiver.

24. The proposed landscaping is inadequate from a design perspective given the number of mature trees that would be removed. Section 9.2.3.E.4 states "Site design should endeavor to preserve existing site characteristics including mature trees, rock outcrops, and significant views."

25. Provide updated floor plans and elevation drawings to reflect the revised configuration of proposed bedrooms.

Site Plan – Application #2495 – "ECM Gardens" Unified Residential Development (15 Units) at Earl Street, east of Crown Street and West of Melrose Street 5/23/24 – First Review; 8/21/24 Second Review; 9/6/24 Updated Second Review.

BUILDING/ZONING ENFORCEMENT (Richard Brown)

1. No comments from Building/Zoning Enforcement at this time.

New Comments 9/6/24

None

POLICE DEPARTMENT (Lt. Krajewski/Sgt. Ouellette)

1. No comment at this time.

New Comments 9/6/24

2. Where will overflow and visitor traffic park? It appears that there are not enough parking spaces to allow for visitors to park within the lot.

3. If they are allowed to park parallel to the curb within the parking lot, a large vehicle may be unable to enter the lot, ie: fire truck

4. I concur with normalizing the intersection of Melrose Street at Earl Street by adding double yellow, stop bar and stop sign to the end of Melrose Street, which would mirror other roadways in the neighborhood.

FIRE MARSHAL (Kristopher Lambert):

1. Is there an update on the fire hydrant placement?

7/31/24 Applicant Response: Hydrant Locations being evaluated.

9/6/24 City Response: Until a consensus has been reached on the fire hydrant location, there are no additional comments at this time.

New Comments 9/6/24

None

WATER DEPARTMENT (Paul Keegan/Rob Longo)

1. (Sewer) Each individual unit will need its own sewer lateral to the sewer main. The current plan has 1 lateral per building.

7/31/24 Applicant Response: Plan to be revised per conversation with the Water Department 6-10-24.

9/6/24 City Response: OK

2. (Water) The plan does not show a Tee with a valve on Melrose Street or Crown Street.

7/31/24 Applicant Response: Acknowledged.

9/6/24 City Response: We have not seen a change in plan to address this.

3. The plan does not show curb stops to each unit, required.

7/31/24 Applicant Response: Acknowledged.

9/6/24 City Response: OK

4. Building #1 shows a water line from Earl Street?

7/31/24 Applicant Response: Plan to be revised.

9/6/24 City Response: (Water) The service to the existing service must be disconnected at the main for demo permit.

New Comments 9/6/24

9/6/24 New comment (Water): If there is no fire hydrant for this project, a blow will be required.

9/6/24 New comment (Water): Have the water services for building 4 and 5 been considered to come from Earl Street based on limited space?

9/6/24 New comment (Sewer): Man hole required at the beginning of the main between building 1 and 4.

9/6/24 New comment (Water): If there is no fire hydrant for this project, a blow will be required.

9/6/24 New comment (Water): Have the water services for building 4 and 5 been considered to come from Earl Street based on limited space?

Letters from Neighbors

From: David Cummings [mailto:dave.cummings81@gmail.com]

Sent: Saturday, June 8, 2024 10:41 PM

To: Andrew Armstrong <AndrewArmstrong@bristolct.gov>; Robert Flanagan <RobertFlanagan@bristolct.gov>

Subject: Earl, Crown and Melrose Streets (application numbers 2494 and 2495)

Town planning committee

My apologies that I could not be present for the meeting on Monday 6/10, due to a prior standing commitment every Monday evening that I have to attend. However, I ask that the committee please take into consideration some of the concerns and questions that I myself, and several neighbors, have regarding the proposed development at Earl, Crown and Melrose Streets (application numbers 2494 and 2495).

1.) Traffic issues:

With the proposed units being 3 bedroom units, the likelihood of each household having 2 or more vehicles is great, not to mention visitor's vehicles. The proposed area of development has 3 intersections in close proximity to each other (Crown St./Earl St., Earl St./View St., Melrose St./Earl St.). With the potential of an additional 30 vehicles coming in and out of this area, as well as added people using street parking, this would overly congest the area and make it more unsafe. This area already has a higher than normal car volume because of the nearby Bristol Central High School, of which Crown St. serves as an exit for. Added volume would no doubt make it more unsafe for the students walking to and from school, in addition to everyone else.

2.) Not consistent with housing in nearby community:

Most of the housing on these streets are single family or multi family houses. While there are some similar condominiums with 3 units to a building, there are none that bunch 5 buildings together, they are more evenly dispersed.

3.) Type of housing:

Will these be strictly rental properties or owner occupied? Or possibly subsidized? Again, keeping with the consistency of the housing nearby, single family homes and many of the condominiums are owner occupied. While there are some housing units being rented out, many of the multi family homes are owner occupied as well. A 100% rental property of 15 units would not be consistent with the area, likely having an impact on the dynamics of the area and devaluing nearby properties.

Being a resident of the neighborhood, I appreciate that this area is not strictly one-family residences. I myself live in a two family home on Melrose Street that I purchased with my wife in 2020. However, a project of the scale that is being proposed is what I would call very aggressive for the neighborhood it's going to be in. I think a scaled back version of this proposal would perhaps be more fitting for the area and would mitigate some of the problems I foresee.

In view of our concerns, we ask you consider the following adjustments to the project:

1.) Scale down the amount of units. This would lower traffic congestion and allow for more off street parking.

2.) Designate more areas on the nearby streets to No Parking areas. Particularly the property area bordering of Earl St., Crown St., and Melrose St.

3.) If this project is planned for rental property, limit that to no more than 50% of the units. We don't support subsidized / section 8 housing for this area. There are plenty of areas in the downtown that could be used for that and are more suitable.

Thank you for your consideration,

David & Erin Cummings

15 Melrose St, Bristol, CT 06010

City of Bristol Commissioners
Bristol City Hall
111 North Main Street
Bristol, CT 06010

June 15, 2024

RECEIVED
JUN 20 2024
MAYOR'S OFFICE
CITY OF BRISTOL, CT

Re: Empty Lot on Earl Street

Dear Commissioners,

This Letter is to address my concerns regarding the empty lot on the corners of Earl Street and Melrose Street, and Earl Street and Crown Street.

My first concern is the traffic, especially on Crown St. Traffic on Crown St. is already extremely dangerous because of the high school. Traffic is backed way up on Crown St. with cars bringing their kids to/from school. There are large school busses driving up and down this narrow road with multiple stops. There are also many cars that pull over to the side of the road to drop off/pick up their kids, forcing other cars and busses to go around them, and also making it very difficult for drivers to see children crossing the road. Quite a few times I've seen cars go speeding up on the LEFT side of the street to get passed the long line of traffic. Through all this, many children are walking to and from school in the road because there are no sidewalks in spots, especially near the school, or standing on the side or the road at their bus stops.

I feel that dumping 30 additional cars out on to Crown St. will make the situation so much worse. As mentioned by others at the June 10th meeting, there have already been many accidents in the neighborhood, including fatalities. It was mentioned at the meeting that the owner feels that having the one entrance/exit on Crown St. is better than having multiple entrances/exits on Melrose St., Earl St. and Crown St., but I disagree, and I believe the rest of the neighborhood feels the same way. As much as we don't want any additional traffic in the neighborhood, I believe that splitting up the cars onto multiple streets would be better than dumping all the cars out onto Crown St. Adding to our concerns, we were informed that there will only be 1 parking spot available to visitors of these 15 families, forcing the visitors of 14 families (or more, if 1 family has more than 1 visitor) to park along the sides of our narrow roads. I feel that having 5 separate multi-family houses would work out better, since there could be 5 long driveways along the sides of each house, providing enough room for tenants and visitors.

This is very much a residential neighborhood that unfortunately already has a lot of traffic. Cars trying to avoid the Route 69 and Route 72 traffic cut through our neighborhood, making Gridley St., Earl St., View St., Crown St. and Melrose St. extremely dangerous for our children in this residential neighborhood.

The attorneys mentioned at the meeting that they did the same thing at the bottom of Willis St. and it worked, but that is a completely different neighborhood. South St., which is at the bottom of Willis St., is a very busy, wide street designed for a lot of traffic. People moving into that neighborhood know to expect a lot of traffic. Our neighborhood is not designed for a large amount of traffic. At the June 10th meeting it was suggested that a traffic assessor (not sure of the title) could come out to assess the amount of traffic. I think that step should be mandatory, at the very least.

My other concern is the dumpsters. We were informed that there will be 2 large dumpsters with lids at these apartments, being emptied twice a week. Adding to an already problematic traffic situation, large trucks will be driving on our narrow streets twice a week to empty these dumpsters, causing loud noise from the crashing lids. I believe our neighborhood would prefer 15 garbage cans (5 per street) out on the roads instead of 2 large dumpsters.

The safety of our children is my main concern. Apparently these owners have owned this property for the last five years. Throughout this time there have been many issues. In the winter the sidewalks are ALWAYS a sheet of ice. On rainy days, and days following rainy days, the sidewalks are so full of mud that my son has actually slipped on the mud and fallen. Last summer he came home from school almost every day covered in ticks because the overgrowth grew out onto the sidewalks and, unless you walked in the road, there was no way to walk by and avoid ticks. I finally had to tell my son to cross over to the other side of the street before he gets to this property and to stay away from this property when he's walking home from school. If it was that bad over these last five years, how can we be sure it'll be properly maintained in the future? I certainly don't want to stereotype all landlords who don't live at their rental properties.....I'm sure there are many great ones.....but judging by these last five years, these owners appear to have the characteristics of slumlords. There are already a handful of multi-family houses in this neighborhood owned by landlords who don't live there and the tenants at these properties are always loud, throwing parties with a lot of drinking and drugs, with no respect for the neighborhood or the property. We certainly don't need more of this. A little over ten years ago I fought extremely hard to clean up our neighborhood from this type of behavior. We had one house on Earl St. (across from my house) who threw loud parties all day, every day, from about 7 a.m. to midnight. Earl St. looked like a McDonald's drive-thru with cars lined up in the road, waiting to pull into the driveway to buy drugs from this house. The loud yelling, foul language, drug use and drug dealing, and the overall environment forced our families to keep our children inside all the time, unable to go out and play. It took many years of working closely with the police chef to finally get this family to move out of our neighborhood. I absolutely LOVE our police department and I don't mean to speak negatively of them, but back when this was going on I once asked a police officer, after being told by him that there was nothing he could do, what he would do if he lived next to this person and his reply was "that's why I don't live in Bristol"! I don't want people to think of Bristol that way, and I especially don't want that for our quiet neighborhood again. And I feel that by allowing this complex into our neighborhood, which is owned by property owners who don't care about the neighborhood, we are just inviting families like this back into our family-oriented neighborhood.

I thank you for your time and attention to this matter.

Sincerely,

Tara Ilic
6 Earl Street
Bristol, CT
860-977-9111

Robert Flanigan

This petition aims to halt the proposed development of ECM Gardens on Earl, Melrose & Crown Street in Bristol, CT, by DGG Development LLC. The development plan has raised numerous concerns among local residents due to potential negative impacts on our community. These include increased traffic congestion, strain on local resources and infrastructure. The addition of this large-scale development could significantly distrupt our peaceful community life. This property was originally zoned for 5 single family dwellings. Who changed the zoning regulations. This parcel of land which is less than one acre would not support this property development.

Will it be owner occupied?

Who maintains the property?

Rubbish & Snow removal?

Drainage issues in this neighborhood?

Daily school buses and student traffic issues?

We urge city officials to reconsider this proposal and seek alternatives that will respect the needs and wishes of Bristol's residents while promoting sustainable growth for our city.

Please sign this petition if you agree that we should preserve our community's character and quality of life.

Petition

Date	Name	Address
1.	[illegible]	72 View St
2.	[illegible]	51 View St
3.	Diana Marrero	57 View St.
4.	[illegible]	71 View ST.
5.	Eleanora Mercier	82 View St.
6.	Caitlyn Tomlen	90 View St.
7.	[illegible]	92 view St.
8.	Doris Pelletier	14 Field St.
9.	6/12/24 Taylor Mazelka	16 field st
10.	6/13/24 William Geary	26 Field St
11.	Kenneth C. Mowry	33 FIELD ST
12.	Angelina Furniss	19 Field St
13.	Hollis Laviero	239 Divinity St.
14.	Nancy Peters	29 MELROSE ST.
15.	[illegible]	38 Earl St.

Petition

Date 6/30 Name	Address
1. Elizabeth Beattie	17 Crown Street
2. Justine Pratt	23 Crown St
3. Gregory Weaver	24 Crown St
4. Grattan Farrell	29 Crown St
5. Rita Krugenberg	39 Crown ST
6. Amanda J. Weaver	38 Crown St
7. Brenda Dallaire	42 Crown St
8. Glenn Dallaire	42 Crown St.
9. [illegible]	75 Crown St
10. [illegible]	91 Crown St
11. [illegible]	112 Crown St
12. [illegible]	121 Crown Street
13. [illegible]	148 Crown Street
14. [illegible]	148 Crown St
15. [illegible]	129 Crown St
16. [illegible]	33 Bethel St
17. Nancy J. Scalia	33 Bethel St

Petition

	Date	Name	Address
1.	6/24/24	Marybeth Kelm	17 Melrose St
2.	6-24-24	Lisa Selvaggi	23 Melrose St
3.	6-24-24	Corina White	23 Melrose ST
4.	6-27/24	Nick Perugini	27 Melrose ST
5.	6-27-24	Mackenzie Webber	27 Melrose St
6.	6-27	Arlene McCormick	21 melrose St
7.	6-28-2024	Lynn Mills	25 Melrose St
8.	6-30-2024	David Cummings	15 Melrose St.
9.	6/30/2024	Erin Cummings	15 Melrose St.
10.	6/30/2024	Farzeela Persaud	70 Melrose St
11.	6/30/2024	Ryan Persaud	70 Melrose St
12.	6/30/2024	[illegible]	58 Melrose St.
13.	6/30/2024	[illegible]	58 Melrose St
14.	6/30/24	Kari Hutgaard	65 Melrose St.
15.	6/30/24	Angela Gaeta	75 Melrose St 2nd

Petition

Date	Name	Address
1. 6/30/24	Melissa Timbrell	80 Melrose St
2. 6/30/24	Joan Vanvee	71 Melrose St
3. 6/30/24	MyGreen Streeter	71 Melrose st.
4. 6/30/24	Karen Kellems	101 Melrose ST
5. 6/30/24	Sharon C. Niemann Testa	19 Melrose ST
6. 6/30/24	GARY Testa	19 Melrose ST
7. 6/30/24	Kris Bond	20 melrose st
8. 6/30/24	Carmen C	20 Melrose St.
9.		
10,		
11.		
12.		
13.		
14.		
15.		

Petition

Date 6-14-2024	Name	Address
1.	Yolanda Duthiewicz	57 Atkins Ave.
2.	Nancy Laflamme	189 Park St
3.	Judith Delgado, A. Vincent Xd	
4.	Kendal Gibbs	43 Peggy Lane Farmington CT
5.	Zaida Santaye	157 P
6.	Sandra Cudney	30 Troutbrook Rd Bristol CT
7.	Janice Skulskey	34 Beths Ave Bristol CT
8.	Melissa Gunderson	6 Crown St Bristol, Ct
9.	Jocelyn Andersen	92 Round Hill Rd. Bristol, CT
10.	Sandra Edgerton	4 Crown Street. Bristol, Ct
11.		
12.		
13.		
14.		
15.		

Petition

Date	Name	Address
1. 6-15-24	Sandy michaud	23 view Street, Bristol
2. 6-15-24		23 view Street, Bristol
3. 6-16-24	Josephine S Marino	25 View St Bristol, CT
4. 6/17/24		24 View St Bristol CT.
5. 6/17/24	RYAN Lowe	28 View St BRISTOL CT
6. 6-25-24	Dave Greenleaf	255 Divinity St. bottom of View
7. 6-27-24	Ralph Lynn	90 view st
8. 6-27-24	Michael D Hoyt	89 View St
9. 6-28-24		22/24 Earl Street
10,		
11.		
12.		
13.		
14.		
15.		

Petition

	Date	Name	Address
1.	June 17, 2024	Dan Bailey	64 Earl St.
2.	6/17/24	Jessica Reklaitis	95 Earl St.
3.		Vianny Polanco	85 Earl st
4.		Matthew Bailey	64 Earl st
5.		MaryAnn Cabrera	94 View St
6.		Gerard Cabrera	94 View St
7.			
8.			
9.			
10,			
11.			
12.			
13.			
14.			
15.			

Petition

Date	Name	Address
1. 6-14-24		4 crown st Bristol
2. 6/14/24	David Dobrecki	14 CROWN ST. BRISTOL
3. 6/15/24		6 Crown St. Bristol
4. 6-15-24	Richard Aviles	75 EARL ST BRISTOL
5. 6/15-24	Richard A Aviles	75 Earl St. Bristol
6/14 6.	Christine Bird	2 Crown St Bristol
7. 6-15-2024	Antonio Bordoso	
8. 6/15/24		284 cherry St New Britain CT
9. 6/15/24	Danielle Johnson	12 CROWN ST BRISTOL CT
6-15-24 10.	Donald L. Weeks	105 EARL St. Bristol, Ct.
11. 6-15-24	Dwayne Brown	91 view St.
12. 6/15/24	Jeffrey Edgerton	13 Mare Rd, Bristol
13.		
14.		
15.		

Petition

Date	Name	Address
1.	Ledion Tito	100 view st
2.	Thanas Tito	98 view st
3.	Luljeta Tito	98 view st
4.	Klodjana Tito	100 view st
5.		
6.		
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11.		
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15.		

Site Plan Revised 081224

Full Set Received: 090424

Review Pending

ECM GARDENS

ASSESSORS MAP: 14 LOT'S: 72/71, 73/70, 74/69, 75/68 & 76/67

EARL STREET, CROWN STREET & MELROSE STREET

BRISTOL, CONNECTICUT

MAY 1, 2024

APPLICATION: #2494

SPECIAL PERMIT FOR A UNIFIED RESIDENTIAL DEVELOPMENT (15 UNITS)

GRANTED:

APPLICATION: #2495

SITE PLAN FOR A UNIFIED RESIDENTIAL DEVELOPMENT (15 UNITS)

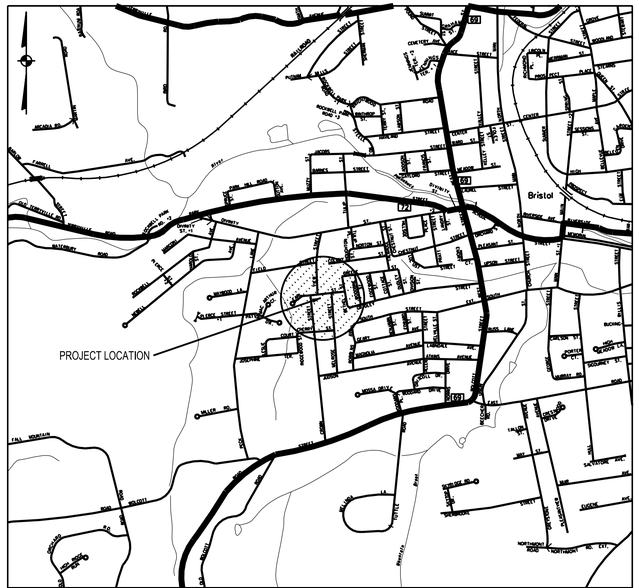
GRANTED:

LIST OF REVISIONS

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

LEGEND

- NORTH ARROW
- UTILITY POLE
- UTILITY POLE W/ LUMINAIRE
- MANHOLE
- CATCH BASIN
- SIGN
- GATE VALVE (TYPE AS NOTED)
- HYDRANT
- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUB / BUSH
- +000.0 EXISTING SPOT ELEVATION
- 000.0 PROPOSED SPOT ELEVATION
- CURBING (TYPE AS NOTED)
- CHAIN LINK FENCE
- ZONING SETBACK LINE
- 000 EXISTING CONTOUR
- 000 PROPOSED CONTOUR
- S APPROX. LOCATION EXISTING SEWER MAIN
- W APPROX. LOCATION EXISTING WATER MAIN
- G APPROX. LOCATION EXISTING GAS MAIN
- W PROPOSED 6" D.I.P. WATER MAIN
- WS PROPOSED 1" COPPER DOMESTIC WATER SERVICE
- S PROPOSED 8" PVC SDR. 35 SEWER MAIN
- SS PROPOSED 6" PVC SDR. 35 SEWER CONNECTION
- V PROPOSED OVERHEAD ELECTRIC CONNECTION
- RL PROPOSED ROOF LEADER CONNECTION
- SEDIMENTATION AND EROSION CONTROL FENCE
- WHITE PAINTED PAVEMENT ARROW



LOCATION MAP
(SCALE 1"=800')

LIST OF DRAWINGS

1	COVER SHEET
2	BOUNDARY AND TOPOGRAPHIC SURVEY
3	GENERAL NOTES
4	SITE REMOVALS PLAN
5	LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN
6	DRAINAGE AND UTILITIES PLAN
7	GRADING PLAN
8	EROSION AND SEDIMENTATION CONTROL PLAN
9-13	MISCELLANEOUS NOTES AND DETAILS
L1.0	LIGHTING PLAN
L2.0	LANDSCAPING PLAN

Applicant:

D.G.G. Development LLC
21 Cobbs Road
West Hartford, CT 06107
(860) 841-6008

Surveyor/Civil Engineer:

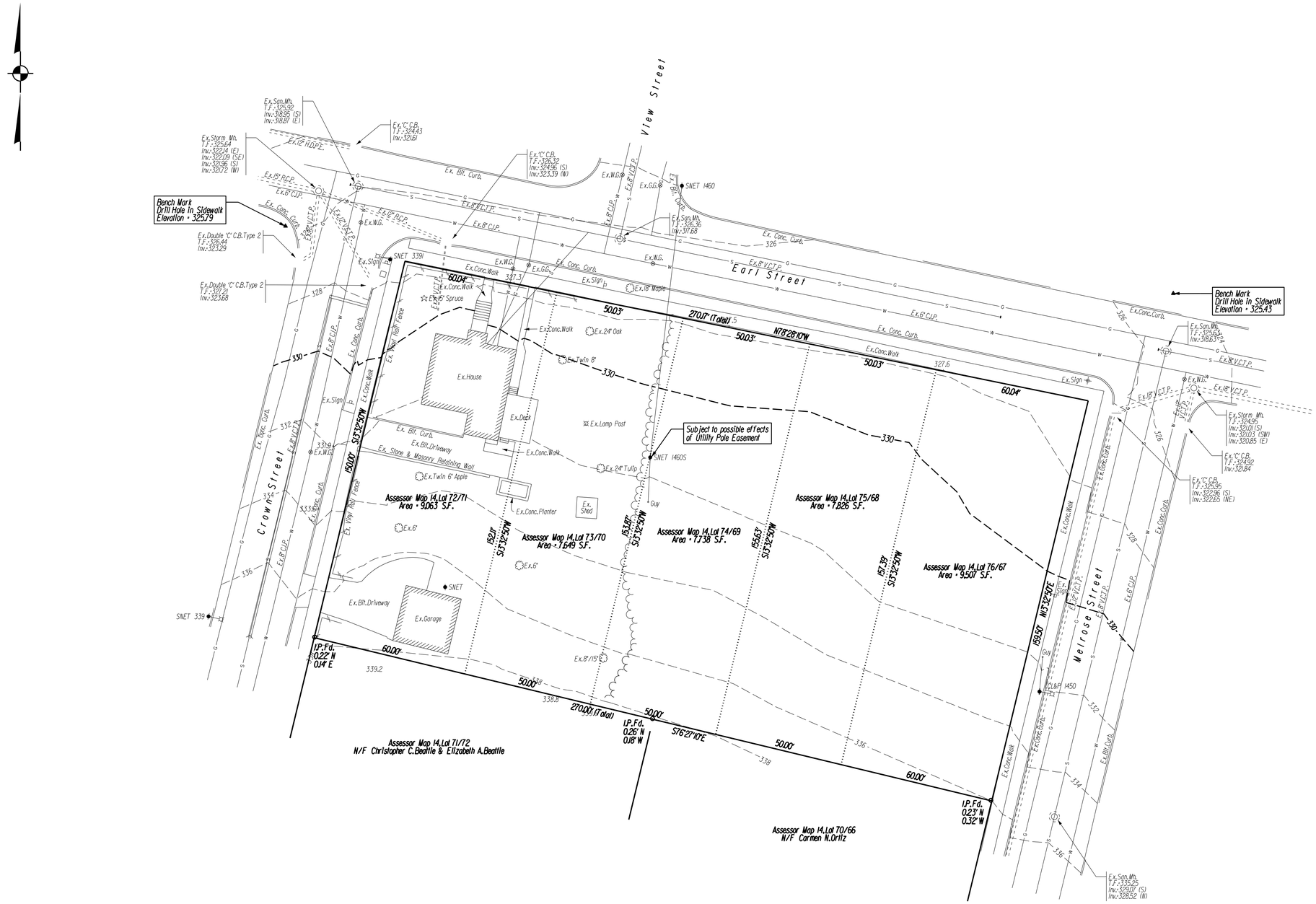
Robert Green Associates LLC
6 Old Waterbury Road
Terryville, CT 06786
(860) 589-0135

Landscaping:

Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
(860) 506-4268

Lighting:

Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
(860) 282-1822



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

SURVEYOR SIGNATURE/BLOCK:

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HERON.

ROBERT C. GREEN JR. — STATE OF CONNECTICUT — No. 70230 LICENSED LAND SURVEYOR

PROJECT TITLE:

SITE PLAN

ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: V-001

DRAWING TITLE: BOUNDARY AND TOPOGRAPHIC SURVEY

SHEET NO.: 2

GENERAL NOTES:

1. ASSESSORS MAP: 14
ASSESSEORS LOT'S: 72/71,73/70,74/69,75/68,76/67

2. PROPERTY ADDRESS: 29-49 EARL STREET

3. OWNER NAME: D.G.G.DEVELOPMENT LLC

4. PREPARED FOR: D.G.G.DEVELOPMENT LLC

5. ZONE: R-15/RM

6. ASSESSORS LOT 72/71 REVISED AREA * 7,341 S.F.
ASSESSORS LOT 73/70 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 74/69 REVISED AREA * 8,814 S.F.
ASSESSORS LOT 75/68 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 76/67 REVISED AREA * 7,983 S.F.

* SUBSEQUENT TO SITE PLAN APPROVAL BY LOCAL AGENCIES AND PRIOR TO ISSUANCE OF A ZONING PERMIT,THE OWNER SHALL COMBINE LOT'S 72/71,73/70,74/69,75/68,76/67

7. BASED ON THE CITY OF BRISTOL INLAND WETLAND AND WATER COURSES MAPS, THERE ARE NO WETLANDS ON THE SUBJECT PROPERTY.

8. BASED ON FLOOD INSURANCE RATE MAP,HARTFORD COUNTY,CONNECTICUT (ALL JURISDICTIONS), PANEL 468 OF 675,MAP NUMBER 09003C0468F,EFFECTIVE DATE:SEPTEMBER 26, 2008 THE PARCEL LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

9. THE PROPERTY IS "NOT" LOCATED WITHIN A AQUIFER PROTECTION AREA

10. EXISTING AND PROPOSED CONTOURS AT 2' INTERVALS

11. PROPOSED BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER

12. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION.THE LOCATIONS ARE APPROXIMATE, ALL UTILITIES MAY NOT BE SHOWN,THE CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" AT 811 PRIOR TO THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL PERFORM CAREFUL EXPLORATORY EXCAVATIONS TO IDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ENCOUNTERED AND MAY INTERFERE WITH THE PROPOSED WORK, WHETHER SHOWN ON THE EXISTING CONDITIONS DRAWINGS OR NOT.

13. CONTRACTOR SHALL VERFIY ALL DIMENSIONS,ELEVATIONS,QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION

14. TECHNICAL SPECIFICATIONS ARE THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS,BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, INCLUDING ANY SPECIAL PROVISIONS.

PARKING CALCULATION:

PROPOSED USE: THREE FAMILY DWELLING

PARKING REQUIREMENT: 2 PER DWELLING UNIT
15 DWELLING UNITS x 2 PER = 30 SPACES

PARKING PROPOSED: 31 SPACES

SITE BASED AMENITIES:

1) ENERGY EFFICIENT LIGHTING

2) LOW-IMPACT STORMWATER MANAGEMENT: GROUNDWATER RECHARGE & STORMWATER QUALITY STRUCTURES

FUNCTIONAL OPEN SPACE CALCULATION:

REQUIRED: 250 S.F./ DWELLING UNIT
15 UNITS x 250 S.F.= 3,750 S.F.

LAWN AREA/GARDENS NOT EXCEEDING 5% = 4,275 S.F.

DECKS OR PATIOS = 525 S.F.

TOTAL PROVIDED: 4,800 S.F.

Unified Residential Developments (R15/RM)
Area and Dimensional Requirements

Standard		Proposed
a) Maximum Density (units per acre)	18	15.6
b) Minimum Lot Area (acres)	0.5	0.96
c) Minimum Lot Frontage (ft)	75	150
d) Minimum Front Yard (ft)	6	11.5
e) Minimum Side Yard (ft)	6	6.5
f) Minimum Rear Yard (ft)	15	NA
g) Maximum Building Height (ft)	35	25
h) Maximum Building Coverage (%)	40	25.6
i) Maximum Impervious Coverage (%)	80	67.6
j) Minimum Building Spacing (ft)	18	19.8

CONSTRUCTION SEQUENCE:

1. FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING.

2. HOLD PRECONSTRUCTION MEETING WITH THE OWNER,ENGINEER,CONTRACTOR AND APPROPRIATE TOWN STAFF. REVIEW FLAGGED CLEARING LIMITS AND DETERMINE TOPSOIL STOCKPILE AREA. (REMEMBER TO CALL BEFORE YOU DIG 1-800-922-4455.

3. FLAG REMAINDER OF THE LIMITS OF CONSTRUCTION AND TREE PROTECTION ZONES IF REQUIRED.

4. PROJECT SURVEYOR TO STAKE SOUTHERN PROPERTY LINE PRIOR TO THE START OF CONSTRUCTION.

5. INSTALL CONSTRUCTION ENTRANCE PAD.

6. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE E&S PLAN.

7. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD CHIP BRUSH AND SLASH,STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.

8. REMOVE ALL ITEMS PER REMOVALS PLAN.

9. STRIP AND STOCKPILE ALL TOPSOIL THAT IS WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE AND REFERENCE STOCKPILE MANAGEMENT FOR EROSION AND SEDIMENT CONTROLS. EITHER REMOVE TREE STUMPS TO AN APPROVED DISPOSAL SITE OR CHIP IN PLACE AS INDICATED ON THE PLANS.

10. MAKE ALL CUTS AND FILLS REQUIRED, ESTABLISH THE SUBGRADE FOR THE PARKING LOT AND DRIVEWAY AS REQUIRED AND BENCH THE BUILDING'S TO A SUBGRADE. ALLOW A REASONABLE AMOUNT OF AREA AROUND THE FOOT-PRINT OF THE PROPOSED BUILDING FOR THE CONSTRUCTION ACTIVITIES.

11. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING'S.

12. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES,INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE,REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.

13. INSTALL ALL UTILITIES AND DRAINAGE SYSTEMS TO WITHIN 5 FEET OF THE BUILDING OR AS OTHERWISE MODIFIED BY THE DESIGN ENGINEER TO ADJUST FOR UNFORESEEN SITE CONDITIONS.

14. PREPARE SUB-BASE, SLOPES, PARKING AREAS, SHOULDER AREAS, ACCESS DRIVES AND ANY OTHER DISTURBANCE FOR FINAL GRADING.

15. INSTALL PROCESS AGGREGATE IN PARKING AREAS.

16. PLACE TOPSOIL WHERE REQUIRED, COMPLETE THE PERIMETER LANDSCAPE PLANTINGS.

17. FINE GRADE, RAKE, SEED AND MULCH TO WITHIN 2 FEET OF THE CURBING.

18. UPON SUBSTANTIAL COMPLETION OF THE PROPOSED BUILDING'S,COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS. INSTALL FIRST COURSE OF PAVING.

19. WHEN ALL OTHER WORK HAS BEEN COMPLETED,REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.

20. INSTALL FINAL COURSE OF PAVEMENT.

21. AFTER THE SITE IS STABILIZED REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

OPERATION AND MAINTENANCE PLAN (POST CONSTRUCTION)

1. ALL DRAINAGE SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN 12 INCHES OF THE OUTLET PIPE INVERT,NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

2. ALL PAVED AREAS SHALL BE SWEPT TWICE ANNUALLY, TYPICALLY, SWEEPING SHOULD OCCUR IN THE SPRING, AFTER WINTER SANDING,AND IN THE FALL, AFTER ALL LEAVES HAVE FALLEN.

3. A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES. (USE ONLY ORGANIC FERTILIZER)

4. DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2 " OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

INSPECTION AND MAINTENANCE GUIDELINES STORMWATER QUALITY MEASURES AND UNDERGROUND DETENTION SYSTEMS

1. THE CATCHBASIN SYSTEM SHOULD BE INSPECTED MONTHLY IN THE FIRST YEAR AND TWICE-A-YEAR (APRIL AND OCTOBER) THEREAFTER TO CHECK INLETS AND OUTLETS FOR CLOGGING AND TO REMOVE ANY DEBRIS AS REQUIRED.

2. INSPECTION AND MAINTENANCE FOR THE STORMWATER QUALITY CHAMBER SHALL BE PER THE GUIDELINES PUBLISHED BY THE MANUFACTURER.

https://www.conleches.com/Portals/0/Documents/Maintenance%20Guides/CDS-Maintenance-Guide.pdf?ver=2018-05-31-143259-453

REMOVAL NOTES:

1. INFORMATION ON EXISTING UTILITIES AND UNDERGROUND FEATURES HAS BEEN COMPILED,IN PART,BASED UPON INFORMATION FURNISHED BY OTHERS AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE OF DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO THE START OF SITE REMOVALS OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG AT 811 AND RECEIVE REQUIRED FIELD MARKOUTS. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO INDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ECOUNTERED, WHETHER SHOWN ON AN EXISTING CONDITIONS DRAWING OR NOT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.

3. MANHOLES,CATCH BASINS,CLEANOUTS,VALVE BOXES,FRAMES,COVERS,GRATES,ETC.TO REMAIN IN USE, SHALL BE PROTECTED AND ADJUSTED TO PROPOSED GRADES AS NECESARY.

4. EXISTING BITUMINOUS PAVEMENT NOTED TO BE REMOVED SHALL BE DEMOLISHED,STOCKPILED,PULVERIZED AND INSPECTED BY A MATERIALS INSPECTOR PRIOR TO ANY USE AS RECLAIMED MATERIAL. RECLAIMED MATERIALS MEETING THE TESTING REQUIREMENTS MAY BE USED AS OR BE INCLUDED IN SUB-BASE MATERIALS FOR NEW PAVEMENTS. ALL REMAINING PAVEMENT MATERIAL THAT IS TO BE REMOVED SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

5. ANY SITE FEATURE NOT LABELED AS BEING REMOVED,REPLACED,ETC.IS INTENDED TO REMAIN.

6. DURING THE PRECONSTRUCTION MEETING, THE CONTRACTOR,ENGINEER AND CITY SHALL DETERMINE A SUITABLE STOCKPILE LOCATIONS.

7. SIDEWALKS TO BE REPLACED SHALL BE REPLACED TO THE NEAREST JOINT.

8. ALL ASPHALT AND CONCRETE MATERIALS SHALL BE REMOVED TO FULL DEPTH WHERE LANDSCAPED AREAS ARE PROPOSED OR WHERE NEW CONSTRUCTION IS PROPOSED.

9. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

SIGNING AND PAVEMENT MARKING NOTES:

1. SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO MUTCD OR CONNDOT STANDARDS AS DEPICTED.

2. SIGNS SHALL BE INSTALLED WITH A BREAKAWAY FEATURE.

3. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.

2. ALL ACCESSIBLE EGRESSES SHALL BE FLUSH WITH THE ADJOINING MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

3. WALKWAYS ALONG ACCESSIBLE ROUTES ARE NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

4. ALL RAMPS SHALL NOT EXCEED 1:12 OR 2% CROSS PITCH.

UTILITY AND DRAINAGE NOTES:

1. TOP OF FRAME ELEVATIONS SHOWN ON THESE PLANS REFLECT THE 2" STANDARD DEPRESSION FROM GUTTER LINE.

2. ALL CATCH BASINS SHALL HAVE A 2FT SUMP UNLESS OTHERWISE NOTED ON THE PLANS.

3. ALL YARD DRAINS SHALL BE "NYLOPLAST DRAIN BASINS" (OR APPROVED EQUAL) WITH THE STANDARD D.I. FRAME AND GRATE UNLESS OTHERWISE NOTED ON THE PLANS.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES REGARDING A FINAL DESIGN, MEANS OF CONSTRUCTION AND AN EXACT LOCATION AND SIZE OF THE UTILITY PRIOR TO THE START OF CONSTRUCTION.

5. ALL WATERMAIN AND SERVICE WORK TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS, INCLUDING BACKFLOW PREVENTION SPECIFICATIONS. PRIOR TO THE START OF CONSTRUCTION CONTACT PAUL KEEGAN FOR ALL WATERMAIN AND SERVICE WORK AND BRYAN ROBERTS FOR ALL SEWER MAIN AND SERVICE WORK, BOTH AT THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT (860) 582-7431.

6. FINAL WATER SERVICE SIZES TO BE DETERMINED BY THE OWNERS MECHANICAL ENGINEER ONCE ALL PERTINENT WATER FIXTURE DATA HAS BEEN RECEIVED.

7. ONCE THE OWNERS MECHANICAL ENGINEER HAS DETERMINED THE MAX GPM TO BE SUPPLIED TO THE BUILDING'S, THE BRISTOL WATER AND SEWER DEPARTMENT WILL THEN DETERMINE THE METER SIZE.

8. ALL SERVICE TAPS TO BE DONE BY THE BRISTOL WATER AND SEWER DEPARTMENT.

9. ALL FEES MUST BE PAID BEFORE ANY WORK CAN BE SCHEDULED. ALL WATER TAPS TO BE DONE BY BRISTOL WATER DIVISION.

10. WHEN SEWER AND WATER ARE WITHIN 10' HORIZONTALLY, THE WATER MAIN SHALL BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED SHELF AND AT LEAST 12" HORIZONTALLY (18" RECOMMENDED), MEASURED EDGE TO EDGE AND 18" ABOVE THE TOP OF THE SEWER, MEASURED FROM CROWN TO INVERT. FINAL LOCATIONS SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.

11. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS, HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

GENERAL NOTES FOR SITE PLANS "CITY OF BRISTOL" (AS APPLICABLE)

1. A SANITARY SEWER LATERAL PERMIT OBTAINED FROM THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT, WILL BE REQUIRED PRIOR TO CONNECTING INTO THE EXISTING SEWER SYSTEM. THE CONTRACTOR INSTALLING THE SEWERS/LATERALS SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE SANITARY SEWER INSTALLATIONS. NO SANITARY SEWER INSTALLATION SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR. ALL BUILDING SEWERS SHALL HAVE A GRAVITY BACK FLOW PREVENTER. (BUILDING SEWERS AND CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH SEC. 22-19(F) OF THE CODE OF ORDINANCES - CITY OF BRISTOL)

2. A STORM SEWER CONNECTION PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT. WILL BE REQUIRED PRIOR TO CONNECTING THE PROPOSED DRAINAGE SYSTEM(S) INTO THE CITY SYSTEM AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. THE CONTRACTOR MAKING THE STORM SEWER CONNECTION AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE STORM SEWER INSTALLATIONS. NO STORM SEWER SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR.

3. A DRIVEWAY APRON AND/OR SIDEWALK PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT. WILL BE REQUIRED PRIOR TO CONSTRUCTING ANY DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. THE CONTRACTOR CONSTRUCTING THE DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. SHALL NOTIFY THE CITY HIGHWAY INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH CONSTRUCTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF ANY DRIVEWAY APRON AND/OR SIDEWALK INSTALLATIONS. NO CONCRETE (PORTLAND CEMENT AND/OR BITUMINOUS) SHALL BE PLACED PRIOR TO AN INSPECTION BY THE CITY HIGHWAY INSPECTOR.

4. SEDIMENTATION AND SILTATION CONTROLS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEERING DIVISION/WEO.

5. GRADING AROUND THE PROPOSED IMPROVEMENTS SHALL BE PERFORMED IN A MANNER WHICH PREVENTS ALL RUNOFF FROM BEING DIRECTED ONTO ADJACENT PROPERTIES; BOTH DURING AND AFTER CONSTRUCTION.

6. AS-BUILT PLOT PLANS SHALL BE SUBMITTED FOR ENGINEERING DIVISION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE REQUIRED ENGINEERING SIGN-OFF FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.). AS-BUILT PLANS MUST INCLUDE AS-BUILT GRADING OF THE SITE.

7. ANY EXISTING DAMAGED SECTIONS OF SIDEWALK AND/OR CURBING AS A RESULT OF CONSTRUCTION ALONG STREETS ABUTTING THE SITE SHALL BE IDENTIFIED AND REPLACED AT THE DIRECTION OF BRISTOL DPW ENGINEERING DIVISION. THE APPLICANT SHALL CONTACT THE BRISTOL DPW ENGINEERING DIVISION TO SCHEDULE INSPECTION.

GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. THIS PLAN OF DEVELOPMENT PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE,CONTROL OF RUNOFF,SHIELDING OF THE SOILS AND BINDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE NEED FOR EXTENSIVE SEDIMENTATION CONTROLS.

2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

3. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND FOR A PERIOD AFTERWARDS UNTIL ALL AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AFTER EACH STORM EVENT (1/2" OR MORE) OR ONCE A WEEK AND IMMEDIATELY MAKE ANY CORRECTIVE ACTION REQUIRED.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.

5. RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE.

6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM AND RESTABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. THE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS,TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED OR AN APPROVED EQUAL.

A) SEED BED PREPARATION:
- REMOVE STONES LARGER THAN 2"
- APPLY LIMESTONE AT 90# / 1000 S.F.
- WORK LIME AND FERTILIZER INTO SOIL

B) SEED APPLICATION:
- APPLY GRASS MIXTURE BY HAND OR CYCLONE SEEDER,LIGHTLY DRAG OR ROLL THE SEED SURFACE TO COVER SEED. OPTIMAL SEEDING SEASON IS BETWEEN MARCH 15TH AND JUNE 30TH OR BETWEEN AUGUST 15TH AND OCTOBER 30TH.
- IF SEEDING CAN NOT BE DONE DURING THESE TIMES,REPEAT MULCHING PROCEDURE STATED BELOW UNTIL SEEDING CAN TAKE PLACE.

C) SEED MIX:
- CREEPING RED FESCUE 49# / ACRE
- TALL FESCUE 20# / ACRE

D) MULCHING:
- IMMEDIATELY FOLLOWING SEEDING,MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1-1/2 TONS / ACRE SPREAD MULCH BY HAND OR MULCH BLOWER.
- PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISK HARROW STRAIGHT UP. MULCH MATERIAL SHOULD BE "TUCKED" APPROXIMATELY 2" - 3" INTO SOIL SURFACE.

E) TREE PROTECTION:
- LIMIT CONSTRUCTION ACTIVITIES THAT MIGHT CAUSE DAMAGE TO TREES. THE AREA ADJACENT TO AND TREES THAT ARE TO BE PROTECTED,WILL BE IDENTIFIED AND CLEARLY MARKED. EXCAVATION SHOULD NOT OCCUR WITHIN THE ROOT ZONE OF THE TREES THAT ARE TO REMAIN. IN ADDITION,RAISING OR LOWERING THE GRADE NEAR REMAINING TREES SHOULD NOT OCCUR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY EROSION AND SEDIMENTATION CONTROL MEASURES DUE TO UNFORESEEN FIELD CONDITIONS. ADDITIONAL CONTROL MEASURES MAY ALSO BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER,ENVIRONMENTAL SUPERVISOR AND/OR TOWN ENGINEER.

8. ANY CHANGE TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN BY THE CONTRACTOR SHALL BE SUBMITTED BY THE CONTRACTOR IN WRITING AND APPROVED BY THE ENGINEER.

9. ANTI-TRACKING PADS SHALL BE INSTALLED WHERE CONSTRUCTION ACCESS MEETS A PAVED ACCESS POINT,OR AS DIRECTED BY THE ENGINEER.

10. STOCKPILE LOCATIONS SHALL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION AND IF A STOCKPILE IS LOCATED OFF-SITE,THE LOCATION SHALL HAVE EROSION CONTROL MEASURES IN PLACE AND MEET ALL LOCAL REQUIREMENTS.

11. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL TO 1' VERTICAL OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS. WHERE LEDGE IS ENCOUNTERED,THE MAXIMUM CUT SLOPE MAY BE INCREASED TO 1 HORIZ.: 1 VERT. A 4FT HIGH PERMANENT SAFETY FENCE (e.g.CHAIN LINK FENCE) SHALL BE ADDED TO ALL ROCK CUTS GREATER THAN 4FT HIGH.

12. ALL SLOPES OR DISTURBED AREAS (EXCEPT PAVED AREAS) ARE TO BE STABILIZED WITH 4" OF TOPSOIL AND TURF MUST BE ESTABLISHED UNLESS OTHERWISE NOTED ON THE PLANS. STABILIZATION SHALL INCLUDE INSTALLATION OF EROSION CONTROL MATTING WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

13. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE,OR APPROVED EQUAL. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.

14. TEMPORARY PERVIOUS BARRIERS,USING SILT FENCE AND HAYBALES HELD IN PLACE WITH WOODEN STAKES,SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF-SITE.

15. JEFFERY NIMAN OR HER DULY AUTHORIZED AGENT (860) 841-6008 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPAL PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE TO THE START OF ANY CONSTRUCTION ACTIVITY.

16. JEFFERY NIMAN OR HIS DULY AUTHORIZED AGENT (860) 841-6008 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES,INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN,NOTIFYING THE PLANNING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.

17. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, AS AMENDED. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION AND SEDIMENTATION CONTROL MAINTENANCE REQUIREMENTS

TOPSOIL STOCKPILES:

THE SIDE SLOPES SHALL NOT EXCEED A SLOPE GREATER THAN 2:1. STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHOULD BE SEEDED AND MULCHED. A SEDIMENTATION FENCE SHALL BE INSTALLED APPROX.10FT FROM THE TOE OF SLOPE.

IF THE TOPSOIL STOCKPILE LOCATION IS RELOCATED, IT SHALL BE LOCATED SO AS NOT TO OBSTRUCT THE NATURAL DRAINAGE PATTERN OF THE SITE. IT SHALL BE LOCATED AS FAR AS PRACTICAL FROM ANY WETLANDS,WATER COURSES DRAINAGE WAYS AND STEEP SLOPES. IF THE LOCATION IS DOWNGRADIENT FROM A LONG SLOPE,DIVERT RUNOFF AROUND THE STOCKPILE.

CONSTRUCTION ENTRANCE PAD / ANTI-TRACKING PAD:

THE CONSTRUCTION ENTRANCE SHALL BE KEPT CLEAN OF ANY DEBRIS OR CONSTRUCTION MATERIALS. A PERIODIC TOP DRESSING OF STONE SHALL BE ADDED AS MAY BE REQUIRED TO KEEP THE ENTRANCE PAD WORKING EFFECTIVELY. IF A SEDIMENT SPILL OCCURS ON THE ROAD, IT SHALL BE CLEANED UP IMMEDIATELY.

SEDIMENTATION CONTROL FENCE:

THE SEDIMENTATION CONTROL FENCE SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAIN EVENT OF 0.5 INCHES OR MORE. IF A FAILURE OCCURS,REPAIR OR REPLACE THE FENCE WITHIN 24 HRS. ANY SEDIMENT DEPOSITS THAT REACH HALF THE HEIGHT OF THE FENCE SHALL BE REMOVED.

DUST CONTROL:

PERIODICALLY MOISTEN THE EXPOSED SOIL SURFACE TO KEEP TRAVELWAYS DAMP. AFTER THE TRAVELWAY HAS BEEN PAVED,PERIODIC SWEEPING MAY BE REQUIRED TO REMOVE DUST AND FINE MATERIALS ACCUMULATED FROM TRUCK TRAFFIC.

TREE PROTECTION:

TREES TO BE PROTECTED WILL BE IDENTIFIED AND CLEARLY MARKED. CONSTRUCTION ACTIVITIES WITHIN THE ADJACENT AREA THAT MAY CAUSE DAMAGE TO THE TREE SHALL BE LIMITED AND TRUNK ARMORING PROVIDED.

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT · JOSEPH M. GREEN · No. PEN.0026232 · LICENSED PROFESSIONAL ENGINEER

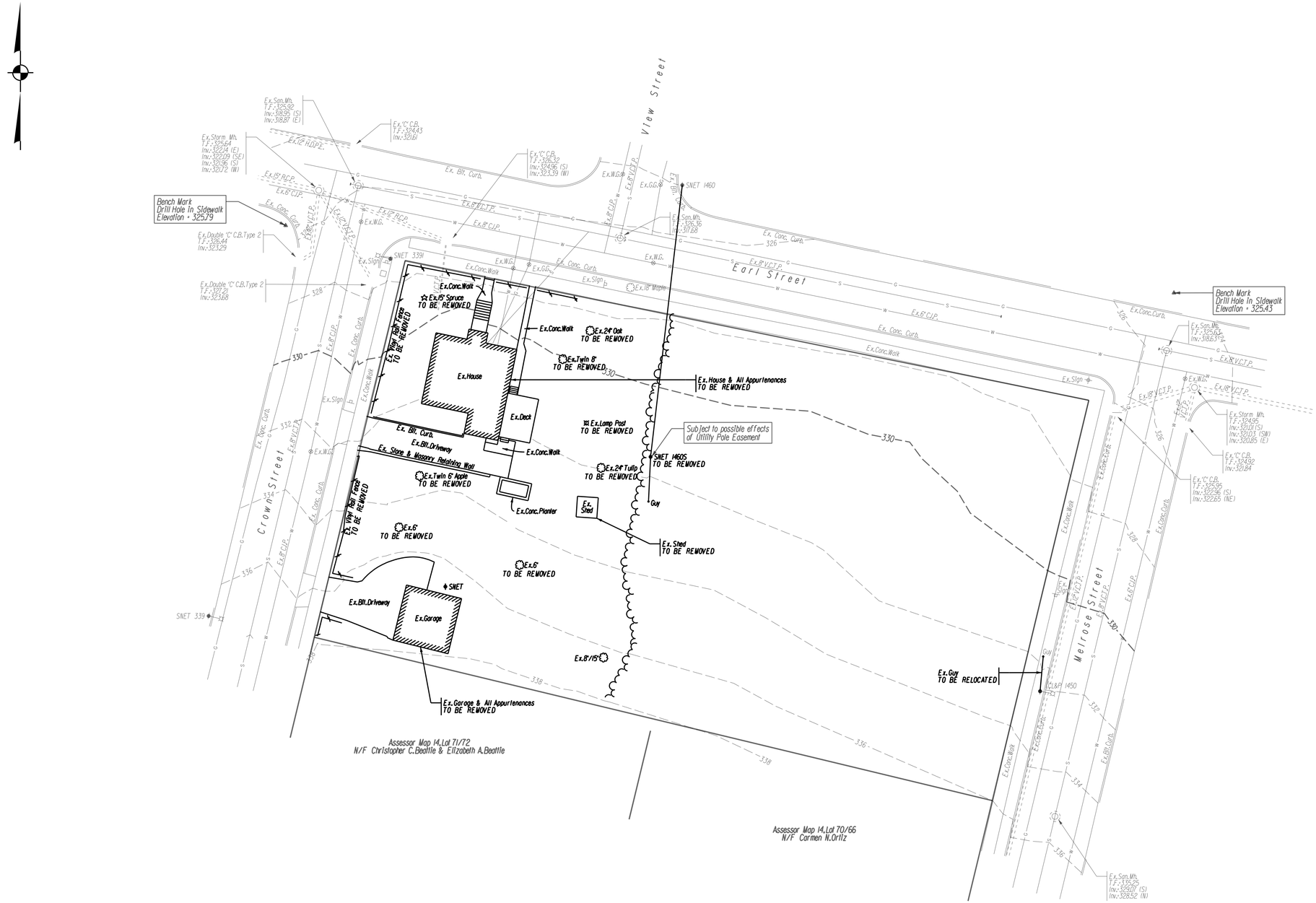
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: NOTES-001

DRAWING TITLE: GENERAL NOTES

SHEET NO.: 3



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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ENGINEER SIGNATURE/BLOCK:

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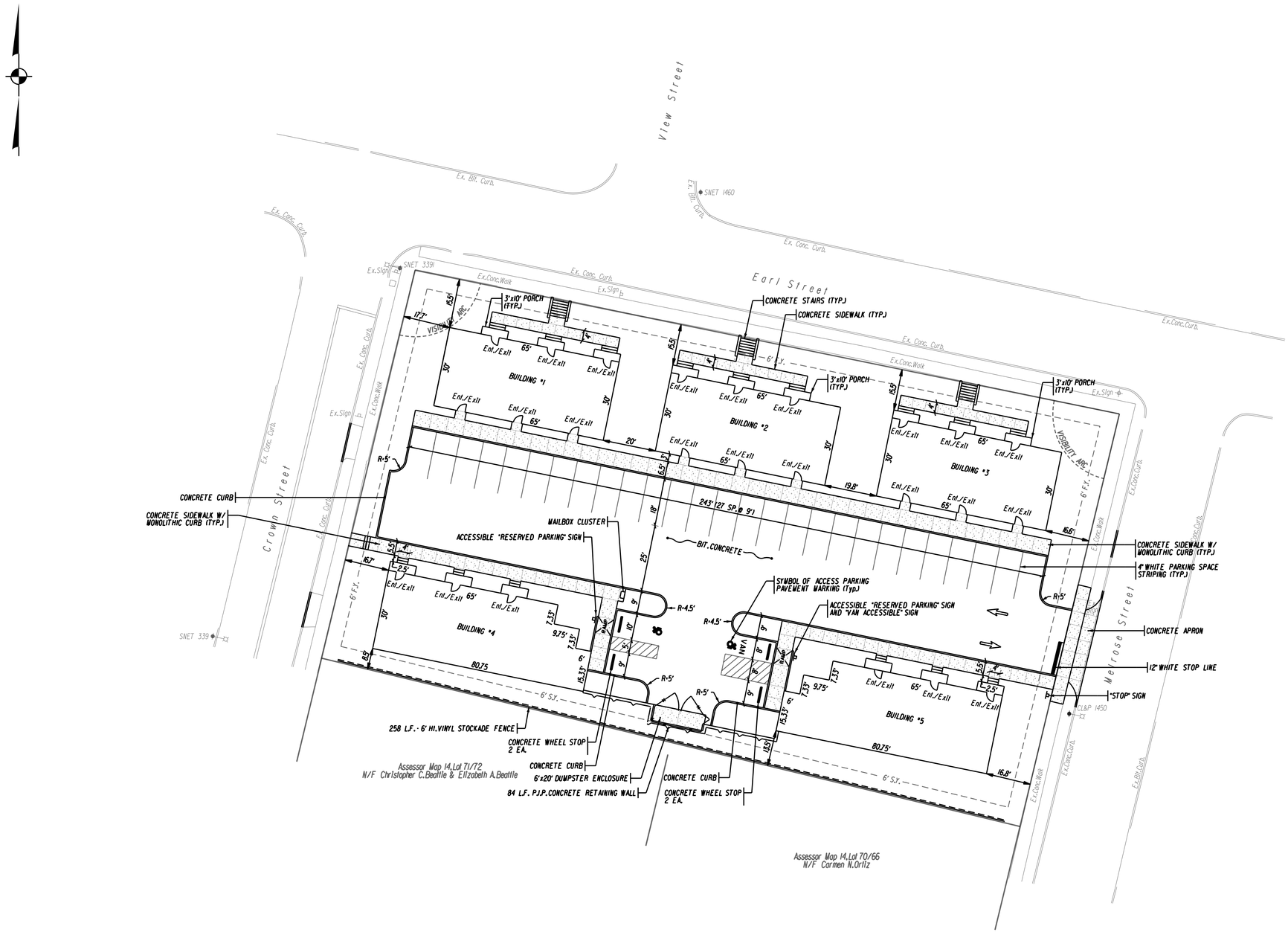
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BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO. RMV-001

DRAWING TITLE: SITE REMOVALS PLAN

SHEET NO. 4



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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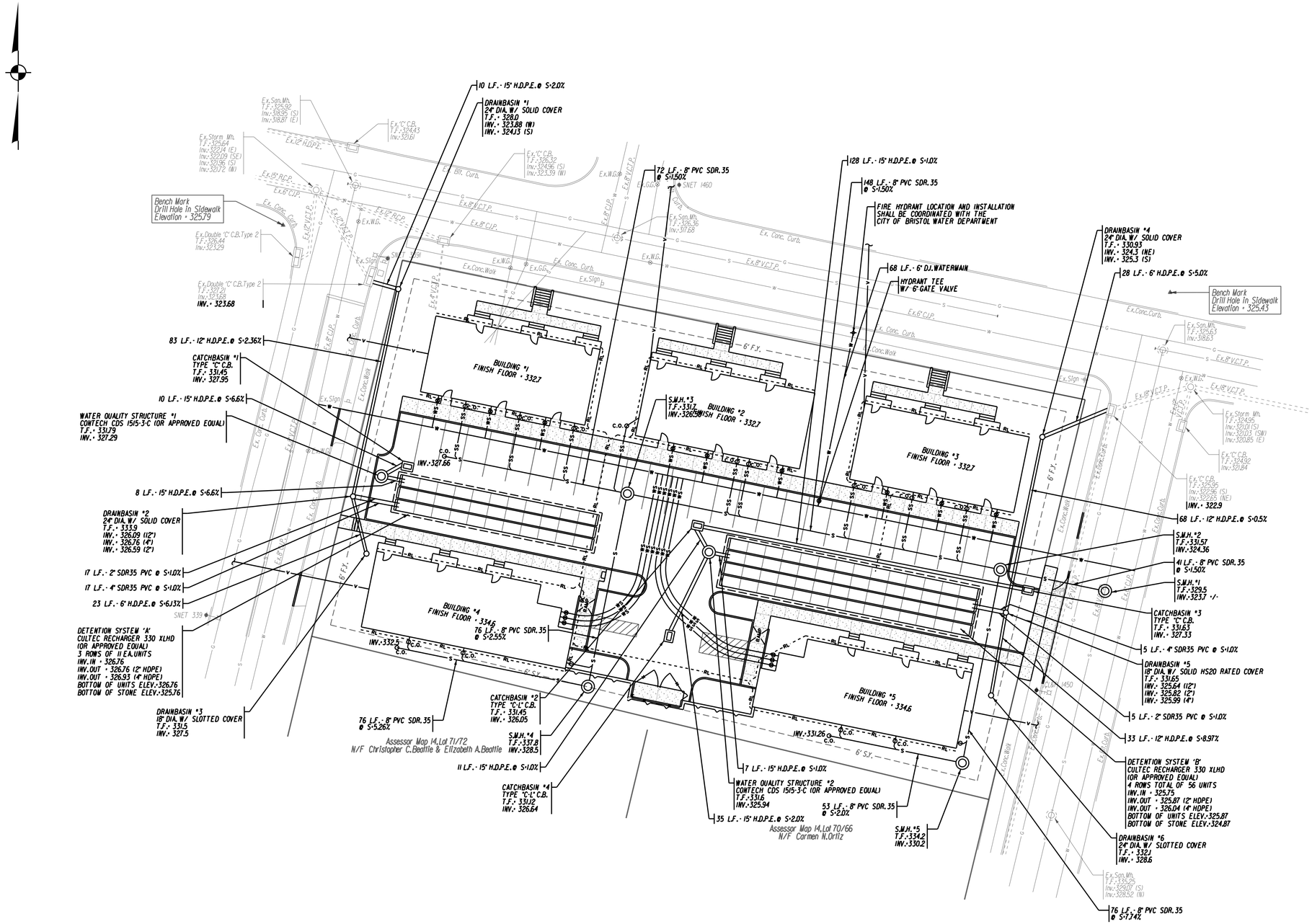
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ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: PLN-001

DRAWING TITLE:
LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN

SHEET NO.: 5



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT — JOSEPH M. GREEN — No. PEN.0026232 — LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:

SITE PLAN

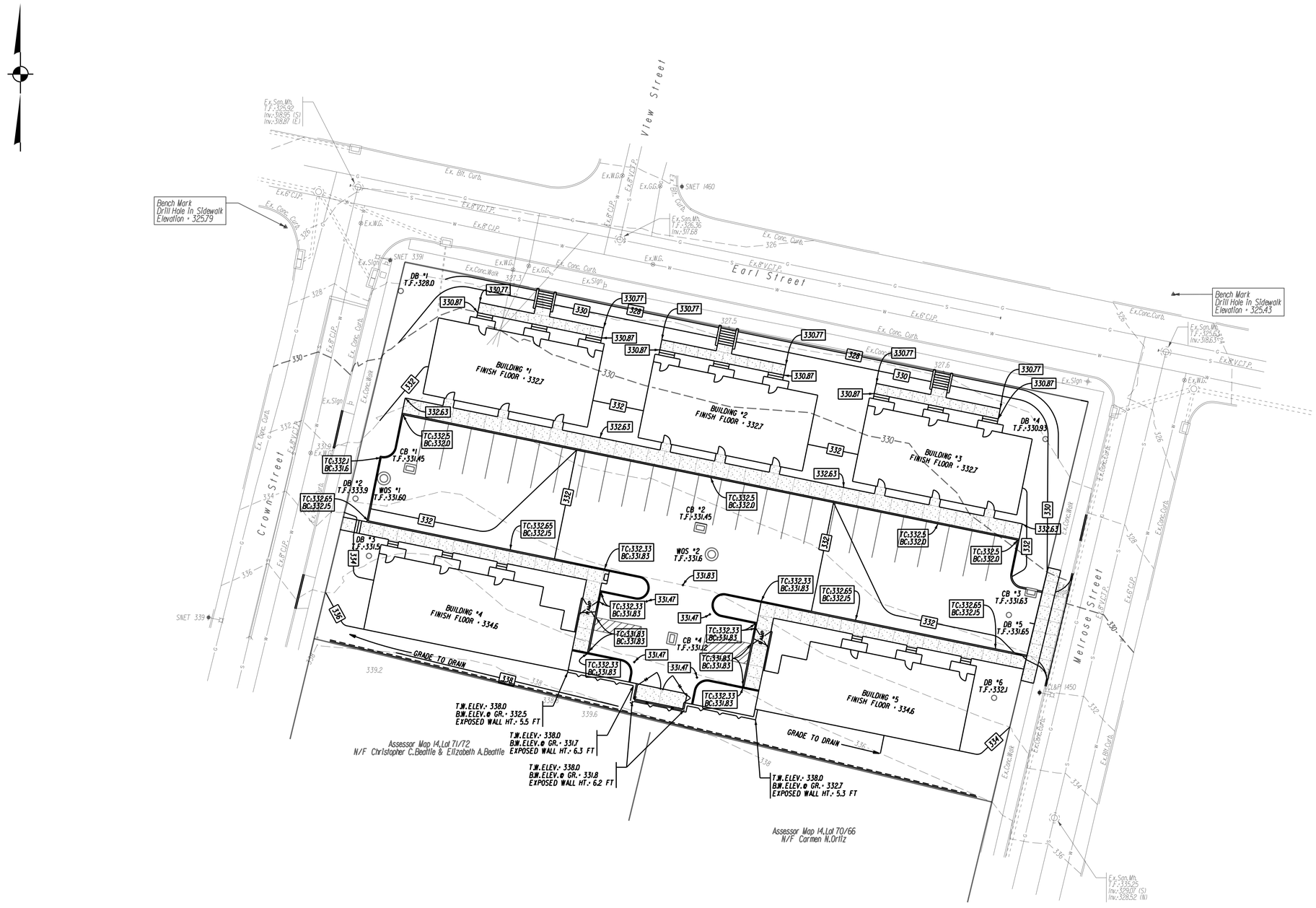
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: UTIL-001

DRAWING TITLE: DRAINAGE AND UTILITIES PLAN

SHEET NO.: 6



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 SCALE 1"=20'

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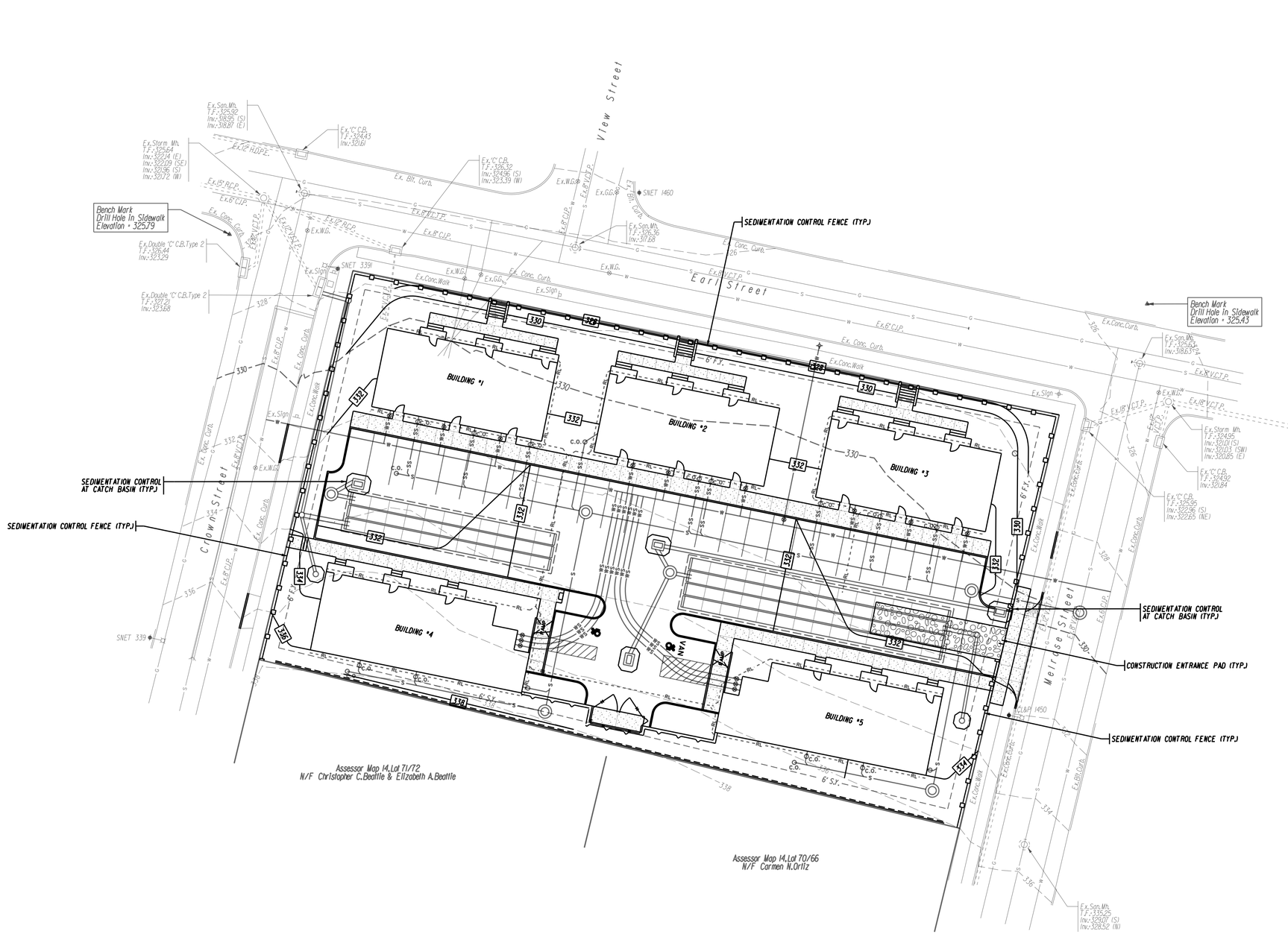
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BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: GRA-001

DRAWING TITLE: GRADING PLAN

SHEET NO.: 7



REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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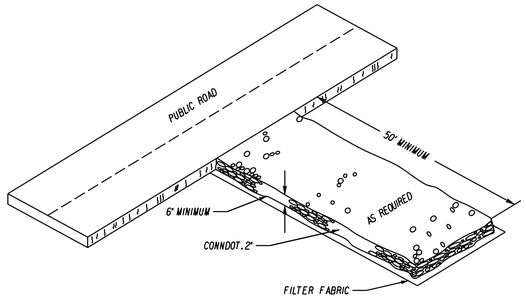
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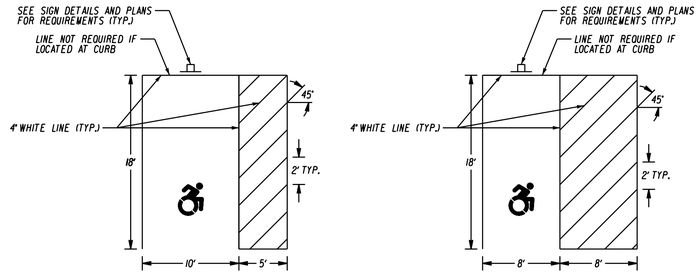
DRAWING NO.
E&S-001

DRAWING TITLE:
EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
8



CONSTRUCTION ENTRANCE PAD
NOT TO SCALE

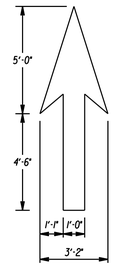


NOTE: IF A CAR AND VAN SPACE SHARE A COMMON ACCESS AISLE, THAT AISLE SHALL BE 96 INCHES MINIMUM IN WIDTH

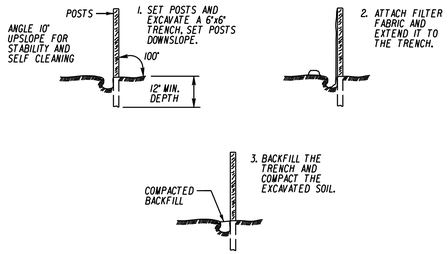
PARKING STALLS FOR HANDICAPPED
NOT TO SCALE



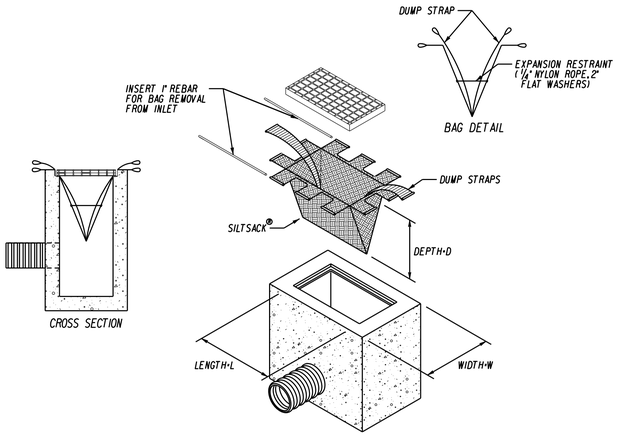
SYMBOL OF ACCESS PARKING SPACE MARKING
(TO COMPLY WITH CT.PA.#16-78)
NOT TO SCALE



PAVEMENT ARROW DETAIL (WHITE)
NOT TO SCALE



PLACEMENT AND CONSTRUCTION OF A SEDIMENTATION CONTROL FENCE
NOT TO SCALE



SEDIMENTATION CONTROL AT CATCH BASIN
NOT TO SCALE

SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS

RESERVED PARKING
PERMIT REQUIRED
VIOLATORS WILL BE TOWED AT OWNER'S EXPENSE

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
2.00	12X24		1	.080

VAN ACCESSIBLE

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
	12X6	31-0648		.080

R1-1

STOP

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. O.D.T. #	POSTS	ALUM. THK.
5.19	30	31-0552	1	.080

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT
JOSEPH M. GREEN
No. PEN.0026232
LICENSED PROFESSIONAL ENGINEER

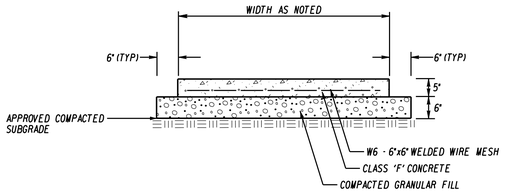
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

DRAWING NO.
MISC-001

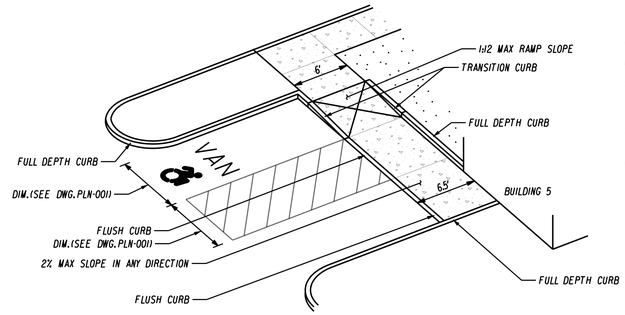
SHEET NO.
9



CONCRETE SIDEWALK SECTION
NOT TO SCALE

NOTES:

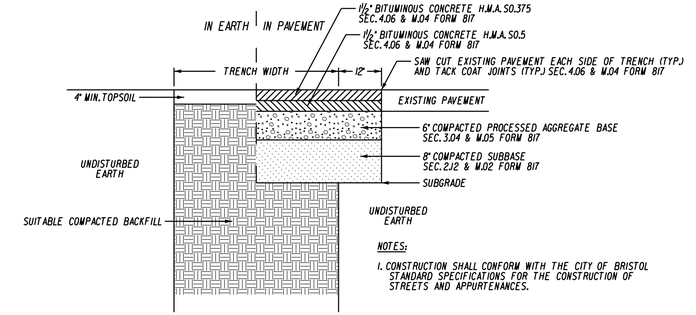
1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.
5. WHEN APPLICABLE, MAINTAIN ¼" PER 1'-0" MAX. CROSS SLOPE TOWARDS GUTTER.



ACCESSIBLE PARKING SITE
NOT TO SCALE

NOTES:

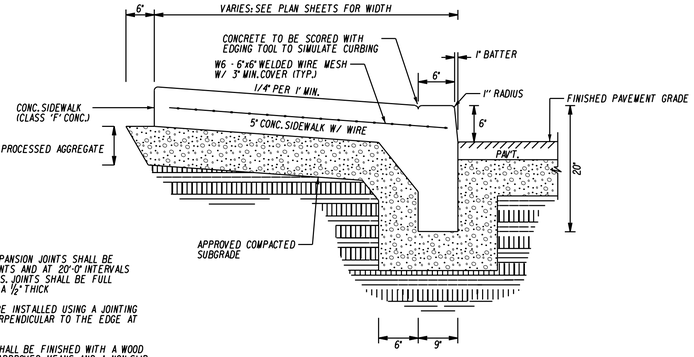
1. 2% MAX SIDEWALK CROSS SLOPE.
2. ADJOINING PAVEMENT SLOPE SHALL BE 2% MAX IN ANY DIRECTION.
3. SEE DWG. PLN-001 FOR DIMENSIONS
4. ACCESSIBLE PARKING SHALL BE MIRRORED AT BUILDING 4 AND PER DIMENSIONS SHOWN ON DWG. PLN-001
5. SEE DWG. GRA-001 FOR TOP AND BOTTOM OF CURB ELEV.'S



NOTES:

1. CONSTRUCTION SHALL CONFORM WITH THE CITY OF BRISTOL STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF STREETS AND APPURTENANCES.

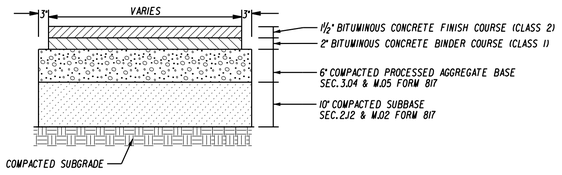
TRENCH RESTORATION DETAIL
NOT TO SCALE



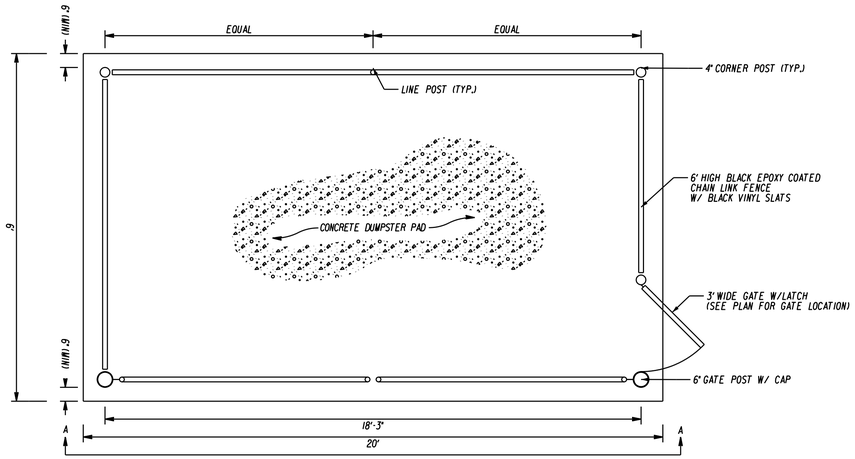
W/ 6" CURB REVEAL

NOTES:

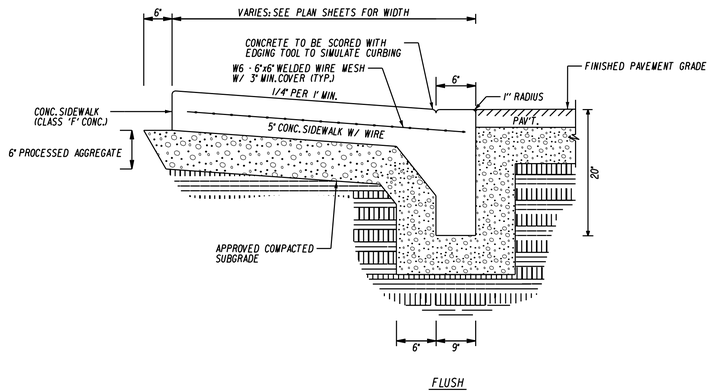
1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.



BITUMINOUS CONCRETE DRIVEWAY AND PARKING LOT PAVEMENT SECTION
NOT TO SCALE

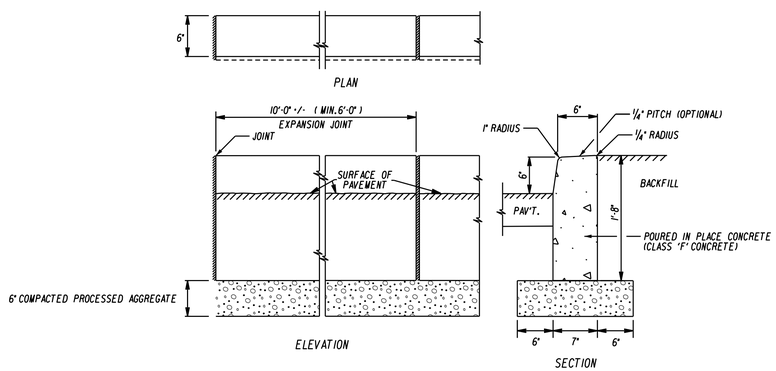


PLAN

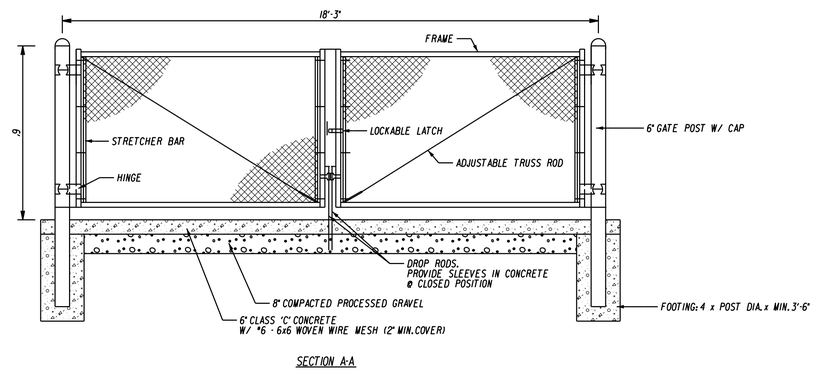


FLUSH

MONOLITHIC CONRETE CURB AND SIDEWALK
NOT TO SCALE



CONCRETE CURBING
NOT TO SCALE



SECTION A-A

DUMPSTER PAD DETAIL
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0020232 LICENSED PROFESSIONAL ENGINEER

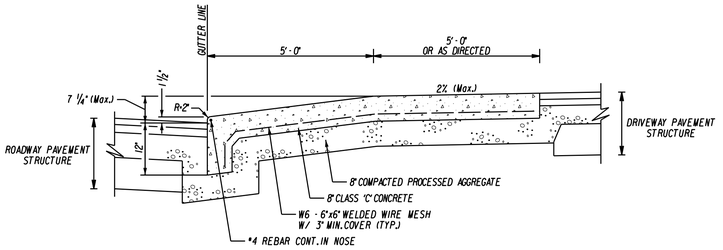
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

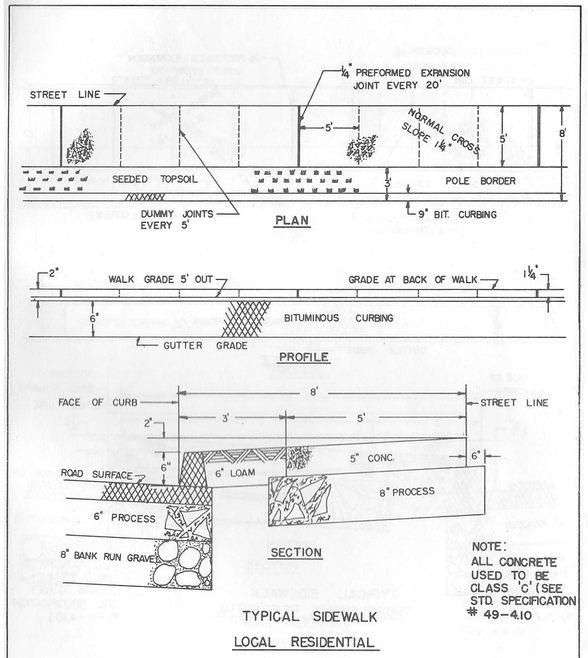
DRAWING NO.: MISC-002

DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 10



CONCRETE APRON SECTION
(NOT TO SCALE)

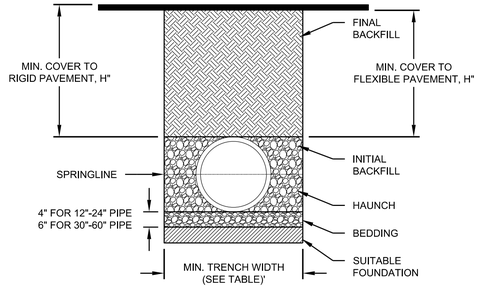


TYPICAL SIDEWALK
LOCAL RESIDENTIAL

PREPARED BY ENGINEERING DEPT.

5-10

STANDARD DETAIL FOR THE CONSTRUCTION OF STREETS & APPURTENANCES IN THE CITY OF BRISTOL, CONNECTICUT.
EFFECTIVE DATE 2/20/70



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
6" (150mm)	40 (12.2m)	19 (5.8m)	27 (8.2m)	19 (5.8m)	20 (6.1m)
8" (200mm)	30 (9.1m)	14 (4.3m)	21 (6.4m)	14 (4.3m)	15 (4.6m)
10" (250mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	18 (5.5m)
15" (375mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	19 (5.8m)
18" (450mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
24" (600mm)	27 (8.2m)	13 (4.0m)	19 (5.8m)	13 (4.0m)	14 (4.3m)
30" (750mm)	22 (6.7m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)
42" (1050mm)	24 (7.3m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
48" (1200mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

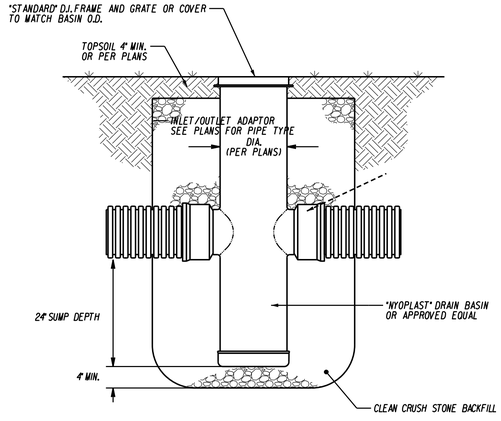
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDINGTO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

TYPICAL TRENCH DETAIL FOR HDPE PIPE
NOT TO SCALE



YARD DRAIN
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Phone: (860)-589-0135
Terryville, CT 06786 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-003

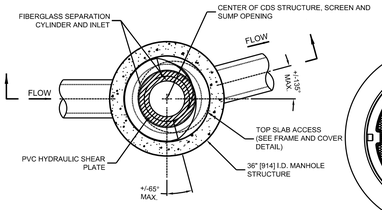
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 11

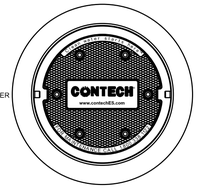
CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1,0 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.



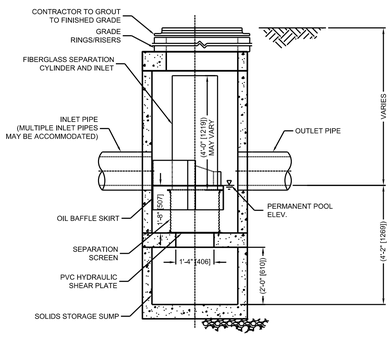
PLAN VIEW B-B
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #1
WATER QUALITY FLOW RATE (cfs [L/s])			0,08 cfs
PEAK FLOW RATE (cfs [L/s])			2,23 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			331,79
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	327,29	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	327,29	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #2
WATER QUALITY FLOW RATE (cfs [L/s])			0,31 cfs
PEAK FLOW RATE (cfs [L/s])			2,08 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			331,6
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	325,94	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	325,94	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			



ELEVATION A-A
N.T.S.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENTS 5,759,415; 6,027,639; 6,641,720; AND RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C
ONLINE CDS
STANDARD DETAIL

M:\STORM\MATER\JOBS\CTONS\USA\MKL_SDE DESIGN TOOLS_STANDARD DETAILS\CDS\CDS1515-3-C-DTL.DWG 8/6/2018 4:16 PM

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024
SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0028232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-004

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 12

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATIONS

GENERAL

CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE.
8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT³ / FT (0.693 m³ / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT³ / UNIT (1.478 m³ / UNIT) - WITHOUT STONE.
11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS.
14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLRHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLSHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION.
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m)
27. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL

CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

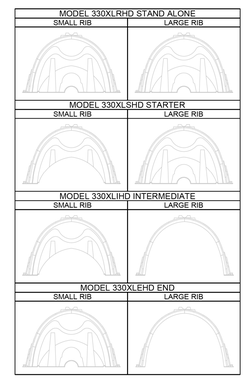
CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

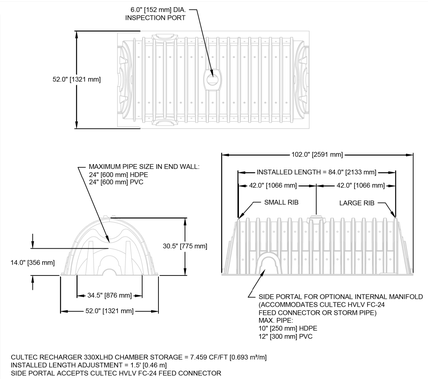
GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

330XLHD 1.0

GENERAL NOTES

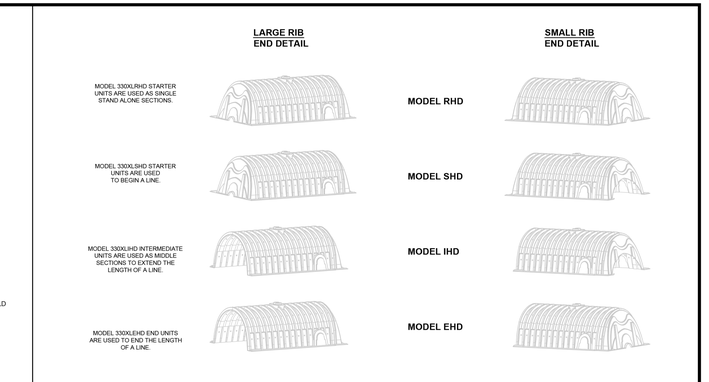




CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR

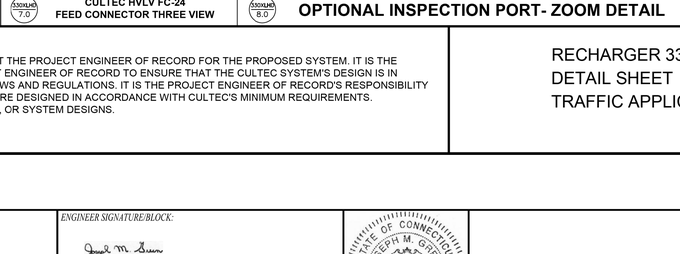
330XLHD 2.0

CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW



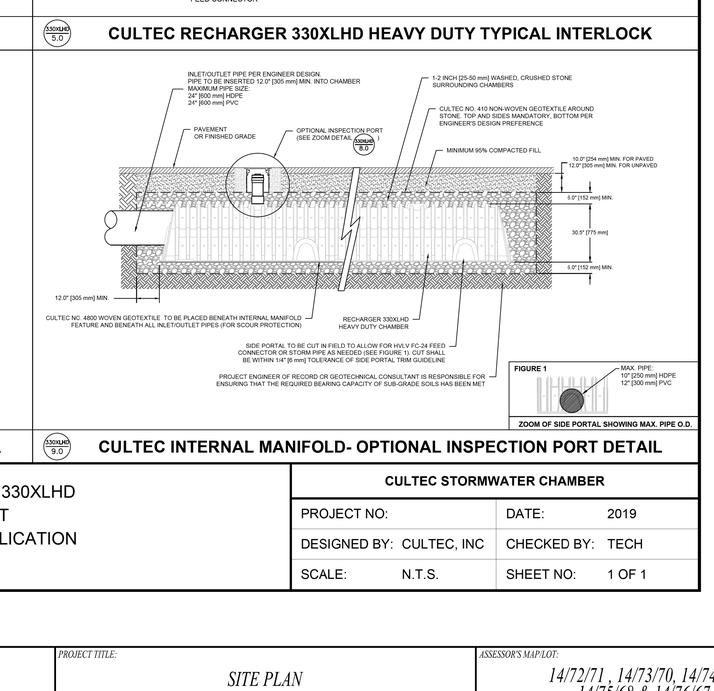
330XLHD 3.0

CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION



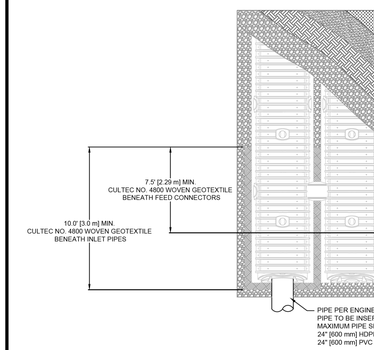
330XLHD 4.0

CULTEC RECHARGER 330XLHD HEAVY DUTY CROSS SECTION



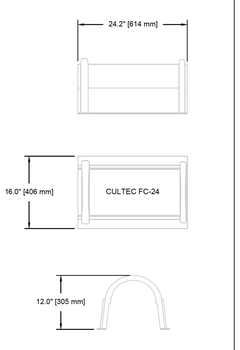
330XLHD 5.0

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK



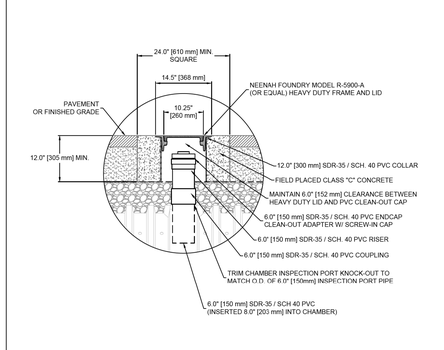
330XLHD 6.0

CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW



330XLHD 7.0

CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



330XLHD 8.0

OPTIONAL INSPECTION PORT- ZOOM DETAIL

330XLHD 9.0

CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL

TM
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Subsurface Stormwater Management Systems
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FX: (203) 775-1462
tech@cultec.com
CULTEC

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER

PROJECT NO:		DATE:	2019
DESIGNED BY:	CULTEC, INC	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 1

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. P.E.N.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO. MISC-005

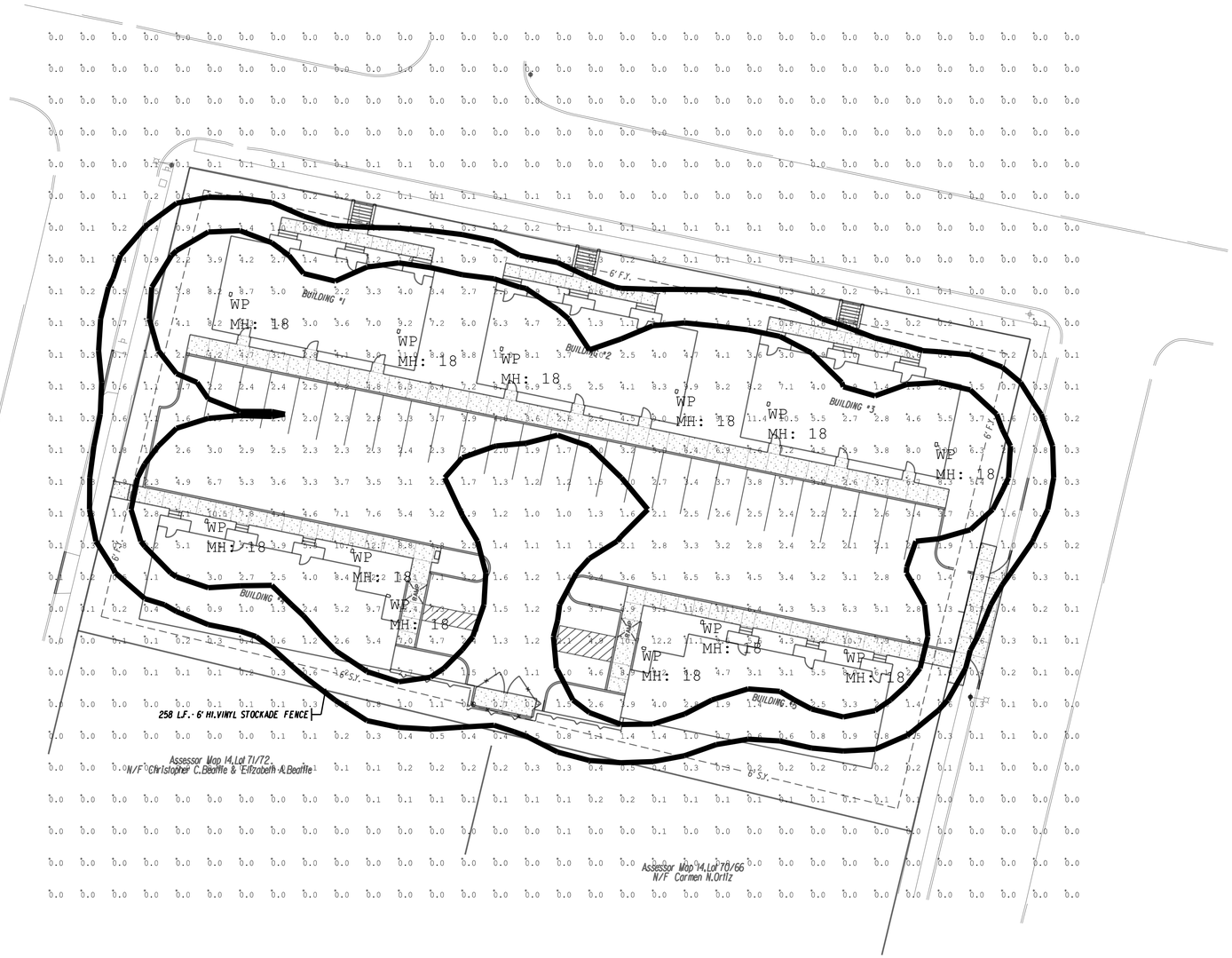
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO. 13

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	12	WP	SINGLE	WPC100UT4-WCSBPCCR

Blue - 2fc
Red - .5fc

Designed by Wattsaver Lighting - JC



LIGHTING NOTES:

1. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES WHICH MAY BE IN CONFLICT WITH THE INDICATED LAYOUT. ANY CONFLICTS WHICH WAY OCCUR SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE LOCATIONS CAN BE DETERMINED.

2. ALL LIGHTS WILL BE PROVIDED WITH INTERNAL CUTOFFS TO PREVENT LIGHT TRESSPASS ONTO ADJOINING PROPERTIES.

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Greg Cate
Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
Phone: 860-282-1818
Website: www.wattsaverlighting.com

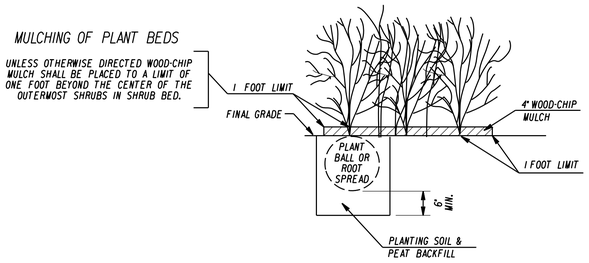
PROJECT TITLE:
SITE PLAN
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BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

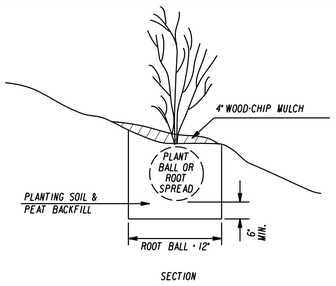
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DRAWING TITLE: LIGHTING PLAN

SHEET NO.: L1.0



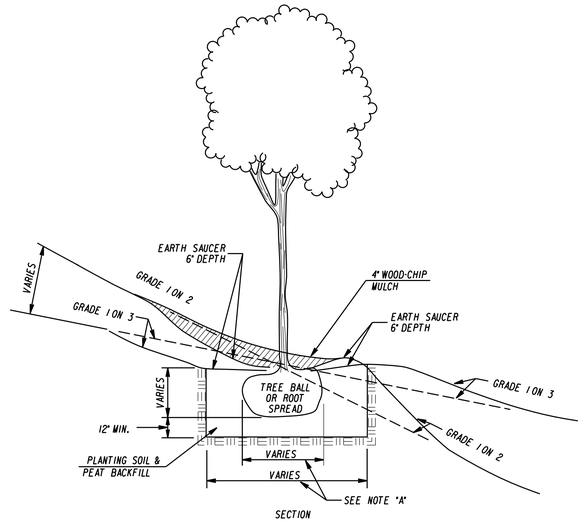
SHRUB PLANTING IN BEDS



SHRUB PLANTING

LANDSCAPE NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM AND SEED.
2. PROVIDE A APPROVED WEED BARRIER UNDER ALL BARK MULCH
3. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH WAY OCCUR BETWEEN PLANTING AND UTILITIES SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
4. PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND ACCEPTANCE AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.
5. FINAL QUANTITIES AND SPACING MAY BE MODIFIED AS NEEDED BY THE LANDSCAPE INSTALLER.
6. PLANT SPECIES MAY NEED TO BE SUBSTITUTED WITH AN EQUIVALENT SPECIES DUE TO AVAILABILITY AT THE TIME OF INSTALLATION.



TREE PLANTING



Planting Key

Key	Quantity	Botanical Name Common Name	Size	Condition	Notes
AV	12	Thuja Occidentals Emerald Arborvitae	4 Foot	Height	
BP	4	Pyrus Calleryana "Bradford" Bradford Pear	2" - 2 1/2"	Caliper	
AZ	8	Rodedendron / Robelzea Autumn Bonfire Azalea / Deleware Wine Valley Azalea	3	Gallon	
R	2	Rhododendron Catawbiense Album	3	Gallon	
AP	38	Thuja Occidentals American Pillar	4-5 Foot	Height	
DL	42	Hermerocallis Daylily Stella De Oro	1	Gallon	

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

DPS DEVELOPMENT PLANNING SOLUTIONS LLC

Charlie Talmadge
Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
Phone: 860-506-4268
Website: www.developmentplanningsolutions.com

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

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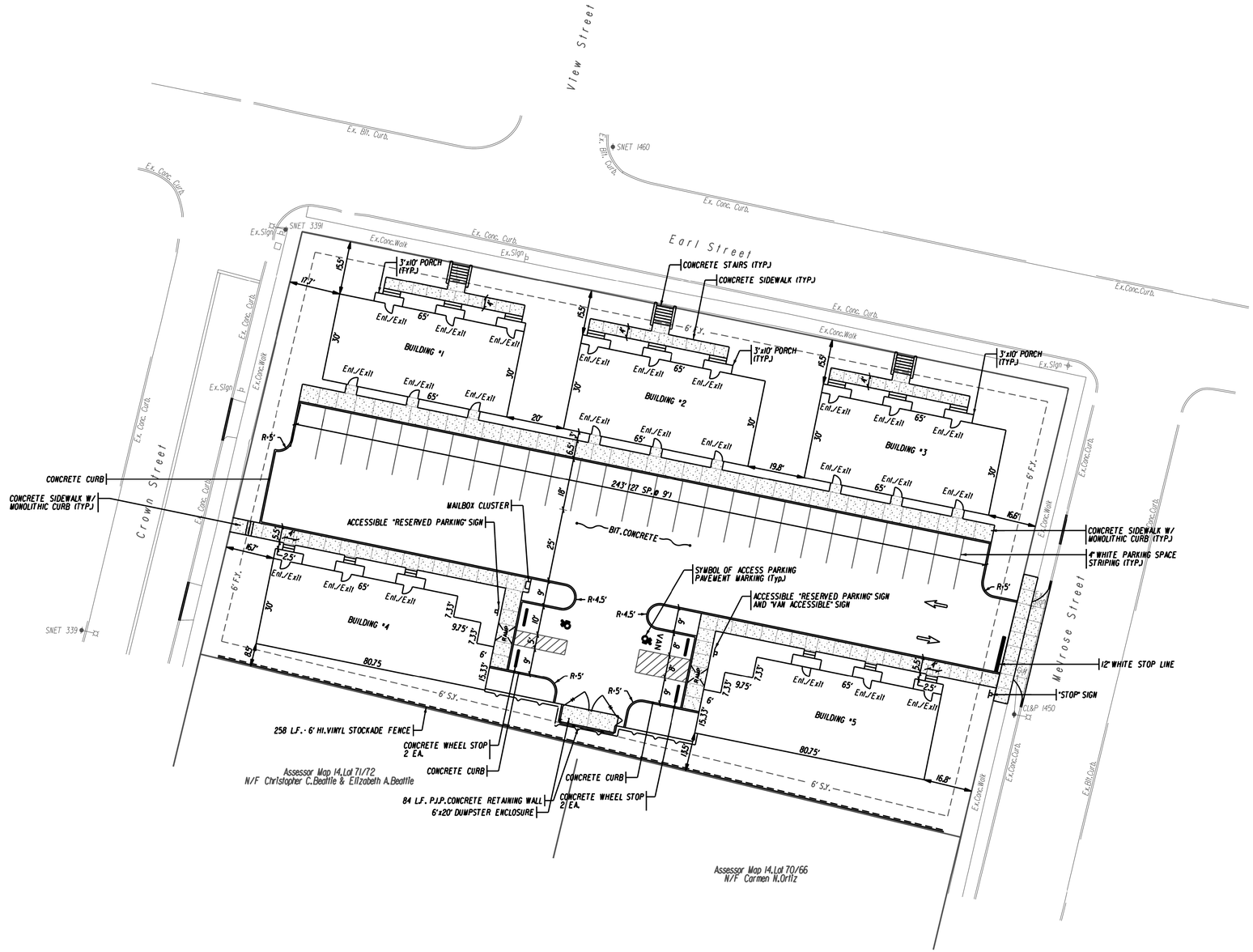
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SHEET NO.: L2.0

Site Plan Revised 081224

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Selected Sheets Submitted 8/19/24 4:00 PM



REV.	DATE	REVISION DESCRIPTION
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1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0020232 LICENSED PROFESSIONAL ENGINEER

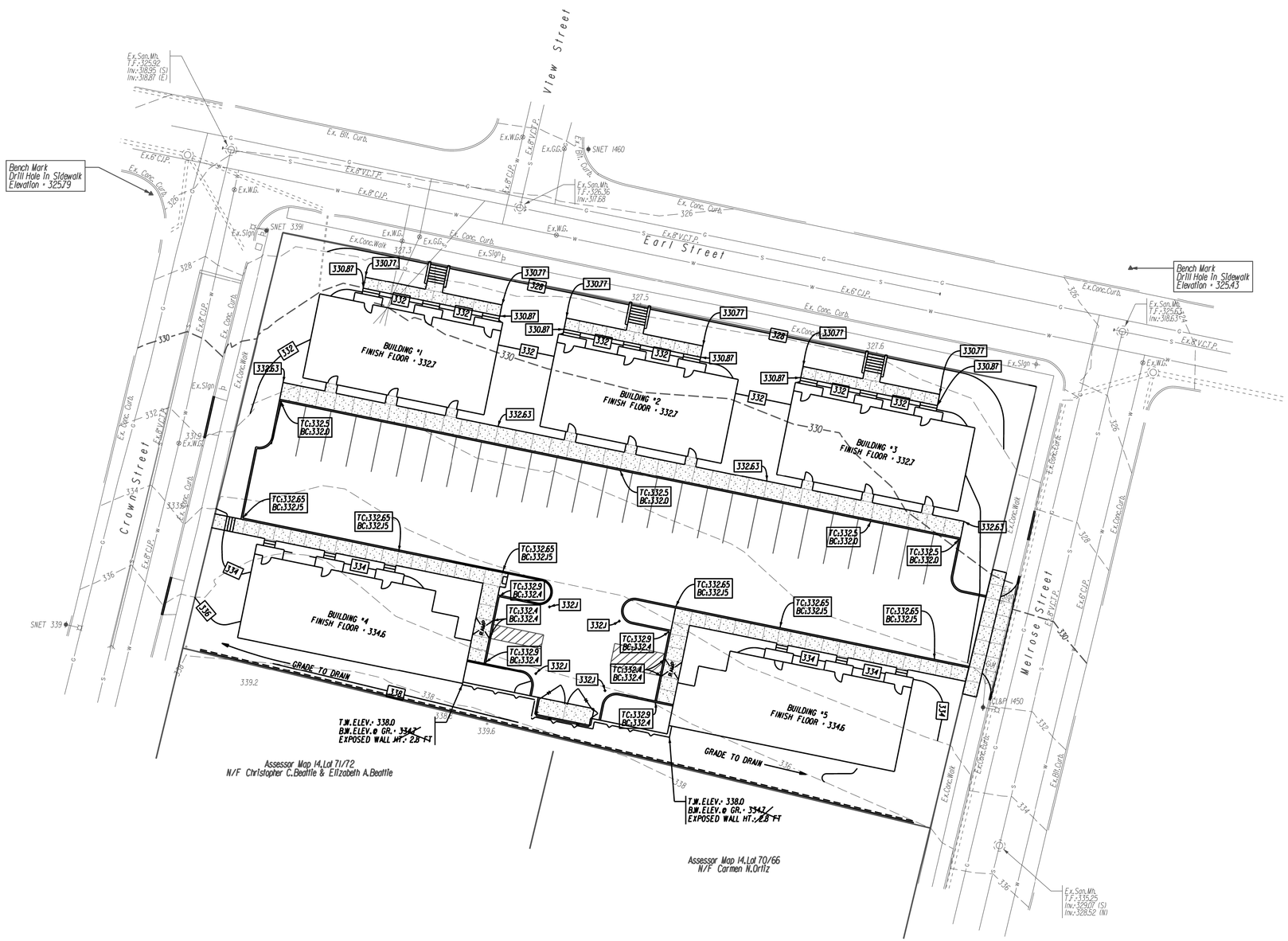
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: PLN-001

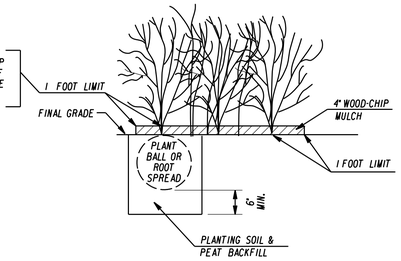
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SHEET NO.: 5

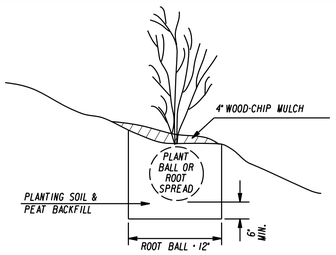

View Street
Earl Street
Crown Street
Melrose Street
Ex. San.Mh.
T.F.:326.92
Inv.:318.95 (S)
Inv.:318.87 (E)
Ex. Blk. Curb.
Ex.W.G.
Ex.8"V.C.T.P.
Ex.G.G.
SNET 1460
Ex.8"C.I.P.
Ex. Conc. Curb
Ex.Sign
Ex.Conc.Walk
Ex.Sanc.Curb
Ex.W.V.
Ex.San.Mh.
T.F.:326.36
Inv.:317.58
Ex. Conc. Curb.
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
SNET 1391
Ex.Sign
Ex.Conc.Walk
Ex.Sanc.Curb
Ex.W.V.
Ex.W.G.
Ex.8"C.I.P.
Ex.Conc. Curb
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Ex.Conc.Curb.
Ex.San.Mh.
T.F.:325.63
Inv.:316.53 (E)
Ex.8"V.C.T.P.
Ex.W.V.
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Sanc.Curb
Ex.W.V.
Ex.W.G.
Ex.8"C.I.P.
Ex.Conc. Curb
SNET 3391
Ex.Sign
Ex.Conc.Walk
Ex.Sanc.Curb
Ex.W.V.
Ex.W.G.
Ex.8"C.I.P.
Ex.Conc. Curb
BUILDING #1
FINISH FLOOR = 332.7
BUILDING #2
FINISH FLOOR = 332.7
BUILDING #3
FINISH FLOOR = 332.7
BUILDING #4
FINISH FLOOR = 334.6
BUILDING #5
FINISH FLOOR = 334.6
TC.332.5
BC.332.0
TC.332.65
BC.332.15
TC.332.9
BC.332.4
TC.332.4
BC.332.4
TC.332.9
BC.332.4
TC.332.4
BC.332.1
TC.332.9
BC.332.4
330.87
330.77
332
332.63
330
328
326
334
336
338
332.1
GRADE TO DRAIN
339.2
339.6
T.W.ELEV.= 338.0
B.W.ELEV.@ GR.= 334.2
EXPOSED WALL HT.= 2.8 FT
T.W.ELEV.= 338.0
B.W.ELEV.@ GR.= 334.2
EXPOSED WALL HT.= 2.8 FT
Assessor Map 14, Lot 71/72
N/F Christopher C.Beattie & Elizabeth A.Beattie
Assessor Map 14, Lot 70/66
N/F Carmen M.Ortiz
Ex.Sewer Line
Ex.Sewer Manh.
Ex.Sewer Manh.

MULCHING OF PLANT BEDS

UNLESS OTHERWISE DIRECTED WOOD-CHIP MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.



SHRUB PLANTING IN BEDS

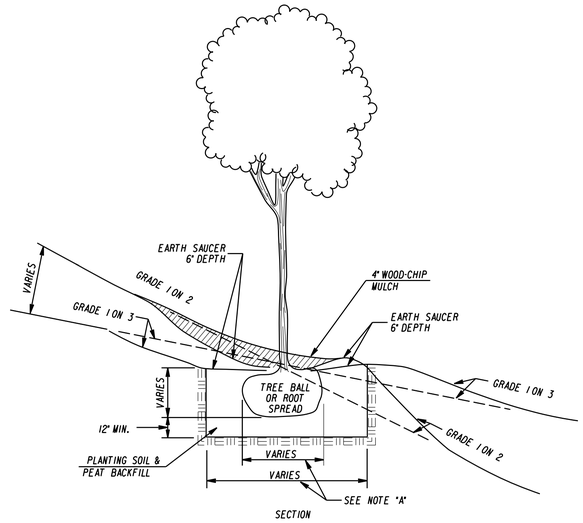


SECTION

SHRUB PLANTING

LANDSCAPE NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM AND SEED.
2. PROVIDE A APPROVED WEED BARRIER UNDER ALL BARK MULCH
3. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH WAY OCCUR BETWEEN PLANTING AND UTILITIES SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
4. PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND ACCEPTANCE AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.
5. FINAL QUANTITIES AND SPACING MAY BE MODIFIED AS NEEDED BY THE LANDSCAPE INSTALLER.
6. PLANT SPECIES MAY NEED TO BE SUBSTITUTED WITH AN EQUIVALENT SPECIES DUE TO AVAILABILITY AT THE TIME OF INSTALLATION.



SECTION

TREE PLANTING



Planting Key

Key	Quantity	Botanical Name Common Name	Size	Condition	Notes
AV	12	Thuja Occidentals Emerald Arborvitae	4 Foot	Height	
BP	4	Pyrus Calleryana "Bradford" Bradford Pear	2" - 2 1/2"	Caliper	
AZ	8	Rododendron / Robelzea Autumn Bonfire Azalea / Deleware Wine Valley Azalea	3	Gallon	
R	2	Rhododendron Catawbiense Album	3	Gallon	
AP	38	Thuja Occidentals American Pillar	4-5 Foot	Height	
DL	42	Hermerocallis Daylily Stella De Oro	1	Gallon	

REV.	DATE	REVISION DESCRIPTION
2	8-12-24	INGRESS/EGRESS AND SITE GRADING
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

DPS DEVELOPMENT PLANNING SOLUTIONS LLC

Charlie Talmadge
Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
Phone: 860-506-4268
Website: www.developmentplanningsolutions.com

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.

DRAWING TITLE: LANDSCAPE PLAN

SHEET NO. L2.0



Site Location Map

Legend

- Existing IP
- IP (to be set)
- Existing Monument
- Monument to be set
- Drill Hole
- Utility Pole
- Wire on Ground
- Water gate
- Gas gate
- Signs
- Wooden post
- Hydrant
- Existing light
- Proposed light
- Handhole
- Mailbox
- Monitor well
- Proposed Trees
- Stone Wall
- Chain link fence
- Guardrail
- Existing tree line

Current Zoning Analysis Table R-15/RM	
Minimum Lot Area SQFT.	5,000 SQFT.
Minimum Lot Frontage (one street)	50 FT.
Minimum Front Yard Setback	15 FT.
Minimum Side Yard Setback (each)	6 FT.
Minimum Rear Yard Setback	15 FT.
Maximum Building Height Ft.	40 FT.
Maximum Lot Coverage	40%
Maximum Impervious Coverage	80%

Graphic Scale

20 10 0 20 40

Prepared For
DGG Development LLC

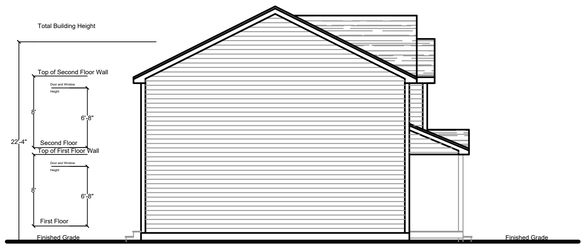
Scale
1" = 20'-0"

DPS
DEVELOPMENT PLANNING SOLUTIONS LLC

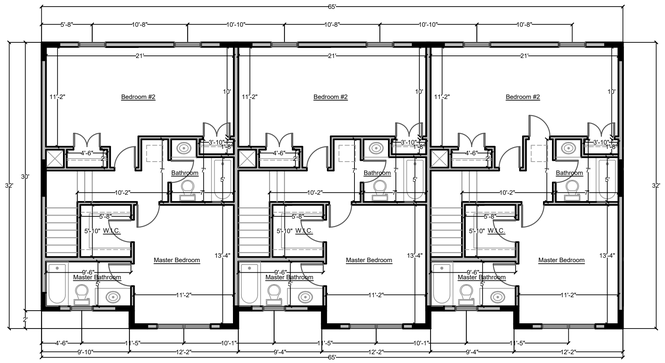
Concept Development Plan
Map 14 Lots 73-70, 74-69, 75-68, and 76-67
Earl Street
Bristol Connecticut
July 30, 2024

Development Planning Solutions LLC
225 North Main Street Ste. 207 Bristol Ct
(860) 506-4268

DPS_Niman_Earl Street_Bristol



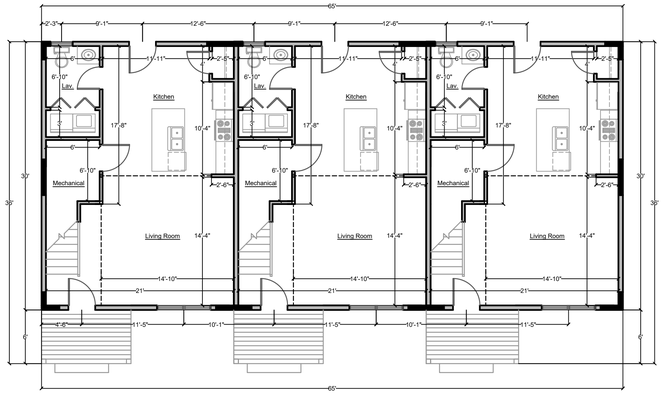
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 1
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET | Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
Jan. 16, 2023	Aug. 16, 2024
Mar. 14, 2023	
June 5, 2023	

Drawing Index

A.1	Schematic Design	A.6	
A.2		A.7	
A.3		A.8	
A.4		A.9	
A.5		A.10	

Code Data

The basis for design is the following:

2021 International Residential Code for One and Two Family Dwellings
2022 CT Supplement
2021 IECC
(ResCheck Software Version 4.7.2.0)

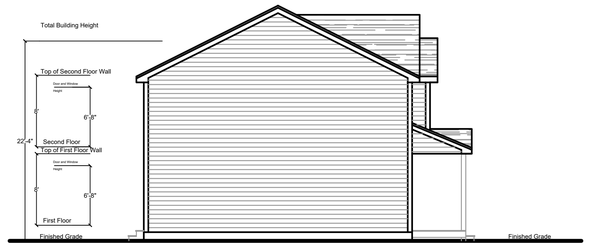
The General Contractor and all Sub Contractors shall comply with all Local, State, and Federal Building Codes and Regulations as applicable

Schematic Design

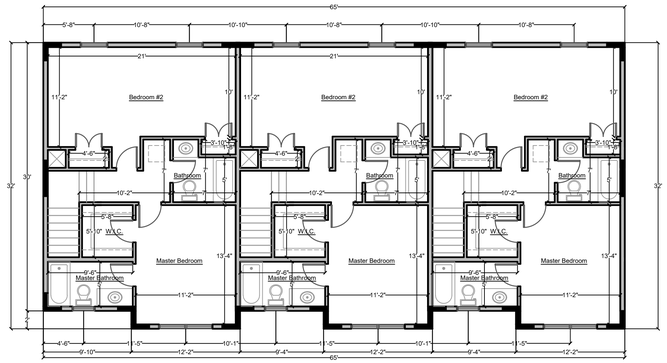
SCALE
$\frac{1}{8}" = 1'-0"$

SHEET
A.1

D | P | S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



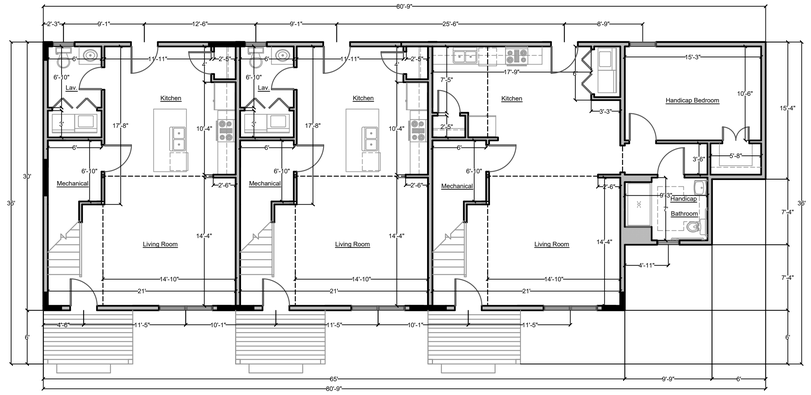
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 2
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET | Project Number 2022-07

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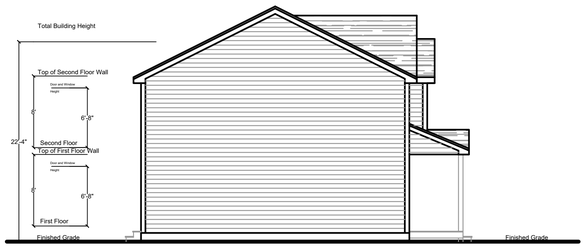
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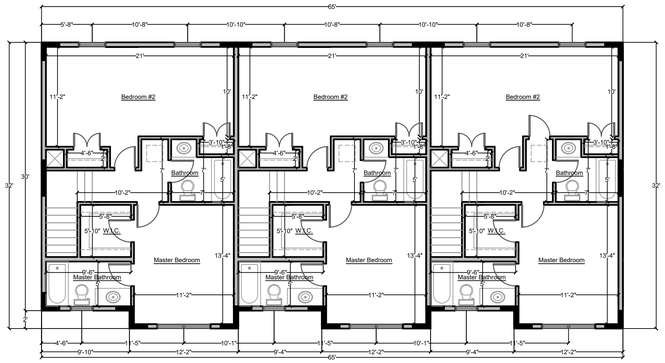
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SHEET
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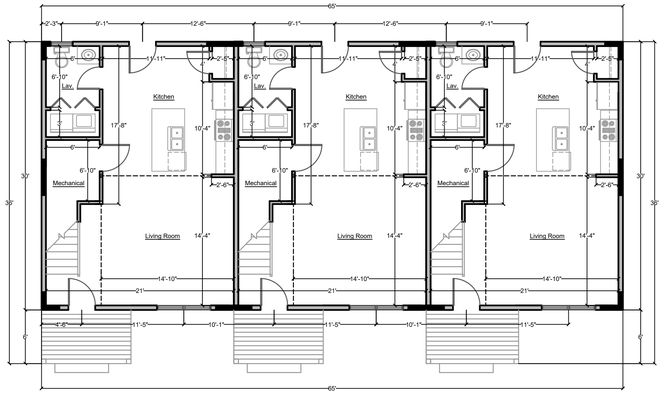
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 1
Earl Street
Bristol Connecticut

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Schematic Design

SCALE
$\frac{1}{8}" = 1'-0"$

SHEET
A.1

D | P | S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268

Hyperlink for Traffic Impact Statement:

https://ct-bristol2.civicplus.com/DocumentCenter/View/47467/8--Hesketh-report-2024

Hesketh

Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh & Associates, Inc.

July 30, 2024

Development Planning Solutions, LLC
225 North Main Street, Suite 207
Bristol, CT 06010

Attn: Mr. Charlie Talmadge

RE: Traffic Impact Statement
Earl Street Residential
Bristol, CT
Our File: 24063

Dear Mr. Talmadge:

Pursuant to your request our office has prepared this statement outlining the potential traffic generation and potential impact of a proposed 15-unit single family attached residential development proposed for property on Earl Street between Crown Street and Melrose Street in the Town of Bristol, CT. The site location with respect to the surrounding roadway network is presented in Figure 1. This letter presents our findings.

The site proposed for development consists of five residential lots, only one of which is currently occupied by a single-family residence. The five properties front Earl Street and occupy the entire block between Crown Street and Melrose Street. Access to the singe residence is from Crown Street. The current proposal is to demolish the existing residential structure and to construct five new buildings with three single family units each. Three buildings will be constructed along Earl Street, and two buildings will be constructed across the rear of the parcel. A parking lot will be constructed in the center of the site with a total of 31 spaces, including four accessible spaces. Access to the site is proposed to Melrose Street, approximately 100 feet south of Earl Street.

The development site is located on the south side of Earl Street between Crown Street and Melrose Street. Earl Street originates at an unsignalized intersection with Bethel Street and extends in a westerly direction past Melrose Street, the subject site, and Crown Street then continues another 400 feet to its terminus at a cul-de-sac. Earl Street provides 30 feet of

6 Creamery Brook • East Granby, CT 06026

Tel 860.653.8000 • Fax 860.844.8600
www.fahesketh.com

Site Plan Revised 073124

Selected Sheets

GENERAL NOTES:

1. ASSESSORS MAP: 14
ASSESSEORS LOT'S: 72/71,73/70,74/69,75/68,76/67

2. PROPERTY ADDRESS: 29-49 EARL STREET

3. OWNER NAME: D.G.G.DEVELOPMENT LLC

4. PREPARED FOR: D.G.G.DEVELOPMENT LLC

5. ZONE: R-15/RM

6. ASSESSORS LOT 72/71 REVISED AREA * 7,341 S.F.
ASSESSORS LOT 73/70 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 74/69 REVISED AREA * 8,814 S.F.
ASSESSORS LOT 75/68 REVISED AREA * 8,822 S.F.
ASSESSORS LOT 76/67 REVISED AREA * 7,983 S.F.

* SUBSEQUENT TO SITE PLAN APPROVAL BY LOCAL AGENCIES AND PRIOR TO ISSUANCE OF A ZONING PERMIT,THE OWNER SHALL COMBINE LOT'S 72/71,73/70,74/69,75/68,76/67

7. BASED ON THE CITY OF BRISTOL INLAND WETLAND AND WATER COURSES MAPS, THERE ARE NO WETLANDS ON THE SUBJECT PROPERTY.

8. BASED ON FLOOD INSURANCE RATE MAP,HARTFORD COUNTY,CONNECTICUT (ALL JURISDICTIONS), PANEL 468 OF 675,MAP NUMBER 09003C0468F,EFFECTIVE DATE:SEPTEMBER 26, 2008 THE PARCEL LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

9. THE PROPERTY IS "NOT" LOCATED WITHIN A AQUIFER PROTECTION AREA

10. EXISTING AND PROPOSED CONTOURS AT 2' INTERVALS

11. PROPOSED BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER

12. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION.THE LOCATIONS ARE APPROXIMATE, ALL UTILITIES MAY NOT BE SHOWN,THE CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" AT 811 PRIOR TO THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL PERFORM CAREFUL EXPLORATORY EXCAVATIONS TO IDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ENCOUNTERED AND MAY INTERFERE WITH THE PROPOSED WORK, WHETHER SHOWN ON THE EXISTING CONDITIONS DRAWINGS OR NOT.

13. CONTRACTOR SHALL VERFIY ALL DIMENSIONS,ELEVATIONS,QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION

14. TECHNICAL SPECIFICATIONS ARE THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS,BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, INCLUDING ANY SPECIAL PROVISIONS.

PARKING CALCULATION:

PROPOSED USE: THREE FAMILY DWELLING

PARKING REQUIREMENT: 2 PER DWELLING UNIT
15 DWELLING UNITS x 2 PER = 30 SPACES

PARKING PROPOSED: 31 SPACES

SITE BASED AMENITIES:

1) ENERGY EFFICIENT LIGHTING

2) LOW-IMPACT STORMWATER MANAGEMENT: GROUNDWATER RECHARGE & STORMWATER QUALITY STRUCTURES

FUNCTIONAL OPEN SPACE CALCULATION:

REQUIRED: 250 S.F./ DWELLING UNIT
15 UNITS x 250 S.F.= 3,750 S.F.

PROVIDED: 4,800 S.F.

Unified Residential Developments (R15/RM)
Area and Dimensional Requirements

Standard		Proposed
a) Maximum Density (units per acre)	18	15.6
b) Minimum Lot Area (acres)	0.5	0.96
c) Minimum Lot Frontage (ft)	75	150
d) Minimum Front Yard (ft)	6	11.5
e) Minimum Side Yard (ft)	6	6.5
f) Minimum Rear Yard (ft)	15	NA
g) Maximum Building Height (ft)	35	25
h) Maximum Building Coverage (%)	40	25.6
i) Maximum Impervious Coverage (%)	80	67.6
j) Minimum Building Spacing (ft)	18	19.8

CONSTRUCTION SEQUENCE:

1. FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING.

2. HOLD PRECONSTRUCTION MEETING WITH THE OWNER,ENGINEER,CONTRACTOR AND APPROPRIATE TOWN STAFF. REVIEW FLAGGED CLEARING LIMITS AND DETERMINE TOPSOIL STOCKPILE AREA. (REMEMBER TO CALL BEFORE YOU DIG 1-800-922-4455.

3. FLAG REMAINDER OF THE LIMITS OF CONSTRUCTION AND TREE PROTECTION ZONES IF REQUIRED.

4. PROJECT SURVEYOR TO STAKE SOUTHERN PROPERTY LINE PRIOR TO THE START OF CONSTRUCTION.

5. INSTALL CONSTRUCTION ENTRANCE PAD.

6. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE E&S PLAN.

7. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD CHIP BRUSH AND SLASH,STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.

8. REMOVE ALL ITEMS PER REMOVALS PLAN.

9. STRIP AND STOCKPILE ALL TOPSOIL THAT IS WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE AND REFERENCE STOCKPILE MANAGEMENT FOR EROSION AND SEDIMENT CONTROLS. EITHER REMOVE TREE STUMPS TO AN APPROVED DISPOSAL SITE OR CHIP IN PLACE AS INDICATED ON THE PLANS.

10. MAKE ALL CUTS AND FILLS REQUIRED. ESTABLISH THE SUBGRADE FOR THE PARKING LOT AND DRIVEWAY AS REQUIRED AND BENCH THE BUILDING'S TO A SUBGRADE. ALLOW A REASONABLE AMOUNT OF AREA AROUND THE FOOT-PRINT OF THE PROPOSED BUILDING FOR THE CONSTRUCTION ACTIVITIES.

11. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING'S.

12. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES,INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE,REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.

13. INSTALL ALL UTILITIES AND DRAINAGE SYSTEMS TO WITHIN 5 FEET OF THE BUILDING OR AS OTHERWISE MODIFIED BY THE DESIGN ENGINEER TO ADJUST FOR UNFORESEEN SITE CONDITIONS.

14. PREPARE SUB-BASE,SLOPES,PARKING AREAS,SHOULDER AREAS,ACCESS DRIVES AND ANY OTHER DISTURBANCE FOR FINAL GRADING.

15. INSTALL PROCESS AGGREGATE IN PARKING AREAS.

16. PLACE TOPSOIL WHERE REQUIRED, COMPLETE THE PERIMETER LANDSCAPE PLANTINGS.

17. FINE GRADE,RAKE,SEED AND MULCH TO WITHIN 2 FEET OF THE CURBING.

18. UPON SUBSTANTIAL COMPLETION OF THE PROPOSED BUILDING'S,COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS. INSTALL FIRST COURSE OF PAVING.

19. WHEN ALL OTHER WORK HAS BEEN COMPLETED,REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.

20. INSTALL FINAL COURSE OF PAVEMENT.

21. AFTER THE SITE IS STABILIZED REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

OPERATION AND MAINTENANCE PLAN (POST CONSTRUCTION)

1. ALL DRAINAGE SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN 12 INCHES OF THE OUTLET PIPE INVERT,NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

2. ALL PAVED AREAS SHALL BE SWEPT TWICE ANNUALLY. TYPICALLY, SWEEPING SHOULD OCCUR IN THE SPRING, AFTER WINTER SANDING,AND IN THE FALL, AFTER ALL LEAVES HAVE FALLEN.

3. A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES. (USE ONLY ORGANIC FERTILIZER)

4. DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2 " OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

INSPECTION AND MAINTENANCE GUIDELINES STORMWATER QUALITY MEASURES AND UNDERGROUND DETENTION SYSTEMS

1. THE CATCHBASIN SYSTEM SHOULD BE INSPECTED MONTHLY IN THE FIRST YEAR AND TWICE-A-YEAR (APRIL AND OCTOBER) THEREAFTER TO CHECK INLETS AND OUTLETS FOR CLOGGING AND TO REMOVE ANY DEBRIS AS REQUIRED.

2. INSPECTION AND MAINTENANCE FOR THE STORMWATER QUALITY CHAMBER SHALL BE PER THE GUIDELINES PUBLISHED BY THE MANUFACTURER.

https://www.conleches.com/Portals/0/Documents/Maintenance%20Guides/CDS-Maintenance-Guide.pdf?ver=2018-05-31-143259-453

REMOVAL NOTES:

1. INFORMATION ON EXISTING UTILITIES AND UNDERGROUND FEATURES HAS BEEN COMPILED,IN PART,BASED UPON INFORMATION FURNISHED BY OTHERS AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE OF DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO THE START OF SITE REMOVALS OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG AT 811 AND RECEIVE REQUIRED FIELD MARKOUTS. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO INDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ECOUNTERED, WHETHER SHOWN ON AN EXISTING CONDITIONS DRAWING OR NOT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.

3. MANHOLES,CATCH BASINS,CLEANOUTS,VALVE BOXES,FRAMES,COVERS,GRATES,ETC.TO REMAIN IN USE, SHALL BE PROTECTED AND ADJUSTED TO PROPOSED GRADES AS NECESARY.

4. EXISTING BITUMINOUS PAVEMENT NOTED TO BE REMOVED SHALL BE DEMOLISHED,STOCKPILED,PULVERIZED AND INSPECTED BY A MATERIALS INSPECTOR PRIOR TO ANY USE AS RECLAIMED MATERIAL. RECLAIMED MATERIALS MEETING THE TESTING REQUIREMENTS MAY BE USED AS OR BE INCLUDED IN SUB-BASE MATERIALS FOR NEW PAVEMENTS. ALL REMAINING PAVEMENT MATERIAL THAT IS TO BE REMOVED SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

5. ANY SITE FEATURE NOT LABELED AS BEING REMOVED,REPLACED,ETC.IS INTENDED TO REMAIN.

6. DURING THE PRECONSTRUCTION MEETING, THE CONTRACTOR,ENGINEER AND CITY SHALL DETERMINE A SUITABLE STOCKPILE LOCATIONS.

7. SIDEWALKS TO BE REPLACED SHALL BE REPLACED TO THE NEAREST JOINT.

8. ALL ASPHALT AND CONCRETE MATERIALS SHALL BE REMOVED TO FULL DEPTH WHERE LANDSCAPED AREAS ARE PROPOSED OR WHERE NEW CONSTRUCTION IS PROPOSED.

9. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

SIGNING AND PAVEMENT MARKING NOTES:

1. SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO MUTCD OR CONNDOT STANDARDS AS DEPICTED.

2. SIGNS SHALL BE INSTALLED WITH A BREAKAWAY FEATURE.

3. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.

2. ALL ACCESSIBLE EGRESSES SHALL BE FLUSH WITH THE ADJOINING MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

3. WALKWAYS ALONG ACCESSIBLE ROUTES ARE NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

4. ALL RAMPS SHALL NOT EXCEED 1:12 OR 2% CROSS PITCH.

UTILITY AND DRAINAGE NOTES:

1. TOP OF FRAME ELEVATIONS SHOWN ON THESE PLANS REFLECT THE 2" STANDARD DEPRESSION FROM GUTTER LINE.

2. ALL CATCH BASINS SHALL HAVE A 2FT SUMP UNLESS OTHERWISE NOTED ON THE PLANS.

3. ALL YARD DRAINS SHALL BE "NYLOPLAST DRAIN BASINS"(OR APPROVED EQUAL)WITH THE STANDARD D.I.FRAME AND GRATE UNLESS OTHERWISE NOTED ON THE PLANS.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES REGARDING A FINAL DESIGN, MEANS OF CONSTRUCTION AND AN EXACT LOCATION AND SIZE OF THE UTILITY PRIOR TO THE START OF CONSTRUCTION.

5. ALL WATERMAIN AND SERVICE WORK TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS,INCLUDING BACKFLOW PREVENTION SPECIFICATIONS. PRIOR TO THE START OF CONSTRUCTION CONTACT PAUL KEEGAN FOR ALL WATERMAIN AND SERVICE WORK AND BRYAN ROBERTS FOR ALL SEWER MAIN AND SERVICE WORK,BOTH AT THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT (860) 582-7431.

6. FINAL WATER SERVICE SIZES TO BE DETERMINED BY THE OWNERS MECHANICAL ENGINEER ONCE ALL PERTINENT WATER FIXTURE DATA HAS BEEN RECEIVED.

7. ONCE THE OWNERS MECHANICAL ENGINEER HAS DETERMINED THE MAX GPM TO BE SUPPLIED TO THE BUILDING'S, THE BRISTOL WATER AND SEWER DEPARTMENT WILL THEN DETERMINE THE METER SIZE.

8. ALL SERVICE TAPS TO BE DONE BY THE BRISTOL WATER AND SEWER DEPARTMENT.

9. ALL FEES MUST BE PAID BEFORE ANY WORK CAN BE SCHEDULED. ALL WATER TAPS TO BE DONE BY BRISTOL WATER DIVISION.

10. WHEN SEWER AND WATER ARE WITHIN 10' HORIZONTALLY,THE WATER MAIN SHALL BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED SHELF AND AT LEAST 12" HORIZONTALLY (18" RECOMMENDED), MEASURED EDGE TO EDGE AND 18" ABOVE THE TOP OF THE SEWER, MEASURED FROM CROWN TO INVERT. FINAL LOCATIONS SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.

11. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

GENERAL NOTES FOR SITE PLANS "CITY OF BRISTOL" (AS APPLICABLE)

1. A SANITARY SEWER LATERAL PERMIT OBTAINED FROM THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT, WILL BE REQUIRED PRIOR TO CONNECTING INTO THE EXISTING SEWER SYSTEM. THE CONTRACTOR INSTALLING THE SEWERS/LATERALS SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE SANITARY SEWER INSTALLATIONS. NO SANITARY SEWER INSTALLATION SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR. ALL BUILDING SEWERS SHALL HAVE A GRAVITY BACK FLOW PREVENTER. (BUILDING SEWERS AND CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH SEC.22-19(F) OF THE CODE OF ORDINANCES - CITY OF BRISTOL)

2. A STORM SEWER CONNECTION PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONNECTING THE PROPOSED DRAINAGE SYSTEM(S) INTO THE CITY SYSTEM AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. THE CONTRACTOR MAKING THE STORM SEWER CONNECTION AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE STORM SEWER INSTALLATIONS. NO STORM SEWER SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR.

3. A DRIVEWAY APRON AND/OR SIDEWALK PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONSTRUCTING ANY DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. THE CONTRACTOR CONSTRUCTING THE DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY HIGHWAY INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH CONSTRUCTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF ANY DRIVEWAY APRON AND/OR SIDEWALK INSTALLATIONS. NO CONCRETE (PORTLAND CEMENT AND/OR BITUMINOUS) SHALL BE PLACED PRIOR TO AN INSPECTION BY THE CITY HIGHWAY INSPECTOR.

4. SEDIMENTATION AND SILTATION CONTROLS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEERING DIVISION/WEO.

5. GRADING AROUND THE PROPOSED IMPROVEMENTS SHALL BE PERFORMED IN A MANNER WHICH PREVENTS ALL RUNOFF FROM BEING DIRECTED ONTO ADJACENT PROPERTIES; BOTH DURING AND AFTER CONSTRUCTION.

6. AS-BUILT PLOT PLANS SHALL BE SUBMITTED FOR ENGINEERING DIVISION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE REQUIRED ENGINEERING SIGN-OFF FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.). AS-BUILT PLANS MUST INCLUDE AS-BUILT GRADING OF THE SITE.

7. ANY EXISTING DAMAGED SECTIONS OF SIDEWALK AND/OR CURBING AS A RESULT OF CONSTRUCTION ALONG STREETS ABUTTING THE SITE SHALL BE IDENTIFIED AND REPLACED AT THE DIRECTION OF BRISTOL DPW ENGINEERING DIVISION. THE APPLICANT SHALL CONTACT THE BRISTOL DPW ENGINEERING DIVISION TO SCHEDULE INSPECTION.

GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. THIS PLAN OF DEVELOPMENT PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE,CONTROL OF RUNOFF,SHIELDING OF THE SOILS AND BINDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE NEED FOR EXTENSIVE SEDIMENTATION CONTROLS.

2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

3. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND FOR A PERIOD AFTERWARDS UNTIL ALL AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AFTER EACH STORM EVENT (1/2" OR MORE) OR ONCE A WEEK AND IMMEDIATELY MAKE ANY CORRECTIVE ACTION REQUIRED.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.

5. RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE.

6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM AND RESTABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. THE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS,TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED OR AN APPROVED EQUAL.

A) SEED BED PREPARATION:
- REMOVE STONES LARGER THAN 2"
- APPLY LIMESTONE AT 90# / 1000 S.F.
- WORK LIME AND FERTILIZER INTO SOIL

B) SEED APPLICATION:
- APPLY GRASS MIXTURE BY HAND OR CYCLONE SEEDER,LIGHTLY DRAG OR ROLL THE SEED SURFACE TO COVER SEED. OPTIMAL SEEDING SEASON IS BETWEEN MARCH 15TH AND JUNE 30TH OR BETWEEN AUGUST 15TH AND OCTOBER 30TH.
- IF SEEDING CAN NOT BE DONE DURING THESE TIMES,REPEAT MULCHING PROCEDURE STATED BELOW UNTIL SEEDING CAN TAKE PLACE.

C) SEED MIX:
- CREEPING RED FESCUE 49# / ACRE
- TALL FESCUE 20# / ACRE

D) MULCHING:
- IMMEDIATELY FOLLOWING SEEDING,MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1-1/2 TONS / ACRE SPREAD MULCH BY HAND OR MULCH BLOWER.
- PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISK HARROW STRAIGHT UP. MULCH MATERIAL SHOULD BE "TUCKED" APPROXIMATELY 2" - 3" INTO SOIL SURFACE.

E) TREE PROTECTION:
- LIMIT CONSTRUCTION ACTIVITIES THAT MIGHT CAUSE DAMAGE TO TREES. THE AREA ADJACENT TO AND TREES THAT ARE TO BE PROTECTED,WILL BE IDENTIFIED AND CLEARLY MARKED. EXCAVATION SHOULD NOT OCCUR WITHIN THE ROOT ZONE OF THE TREES THAT ARE TO REMAIN. IN ADDITION,RAISING OR LOWERING THE GRADE NEAR REMAINING TREES SHOULD NOT OCCUR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY EROSION AND SEDIMENTATION CONTROL MEASURES DUE TO UNFORESEEN FIELD CONDITIONS. ADDITIONAL CONTROL MEASURES MAY ALSO BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER,ENVIRONMENTAL SUPERVISOR AND/OR TOWN ENGINEER.

8. ANY CHANGE TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN BY THE CONTRACTOR SHALL BE SUBMITTED BY THE CONTRACTOR IN WRITING AND APPROVED BY THE ENGINEER.

9. ANTI-TRACKING PADS SHALL BE INSTALLED WHERE CONSTRUCTION ACCESS MEETS A PAVED ACCESS POINT,OR AS DIRECTED BY THE ENGINEER.

10. STOCKPILE LOCATIONS SHALL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION AND IF A STOCKPILE IS LOCATED OFF-SITE,THE LOCATION SHALL HAVE EROSION CONTROL MEASURES IN PLACE AND MEET ALL LOCAL REQUIREMENTS.

11. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL TO 1' VERTICAL OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS. WHERE LEDGE IS ENCOUNTERED,THE MAXIMUM CUT SLOPE MAY BE INCREASED TO 1 HORIZ.: 1 VERT. A 4FT HIGH PERMANENT SAFETY FENCE (e.g.CHAIN LINK FENCE) SHALL BE ADDED TO ALL ROCK CUTS GREATER THAN 4FT HIGH.

12. ALL SLOPES OR DISTURBED AREAS (EXCEPT PAVED AREAS) ARE TO BE STABILIZED WITH 4" OF TOPSOIL AND TURF MUST BE ESTABLISHED UNLESS OTHERWISE NOTED ON THE PLANS. STABILIZATION SHALL INCLUDE INSTALLATION OF EROSION CONTROL MATTING WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

13. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE,OR APPROVED EQUAL. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.

14. TEMPORARY PERVIOUS BARRIERS,USING SILT FENCE AND HAYBALES HELD IN PLACE WITH WOODEN STAKES,SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF-SITE.

15. JEFFERY NIMAN OR HER DULY AUTHORIZED AGENT (860) 841-6008 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPAL PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE TO THE START OF ANY CONSTRUCTION ACTIVITY.

16. JEFFERY NIMAN OR HIS DULY AUTHORIZED AGENT (860) 841-6008 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES,INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN,NOTIFYING THE PLANNING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.

17. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, AS AMENDED. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION AND SEDIMENTATION CONTROL MAINTENANCE REQUIREMENTS

TOPSOIL STOCKPILES:

THE SIDE SLOPES SHALL NOT EXCEED A SLOPE GREATER THAN 2:1. STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHOULD BE SEEDED AND MULCHED. A SEDIMENTATION FENCE SHALL BE INSTALLED APPROX.10FT FROM THE TOE OF SLOPE.

IF THE TOPSOIL STOCKPILE LOCATION IS RELOCATED, IT SHALL BE LOCATED SO AS NOT TO OBSTRUCT THE NATURAL DRAINAGE PATTERN OF THE SITE. IT SHALL BE LOCATED AS FAR AS PRACTICAL FROM ANY WETLANDS,WATER COURSES DRAINAGE WAYS AND STEEP SLOPES. IF THE LOCATION IS DOWNGRADIENT FROM A LONG SLOPE,DIVERT RUNOFF AROUND THE STOCKPILE.

CONSTRUCTION ENTRANCE PAD / ANTI-TRACKING PAD:

THE CONSTRUCTION ENTRANCE SHALL BE KEPT CLEAN OF ANY DEBRIS OR CONSTRUCTION MATERIALS. A PERIODIC TOP DRESSING OF STONE SHALL BE ADDED AS MAY BE REQUIRED TO KEEP THE ENTRANCE PAD WORKING EFFECTIVELY. IF A SEDIMENT SPILL OCCURS ON THE ROAD, IT SHALL BE CLEANED UP IMMEDIATELY.

SEDIMENTATION CONTROL FENCE:

THE SEDIMENTATION CONTROL FENCE SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAIN EVENT OF 0.5 INCHES OR MORE. IF A FAILURE OCCURS,REPAIR OR REPLACE THE FENCE WITHIN 24 HRS. ANY SEDIMENT DEPOSITS THAT REACH HALF THE HEIGHT OF THE FENCE SHALL BE REMOVED.

DUST CONTROL:

PERIODICALLY MOISTEN THE EXPOSED SOIL SURFACE TO KEEP TRAVELWAYS DAMP. AFTER THE TRAVELWAY HAS BEEN PAVED,PERIODIC SWEEPING MAY BE REQUIRED TO REMOVE DUST AND FINE MATERIALS ACCUMULATED FROM TRUCK TRAFFIC.

TREE PROTECTION:

TREES TO BE PROTECTED WILL BE IDENTIFIED AND CLEARLY MARKED. CONSTRUCTION ACTIVITIES WITHIN THE ADJACENT AREA THAT MAY CAUSE DAMAGE TO THE TREE SHALL BE LIMITED AND TRUNK ARMORING PROVIDED.

REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

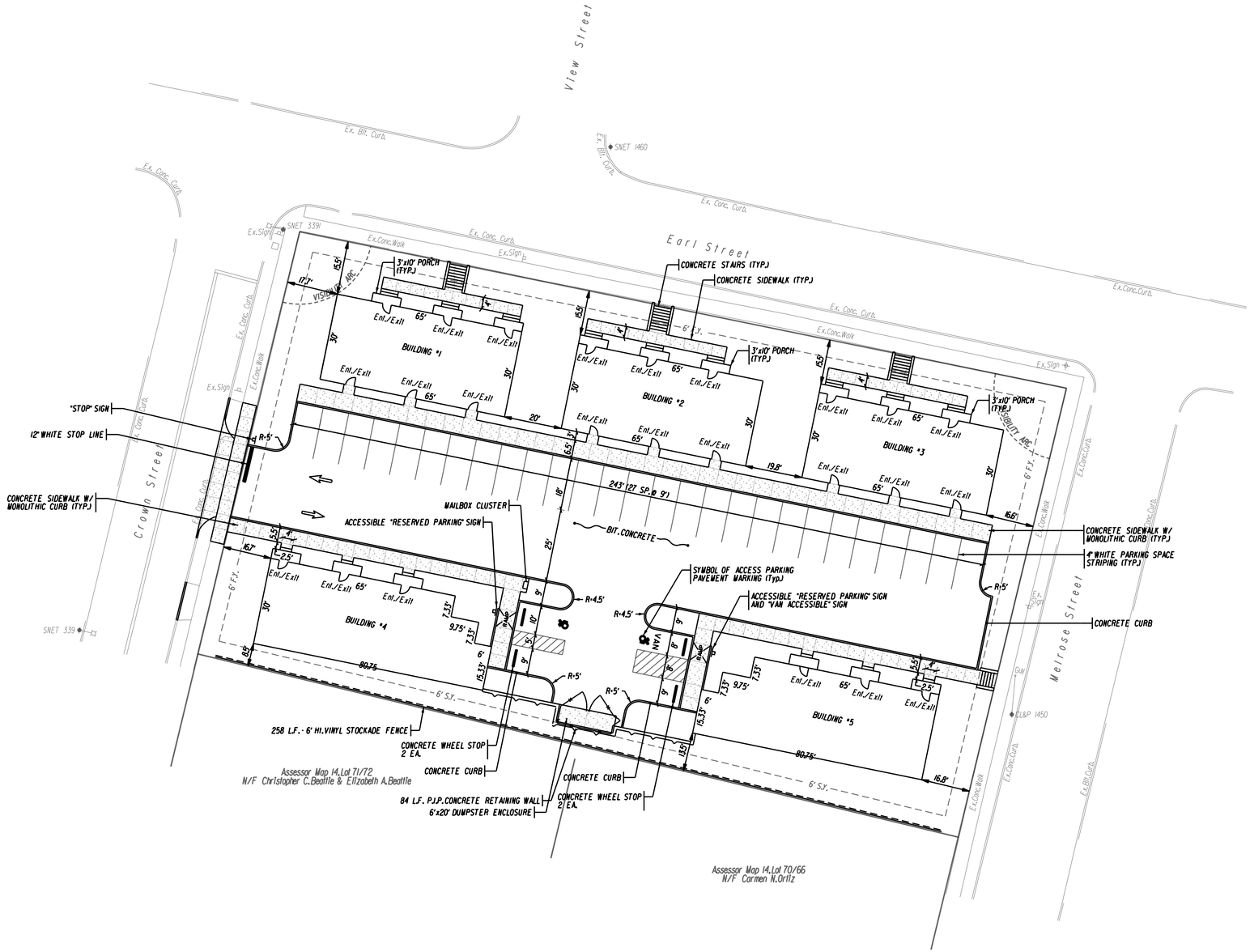
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING TITLE: GENERAL NOTES

DRAWING NO.: NOTES-001

SHEET NO.: 3



REV.	DATE	REVISION DESCRIPTION
1	6-7-24	SITE PLAN REVIEW COMMITTEE COMMENTS: 5/23/24

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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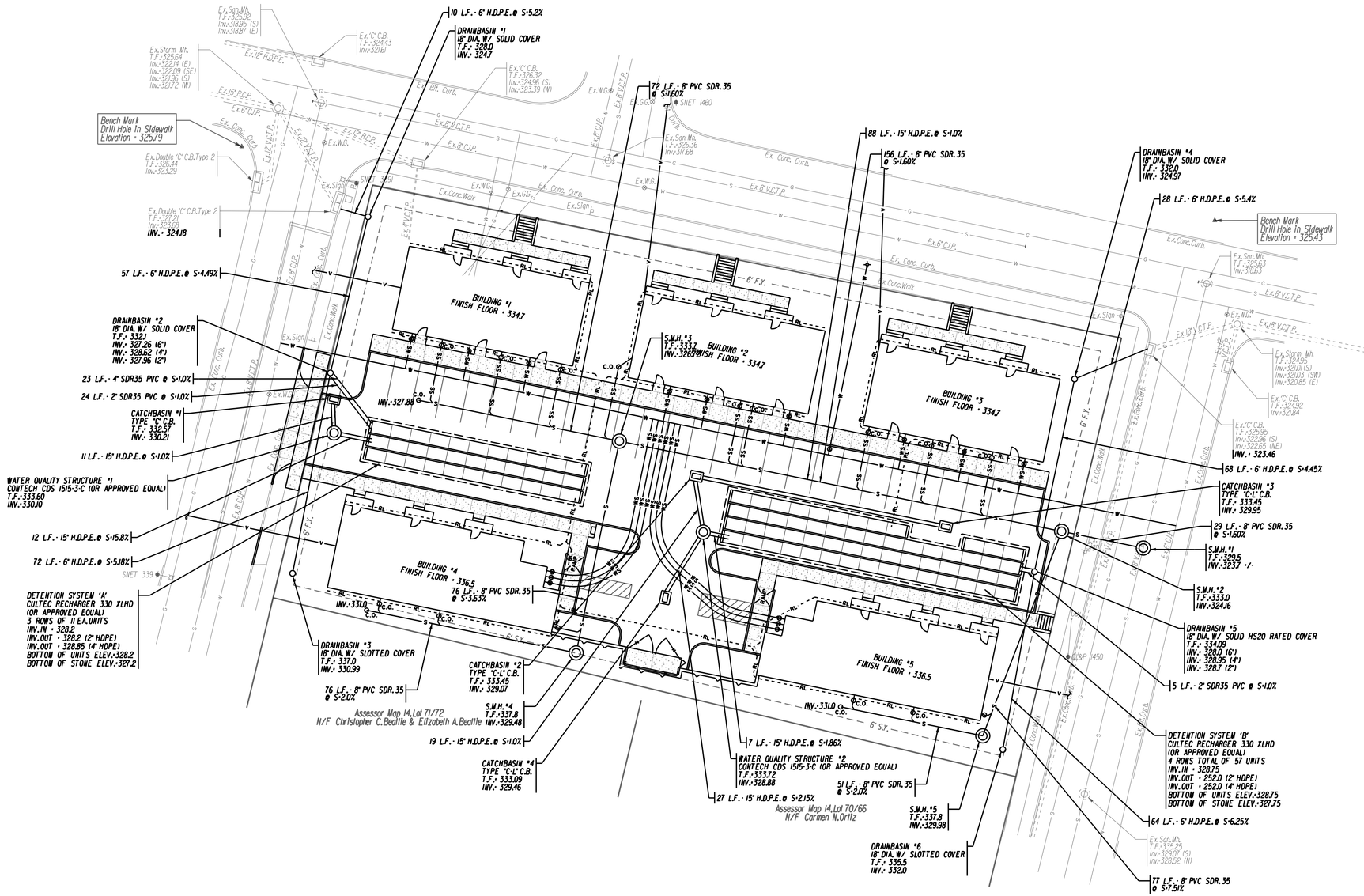
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

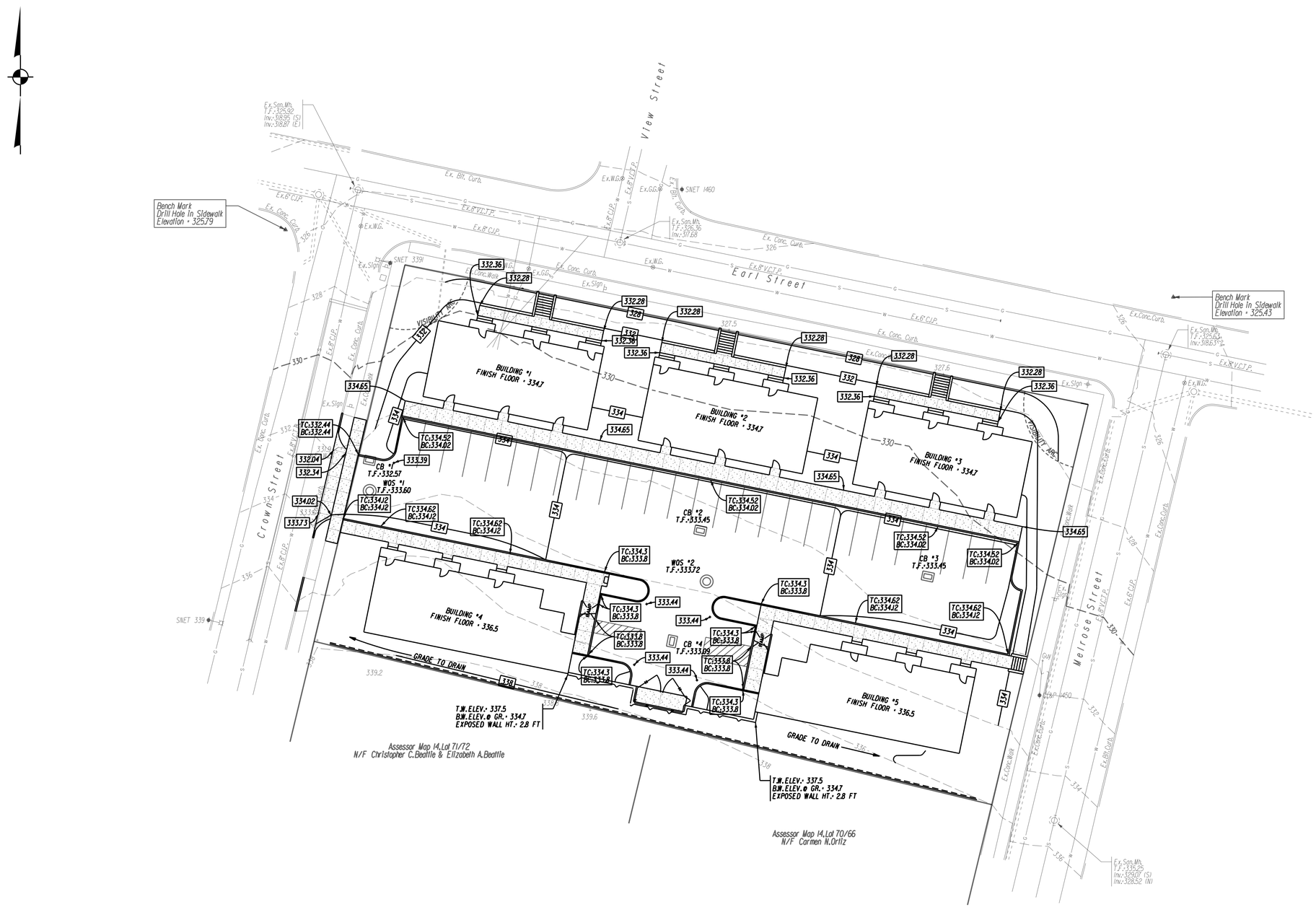
ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.
PLN-001

DRAWING TITLE:
LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN

SHEET NO.
5


10 L.F.- 6" H.D.P.E.@ S=5.2%
DRAINBASIN #1
18" DIA. W/ SOLID COVER
T.F.= 328.0
INV.= 324.7
72 L.F.- 8" PVC SDR.35
@ S=1.60%
88 L.F.- 15" H.D.P.E.@ S=1.0%
156 L.F.- 8" PVC SDR.35
@ S=1.60%
DRAINBASIN #4
18" DIA. W/ SOLID COVER
T.F.= 332.0
INV.= 324.97
28 L.F.- 6" H.D.P.E.@ S=5.4%
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Ex.Storm Mh.
T.F.=325.92
Inv.=318.95 (S)
Inv.=318.87 (E)
Ex.'C' C.B.
T.F.=324.43
Inv.=320.61
Ex.Storm Mh.
T.F.=325.64
Inv.=322.14 (E)
Inv.=322.09 (SE)
Inv.=321.96 (S)
Inv.=321.72 (W)
Ex.12" H.D.P.E.
Ex.15" R.C.P.
Ex.8" C.I.P.
Ex.12" R.C.P.
Ex.Conc. Curb
Ex.8" V.C.T.P.
Ex.W.G.
Ex.Bit. Curb.
Ex.'C' C.B.
T.F.=326.32
Inv.=324.96 (S)
Inv.=323.39 (W)
Ex.W.G.
Ex.6" C.I.P.
Ex.G.P.
SNET 1460
Ex.Sign
Ex.Conc.Walk
Ex.Storm Mh.
T.F.=326.36
Inv.=311.68
Ex.Conc. Curb.
Ex.Double 'C' C.B.,Type 2
T.F.=326.44
Inv.=323.29
Ex.Double 'C' C.B.,Type 2
T.F.=321.21
Inv.=321.68
INV.= 324.18
57 L.F.- 6" H.D.P.E.@ S=4.49%
BUILDING #1
FINISH FLOOR = 334.7
6' F.Y.
S.M.H.#3
T.F.=333.7
INV.=326.17
BUILDING #2
FINISH FLOOR = 334.7
BUILDING #3
FINISH FLOOR = 334.7
DRAINBASIN #2
18" DIA. W/ SOLID COVER
T.F.= 332.1
INV.= 327.26 (6")
INV.= 328.62 (4")
INV.= 327.96 (2")
23 L.F.- 4" SDR35 PVC @ S=1.0%
24 L.F.- 2" SDR35 PVC @ S=1.0%
CATCHBASIN #1
TYPE 'C' C.B.
T.F.= 332.57
INV.= 330.21
11 L.F.- 15" H.D.P.E.@ S=1.0%
INV.=327.88
C.O.
WATER QUALITY STRUCTURE #1
CONTECH CDS 1515-3-C (OR APPROVED EQUAL)
T.F.=333.60
INV.=330.10
12 L.F.- 15" H.D.P.E.@ S=15.8%
72 L.F.- 6" H.D.P.E.@ S=5.18%
SNET 339
DETENTION SYSTEM 'A'
CULTEC RECHARGER 330 XLHD
(OR APPROVED EQUAL)
3 ROWS OF 11 E.A.UNITS
INV.IN = 328.2
INV.OUT = 328.2 (2" HDPE)
INV.OUT = 328.85 (4" HDPE)
BOTTOM OF UNITS ELEV.=328.2
BOTTOM OF STONE ELEV.=327.2
BUILDING #4
FINISH FLOOR = 336.5
76 L.F.- 8" PVC SDR.35
@ S=3.63%
INV.=331.0
DRAINBASIN #3
18" DIA. W/ SLOTTED COVER
T.F.= 337.0
INV.= 330.99
76 L.F.- 8" PVC SDR.35
@ S=2.0%
Assessor Map 14,Lot 71/72
N/F Christopher C.Beattie & Elizabeth A.Beattie
CATCHBASIN #2
TYPE 'C-1' C.B.
T.F.= 333.45
INV.= 329.07
S.M.H.#4
T.F.=337.8
INV.=329.48
19 L.F.- 15" H.D.P.E.@ S=1.0%
CATCHBASIN #4
TYPE 'C-1' C.B.
T.F.= 333.09
INV.= 329.46
BUILDING #5
FINISH FLOOR = 336.5
INV.=331.0
7 L.F.- 15" H.D.P.E.@ S=1.86%
WATER QUALITY STRUCTURE #2
CONTECH CDS 1515-3-C (OR APPROVED EQUAL)
T.F.=333.72
INV.=328.88
51 L.F.- 8" PVC SDR.35
@ S=2.0%
27 L.F.- 15" H.D.P.E.@ S=2.15%
Assessor Map 14,Lot 70/66
N/F Carmen M.Ortiz
S.M.H.#5
T.F.=337.8
INV.=329.58
DRAINBASIN #6
18" DIA. W/ SLOTTED COVER
T.F.= 335.5
INV.= 332.0
Ex.Storm Mh.
T.F.=324.95
Inv.=321.03 (S)
Inv.=321.03 (SW)
Inv.=320.85 (E)
Ex.'C' C.B.
T.F.=324.92
Inv.=321.84
Ex.'C' C.B.
T.F.=325.95
Inv.=322.56 (S)
Inv.=322.65 (NE)
INV.= 323.46
68 L.F.- 6" H.D.P.E.@ S=4.45%
CATCHBASIN #3
TYPE 'C-1' C.B.
T.F.= 333.45
INV.= 329.95
29 L.F.- 8" PVC SDR.35
@ S=1.60%
S.M.H.#1
T.F.=329.5
INV.=323.7 +/-
S.M.H.#2
T.F.=333.0
INV.=324.16
DRAINBASIN #5
18" DIA. W/ SOLID HS20 RATED COVER
T.F.= 334.09
INV.= 328.0 (6")
INV.= 328.95 (4")
INV.= 328.7 (2")
5 L.F.- 2" SDR35 PVC @ S=1.0%
DETENTION SYSTEM 'B'
CULTEC RECHARGER 330 XLHD
(OR APPROVED EQUAL)
4 ROWS TOTAL OF 57 UNITS
INV.IN = 328.75
INV.OUT = 252.0 (2" HDPE)
INV.OUT = 252.0 (4" HDPE)
BOTTOM OF UNITS ELEV.=328.75
BOTTOM OF STONE ELEV.=327.75
64 L.F.- 6" H.D.P.E.@ S=6.25%
Ex.San.Mh.
T.F.=336.25
Inv.=329.07 (S)
Inv.=328.52 (N)
77 L.F.- 8" PVC SDR.35
@ S=7.51%
6' F.Y.
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Sign
Ex.W.G.
Ex.8" V.C.T.P.
Ex.18" V.C.T.P.
Ex.Conc. Curb.
Ex.6" C.I.P.
Ex.Conc.Walk
Ex.Sign
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb



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ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: GRA-001

DRAWING TITLE: GRADING PLAN

SHEET NO.: 7

Site Plan
050124

ECM GARDENS

ASSESSORS MAP: 14 LOT'S: 72/71, 73/70, 74/69, 75/68 & 76/67

EARL STREET, CROWN STREET & MELROSE STREET

BRISTOL, CONNECTICUT

MAY 1, 2024

APPLICATION: #

SPECIAL PERMIT FOR

GRANTED:

APPLICATION: #

SITE PLAN FOR

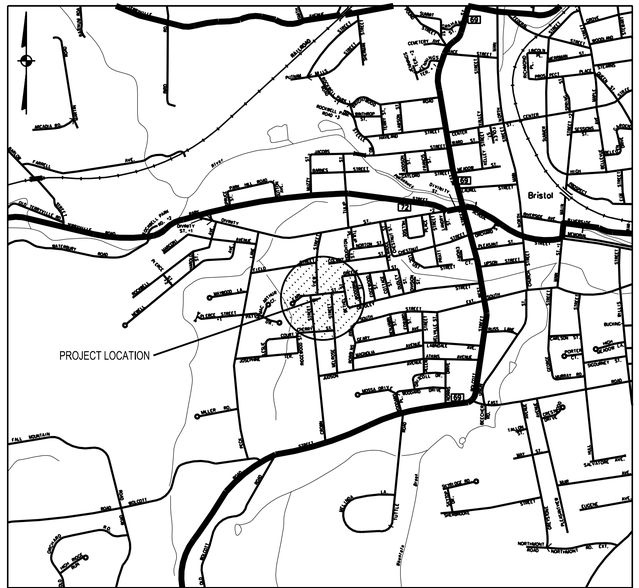
GRANTED:

LIST OF REVISIONS

REV.	DATE	REVISION DESCRIPTION

LEGEND

- NORTH ARROW
- UTILITY POLE
- UTILITY POLE W/ LUMINAIRE
- MANHOLE
- CATCH BASIN
- SIGN
- GATE VALVE (TYPE AS NOTED)
- HYDRANT
- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUB / BUSH
- +000.0 EXISTING SPOT ELEVATION
- 000.0 PROPOSED SPOT ELEVATION
- CURBING (TYPE AS NOTED)
- CHAIN LINK FENCE
- ZONING SETBACK LINE
- 000 EXISTING CONTOUR
- 000 PROPOSED CONTOUR
- S APPROX. LOCATION EXISTING SEWER MAIN
- W APPROX. LOCATION EXISTING WATER MAIN
- G APPROX. LOCATION EXISTING GAS MAIN
- W PROPOSED 6" D.I.P. WATER MAIN
- WS PROPOSED 1" COPPER DOMESTIC WATER SERVICE
- S PROPOSED 8" PVC SDR. 35 SEWER MAIN
- SS PROPOSED 6" PVC SDR. 35 SEWER CONNECTION
- V PROPOSED OVERHEAD ELECTRIC CONNECTION
- RL PROPOSED ROOF LEADER CONNECTION
- SEDIMENTATION AND EROSION CONTROL FENCE
- WHITE PAINTED PAVEMENT ARROW



LOCATION MAP
(SCALE 1"=800')

LIST OF DRAWINGS

1	COVER SHEET
2	BOUNDARY AND TOPOGRAPHIC SURVEY
3	GENERAL NOTES
4	SITE REMOVALS PLAN
5	LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN
6	DRAINAGE AND UTILITIES PLAN
7	GRADING PLAN
8	EROSION AND SEDIMENTATION CONTROL PLAN
9-13	MISCELLANEOUS NOTES AND DETAILS
L1.0	LIGHTING PLAN
L2.0	LANDSCAPING PLAN

Applicant:

D.G.G. Development LLC
21 Cobbs Road
West Hartford, CT 06107
(860) 841-6008

Surveyor/Civil Engineer:

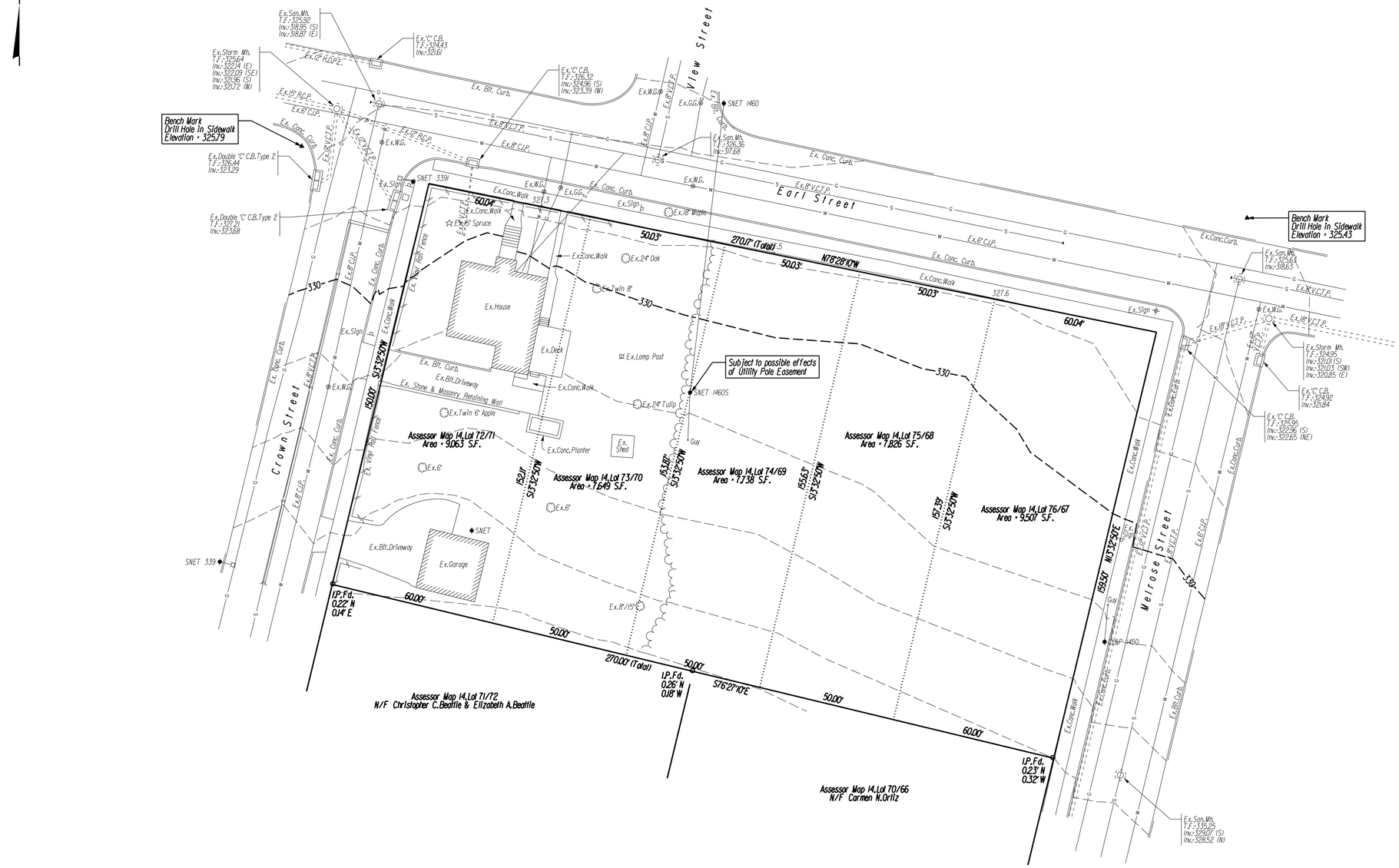
Robert Green Associates LLC
6 Old Waterbury Road
Terryville, CT 06786
(860) 589-0135

Landscaping:

Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
(860) 506-4268

Lighting:

Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
(860) 282-1822


Earl Street
Crown Street
Melrose Street
View Street
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Subject to possible effects of Utility Pole Easement
Ex.House
Ex.Deck
Ex.Shed
Ex.Garage
Ex.Bit.Driveway
Ex.Stone & Masonry Retaining Wall
Ex.Conc.Planter
Ex.Twin 6" Apple
Ex.24" Tulip
Ex.24" Oak
Ex.Twin 8"
Ex.Lamp Post
Ex.18" Maple
Ex.6" Spruce
Ex.Conc.Walk
Ex.Bit. Curb
Ex.Conc. Curb
Ex.Vinyl Rail Fence
Ex.Wire Fence
Ex.Chain Link Fence
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Sign
Ex.W.G.
Ex.G.G.
Ex.6" C.I.P.
Ex.8" C.I.P.
Ex.8" V.C.T.P.
Ex.12" H.D.P.E.
Ex.15" R.C.P.
Ex.18" V.C.T.P.
Ex.Storm Mh.
T.F.=325.64
Inv.=322.14 (E)
Inv.=322.09 (SE)
Inv.=321.96 (S)
Inv.=322.72 (W)
Ex.'C' C.B.
T.F.=324.43
Inv.=321.61
Ex.'C' C.B.
T.F.=326.32
Inv.=324.96 (S)
Inv.=323.39 (W)
Ex.San.Mh.
T.F.=326.36
Inv.=317.58
Ex.San.Mh.
T.F.=326.92
Inv.=318.95 (S)
Inv.=318.87 (E)
Ex.Double 'C' C.B.Type 2
T.F.=326.44
Inv.=323.29
Ex.Double 'C' C.B.Type 2
T.F.=327.21
Inv.=323.68
Ex.San.Mh.
T.F.=325.63
Inv.=318.63
Ex.Storm Mh.
T.F.=324.95
Inv.=321.01 (S)
Inv.=321.03 (SW)
Inv.=320.85 (E)
Ex.'C' C.B.
T.F.=324.92
Inv.=321.84
Ex.'C' C.B.
T.F.=325.95
Inv.=322.56 (S)
Inv.=322.65 (NE)
Ex.San.Mh.
T.F.=335.25
Inv.=329.07 (S)
Inv.=328.52 (W)
SNET 1460
SNET 1460S
SNET 339
SNET 339
SNET
Guy
Guy
Ex.6'
Ex.6'/15"
Ex.W.G.
Ex.Gas Line
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Bit.Dr.
Ex.Bit.Curb
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc

GENERAL NOTES:

1. ASSESSORS MAP: 14
ASSESSEORS LOT'S: 72/71,73/70,74/69,75/68,76/67

2. PROPERTY ADDRESS: 29-49 EARL STREET

3. OWNER NAME: D.G.G.DEVELOPMENT LLC

4. PREPARED FOR: D.G.G.DEVELOPMENT LLC

5. ZONE: R-15/RM

6. ASSESSORS LOT 72/71 REVISED AREA - 7,341 S.F.
ASSESSORS LOT 73/70 REVISED AREA - 8,822 S.F.
ASSESSORS LOT 74/69 REVISED AREA - 8,814 S.F.
ASSESSORS LOT 75/68 REVISED AREA - 8,822 S.F.
ASSESSORS LOT 76/67 REVISED AREA - 7,983 S.F.

* SUBSEQUENT TO SITE PLAN APPROVAL BY LOCAL AGENCIES AND PRIOR TO ISSUANCE OF A ZONING PERMIT,THE OWNER SHALL COMBINE LOT'S 72/71,73/70,74/69,75/68,76/67

7. BASED ON THE CITY OF BRISTOL INLAND WETLAND AND WATER COURSES MAPS, THERE ARE NO WETLANDS ON THE SUBJECT PROPERTY.

8. BASED ON FLOOD INSURANCE RATE MAP,HARTFORD COUNTY,CONNECTICUT (ALL JURISDICTIONS), PANEL 468 OF 675, MAP NUMBER 09003C0468F, EFFECTIVE DATE: SEPTEMBER 26, 2008 THE PARCEL LIES WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)

9. THE PROPERTY IS "NOT" LOCATED WITHIN A AQUIFER PROTECTION AREA

10. EXISTING AND PROPOSED CONTOURS AT 2' INTERVALS

11. PROPOSED BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER

12. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION.THE LOCATIONS ARE APPROXIMATE, ALL UTILITIES MAY NOT BE SHOWN,THE CONTRACTOR SHALL CONTACT "CALL-BEFORE-YOU-DIG" AT 811 PRIOR TO THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL PERFORM CAREFUL EXPLORATORY EXCAVATIONS TO IDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ENCOUNTERED AND MAY INTERFERE WITH THE PROPOSED WORK, WHETHER SHOWN ON THE EXISTING CONDITIONS DRAWINGS OR NOT.

13. CONTRACTOR SHALL VERFIY ALL DIMENSIONS,ELEVATIONS,QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION

14. TECHNICAL SPECIFICATIONS ARE THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS,BRIDGES AND INCIDENTAL CONSTRUCTION (FORM 818) AND ALL LATEST SUPPLEMENTAL SPECIFICATIONS THERETO, INCLUDING ANY SPECIAL PROVISIONS.

PARKING CALCULATION:

PROPOSED USE: THREE FAMILY DWELLING

PARKING REQUIREMENT: 2 PER DWELLING UNIT
15 DWELLING UNITS x 2 PER = 30 SPACES

PARKING PROPOSED: 31 SPACES

SITE BASED AMENITIES:

1) ENERGY EFFICIENT LIGHTING

2) LOW-IMPACT STORMWATER MANAGEMENT: GROUNDWATER RECHARGE & STORMWATER QUALITY STRUCTURES

FUNCTIONAL OPEN SPACE CALCULATION:

REQUIRED: 250 S.F./ DWELLING UNIT
15 UNITS x 250 S.F.= 3,750 S.F.

PROVIDED: 4,800 S.F.

Unified Residential Developments (R15/RM)
Area and Dimensional Requirements

Standard		Proposed
a) Maximum Density (units per acre)	18	15.6
b) Minimum Lot Area (acres)	0.5	0.96
c) Minimum Lot Frontage (ft)	75	150
d) Minimum Front Yard (ft)	6	11.5
e) Minimum Side Yard (ft)	6	6.5
f) Minimum Rear Yard (ft)	15	NA
g) Maximum Building Height (ft)	35	25
h) Maximum Building Coverage (%)	40	25.6
i) Maximum Impervious Coverage (%)	80	67.6
j) Minimum Building Spacing (ft)	18	19.8

CONSTRUCTION SEQUENCE:

1. FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING.

2. HOLD PRECONSTRUCTION MEETING WITH THE OWNER,ENGINEER,CONTRACTOR AND APPROPRIATE TOWN STAFF. REVIEW FLAGGED CLEARING LIMITS AND DETERMINE TOPSOIL STOCKPILE AREA. (REMEMBER TO CALL BEFORE YOU DIG 1-800-922-4455.

3. FLAG REMAINDER OF THE LIMITS OF CONSTRUCTION AND TREE PROTECTION ZONES IF REQUIRED.

4. INSTALL CONSTRUCTION ENTRANCE PAD.

5. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION DEVICES IN ACCORDANCE WITH THE E&S PLAN.

6. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD CHIP BRUSH AND SLASH.STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.

7. REMOVE ALL ITEMS PER REMOVALS PLAN.

8. STRIP AND STOCKPILE ALL TOPSOIL THAT IS WITHIN THE FOOTPRINT OF THE CONSTRUCTION SITE AND REFERENCE STOCKPILE MANAGEMENT FOR EROSION AND SEDIMENT CONTROLS. EITHER REMOVE TREE STUMPS TO AN APPROVED DISPOSAL SITE OR CHIP IN PLACE AS INDICATED ON THE PLANS.

9. MAKE ALL CUTS AND FILLS REQUIRED, ESTABLISH THE SUBGRADE FOR THE PARKING LOT AND DRIVEWAY AS REQUIRED AND BENCH THE BUILDING'S TO A SUBGRADE. ALLOW A REASONABLE AMOUNT OF AREA AROUND THE FOOT-PRINT OF THE PROPOSED BUILDING FOR THE CONSTRUCTION ACTIVITIES.

10. BEGIN CONSTRUCTION OF THE PROPOSED BUILDING'S.

11. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSIONS AND STONE DIKES,INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE. IF NOT STABLE,REVIEW DISCHARGE CONDITIONS WITH THE DESIGN ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING WATER SURFACE CONTROLS.

12. INSTALL ALL UTILITIES AND DRAINAGE SYSTEMS TO WITHIN 5 FEET OF THE BUILDING OR AS OTHERWISE MODIFIED BY THE DESIGN ENGINEER TO ADJUST FOR UNFORESEEN SITE CONDITIONS.

13. PREPARE SUB-BASE,SLOPES,PARKING AREAS,SHOULDER AREAS,ACCESS DRIVES AND ANY OTHER DISTURBANCE FOR FINAL GRADING.

14. INSTALL PROCESS AGGREGATE IN PARKING AREAS.

15. PLACE TOPSOIL WHERE REQUIRED. COMPLETE THE PERIMETER LANDSCAPE PLANTINGS.

16. FINE GRADE,RAKE,SEED AND MULCH TO WITHIN 2 FEET OF THE CURBING.

17. UPON SUBSTANTIAL COMPLETION OF THE PROPOSED BUILDING'S,COMPLETE THE BALANCE OF SITE WORK AND STABILIZATION OF ALL OTHER DISTURBED AREAS. INSTALL FIRST COURSE OF PAVING.

18. WHEN ALL OTHER WORK HAS BEEN COMPLETED,REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.

19. INSTALL FINAL COURSE OF PAVEMENT.

20. AFTER THE SITE IS STABILIZED REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

OPERATION AND MAINTENANCE PLAN (POST CONSTRUCTION)

1. ALL DRAINAGE SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN 12 INCHES OF THE OUTLET PIPE INVERT,NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

2. ALL PAVED AREAS SHALL BE SWEPT TWICE ANNUALLY, TYPICALLY, SWEEPING SHOULD OCCUR IN THE SPRING, AFTER WINTER SANDING,AND IN THE FALL, AFTER ALL LEAVES HAVE FALLEN.

3. A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES. (USE ONLY ORGANIC FERTILIZER)

4. DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2 " OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

INSPECTION AND MAINTENANCE GUIDELINES STORMWATER QUALITY MEASURES AND UNDERGROUND DETENTION SYSTEMS

1. THE CATCHBASIN SYSTEM SHOULD BE INSPECTED MONTHLY IN THE FIRST YEAR AND TWICE-A-YEAR (APRIL AND OCTOBER) THEREAFTER TO CHECK INLETS AND OUTLETS FOR CLOGGING AND TO REMOVE ANY DEBRIS AS REQUIRED.

2. INSPECTION AND MAINTENANCE FOR THE STORMWATER QUALITY CHAMBER SHALL BE PER THE GUIDELINES PUBLISHED BY THE MANUFACTURER.

https://www.conleches.com/Portals/0/Documents/Maintenance%20Guides/CDS-Maintenance-Guide.pdf?ver-2018-05-31-143259-453

REMOVAL NOTES:

1. INFORMATION ON EXISTING UTILITIES AND UNDERGROUND FEATURES HAS BEEN COMPILED,IN PART,BASED UPON INFORMATION FURNISHED BY OTHERS AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE OF DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO THE START OF SITE REMOVALS OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG AT 811 AND RECEIVE REQUIRED FIELD MARKOUTS. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO INDENTIFY AND VERIFY ALL LOCATIONS WHERE UTILITIES MAY BE ECOUNTERED, WHETHER SHOWN ON AN EXISTING CONDITIONS DRAWING OR NOT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.

3. MANHOLES,CATCH BASINS,CLEANOUTS,VALVE BOXES,FRAMES,COVERS,GRATES,ETC.TO REMAIN IN USE, SHALL BE PROTECTED AND ADJUSTED TO PROPOSED GRADES AS NECESARY.

4. EXISTING BITUMINOUS PAVEMENT NOTED TO BE REMOVED SHALL BE DEMOLISHED,STOCKPILED,PULVERIZED AND INSPECTED BY A MATERIALS INSPECTOR PRIOR TO ANY USE AS RECLAIMED MATERIAL. RECLAIMED MATERIALS MEETING THE TESTING REQUIREMENTS MAY BE USED AS OR BE INCLUDED IN SUB-BASE MATERIALS FOR NEW PAVEMENTS. ALL REMAINING PAVEMENT MATERIAL THAT IS TO BE REMOVED SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

5. ANY SITE FEATURE NOT LABELED AS BEING REMOVED,REPLACED,ETC.IS INTENDED TO REMAIN.

6. DURING THE PRECONSTRUCTION MEETING. THE CONTRACTOR,ENGINEER AND CITY SHALL DETERMINE A SUITABLE STOCKPILE LOCATIONS.

7. SIDEWALKS TO BE REPLACED SHALL BE REPLACED TO THE NEAREST JOINT.

8. ALL ASPHALT AND CONCRETE MATERIALS SHALL BE REMOVED TO FULL DEPTH WHERE LANDSCAPED AREAS ARE PROPOSED OR WHERE NEW CONSTRUCTION IS PROPOSED.

9. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS,HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

SIGNING AND PAVEMENT MARKING NOTES:

1. SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO MUTCD OR CONNDOT STANDARDS AS DEPICTED.

2. SIGNS SHALL BE INSTALLED WITH A BREAKAWAY FEATURE.

3. ALL PAVEMENT MARKINGS SHALL BE EPOXY RESIN.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2% IN ANY DIRECTION.

2. ALL ACCESSIBLE EGRESSES SHALL BE FLUSH WITH THE ADJOINING MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

3. WALKWAYS ALONG ACCESSIBLE ROUTES ARE NOT TO EXCEED 5% RUNNING SLOPE OR 2% CROSS SLOPE UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

4. ALL RAMPS SHALL NOT EXCEED 1:12 OR 2% CROSS PITCH.

UTILITY AND DRAINAGE NOTES:

1. TOP OF FRAME ELEVATIONS SHOWN ON THESE PLANS REFLECT THE 2" STANDARD DEPRESSION FROM GUTTER LINE.

2. ALL CATCH BASINS SHALL HAVE A 2FT SUMP UNLESS OTHERWISE NOTED ON THE PLANS.

3. ALL YARD DRAINS SHALL BE "NYLOPLAST DRAIN BASINS"(OR APPROVED EQUAL)WITH THE STANDARD D.I.FRAME AND GRATE UNLESS OTHERWISE NOTED ON THE PLANS.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES REGARDING A FINAL DESIGN, MEANS OF CONSTRUCTION AND AN EXACT LOCATION AND SIZE OF THE UTILITY PRIOR TO THE START OF CONSTRUCTION.

5. ALL WATERMAIN AND SERVICE WORK TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS.INCLUDING BACKFLOW PREVENTION SPECIFICATIONS. PRIOR TO THE START OF CONSTRUCTION CONTACT PAUL KEEGAN FOR ALL WATERMAIN AND SERVICE WORK AND BRYAN ROBERTS FOR ALL SEWER MAIN AND SERVICE WORK,BOTH AT THE CITY OF BRISTOL WATER AND SEWER DEPARTMENT (860) 582-7431.

6. FINAL WATER SERVICE SIZES TO BE DETERMINED BY THE OWNERS MECHANICAL ENGINEER ONCE ALL PERTINENT WATER FIXTURE DATA HAS BEEN RECEIVED.

7. ONCE THE OWNERS MECHANICAL ENGINEER HAS DETERMINED THE MAX GPM TO BE SUPPLIED TO THE BUILDING'S, THE BRISTOL WATER AND SEWER DEPARTMENT WILL THEN DETERMINE THE METER SIZE.

8. ALL SERVICE TAPS TO BE DONE BY THE BRISTOL WATER AND SEWER DEPARTMENT.

9. ALL FEES MUST BE PAID BEFORE ANY WORK CAN BE SCHEDULED. ALL WATER TAPS TO BE DONE BY BRISTOL WATER DIVISION.

10. WHEN SEWER AND WATER ARE WITHIN 10' HORIZONTALLY,THE WATER MAIN SHALL BE LOCATED IN A SEPARATE TRENCH OR ON AN UNDISTURBED SHELF AND AT LEAST 12" HORIZONTALLY (18" RECOMMENDED), MEASURED EDGE TO EDGE AND 18" ABOVE THE TOP OF THE SEWER, MEASURED FROM CROWN TO INVERT. FINAL LOCATIONS SHALL BE APPROVED BY THE APPROPRIATE UTILITY COMPANY.

11. IF THE CONTRACTOR ENCOUNTERS UNDERGROUND DRAINAGE AND/OR UTILITIES DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLANS.HE/SHE SHALL CONTACT THE ENGINEER FOR EVALUATION AND AS-BUILT.

GENERAL NOTES FOR SITE PLANS "CITY OF BRISTOL" (AS APPLICABLE)

1. A SANITARY SEWER LATERAL PERMIT OBTAINED FROM THE BRISTOL WATER AND SEWER DEPARTMENT WILL BE REQUIRED PRIOR TO CONNECTING INTO THE EXISTING SEWER SYSTEM. THE CONTRACTOR INSTALLING THE SEWERS/LATERALS SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE SANITARY SEWER INSTALLATIONS. NO SANITARY SEWER INSTALLATION SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR. ALL BUILDING SEWERS SHALL HAVE A BACK FLOW PREVENTER WILL BE REQUIRED ON THE SEWER LATERAL IN ACCORDANCE WITH BRISTOL WATER AND SEWER DEPARTMENT SPECIFICATIONS.

2. A TEST PIT SHALL BE REQUIRED TO DETERMINE WHERE THE 8" EXISTING SANITARY LINE TERMINATES ON THE PROPERTY. IT WILL BE CAPPED PRIOR TO THE INSTALLATION OF THE SUBSURFACE STORM DRAINAGE SYSTEM.

3. A STORM SEWER CONNECTION PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONNECTING THE PROPOSED DRAINAGE SYSTEM(S) INTO THE CITY SYSTEM AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W. THE CONTRACTOR MAKING THE STORM SEWER CONNECTION AND/OR INSTALLING STORM DRAINAGE WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY SEWER INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH INSTALLATION AND/OR CONNECTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF THE STORM SEWER INSTALLATIONS. NO STORM SEWER SHALL BE BACKFILLED PRIOR TO AN INSPECTION OF THE COMPLETE PIPE INSTALLATION BY THE CITY SEWER INSPECTOR.

4. A DRIVEWAY APRON AND/OR SIDEWALK PERMIT OBTAINED FROM THE PUBLIC WORKS DEPARTMENT.WILL BE REQUIRED PRIOR TO CONSTRUCTING ANY DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W. THE CONTRACTOR CONSTRUCTING THE DRIVEWAY APRON AND/OR SIDEWALK WITHIN THE CITY R.O.W.SHALL NOTIFY THE CITY HIGHWAY INSPECTOR BETWEEN 24 AND 48 HOURS PRIOR TO ANY SUCH CONSTRUCTION TO MAKE ARRANGEMENTS FOR AN INSPECTION OF ANY DRIVEWAY APRON AND/OR SIDEWALK INSTALLATIONS. NO CONCRETE (PORTLAND CEMENT AND/OR BITUMINOUS) SHALL BE PLACED PRIOR TO AN INSPECTION BY THE CITY HIGHWAY INSPECTOR.

5. SEDIMENTATION AND SILTATION CONTROLS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEERING DIVISION/INEO.

6. GRADING AROUND THE PROPOSED IMPROVEMENTS SHALL BE PERFORMED IN A MANNER WHICH PREVENTS ALL RUNOFF FROM BEING DIRECTED ONTO ADJACENT PROPERTIES; BOTH DURING AND AFTER CONSTRUCTION.

7. AS-BUILT PLOT PLANS SHALL BE SUBMITTED FOR ENGINEERING DIVISION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE REQUIRED ENGINEERING SIGN-OFF FOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.). AS-BUILT PLANS MUST INCLUDE AS-BUILT GRADING OF THE SITE.

8. ANY EXISTING DAMAGED SECTIONS OF SIDEWALK AND/OR CURBING IDENTIFIED BY THE CITY ALONG STREETS ABUTTING THE SITE SHALL BE REPLACED AT THE DIRECTION OF THE CITY'S ENGINEERING STAFF.

GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL

1. THIS PLAN OF DEVELOPMENT PROPOSES EROSION CONTROL MEASURES WHICH WILL PERFORM ONE OR MORE OF THE FOLLOWING FUNCTIONS: MINIMIZATION OF SOIL EXPOSURE,CONTROL OF RUNOFF,SHIELDING OF THE SOILS AND BINDING OF THE SOILS. PROPER EROSION MANAGEMENT WILL MINIMIZE THE NEED FOR EXTENSIVE SEDIMENTATION CONTROLS.

2. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

3. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND FOR A PERIOD AFTERWARDS UNTIL ALL AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AFTER EACH STORM EVENT (1/2" OR MORE) OR ONCE A WEEK AND IMMEDIATELY MAKE ANY CORRECTIVE ACTION REQUIRED.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.

5. RUNOFF SHALL ALSO BE CONTROLLED BY THE STAGING OF CONSTRUCTION ACTIVITY AND THE PRESERVATION OF NATURAL VEGETATION WHENEVER POSSIBLE.

6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM AND RESTABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. THE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS,TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED OR AN APPROVED EQUAL.

A) SEED BED PREPARATION:
- REMOVE STONES LARGER THAN 2"
- APPLY LIMESTONE AT 90# / 1000 S.F.
- WORK LIME AND FERTILIZER INTO SOIL

B) SEED APPLICATION:
- APPLY GRASS MIXTURE BY HAND OR CYCLONE SEEDER.LIGHTLY DRAG OR ROLL THE SEED SURFACE TO COVER SEED. OPTIMAL SEEDING SEASON IS BETWEEN MARCH 15TH AND JUNE 30TH OR BETWEEN AUGUST 15TH AND OCTOBER 30TH.
- IF SEEDING CAN NOT BE DONE DURING THESE TIMES,REPEAT MULCHING PROCEDURE STATED BELOW UNTIL SEEDING CAN TAKE PLACE.

C) SEED MIX:
- CREEPING RED FESCUE 49# / ACRE
- TALL FESCUE 20# / ACRE

D) MULCHING:
- IMMEDIATELY FOLLOWING SEEDING,MULCH THE SEEDED SURFACE WITH STRAW OR HAY AT A RATE OF 1-1/2 TONS / ACRE SPREAD MULCH BY HAND OR MULCH BLOWER.
- PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISK HARROW STRAIGHT UP. MULCH MATERIAL SHOULD BE "TUCKED" APPROXIMATELY 2" - 3" INTO SOIL SURFACE.

E) TREE PROTECTION:
- LIMIT CONSTRUCTION ACTIVITIES THAT MIGHT CAUSE DAMAGE TO TREES. THE AREA ADJACENT TO AND TREES THAT ARE TO BE PROTECTED,WILL BE IDENTIFIED AND CLEARLY MARKED. EXCAVATION SHOULD NOT OCCUR WITHIN THE ROOT ZONE OF THE TREES THAT ARE TO REMAIN. IN ADDITION,RAISING OR LOWERING THE GRADE NEAR REMAINING TREES SHOULD NOT OCCUR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY EROSION AND SEDIMENTATION CONTROL MEASURES DUE TO UNFORESEEN FIELD CONDITIONS. ADDITIONAL CONTROL MEASURES MAY ALSO BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER,ENVIRONMENTAL SUPERVISOR AND/OR TOWN ENGINEER.

8. ANY CHANGE TO THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN BY THE CONTRACTOR SHALL BE SUBMITTED BY THE CONTRACTOR IN WRITING AND APPROVED BY THE ENGINEER.

9. ANTI-TRACKING PADS SHALL BE INSTALLED WHERE CONSTRUCTION ACCESS MEETS A PAVED ACCESS POINT,OR AS DIRECTED BY THE ENGINEER.

10. STOCKPILE LOCATIONS SHALL BE DETERMINED PRIOR TO THE START OF CONSTRUCTION AND IF A STOCKPILE IS LOCATED OFF-SITE,THE LOCATION SHALL HAVE EROSION CONTROL MEASURES IN PLACE AND MEET ALL LOCAL REQUIREMENTS.

11. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL TO 1' VERTICAL OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS. WHERE LEDGE IS ENCOUNTERED,THE MAXIMUM CUT SLOPE MAY BE INCREASED TO 1 HORIZ.: 1 VERT. A 4FT HIGH PERMANENT SAFETY FENCE (e.g.CHAIN LINK FENCE) SHALL BE ADDED TO ALL ROCK CUTS GREATER THAN 4FT HIGH.

12. ALL SLOPES OR DISTURBED AREAS (EXCEPT PAVED AREAS) ARE TO BE STABILIZED WITH 4" OF TOPSOIL AND TURF MUST BE ESTABLISHED UNLESS OTHERWISE NOTED ON THE PLANS. STABILIZATION SHALL INCLUDE INSTALLATION OF EROSION CONTROL MATTING WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

13. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE,OR APPROVED EQUAL. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.

14. TEMPORARY PERVIOUS BARRIERS,USING SILT FENCE AND HAYBALES HELD IN PLACE WITH WOODEN STAKES,SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF-SITE.

15. JEFFERY NIMAN OR HER DULY AUTHORIZED AGENT (860) 841-6008 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPAL PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE TO THE START OF ANY CONSTRUCTION ACTIVITY.

16. JEFFERY NIMAN OR HIS DULY AUTHORIZED AGENT (860) 841-6008 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES,INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN,NOTIFYING THE PLANNING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.

17. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, AS AMENDED. AN ADDITIONAL REFERENCE IS THE 1994 CONNDOT PUBLICATION "ON-SITE MITIGATION FOR CONSTRUCTION ACTIVITIES".

EROSION AND SEDIMENTATION CONTROL MAINTENANCE REQUIREMENTS

TOPSOIL STOCKPILES:

THE SIDE SLOPES SHALL NOT EXCEED A SLOPE GREATER THAN 2:1. STOCKPILES THAT WILL NOT BE USED WITHIN 30 DAYS SHOULD BE SEEDED AND MULCHED. A SEDIMENTATION FENCE SHALL BE INSTALLED APPROX.10FT FROM THE TOE OF SLOPE.

IF THE TOPSOIL STOCKPILE LOCATION IS RELOCATED, IT SHALL BE LOCATED SO AS NOT TO OBSTRUCT THE NATURAL DRAINAGE PATTERN OF THE SITE. IT SHALL BE LOCATED AS FAR AS PRACTICAL FROM ANY WETLANDS,WATER COURSES DRAINAGE WAYS AND STEEP SLOPES. IF THE LOCATION IS DOWNGRADIENT FROM A LONG SLOPE,DIVERT RUNOFF AROUND THE STOCKPILE.

CONSTRUCTION ENTRANCE PAD / ANTI-TRACKING PAD:

THE CONSTRUCTION ENTRANCE SHALL BE KEPT CLEAN OF ANY DEBRIS OR CONSTRUCTION MATERIALS. A PERIODIC TOP DRESSING OF STONE SHALL BE ADDED AS MAY BE REQUIRED TO KEEP THE ENTRANCE PAD WORKING EFFECTIVELY. IF A SEDIMENT SPILL OCCURS ON THE ROAD, IT SHALL BE CLEANED UP IMMEDIATELY.

SEDIMENTATION CONTROL FENCE:

THE SEDIMENTATION CONTROL FENCE SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAIN EVENT OF 0.5 INCHES OR MORE. IF A FAILURE OCCURS,REPAIR OR REPLACE THE FENCE WITHIN 24 HRS. ANY SEDIMENT DEPOSITS THAT REACH HALF THE HEIGHT OF THE FENCE SHALL BE REMOVED.

DUST CONTROL:

PERIODICALLY MOISTEN THE EXPOSED SOIL SURFACE TO KEEP TRAVELWAYS DAMP. AFTER THE TRAVELWAY HAS BEEN PAVED,PERIODIC SWEEPING MAY BE REQUIRED TO REMOVE DUST AND FINE MATERIALS ACCUMULATED FROM TRUCK TRAFFIC.

TREE PROTECTION:

TREES TO BE PROTECTED WILL BE IDENTIFIED AND CLEARLY MARKED. CONSTRUCTION ACTIVITIES WITHIN THE ADJACENT AREA THAT MAY CAUSE DAMAGE TO THE TREE SHALL BE LIMITED AND TRUNK ARMORING PROVIDED.

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
Surveyors and Engineers
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

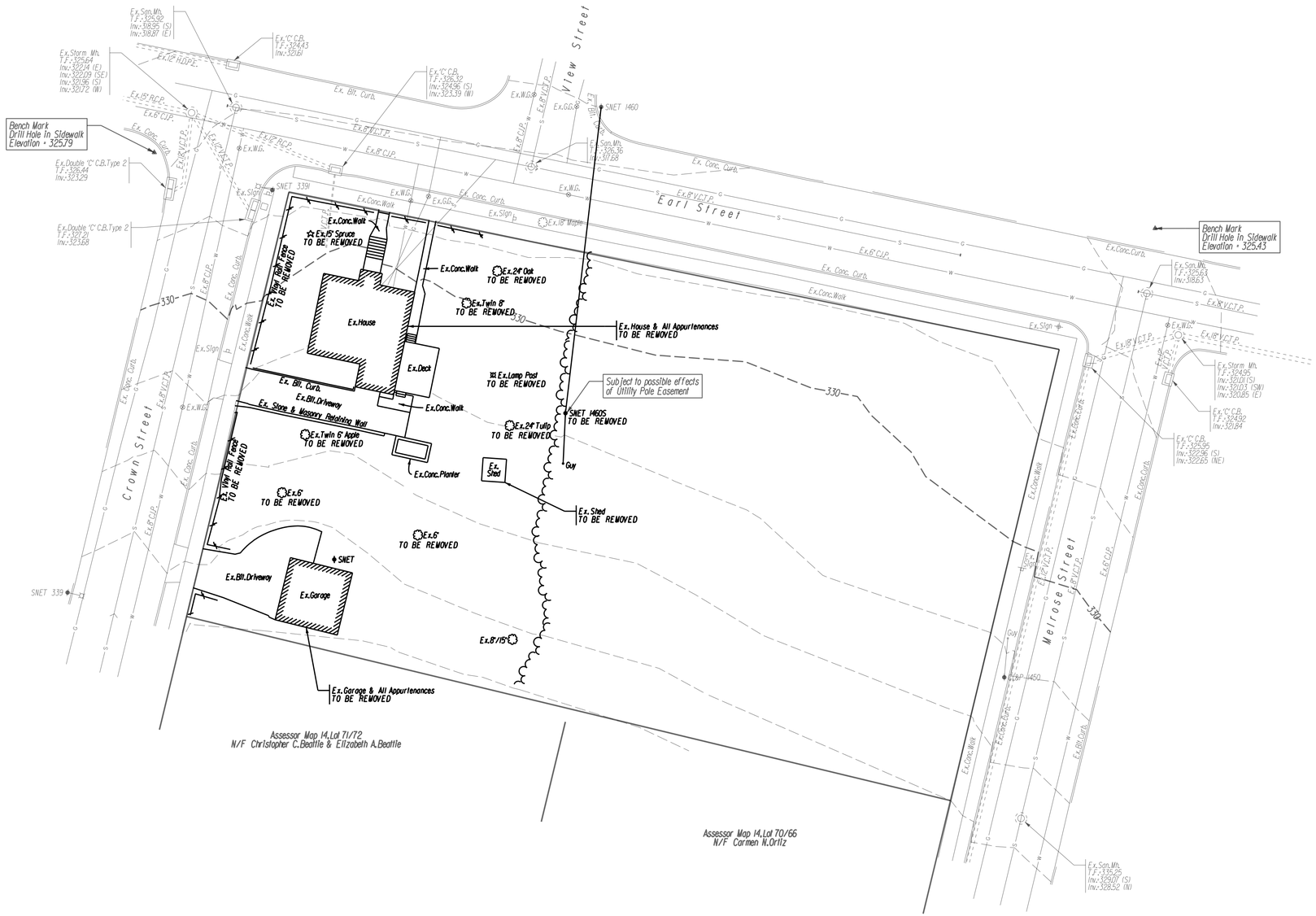
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

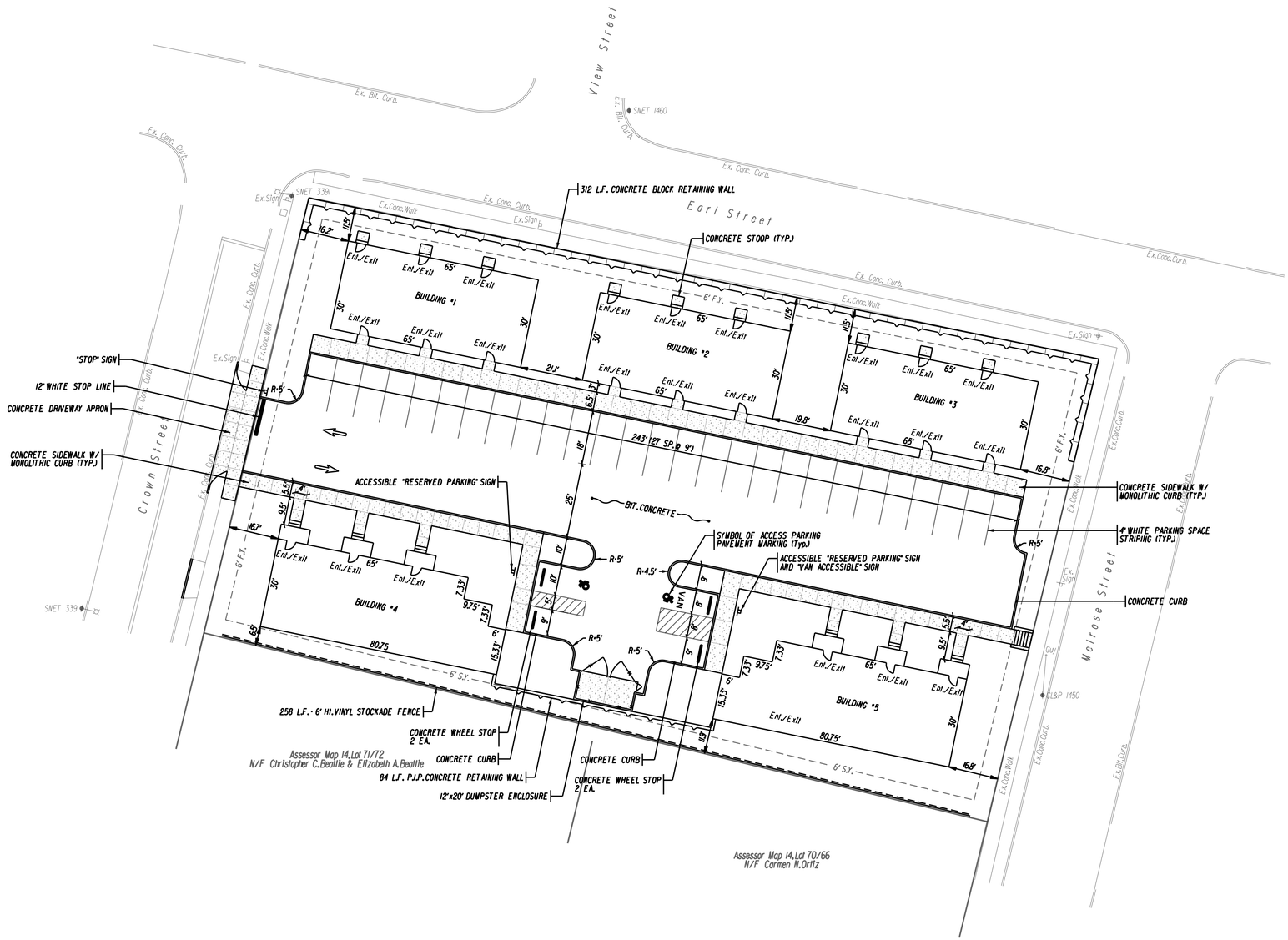
ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: NOTES-001

DRAWING TITLE: GENERAL NOTES

SHEET NO.: 3


Earl Street
View Street
Crown Street
Melrose Street
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.43
Ex.House
Ex.Deck
Ex.Garage
Ex.Shed
TO BE REMOVED
Ex.House & All Appurtenances
TO BE REMOVED
Ex.Garage & All Appurtenances
TO BE REMOVED
Subject to possible effects
of Utility Pole Easement
Ex.Conc.Walk
Ex.Bit.Driveway
Ex.Bit.Curb
Ex.Conc.Curb
Ex.Conc.Planter
Ex.Stone & Masonry Retaining Wall
Ex.15" Spruce
Ex.24" Oak
Ex.Twin 8"
Ex.Lamp Post
Ex.24" Tulip
SNET 1460S
Guy
Ex.Twin 6" Apple
Ex.Twin Yew Trees
Ex.6"
Ex.8"/15"
SNET 1460
SNET 3391
SNET 339
Ex.Sign
Ex.18" Maple
Ex.W.G.
Ex.G.G.
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Bit.Curb
Ex.Bit.Driveway
Ex.Stone & Masonry Retaining Wall
Ex.Conc.Planter
Ex.Garage
Ex.Shed
Ex.House
Ex.Deck
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb.
Ex.Conc.Walk
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

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6 Old Waterbury Rd. Terryville, CT. 06786
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Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

Joseph M. Green

STATE OF CONNECTICUT — JOSEPH M. GREEN — No. PEN.0029232 LICENSED PROFESSIONAL ENGINEER

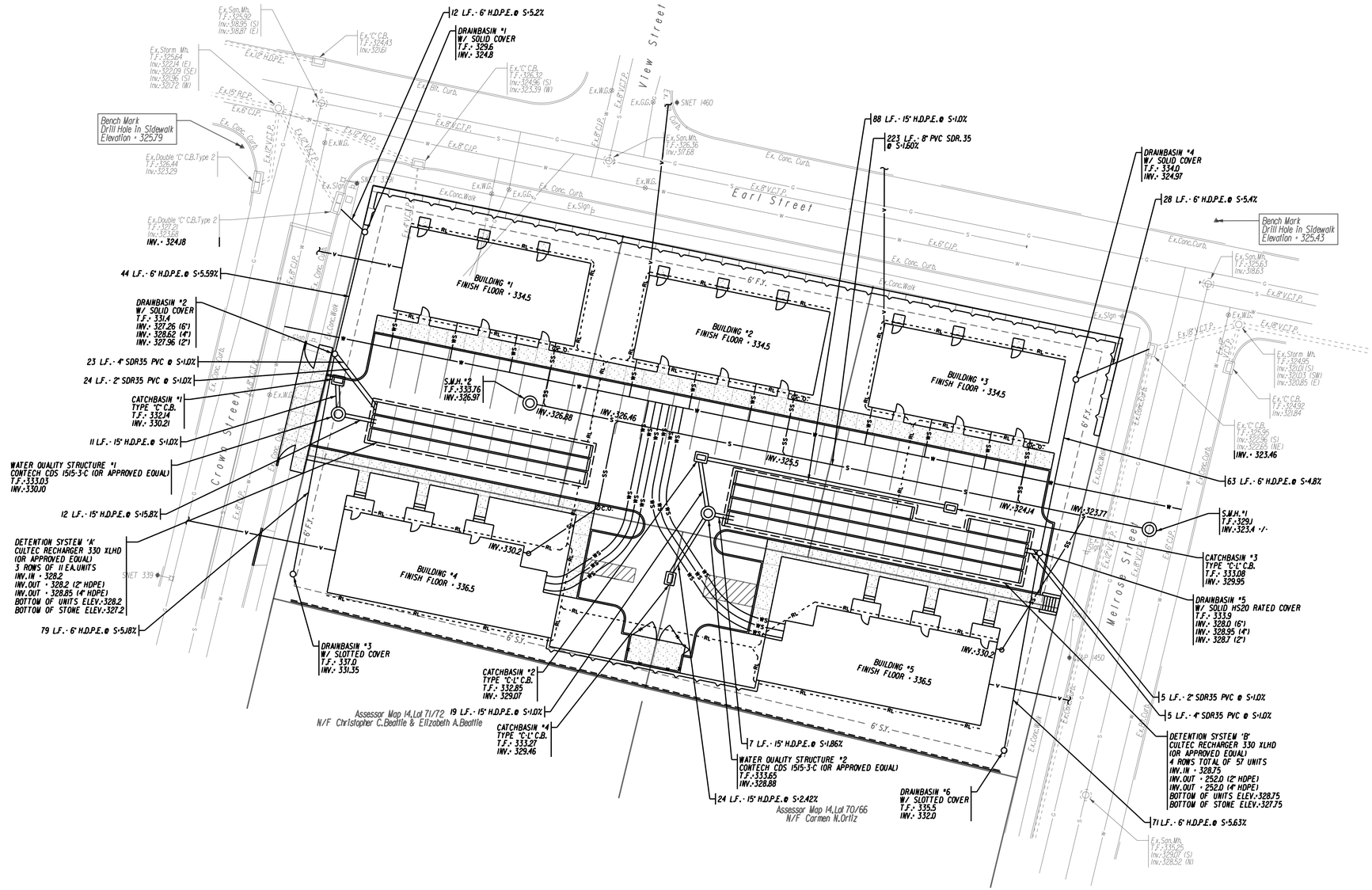
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

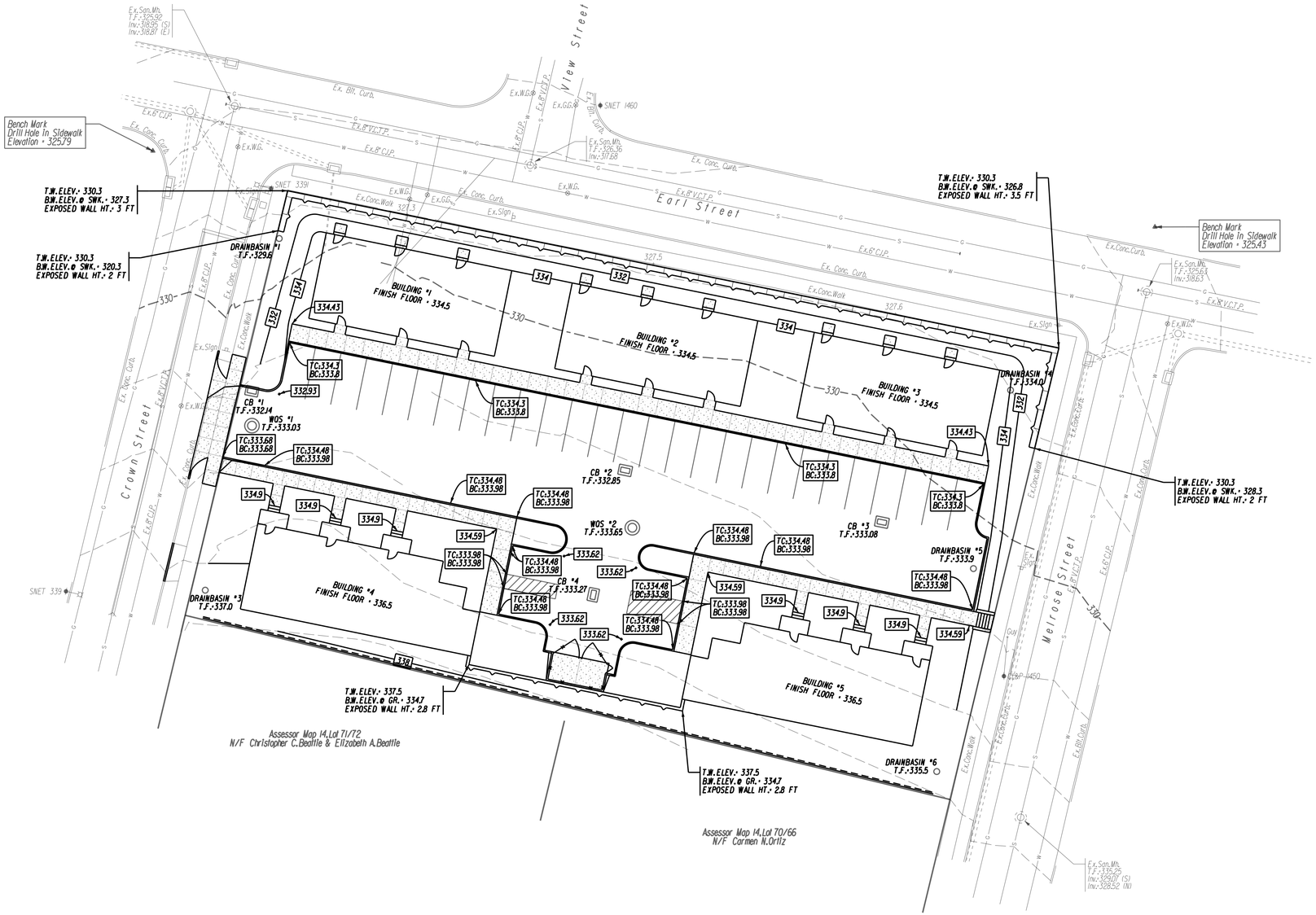
ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: PLN-001

DRAWING TITLE:
LAYOUT, SIGNS AND PAVEMENT MARKINGS PLAN

SHEET NO.: 5


Ex.San.Mh.
T.F.:326.92
Inv.:318.95 (S)
Inv.:318.87 (E)
Ex.'C' C.B.
T.F.:324.43
Inv.:320.61
Ex.Storm Mh.
T.F.:325.64
Inv.:322.14 (E)
Inv.:322.09 (SE)
Inv.:321.96 (S)
Inv.:322.72 (W)
Ex.12" H.D.P.E.
Ex.18" R.C.P.
Ex.8" C.I.P.
Ex.12" R.C.P.
Ex.8" V.C.T.P.
Ex.Conc. Curb
Ex.W.G.
Ex.Double 'C' C.B.Type 2
T.F.:326.44
Inv.:323.29
Ex.Double 'C' C.B.Type 2
T.F.:327.21
Inv.:321.58
INV.: 324.18
Bench Mark
Drill Hole In Sidewalk
Elevation = 325.79
SHET 338
Ex.Sign
Ex.Conc.Walk
Ex.G.C.
Ex.Blk. Curb.
Ex.W.G.
Ex.G.G.
Ex.8" C.I.P.
Ex.6" V.C.T.P.
Ex.6" C.I.P.
Ex.G.G.
SNET 1460
Ex.Conc. Curb
Ex.Sign
Ex.San.Mh.
T.F.:326.36
Inv.:317.68
Ex.Conc. Curb
Ex.W.G.
Ex.G.G.
Ex.Conc.Walk
Ex.Sign
Ex.Conc. Curb
Ex.Conc.Walk
Ex.Sign
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Walk
Ex.Conc.Curb
Ex.Conc.Curb
Ex.Conc.Curb



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
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Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT — JOSEPH M. GREEN — No. PE.N. 0026920 — LICENSED PROFESSIONAL ENGINEER

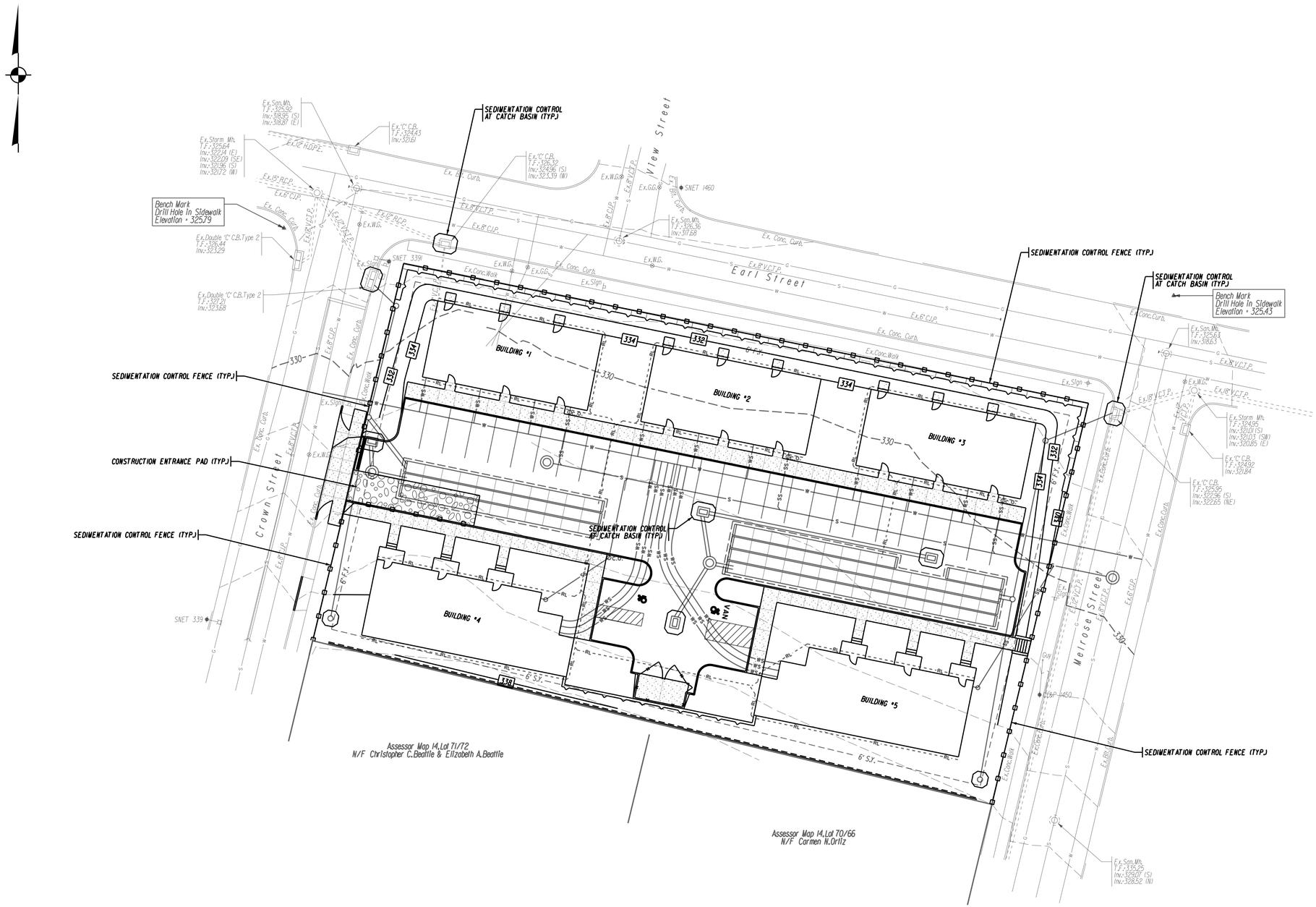
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69,
14/75/68 & 14/76/67

DRAWING NO.: GRA-001

DRAWING TITLE: GRADING PLAN

SHEET NO.: 7



REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

Robert Green Associates L.L.C.
Surveyors and Engineers
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Phone: (860)-589-0135 Fax: (860)-589-1342

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT — JOSEPH M. GREEN — No. PEN.0026232 — LICENSED PROFESSIONAL ENGINEER

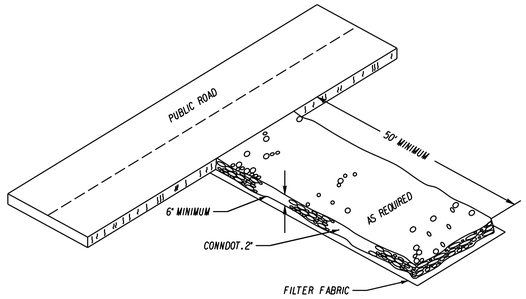
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

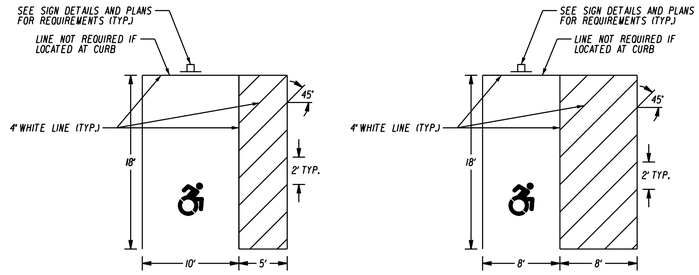
DRAWING NO.
E&S-001

DRAWING TITLE:
EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
8



CONSTRUCTION ENTRANCE PAD
NOT TO SCALE

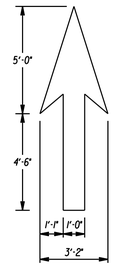


NOTE: IF A CAR AND VAN SPACE SHARE A COMMON ACCESS AISLE, THAT AISLE SHALL BE 96 INCHES MINIMUM IN WIDTH

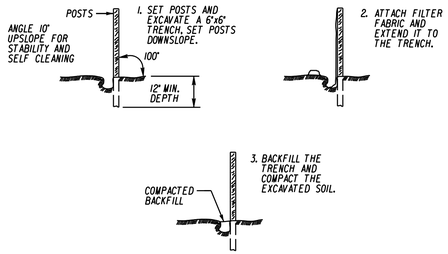
PARKING STALLS FOR HANDICAPPED
NOT TO SCALE



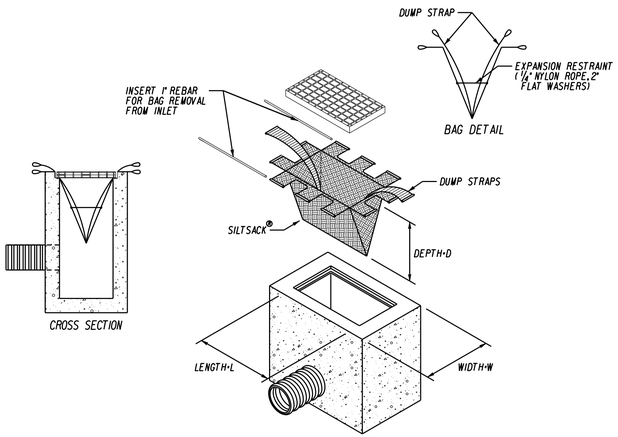
SYMBOL OF ACCESS PARKING SPACE MARKING
(TO COMPLY WITH CT.PA.#16-78)
NOT TO SCALE



PAVEMENT ARROW DETAIL (WHITE)
NOT TO SCALE



PLACEMENT AND CONSTRUCTION OF A SEDIMENTATION CONTROL FENCE
NOT TO SCALE



SEDIMENTATION CONTROL AT CATCH BASIN
NOT TO SCALE

SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS

RESERVED PARKING
PERMIT REQUIRED
VIOLATORS WILL BE TOWED AT OWNER'S EXPENSE

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	12X24		1	.080

VAN ACCESSIBLE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
	12X6	31-0648		.080

R1-1

STOP

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.19	30	31-0552	1	.080

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

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6 Old Waterbury Rd. Terryville, CT. 06786
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Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

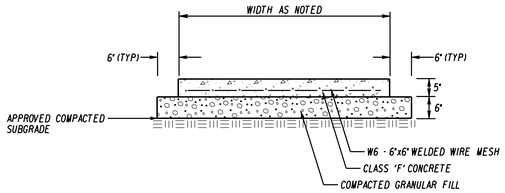
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.
MISC-001

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

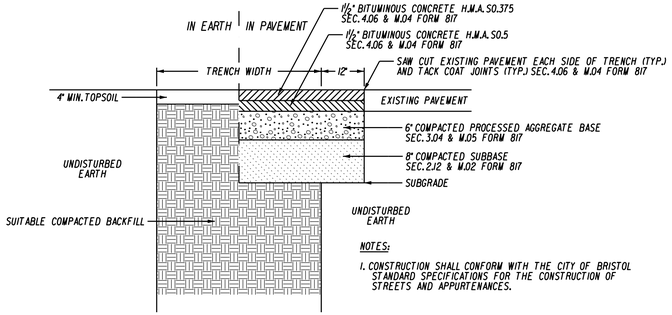
SHEET NO.
9



NOTES:

1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.
5. WHEN APPLICABLE, MAINTAIN ¼" PER 1'-0" MAX. CROSS SLOPE TOWARDS GUTTER.

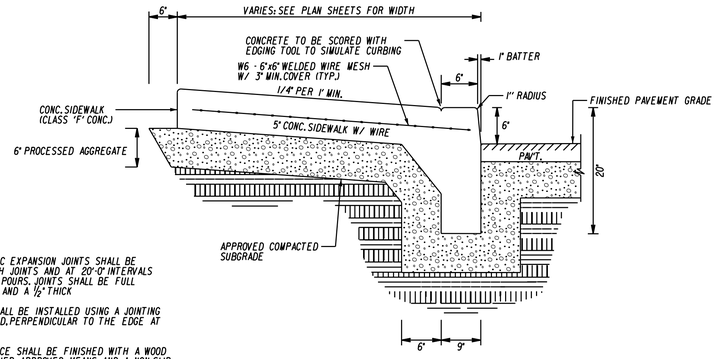
CONCRETE SIDEWALK SECTION
NOT TO SCALE



NOTES:

1. CONSTRUCTION SHALL CONFORM WITH THE CITY OF BRISTOL STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF STREETS AND APPURTENANCES.

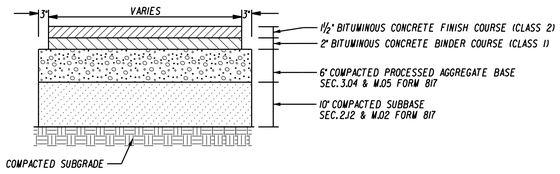
TRENCH RESTORATION DETAIL
NOT TO SCALE



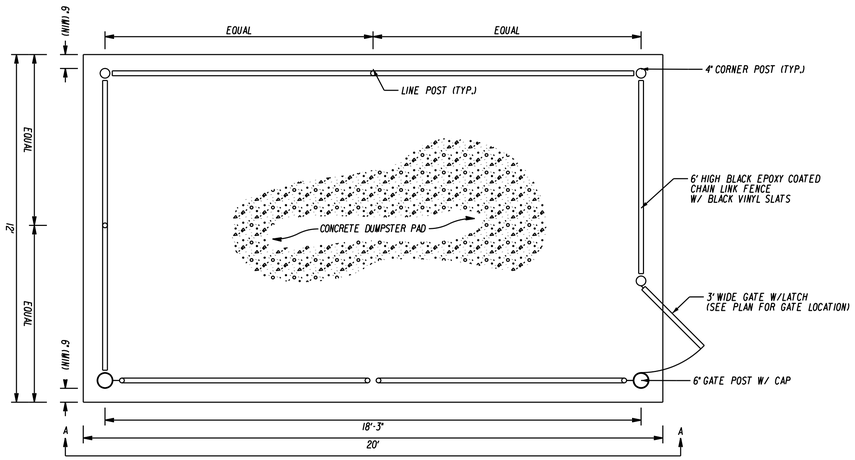
W/ 6" CURB REVEAL

NOTES:

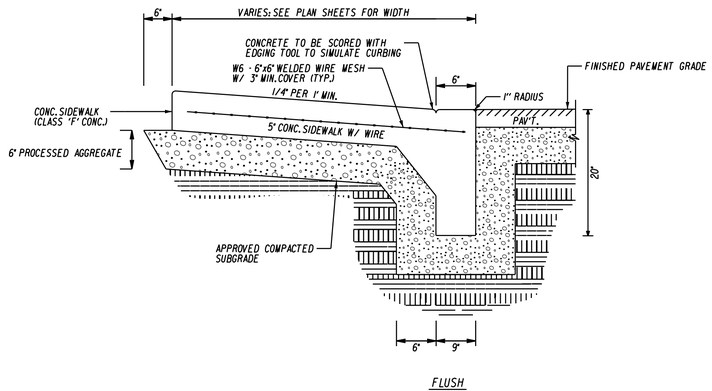
1. PREMOLDED MASTIC EXPANSION JOINTS SHALL BE PLACED AT MATCH JOINTS AND AT 20'-0" INTERVALS FOR CONTINUOUS POURS. JOINTS SHALL BE FULL DEPTH OF POUR AND A ½" THICK
2. DUMMY JOINTS SHALL BE INSTALLED USING A JOINTING TOOL AS DIRECTED, PERPENDICULAR TO THE EDGE AT 5'-0" ON CENTER.
3. CONCRETE SURFACE SHALL BE FINISHED WITH A WOOD FLOAT OR BY OTHER APPROVED MEANS AND A NON-SLIP LIGHT BROOM FINISH APPLIED PERPENDICULAR TO THE EDGE OF WALK.
4. OUTSIDE EDGES AND ALL JOINTS SHALL BE EDGED WITH A ¼" RADIUS EDGING TOOL.



BITUMINOUS CONCRETE DRIVEWAY AND PARKING LOT PAVEMENT SECTION
NOT TO SCALE

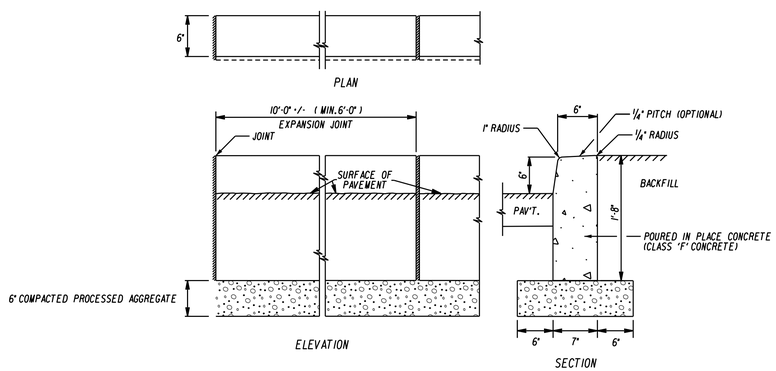


PLAN

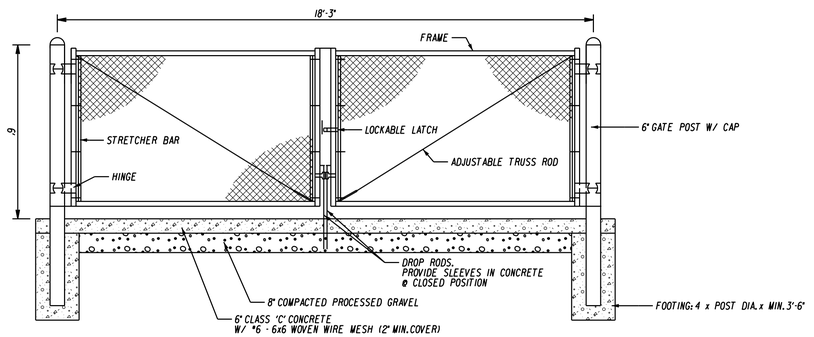


FLUSH

MONOLITHIC CONRETE CURB AND SIDEWALK
NOT TO SCALE



CONCRETE CURBING
NOT TO SCALE



SECTION A-A

DUMPSTER PAD DETAIL
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C
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ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0020232 LICENSED PROFESSIONAL ENGINEER

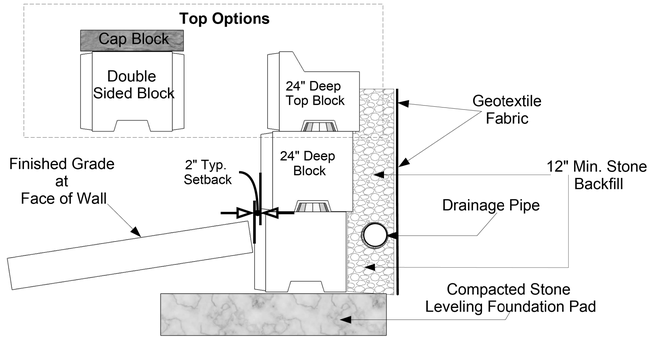
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-002

DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

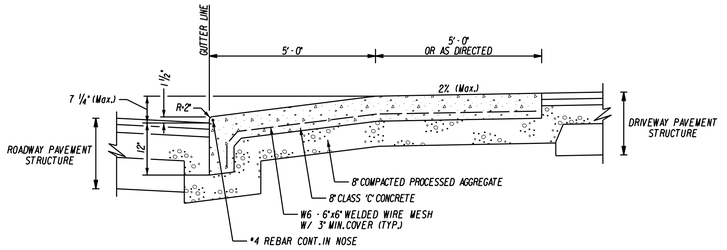
SHEET NO.: 10



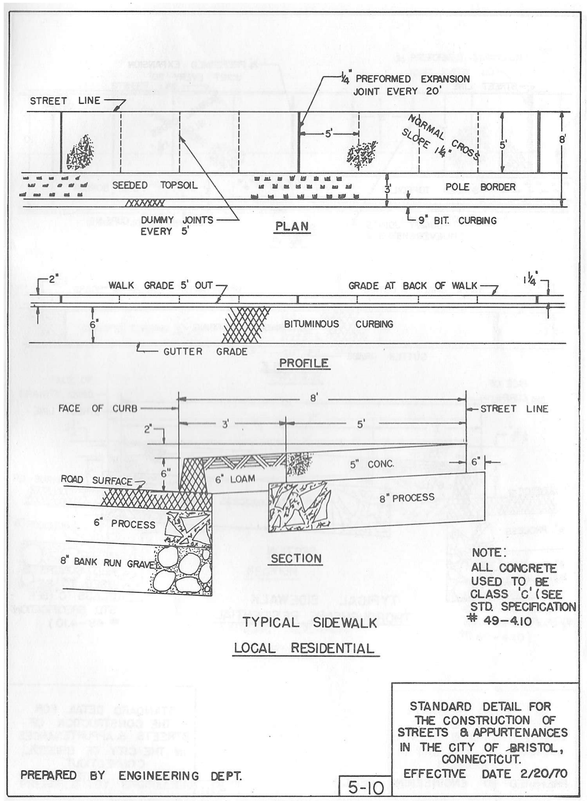
ATLAS CONCRETE PRODUCTS
www.AtlasConcrete.com
65 Burritt St. 800-774-1112
New Britain CT 06053 860-224-2244
860-224-2255 Fax

ATLAS CONCRETE PRODUCTS

Atlas Retaining Wall
Typical Section
6' Height Wall



CONCRETE APRON SECTION
(NOT TO SCALE)

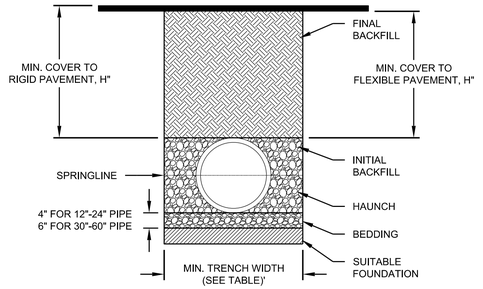


TYPICAL SIDEWALK
LOCAL RESIDENTIAL

PREPARED BY ENGINEERING DEPT.

5-10

STANDARD DETAIL FOR THE CONSTRUCTION OF STREETS & APPURTENANCES IN THE CITY OF BRISTOL, CONNECTICUT.
EFFECTIVE DATE 2/20/70



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *
12" - 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLASS II		CLASS III
	COMPACTED	DUMPED	95%	90%	95%
4" (100mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
6" (150mm)	40 (12.2m)	19 (5.8m)	27 (8.2m)	19 (5.8m)	20 (6.1m)
8" (200mm)	30 (9.1m)	14 (4.3m)	21 (6.4m)	14 (4.3m)	15 (4.6m)
10" (250mm)	34 (10.4m)	16 (4.9m)	23 (7.0m)	16 (4.9m)	17 (5.2m)
12" (300mm)	35 (10.7m)	17 (5.2m)	24 (7.3m)	17 (5.2m)	18 (5.5m)
15" (375mm)	37 (11.3m)	18 (5.5m)	25 (7.6m)	18 (5.5m)	19 (5.8m)
18" (450mm)	32 (9.8m)	15 (4.6m)	22 (6.7m)	15 (4.6m)	16 (4.9m)
24" (600mm)	27 (8.2m)	13 (4.0m)	19 (5.8m)	13 (4.0m)	14 (4.3m)
30" (750mm)	22 (6.7m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	11 (3.4m)
36" (900mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)
42" (1050mm)	24 (7.3m)	11 (3.4m)	17 (5.2m)	11 (3.4m)	12 (3.7m)
48" (1200mm)	23 (7.0m)	11 (3.4m)	16 (4.9m)	11 (3.4m)	12 (3.7m)
60" (1500mm)	26 (7.9m)	12 (3.7m)	18 (5.5m)	12 (3.7m)	13 (4.0m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE,
UNIT WEIGHT OF SOIL (Ys) = 120 PCF

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

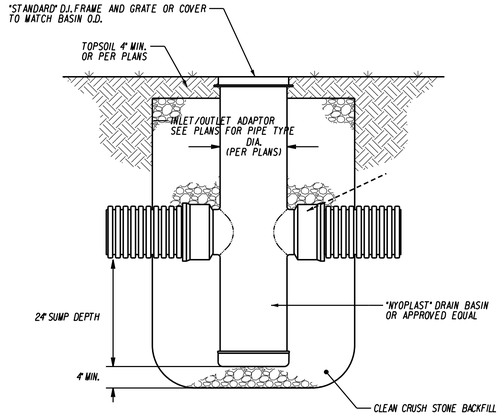
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDINGTO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

TYPICAL TRENCH DETAIL FOR HDPE PIPE
NOT TO SCALE



YARD DRAIN
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024
SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Phone: (860)-589-0135
Terryville, CT 06786 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. PEN.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-003

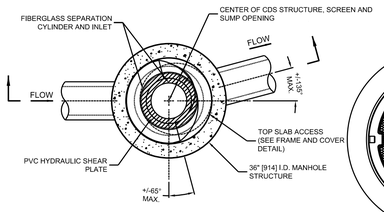
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 11

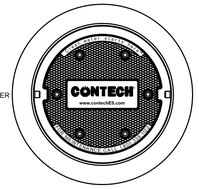
CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1,0 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.



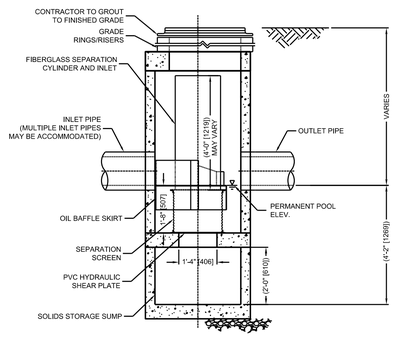
PLAN VIEW B-B
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #1
WATER QUALITY FLOW RATE (cfs [L/s])			0,08 cfs
PEAK FLOW RATE (cfs [L/s])			2,23 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			333,03
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	330,10	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	330,10	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			WQS #2
WATER QUALITY FLOW RATE (cfs [L/s])			0,31 cfs
PEAK FLOW RATE (cfs [L/s])			2,08 cfs
RETURN PERIOD OF PEAK FLOW (yrs)			25 yr
RIM ELEVATION			333,65
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1	328,88	HDPE	15"
INLET PIPE 2			
OUTLET PIPE	328,88	HDPE	15"
NOTES / SPECIAL REQUIREMENTS:			



ELEVATION A-A
N.T.S.

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENTS 5,788,848 AND 6,641,720, RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C
ONLINE CDS
STANDARD DETAIL

M:\STORMWATER\JA\RSC\CTOWN\SJA\MAIN_SJDE DESIGN TOOLS_STANDARD DETAILS\CDS\CDS1515-3-C-DTL.DWG 8/6/2018 4:16 PM

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN 17178 REGISTERED No. PEN.0028232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT:
14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-004

DRAWING TITLE:
MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 12

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATIONS

GENERAL

CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS
6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE.
8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT³ / FT (0.693 m³ / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT³ / UNIT (1.478 m³ / UNIT) - WITHOUT STONE.
11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS.
14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLRHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLSHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS
21. THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION
23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION.
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m)
27. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL

CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

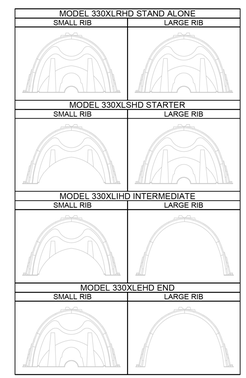
CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

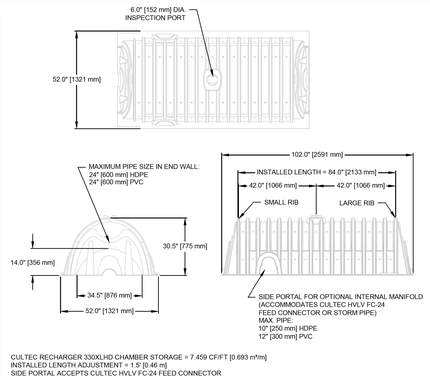
GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

330XLHD 1.0

GENERAL NOTES

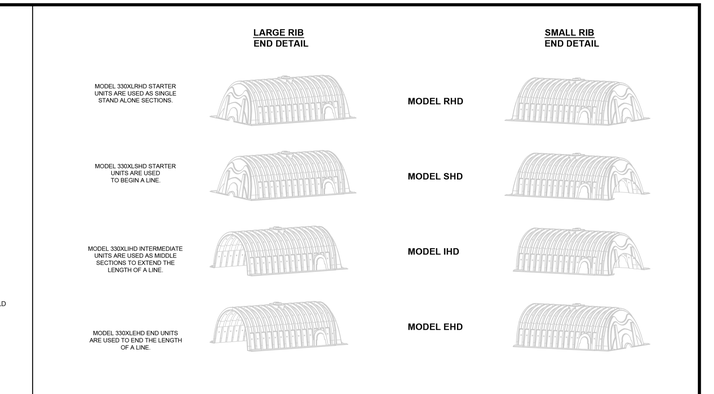




CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.459 CF/FT [0.693 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR

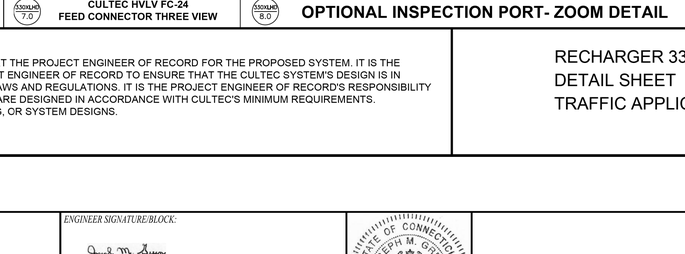
330XLHD 2.0

CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW



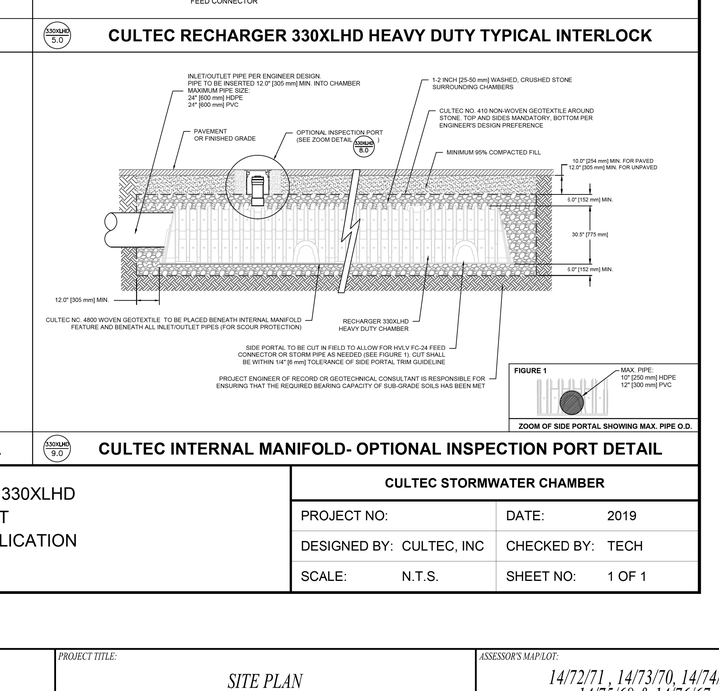
330XLHD 3.0

CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION



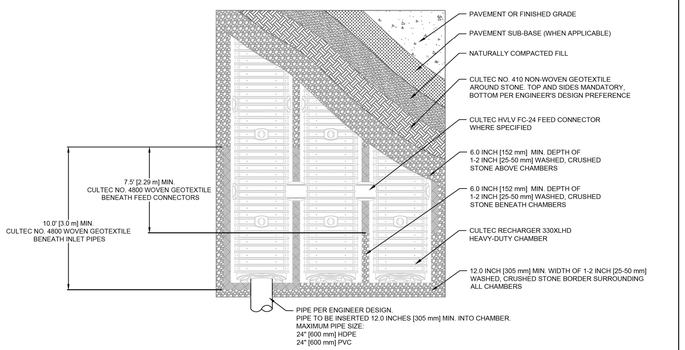
330XLHD 4.0

CULTEC RECHARGER 330XLHD HEAVY DUTY CROSS SECTION



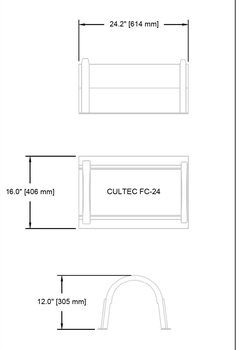
330XLHD 5.0

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK



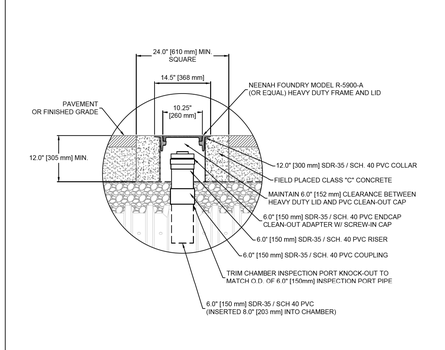
330XLHD 6.0

CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW



330XLHD 7.0

CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



330XLHD 8.0

OPTIONAL INSPECTION PORT- ZOOM DETAIL

330XLHD 9.0

CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL

TM
CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280
878 Federal Road
Brookfield, CT 06804
www.cultec.com
PH: (203) 775-4416
PH: (800) 4-CULTEC
FX: (203) 775-1462
tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER

PROJECT NO:		DATE:	2019
DESIGNED BY:	CULTEC, INC	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 1

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: AS NOTED

Robert Green Associates L.L.C.
6 Old Waterbury Rd. Terryville, CT. 06786
Phone: (860)-589-0135 Fax: (860)-589-1342
Surveyors and Engineers

ENGINEER SIGNATURE/BLOCK:

STATE OF CONNECTICUT JOSEPH M. GREEN No. P.E.N.0026232 LICENSED PROFESSIONAL ENGINEER

PROJECT TITLE:

SITE PLAN

ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

DRAWING NO.: MISC-005

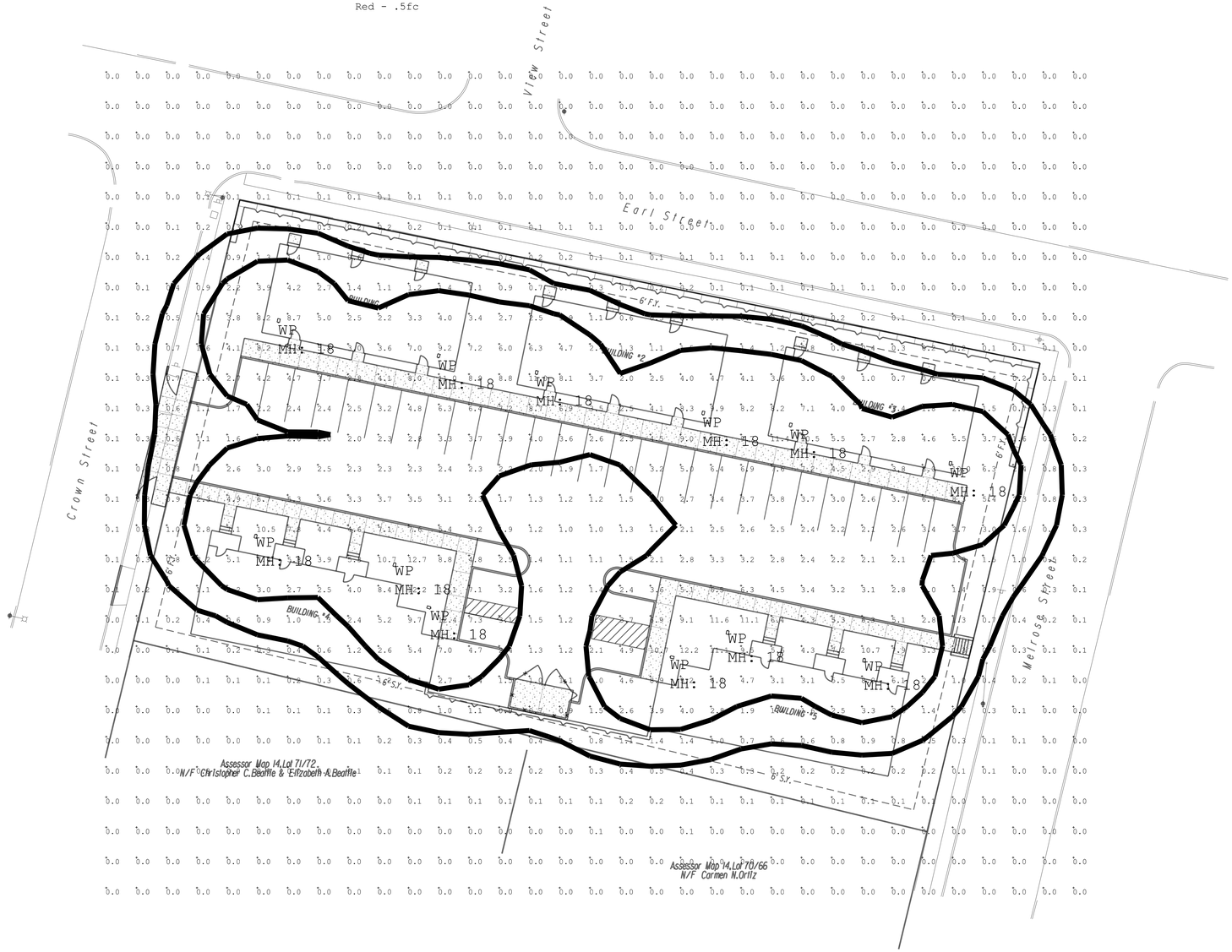
DRAWING TITLE: MISCELLANEOUS NOTES AND DETAILS

SHEET NO.: 13

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	12	WP	SINGLE	WPC100UT4-WCSBPCCR

Designed by Wattsaver Lighting - JC

Blue - 2fc
Red - .5fc



LIGHTING NOTES:

1. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES WHICH WAY BE IN CONFLICT WITH THE INDICATED LAYOUT. ANY CONFLICTS WHICH WAY OCCUR SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE LOCATIONS CAN BE DETERMINED.
2. ALL LIGHTS WILL BE PROVIDED WITH INTERNAL CUTOFFS TO PREVENT LIGHT TRESSPASS ONTO ADJOINING PROPERTIES.

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE:
SCALE IN FEET 0 20 40 — SCALE 1"=20'

Greg Cate
Wattsaver Lighting Products
22 Thomas Street
East Hartford, CT 06108
Phone: 860-282-1818
Website: www.wattsaverlighting.com

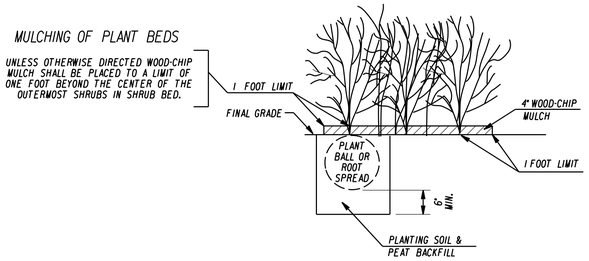
PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

ASSESSOR'S MAP/LOT: 14/72/71 , 14/73/70, 14/74/69, 14/75/68 & 14/76/67

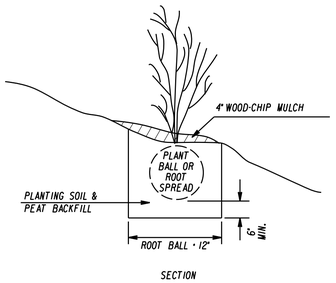
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DRAWING TITLE: LIGHTING PLAN

SHEET NO.: L1.0



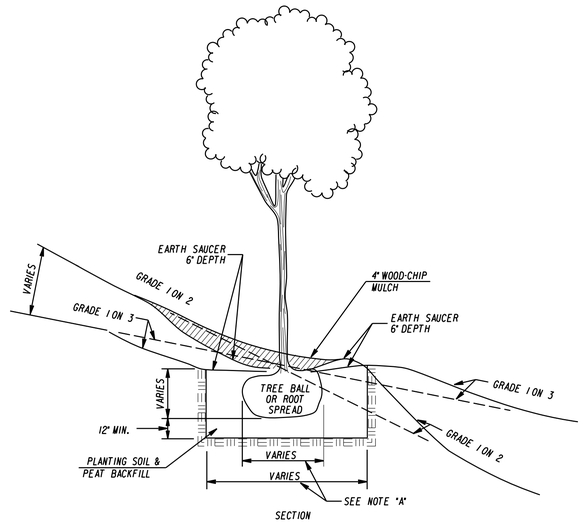
SHRUB PLANTING IN BEDS



SHRUB PLANTING

LANDSCAPE NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM AND SEED.
2. PROVIDE A APPROVED WEED BARRIER UNDER ALL BARK MULCH
3. THE CONTRACTOR SHALL LOCATE,VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILIITES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH WAY OCCUR BETWEEN PLANTING AND UTILITIES SHALL BE IMMDEATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
4. PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND ACCEPTANCE AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.
5. FINAL QUANTITIES AND SPACING MAY BE MODIFIED AS NEEDED BY THE LANDSCAPE INSTALLER.
6. PLANT SPECIES MAY NEED TO BE SUBSTITUTED WITH AN EQUIVALENT SPECIES DUE TO AVAILABILITY AT THE TIME OF INSTALLATION.



TREE PLANTING



Planting Key

Key	Quantity	Botanical Name Common Name	Size	Condition	Notes
AV	8	Thuja Occidentals Emerald Arborvitae	4 Foot	Height	
BP	4	Pyrus Calleryana "Bradford" Bradford Pear	2" - 2 1/2"	Caliper	
AZ	2	Rododendron / Robelzea Autumn Bonfire Azalea / Deleware Wine Valley Azalea	3	Gallon	
BW	8	Buxus Horizontalis Japonic Japanese Boxwood	#2	Container	

REV.	DATE	REVISION DESCRIPTION

DATE: MAY 1, 2024

SCALE: SCALE IN FEET 0 20 40 — SCALE 1"=20'

DPS DEVELOPMENT PLANNING SOLUTIONS LLC

Charlie Talmadge
Development Planning Solutions LLC
225 North Main Street, Suite 207
Bristol, CT 06010
Phone: 860-506-4268
Website: www.developmentplanningsolutions.com

PROJECT TITLE:
SITE PLAN
ECM GARDENS
EARL STREET, MELROSE STREET & CROWN STREET
BRISTOL, CONNECTICUT

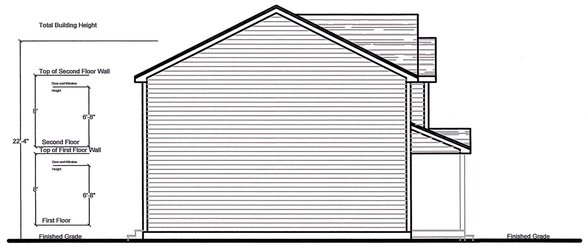
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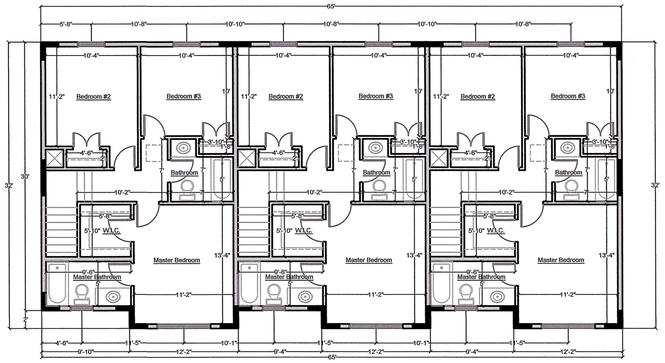
DRAWING TITLE: LANDSCAPE PLAN

SHEET NO.: L2.0

Elevation Drawings and Floor Plans Dated: 5/1/24



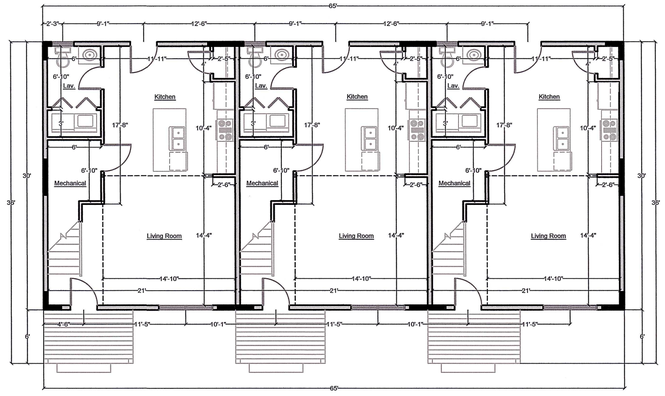
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 1
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET

Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
Jan. 16, 2023	
Mar. 14, 2023	

Drawing Index

A.1	Schematic Design	A.6	
A.2		A.7	
A.3		A.8	
A.4		A.9	
A.5		A.10	

Code Data

The basis for design is the following:

2021 International Residential Code for One and Two Family Dwellings
2022 CT Supplement
2021 IECC
(ResCheck Software Version 4.7.2.0)

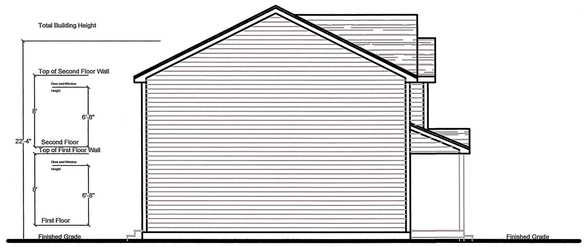
The General Contractor and all Sub Contractors shall comply with all Local, State, and Federal Building Codes and Regulations as applicable

Schematic Design

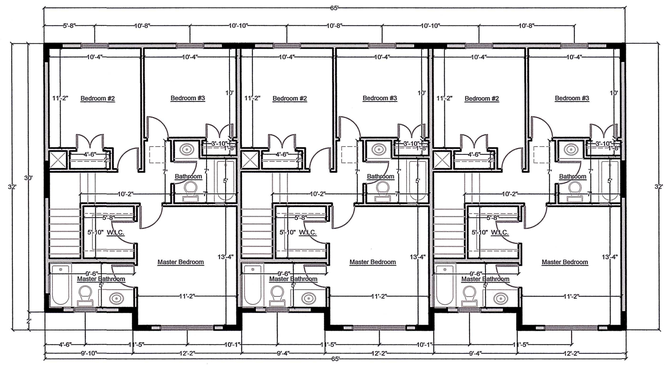
Scale
$\frac{1}{8}" = 1'-0"$

Sheet
A.1

D|P|S
Development Planning Solutions LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



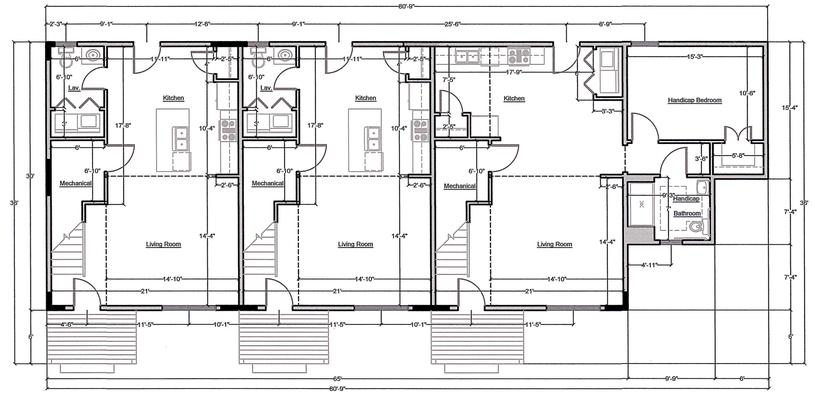
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 2
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET

Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
Jan. 16, 2023	
Mar. 14, 2023	
June 5, 2023	

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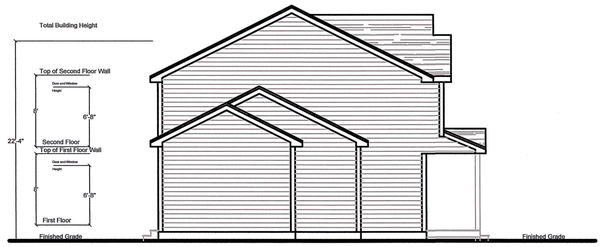
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Schematic Design

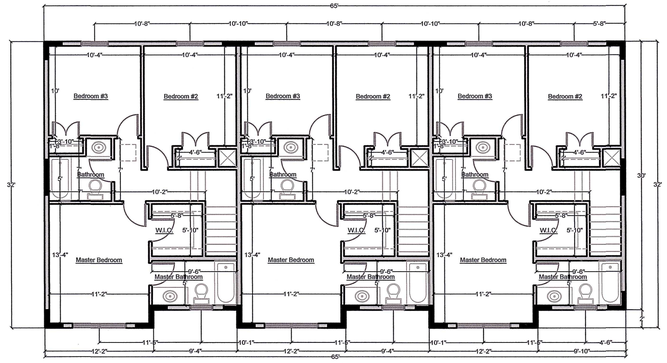
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SHEET
A.1

D|P|S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268



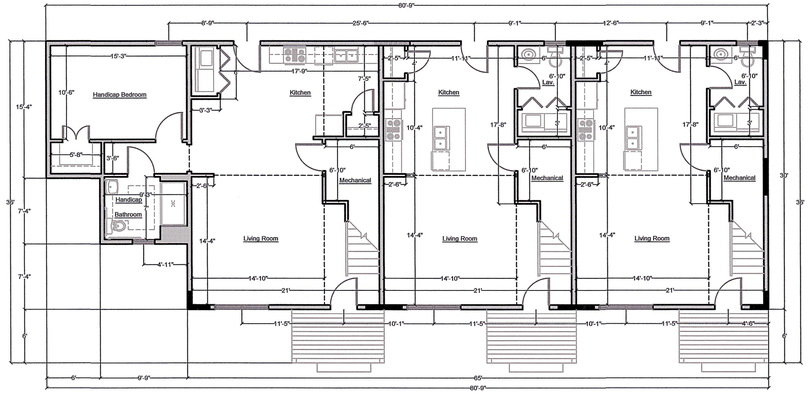
Side Elevation



Second Floor Plan



Front Elevation



First Floor Plan

Attached Single Family Residences
Building 3
Earl Street
Bristol Connecticut

DPS_CLIENTS_J NIMAN LLC_BRISTOL_EARL STREET

Project Number 2022-07

Issue Date
Oct. 30, 2022

Revisions

Jan. 12, 2023	Mar. 19, 2024
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Code Data

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2021 IECC
(ResCheck Software Version 4.7.2.0)

The General Contractor and all Sub Contractors shall comply with all Local, State, and Federal Building Codes and Regulations as applicable

Schematic Design

SCALE
$\frac{1}{8}$" = 1'-0"

SHEET
A.1

D|P|S
DEVELOPMENT PLANNING SOLUTIONS LLC
225 North Main Street
Suite 207
Bristol Connecticut
(860)506-4268

For Office Use Only	
APPLICATION NO.	2498
DATE FILED:	5/2/24
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR CHANGE OF ZONE

The undersigned Applicant hereby petitions the Bristol Zoning Commission to hold a public hearing to hear and consider the proposed zone change requested herein for the Property described below.

Present zone of the Property: R-15 Proposed zone of the Property: A

Address or Location of the Property: east of Old Wolcott Road and south of Wolcott Street

Assessor's Map No.: 7 Assessor's Lot No.(s): Lots 45, 44, 44-1,44-2

Size of the Property (in acres or square feet): 3.89 Acres Extension of a like zone? [✓] yes [ ] no

Minimum lot area requirement of the proposed zone: 2 Acres

Reason for the proposed zone change:
In Accordance with the 2018 Plan of Conservation and Development Section 10.3.3 Housing Mix, this application seeks to promote the creation of new modern housing opportunities for young adults and families.

Other comments:

APPLICANT (If more than one, list on Page 2)

Name: Crown Estates LLC

Address: 22 Pine Street City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 250-7784 E-Mail: laurettico@aol.com

Signature: Mark A Lauretti Signature – (Printed/Typed) Mark Lauretti

CHECK ONE: [✓] owner [ ] other (specify):

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: Same as Applicant

Address: City: State: Zip:

Telephone No.: E-Mail:

Signature: Mark A Lauretti Signature – (Printed/Typed) Mark A. Lauretti

*not applicable for zone changes initiated by the Zoning Commission itself

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2498

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: east of Old Wolcott Road and south of Wolcott Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Development Planning Solutions LLC

Address: 225 North Main Street Suite 207 City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 506-4268 E-Mail: charlie@developmentplanningsolutions.com

08/17 - LUO

For Office Use Only
APPLICATION NO. 2498

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: east of Old Wolcott Road and south of Wolcott Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Attorney Timothy Furey

Address: 43 Bellevue Avenue City: Bristol State: Ct Zip: 06010

Telephone No.: (860) 589-4343 E-Mail: tfurey@fureydonovan.com

08/17 - LUO

Referral Letters

City of Bristol

BRISTOL, CONNECTICUT 06010
Planning Commission

DATE: May 21, 2024

TO: Bristol Zoning Commission

FROM: Bristol Planning Commission

RE: App. #2498 – Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone at east of Old Wolcott Road and south of Wolcott Street; Map 7, Lot 45 (Old Wolcott Road) and Assessor's Map 7, Lots 44-2, 44-1 & 44 (Wolcott Street); Crown Estates, LLC, applicant

The Planning Commission, at its Regular Meeting of May 20, 2024, voted to recommend the approval of the above zoning text amendment application with the following positive referral motion:

"To send a positive referral to the Zoning Commission for App. #2498 Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone.

The Planning Commission finds that the proposed zoning map amendment, as presented, would be generally consistent with the goals and policies of the 2015 Plan of Conservation and Development (POCD), amended to April 1, 2018."

For questions or additional information, please contact:
City Planner – Robert M. Flanagan, AICP – City of Bristol Land Use Office at 860-584-6225.

City of Bristol

BRISTOL, CONNECTICUT 06010

Zoning Commission

DATE: May 8, 2024

TO: Bristol Planning Commission

FROM: Bristol Zoning Commission

Re: Referral of Proposed Map Amendment

Pursuant to Section 8-3a of the Connecticut General Statutes, as amended, and Section XII.E.3.a. of the Bristol Zoning Regulations, the following proposed amendment to the Zoning Map is hereby referred to the Planning Commission for a report:

Application #2498

Proposal: Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone at east of Old Wolcott Road and south of Wolcott Street; Map 7, Lot 45 (Old Wolcott Road) and Assessor's Map 7, Lots 44-2, 44-1 & 44 (Wolcott Street).

Initiated by: Crown Estates, LLC

Tentative Hearing Date: June 10, 2024

City Planner – Robert Flanagan – City of Bristol Land Use Office at 860-584-6225.

Enclosure

City of Bristol

BRISTOL, CONNECTICUT 06010

Zoning Commission

DATE: May 8, 2024

TO: Town and City Clerk - Bristol

FROM: Bristol Zoning Commission

Re: Referral of Proposed Map Amendment

Pursuant to Section 8-3(d) of the Connecticut General Statutes, as amended, the following proposed amendment to the Zoning Map is hereby referred to your office:

Application #2498

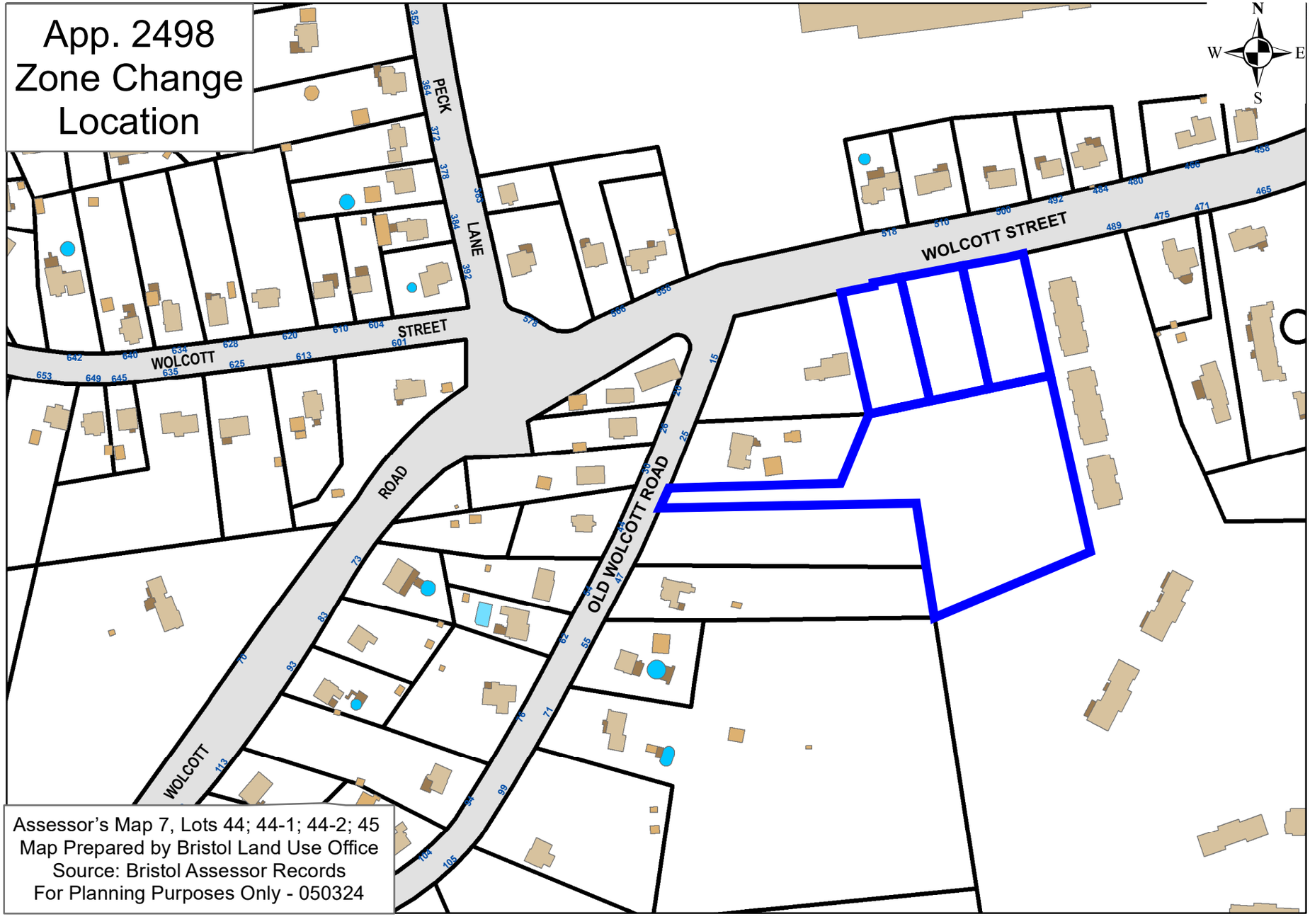
Proposal: Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone at east of Old Wolcott Road and south of Wolcott Street; Map 7, Lot 45 (Old Wolcott Road) and Assessor's Map 7, Lots 44-2, 44-1 & 44 (Wolcott Street).

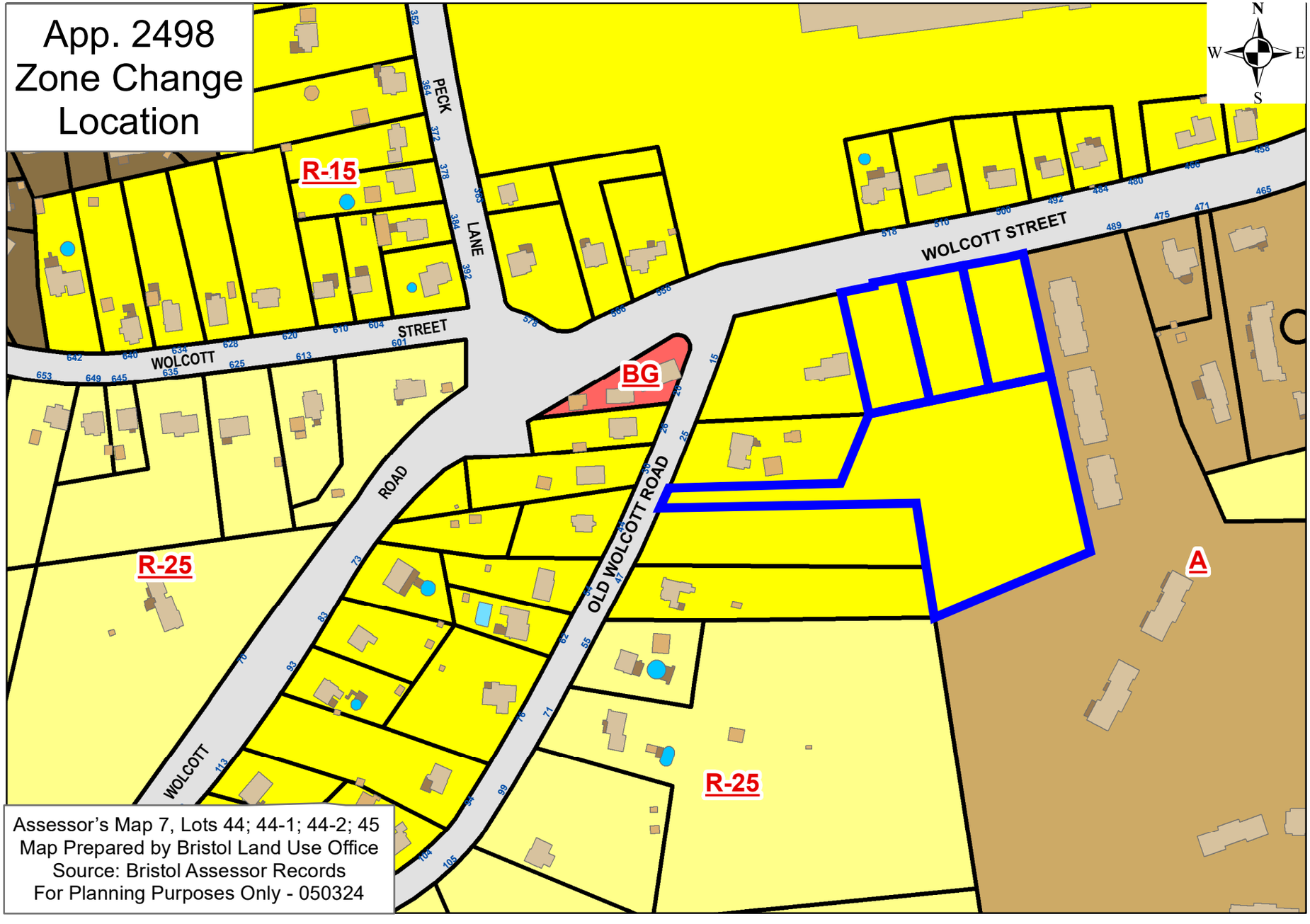
Initiated by: Crown Estates, LLC

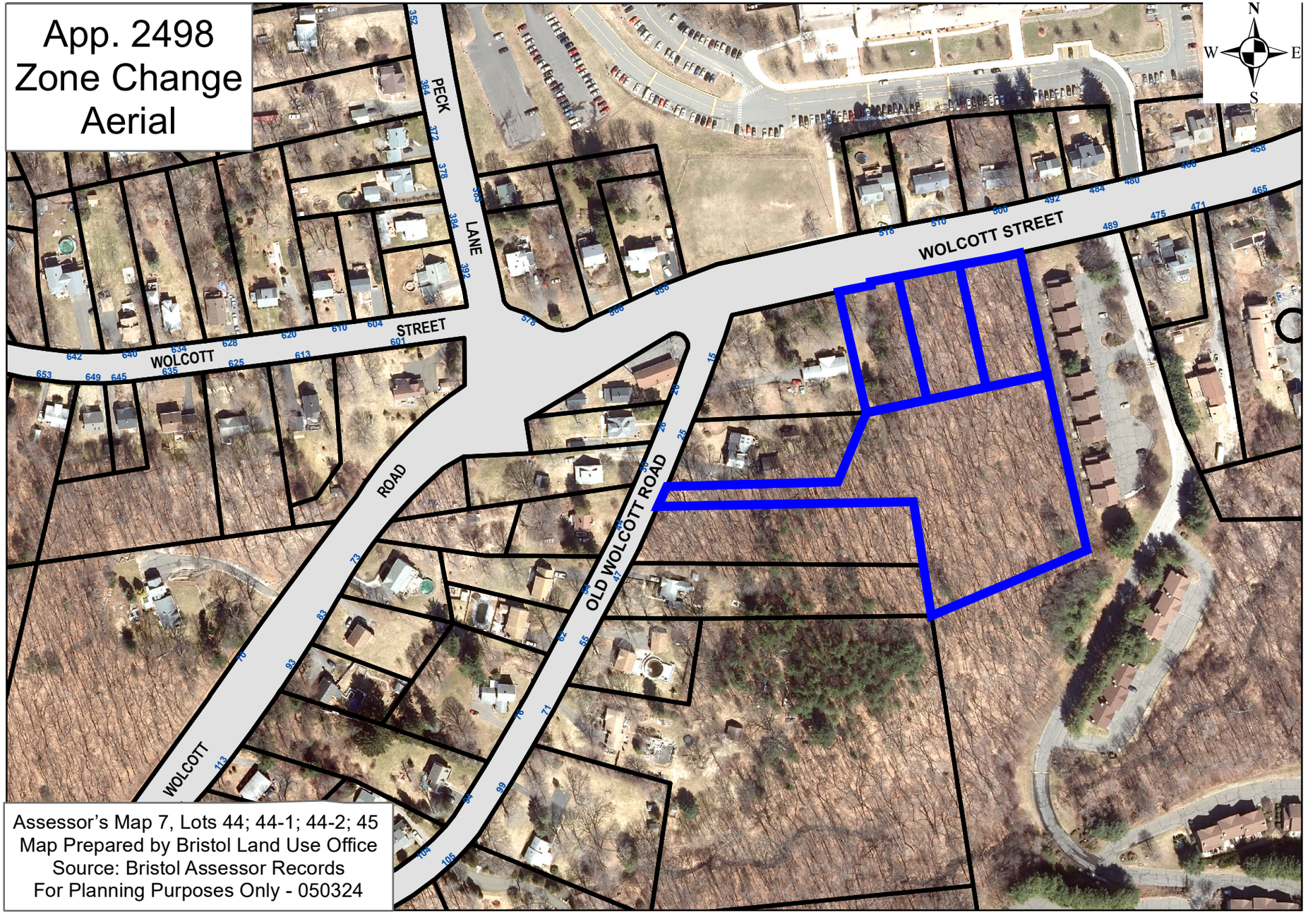
Tentative Hearing Date: June 10, 2024

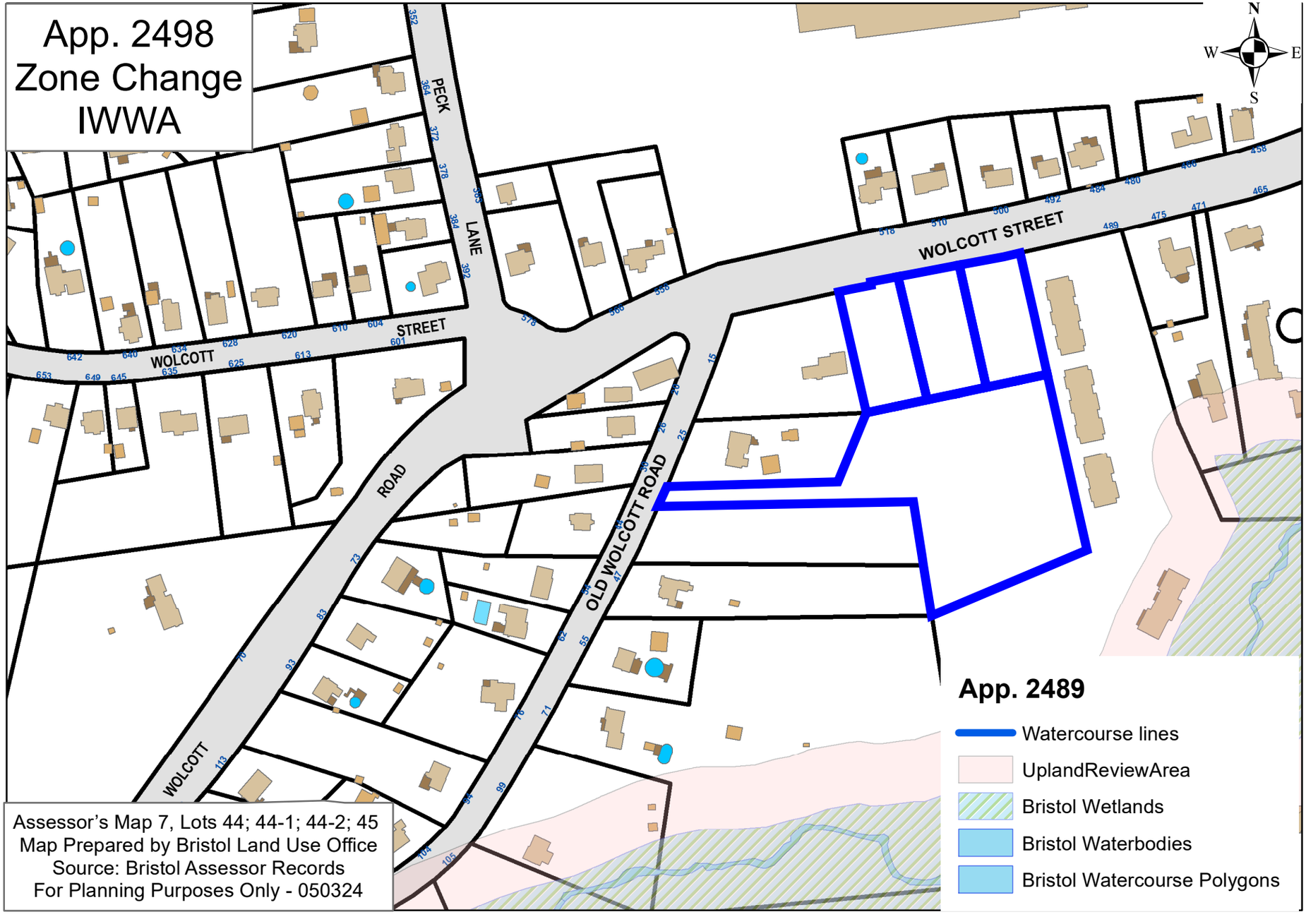
City Planner – Robert Flanagan – City of Bristol Land Use Office at 860-584-6225.

Enclosure


App. 2498
Zone Change
Location
N
W
E
S
PECK LANE
WOLCOTT STREET
WOLCOTT STREET
OLD WOLCOTT ROAD
WOLCOTT ROAD
Assessor's Map 7, Lots 44; 44-1; 44-2; 45
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 050324


App. 2498
Zone Change
Location
N
W
E
S
R-15
PECK
LANE
WOLCOTT STREET
WOLCOTT
STREET
BG
ROAD
OLD WOLCOTT ROAD
R-25
A
R-25
WOLCOTT
Assessor's Map 7, Lots 44; 44-1; 44-2; 45
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 050324


App. 2498
Zone Change
Aerial
N
W
E
S
PECK LANE
WOLCOTT STREET
WOLCOTT STREET
WOLCOTT ROAD
OLD WOLCOTT ROAD
Assessor's Map 7, Lots 44; 44-1; 44-2; 45
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 050324


App. 2498
Zone Change
IWWA
N
W
E
S
PECK
LANE
WOLCOTT STREET
WOLCOTT
STREET
ROAD
OLD WOLCOTT ROAD
WOLCOTT
App. 2489
Watercourse lines
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies
Bristol Watercourse Polygons
Assessor's Map 7, Lots 44; 44-1; 44-2; 45
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 050324

Neighbor Letters

Sent from my iPhone

Begin forwarded message:

From: Kimberly Doucette <dstellalv@comcast.net>
Date: August 4, 2024 at 5:08:39 PM EDT
To: Lisa Ouellette <Louellette2411@sbcglobal.ne>
Subject: Citizen concern application #2498

We are writing to the Zoning Board to express our opposition to application #2498, change of zone from residential zone to zone A multi family.
Map7, Lot 45,44.2,44.7,49.

We are unable to attend the public hearing on 9/16/24. We have composed this letter to explain our opposition to the zone change.
We understand that some development may occur in this area. However, zoning for multi family housing would increase traffic and safety problems as well as destruction of wildlife habitat and potentially lower property values.

Our Concerns:
1. Traffic and Safety
The present traffic flow at the junction of route 69, Old Wolcott Rd. and the junction of route 69 with Southridge Condominiums and the main entrance of Bristol Central High School is already problematic, especially during the beginning and end of the school day combined with rush hour. We are concerned that adding another entrance onto route 69 with multiple vehicles will greatly increase traffic problems and safety issues for all who live in this area, especially the students walking to and from school. Anecdotally, a resident of Southridge Condominiums working at Bristol Central could not get across Wolcott Street to the high school safely and had to turn right, drive down to Southside School and turn around to get to work. Multiple family housing would cause a traffic surge to an already problematic traffic area.

2.Destruction of Wildlife
This forested area is home to many species of plants and animals. We would like to have an expert survey the area. We can personally report to you what we have observed.
Plants: Lady Slippers, listed as “Special Concern” under the Native Plant Protection Act (photo attached).
Birds: Pileated Woodpecker (photo attached),Barred Owl, Screech Owl, nesting Blue Birds, nesting Sharp Shinned Hawk with two healthy young, Red-tail Hawk, Goldfinches, Hummingbirds, Red Belly Woodpeckers, Downy Woodpeckers, Flickers, Baltimore Orioles, Cardinals, Cedar Wax Wing, Sparrows, Wrens, Finches, Doves, Bluejays, and Cat Birds. These are just some of the birds we have observed in this area.



Animals: Bear, Bobcat, Fox den with five pups, White Tail Deer. Recently, a rare Piebald White Tail Deer was seen at 47 Old Wolcott Rd. (photos included of this and other wildlife). According to the National Deer Association, less than 1% of White Tail Deer are Piebald.
Our hope is to save as much of the natural forested area in our community as we can by limiting the development and destruction of this area.

We urge the Zoning Board. to disapprove the proposed zone change in application #2498.

Thank you for your continued service and support for all Bristol residents.

Sincerely,
Kim Doucette 47 Old Wolcott Rd
Lisa Freimuth 47 Old Wolcott Rd







July 8, 2024

Rezoning issue at 25 Old Wolcott Rd Bristol, Ct 06010
Application #2498

Dawn Lloyd & Salvatore Raimondi

Your goal is to rezone directly around my house from a R/15 zone to an A zone. Absolutely directly affecting the beautiful peaceful house I just bought in November 2023.

The plan as I understand it is to build apartments for 140 young adults/families. That to me is considered low income housing. Not many young adults or families starting out can not afford housing or even apartments in todays market. Low income housing can bring in higher crime rates, safety issues, much more noise, an extreme higher level of traffic with cars and people and no more privacy.

If you're planning on 140 people, which should equal to at least 50-70 units, that will be an extreme amount of everything I just listed above. As for cars, each family will have at least 2 cars each and lets face it, many families aren't just 2-4 people, they include extended families and friends that will live with them. This will create more cars and people that will reside here. The amount of cars for this project (which I see this being, projects like Union street used to be) 120-150 cars you expect to be added to this area of Bristol. I absolutely refuse to have a street added alongside my driveway and house to accommodate this many vehicles. Our street is residential, it is currently a nice quiet street. Old Wolcott Rd and Wolcott Rd does not have a street light to accommodate that level of traffic and it will greatly affect our house and driveway.

All of this is directly across from a High school and not far from an elementary school. The level of traffic that will affect the safety of our children walking and even trying to get to school will be affected. Can our school system even be able to handle that influx of bodies attending?? The infrastructure of our roadways and sewer and water systems will be affected trying to accommodate such a large number of units.

A large apartment complex will be an eye sore and does not fit in with the aesthetics of this entire area of Bristol.

If you are to start tearing down all of the wooded lots around us and especially along our driveway, it will destroy the roots of the very tall established trees we have along our property line. This will cause them to weaken and can fall on our house, cars and garage. Hopefully not any one of us or our 8 year old son while outside. Also changing the structure of the landscape will cause water to flow directly onto our property and into our basement and cause much unwanted damage to our basement, house and property.

The absolute most important problem of all is the value of our houses especially mine will be lowered. I struggled and fought my whole life and at the age of 50 I was finally able to afford a

7-8-24

house of my own. My fiance and I fell in love with the house and property because of the secluded wooded feeling in a city. It's very peaceful. We have deer, bear, foxes and other wildlife in our yard. We had no idea this was going to happen or that the lots went up for sale. We were never given the chance to purchase it to protect the peacefulness we bought this house for. We've put so much time money and effort into updating it and making it a home for it to be destroyed by a looming apartment complex for low income families with a ton of traffic and all the construction that will come along with it.

We are willing to purchase the land next to our driveway and the odd corner of our back lot or even the whole lot. I still refuse and will fight to not have apartments built here, but the entrance can come from Wolcott St, not Old Wolcott Rd. I can understand houses being built there but absolutely not apartments and absolutely not a road directly affecting my house. I am absolutely heart broken that the house and property I love will be destroyed as soon as we get settled in.

Please do not rezone this area of Bristol. It isn't good for anyone in this neighborhood, the schools or street and traffic. Take into consideration all of my points and concerns and DO NOT allow this to happen.

Dawn Lloyd
Extremely Angry Homeowner of 25 Old Wolcott Rd

My name is Matthew Small, my wife and I recently moved into 15 Old Wolcott Road. When we saw the house with our real estate agent after over a year of looking for houses, we were ecstatic at the idea of owning such a nice piece of land. The house itself seemed like it had some work to do but nothing we couldn't handle. The main selling point for us was the land surrounded by woods, in a quiet neighborhood, but still close enough to any entertainment/services we would ever need. After moving in we quickly learned that the drainage on this property needed to be addressed. We realized that we were on the bottom of the road that basically goes up a mountain, making it a runoff for a lot of water as rain falls. With the addition of a large condominium complex right next door I am fearful that our drainage problem, which has already cost us a lot of money to try to resolve, will only get much worse. I would like to see what the EPA would consider for proper drainage regulation regarding our land and surrounding properties.

Changing this zone to a multifamily zone with plans for a large condo would inherently make our property value plummet. As I stated previously the main selling point for the house was the land and how quiet it was there, even with Wolcott St. off the front of our property. We are set far enough back from Wolcott St that when you are inside or in the yard on the opposite side of the house you would never imagine that you are right off a busy road. There is no way we would have considered purchasing our home if there was a large condo directly on the backside of the house. It would have been a "no" the second we pulled up for the viewing. I can all but guarantee most of you would feel the same way.

In the plans I have attached there is a clear tree line shown between our property and the proposed condominium. I'm also concerned with how close to our house the tree clearing will be done when there is already a tree line present. The risk is large if any mistake were to take place when clearing this land, which brings me to my next concern. Noise.

When this land is being cleared, built on, and lived in, the noise levels will increase dramatically. I am worried that my wife and I will lose sleep as they work on this project, I have worked in construction most of my life and know the machinery that goes into projects like these are things that nobody wants outside their bedroom window. The proposed parking lot would be right outside of our bedroom window. Back in May we had an attempted home invasion in our bedroom window. A man being driven down Wolcott Street jumped out of a moving car and smashed through our bedroom window with his bare hand. Thankfully my wife and dog were able to protect our home without anyone getting injured. With an added parking lot feet away from where we sleep every night, we will literally lose sleep, to this day my wife and I both wake up to small noises fearing the worst that someone will be breaking in to harm us. Adding hundreds of occupants with a parking lot right outside of our bedroom will do nothing but make these fears worse.

Traffic in our quiet neighborhood will increase drastically. I am concerned about the safety and well-being of the children in our neighborhood, along with pedestrians and pets that enjoy being able to walk down the street without too much fear of traffic.

All these things taken into consideration will drastically and permanently effect the value of our home. This is something that I think the city should care about as in the long run if this pattern of building large condominiums continues, no one will want to be buying the houses directly adjacent to them, or even nearby if the planning of them effects as many houses as this one does. I have worked hard to own a place that my wife and I can call home and would be crushed to see it squandered by a plan such as the one proposed. Thank you for your time and I truly hope you consider the negative impacts this condo facility would have on our neighborhood.

Traffic Statement

Hesketh

Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh
& Associates, Inc.

May 13, 2024

Development Planning Solutions, LLC
225 North Main Street, Suite 207
Bristol, CT 06010

Attn: Mr. Charlie Talmadge

RE: Traffic Impact Statement
Crown Estates Residential
Wolcott Street
Bristol, CT
Our File: 24036

Dear Mr. Talmadge:

Pursuant to your request our office has prepared this statement outlining the potential traffic generation and potential impact of a proposed 30-unit multi-family residential development proposed for property on Wolcott Street, east of Old Wolcott Road in the Town of Bristol, CT. The site location with respect to the surrounding roadway network is presented in Figure 1. This letter presents our findings.

The site proposed for development is currently an undeveloped parcel with multi-family development to the east and single-family development to the west. The current proposal is to construct three buildings with a total of 30 residential units and a total of 83 parking spaces. The site will be served by a single driveway to Wolcott Street, located approximately 350 feet east of Old Wolcott Road.

The development site is located on the south side of Wolcott Street east of Old Wolcott Road and west of the Southridge Condominium development. The property is a short distance west of and opposite from the Bristol Central High School. Wolcott Street is a State maintained roadway carrying the designation of CT Route 69. Route 69 traverses the Town of Bristol from the Town of Burlington on the north to the Town of Wolcott to the south. Route 69 takes on the name of Wolcott Street at East Road. The roadway passes by the site in an east/west orientation then turns to the south into the Town of Wolcott. Across the site frontage, Wolcott

6 Creamery Brook • East Granby, CT 06026

Tel 860.653.8000 • Fax 860.844.8600
www.fahesketh.com

Street provides 39 feet of pavement with a single travel lane in each direction, separated by a painted double yellow centerline. A sidewalk is provided on the north side of the roadway from the Wolcott Street / Peck Lane intersection east to Norris Drive. Wolcott Street is posted at 35 miles per hour. Land use along the roadway is a mix of residential, commercial, and institutional uses, in addition to the subject site.

A review of recent ConnDOT traffic volume data indicates a count on Wolcott Street west of Old Wolcott Road. The count was conducted during September 2021. The count indicates that Wolcott Street carries an average daily traffic volume (ADT) of 11,100 vehicles with peak hour volumes of 867 during the morning peak hour and 1,038 vehicles during the afternoon peak hour. The ConnDOT count is presented in Table 1.

Trip generation estimates were made for the proposed development utilizing the ITE *Trip Generation* Report, 11th Edition. Included in the *Trip Generation* database is Land Use Code (LUC): 220 – Multifamily Housing (Low Rise). With a total of 30 units the proposed development has a trip generation potential of 268 trips daily, with a morning peak hour volume of 32 trips and an afternoon peak hour volume of 33 trips. The *Trip Generation* worksheets are included in the appendix. The trip generation is summarized in Table 2.

Figure 2 depicts the background, site generated and combined traffic volumes for the intersection of Wolcott Street and the proposed site driveway. For this analysis we have used the 2021 ConnDOT volumes, increased 1.5% per year (7.5% total) to a design year of 2026. We have assumed a directional distribution of site generated traffic of 75% to and from the east and 25% to and from the west. This distribution is generally consistent with the observed morning peak hour background traffic volumes.

A capacity analysis was completed for the proposed site driveway. The analysis indicated that the Wolcott Street approaches will operate at a LOS A during peak hours. The proposed site access will operate at a LOS C during the morning peak and afternoon peak hours with average delays of 16.2 and 15.2 seconds per vehicle, respectively. The threshold between LOS B and LOS C is 15 seconds. The results are summarized in Table 3.

It is our understanding that ConnDOT has recently completed new counts on Route 69 east of Old Wolcott Road. Those counts are not yet available for use. We anticipate that we will receive the new counts in the next few weeks. Once the new counts are provided, our office will provide an updated analysis for review.

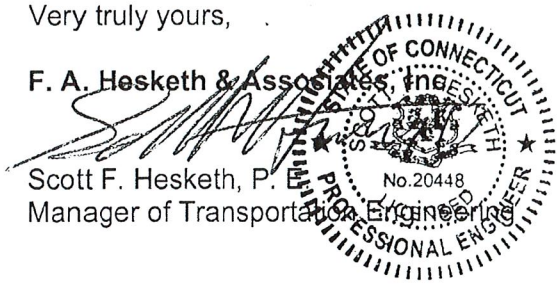
A representative from our office has had an opportunity to visit the proposed site location and has observed the available intersection sight distances at the proposed site driveway location. The available sight distances are more than 500 feet in each direction. Some trimming of vegetation is required to achieve this sight distance looking to the west. The 500 foot sight distances meet the current ConnDOT requirement for an approach speed of 45 miles per hour. Wolcott Street is posted at 35 miles per hour.

Based on the relatively low volume of site generated traffic it is my professional opinion that the local roadway network will not be significantly impacted by the traffic volumes associated with the proposed development. The existing site driveway is properly located with respect to available intersection sight distances and properly designed to accommodate the anticipated driveway volumes.

We appreciate the opportunity to provide this information to you. If you require any additional information, please do not hesitate to contact our office. A representative from our office will be available to present testimony before local commission upon your request.

Very truly yours,

F. A. Hesketh & Associates, Inc.

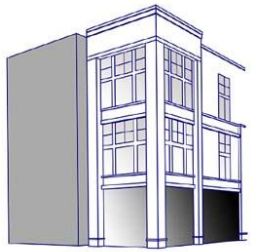


Scott F. Hesketh, P. E.
Manager of Transportation Engineering

T:\24136\Traffic.2024.05.13.docx

Applicant Presentation

Proposed Zone Change
From R-15 zone
To A zone



DPS
DEVELOPMENT PLANNING SOLUTIONS LLC.

Subject Property – Map 7, Lots 44, 44-1, 44-2 and 45

Total Acres = 3.89 ac





Plan of Conservation and Development

ENHANCE COMMUNITY CHARACTER 6

6.3.7. Community Design

1. Encourage buildings and sites to be designed to reflect the overall character of Bristol.
2. Continue to evaluate the design of new developments and work with applicants to achieve the best design results possible.
3. Promote the “greening” of Bristol by encouraging the installation and maintenance of appropriate landscaping such as trees and shrubs along streets and public rights-of-way, in public open spaces, and by requiring landscaping in new private developments.

GUIDE RESIDENTIAL DEVELOPMENT 10

10.2. Overall Goals

10.2.2. Housing Design – Encourage the appropriate design of housing in order to meet community needs in the future.

10.2.3. Housing Mix –
Encourage the provision of a mix of attractive, decent, safe and sanitary housing to meet the social and economic needs of Bristol’s current and future population.

10.3. Policies

10.3.1. Neighborhood Stability

9. Discourage zoning actions that would allow mixed uses in established residential areas except at the borders and fringes where major streets are located.

10.3.2. Housing Design

Require that parcels for multi-family residential development be of suitable size and configuration to a ccommodate good site layout and design.

10.3.3. Housing Mix

Encourage a mix of housing in appropriate locations (such as near services and/or transit) to meet the changing housing needs of current and future residents: young adults (ages 25 to 35) since Bristol’s continued growth and vitality depend in part on the ability of Bristol to attract and retain younger residents, families with children (ages 35 to 55),

Planning Commission Referral

City of Bristol

BRISTOL, CONNECTICUT 06010

Planning Commission

DATE: May 21, 2024

TO: Bristol Zoning Commission

FROM: Bristol Planning Commission

RE: App. #2498 – Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone at east of Old Wolcott Road and south of Wolcott Street; Map 7, Lot 45 (Old Wolcott Road) and Assessor's Map 7, Lots 44-2, 44-1 & 44 (Wolcott Street); Crown Estates, LLC, applicant

The Planning Commission, at its Regular Meeting of May 20, 2024, voted to recommend the approval of the above zoning text amendment application with the following positive referral motion:

"To send a positive referral to the Zoning Commission for App. #2498 Change of Zone from R-15 (Single-Family Residential) zone to A (Multi-Family Residential) zone.

The Planning Commission finds that the proposed zoning map amendment, as presented, would be generally consistent with the goals and policies of the 2015 Plan of Conservation and Development (POCD), amended to April 1, 2018."

For questions or additional information, please contact:
City Planner – Robert M. Flanagan, AICP – City of Bristol Land Use Office at 860-584-6225.

Bristol Housing Statistics

2022 Housing Data Profiles

BRISTOL

PARTNERSHIP FOR STRONG COMMUNITIES

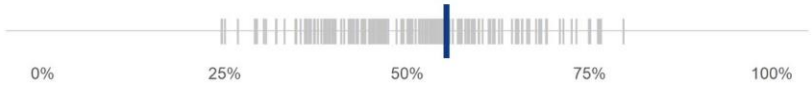
HOUSING

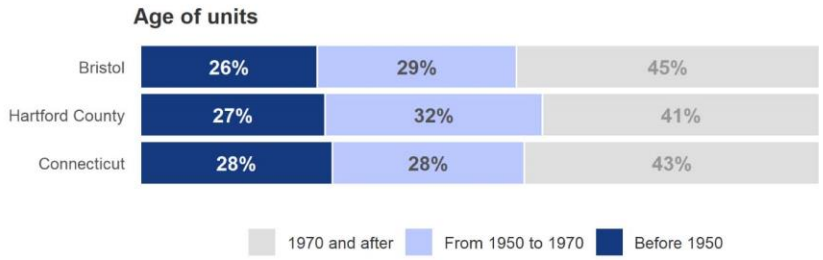
2022 Housing Data Profiles — BRISTOL

UNITS BUILT BEFORE 1970

55%

Older homes are prone to falling into disrepair, and often carry environmental risks such as lead paint. An aging housing stock can be a sign of poor housing quality.





Tables of Changes (Town)

CT data collaborative

2010 to 2020

Search in table

Page 2 of 17

Town	Population	Housing Units
Bloomfield	+5.1%	+7.7%
Bolton	−2.4%	+1.5%
Bozrah	−7.5%	+6.8%
Branford	+0.9%	+1.5%
Bridgeport	+3.1%	+3.3%
Bridgewater	−3.8%	−2.0%
Bristol	+0.6%	+0.9%
Brookfield	+6.5%	+8.4%
Brooklyn	+2.9%	+3.3%
Burlington	+2.3%	+7.1%

Table: Connecticut Data Collaborative • Source: U.S. Census Bureau • Created with Datawrapper

Table of Changes (County)

2010 to 2020

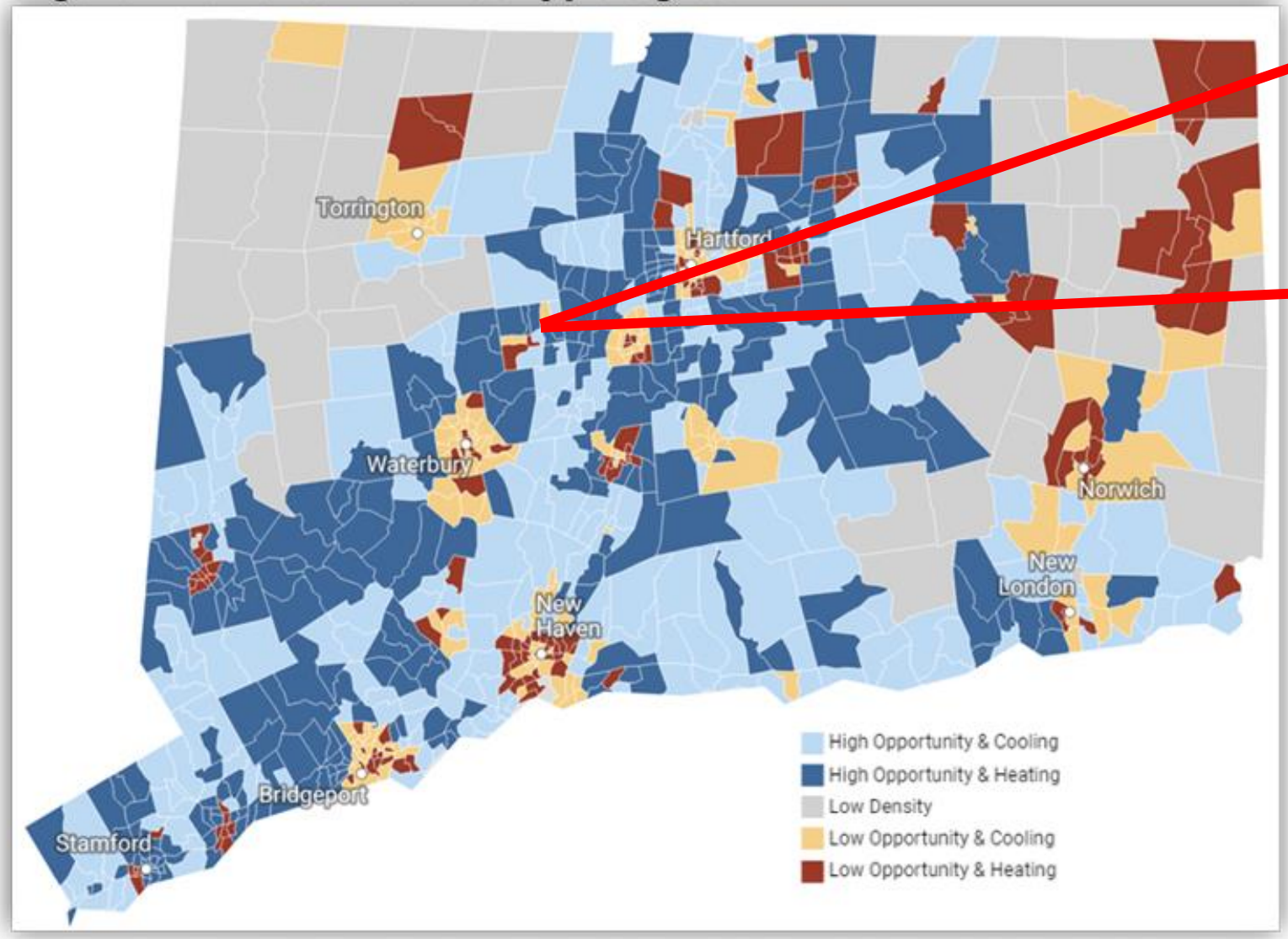
County	Population	Housing Units
Fairfield County	+4.4%	+4.8%
Hartford County	+0.6%	+3.0%
Litchfield County	−2.5%	+0.1%
Middlesex County	−0.9%	+1.9%
New Haven County	+0.3%	+2.0%
New London County	−2.0%	+1.5%
Tolland County	−1.9%	+5.0%
Windham County	−1.7%	+1.1%

Table: Connecticut Data Collaborative • Source: U.S. Census Bureau • Created with Datawrapper

Bristol Housing Statistics

CONNECTICUT HOUSING FINANCE AUTHORITY
The Key To Affordable Housing

Figure 27: Rental Market Typologies



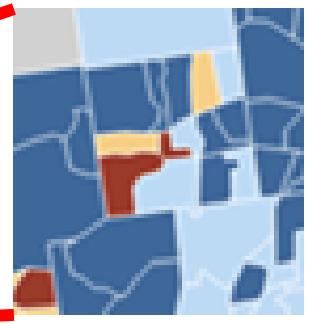


Figure 28: Key Market Typology Trends

	Cooling Market	Heating Market
Low Opportunity	• Older Housing Stock • Higher Proportion of Buildings with 2 to 9 Units • Highest Rental Vacancy • Higher Housing Costs as a percent of Median Household Income Notable Home Price appreciation since 2012	• Older Housing Stock • Higher Proportion of Buildings with 2 to 9 Units • Higher Housing Costs as a percent of Median Household Income • Notable Home Price appreciation since 2012
High Opportunity	• Higher Household Incomes • Higher Owner and Renter Housing Costs • Significant Home Sales Volume	• Lowest Rental Vacancy Rates • Higher Household Incomes • Higher Owner and Renter Housing Costs • Largest Volume of Home Sales and Highest Median Home Prices

Connecticut Housing Demand

UCONN SCHOOL OF BUSINESS

UConn Today

February 2, 2022 | Claire Hall

Professor: Surging Demand for Housing Creates Apartment-Construction Boom in Connecticut

A boom in construction as demand rises, but supply chain snares and other challenges still lie ahead



Developers are planning to build thousands of new apartments across Connecticut, tapping into an exploding need for more housing options for everyone from millennials to empty nesters.

"There has really been an unprecedented demand for modern rental housing, not only in Connecticut but in many places across the nation," says Jeffrey Cohen, finance professor and the Kinnard Scholar in Real Estate at the School of Business. "We're seeing some complexes being developed on empty parcels and many other unused properties being converted into apartments."

How important is it for thriving areas to have a strong supply of housing options?

If having good jobs is the top way to attract and retain people, having great housing options is a close second. These two factors are often intertwined, as many young people prefer the convenience of working, living, and socializing nearby, making a city the best option.

Units In Development as of the time of printing

Farmington – 224 Units

New Britain – 107 Units

East Hartford – 360 Units

Hartford – 200 Units

Newington – 238 Units

Bristol Zoning Map

Currently there are 5 Undeveloped

A Zone Properties

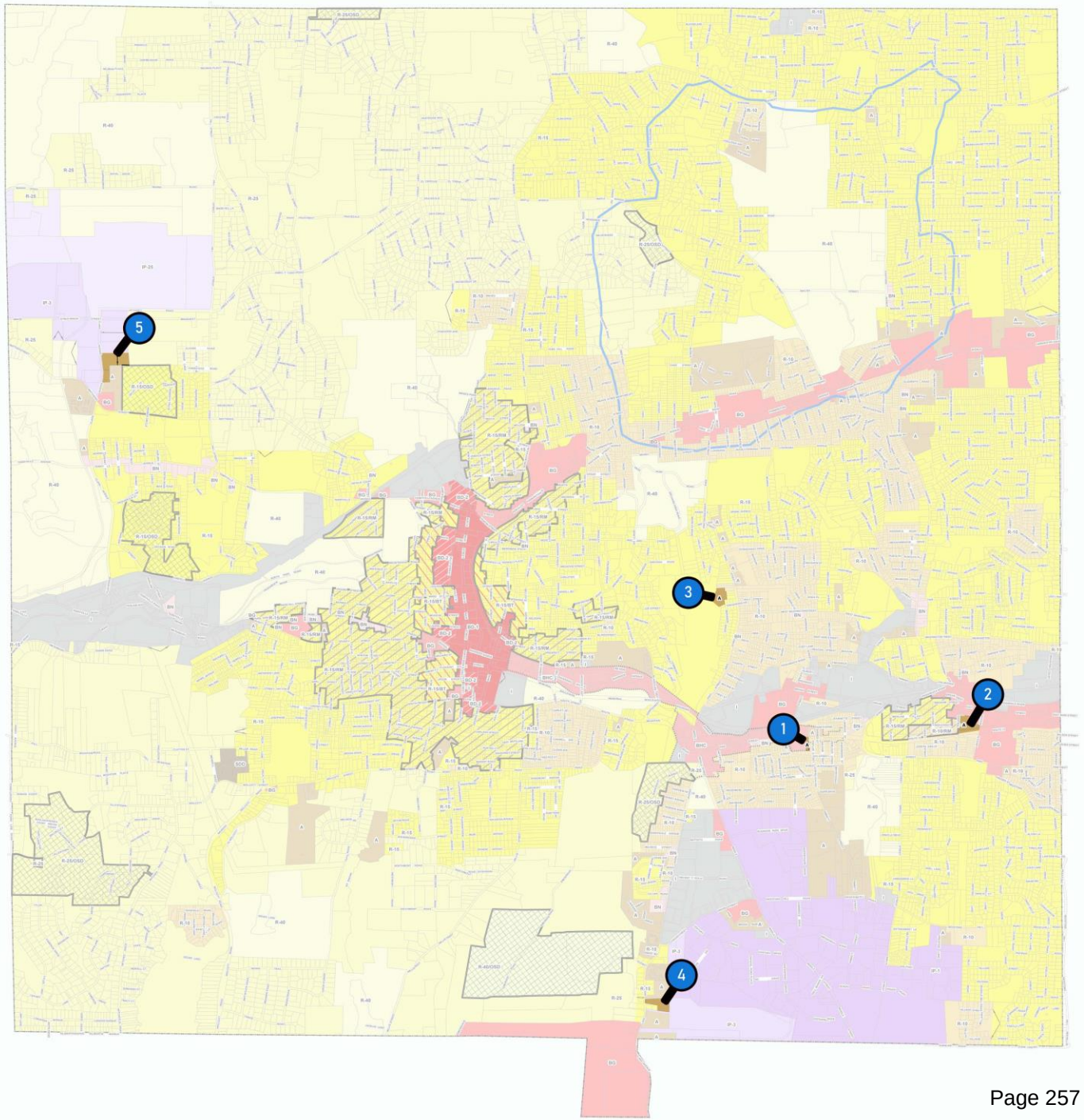
1 – 280 Pine Street

2 – 90 Central Street

3 – Kingswood Drive

4 – Lake Avenue

5 – Clark Avenue



Current Vacant A Zone Properties

Site	Status or Challenge	Total Area in Acres	Total potential number of units
280 Pine Street	Approved Site Plan for Cumberland Farms Expansion	0.9	7.2
90 Central Street	Mulit-Family Development currently being designed	2.64	21.12
Map 35 Lot 29 Kingswood Drive	Challenging Topography, more than 20% Slope	3.15	25.2
Map 4 Lot 17 Lake Avenue	Current Farm Land with related structures	3.1	24.8
Map 66 Lots 264-1 and 261A Clark Avenue	Significant area of Wetlands (4.53 acres)	12.4	62.96
		Total Acres	Total Units
		22.19	141

Total Area Comparison

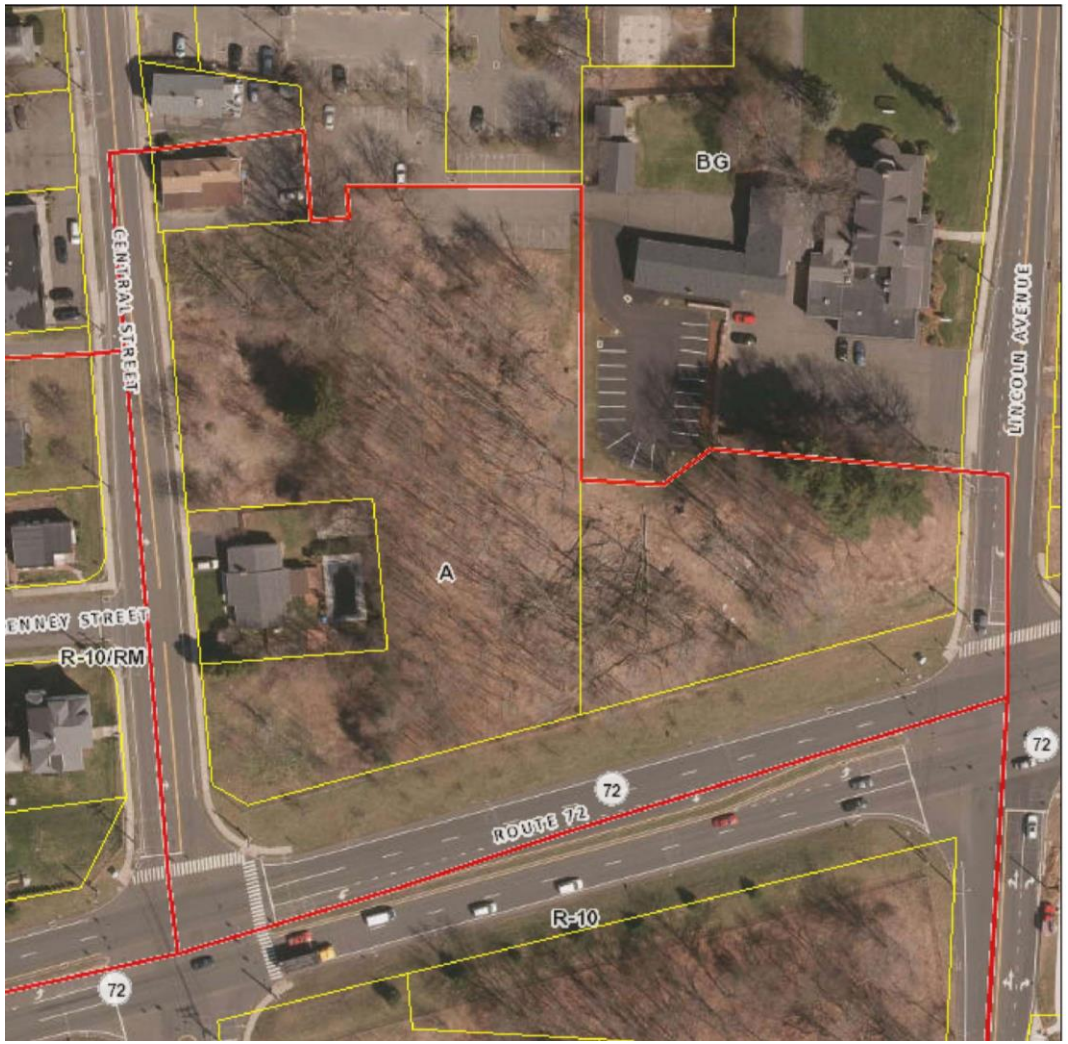
Bristol's Total Area is listed as 26.8 Square Miles = 17,152 Total Acres

22.19 / 17,152 = .1% of Bristol is Currently available A Zone

280 Pine Street



90 Central Street



Kingswood Drive



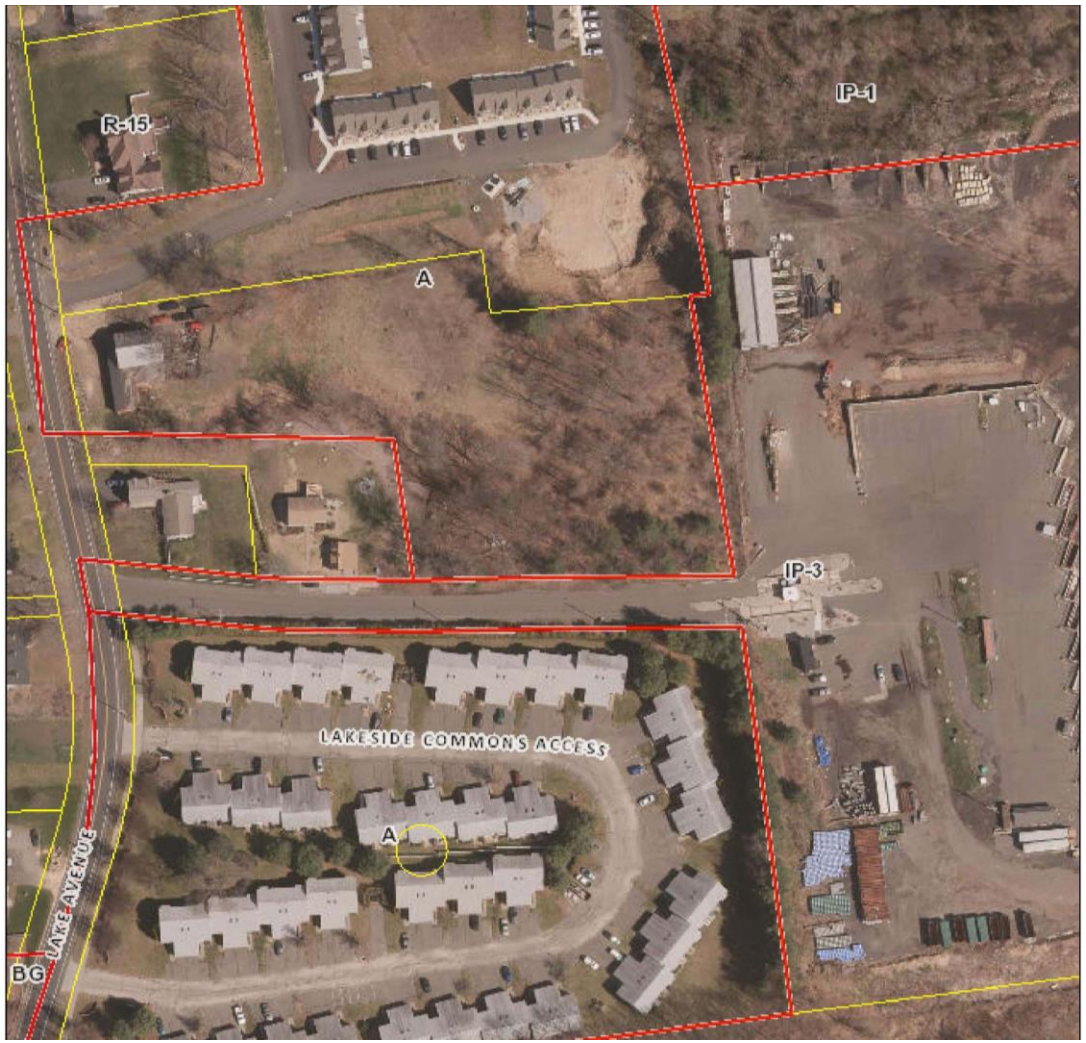


Clark Avenue

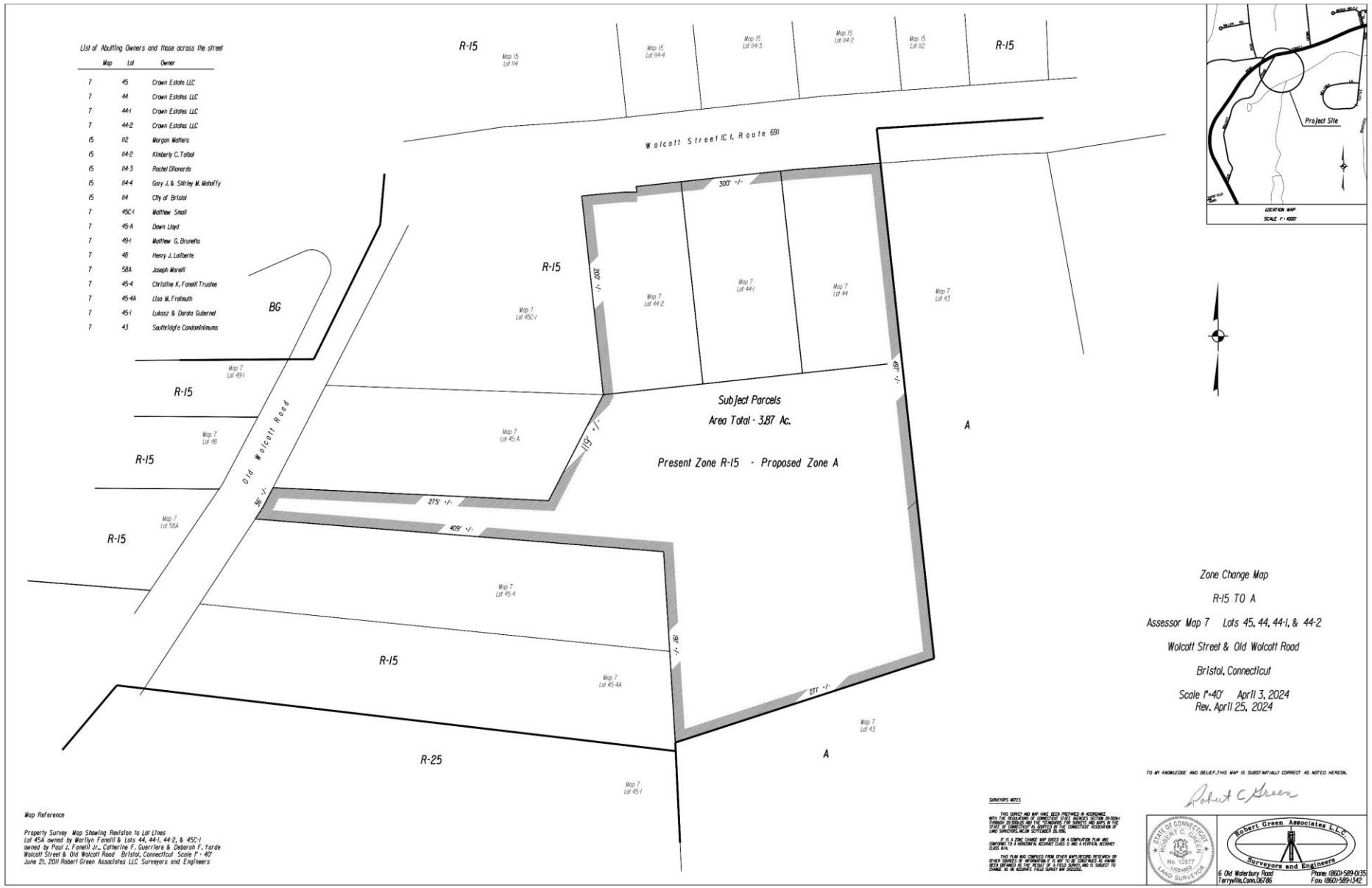




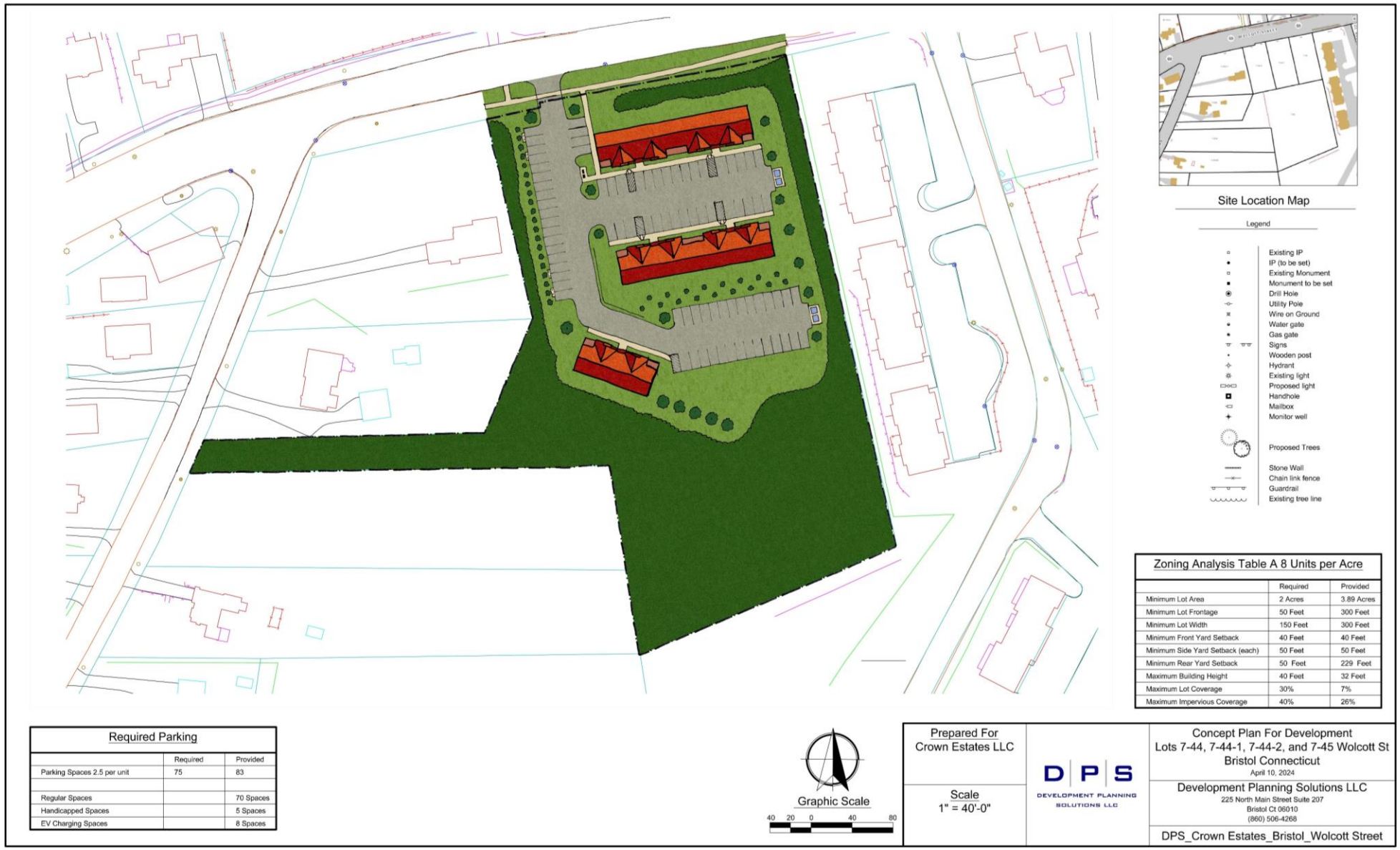
Lake Avenue



Map for Zone Change



Proposed Concept Plan for Development



Site Location Map

Legend

- Existing IP
- IP (to be set)
- Existing Monument
- Monument to be set
- Drill Hole
- Utility Pole
- Wire on Ground
- Water gate
- Gas gate
- Signs
- Wooden post
- Hydrant
- Existing light
- Proposed light
- Handhole
- Mailbox
- Monitor well
- Proposed Trees
- Stone Wall
- Chain link fence
- Guardrail
- Existing tree line

Zoning Analysis Table A 8 Units per Acre

	Required	Provided
Minimum Lot Area	2 Acres	3.89 Acres
Minimum Lot Frontage	50 Feet	300 Feet
Minimum Lot Width	150 Feet	300 Feet
Minimum Front Yard Setback	40 Feet	40 Feet
Minimum Side Yard Setback (each)	50 Feet	50 Feet
Minimum Rear Yard Setback	50 Feet	229 Feet
Maximum Building Height	40 Feet	32 Feet
Maximum Lot Coverage	30%	7%
Maximum Impervious Coverage	40%	26%

Required Parking

	Required	Provided
Parking Spaces 2.5 per unit	75	83
Regular Spaces		70 Spaces
Handicapped Spaces		5 Spaces
EV Charging Spaces		8 Spaces

Graphic Scale

40 20 0 40 80

Prepared For
Crown Estates LLC

Scale
1" = 40'-0"

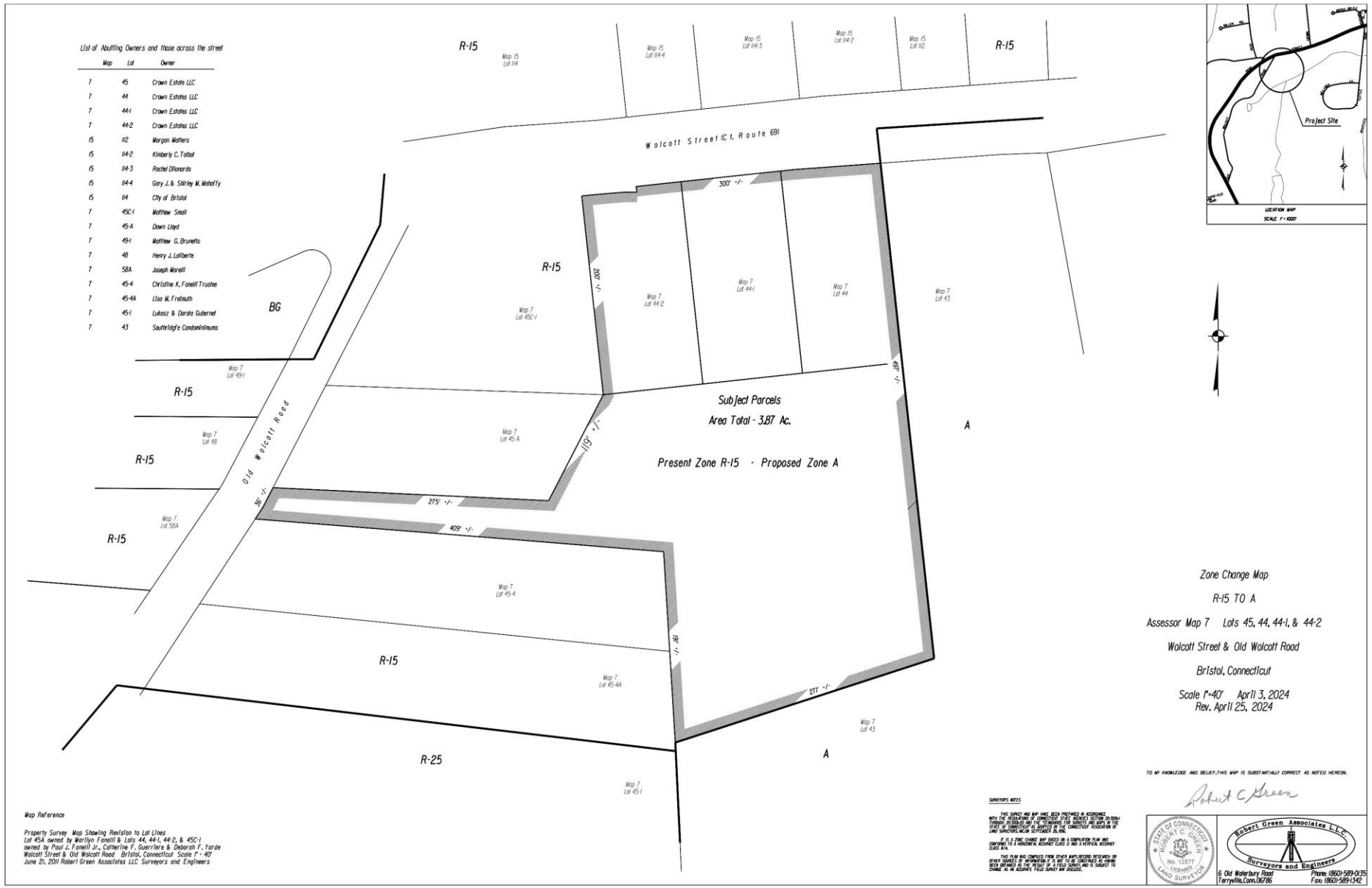
DPS
DEVELOPMENT PLANNING SOLUTIONS LLC

Concept Plan For Development
Lots 7-44, 7-44-1, 7-44-2, and 7-45 Wolcott St
Bristol Connecticut
April 10, 2024

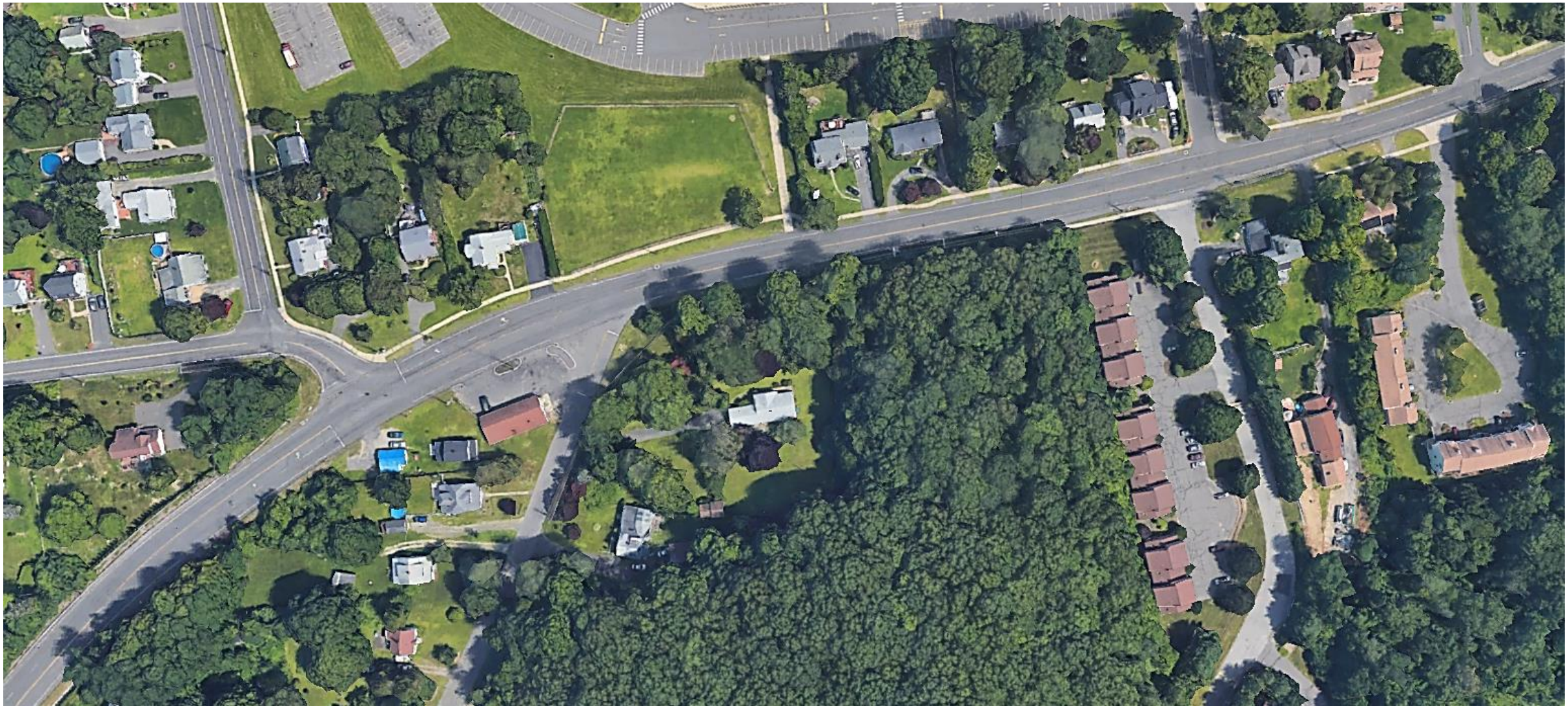
Development Planning Solutions LLC
225 North Main Street Suite 207
Bristol Ct 06010
(860) 506-4268

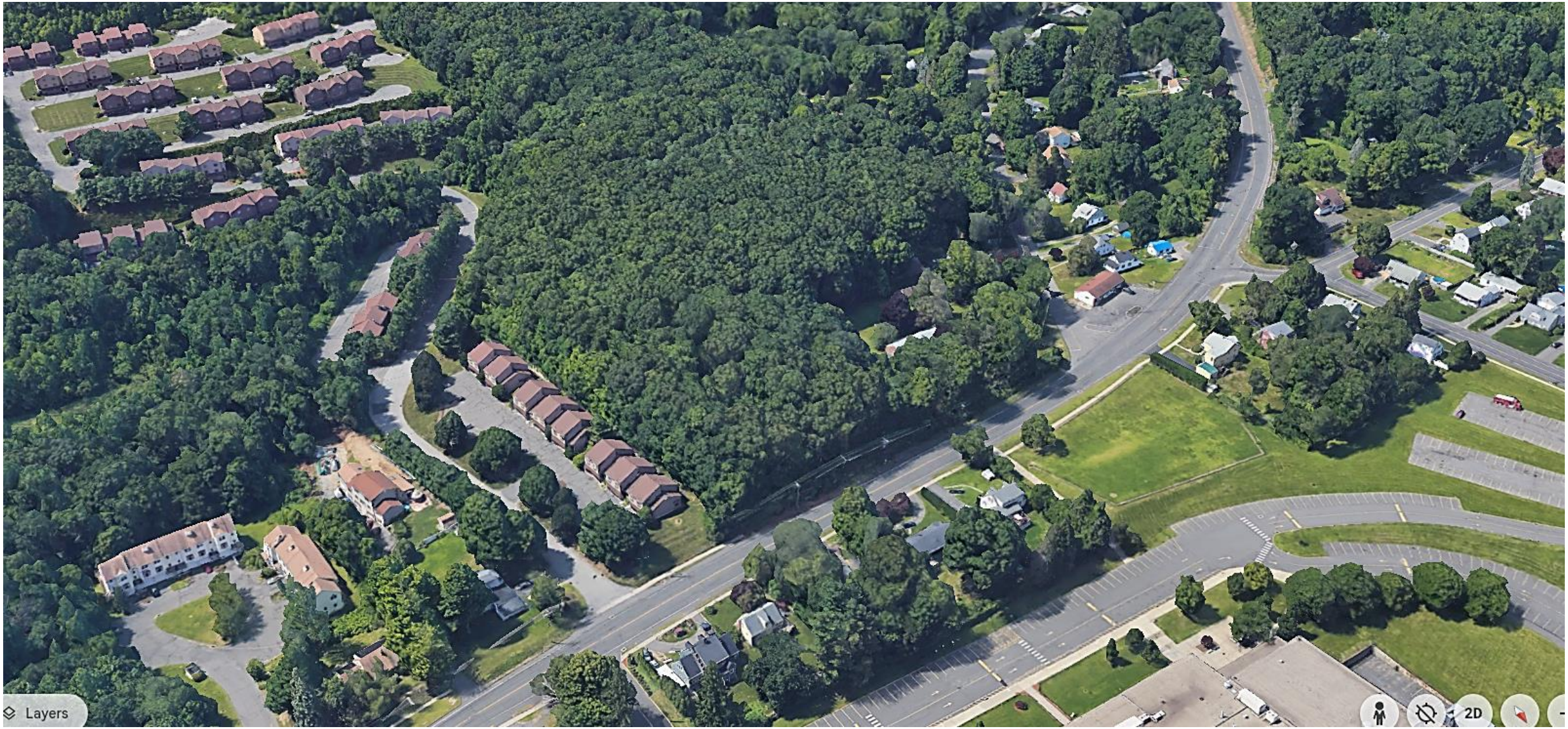
DPS_Crown Estates_Bristol_Wolcott Street

Map for Zone Change



Google Earth

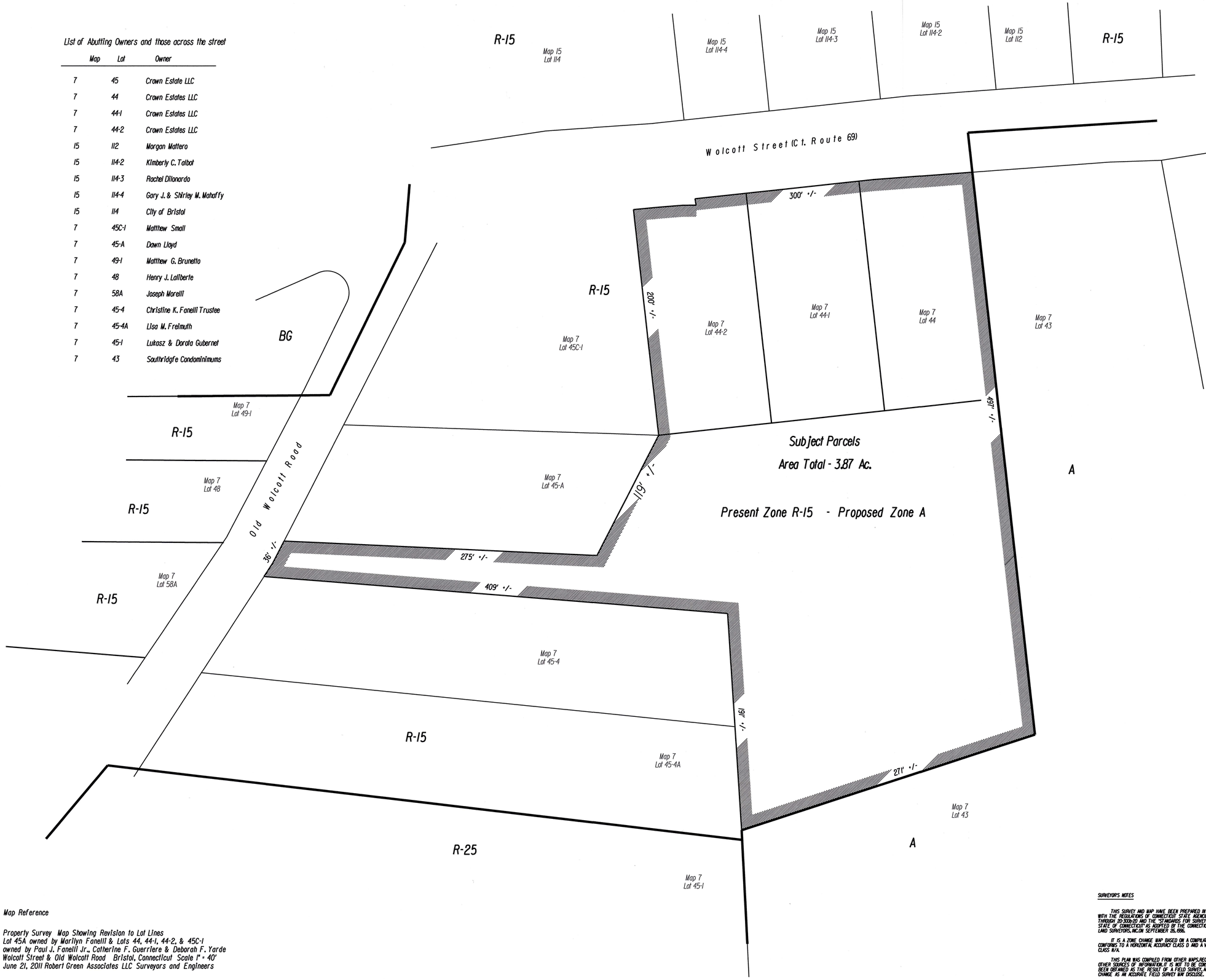


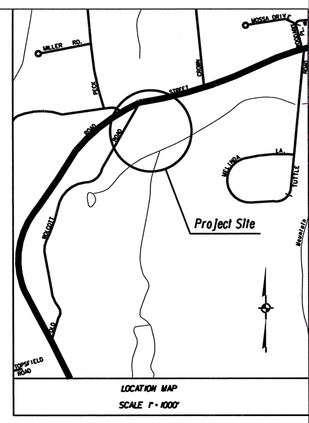

Layers
2D

Zone Change Map

List of Abutting Owners and those across the street

Map	Lot	Owner
7	45	Crown Estate LLC
7	44	Crown Estates LLC
7	44-1	Crown Estates LLC
7	44-2	Crown Estates LLC
15	112	Morgan Mattero
15	114-2	Kimberly C. Talbot
15	114-3	Rachel DiIonardo
15	114-4	Gary J. & Shirley M. Mahaffy
15	114	City of Bristol
7	45C-1	Matthew Small
7	45-A	Down Lloyd
7	49-1	Matthew G. Brunetto
7	48	Henry J. Lalliberte
7	58A	Joseph Morelli
7	45-4	Christine K. Fanelli Trustee
7	45-4A	Lisa M. Freimuth
7	45-1	Lukasz & Dorota Gubernet
7	43	Southridge Condominiums





Map Reference

Property Survey Map Showing Revision to Lot Lines
Lot 45A owned by Marilyn Fanelli & Lots 44, 44-1, 44-2, & 45C-1
owned by Paul J. Fanelli Jr., Catherine F. Guerriere & Deborah F. Yarde
Wolcott Street & Old Wolcott Road Bristol, Connecticut Scale 1" = 40'
June 21, 2011 Robert Green Associates LLC Surveyors and Engineers

Zone Change Map

R-15 TO A

Assessor Map 7 Lots 45, 44, 44-1, & 44-2

Wolcott Street & Old Wolcott Road

Bristol, Connecticut

Scale 1"=40' April 3, 2024
Rev. April 25, 2024

SURVEYORS NOTES

THIS SURVEY AND MAP HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTION 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.ON SEPTEMBER 26, 1996.

IT IS A ZONE CHANGE MAP BASED ON A COMPILATION PLAN AND CONFORMS TO A HORIZONTAL ACCURACY CLASS D AND A VERTICAL ACCURACY CLASS N/A.

THIS PLAN WAS COMPILED FROM OTHER MAPS,RECORD RESEARCH OR OTHER SOURCES OF INFORMATION.IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY,AND IS SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

TO MY KNOWLEDGE AND BELIEF,THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Robert C. Green

STATE OF CONNECTICUT
ROBERT C. GREEN
No. 12877
LICENSED LAND SURVEYOR

Robert Green Associates L.L.C.
Surveyors and Engineers
6 Old Waterbury Road
Terryville, Conn. 06786
Phone: (860)-589-0135
Fax: (860)-589-1342

For Office Use Only	
APPLICATION NO.	2504
DATE FILED:	6/27/24
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SPECIAL PERMIT

The undersigned Applicant hereby applies to the Bristol Zoning Commission for approval under Section(s) Article II, Section 4.2 of the Bristol Zoning Regulations for the following Special Permit use: Civic Facility

Address or Location of the Property: Maltby Street

Assessor's Map No.: 52 & 53 Assessor's Lot No.(s): 11, 15, 16B16A, 17, 145, 147, 149, 150, 151

Zone of the Property: R-40 Size of the Property (in acres or square feet): 303.7 acres (total)

Reason for the Special Permit: Replacement of White Bridge Waterworks Facilitie, including new pump station and wells.

See project narrative, ATTACHED.

Does this application involve an activity regulated by the Inland Wetlands Agency? [✓] yes [ ] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [✓] yes, on 12/26/2023 [ ] no

Other comments: Three applications were submitted to Inland Wetlands Agency (App# 2019, #2020, #23-458F-305)

Approval for all three applications received from Inlands Wetland Agency on June 3, 2024. SEE ATTACHED

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: New Britain Water Department, Ramon Esponda

Address: 1000 Shuttle Meadow Ave City: New Britain State: CT Zip: 06052

Telephone No.: (860) 826-3535 E-Mail: Ray.Esponda@newbritainct.gov

Signature: [signature] *Signature – (Printed/Typed)* Ramon Esponda

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* _____

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2504

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Maltby Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street.

See the attached documents for more information.

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Vinta Varghese (CDM Smith)

Address: 101 East River Drive, Suite 1A City: East Hartford State: CT Zip: 06108

Telephone No.: Direct: 860-808-2325 E-Mail: vargheseva@cdmsmith.com

08/17 - LUO

From: Joseph Hammer [mailto:jhammer@mrglaw.com]
Sent: Wednesday, July 3, 2024 3:18 PM
To: Robert Flanagan <RobertFlanagan@bristolct.gov>; Nancy Levesque <NancyLevesque@bristolct.gov>; andrewarmstrong@bristolct.org
Cc: ray.esponda@newbritainct.gov; Sebastian Amenta - Comprehensive Environmental Inc. (samenta@ceiengineers.com) <samenta@ceiengineers.com>; Varghese, Vinta A. (vargheseva@cdmsmith.com) <vargheseva@cdmsmith.com>; Rachel Fancy <RFancy@mrglaw.com>
Subject: Bristol Zoning Commission - Applications #2504, #2505,# 2506; Applicant - City of New Britain, Water Department

Dear Mr. Flanagan,

Our firm represents the City of New Britain in connection with the above-referenced Special Permit and Site Plan applications which were submitted on June 27, 2024.

The applicant understands that due to the holidays and anticipated scheduling of public hearings by the Zoning Commission, the public hearing on the applications will likely be scheduled for September 16, 2024. The 65 day period to open the hearing, following receipt of the applications on July 8, will expire on September 11. The applicant therefore consents to a five-day extension of time, to September 16, 2024, within which to commence the public hearing.

Thank you.

M R G
MacDermid Reynolds & Glissman, P.C.
110 Whitney Avenue
New Haven, CT 06510

86 Farmington Avenue
Hartford, CT 06105
www.mrglaw.com

Joseph L. Hammer
jhammer@mrglaw.com
Tel: 203-777-1001
Cell: 860-992-3130
Fax: 860-547-1191
Bio V-card

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CT DPH - Notification

From: Microsoft Power Apps and Power Automate <microsoft@powerapps.com>
Sent: Tuesday, July 2, 2024 3:34 PM
To: Ray.Esponda <Ray.Esponda@newbritainct.gov>; Gerlach, Kyle T. <gerlachkt@cdmsmith.com>
Subject: Acknowledgement of Submission to CTDPH

This email is being sent automatically to confirm the submission of a project notification form to the Connecticut Department of Public Health pursuant to Connecticut General Statutes Section 8-3i and/or 22a-42f.

A project notification form is required to be completed and submitted to the Department of Public Health when an application, petition, request or plan is located in a Drinking Water Source Watershed or Aquifer Protection Area.

Thank you for your submission. If you have any questions, please send an email to dph.sourceprotection@ct.gov.

Please enter the docket number/application ID for this application, petition, request or plan, if applicable:
App 2504 - Special Permit for Civic Facility

What municipal entity is this application, petition, request or plan being submitted to?["Zoning Commission"]

Is the location associated with the proposed application, petition, request or plan in a drinking water watershed?Yes

Is the location associated with the proposed application, petition, request or plan in an Aquifer Protection Area?
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street.

Does this application include a petition or proposal to change the regulations, boundaries or classifications of zoning districts?No

Please enter a brief description of the project or proposal:
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street.

Please enter the date of the application, petition, request or plan:
2024-06-27

What is the size of the area to be disturbed?
equal to or greater than 5 acres

Is any part of this project located within 50 feet of a wetland, stream, pond, lake or reservoir?Yes

What type of use is this application, petition, request or plan proposing?Institutional (school, hospital, nursing home, etc,)

How will this project be provided a potable water supply?Connection to existing public water supply

How will domestic waste be handled?
Sanitary Sewer (will be extended to project area as a result of project)

If the proposed project is 1) not located on single family residential property and 2) will utilize a new well for drinking water supply, a Public Water Supply (PWS) Screening Application should be submitted to the Department of Public Health. Was a PWS Screening Application submitted?Yes

Applicant Name:
New Britain Water Department - Ramon Esponda

Applicant email address:
Ray.Esponda@newbritainct.gov

Street address or intersection of application, petition, request or plan:
Maltby Street, Bristol CT

Enter Project Longitude/Latitude:
-72.916330
41.700721

Is there any other information relevant to the Department's review of this application, petition, request or plan? If so, please enter in the space below:
This project is receiving funding by the Department of Public Health and there has been much coordination and collaboration between the City of New Britain, the design team, and the Department. The Department has been kept updated throughout the progress of the project design and has already received site plans and other documentation.

If you would like a confirmation of this submission to be sent to the town, please enter the email address you would like it to be sent to in the field below:
gerlachkt@cdmsmith.com

Site Plan Comments

CITY OF BRISTOL
SITE PLAN REVIEW COMMITTEE
STAFF COMMENTS - 2505

SITE PLAN & SPECIAL PERMIT: Site Plan for a Civic Facility at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single-Family Residential) zone; New Britain Water Department, applicant. *Plans Dated: June 2024; Date of Committee Review: July 31, 2024 (first review); September 16, 2024 (second review)*

ENGINEERING/PUBLIC WORKS (Anthony Lorenzetti):
Engineering Review Comments Application # 2504 and #2505

1) Section 16.3.5, a Class A-2 survey is required.

   9/7/24 Applicant Response: The A2 Survey for the work area was provided electronically. Additional A2 survey for the access road on Mix Street for location curb cut/ entrance to work area access is in progress and anticipated to be submitted in October 2024.

   9/16/24 City Response:

2) Section 16.3.8 There are several homes and other adjacent facilities that are across Mix Street that are not shown.

   9/7/24 Applicant Response: The additional homes across Mix Street will be shown on expanded drawings after completion of the additional survey in October 2024.

   9/16/24 City Response:

3) In review of the Traffic Impact Sketch showing trucking routes, it is stated that the traffic is going to enter and exit the site primarily from Stafford Avenue, other than the compensatory storage construction area on Mix Street. Considering that both driveway access points are located approximately midway between Stafford Avenue and Maltby Street, and utility installation on Maltby Street, Mix Street, and Stafford Avenue along with wetlands creation on Mix Street would likely be utilized more extensively. In addition, what temporary traffic impacts are expected due to the utility construction expected to have on Mix Street and Stafford Avenue? Construction the within the intersections of Maltby Street at Stafford and Maltby Street and Mix Street should be limited to off peak periods. This item can be more thoroughly discussed in the permitting process. Two new Truck warning signs (w11-10) are recommended on Maltby street, due to the very limited current traffic entering from both existing drives that will be increased. The traffic narrative mentions only 15 vehicles per day on site, does this also include trucking materials in and out of the site. What would be the expected total project trip ends per day?

   9/7/24 Applicant Response: Construction at the Maltby Street/Stafford Avenue and Maltby Street/Mix Street intersections will be limited to off-peak hours, avoiding school bus traffic times, as required by the City of Bristol. A more detailed traffic control narrative is in development and will incorporate any additional considerations put forth by the City.

   9/16/24 City Response:

4) Provide enhanced mapping for the site access on Mix Street for the Wetlands creation, showing street access required. A City permit will be required for this area.

   9/7/24 Applicant Response: Enhanced mapping for the site access on Mix Street will be shown on expanded drawings after completion of the additional survey in October 2024.

   9/16/24 City Response:

5) Recommend storage of all construction equipment in upland areas to minimize risk of pollution.

9/7/24 Applicant Response: This is good practice and will be covered in the Stormwater Pollution Prevention Plan prepared by the Contractor per Specification Section 312500, Erosion and Sedimentation Controls. Additional language will also be added to the General Notes on Sheet C-1 to enhance this requirement.

9/16/24 City Response:

6) Update as needed to the updated 2024 Connecticut Guidelines for Soil Erosion and Sediment Control and Connecticut Stormwater Quality Manual.

9/7/24 Applicant Response: Specification Section 312500, Erosion and Sedimentation Controls, as well as relevant Drawings and notes, will be updated to reflect compliance with the 2024 Connecticut Guidelines for Soil Erosion and Sediment Control and Connecticut Stormwater Quality Manual.

9/16/24 City Response:

7) While it is understood that the timelines shown in the design report are preliminary and subject to final completion of the contractor(s), the narrative on page 4 and the schedule chart submitted are not consistent with each other.

9/7/24 Applicant Response: The overall Construction Sequencing stages presented in the Project Narrative reflects sequencing and interdependence of some activities as well as seasonal constraints; the schedule chart will be reviewed and updated. The utility work in Maltby Street must occur before the new Pumping Station building is completed, but can be arranged to accommodate any specific timing constraints by the City of Bristol.

9/16/24 City Response:

8) Add the most current city road repair details, we can provide them to you.

9/7/24 Applicant Response: The Civil Detail sheets will be updated with the City's most current road repair details when provided (it appears that the Details available on the DPW website are sidewalk and curb related).

9/16/24 City Response:

9) Where will the staging areas for the utility main construction be?

9/7/24 Applicant Response: Proposed staging areas (onsite and offsite) are required to be submitted by the Contractor per Specification Section 015000, Temporary Facilities and Controls.

9/16/24 City Response:

10) The site access off Maltby Street to the lower well field site is being widened, and as part of the widening to the west trees will have to be removed and some tree trimming may be required to provide adequate sightlines from the driveway, add to plans.

9/7/24 Applicant Response: Additional notes regarding tree removal will be added to Sheet C-7 to reflect this work.

9/16/24 City Response:

11) The access to the upper well field does not show any upgrades on the plans. The driveway currently is gravel with a reveal at the edge of sidewalk. Care must be taken to not break the sidewalk.

9/7/24 Applicant Response: The upper wellfield access driveway is anticipated to remain with no substantial improvements, other than filling of potholes and restoration of any damage that may occur during construction. Additional notes regarding protection and repair of sidewalk will be added to Sheets C-1 and C-6.

9/16/24 City Response:

CITY PLANNER (Robert Flanagan/Andrew Armstrong):

1. Indicate application number, approval date, and nature of Site Plan/Special Permits associated with this project.

9/7/24 Applicant Response: This information will be added to the Cover sheet for the project prior to bidding.

9/16/24 City Response:

2. Indicate application number, approval date, and nature of IWWA approval associated with this project.

9/7/24 Applicant Response: This information will be added to the Cover sheet for the project prior to bidding.

9/16/24 City Response:

3. Show/label on Site Plan the location of all proposed building entrances and exits.

9/7/24 Applicant Response: This information is shown on Sheet C-10. A simpler overall Site Plan is in development and will be added to the drawing set.

9/16/24 City Response:

4. Final As-Built of building required prior to C.O. being issued.

9/7/24 Applicant Response: Record drawings will be prepared for the project and are noted in Specification Section 017839. The requirement to submit building record drawings prior to the Certificate of Occupancy will be added to that Specification.

9/16/24 City Response:

5. Indicate dimension of driveway opening, measured at street line.

9/7/24 Applicant Response: This information will be added to Sheet C-10.

9/16/24 City Response:

6. What are the proposed limits of tree clearing for all proposed improvements? Particularly, show the dimension and final landscape condition for proposed compensation and storage area abutting single-family residential properties on the upper and lower wellfields. Provide a landscape sheet showing these conditions and setback dimensions to the property lines not just the floodway line.

9/7/24 Applicant Response: Additional drawings to clarify these conditions are in development and will be added to the drawing set.

9/16/24 City Response:

7. The "site plans" for the upper and lower wellfields need to be shown as an actual site plan. The building and site features are not clear. These sheets primarily show underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan. Provide a plan sheet for site plan that clearly shows residential property lines, particularly the properties from Collins Road and parcel boundaries, including the abutting parcel located at Assessor's Map 53, Lot 147. Plans provided are drawn indicating mostly Wetlands features.

   9/7/24 Applicant Response: Additional drawings to clarify these conditions, including a simpler overall Site Plan, are in development and will be added to the drawing set.

   9/16/24 City Response:

8. The abbreviated plan set shows many red revision clouds. Was this plan set intended to be submitted? Please make changes and remove notes and revision symbols.

   9/7/24 Applicant Response: The latest drawings, revised to incorporate comments herein, will be submitted in October 2024.

   9/16/24 City Response:

9. The Zoning Table lists the proposed building height as 258.3 feet. Please revise.

   9/7/24 Applicant Response: The reference to 258.3 feet in the Zoning Table on Sheet C-10 is an elevation, not the building height; this will be revised in the October 2024 submission.

   9/16/24 City Response:

10. There are 2 separate Zoning Tables with the same lot numbers and different requirements. Please clarify.

    9/7/24 Applicant Response: The second table on Sheet C-10 refers to parking requirements; this will be revised in the October 2024 submission.

    9/16/24 City Response:

11. This property is located within an Aquifer Protection Area and requires a determination by the Aquifer Protection Agency. When this determination has been completed, please add the approval, date, and application number to the cover sheet.

    9/7/24 Applicant Response: The Aquifer Protection Agency review is pending; this information will be added to the Cover sheet for the project prior to bidding.

    9/16/24 City Response:

12. The "site plans" for the upper and lower wellfields need to be shown as an actual site plan. The building and site features are not clear. These sheets primarily show underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan.

    9/7/24 Applicant Response: Additional drawings to clarify these conditions, including a simpler overall Site Plan, are in development and will be underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan added to the drawing set.

9/16/24 City Response:

13. What is the height of the retaining walls? Please include this on the plan and details.

9/7/24 Applicant Response: The wall is detailed on Sheet C-27; additional information will be provided for wall greater than 3 feet tall.

9/16/24 City Response:

14. Will there be any impacts or protections to the nearby parking area for 815 Stafford Avenue?

9/7/24 Applicant Response: There are no anticipated impacts to the parking area for 815 Stafford Avenue.

9/16/24 City Response:

15. Include a plan sheet showing E&S controls. (E&S control details are included in the current set).

9/7/24 Applicant Response: Locations of E&S controls are shown on Sheets C-6, C-7, and C-8.

9/16/24 City Response:

BUILDING/ZONING ENFORCEMENT (Richard Brown)
1. No comments at this time.

POLICE DEPARTMENT (Lt. Krajewski/Sgt. Ouellette)
1. No issues with design, does not affect traffic of surrounding roads.

FIRE MARSHAL (Kristopher Lambert):
1. On page A-2 there is a double leaf door that leads from/into the "Future Treatment Area" that is part of a 2-hour rated wall assembly. What is the rating of these doors?

9/7/24 Applicant Response: This is door D-104C per Sheet A-3; this door has a 90-minute fire rating per the Door Schedule on Sheet A-9.

9/16/24 City Response:

WATER DEPARTMENT (Paul Keegan/Rob Longo)
1. Bristol Water and Sewer requires all permits to be pulled by licensed plumbers. A copy of our policies and procedures are given to the plumber when the permit is pulled. All non-emergency work requires a min of 4 days' notice.

9/7/24 Applicant Response: This requirement will be added to Division 01 of the project Specifications.

9/16/24 City Response:

<u>Water:</u>
1. 12 X 8 tapping sleeve and valve requires payment prior to work being done

9/7/24 Applicant Response: This requirement will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

2. All hydrants require a secondary valve.

9/7/24 Applicant Response: The hydrant assembly includes a gate valve per Detail D on Sheet C-25.

9/16/24 City Response:

3. Call the office for a price on the 2" service.

9/7/24 Applicant Response: The relevant fees will be included in Division 01 of the project Specifications. Information provided by the City recently indicates an anticipated $4,725 connection fee.

9/16/24 City Response:

4. 2" service requires a curb stop.

9/7/24 Applicant Response: Additional details on the 2" water service connection will be added to Sheet C-18C.

9/16/24 City Response:

5. Bristol Water and Sewer insects every inch of pipe being installed.

9/7/24 Applicant Response: This requirement for full inspection will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

6. 8" DIP requires pressure test, flushing and Bacteria test.

9/7/24 Applicant Response: Pressure test and flushing are included in Sections 221113 and 330519 of the Specifications. Disinfection requirements are included in Section 331300 of the Specifications. City of Bristol requirements are also referenced in Section 331300.

9/16/24 City Response:

7. Each hydrant requires pressure test, flush and Bacteria sample.

9/7/24 Applicant Response: Pressure test and flushing of hydrants are included in Sections 221113 and 331219 of the Specifications Disinfection requirements are included in Section 331300 of the Specifications. City of Bristol requirements are also referenced in Sections 331219 and 331300.

9/16/24 City Response:

8. Inspection fees apply to private services.

9/7/24 Applicant Response: Requirements and anticipated fees for full inspection will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

9. Water and sewer must maintain 10’ separation at all times

9/7/24 Applicant Response: Understood; Maltby Street water and sewer drawings have been submitted to the Water and Sewer Department.

9/16/24 City Response:

Sewer:

1. 8” sewer must extend, no forced main in the city right of way

9/7/24 Applicant Response: he low-pressure sewer can remain on NBWD property until the edge of the property and then transition to gravity sewer in the street, but there are concerns with storm drain conflict and shallow coverage, so the exact location requires further discussion with the Water and Sewer Department.

9/16/24 City Response:

Project Narrative

Zoning Commission – Application for Special Permit

Project Narrative:

The New Britain Water Department (NBWD) has owned and operated groundwater wells as a raw water source at the White Bridge Waterworks Facilities on Maltby Street in Bristol for over one hundred years. The facilities are located in an R-40 designated residential zone across several parcels including 52-11, 52-15, 52-16B16A, 52-17, 53-145, 53-147, 53-149, 53-150, and 53-151. Work is specifically being performed on lot 52-16B16A, 52-17, 53-145, 53-147, and 53-150. Project location figures are included as **Attachment 1** to this application. The Lower Wellfield wells (located south of Maltby Street) were originally constructed in 1921 and have been operated since 1923. These wells have undergone upgrades in the 1940s and 1950s, with the most recent upgrades occurring the 1980s. A pump station at the Lower Wellfield was constructed as part of the 1940s upgrades. The Upper Wellfield wells (located north of Maltby Street) were originally installed in 1940. These were replaced with new wells in 1955 and again in the 1980s. A pump station at the Upper Wellfield was also constructed in the floodway in 1955. In addition to the wells, NBWD has also operated the Supply Pond surface water source at the White Bridge Waterworks Facilities since the 1950s. The existing 1923 pump station, already located on the site, was converted to a surface water pump station in 1950. This building and associated pumping equipment have not received major upgrades since.

Much of the mechanical equipment at the wellfields and existing Pond Pumping Station has reached the end of its useful life or, due to its age, is very difficult or not possible to find the necessary replacement parts for sustained operations. Regulatory requirements and industry standards have also changed over the past 100-years. To redevelop the Upper and Lower Wellfields with new wells that can be used as a potable drinking water source, the Connecticut Department of Public Health (DPH) requires new wells to be located 50-feet from any water body or wetlands boundary. In addition, DPH requires new wells and water infrastructure to be raised to an elevation 2-feet above the 100-year floodplain elevation. As the majority of the NBWD owned property is within the 100-year floodplain with some areas up to 6-feet below the flood elevation, the existing wells and three pump stations cannot be redrilled/rehabilitated in their current locations. This project will rehabilitate the White Bridge Waterworks Facility to bring it up to modern standards and regulations and create a reliable potable drinking water source for the New Britain Water Department and surrounding communities.

The project includes the abandonment of all currently existing wells in accordance with DPH requirements, demolition of existing structures and the three existing pump stations, construction of a single new pump station, filling and grading to achieve DPH flood resiliency requirements, wetlands creation/replication, and creation of compensatory flood storage. A total of three new wells will be drilled at the Upper Wellfield and six new wells drilled at the Lower Wellfield. Based on water quality, the Lower Wellfield wells may but suitable for use as a public potable water supply with minimal chemical treatment, subject to the ground water under the direct influence of surface water (GWUDI) testing. Both the Upper and Lower Wellfield wells will be equipped with new submersible style pumps within the wells, making it unnecessary to have pump stations at each site. An Aquifer Protection Area Program Registration Form for Regulated Activities will be submitted following this application submittal. A single pump station building will be constructed to house pumping equipment associated with the

Supply Pond surface water source and will also include designated space for treatment equipment in the event the Lower Wellfield is used for potable water. This new building will be constructed with a finished floor elevation 2-feet above the 100-year flood elevation and outside the floodway. The project will also install associated yard piping around the wells, pump station building, and connections to the existing New Britain water infrastructure on-site. New water and sewer utilities from Bristol will be constructed in Maltby Street and provide service for the new pump station. Design Drawings for the project are included in **Attachment 2** and a 3D Rendering of the new Pond Pumping Station is included in **Attachment 3**.

As filling of the site is required for the new wells and pump station to meet DPH requirements, compensatory flood storage areas will be constructed so as to not increase the current flood elevation levels, as given by FEMA guidelines. The new structure and wells will add approximately 6,543 cubic yards of fill within the floodplain. Approximately 15,327 cubic yards of material will be removed from the floodplain for the creation of compensatory storage. These compensatory storage areas will also create additional wetland areas. Fill and earth removal on the site is associated with construction activities only and the final use of the site will not include earth removal activities. A Special Permit for Earth Removal in Excess of 400 Cubic Yards is also being filed for approval. The project will impact approximately 24,952 square feet of wetlands. However, wetlands replication will be done at a ratio of three to one, with a total of 75,946 square feet of wetlands replication proposed. In total, the project is expected to disturb approximately 223,000 square feet of land. This includes areas for wetland replication; compensatory storage creation; and disturbances for installing the new wells, associated yard piping, abandoning and decommissioning existing wells, Pond Pump Station building construction, and demolition of the three existing buildings. A Permit for Flood Plain Development (Application #23-458F-305), Form IW-1 (Application for a Wetlands Permit) (Application #2020), and Form IW-2 (Application for a Wetlands Boundary Change) (Application #2019) were approved by the Bristol Inland Wetlands and Watercourses Agency of the Conservation Commission on June 6, 2024 for this project. A Site Plan Permit for this project is also being filed for approval.

An Erosion and Sediment Control Plan has been developed to control accelerated erosion and sedimentation from stormwater runoff on the site during construction based on the best available technologies. The Control Plan narrative is included with this application in accordance with Section 15.1.5. The “Connecticut Guidelines for Soil Erosion and Sedimentation Control (2002)” document was utilized in preparation of the Plan. A Stormwater Management Report for post-construction conditions has also been developed for this project based on the 2004 *Connecticut Stormwater Quality Manual (CSQM)* as required in Section 15.5.3. A copy of the Stormwater Management Report is included as **Attachment 6** to this application.

The new Pond Pump Station and Lower Wellfield area will be enclosed in a 6.5-foot tall chain link fence for security. A double-leaf swing gate will provide access to the site on the driveway. As shown on the Drawings, the fence and access gate are located outside of the 50-foot required front yardage for R-40 residential zones. A double-leaf vehicular control gate will be located at the foot of the driveway to control vehicular access onto the public utility site. This gate will be less than the 4.5-foot height restriction for fences within front yards and will be more than 50 percent open. A detail for this vehicular control gate is included in the drawings. An existing vehicular access gate for the Upper Wellfield access road (located on the north side of Maltby Street) will remain.

Public utility buildings are not listed as a Use Group in the table included in Section 13.2 of the Zoning Regulations; however, two parking spaces will be provided at the Pond Pumping Station. Each parking space is designed to be 10-feet wide and 18-feet deep, meeting the requirements of perpendicular parking spaces required by Section 13.7.2. As a utility service building, this facility is not open to the public and it will not be continuously manned by NBWD staff. It is not expected that more than two NBWD staff vehicles will be present on-site during operations. The post-construction vehicle traffic from NBWD staff is not expected to increase from their current operations. In the event potable water treatment is implemented for the Lower Wellfield, it is expected that the facility will received 2-3 trucks per month for deliveries.

A construction vehicle routing figure is included as **Attachment 5** to this application. The main route for construction vehicle access to the site on Maltby Street will be via Stafford Avenue, south to Farmington Avenue (Route 6). Vehicles can than access other State Roadways, including Route 69 (to the west) and Route 177 (to the east). It is expected that 15-20 construction vehicles (including pickup trucks, trailers, dump trucks, etc.) could be accessing the site during construction. The Annual Average Daily Traffic (AADT) for Stafford Avenue is 8,300 vehicles per day, 19,300 vehicles per day for Route 6 (west of Stafford Avenue), and 23,200 vehicles per day for Route 6 (east of Stafford Avenue). The construction vehicles generated by this project will represent less than 1% of traffic in the area. For access to the compensatory storage area located in the south of the site (closest to Harbor Freight), construction vehicle access will be off Mix Street via Stafford Avenue. Additionally, work to install new water and sewer utilities within Maltby Street will require temporary lane closures. Typical traffic management details have been developed and are included in the attached design drawings.

The accompanying plans to this application are based on a Class A-2 survey map prepared by a registered land surveyor licensed to conduct business in the State of Connecticut with the exception of Sheets C-13, Sheet C-14, and Sheet C-14A. These sheets depict the general locations of wetland replication and compensatory storage areas and are currently based on a Class D survey due to the scale and size of the parcels and location of work. We request a Class A-2 survey of these areas to be included as a condition of approval for this application and the final Class A-2 survey will be performed and submitted to the Commission for final issuance of the Special Permit prior to construction. Additionally, the wetlands replication and compensatory storage area in the southernmost part of the site, shown on Sheet C-13, cannot comply with the 100-foot buffer zone to a residential property (as required by Section 15.2.5.B). The closest abutting residential property line is 70-feet from proposed excavation activities for the wetlands replication and compensatory storage area. The location of this earth removal work to create compensatory storage is dictated by the contours of existing grade and the removal of certain volumes at each elevation to offset fill brought to that same elevation. It is important to note that this area of the site is heavily vegetated along with the abutting residential properties. We also note that the closest residential building on these lots are 250-feet away. We believe the dense vegetation, distance to residential dwelling, and nature of this construction (creation of wetlands area without a permanent structure) comply with the intent of requirements in Section 15.2.5.B for screening.

Erosion Control Narrative

Zoning Commission – Application for Special Permit

Erosion and Sediment Control Plan- Project Narrative:

This Erosion and Sediment Control Plan is provided in accordance with Section 15.1.5 of the Bristol Zoning Regulations. The erosion and sedimentation control measures at the White Bridge facility focus on the protection of wetlands and waterways during and following construction since the work includes land disturbances, excavation dewatering, supply pond and canal sediment removal activities, and other associated construction activities. Several methods are included on the Drawings to slow the flow of runoff and protect disturbed land during construction activities. Please refer to the project plans for typical details of measures to protect wetlands and waterways during and after construction. The following summary presents typical mitigation measures that will be implemented to avoid and minimize wetland impacts during construction.

Construction Period

- During construction, the limit of land disturbances will be kept to a minimum, where possible, and the construction will be sequenced so the entire site will not be disturbed at the same time.
- Clearing and grubbing will be limited to only the areas necessary for work to be performed, specifically in areas at the Upper and Lower Wellfields (Sheet C-9 and C-11) where wells and piping will be installed, at the Maltby Street 16" pipe crossing (Sheet C-18), at areas where wetlands and compensatory storage will be created (Sheet C-13 and C-14), and areas around the Supply Pond for access during sediment removal activities (Sheet C-23).
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed at the down gradient limits of work and construction access roadways prior to the commencement of work to prevent the transport of sediment to the downgradient wetlands and waterways during construction (see Sheets C-6 thru C-8). Specifically, at the Upper Wellfield this includes compost logs/straw wattles along the facility driveway from Maltby Street to the existing Pumping Station and down each of the well field laterals. At the Lower Wellfield, this includes along the wetlands to the north and west of proposed work, along the Coppermine Brook to the east, around the Supply Pond, and along both sides of the Canal to the Polkville Avenue Brook. These barriers will be inspected at least once per week and within 24 hours of rainfall events ½-inch or greater and repaired as needed. These barriers will remain in place until all disturbed soils are stabilized. A stockpile of compost logs/straw wattles and silt fence will be maintained on site for routine maintenance and emergency repairs. Barriers will be replaced as necessary due to sediment build-up and degradation.
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed surrounding temporary stockpile areas.
- For all slopes 4:1 or steeper, an erosion control blanket will be required, including at the Upper and Lower Wellfield wells (see Sheet C-9 and C-11). Temporary erosion control blankets will be inspected at least once per week and within 24 hours of rainfall events.

- A turbidity curtain will be installed to prevent sedimentation and turbidity disturbances in the Coppermine Brook during canal and supply pond sediment removal activities (see Sheet C-23 and Detail Sheet C-24). Turbidity curtains will be inspected daily during Supply Pond and canal sediment removal activities. The turbidity curtain will not be removed before sediment removal activities have ended and clarity of water has returned.
- Catch basin filters will be installed on catch basins near all excavation work on Maltby Street, Stafford Avenue, and Mix Street (See Sheet C-18 and Detail Sheet C-24).
- In the event that excavation dewatering is necessary, water will be pumped and discharged to one of the temporary sedimentation basins in designated areas of the site (see Sheet C-6 thru C-8 and Detail Sheet C-24). Temporary sedimentation basins will be inspected at least once per week and cleaned as needed to remove accumulated sediments. Temporary portable sediment tanks may also be used to handle significant amounts of excavation dewatering. All water to be discharged from dewatering activities will be filtered or otherwise treated prior to discharge to prevent siltation to adjacent areas. Best management practices will be used by the Contractor in order to prevent siltation to adjacent areas during dewatering activities.
- A temporary sediment dewatering and stockpiling area has been designated within the Supply Pond to dewater removed sediments during restoration activities (see Sheet C-23 and Detail Sheet C-24). Stockpiled materials and containment area will be inspected daily during dewatering activities, weekly during non-dewatering activities, and within 24 hours of rainfall events of ½-inch or greater.
- A stabilized construction entrance is also being required for the site to prevent tire tracked soils to onsite and offsite locations (see Sheet C-23 and Detail Sheet C-24). The stabilized construction entrance will be inspected periodically and additional top dressing or length will be added, as necessary, to continue capturing sediment tracked on vehicles.
- The silt fence and/or compost log/straw wattle barrier will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- The sedimentation barriers will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- Periodic inspections will be made by the applicant to ensure compliance with the permit conditions.

Spill Control Measures

- Spill containment equipment (e.g. oil absorbent pads, oil absorbent materials, containment booms, shovels, etc.) will be stored in the equipment storage and refueling area in an easily accessible manner for use in the clean-up of accidental releases of fuel or other hazardous materials. Should there be an accidental release the proper authorities will be notified in accordance with all applicable federal, state, and local laws; and

- To minimize the possibility of leakage of hydraulic fluid, all hydraulic lines on all construction equipment and vehicles will be inspected at the end of each workday. If any excessive wear or leakage is observed, the line will be repaired prior to further use. In addition, a supply of oil absorbent materials (i.e. pads, "speedy dry," and/or booms) will be maintained with the equipment at the work area for immediate deployment in the event of an accidental release of fuel, hydraulic fluid, oil, etc.

Schedule for Grading and Construction Activities:

A proposed construction sequencing for critical path items in the White Bridge Waterworks Facilities Upper and Lower Wellfields and Pond Pumping Station Project is included as an attachment to this application. Tasks listed are generally to be performed within each proposed stage, and are not necessarily presented sequentially. As required by Project Specifications, the Contractor is required to submit a detailed Final Construction Schedule for approval by the Engineer. Further, as required by the Specifications, the Contractor is required to submit a detailed Construction Sequencing Plan for review and approval by the Engineer. Both the Construction Schedule and Construction Sequencing Plan submitted by the Contractor will be reviewed for compliance with time of year restrictions imposed by the Natural Diversity Database (NDDB) (no bank disturbance work in/adjacent to wetlands November 1 through March 15) and for the expected Great Blue Heron nesting period (March through May).

Some specific sequencing constraints and estimated durations are listed below. <u>These represent a suggested sequencing for critical path items or items that will require earth excavation and disturbance of soils. The final Construction Sequence will be developed by the Contractor.</u> Some items listed in each "Stage" can/will overlap with items listed in previous stages.

<u>Construction Sequencing - Stage 1 (Fall 2024 – Fall 2026)</u>

- Terminate operation of existing Lower Wellfield (LWF) Wells
- **Install Erosion and Sedimentation control measures around the Lower Wellfield, Lower Wellfield Pump Station, Supply Pond, and Canal areas**
- Demolish existing LWF Pumping Station (3 months)
- Demolish existing caisson and fencing near intake pond (1 month)
- Perform canal and pond restoration (to be completed following demolition of the caisson and prior to replacement of the canal culverts) (3 months – **not to be performed between November 1 and March 15**)
- Install test wells, stream gauges, and other equipment required for well pump testing at Upper Wellfield (UWF) and LWF (2 months)
- **Install Erosion and Sedimentation control measures around the Upper Wellfield and access driveway**
- Drill UWF Wells. Order final UWF pumps/motors (3 months each, 7 months total – **not to be performed between November 1 and March 15 at applicable wells**)
- Drill LWF Wells. Order final LWF pumps/motors (3 months each, 13 months total – **not to be performed between November 1 and March 15 at applicable wells, not to be performed between March and May**)
- Install well meter vault, vault control cabinets, meter, and electrical equipment (18 months total, to follow each well drilled – **not to be performed between November 1 and March 15 at applicable wells**)

- Install foundation of new Pond Pumping Station building (3 months – **not to be performed between March and May**)

Construction Sequencing - Stage 2 (Spring 2025 – Fall 2026)

- Install yard piping from UWF and LWF for raw water transmission to Shuttle Meadow during Groundwater Under Direct Influence of Surface Water (GWUDI) testing. Install temporary connection to existing Pond Pumping Station. Install fiber optic cabling (6 months – **not to be performed between November 1 and March 15**
- Install final LWF yard piping, electrical conduit, fiber optic cabling (6 months – **not to be performed between November 1 and March 15 in applicable areas, not to be performed between March and May in applicable areas**)
- **Final stabilization of UWF and LWF wellhead areas**
- Perform canal crossing work for yard piping and restore canal culverts (1 month – **not to be performed between November 1 and March 15**)
- Install new gas service from Mix Street to Pond Pumping Station building (2 months – **not to be performed between March and May**)
- Install new sewer force main and water service to Maltby Street (3 months)
- Install fiber optic cables and Well Pump Communication/VFD Platforms (3 months each, 9 months total)
- Terminate operation of existing UWF Wells. **Install Erosion and Sedimentation control measures around the UWF Pump Station**
- Demolish existing UWF Pump Station
- Install and test UWF submersible well pumps and motors (2 months)
- Install and test LWF submersible well pumps and motors (2 months)
- Install electrical service and equipment at the new Pond Pumping Station, UWF, and LWF (3 months)

Construction Sequencing - Stage 3 (Summer 2025 – Spring 2028)

- Setup instrumentation and perform GWUDI Testing on new UWF and LWF wells (12 months). UWF and LWF pumped via raw water main to Shuttle Meadow Reservoir
- Construct new Pond Pumping Station Building (18 months total - **exterior construction not to be performed between March and May**)
- Install yard piping to complete final connections to Pond Pumping Station (1 month)

Construction Sequencing – Stage 4 (Summer 2027 – Fall 2027)

- GWUDI testing completed
- Completion of new Pond Pumping Station building. Terminate operation of existing Pond Pumping Station
- Abandon/demolish existing Pond Pumping Station building, electrical shed, and UWF Pumping Station. Cap and abandon temporary connections (3 months)

Construction Methods:
Trench excavations will be used for pipe, valve, and appurtenance installation. Suitable material removed from trenches may be placed back into the excavation and compacted or temporarily stockpiled on site, while material deemed unsuitable for reuse will be removed from the site. Open excavations will be used to install the foundation and footings for the Pond Pumping Station and the vaults located at each well. Material removed from these excavations will be taken off-site or temporarily stockpiled on the site with proper best management erosion and sedimentation control measures being implemented around the

stockpile to prevent sedimentation from stockpiled material. This includes placement of straw wattles/compost socks and a trenched silt fence around the stockpile area in addition to the sedimentation controls along the limits of work.

Alternative construction methods for the yard piping may include trenchless installation of pipe to limit area of disturbed land. Pipe could be installed by horizontal directional drilling, pipe ramming, pipe bursting of existing pipelines, tunneling, or horizontal auger boring. All of these methods would still require excavation for access to the existing pipe or as insertion and receiving pits. None of these methods were selected due to the amount and complexity of existing utilities present at the site, lack of record drawings for most of these utilities, and complexity of new piping connections to be installed.

A temporary stabilized construction entrance will be installed during sediment removal and restoration of the supply pond and canal. This construction entrance will run along the berm between the canal and supply pond to the temporary stabilized pond access point. Sediment removed from the supply pond and canal will be temporarily stored within the supply pond to dewater before being removed from the site.

Backfilling of trenches and excavations will be completed as soon as practicable. Pipe bedding will be placed up to 12-inches above the crown of the pipe and suitable backfill will be placed in 6-inch lifts and compacted by hand or pneumatic ramming with tools weighing at least 20 pounds to finished grade. Disturbed areas will be loamed and seeded to provide vegetated soil cover against sheet runoff and wind erosion. An erosion control blanket will be required for slopped areas until vegetated cover is established.

Typical construction equipment, including heavy machinery, is expected to be used to complete this work. Machinery may include bulldozers, loaders, excavators, backhoe loaders, triaxle dump trucks, and drill rig trucks. Equipment, machinery, and materials will be stored or stockpiled in the designated areas shown on the sequencing drawings.

Post-Construction Period

The following summary of mitigation measures will be implemented to restore any areas affected by short-term impacts that occur in or adjacent to wetlands.

- The final site is designed to have a 3-foot wide gravel infiltration trench with 1.5”-3” diameter washed aggregate covered with 6” pea gravel running along the facility driveway to collect and slow the flow of runoff from impervious surfaces (see Sheet C-10 and Detail Sheet C-26).
- All areas disturbed during construction activities are to be loamed and seeded to provide vegetated soil cover protection against sheet runoff and wind erosion (see Sheet C-9 thru C-12). Seeded areas will be inspected at least once per week and within 24 hours of rainfall events of ½-inch or greater.
- Once established, seeded areas will be mowed and maintained as appropriate.
- The Pond Pumping Station building roof drain leader will outlet to a riprap apron (See Sheet C-10 and Detail Sheet C-26). Riprap used in the roof drain apron will be inspected periodically to determine if high flows have caused scour beneath riprap or if vegetation removal is required. On

the northeast side of the Pond Pumping Station building, a retaining wall will be utilized to prevent steep slopes.

- The wetland replication and restoration areas will be planted with trees and shrubs per the planting plans, and seeded with a wetland seed mixture.
- If seeding occurs outside of the growing season, temporary stabilization measures (i.e., mulching or erosion control blankets) will be used to prevent erosion until the area can be seeded during the following growing season.
- Reseeding and mulching disturbed areas. These areas will be maintained and re-seeded to ensure that grass cover is adequate to stabilize the exposed soil, and
- Sedimentation and erosion control barriers will not be removed until a vegetative cover dense enough to prevent erosion is established.

Selections from Figure 3-2 of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control:

Figure 3-2 Measure Selection Matrix

Identify Problem Areas	Identify Control Problems	Identify Strategy	Select Specific Measure		Plan Key
			Functional Group	Measure	
Disturbed Areas	**Control Soil Detachment**	Preserve and Conserve Existing Site Resources	Protect Vegetation	Tree Protection	TP
			Preserve and Conserve Soil	Topsoiling	TO
	Raindrop Splash			Land Grading	LG
				Surface Roughening	SR
Short or Shallow Slopes	Sheet & Rill Erosion	Protect Surface		Dust Control	DC
			Vegetative Soil Cover	Temporary Seeding	TS
	Wind Erosion			Permanent Seeding	PS
				Sodding	SO
				Landscape Planting	LP
Steep Slopes			Non-Living Soil Protection	Temporary Soil Protection	TSP
				Mulch for Seed	MS
Long Slopes				Landscape Mulch	LM
				Temporary Erosion Control Blanket	ECB
				Permanent Turf Reinforcement Mat	TRM
				Stone Slope Protection	SSP
Stockpile Areas		Protect Surface and/or Convey Runoff	Stabilization Structures	Retaining Walls	RW
				Riprap	RR
	Control Water Movement			Gabions	G
Borrow Areas				Permanent Slope Drain	PSD
	Gully Erosion			Channel Grade Stabilization Structure	CSS
				Temporary Lined Chute	TC
				Temporary Pipe Slope Drain	TSD
	Channel & Stream Erosion		Drainageways and Watercourses	Vegetated Waterway	VW
Drainage Ways		Convey Runoff		Temporary Lined Channel	TLC
				Permanent Lined Waterway	PW
Wetlands and Watercourses				Temporary Stream Crossing	TSC
		Direct Runoff	Diversions	Temporary Fill Berm	TFB
				Water Bar	WB
				Temporary Diversion	TD
Waterbodies				Permanent Diversion	PD
		Intercept Grnd.Water	Subsurface Drains	Subsurface Drain	SD
		Detain Runoff	Detention Structures	Detention Basin	DB
Areas of Flooding and Existing Erosion	Natural Resource Degradation	Diffuse Runoff	Energy Dissipators	Level Spreader	LS
				Outlet Protection	OP
				Stone Check Dam	SCD
	Control Sediment Deposition	Detain Sediments	Sediment Impoundments, Barriers, and Filters	Temporary Sediment Basin	SB
				Temporary Sediment Trap	TST
Drainage Outlets				Hay Bale Barrier	HB
	Protect Onsite and Offsite Areas			Geotextile Silt Fence	GSF
				Turbidity Curtain	TC
				Vegetative Filter	VF
Travel Areas		Control Mechanically Moved Waters and Soils	Tire Tracked Soils Dewatering	Construction Entrance	CE
				Pump Intake and Outlet Protection	PuP
				Pumping Settling Basin	PSB
				Portable Sediment Tank	PST
Dewatering				Dewatering of Earth Materials	DWM

Stormwater Management Report Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47020/NBW-Stormwater-Report

Geotechnical Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

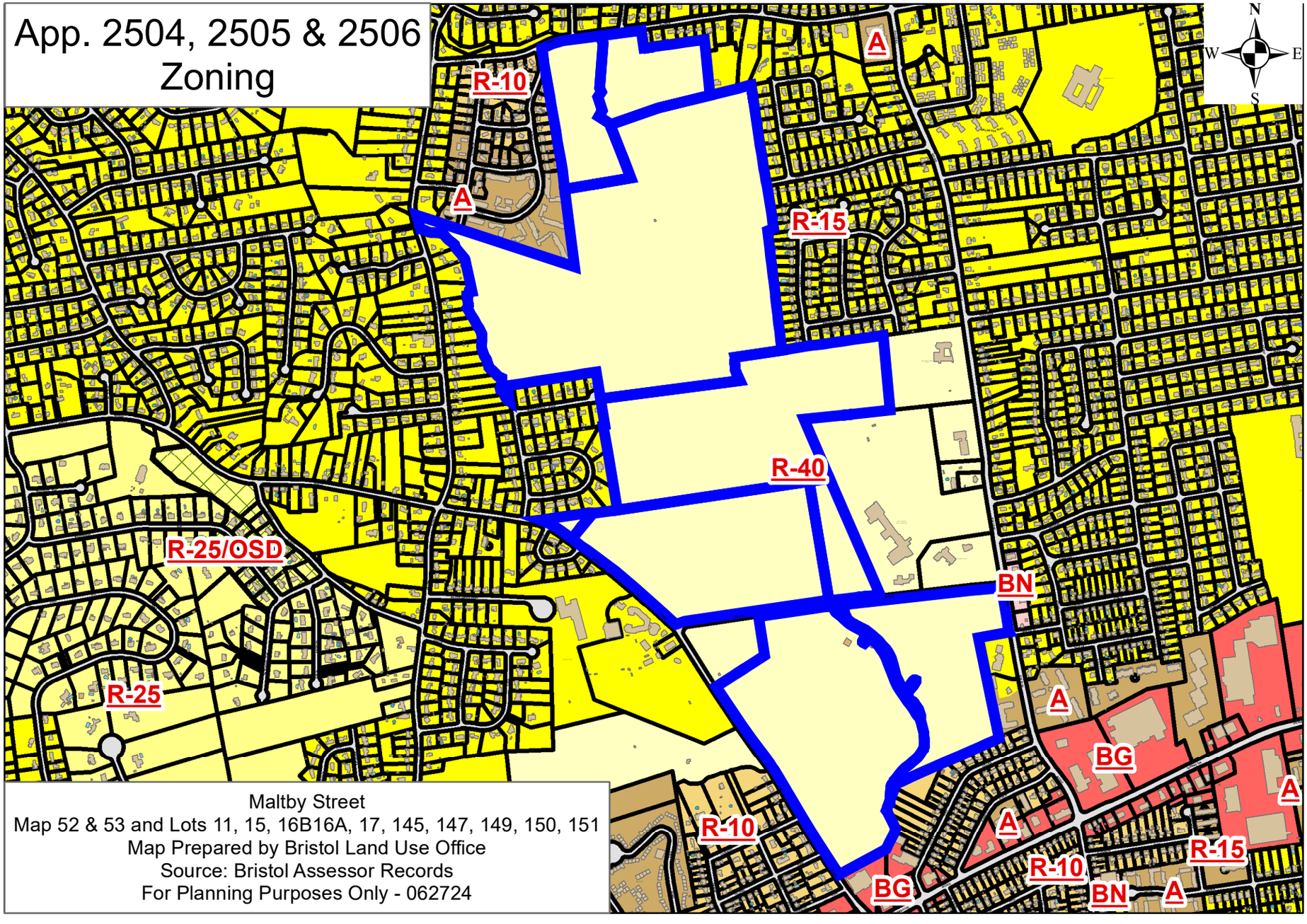
Custom Soil Resource Report for State of Connecticut

White Bridge Waterworks Facilities - Pond Pumping Station

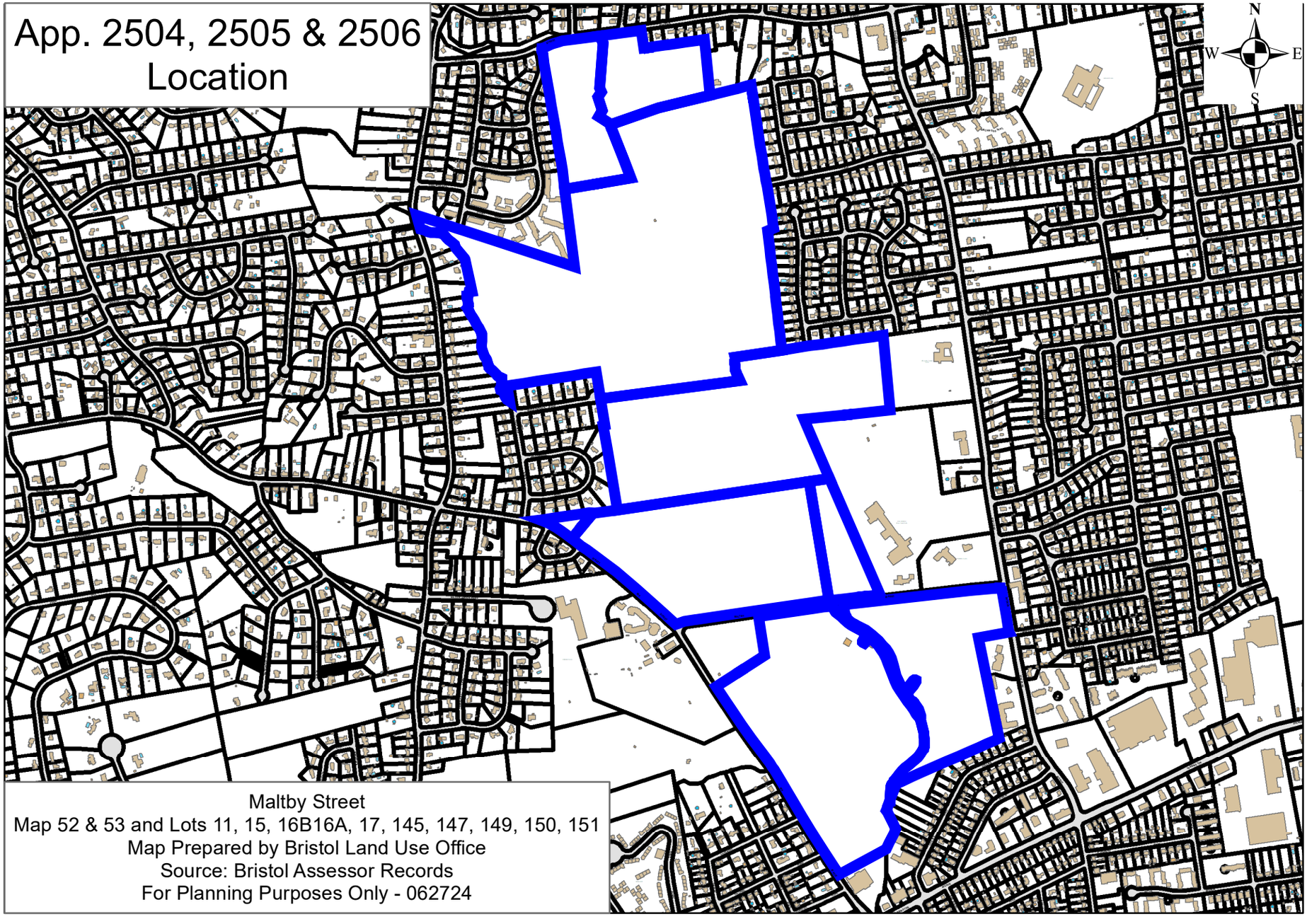
Hyperlink:
https://www.bristolct.gov/DocumentCenter/View/47021/Geotechnical-Report



September 26, 2022

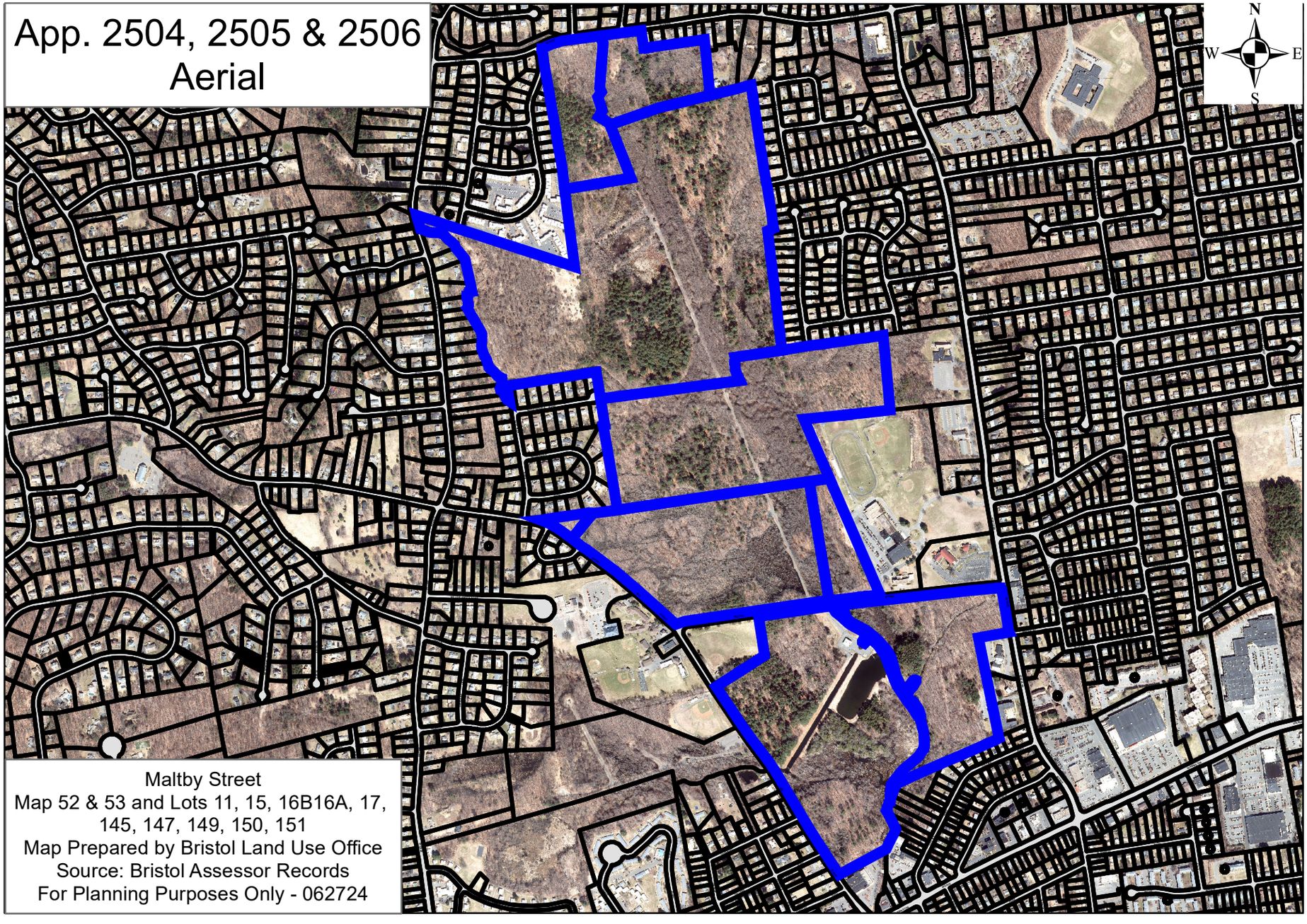

App. 2504, 2505 & 2506
Zoning
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S
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A
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R-15
R-40
R-25/OSD
BN
R-25
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BG
A
R-10
A
R-15
R-10
BG
BN
A
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506 Location

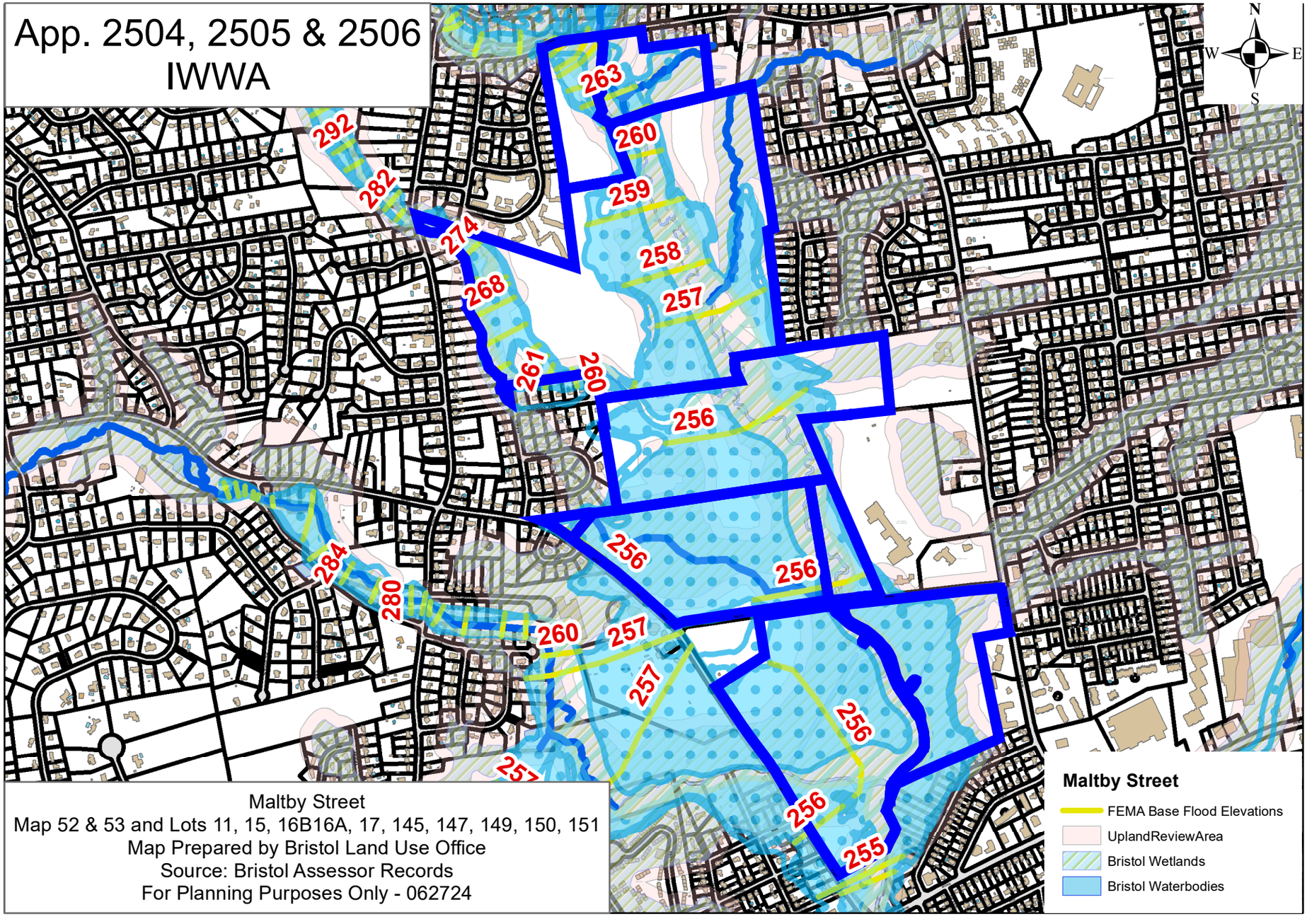


Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

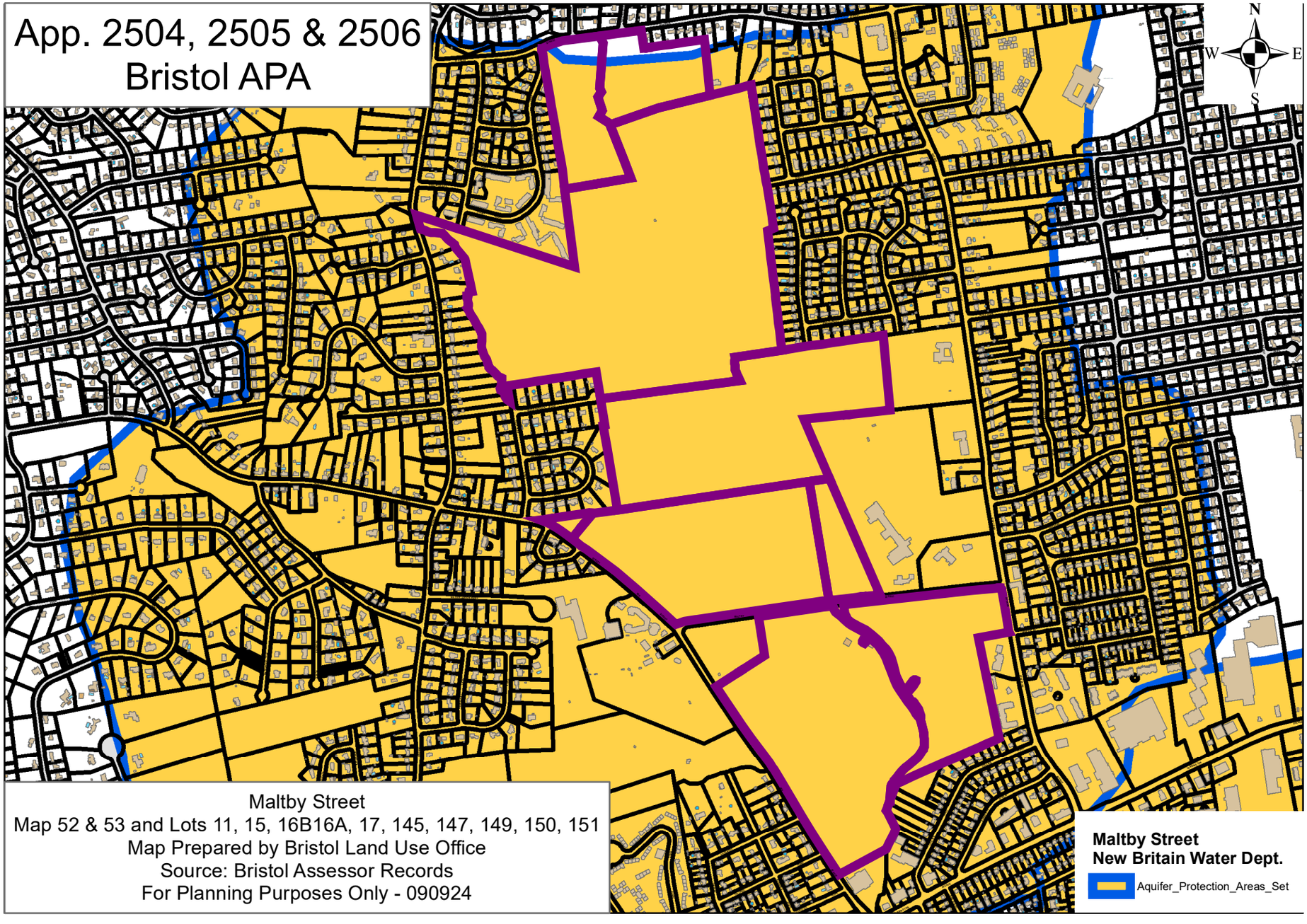
App. 2504, 2505 & 2506
Aerial



Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724


App. 2504, 2505 & 2506
IWWA
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263
260
259
258
257
292
282
274
268
261
260
256
256
256
284
280
260
257
257
256
256
255
Maltby Street
FEMA Base Flood Elevations
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506
Bristol APA



Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 090924

Google Earth


Copper Mine Brook
Polkville Ave Brook
Layers
2D


Copper Mine Brook
Polkville Ave Brook
Field


Copper Mine Brook
Copper Mine Brook
Copper Mine Brook

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

BID NO. 4145

MAYOR

HONORABLE ERIN E. STEWART

DIRECTOR OF PUBLIC WORKS

MARK E. MORIARTY, P.E.

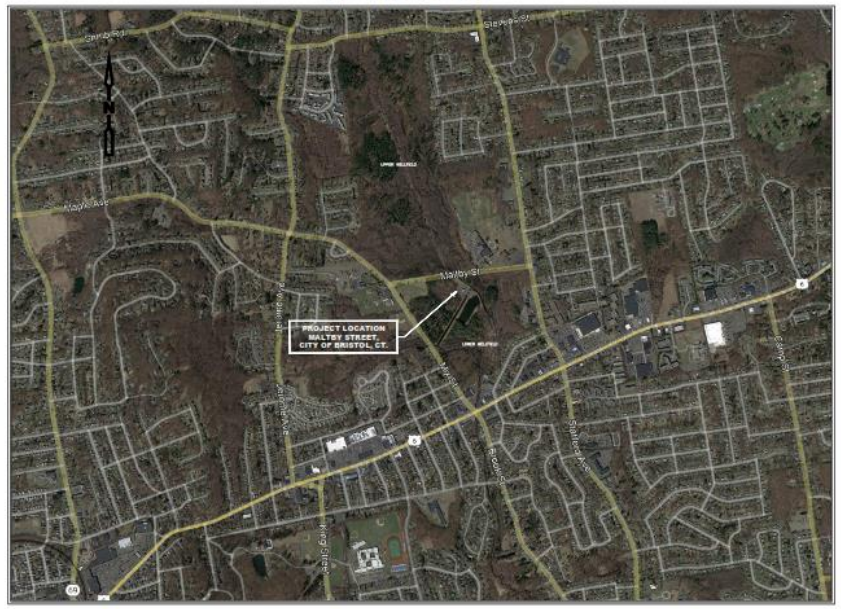
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

CDM Smith

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EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

Full Set of Civil Drawings at this Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47022/Full-Set-NBW

Site Plan

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

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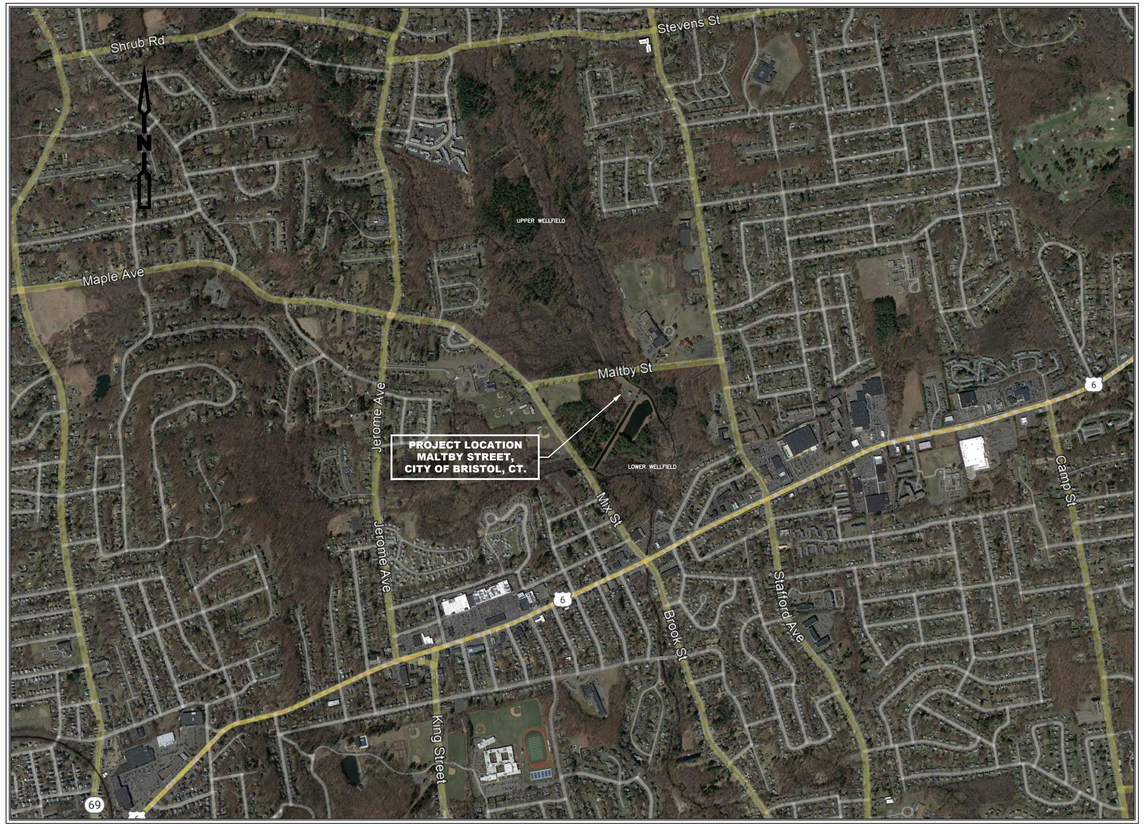
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

SCALE: 1" = 1000'

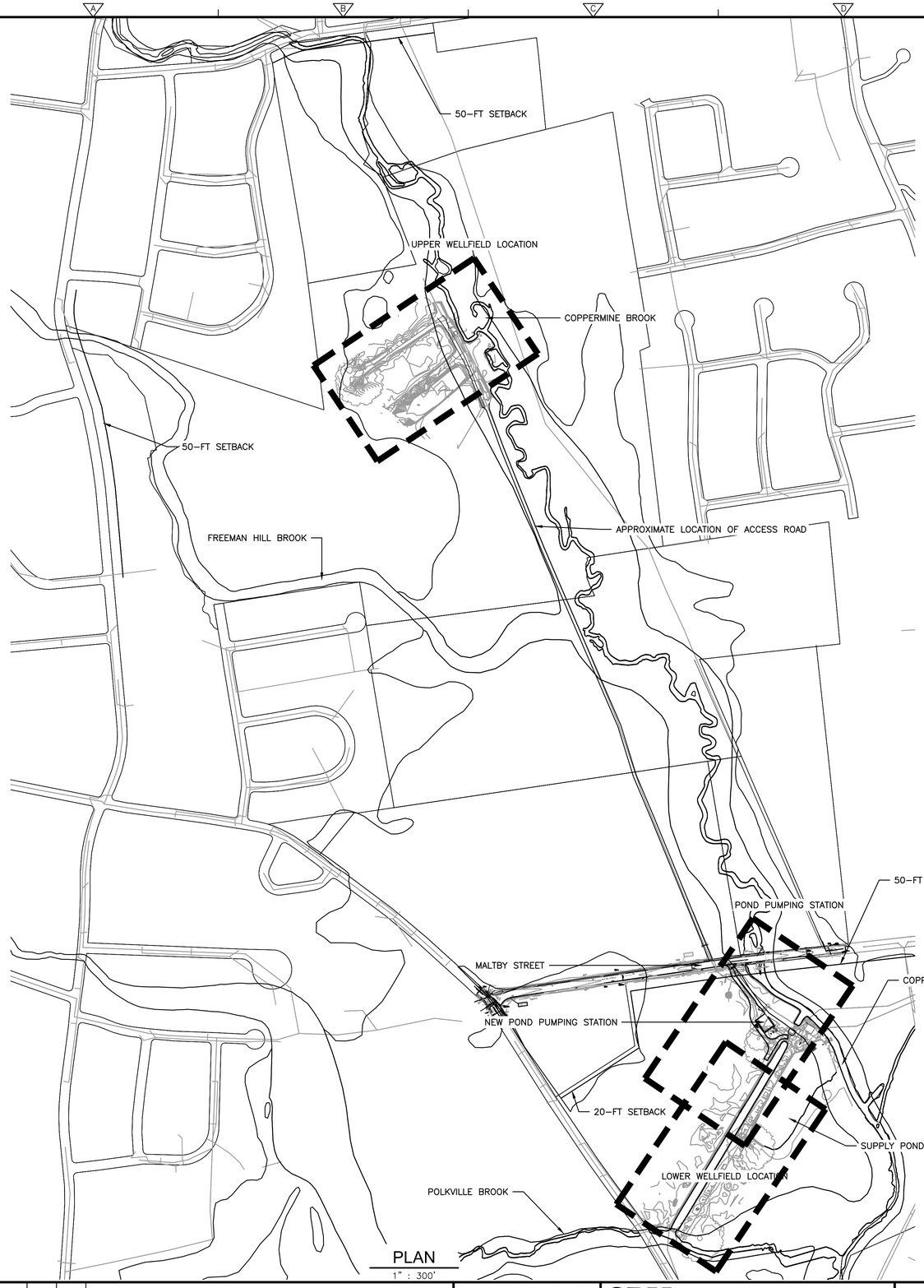
CDM Smith

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

IMAGE OBTAINED FROM GOOGLE EARTH PRO DECEMBER, 2021
Plot Stamp – File: C:\USERS\ENGELSB\DC\ACCDOCS\CDM SMITH INC\10739-264571 – NEW BRITAIN CT WHITE BRIDGE WELL FIELDS AND PS\PROJECT FILES\01 GENERAL (G)\10 CADD\G00DNFCV.DWG Saved by: ENGELSB On: 11-Jan-24 Plotted on: 21-Jun-24 12:54 PM



PLAN
1" : 300'



PLAN
N.T.S.

FLOOD	LOWER WELLFIELD & POND PUMPING STATION ELEVATION (ft)	UPPER WELLFIELD ELEVATION (ft)
0.2% ANNUAL CHANCE FLOOD (500 – YR FLOOD)	256.7	259.7
1% ANNUAL CHANCE FLOOD (100 – YR FLOOD)	255.9	259.0
2% ANNUAL CHANCE FLOOD (50 – YR FLOOD)	255.6	258.6
10% ANNUAL CHANCE FLOOD (10 – YR FLOOD)	253.0	258.0

NOTE: ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED USGS DATUM NAVD88

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

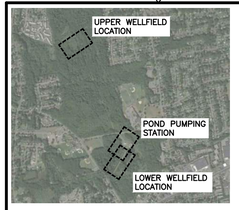
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

OVERALL SITE PLAN

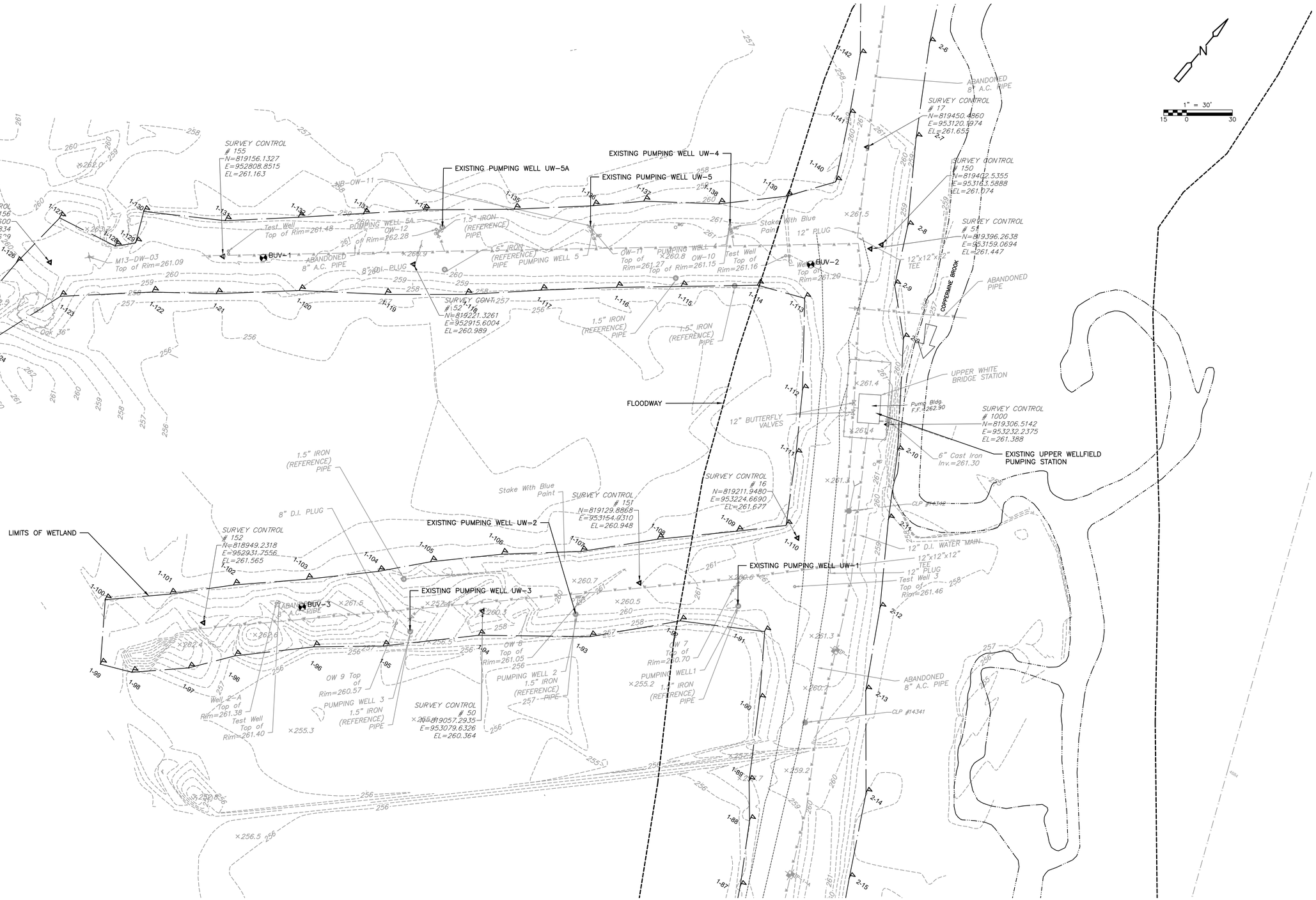
PROJECT NO. 10739–264571
FILE NAME: C002STPL.DWG
SHEET NO.
C-2

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.



NOTES:

1. AREAS OF THE UPPER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

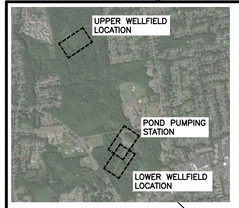
UPPER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C003STPL.DWG
SHEET NO.
C-3

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PLAN
N.T.S.

NOTES:

1. AREAS OF THE LOWER WELLFIELD AND POND PUMPING STATION ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G.HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

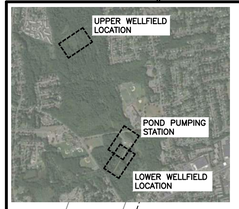
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATIONS EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C004STPL.DWG

SHEET NO.
C-4

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

APPROXIMATE LOCATION OF EXISTING GREAT BLUE HERON ROOKERY. SEE GENERAL NOTE 25 ON SHEET C–1 FOR MORE DETAILS

LIMIT OF WETLAND

SURVEY CONTROL # 2567 N=814780.4678 E=954191.2578 EL=249.809

SURVEY CONTROL # 149 N=815074.5860 E=954425.7922 EL=251.494

SURVEY CONTROL # 148 N=815197.8447 E=954516.4738 EL=253.523

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.292

SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733

SURVEY CONTROL # 31 N=814722.6132 E=954351.2270 EL=251.019

SURVEY CONTROL # 32 N=814962.7770 E=954515.6314 EL=251.406

SURVEY CONTROL # 33 N=815089.6478 E=954688.8275 EL=249.693

SURVEY CONTROL # 44 N=814637.4824 E=954479.1256 EL=248.687

SURVEY CONTROL # 45 N=814631.6821 E=954563.1325 EL=248.503

WELL 9 Upper Rim 250.16
WELL 9–A Upper Rim 250.18
Well 10 Upper Rim=251.81
Well 10–A Upper Rim=251.82
Well 7–A Upper Rim=251.62
Well 7 Upper Rim=251.63
Well 11 3" Upper Rim=251.62
Well 3" 11–A Upper Rim=252.29
3" Dia. Well Top of Rim=250.88

BLWF–1
BLWF–3
BLWF–4
BLWF–6

CANAL
CANAL

Top of Wall At Spillway=251.4
Test Well 5–A Top of Cap=250.35
Test Well OW–16 Top of Cap=251.91
Test Well 6A Top of Rim=251.56
Top of Rim=251.62
Top of Rim=252.60
Top of Rim=253.20
Top of Rim=253.05
Top of Rim=252.96
Top of Rim=251.42
3" WELL OW–5 Top of Rim=250.43
OW–15 Top of Rim=250.97
Top of Frame=251.67
Top of Frame=251.65
Top of Frame=252.55
Top of Frame=252.41
Top of Frame=252.37
Top of Frame=252.43
Top of Frame=252.15
Top of Frame=251.30
Top of Frame=252.20
Top of Frame=253.65
Top of Frame=253.73
Existing Well (Typ)
Well 5 stake
CLP #1021
CLP #10213
CLP #10214
CLP #10216
No #

HEADER CAP
ABANDONED PIPE AND WELLS
FLOODWAY
POLKVILLE BROOK
SUPPLY POND
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
48" OAK
PINE

MATCH LINE SEE SHEET C–4

NOTES:

1. AREAS OF THE LOWER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C–1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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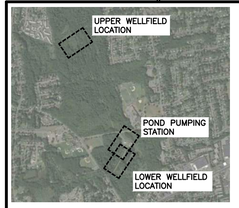
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WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739–264571
FILE NAME: C005GDPL.DWG
SHEET NO. C-5

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PLAN
N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE HEADER PIPE AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. THE EXISTING UPPER WELLFIELD PUMPING STATION BUILDING TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
3. CONTRACTOR TO INSTALL COMPOST SOCK ON BOTH SIDES OF THE UPPER WELLFIELD ACCESS DRIVEWAY (APPROX. 3,200 LF EACH, NOT SHOWN) TO MALTBY STREET. THE EXISTING ACCESS DRIVEWAY BRIDGE CROSSING OF THE FREEMAN HILL BROOK TO BE PROTECTED DURING CONSTRUCTION.
4. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.

J/C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN

ABANDON EXISTING WELL (TYP). SEE NOTE 1

COMPOST SOCK B/C-24

EXISTING PIPING TO BE ABANDONED IN PLACE

FLOODWAY

DEMOLISH EXISTING UPPER WELLFIELD PUMPING STATION. SEE NOTE 2

REMOVE AND DISPOSE OF EXISTING FENCE

EXISTING TEST WELL TO BE PROTECTED

COMPOST SOCK TO BE INSTALLED DOWN ACCESS DRIVEWAY TO MALTBY STREET. APPROX. 3,200 LF (NOT SHOWN). SEE NOTE 3

COPPER MINE BROOK

N

1" = 30'
15 0 30

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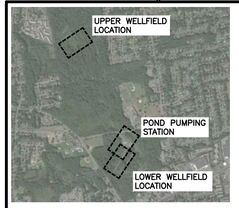
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

UPPER WELLFIELD DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C006STPL.DWG
SHEET NO. C-6

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN

N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
3. THE EXISTING POND PUMPING STATION BUILDING TO BE DEMOLISHED AT COMPLETION OF NEW POND PUMPING STATION TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
4. THE EXISTING LOWER WELLFIELD PUMPING STATION BUILDING AND FOUNDATION TO BE DEMOLISHED TO ELEVATION 241.2 FT. EXCAVATION LIMITS FOR THE NEW POND PUMPING STATION BUILDING TO APPROXIMATE MIN ELEVATION 241.2 FT. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE DETAIL B ON SHEET C-26 AND SPECIFICATIONS SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
5. THE EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED IN PLACE. THE CONE OF THE EXISTING CAISSON WELL TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE. SEE DETAIL B ON SHEET C-28 AND SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF THE EXISTING CAISSON WELL.
6. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

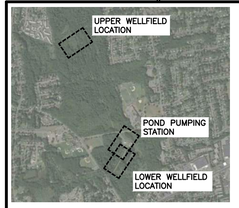
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATIONS
DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C007STPL.DWG
SHEET NO. C-7

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

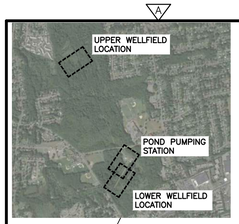
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C008GDPL.DWG
SHEET NO.
C-8

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

LEGEND

- WETLAND FLAG
- BORING

N=819160.92
E=952810.68

N=819369.72
E=953117.58

N=818987.22
E=952965.00

UPPER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

FLOODWAY

B C-27 6-FT HIGH CHAIN LINK FENCE

A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE

EXISTING UPPER WELLFIELD PUMPING STATION

TRENCH FOR PIPING, AND REPAIR TRENCH TO EXISTING CONDITIONS

COPPER MINE BROOK

1" = 30'
15 0 30

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SHEET CHK'D BY: G. HOWARD
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APPROVED BY: K. WAGNER
DATE: APRIL 2023

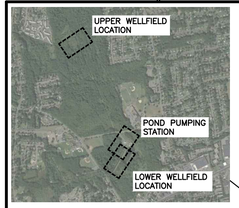
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77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C009STPL.DWG
SHEET NO. C-9

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

LEGEND
- BITUMINOUS CONCRETE
- INFILTRATION TRENCH
- CONCRETE WALKWAY
- DETENTION BASIN
- CHAIN LINK FENCE
- STEEL BEAM GUARDRAIL
- WETLAND FLAG
- BORING

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

RESOURCE IMPACTS TABLE		
PERMANENT IMPACT WETLAND		220 S.F.

LIMITS OF WETLAND
SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733
3" Dia. Well Top of Rim=250.88
SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162
SURVEY CONTROL # 148 N=815295.0131 E=954567.0095 EL=251.292
×250.5
×249.5
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
Well 11 3" Upper Rim=251.62
Well 3" 11-A Upper Rim=252.29
BLWF-3
CLP #10217
CLP #10216
MATCH LINE SEE SHEET C-11
CANAL
NB-OW-14 Old 3" Well Top of Rim=252.60
Existing Well (Typ)
Top of Frame=251.45
Top of Frame=253.73
Top of Frame=253.05
Top of Frame=252.96
Top of Frame=253.26
Top of Frame=252.20
SUPPLY POND
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS

LIMIT OF METAL BEAM RAIL
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
50-FT FRONT YARD SETBACK
put setback lines in red
16" WATER MAIN
N=816028.56 E=954636.04
NEW BRITAIN WATER DEPARTMENT LOT 53-145 (ZONE R-40) AREA: 50.38 ACRES
BPS-1
HBLW-1
BIT CONC. ACCESS DRIVE (J/C-26)
3 FT WIDE GRAVEL INFILTRATION TRENCH (C/C-26)
LIMITS OF WETLAND
HBLW-2
BPS-2
BPS-3
N=815815.04 E=954723.44
N=815805.58 E=954749.03
6.5-foot high
6.5-FT HIGH CHAIN LINK FENCE (B/C-27)
BUILDING ENTRANCE/EXIT
METAL BEAM RAIL (A/C-25)
BUILDING ENTRANCE/EXIT
5 FT WIDE CONCRETE WALK (L/C-26)
N=815745.97 E=954792.91
TEMPORARY SWITCHBOARD
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
LIMIT OF METAL BEAM RAIL
N=815665.20 E=954833.75
BUILDING ENTRANCE/EXIT
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
LIMIT OF METAL BEAM RAIL
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
3 FT WIDE GRAVEL INFILTRATION TRENCH (C/C-26)
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
HYDRANT
LOAM AND SEED DISTURBED AREA
220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
RIPRAP
NEW POND PUMPING STATION FFE = 258' 56'Lx72'Wx25'H
BPS-4
×251.6
×251.8
×252.3
×252.31
×250.3
N=815900.69 E=954734.73
FLOODWAY
N=815870.26 E=954771.18
LIMIT OF METAL BEAM RAIL
N=815860.24 E=954792.16
SEGMENTAL BLOCK RETAINING WALL (E/C-27)
FUTURE MAU-1 SEE HVAC DRAWINGS SET AT ELEVATION 258.5'
BUILDING ENTRANCE/EXIT
N=815820.57 E=954836.35
ROOF LEADER OUTLET SET AT ELEVATION 252.0'
RIPRAP APRON (E/C-26)
BUILDING ENTRANCE/EXIT
EXISTING LOWER WELLFIELD WELL PUMPING STATION TO BE DEMOLISHED 50'H X 50'W X 26'H
LOCATION OF GENERATOR
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
FLOODWAY - WESTERN BOUNDARY
FLOODWAY - EASTERN BOUNDARY
EDGE OF STREAM
PAD-MOUNTED UTILITY TRANSFORMER
METAL BEAM RAIL (A/C-28)
LIMIT OF BIT. CONC. ACCESS DRIVE
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
LIMIT OF METAL BEAM RAIL
EXISTING POND PUMPING STATION TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION 37'L X 42' W X 26'H
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
NEW BRITAIN WATER DEPARTMENT LOT 53-147 (ZONE R-40) AREA: 25.8 ACRES
NEW BRITAIN WATER DEPARTMENT LOT 53-150 (ZONE R-40) AREA: 39.9 ACRES
scale this back to existing
SURVEY CONTROL # 91 N=816097.6711 E=954678.5708 EL=256.530
SURVEY CONTROL # 92 N=816091.7206 E=954678.5611 EL=256.479
VEHICLE CONTROL GATE
24-FT WIDE DOUBLE-LEAF SWING GATE (A/C-27)
fix leaders
SURVEY CONTROL # 93 N=816144.3791 E=954804.3858 EL=256.979
NEW BRITAIN WATER DEPARTMENT LOT 53-149 (ZONE R-40) AREA: 6.8 ACRES
show dimensions of parking space
6.5-foot high
MALTBY STREET
COPPER MINE BROOK
MATCH LINE SEE SHEET C-11
1" = 30'
15 0 30

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

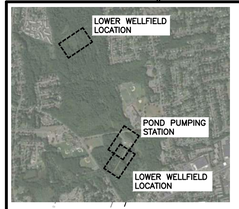
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
LAYOUT AND MATERIALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C010GDPL.DWG
SHEET NO. C-10

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

LEGEND
- WETLAND FLAG
- BORING

50-FT FRONT YARD SETBACK

LOWER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814826.21
E=954295.69

LOWER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814966.07
E=954566.76

LOWER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=815489.21
E=954705.31

LOWER WELLFIELD WELL NO. 4. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814809.95
E=954461.28

LOWER WELLFIELD WELL NO. 5. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

LOWER WELLFIELD WELL NO. 6. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=815118.36
E=954657.81

B / C-27 6-FT HIGH CHAIN LINK FENCE

C / C-27 6-FT WIDE PEDESTRIAN SWING GATE

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

LOAM AND SEED ALL DISTURBED AREAS

LOAM AND SEED ALL WELL BERMS, TYP.

3,003 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

1,320 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

358 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

CANAL

SUPPLY POND

POLKVILLE BROOK

ABANDONED PIPE AND WELLS

HEADER CAP

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

52" ASH

48" OAK

Well 9 Upper Rim 250.16
Well 9-A Upper Rim 250.18
Well 10 Upper Rim=251.81
Well 10-A Upper Rim=251.82
Well 7-A Upper Rim=251.62
Well 7-3 Upper Rim=251.63
3" Dia. Well Top of Rim=250.88
Well 11 3" Upper Rim=251.6
Well 3" 11-A Upper Rim=252.29
Test Well 5-A Top of Cap=250.35
Test Well OW-16 Top of Cap=251.91
Test Well 6A Top of Rim=251.56
Test Well 6A Top of Rim=251.49
3" WELL OW-5 Top of Rim=250.43
OW-15 Top of Rim=250.97
NB-OW-14 Old 3" Well Top of Rim=252.60
Top of Wall At Spillway=251.4
Well 5 stake
Existing Well (Typ)
Top of Frame=251.67
Top of Frame=251.65
Top of Frame=252.55
Top of Frame=252.41
Top of Frame=252.37
Top of Frame=252.43
Top of Frame=252.15
Top of Frame=251.30
Top of Frame=252.20
Top of Frame=253.73
Top of Frame=253.20
Top of Frame=253.05
Top of Frame=252.96
Top of Frame=251.42
CLP #10213
CLP #10214
CLP #10216
CLP #1021
BLWF-1
BLWF-2
BLWF-3
BLWF-4
BLWF-5
BLWF-6
RINE"
No#

MATCH LINE SEE PUMPING STATION SHEETS

1" = 30'
15 0 30

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CITY OF NEW BRITAIN, CONNECTICUT

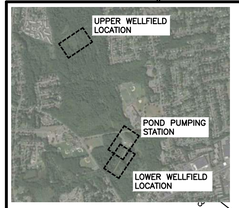
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

LOWER WELLFIELD LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C011GDPL.DWG

SHEET NO.
C-11

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

10,357 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

NEW POND PUMPING STATION FFE = 258'

ROOFLEADER OUTLET SET AT ELEVATION 252.0' (E C-26)

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

MATCH EXISTING GRADE

MATCH LINE SEE LOWER WELLFIELD SHEETS

CANAL

SUPPLY POND

Edge of Pavement

MALTBY STREET

COPPER MINE BROOK

MALTBY STREET BRIDGE

COPPER MINE BROOK

1" = 30'

15 0 30

N

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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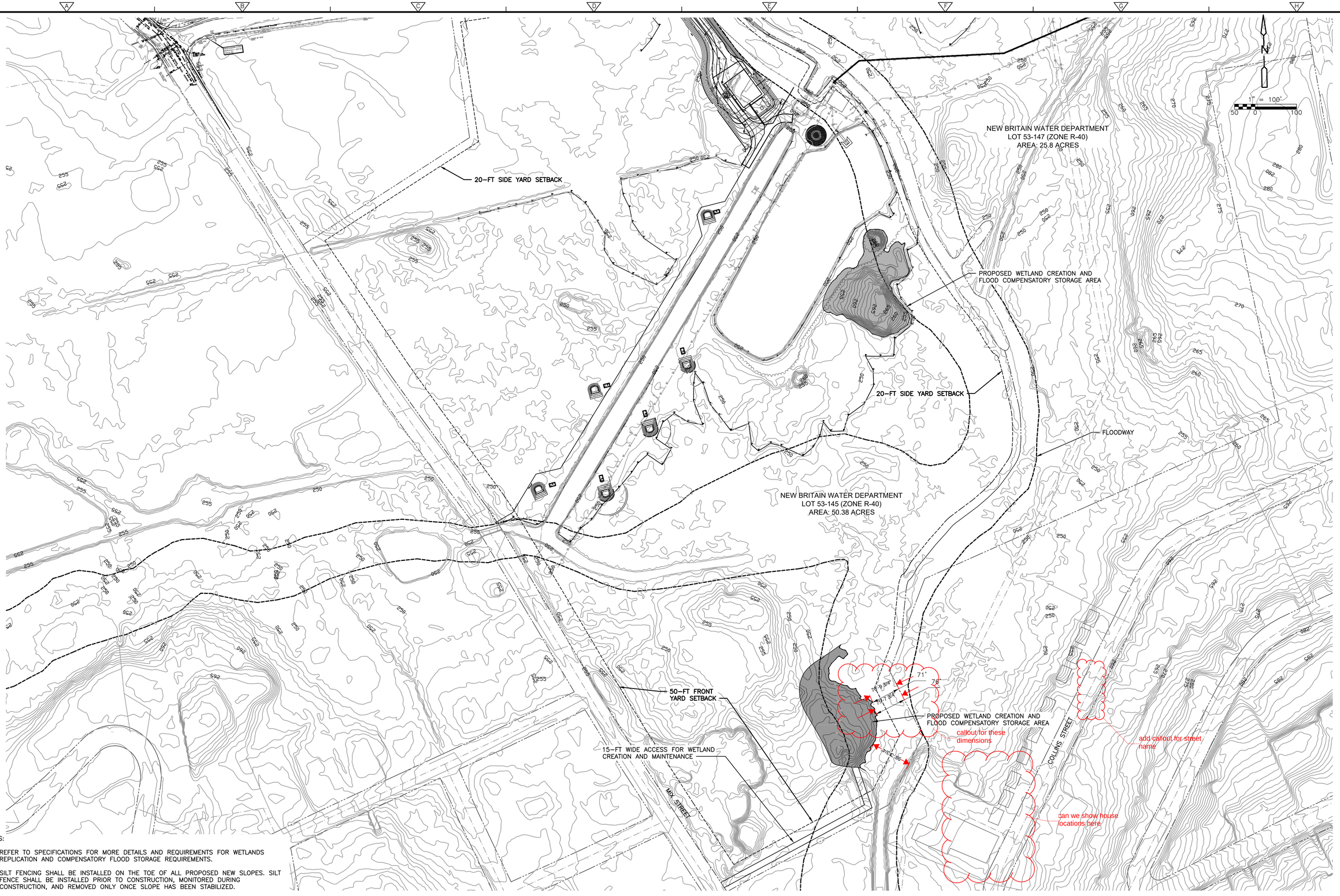
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
GRADING AND DRAINAGE PLAN

PROJECT NO. 10739-264571
FILE NAME: C012GDPL.DWG
SHEET NO. C-12

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GARLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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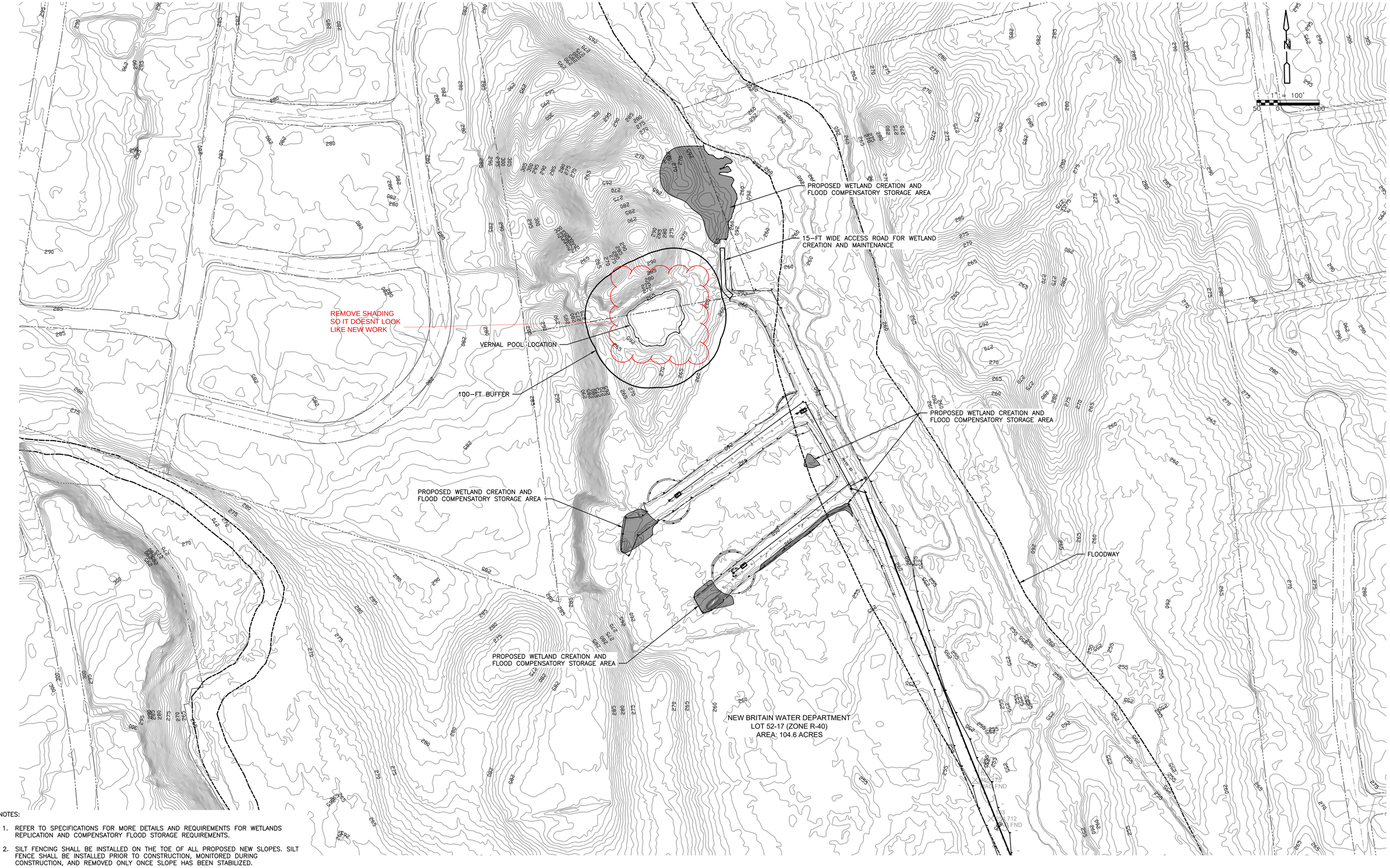
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN I

PROJECT NO. 10739-264571
FILE NAME: C013STPL.DWG
SHEET NO. C-13

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

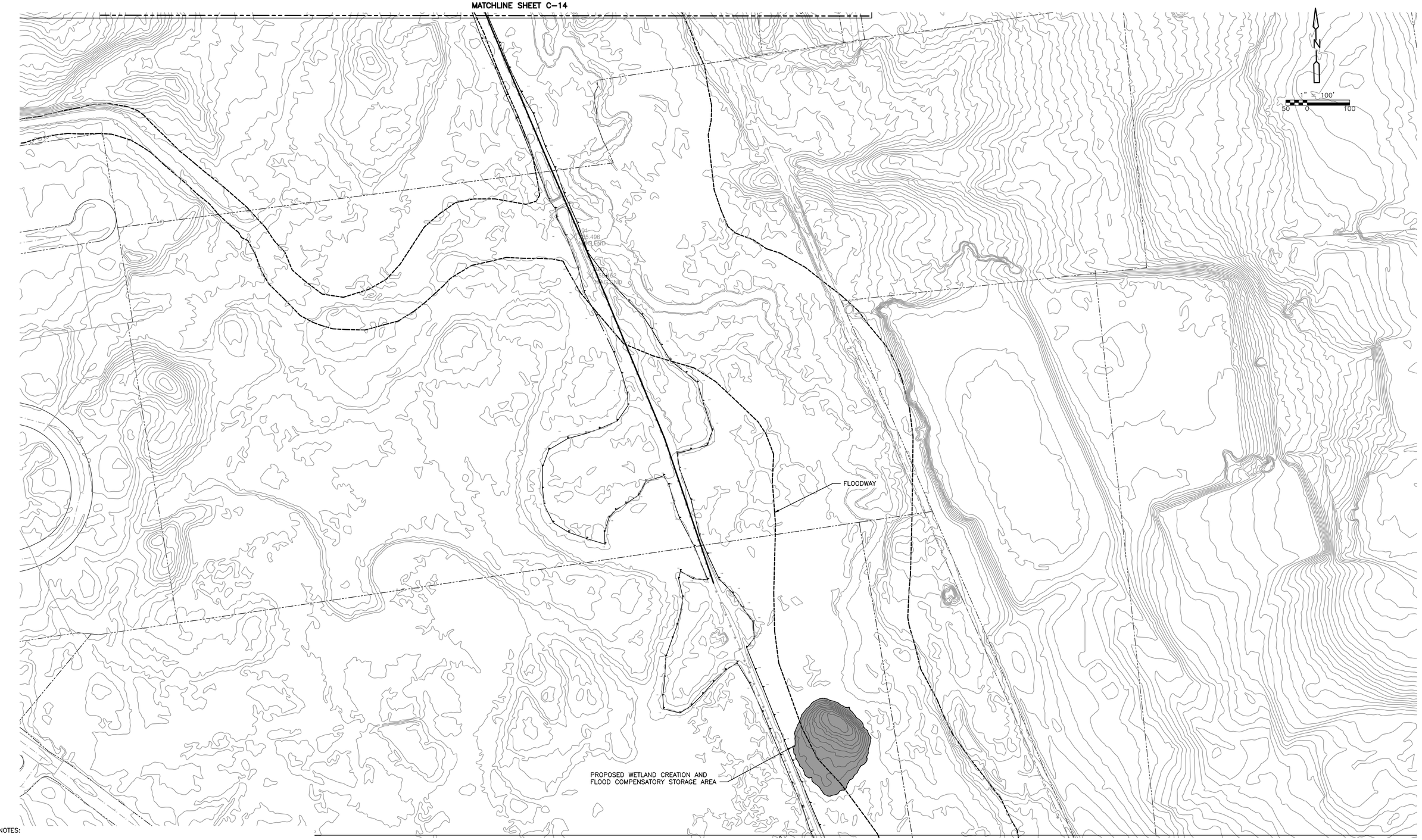
WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN II

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO. C-14

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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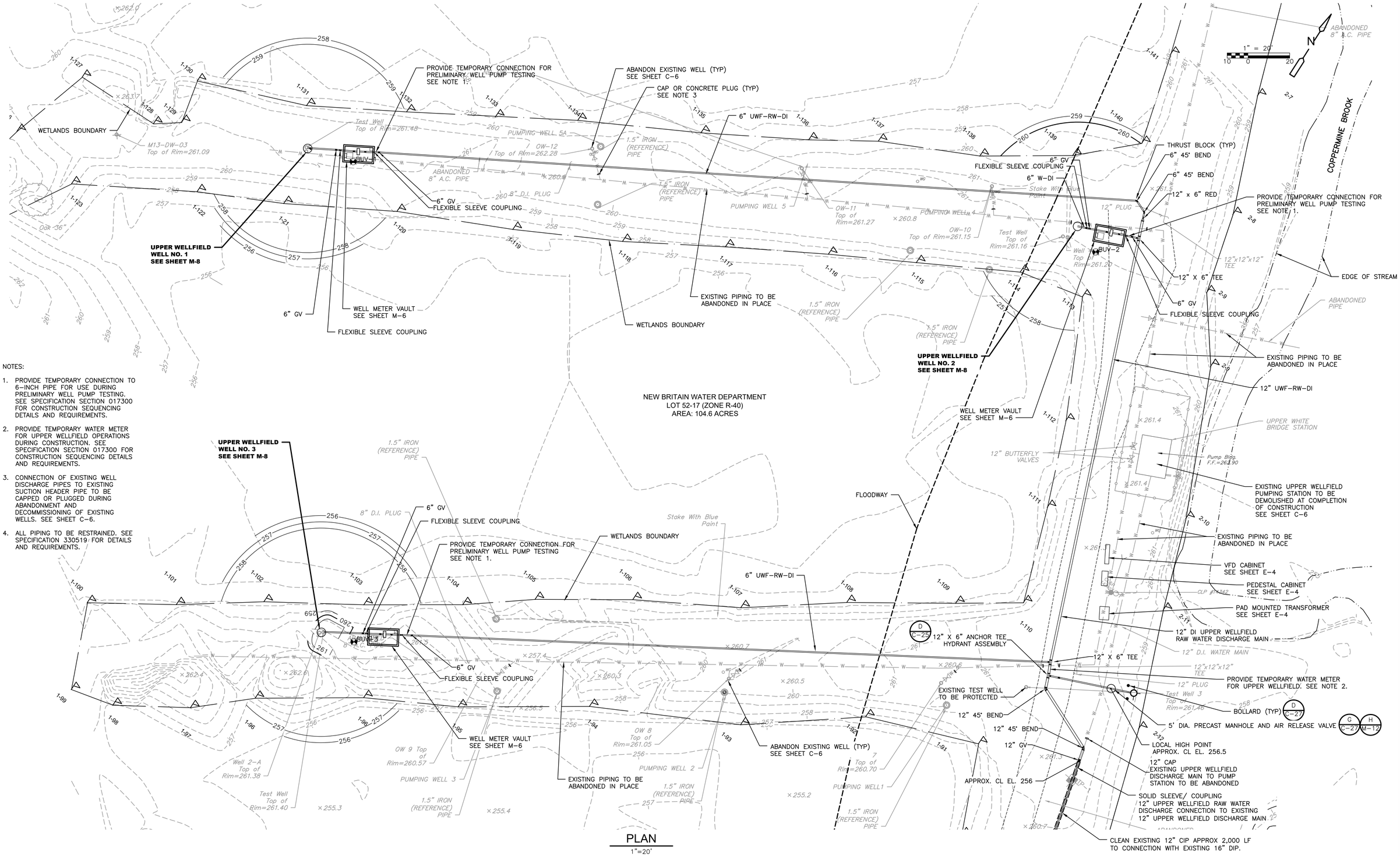
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN III

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO.
C-14A

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6-INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. PROVIDE TEMPORARY WATER METER FOR UPPER WELLFIELD OPERATIONS DURING CONSTRUCTION. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C-6.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

NEW BRITAIN WATER DEPARTMENT
LOT 52-17 (ZONE R-40)
AREA: 104.6 ACRES

PLAN
1"=20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD YARD PIPING PLAN

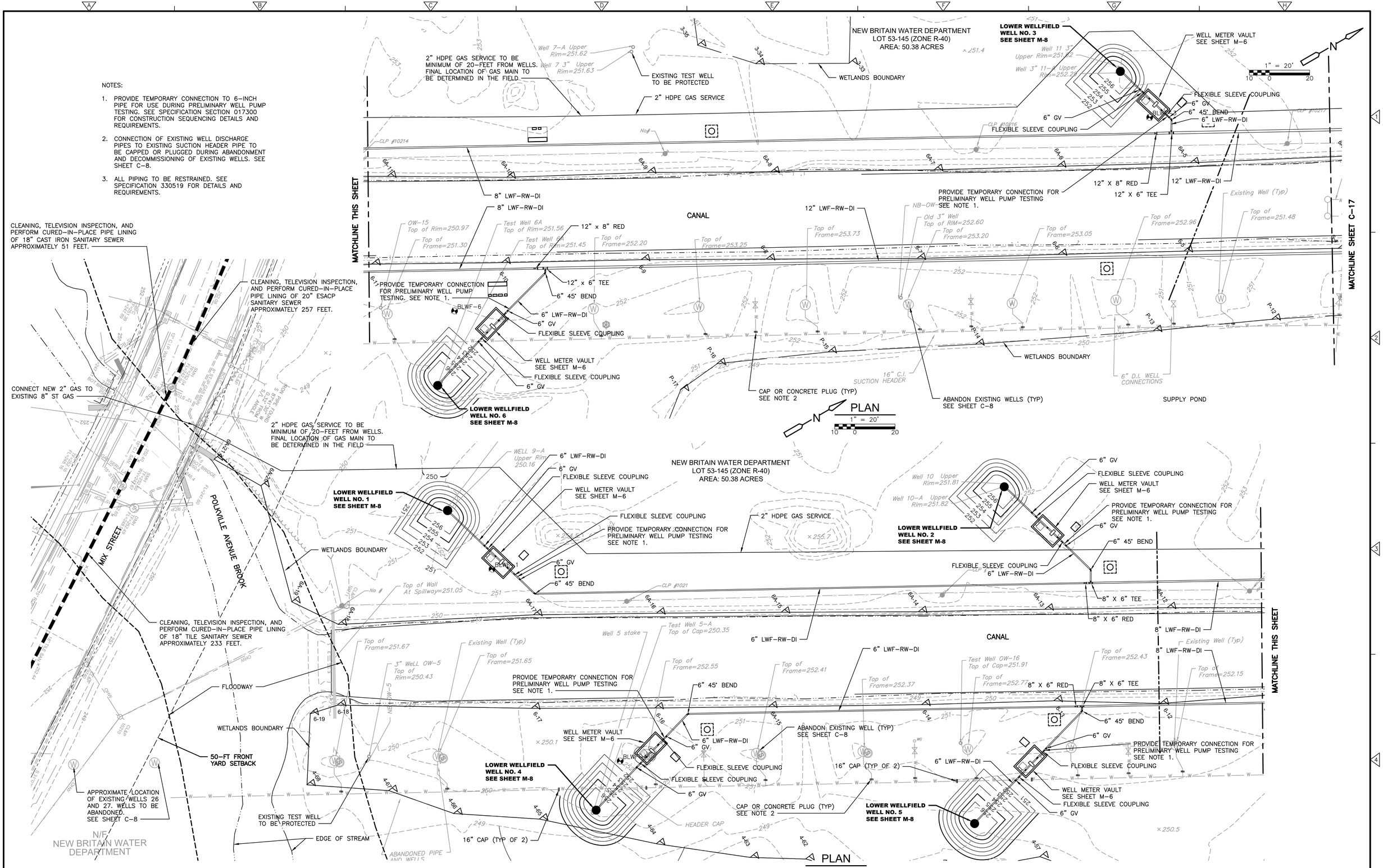
PROJECT NO. 10739-264571
FILE NAME: C015YPPL.DWG
SHEET NO. C-15

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6–INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C–8.
3. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

LOWER WELLFIELD YARD PIPING PLAN

PROJECT NO. 10739–264571
FILE NAME: C016YPPL.DWG
SHEET NO. C-16

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436, CYPWP001, XSVPL000, CWP000ST, AWZ001PS – 2D Process Export, 2022–17, BORING LOCATIONS, Floodway_Floodplain, EWP001ST] Images: []
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MATCHLINE SHEET C-16

NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 16–INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C–7.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

N

1" = 20'
10 0 20

NEW BRITAIN WATER DEPARTMENT
LOT 53-145 (ZONE R-40)
AREA: 50.38 ACRES

PROTECT EXISTING 12" WATER MAIN
ABANDON EXISTING WELLS (TYP) SEE SHEET C–7
WETLANDS BOUNDARY
EXISTING PIPING TO BE ABANDONED IN PLACE
730 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
CAP OR CONCRETE PLUG (TYP) SEE NOTE 3
D C–25 12" X 6" ANCHOR TEE HYDRANT ASSEMBLY
12" 45° VERTICAL BEND (TYP OF 4)
12" LW–RW–DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
30" 45° VERTICAL BEND (TYP OF 4)
30" P–RW–DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
16" CAP (TYP OF 3)
16" BFV TO BE REMOVED
EXISTING MAIN TO BE CAPPED
EXISTING CAISSON WELL AND PIPING TO BE ABANDONED
30" P–RW–DI (℄ EL. 237.52)
REMOVE AND DISPOSE EXISTING MANHOLE (TYP OF 2)
G C–27 5' DIAMETER PRECAST MANHOLE
H M–12 AIR RELEASE VALVE
CONNECT TO EXISTING PIPING
INSTALL RIPRAP APRON AROUND INTAKE STRUCTURE APPROXIMATELY 2–FT TALL BY 5–FT WIDE
EXISTING STEEL INTAKE STRUCTURE SCREENS TO BE REPLACED WITH STAINLESS STEEL SCREENS. MATCH EXISTING DIMENSIONS, SCREEN OPENINGS, AND REINFORCING BARS. MOUNT IN EXISTING SPACE WITH SIMILAR HARDWARE. APPROXIMATELY 9–FT HIGH BY 9.5–FT WIDE; CLEAR SCREEN OPENINGS APPROXIMATELY 0.5–IN SPACING. TYP 2 SIDES.
220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
COPPERMINE BROOK
D C–25 36 X 6" ANCHOR TEE HYDRANT ASSEMBLY
F C–25 SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" WATER MAIN
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 36" W–CI FOR FINAL CONNECTION
WETLANDS BOUNDARY
FLOODWAY EASTERN BOUNDARY
36" W–CI (TO STAFFORD AVE)
EXISTING POND PUMPING STATION FF=253.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)
FUTURE WORK CLEAN, INSPECT, AND CIPP LINE EXISTING 20" PIPE TO STAFFORD AVENUE (APPROX. 1,200 LF)
(TO STAFFORD AVE)
MATCHLINE SHEET C–19
FLOODWAY WESTERN BOUNDARY
SUPPLY POND
CANAL
12" Dia.MH Top of Frame=251.42
Observation Well Elevation=252.00
Top of Frame=252.12
Top of Frame=252.61
NB–OW–13
INLET SCREEN AND GATE VALVE
12" X 6" ANCHOR TEE HYDRANT ASSEMBLY D C–25
2" HDPE GAS SERVICE
BOLLARD (TYP) D C–27
12" LWF–RW–DI
12" LWF–RW–DI
16" X 12" TEE
PLUGGED 16" C.I. SECTION ABANDONED
30" C.M.P. F.E. Inv.=247.28
MH Hatch 2'Dia. Top of Frame=258.26
16" LWF–RW–DI APPROX CL EL 245
12" GV
12" LWF–RW–DI
30" P–RW–DI (℄ E. 240)
16" GV WITH POST INDICATOR (TYP OF 3)
16" LWF–RW–DI TO BE INSTALLED ABOVE 30" P–RW–DI
Conc.Structure with Metal Grate Top of Grate=252.36
Top Concrete Wall At Inlet=251.95
INLET SCREEN AND EQUALIZER
APPROX CL EL 244.6 (MATCH EXISTING)
30" P–RW–DI
30" TEE (℄ EL. 238.05)
30"X24" RED
24" CAP
(TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
CAP
36" CAP
36" TEE
APPROX CL EL 243.8 (MATCH EXISTING)
MH Hatch 2'Dia. Top of Frame=252.32
MH Hatch 2'Dia. Top of Frame=252.43
30k Generator with Underground Conduit
CAP EXISTING 20" WATER MAIN
6'x4' Conc. Inv=245.50
6'x4' Conc. Inv=245.60
6'x4' Conc. Inv=245.53
6'x4' Conc. Inv=245.50
CAP AND THRUST BLOCK FOR TEMPORARY DEAD END
FUTURE WORK 20" X 6" ANCHOR TEE HYDRANT ASSEMBLY
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 20" W–CI FOR FINAL CONNECTION
36" CAP (TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
TEMPORARY SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" PUMP STATION DISCHARGE MAIN
20" DI WATER MAIN
1" DI COPPER SERVICE
16" D.I. SUCTION HEADER Inv=245.95
ABANDONED PIPE
16"45° BEND
16" BFV
36" C.M.P. F.E. Inv.=247.00
36" PUMPED POND AND UPPER WELLFIELD RAW WATER (℄ EL. 245.50)
16" LOWER WELLFIELD (APPROX. ℄ EL. 246.33) (FUTURE TREATED POTABLE) WATER MAIN
LOWER WELLFIELD RAW WATER BACKFLOW PREVENTION ASSEMBLY (SEE SHEET M–7)
BOLLARD (TYP) D C–27
PROVIDE TEMPORARY CONNECTION FOR PRELIMINARY WELL PUMP TESTING. SEE NOTE 1.
SPACE FOR FUTURE LOWER WELLFIELD FINISHED WATER CHLORINE CONTACT TIME PIPE LOOP
36" X 16" TEE
1,197 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
EXISTING CORRUGATED METAL PIPE CULVERTS TO BE REPLACED WITH CONCRETE CULVERT AND CULVERT ENDS (MATCH EXISTING INVERTS) K C–26
36" 45° VERTICAL BEND (TYP OF 4)
16" 45° VERTICAL BEND (TYP OF 4)
36" W–DI AND 16" W–DI TO BE INSTALLED BELOW EXISTING CONCRETE CULVERTS
EXISTING OBSERVATION WELLS 8 AND 8A TO BE ABANDONED SEE SHEET C–7
16" 45° BEND (℄ EL. 250.20)
6" 45° BEND (TYP OF 4)
2" W–CU
6" W–DI
30" POND RAW WATER INTAKE (℄ EL. 234.44)
30" 90° BEND
30" X 20" TEE (3)
30" W–DI
16" 22.5° BEND (℄ EL. 250.20)
PREFABRICATED SANITARY SEWER GRINDER PUMPING STATION
TOP ELEV APPROX 258; TANK INVERT ELEV APPROX 248.5
4" INLET APPROX INV 251.5; 1.25" SAN–HDPE PUMPED OUTLET APPROX CL 252.5
20" MJ BFV WITH EXTENDED NECK AND HANDWHEEL OPERATOR (3)
16" BFV
16" 45° BEND (℄ EL. 250.20)
16" LWF–RW–DI (LOWER WELLFIELD RAW WATER MAIN) (APPROX. ℄ EL. 250.20)
EXISTING LOWER WELLFIELD PUMPING STATION FF=253.00 (TO BE DEMOLISHED) SEE SHEET C–7
EXISTING 16" DI WATER MAIN TO BE REMOVED SEE SHEET C–7
6" 45° BEND
1.25" SAN–HDPE LOCAL HIGH POINT, APPROX. CL EL 253
4' DIA. MANHOLE G C–27 AND AIR RELEASE VALVE AS SPECIFIED
WETLANDS BOUNDARY
PROPOSED POND PUMPING STATION FFE 258.00 SEE SHEET M–2
HYDRANT ASSEMBLY D C–25
16" CAP
EXISTING 16" DI WATER MAIN TO BE ABANDONED IN PLACE
BORING LOCATION (TYP) SEE NOTE 2 THIS SHEET
SEGMENTAL BLOCK RETAINING WALL E C–27
6" 45° BEND
1.25" SAN–HDPE (APPROX. ℄ EL. 252.5)
6" GAS TO EMERGENCY GENERATOR
24" PUMPED POND RAW WATER (APPROX. ℄ EL. 252.17)
24" 22.5° BEND (DN)
4" DI ROOF DRAIN D C–26
Gate with Bollard
16" LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN (APPROX. ℄ EL. 250.20)
16" BFV
16" 90° BEND (DN)
16" 45° BEND
16"–LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN TO BE INSTALLED ABOVE 16"–UWF–RW–DI
16" UWF–RW–DI
6" W–DI
2" W–CU
TEST PIT LOCATION (TYP) SEE NOTE 2 THIS SHEET
WETLANDS BOUNDARY
EDGE OF STREAM
COPPERMINE BROOK
MATCHLINE SHEET C–18C

PLAN
1" = 20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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101 East River Drive, Suite 1A
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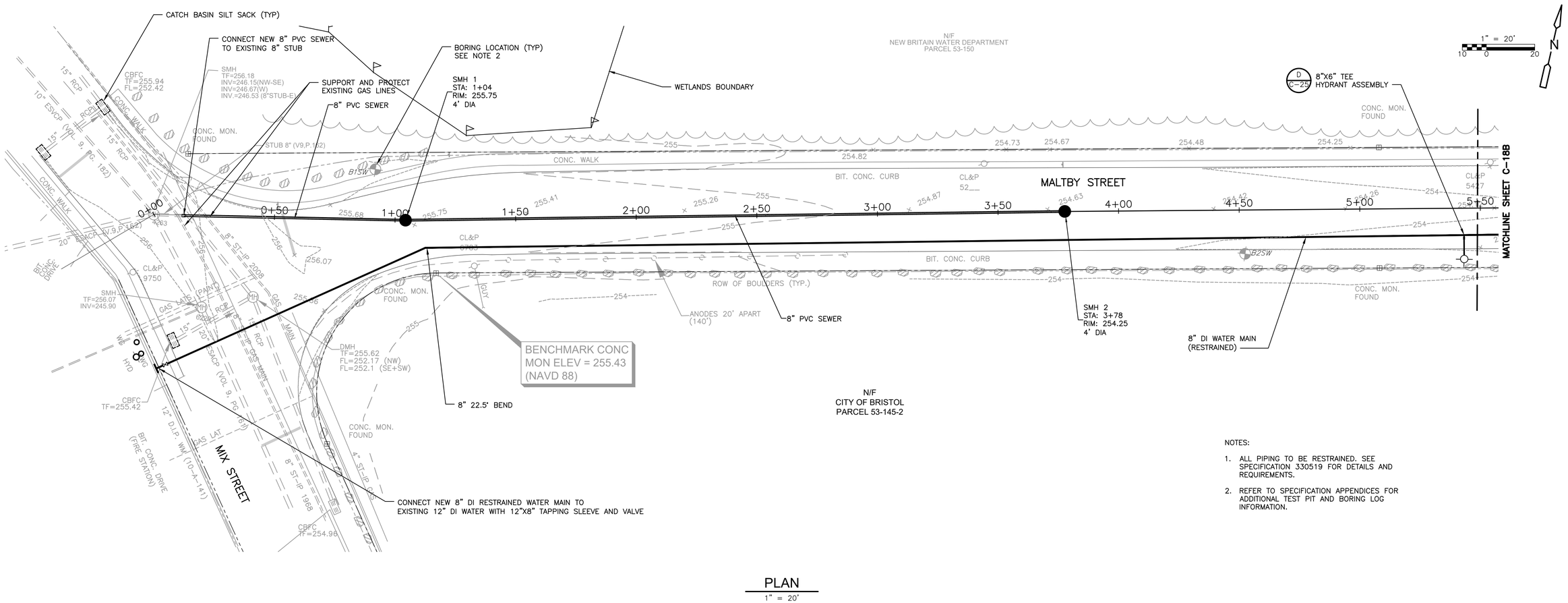
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

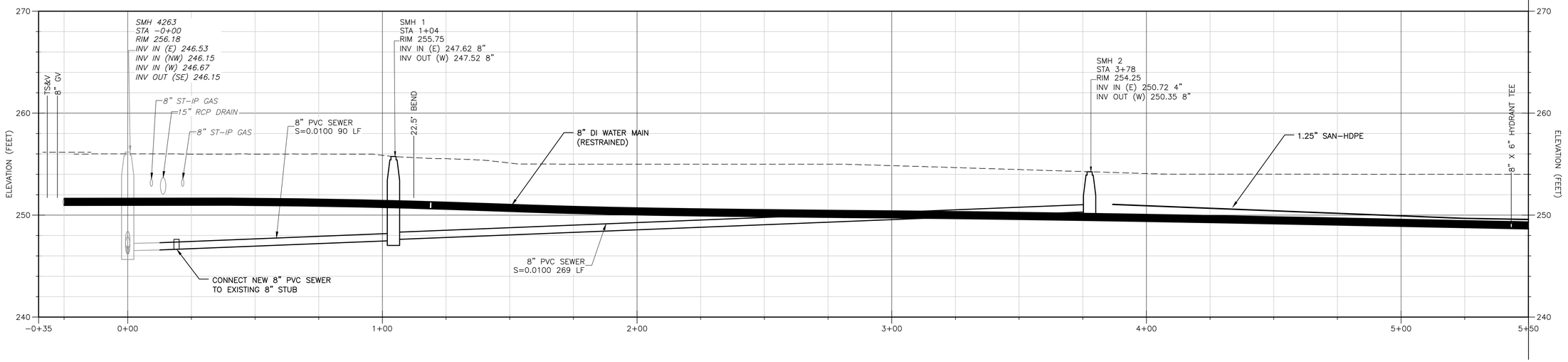
POND PUMPING STATION YARD PIPING PLAN

PROJECT NO. 10739–264571
FILE NAME: C017YPPL.DWG
SHEET NO. C–17

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
1" = 20'



1" = 20' (10 0 20) PROFILE HORZ:1"=20' VERT:1"=5' 1" = 5' (2.5 0 5)

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

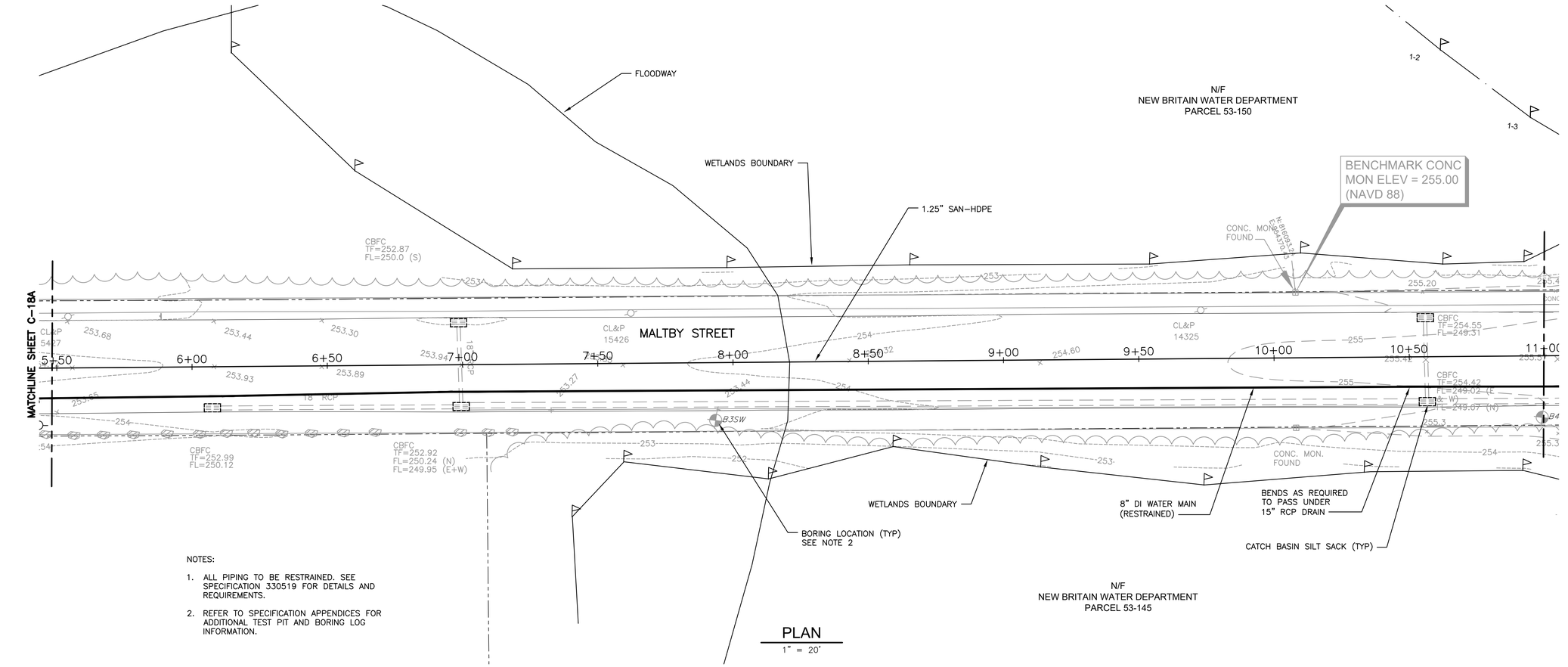
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE I

PROJECT NO. 10739-264571
FILE NAME: C018AYPPL.DWG
SHEET NO.
C-18A

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

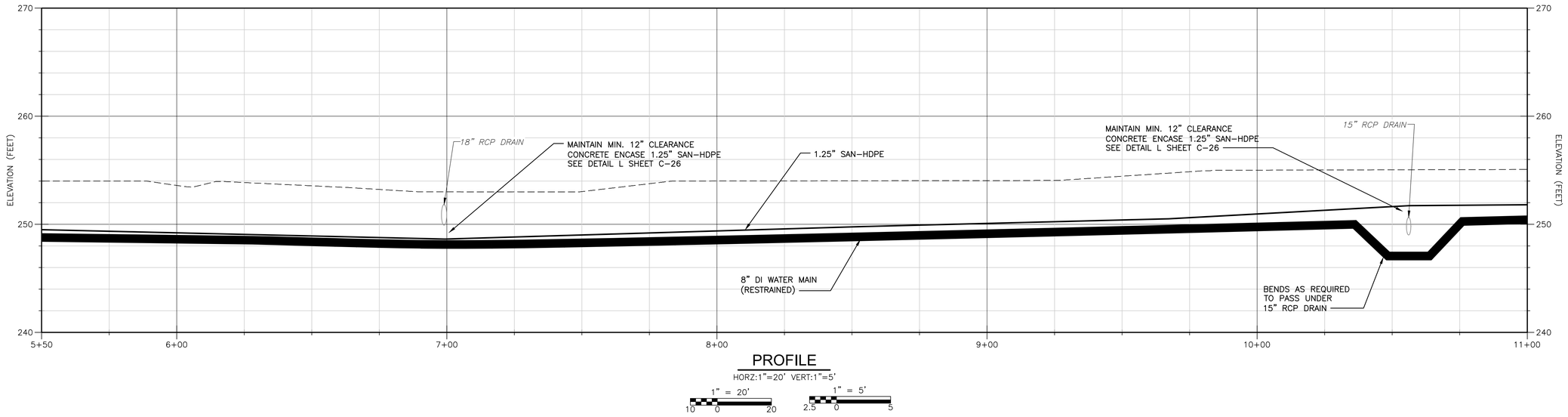
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C:\Users\engelsb\ACCDocs\CDM Smith Inc\10739-264571 - New Britain CT White Bridge Well Fields and PS\Project Files\02 Civil (C)\10 CADD\C018AYPPL.dwg
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NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.

PLAN
1" = 20'



PROFILE
HORZ:1"=20' VERT:1"=5'
1" = 20' 10 0 20
1" = 5' 2.5 0 5

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

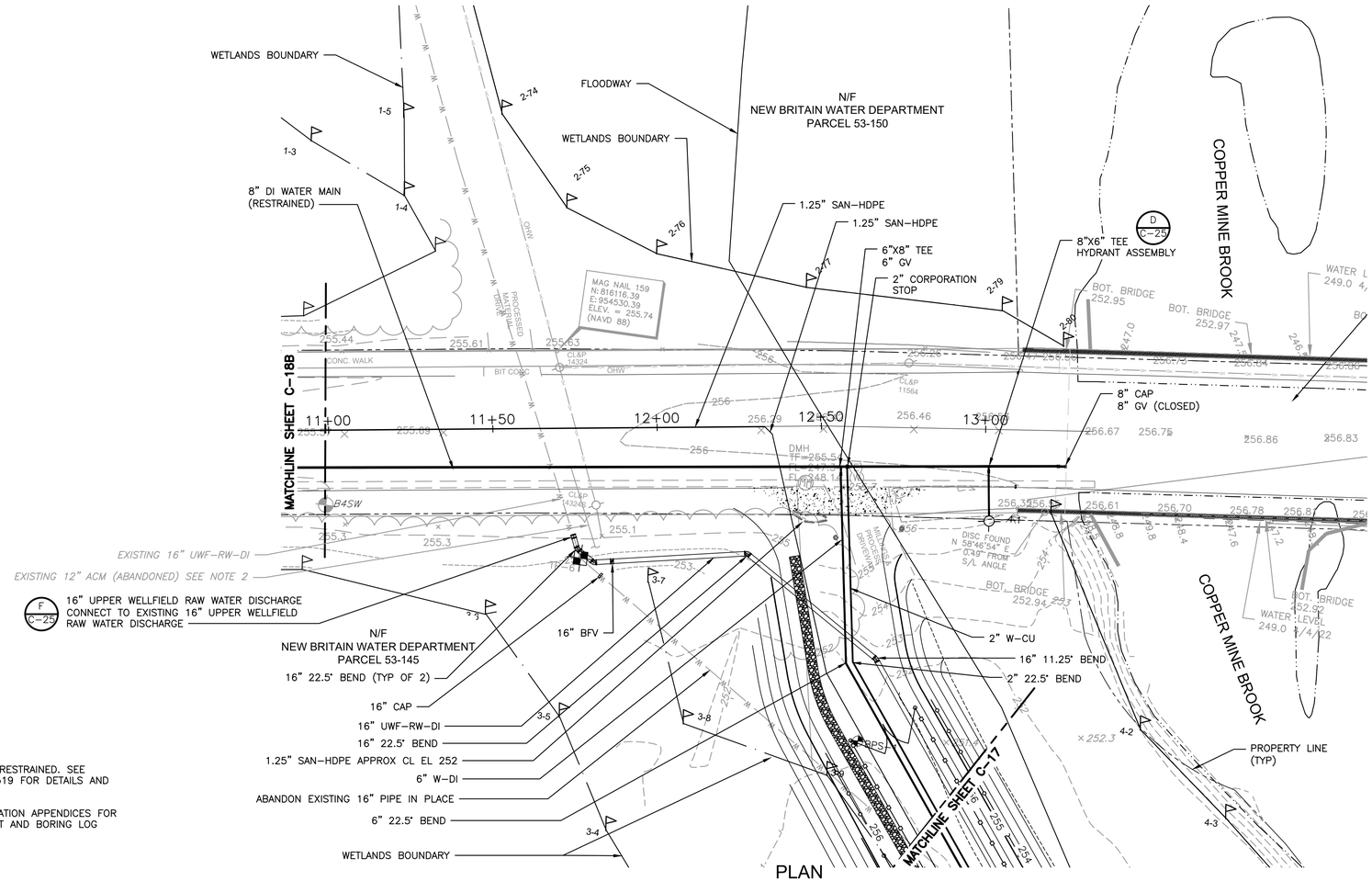
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE II

PROJECT NO. 10739–264571
FILE NAME: C018BYPPL.DWG
SHEET NO.
C-18B

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436_XSVPL000, CWP000ST, AW2001PS – 2D Process Export, 2022-17, BORING LOCATIONS-CEI Edits, Floodway_Floodplain, CYPWP002] Images: []
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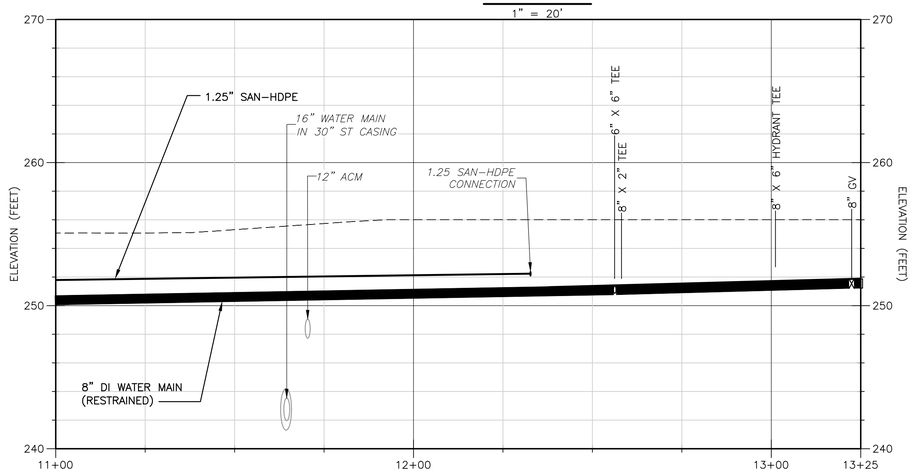


NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.

PLAN

1" = 20'



PROFILE

1" = 20' HORZ:1"=20' VERT:1"=5'

1" = 5'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE III

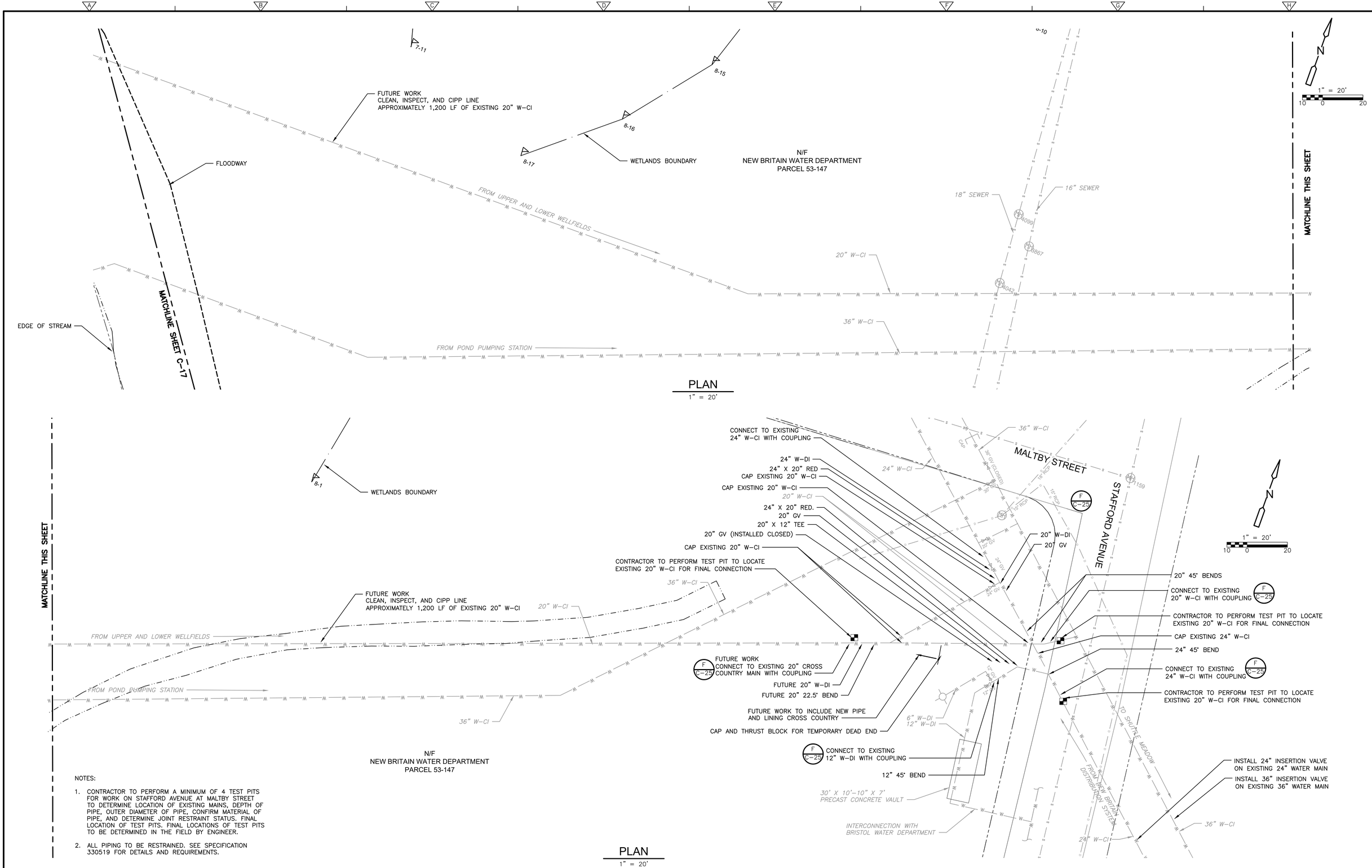
PROJECT NO. 10739–264571
FILE NAME: C018CYPPL.DWG

SHEET NO.
C-18C

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436, XSVPL000, CWP000ST, AWZ001PS – 2D Process Export, 2022–17, BORING LOCATIONS–CEI Edits, Floodway_Floodplain, CYPWP002] Images: []
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PLAN
1" = 20'

PLAN
1" = 20'

NOTES:

1. CONTRACTOR TO PERFORM A MINIMUM OF 4 TEST PITS FOR WORK ON STAFFORD AVENUE AT MALTBY STREET TO DETERMINE LOCATION OF EXISTING MAINS, DEPTH OF PIPE, OUTER DIAMETER OF PIPE, CONFIRM MATERIAL OF PIPE, AND DETERMINE JOINT RESTRAINT STATUS. FINAL LOCATION OF TEST PITS. FINAL LOCATIONS OF TEST PITS TO BE DETERMINED IN THE FIELD BY ENGINEER.
2. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

STAFFORD AVENUE AND CROSS COUNTRY PLAN

PROJECT NO. 10739-264571
FILE NAME: C019YPPL.DWG
SHEET NO. C-19

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

LIMITS OF CANAL SEDIMENT REMOVAL

WETLAND BOUNDARY

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE. TO BE REMOVED AT THE END OF CONSTRUCTION (A / C-24)

CANAL TO BE DEWATERED AS NECESSARY

PROTECT EXISTING GATE STRUCTURE AND PIPE

REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE AND GATES

PROTECT EXISTING PIPES

INLET SCREEN AND GATE VALVE

STOPLOG AND PLUG FOR POND DEWATERING

TURBIDITY CURTAIN (D / C-24)

CANAL TO BE DEWATERED AS REQUIRED. SEE NOTE 5

EDGE OF STREAM

PROVIDE STEEL PLATES TO PROTECT EXISTING CULVERT

PROTECT EXISTING PIPES

PROTECT EXISTING 16" DI PIPE

PROTECT EXISTING SUCTION HEADER

PROTECT EXISTING GATE STRUCTURE AND SUCTION PIPE

PROTECT EXISTING PIPE AND WALL

STOPLOG AND PLUG FOR POND DEWATERING

TEMPORARY SEDIMENT DEWATERING AND STOCKPILING AREA

STABILIZED POND ACCESS (F / C-27)

35-LF OF BANK RESTORATION (I / C-26)

LIMITS OF POND SEDIMENT REMOVAL

EXTENTS OF CLEARING AND GRUBBING TO BE DETERMINED

TEMPORARY ALTERATION TO APPROXIMATELY 30,900 SF OF WATERS OF THE U.S.

OCTOBER 2021 SEDIMENT DEPTH LOCATION AND MEASUREMENT (TYP)

DECEMBER 2021 SEDIMENT SAMPLE LOCATION AND ESTIMATED SEDIMENT DEPTH (TYP)

POND TO BE DEWATERED VIA THE EXISTING POND PUMPING STATION. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASIN. (J / C-24)

FLOODWAY

WETLAND FLAG LINE IS ORDINARY HIGH WATER

CANAL 1 (21.4")

CANAL 3 (12")

CANAL 4 (7")

POND 7 (2")

POND 8 (7.8")

POND 9 (6.6")

POND 10 (7.4")

POND 1 (12")

POND 3 (23.8")

POND 6A & 6B (48")

POND 4 (5")

POND 2 (13.6")

POND 5A & 5B (14.4")

SMU-1 1 FT

SMU-2 2 FT

SMU-3 2.5 FT

SMU-4 2.5 FT

SMU-5 1 FT

SMU-6 1 FT

SMU-7 0.5 FT

SMU-8 1 FT

SMU-9 2 FT

SMU-10 AVG 4 FT MAX 7.5 FT

AREA 1A 3"

AREA 1B 13"

AREA 2A 30"

AREA 2B 17.5"

EXISTING LOWER WELLFIELD PUMPING STATION F.F.= 253.00

EXISTING POND PUMPING STATION F.F.= 253.15

EXISTING WELL NO. 6

30k Generator with Underground Conduit

NOTES:

1. APPROXIMATELY 6,000 CUBIC YARDS (IN-SITU) OF SEDIMENT MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION.
2. AREA FOR TEMPORARY DEWATERING AND STOCKPILING OF SEDIMENT REMOVED FROM THE CANAL AND SUPPLY POND LIMITED TO THE HATCHED AREA INDICATED IN THE SUPPLY POND.
3. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED UPON COMPLETION OF PROJECT. DISTURBED AREAS TO BE LOAMED AND SEEDED.
4. CONTRACTOR TO DEWATER CANAL AS NECESSARY. PLUG OR INSTALL STOP LOGS IN EXISTING CULVERTS OR INSTALL COFFERDAM. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASINS.

PLAN
1" = 30'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. BURKE
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: T. BURKE
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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101 East River Drive, Suite 1A
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

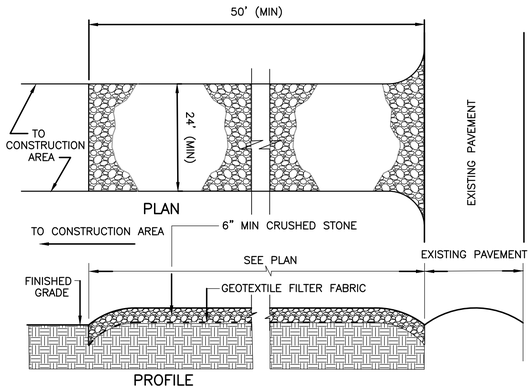
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

SUPPLY POND AND CANAL SEDIMENT REMOVAL PLAN

PROJECT NO. 10739-264571
FILE NAME: C023SDRM.DWG
SHEET NO. C-23

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [TEST HOLE POINTS, CDMS_2436, XSVPL040, 2022-17, BORING LOCATIONS, Floodway_Floodplain] Images: []
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NOTES:

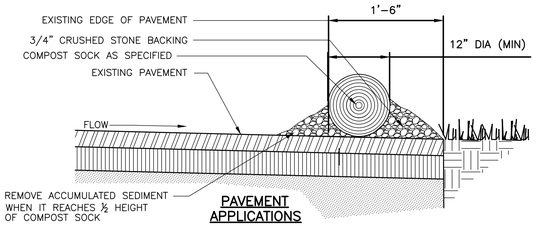
1.) PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND EXISTING PAVEMENT.

2.) LIMITS OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE AS DIRECTED BY THE ENGINEER.

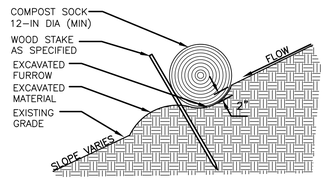
3.) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.

4.) REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO EXISTING PAVEMENT SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
DETAIL A
NOT TO SCALE

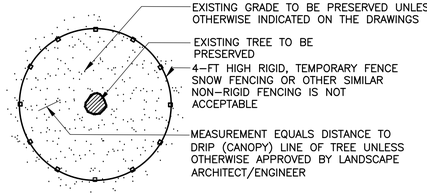


PAVEMENT APPLICATIONS



LANDSCAPE APPLICATIONS

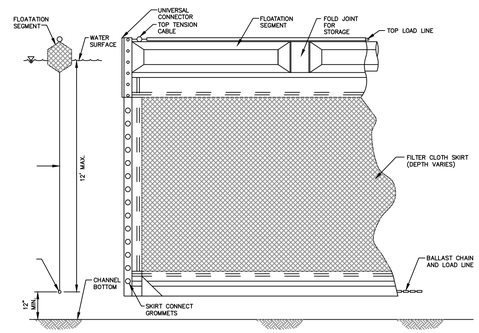
COMPOST SOCK
DETAIL B
SCALE: NTS

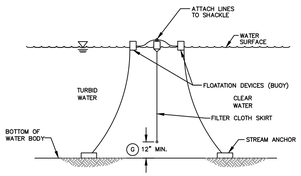


NOTES:
1. FENCING SHALL BE INSTALLED AROUND PERIMETER OF ALL EXISTING TREES TO BE PRESERVED WITHIN THE LIMIT OF WORK.
2. FENCING MAY BE REMOVED TEMPORARILY, ONLY AS REQUIRED TO PERFORM THE WORK SHOWN ON THE DRAWINGS.
3. FENCING SHALL REMAIN IN PLACE & BE MAINTAINED THROUGHOUT CONSTRUCTION AND THEN REMOVED COMPLETELY.

TREE PROTECTION
DETAIL C
NOT TO SCALE

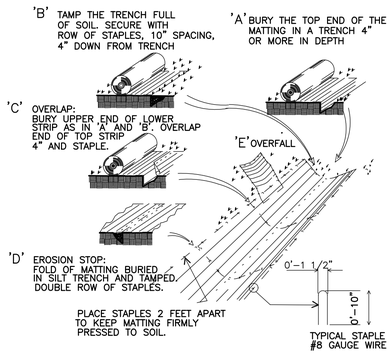
TURBIDITY CURTAIN





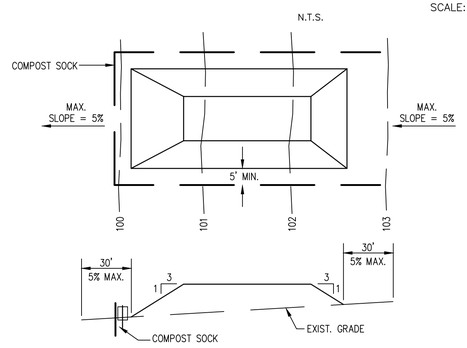
TYPICAL ANCHORING SECTION

TURBIDITY CURTAIN
DETAIL D
NOT TO SCALE



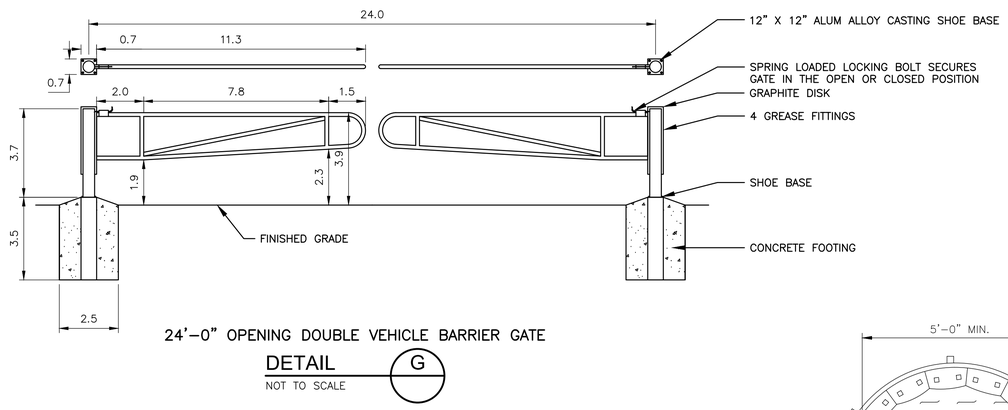
NOTE:
1.) APPLY ON ALL NEW SLOPES 3(H):1(V) AND STEEPER.

EROSION CONTROL BLANKET
DETAIL E
NOT TO SCALE

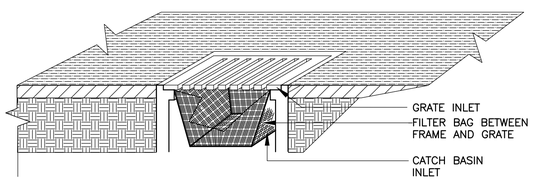


NOTES:
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQ.
4. COMPOST SHALL BE INSTALLED AS DETAILED HEREON.

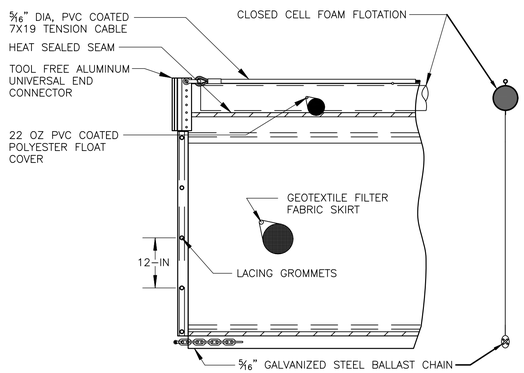
SOIL STOCKPILE
DETAIL F
NOT TO SCALE



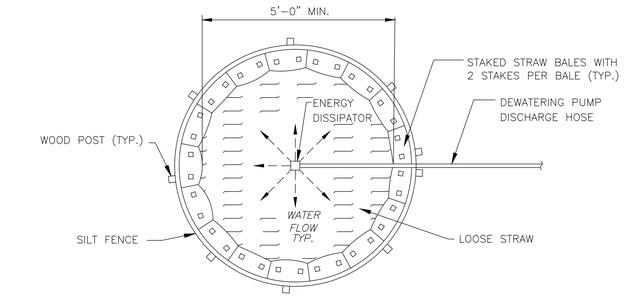
24'-0" OPENING DOUBLE VEHICLE BARRIER GATE
DETAIL G
NOT TO SCALE



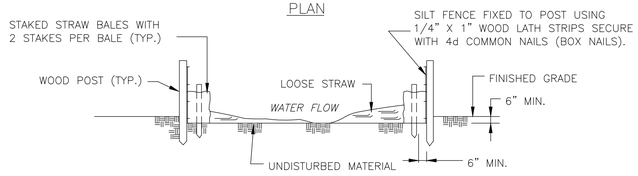
CATCH BASIN FILTER
DETAIL H
NOT TO SCALE



FLOATING TURBIDITY BARRIER
DETAIL I
NOT TO SCALE



PLAN



DEWATERING SEDIMENTATION BASIN
DETAIL J
NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

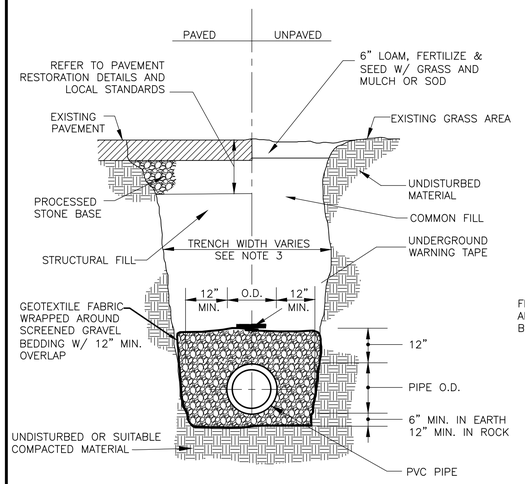
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS I

PROJECT NO. 10739-264571
FILE NAME: CD001CSDT.DWG
SHEET NO.
C-24

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

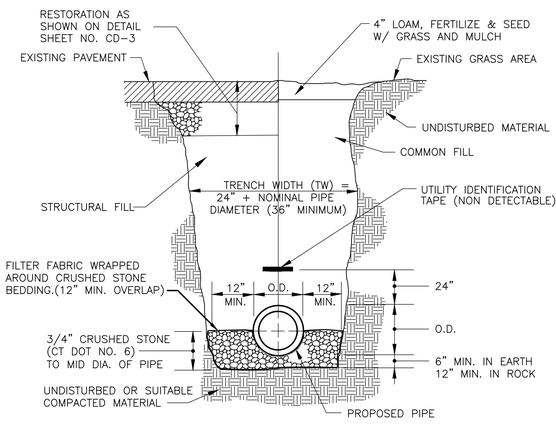
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PVC PIPE TRENCH

DETAIL A

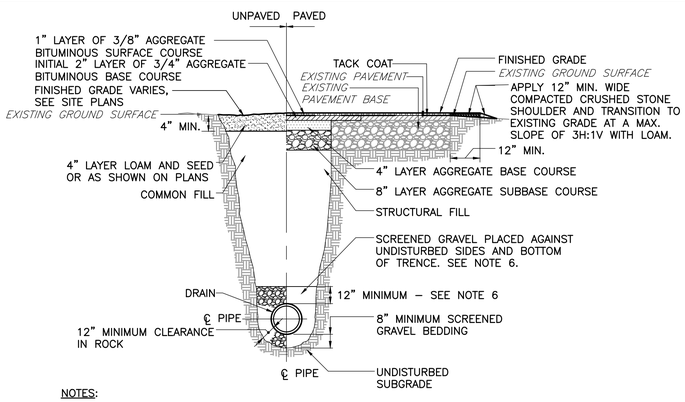
NOT TO SCALE



DI PIPE TRENCH

DETAIL B

NOT TO SCALE



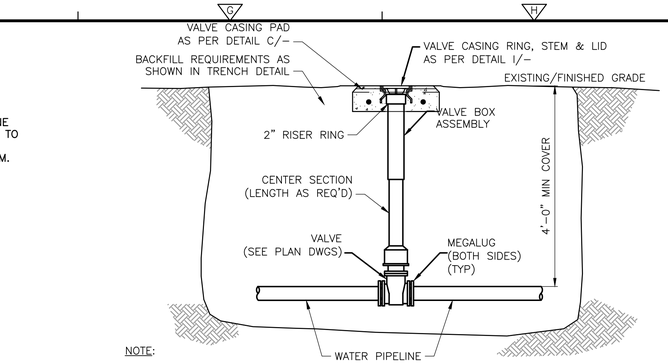
NOTES:

1. THE CONTRACTOR SHALL MAINTAIN INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE FOR 60–90 DAYS MINIMUM.
2. IF INITIAL PAVEMENT IS PLACED AFTER OCTOBER 1ST, THEN IT SHALL BE MAINTAINED UNTIL PAVEMENT OVERLAY IS PLACED.
3. PAVEMENT OVERLAY SHALL BE PLACED BETWEEN APRIL 15 AND NOVEMBER 15 OF EACH CALENDAR YEAR.
4. THE CONTRACTOR SHALL SAW CUT 12–INCHES OUTSIDE OF INITIAL TRENCH EXCAVATION. INITIAL PAVEMENT SHALL BE REMOVED AND DISPOSED OF.
5. INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE SHALL MATCH EXISTING ROADWAY GRADES.
6. FOR PIPES OTHER THAN PVC AND HDPE, SELECT COMMON FILL MAY BE USED FROM MID–DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE.
7. PROVIDE AT LEAST ONE IMPERVIOUS DAM IN GRAVEL BEDDING BETWEEN EACH MANHOLE OR EVERY 300 FEET, WHICHEVER IS LESS.
8. PRIOR TO INSTALLATION OF 1" LAYER OF 3/8" AGGREGATE BITUMINOUS SURFACE COURSE, SHIM EXISTING ROAD AS REQUIRED TO PROVIDE A SMOOTH FINISHED GRADE WITH NO PUDDLING.
9. IN LOCATIONS WHERE TRENCH PAVING MEETS EXISTING BITUMINOUS CONCRETE, MATCH FINISHED GRADE.

TRENCHING AND REPAIRS

DETAIL C

NTS



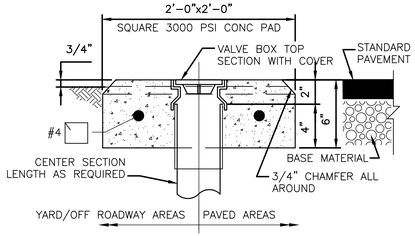
NOTE:

THE VALVE BOX SHALL BE PLUMB AND CENTERED OVER THE VALVE OPERATING NUT IN SUCH A MANNER THAT IT CAN BE FREELY OPERATED WITH A VALVE KEY. THE CONTRACTOR PERFORMING WORK SHALL ASSURE THAT THE VALVE BOX IS FREE OF DEBRIS BEFORE RESETTING.

VALVE BOX (PIPE 12" DIAMETER AND SMALLER)

DETAIL H

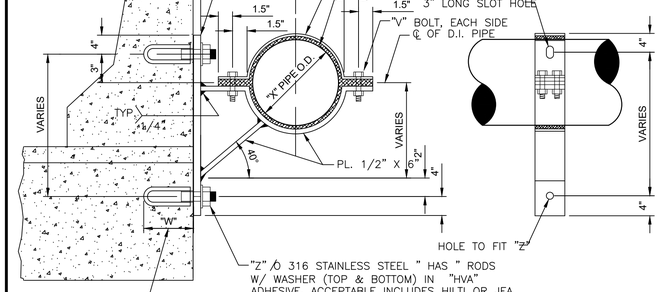
NTS



VALVE CASING PAD

DETAIL I

NTS



CROSS–SECTION PROFILE

PIPE SIZE	4"	6"	8"	10"	12"	16"	20"	24"
X	4.80"	6.90"	9.05"	11.10"	13.20"	17.40"	21.60"	25.80"
Y	8"	9"	10"	12"	13"	15"	17"	19"
Z	¾"	¾"	¾"	1"	1"	1"	1¼"	1¼"
W	6.625"	6.625"	6.625"	8.25"	8.25"	8.25"	12"	12"
V	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"

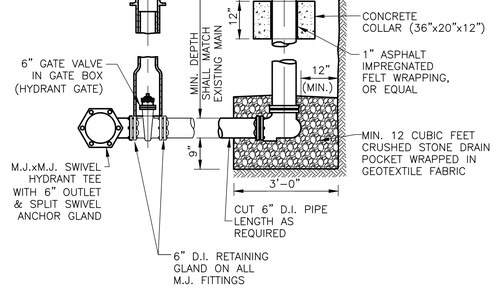
NOTES :

1. ALL WELDS TO BE PERFORMED BY A CERTIFIED STRUCTURAL WELDER.
2. ALL SUPPORT BRACKET MEMBERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
3. ALL NUTS, BOLTS, AND WASHERS SHALL BE 316 STAINLESS STEEL.
4. THE SPACING OF SIDEWALL PIPE SUPPORTS SHALL BE SPECIFICALLY DESIGNED BASED UPON MANY FACTS INCLUDING PIPE SIZE AND MATERIAL EMBEDMENT LIMITATIONS. UNLESS APPROVED OTHERWISE BY THE ENGINEER, IN NO CASE SHALL THE SPACING OF PIPE SUPPORTS EXCEED TWENTY (20) FEET ON–CENTER FOR PIPE SIZES TWELVE (12) INCH AND SMALLER AND TEN (10) FEET ON–CENTER FOR PIPE SIZES GREATER THAN TWELVE (12) INCHES.

SIDEWALL PIPE HANGER

DETAIL E

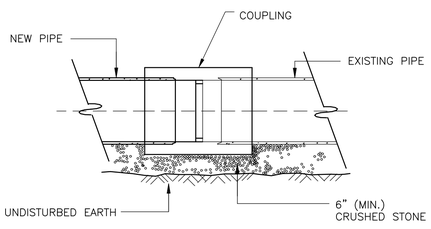
NOT TO SCALE



FIRE HYDRANT ASSEMBLY

DETAIL D

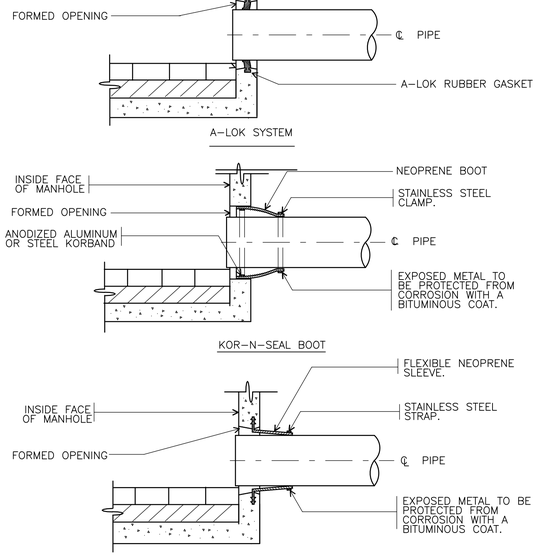
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COUPLING CONNECTION TO EXISTING PIPE

DETAIL F

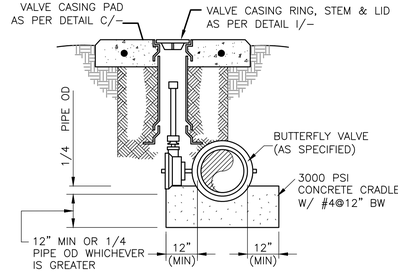
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PIPE CONNECTION DETAILS

DETAIL G

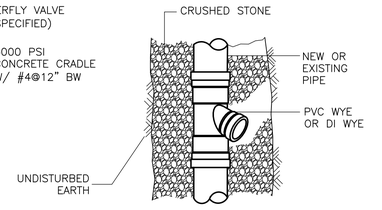
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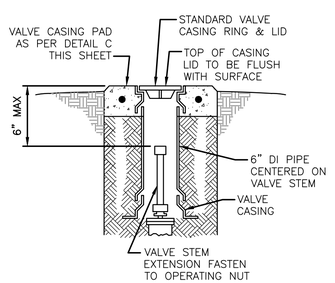
DIRECT BURIED BUTTERFLY VALVE (FOR 16"–36" BUTTERFLY VALVES)

DETAIL J

NTS



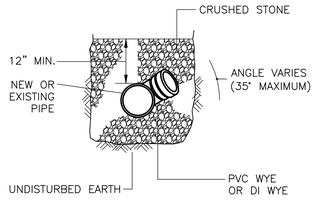
PLAN



VALVE BOX

DETAIL K

NTS



SECTION

PVC OR DI WYE BRANCH

DETAIL L

NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

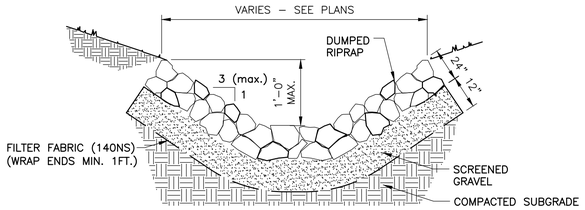
CIVIL DETAILS II

PROJECT NO. 10739–264571
FILE NAME: CD002CSDT.DWG

SHEET NO.
C-25

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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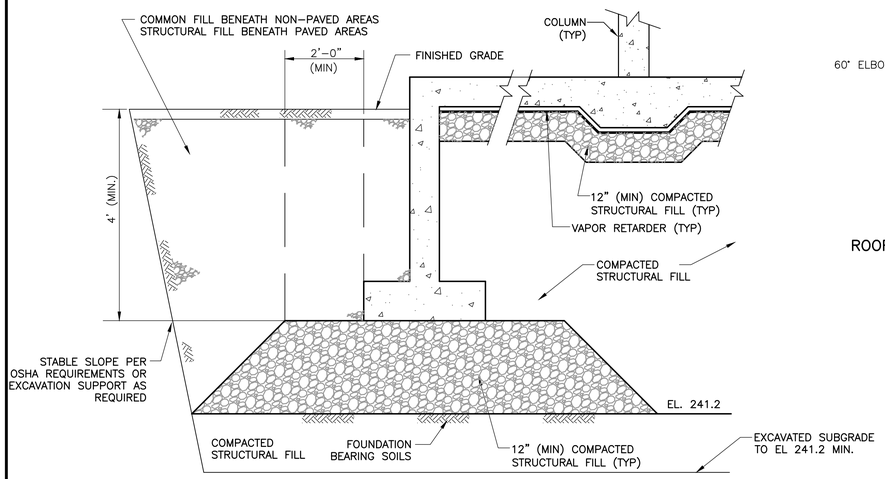


SECTION

RIPRAP SWALE

DETAIL A

SCALE: NTS



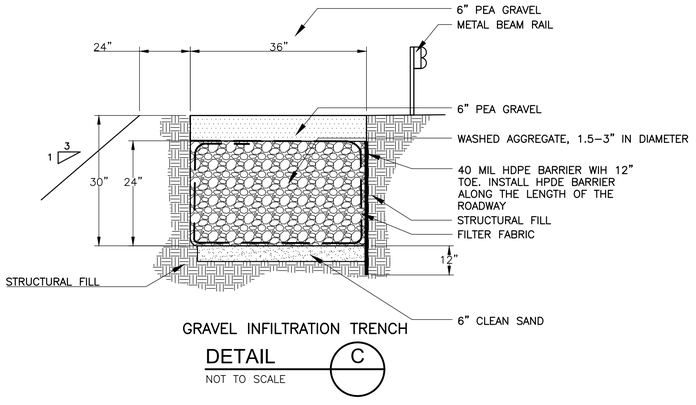
NOTES:

1. THE SUITABILITY OF THE FOUNDATION SUB-GRADE TO BE VERIFIED BY CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
2. SEE SPECIFICATION SECTION 312000 FOR SUBGRADE PREPARATION REQUIREMENTS AND COMPACTION REQUIREMENTS.
3. STRUCTURES INCLUDE TANK, BUILDING, OR SHALLOW FOOTINGS. SEE SITE PLANS.

BACKFILL

DETAIL B

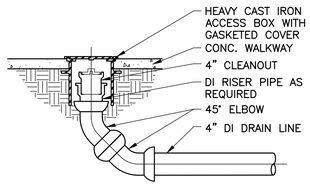
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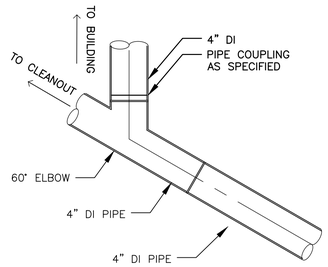
GRAVEL INFILTRATION TRENCH

DETAIL C

NOT TO SCALE



SECTION VIEW

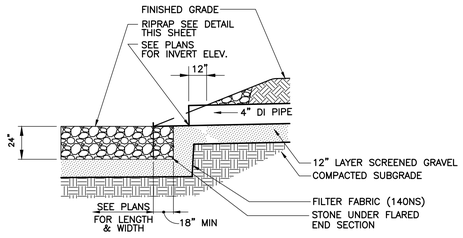


PLAN VIEW

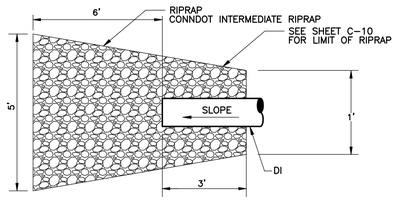
ROOF DRAIN CONNECTION WITH CLEANOUT

DETAIL D

NTS



SECTION

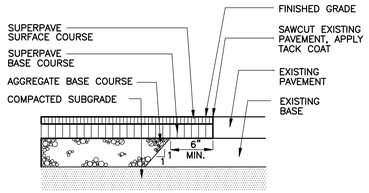


PLAN

PIPE END SECTION & RIPRAP APRON

DETAIL E

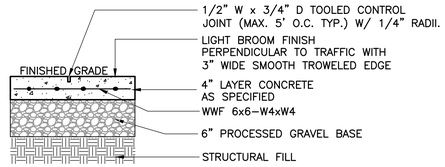
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PAVEMENT MATCH

DETAIL F

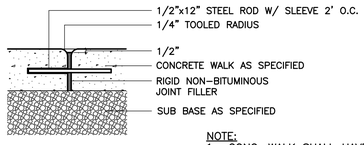
NOT TO SCALE



CONCRETE WALKWAY

DETAIL G

NOT TO SCALE



NOTE:

1. CONC. WALK SHALL HAVE 3 STEEL RODS MIN.
2. EXPANSION JOINTS SHALL BE LOCATED 30 FT. MIN. O.C. AND AT THE END OF EACH DAYS POUR.

EXPANSION JOINT

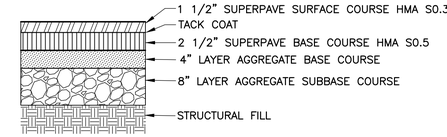
DETAIL H

NOT TO SCALE

BANK RESTORATION

DETAIL I

NOT TO SCALE



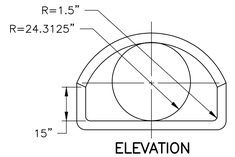
NOTES:

1. BASE COURSE SHALL EXTEND 3" MIN. BEYOND EDGE OF PAVEMENT. DEPTH VARIES SEE GRADING AND DRAINAGE PLAN

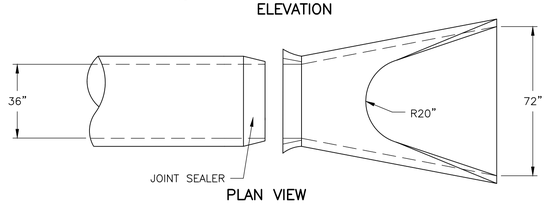
BITUMINOUS CONCRETE PAVEMENT

DETAIL J

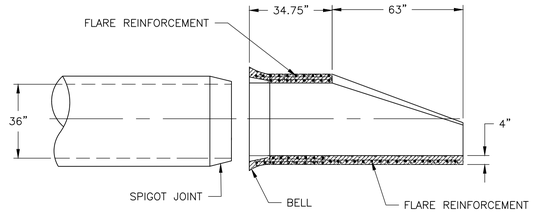
NOT TO SCALE



ELEVATION



PLAN VIEW

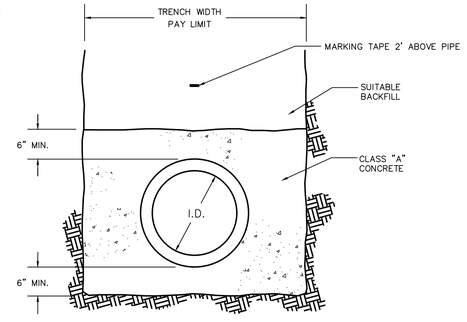


SECTION VIEW

RCP CULVERT PIPE END

DETAIL K

NOT TO SCALE



CONCRETE ENCASEMENT

DETAIL L

NOT TO SCALE

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

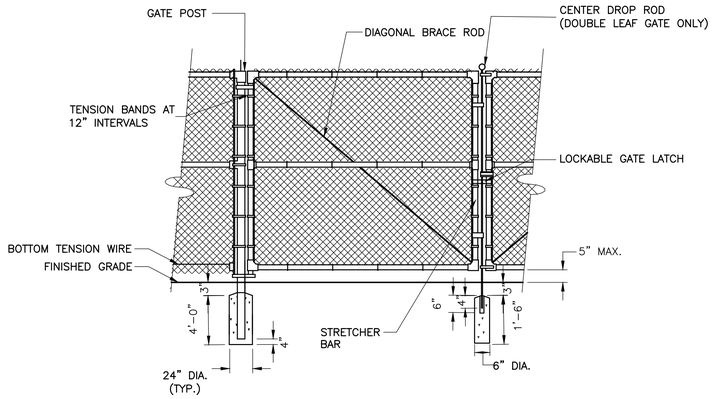
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS III

PROJECT NO. 10739-264571
FILE NAME: CD003CSDT.DWG

SHEET NO.
C-26

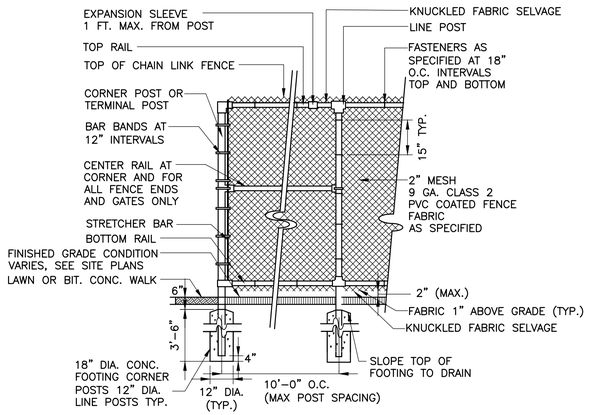
REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



CHAIN LINK DOUBLE LEAF SWING GATE

DETAIL A

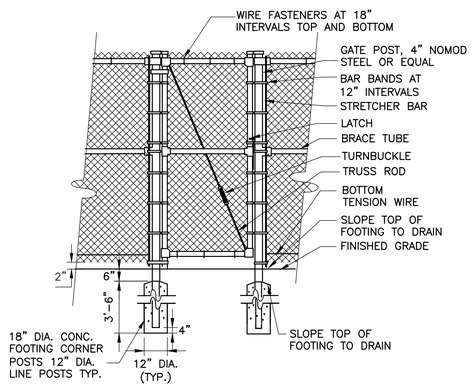
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6.5-FT HIGH CHAIN LINK FENCE

DETAIL B

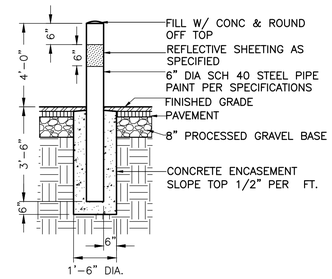
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PEDESTRIAN CHAIN LINK FENCE GATE

DETAIL C

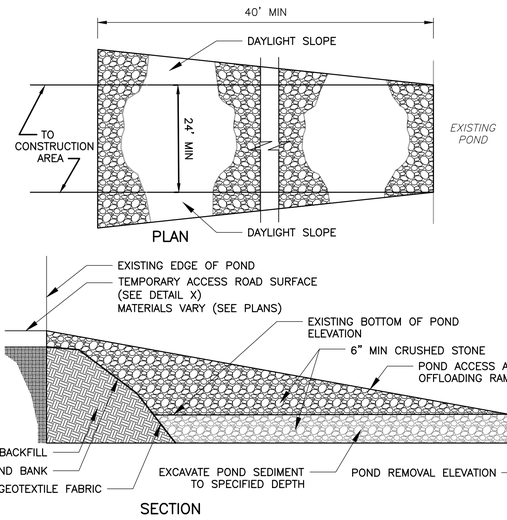
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STEEL BOLLARD

DETAIL D

NOT TO SCALE



SECTION

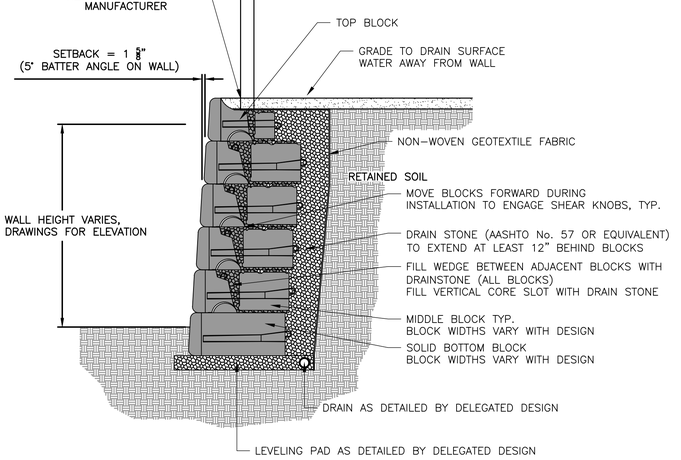
NOTES:

1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED POND ACCESS/TRUCK OFFLOADING RAMP AND EXISTING GROUND SURFACE
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO GROUND SURFACE.
3. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
4. REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
6. THE SLOPE OF THE POND ACCESS AND OFFLOADING RAMP TO BE DETERMINED BY CONTRACTOR BASED ON SELECTED EQUIPMENT, MEANS AND METHODS, AND APPROVED BY THE ENGINEER.
7. DAYLIGHT SLOPES OF THE RAMP WILL BE INSTALLED AS NEEDED BASED ON THE EXCAVATION DEPTH AND BANK HEIGHT TO MAINTAIN STABILITY OF THE POND ACCESS/OFFLOADING RAMP.
8. ALL MATERIAL FOR POND ACCESS/OFFLOADING RAMP IS TEMPORARY AND WILL BE REMOVED AFTER SEDIMENT REMOVAL COMPLETED. POND BANK TO BE RESTORED PER SPECIFICATIONS.

POND ACCESS AND TRUCK OFFLOADING RAMP

DETAIL F

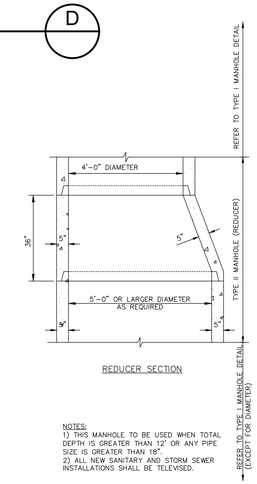
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SEGMENTAL UNIT RETAINING WALL

DETAIL E

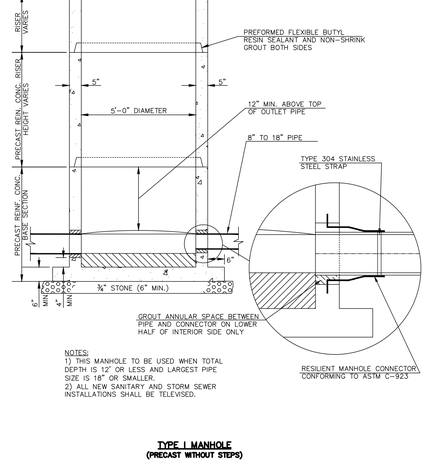
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REDUCER SECTION

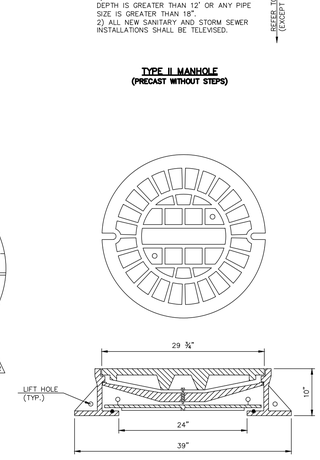
NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS GREATER THAN 12' OR ANY PIPE SIZE IS GREATER THAN 18".
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

TYPE II MANHOLE
(PRECAST WITHOUT STEPS)



NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS 12' OR LESS AND LARGEST PIPE SIZE IS 18" OR SMALLER.
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

TYPE I MANHOLE
(PRECAST WITHOUT STEPS)



NEW BRITAIN STANDARD
WATERTIGHT MANHOLE CASTING

MANHOLE

DETAIL G

NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

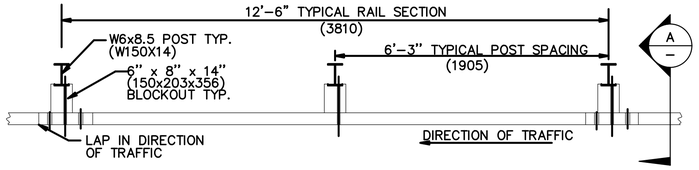
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS IV

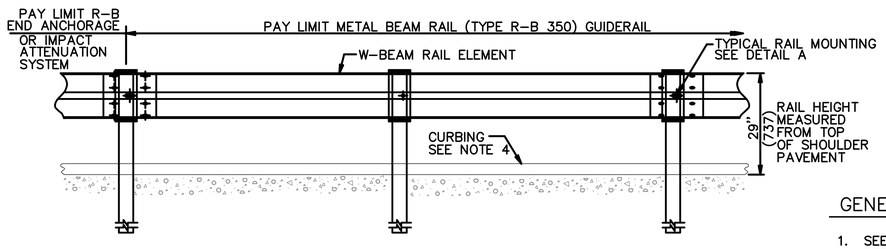
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FILE NAME: CD004CSDT.DWG
SHEET NO.
C-27

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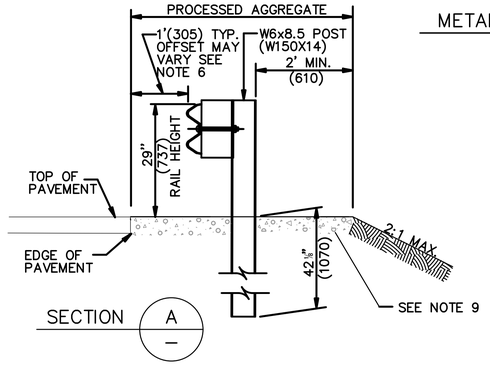
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PLAN

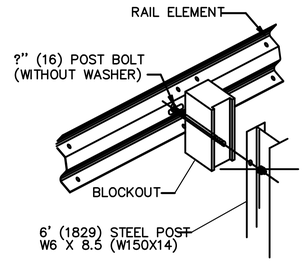


ELEVATION

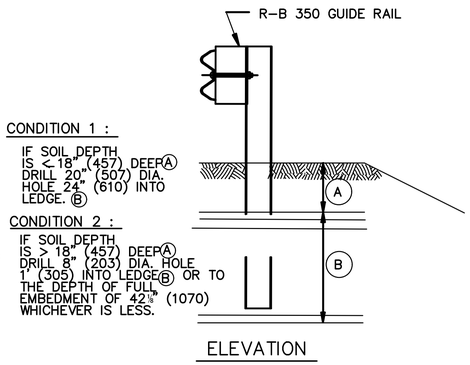


NO CURB APPLICATION

METAL BEAM RAIL (TYPE R-B 350)



DETAIL A
RAIL MOUNTING

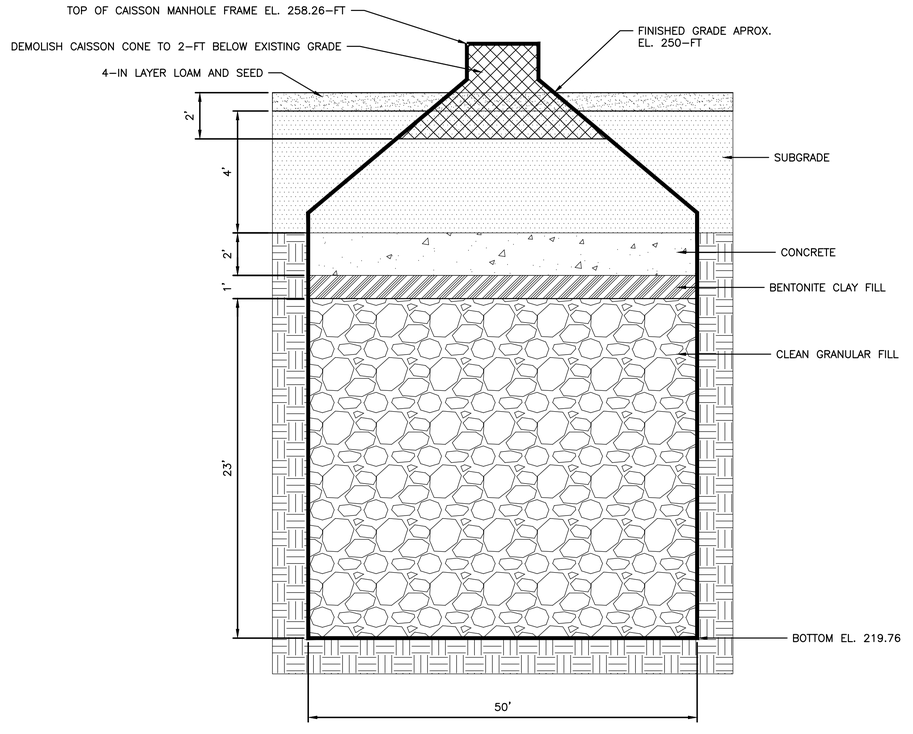


ELEVATION

GENERAL NOTES:

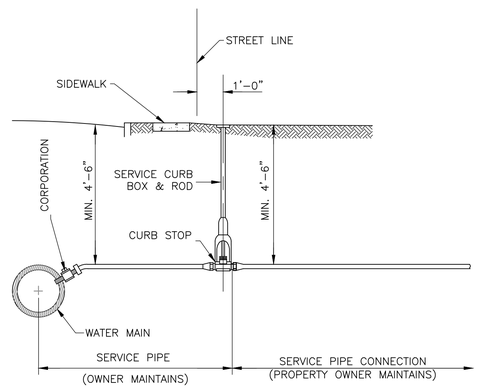
1. SEE CTDOT STANDARDS FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3" IS 4'-3". DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (>45mph 72.4kph), 4" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9" BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1' OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2' OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2' FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2' BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" + 1".

METAL BEAM RAIL
DETAIL A
NOT TO SCALE



NOTES:
1. EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED AS REQUIRED IN SECTION 019416, APPENDED TO THE SPECIFICATIONS.
2. CAISSON TOP CONE TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE.

CAISSON DECOMMISSIONING AND ABANDONMENT
DETAIL B
NOT TO SCALE



WATER SERVICE CONNECTION
DETAIL C
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS V

PROJECT NO. 10739-264571
FILE NAME: CD005CSDT.DWG
SHEET NO. C-28

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NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
10. SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' (165m)
50	600' (180m)
55	660' (200m)
65	780' (240m)

METRIC CONVERSION CHART (1" = 25mm)

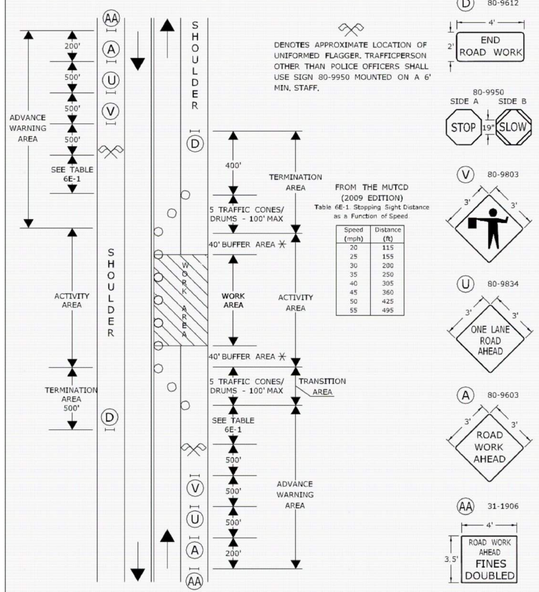
ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
NOTES

WORK IN TRAVEL LANE AND SHOULDER
TWO LANE HIGHWAY
ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 1 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER
TWO LANE HIGHWAY
ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)

HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



B. TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



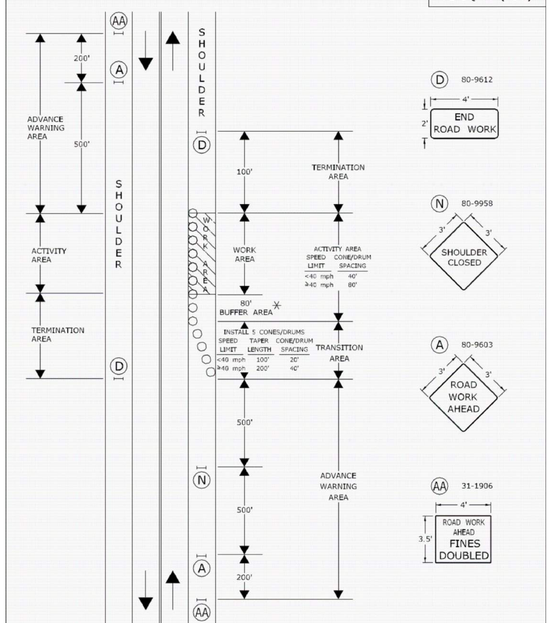
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 2 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN SHOULDER - TWO LANE HIGHWAY

SIGN FACE 71 SQ. FT (MIN.)



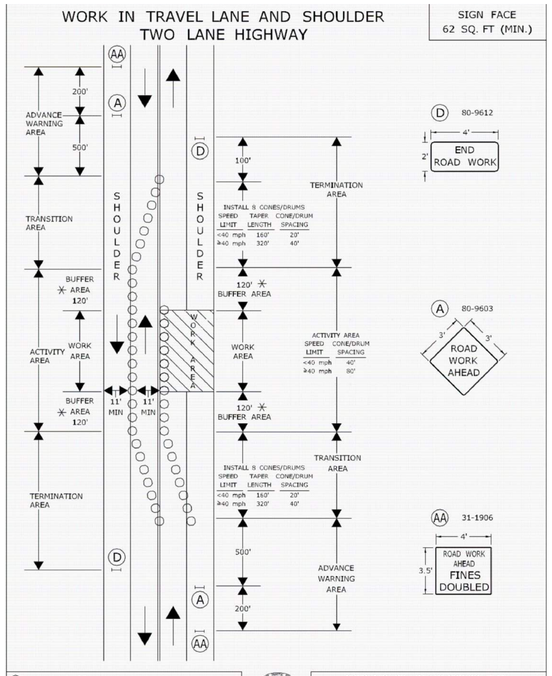
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OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 14
SEE NOTES 1, 2, 4, 7, 8

WORK IN TRAVEL LANE AND SHOULDER
TWO LANE HIGHWAY

SIGN FACE 62 SQ. FT (MIN.)



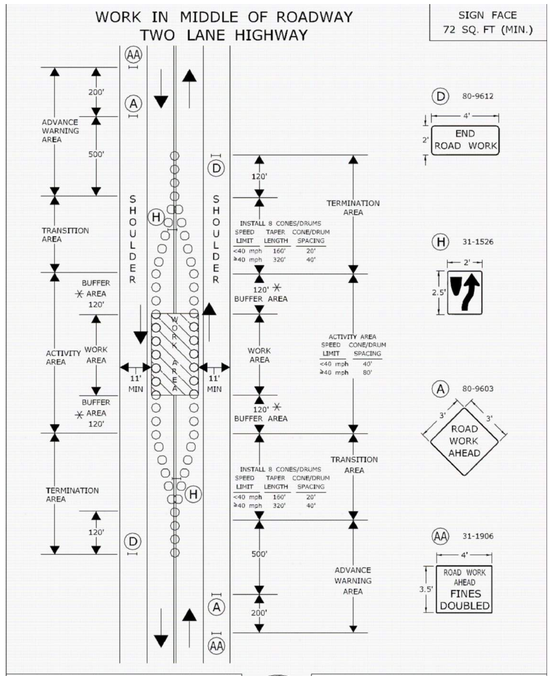
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OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 15
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY
TWO LANE HIGHWAY

SIGN FACE 72 SQ. FT (MIN.)



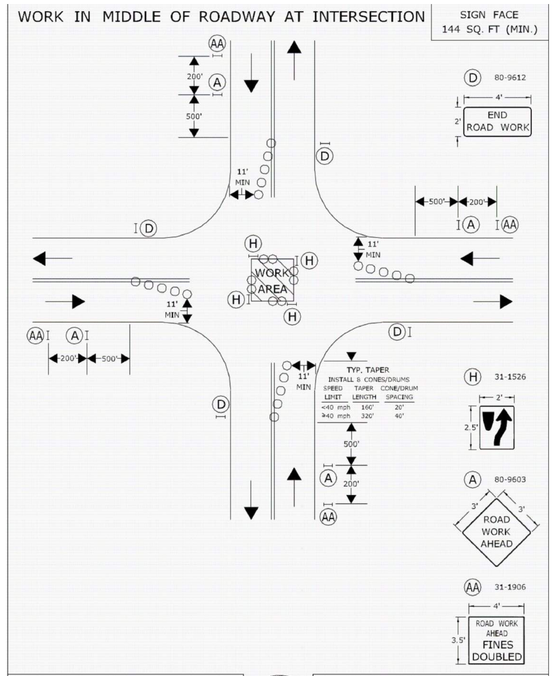
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OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 16
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY AT INTERSECTION

SIGN FACE 144 SQ. FT (MIN.)



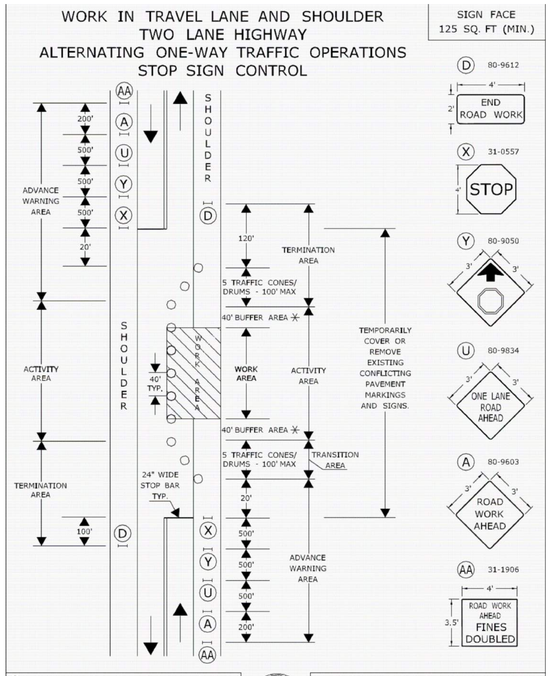
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 17
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER
TWO LANE HIGHWAY
ALTERNATING ONE-WAY TRAFFIC OPERATIONS
STOP SIGN CONTROL

SIGN FACE 125 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 18
SEE NOTES 1, 2, 4, 7, 8

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

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101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

TRAFFIC CONTROL
NOTES AND PLANS

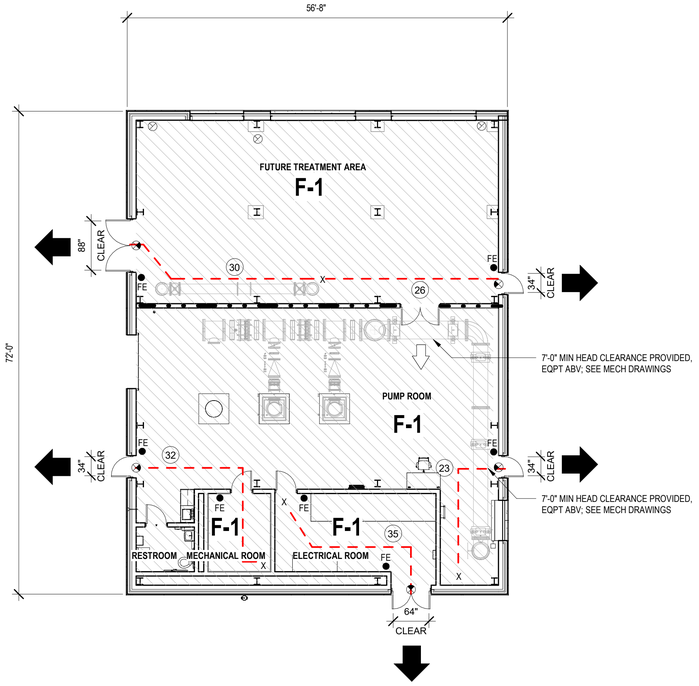
PROJECT NO. 10739-264571
FILE NAME: C029TRFC.DWG
SHEET NO. C-29

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Elevation Drawings and Floor Plans

Include in hard copy submittal



LIFE SAFETY PLAN

3/32" = 1'-0"

LIFE SAFETY PLAN LEGEND

- EGRESS PATH
- 2 HOUR FIRE RATING
- EXIT DISCHARGE
- AREA OR SPACE EXIT
- EXIT SIGN
- FE — FIRE EXTINGUISHER - MULTIPURPOSE DRY-CHEMICAL TYPE
- (X) — TRAVEL DISTANCE (FEET)
- [X] — COMMON PATH OF TRAVEL (FEET)
- X — POINT OF ORIGIN
- FACTORY INDUSTRIAL, F-1 OCCUPANCY CLASSIFICATION

Building Code Summary			
Owner:	City of New Britain, Connecticut	**Date:**	April 2023
Project Name:	White Bridge Waterworks Facilities	**Location:**	New Britain, CT
Project No:	10739-264571	**Architect of Record:**	CDM Architects Inc.
Building Name:	Pond Pumping Station		
Work Scope:	Construction of pump station (New Structure)		
Applicable Ordinances, Codes, and Standards			
Abbreviations	**ICC** - International Code Council; **IBC** - International Building Code; **IEBC** - International Existing Building Code; **IECC** - International Energy Conservation Code; **IFC** - International Fire Code; **IMC** - International Mechanical Code; **IPC** - International Plumbing Code;		
Building Code	2022 CT State Building Code - 2021 IBC		
Mechanical Code	2022 CT State Building Code - 2021 IMC		
Energy Code	2022 CT State Building Code - 2021 IECC		
Plumbing Code	2022 CT State Building Code - 2021 IPC		
Electrical Code	2020 National Electrical Code (NFPA 70)		
Accessibility Code	2017 ICC A117.1		
Use and Occupancy Classification			
IBC Code Reference			
Chapter 3			
Section 306	Factory Group F		
306.2	Moderate-hazard factory industrial, Group F-1		
General Building Heights and Areas			
Chapter 5			
Section 504	Building Height and Number of Stories		
Table 504.3	Allowable Building Height in Feet Above Grade Plane	Allowable	Proposed
	Group F-1 Type IIB - No Sprinklers	55 Feet	25 Feet, 10 Inches
Table 504.4	Allowable Number of Stories Above Grade Plane		
	Group F-1 Type IIB - No Sprinklers	2 Stories	1 Story
Section 506	Building Area		
Table 506.2	Allowable Area Factor in Square Feet		
	Group F-1 Type IIB - No Sprinklers	15,500 SF	4,085 SF
Types of Construction			
Chapter 6			
Section 602	Construction Classification		
602.2	Types I and II, Non Combustible	Type IIB Construction	
Fire Protection and Life Safety Systems			
Chapter 9			
Section 903	Automatic Sprinkler Systems	Not required for Group F-1 occupancy: 1. Fire area under 12,000 square feet. 2. Fire area not located more than three stories above grade plane. 3. Combined area of all F-1 fire areas under 24,000 square feet.	
Section 906	Portable Fire Extinguishers	Required in accordance to 906.2 and NFPA 10	
Section 907 907.2.4	Fire Alarm and Detection Systems Group F	Not required for Group F-1 occupancy 1. F occupancy under two stories in height. 2. F occupancy has occupant load under 500.	
Means of Egress			
Chapter 10			
Section 1004	Occupant Load		
Table 1004.5	Maximum Floor Area Allowances per Occupant		
	Function of Space	Occupant Load Factor	Area / Occupant Load Factor
	Accessory storage areas, mechanical equipment room	300 gross	(4,085 / 300) = 14
Section 1010	Doors, Gates and Turnstiles	Required	Proposed
1010.1.1	Size of doors	Minimum clear width: 32 inches	34 inches
Section 1017	Exit Access Travel Distance		
Table 1017.2	Occupancy	without Sprinklers (feet)	with Sprinklers (feet)
	F-1	200	N/A
Accessibility			
Chapter 11			
Section 1103	Scoping Requirements		
1103.2.9	Equipment spaces are not required to comply with this chapter		
Energy Efficiency			
Chapter 13			
Section 1301	General		
1301.1.1	Building designed and constructed in accordnace with the IECC with compliance requirements indicated in COMcheck report		

0 4' 8' 12' 20'

SCALE: 3/32" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

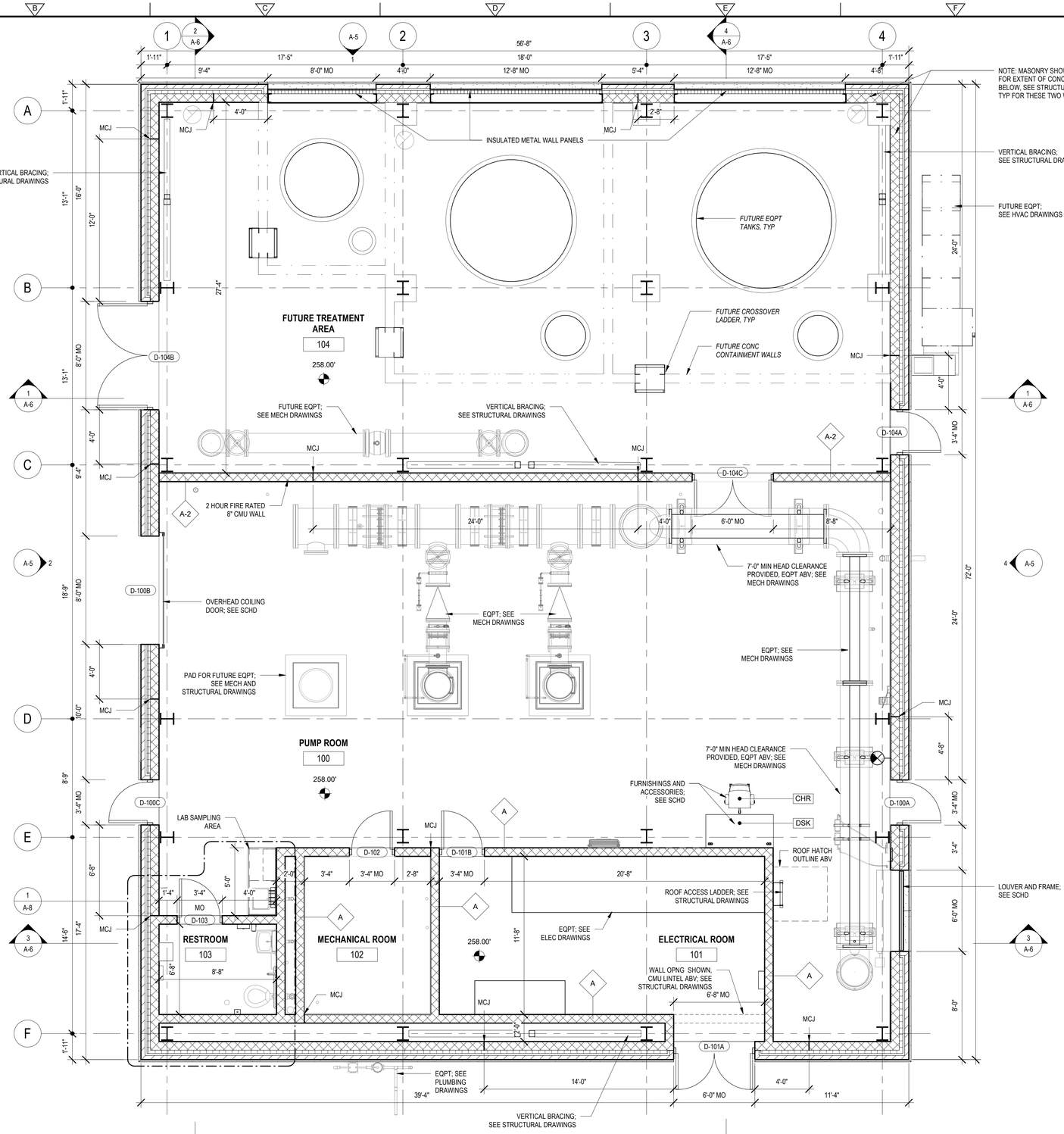
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

POND PUMPING STATION
BUILDING CODE SUMMARY AND LIFE SAFETY PLAN

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT
SHEET NO. A-2

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GROUND LEVEL FLOOR PLAN
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
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75 State Street
Boston, Massachusetts 02109

CITY OF NEW BRITAIN, CONNECTICUT

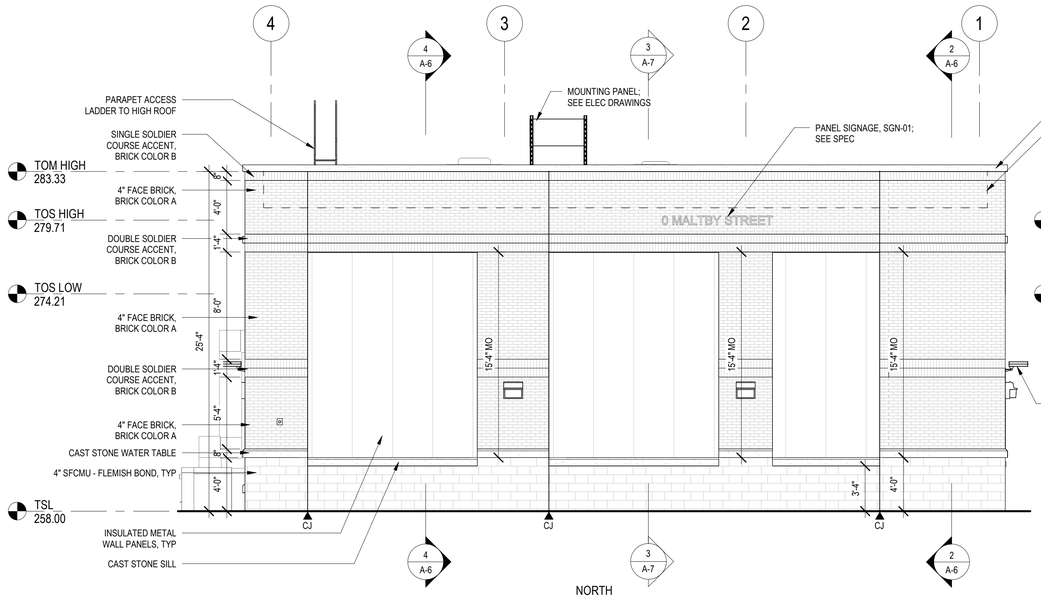
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

POND PUMPING STATION
FLOOR PLAN

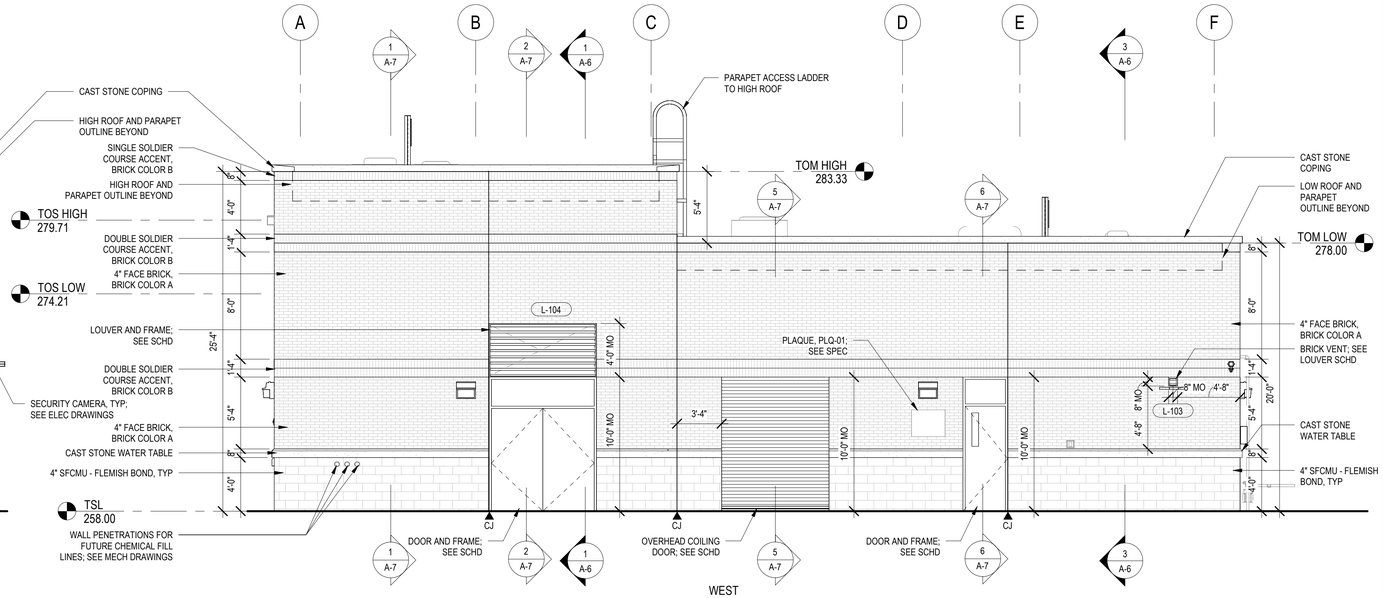
PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT
SHEET NO.
A-3

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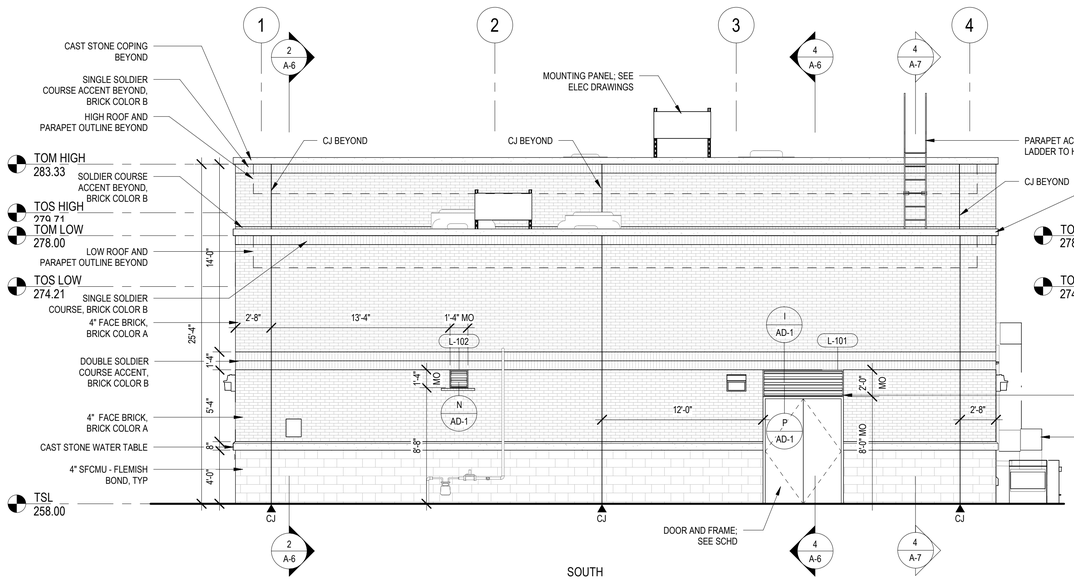
Include in hard copy submittal



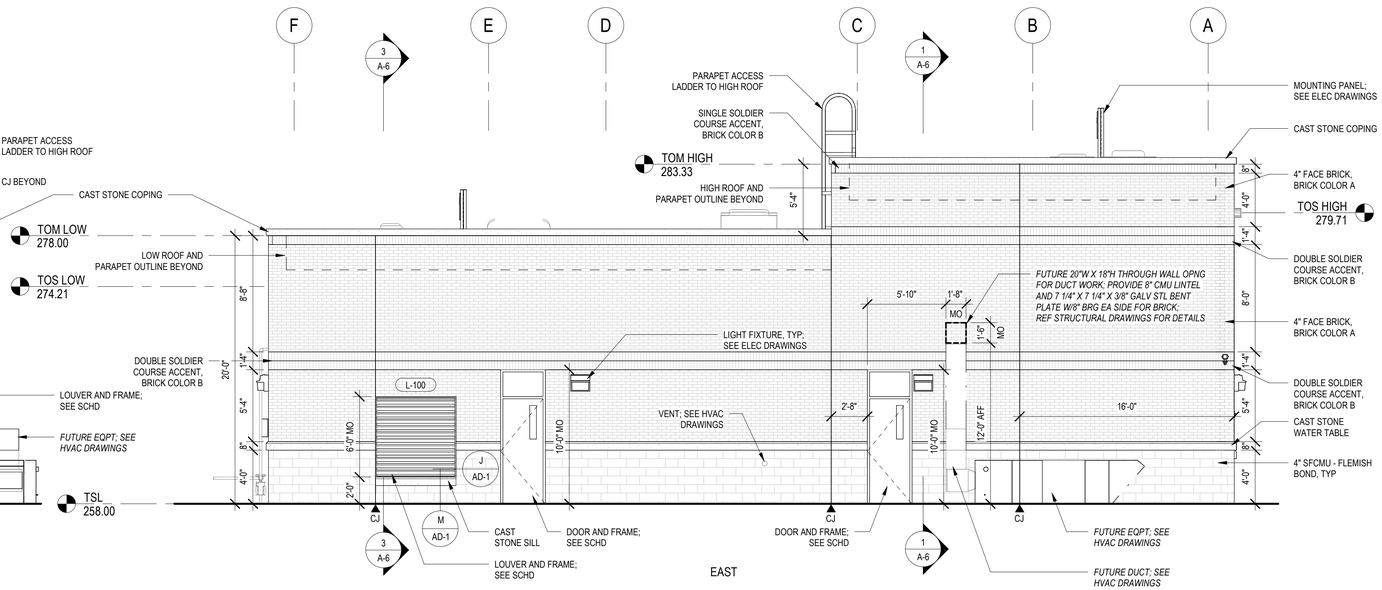
1 ELEVATION A-3 — 3/16" = 1'-0"



2 ELEVATION A-3 — 3/16" = 1'-0"



3 ELEVATION A-3 — 3/16" = 1'-0"



4 ELEVATION A-3 — 3/16" = 1'-0"

0 2' 4' 6' 10'

SCALE: 3/16" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CDM Architects Inc.
75 State Street
Boston, Massachusetts 02109

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

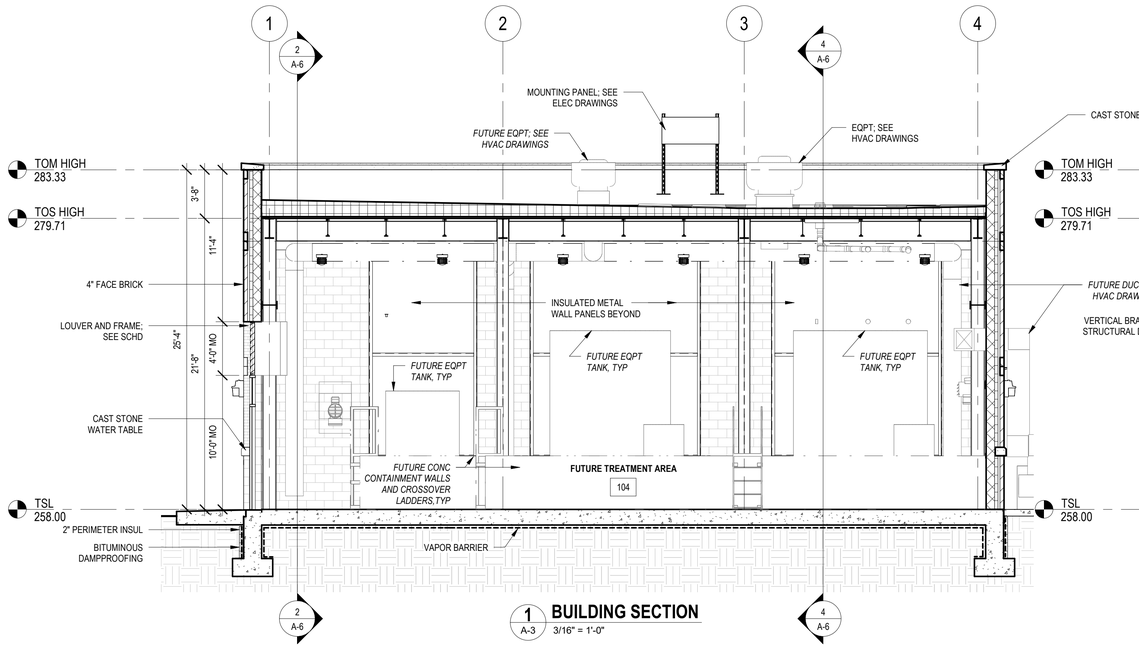
POND PUMPING STATION
EXTERIOR ELEVATIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

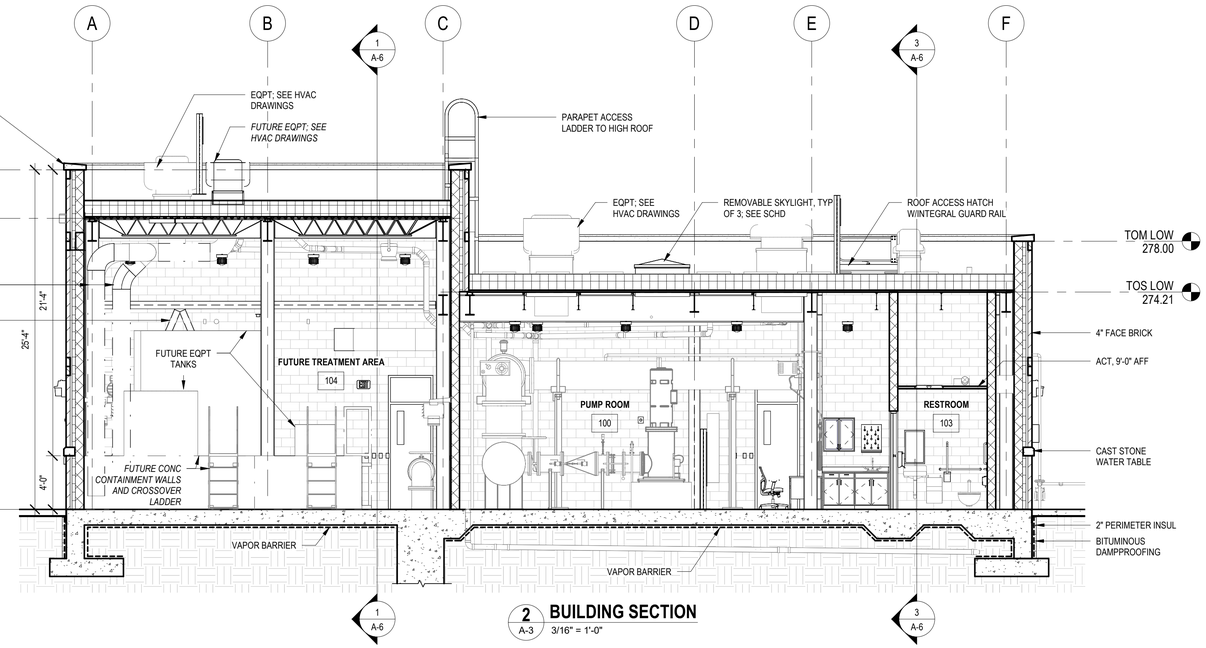
SHEET NO.
A-5

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

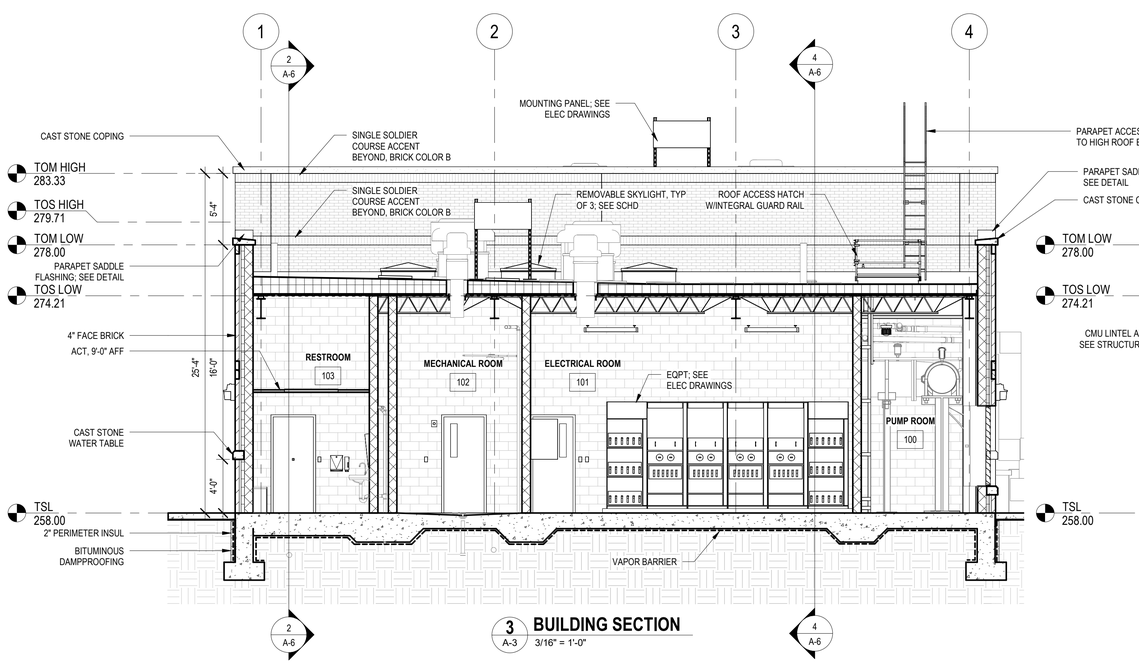
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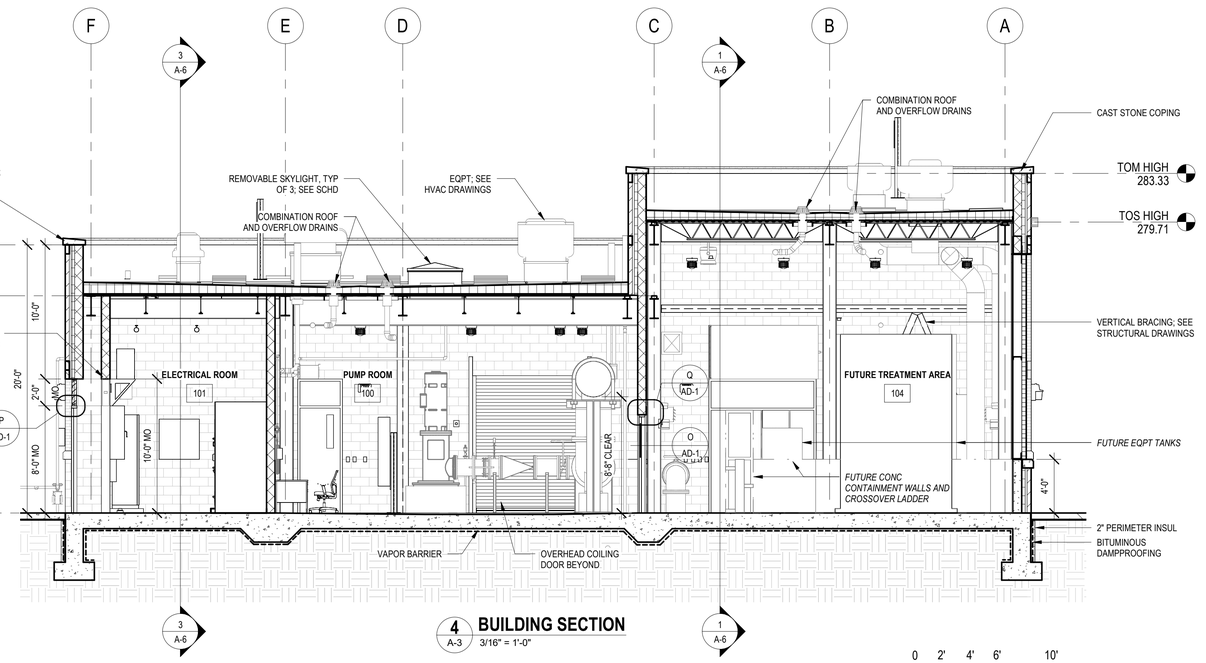
1 BUILDING SECTION
A-3 3/16" = 1'-0"



2 BUILDING SECTION
A-3 3/16" = 1'-0"



3 BUILDING SECTION
A-3 3/16" = 1'-0"



4 BUILDING SECTION
A-3 3/16" = 1'-0"

0 2' 4' 6' 10'
SCALE: 3/16" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
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SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

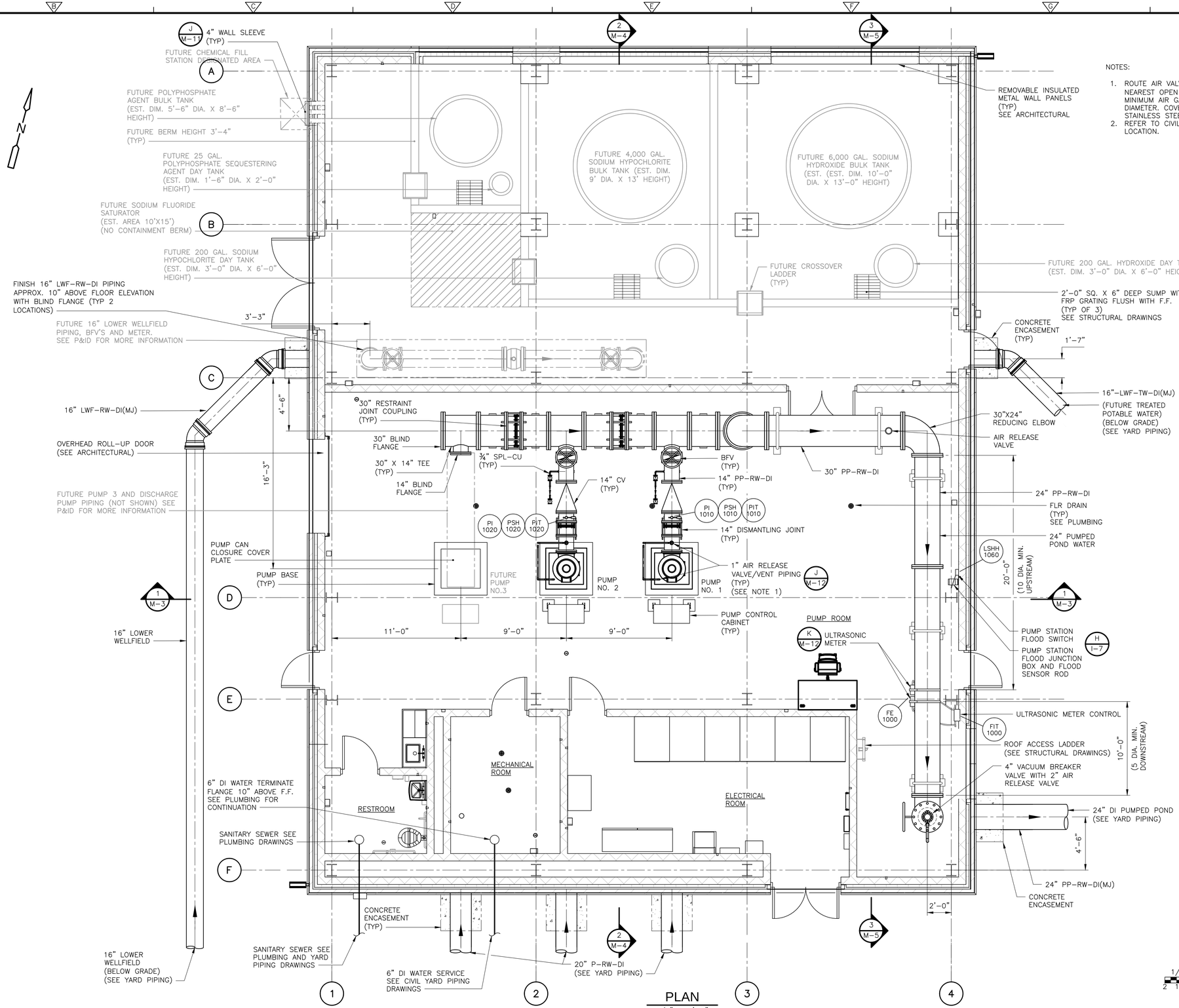
POND PUMPING STATION
BUILDING SECTIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

SHEET NO.
A-6

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NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. REFER TO CIVIL SHEETS FOR BUILDING LOCATION.

XREFs: [CDMS_2436]
Images: []
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

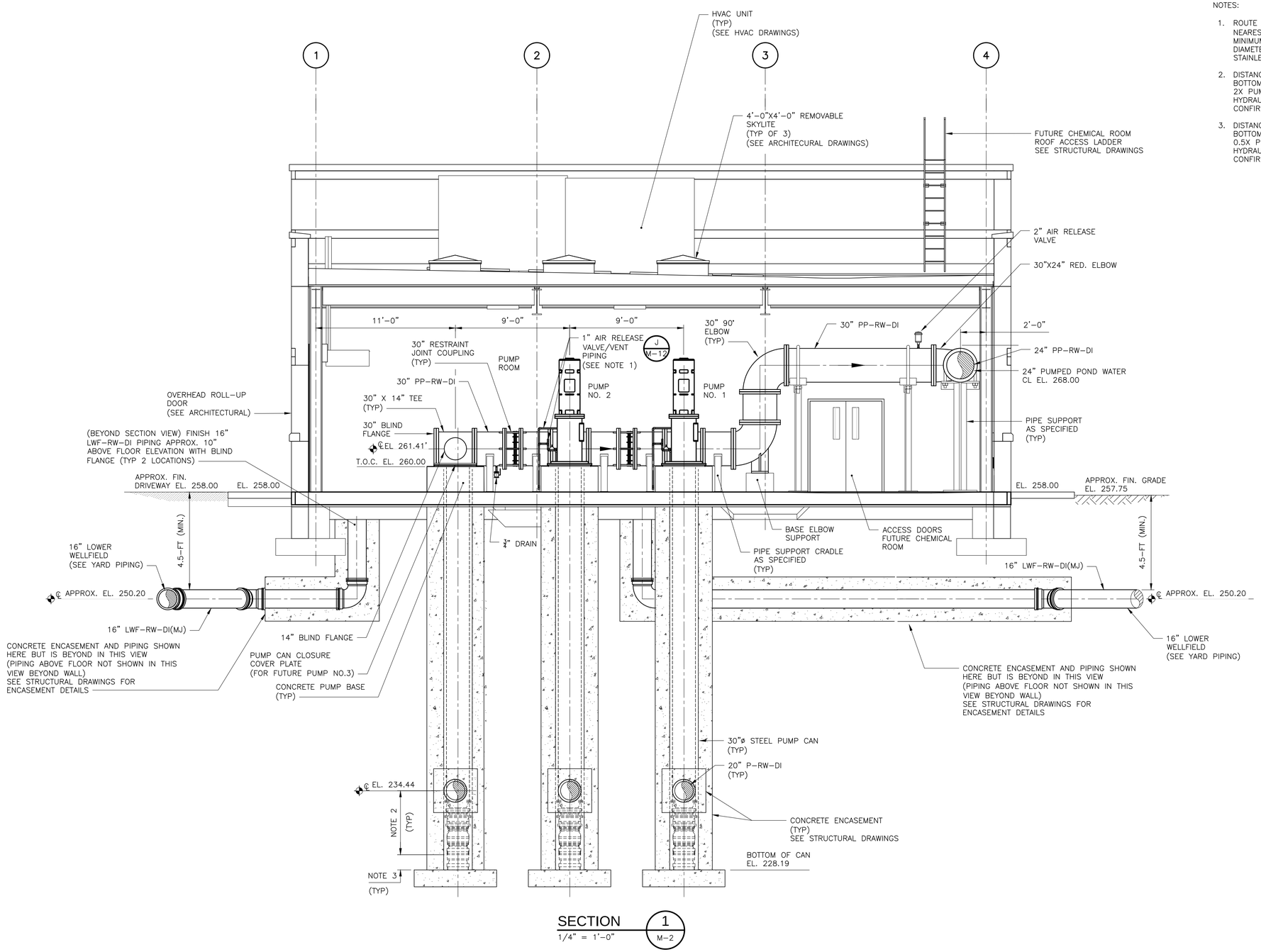
POND PUMPING STATION FLOOR PLAN

PROJECT NO. 10739-264571
FILE NAME: M002PSPL.DWG

SHEET NO.
M-2

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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SECTION 1 / 1/4" = 1'-0" (M-2)

NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
3. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BEMINIMUM 0.5X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.

1/4" = 1'- 0"
2 1 0 2 4

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

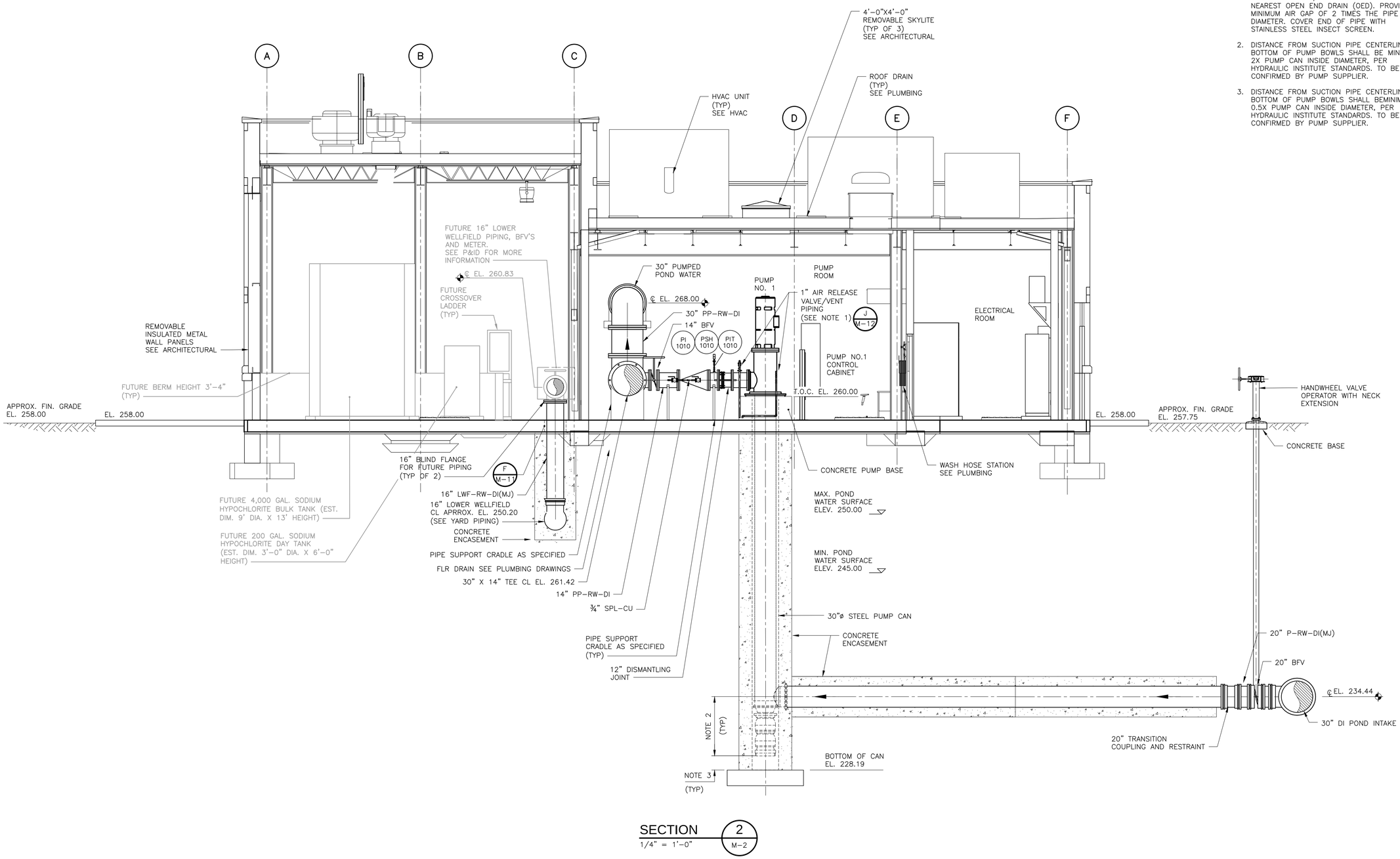
POND PUMPING STATION
SECTIONS I

PROJECT NO. 10739-264571
FILE NAME: M003PSSC.DWG
SHEET NO.
M-3

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
3. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BEMINIMUM 0.5X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.



SECTION 2 / M-2
1/4" = 1'-0"

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APPROVED BY: K. WAGNER
DATE: APRIL 2023

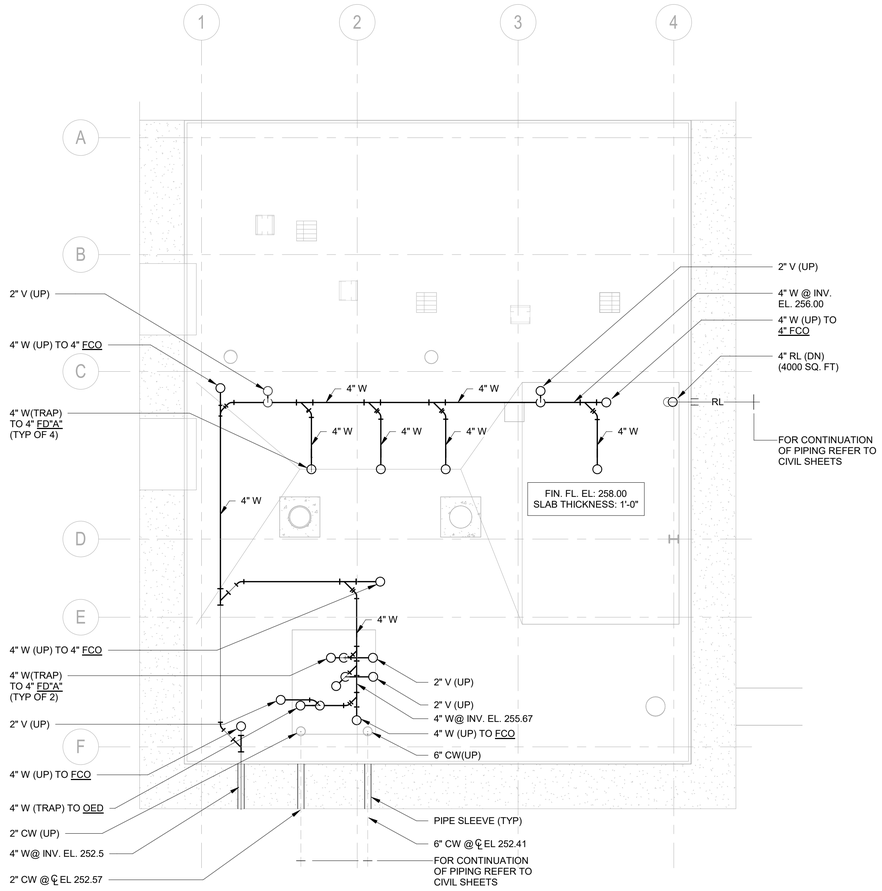
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East Hartford, CT 06108
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
SECTIONS II

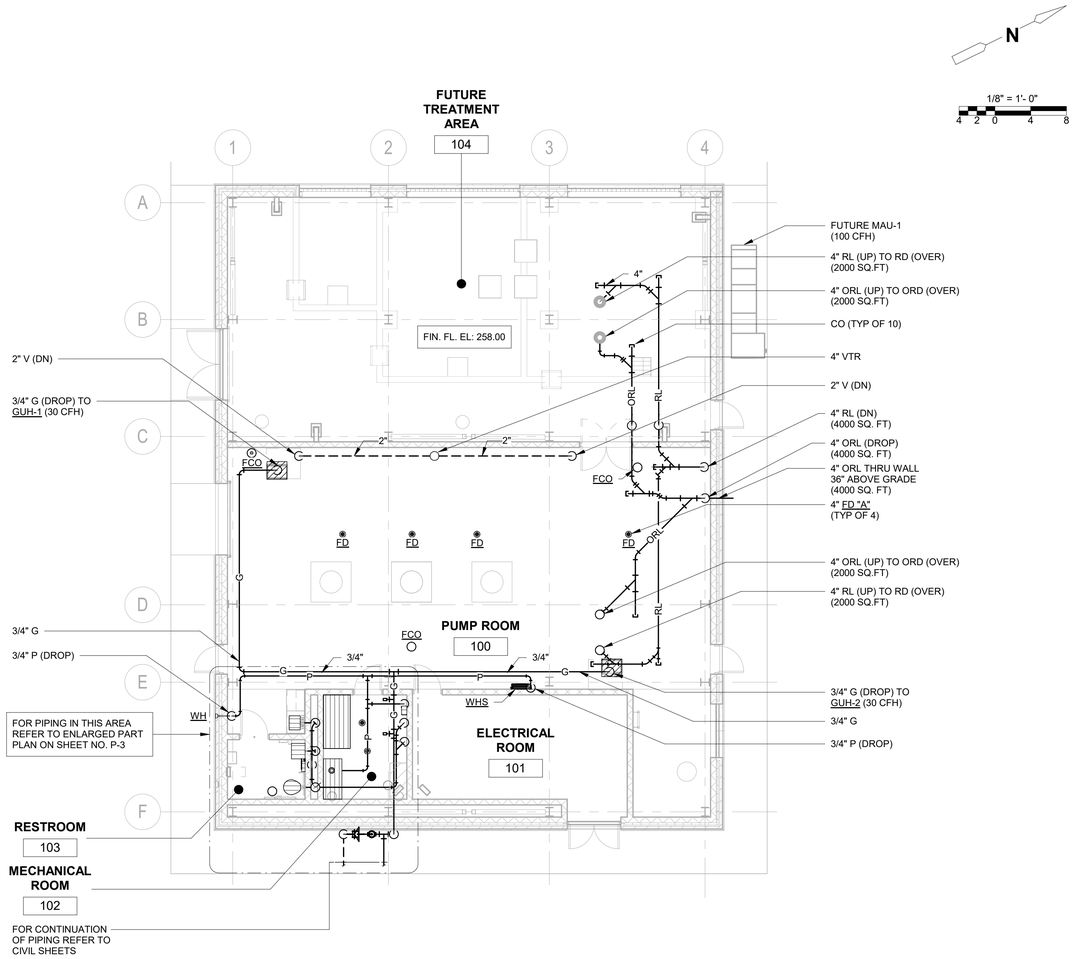
PROJECT NO. 10739-264571
FILE NAME: M004PSSC.DWG
SHEET NO. M-4

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BURIED PIPING

1/8" = 1'-0"



FLOOR PLAN

1/8" = 1'-0"

NOTES:

1. ALL PIPES PASSING THROUGH THE FOUNDATION WALL SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND THOUGH THE WALL 2" ON EITHER SIDE OF THE FOUNDATION WALL IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
2. ALL PIPES PASSING UNDERNEATH THE FOUNDATION SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND 12" BEYOND THE ANGLE OF REPOSE OF THE FOUNDATION FOOTING ON BOTH SIDES OF THE FOOTING.

NOTES:

1. ALL BURIED PIPING WITHIN THE BUILDING SHALL BE ENCASED IN CONCRETE AS SHOWN ON THE DETAIL ON THE STRUCTURAL DETAIL SHEET.
2. IN LIEU OF TRAP PRIMERS WHERE ALLOWED BY CODE, CONTRACTOR SHALL INSTALL A TRAP RESEALER MADE OF ELASTOMERIC MATERIAL.
3. 1/2" SOFT ROLLED COPPER TUBING SHALL BE INSTALLED TO FEED THE WATER FROM THE TRAP PRIMER UNIT TO THE TRAPS FOR THE FLOOR DRAINS WHERE REQUIRED. THE SOFT ROLLED COPPER TUBING SHALL BE WRAPPED WITH ARMAFLEX TO PROTECT IT FROM THE CONCRETE. THE TUBING IS NOT SHOWN ON THE DRAWING FOR CLARITY SAKE. BUT THE PIPING SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
4. SANITARY PIPING SHALL EXTEND BEYOND THE BUILDING 5'-0" UNDER THE PLUMBING CONTRACTOR'S SCOPE OF WORK.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. SHEEHAN
DRAWN BY: P. MANI
SHEET CHK'D BY: B. BUCCHIANERI
CROSS CHK'D BY: K. WAGNER
APPROVED BY: D. FLAHERTY
DATE: JANUARY 2024

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

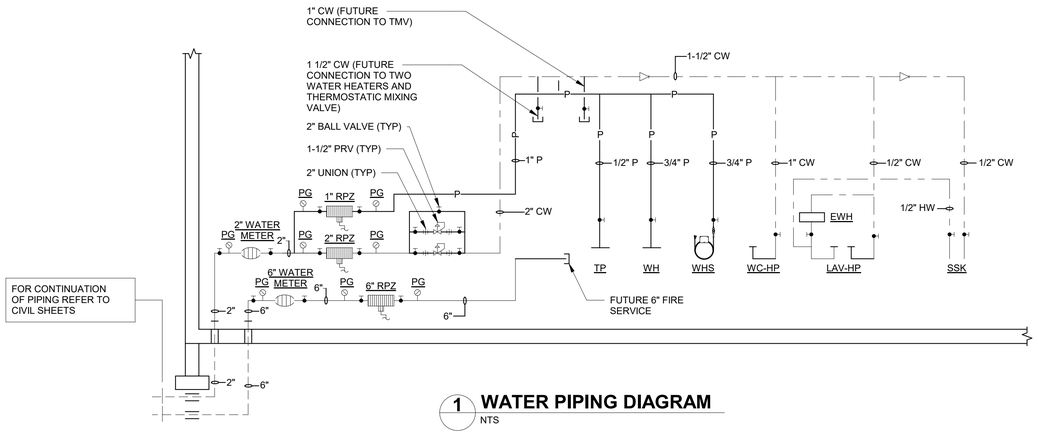
BURIED PIPING AND FLOOR PLANS

PROJECT NO. 10739-264571
FILE NAME: HPWZ001PS.RVT

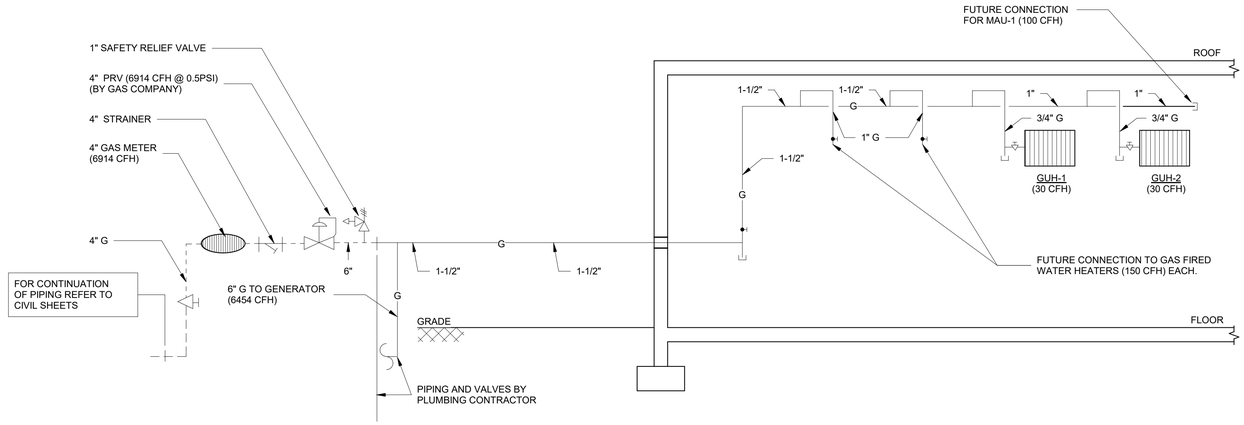
SHEET NO.
P-2

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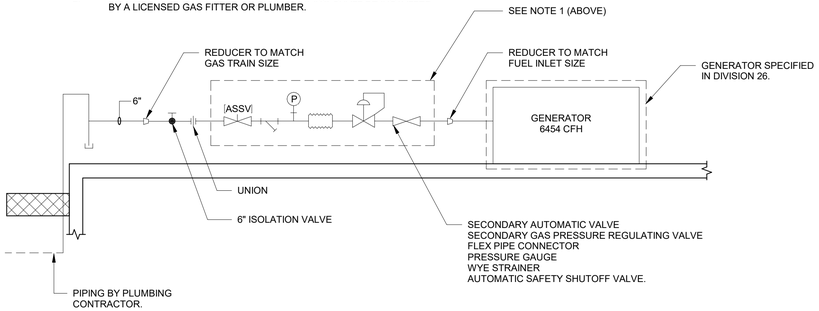
1 WATER PIPING DIAGRAM
NTS



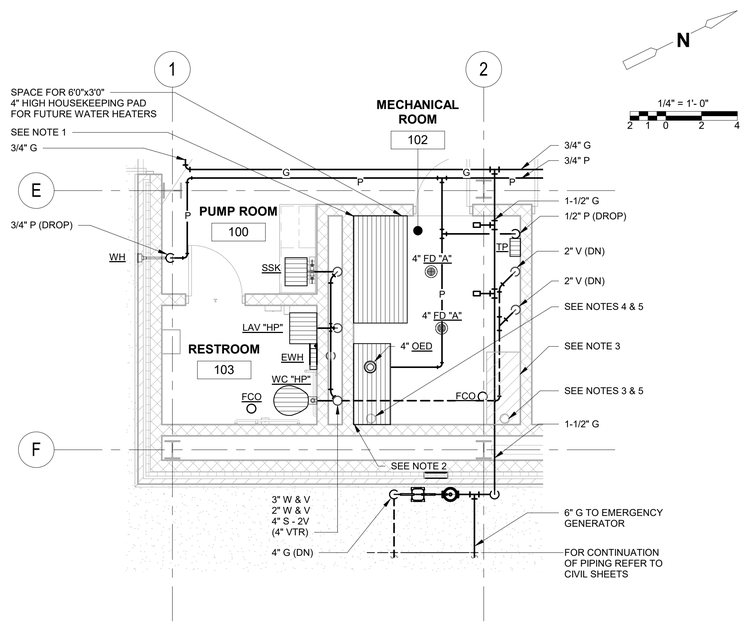
2 GAS PIPING DIAGRAM
NTS

NOTES:

1. GAS TRAIN COMPONENTS SHALL BE PROVIDED BY THE GENERATOR MANUFACTURER AND INSTALLED BY THE PLUMBING CONTRACTOR.
2. INSTALL 6" G LINE TO GENERATOR. GAS PIPING SHALL BE INSTALLED BY A LICENSED GAS FITTER OR PLUMBER.



3 GAS PIPING DIAGRAM FOR STANDBY GENERATOR
NTS



4 ENLARGED FLOOR PLAN
1/4" = 1'-0"

NOTES:

1. SPACE ALLOCATED FOR FUTURE WATER HEATERS, TEPID WATER MIXING VALVE AND TEPID WATER RECIRCULATION PUMP.
2. SPACE ALLOCATED FOR DOMESTIC WATER SERVICE. FOR VALVES AND APPURTENANCES REFER TO THE WATER PIPING DIAGRAM ON SHEET NO. P-3. WATER SERVICE HAS BEEN SIZED TO INCLUDE FUTURE ADDITION OF CHEMICALS AND TEPID WATER HEATING SYSTEM.
3. SPACE ALLOCATED FOR FUTURE FIRE PROTECTION SERVICE SHALL SERVE AN AUTOMATIC FIRE PROTECTION SYSTEM WHEN THE FUTURE CHEMICAL SYSTEMS ARE INSTALLED ON THE PROJECT. 6" FIRE SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR.
4. 2" DOMESTIC WATER SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR. A 2" CAPPED WATER CONNECTION SHALL BE LEFT IN THE MECHANICAL ROOM 102.
5. 6" RPZ FOR FUTURE FIRE SERVICE SHALL BE INSTALLED 36" AFF. 2" RPZ FOR DOMESTIC POTABLE WATER SHALL BE INSTALLED 36" AFF AND THE 1" RPZ FOR NON-POTABLE WATER SHALL BE INSTALLED AT 54" AFF.

PLUMBING FIXTURE SCHEDULE

FIXTURE	DESCRIPTION	WASTE (INCH) MIN	VENT (INCH) MIN	TRAP (INCH) MIN	CW (INCH) MIN	HW (INCH) MIN	TW (INCH) MIN	REMARKS
WC-HP	TOILET, FLUSH VALVE, WALL MOUNTED, WALL OUTLET	4	2	4	1	-	-	SEE SECTION 224213.13
SSK	SERVICE SINK	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
LAV-HP	LAVATORY, COUNTER MOUNTED	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
WHS	WASH HOSE STATION	-	-	-	3/4	-	-	SEE SECTION 221119
EWH	ELECTRIC WATER HEATER	-	-	-	1/2	1/2	-	SEE SECTION 223300
TP	TRAP PRIMER	-	-	-	1/2	-	-	SEE SECTION 221119

REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

PIPING DIAGRAMS, ENLARGED FLOOR PLAN AND PLUMBING SCHEDULE

PROJECT NO. 10739-264571
FILE NAME: HPWZ001PS.RVT

SHEET NO.
P-3

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For Office Use Only
APPLICATION NO. 2505
DATE FILED: 6/27/24
DECISION DATE: _____
DECISION: _____

CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SITE PLAN APPROVAL

The undersigned Applicant hereby applies for approval of a Site Plan for the following use:

Civic Facility and Earth Removal, a [ ] permitted use [✓] Special Permit use

under Section(s) Article II, Section 4.2 of the Bristol Zoning Regulations.

Address or Location of the Property: Maltby Street

Assessor's Map No.: 52 & 53 Assessor's Lot No.(s): 11, 15, 16B16A, 17, 145, 147, 149, 150, 151

Zone of the Property: R-40 Size of the Property (in acres or square feet): 303.7

Does this application involve an activity regulated by the Inland Wetlands Agency? [✓] yes [ ] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [✓] yes, on 12/26/2023 [ ] no

Other comments: Three applications were submitted to Inland Wetlands Agency (App# 2019, #2020, #23-458F-305)

Approval for all three applications received from Inlands Wetland Agency on June 3, 2024. SEE ATTACHED

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: New Britain Water Department, Ramon Esponda

Address: 1000 Shuttle Meadow Ave City: New Britain State: CT Zip: 06052

Telephone No.: (860) 826-3535 E-Mail: Ray.Esponda@newbritainct.gov

Signature: [signature] *Signature – (Printed/Typed)* Ramon Esponda

CHECK ONE: [X] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* _____

The following shall be included as part of this application:

- filing fee – $310 (includes $60 State fee) *plus* $50 per dwelling unit *plus* $10 per 1,000 sq. ft. or portion thereof of proposed non-residential building (make checks payable to "City of Bristol")
- six paper copies and one digital copy of a Site Plan containing all information required on the Site Plan Requirements Checklist
- a written narrative and any other data and drawings as may be required (e.g., drainage calculations, exterior building elevations)

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

LUO – 01/24

For Office Use Only
APPLICATION NO. 2505

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Maltby Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street.

See the attached documents for more information.

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Vinta Varghese

Address: 101 East River Drive, Suite 1A City: East Hartford State: CT Zip: 06108

Telephone No.: 860-808-2325 E-Mail: vargheseva@cdmsmith.com

From: Joseph Hammer [mailto:jhammer@mrglaw.com]
Sent: Wednesday, July 3, 2024 3:18 PM
To: Robert Flanagan <RobertFlanagan@bristolct.gov>; Nancy Levesque <NancyLevesque@bristolct.gov>; andrewarmstrong@bristolct.org
Cc: ray.esponda@newbritainct.gov; Sebastian Amenta - Comprehensive Environmental Inc. (samenta@ceiengineers.com) <samenta@ceiengineers.com>; Varghese, Vinta A. (vargheseva@cdmsmith.com) <vargheseva@cdmsmith.com>; Rachel Fancy <RFancy@mrglaw.com>
Subject: Bristol Zoning Commission - Applications #2504, #2505,# 2506; Applicant - City of New Britain, Water Department

Dear Mr. Flanagan,

Our firm represents the City of New Britain in connection with the above-referenced Special Permit and Site Plan applications which were submitted on June 27, 2024.

The applicant understands that due to the holidays and anticipated scheduling of public hearings by the Zoning Commission, the public hearing on the applications will likely be scheduled for September 16, 2024. The 65 day period to open the hearing, following receipt of the applications on July 8, will expire on September 11. The applicant therefore consents to a five-day extension of time, to September 16, 2024, within which to commence the public hearing.

Thank you.

M R G
MacDermid Reynolds & Glissman, P.C.
110 Whitney Avenue
New Haven, CT 06510

86 Farmington Avenue
Hartford, CT 06105
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CT DPH - Notification

From: Microsoft Power Apps and Power Automate <microsoft@powerapps.com>
Sent: Tuesday, July 2, 2024 3:42 PM
To: Ray.Esponda <Ray.Esponda@newbritainct.gov>; Gerlach, Kyle T. <gerlachkt@cdmsmith.com>
Subject: Acknowledgement of Submission to CTDPH

This email is being sent automatically to confirm the submission of a project notification form to the Connecticut Department of Public Health pursuant to Connecticut General Statutes Section 8-3i and/or 22a-42f.

A project notification form is required to be completed and submitted to the Department of Public Health when an application, petition, request or plan is located in a Drinking Water Source Watershed or Aquifer Protection Area.

Thank you for your submission. If you have any questions, please send an email to dph.sourceprotection@ct.gov.

Please enter the docket number/application ID for this application, petition, request or plan, if applicable:
App 2505 - Site Plan

What municipal entity is this application, petition, request or plan being submitted to?["Zoning Commission"]

Is the location associated with the proposed application, petition, request or plan in a drinking water watershed?Yes

Is the location associated with the proposed application, petition, request or plan in an Aquifer Protection Area?
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street. This notification is for the Bristol Zoning Site Plan application.

Does this application include a petition or proposal to change the regulations, boundaries or classifications of zoning districts?No

Please enter a brief description of the project or proposal:
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street. This notification is for the Bristol Zoning Site Plan application.

Please enter the date of the application, petition, request or plan:
2024-06-27

What is the size of the area to be disturbed?
equal to or greater than 5 acres

Is any part of this project located within 50 feet of a wetland, stream, pond, lake or reservoir?Yes

What type of use is this application, petition, request or plan proposing?Institutional (school, hospital, nursing home, etc,)

How will this project be provided a potable water supply?Connection to existing public water supply

How will domestic waste be handled?
Sanitary Sewer (will be extended to project area as a result of project)

If the proposed project is 1) not located on single family residential property and 2) will utilize a new well for drinking water supply, a Public Water Supply (PWS) Screening Application should be submitted to the Department of Public Health. Was a PWS Screening Application submitted?Yes

Applicant Name:
New Britain Water Department - Ramon Esponda

Applicant email address:
Ray.Esponda@newbritainct.gov

Street address or intersection of application, petition, request or plan:
Maltby Street, Bristol, CT

Enter Project Longitude/Latitude:
-72.916330
41.700721

Is there any other information relevant to the Department's review of this application, petition, request or plan? If so, please enter in the space below:
This project is receiving funding by the Department of Public Health and there has been much coordination and collaboration between the City of New Britain, the design team, and the Department. The Department has been kept updated throughout the progress of the project design and has already received site plans and other documentation.

If you would like a confirmation of this submission to be sent to the town, please enter the email address you would like it to be sent to in the field below:
gerlachkt@cdmsmith.com

Site Plan Comments

CITY OF BRISTOL
SITE PLAN REVIEW COMMITTEE
STAFF COMMENTS - 2505

SITE PLAN & SPECIAL PERMIT: Site Plan for a Civic Facility at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single-Family Residential) zone; New Britain Water Department, applicant. *Plans Dated: June 2024; Date of Committee Review: July 31, 2024 (first review); September 16, 2024 (second review)*

ENGINEERING/PUBLIC WORKS (Anthony Lorenzetti):
Engineering Review Comments Application # 2504 and #2505

1) Section 16.3.5, a Class A-2 survey is required.

   9/7/24 Applicant Response: The A2 Survey for the work area was provided electronically. Additional A2 survey for the access road on Mix Street for location curb cut/ entrance to work area access is in progress and anticipated to be submitted in October 2024.

   9/16/24 City Response:

2) Section 16.3.8 There are several homes and other adjacent facilities that are across Mix Street that are not shown.

   9/7/24 Applicant Response: The additional homes across Mix Street will be shown on expanded drawings after completion of the additional survey in October 2024.

   9/16/24 City Response:

3) In review of the Traffic Impact Sketch showing trucking routes, it is stated that the traffic is going to enter and exit the site primarily from Stafford Avenue, other than the compensatory storage construction area on Mix Street. Considering that both driveway access points are located approximately midway between Stafford Avenue and Maltby Street, and utility installation on Maltby Street, Mix Street, and Stafford Avenue along with wetlands creation on Mix Street would likely be utilized more extensively. In addition, what temporary traffic impacts are expected due to the utility construction expected to have on Mix Street and Stafford Avenue? Construction the within the intersections of Maltby Street at Stafford and Maltby Street and Mix Street should be limited to off peak periods. This item can be more thoroughly discussed in the permitting process. Two new Truck warning signs (w11-10) are recommended on Maltby street, due to the very limited current traffic entering from both existing drives that will be increased. The traffic narrative mentions only 15 vehicles per day on site, does this also include trucking materials in and out of the site. What would be the expected total project trip ends per day?

   9/7/24 Applicant Response: Construction at the Maltby Street/Stafford Avenue and Maltby Street/Mix Street intersections will be limited to off-peak hours, avoiding school bus traffic times, as required by the City of Bristol. A more detailed traffic control narrative is in development and will incorporate any additional considerations put forth by the City.

   9/16/24 City Response:

4) Provide enhanced mapping for the site access on Mix Street for the Wetlands creation, showing street access required. A City permit will be required for this area.

   9/7/24 Applicant Response: Enhanced mapping for the site access on Mix Street will be shown on expanded drawings after completion of the additional survey in October 2024.

   9/16/24 City Response:

5) Recommend storage of all construction equipment in upland areas to minimize risk of pollution.

9/7/24 Applicant Response: This is good practice and will be covered in the Stormwater Pollution Prevention Plan prepared by the Contractor per Specification Section 312500, Erosion and Sedimentation Controls. Additional language will also be added to the General Notes on Sheet C-1 to enhance this requirement.

9/16/24 City Response:

6) Update as needed to the updated 2024 Connecticut Guidelines for Soil Erosion and Sediment Control and Connecticut Stormwater Quality Manual.

9/7/24 Applicant Response: Specification Section 312500, Erosion and Sedimentation Controls, as well as relevant Drawings and notes, will be updated to reflect compliance with the 2024 Connecticut Guidelines for Soil Erosion and Sediment Control and Connecticut Stormwater Quality Manual.

9/16/24 City Response:

7) While it is understood that the timelines shown in the design report are preliminary and subject to final completion of the contractor(s), the narrative on page 4 and the schedule chart submitted are not consistent with each other.

9/7/24 Applicant Response: The overall Construction Sequencing stages presented in the Project Narrative reflects sequencing and interdependence of some activities as well as seasonal constraints; the schedule chart will be reviewed and updated. The utility work in Maltby Street must occur before the new Pumping Station building is completed, but can be arranged to accommodate any specific timing constraints by the City of Bristol.

9/16/24 City Response:

8) Add the most current city road repair details, we can provide them to you.

9/7/24 Applicant Response: The Civil Detail sheets will be updated with the City's most current road repair details when provided (it appears that the Details available on the DPW website are sidewalk and curb related).

9/16/24 City Response:

9) Where will the staging areas for the utility main construction be?

9/7/24 Applicant Response: Proposed staging areas (onsite and offsite) are required to be submitted by the Contractor per Specification Section 015000, Temporary Facilities and Controls.

9/16/24 City Response:

10) The site access off Maltby Street to the lower well field site is being widened, and as part of the widening to the west trees will have to be removed and some tree trimming may be required to provide adequate sightlines from the driveway, add to plans.

9/7/24 Applicant Response: Additional notes regarding tree removal will be added to Sheet C-7 to reflect this work.

9/16/24 City Response:

11) The access to the upper well field does not show any upgrades on the plans. The driveway currently is gravel with a reveal at the edge of sidewalk. Care must be taken to not break the sidewalk.

9/7/24 Applicant Response: The upper wellfield access driveway is anticipated to remain with no substantial improvements, other than filling of potholes and restoration of any damage that may occur during construction. Additional notes regarding protection and repair of sidewalk will be added to Sheets C-1 and C-6.

9/16/24 City Response:

CITY PLANNER (Robert Flanagan/Andrew Armstrong):

1. Indicate application number, approval date, and nature of Site Plan/Special Permits associated with this project.

9/7/24 Applicant Response: This information will be added to the Cover sheet for the project prior to bidding.

9/16/24 City Response:

2. Indicate application number, approval date, and nature of IWWA approval associated with this project.

9/7/24 Applicant Response: This information will be added to the Cover sheet for the project prior to bidding.

9/16/24 City Response:

3. Show/label on Site Plan the location of all proposed building entrances and exits.

9/7/24 Applicant Response: This information is shown on Sheet C-10. A simpler overall Site Plan is in development and will be added to the drawing set.

9/16/24 City Response:

4. Final As-Built of building required prior to C.O. being issued.

9/7/24 Applicant Response: Record drawings will be prepared for the project and are noted in Specification Section 017839. The requirement to submit building record drawings prior to the Certificate of Occupancy will be added to that Specification.

9/16/24 City Response:

5. Indicate dimension of driveway opening, measured at street line.

9/7/24 Applicant Response: This information will be added to Sheet C-10.

9/16/24 City Response:

6. What are the proposed limits of tree clearing for all proposed improvements? Particularly, show the dimension and final landscape condition for proposed compensation and storage area abutting single-family residential properties on the upper and lower wellfields. Provide a landscape sheet showing these conditions and setback dimensions to the property lines not just the floodway line.

9/7/24 Applicant Response: Additional drawings to clarify these conditions are in development and will be added to the drawing set.

9/16/24 City Response:

7. The "site plans" for the upper and lower wellfields need to be shown as an actual site plan. The building and site features are not clear. These sheets primarily show underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan. Provide a plan sheet for site plan that clearly shows residential property lines, particularly the properties from Collins Road and parcel boundaries, including the abutting parcel located at Assessor's Map 53, Lot 147. Plans provided are drawn indicating mostly Wetlands features.

   9/7/24 Applicant Response: Additional drawings to clarify these conditions, including a simpler overall Site Plan, are in development and will be added to the drawing set.

   9/16/24 City Response:

8. The abbreviated plan set shows many red revision clouds. Was this plan set intended to be submitted? Please make changes and remove notes and revision symbols.

   9/7/24 Applicant Response: The latest drawings, revised to incorporate comments herein, will be submitted in October 2024.

   9/16/24 City Response:

9. The Zoning Table lists the proposed building height as 258.3 feet. Please revise.

   9/7/24 Applicant Response: The reference to 258.3 feet in the Zoning Table on Sheet C-10 is an elevation, not the building height; this will be revised in the October 2024 submission.

   9/16/24 City Response:

10. There are 2 separate Zoning Tables with the same lot numbers and different requirements. Please clarify.

    9/7/24 Applicant Response: The second table on Sheet C-10 refers to parking requirements; this will be revised in the October 2024 submission.

    9/16/24 City Response:

11. This property is located within an Aquifer Protection Area and requires a determination by the Aquifer Protection Agency. When this determination has been completed, please add the approval, date, and application number to the cover sheet.

    9/7/24 Applicant Response: The Aquifer Protection Agency review is pending; this information will be added to the Cover sheet for the project prior to bidding.

    9/16/24 City Response:

12. The "site plans" for the upper and lower wellfields need to be shown as an actual site plan. The building and site features are not clear. These sheets primarily show underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan.

    9/7/24 Applicant Response: Additional drawings to clarify these conditions, including a simpler overall Site Plan, are in development and will be underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan added to the drawing set.

9/16/24 City Response:

13. What is the height of the retaining walls? Please include this on the plan and details.

9/7/24 Applicant Response: The wall is detailed on Sheet C-27; additional information will be provided for wall greater than 3 feet tall.

9/16/24 City Response:

14. Will there be any impacts or protections to the nearby parking area for 815 Stafford Avenue?

9/7/24 Applicant Response: There are no anticipated impacts to the parking area for 815 Stafford Avenue.

9/16/24 City Response:

15. Include a plan sheet showing E&S controls. (E&S control details are included in the current set).

9/7/24 Applicant Response: Locations of E&S controls are shown on Sheets C-6, C-7, and C-8.

9/16/24 City Response:

BUILDING/ZONING ENFORCEMENT (Richard Brown)
1. No comments at this time.

POLICE DEPARTMENT (Lt. Krajewski/Sgt. Ouellette)
1. No issues with design, does not affect traffic of surrounding roads.

FIRE MARSHAL (Kristopher Lambert):
1. On page A-2 there is a double leaf door that leads from/into the "Future Treatment Area" that is part of a 2-hour rated wall assembly. What is the rating of these doors?

9/7/24 Applicant Response: This is door D-104C per Sheet A-3; this door has a 90-minute fire rating per the Door Schedule on Sheet A-9.

9/16/24 City Response:

WATER DEPARTMENT (Paul Keegan/Rob Longo)
1. Bristol Water and Sewer requires all permits to be pulled by licensed plumbers. A copy of our policies and procedures are given to the plumber when the permit is pulled. All non-emergency work requires a min of 4 days' notice.

9/7/24 Applicant Response: This requirement will be added to Division 01 of the project Specifications.

9/16/24 City Response:

<u>Water:</u>
1. 12 X 8 tapping sleeve and valve requires payment prior to work being done

9/7/24 Applicant Response: This requirement will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

2. All hydrants require a secondary valve.

9/7/24 Applicant Response: The hydrant assembly includes a gate valve per Detail D on Sheet C-25.

9/16/24 City Response:

3. Call the office for a price on the 2" service.

9/7/24 Applicant Response: The relevant fees will be included in Division 01 of the project Specifications. Information provided by the City recently indicates an anticipated $4,725 connection fee.

9/16/24 City Response:

4. 2" service requires a curb stop.

9/7/24 Applicant Response: Additional details on the 2" water service connection will be added to Sheet C-18C.

9/16/24 City Response:

5. Bristol Water and Sewer insects every inch of pipe being installed.

9/7/24 Applicant Response: This requirement for full inspection will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

6. 8" DIP requires pressure test, flushing and Bacteria test.

9/7/24 Applicant Response: Pressure test and flushing are included in Sections 221113 and 330519 of the Specifications. Disinfection requirements are included in Section 331300 of the Specifications. City of Bristol requirements are also referenced in Section 331300.

9/16/24 City Response:

7. Each hydrant requires pressure test, flush and Bacteria sample.

9/7/24 Applicant Response: Pressure test and flushing of hydrants are included in Sections 221113 and 331219 of the Specifications Disinfection requirements are included in Section 331300 of the Specifications. City of Bristol requirements are also referenced in Sections 331219 and 331300.

9/16/24 City Response:

8. Inspection fees apply to private services.

9/7/24 Applicant Response: Requirements and anticipated fees for full inspection will be added to Division 01 of the project Specifications and to the Civil Drawings.

9/16/24 City Response:

9. Water and sewer must maintain 10’ separation at all times

9/7/24 Applicant Response: Understood; Maltby Street water and sewer drawings have been submitted to the Water and Sewer Department.

9/16/24 City Response:

Sewer:

1. 8” sewer must extend, no forced main in the city right of way

9/7/24 Applicant Response: he low-pressure sewer can remain on NBWD property until the edge of the property and then transition to gravity sewer in the street, but there are concerns with storm drain conflict and shallow coverage, so the exact location requires further discussion with the Water and Sewer Department.

9/16/24 City Response:

Project Narrative

Zoning Commission – Application for Special Permit

Project Narrative:

The New Britain Water Department (NBWD) has owned and operated groundwater wells as a raw water source at the White Bridge Waterworks Facilities on Maltby Street in Bristol for over one hundred years. The facilities are located in an R-40 designated residential zone across several parcels including 52-11, 52-15, 52-16B16A, 52-17, 53-145, 53-147, 53-149, 53-150, and 53-151. Work is specifically being performed on lot 52-16B16A, 52-17, 53-145, 53-147, and 53-150. Project location figures are included as **Attachment 1** to this application. The Lower Wellfield wells (located south of Maltby Street) were originally constructed in 1921 and have been operated since 1923. These wells have undergone upgrades in the 1940s and 1950s, with the most recent upgrades occurring the 1980s. A pump station at the Lower Wellfield was constructed as part of the 1940s upgrades. The Upper Wellfield wells (located north of Maltby Street) were originally installed in 1940. These were replaced with new wells in 1955 and again in the 1980s. A pump station at the Upper Wellfield was also constructed in the floodway in 1955. In addition to the wells, NBWD has also operated the Supply Pond surface water source at the White Bridge Waterworks Facilities since the 1950s. The existing 1923 pump station, already located on the site, was converted to a surface water pump station in 1950. This building and associated pumping equipment have not received major upgrades since.

Much of the mechanical equipment at the wellfields and existing Pond Pumping Station has reached the end of its useful life or, due to its age, is very difficult or not possible to find the necessary replacement parts for sustained operations. Regulatory requirements and industry standards have also changed over the past 100-years. To redevelop the Upper and Lower Wellfields with new wells that can be used as a potable drinking water source, the Connecticut Department of Public Health (DPH) requires new wells to be located 50-feet from any water body or wetlands boundary. In addition, DPH requires new wells and water infrastructure to be raised to an elevation 2-feet above the 100-year floodplain elevation. As the majority of the NBWD owned property is within the 100-year floodplain with some areas up to 6-feet below the flood elevation, the existing wells and three pump stations cannot be redrilled/rehabilitated in their current locations. This project will rehabilitate the White Bridge Waterworks Facility to bring it up to modern standards and regulations and create a reliable potable drinking water source for the New Britain Water Department and surrounding communities.

The project includes the abandonment of all currently existing wells in accordance with DPH requirements, demolition of existing structures and the three existing pump stations, construction of a single new pump station, filling and grading to achieve DPH flood resiliency requirements, wetlands creation/replication, and creation of compensatory flood storage. A total of three new wells will be drilled at the Upper Wellfield and six new wells drilled at the Lower Wellfield. Based on water quality, the Lower Wellfield wells may but suitable for use as a public potable water supply with minimal chemical treatment, subject to the ground water under the direct influence of surface water (GWUDI) testing. Both the Upper and Lower Wellfield wells will be equipped with new submersible style pumps within the wells, making it unnecessary to have pump stations at each site. An Aquifer Protection Area Program Registration Form for Regulated Activities will be submitted following this application submittal. A single pump station building will be constructed to house pumping equipment associated with the

Supply Pond surface water source and will also include designated space for treatment equipment in the event the Lower Wellfield is used for potable water. This new building will be constructed with a finished floor elevation 2-feet above the 100-year flood elevation and outside the floodway. The project will also install associated yard piping around the wells, pump station building, and connections to the existing New Britain water infrastructure on-site. New water and sewer utilities from Bristol will be constructed in Maltby Street and provide service for the new pump station. Design Drawings for the project are included in **Attachment 2** and a 3D Rendering of the new Pond Pumping Station is included in **Attachment 3**.

As filling of the site is required for the new wells and pump station to meet DPH requirements, compensatory flood storage areas will be constructed so as to not increase the current flood elevation levels, as given by FEMA guidelines. The new structure and wells will add approximately 6,543 cubic yards of fill within the floodplain. Approximately 15,327 cubic yards of material will be removed from the floodplain for the creation of compensatory storage. These compensatory storage areas will also create additional wetland areas. Fill and earth removal on the site is associated with construction activities only and the final use of the site will not include earth removal activities. A Special Permit for Earth Removal in Excess of 400 Cubic Yards is also being filed for approval. The project will impact approximately 24,952 square feet of wetlands. However, wetlands replication will be done at a ratio of three to one, with a total of 75,946 square feet of wetlands replication proposed. In total, the project is expected to disturb approximately 223,000 square feet of land. This includes areas for wetland replication; compensatory storage creation; and disturbances for installing the new wells, associated yard piping, abandoning and decommissioning existing wells, Pond Pump Station building construction, and demolition of the three existing buildings. A Permit for Flood Plain Development (Application #23-458F-305), Form IW-1 (Application for a Wetlands Permit) (Application #2020), and Form IW-2 (Application for a Wetlands Boundary Change) (Application #2019) were approved by the Bristol Inland Wetlands and Watercourses Agency of the Conservation Commission on June 6, 2024 for this project. A Site Plan Permit for this project is also being filed for approval.

An Erosion and Sediment Control Plan has been developed to control accelerated erosion and sedimentation from stormwater runoff on the site during construction based on the best available technologies. The Control Plan narrative is included with this application in accordance with Section 15.1.5. The “Connecticut Guidelines for Soil Erosion and Sedimentation Control (2002)” document was utilized in preparation of the Plan. A Stormwater Management Report for post-construction conditions has also been developed for this project based on the 2004 *Connecticut Stormwater Quality Manual (CSQM)* as required in Section 15.5.3. A copy of the Stormwater Management Report is included as **Attachment 6** to this application.

The new Pond Pump Station and Lower Wellfield area will be enclosed in a 6.5-foot tall chain link fence for security. A double-leaf swing gate will provide access to the site on the driveway. As shown on the Drawings, the fence and access gate are located outside of the 50-foot required front yardage for R-40 residential zones. A double-leaf vehicular control gate will be located at the foot of the driveway to control vehicular access onto the public utility site. This gate will be less than the 4.5-foot height restriction for fences within front yards and will be more than 50 percent open. A detail for this vehicular control gate is included in the drawings. An existing vehicular access gate for the Upper Wellfield access road (located on the north side of Maltby Street) will remain.

Public utility buildings are not listed as a Use Group in the table included in Section 13.2 of the Zoning Regulations; however, two parking spaces will be provided at the Pond Pumping Station. Each parking space is designed to be 10-feet wide and 18-feet deep, meeting the requirements of perpendicular parking spaces required by Section 13.7.2. As a utility service building, this facility is not open to the public and it will not be continuously manned by NBWD staff. It is not expected that more than two NBWD staff vehicles will be present on-site during operations. The post-construction vehicle traffic from NBWD staff is not expected to increase from their current operations. In the event potable water treatment is implemented for the Lower Wellfield, it is expected that the facility will received 2-3 trucks per month for deliveries.

A construction vehicle routing figure is included as **Attachment 5** to this application. The main route for construction vehicle access to the site on Maltby Street will be via Stafford Avenue, south to Farmington Avenue (Route 6). Vehicles can than access other State Roadways, including Route 69 (to the west) and Route 177 (to the east). It is expected that 15-20 construction vehicles (including pickup trucks, trailers, dump trucks, etc.) could be accessing the site during construction. The Annual Average Daily Traffic (AADT) for Stafford Avenue is 8,300 vehicles per day, 19,300 vehicles per day for Route 6 (west of Stafford Avenue), and 23,200 vehicles per day for Route 6 (east of Stafford Avenue). The construction vehicles generated by this project will represent less than 1% of traffic in the area. For access to the compensatory storage area located in the south of the site (closest to Harbor Freight), construction vehicle access will be off Mix Street via Stafford Avenue. Additionally, work to install new water and sewer utilities within Maltby Street will require temporary lane closures. Typical traffic management details have been developed and are included in the attached design drawings.

The accompanying plans to this application are based on a Class A-2 survey map prepared by a registered land surveyor licensed to conduct business in the State of Connecticut with the exception of Sheets C-13, Sheet C-14, and Sheet C-14A. These sheets depict the general locations of wetland replication and compensatory storage areas and are currently based on a Class D survey due to the scale and size of the parcels and location of work. We request a Class A-2 survey of these areas to be included as a condition of approval for this application and the final Class A-2 survey will be performed and submitted to the Commission for final issuance of the Special Permit prior to construction. Additionally, the wetlands replication and compensatory storage area in the southernmost part of the site, shown on Sheet C-13, cannot comply with the 100-foot buffer zone to a residential property (as required by Section 15.2.5.B). The closest abutting residential property line is 70-feet from proposed excavation activities for the wetlands replication and compensatory storage area. The location of this earth removal work to create compensatory storage is dictated by the contours of existing grade and the removal of certain volumes at each elevation to offset fill brought to that same elevation. It is important to note that this area of the site is heavily vegetated along with the abutting residential properties. We also note that the closest residential building on these lots are 250-feet away. We believe the dense vegetation, distance to residential dwelling, and nature of this construction (creation of wetlands area without a permanent structure) comply with the intent of requirements in Section 15.2.5.B for screening.

Erosion Control Narrative

Zoning Commission – Application for Special Permit

Erosion and Sediment Control Plan- Project Narrative:

This Erosion and Sediment Control Plan is provided in accordance with Section 15.1.5 of the Bristol Zoning Regulations. The erosion and sedimentation control measures at the White Bridge facility focus on the protection of wetlands and waterways during and following construction since the work includes land disturbances, excavation dewatering, supply pond and canal sediment removal activities, and other associated construction activities. Several methods are included on the Drawings to slow the flow of runoff and protect disturbed land during construction activities. Please refer to the project plans for typical details of measures to protect wetlands and waterways during and after construction. The following summary presents typical mitigation measures that will be implemented to avoid and minimize wetland impacts during construction.

Construction Period

- During construction, the limit of land disturbances will be kept to a minimum, where possible, and the construction will be sequenced so the entire site will not be disturbed at the same time.
- Clearing and grubbing will be limited to only the areas necessary for work to be performed, specifically in areas at the Upper and Lower Wellfields (Sheet C-9 and C-11) where wells and piping will be installed, at the Maltby Street 16" pipe crossing (Sheet C-18), at areas where wetlands and compensatory storage will be created (Sheet C-13 and C-14), and areas around the Supply Pond for access during sediment removal activities (Sheet C-23).
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed at the down gradient limits of work and construction access roadways prior to the commencement of work to prevent the transport of sediment to the downgradient wetlands and waterways during construction (see Sheets C-6 thru C-8). Specifically, at the Upper Wellfield this includes compost logs/straw wattles along the facility driveway from Maltby Street to the existing Pumping Station and down each of the well field laterals. At the Lower Wellfield, this includes along the wetlands to the north and west of proposed work, along the Coppermine Brook to the east, around the Supply Pond, and along both sides of the Canal to the Polkville Avenue Brook. These barriers will be inspected at least once per week and within 24 hours of rainfall events ½-inch or greater and repaired as needed. These barriers will remain in place until all disturbed soils are stabilized. A stockpile of compost logs/straw wattles and silt fence will be maintained on site for routine maintenance and emergency repairs. Barriers will be replaced as necessary due to sediment build-up and degradation.
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed surrounding temporary stockpile areas.
- For all slopes 4:1 or steeper, an erosion control blanket will be required, including at the Upper and Lower Wellfield wells (see Sheet C-9 and C-11). Temporary erosion control blankets will be inspected at least once per week and within 24 hours of rainfall events.

- A turbidity curtain will be installed to prevent sedimentation and turbidity disturbances in the Coppermine Brook during canal and supply pond sediment removal activities (see Sheet C-23 and Detail Sheet C-24). Turbidity curtains will be inspected daily during Supply Pond and canal sediment removal activities. The turbidity curtain will not be removed before sediment removal activities have ended and clarity of water has returned.
- Catch basin filters will be installed on catch basins near all excavation work on Maltby Street, Stafford Avenue, and Mix Street (See Sheet C-18 and Detail Sheet C-24).
- In the event that excavation dewatering is necessary, water will be pumped and discharged to one of the temporary sedimentation basins in designated areas of the site (see Sheet C-6 thru C-8 and Detail Sheet C-24). Temporary sedimentation basins will be inspected at least once per week and cleaned as needed to remove accumulated sediments. Temporary portable sediment tanks may also be used to handle significant amounts of excavation dewatering. All water to be discharged from dewatering activities will be filtered or otherwise treated prior to discharge to prevent siltation to adjacent areas. Best management practices will be used by the Contractor in order to prevent siltation to adjacent areas during dewatering activities.
- A temporary sediment dewatering and stockpiling area has been designated within the Supply Pond to dewater removed sediments during restoration activities (see Sheet C-23 and Detail Sheet C-24). Stockpiled materials and containment area will be inspected daily during dewatering activities, weekly during non-dewatering activities, and within 24 hours of rainfall events of ½-inch or greater.
- A stabilized construction entrance is also being required for the site to prevent tire tracked soils to onsite and offsite locations (see Sheet C-23 and Detail Sheet C-24). The stabilized construction entrance will be inspected periodically and additional top dressing or length will be added, as necessary, to continue capturing sediment tracked on vehicles.
- The silt fence and/or compost log/straw wattle barrier will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- The sedimentation barriers will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- Periodic inspections will be made by the applicant to ensure compliance with the permit conditions.

Spill Control Measures

- Spill containment equipment (e.g. oil absorbent pads, oil absorbent materials, containment booms, shovels, etc.) will be stored in the equipment storage and refueling area in an easily accessible manner for use in the clean-up of accidental releases of fuel or other hazardous materials. Should there be an accidental release the proper authorities will be notified in accordance with all applicable federal, state, and local laws; and

- To minimize the possibility of leakage of hydraulic fluid, all hydraulic lines on all construction equipment and vehicles will be inspected at the end of each workday. If any excessive wear or leakage is observed, the line will be repaired prior to further use. In addition, a supply of oil absorbent materials (i.e. pads, "speedy dry," and/or booms) will be maintained with the equipment at the work area for immediate deployment in the event of an accidental release of fuel, hydraulic fluid, oil, etc.

Schedule for Grading and Construction Activities:

A proposed construction sequencing for critical path items in the White Bridge Waterworks Facilities Upper and Lower Wellfields and Pond Pumping Station Project is included as an attachment to this application. Tasks listed are generally to be performed within each proposed stage, and are not necessarily presented sequentially. As required by Project Specifications, the Contractor is required to submit a detailed Final Construction Schedule for approval by the Engineer. Further, as required by the Specifications, the Contractor is required to submit a detailed Construction Sequencing Plan for review and approval by the Engineer. Both the Construction Schedule and Construction Sequencing Plan submitted by the Contractor will be reviewed for compliance with time of year restrictions imposed by the Natural Diversity Database (NDDB) (no bank disturbance work in/adjacent to wetlands November 1 through March 15) and for the expected Great Blue Heron nesting period (March through May).

Some specific sequencing constraints and estimated durations are listed below. <u>These represent a suggested sequencing for critical path items or items that will require earth excavation and disturbance of soils. The final Construction Sequence will be developed by the Contractor.</u> Some items listed in each "Stage" can/will overlap with items listed in previous stages.

<u>Construction Sequencing - Stage 1 (Fall 2024 – Fall 2026)</u>

- Terminate operation of existing Lower Wellfield (LWF) Wells
- **Install Erosion and Sedimentation control measures around the Lower Wellfield, Lower Wellfield Pump Station, Supply Pond, and Canal areas**
- Demolish existing LWF Pumping Station (3 months)
- Demolish existing caisson and fencing near intake pond (1 month)
- Perform canal and pond restoration (to be completed following demolition of the caisson and prior to replacement of the canal culverts) (3 months – **not to be performed between November 1 and March 15**)
- Install test wells, stream gauges, and other equipment required for well pump testing at Upper Wellfield (UWF) and LWF (2 months)
- **Install Erosion and Sedimentation control measures around the Upper Wellfield and access driveway**
- Drill UWF Wells. Order final UWF pumps/motors (3 months each, 7 months total – **not to be performed between November 1 and March 15 at applicable wells**)
- Drill LWF Wells. Order final LWF pumps/motors (3 months each, 13 months total – **not to be performed between November 1 and March 15 at applicable wells, not to be performed between March and May**)
- Install well meter vault, vault control cabinets, meter, and electrical equipment (18 months total, to follow each well drilled – **not to be performed between November 1 and March 15 at applicable wells**)

- Install foundation of new Pond Pumping Station building (3 months – **not to be performed between March and May**)

Construction Sequencing - Stage 2 (Spring 2025 – Fall 2026)

- Install yard piping from UWF and LWF for raw water transmission to Shuttle Meadow during Groundwater Under Direct Influence of Surface Water (GWUDI) testing. Install temporary connection to existing Pond Pumping Station. Install fiber optic cabling (6 months – **not to be performed between November 1 and March 15**
- Install final LWF yard piping, electrical conduit, fiber optic cabling (6 months – **not to be performed between November 1 and March 15 in applicable areas, not to be performed between March and May in applicable areas**)
- **Final stabilization of UWF and LWF wellhead areas**
- Perform canal crossing work for yard piping and restore canal culverts (1 month – **not to be performed between November 1 and March 15**)
- Install new gas service from Mix Street to Pond Pumping Station building (2 months – **not to be performed between March and May**)
- Install new sewer force main and water service to Maltby Street (3 months)
- Install fiber optic cables and Well Pump Communication/VFD Platforms (3 months each, 9 months total)
- Terminate operation of existing UWF Wells. **Install Erosion and Sedimentation control measures around the UWF Pump Station**
- Demolish existing UWF Pump Station
- Install and test UWF submersible well pumps and motors (2 months)
- Install and test LWF submersible well pumps and motors (2 months)
- Install electrical service and equipment at the new Pond Pumping Station, UWF, and LWF (3 months)

Construction Sequencing - Stage 3 (Summer 2025 – Spring 2028)

- Setup instrumentation and perform GWUDI Testing on new UWF and LWF wells (12 months). UWF and LWF pumped via raw water main to Shuttle Meadow Reservoir
- Construct new Pond Pumping Station Building (18 months total - **exterior construction not to be performed between March and May**)
- Install yard piping to complete final connections to Pond Pumping Station (1 month)

Construction Sequencing – Stage 4 (Summer 2027 – Fall 2027)

- GWUDI testing completed
- Completion of new Pond Pumping Station building. Terminate operation of existing Pond Pumping Station
- Abandon/demolish existing Pond Pumping Station building, electrical shed, and UWF Pumping Station. Cap and abandon temporary connections (3 months)

Construction Methods:

Trench excavations will be used for pipe, valve, and appurtenance installation. Suitable material removed from trenches may be placed back into the excavation and compacted or temporarily stockpiled on site, while material deemed unsuitable for reuse will be removed from the site. Open excavations will be used to install the foundation and footings for the Pond Pumping Station and the vaults located at each well. Material removed from these excavations will be taken off-site or temporarily stockpiled on the site with proper best management erosion and sedimentation control measures being implemented around the

stockpile to prevent sedimentation from stockpiled material. This includes placement of straw wattles/compost socks and a trenched silt fence around the stockpile area in addition to the sedimentation controls along the limits of work.

Alternative construction methods for the yard piping may include trenchless installation of pipe to limit area of disturbed land. Pipe could be installed by horizontal directional drilling, pipe ramming, pipe bursting of existing pipelines, tunneling, or horizontal auger boring. All of these methods would still require excavation for access to the existing pipe or as insertion and receiving pits. None of these methods were selected due to the amount and complexity of existing utilities present at the site, lack of record drawings for most of these utilities, and complexity of new piping connections to be installed.

A temporary stabilized construction entrance will be installed during sediment removal and restoration of the supply pond and canal. This construction entrance will run along the berm between the canal and supply pond to the temporary stabilized pond access point. Sediment removed from the supply pond and canal will be temporarily stored within the supply pond to dewater before being removed from the site.

Backfilling of trenches and excavations will be completed as soon as practicable. Pipe bedding will be placed up to 12-inches above the crown of the pipe and suitable backfill will be placed in 6-inch lifts and compacted by hand or pneumatic ramming with tools weighing at least 20 pounds to finished grade. Disturbed areas will be loamed and seeded to provide vegetated soil cover against sheet runoff and wind erosion. An erosion control blanket will be required for slopped areas until vegetated cover is established.

Typical construction equipment, including heavy machinery, is expected to be used to complete this work. Machinery may include bulldozers, loaders, excavators, backhoe loaders, triaxle dump trucks, and drill rig trucks. Equipment, machinery, and materials will be stored or stockpiled in the designated areas shown on the sequencing drawings.

Post-Construction Period

The following summary of mitigation measures will be implemented to restore any areas affected by short-term impacts that occur in or adjacent to wetlands.

- The final site is designed to have a 3-foot wide gravel infiltration trench with 1.5”-3” diameter washed aggregate covered with 6” pea gravel running along the facility driveway to collect and slow the flow of runoff from impervious surfaces (see Sheet C-10 and Detail Sheet C-26).
- All areas disturbed during construction activities are to be loamed and seeded to provide vegetated soil cover protection against sheet runoff and wind erosion (see Sheet C-9 thru C-12). Seeded areas will be inspected at least once per week and within 24 hours of rainfall events of ½-inch or greater.
- Once established, seeded areas will be mowed and maintained as appropriate.
- The Pond Pumping Station building roof drain leader will outlet to a riprap apron (See Sheet C-10 and Detail Sheet C-26). Riprap used in the roof drain apron will be inspected periodically to determine if high flows have caused scour beneath riprap or if vegetation removal is required. On

the northeast side of the Pond Pumping Station building, a retaining wall will be utilized to prevent steep slopes.

- The wetland replication and restoration areas will be planted with trees and shrubs per the planting plans, and seeded with a wetland seed mixture.
- If seeding occurs outside of the growing season, temporary stabilization measures (i.e., mulching or erosion control blankets) will be used to prevent erosion until the area can be seeded during the following growing season.
- Reseeding and mulching disturbed areas. These areas will be maintained and re-seeded to ensure that grass cover is adequate to stabilize the exposed soil, and
- Sedimentation and erosion control barriers will not be removed until a vegetative cover dense enough to prevent erosion is established.

Selections from Figure 3-2 of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control:

Figure 3-2 Measure Selection Matrix

Identify Problem Areas	Identify Control Problems	Identify Strategy	Select Specific Measure		Plan Key
			Functional Group	Measure	
Disturbed Areas	**Control Soil Detachment**	Preserve and Conserve Existing Site Resources	Protect Vegetation	Tree Protection	TP
			Preserve and Conserve Soil	Topsoiling	TO
	Raindrop Splash			Land Grading	LG
				Surface Roughening	SR
Short or Shallow Slopes	Sheet & Rill Erosion	Protect Surface		Dust Control	DC
			Vegetative Soil Cover	Temporary Seeding	TS
	Wind Erosion			Permanent Seeding	PS
				Sodding	SO
				Landscape Planting	LP
Steep Slopes			Non-Living Soil Protection	Temporary Soil Protection	TSP
				Mulch for Seed	MS
Long Slopes				Landscape Mulch	LM
				Temporary Erosion Control Blanket	ECB
				Permanent Turf Reinforcement Mat	TRM
				Stone Slope Protection	SSP
Stockpile Areas		Protect Surface and/or Convey Runoff	Stabilization Structures	Retaining Walls	RW
				Riprap	RR
	Control Water Movement			Gabions	G
Borrow Areas				Permanent Slope Drain	PSD
	Gully Erosion			Channel Grade Stabilization Structure	CSS
				Temporary Lined Chute	TC
				Temporary Pipe Slope Drain	TSD
	Channel & Stream Erosion		Drainageways and Watercourses	Vegetated Waterway	VW
Drainage Ways		Convey Runoff		Temporary Lined Channel	TLC
				Permanent Lined Waterway	PW
Wetlands and Watercourses				Temporary Stream Crossing	TSC
		Direct Runoff	Diversions	Temporary Fill Berm	TFB
				Water Bar	WB
				Temporary Diversion	TD
Waterbodies				Permanent Diversion	PD
		Intercept Grnd.Water	Subsurface Drains	Subsurface Drain	SD
		Detain Runoff	Detention Structures	Detention Basin	DB
Areas of Flooding and Existing Erosion	Natural Resource Degradation	Diffuse Runoff	Energy Dissipators	Level Spreader	LS
				Outlet Protection	OP
				Stone Check Dam	SCD
	Control Sediment Deposition	Detain Sediments	Sediment Impoundments, Barriers, and Filters	Temporary Sediment Basin	SB
				Temporary Sediment Trap	TST
Drainage Outlets				Hay Bale Barrier	HB
	Protect Onsite and Offsite Areas			Geotextile Silt Fence	GSF
				Turbidity Curtain	TC
				Vegetative Filter	VF
Travel Areas		Control Mechanically Moved Waters and Soils	Tire Tracked Soils	Construction Entrance	CE
			Dewatering	Pump Intake and Outlet Protection	PuP
				Pumping Settling Basin	PSB
				Portable Sediment Tank	PST
Dewatering				Dewatering of Earth Materials	DWM

Stormwater Management Report Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47020/NBW-Stormwater-Report

Geotechnical Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

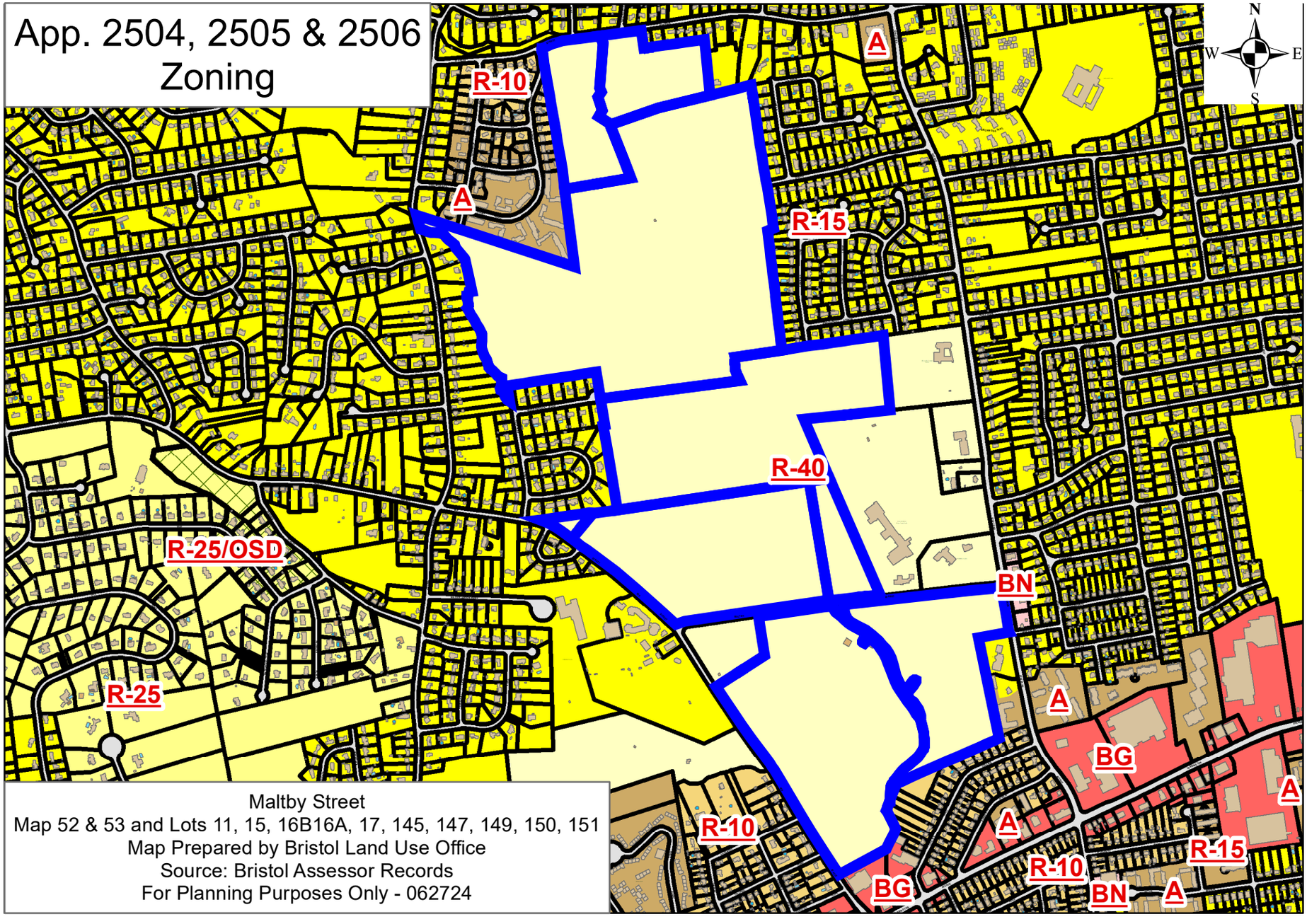
Custom Soil Resource Report for State of Connecticut

White Bridge Waterworks Facilities - Pond Pumping Station

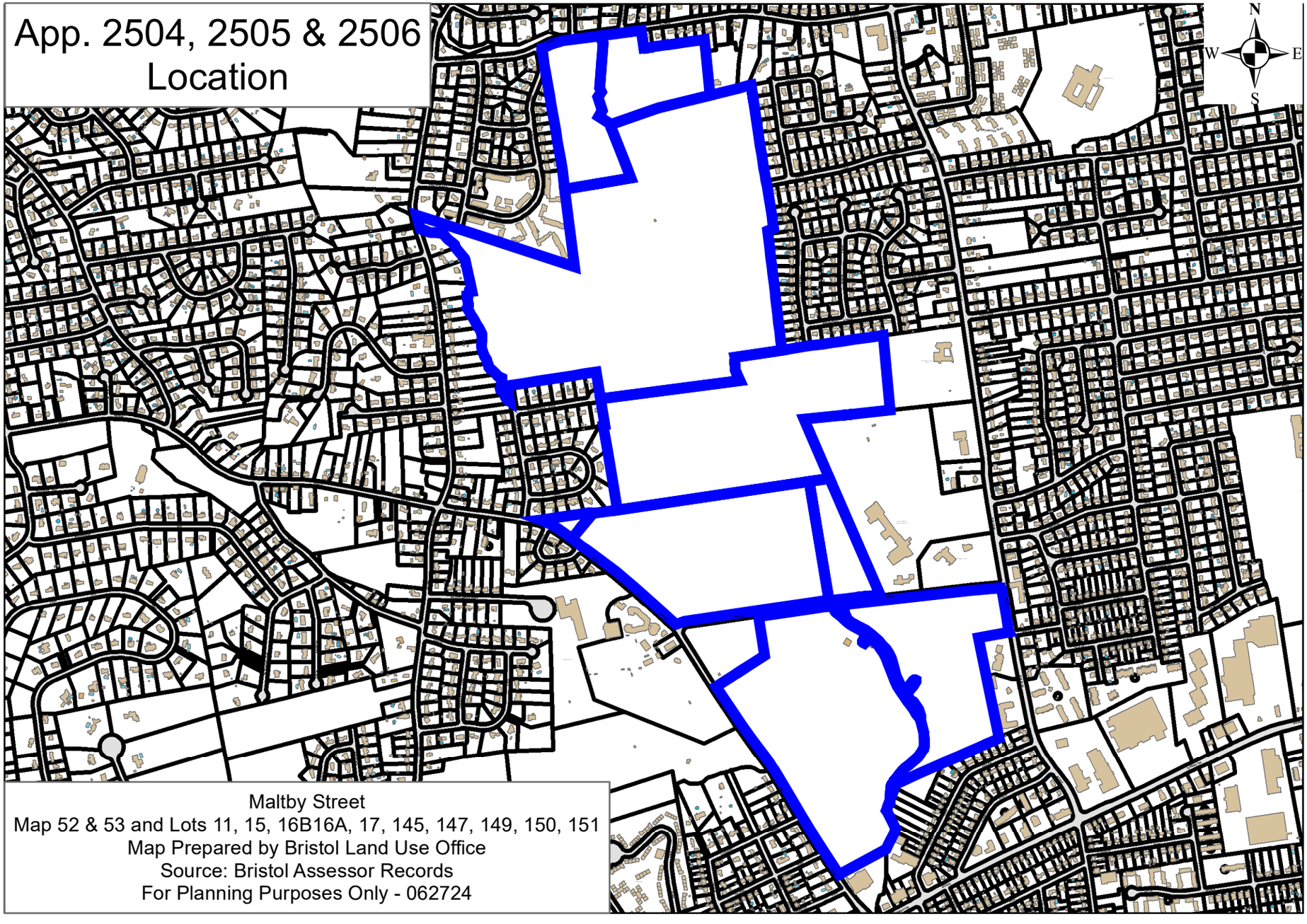
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September 26, 2022

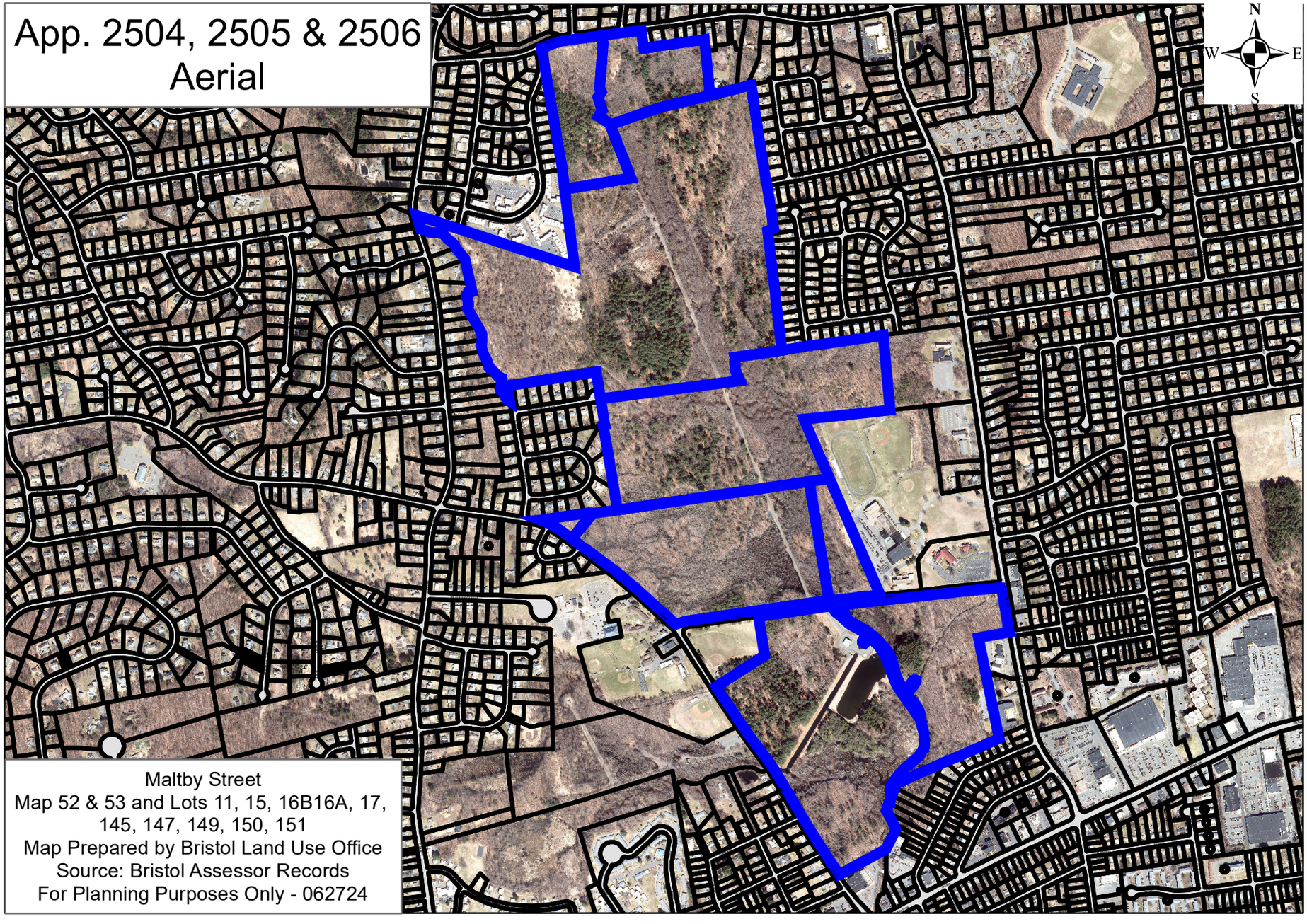

App. 2504, 2505 & 2506
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Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506 Location

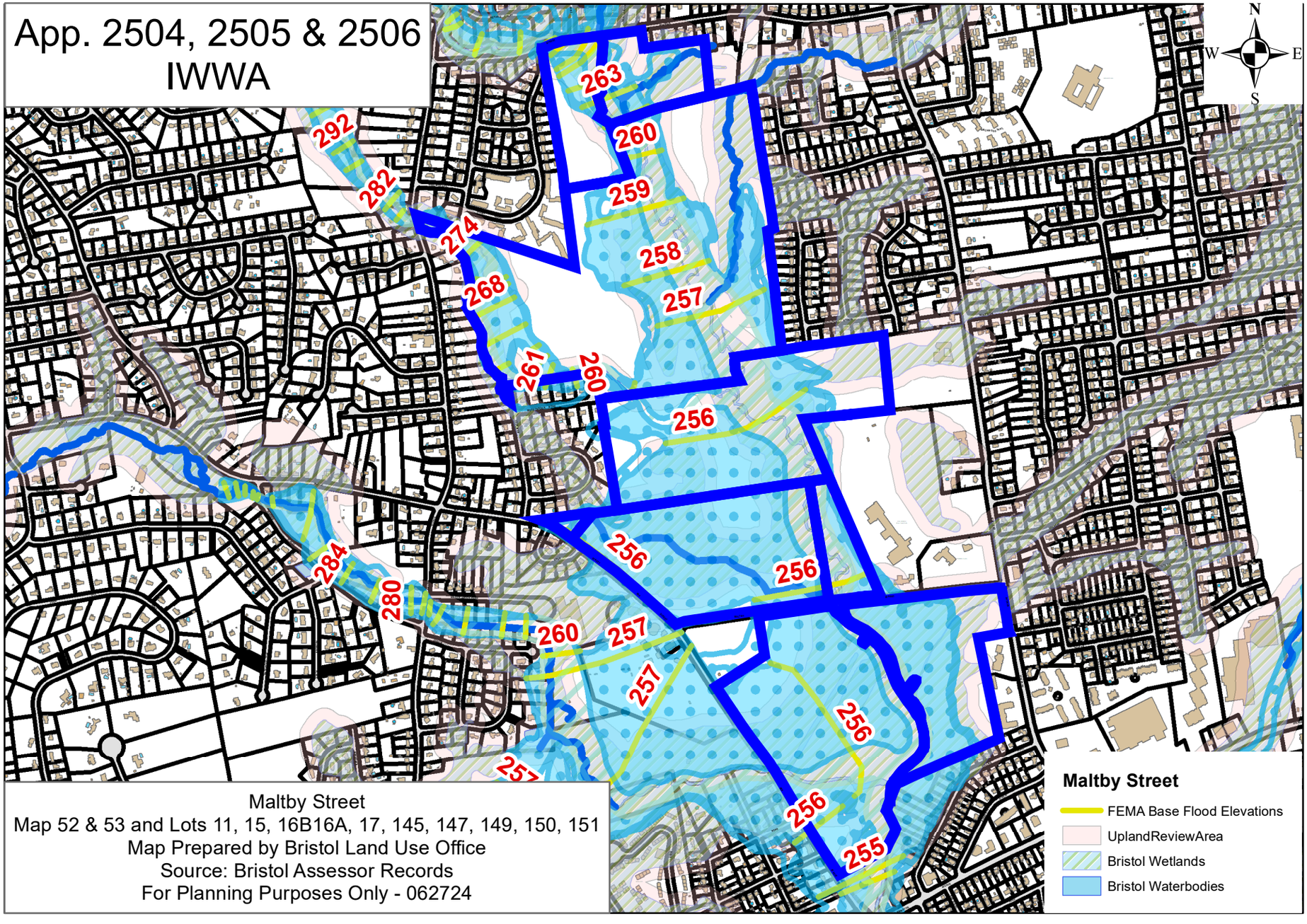


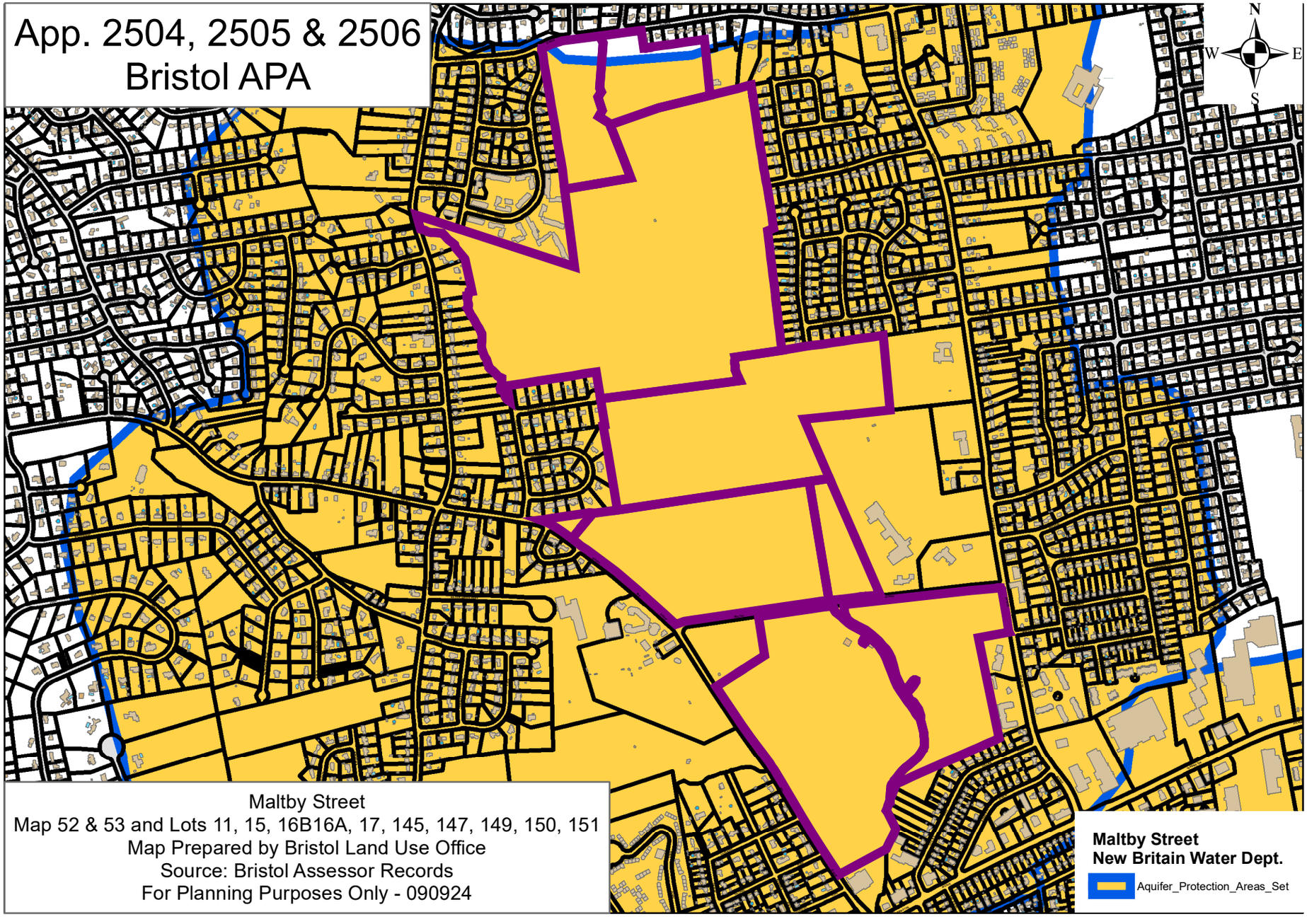
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506
Aerial



Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724


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Maltby Street
FEMA Base Flood Elevations
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724


App. 2504, 2505 & 2506
Bristol APA
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Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 090924
Maltby Street
New Britain Water Dept.
Aquifer_Protection_Areas_Set

Google Earth


Copper Mine Brook
Polkville Ave Brook
Layers
2D


Copper Mine Brook
Polkville Ave Brook
Field


Copper Mine Brook
Copper Mine Brook
Copper Mine Brook

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

BID NO. 4145

MAYOR

HONORABLE ERIN E. STEWART

DIRECTOR OF PUBLIC WORKS

MARK E. MORIARTY, P.E.

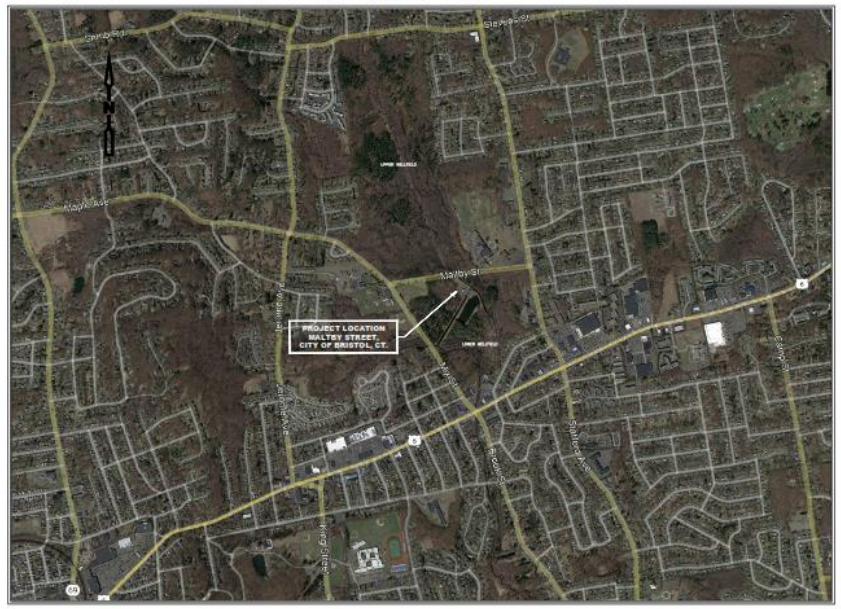
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

CDM Smith

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

Full Set of Civil Drawings at this Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47022/Full-Set-NBW

Site Plan

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

BID NO. 4145

MAYOR

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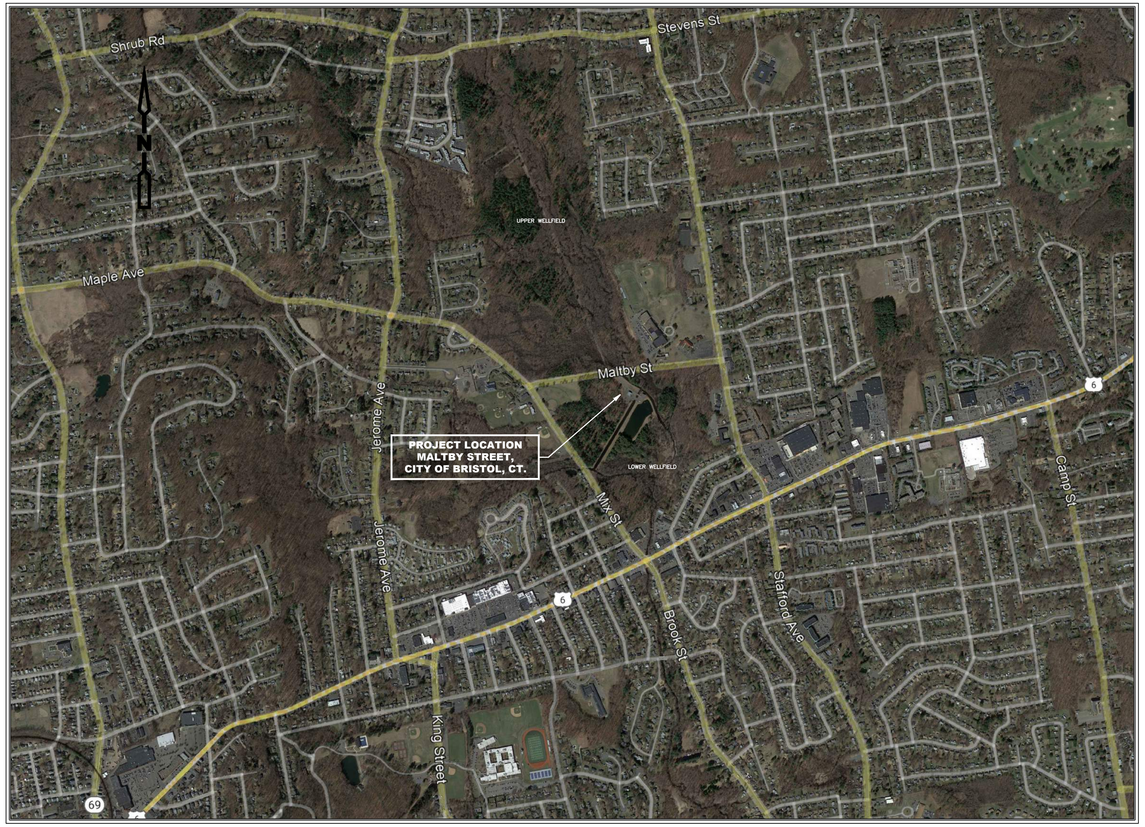
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

SCALE: 1" = 1000'

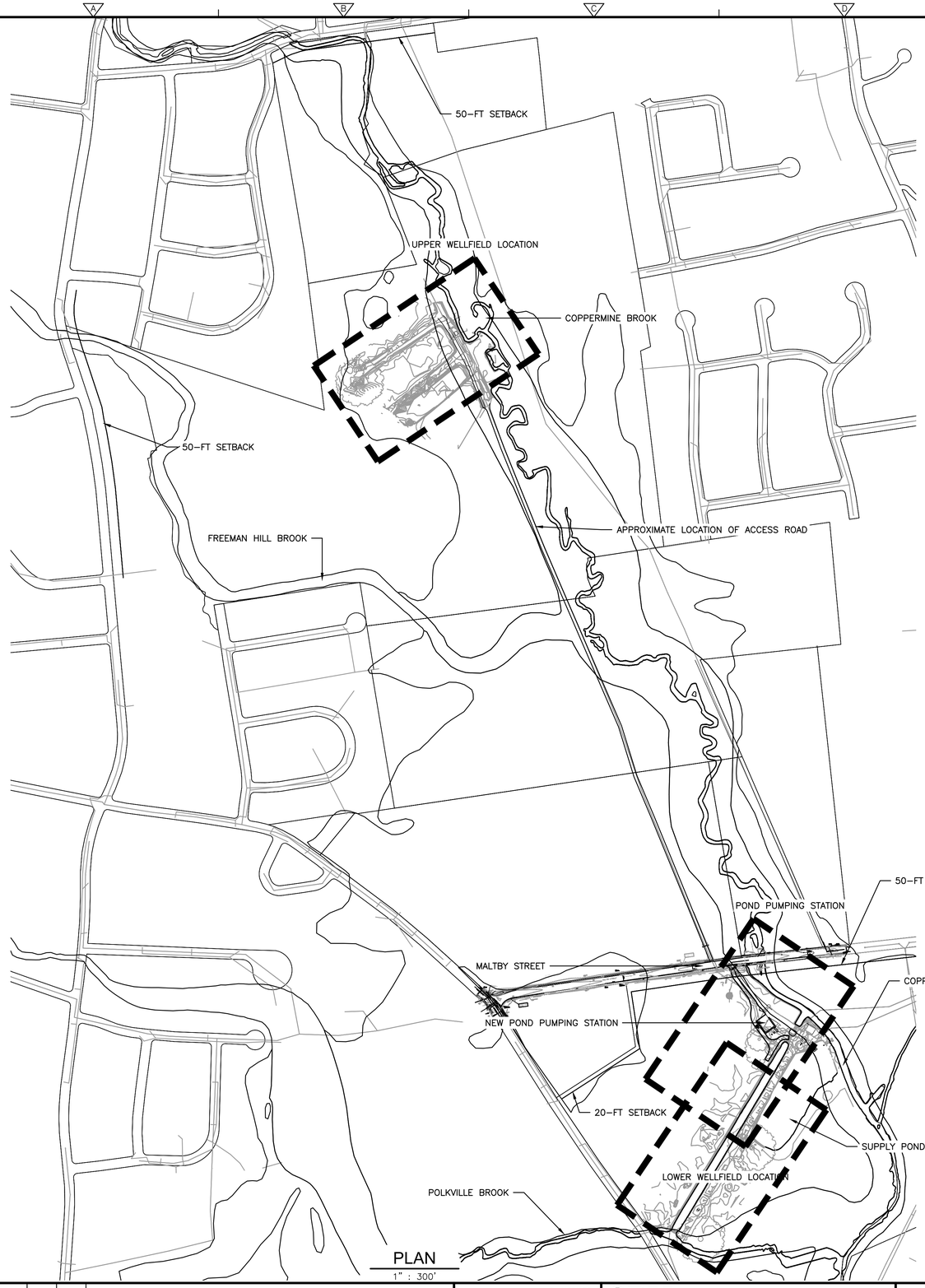
CDM Smith

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

IMAGE OBTAINED FROM GOOGLE EARTH PRO DECEMBER, 2021
Plot Stamp – File: C:\USERS\ENGELSB\DC\ACCDOCS\CDM SMITH INC\10739-264571 – NEW BRITAIN CT WHITE BRIDGE WELL FIELDS AND PS\PROJECT FILES\01 GENERAL (G)\10 CADD\G00DNFCV.DWG Saved by: ENGELSB On: 11-Jan-24 Plotted on: 21-Jun-24 12:54 PM



PLAN
1" : 300'



PLAN
N.T.S.

FLOOD	LOWER WELLFIELD & POND PUMPING STATION ELEVATION (ft)	UPPER WELLFIELD ELEVATION (ft)
0.2% ANNUAL CHANCE FLOOD (500 – YR FLOOD)	256.7	259.7
1% ANNUAL CHANCE FLOOD (100 – YR FLOOD)	255.9	259.0
2% ANNUAL CHANCE FLOOD (50 – YR FLOOD)	255.6	258.6
10% ANNUAL CHANCE FLOOD (10 – YR FLOOD)	253.0	258.0

NOTE: ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED USGS DATUM NAVD88

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

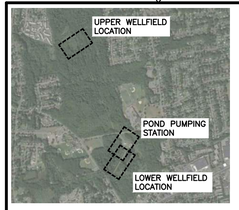
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

OVERALL SITE PLAN

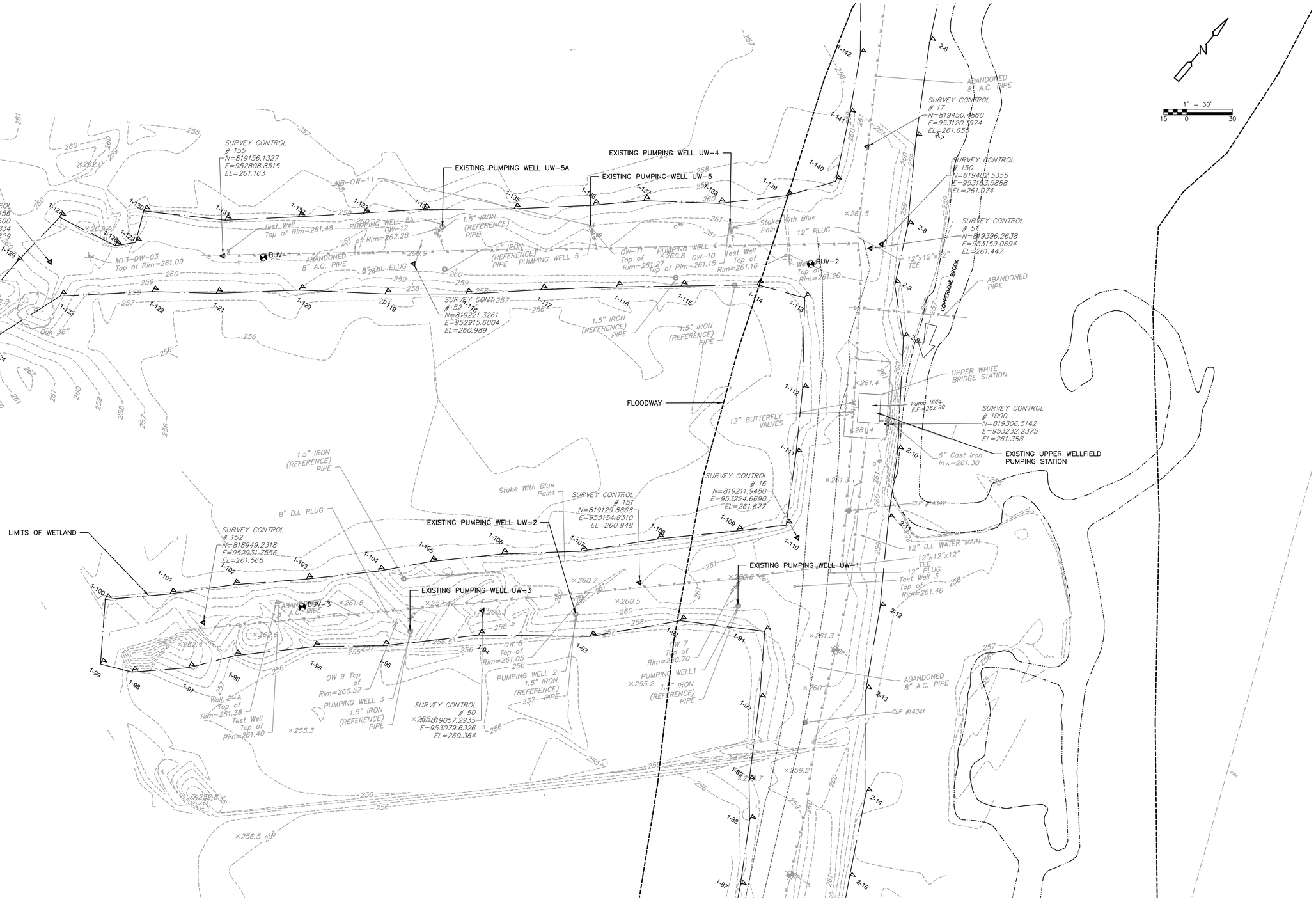
PROJECT NO. 10739–264571
FILE NAME: C002STPL.DWG
SHEET NO.
C-2

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.



NOTES:

1. AREAS OF THE UPPER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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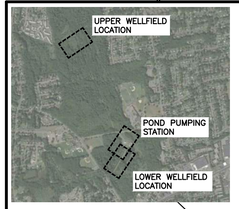
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C003STPL.DWG
SHEET NO.
C-3

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

LIMITS OF WETLAND

MATCH LINE SEE SHEET C-5

MALTBY STREET

COPPER MINE BROOK

CANAL

SUPPLY POND

FLOODWAY WESTERN BOUNDARY

FLOODWAY EASTERN BOUNDARY

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.292

SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733

SURVEY CONTROL # 91 N=816091.6711 E=954678.5708 EL=256.530

SURVEY CONTROL # 1 N=816091.7206 E=954678.5697 EL=256.431

SURVEY CONTROL # 92 N=816144.3791 E=954804.3858 EL=256.979

BPS-1
BPS-2
BPS-3
BPS-4 ×251.6
BPS-5
HBLW-1
HBLW-2
BLWF-3

EXISTING LOWER WELLFIELD PUMPING STATION F.F.= 253.20 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)

EXISTING POND PUMPING STATION F.F.= 253.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)

EXISTING CASSON WELL

"TWIN" 26" DEAD

"SISTER" MAPLES 7-8" 10"

Well 8 Top of Rim=249.80

Well 8-A Top of Rim=251.41

3" Dia. Well Top of Rim=250.88

Well 11 3" Upper Rim=251.62 Well 3" 11-A Upper Rim=252.29

Well 6A of Rim=251.56 Test Well 6A Top of Rim=251.63 Top of Frame=252.20

Top of Frame=253.73

Top of Frame=253.05

Top of Frame=252.96

Existing Well (Typ.) Top of Frame=251.48

NB-OW-14 Old 3" Well Top of Rim=252.60 Frame=253.20

NB-OW-1 Top of Frame=252.63

12" Dia. Well Top of Frame=252.12

INLET SCREEN AND GATE VALVE

CLP #10216

CLP #10218

16" WATER MAIN

20" D.I. COPPER WATER MAIN

1" D.I. COPPER SERVICE

ABANDONED 16" D.I. SUCTION HEADERS

30k Gen. with Underground Fuel

UGGED 16" C.I. ION ABANDONED VALVE

Dia. of 26

6" D.I. WELL CONNECTIONS

FLOODWAY WESTERN BOUNDARY

FLOODWAY EASTERN BOUNDARY

N

1" = 30'
15 0 30

NOTES:

1. AREAS OF THE LOWER WELLFIELD AND POND PUMPING STATION ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G.HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

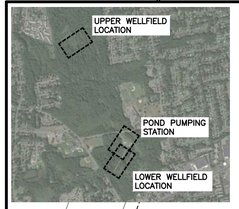
POND PUMPING STATIONS
EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C004STPL.DWG

SHEET NO.
C-4

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PLAN
N.T.S.

APPROXIMATE LOCATION OF EXISTING GREAT BLUE HERON ROOKERY. SEE GENERAL NOTE 25 ON SHEET C–1 FOR MORE DETAILS

LIMIT OF WETLAND

SURVEY CONTROL # 2567 N=814780.4678 E=954191.2578 EL=249.809

SURVEY CONTROL # 149 N=815074.5860 E=954425.7922 EL=251.494

SURVEY CONTROL # 148 N=815197.8447 E=954516.4738 EL=253.523

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.292

SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733

SURVEY CONTROL # 31 N=814722.6132 E=954351.2270 EL=251.019

SURVEY CONTROL # 32 N=814962.7770 E=954515.6314 EL=251.406

SURVEY CONTROL # 33 N=815089.6478 E=954688.8275 EL=249.693

SURVEY CONTROL # 44 N=814637.4824 E=954479.1256 EL=248.687

SURVEY CONTROL # 45 N=814631.6821 E=954563.1325 EL=248.503

WELL 9 Upper Rim 250.16
WELL 9–A Upper Rim 250.18
Well 10 Upper Rim=251.81
Well 10–A Upper Rim=251.82
Well 7–A Upper Rim=251.62
Well 7 Upper Rim=251.63
3" Dia. Well Top of Rim=250.88
Well 11 3" Upper Rim=251.62
Well 3" 11–A Upper Rim=252.29
Top of Wall At Spillway=254.1
3" WELL OW–5 Top of Rim=250.43
Test Well 5–A Top of Cap=250.35
Test Well OW–16 Top of Cap=251.91
OW–15 Top of Rim=250.97
Test Well 6A Top of Rim=251.56
Test Well 6A Top of Rim=251.46
NB–OW–14 Old 3" Well Top of Rim=252.60
Top of Frame=251.67
Top of Frame=251.65
Top of Frame=252.55
Top of Frame=252.41
Top of Frame=252.37
Top of Frame=252.43
Top of Frame=252.15
Top of Frame=251.30
Top of Frame=252.20
Top of Frame=252.65
Top of Frame=253.73
Top of Frame=253.20
Top of Frame=253.05
Top of Frame=252.96
Top of Frame=251.42
Existing Well (Typ)
Well 5 stake
BLWF–1
BLWF–3
BLWF–4
BLWF–6
CLP #1021
CLP #10213
CLP #10214
CLP #10216
CANAL
HEADER CAP
ABANDONED PIPE AND WELLS
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
48" OAK
SUPPLY POND
FLOODWAY
POLKVILLE BROOK
MATCH LINE SEE SHEET C–4

NOTES:

1. AREAS OF THE LOWER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C–1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
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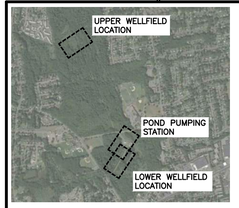
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WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739–264571
FILE NAME: C005GDPL.DWG
SHEET NO. C-5

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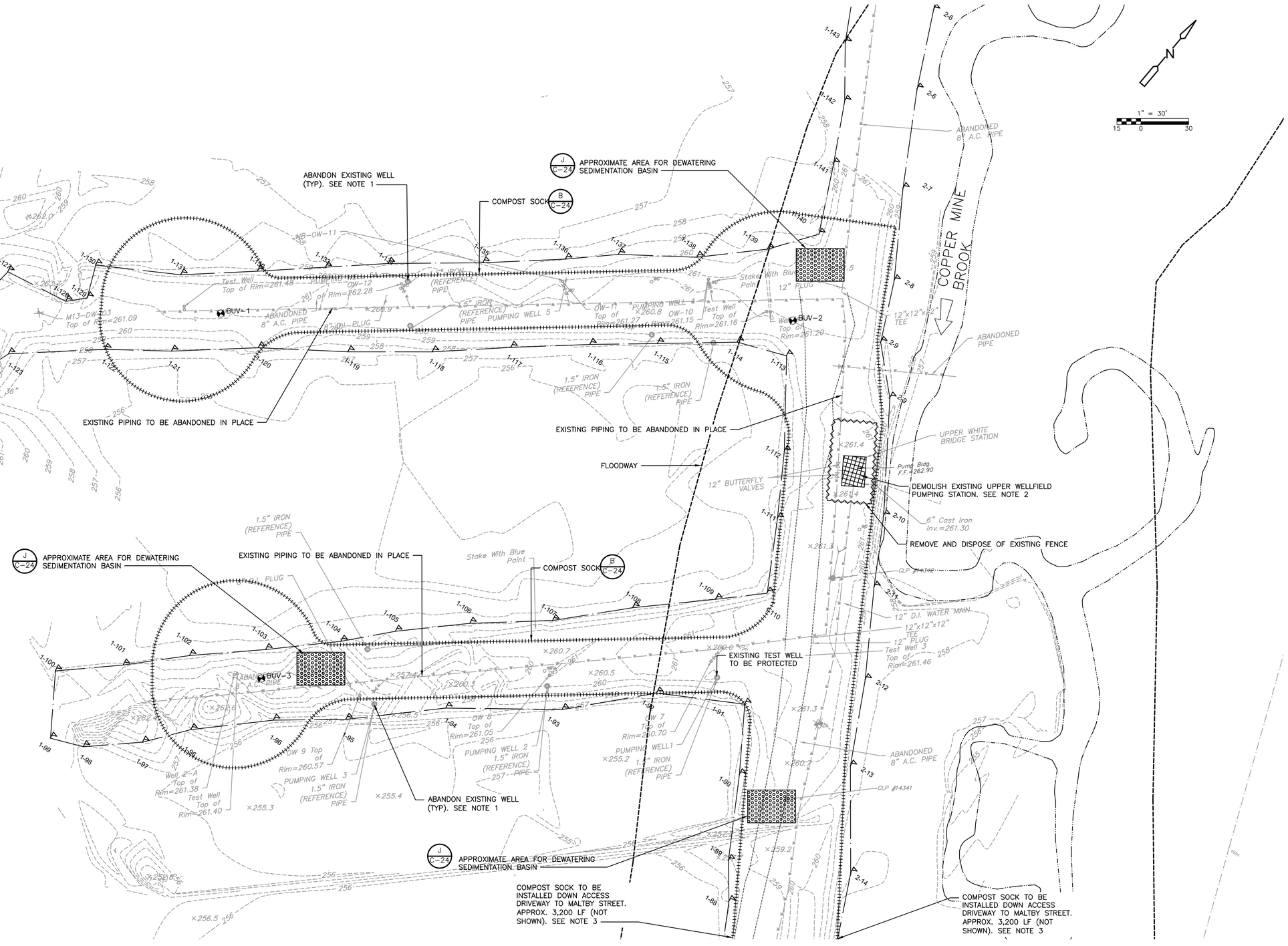
PLAN
N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE HEADER PIPE AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. THE EXISTING UPPER WELLFIELD PUMPING STATION BUILDING TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
3. CONTRACTOR TO INSTALL COMPOST SOCK ON BOTH SIDES OF THE UPPER WELLFIELD ACCESS DRIVEWAY (APPROX. 3,200 LF EACH, NOT SHOWN) TO MALTBY STREET. THE EXISTING ACCESS DRIVEWAY BRIDGE CROSSING OF THE FREEMAN HILL BROOK TO BE PROTECTED DURING CONSTRUCTION.
4. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.



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DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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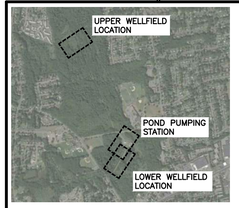
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

UPPER WELLFIELD DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C006STPL.DWG
SHEET NO. C-6

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN

N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
3. THE EXISTING POND PUMPING STATION BUILDING TO BE DEMOLISHED AT COMPLETION OF NEW POND PUMPING STATION TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
4. THE EXISTING LOWER WELLFIELD PUMPING STATION BUILDING AND FOUNDATION TO BE DEMOLISHED TO ELEVATION 241.2 FT. EXCAVATION LIMITS FOR THE NEW POND PUMPING STATION BUILDING TO APPROXIMATE MIN ELEVATION 241.2 FT. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE DETAIL B ON SHEET C-26 AND SPECIFICATIONS SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
5. THE EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED IN PLACE. THE CONE OF THE EXISTING CAISSON WELL TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE. SEE DETAIL B ON SHEET C-28 AND SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF THE EXISTING CAISSON WELL.
6. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.

REMOVE AND DISPOSE OF EXISTING GATE

REMOVE AND DISPOSE OF EXISTING BIT. CONC. DRIVE

APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN. SEE DETAIL J ON SHEET C-24

REMOVE AND DISPOSE OF OR STOCKPILE FOR REUSE OF TOPSOIL WITHIN LIMITS OF WORK. STOCKPILED TOPSOIL MAY BE AMENDED AND UTILIZED IN AREAS TO BE LOAMED AND SEEDED IN ACCORDANCE WITH SPECIFICATION SECTION 329113 SOIL PREPARATION AS APPROVED BY ENGINEER

REMOVE AND DISPOSE OF EXISTING GRAVEL DRIVE TO A MINIMUM DEPTH OF 12-INCHES

B C-24 COMPOST SOCK

16" WATER MAIN TO BE ABANDONED

LIMIT OF AREA OF EXCAVATION FOR NEW PUMPING STATION BUILDING

REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE AND GATES

EXISTING WATER LINES TO BE ABANDONED IN PLACE. ANY CONFLICTS WITH PROPOSED WORK SHALL BE REMOVED AND DISPOSED OF

EXISTING WELL 8 TO BE ABANDONED. SEE NOTE 1

EXISTING WELL 8-A TO BE ABANDONED. SEE NOTE 1

J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN

EXISTING ELECTRICAL SHED AND CLP #10218 TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION

REMOVE AND REPLACE TWO CULVERTS

B C-24 COMPOST SOCK

ABANDON EXISTING WELL (TYP). SEE NOTES 1 & 2

B C-24 COMPOST SOCK

6" D.I. WELL CONNECTIONS

16" C.I. SUCTION HEADER

EXISTING PIPE TO BE ABANDONED IN PLACE

DECOMMISSION AND ABANDON EXISTING CAISSON WELL. SEE NOTE 5 THIS SHEET AND DETAIL B ON SHEET C-28

REMOVE AND DISPOSE EXISTING MANHOLE (TYP 2).

MATCH LINE SEE SHEET C-8

B C-24 COMPOST SOCK TO BE INSTALLED WEST DOWN MALTBY STREET ON BOTH SIDES TO MIX STREET (APPROXIMATELY 1,200 LF EACH SIDE)

A C-24 STABILIZED CONSTRUCTION ENTRANCE

N

1" = 30'

15 0 30

MALTBY STREET

MALTBY STREET BRIDGE

COPPER MINE BROOK

FLOODWAY WESTERN BOUNDARY

DEMOLISH EXISTING LOWER WELLFIELD PUMPING STATION. SEE NOTE 4

J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN

B C-24 COMPOST SOCK

FLOODWAY EASTERN BOUNDARY

LIMIT OF REMOVE AND DISPOSE OF EXISTING GRAVEL DRIVE TO A MINIMUM DEPTH OF 12-INCHES

B C-24 COMPOST SOCK

DEMOLISH EXISTING GENERATOR AT COMPLETION OF CONSTRUCTION

DEMOLISH EXISTING POND PUMPING STATION AT COMPLETION OF CONSTRUCTION. SEE NOTE 3

J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN

EXISTING LOWER WELLFIELD PUMPING STATION FFE = 253.00

EXISTING POND PUMPING STATION F.F.= 255.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)

EXISTING GRAVEL DRIVE

CANAL

3" Dia. Well Top of Rim=250.88

Well 11 3" Upper Rim=251.62 Well 3" 11-A Upper Rim=252.29

NB-OW-14 Old 3" Well Top of Rim=252.60

BPS-1 BPS-2 BPS-3 BPS-4 BPS-5 BLWF-3 HBLW-1 HBLW-2

Top of Frame=253.73 Top of Frame=253.05 Top of Frame=252.96 Top of Frame=251.44 Top of Frame=252.20 Top of Frame=253.20

Existing Well (Typ.)

CLP #10216 CLP #10218

Gate Valve Vault

Generator with Quick Connect

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

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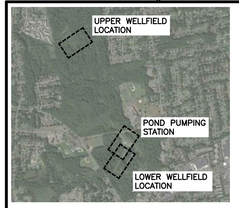
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATIONS DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C007STPL.DWG
SHEET NO. C-7

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS

LEGEND
- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

N

1" = 30'
15 0 30

LIMITS OF WETLAND

APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN (J/C-24)

EXISTING TEST WELL TO BE PROTECTED

COMPOST SOCK (B/C-24) CLP #10213

COMPOST SOCK (B/C-24) CLP #10214

COMPOST SOCK (B/C-24) CLP #10216

BLWF-1

BLWF-3

BLWF-4

BLWF-6

ABANDON EXISTING WELL (TYP). SEE NOTE 1 & 2

CANAL

LIMIT OF COMPOST SOCK

EXISTING TEST WELL TO BE PROTECTED

EXISTING PIPING TO BE ABANDONED IN PLACE

EXISTING WELLS 26 AND 27 TO BE ABANDONED. SEE NOTE 1 AND 2

LIMIT OF FLOODWAY

POLKVILLE BROOK

SUPPLY POND

HEADER CAP AND WELLS

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

52" ASH

48" OAK

MATCH LINE SEE SHEET C-7

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APPROVED BY: K. WAGNER
DATE: APRIL 2023

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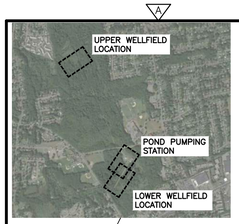
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C008GDPL.DWG
SHEET NO. C-8

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

LEGEND

- WETLAND FLAG
- BORING

N=819160.92
E=952810.68

N=819369.72
E=953117.58

N=818987.22
E=952965.00

UPPER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

FLOODWAY

B C-27 6-FT HIGH CHAIN LINK FENCE

A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE

TRENCH FOR PIPING, AND REPAIR TRENCH TO EXISTING CONDITIONS

EXISTING UPPER WELLFIELD PUMPING STATION

COPPER MINE BROOK

1" = 30'
15 0 30

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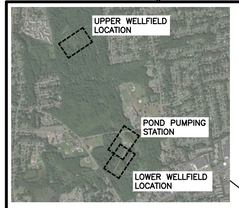
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C009STPL.DWG
SHEET NO. C-9

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

LEGEND
- BITUMINOUS CONCRETE
- INFILTRATION TRENCH
- CONCRETE WALKWAY
- DETENTION BASIN
- CHAIN LINK FENCE
- STEEL BEAM GUARDRAIL
- WETLAND FLAG
- BORING

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

RESOURCE IMPACTS TABLE		
PERMANENT IMPACT WETLAND		220 S.F.

LIMITS OF WETLAND
SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733
3" Dia. Well Top of Rim=250.88
SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162
SURVEY CONTROL # 148 N=815295.0131 E=954567.0095 EL=251.292
×250.5
×249.5
Well 11 3" Upper Rim=251.62 Well 3" 11-A Upper Rim=252.29
CLP #10217
CLP #10216
BLWF-3
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
MATCH LINE SEE SHEET C-11
CANAL
SUPPLY POND
NB-OW-14 Old 3" Well Top of Rim=252.60 Frame=253.20
Top of Frame=253.73
Top of Frame=253.05
Top of Frame=252.96
Existing Well (Typ.)
Top of Frame=251.45
Top of Frame=252.20
Top of Frame=253.26
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
RIM=?

LIMIT OF METAL BEAM RAIL
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
50-FT FRONT YARD SETBACK
put setback lines in red
16" WATER MAIN
N=816028.56 E=954636.04
NEW BRITAIN WATER DEPARTMENT LOT 53-145 (ZONE R-40) AREA: 50.38 ACRES
BPS-1
HBLW-1
J C-26 BIT CONC. ACCESS DRIVE
C C-26 3 FT WIDE GRAVEL INFILTRATION TRENCH
LIMITS OF WETLAND
HBLW-2
BPS-3
BPS-2
N=815815.04 E=954723.44
6.5-foot high
B C-27 6.5-FT HIGH CHAIN LINK FENCE
N=815805.58 E=954749.03
BUILDING ENTRANCE/EXIT
A C-25 METAL BEAM RAIL
BUILDING ENTRANCE/EXIT
L C-26 5 FT WIDE CONCRETE WALK
N=815745.97 E=954792.91
TEMPORARY SWITCHBOARD
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
LIMIT OF METAL BEAM RAIL
N=815665.20 E=954833.75
BUILDING ENTRANCE/EXIT
NEW POND PUMPING STATION FFE = 258' 56'Lx72'Wx25'H
BPS-4
×251.6
BPS-5
LIMIT OF METAL BEAM RAIL
LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
HYDRANT
LOAM AND SEED DISTURBED AREA
220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
RIPRAP
PLUGGED 6" C.I. SECTION ABANDONED IN PLACE
6" BUTTERFLY Valve
2"Dia. Top of Frame=258.26
2"Dia. Top of Frame=252.43
Top of Patch =252.63
30x Concrete Encased with Underdrain
NEW BRITAIN WATER DEPARTMENT LOT 53-147 (ZONE R-40) AREA: 25.8 ACRES
EXISTING POND PUMPING STATION TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION 37'L X 42' W X 26'H
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
A C-28 METAL BEAM RAIL
LIMIT OF BIT. CONC. ACCESS DRIVE
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
LIMIT OF METAL BEAM RAIL
A C-25 METAL BEAM RAIL
20-FT SIDE YARD SETBACK
B C-27 6.5-FT HIGH CHAIN LINK FENCE
6.5-foot high
N=815900.69 E=954734.73
FLOODWAY
show dimensions of parking space
N=815870.26 E=954771.18
LIMIT OF METAL BEAM RAIL
N=815860.24 E=954792.16
E C-27 SEGMENTAL BLOCK RETAINING WALL
FUTURE MAU-1 SEE HVAC DRAWINGS SET AT ELEVATION 258.5'
BUILDING ENTRANCE/EXIT
N=815820.57 E=954836.35
ROOF LEADER OUTLET SET AT ELEVATION 252.0'
E C-26 RIPRAP APRON
BUILDING ENTRANCE/EXIT
EXISTING LOWER WELLFIELD WELL PUMPING STATION TO BE DEMOLISHED 50'H X 50'W X 26'H
LOCATION OF GENERATOR
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
FLOODWAY - WESTERN BOUNDARY
FLOODWAY - EASTERN BOUNDARY
EDGE OF STREAM
PAD-MOUNTED UTILITY TRANSFORMER
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
NEW BRITAIN WATER DEPARTMENT LOT 53-149 (ZONE R-40) AREA: 6.8 ACRES
NEW BRITAIN WATER DEPARTMENT LOT 53-150 (ZONE R-40) AREA: 39.9 ACRES
scale this back to existing
fix leaders
SURVEY CONTROL # 91 N=816097.6711 E=954678.5708 EL=256.530
SURVEY CONTROL # 92 N=816091.7206 E=954678.5611 EL=256.439
SURVEY CONTROL # 93 N=816144.3791 E=954804.3858 EL=256.979
MALTBY STREET
COPPER MINE BROOK
VEHICLE CONTROL GATE
A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE
LIMIT OF METAL BEAM RAIL
N
1" = 30'
15 0 30

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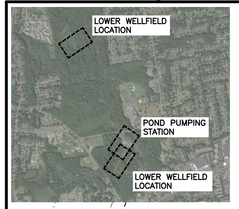
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION LAYOUT AND MATERIALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C010GDPL.DWG
SHEET NO. C-10

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

LEGEND
- WETLAND FLAG
- BORING

50-FT FRONT YARD SETBACK

LOWER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814826.21
E=954295.69

WELL 9 Upper Rim 250.16
WELL 9-A Upper Rim 250.18

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

LOWER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

Well 10 Upper Rim=251.81
Well 10-A Upper Rim=251.82

B/C-27 6-FT HIGH CHAIN LINK FENCE

C/C-27 6-FT WIDE PEDESTRIAN SWING GATE

LOAM AND SEED ALL DISTURBED AREAS

Well 7-A Upper Rim=251.62
Well 7-3 Upper Rim=251.63

LOWER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=815489.21
E=954705.31

3" Dia. Well Top of Rim=250.88

Well 11 3" Upper Rim=251.62
Well 3" 11-A Upper Rim=252.29

MATCH LINE SEE PUMPING STATION SHEETS

CANAL

Top of Wall At Spillway=251.4

CLP #10213
CLP #1021
CLP #10214
CLP #10216

Test Well 5-A Top of Cap=250.35
Well 5 stake
3" WELL OW-5 Top of Rim=250.43
Top of Frame=251.67
Top of Frame=251.65
Existing Well (Typ)
Top of Frame=252.55
Top of Frame=252.41
Top of Frame=252.37
Test Well OW-16 Top of Cap=251.91 Top of Frame=252.77
Top of Frame=252.43
Top of Frame=252.15
OW-15 Top of Rim=250.07 Top of Frame=251.30
Test Well 6A Top of Rim=251.56
Test Well 6A Top of Rim=251.44
Top of Frame=252.20
Top of Frame=253.66
Top of Frame=253.73
NB-OW-14 Old 3" Well Top of Rim=252.60 Top of Frame=253.20
Top of Frame=253.05
Top of Frame=252.96
Existing Well (Typ)
Top of Frame=251.43

BLWF-1
BLWF-2
BLWF-3
BLWF-4

HEADER CAP
ABANDONED PIPE AND WELLS
52" ASH
48" OAK

N=814966.07
E=954566.76

LOWER WELLFIELD WELL NO. 4. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814809.95
E=954461.28

LOWER WELLFIELD WELL NO. 5. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

3,003 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

LOAM AND SEED ALL WELL BERMS, TYP.

1,320 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

C/C-27 6-FT WIDE PEDESTRIAN SWING GATE

N=815118.36
E=954657.81

358 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

6-FT HIGH CHAIN LINK FENCE B/C-27

LOWER WELLFIELD WELL NO. 6. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

SUPPLY POND

POLKVILLE BROOK

1" = 30'
15 0 30

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CITY OF NEW BRITAIN, CONNECTICUT

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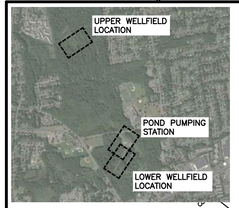
LOWER WELLFIELD LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C011GDPL.DWG

SHEET NO.
C-11

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PLAN
N.T.S.

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

10,357 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

NEW POND PUMPING STATION FFE = 258'

ROOFLEADER OUTLET SET AT ELEVATION 252.0' (E C-26)

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

MATCH EXISTING GRADE

MATCH LINE SEE LOWER WELLFIELD SHEETS

CANAL

SUPPLY POND

Edge of Pavement

MALTBY STREET

COPPER MINE BROOK

MALTBY STREET BRIDGE

COPPER MINE BROOK

1" = 30'

BPS-1 BPS-2 BPS-3 BPS-4 BPS-5 BPS-6

HBLW-1 HBLW-2

BLDWF-3

Well 8 Top of Rim=249.80

Well 8-A Top of Rim=251.41

Well 11 3" Upper Rim=251.62 Well 3" 11-A Upper Rim=252.29

3" Dia. Well Top of Rim=250.88

NB-OW-14 Old 3" Well Top of Rim=252.60

NB-OW-1

NB-OW-2

Existing Well (Typ)

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

PLUGGED 16" C.I. SECTION ABANDONED IN PLACE

16" D.I. SUCTION HEADER

20" DI WATER MAIN

ABANDONED 6" D.I. COPPER SERVICE

CLP #10216

CLP #10218

SISTER MAPLES Top 10"

DEAD

Gate

Gate Valve

Hydrant

Utility Pole

Sign

Guide Rail

Top of Frame=253.73

Top of Frame=253.05

Top of Frame=252.96

Top of Frame=251.48

Top of Frame=252.20

Top of Frame=253.20

Top of Frame=251.66

Top of Frame=251.56

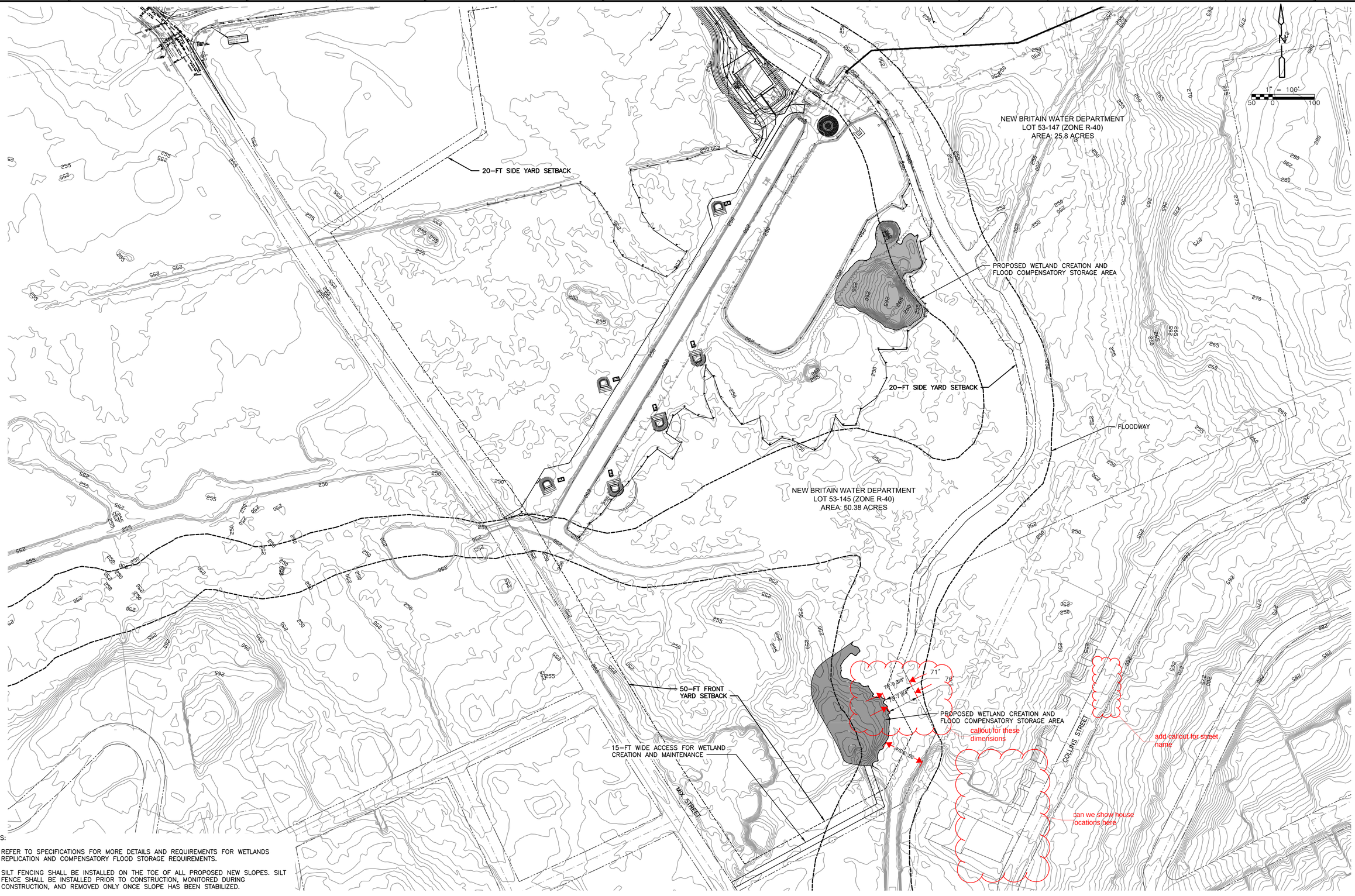
Top of Frame=252.43

Top of Frame=258.26

Top of Frame=252.29

Top of Frame=252.60

Top of Frame=252



NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GARLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

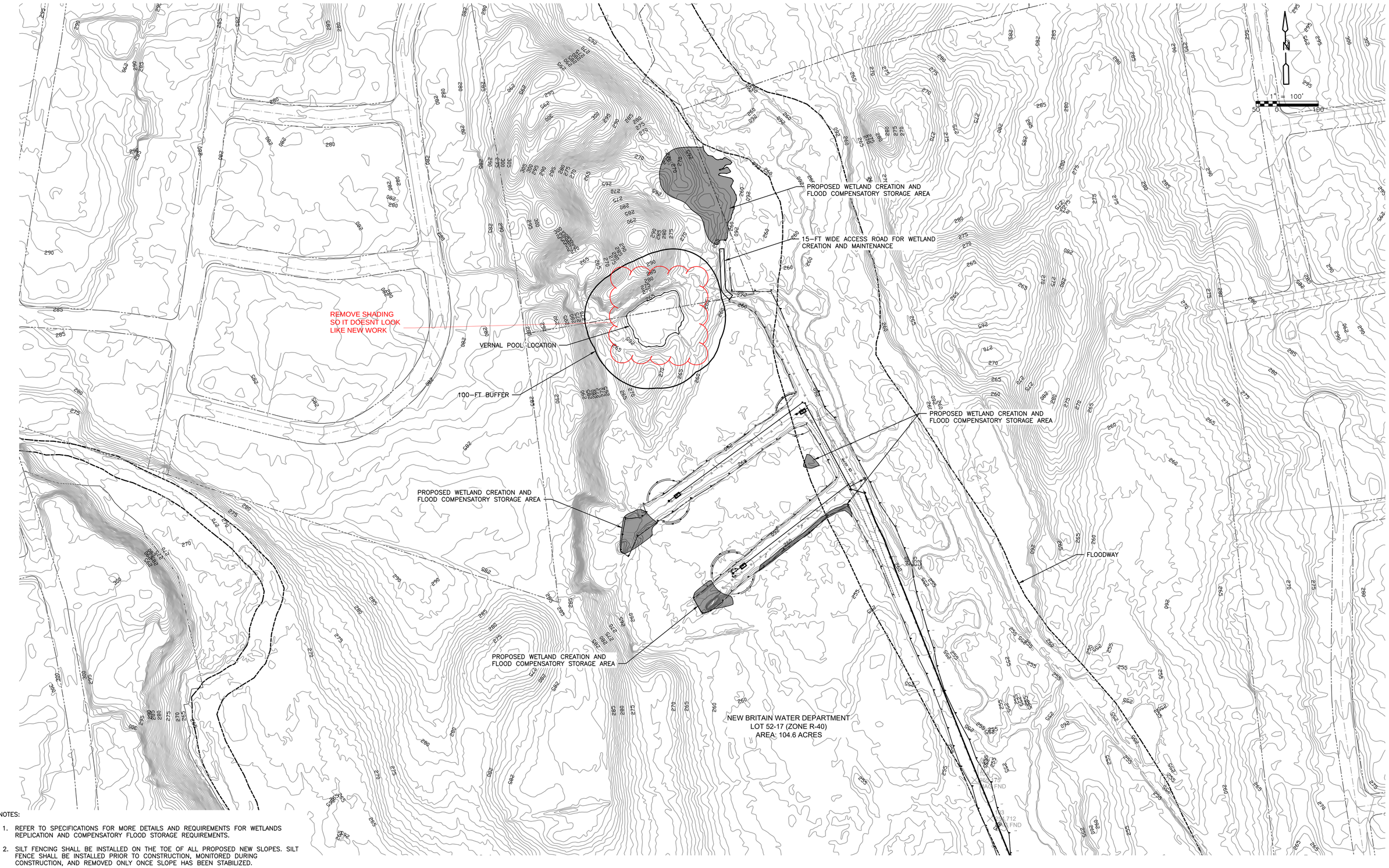
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN I

PROJECT NO. 10739-264571
FILE NAME: C013STPL.DWG
SHEET NO. C-13

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

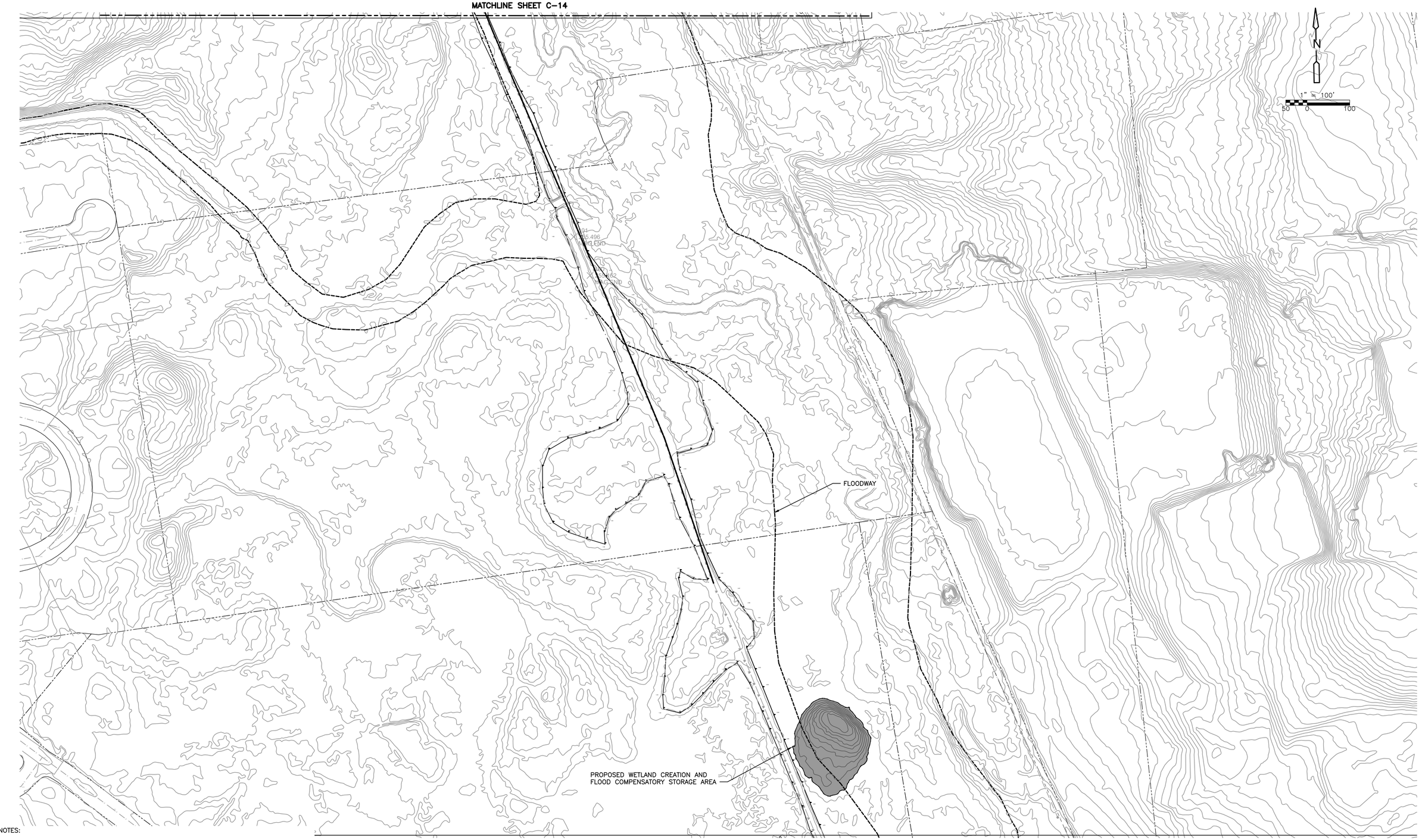
WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN II

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO. C-14

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436_XSVPL000, Floodway_Floodplain, CEP000ST, CMP000ST, AWZ001PS - 2D Process Export, 2022-17, BORING LOCATIONS, BristolTopo, CYPWP001] Images: []
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NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN III

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO.
C-14A

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436, CYPWP001, XSVPL000, CWP000ST, AW2001PS – 2D Process Export, 2022–17, BORING LOCATIONS, Floodway_Floodplain, EWP001ST] Images: []
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NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6–INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. PROVIDE TEMPORARY WATER METER FOR UPPER WELLFIELD OPERATIONS DURING CONSTRUCTION. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C–6.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

PLAN
1"=20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

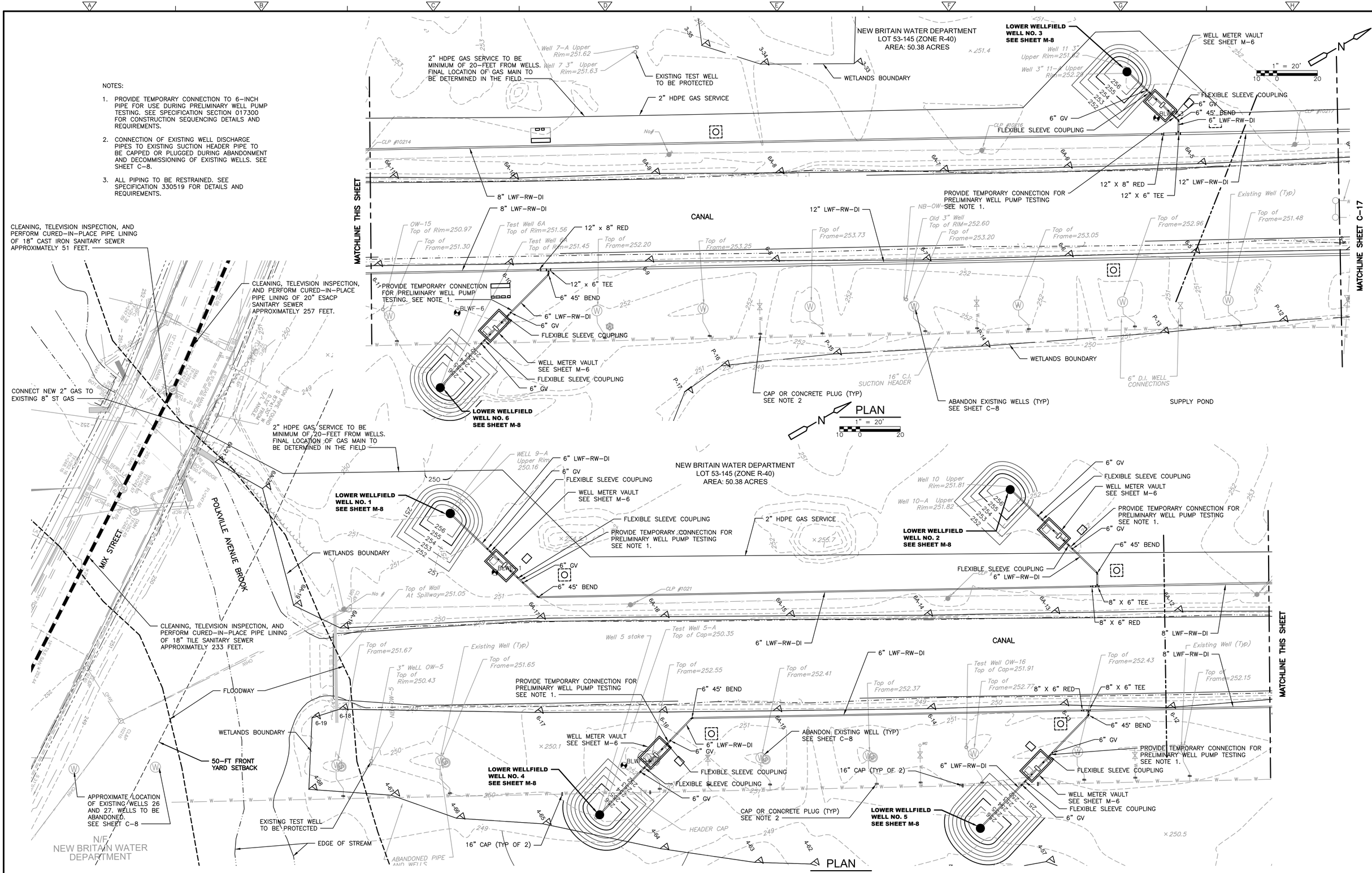
UPPER WELLFIELD YARD PIPING PLAN

PROJECT NO. 10739–264571
FILE NAME: C015YPPL.DWG
SHEET NO. C-15

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6–INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C–8.
3. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

LOWER WELLFIELD YARD PIPING PLAN

PROJECT NO. 10739–264571
FILE NAME: C016YPPL.DWG
SHEET NO. C-16

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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MATCHLINE SHEET C-16

NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 16-INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C-7.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

N

1" = 20'
10 0 20

NEW BRITAIN WATER DEPARTMENT
LOT 53-145 (ZONE R-40)
AREA: 50.38 ACRES

PROTECT EXISTING 12" WATER MAIN
ABANDON EXISTING WELLS (TYP) SEE SHEET C-7
WETLANDS BOUNDARY
EXISTING PIPING TO BE ABANDONED IN PLACE
730 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
CAP OR CONCRETE PLUG (TYP) SEE NOTE 3
D C-25 12" X 6" ANCHOR TEE HYDRANT ASSEMBLY
SUPPLY POND
12" 45° VERTICAL BEND (TYP OF 4)
12" LW-RW-DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
30" 45° VERTICAL BEND (TYP OF 4)
30" P-RW-DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
FLOODWAY WESTERN BOUNDARY
16" CAP (TYP OF 3)
16" BFV TO BE REMOVED
EXISTING MAIN TO BE CAPPED
EXISTING CAISSON WELL AND PIPING TO BE ABANDONED
30" P-RW-DI (℄ EL. 237.52)
REMOVE AND DISPOSE EXISTING MANHOLE (TYP OF 2)
G C-27 5' DIAMETER PRECAST MANHOLE
H M-12 AIR RELEASE VALVE
CONNECT TO EXISTING PIPING
INSTALL RIPRAP APRON AROUND INTAKE STRUCTURE APPROXIMATELY 2-FT TALL BY 5-FT WIDE
EXISTING STEEL INTAKE STRUCTURE SCREENS TO BE REPLACED WITH STAINLESS STEEL SCREENS. MATCH EXISTING DIMENSIONS, SCREEN OPENINGS, AND REINFORCING BARS. MOUNT IN EXISTING SPACE WITH SIMILAR HARDWARE. APPROXIMATELY 9-FT HIGH BY 9.5-FT WIDE; CLEAR SCREEN OPENINGS APPROXIMATELY 0.5-IN SPACING. TYP 2 SIDES.
220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
COPPERMINE BROOK
D C-25 36 X 6" ANCHOR TEE HYDRANT ASSEMBLY
F C-25 SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" WATER MAIN
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 36" W-CI FOR FINAL CONNECTION
WETLANDS BOUNDARY
FLOODWAY EASTERN BOUNDARY
36" W-CI (TO STAFFORD AVE)
EXISTING POND PUMPING STATION FF=253.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)
FUTURE WORK CLEAN, INSPECT, AND CIPP LINE EXISTING 20" PIPE TO STAFFORD AVENUE (APPROX. 1,200 LF)
(TO STAFFORD AVE)
MATCHLINE SHEET C-19

12" X 6" ANCHOR TEE HYDRANT ASSEMBLY D C-25
2" HDPE GAS SERVICE
INLET SCREEN AND GATE VALVE
12" Dia.MH Top of Frame=251.42
CANAL
NB-OW-13
Observation Well Elevation=252.00
Top of Frame=252.12
Top of Frame=252.61
12" LWF-RW-DI
12" LWF-RW-DI
16" X 12" TEE
PLUGGED 16" C.I. SECTION ABANDONED
TERFLY VALVE
MH Hatch 2'Dia. Top of Frame=258.26
16" LWF-RW-DI APPROX CL EL 245
12" GV
12" LWF-RW-DI
Conc.Structure with Metal Grate Top of Grate=252.36
Top Concrete Wall At Inlet=251.95
INLET SCREEN AND EQUALIZER APPROX CL EL 244.6 (MATCH EXISTING)
30" P-RW-DI (℄ E. 240)
16" GV WITH POST INDICATOR (TYP OF 3)
30" P-RW-DI (MATCH EXISTING)
30" TEE (℄ EL. 238.05)
30"X24" RED
24" CAP
(TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
CAP
36" CAP
36" TEE APPROX CL EL 243.8 (MATCH EXISTING)
MH Hatch 2'Dia. Top of Frame=252.32
MH Hatch 2'Dia. Top of Frame=252.43
CAP EXISTING 20" WATER MAIN
6x4' Conc. Inv=245.50
6.4' Conc. Inv=245.60
6.4' Conc. Inv=245.53
6.4' Conc. Inv=245.50
30k Generator with Underground Conduit
CAP AND THRUST BLOCK FOR TEMPORARY DEAD END
FUTURE WORK 20" X 6" ANCHOR TEE HYDRANT ASSEMBLY
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 20" W-CI FOR FINAL CONNECTION
36" CAP (TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
TEMPORARY SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" PUMP STATION DISCHARGE MAIN
16" LWF-RW-DI TO BE INSTALLED ABOVE 30" P-RW-DI
20" DI WATER MAIN
1" DI COPPER SERVICE
16" D.I. SUCTION HEADER
ABANDONED PIPE
30" C.M.P. F.E. Inv.=247.00
36" PUMPED POND AND UPPER WELLFIELD RAW WATER (℄ EL. 245.50)
16" LOWER WELLFIELD (APPROX. ℄ EL. 246.33) (FUTURE TREATED POTABLE) WATER MAIN
LOWER WELLFIELD RAW WATER BACKFLOW PREVENTION ASSEMBLY (SEE SHEET M-7)
BOLLARD (TYP) D C-27
PROVIDE TEMPORARY CONNECTION FOR PRELIMINARY WELL PUMP TESTING. SEE NOTE 1.
SPACE FOR FUTURE LOWER WELLFIELD FINISHED WATER CHLORINE CONTACT TIME PIPE LOOP
36" X 16" TEE
1,197 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
EXISTING CORRUGATED METAL PIPE CULVERTS TO BE REPLACED WITH CONCRETE CULVERT AND CULVERT ENDS (MATCH EXISTING INVERTS) K C-26
36" 45° VERTICAL BEND (TYP OF 4)
16" 45° VERTICAL BEND (TYP OF 4)
36" W-DI AND 16" W-DI TO BE INSTALLED BELOW EXISTING CONCRETE CULVERTS

EXISTING OBSERVATION WELLS 8 AND 8A TO BE ABANDONED SEE SHEET C-7
16" 45° BEND (℄ EL. 250.20)
6" 45° BEND (TYP OF 4)
2" W-CU
6" W-DI
30" POND RAW WATER INTAKE (℄ EL. 234.44)
30" 90° BEND
30" X 20" TEE (3)
30" W-DI
16" 22.5° BEND (℄ EL. 250.20)
PREFABRICATED SANITARY SEWER GRINDER PUMPING STATION
TOP ELEV APPROX 258; TANK INVERT ELEV APPROX 248.5
4" INLET APPROX INV 251.5; 1.25" SAN-HDPE PUMPED OUTLET APPROX CL 252.5
20" MJ BFV WITH EXTENDED NECK AND HANDWHEEL OPERATOR (3)
16" BFV
16" 45° BEND (℄ EL. 250.20)
16" LWF-RW-DI (LOWER WELLFIELD RAW WATER MAIN) (APPROX. ℄ EL. 250.20)
EXISTING LOWER WELLFIELD PUMPING STATION FF=253.00 (TO BE DEMOLISHED) SEE SHEET C-7
EXISTING 16" DI WATER MAIN TO BE REMOVED SEE SHEET C-7
6" 45° BEND
1.25" SAN-HDPE LOCAL HIGH POINT, APPROX. CL EL 253
4' DIA. MANHOLE G C-27 AND AIR RELEASE VALVE AS SPECIFIED
WETLANDS BOUNDARY
PROPOSED POND PUMPING STATION FFE 258.00 SEE SHEET M-2
HYDRANT ASSEMBLY D C-25
16" CAP
EXISTING 16" DI WATER MAIN TO BE ABANDONED IN PLACE
BORING LOCATION (TYP) SEE NOTE 2 THIS SHEET
SEGMENTAL BLOCK RETAINING WALL E C-27
6" 45° BEND
1.25" SAN-HDPE (APPROX. ℄ EL. 252.5)
6" GAS TO EMERGENCY GENERATOR
24" PUMPED POND RAW WATER (APPROX. ℄ EL. 252.17)
24" 22.5° BEND (DN)
4" DI ROOF DRAIN D C-26
Gate with Bollard
16" LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN (APPROX. ℄ EL. 250.20)
16" BFV
16"45° BEND
16" BFV
Gate with Bollard
16" 90° BEND (DN)
16" 45° BEND
16"-LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN TO BE INSTALLED ABOVE 16"-UWF-RW-DI
TEST PIT LOCATION (TYP) SEE NOTE 2 THIS SHEET
16" UWF-RW-DI
6" W-DI
2" W-CU
EDGE OF STREAM
COPPERMINE BROOK
MATCHLINE SHEET C-18C

PLAN
1" = 20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
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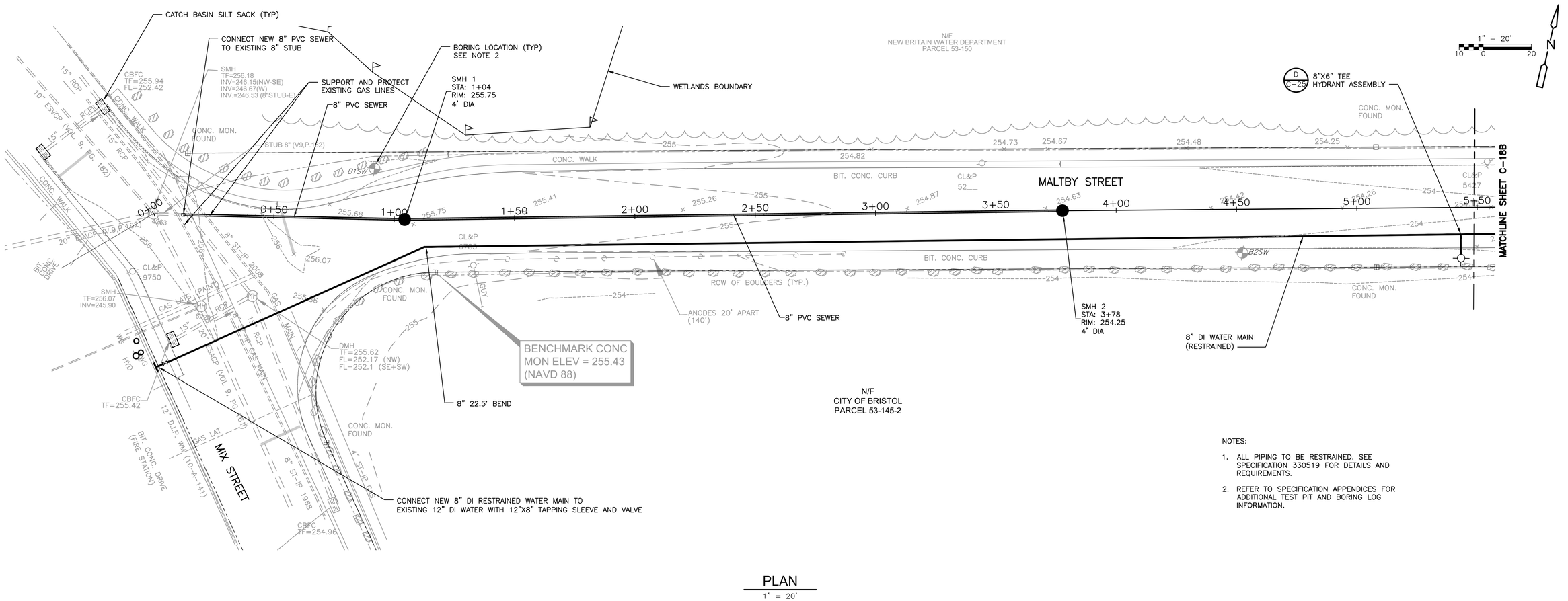
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
YARD PIPING PLAN

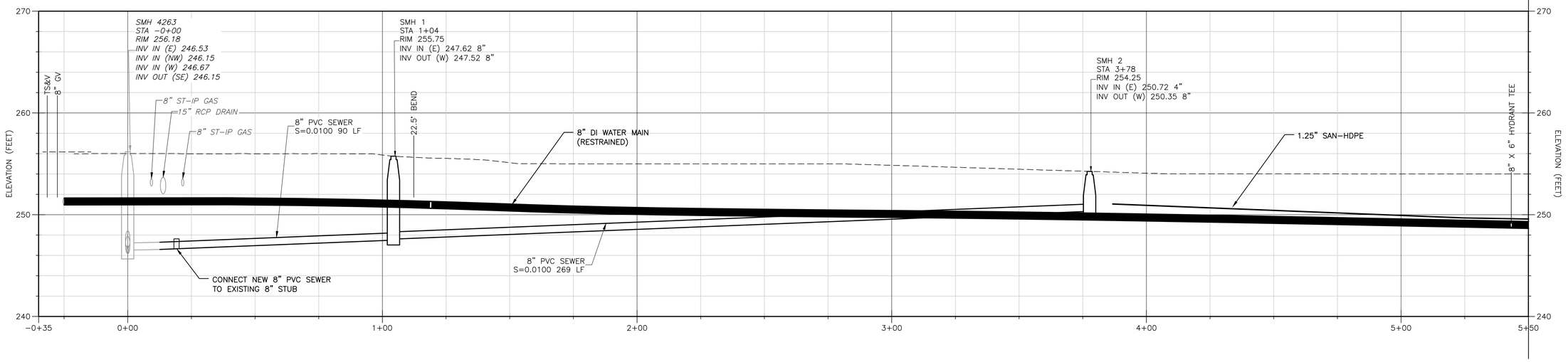
PROJECT NO. 10739-264571
FILE NAME: C017YPPL.DWG
SHEET NO. C-17

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
1" = 20'



1" = 20' (10 0 20) PROFILE HORZ:1"=20' VERT:1"=5' 1" = 5' (2.5 0 5)

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
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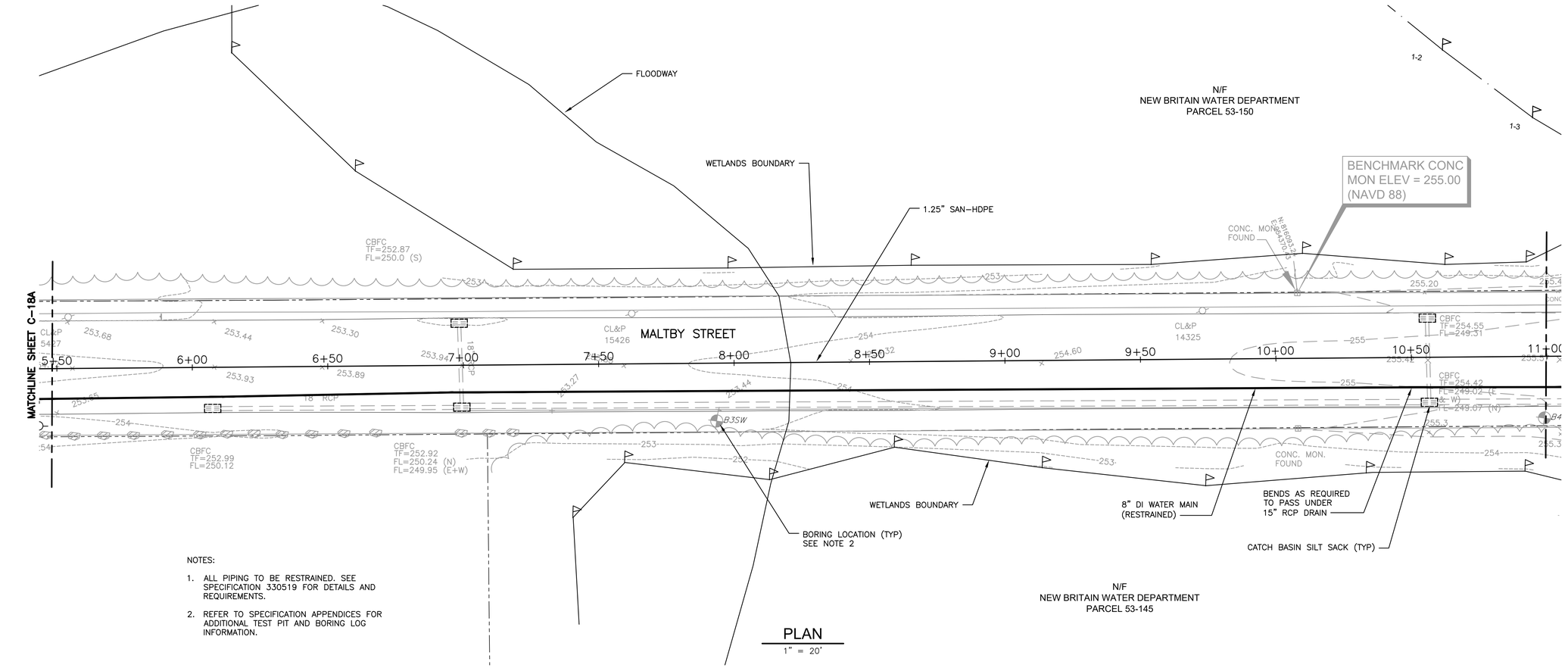
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE I

PROJECT NO. 10739-264571
FILE NAME: C018AYPPL.DWG
SHEET NO.
C-18A

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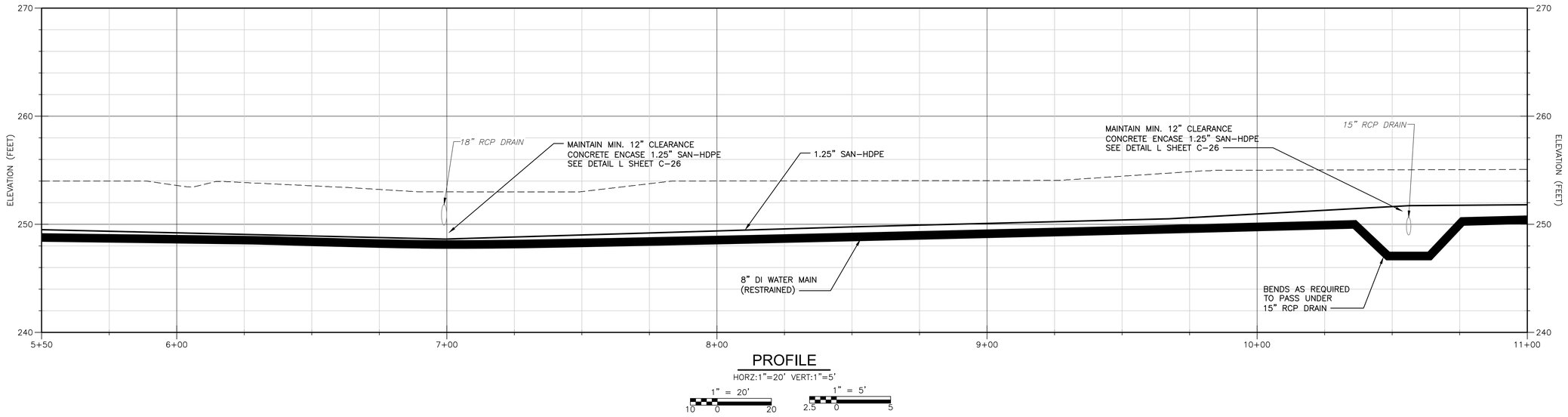
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NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.

PLAN
1" = 20'



PROFILE
HORZ:1"=20' VERT:1"=5'
1" = 20' 10 0 20
1" = 5' 2.5 0 5

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

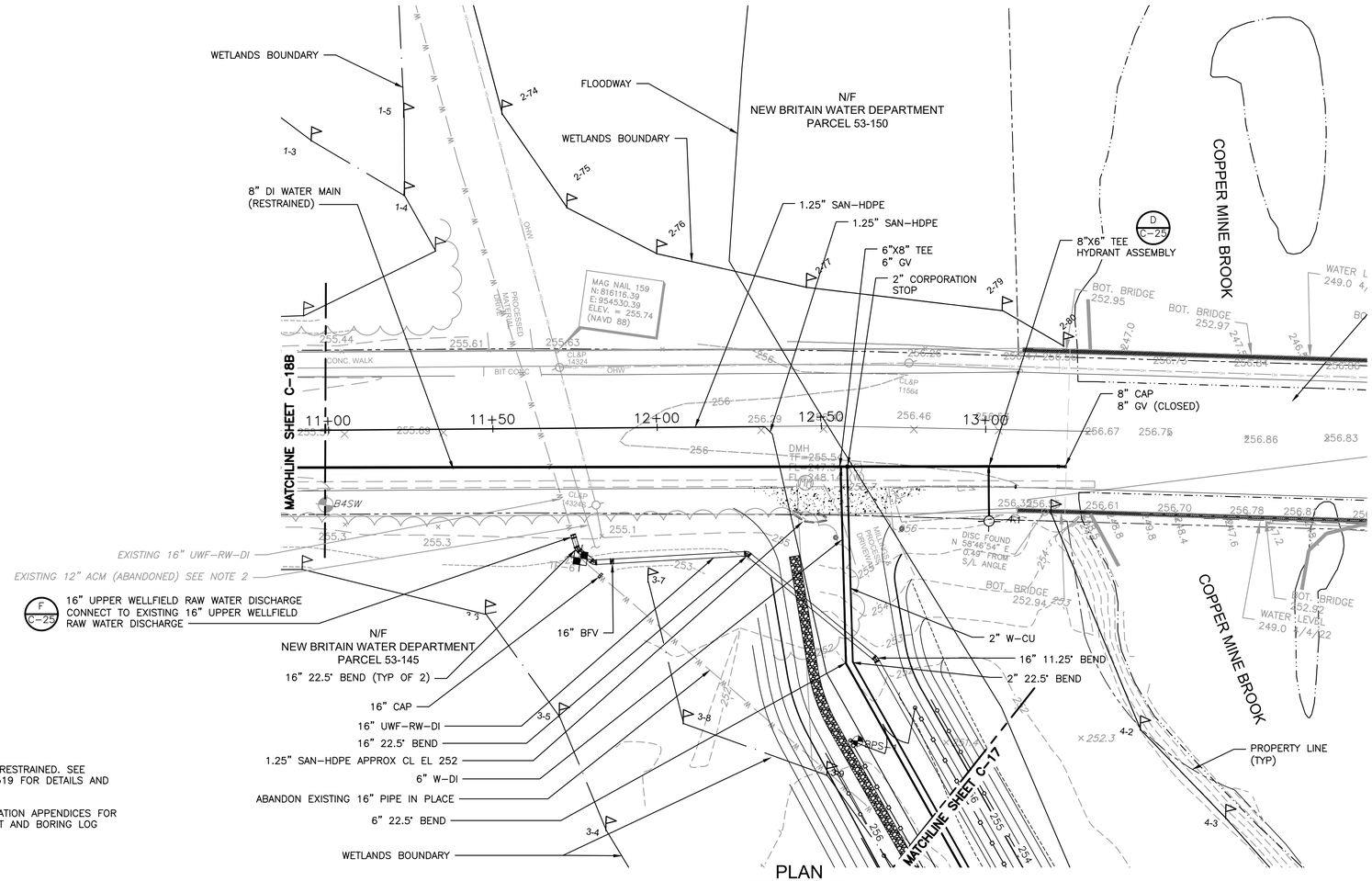
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE II

PROJECT NO. 10739–264571
FILE NAME: C018BYPPL.DWG
SHEET NO.
C-18B

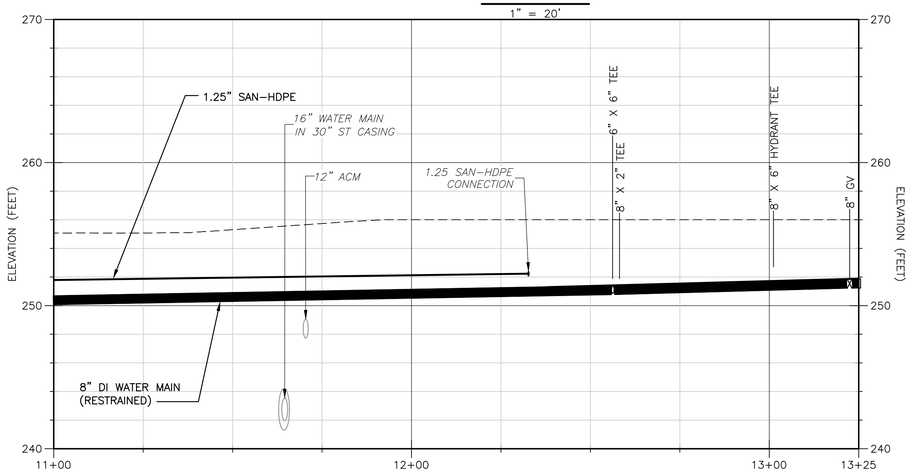
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NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

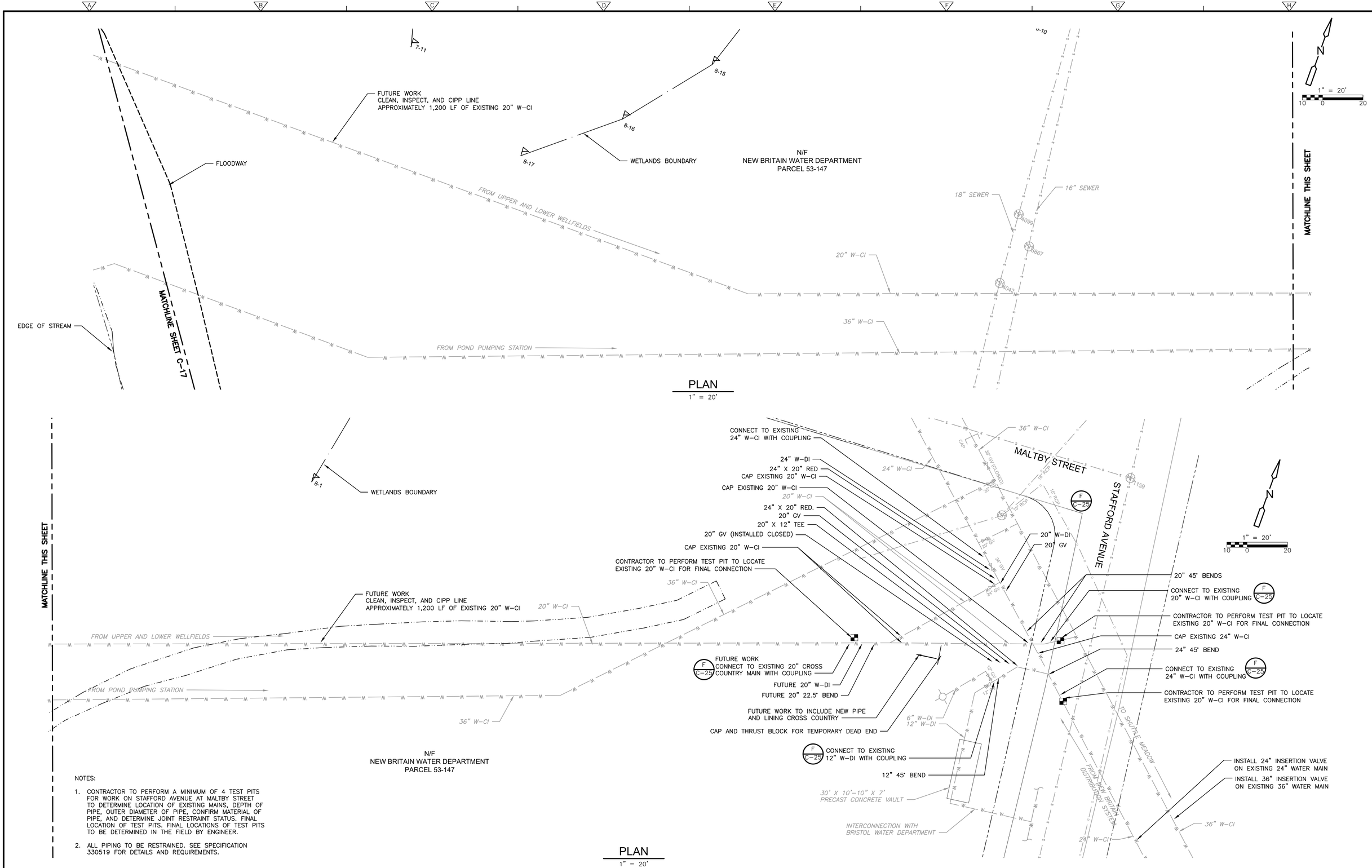
MALTBY STREET
PLAN AND PROFILE III

PROJECT NO. 10739–264571
FILE NAME: C018CYPPL.DWG
SHEET NO.
C-18C

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
1" = 20'

NOTES:

1. CONTRACTOR TO PERFORM A MINIMUM OF 4 TEST PITS FOR WORK ON STAFFORD AVENUE AT MALTBY STREET TO DETERMINE LOCATION OF EXISTING MAINS, DEPTH OF PIPE, OUTER DIAMETER OF PIPE, CONFIRM MATERIAL OF PIPE, AND DETERMINE JOINT RESTRAINT STATUS. FINAL LOCATION OF TEST PITS. FINAL LOCATIONS OF TEST PITS TO BE DETERMINED IN THE FIELD BY ENGINEER.
2. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

PLAN
1" = 20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

STAFFORD AVENUE AND CROSS COUNTRY PLAN

PROJECT NO. 10739–264571
FILE NAME: C019YPPL.DWG
SHEET NO.
C-19

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [TEST HOLE POINTS, CDMS_2436, XSVPL040, 2022-17, BORING LOCATIONS, Floodway_Floodplain] Images: []
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LIMITS OF CANAL SEDIMENT REMOVAL

WETLAND BOUNDARY

PROTECT EXISTING GATE STRUCTURE AND PIPE

REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE AND GATES

A C-24 TEMPORARY STABILIZED CONSTRUCTION ENTRANCE. TO BE REMOVED AT THE END OF CONSTRUCTION

CANAL TO BE DEWATERED AS NECESSARY

PROTECT EXISTING PIPES

TURBIDITY CURTAIN D C-24

CANAL TO BE DEWATERED AS REQUIRED. SEE NOTE 5

EDGE OF STREAM

EXISTING WELL NO. 6

CANAL POLE 5 0"

CANAL POLE 4 7.5"

CANAL POLE 3 9.75"

CANAL 1 (21.4")

CANAL POLE 2 18.5"

CANAL POLE 1 15.5"

CANAL 2 (12")

CANAL 3 (12")

CANAL 4 (7")

SMU-1 1 FT

SMU-2 2 FT

SMU-3 2.5 FT

SMU-4 2.5 FT

SMU-5 1 FT

BLWF-6

BLWF-3

BPS-4

BPS-5

EXISTING LOWER WELLFIELD PUMPING STATION F.F.= 253.00

EXISTING POND PUMPING STATION F.F.= 253.15

STOPLOG AND PLUG FOR POND DEWATERING

INLET SCREEN AND GATE VALVE

PROVIDE STEEL PLATES TO PROTECT EXISTING CULVERT

PROTECT EXISTING PIPES

PROTECT EXISTING 16" DI PIPE

PROTECT EXISTING SUCTION HEADER

TEMPORARY SEDIMENT DEWATERING AND STOCKPILING AREA

STABILIZED POND ACCESS F C-27

35-LF OF BANK RESTORATION I C-26

LIMITS OF POND SEDIMENT REMOVAL

EXTENTS OF CLEARING AND GRUBBING TO BE DETERMINED

TEMPORARY ALTERATION TO APPROXIMATELY 30,900 SF OF WATERS OF THE U.S.

OCTOBER 2021 SEDIMENT DEPTH LOCATION AND MEASUREMENT (TYP)

DECEMBER 2021 SEDIMENT SAMPLE LOCATION AND ESTIMATED SEDIMENT DEPTH (TYP)

POND TO BE DEWATERED VIA THE EXISTING POND PUMPING STATION. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASIN. J C-24

FLOODWAY

WETLAND FLAG LINE IS ORDINARY HIGH WATER

POND 7 (2")

POND 8 (7.8")

POND 9 (6.6")

POND 10 (7.4")

POND 1 (12")

POND 3 (23.8")

POND 6A & 6B (48")

POND 4 (5")

POND 2 (13.6")

POND 5A & 5B (14.4")

SMU-6 1 FT

SMU-7 0.5 FT

SMU-8 1 FT

SMU-9 2 FT

SMU-10 AVG 4 FT MAX 7.5 FT

AREA 1A 3"

AREA 1B 13"

AREA 2A 30"

AREA 2B 17.5"

NOTES:

1. APPROXIMATELY 6,000 CUBIC YARDS (IN-SITU) OF SEDIMENT MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION.
2. AREA FOR TEMPORARY DEWATERING AND STOCKPILING OF SEDIMENT REMOVED FROM THE CANAL AND SUPPLY POND LIMITED TO THE HATCHED AREA INDICATED IN THE SUPPLY POND.
3. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED UPON COMPLETION OF PROJECT. DISTURBED AREAS TO BE LOAMED AND SEEDED.
4. CONTRACTOR TO DEWATER CANAL AS NECESSARY. PLUG OR INSTALL STOP LOGS IN EXISTING CULVERTS OR INSTALL COFFERDAM. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASINS.

PLAN
1" = 30'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. BURKE
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: T. BURKE
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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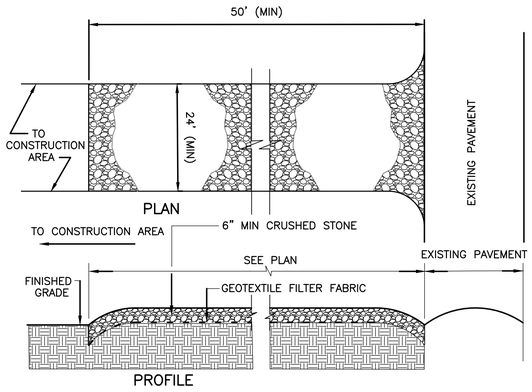
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

SUPPLY POND AND CANAL SEDIMENT REMOVAL PLAN

PROJECT NO. 10739-264571
FILE NAME: C023SDRM.DWG
SHEET NO. C-23

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



NOTES:

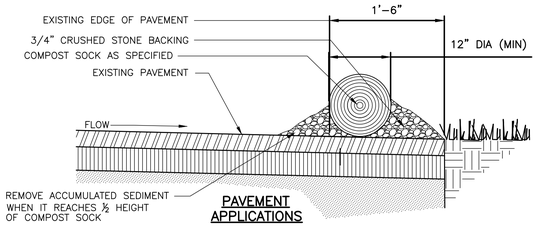
1.) PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND EXISTING PAVEMENT.

2.) LIMITS OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE AS DIRECTED BY THE ENGINEER.

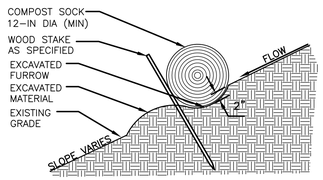
3.) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.

4.) REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO EXISTING PAVEMENT SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
DETAIL A
NOT TO SCALE

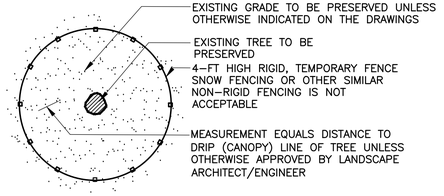


PAVEMENT APPLICATIONS



LANDSCAPE APPLICATIONS

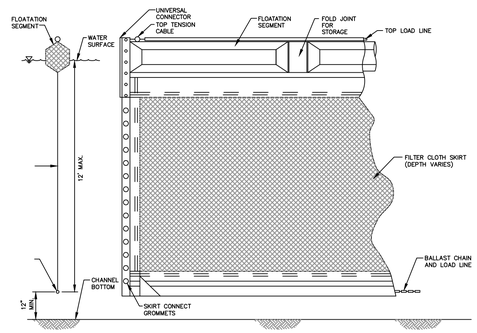
COMPOST SOCK
DETAIL B
SCALE: NTS

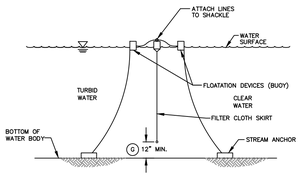


NOTES:
1. FENCING SHALL BE INSTALLED AROUND PERIMETER OF ALL EXISTING TREES TO BE PRESERVED WITHIN THE LIMIT OF WORK.
2. FENCING MAY BE REMOVED TEMPORARILY, ONLY AS REQUIRED TO PERFORM THE WORK SHOWN ON THE DRAWINGS.
3. FENCING SHALL REMAIN IN PLACE & BE MAINTAINED THROUGHOUT CONSTRUCTION AND THEN REMOVED COMPLETELY.

TREE PROTECTION
DETAIL C
NOT TO SCALE

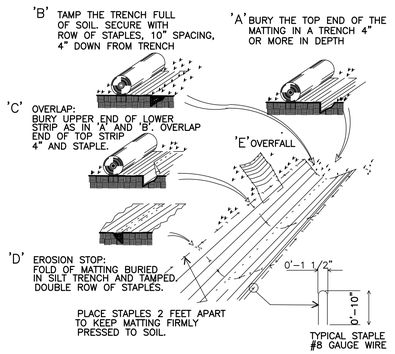
TURBIDITY CURTAIN





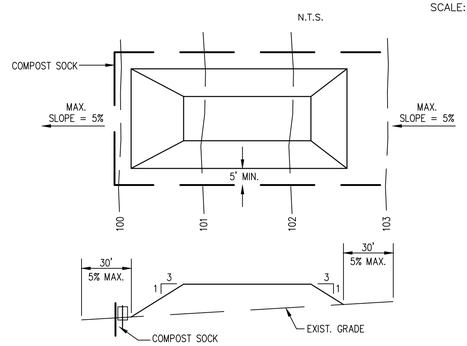
TYPICAL ANCHORING SECTION

TURBIDITY CURTAIN
DETAIL D
NOT TO SCALE



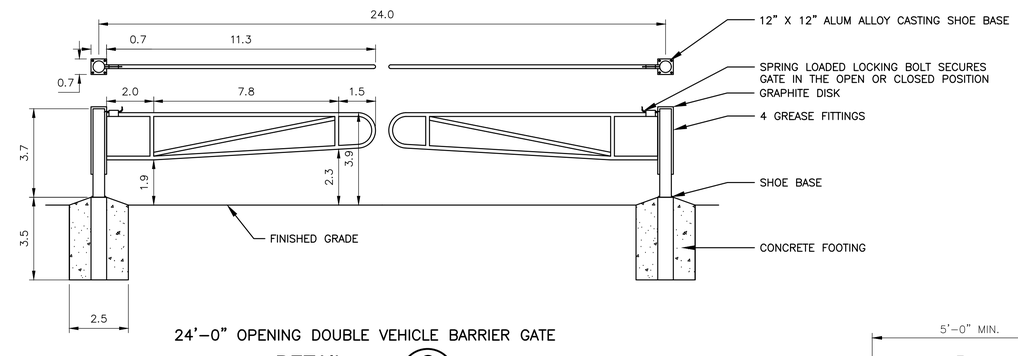
NOTE:
1.) APPLY ON ALL NEW SLOPES 3(H):1(V) AND STEEPER.

EROSION CONTROL BLANKET
DETAIL E
NOT TO SCALE

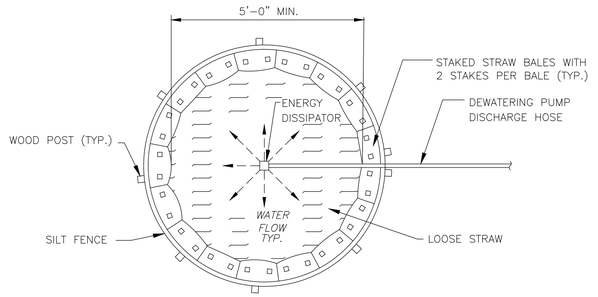


NOTES:
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQ.
4. COMPOST SHALL BE INSTALLED AS DETAILED HEREON.

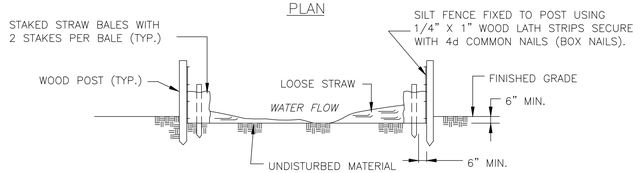
SOIL STOCKPILE
DETAIL F
NOT TO SCALE



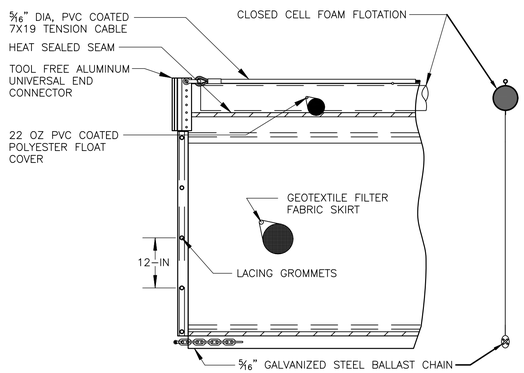
24'-0" OPENING DOUBLE VEHICLE BARRIER GATE
DETAIL G
NOT TO SCALE



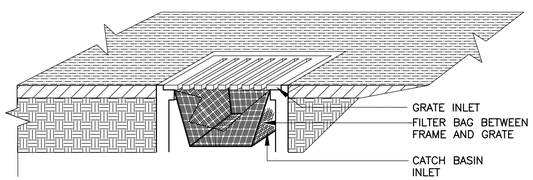
PLAN



DEWATERING SEDIMENTATION BASIN
DETAIL J
NOT TO SCALE



FLOATING TURBIDITY BARRIER
DETAIL I
NOT TO SCALE



CATCH BASIN FILTER
DETAIL H
NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

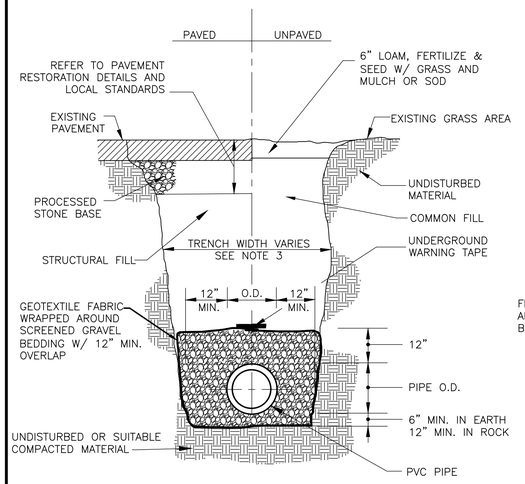
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS I

PROJECT NO. 10739-264571
FILE NAME: CD001CSDT.DWG
SHEET NO. C-24

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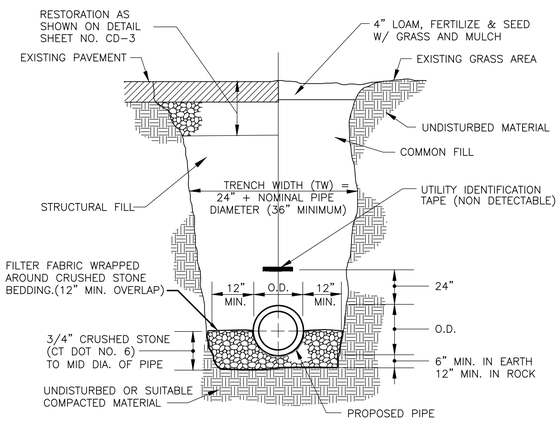
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PVC PIPE TRENCH

DETAIL A

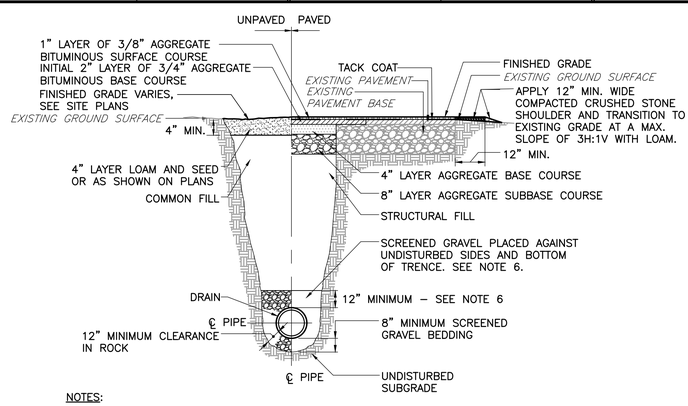
NOT TO SCALE



DI PIPE TRENCH

DETAIL B

NOT TO SCALE



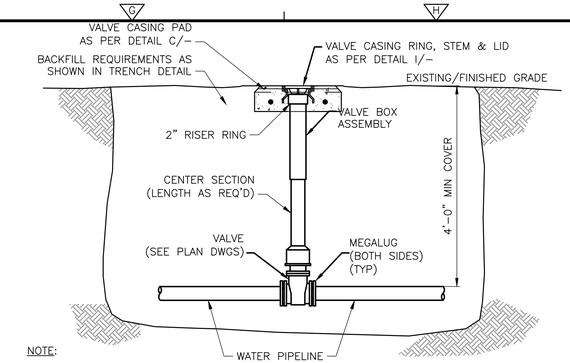
NOTES:

1. THE CONTRACTOR SHALL MAINTAIN INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE FOR 60–90 DAYS MINIMUM.
2. IF INITIAL PAVEMENT IS PLACED AFTER OCTOBER 1ST, THEN IT SHALL BE MAINTAINED UNTIL PAVEMENT OVERLAY IS PLACED.
3. PAVEMENT OVERLAY SHALL BE PLACED BETWEEN APRIL 15 AND NOVEMBER 15 OF EACH CALENDAR YEAR.
4. THE CONTRACTOR SHALL SAW CUT 12–INCHES OUTSIDE OF INITIAL TRENCH EXCAVATION. INITIAL PAVEMENT SHALL BE REMOVED AND DISPOSED OF.
5. INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE SHALL MATCH EXISTING ROADWAY GRADES.
6. FOR PIPES OTHER THAN PVC AND HDPE, SELECT COMMON FILL MAY BE USED FROM MID–DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE.
7. PROVIDE AT LEAST ONE IMPERVIOUS DAM IN GRAVEL BEDDING BETWEEN EACH MANHOLE OR EVERY 300 FEET, WHICHEVER IS LESS.
8. PRIOR TO INSTALLATION OF 1" LAYER OF 3/8" AGGREGATE BITUMINOUS SURFACE COURSE, SHIM EXISTING ROAD AS REQUIRED TO PROVIDE A SMOOTH FINISHED GRADE WITH NO PUDDLING.
9. IN LOCATIONS WHERE TRENCH PAVING MEETS EXISTING BITUMINOUS CONCRETE, MATCH FINISHED GRADE.

TRENCHING AND REPAIRS

DETAIL C

NTS



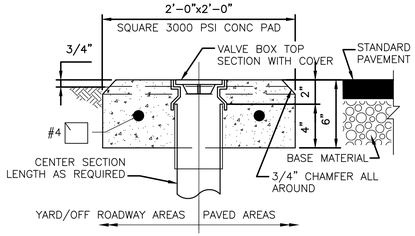
NOTE:

THE VALVE BOX SHALL BE PLUMB AND CENTERED OVER THE VALVE OPERATING NUT IN SUCH A MANNER THAT IT CAN BE FREELY OPERATED WITH A VALVE KEY. THE CONTRACTOR PERFORMING WORK SHALL ASSURE THAT THE VALVE BOX IS FREE OF DEBRIS BEFORE RESETTING.

VALVE BOX (PIPE 12" DIAMETER AND SMALLER)

DETAIL H

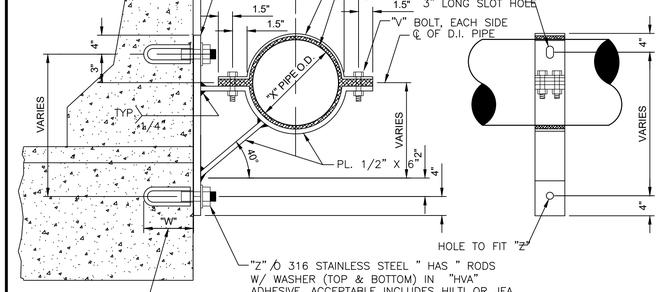
NTS



VALVE CASING PAD

DETAIL I

NTS



CROSS–SECTION PROFILE

PIPE SIZE	4"	6"	8"	10"	12"	16"	20"	24"
X	4.80"	6.90"	9.05"	11.10"	13.20"	17.40"	21.60"	25.80"
Y	8"	9"	10"	12"	13"	15"	17"	19"
Z	¾"	¾"	¾"	1"	1"	1"	1¼"	1¼"
W	6.625"	6.625"	6.625"	8.25"	8.25"	8.25"	12"	12"
V	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"

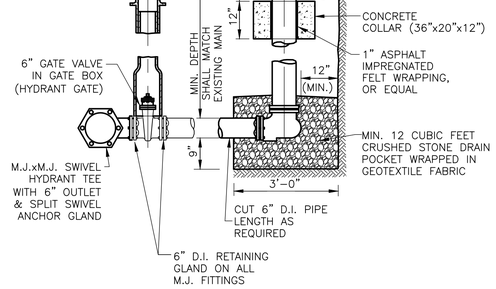
NOTES :

1. ALL WELDS TO BE PERFORMED BY A CERTIFIED STRUCTURAL WELDER.
2. ALL SUPPORT BRACKET MEMBERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
3. ALL NUTS, BOLTS, AND WASHERS SHALL BE 316 STAINLESS STEEL.
4. THE SPACING OF SIDEWALL PIPE SUPPORTS SHALL BE SPECIFICALLY DESIGNED BASED UPON MANY FACTS INCLUDING PIPE SIZE AND MATERIAL EMBEDMENT LIMITATIONS. UNLESS APPROVED OTHERWISE BY THE ENGINEER, IN NO CASE SHALL THE SPACING OF PIPE SUPPORTS EXCEED TWENTY (20) FEET ON–CENTER FOR PIPE SIZES TWELVE (12) INCH AND SMALLER AND TEN (10) FEET ON–CENTER FOR PIPE SIZES GREATER THAN TWELVE (12) INCHES.

SIDEWALL PIPE HANGER

DETAIL E

NOT TO SCALE



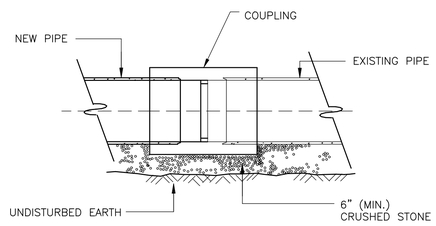
NOTE:

1. INSTALL NON–DETECTABLE UTILITY IDENTIFICATION TAPE 2'–0" OVER LENGTH OF HYDRANT BRANCH.

FIRE HYDRANT ASSEMBLY

DETAIL D

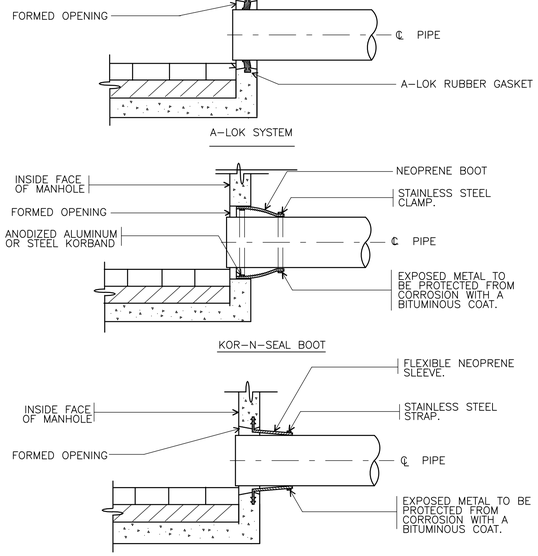
NOT TO SCALE



COUPLING CONNECTION TO EXISTING PIPE

DETAIL F

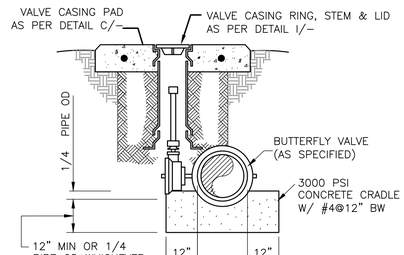
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PIPE CONNECTION DETAILS

DETAIL G

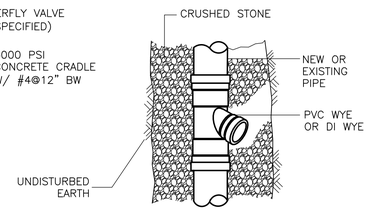
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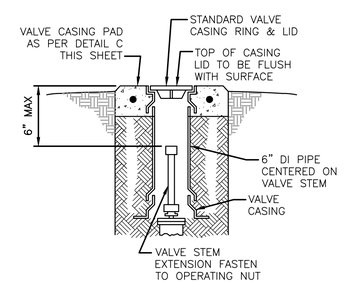
DIRECT BURIED BUTTERFLY VALVE (FOR 16"–36" BUTTERFLY VALVES)

DETAIL J

NTS



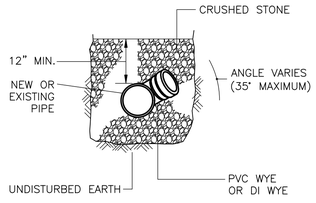
PLAN



VALVE BOX

DETAIL K

NTS



SECTION

PVC OR DI WYE BRANCH

DETAIL L

NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

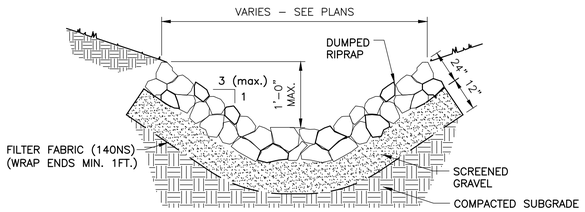
CIVIL DETAILS II

PROJECT NO. 10739–264571
FILE NAME: CD002CSDT.DWG

SHEET NO.
C-25

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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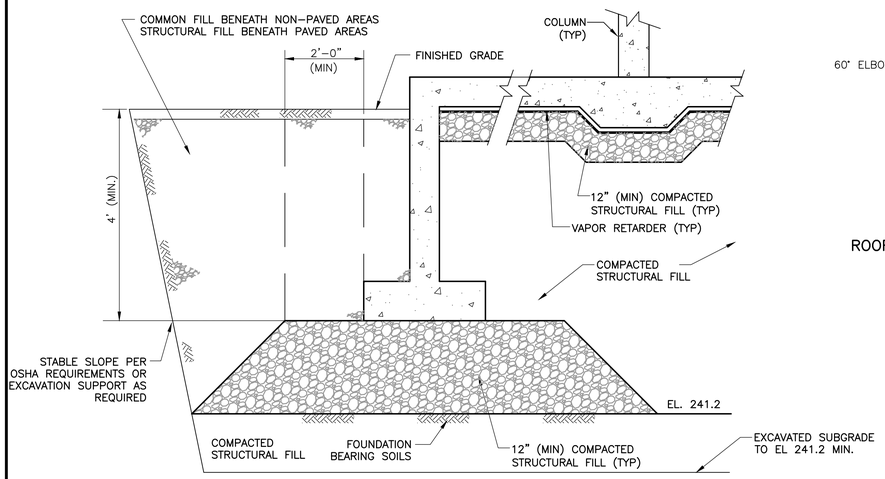


SECTION

RIPRAP SWALE

DETAIL A

SCALE: NTS



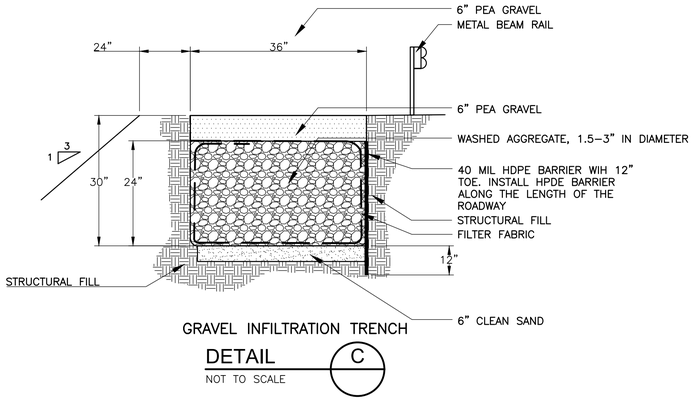
NOTES:

1. THE SUITABILITY OF THE FOUNDATION SUB-GRADE TO BE VERIFIED BY CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
2. SEE SPECIFICATION SECTION 312000 FOR SUBGRADE PREPARATION REQUIREMENTS AND COMPACTION REQUIREMENTS.
3. STRUCTURES INCLUDE TANK, BUILDING, OR SHALLOW FOOTINGS. SEE SITE PLANS.

BACKFILL

DETAIL B

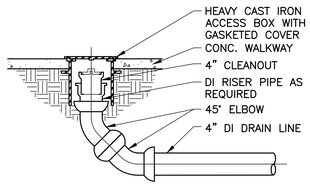
NTS



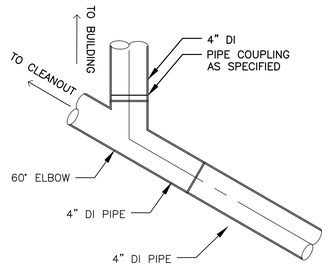
GRAVEL INFILTRATION TRENCH

DETAIL C

NOT TO SCALE



SECTION VIEW

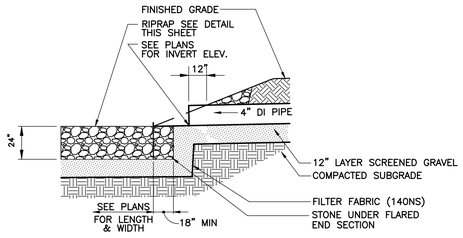


PLAN VIEW

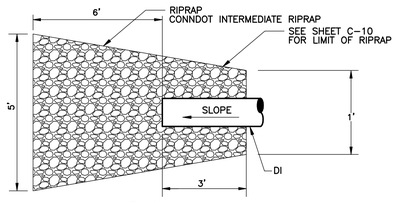
ROOF DRAIN CONNECTION WITH CLEANOUT

DETAIL D

NTS



SECTION

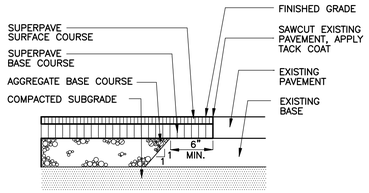


PLAN

PIPE END SECTION & RIPRAP APRON

DETAIL E

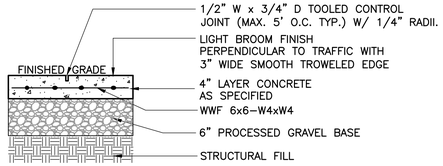
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PAVEMENT MATCH

DETAIL F

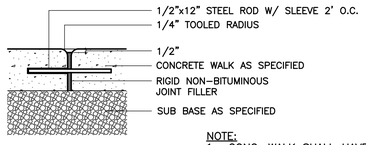
NOT TO SCALE



CONCRETE WALKWAY

DETAIL G

NOT TO SCALE



NOTE:

1. CONC. WALK SHALL HAVE 3 STEEL RODS MIN.
2. EXPANSION JOINTS SHALL BE LOCATED 30 FT. MIN. O.C. AND AT THE END OF EACH DAYS POUR.

EXPANSION JOINT

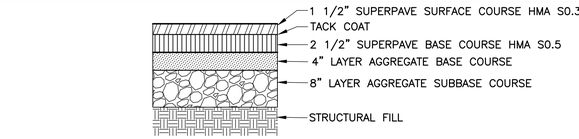
DETAIL H

NOT TO SCALE

BANK RESTORATION

DETAIL I

NOT TO SCALE



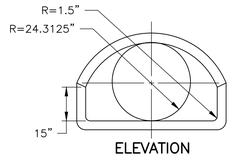
NOTES:

1. BASE COURSE SHALL EXTEND 3" MIN. BEYOND EDGE OF PAVEMENT. DEPTH VARIES SEE GRADING AND DRAINAGE PLAN

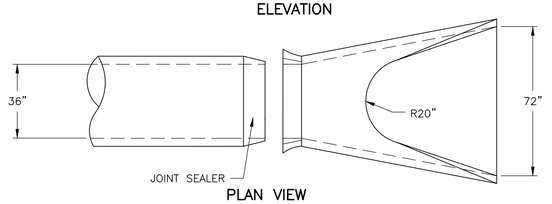
BITUMINOUS CONCRETE PAVEMENT

DETAIL J

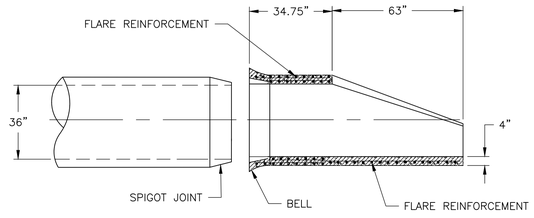
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ELEVATION



PLAN VIEW

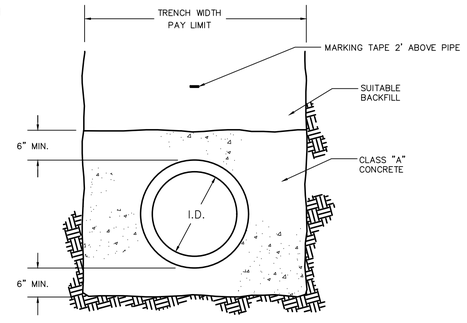


SECTION VIEW

RCP CULVERT PIPE END

DETAIL K

NOT TO SCALE



CONCRETE ENCASEMENT

DETAIL L

NOT TO SCALE

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

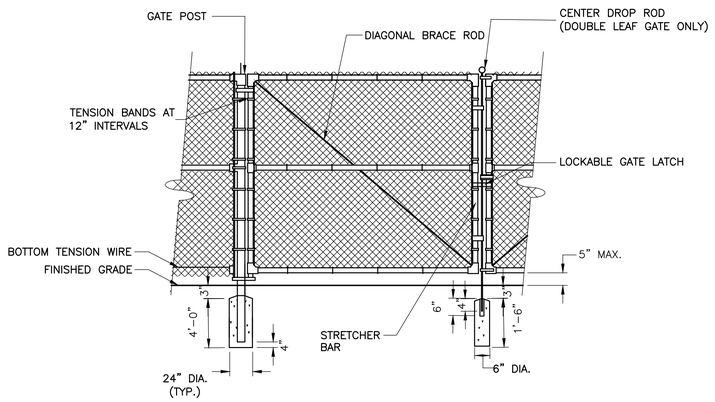
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS III

PROJECT NO. 10739-264571
FILE NAME: CD003CSDT.DWG

SHEET NO.
C-26

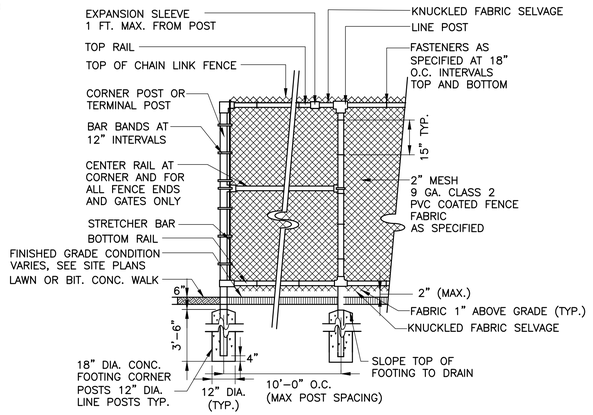
REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



CHAIN LINK DOUBLE LEAF SWING GATE

DETAIL A

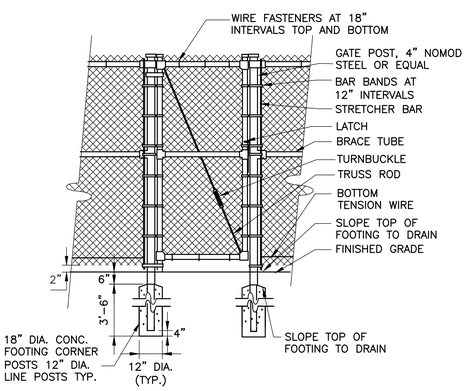
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6.5-FT HIGH CHAIN LINK FENCE

DETAIL B

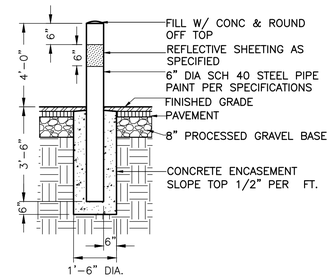
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PEDESTRIAN CHAIN LINK FENCE GATE

DETAIL C

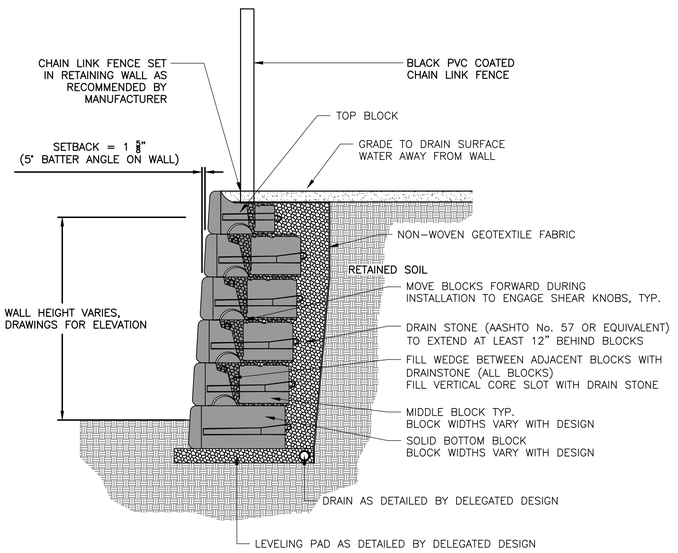
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STEEL BOLLARD

DETAIL D

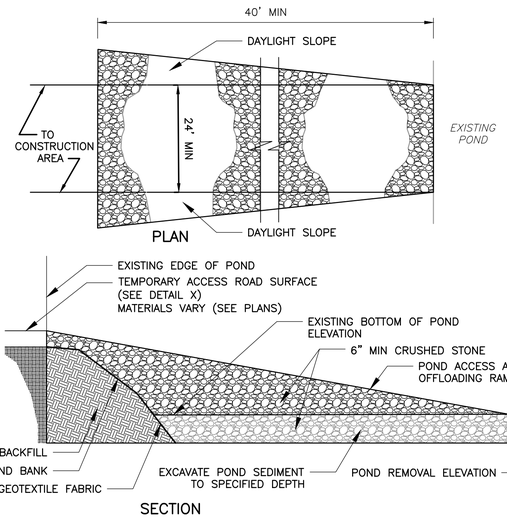
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SEGMENTAL UNIT RETAINING WALL

DETAIL E

SCALE: NTS



SECTION

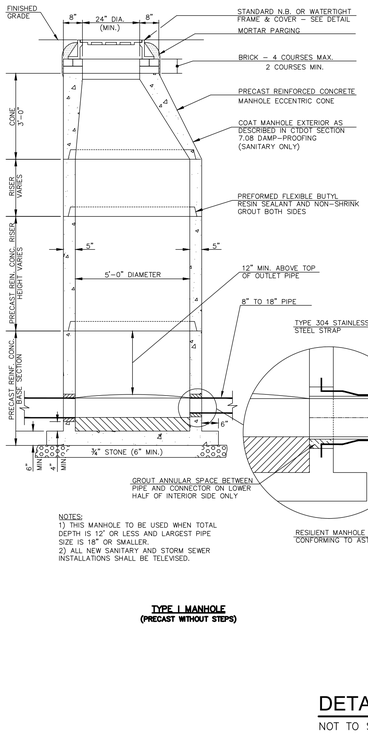
NOTES:

1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED POND ACCESS/TRUCK OFFLOADING RAMP AND EXISTING GROUND SURFACE
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO GROUND SURFACE.
3. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
4. REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
6. THE SLOPE OF THE POND ACCESS AND OFFLOADING RAMP TO BE DETERMINED BY CONTRACTOR BASED ON SELECTED EQUIPMENT, MEANS AND METHODS, AND APPROVED BY THE ENGINEER.
7. DAYLIGHT SLOPES OF THE RAMP WILL BE INSTALLED AS NEEDED BASED ON THE EXCAVATION DEPTH AND BANK HEIGHT TO MAINTAIN STABILITY OF THE POND ACCESS/OFFLOADING RAMP.
8. ALL MATERIAL FOR POND ACCESS/OFFLOADING RAMP IS TEMPORARY AND WILL BE REMOVED AFTER SEDIMENT REMOVAL COMPLETED. POND BANK TO BE RESTORED PER SPECIFICATIONS.

POND ACCESS AND TRUCK OFFLOADING RAMP

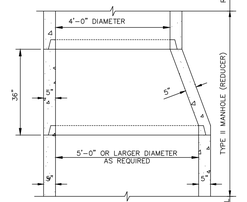
DETAIL F

SCALE: NTS



NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS 12' OR LESS AND LARGEST PIPE SIZE IS 18" OR SMALLER.
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

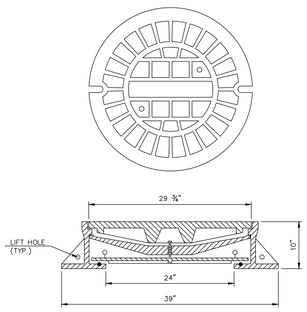
TYPE I MANHOLE
(PRECAST WITHOUT STEPS)



REDUCER SECTION

NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS GREATER THAN 12' OR ANY PIPE SIZE IS GREATER THAN 18".
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

TYPE II MANHOLE
(PRECAST WITHOUT STEPS)



NEW BRITAIN STANDARD
WATERTIGHT MANHOLE CASTING

MANHOLE

DETAIL G

NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

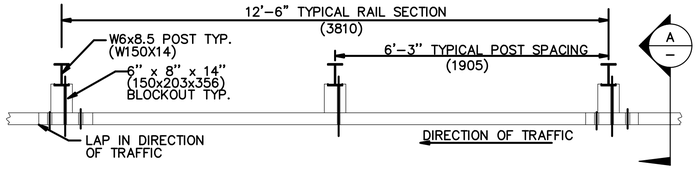
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS IV

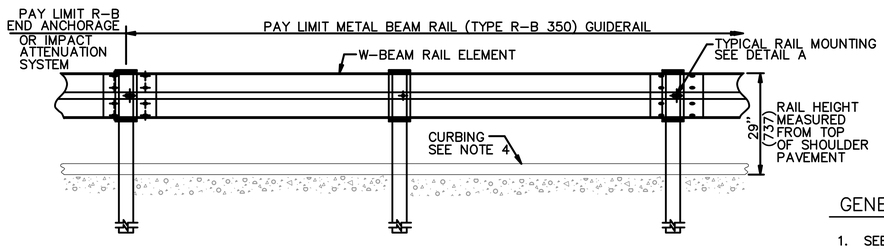
PROJECT NO. 10739-264571
FILE NAME: CD004CSDT.DWG
SHEET NO.
C-27

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

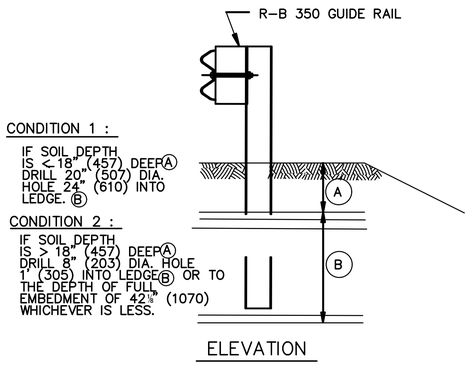
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PLAN



ELEVATION

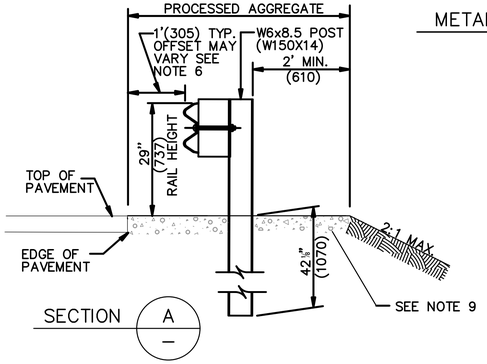


ELEVATION

GENERAL NOTES:

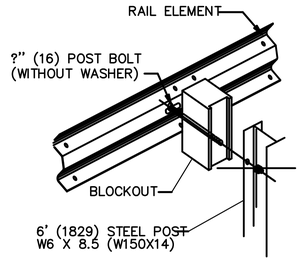
1. SEE CTDOT STANDARDS FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3" IS 4'-3". DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (>45mph 72.4kph), 4" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9" BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1' OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2' OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2' FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2' BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" + 1".

METAL BEAM RAIL (TYPE R-B 350)



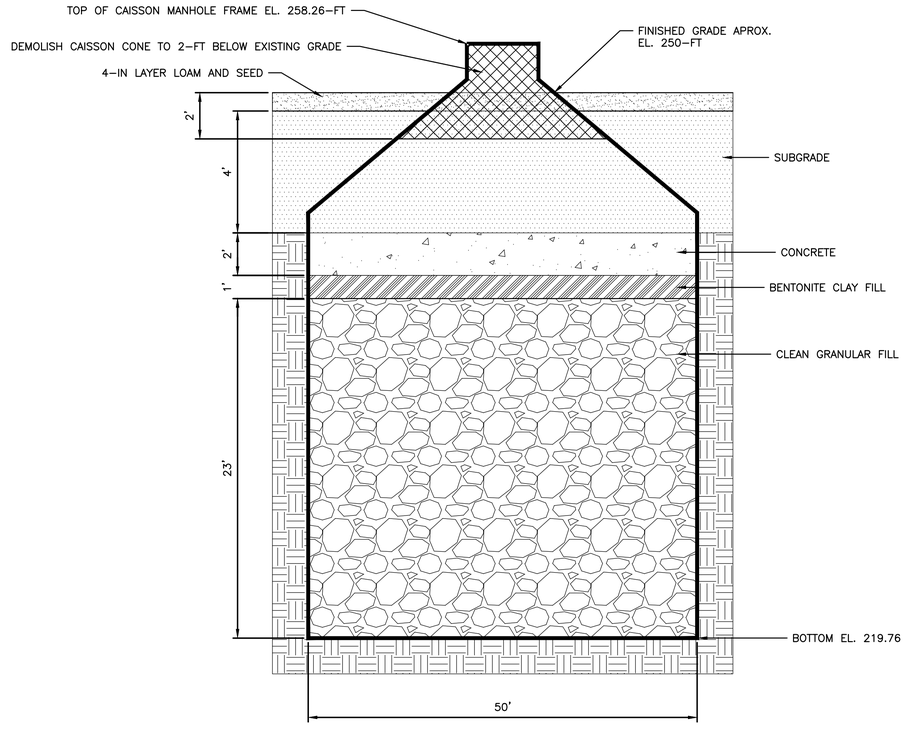
SECTION A

NO CURB APPLICATION



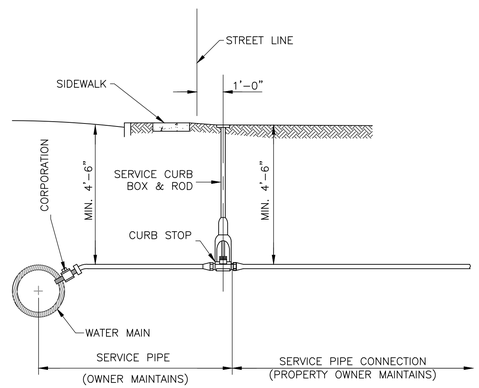
DETAIL A
RAIL MOUNTING

METAL BEAM RAIL
DETAIL A
NOT TO SCALE



NOTES:
1. EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED AS REQUIRED IN SECTION 019416, APPENDED TO THE SPECIFICATIONS.
2. CAISSON TOP CONE TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE.

CAISSON DECOMMISSIONING AND ABANDONMENT
DETAIL B
NOT TO SCALE



WATER SERVICE CONNECTION
DETAIL C
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
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APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS V

PROJECT NO. 10739-264571
FILE NAME: CD005CSDT.DWG
SHEET NO. C-28

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [CDMS_2436_XSVPL000, CWP000ST, Floodway_Floodplain, AWZ001PS - 2D Process Export] Images: []
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NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
10. SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' (165m)
50	600' (180m)
55	660' (200m)
65	780' (240m)

METRIC CONVERSION CHART (1" = 25mm)

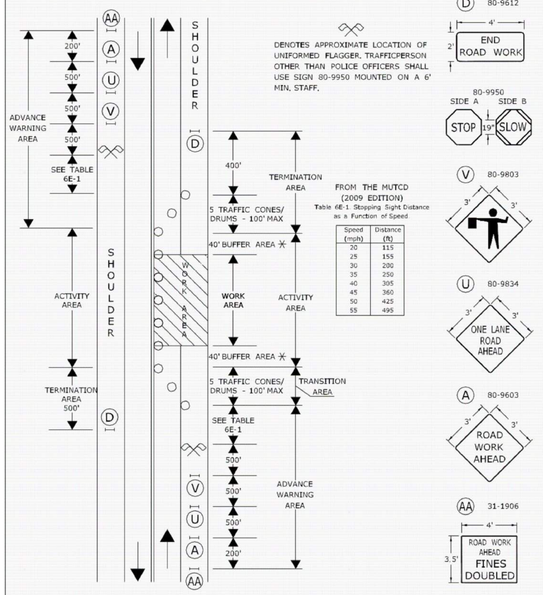
ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
NOTES

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 1 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)

HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



B. TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



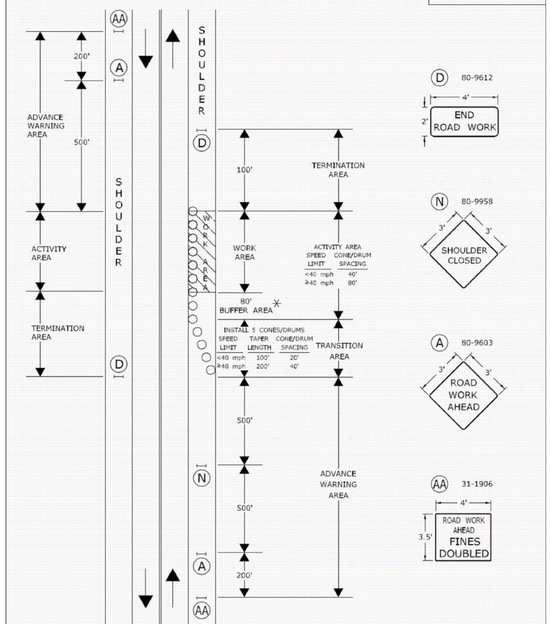
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 2 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN SHOULDER - TWO LANE HIGHWAY

SIGN FACE 71 SQ. FT (MIN.)



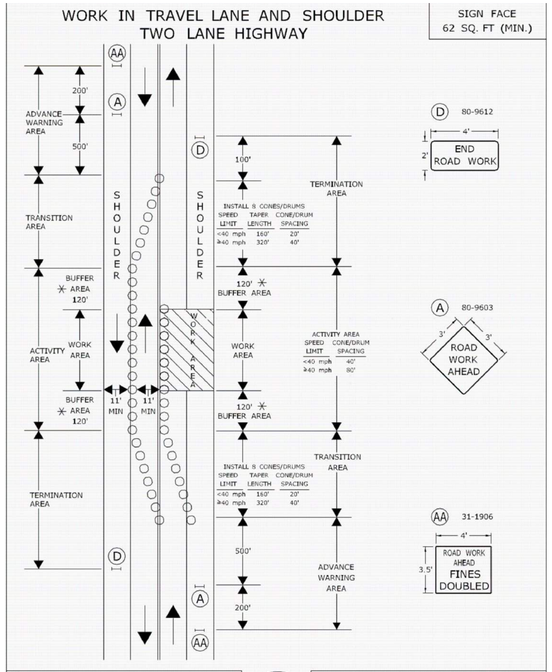
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 14
SEE NOTES 1, 2, 4, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY

SIGN FACE 62 SQ. FT (MIN.)



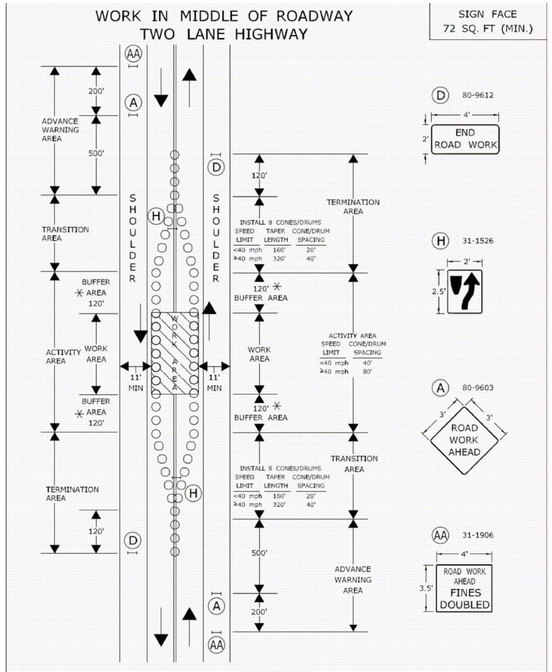
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 15
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY TWO LANE HIGHWAY

SIGN FACE 72 SQ. FT (MIN.)



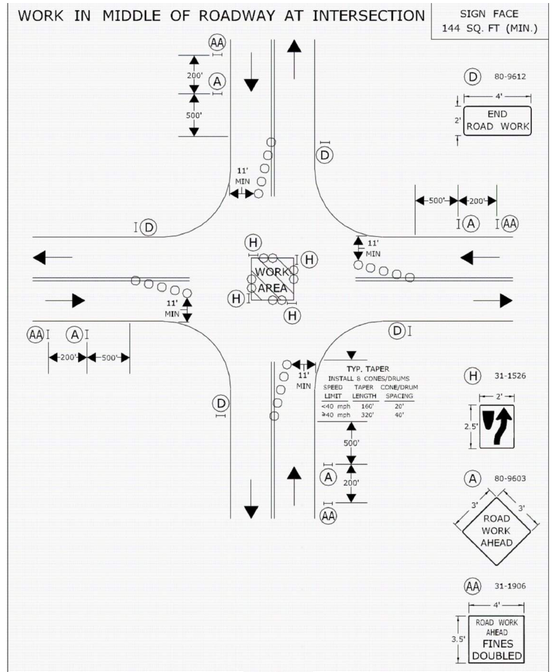
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 16
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY AT INTERSECTION

SIGN FACE 144 SQ. FT (MIN.)



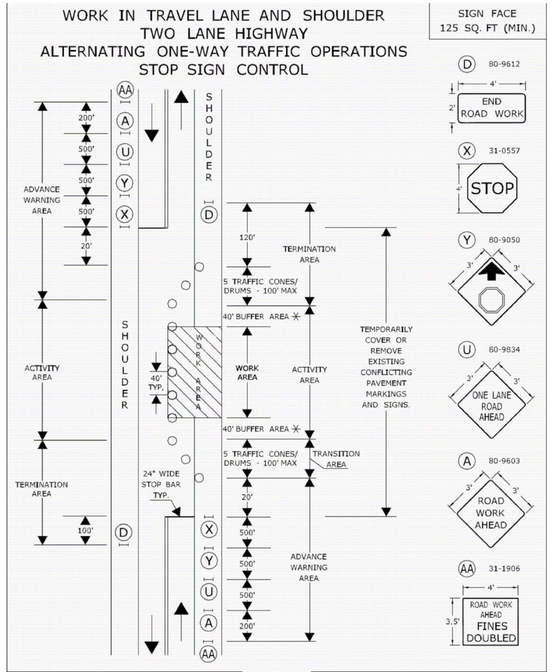
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 17
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS STOP SIGN CONTROL

SIGN FACE 125 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 18
SEE NOTES 1, 2, 4, 7, 8

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
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CROSS CHK'D BY: K. GERLACH
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DATE: DECEMBER 2023

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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

TRAFFIC CONTROL NOTES AND PLANS

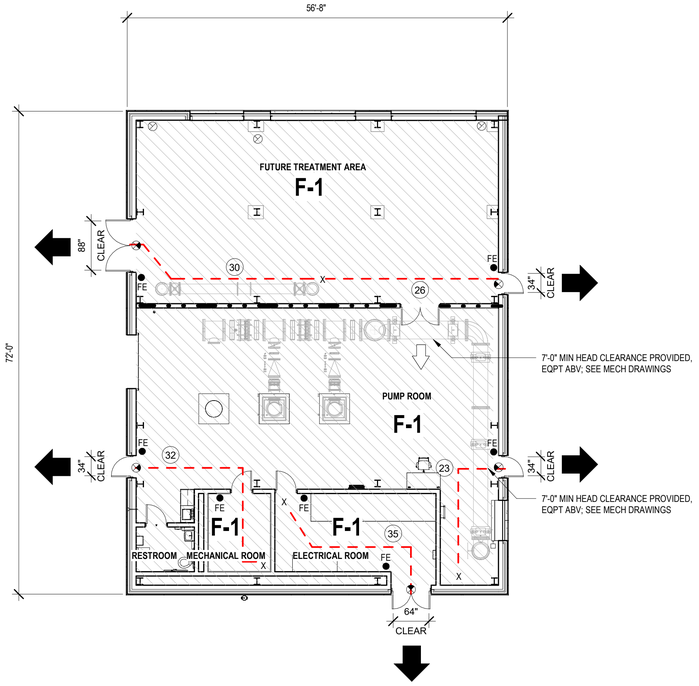
PROJECT NO. 10739-264571
FILE NAME: C029TRFC.DWG
SHEET NO. C-29

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Elevation Drawings and Floor Plans

Include in hard copy submittal



LIFE SAFETY PLAN

3/32" = 1'-0"

LIFE SAFETY PLAN LEGEND

- EGRESS PATH
- 2 HOUR FIRE RATING
- EXIT DISCHARGE
- AREA OR SPACE EXIT
- EXIT SIGN
- FE — FIRE EXTINGUISHER - MULTIPURPOSE DRY-CHEMICAL TYPE
- (X) — TRAVEL DISTANCE (FEET)
- [X] — COMMON PATH OF TRAVEL (FEET)
- X — POINT OF ORIGIN
- FACTORY INDUSTRIAL, F-1 OCCUPANCY CLASSIFICATION

Building Code Summary			
Owner:	City of New Britain, Connecticut	**Date:**	April 2023
Project Name:	White Bridge Waterworks Facilities	**Location:**	New Britain, CT
Project No:	10739-264571	**Architect of Record:**	CDM Architects Inc.
Building Name:	Pond Pumping Station		
Work Scope:	Construction of pump station (New Structure)		
Applicable Ordinances, Codes, and Standards			
Abbreviations	**ICC** - International Code Council; **IBC** - International Building Code; **IEBC** - International Existing Building Code; **IECC** - International Energy Conservation Code; **IFC** - International Fire Code; **IMC** - International Mechanical Code; **IPC** - International Plumbing Code;		
Building Code	2022 CT State Building Code - 2021 IBC		
Mechanical Code	2022 CT State Building Code - 2021 IMC		
Energy Code	2022 CT State Building Code - 2021 IECC		
Plumbing Code	2022 CT State Building Code - 2021 IPC		
Electrical Code	2020 National Electrical Code (NFPA 70)		
Accessibility Code	2017 ICC A117.1		
Use and Occupancy Classification			
IBC Code Reference			
Chapter 3			
Section 306	Factory Group F		
306.2	Moderate-hazard factory industrial, Group F-1		
General Building Heights and Areas			
Chapter 5			
Section 504	Building Height and Number of Stories		
Table 504.3	Allowable Building Height in Feet Above Grade Plane	Allowable	Proposed
	Group F-1 Type IIB - No Sprinklers	55 Feet	25 Feet, 10 Inches
Table 504.4	Allowable Number of Stories Above Grade Plane		
	Group F-1 Type IIB - No Sprinklers	2 Stories	1 Story
Section 506	Building Area		
Table 506.2	Allowable Area Factor in Square Feet		
	Group F-1 Type IIB - No Sprinklers	15,500 SF	4,085 SF
Types of Construction			
Chapter 6			
Section 602	Construction Classification		
602.2	Types I and II, Non Combustible	Type IIB Construction	
Fire Protection and Life Safety Systems			
Chapter 9			
Section 903	Automatic Sprinkler Systems	Not required for Group F-1 occupancy: 1. Fire area under 12,000 square feet. 2. Fire area not located more than three stories above grade plane. 3. Combined area of all F-1 fire areas under 24,000 square feet.	
Section 906	Portable Fire Extinguishers	Required in accordance to 906.2 and NFPA 10	
Section 907 907.2.4	Fire Alarm and Detection Systems Group F	Not required for Group F-1 occupancy 1. F occupancy under two stories in height. 2. F occupancy has occupant load under 500.	
Means of Egress			
Chapter 10			
Section 1004	Occupant Load		
Table 1004.5	Maximum Floor Area Allowances per Occupant		
	Function of Space	Occupant Load Factor	Area / Occupant Load Factor
	Accessory storage areas, mechanical equipment room	300 gross	(4,085 / 300) = 14
Section 1010	Doors, Gates and Turnstiles	Required	Proposed
1010.1.1	Size of doors	Minimum clear width: 32 inches	34 inches
Section 1017	Exit Access Travel Distance		
Table 1017.2	Occupancy	without Sprinklers (feet)	with Sprinklers (feet)
	F-1	200	N/A
Accessibility			
Chapter 11			
Section 1103	Scoping Requirements		
1103.2.9	Equipment spaces are not required to comply with this chapter		
Energy Efficiency			
Chapter 13			
Section 1301	General		
1301.1.1	Building designed and constructed in accordnace with the IECC with compliance requirements indicated in COMcheck report		

0 4' 8' 12' 20'

SCALE: 3/32" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

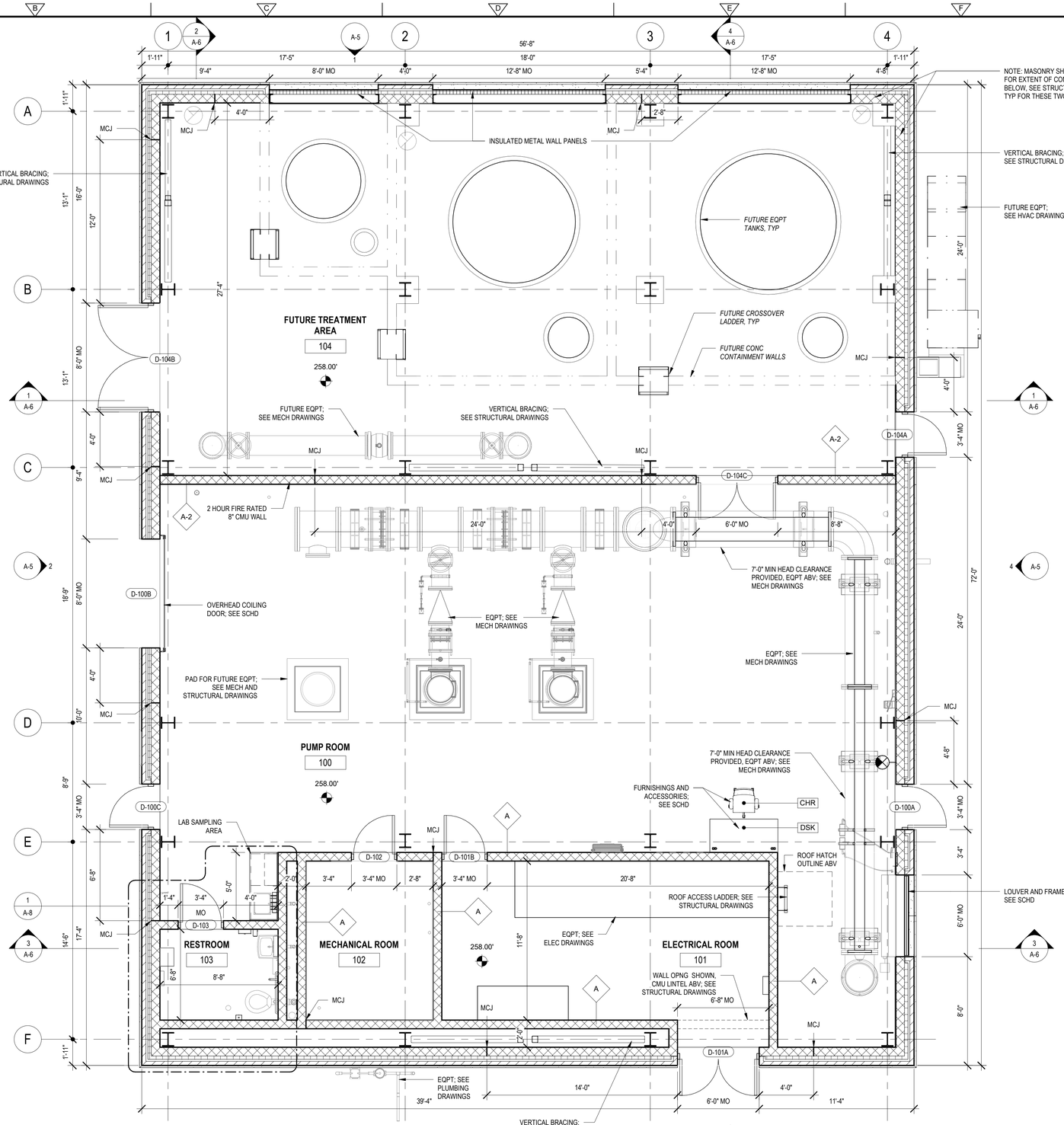
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

POND PUMPING STATION
BUILDING CODE SUMMARY AND LIFE SAFETY PLAN

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT
SHEET NO. A-2

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GROUND LEVEL FLOOR PLAN

1/4" = 1'-0"

0 2' 4' 8'

SCALE: 1/4" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

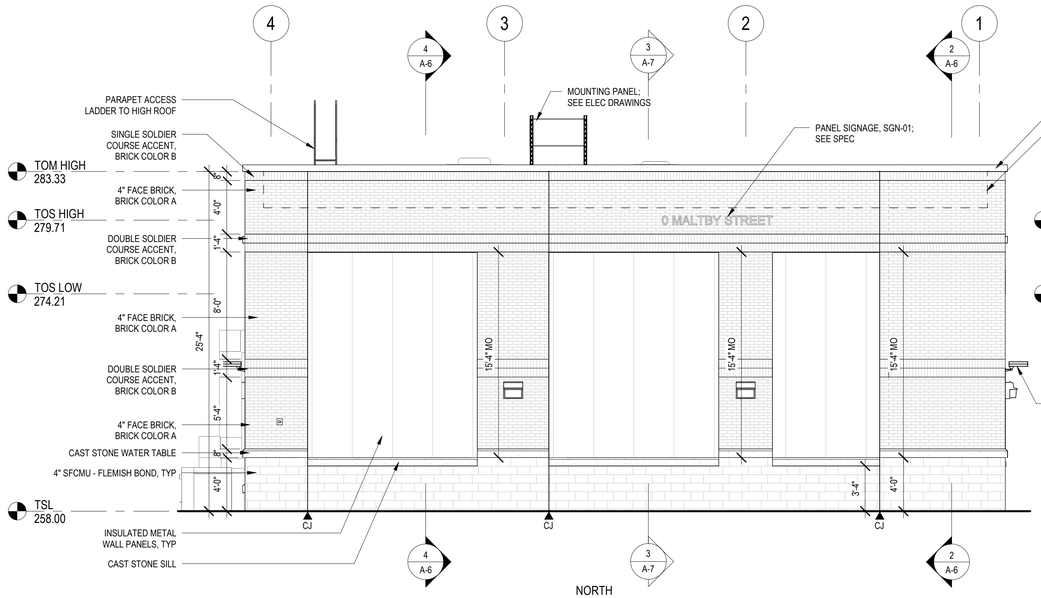
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

POND PUMPING STATION
FLOOR PLAN

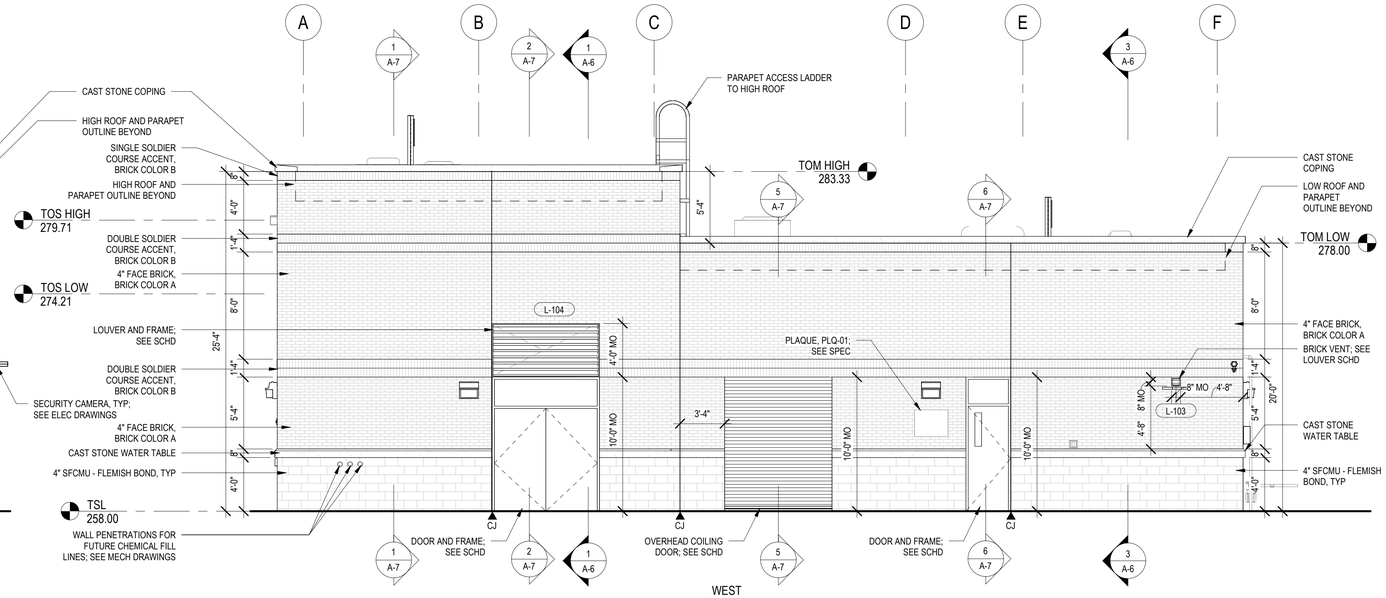
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SHEET NO. A-3

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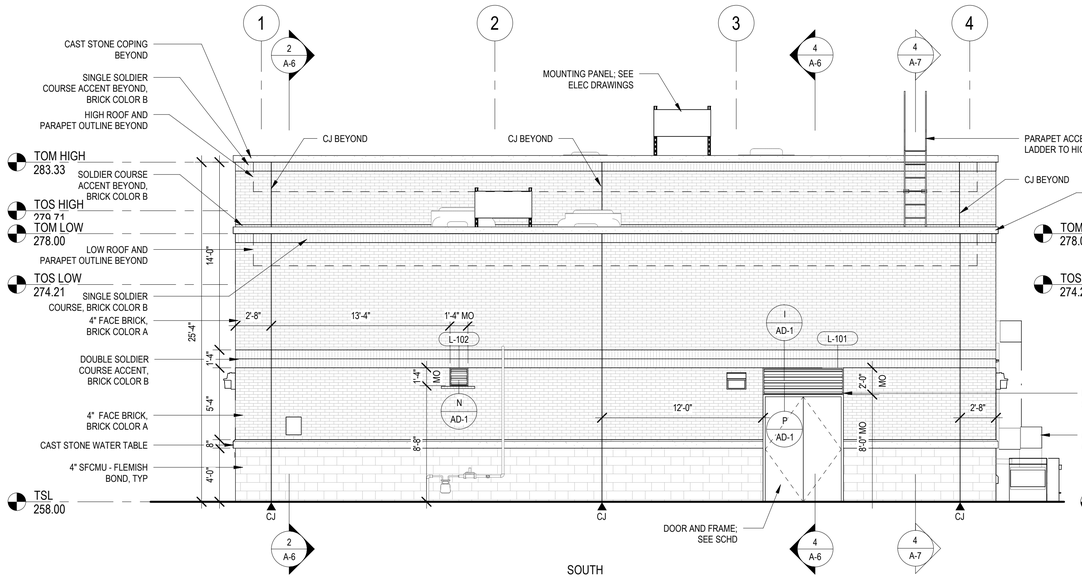
Include in hard copy submittal



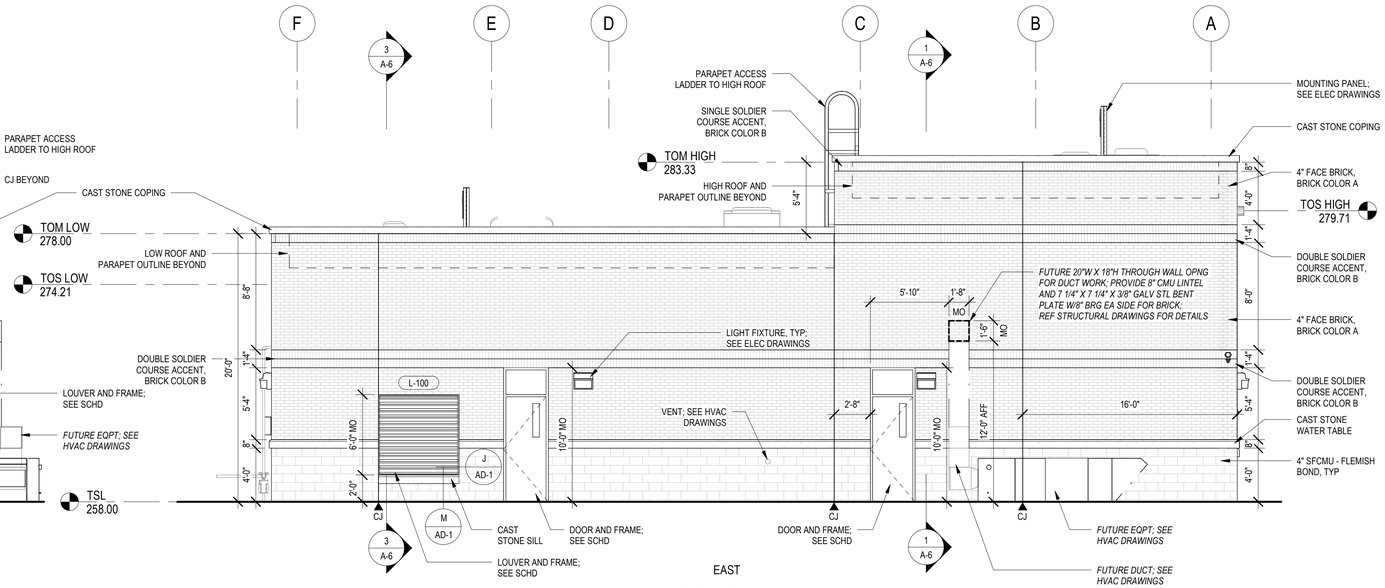
1 ELEVATION
A-3 3/16" = 1'-0"



2 ELEVATION
A-3 3/16" = 1'-0"



3 ELEVATION
A-3 3/16" = 1'-0"



4 ELEVATION
A-3 3/16" = 1'-0"

0 2' 4' 6' 10'

SCALE: 3/16" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CDM Architects Inc.
75 State Street
Boston, Massachusetts 02109

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

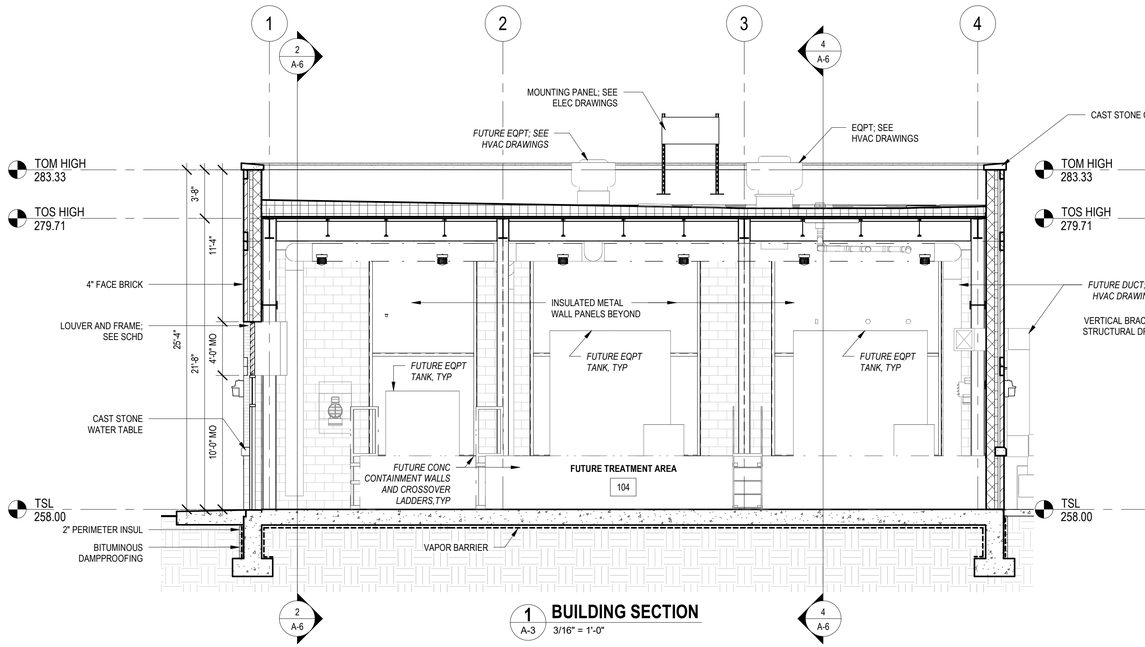
POND PUMPING STATION
EXTERIOR ELEVATIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

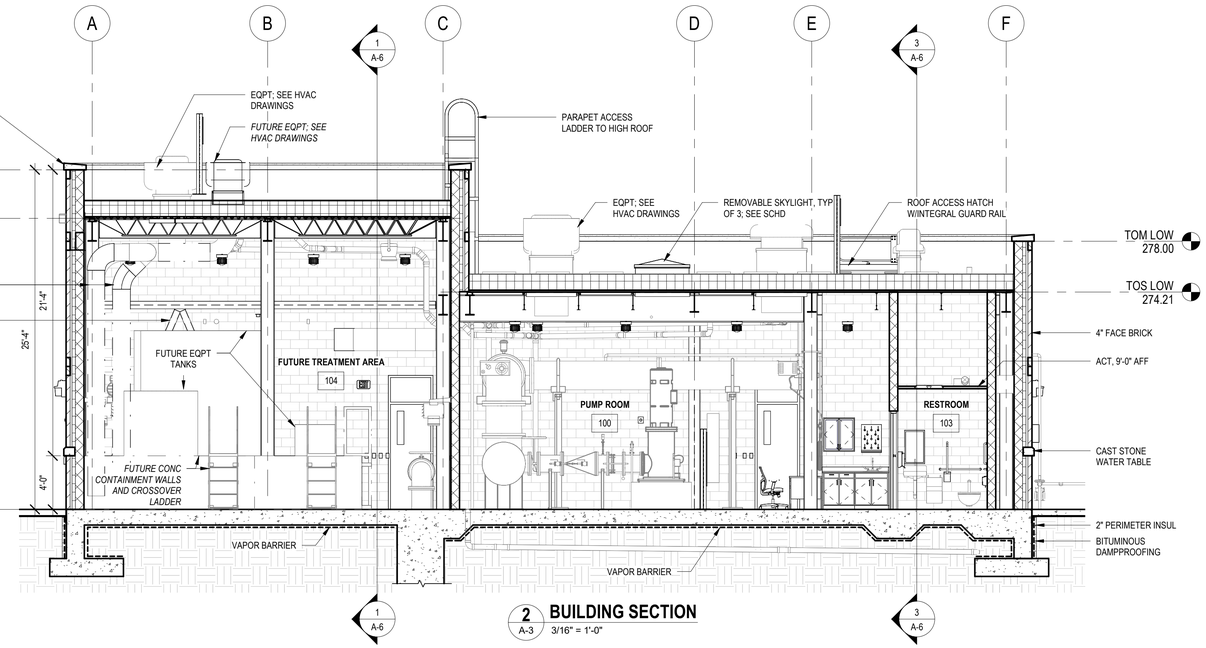
SHEET NO.
A-5

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

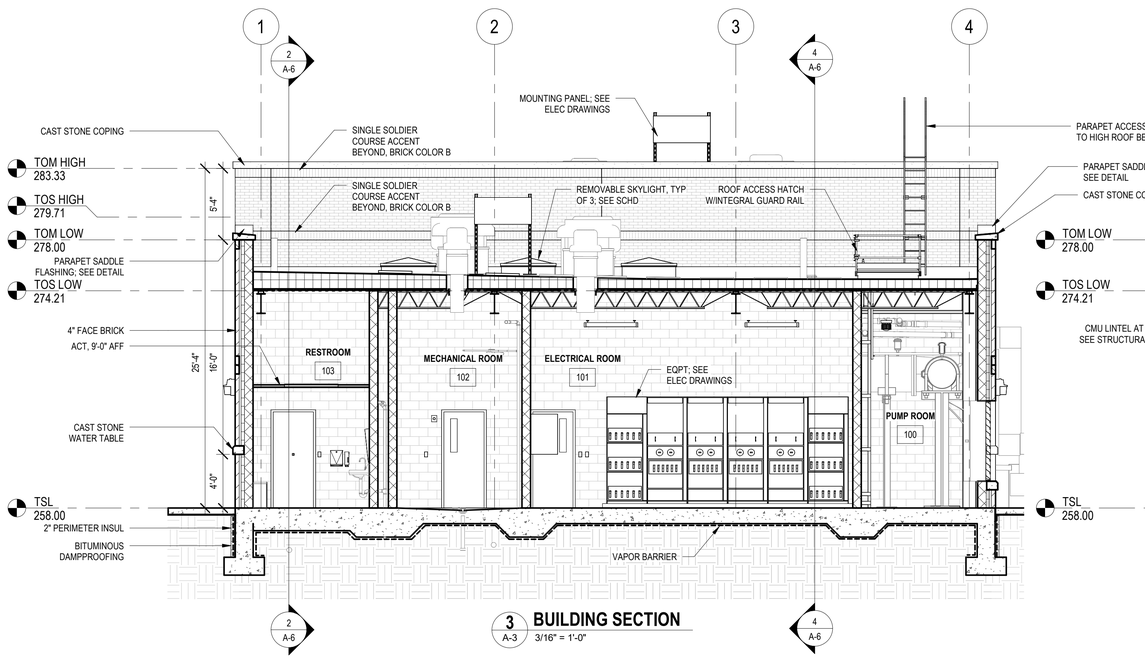
Include in hard copy submittal



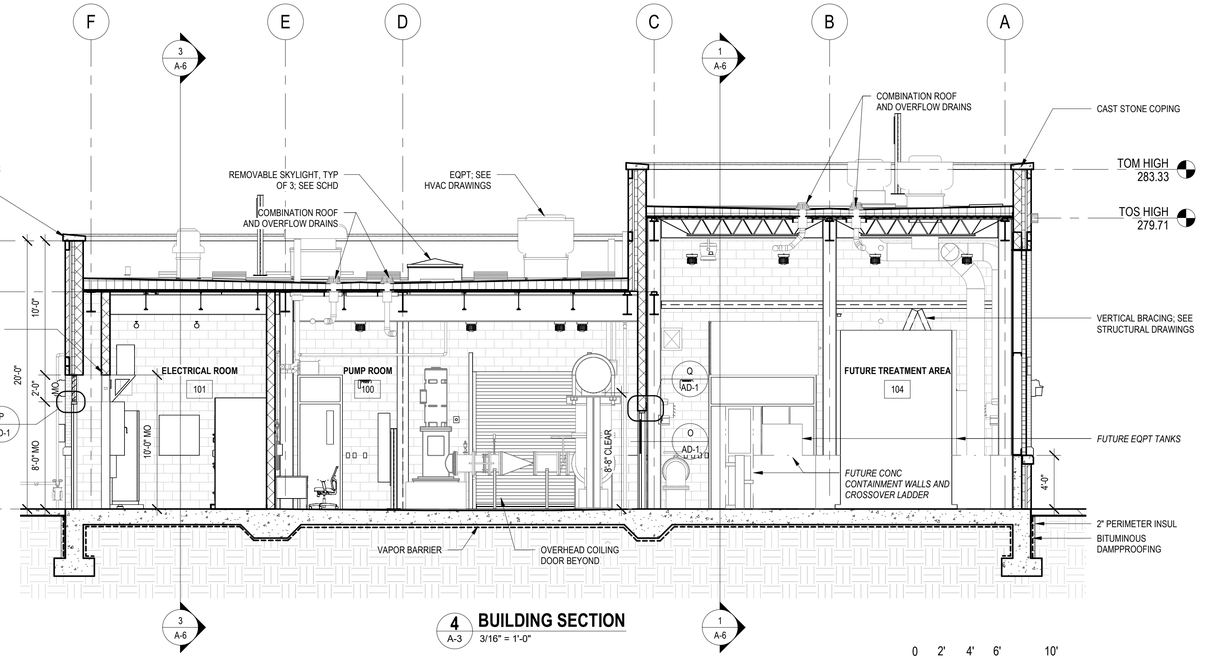
1 BUILDING SECTION
A-3 3/16" = 1'-0"



2 BUILDING SECTION
A-3 3/16" = 1'-0"



3 BUILDING SECTION
A-3 3/16" = 1'-0"



4 BUILDING SECTION
A-3 3/16" = 1'-0"

0 2' 4' 6' 10'
SCALE: 3/16" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

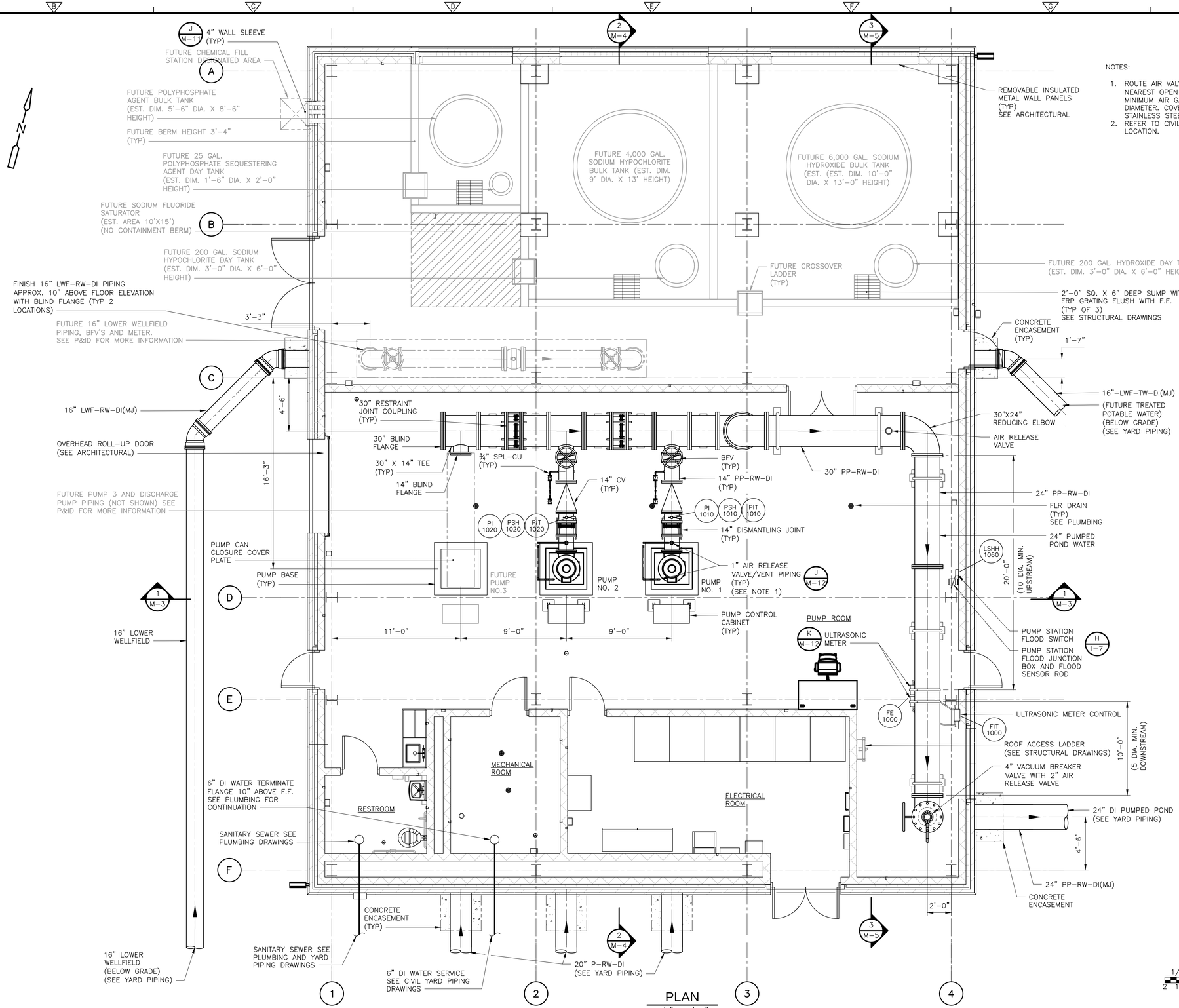
POND PUMPING STATION
BUILDING SECTIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

SHEET NO.
A-6

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NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. REFER TO CIVIL SHEETS FOR BUILDING LOCATION.

PLAN
1/4" = 1'-0"

1/4" = 1'- 0"
2 1 0 2 4

XREFs: [CDMS_2436]
Images: []
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

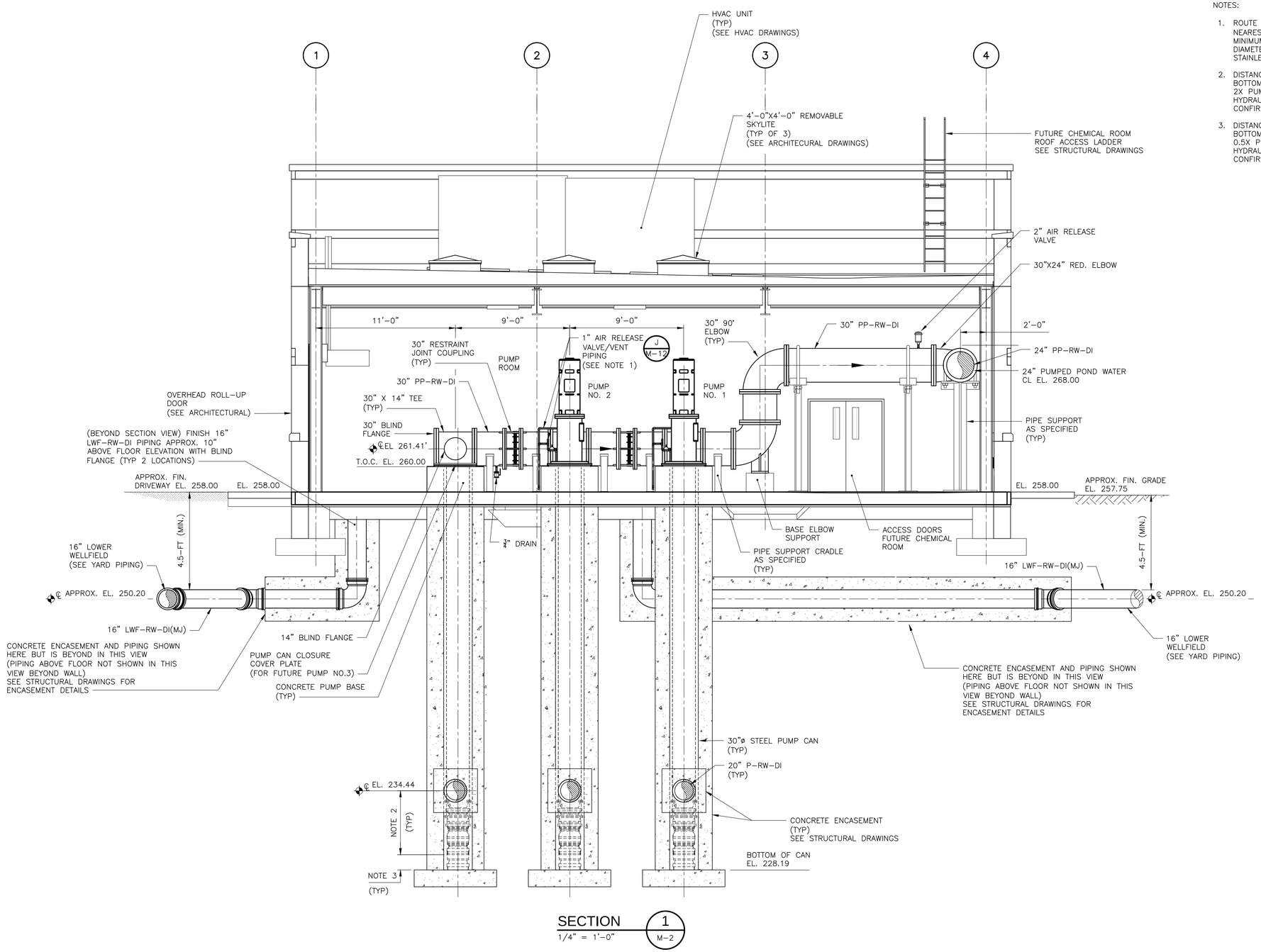
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION FLOOR PLAN

PROJECT NO. 10739-264571
FILE NAME: M002PSPL.DWG

SHEET NO.
M-2

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



SECTION 1
1/4" = 1'-0"
M-2

NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
3. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BEMINIMUM 0.5X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.

1/4" = 1'- 0"
2 1 0 2 4

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DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

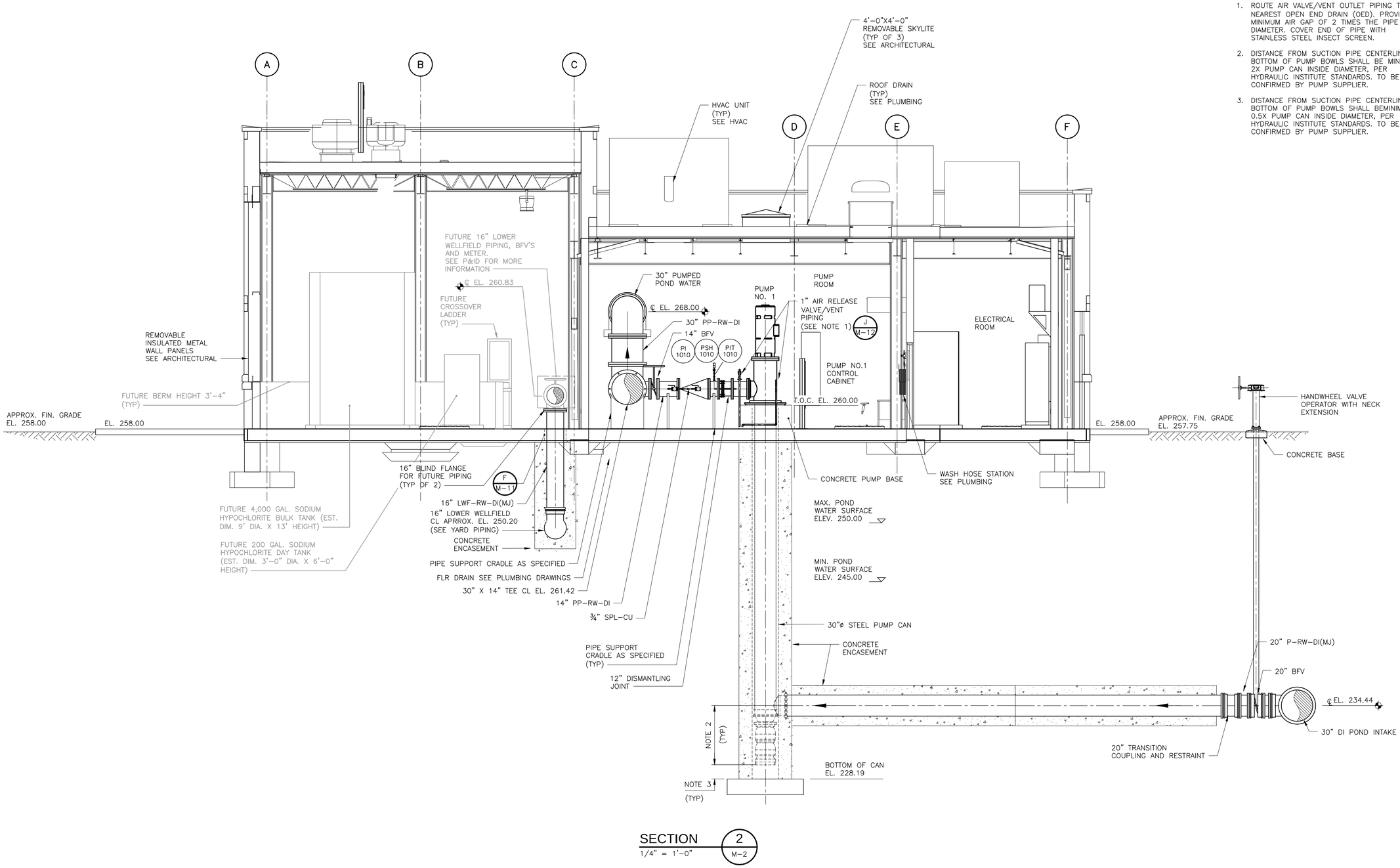
POND PUMPING STATION
SECTIONS I

PROJECT NO. 10739-264571
FILE NAME: M003PSSC.DWG
SHEET NO.
M-3

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
3. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BEMINIMUM 0.5X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.



SECTION 2 / M-2
1/4" = 1'-0"

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DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

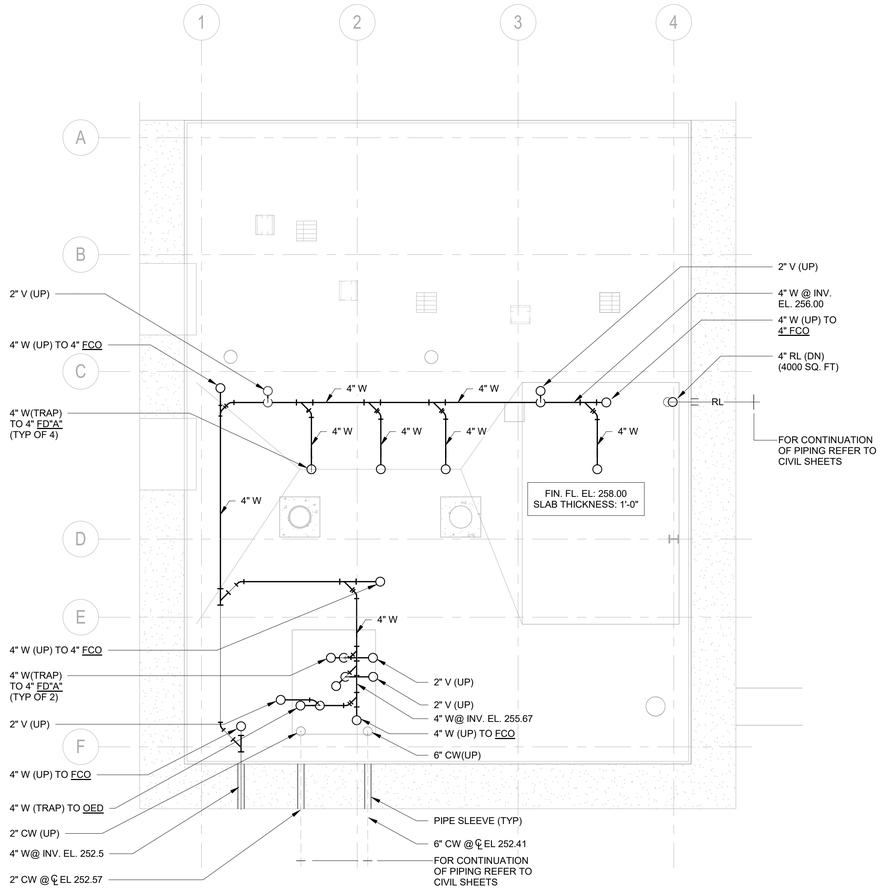
CDM Smith
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East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
SECTIONS II

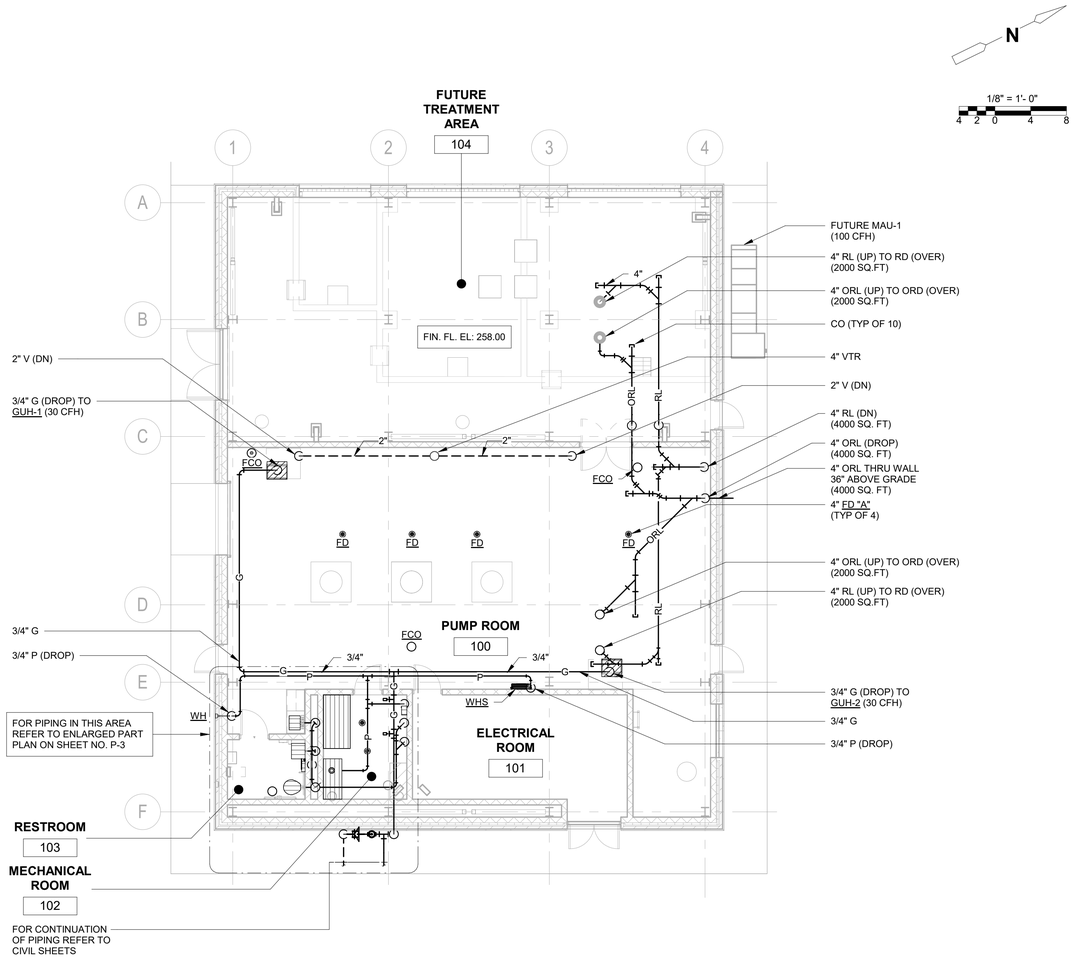
PROJECT NO. 10739-264571
FILE NAME: M004PSSC.DWG
SHEET NO. M-4

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



BURIED PIPING

1/8" = 1'-0"



FLOOR PLAN

1/8" = 1'-0"

NOTES:

1. ALL PIPES PASSING THROUGH THE FOUNDATION WALL SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND THOUGH THE WALL 2" ON EITHER SIDE OF THE FOUNDATION WALL IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
2. ALL PIPES PASSING UNDERNEATH THE FOUNDATION SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND 12" BEYOND THE ANGLE OF REPOSE OF THE FOUNDATION FOOTING ON BOTH SIDES OF THE FOOTING.

NOTES:

1. ALL BURIED PIPING WITHIN THE BUILDING SHALL BE ENCASED IN CONCRETE AS SHOWN ON THE DETAIL ON THE STRUCTURAL DETAIL SHEET.
2. IN LIEU OF TRAP PRIMERS WHERE ALLOWED BY CODE, CONTRACTOR SHALL INSTALL A TRAP RESEALER MADE OF ELASTOMERIC MATERIAL.
3. 1/2" SOFT ROLLED COPPER TUBING SHALL BE INSTALLED TO FEED THE WATER FROM THE TRAP PRIMER UNIT TO THE TRAPS FOR THE FLOOR DRAINS WHERE REQUIRED. THE SOFT ROLLED COPPER TUBING SHALL BE WRAPPED WITH ARMAFLEX TO PROTECT IT FROM THE CONCRETE. THE TUBING IS NOT SHOWN ON THE DRAWING FOR CLARITY SAKE. BUT THE PIPING SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
4. SANITARY PIPING SHALL EXTEND BEYOND THE BUILDING 5'-0" UNDER THE PLUMBING CONTRACTOR'S SCOPE OF WORK.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. SHEEHAN
DRAWN BY: P. MANI
SHEET CHK'D BY: B. BUCCHIANERI
CROSS CHK'D BY: K. WAGNER
APPROVED BY: D. FLAHERTY
DATE: JANUARY 2024

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

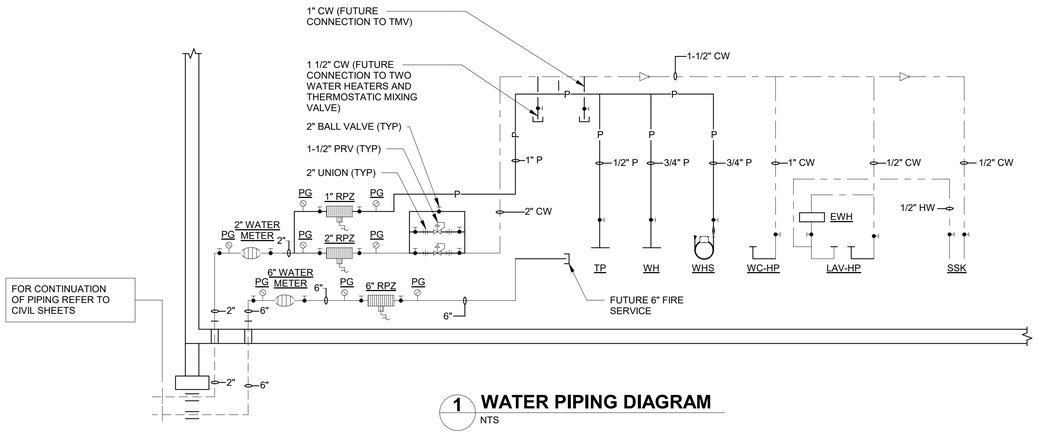
BURIED PIPING AND FLOOR PLANS

PROJECT NO. 10739-264571
FILE NAME: HPWZ001PS.RVT

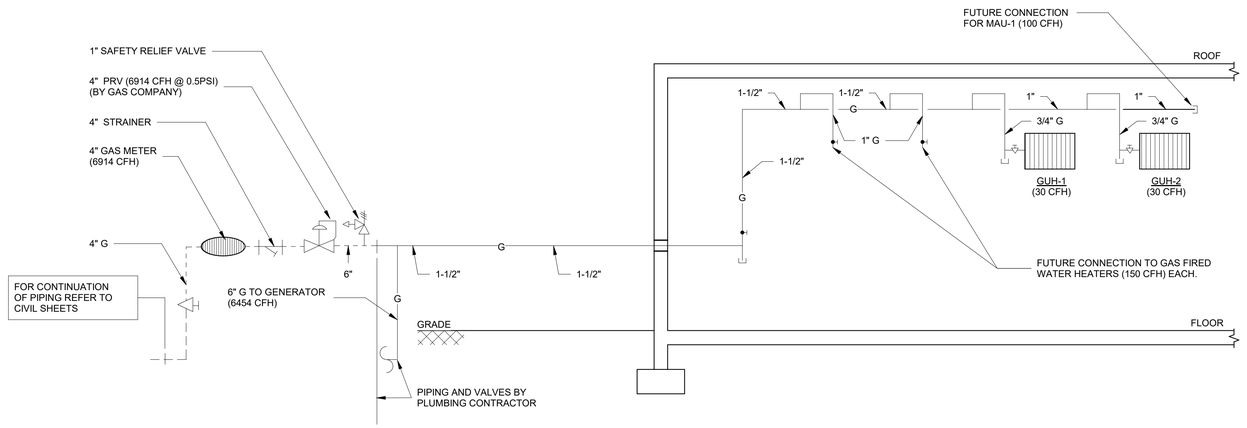
SHEET NO.
P-2

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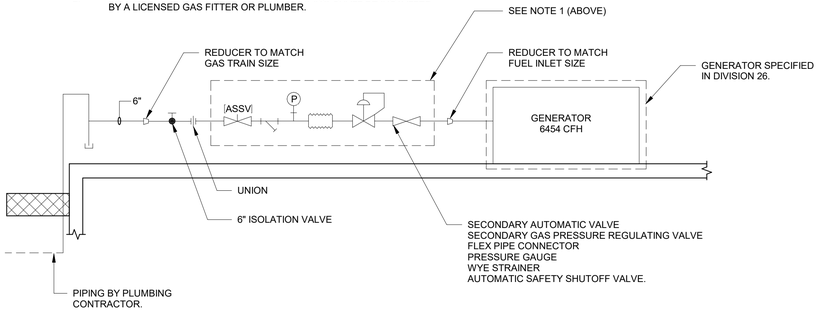
1 WATER PIPING DIAGRAM
NTS



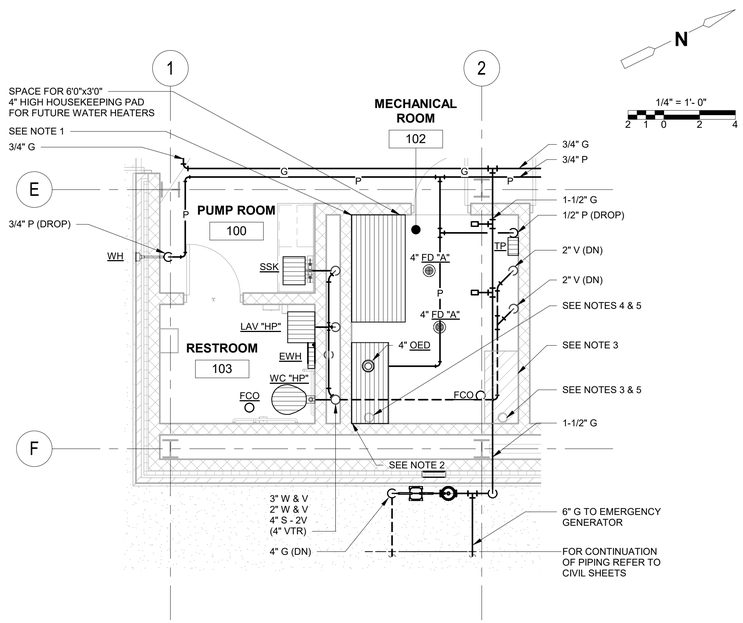
2 GAS PIPING DIAGRAM
NTS

NOTES:

1. GAS TRAIN COMPONENTS SHALL BE PROVIDED BY THE GENERATOR MANUFACTURER AND INSTALLED BY THE PLUMBING CONTRACTOR.
2. INSTALL 6" G LINE TO GENERATOR. GAS PIPING SHALL BE INSTALLED BY A LICENSED GAS FITTER OR PLUMBER.



3 GAS PIPING DIAGRAM FOR STANDBY GENERATOR
NTS



4 ENLARGED FLOOR PLAN
1/4" = 1'-0"

NOTES:

1. SPACE ALLOCATED FOR FUTURE WATER HEATERS, TEPID WATER MIXING VALVE AND TEPID WATER RECIRCULATION PUMP.
2. SPACE ALLOCATED FOR DOMESTIC WATER SERVICE. FOR VALVES AND APPURTENANCES REFER TO THE WATER PIPING DIAGRAM ON SHEET NO. P-3. WATER SERVICE HAS BEEN SIZED TO INCLUDE FUTURE ADDITION OF CHEMICALS AND TEPID WATER HEATING SYSTEM.
3. SPACE ALLOCATED FOR FUTURE FIRE PROTECTION SERVICE SHALL SERVE AN AUTOMATIC FIRE PROTECTION SYSTEM WHEN THE FUTURE CHEMICAL SYSTEMS ARE INSTALLED ON THE PROJECT. 6" FIRE SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR.
4. 2" DOMESTIC WATER SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR. A 2" CAPPED WATER CONNECTION SHALL BE LEFT IN THE MECHANICAL ROOM 102.
5. 6" RPZ FOR FUTURE FIRE SERVICE SHALL BE INSTALLED 36" AFF. 2" RPZ FOR DOMESTIC POTABLE WATER SHALL BE INSTALLED 36" AFF AND THE 1" RPZ FOR NON-POTABLE WATER SHALL BE INSTALLED AT 54" AFF.

PLUMBING FIXTURE SCHEDULE

FIXTURE	DESCRIPTION	WASTE (INCH) MIN	VENT (INCH) MIN	TRAP (INCH) MIN	CW (INCH) MIN	HW (INCH) MIN	TW (INCH) MIN	REMARKS
WC-HP	TOILET, FLUSH VALVE, WALL MOUNTED, WALL OUTLET	4	2	4	1	-	-	SEE SECTION 224213.13
SSK	SERVICE SINK	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
LAV-HP	LAVATORY, COUNTER MOUNTED	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
WHS	WASH HOSE STATION	-	-	-	3/4	-	-	SEE SECTION 221119
EWH	ELECTRIC WATER HEATER	-	-	-	1/2	1/2	-	SEE SECTION 223300
TP	TRAP PRIMER	-	-	-	1/2	-	-	SEE SECTION 221119

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CROSS CHK'D BY: K. WAGNER
APPROVED BY: D. FLAHERTY
DATE: JANUARY 2024

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

PIPING DIAGRAMS, ENLARGED FLOOR PLAN AND PLUMBING SCHEDULE

PROJECT NO. 10739-264571
FILE NAME: HPWZ001PS.RVT

SHEET NO.
P-3

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

For Office Use Only	
APPLICATION NO.	2506
DATE FILED:	6/27/24
DECISION DATE:	
DECISION:	

BRISTOL ZONING COMMISSION
CITY OF BRISTOL, CONNECTICUT
APPLICATION FOR SPECIAL PERMIT

The undersigned Applicant hereby applies to the Bristol Zoning Commission for approval under Section(s) Article III, Section 15.2.4.A.2 of the Bristol Zoning Regulations for the following Special Permit use: Special Permit for Earth Removal in excess of 400 cubic yards

Address or Location of the Property: Maltby Street

Assessor's Map No.: 52 & 53 Assessor's Lot No.(s): 11, 15, 16B16A, 17, 145, 147, 149, 150, 151

Zone of the Property: R-40 Size of the Property (in acres or square feet): 303.7 acres (total)

Reason for the Special Permit: To add approximately 6,500 cubic yards and remove approximately 15,500 cubic yards of material within the floodplain in order to facilitate the renovation and construction of the White Bridge Waterworks Facilities

Does this application involve an activity regulated by the Inland Wetlands Agency? [✓] yes [ ] no

If yes, has an application for a permit been submitted to the Inland Wetlands Agency? [✓] yes, on 12/26/2023 [ ] no

Other comments: Three applications were submitted to Inland Wetlands Agency (App# 2019, #2020, #23-458F-305)

Approval for all three applications received from Inlands Wetland Agency on June 3, 2024. SEE ATTACHED

NOTE: Section 8-3c(a) of the Connecticut General Statutes requires that, if an application for a Special Permit involves an activity regulated under the Inland Wetlands and Watercourses provisions of the statutes, the applicant shall submit an application for a wetlands permit to the local Inland Wetlands Agency no later than the day the Special Permit application is filed.

APPLICANT (If more than one, list on Page 2)

Name: New Britain Water Department, Ramon Esponda

Address: 1000 Shuttle Meadow Ave City: New Britain State: CT Zip: 06052

Telephone No.: (860) 826-3535 E-Mail: Ray.Esponda@newbritainct.gov

Signature: _____ *Signature – (Printed/Typed)* Ramon Esponda

CHECK ONE: [✓] owner [ ] other (specify): _____

OWNER(S) OF RECORD (If other than Applicant; if more than one, list on Page 2)

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ *Signature – (Printed/Typed)* _____

THIS APPLICATION MUST BE FILED IN PERSON NO LATER THAN 12 NOON ON THE DEADLINE DAY FOR APPLICATION SUBMISSION – NO EXCEPTIONS!

BZC – 08/17

For Office Use Only
APPLICATION NO. 2506

CITY OF BRISTOL, CONNECTICUT
SUPPLEMENTARY INFORMATION

Address or location of property: Maltby Street

ADDITIONAL INFORMATION/COMMENTS (click inside the box below and begin typing)

ADDITIONAL APPLICANT

Name: _____ CHECK ONE: [ ] owner [ ] other: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

ADDITIONAL OWNER(S) OF RECORD

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

Name: _____

Address: _____ City: _____ State: ____ Zip: _____

Telephone No.: _____ E-Mail: _____

Signature: _____ Signature – (Printed/Typed) _____

(OPTIONAL) SEND COPIES OF ALL CORRESPONDENCE TO:

Name: Vinta Varghese (CDM Smith)

Address: 101 East River Drive, Suite 1A City: East Hartford State: CT Zip: 06108

Telephone No.: 860-808-2325 E-Mail: vargheseva@cdmsmith.com

08/17 - LUO

From: Joseph Hammer [mailto:jhammer@mrglaw.com]
Sent: Wednesday, July 3, 2024 3:18 PM
To: Robert Flanagan <RobertFlanagan@bristolct.gov>; Nancy Levesque <NancyLevesque@bristolct.gov>; andrewarmstrong@bristolct.org
Cc: ray.esponda@newbritainct.gov; Sebastian Amenta - Comprehensive Environmental Inc. (samenta@ceiengineers.com) <samenta@ceiengineers.com>; Varghese, Vinta A. (vargheseva@cdmsmith.com) <vargheseva@cdmsmith.com>; Rachel Fancy <RFancy@mrglaw.com>
Subject: Bristol Zoning Commission - Applications #2504, #2505,# 2506; Applicant - City of New Britain, Water Department

Dear Mr. Flanagan,

Our firm represents the City of New Britain in connection with the above-referenced Special Permit and Site Plan applications which were submitted on June 27, 2024.

The applicant understands that due to the holidays and anticipated scheduling of public hearings by the Zoning Commission, the public hearing on the applications will likely be scheduled for September 16, 2024. The 65 day period to open the hearing, following receipt of the applications on July 8, will expire on September 11. The applicant therefore consents to a five-day extension of time, to September 16, 2024, within which to commence the public hearing.

Thank you.

M R G
MacDermid Reynolds & Glissman, P.C.
110 Whitney Avenue
New Haven, CT 06510

86 Farmington Avenue
Hartford, CT 06105
www.mrglaw.com

Joseph L. Hammer
jhammer@mrglaw.com
Tel: 203-777-1001
Cell: 860-992-3130
Fax: 860-547-1191
Bio V-card

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CT DPH - Notification

From: Microsoft Power Apps and Power Automate <microsoft@powerapps.com>
Sent: Tuesday, July 2, 2024 3:45 PM
To: Ray.Esponda <Ray.Esponda@newbritainct.gov>; Gerlach, Kyle T. <gerlachkt@cdmsmith.com>
Subject: Acknowledgement of Submission to CTDPH

This email is being sent automatically to confirm the submission of a project notification form to the Connecticut Department of Public Health pursuant to Connecticut General Statutes Section 8-3i and/or 22a-42f.

A project notification form is required to be completed and submitted to the Department of Public Health when an application, petition, request or plan is located in a Drinking Water Source Watershed or Aquifer Protection Area.

Thank you for your submission. If you have any questions, please send an email to dph.sourceprotection@ct.gov.

Please enter the docket number/application ID for this application, petition, request or plan, if applicable:
App 2506 - Special Permit for Earth Removal

What municipal entity is this application, petition, request or plan being submitted to?["Zoning Commission"]

Is the location associated with the proposed application, petition, request or plan in a drinking water watershed?Yes

Is the location associated with the proposed application, petition, request or plan in an Aquifer Protection Area?
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street. This notification is for the Bristol Zoning Earth Removal special permit.

Does this application include a petition or proposal to change the regulations, boundaries or classifications of zoning districts?No

Please enter a brief description of the project or proposal:
The White Bridge Waterworks Facilities Upper and Lower Wellfield Improvements Project is intended to bring this 100-year old drinking water facility up to modern standards so it can continue to be a viable drinking water source for the City of New Britain and surrounding communities. The project includes the replacement and restoration of the wellfields, demolition and removal of existing structures, and construction of new groundwater wells, a new pump house, and underground piping. It also includes the addition of water and sewer utilities in Maltby Street. This notification is for the Bristol Zoning Earth Removal special permit.

Please enter the date of the application, petition, request or plan:
2024-06-27

What is the size of the area to be disturbed?
equal to or greater than 5 acres

Is any part of this project located within 50 feet of a wetland, stream, pond, lake or reservoir?Yes

What type of use is this application, petition, request or plan proposing?Institutional (school, hospital, nursing home, etc,)

How will this project be provided a potable water supply?Connection to existing public water supply

How will domestic waste be handled?
Sanitary Sewer (will be extended to project area as a result of project)

If the proposed project is 1) not located on single family residential property and 2) will utilize a new well for drinking water supply, a Public Water Supply (PWS) Screening Application should be submitted to the Department of Public Health. Was a PWS Screening Application submitted?Yes

Applicant Name:
New Britain Water Department - Ramon Esponda

Applicant email address:
Ray.Esponda@newbritainct.gov

Street address or intersection of application, petition, request or plan:
Maltby Street, Bristol CT

Enter Project Longitude/Latitude:
-72.916330
41.700721

Is there any other information relevant to the Department's review of this application, petition, request or plan? If so, please enter in the space below:
This project is receiving funding by the Department of Public Health and there has been much coordination and collaboration between the City of New Britain, the design team, and the Department. The Department has been kept updated throughout the progress of the project design and has already received site plans and other documentation.

If you would like a confirmation of this submission to be sent to the town, please enter the email address you would like it to be sent to in the field below:
gerlachkt@cdmsmith.com

Site Plan Comments - Earth Removal

CITY OF BRISTOL
SITE PLAN REVIEW COMMITTEE
STAFF COMMENTS - 2506

SPECIAL PERMIT: Application #2506 – Special Permit for Earth Removal at Maltby Street; Assessor's Map 52 & 53, Lots 11, 15, 16B16A, 17, 145, 147, 149, 150 & 151; R-40 (Single- Family Residential) zone; New Britain Water Department, applicant. *Plans Dated: June 2024; Date of Committee Review: July 24, 2024 (first review); September 16, 2024 (second review)*

ENGINEERING/PUBLIC WORKS (Anthony Lorenzetti):

1. Section 15.2.5 B 1, provide mapping that shows the 100-foot buffer location from residential property, and the abutting property that is located 70 feet from the proposed excavation as stated on page 3 the project narrative.

   9/7/24 Applicant Response: The additional properties will be shown on expanded drawings after completion of the additional survey in October 2024.

   9/16/24 City Response:

2. Section 15.2.5 E, provide a narrative and plans showing areas of tree removal.

   9/7/24 Applicant Response: Additional notes regarding tree removal will be added to Sheet C-7 to reflect this work and a narrative will be developed.

   9/16/24 City Response:

3. See comment above regarding traffic.

   9/7/24 Applicant Response: A more detailed traffic control narrative is in development and will incorporate any additional considerations put forth by the City, as well as estimated number of trucks associated with material removal.

   9/16/24 City Response:

CITY PLANNER (Robert Flanagan/Andrew Armstrong):

1. What are the proposed limits of tree clearing for all proposed improvements? Particularly, show the dimension and final landscape condition for proposed compensation and storage area abutting single-family residential properties on the upper and lower wellfields. Provide a landscape sheet showing these conditions and setback dimensions to the property lines not just the floodway line. How will limits of clearing be marked in the field?

   9/7/24 Applicant Response: Additional notes regarding tree removal will be added to Sheet C-7 to reflect this work. Further, additional drawings to clarify these conditions are in development and will be added to the drawing set.

   9/16/24 City Response:

2. Provide a plan sheet that clearly shows residential property lines, particularly the properties from Collins Road and parcel boundaries, including the abutting parcel located at Assessor's Map 53, Lot 147. Plans provided are drawn indicating mostly Wetlands features.

   9/7/24 Applicant Response: Additional drawings to clarify these conditions are in development and will be added to the drawing set.

   9/16/24 City Response:

3. How will limits of clearing be marked in the field? Applicant should develop a plan for review by staff that shows limits of clearing marked in the field. These limits will need to be inspected prior to and during Earth Removal activities occurring on site.

   9/7/24 Applicant Response: Additional drawings to clarify these conditions are in development and will be added to the drawing set.

   9/16/24 City Response:

4. What are the proposed hours of operation for earth removal?

   9/7/24 Applicant Response: Specification Section 011000 includes work hours limitations of 7:00 am to 7:00 pm Mondays through Saturdays, and 9:00 am to 5:00 pm Sundays, and a reference to the City of Bristol Noise Ordinance.

   9/16/24 City Response:

5. Notes should be added to the plan related to measures to control dust and noise associated with the operation.

   9/7/24 Applicant Response: Additional notes will be added to the Civil Drawings. Noise pollution is also addressed in the Contract Supplemental General Conditions and Special Provisions; Dust control is also included in Specification Sections 015000 and various technical specifications.

   9/16/24 City Response:

6. Applicant should define the protective measures used to minimize the nuisance of noise, dust and flying rock.

   9/7/24 Applicant Response: Additional notes will be added to the Civil Drawings. Noise pollution is also addressed in the Contract Supplemental General Conditions and Special Provisions; Dust control is also included in Specification Sections 015000 and various technical specifications.

   9/16/24 City Response:

7. Applicant should provide an engineering estimate for the posting of a Sedimentation and Erosion Control Performance Bond for the project. Engineer should “show the work” in how the bond amount was calculated.

   9/7/24 Applicant Response: This is in development.

   9/16/24 City Response:

8. The abbreviated plan set shows many red revision clouds. Was this plan set intended to be submitted? Please make changes and remove notes and revision symbols.

   9/7/24 Applicant Response: The latest drawings, revised to incorporate comments herein, will be submitted in October 2024.

   9/16/24 City Response:

9. The Zoning Table lists the proposed building height as 258.3 feet. Please revise.

   9/7/24 Applicant Response: The reference to 258.3 feet in the Zoning Table on Sheet C-10 is an elevation, not the building height; this will be revised in the October 2024 submission.

9/16/24 City Response:

10. There are 2 separate Zoning Tables with the same lot numbers and different requirements. Please clarify.

    9/7/24 Applicant Response: The second table on Sheet C-10 refers to parking requirements; this will be revised in the October 2024 submission.

    9/16/24 City Response:

11. The erosion and sediment control narrative references protecting waterways, wetlands, etc. What steps are being taken to reduce the impacts on abutting residential neighbors? What steps will be taken to protect existing properties from the newly created temporary accessway from Mix Street, such as 871 Farmington Avenue and others?

    9/7/24 Applicant Response: Locations of E&S controls are shown on Sheets C-6, C-7, and C-8. Additional measures to protect adjacent properties are under review and will be included in the revised drawings to be submitted in October 2024.

    9/16/24 City Response:

12. Include the proposed E&S control measures outlined in the narrative in the site plan set.

    9/7/24 Applicant Response: Locations of E&S controls are shown on Sheets C-6, C-7, and C-8. Additional drawings are in development and will be added to the drawing set.

    9/16/24 City Response:

13. Include a plan sheet showing E&S controls. (E&S control details are included in the current set).

    9/7/24 Applicant Response: Locations of E&S controls are shown on Sheets C-6, C-7, and C-8. Additional drawings are in development and will be added to the drawing set.

    9/16/24 City Response:

14. The “site plans” for the upper and lower wellfields need to be shown as an actual site plan. The building and site features are not clear. These sheets primarily show underground raceway schedules, charts and other items that are not relevant and should be separate from the site plan.

    9/7/24 Applicant Response: Additional drawings to clarify these conditions, including a simpler overall Site Plan, are in development and will be added to the drawing set.

    9/16/24 City Response:

15. Show the required 100-foot buffer for excavation to properties per Article II, Section 15.2.5A.1.

    9/7/24 Applicant Response: Expanded drawings will be provided after completion of the additional survey in October 2024.

    9/16/24 City Response:

16. Vehicular access to the site within the 100-foot buffer requires Commission approval.

9/7/24 Applicant Response: Enhanced mapping and site access will be shown on expanded drawings after completion of the additional survey in October 2024.

9/16/24 City Response:

17. No trees greater than five inches in caliper measured 3 feet off the ground shall be removed unless approved by the Commission. Is there documentation showing the limits of tree clearing?

9/7/24 Applicant Response: Additional notes regarding tree removal will be added to Sheet C-7 to reflect this work.

9/16/24 City Response:

BUILDING/ZONING ENFORCEMENT (Richard Brown)
1. No comments at this time.

POLICE DEPARTMENT (Lt. Krajewski/Sgt. Ouellette)
1. No issues with design, does not affect traffic of surrounding roads.

FIRE MARSHAL (Kristopher Lambert):
1. On page A-2 there is a double leaf door that leads from/into the "Future Treatment Area" that is part of a 2-hour rated wall assembly. What is the rating of these doors?

9/7/24 Applicant Response: This is door D-104C per Sheet A-3; this door has a 90 minute fire rating per the Door Schedule on Sheet A-9.

9/16/24 City Response:

WATER DEPARTMENT (Paul Keegan/Rob Longo)
1. No comments at this time.

Project Narrative

Zoning Commission – Application for Special Permit

Project Narrative:

The New Britain Water Department (NBWD) has owned and operated groundwater wells as a raw water source at the White Bridge Waterworks Facilities on Maltby Street in Bristol for over one hundred years. The facilities are located in an R-40 designated residential zone across several parcels including 52-11, 52-15, 52-16B16A, 52-17, 53-145, 53-147, 53-149, 53-150, and 53-151. Work is specifically being performed on lot 52-16B16A, 52-17, 53-145, 53-147, and 53-150. Project location figures are included as **Attachment 1** to this application. The Lower Wellfield wells (located south of Maltby Street) were originally constructed in 1921 and have been operated since 1923. These wells have undergone upgrades in the 1940s and 1950s, with the most recent upgrades occurring the 1980s. A pump station at the Lower Wellfield was constructed as part of the 1940s upgrades. The Upper Wellfield wells (located north of Maltby Street) were originally installed in 1940. These were replaced with new wells in 1955 and again in the 1980s. A pump station at the Upper Wellfield was also constructed in the floodway in 1955. In addition to the wells, NBWD has also operated the Supply Pond surface water source at the White Bridge Waterworks Facilities since the 1950s. The existing 1923 pump station, already located on the site, was converted to a surface water pump station in 1950. This building and associated pumping equipment have not received major upgrades since.

Much of the mechanical equipment at the wellfields and existing Pond Pumping Station has reached the end of its useful life or, due to its age, is very difficult or not possible to find the necessary replacement parts for sustained operations. Regulatory requirements and industry standards have also changed over the past 100-years. To redevelop the Upper and Lower Wellfields with new wells that can be used as a potable drinking water source, the Connecticut Department of Public Health (DPH) requires new wells to be located 50-feet from any water body or wetlands boundary. In addition, DPH requires new wells and water infrastructure to be raised to an elevation 2-feet above the 100-year floodplain elevation. As the majority of the NBWD owned property is within the 100-year floodplain with some areas up to 6-feet below the flood elevation, the existing wells and three pump stations cannot be redrilled/rehabilitated in their current locations. This project will rehabilitate the White Bridge Waterworks Facility to bring it up to modern standards and regulations and create a reliable potable drinking water source for the New Britain Water Department and surrounding communities.

The project includes the abandonment of all currently existing wells in accordance with DPH requirements, demolition of existing structures and the three existing pump stations, construction of a single new pump station, filling and grading to achieve DPH flood resiliency requirements, wetlands creation/replication, and creation of compensatory flood storage. A total of three new wells will be drilled at the Upper Wellfield and six new wells drilled at the Lower Wellfield. Based on water quality, the Lower Wellfield wells may but suitable for use as a public potable water supply with minimal chemical treatment, subject to the ground water under the direct influence of surface water (GWUDI) testing. Both the Upper and Lower Wellfield wells will be equipped with new submersible style pumps within the wells, making it unnecessary to have pump stations at each site. An Aquifer Protection Area Program Registration Form for Regulated Activities will be submitted following this application submittal. A single pump station building will be constructed to house pumping equipment associated with the

Supply Pond surface water source and will also include designated space for treatment equipment in the event the Lower Wellfield is used for potable water. This new building will be constructed with a finished floor elevation 2-feet above the 100-year flood elevation and outside the floodway. The project will also install associated yard piping around the wells, pump station building, and connections to the existing New Britain water infrastructure on-site. New water and sewer utilities from Bristol will be constructed in Maltby Street and provide service for the new pump station. Design Drawings for the project are included in **Attachment 2** and a 3D Rendering of the new Pond Pumping Station is included in **Attachment 3**.

As filling of the site is required for the new wells and pump station to meet DPH requirements, compensatory flood storage areas will be constructed so as to not increase the current flood elevation levels, as given by FEMA guidelines. The new structure and wells will add approximately 6,543 cubic yards of fill within the floodplain. Approximately 15,327 cubic yards of material will be removed from the floodplain for the creation of compensatory storage. These compensatory storage areas will also create additional wetland areas. Fill and earth removal on the site is associated with construction activities only and the final use of the site will not include earth removal activities. A Special Permit for Earth Removal in Excess of 400 Cubic Yards is also being filed for approval. The project will impact approximately 24,952 square feet of wetlands. However, wetlands replication will be done at a ratio of three to one, with a total of 75,946 square feet of wetlands replication proposed. In total, the project is expected to disturb approximately 223,000 square feet of land. This includes areas for wetland replication; compensatory storage creation; and disturbances for installing the new wells, associated yard piping, abandoning and decommissioning existing wells, Pond Pump Station building construction, and demolition of the three existing buildings. A Permit for Flood Plain Development (Application #23-458F-305), Form IW-1 (Application for a Wetlands Permit) (Application #2020), and Form IW-2 (Application for a Wetlands Boundary Change) (Application #2019) were approved by the Bristol Inland Wetlands and Watercourses Agency of the Conservation Commission on June 6, 2024 for this project. A Site Plan Permit for this project is also being filed for approval.

An Erosion and Sediment Control Plan has been developed to control accelerated erosion and sedimentation from stormwater runoff on the site during construction based on the best available technologies. The Control Plan narrative is included with this application in accordance with Section 15.1.5. The “Connecticut Guidelines for Soil Erosion and Sedimentation Control (2002)” document was utilized in preparation of the Plan. A Stormwater Management Report for post-construction conditions has also been developed for this project based on the 2004 *Connecticut Stormwater Quality Manual (CSQM)* as required in Section 15.5.3. A copy of the Stormwater Management Report is included as **Attachment 6** to this application.

The new Pond Pump Station and Lower Wellfield area will be enclosed in a 6.5-foot tall chain link fence for security. A double-leaf swing gate will provide access to the site on the driveway. As shown on the Drawings, the fence and access gate are located outside of the 50-foot required front yardage for R-40 residential zones. A double-leaf vehicular control gate will be located at the foot of the driveway to control vehicular access onto the public utility site. This gate will be less than the 4.5-foot height restriction for fences within front yards and will be more than 50 percent open. A detail for this vehicular control gate is included in the drawings. An existing vehicular access gate for the Upper Wellfield access road (located on the north side of Maltby Street) will remain.

Public utility buildings are not listed as a Use Group in the table included in Section 13.2 of the Zoning Regulations; however, two parking spaces will be provided at the Pond Pumping Station. Each parking space is designed to be 10-feet wide and 18-feet deep, meeting the requirements of perpendicular parking spaces required by Section 13.7.2. As a utility service building, this facility is not open to the public and it will not be continuously manned by NBWD staff. It is not expected that more than two NBWD staff vehicles will be present on-site during operations. The post-construction vehicle traffic from NBWD staff is not expected to increase from their current operations. In the event potable water treatment is implemented for the Lower Wellfield, it is expected that the facility will received 2-3 trucks per month for deliveries.

A construction vehicle routing figure is included as **Attachment 5** to this application. The main route for construction vehicle access to the site on Maltby Street will be via Stafford Avenue, south to Farmington Avenue (Route 6). Vehicles can than access other State Roadways, including Route 69 (to the west) and Route 177 (to the east). It is expected that 15-20 construction vehicles (including pickup trucks, trailers, dump trucks, etc.) could be accessing the site during construction. The Annual Average Daily Traffic (AADT) for Stafford Avenue is 8,300 vehicles per day, 19,300 vehicles per day for Route 6 (west of Stafford Avenue), and 23,200 vehicles per day for Route 6 (east of Stafford Avenue). The construction vehicles generated by this project will represent less than 1% of traffic in the area. For access to the compensatory storage area located in the south of the site (closest to Harbor Freight), construction vehicle access will be off Mix Street via Stafford Avenue. Additionally, work to install new water and sewer utilities within Maltby Street will require temporary lane closures. Typical traffic management details have been developed and are included in the attached design drawings.

The accompanying plans to this application are based on a Class A-2 survey map prepared by a registered land surveyor licensed to conduct business in the State of Connecticut with the exception of Sheets C-13, Sheet C-14, and Sheet C-14A. These sheets depict the general locations of wetland replication and compensatory storage areas and are currently based on a Class D survey due to the scale and size of the parcels and location of work. We request a Class A-2 survey of these areas to be included as a condition of approval for this application and the final Class A-2 survey will be performed and submitted to the Commission for final issuance of the Special Permit prior to construction. Additionally, the wetlands replication and compensatory storage area in the southernmost part of the site, shown on Sheet C-13, cannot comply with the 100-foot buffer zone to a residential property (as required by Section 15.2.5.B). The closest abutting residential property line is 70-feet from proposed excavation activities for the wetlands replication and compensatory storage area. The location of this earth removal work to create compensatory storage is dictated by the contours of existing grade and the removal of certain volumes at each elevation to offset fill brought to that same elevation. It is important to note that this area of the site is heavily vegetated along with the abutting residential properties. We also note that the closest residential building on these lots are 250-feet away. We believe the dense vegetation, distance to residential dwelling, and nature of this construction (creation of wetlands area without a permanent structure) comply with the intent of requirements in Section 15.2.5.B for screening.

Erosion Control Narrative

Zoning Commission – Application for Special Permit

Erosion and Sediment Control Plan- Project Narrative:

This Erosion and Sediment Control Plan is provided in accordance with Section 15.1.5 of the Bristol Zoning Regulations. The erosion and sedimentation control measures at the White Bridge facility focus on the protection of wetlands and waterways during and following construction since the work includes land disturbances, excavation dewatering, supply pond and canal sediment removal activities, and other associated construction activities. Several methods are included on the Drawings to slow the flow of runoff and protect disturbed land during construction activities. Please refer to the project plans for typical details of measures to protect wetlands and waterways during and after construction. The following summary presents typical mitigation measures that will be implemented to avoid and minimize wetland impacts during construction.

Construction Period

- During construction, the limit of land disturbances will be kept to a minimum, where possible, and the construction will be sequenced so the entire site will not be disturbed at the same time.
- Clearing and grubbing will be limited to only the areas necessary for work to be performed, specifically in areas at the Upper and Lower Wellfields (Sheet C-9 and C-11) where wells and piping will be installed, at the Maltby Street 16" pipe crossing (Sheet C-18), at areas where wetlands and compensatory storage will be created (Sheet C-13 and C-14), and areas around the Supply Pond for access during sediment removal activities (Sheet C-23).
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed at the down gradient limits of work and construction access roadways prior to the commencement of work to prevent the transport of sediment to the downgradient wetlands and waterways during construction (see Sheets C-6 thru C-8). Specifically, at the Upper Wellfield this includes compost logs/straw wattles along the facility driveway from Maltby Street to the existing Pumping Station and down each of the well field laterals. At the Lower Wellfield, this includes along the wetlands to the north and west of proposed work, along the Coppermine Brook to the east, around the Supply Pond, and along both sides of the Canal to the Polkville Avenue Brook. These barriers will be inspected at least once per week and within 24 hours of rainfall events ½-inch or greater and repaired as needed. These barriers will remain in place until all disturbed soils are stabilized. A stockpile of compost logs/straw wattles and silt fence will be maintained on site for routine maintenance and emergency repairs. Barriers will be replaced as necessary due to sediment build-up and degradation.
- Sedimentation barriers (i.e., silt fence and/or compost logs/straw wattles installed per industry standards) will be installed surrounding temporary stockpile areas.
- For all slopes 4:1 or steeper, an erosion control blanket will be required, including at the Upper and Lower Wellfield wells (see Sheet C-9 and C-11). Temporary erosion control blankets will be inspected at least once per week and within 24 hours of rainfall events.

- A turbidity curtain will be installed to prevent sedimentation and turbidity disturbances in the Coppermine Brook during canal and supply pond sediment removal activities (see Sheet C-23 and Detail Sheet C-24). Turbidity curtains will be inspected daily during Supply Pond and canal sediment removal activities. The turbidity curtain will not be removed before sediment removal activities have ended and clarity of water has returned.
- Catch basin filters will be installed on catch basins near all excavation work on Maltby Street, Stafford Avenue, and Mix Street (See Sheet C-18 and Detail Sheet C-24).
- In the event that excavation dewatering is necessary, water will be pumped and discharged to one of the temporary sedimentation basins in designated areas of the site (see Sheet C-6 thru C-8 and Detail Sheet C-24). Temporary sedimentation basins will be inspected at least once per week and cleaned as needed to remove accumulated sediments. Temporary portable sediment tanks may also be used to handle significant amounts of excavation dewatering. All water to be discharged from dewatering activities will be filtered or otherwise treated prior to discharge to prevent siltation to adjacent areas. Best management practices will be used by the Contractor in order to prevent siltation to adjacent areas during dewatering activities.
- A temporary sediment dewatering and stockpiling area has been designated within the Supply Pond to dewater removed sediments during restoration activities (see Sheet C-23 and Detail Sheet C-24). Stockpiled materials and containment area will be inspected daily during dewatering activities, weekly during non-dewatering activities, and within 24 hours of rainfall events of ½-inch or greater.
- A stabilized construction entrance is also being required for the site to prevent tire tracked soils to onsite and offsite locations (see Sheet C-23 and Detail Sheet C-24). The stabilized construction entrance will be inspected periodically and additional top dressing or length will be added, as necessary, to continue capturing sediment tracked on vehicles.
- The silt fence and/or compost log/straw wattle barrier will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- The sedimentation barriers will not be removed until the site areas are vegetated, paved or otherwise permanently stabilized to prevent erosion of exposed soils. Work will proceed as rapidly as possible, limiting the exposure time of disturbed soils to wind and precipitation.
- Periodic inspections will be made by the applicant to ensure compliance with the permit conditions.

Spill Control Measures

- Spill containment equipment (e.g. oil absorbent pads, oil absorbent materials, containment booms, shovels, etc.) will be stored in the equipment storage and refueling area in an easily accessible manner for use in the clean-up of accidental releases of fuel or other hazardous materials. Should there be an accidental release the proper authorities will be notified in accordance with all applicable federal, state, and local laws; and

- To minimize the possibility of leakage of hydraulic fluid, all hydraulic lines on all construction equipment and vehicles will be inspected at the end of each workday. If any excessive wear or leakage is observed, the line will be repaired prior to further use. In addition, a supply of oil absorbent materials (i.e. pads, "speedy dry," and/or booms) will be maintained with the equipment at the work area for immediate deployment in the event of an accidental release of fuel, hydraulic fluid, oil, etc.

Schedule for Grading and Construction Activities:

A proposed construction sequencing for critical path items in the White Bridge Waterworks Facilities Upper and Lower Wellfields and Pond Pumping Station Project is included as an attachment to this application. Tasks listed are generally to be performed within each proposed stage, and are not necessarily presented sequentially. As required by Project Specifications, the Contractor is required to submit a detailed Final Construction Schedule for approval by the Engineer. Further, as required by the Specifications, the Contractor is required to submit a detailed Construction Sequencing Plan for review and approval by the Engineer. Both the Construction Schedule and Construction Sequencing Plan submitted by the Contractor will be reviewed for compliance with time of year restrictions imposed by the Natural Diversity Database (NDDB) (no bank disturbance work in/adjacent to wetlands November 1 through March 15) and for the expected Great Blue Heron nesting period (March through May).

Some specific sequencing constraints and estimated durations are listed below. <u>These represent a suggested sequencing for critical path items or items that will require earth excavation and disturbance of soils. The final Construction Sequence will be developed by the Contractor.</u> Some items listed in each "Stage" can/will overlap with items listed in previous stages.

<u>Construction Sequencing - Stage 1 (Fall 2024 – Fall 2026)</u>

- Terminate operation of existing Lower Wellfield (LWF) Wells
- **Install Erosion and Sedimentation control measures around the Lower Wellfield, Lower Wellfield Pump Station, Supply Pond, and Canal areas**
- Demolish existing LWF Pumping Station (3 months)
- Demolish existing caisson and fencing near intake pond (1 month)
- Perform canal and pond restoration (to be completed following demolition of the caisson and prior to replacement of the canal culverts) (3 months – **not to be performed between November 1 and March 15**)
- Install test wells, stream gauges, and other equipment required for well pump testing at Upper Wellfield (UWF) and LWF (2 months)
- **Install Erosion and Sedimentation control measures around the Upper Wellfield and access driveway**
- Drill UWF Wells. Order final UWF pumps/motors (3 months each, 7 months total – **not to be performed between November 1 and March 15 at applicable wells**)
- Drill LWF Wells. Order final LWF pumps/motors (3 months each, 13 months total – **not to be performed between November 1 and March 15 at applicable wells, not to be performed between March and May**)
- Install well meter vault, vault control cabinets, meter, and electrical equipment (18 months total, to follow each well drilled – **not to be performed between November 1 and March 15 at applicable wells**)

- Install foundation of new Pond Pumping Station building (3 months – **not to be performed between March and May**)

Construction Sequencing - Stage 2 (Spring 2025 – Fall 2026)

- Install yard piping from UWF and LWF for raw water transmission to Shuttle Meadow during Groundwater Under Direct Influence of Surface Water (GWUDI) testing. Install temporary connection to existing Pond Pumping Station. Install fiber optic cabling (6 months – **not to be performed between November 1 and March 15**
- Install final LWF yard piping, electrical conduit, fiber optic cabling (6 months – **not to be performed between November 1 and March 15 in applicable areas, not to be performed between March and May in applicable areas**)
- **Final stabilization of UWF and LWF wellhead areas**
- Perform canal crossing work for yard piping and restore canal culverts (1 month – **not to be performed between November 1 and March 15**)
- Install new gas service from Mix Street to Pond Pumping Station building (2 months – **not to be performed between March and May**)
- Install new sewer force main and water service to Maltby Street (3 months)
- Install fiber optic cables and Well Pump Communication/VFD Platforms (3 months each, 9 months total)
- Terminate operation of existing UWF Wells. **Install Erosion and Sedimentation control measures around the UWF Pump Station**
- Demolish existing UWF Pump Station
- Install and test UWF submersible well pumps and motors (2 months)
- Install and test LWF submersible well pumps and motors (2 months)
- Install electrical service and equipment at the new Pond Pumping Station, UWF, and LWF (3 months)

Construction Sequencing - Stage 3 (Summer 2025 – Spring 2028)

- Setup instrumentation and perform GWUDI Testing on new UWF and LWF wells (12 months). UWF and LWF pumped via raw water main to Shuttle Meadow Reservoir
- Construct new Pond Pumping Station Building (18 months total - **exterior construction not to be performed between March and May**)
- Install yard piping to complete final connections to Pond Pumping Station (1 month)

Construction Sequencing – Stage 4 (Summer 2027 – Fall 2027)

- GWUDI testing completed
- Completion of new Pond Pumping Station building. Terminate operation of existing Pond Pumping Station
- Abandon/demolish existing Pond Pumping Station building, electrical shed, and UWF Pumping Station. Cap and abandon temporary connections (3 months)

Construction Methods:

Trench excavations will be used for pipe, valve, and appurtenance installation. Suitable material removed from trenches may be placed back into the excavation and compacted or temporarily stockpiled on site, while material deemed unsuitable for reuse will be removed from the site. Open excavations will be used to install the foundation and footings for the Pond Pumping Station and the vaults located at each well. Material removed from these excavations will be taken off-site or temporarily stockpiled on the site with proper best management erosion and sedimentation control measures being implemented around the

stockpile to prevent sedimentation from stockpiled material. This includes placement of straw wattles/compost socks and a trenched silt fence around the stockpile area in addition to the sedimentation controls along the limits of work.

Alternative construction methods for the yard piping may include trenchless installation of pipe to limit area of disturbed land. Pipe could be installed by horizontal directional drilling, pipe ramming, pipe bursting of existing pipelines, tunneling, or horizontal auger boring. All of these methods would still require excavation for access to the existing pipe or as insertion and receiving pits. None of these methods were selected due to the amount and complexity of existing utilities present at the site, lack of record drawings for most of these utilities, and complexity of new piping connections to be installed.

A temporary stabilized construction entrance will be installed during sediment removal and restoration of the supply pond and canal. This construction entrance will run along the berm between the canal and supply pond to the temporary stabilized pond access point. Sediment removed from the supply pond and canal will be temporarily stored within the supply pond to dewater before being removed from the site.

Backfilling of trenches and excavations will be completed as soon as practicable. Pipe bedding will be placed up to 12-inches above the crown of the pipe and suitable backfill will be placed in 6-inch lifts and compacted by hand or pneumatic ramming with tools weighing at least 20 pounds to finished grade. Disturbed areas will be loamed and seeded to provide vegetated soil cover against sheet runoff and wind erosion. An erosion control blanket will be required for slopped areas until vegetated cover is established.

Typical construction equipment, including heavy machinery, is expected to be used to complete this work. Machinery may include bulldozers, loaders, excavators, backhoe loaders, triaxle dump trucks, and drill rig trucks. Equipment, machinery, and materials will be stored or stockpiled in the designated areas shown on the sequencing drawings.

Post-Construction Period

The following summary of mitigation measures will be implemented to restore any areas affected by short-term impacts that occur in or adjacent to wetlands.

- The final site is designed to have a 3-foot wide gravel infiltration trench with 1.5”-3” diameter washed aggregate covered with 6” pea gravel running along the facility driveway to collect and slow the flow of runoff from impervious surfaces (see Sheet C-10 and Detail Sheet C-26).
- All areas disturbed during construction activities are to be loamed and seeded to provide vegetated soil cover protection against sheet runoff and wind erosion (see Sheet C-9 thru C-12). Seeded areas will be inspected at least once per week and within 24 hours of rainfall events of ½-inch or greater.
- Once established, seeded areas will be mowed and maintained as appropriate.
- The Pond Pumping Station building roof drain leader will outlet to a riprap apron (See Sheet C-10 and Detail Sheet C-26). Riprap used in the roof drain apron will be inspected periodically to determine if high flows have caused scour beneath riprap or if vegetation removal is required. On

the northeast side of the Pond Pumping Station building, a retaining wall will be utilized to prevent steep slopes.

- The wetland replication and restoration areas will be planted with trees and shrubs per the planting plans, and seeded with a wetland seed mixture.
- If seeding occurs outside of the growing season, temporary stabilization measures (i.e., mulching or erosion control blankets) will be used to prevent erosion until the area can be seeded during the following growing season.
- Reseeding and mulching disturbed areas. These areas will be maintained and re-seeded to ensure that grass cover is adequate to stabilize the exposed soil, and
- Sedimentation and erosion control barriers will not be removed until a vegetative cover dense enough to prevent erosion is established.

Selections from Figure 3-2 of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control:

Figure 3-2 Measure Selection Matrix

Identify Problem Areas	Identify Control Problems	Identify Strategy	Select Specific Measure		Plan Key
			Functional Group	Measure	
Disturbed Areas	**Control Soil Detachment**	Preserve and Conserve Existing Site Resources	Protect Vegetation	Tree Protection	TP
			Preserve and Conserve Soil	Topsoiling	TO
	Raindrop Splash			Land Grading	LG
				Surface Roughening	SR
Short or Shallow Slopes	Sheet & Rill Erosion	Protect Surface		Dust Control	DC
			Vegetative Soil Cover	Temporary Seeding	TS
	Wind Erosion			Permanent Seeding	PS
				Sodding	SO
				Landscape Planting	LP
Steep Slopes			Non-Living Soil Protection	Temporary Soil Protection	TSP
				Mulch for Seed	MS
Long Slopes				Landscape Mulch	LM
				Temporary Erosion Control Blanket	ECB
				Permanent Turf Reinforcement Mat	TRM
				Stone Slope Protection	SSP
Stockpile Areas		Protect Surface and/or Convey Runoff	Stabilization Structures	Retaining Walls	RW
				Riprap	RR
	Control Water Movement			Gabions	G
Borrow Areas				Permanent Slope Drain	PSD
	Gully Erosion			Channel Grade Stabilization Structure	CSS
				Temporary Lined Chute	TC
				Temporary Pipe Slope Drain	TSD
	Channel & Stream Erosion		Drainageways and Watercourses	Vegetated Waterway	VW
Drainage Ways		Convey Runoff		Temporary Lined Channel	TLC
				Permanent Lined Waterway	PW
Wetlands and Watercourses				Temporary Stream Crossing	TSC
		Direct Runoff	Diversions	Temporary Fill Berm	TFB
				Water Bar	WB
				Temporary Diversion	TD
Waterbodies				Permanent Diversion	PD
		Intercept Grnd.Water	Subsurface Drains	Subsurface Drain	SD
		Detain Runoff	Detention Structures	Detention Basin	DB
Areas of Flooding and Existing Erosion	Natural Resource Degradation	Diffuse Runoff	Energy Dissipators	Level Spreader	LS
				Outlet Protection	OP
				Stone Check Dam	SCD
	Control Sediment Deposition	Detain Sediments	Sediment Impoundments, Barriers, and Filters	Temporary Sediment Basin	SB
				Temporary Sediment Trap	TST
Drainage Outlets				Hay Bale Barrier	HB
	Protect Onsite and Offsite Areas			Geotextile Silt Fence	GSF
				Turbidity Curtain	TC
				Vegetative Filter	VF
Travel Areas		Control Mechanically Moved Waters and Soils	Tire Tracked Soils	Construction Entrance	CE
			Dewatering	Pump Intake and Outlet Protection	PuP
				Pumping Settling Basin	PSB
				Portable Sediment Tank	PST
Dewatering				Dewatering of Earth Materials	DWM

Stormwater Management Report Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47020/NBW-Stormwater-Report

Geotechnical Report

USDA United States Department of Agriculture

NRCS Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

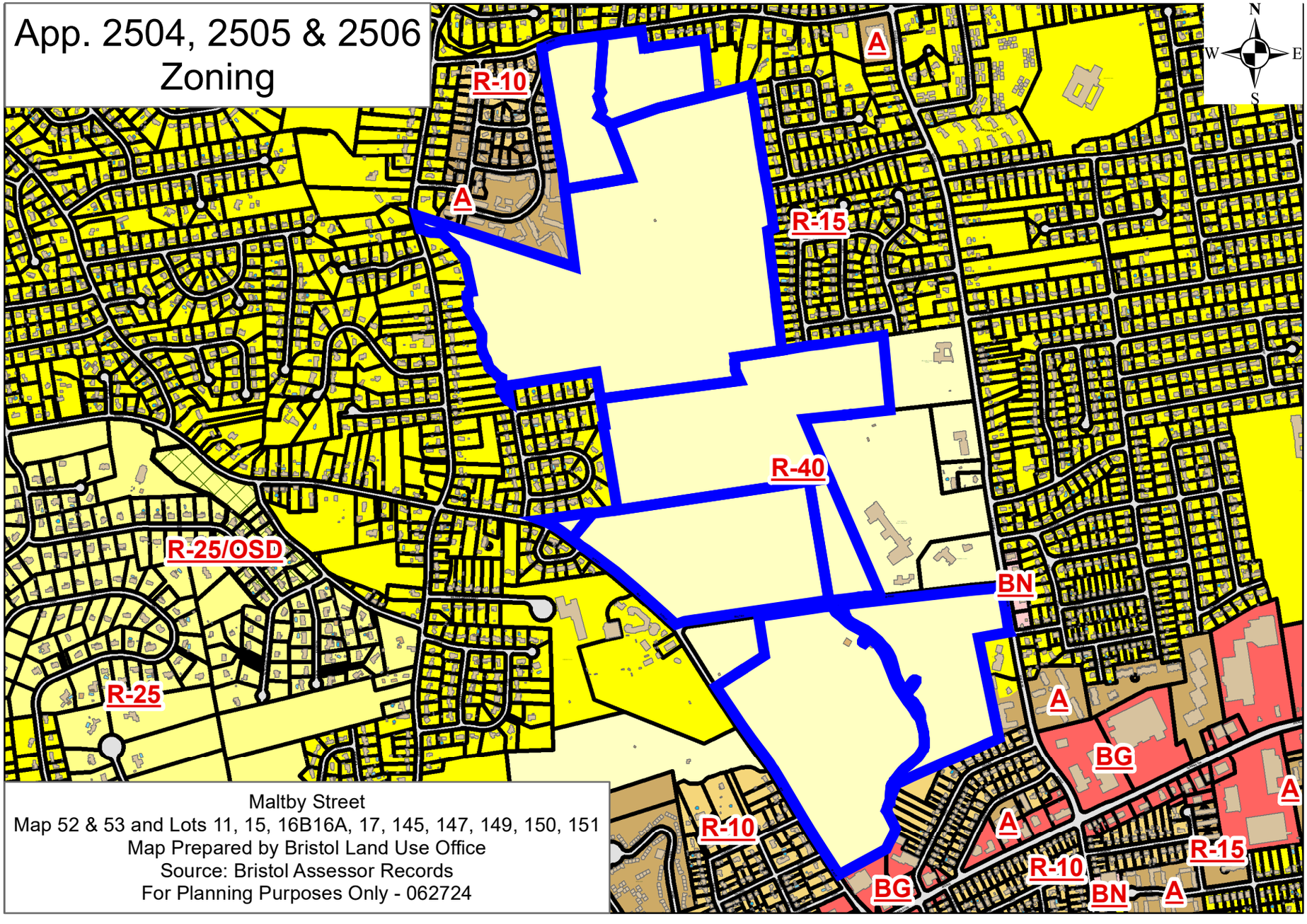
Custom Soil Resource Report for State of Connecticut

White Bridge Waterworks Facilities - Pond Pumping Station

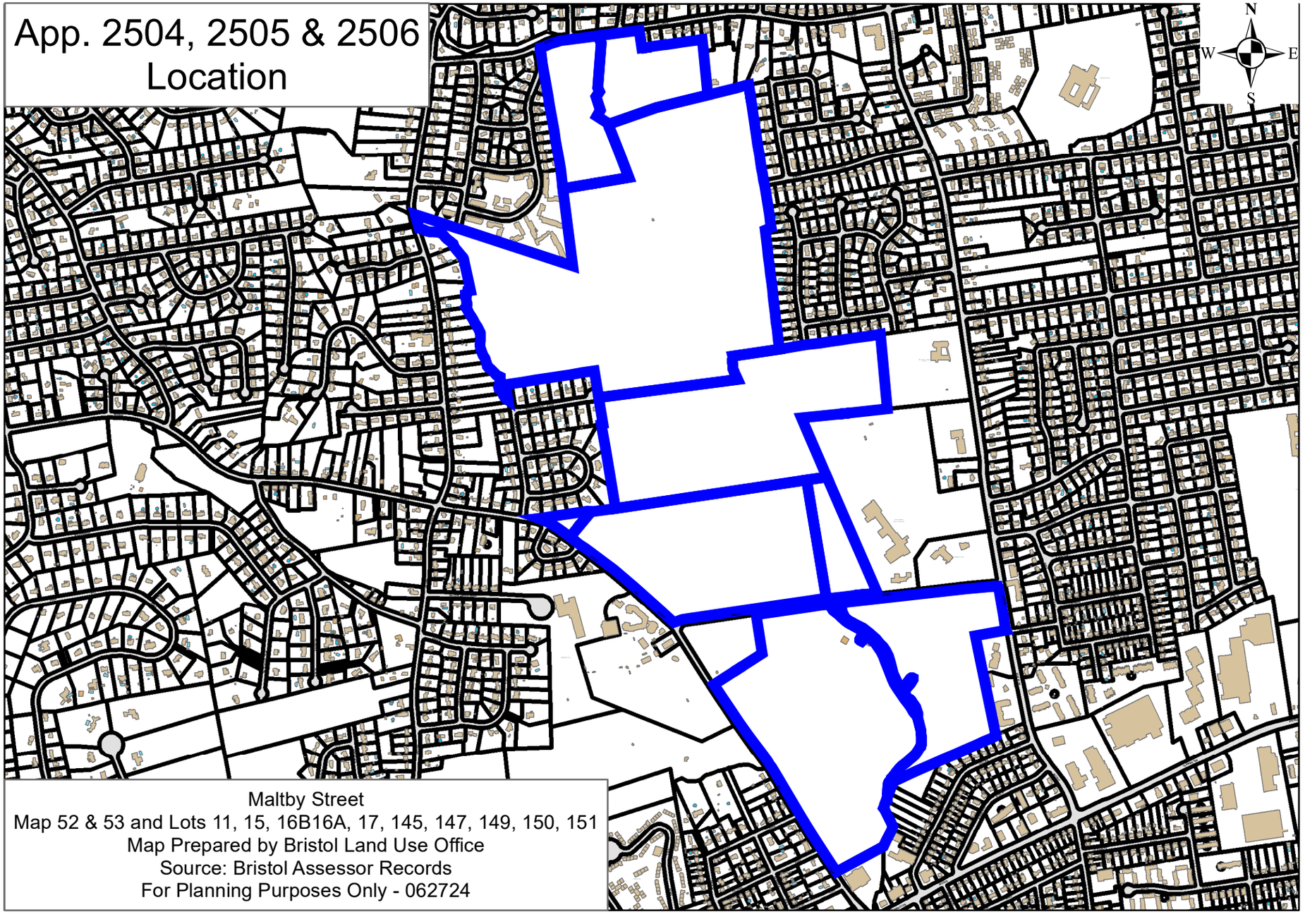
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https://www.bristolct.gov/DocumentCenter/View/47021/Geotechnical-Report



September 26, 2022

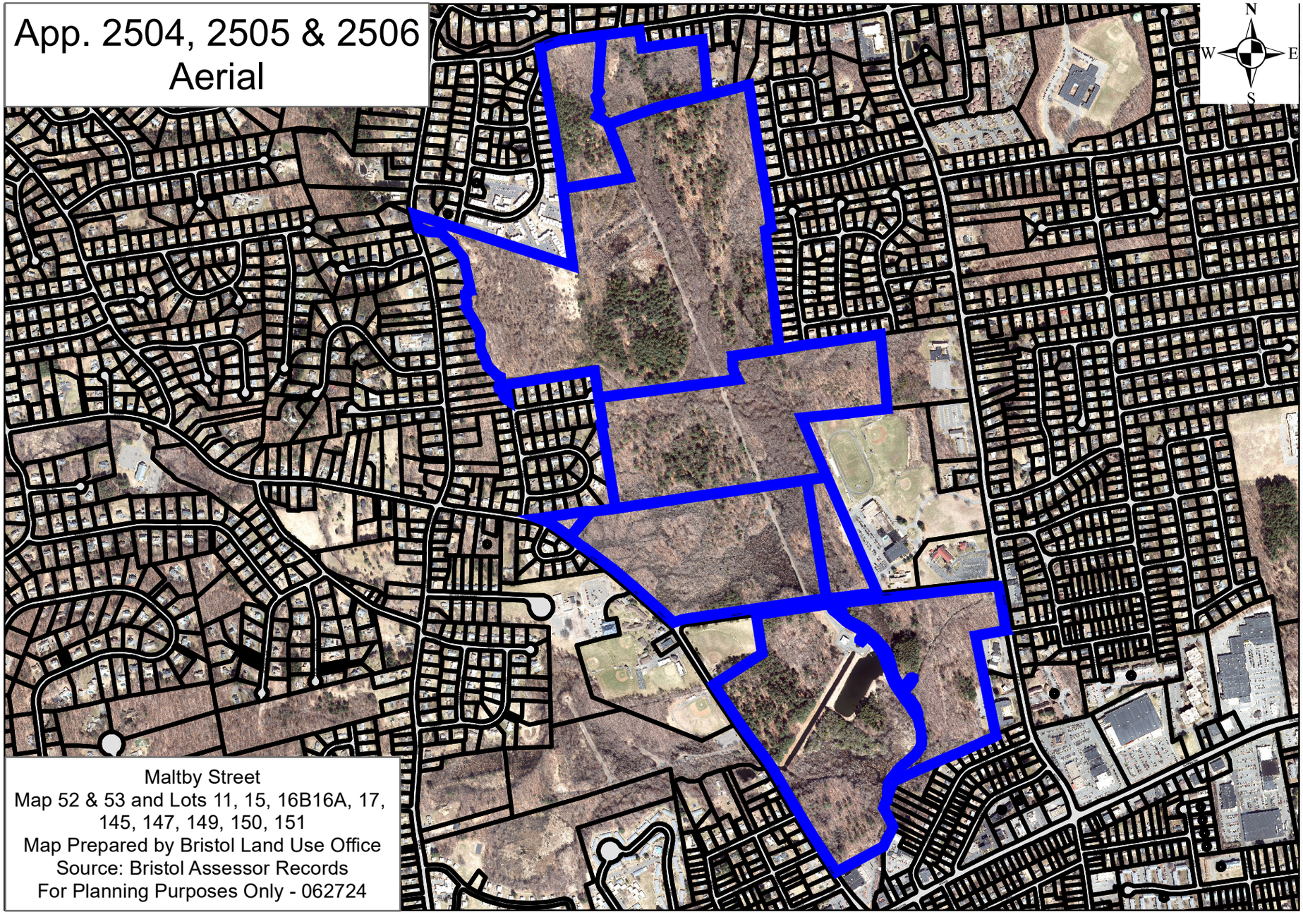

App. 2504, 2505 & 2506
Zoning
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R-40
R-25/OSD
BN
R-25
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BG
A
R-10
A
R-15
R-10
BG
BN
A
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506 Location

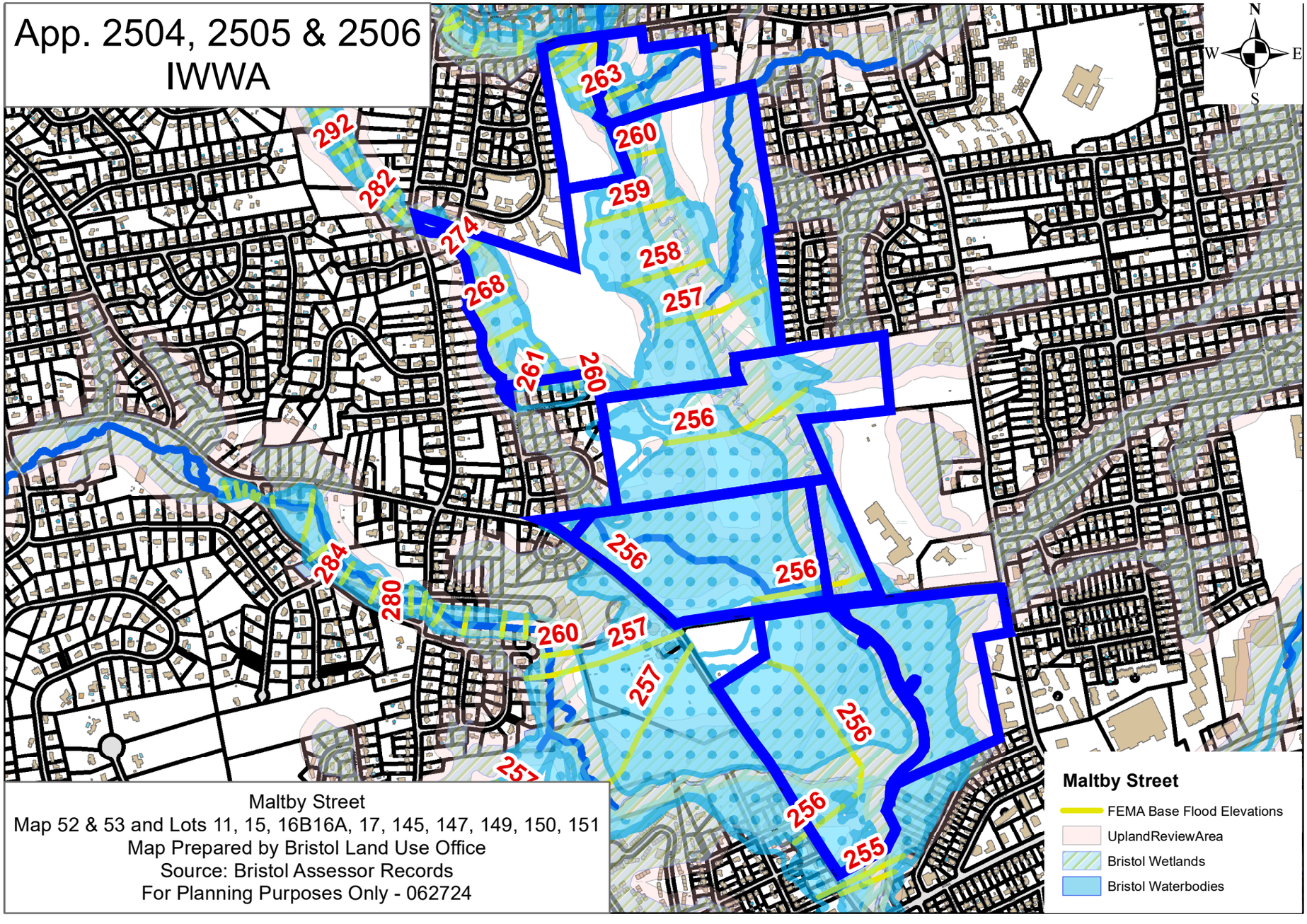


Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

App. 2504, 2505 & 2506
Aerial



Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724


App. 2504, 2505 & 2506
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284
280
260
257
257
256
256
255
Maltby Street
FEMA Base Flood Elevations
UplandReviewArea
Bristol Wetlands
Bristol Waterbodies
Maltby Street
Map 52 & 53 and Lots 11, 15, 16B16A, 17, 145, 147, 149, 150, 151
Map Prepared by Bristol Land Use Office
Source: Bristol Assessor Records
For Planning Purposes Only - 062724

Google Earth


Copper Mine Brook
Polkville Ave Brook
Layers
2D


Copper Mine Brook
Polkville Ave Brook
Field


Copper Mine Brook
Copper Mine Brook
Copper Mine Brook

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

BID NO. 4145

MAYOR

HONORABLE ERIN E. STEWART

DIRECTOR OF PUBLIC WORKS

MARK E. MORIARTY, P.E.

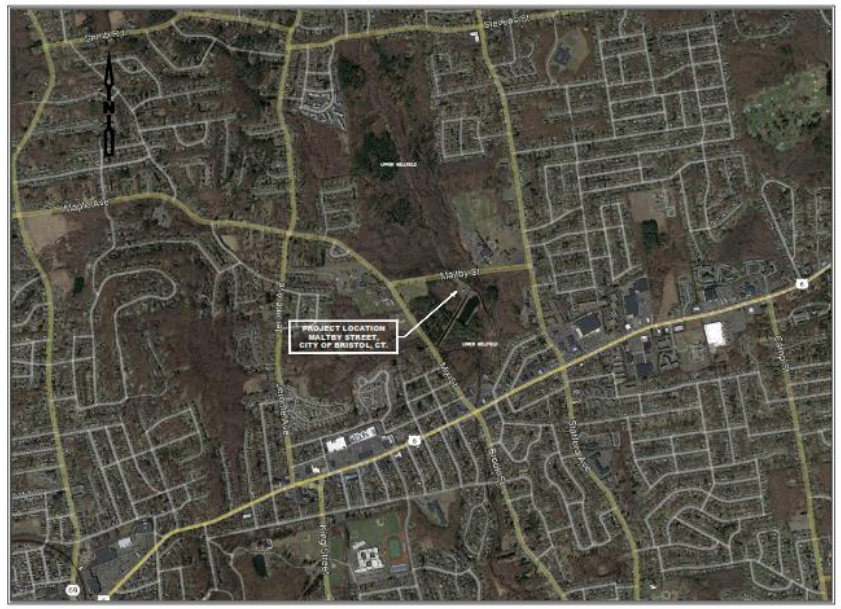
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

CDM Smith

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

Full Set of Civil Drawings at this Hyperlink:

https://www.bristolct.gov/DocumentCenter/View/47022/Full-Set-NBW

Site Plan

CITY OF NEW BRITAIN, CONNECTICUT

WATER SYSTEM IMPROVEMENTS

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

BID NO. 4145

MAYOR

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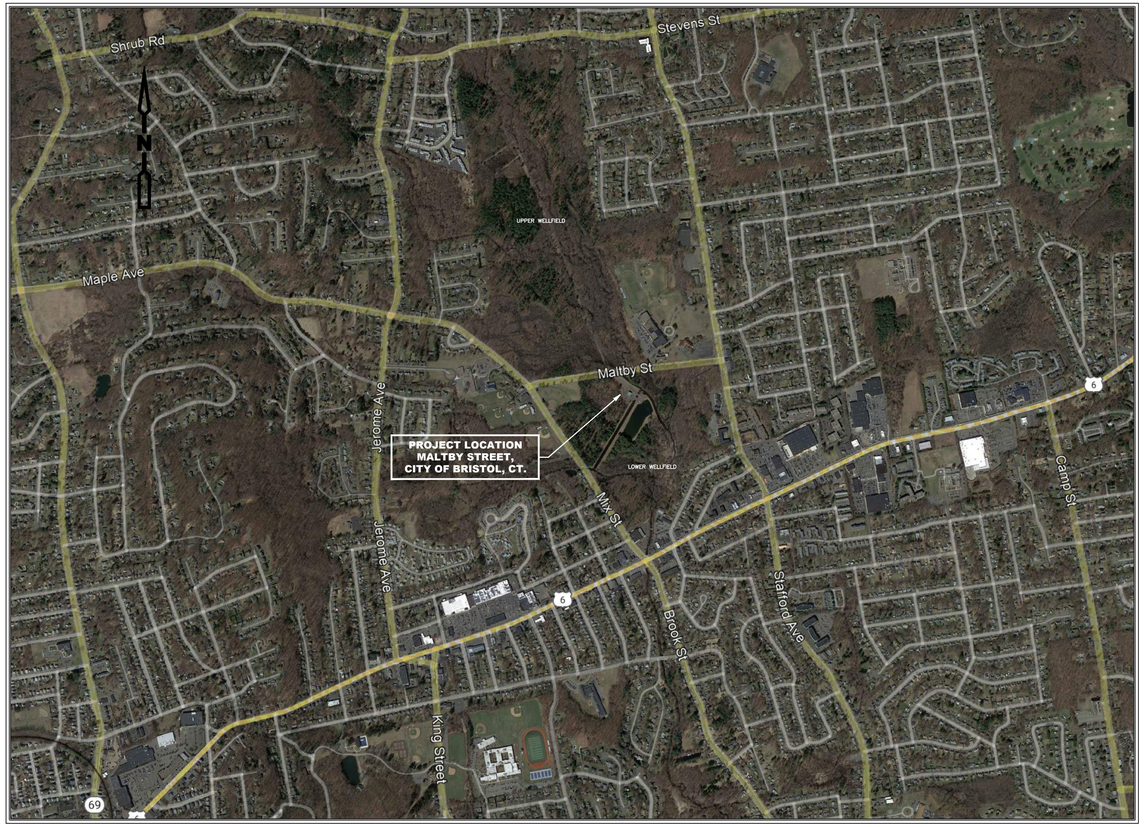
DIRECTOR OF UTILITIES DIVISION

RAMON ESPONDA, P.E.

SUPERINTENDENT OF UTILITIES DIVISION

CHRIS POLKOWSKI

JUNE 2024



LOCATION PLAN

SCALE: 1" = 1000'

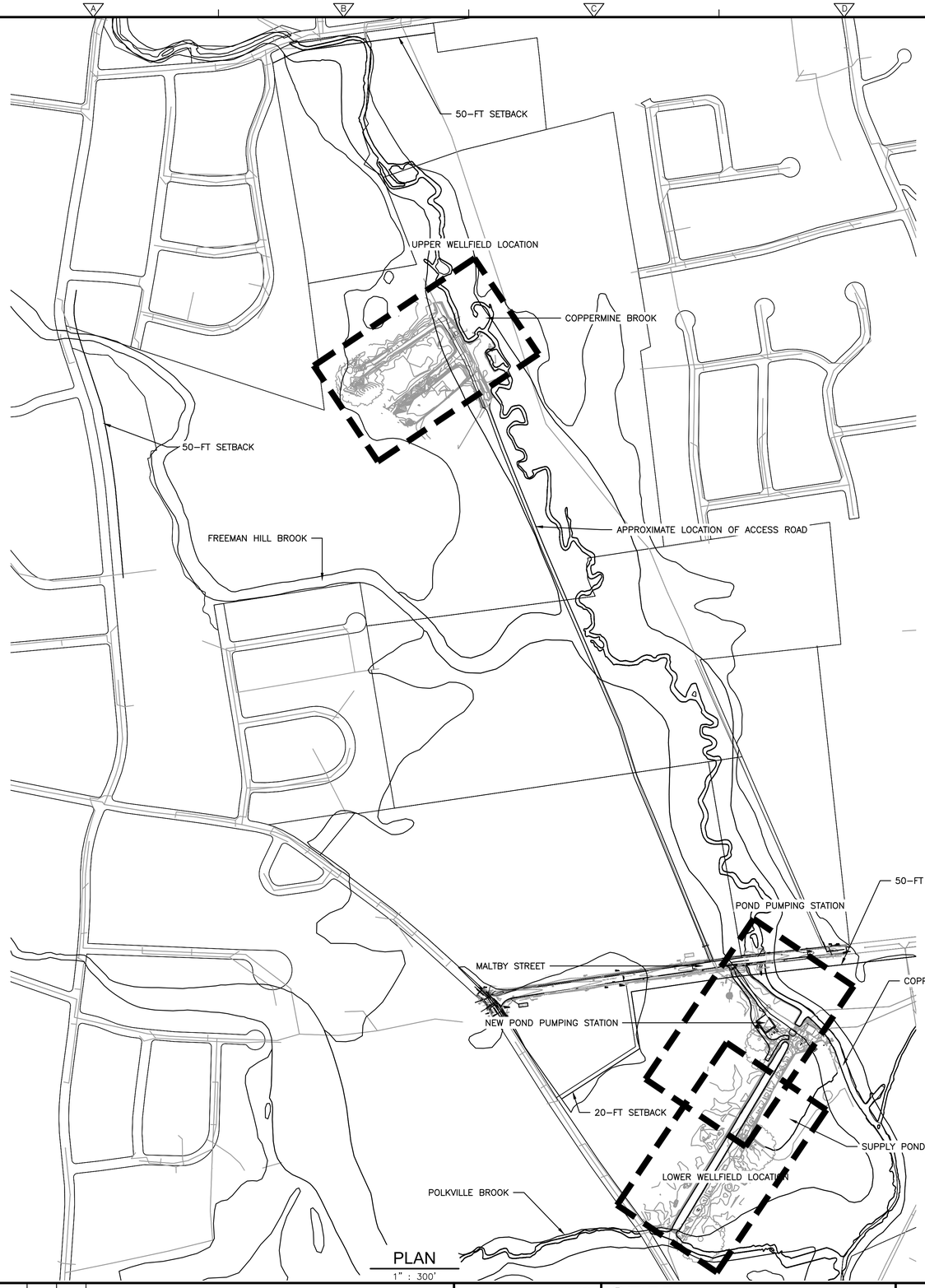
CDM Smith

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

EAST HARTFORD, CONNECTICUT

Water ***Environment*** ***Transportation*** ***Energy*** ***Facilities***

IMAGE OBTAINED FROM GOOGLE EARTH PRO DECEMBER, 2021
Plot Stamp – File: C:\USERS\ENGELSB\DC\ACCDOCS\CDM SMITH INC\10739-264571 – NEW BRITAIN CT WHITE BRIDGE WELL FIELDS AND PS\PROJECT FILES\01 GENERAL (G)\10 CADD\G00DNFCV.DWG Saved by: ENGELSB On: 11-Jan-24 Plotted on: 21-Jun-24 12:54 PM



PLAN
1" : 300'



PLAN
N.T.S.

FLOOD	LOWER WELLFIELD & POND PUMPING STATION ELEVATION (ft)	UPPER WELLFIELD ELEVATION (ft)
0.2% ANNUAL CHANCE FLOOD (500 – YR FLOOD)	256.7	259.7
1% ANNUAL CHANCE FLOOD (100 – YR FLOOD)	255.9	259.0
2% ANNUAL CHANCE FLOOD (50 – YR FLOOD)	255.6	258.6
10% ANNUAL CHANCE FLOOD (10 – YR FLOOD)	253.0	258.0

NOTE: ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED USGS DATUM NAVD88

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	**(LOT 53-145) MALTBY STREET BRISTOL, CT**
Zone:	**R-40 RESIDENTIAL ZONE**
Use:	**PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)**

Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

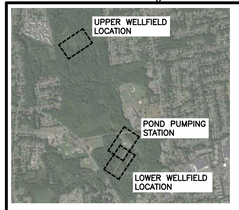
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

OVERALL SITE PLAN

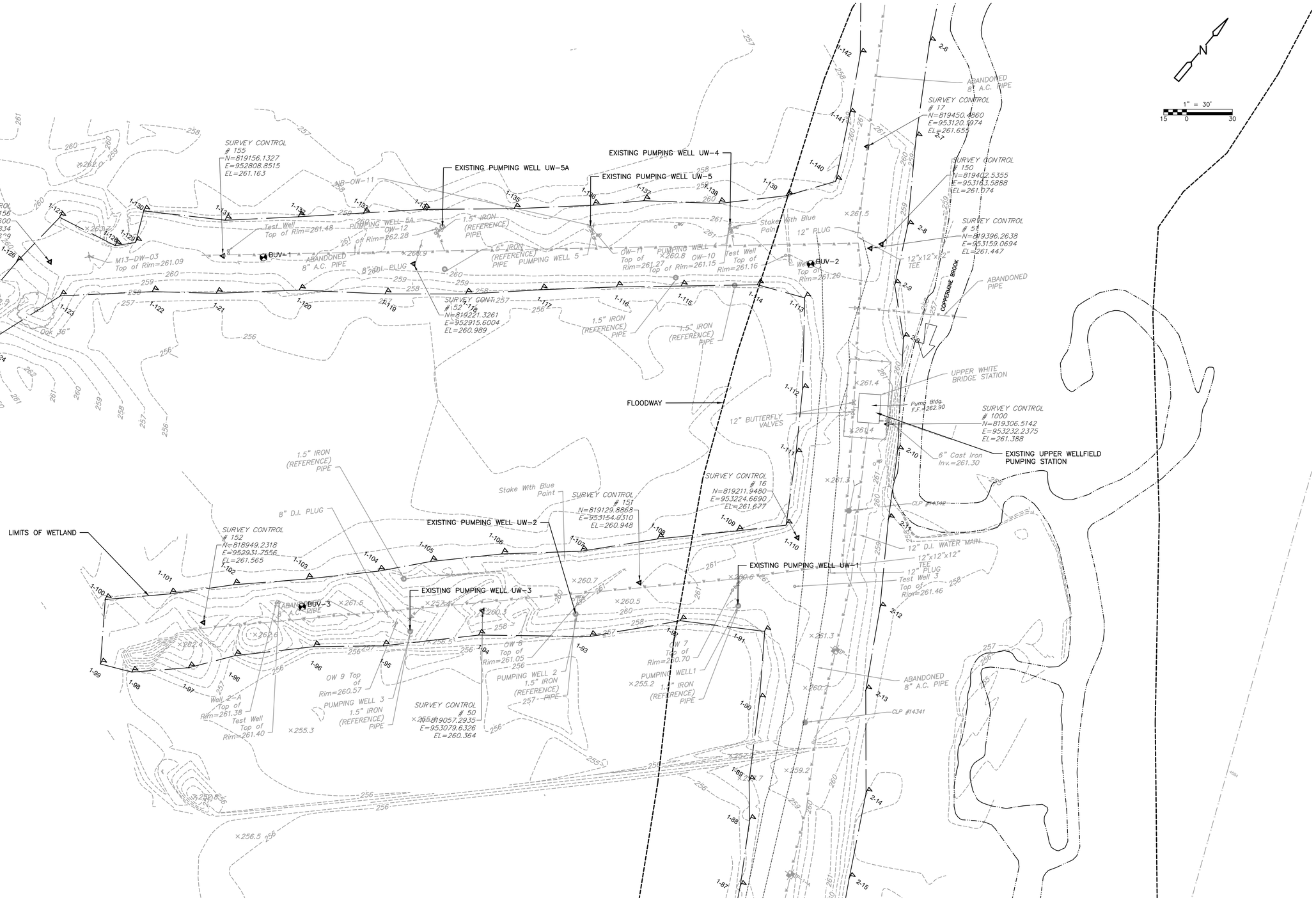
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FILE NAME: C002STPL.DWG
SHEET NO.
C-2

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PLAN
N.T.S.



NOTES:

1. AREAS OF THE UPPER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

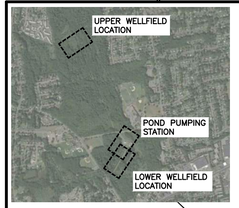
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C003STPL.DWG
SHEET NO.
C-3

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PLAN
N.T.S.

LIMITS OF WETLAND

SURVEY CONTROL
# 60
N=815542.7606
E=954587.8219
EL=251.733

SURVEY CONTROL
# 147
N=815295.0131
E=954567.0095
EL=251.162

SURVEY CONTROL
# 147
N=815295.0131
E=954567.0095
EL=251.292

SURVEY CONTROL
# 91
N=816091.6711
E=954678.5708
EL=256.530

SURVEY CONTROL
# 1
N=816091.7206
E=954678.5697
EL=256.431

SURVEY CONTROL
# 92
N=816144.3791
E=954804.3858
EL=256.979

1" = 30'
15 0 30

MALTBY STREET

COPPER MINE BROOK

3" Dia. Well
Top of
Rim=250.88

Well 11 3"
Upper Rim=251.62
Well 3" 11-A Upper
Rim=252.29

11-A Upper
Rim=251.62
3" Upper
Rim=251.63

BLWF-3

BPS-1
BPS-2
BPS-3
BPS-4
BPS-5

HBLW-1
HBLW-2

Well 8
Top of
Rim=249.80

Well 8-A
Top of
Rim=251.41

TWIN" 26" DEAD

"SISTER" MAPLES
T=8, 10"

EXISTING LOWER WELLFIELD PUMPING STATION
F.F.= 253.20
(TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)

EXISTING POND PUMPING STATION
F.F.= 253.15
(TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)

EXISTING CASSON WELL

20" D.I. COPPER WATER MAIN

1" D.I. COPPER SERVICE

ABANDONED 16" D.I. SUCTION HEADERS

16" D.I. WATER MAIN

UGGED 16" C.I. ION ABANDONED VALVE

Dia. of 26

INLET SCREEN AND GATE VALVE

12" Dia.Manhole
Top of
Frame=252.12

NB-OW-1
Top of
Frame=252.13

Top of
Frame=252.6

Existing Well (Typ)
Top of
Frame=251.48

NB-OW-14
Old 3" Well
Top of
Frame=252.60

Top of
Frame=253.20

Top of
Frame=253.05

Top of
Frame=252.96

Top of
Frame=253.73

Well 6A
of Rim=251.56
Test Well 6A
Top of Rim=251.4

Top of
Frame=252.20

Top of
Frame=253.85

16" WATER MAIN

6" D.I. WELL CONNECTIONS

CANAL

SUPPLY POND

FLOODWAY WESTERN BOUNDARY

FLOODWAY EASTERN BOUNDARY

MATCH LINE SEE SHEET C-5

NOTES:

1. AREAS OF THE LOWER WELLFIELD AND POND PUMPING STATION ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C-1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G.HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

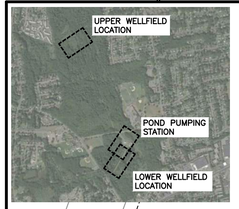
POND PUMPING STATIONS EXISTING CONDITIONS PLAN

PROJECT NO. 10739-264571
FILE NAME: C004STPL.DWG

SHEET NO.
C-4

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

APPROXIMATE LOCATION OF EXISTING GREAT BLUE HERON ROOKERY. SEE GENERAL NOTE 25 ON SHEET C–1 FOR MORE DETAILS

LIMIT OF WETLAND

SURVEY CONTROL # 2567 N=814780.4678 E=954191.2578 EL=249.809

SURVEY CONTROL # 149 N=815074.5860 E=954425.7922 EL=251.494

SURVEY CONTROL # 148 N=815197.8447 E=954516.4738 EL=253.523

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.292

SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733

SURVEY CONTROL # 31 N=814722.6132 E=954351.2270 EL=251.019

SURVEY CONTROL # 32 N=814962.7770 E=954515.6314 EL=251.406

SURVEY CONTROL # 33 N=815089.6478 E=954688.8275 EL=249.693

SURVEY CONTROL # 44 N=814637.4824 E=954479.1256 EL=248.687

SURVEY CONTROL # 45 N=814631.6821 E=954563.1325 EL=248.503

WELL 9 Upper Rim 250.16
WELL 9–A Upper Rim 250.18
Well 10 Upper Rim=251.81
Well 10–A Upper Rim=251.82
Well 7–A Upper Rim=251.62
Well 7 Upper Rim=251.63
Well 11 3" Upper Rim=251.62
Well 3" 11–A Upper Rim=252.29
3" Dia. Well Top of Rim=250.88

BLWF–1
BLWF–3
BLWF–4
BLWF–6

CANAL
CANAL

Top of Wall At Spillway=251.4
Test Well 5–A Top of Cap=250.35
Test Well OW–16 Top of Cap=251.91
Test Well 6A Top of Rim=251.56
Top of Rim=251.62
Top of Rim=252.60
Top of Rim=253.20
Top of Rim=253.05
Top of Rim=252.96
Top of Rim=251.42
3" WELL OW–5 Top of Rim=250.43
OW–15 Top of Rim=250.97
Old 3" Well Top of Rim=252.60
Top of Frame=251.67
Top of Frame=251.65
Top of Frame=252.55
Top of Frame=252.41
Top of Frame=252.37
Top of Frame=252.43
Top of Frame=252.15
Top of Frame=251.30
Top of Frame=252.20
Top of Frame=252.65
Top of Frame=253.73
Existing Well (Typ)
Well 5 stake
HEADER CAP
ABANDONED PIPE AND WELLS
FLOODWAY
POLKVILLE BROOK
SUPPLY POND
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
48" OAK
CLP #10213
CLP #10214
CLP #10216
CLP #1021
No #

MATCH LINE SEE SHEET C–4

NOTES:

1. AREAS OF THE LOWER WELLFIELD ARE LOCATED WITHIN HABITAT OF STATE AND FEDERAL LISTED SPECIES. REFER TO GENERAL NOTE 26 ON SHEET C–1 FOR MORE DETAILS.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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77 Hartland Street, Suite 200
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Tel: (860) 529-7615

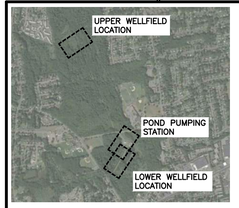
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
EXISTING CONDITIONS PLAN

PROJECT NO. 10739–264571
FILE NAME: C005GDPL.DWG
SHEET NO. C-5

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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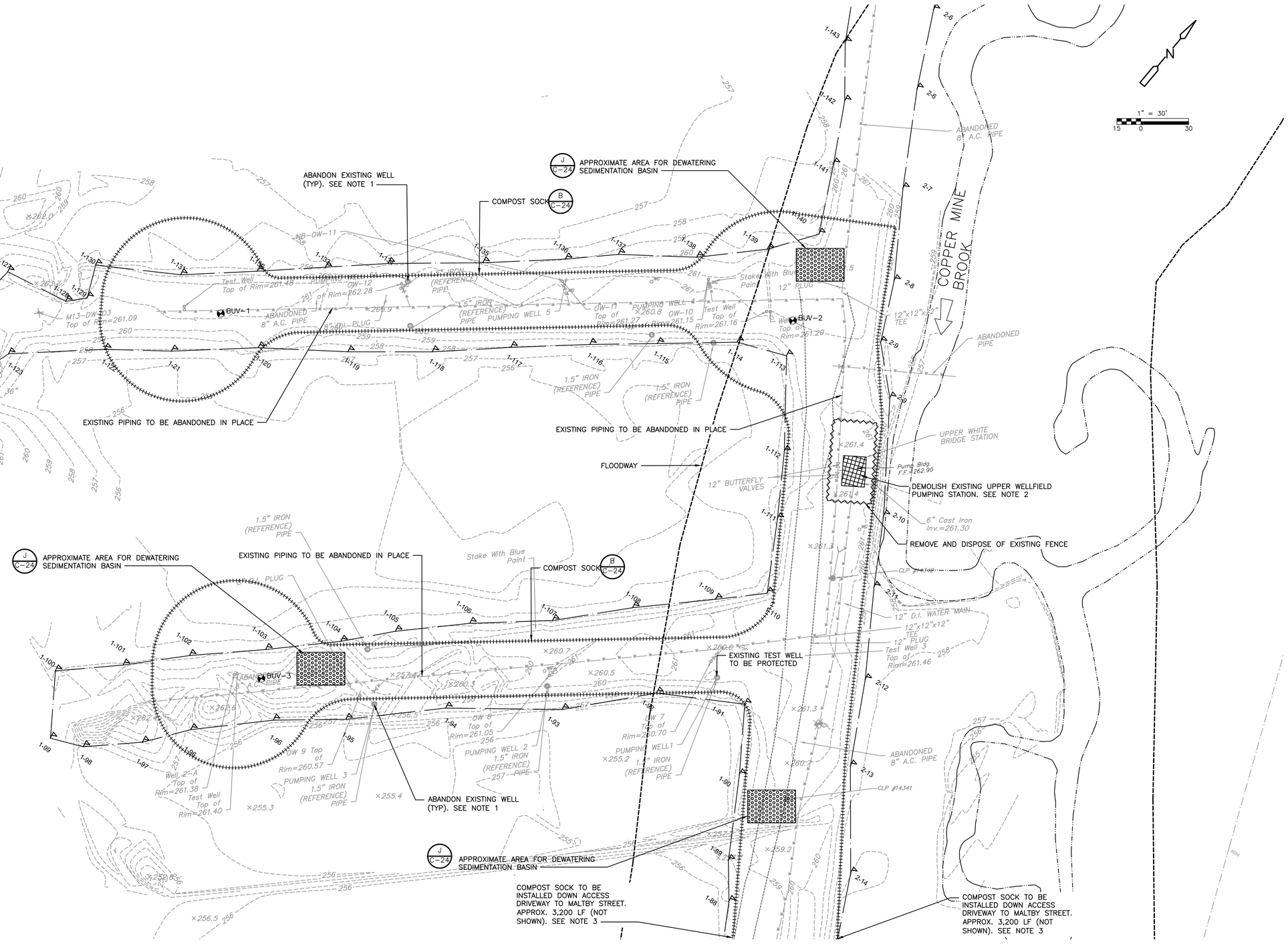
PLAN
N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE HEADER PIPE AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. THE EXISTING UPPER WELLFIELD PUMPING STATION BUILDING TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
3. CONTRACTOR TO INSTALL COMPOST SOCK ON BOTH SIDES OF THE UPPER WELLFIELD ACCESS DRIVEWAY (APPROX. 3,200 LF EACH, NOT SHOWN) TO MALTBY STREET. THE EXISTING ACCESS DRIVEWAY BRIDGE CROSSING OF THE FREEMAN HILL BROOK TO BE PROTECTED DURING CONSTRUCTION.
4. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.



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DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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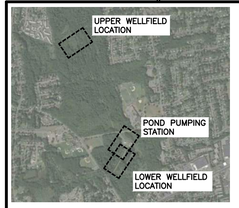
CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

UPPER WELLFIELD DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C006STPL.DWG
SHEET NO. C-6

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN

N.T.S.

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

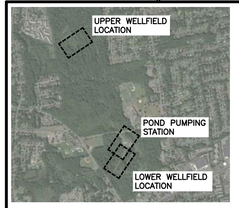
NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
3. THE EXISTING POND PUMPING STATION BUILDING TO BE DEMOLISHED AT COMPLETION OF NEW POND PUMPING STATION TO AT LEAST 2 FEET BELOW FINISHED GRADE. THE WESTERN WALL SHALL REMAIN TO AT LEAST 2 FEET BELOW GRADE. BUILDING FOUNDATION TO BE FILLED AND COMPACTED TO EXISTING GRADE. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE SPECIFICATION SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
4. THE EXISTING LOWER WELLFIELD PUMPING STATION BUILDING AND FOUNDATION TO BE DEMOLISHED TO ELEVATION 241.2 FT. EXCAVATION LIMITS FOR THE NEW POND PUMPING STATION BUILDING TO APPROXIMATE MIN ELEVATION 241.2 FT. OWNER TO TAG ITEMS AND EQUIPMENT TO BE SAVED PRIOR TO DEMOLITION. CONTRACTOR TO REMOVE AND RETURN TO OWNER ANY TAGGED ITEM OR EQUIPMENT. SEE DETAIL B ON SHEET C-26 AND SPECIFICATIONS SECTION 024116 FOR ADDITIONAL BUILDING DEMOLITION REQUIREMENTS.
5. THE EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED IN PLACE. THE CONE OF THE EXISTING CAISSON WELL TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE. SEE DETAIL B ON SHEET C-28 AND SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF THE EXISTING CAISSON WELL.
6. HAZARDOUS BUILDING MATERIALS WERE FOUND IN SAMPLES TAKEN FROM SELECT LOCATIONS IN EXISTING BUILDINGS. PRIOR TO COMMENCING WITH ANY MODIFICATIONS OR DEMOLITION WORK, REFER TO SPECIFICATIONS FOR KNOW LOCATIONS OF HAZARDOUS BUILDING MATERIALS AND EQUIPMENT, PROPOSED ABATEMENT AND DISTURBANCE WORK, REQUIREMENTS FOR ADDITIONAL SAMPLING AND TESTING TO BE PERFORMED AS PART OF THE WORK, MONITORING REQUIREMENTS, AND WASTE HANDLING AND DISPOSAL REQUIREMENTS.

REMOVE AND DISPOSE OF EXISTING GATE
REMOVE AND DISPOSE OF EXISTING BIT. CONC. DRIVE
APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN. SEE DETAIL J ON SHEET C-24
REMOVE AND DISPOSE OF OR STOCKPILE FOR REUSE OF TOPSOIL WITHIN LIMITS OF WORK. STOCKPILED TOPSOIL MAY BE AMENDED AND UTILIZED IN AREAS TO BE LOAMED AND SEEDED IN ACCORDANCE WITH SPECIFICATION SECTION 329113 SOIL PREPARATION AS APPROVED BY ENGINEER
REMOVE AND DISPOSE OF EXISTING GRAVEL DRIVE TO A MINIMUM DEPTH OF 12-INCHES
B C-24 COMPOST SOCK
16" WATER MAIN TO BE ABANDONED
LIMIT OF AREA OF EXCAVATION FOR NEW PUMPING STATION BUILDING
REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE AND GATES
EXISTING WATER LINES TO BE ABANDONED IN PLACE. ANY CONFLICTS WITH PROPOSED WORK SHALL BE REMOVED AND DISPOSED OF
EXISTING WELL 8 TO BE ABANDONED. SEE NOTE 1
EXISTING WELL 8-A TO BE ABANDONED. SEE NOTE 1
J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN
BLWF-3
EXISTING ELECTRICAL SHED AND CLP #10218 TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION
REMOVE AND REPLACE TWO CULVERTS
B C-24 COMPOST SOCK
ABANDON EXISTING WELL (TYP). SEE NOTES 1 & 2
B C-24 COMPOST SOCK
16" C.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
EXISTING PIPE TO BE ABANDONED IN PLACE
DECOMMISSION AND ABANDON EXISTING CAISSON WELL. SEE NOTE 5 THIS SHEET AND DETAIL B ON SHEET C-28
REMOVE AND DISPOSE EXISTING MANHOLE (TYP 2).
MATCH LINE SEE SHEET C-8

B C-24 COMPOST SOCK TO BE INSTALLED WEST DOWN MALTBY STREET ON BOTH SIDES TO MIX STREET (APPROXIMATELY 1,200 LF EACH SIDE)
A C-24 STABILIZED CONSTRUCTION ENTRANCE
FLOODWAY WESTERN BOUNDARY
DEMOLISH EXISTING LOWER WELLFIELD PUMPING STATION. SEE NOTE 4
J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN
B C-24 COMPOST SOCK
FLOODWAY EASTERN BOUNDARY
LIMIT OF REMOVE AND DISPOSE OF EXISTING GRAVEL DRIVE TO A MINIMUM DEPTH OF 12-INCHES
B C-24 COMPOST SOCK
DEMOLISH EXISTING GENERATOR AT COMPLETION OF CONSTRUCTION
DEMOLISH EXISTING POND PUMPING STATION AT COMPLETION OF CONSTRUCTION. SEE NOTE 3
J C-24 APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN

EXISTING GRAVEL DRIVE
MALTBY STREET
MALTBY STREET BRIDGE
COPPER MINE BROOK
EXITING LOWER WELLFIELD PUMPING STATION FFE = 253.00
EXISTING POND PUMPING STATION F.F.= 255.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)
CANAL
Well 11 3" Upper Rim=251.62 Well 3" 11-A Upper Rim=252.29
3" Dia. Well Top of Rim=250.88
NB-OW-14 Old 3" Well Top of Rim=252.60
Top of Frame=253.20
Top of Frame=253.73
Top of Frame=253.05
Top of Frame=252.96
Existing Well (Typ.) Top of Frame=251.44
Top of Frame=252.20
Top of Frame=251.56
CLP #10216
CLP #10218
"OYSTER" MAPLE 10"
20" D.I. COPPER WATER MAIN ABANDONED
16" D.I. SUCTION HEADERS
300 Gallon Fuel Oil Tank with Double Containment
Gate
Manhole
C.I. CAISSON ABANDONED
Elec. Shed
Gen.
Pump
Pump
Pump



PLAN
N.T.S.

NOTES:

1. EXISTING WELLS TO HAVE THE WELL HEAD REMOVED TO 5 FEET BELOW FINISHED GRADE, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS.
2. EXISTING WELLS WITH WELL HEAD LOCATED IN A VAULT TO HAVE VAULT DEMOLISHED AND REMOVED, WELL HEAD REMOVED TO 5 FEET BELOW BOTTOM OF VAULT, LATERAL DISCHARGE PIPING REMOVED TO THE EXISTING 16" CI SUCTION HEADER PIPE, AND A CAP OR CONCRETE PLUG INSTALLED ON THE ABANDONED HEADER PIPE. SEE SECTION 019416, APPENDED TO THE SPECIFICATIONS, FOR MORE DECOMMISSIONING AND ABANDONMENT REQUIREMENTS OF EXISTING WELLS

LEGEND

- COMPOST SOCK
- BUILDING REMOVAL
- WETLAND FLAG
- BORING

N

1" = 30'
15 0 30

LIMITS OF WETLAND

APPROXIMATE AREA FOR DEWATERING SEDIMENTATION BASIN (J/C-24)

EXISTING TEST WELL TO BE PROTECTED

COMPOST SOCK (B/C-24)

BLWF-1

BLWF-3

BLWF-4

BLWF-6

ABANDON EXISTING WELL (TYP). SEE NOTE 1 & 2

CANAL

LIMIT OF COMPOST SOCK

EXISTING PIPING TO BE ABANDONED IN PLACE

EXISTING WELLS 26 AND 27 TO BE ABANDONED. SEE NOTE 1 AND 2

LIMIT OF FLOODWAY

POLKVILLE BROOK

SUPPLY POND

MATCH LINE SEE SHEET C-7

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APPROVED BY: K. WAGNER
DATE: APRIL 2023

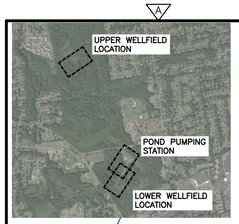
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

LOWER WELLFIELD
DEMOLITION AND REMOVALS PLAN

PROJECT NO. 10739-264571
FILE NAME: C008GDPL.DWG
SHEET NO.
C-8

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



PLAN
N.T.S.

LEGEND

- WETLAND FLAG
- BORING

N=819160.92
E=952810.68

N=819369.72
E=953117.58

N=818987.22
E=952965.00

UPPER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

UPPER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 262. SEE SHEET C-15 FOR WELL LOCATION

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

FLOODWAY

B C-27 6-FT HIGH CHAIN LINK FENCE

A C-27 24-FT WIDE DOUBLE-LEAF SWING GATE

EXISTING UPPER WELLFIELD PUMPING STATION

TRENCH FOR PIPING, AND REPAIR TRENCH TO EXISTING CONDITIONS

COPPER MINE BROOK

1" = 30'
15 0 30

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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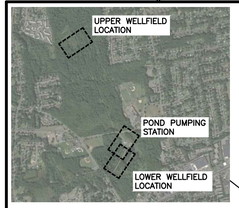
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

UPPER WELLFIELD
LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C009STPL.DWG
SHEET NO. C-9

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PLAN
N.T.S.

LEGEND

- BITUMINOUS CONCRETE
- INFILTRATION TRENCH
- CONCRETE WALKWAY
- DETENTION BASIN
- CHAIN LINK FENCE
- STEEL BEAM GUARDRAIL
- WETLAND FLAG
- BORING

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Minimum Lot Area	40,000 S.F.	2,191,068 S.F.	No
2	Minimum Lot Frontage	150 feet	623 feet	No
3	Minimum Front Yard	50 feet	285 feet	No
4	Minimum Side Yard	20 feet	105 feet	No
5	Minimum Rear Yard	50 feet	1,180 feet	No
6	Maximum Building Height	35 feet	258.3 feet	No
7	Maximum Building Coverage	20 percent	0.18 percent	No

Location:	(LOT 53-145) MALTBY STREET BRISTOL, CT			
Zone:	R-40 RESIDENTIAL ZONE			
Use:	PUBLIC WATER UTILITY FACILITY (SPECIAL PERMIT USE)			
Item #	Item	Requirements	Proposed	Variance
1	Building Size	None Required	4032 S.F. (Pump Station)	No
2	Parking Required	N/A[1]	2 spaces	No
3	Minimum Parking Dimensions	9 feet x 18 feet	10 feet x 18 feet	No
4	Minimum Aisle Width	24 feet	40 feet	No
5	Minimum Residential Setback	50 feet	193 feet	No
6	Minimum Front Lot Line	10 feet	193 feet	No
7	Minimum Side Setback	5 feet	98 feet	No
8	Minimum Rear Setback	5 feet	1,200 feet	No
9	Landscaping, Curbs, and Islands	N/A (Less than 10 parking spaces)	N/A	N/A

LIMITS OF WETLAND

SURVEY CONTROL # 60 N=815542.7606 E=954587.8219 EL=251.733

3" Dia. Well Top of Rim=250.88

SURVEY CONTROL # 147 N=815295.0131 E=954567.0095 EL=251.162

SURVEY CONTROL # 148 N=815295.0131 E=954567.0095 EL=251.292

×250.5

×249.5

A C–27 24–FT WIDE DOUBLE–LEAF SWING GATE

Well 11 3" Upper Rim=251.62
Well 3" 11–A Upper Rim=252.29

BLWF–3

CLP #10217

CLP #10216

MATCH LINE SEE SHEET C–11

CANAL

NB–OW–14 Old 3" Well Top of Rim=252.60 Frame=253.20

Top of Frame=253.73

Top of Frame=253.05

Top of Frame=252.96

Existing Well (Typ.) Top of Frame=251.45

Top of Frame=253.26

Top of Frame=252.20

SUPPLY POND

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

RESOURCE IMPACTS TABLE		
PERMANENT IMPACT WETLAND		220 S.F.

LIMIT OF METAL BEAM RAIL

LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH

50–FT FRONT YARD SETBACK

put setback lines in red

16" WATER MAIN

N=816028.56 E=954636.04

NEW BRITAIN WATER DEPARTMENT LOT 53-145 (ZONE R-40) AREA: 50.38 ACRES

J C–26 BIT CONC. ACCESS DRIVE

C C–26 3 FT WIDE GRAVEL INFILTRATION TRENCH

LIMITS OF WETLAND

6.5-foot high

N=815815.04 E=954723.44

B C–27 6.5–FT HIGH CHAIN LINK FENCE

N=815805.58 E=954749.03

BUILDING ENTRANCE/EXIT

A C–25 METAL BEAM RAIL

BUILDING ENTRANCE/EXIT

L C–26 5 FT WIDE CONCRETE WALK

N=815745.97 E=954792.91

TEMPORARY SWITCHBOARD

LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH

LIMIT OF METAL BEAM RAIL

N=815665.20 E=954833.75

BUILDING ENTRANCE/EXIT

LIMIT OF METAL BEAM RAIL

LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH

C C–26 3 FT WIDE GRAVEL INFILTRATION TRENCH

LIMIT OF 3 FT WIDE GRAVEL INFILTRATION TRENCH

A C–27 24–FT WIDE DOUBLE–LEAF SWING GATE

HYDRANT

LOAM AND SEED DISTURBED AREA

220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.

RIPRAP

NEW POND PUMPING STATION FFE = 258' 56'Lx72'Wx25'H

BPS–1 BPS–2 BPS–3 BPS–4 BPS–5 BPS–6

HBLW–1 HBLW–2

NEW BRITAIN WATER DEPARTMENT LOT 53-150 (ZONE R-40) AREA: 39.9 ACRES

scale this back to existing

MALTBY STREET

COPPER MINE BROOK

SURVEY CONTROL # 91 N=816097.6711 E=954678.5708 EL=256.530

SURVEY CONTROL # 92 N=816091.7206 E=954678.5611 EL=256.430

1" = 30'
15 0 30

VEHICLE CONTROL GATE

24–FT WIDE DOUBLE–LEAF SWING GATE A C–27

LIMIT OF METAL BEAM RAIL

fix leaders

SURVEY CONTROL # 93 N=816144.3791 E=954804.3858 EL=256.979

NEW BRITAIN WATER DEPARTMENT LOT 53-149 (ZONE R-40) AREA: 6.8 ACRES

METAL BEAM RAIL A C–25

20–FT SIDE YARD SETBACK

6.5–FT HIGH CHAIN LINK FENCE B C–27

N=815900.69 E=954734.73

6.5-foot high

FLOODWAY

show dimensions of parking space

N=815870.26 E=954771.18

LIMIT OF METAL BEAM RAIL

N=815860.24 E=954792.16

SEGMENTAL BLOCK RETAINING WALL E C–27

FUTURE MAU–1 SEE HVAC DRAWINGS SET AT ELEVATION 258.5'

BUILDING ENTRANCE/EXIT

N=815820.57 E=954836.35

ROOF LEADER OUTLET SET AT ELEVATION 252.0'

RIPRAP APRON E C–26

BUILDING ENTRANCE/EXIT

EXISTING LOWER WELLFIELD WELL PUMPING STATION TO BE DEMOLISHED 50'H X 50'W X 26'H

LOCATION OF GENERATOR

24–FT WIDE DOUBLE–LEAF SWING GATE A C–27

FLOODWAY – WESTERN BOUNDARY

FLOODWAY – EASTERN BOUNDARY

EDGE OF STREAM

PAD–MOUNTED UTILITY TRANSFORMER

METAL BEAM RAIL A C–28

LIMIT OF BIT. CONC. ACCESS DRIVE

24–FT WIDE DOUBLE–LEAF SWING GATE A C–27

LIMIT OF METAL BEAM RAIL

EXISTING POND PUMPING STATION TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION 37'L X 42' W X 26'H

24–FT WIDE DOUBLE–LEAF SWING GATE A C–27

NEW BRITAIN WATER DEPARTMENT LOT 53-147 (ZONE R-40) AREA: 25.8 ACRES

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

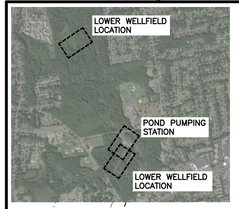
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

POND PUMPING STATION LAYOUT AND MATERIALS PLAN

PROJECT NO. 10739–264571
FILE NAME: C010GDPL.DWG
SHEET NO. C-10

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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PLAN
N.T.S.

LEGEND
- WETLAND FLAG
- BORING

50-FT FRONT YARD SETBACK

LOWER WELLFIELD WELL NO. 1. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814826.21
E=954295.69

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

LOWER WELLFIELD WELL NO. 2. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

LOAM AND SEED ALL DISTURBED AREAS

B C-27 6-FT HIGH CHAIN LINK FENCE

C C-27 6-FT WIDE PEDESTRIAN SWING GATE

LOWER WELLFIELD WELL NO. 3. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=815489.21
E=954705.31

MATCH LINE SEE PUMPING STATION SHEETS

CANAL

C C-27 6-FT WIDE PEDESTRIAN SWING GATE

N=814966.07
E=954566.76

6-FT HIGH CHAIN LINK FENCE B C-27

LOWER WELLFIELD WELL NO. 6. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=815118.36
E=954657.81

LOWER WELLFIELD WELL NO. 4. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

N=814809.95
E=954461.28

LOWER WELLFIELD WELL NO. 5. WELL CAP SET AT ELEVATION 259. SEE SHEET C-16 FOR WELL LOCATION

3,003 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

LOAM AND SEED ALL WELL BERMS, TYP.

1,320 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

358 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

SUPPLY POND

POLKVILLE BROOK

ABANDONED PIPE AND WELLS

HEADER CAP

16" C.I. SUCTION HEADER

6" D.I. WELL CONNECTIONS

52" ASH

48" OAK

1" = 30'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: G. HOWARD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

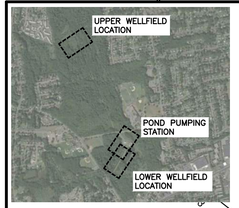
LOWER WELLFIELD
LAYOUT, MATERIALS, AND GRADING PLAN

PROJECT NO. 10739-264571
FILE NAME: C011GDPL.DWG

SHEET NO.
C-11

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PLAN
N.T.S.

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

10,357 SF OF PERMANENT IMPACT TO VEGETATED WETLANDS

NEW POND PUMPING STATION FFE = 258'

ROOFLEADER OUTLET SET AT ELEVATION 252.0' (E C-26)

EROSION CONTROL BLANKETS ON ALL SLOPES 4:1 OR STEEPER

MATCH EXISTING GRADE

MATCH LINE SEE LOWER WELLFIELD SHEETS

CANAL

SUPPLY POND

Edge of Pavement

MALTBY STREET

COPPER MINE BROOK

MALTBY STREET BRIDGE

COPPER MINE BROOK

N

1" = 30'
15 0 30

BPS-1
BPS-2
BPS-3
BPS-4
BPS-5
HBLW-1
HBLW-2
BLDWF-3

Well 8 Top of Rim=249.80
Well 8-A Top of Rim=251.41
Well 11 3" Upper Rim=251.62
Well 3" 11-A Upper Rim=252.29
3" Dia. Well Top of Rim=250.88
NB-OW-14 Old 3" Well Top of Rim=252.60
NB-OW-1 Top of Frame=253.20
NB-OW-2 Top of Frame=253.05
Top of Frame=253.73
Top of Frame=252.96
Top of Frame=251.48
Top of Frame=252.20
Top of Frame=251.66
Top of Frame=251.56

16" D.I. SUCTION HEADER
6" D.I. WELL CONNECTIONS
16" C.I. SUCTION HEADER
PLUGGED 16" C.I. SECTION ABANDONED IN PLACE
20" D.I. COPPER WATER MAIN ABANDONED IN PLACE
16" D.I. SUCTION HEADER
30" Diameter Reinforced Concrete Pipe with Flared End Section
Existing Well (Typ)
CLP #10216
CLP #10218
SISTER MAPLES Tree 10"
SCREEN WALL

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: G. HOWARD
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

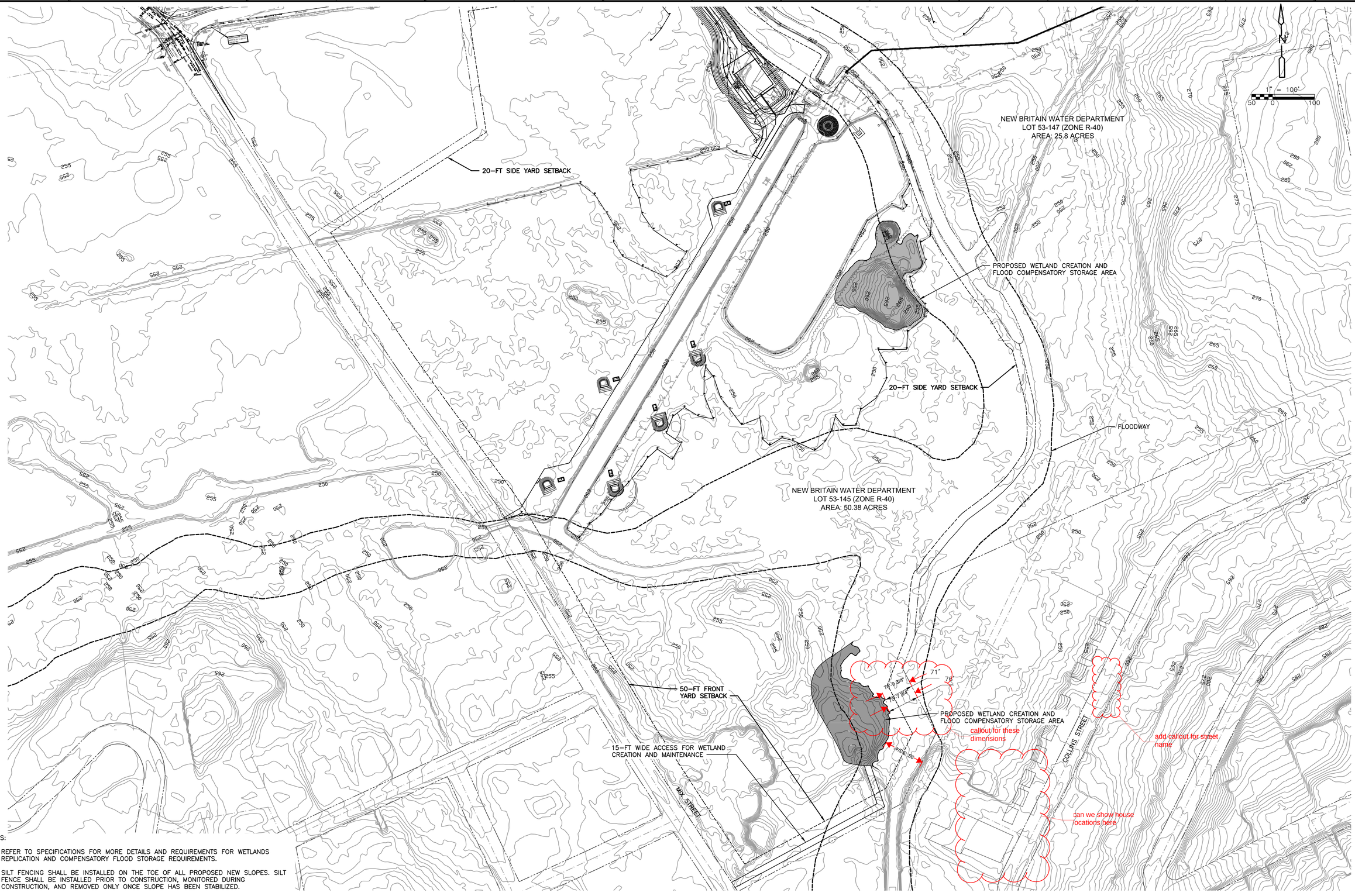
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East Hartford, CT 06108
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
GRADING AND DRAINAGE PLAN

PROJECT NO. 10739-264571
FILE NAME: C012GDPL.DWG
SHEET NO. C-12

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GARLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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East Hartford, CT 06108
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CITY OF NEW BRITAIN, CONNECTICUT

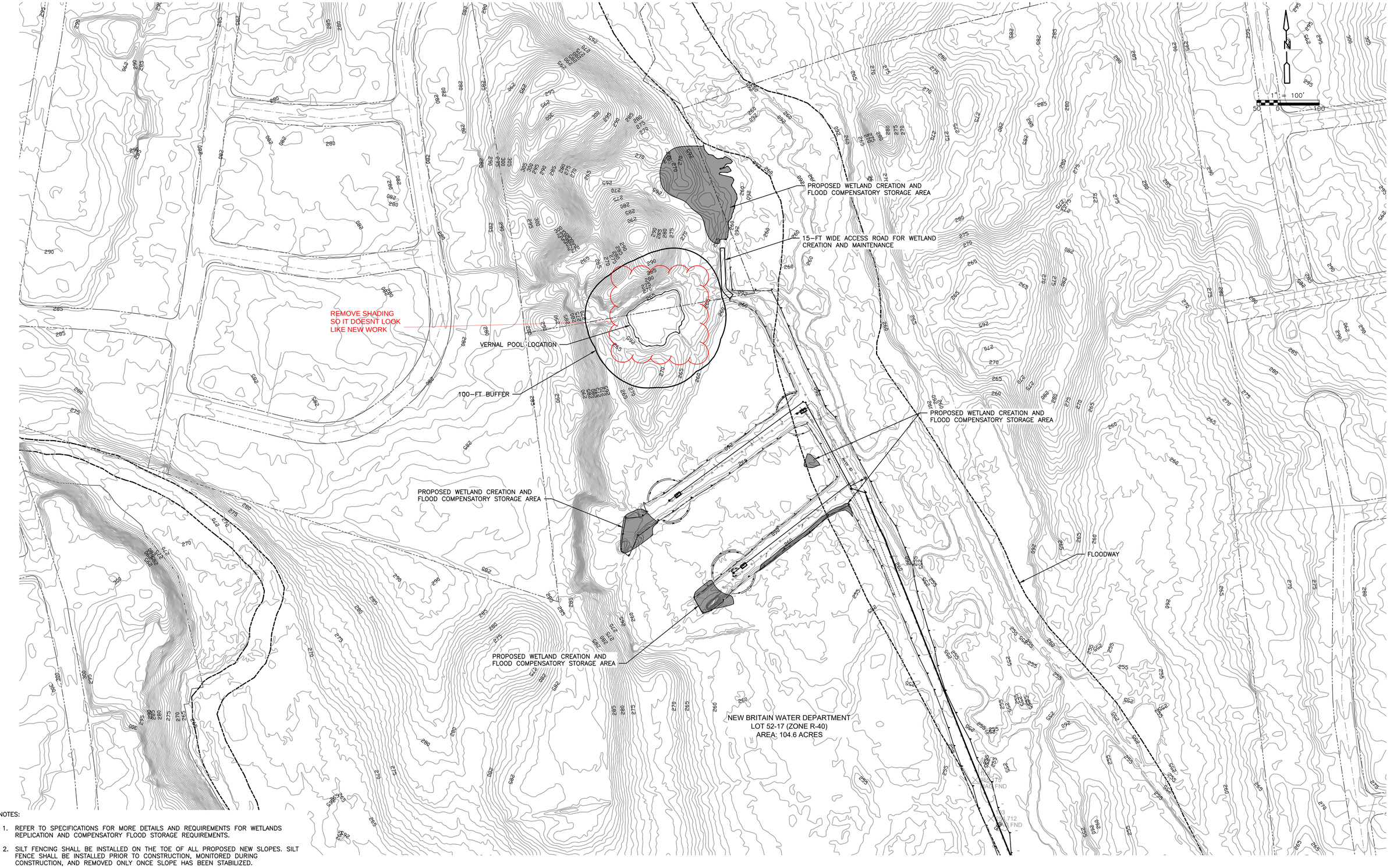
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN I

PROJECT NO. 10739-264571
FILE NAME: C013STPL.DWG
SHEET NO. C-13

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NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
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East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

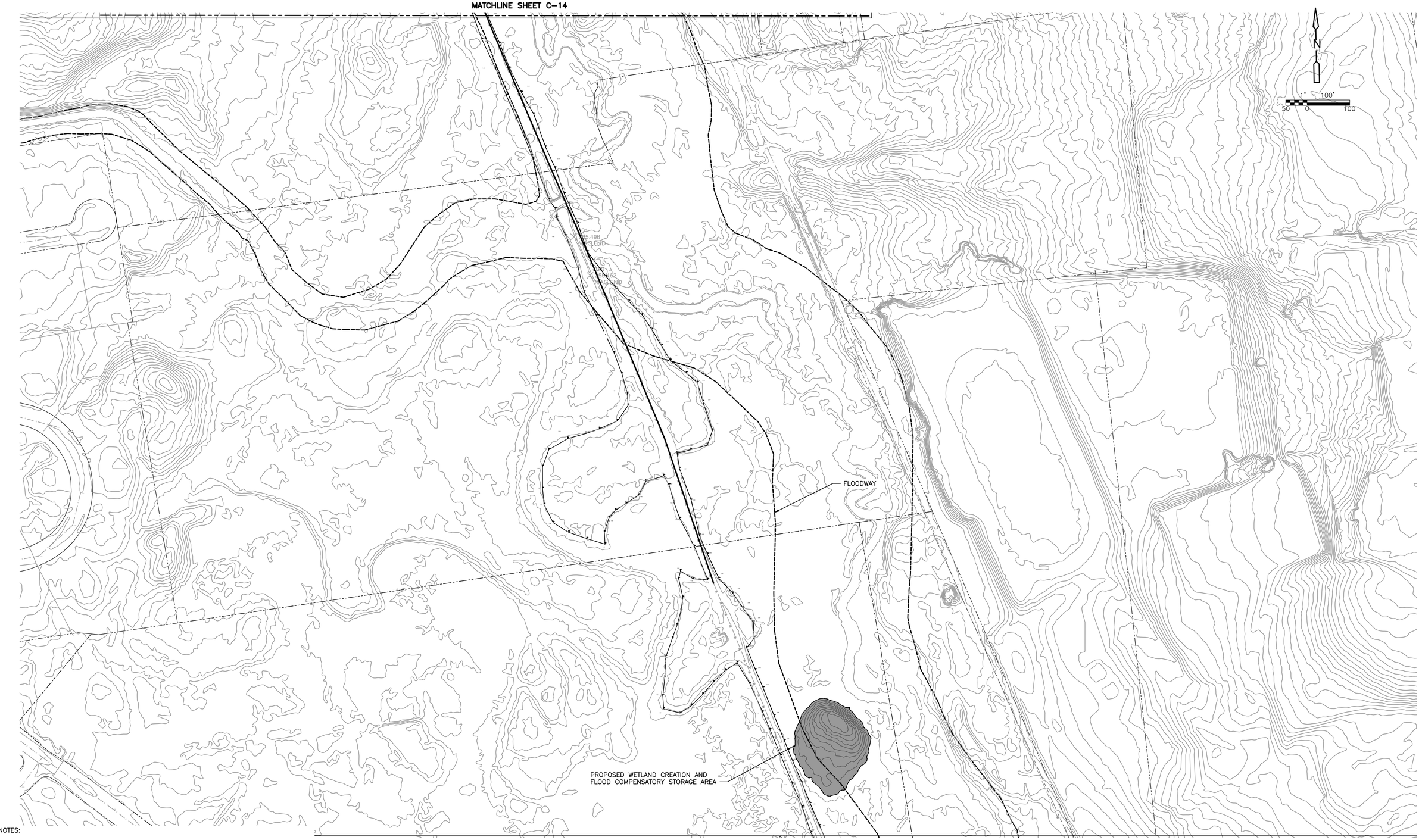
WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN II

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO. C-14

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. REFER TO SPECIFICATIONS FOR MORE DETAILS AND REQUIREMENTS FOR WETLANDS REPLICATION AND COMPENSATORY FLOOD STORAGE REQUIREMENTS.
2. SILT FENCING SHALL BE INSTALLED ON THE TOE OF ALL PROPOSED NEW SLOPES. SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MONITORED DURING CONSTRUCTION, AND REMOVED ONLY ONCE SLOPE HAS BEEN STABILIZED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: K. WAGNER
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

WETLAND REPLICATION AND COMPENSATORY FLOOD STORAGE PLAN III

PROJECT NO. 10739-264571
FILE NAME: C014STPL.DWG
SHEET NO.
C-14A

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6-INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. PROVIDE TEMPORARY WATER METER FOR UPPER WELLFIELD OPERATIONS DURING CONSTRUCTION. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C-6.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

PLAN
1"=20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

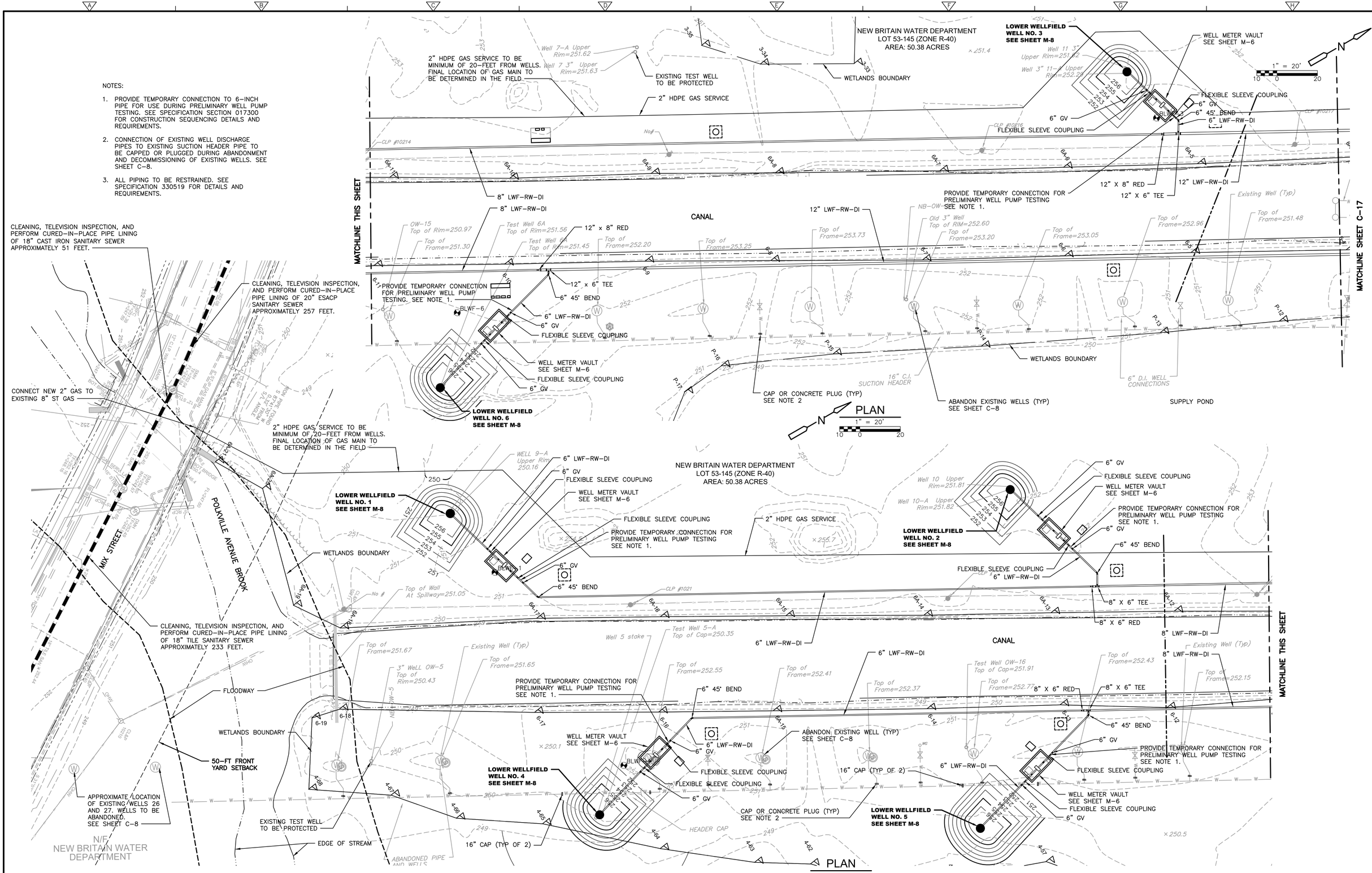
UPPER WELLFIELD YARD PIPING PLAN

PROJECT NO. 10739-264571
FILE NAME: C015YPPL.DWG
SHEET NO. C-15

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 6–INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C–8.
3. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

LOWER WELLFIELD YARD PIPING PLAN

PROJECT NO. 10739–264571
FILE NAME: C016YPPL.DWG
SHEET NO. C-16

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES:

1. PROVIDE TEMPORARY CONNECTION TO 16-INCH PIPE FOR USE DURING PRELIMINARY WELL PUMP TESTING. SEE SPECIFICATION SECTION 017300 FOR CONSTRUCTION SEQUENCING DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.
3. CONNECTION OF EXISTING WELL DISCHARGE PIPES TO EXISTING SUCTION HEADER PIPE TO BE CAPPED OR PLUGGED DURING ABANDONMENT AND DECOMMISSIONING OF EXISTING WELLS. SEE SHEET C-7.
4. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

N

1" = 20'
10 0 20

NEW BRITAIN WATER DEPARTMENT
LOT 53-145 (ZONE R-40)
AREA: 50.38 ACRES

PROTECT EXISTING 12" WATER MAIN
ABANDON EXISTING WELLS (TYP) SEE SHEET C-7
WETLANDS BOUNDARY
EXISTING PIPING TO BE ABANDONED IN PLACE
730 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
CAP OR CONCRETE PLUG (TYP) SEE NOTE 3
D C-25 12" X 6" ANCHOR TEE HYDRANT ASSEMBLY
12" 45° VERTICAL BEND (TYP OF 4)
12" LW-RW-DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
30" 45° VERTICAL BEND (TYP OF 4)
30" P-RW-DI TO BE INSTALLED BELOW NEW CONCRETE CULVERTS
16" CAP (TYP OF 3)
16" BFV TO BE REMOVED
EXISTING MAIN TO BE CAPPED
EXISTING CAISSON WELL AND PIPING TO BE ABANDONED
30" P-RW-DI (℄ EL. 237.52)
REMOVE AND DISPOSE EXISTING MANHOLE (TYP OF 2)
G C-27 5' DIAMETER PRECAST MANHOLE
H M-12 AIR RELEASE VALVE
CONNECT TO EXISTING PIPING
INSTALL RIPRAP APRON AROUND INTAKE STRUCTURE APPROXIMATELY 2-FT TALL BY 5-FT WIDE
EXISTING STEEL INTAKE STRUCTURE SCREENS TO BE REPLACED WITH STAINLESS STEEL SCREENS. MATCH EXISTING DIMENSIONS, SCREEN OPENINGS, AND REINFORCING BARS. MOUNT IN EXISTING SPACE WITH SIMILAR HARDWARE. APPROXIMATELY 9-FT HIGH BY 9.5-FT WIDE; CLEAR SCREEN OPENINGS APPROXIMATELY 0.5-IN SPACING. TYP 2 SIDES.
220 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
COPPERMINE BROOK
D C-25 36 X 6" ANCHOR TEE HYDRANT ASSEMBLY
F C-25 SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" WATER MAIN
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 36" W-CI FOR FINAL CONNECTION
WETLANDS BOUNDARY
FLOODWAY EASTERN BOUNDARY
36" W-CI (TO STAFFORD AVE)
EXISTING POND PUMPING STATION FF=253.15 (TO BE DEMOLISHED AT COMPLETION OF CONSTRUCTION)
FUTURE WORK CLEAN, INSPECT, AND CIPP LINE EXISTING 20" PIPE TO STAFFORD AVENUE (APPROX. 1,200 LF)
(TO STAFFORD AVE)
MATCHLINE SHEET C-19
FLOODWAY WESTERN BOUNDARY
SUPPLY POND
CANAL
12" Dia.MH Top of Frame=251.42
INLET SCREEN AND GATE VALVE
12" X 6" ANCHOR TEE HYDRANT ASSEMBLY D C-25
2" HDPE GAS SERVICE
BOLLARD (TYP) D C-27
NB-OW-13
Observation Well Elevation=252.00
Top of Frame=252.12
Top of Frame=252.61
12" LWF-RW-DI
12" LWF-RW-DI
16" X 12" TEE
30" C.M.P. F.E. Inv.=247.28
MH Hatch 2'Dia. Top of Frame=258.26
PLUGGED 16" C.I. SECTION ABANDONED
16" LWF-RW-DI APPROX CL EL 245
12" GV
12" LWF-RW-DI
Conc.Structure with Metal Grate Top of Grate=252.36
Top Concrete Wall At Inlet=251.95
INLET SCREEN AND EQUALIZER
APPROX CL EL 244.6 (MATCH EXISTING)
30" P-RW-DI (℄ E. 240)
16" GV WITH POST INDICATOR (TYP OF 3)
30" P-RW-DI (MATCH EXISTING)
30" TEE (℄ EL. 238.05)
30"X24" RED
24" CAP
(TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
CAP
36" CAP
36" TEE APPROX CL EL 243.8 (MATCH EXISTING)
MH Hatch 2'Dia. Top of Frame=252.32
MH Hatch 2'Dia. Top of Frame=252.43
30k Generator with Underground Conduit
CAP EXISTING 20" WATER MAIN
6x4' Conc. Inv=245.50
6.4' Conc. Inv=245.60
6.4' Conc. Inv=245.53
6.4' Conc. Inv=245.50
CAP AND THRUST BLOCK FOR TEMPORARY DEAD END
FUTURE WORK 20" X 6" ANCHOR TEE HYDRANT ASSEMBLY
CONTRACTOR TO PERFORM TEST PIT TO LOCATE EXISTING 20" W-CI FOR FINAL CONNECTION
36" CAP (TO BE INSTALLED WHEN EXISTING POND PUMPING STATION IS DEMOLISHED)
TEMPORARY SOLID SLEEVE/COUPLING CONNECTION TO EXISTING 36" PUMP STATION DISCHARGE MAIN
20" DI WATER MAIN
1" DI COPPER SERVICE
16" D.I. SUCTION HEADER Inv.=245.95
ABANDONED PIPE
16"45° BEND
16" BFV
36" C.M.P. F.E. Inv.=247.00
36" PUMPED POND AND UPPER WELLFIELD RAW WATER (℄ EL. 245.50)
16" LOWER WELLFIELD (APPROX. ℄ EL. 246.33) (FUTURE TREATED POTABLE) WATER MAIN
LOWER WELLFIELD RAW WATER BACKFLOW PREVENTION ASSEMBLY (SEE SHEET M-7)
BOLLARD (TYP) D C-27
PROVIDE TEMPORARY CONNECTION FOR PRELIMINARY WELL PUMP TESTING. SEE NOTE 1.
SPACE FOR FUTURE LOWER WELLFIELD FINISHED WATER CHLORINE CONTACT TIME PIPE LOOP
36" X 16" TEE
1,197 SF OF TEMPORARY IMPACT TO WATERS OF THE U.S.
EXISTING CORRUGATED METAL PIPE CULVERTS TO BE REPLACED WITH CONCRETE CULVERT AND CULVERT ENDS (MATCH EXISTING INVERTS) K C-26
36" 45° VERTICAL BEND (TYP OF 4)
16" 45° VERTICAL BEND (TYP OF 4)
36" W-DI AND 16" W-DI TO BE INSTALLED BELOW EXISTING CONCRETE CULVERTS
EXISTING OBSERVATION WELLS 8 AND 8A TO BE ABANDONED SEE SHEET C-7
16" 45° BEND (℄ EL. 250.20)
6" 45° BEND (TYP OF 4)
2" W-CU
6" W-DI
30" POND RAW WATER INTAKE (℄ EL. 234.44)
30" 90° BEND
30" X 20" TEE (3)
30" W-DI
16" 22.5° BEND (℄ EL. 250.20)
PREFABRICATED SANITARY SEWER GRINDER PUMPING STATION
TOP ELEV APPROX 258; TANK INVERT ELEV APPROX 248.5
4" INLET APPROX INV 251.5; 1.25" SAN-HDPE PUMPED OUTLET APPROX CL 252.5
20" MJ BFV WITH EXTENDED NECK AND HANDWHEEL OPERATOR (3)
16" BFV
16" 45° BEND (℄ EL. 250.20)
16" LWF-RW-DI (LOWER WELLFIELD RAW WATER MAIN) (APPROX. ℄ EL. 250.20)
EXISTING LOWER WELLFIELD PUMPING STATION FF=253.00 (TO BE DEMOLISHED) SEE SHEET C-7
EXISTING 16" DI WATER MAIN TO BE REMOVED SEE SHEET C-7
6" 45° BEND
1.25" SAN-HDPE LOCAL HIGH POINT, APPROX. CL EL 253
4' DIA. MANHOLE G C-27 AND AIR RELEASE VALVE AS SPECIFIED
WETLANDS BOUNDARY
PROPOSED POND PUMPING STATION FFE 258.00 SEE SHEET M-2
HYDRANT ASSEMBLY D C-25
16" CAP
EXISTING 16" DI WATER MAIN TO BE ABANDONED IN PLACE
BORING LOCATION (TYP) SEE NOTE 2 THIS SHEET
SEGMENTAL BLOCK RETAINING WALL E C-27
6" 45° BEND
1.25" SAN-HDPE (APPROX. ℄ EL. 252.5)
6" GAS TO EMERGENCY GENERATOR
24" PUMPED POND RAW WATER (APPROX. ℄ EL. 252.17)
24" 22.5° BEND (DN)
4" DI ROOF DRAIN D C-26
Gate with Bollard
16" LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN (APPROX. ℄ EL. 250.20)
16" BFV
16" 90° BEND (DN)
16" 45° BEND
16"-LOWER WELLFIELD (FUTURE TREATED POTABLE) WATER MAIN TO BE INSTALLED ABOVE 16"-UWF-RW-DI
16" UWF-RW-DI
6" W-DI
2" W-CU
TEST PIT LOCATION (TYP) SEE NOTE 2 THIS SHEET
WETLANDS BOUNDARY
EDGE OF STREAM
COPPERMINE BROOK
MATCHLINE SHEET C-18C

PLAN
1" = 20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

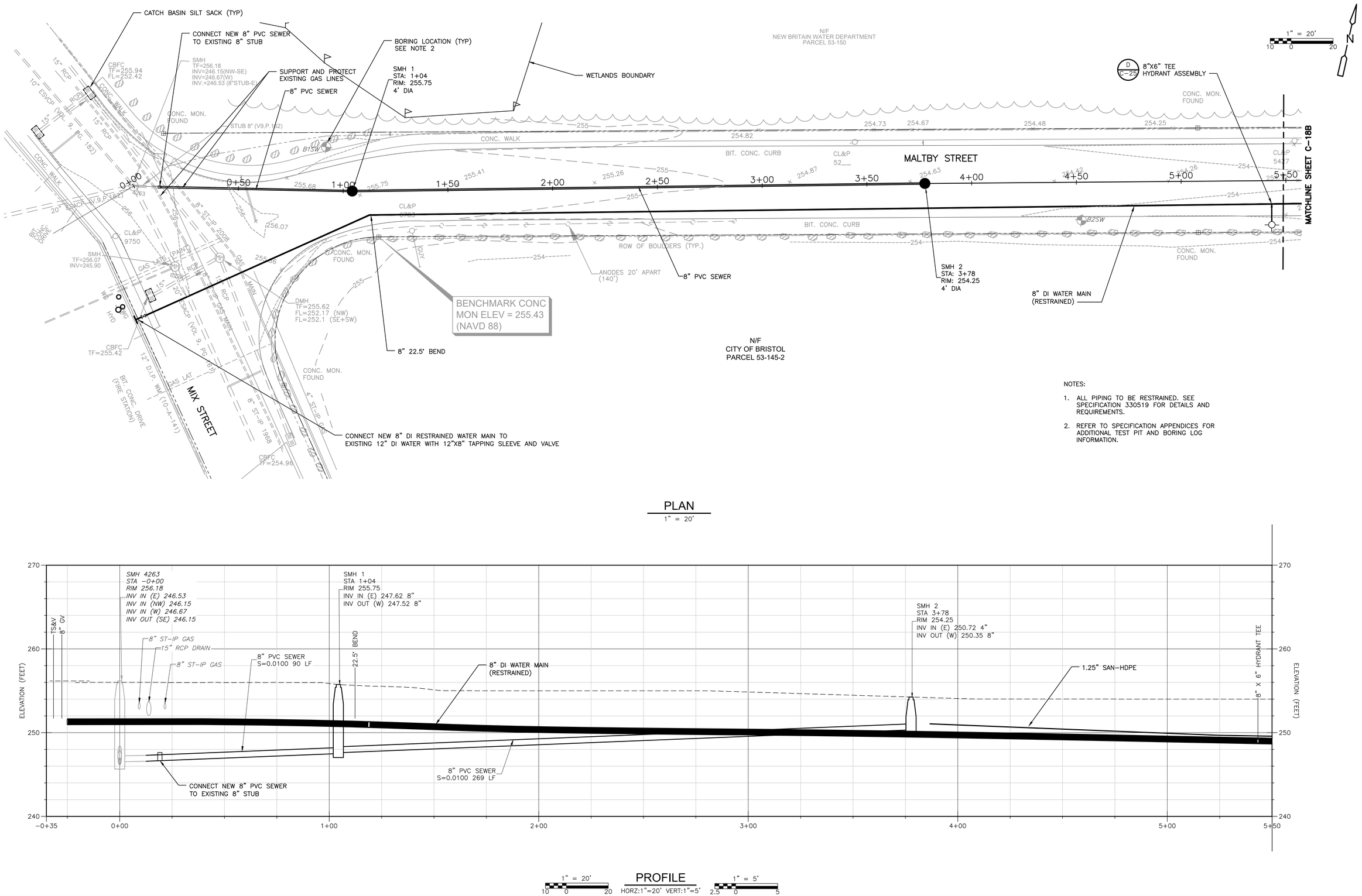
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
YARD PIPING PLAN

PROJECT NO. 10739-264571
FILE NAME: C017YPPL.DWG
SHEET NO. C-17

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PLAN
1" = 20'

1" = 20'

PROFILE
HORZ:1"=20' VERT:1"=5'

1" = 5'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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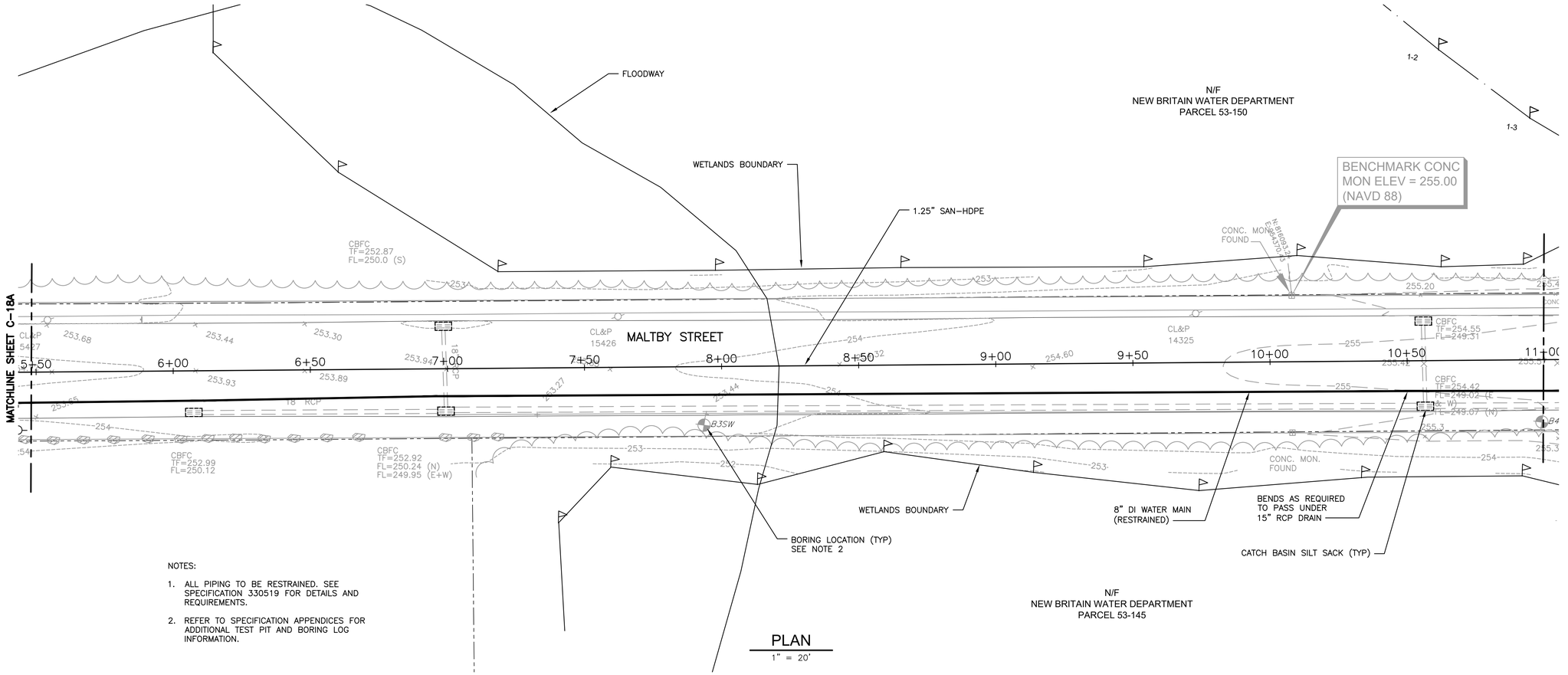
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE I

PROJECT NO. 10739-264571
FILE NAME: C018AYPPL.DWG
SHEET NO.
C-18A

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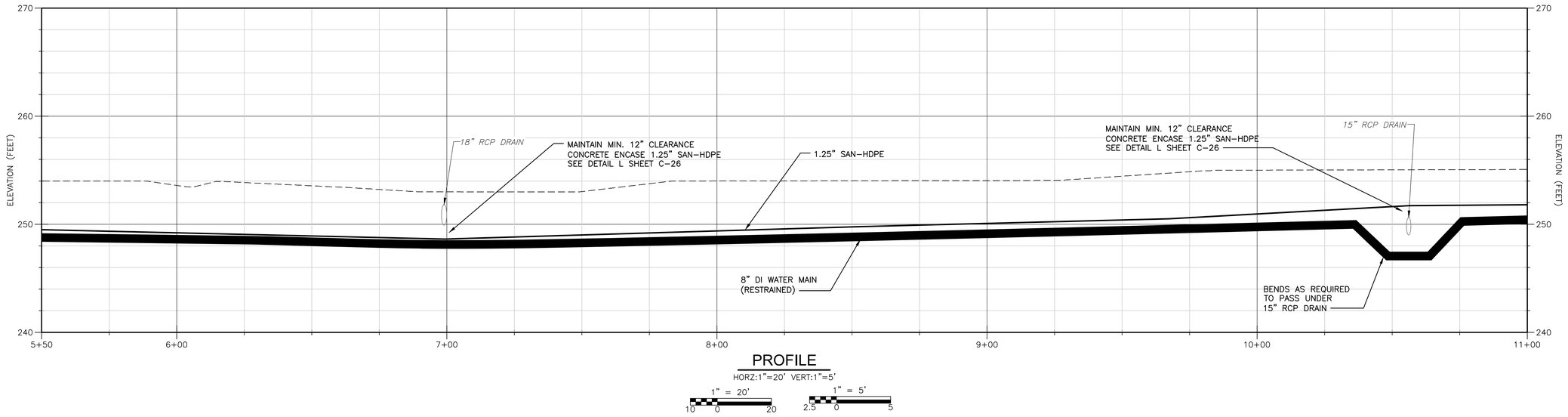
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NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.

PLAN
1" = 20'



PROFILE
HORZ:1"=20' VERT:1"=5'
1" = 20' 10 0 20
1" = 5' 2.5 0 5

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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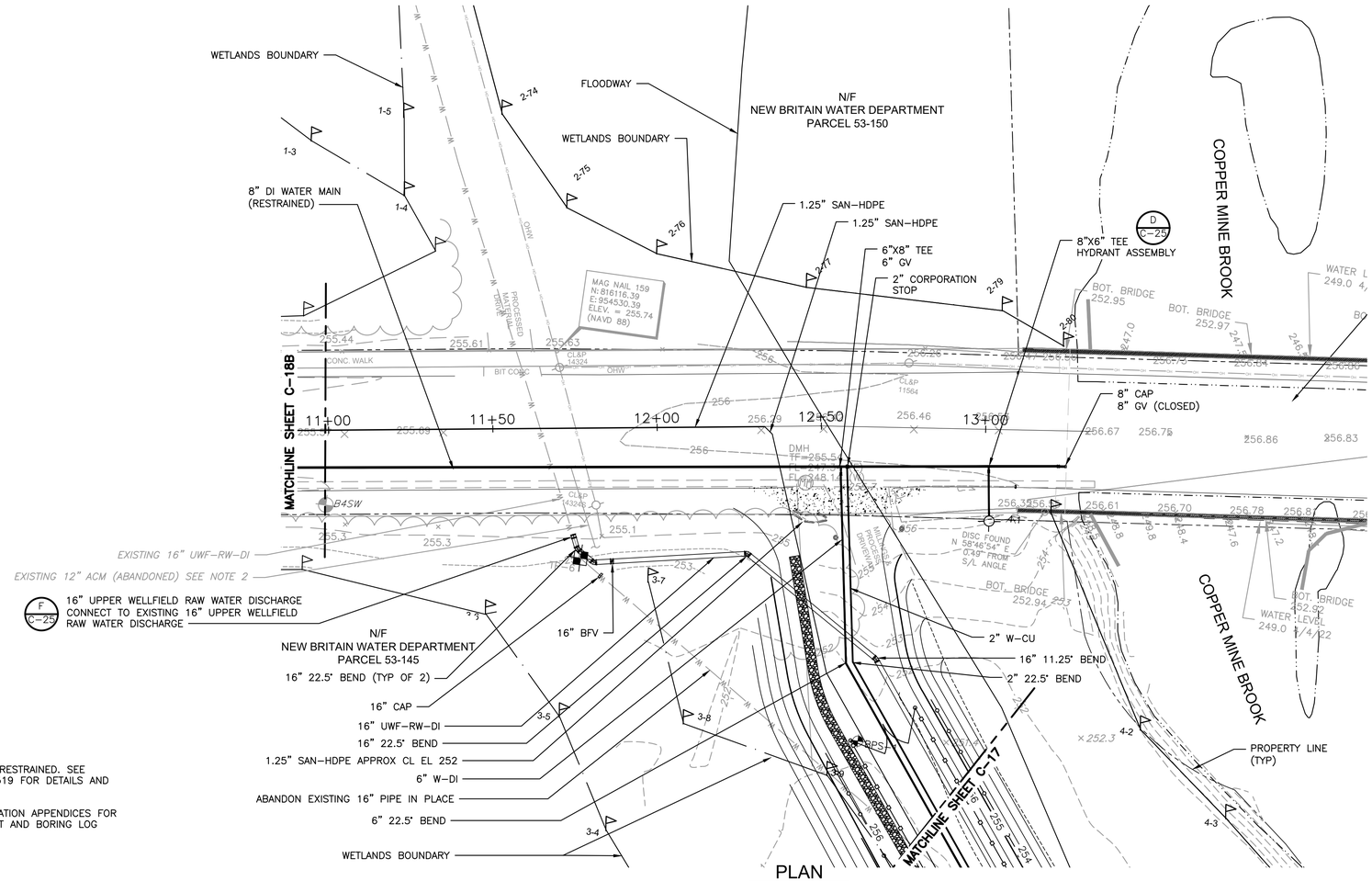
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE II

PROJECT NO. 10739–264571
FILE NAME: C018BYPPL.DWG
SHEET NO.
C-18B

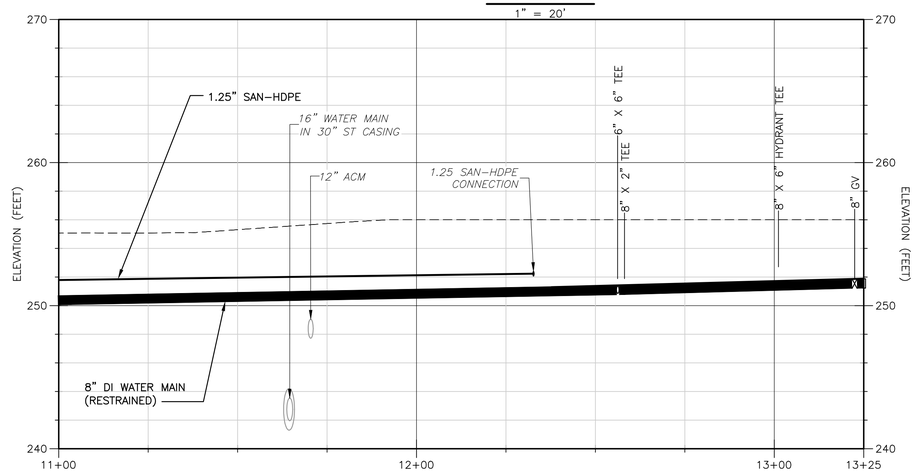
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NOTES:

1. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.
2. REFER TO SPECIFICATION APPENDICES FOR ADDITIONAL TEST PIT AND BORING LOG INFORMATION.



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

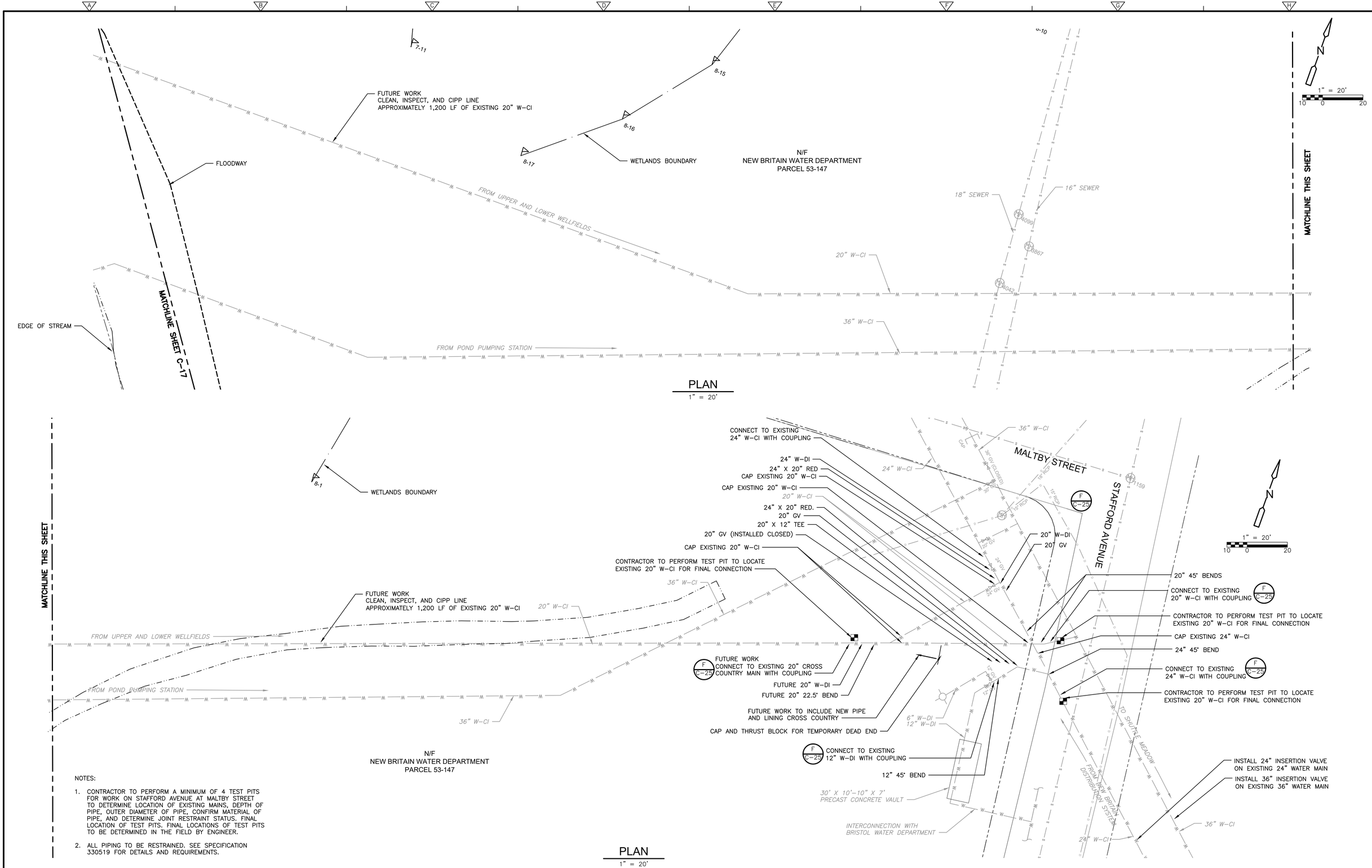
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

MALTBY STREET
PLAN AND PROFILE III

PROJECT NO. 10739–264571
FILE NAME: C018CYPPL.DWG

SHEET NO.
C-18C

XREFs: [CDMS_2436, CYPWP001, XSVPL000, CWP000ST, AWZ001PS – 2D Process Export, 2022-17, BORING LOCATIONS-CEI Edits, Floodway_Floodplain] Images: []
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NOTES:

1. CONTRACTOR TO PERFORM A MINIMUM OF 4 TEST PITS FOR WORK ON STAFFORD AVENUE AT MALTBY STREET TO DETERMINE LOCATION OF EXISTING MAINS, DEPTH OF PIPE, OUTER DIAMETER OF PIPE, CONFIRM MATERIAL OF PIPE, AND DETERMINE JOINT RESTRAINT STATUS. FINAL LOCATION OF TEST PITS. FINAL LOCATIONS OF TEST PITS TO BE DETERMINED IN THE FIELD BY ENGINEER.
2. ALL PIPING TO BE RESTRAINED. SEE SPECIFICATION 330519 FOR DETAILS AND REQUIREMENTS.

PLAN
1" = 20'

PLAN
1" = 20'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

CDM Smith
101 East River Drive, Suite 1A
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

STAFFORD AVENUE AND CROSS COUNTRY PLAN

PROJECT NO. 10739–264571
FILE NAME: C019YPPL.DWG
SHEET NO. C-19

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

LIMITS OF CANAL SEDIMENT REMOVAL

WETLAND BOUNDARY

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE. TO BE REMOVED AT THE END OF CONSTRUCTION (A / C-24)

CANAL TO BE DEWATERED AS NECESSARY

PROTECT EXISTING GATE STRUCTURE AND PIPE

REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE AND GATES

PROTECT EXISTING PIPES

INLET SCREEN AND GATE VALVE

STOPLOG AND PLUG FOR POND DEWATERING

TURBIDITY CURTAIN (D / C-24)

CANAL TO BE DEWATERED AS REQUIRED. SEE NOTE 5

EDGE OF STREAM

PROVIDE STEEL PLATES TO PROTECT EXISTING CULVERT

PROTECT EXISTING PIPES

PROTECT EXISTING 16" DI PIPE

PROTECT EXISTING SUCTION HEADER

PROTECT EXISTING GATE STRUCTURE AND SUCTION PIPE

INLET SCREEN AND EQUALIZER

PROTECT EXISTING PIPE AND WALL

STOPLOG AND PLUG FOR POND DEWATERING

TEMPORARY SEDIMENT DEWATERING AND STOCKPILING AREA

STABILIZED POND ACCESS (F / C-27)

35-LF OF BANK RESTORATION (I / C-26)

LIMITS OF POND SEDIMENT REMOVAL

EXTENTS OF CLEARING AND GRUBBING TO BE DETERMINED

TEMPORARY ALTERATION TO APPROXIMATELY 30,900 SF OF WATERS OF THE U.S.

OCTOBER 2021 SEDIMENT DEPTH LOCATION AND MEASUREMENT (TYP)

DECEMBER 2021 SEDIMENT SAMPLE LOCATION AND ESTIMATED SEDIMENT DEPTH (TYP)

POND TO BE DEWATERED VIA THE EXISTING POND PUMPING STATION. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASIN. (J / C-24)

FLOODWAY

WETLAND FLAG LINE IS ORDINARY HIGH WATER

CANAL 1 (21.4")

CANAL 3 (12")

CANAL 4 (7")

POND 7 (2")

POND 8 (7.8")

POND 9 (6.6")

POND 10 (7.4")

POND 1 (12")

POND 3 (23.8")

POND 6A & 6B (48")

POND 4 (5")

POND 2 (13.6")

POND 5A & 5B (14.4")

SMU-1 1 FT

SMU-2 2 FT

SMU-3 2.5 FT

SMU-4 2.5 FT

SMU-5 1 FT

SMU-6 1 FT

SMU-7 0.5 FT

SMU-8 1 FT

SMU-9 2 FT

SMU-10 AVG 4 FT MAX 7.5 FT

EXISTING WELL NO. 6

EXISTING LOWER WELLFIELD PUMPING STATION F.F.= 253.00

EXISTING POND PUMPING STATION F.F.= 253.15

30k Generator with Underground Conduit

NOTES:

1. APPROXIMATELY 6,000 CUBIC YARDS (IN-SITU) OF SEDIMENT MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION.
2. AREA FOR TEMPORARY DEWATERING AND STOCKPILING OF SEDIMENT REMOVED FROM THE CANAL AND SUPPLY POND LIMITED TO THE HATCHED AREA INDICATED IN THE SUPPLY POND.
3. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED UPON COMPLETION OF PROJECT. DISTURBED AREAS TO BE LOAMED AND SEEDED.
4. CONTRACTOR TO DEWATER CANAL AS NECESSARY. PLUG OR INSTALL STOP LOGS IN EXISTING CULVERTS OR INSTALL COFFERDAM. SUPPLEMENTAL DEWATERING (AS REQUIRED) TO BE DIRECTED TO DEWATERING SEDIMENTATION BASINS.

PLAN
1" = 30'

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: T. BURKE
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. GERLACH
CROSS CHK'D BY: T. BURKE
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

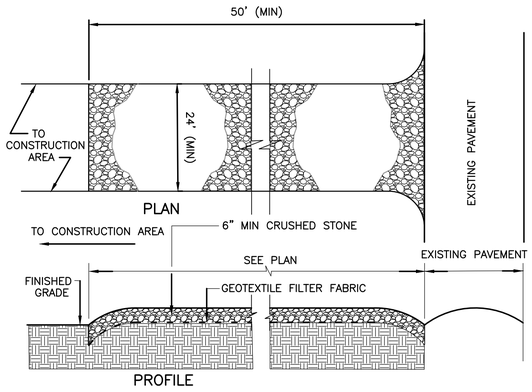
WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

SUPPLY POND AND CANAL SEDIMENT REMOVAL PLAN

PROJECT NO. 10739-264571
FILE NAME: C023SDRM.DWG
SHEET NO. C-23

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

XREFs: [TEST HOLE POINTS, CDMS_2436, XSVPL040, 2022-17, BORING LOCATIONS, Floodway_Floodplain] Images: []
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NOTES:

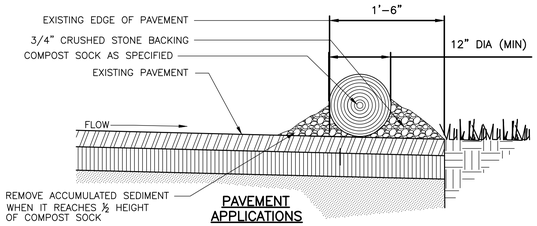
1.) PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND EXISTING PAVEMENT.

2.) LIMITS OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE AS DIRECTED BY THE ENGINEER.

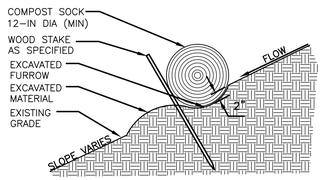
3.) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.

4.) REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO EXISTING PAVEMENT SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
DETAIL A
NOT TO SCALE

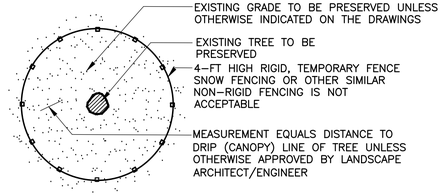


PAVEMENT APPLICATIONS



LANDSCAPE APPLICATIONS

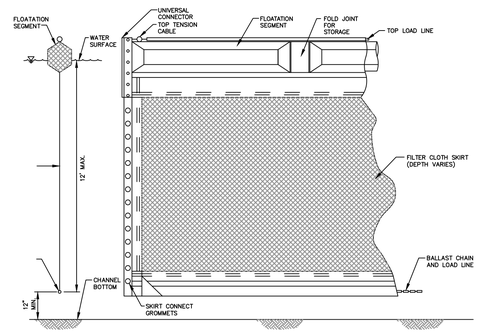
COMPOST SOCK
DETAIL B
SCALE: NTS

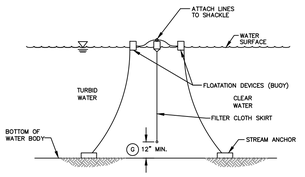


NOTES:
1. FENCING SHALL BE INSTALLED AROUND PERIMETER OF ALL EXISTING TREES TO BE PRESERVED WITHIN THE LIMIT OF WORK.
2. FENCING MAY BE REMOVED TEMPORARILY, ONLY AS REQUIRED TO PERFORM THE WORK SHOWN ON THE DRAWINGS.
3. FENCING SHALL REMAIN IN PLACE & BE MAINTAINED THROUGHOUT CONSTRUCTION AND THEN REMOVED COMPLETELY.

TREE PROTECTION
DETAIL C
NOT TO SCALE

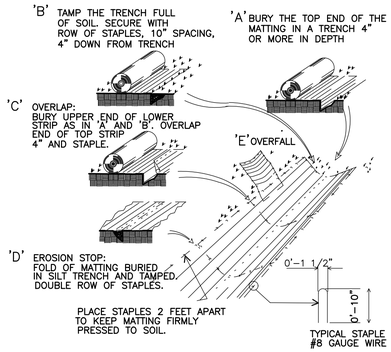
TURBIDITY CURTAIN





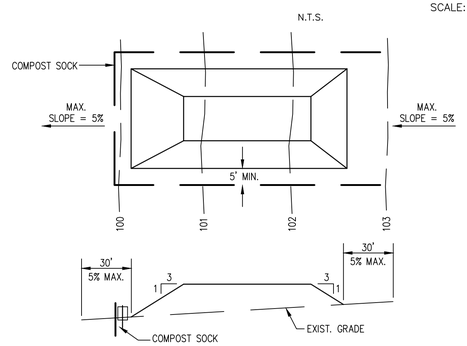
TYPICAL ANCHORING SECTION

TURBIDITY CURTAIN
DETAIL D
NOT TO SCALE



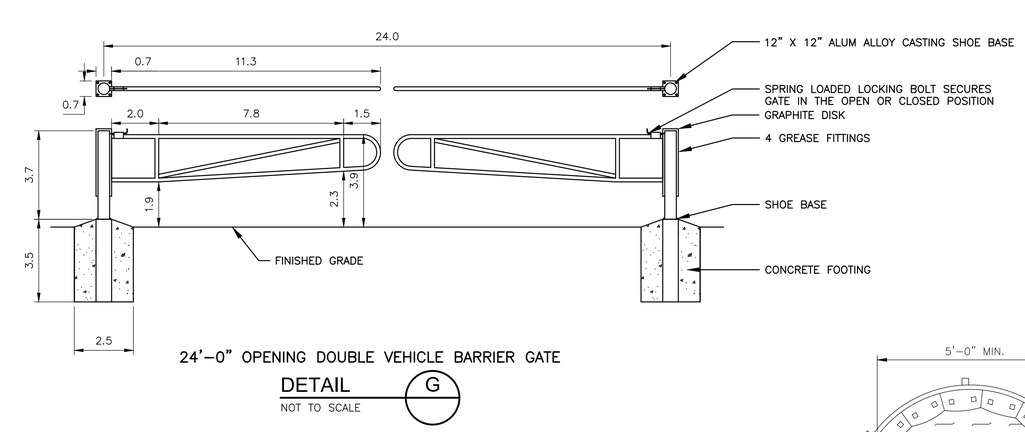
NOTE:
1.) APPLY ON ALL NEW SLOPES 3(H):1(V) AND STEEPER.

EROSION CONTROL BLANKET
DETAIL E
NOT TO SCALE

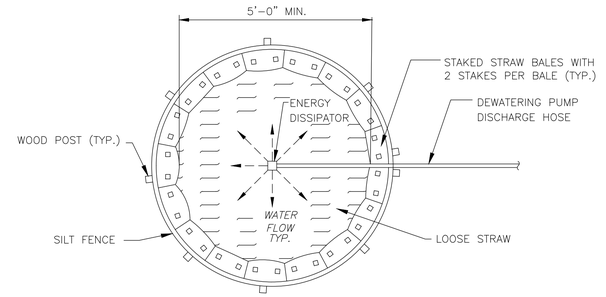


NOTES:
1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQ.
4. COMPOST SHALL BE INSTALLED AS DETAILED HEREON.

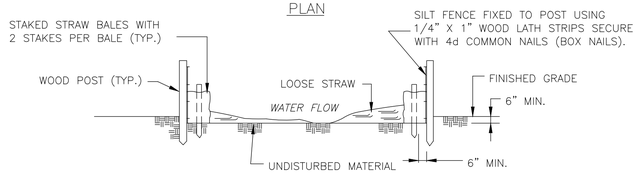
SOIL STOCKPILE
DETAIL F
NOT TO SCALE



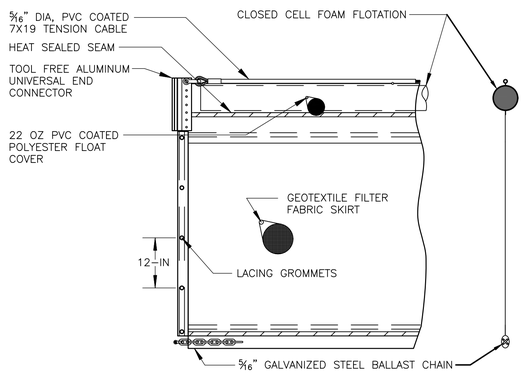
24'-0" OPENING DOUBLE VEHICLE BARRIER GATE
DETAIL G
NOT TO SCALE



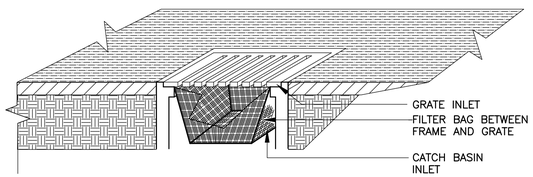
PLAN



DEWATERING SEDIMENTATION BASIN
DETAIL J
NOT TO SCALE



FLOATING TURBIDITY BARRIER
DETAIL I
NOT TO SCALE



CATCH BASIN FILTER
DETAIL H
NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

CDM Smith
77 Hartland Street, Suite 200
East Hartford, CT 06108
Tel: (860) 529-7615

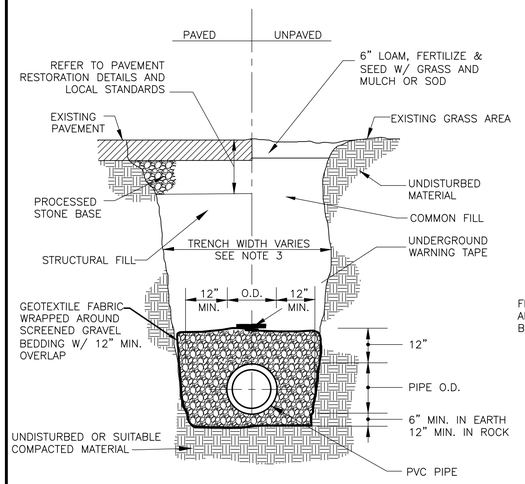
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS I

PROJECT NO. 10739-264571
FILE NAME: CD001CSDT.DWG
SHEET NO. C-24

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

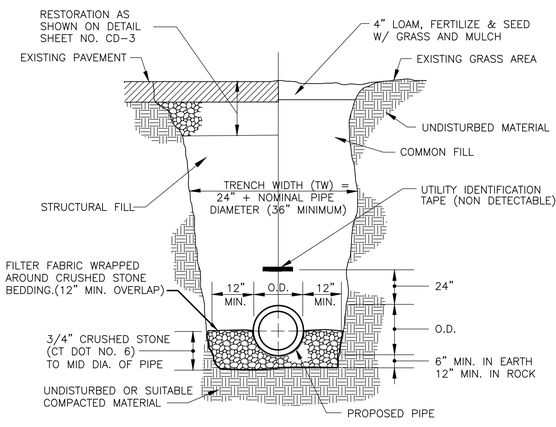
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PVC PIPE TRENCH

DETAIL A

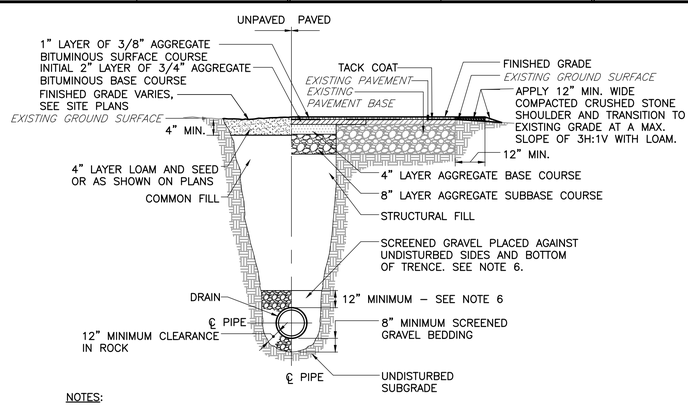
NOT TO SCALE



DI PIPE TRENCH

DETAIL B

NOT TO SCALE



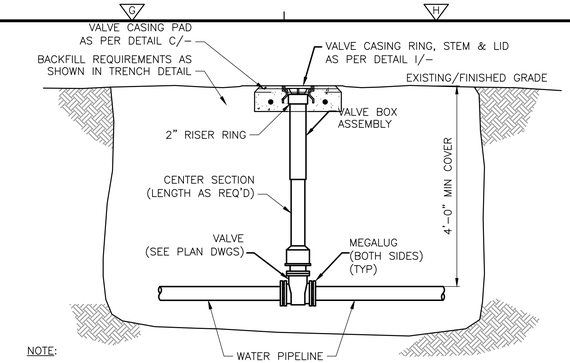
NOTES:

1. THE CONTRACTOR SHALL MAINTAIN INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE FOR 60–90 DAYS MINIMUM.
2. IF INITIAL PAVEMENT IS PLACED AFTER OCTOBER 1ST, THEN IT SHALL BE MAINTAINED UNTIL PAVEMENT OVERLAY IS PLACED.
3. PAVEMENT OVERLAY SHALL BE PLACED BETWEEN APRIL 15 AND NOVEMBER 15 OF EACH CALENDAR YEAR.
4. THE CONTRACTOR SHALL SAW CUT 12–INCHES OUTSIDE OF INITIAL TRENCH EXCAVATION. INITIAL PAVEMENT SHALL BE REMOVED AND DISPOSED OF.
5. INITIAL 2" LAYER OF 3/4" AGGREGATE BITUMINOUS BASE COURSE SHALL MATCH EXISTING ROADWAY GRADES.
6. FOR PIPES OTHER THAN PVC AND HDPE, SELECT COMMON FILL MAY BE USED FROM MID–DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE.
7. PROVIDE AT LEAST ONE IMPERVIOUS DAM IN GRAVEL BEDDING BETWEEN EACH MANHOLE OR EVERY 300 FEET, WHICHEVER IS LESS.
8. PRIOR TO INSTALLATION OF 1" LAYER OF 3/8" AGGREGATE BITUMINOUS SURFACE COURSE, SHIM EXISTING ROAD AS REQUIRED TO PROVIDE A SMOOTH FINISHED GRADE WITH NO PUDDLING.
9. IN LOCATIONS WHERE TRENCH PAVING MEETS EXISTING BITUMINOUS CONCRETE, MATCH FINISHED GRADE.

TRENCHING AND REPAIRS

DETAIL C

NTS



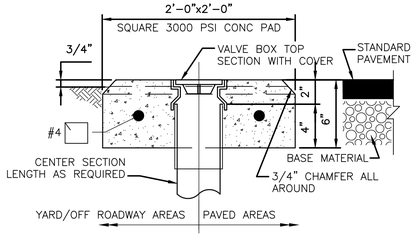
NOTE:

THE VALVE BOX SHALL BE PLUMB AND CENTERED OVER THE VALVE OPERATING NUT IN SUCH A MANNER THAT IT CAN BE FREELY OPERATED WITH A VALVE KEY. THE CONTRACTOR PERFORMING WORK SHALL ASSURE THAT THE VALVE BOX IS FREE OF DEBRIS BEFORE RESETTING.

VALVE BOX (PIPE 12" DIAMETER AND SMALLER)

DETAIL H

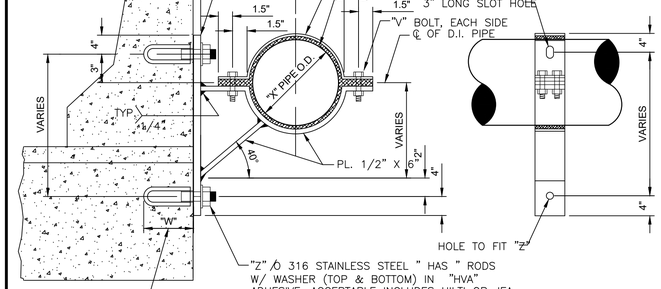
NTS



VALVE CASING PAD

DETAIL I

NTS



CROSS–SECTION PROFILE

PIPE SIZE	4"	6"	8"	10"	12"	16"	20"	24"
X	4.80"	6.90"	9.05"	11.10"	13.20"	17.40"	21.60"	25.80"
Y	8"	9"	10"	12"	13"	15"	17"	19"
Z	¾"	¾"	¾"	1"	1"	1"	1¼"	1¼"
W	6.625"	6.625"	6.625"	8.25"	8.25"	8.25"	12"	12"
V	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"

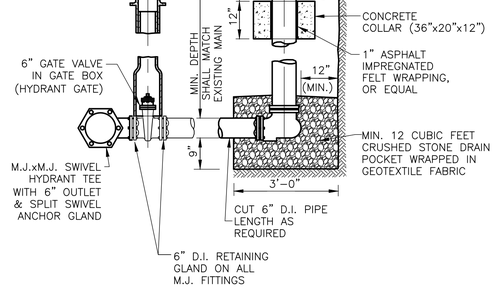
NOTES :

1. ALL WELDS TO BE PERFORMED BY A CERTIFIED STRUCTURAL WELDER.
2. ALL SUPPORT BRACKET MEMBERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
3. ALL NUTS, BOLTS, AND WASHERS SHALL BE 316 STAINLESS STEEL.
4. THE SPACING OF SIDEWALL PIPE SUPPORTS SHALL BE SPECIFICALLY DESIGNED BASED UPON MANY FACTS INCLUDING PIPE SIZE AND MATERIAL EMBEDMENT LIMITATIONS. UNLESS APPROVED OTHERWISE BY THE ENGINEER, IN NO CASE SHALL THE SPACING OF PIPE SUPPORTS EXCEED TWENTY (20) FEET ON–CENTER FOR PIPE SIZES TWELVE (12) INCH AND SMALLER AND TEN (10) FEET ON–CENTER FOR PIPE SIZES GREATER THAN TWELVE (12) INCHES.

SIDEWALL PIPE HANGER

DETAIL E

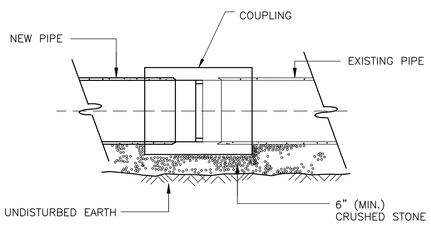
NOT TO SCALE



FIRE HYDRANT ASSEMBLY

DETAIL D

NOT TO SCALE



COUPLING CONNECTION TO EXISTING PIPE

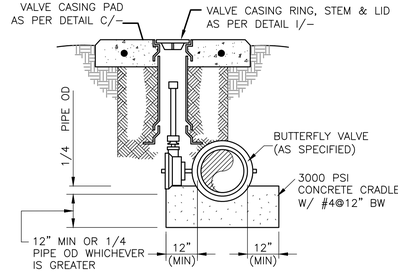
DETAIL F

NOT TO SCALE

PIPE CONNECTION DETAILS

DETAIL G

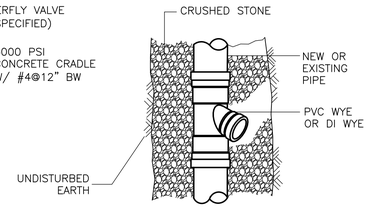
NOT TO SCALE



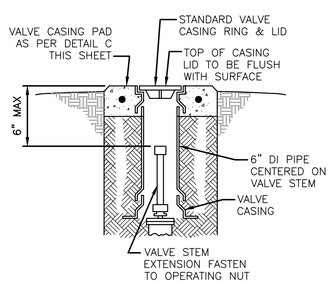
DIRECT BURIED BUTTERFLY VALVE (FOR 16"–36" BUTTERFLY VALVES)

DETAIL J

NTS



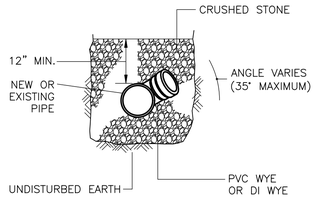
PLAN



VALVE BOX

DETAIL K

NTS



SECTION

PVC OR DI WYE BRANCH

DETAIL L

NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

CDM Smith
101 East River Drive, Suite 1A
East Hartford, CT 06108
Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

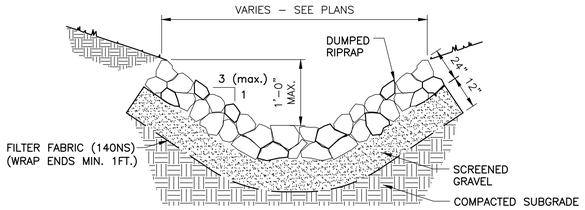
CIVIL DETAILS II

PROJECT NO. 10739–264571
FILE NAME: CD002CSDT.DWG

SHEET NO.
C-25

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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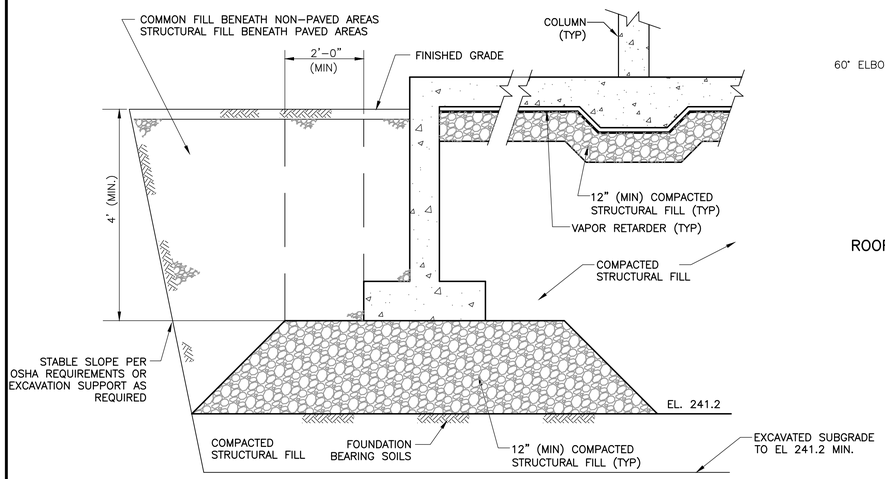


SECTION

RIPRAP SWALE

DETAIL A

SCALE: NTS



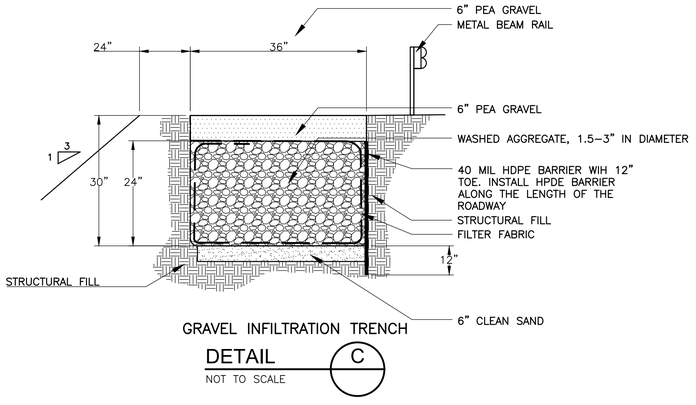
NOTES:

1. THE SUITABILITY OF THE FOUNDATION SUB-GRADE TO BE VERIFIED BY CONTRACTOR'S GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
2. SEE SPECIFICATION SECTION 312000 FOR SUBGRADE PREPARATION REQUIREMENTS AND COMPACTION REQUIREMENTS.
3. STRUCTURES INCLUDE TANK, BUILDING, OR SHALLOW FOOTINGS. SEE SITE PLANS.

BACKFILL

DETAIL B

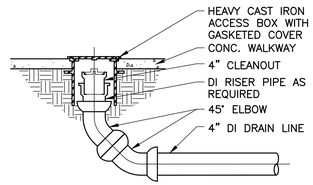
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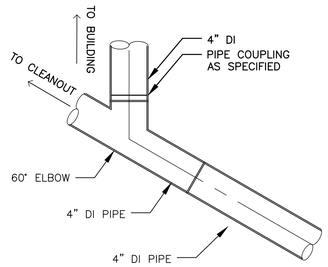
GRAVEL INFILTRATION TRENCH

DETAIL C

NOT TO SCALE



SECTION VIEW

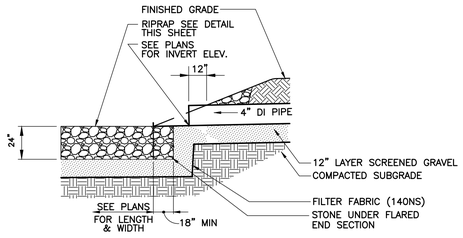


PLAN VIEW

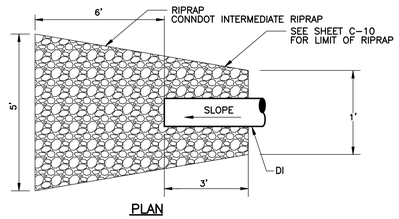
ROOF DRAIN CONNECTION WITH CLEANOUT

DETAIL D

NTS



SECTION

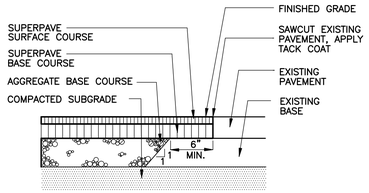


PLAN

PIPE END SECTION & RIPRAP APRON

DETAIL E

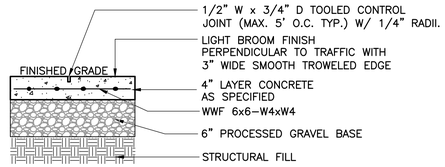
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PAVEMENT MATCH

DETAIL F

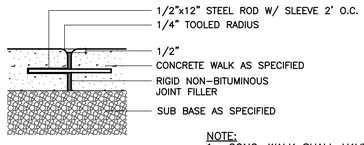
NOT TO SCALE



CONCRETE WALKWAY

DETAIL G

NOT TO SCALE



NOTE:

1. CONC. WALK SHALL HAVE 3 STEEL RODS MIN.
2. EXPANSION JOINTS SHALL BE LOCATED 30 FT. MIN. O.C. AND AT THE END OF EACH DAYS POUR.

EXPANSION JOINT

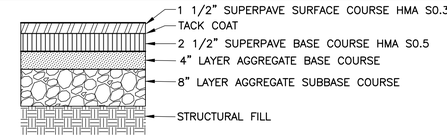
DETAIL H

NOT TO SCALE

BANK RESTORATION

DETAIL I

NOT TO SCALE



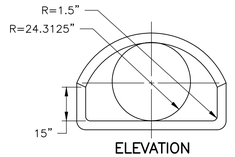
NOTES:

1. BASE COURSE SHALL EXTEND 3" MIN. BEYOND EDGE OF PAVEMENT. DEPTH VARIES SEE GRADING AND DRAINAGE PLAN

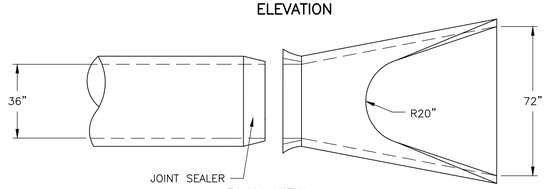
BITUMINOUS CONCRETE PAVEMENT

DETAIL J

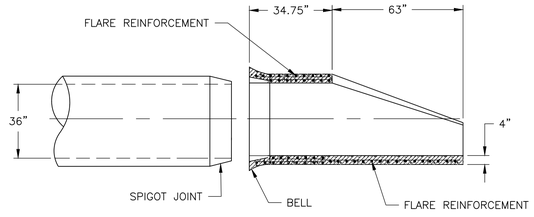
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ELEVATION



PLAN VIEW

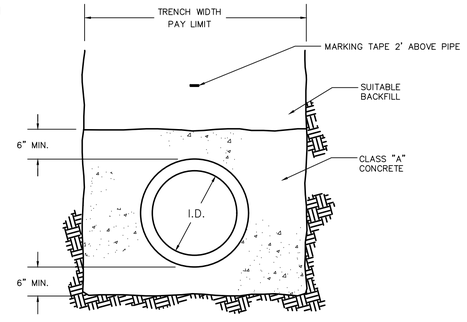


SECTION VIEW

RCP CULVERT PIPE END

DETAIL K

NOT TO SCALE



CONCRETE ENCASEMENT

DETAIL L

NOT TO SCALE

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

CDM Smith
101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT

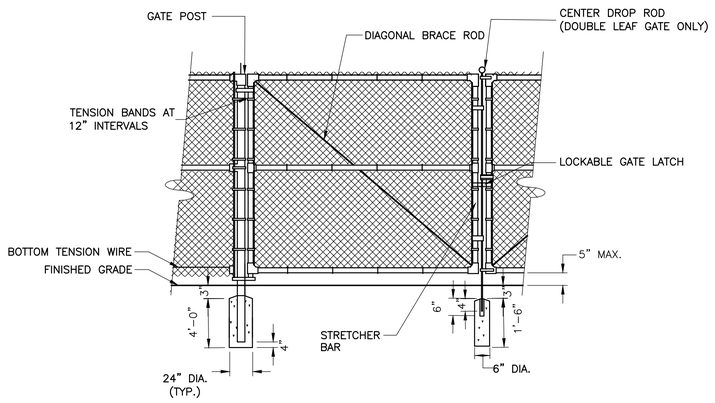
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS III

PROJECT NO. 10739-264571
FILE NAME: CD003CSDT.DWG

SHEET NO.
C-26

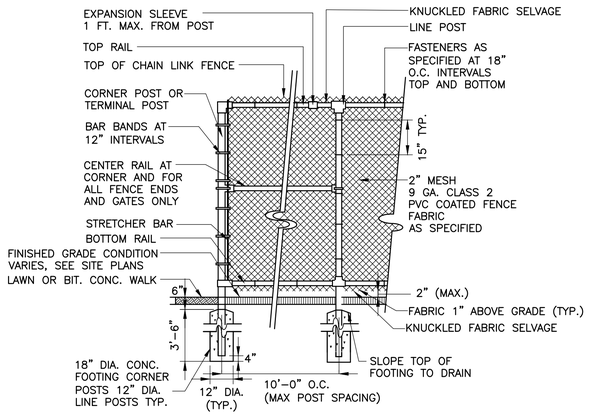
REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



CHAIN LINK DOUBLE LEAF SWING GATE

DETAIL A

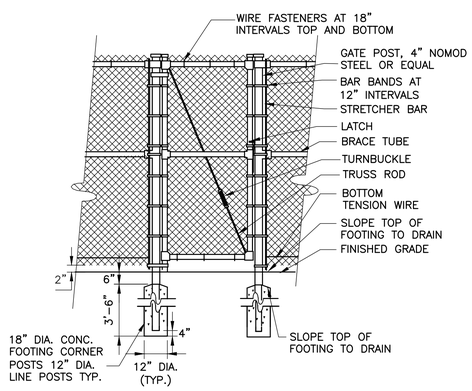
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6.5-FT HIGH CHAIN LINK FENCE

DETAIL B

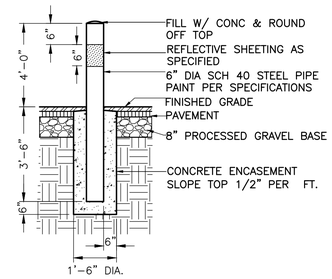
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PEDESTRIAN CHAIN LINK FENCE GATE

DETAIL C

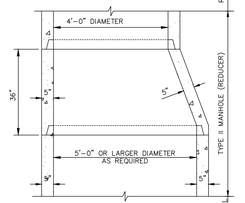
NOT TO SCALE



STEEL BOLLARD

DETAIL D

NOT TO SCALE



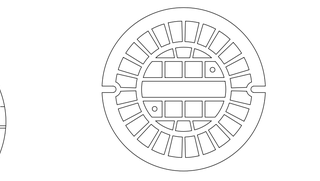
REDUCER SECTION

NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS GREATER THAN 12' OR ANY PIPE SIZE IS GREATER THAN 18".
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

TYPE II MANHOLE
(PRECAST WITHOUT STEPS)

NOTES:
1) THIS MANHOLE TO BE USED WHEN TOTAL DEPTH IS 12' OR LESS AND LARGEST PIPE SIZE IS 18" OR SMALLER.
2) ALL NEW SANITARY AND STORM SEWER INSTALLATIONS SHALL BE TELEVISED.

TYPE I MANHOLE
(PRECAST WITHOUT STEPS)

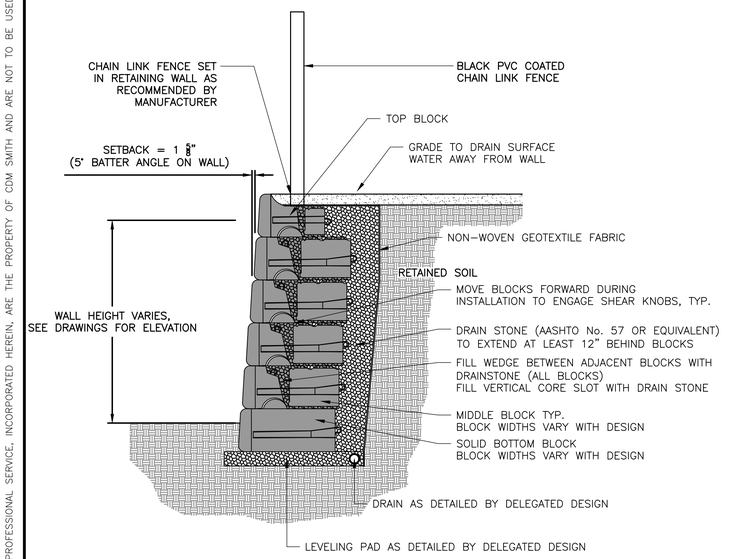


NEW BRITAIN STANDARD
WATERTIGHT MANHOLE CASTING

MANHOLE

DETAIL G

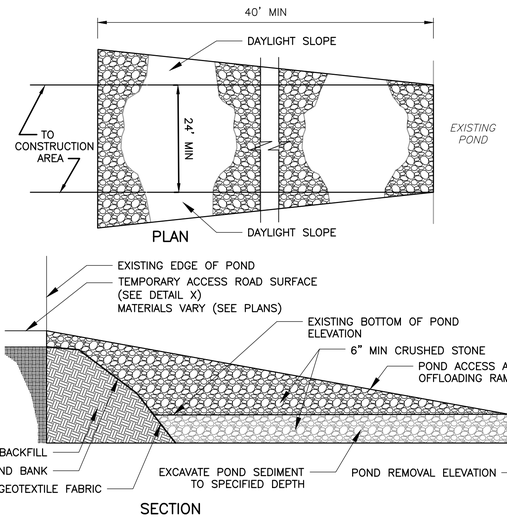
NOT TO SCALE



SEGMENTAL UNIT RETAINING WALL

DETAIL E

SCALE: NTS



SECTION

NOTES:

1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED POND ACCESS/TRUCK OFFLOADING RAMP AND EXISTING GROUND SURFACE
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO GROUND SURFACE.
3. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
4. REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
6. THE SLOPE OF THE POND ACCESS AND OFFLOADING RAMP TO BE DETERMINED BY CONTRACTOR BASED ON SELECTED EQUIPMENT, MEANS AND METHODS, AND APPROVED BY THE ENGINEER.
7. DAYLIGHT SLOPES OF THE RAMP WILL BE INSTALLED AS NEEDED BASED ON THE EXCAVATION DEPTH AND BANK HEIGHT TO MAINTAIN STABILITY OF THE POND ACCESS/OFFLOADING RAMP.
8. ALL MATERIAL FOR POND ACCESS/OFFLOADING RAMP IS TEMPORARY AND WILL BE REMOVED AFTER SEDIMENT REMOVAL COMPLETED. POND BANK TO BE RESTORED PER SPECIFICATIONS.

POND ACCESS AND TRUCK OFFLOADING RAMP

DETAIL F

SCALE: NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JUNE 2024

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101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

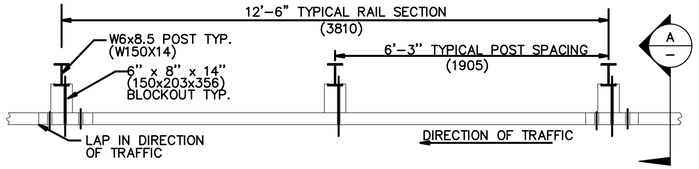
CIVIL DETAILS IV

PROJECT NO. 10739-264571
FILE NAME: CD004CSDT.DWG

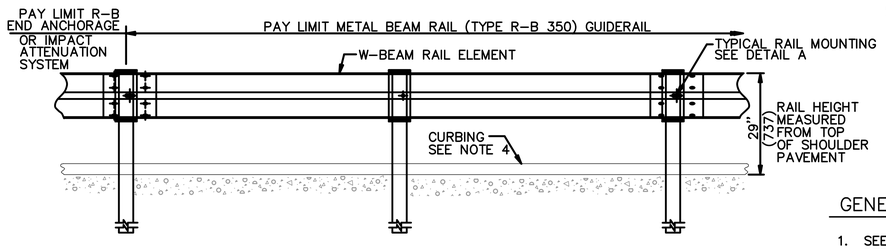
SHEET NO.
C-27

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

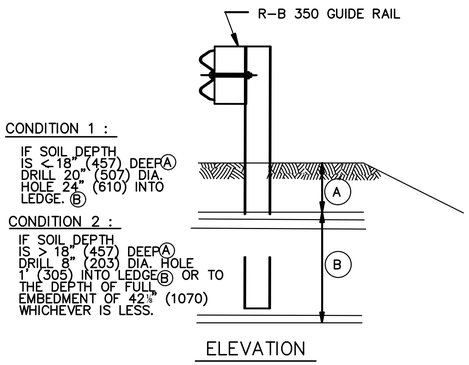
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PLAN



ELEVATION

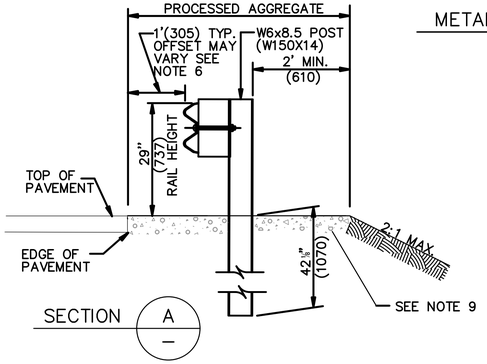


ELEVATION

GENERAL NOTES:

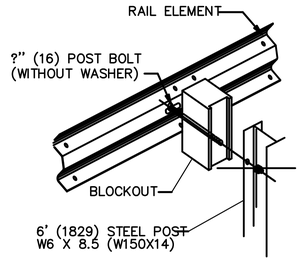
1. SEE CTDOT STANDARDS FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3" IS 4'-3". DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (>45mph 72.4kph), 4" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6" CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9" BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1' OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2' OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2' FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2' BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" + 1".

METAL BEAM RAIL (TYPE R-B 350)



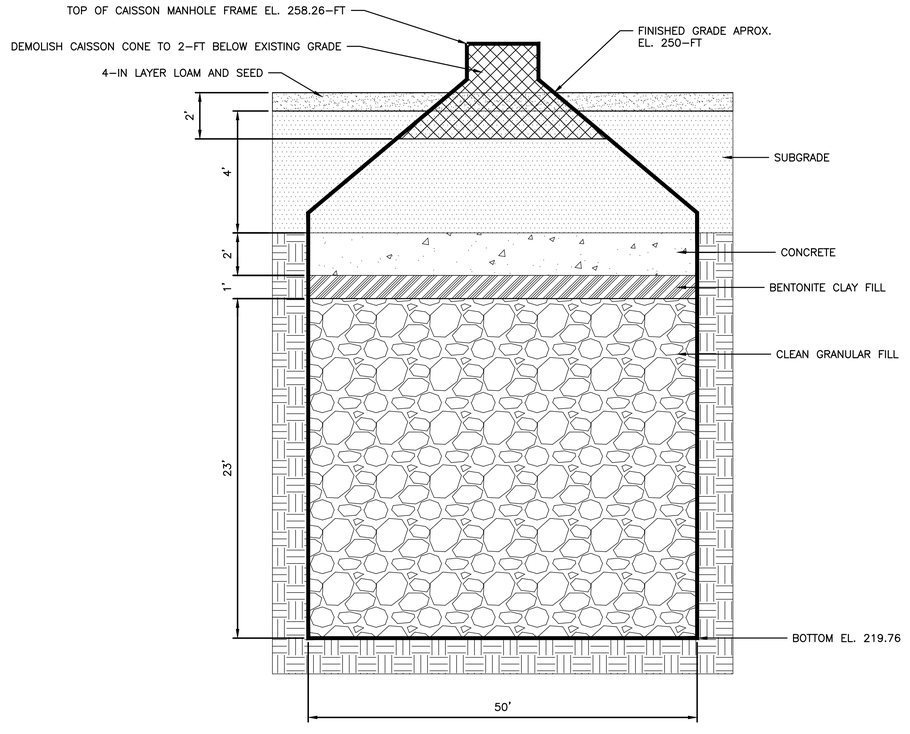
SECTION A

NO CURB APPLICATION



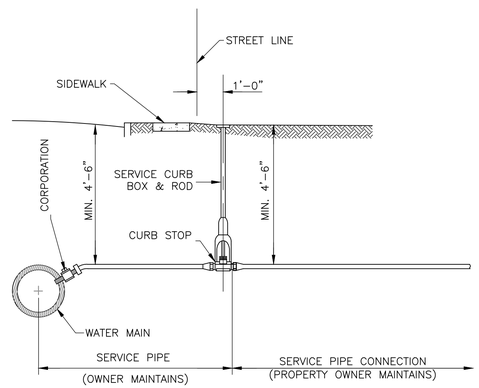
DETAIL A
RAIL MOUNTING

METAL BEAM RAIL
DETAIL A
NOT TO SCALE



NOTES:
1. EXISTING CAISSON WELL TO BE DECOMMISSIONED AND ABANDONED AS REQUIRED IN SECTION 019416, APPENDED TO THE SPECIFICATIONS.
2. CAISSON TOP CONE TO BE DEMOLISHED TO AT LEAST 2 FEET BELOW FINISH GRADE.

CAISSON DECOMMISSIONING AND ABANDONMENT
DETAIL B
NOT TO SCALE



WATER SERVICE CONNECTION
DETAIL C
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: JANUARY 2024

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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

CIVIL DETAILS V

PROJECT NO. 10739-264571
FILE NAME: CD005CSDT.DWG
SHEET NO. C-28

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION

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NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
10. SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' (165m)
50	600' (180m)
55	660' (200m)
65	780' (240m)

METRIC CONVERSION CHART (1" = 25mm)

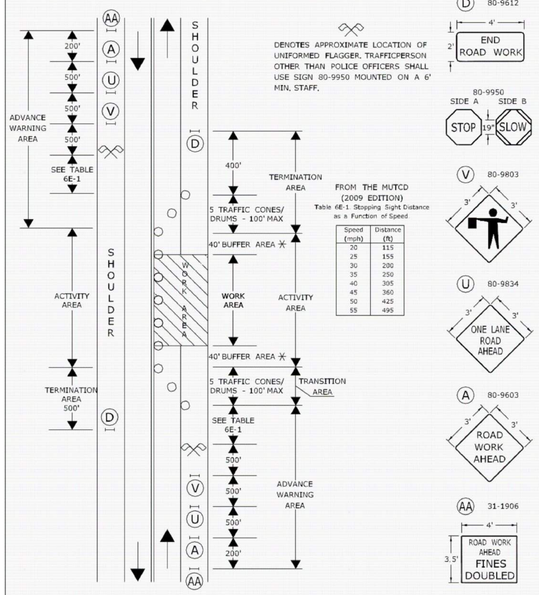
ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
NOTES

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 1 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)

HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



B. TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



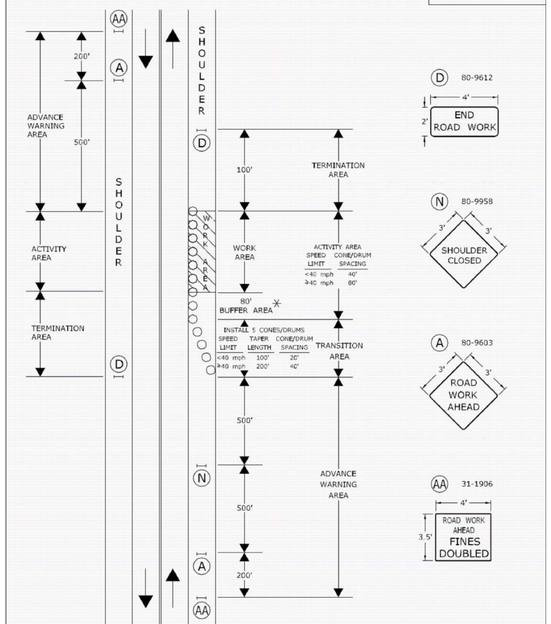
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 13 - SHEET 2 OF 2
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN SHOULDER - TWO LANE HIGHWAY

SIGN FACE 71 SQ. FT (MIN.)



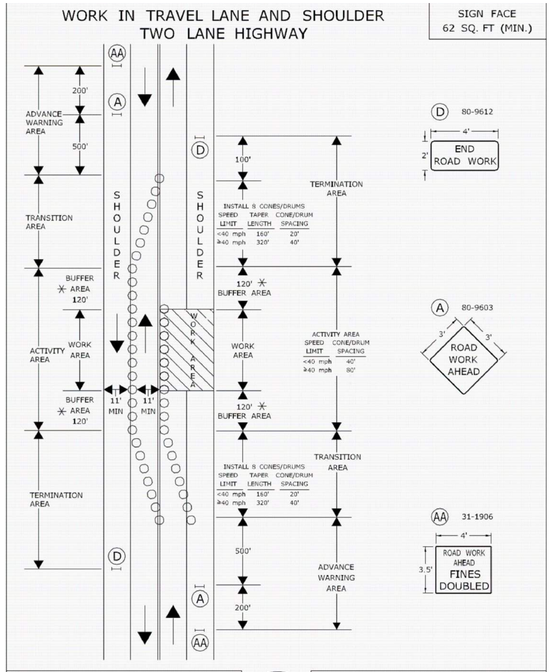
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 14
SEE NOTES 1, 2, 4, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY

SIGN FACE 62 SQ. FT (MIN.)



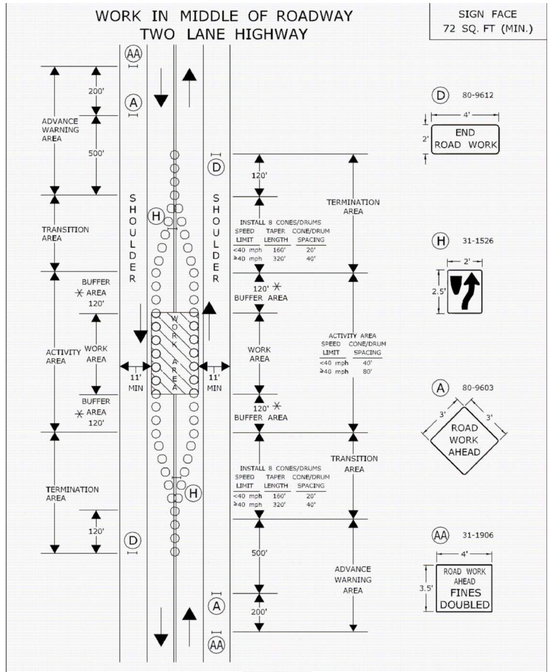
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 15
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY TWO LANE HIGHWAY

SIGN FACE 72 SQ. FT (MIN.)



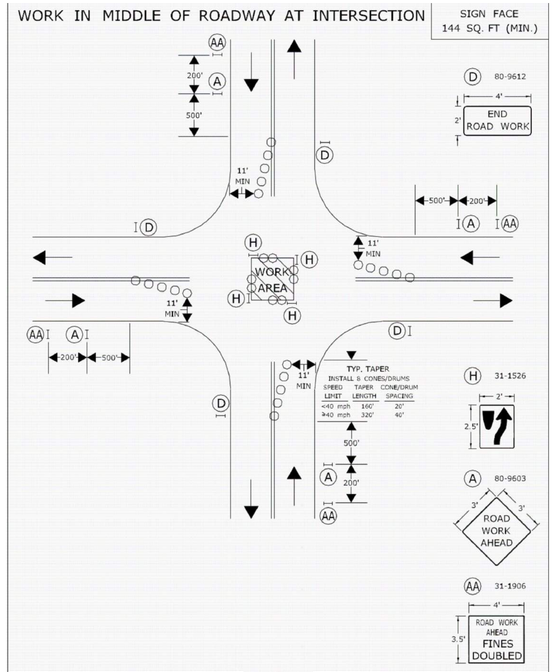
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 16
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN MIDDLE OF ROADWAY AT INTERSECTION

SIGN FACE 144 SQ. FT (MIN.)



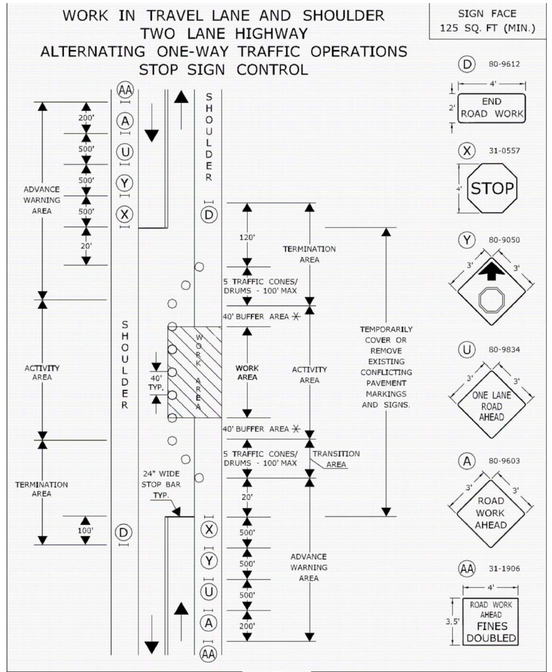
TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 17
SEE NOTES 1, 2, 4, 6, 7, 8

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS STOP SIGN CONTROL

SIGN FACE 125 SQ. FT (MIN.)



TRAFFIC CONE **OR** TRAFFIC DRUM
OPTIONAL TRAFFIC DRUM PORTABLE SIGN SUPPORT
HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 18
SEE NOTES 1, 2, 4, 7, 8

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: S. ENGEL
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: DECEMBER 2023

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101 East River Drive, Suite 1A
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CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

TRAFFIC CONTROL NOTES AND PLANS

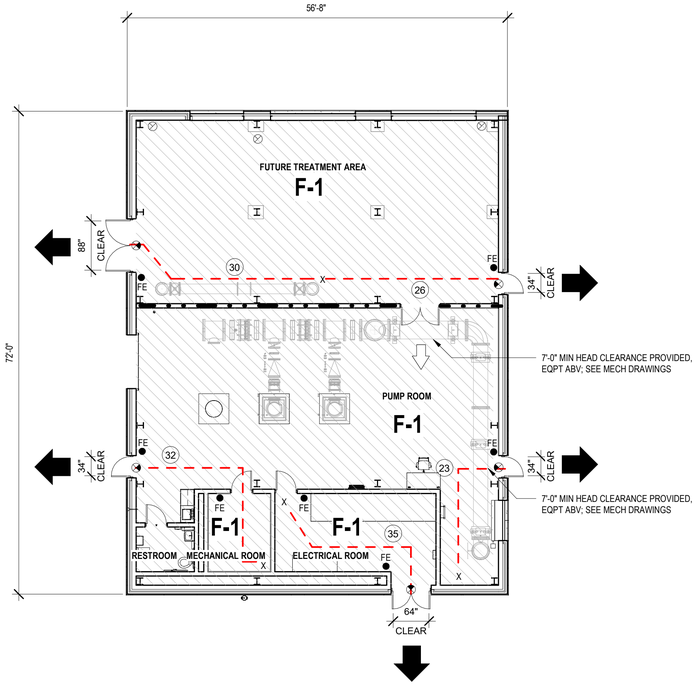
PROJECT NO. 10739-264571
FILE NAME: C029TRFC.DWG
SHEET NO. C-29

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Elevation Drawings and Floor Plans

Include in hard copy submittal



LIFE SAFETY PLAN

3/32" = 1'-0"

LIFE SAFETY PLAN LEGEND

- EGRESS PATH
- 2 HOUR FIRE RATING
- EXIT DISCHARGE
- AREA OR SPACE EXIT
- EXIT SIGN
- FE — FIRE EXTINGUISHER - MULTIPURPOSE DRY-CHEMICAL TYPE
- (X) — TRAVEL DISTANCE (FEET)
- [X] — COMMON PATH OF TRAVEL (FEET)
- X — POINT OF ORIGIN
- FACTORY INDUSTRIAL, F-1 OCCUPANCY CLASSIFICATION

Building Code Summary			
Owner:	City of New Britain, Connecticut	**Date:**	April 2023
Project Name:	White Bridge Waterworks Facilities	**Location:**	New Britain, CT
Project No:	10739-264571	**Architect of Record:**	CDM Architects Inc.
Building Name:	Pond Pumping Station		
Work Scope:	Construction of pump station (New Structure)		
Applicable Ordinances, Codes, and Standards			
Abbreviations	**ICC** - International Code Council; **IBC** - International Building Code; **IEBC** - International Existing Building Code; **IECC** - International Energy Conservation Code; **IFC** - International Fire Code; **IMC** - International Mechanical Code; **IPC** - International Plumbing Code;		
Building Code	2022 CT State Building Code - 2021 IBC		
Mechanical Code	2022 CT State Building Code - 2021 IMC		
Energy Code	2022 CT State Building Code - 2021 IECC		
Plumbing Code	2022 CT State Building Code - 2021 IPC		
Electrical Code	2020 National Electrical Code (NFPA 70)		
Accessibility Code	2017 ICC A117.1		
Use and Occupancy Classification			
IBC Code Reference			
Chapter 3			
Section 306	Factory Group F		
306.2	Moderate-hazard factory industrial, Group F-1		
General Building Heights and Areas			
Chapter 5			
Section 504	Building Height and Number of Stories		
Table 504.3	Allowable Building Height in Feet Above Grade Plane	Allowable	Proposed
	Group F-1 Type IIB - No Sprinklers	55 Feet	25 Feet, 10 Inches
Table 504.4	Allowable Number of Stories Above Grade Plane		
	Group F-1 Type IIB - No Sprinklers	2 Stories	1 Story
Section 506	Building Area		
Table 506.2	Allowable Area Factor in Square Feet		
	Group F-1 Type IIB - No Sprinklers	15,500 SF	4,085 SF
Types of Construction			
Chapter 6			
Section 602	Construction Classification		
602.2	Types I and II, Non Combustible	Type IIB Construction	
Fire Protection and Life Safety Systems			
Chapter 9			
Section 903	Automatic Sprinkler Systems	Not required for Group F-1 occupancy: 1. Fire area under 12,000 square feet. 2. Fire area not located more than three stories above grade plane. 3. Combined area of all F-1 fire areas under 24,000 square feet.	
Section 906	Portable Fire Extinguishers	Required in accordance to 906.2 and NFPA 10	
Section 907 907.2.4	Fire Alarm and Detection Systems Group F	Not required for Group F-1 occupancy 1. F occupancy under two stories in height. 2. F occupancy has occupant load under 500.	
Means of Egress			
Chapter 10			
Section 1004	Occupant Load		
Table 1004.5	Maximum Floor Area Allowances per Occupant		
	Function of Space	Occupant Load Factor	Area / Occupant Load Factor
	Accessory storage areas, mechanical equipment room	300 gross	(4,085 / 300) = 14
Section 1010	Doors, Gates and Turnstiles	Required	Proposed
1010.1.1	Size of doors	Minimum clear width: 32 inches	34 inches
Section 1017	Exit Access Travel Distance		
Table 1017.2	Occupancy	without Sprinklers (feet)	with Sprinklers (feet)
	F-1	200	N/A
Accessibility			
Chapter 11			
Section 1103	Scoping Requirements		
1103.2.9	Equipment spaces are not required to comply with this chapter		
Energy Efficiency			
Chapter 13			
Section 1301	General		
1301.1.1	Building designed and constructed in accordnace with the IECC with compliance requirements indicated in COMcheck report		

0 4' 8' 12' 20'

SCALE: 3/32" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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75 State Street
Boston, Massachusetts 02109

CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

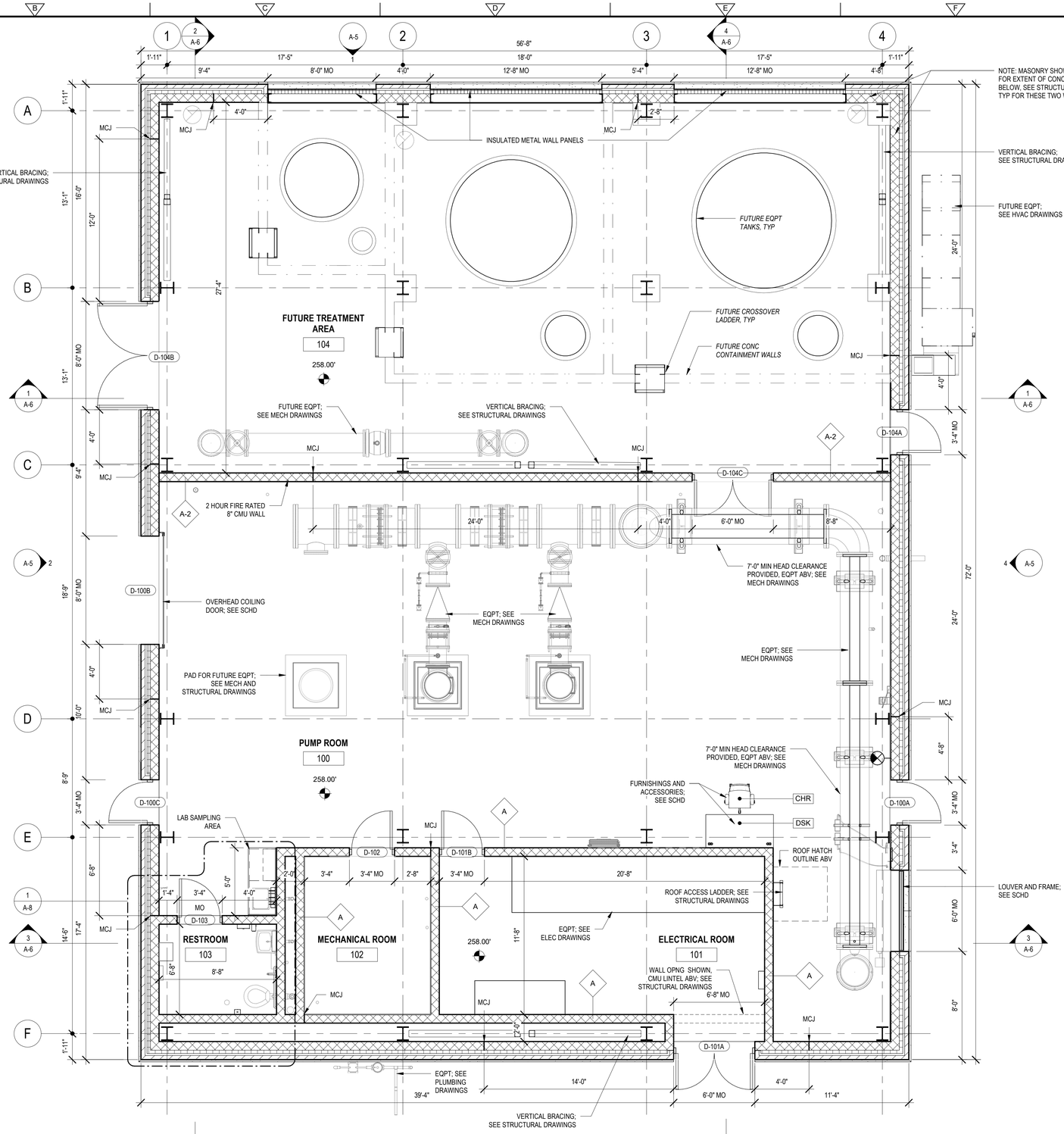
POND PUMPING STATION
BUILDING CODE SUMMARY AND LIFE SAFETY PLAN

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT
SHEET NO. A-2

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GROUND LEVEL FLOOR PLAN
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

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CITY OF NEW BRITAIN, CONNECTICUT

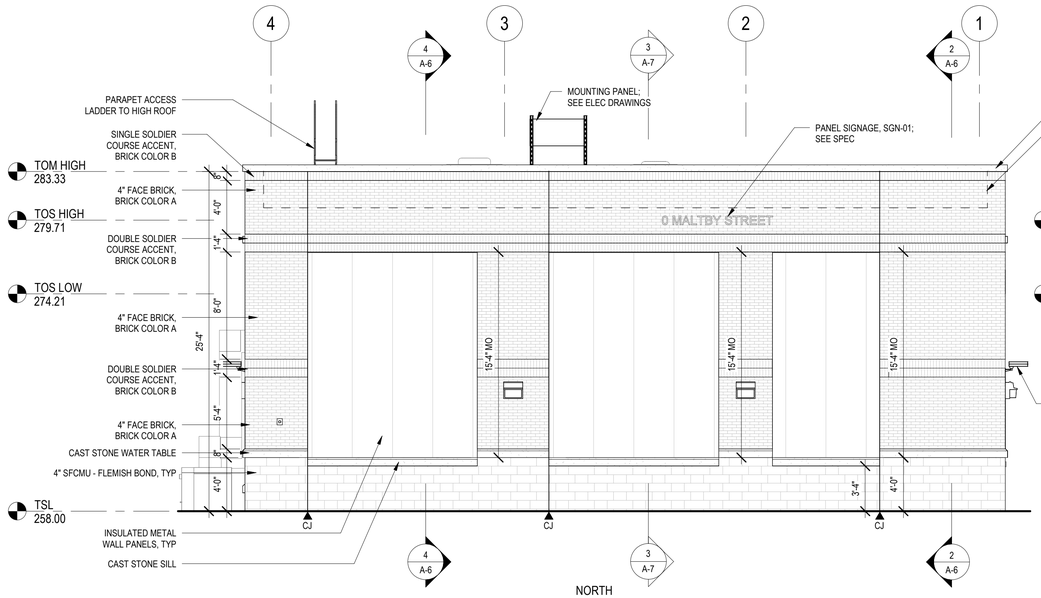
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

POND PUMPING STATION
FLOOR PLAN

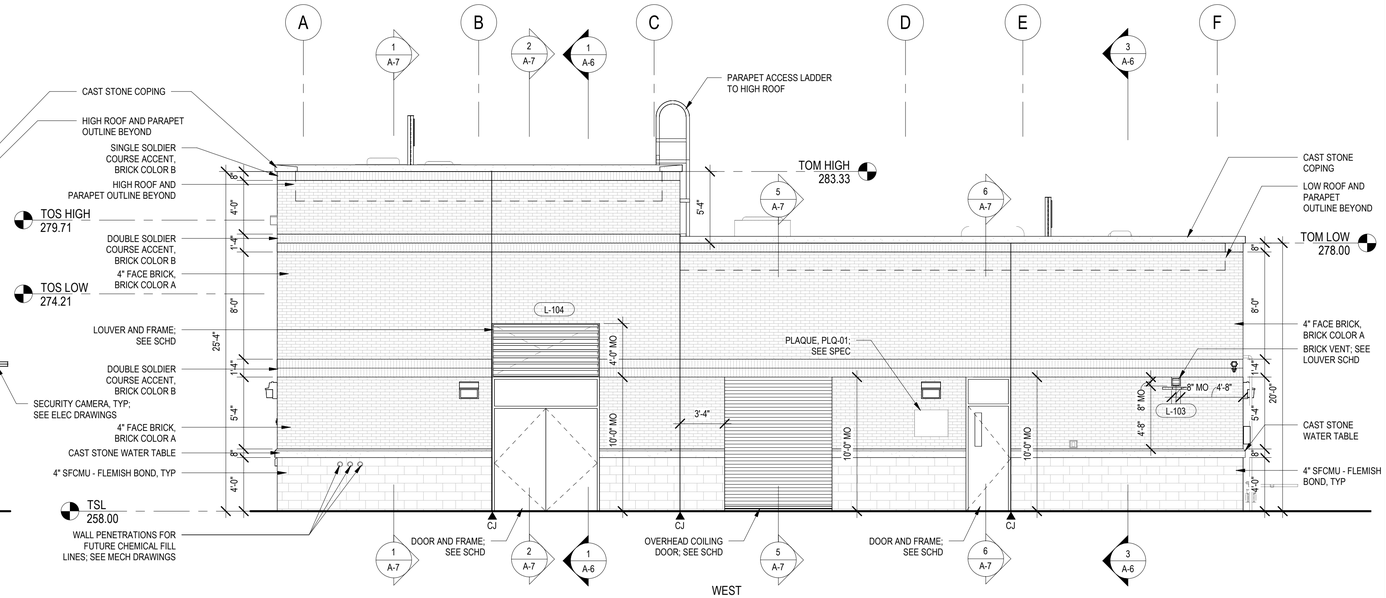
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FILE NAME: AWZ001PS.RVT
SHEET NO.
A-3

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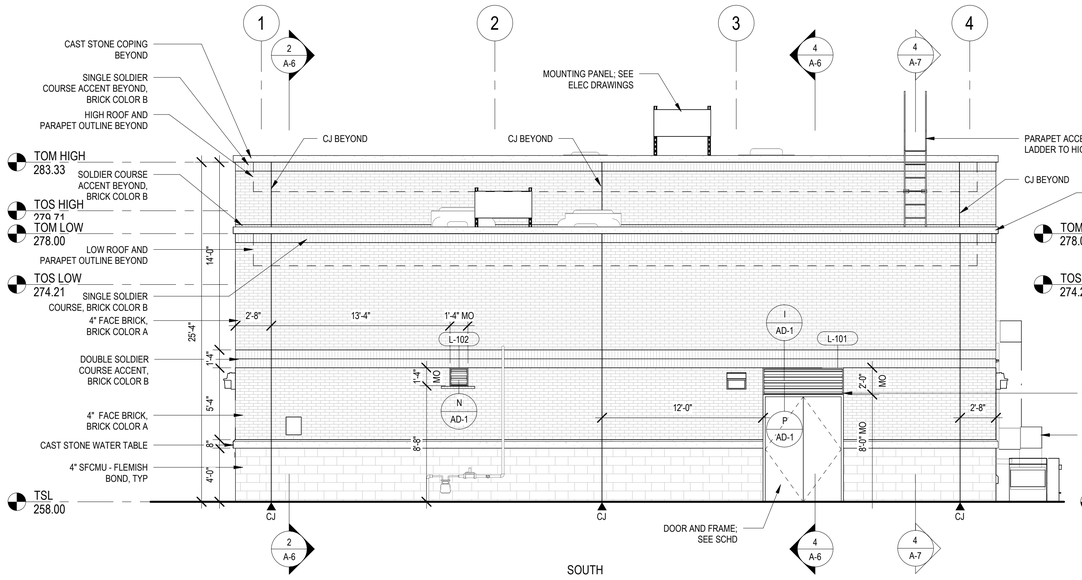
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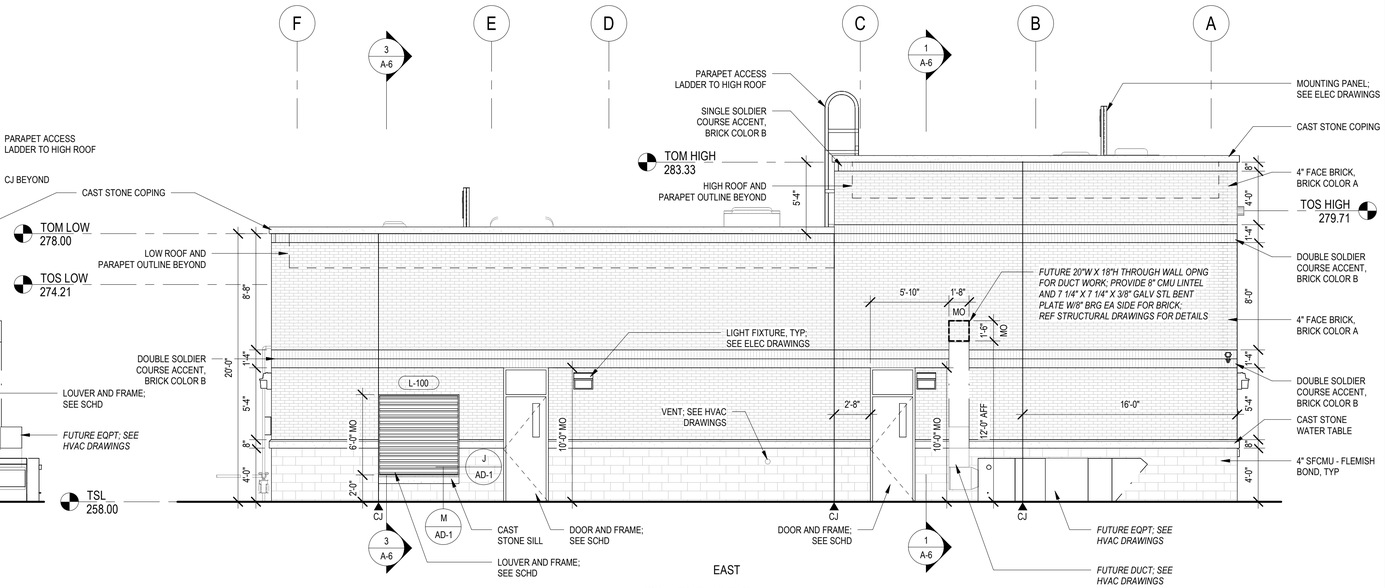
1 ELEVATION
A-3 3/16" = 1'-0"



2 ELEVATION
A-3 3/16" = 1'-0"



3 ELEVATION
A-3 3/16" = 1'-0"



4 ELEVATION
A-3 3/16" = 1'-0"

0 2' 4' 6' 10'

SCALE: 3/16" = 1'-0"

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DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

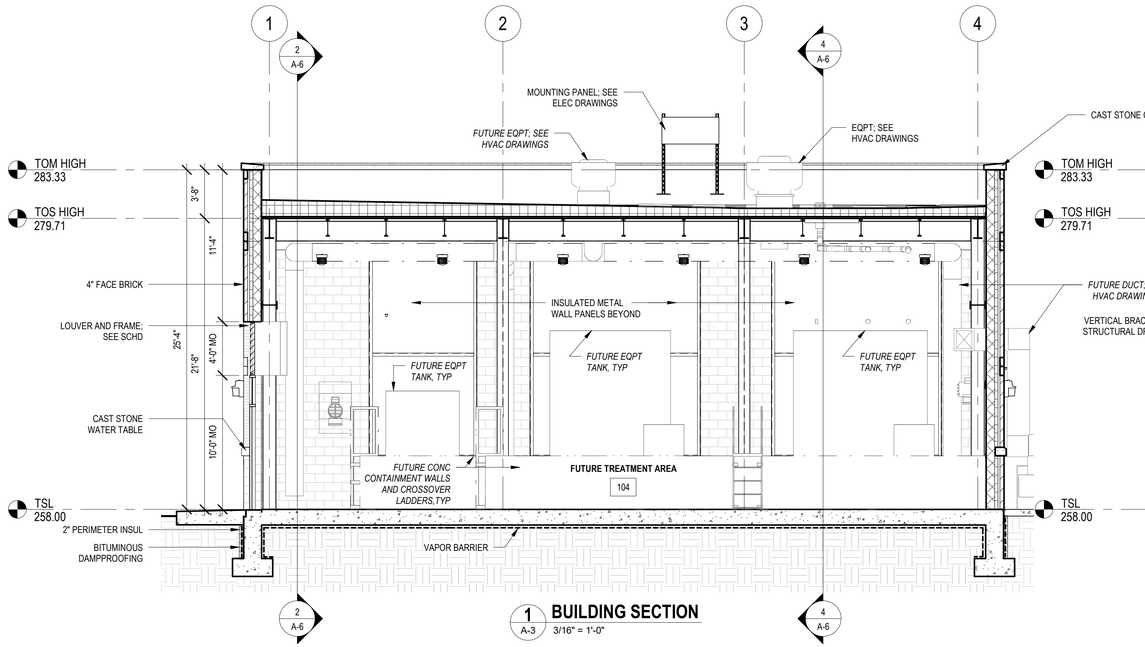
POND PUMPING STATION
EXTERIOR ELEVATIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

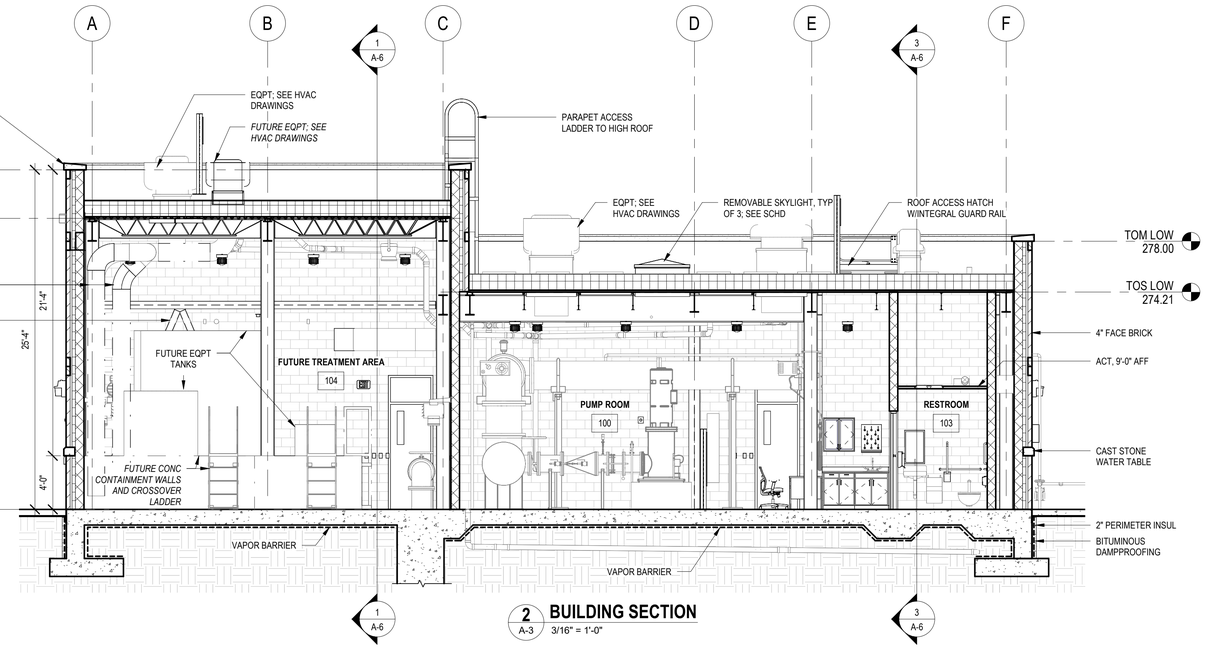
SHEET NO.
A-5

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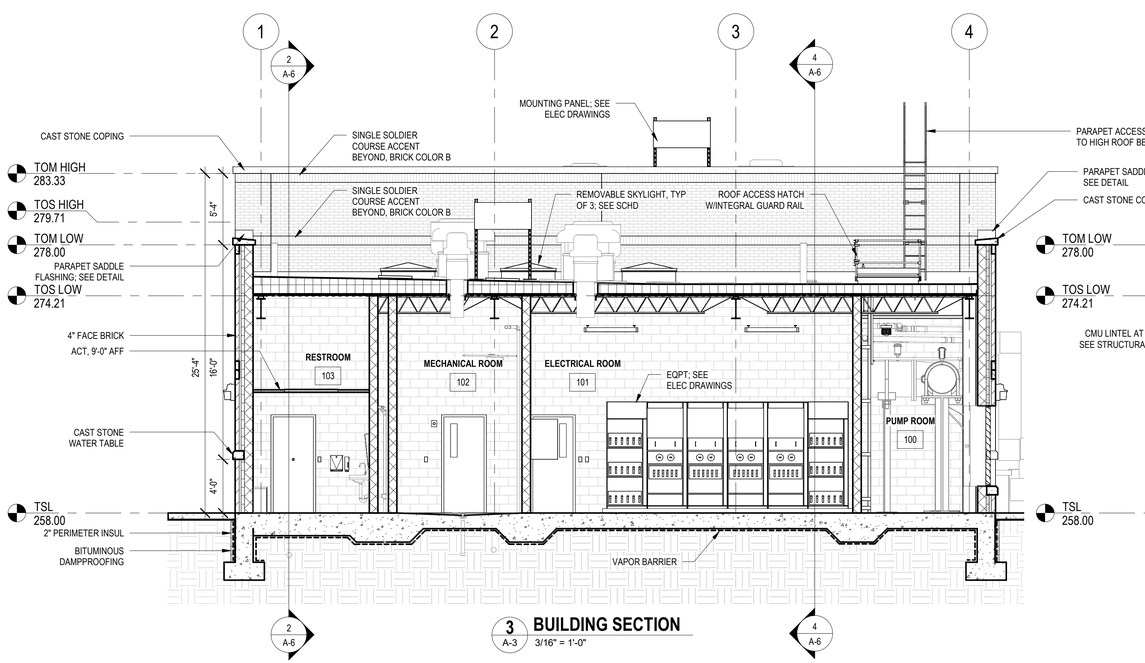
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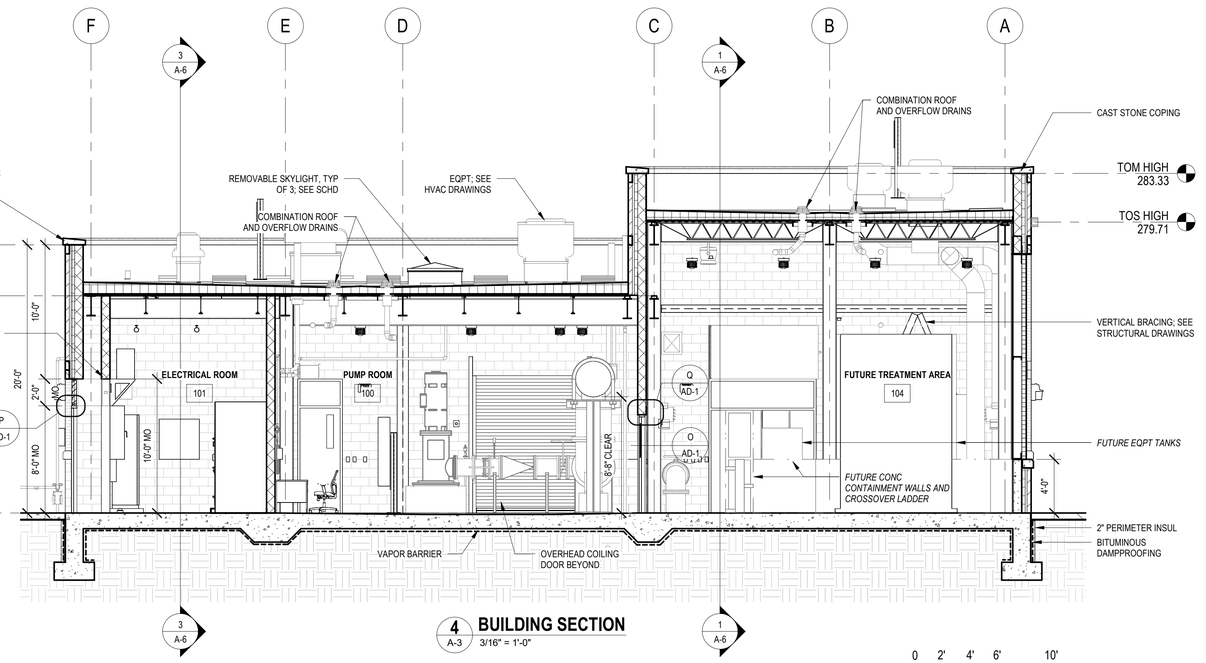
1 BUILDING SECTION
A-3 3/16" = 1'-0"



2 BUILDING SECTION
A-3 3/16" = 1'-0"



3 BUILDING SECTION
A-3 3/16" = 1'-0"



4 BUILDING SECTION
A-3 3/16" = 1'-0"

0 2' 4' 6' 10'
SCALE: 3/16" = 1'-0"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. MARSHALL
DRAWN BY: R. MARSHALL
SHEET CHK'D BY: S. BRADFORD
CROSS CHK'D BY: K. WAGNER
APPROVED BY: B. GIORGI
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

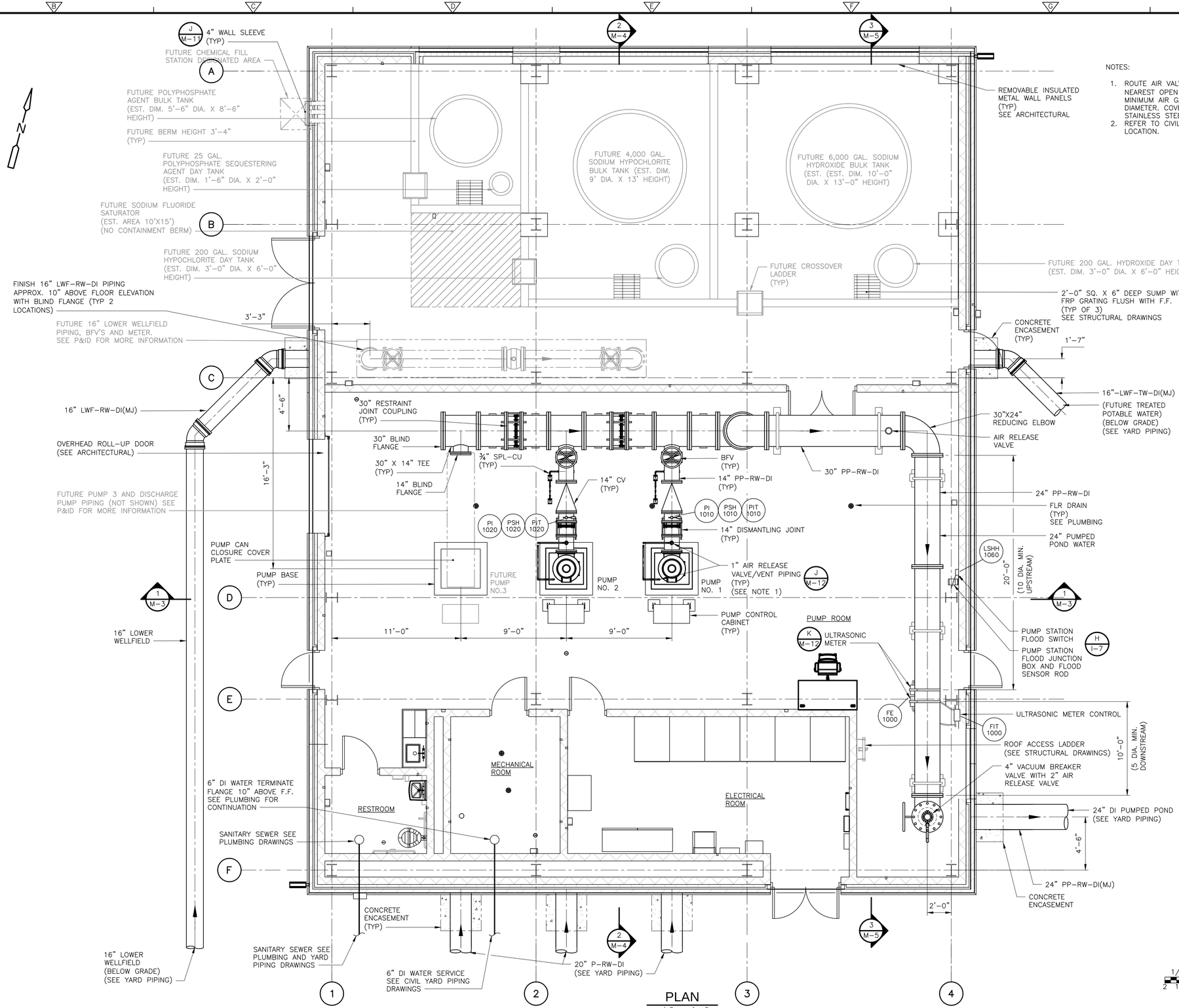
POND PUMPING STATION
BUILDING SECTIONS

PROJECT NO. 10739-264571
FILE NAME: AWZ001PS.RVT

SHEET NO.
A-6

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NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. REFER TO CIVIL SHEETS FOR BUILDING LOCATION.

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES UPPER AND LOWER WELLFIELDS AND POND PUMPING STATION

POND PUMPING STATION FLOOR PLAN

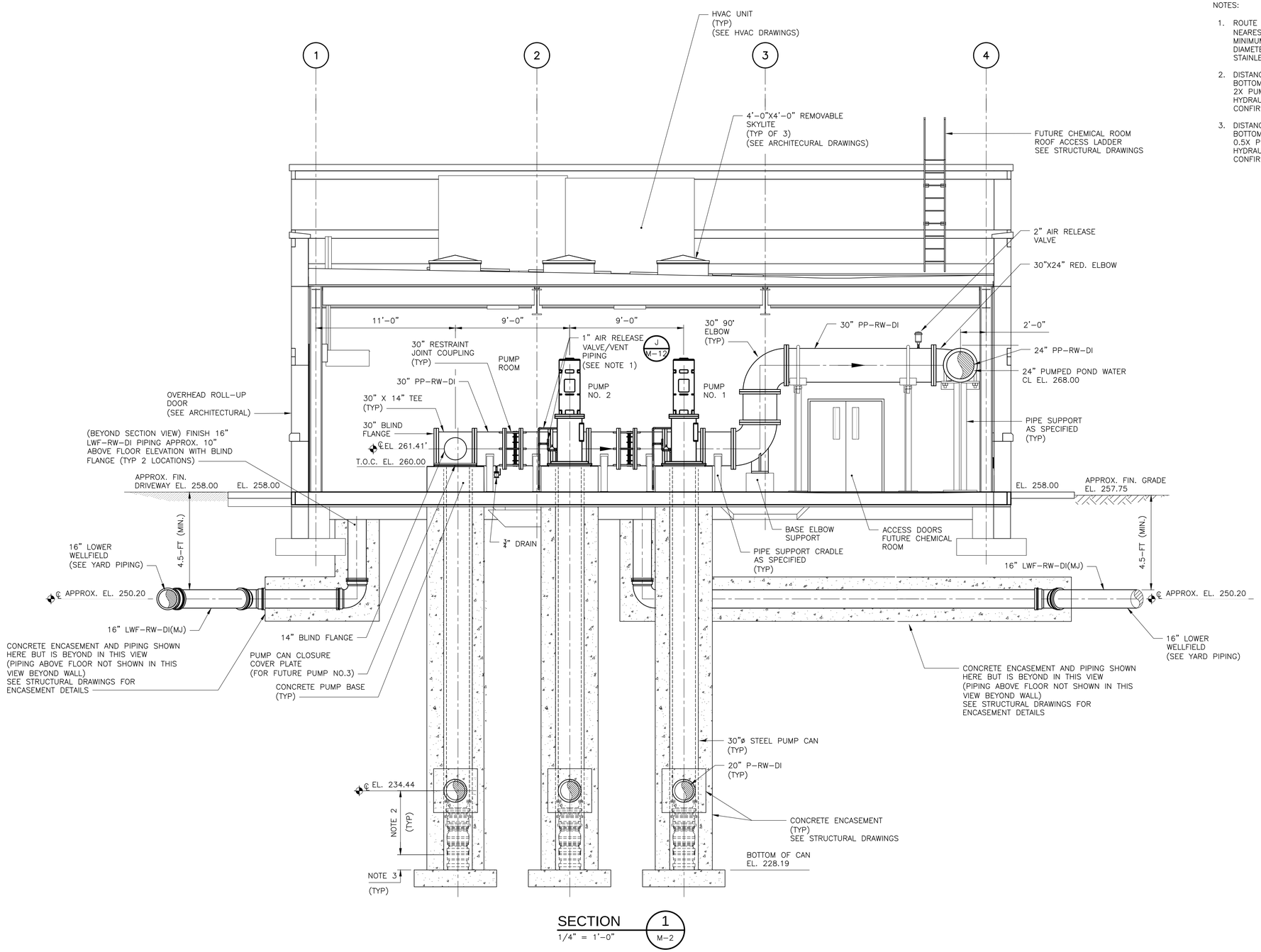
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NOTES:

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2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
3. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BEMINIMUM 0.5X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.



SECTION 1 / 1/4" = 1'-0" / M-2

1/4" = 1'- 0"
2 1 0 2 4

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

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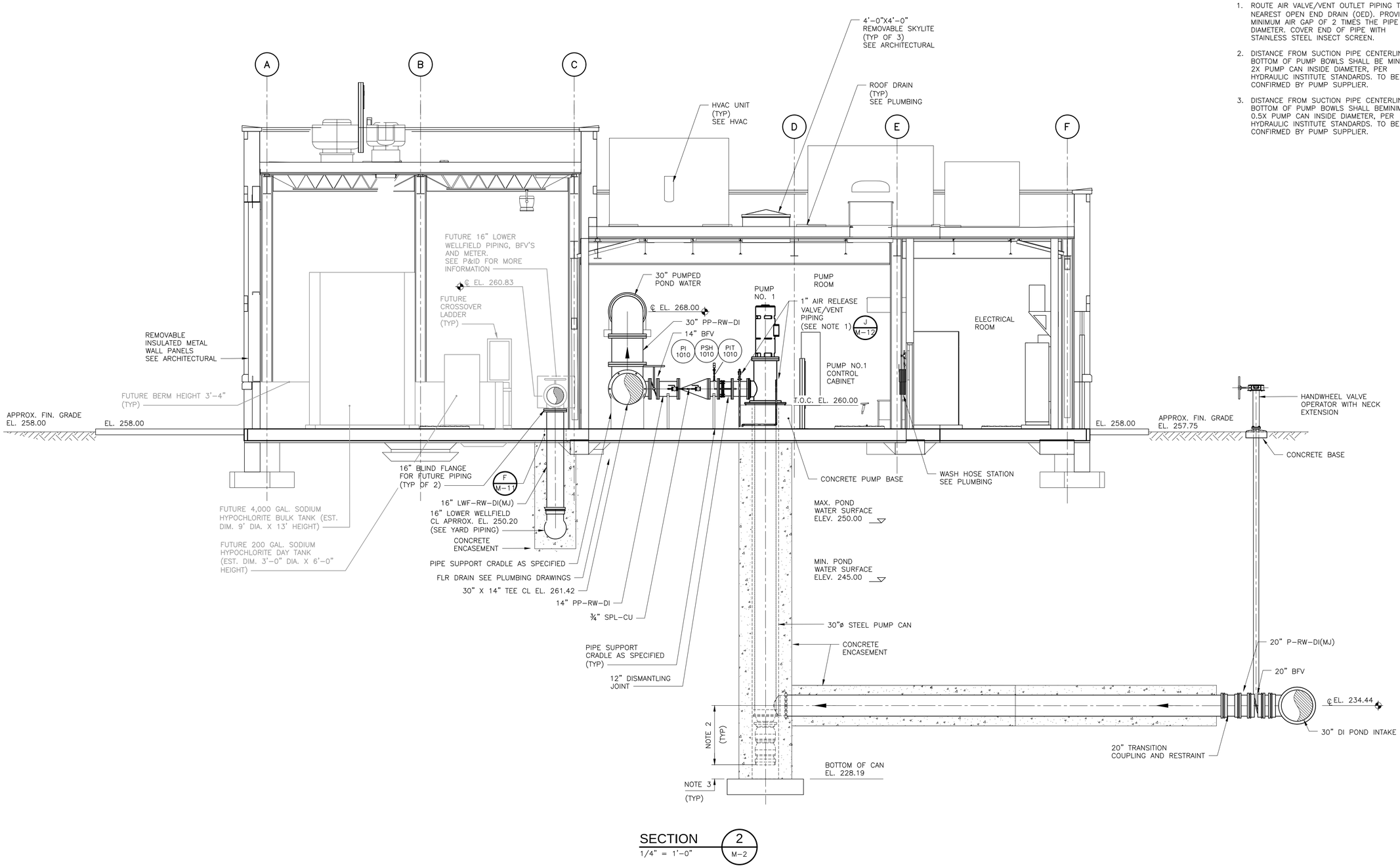
CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
SECTIONS I

PROJECT NO. 10739-264571
FILE NAME: M003PSSC.DWG
SHEET NO. M-3

NOTES:

1. ROUTE AIR VALVE/VENT OUTLET PIPING TO THE NEAREST OPEN END DRAIN (OED). PROVIDE MINIMUM AIR GAP OF 2 TIMES THE PIPE DIAMETER. COVER END OF PIPE WITH STAINLESS STEEL INSECT SCREEN.
2. DISTANCE FROM SUCTION PIPE CENTERLINE TO BOTTOM OF PUMP BOWLS SHALL BE MINIMUM 2X PUMP CAN INSIDE DIAMETER, PER HYDRAULIC INSTITUTE STANDARDS. TO BE CONFIRMED BY PUMP SUPPLIER.
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SECTION 2 / M-2
1/4" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: K. GERLACH
DRAWN BY: V. BITTO
SHEET CHK'D BY: K. WAGNER
CROSS CHK'D BY: K. GERLACH
APPROVED BY: K. WAGNER
DATE: APRIL 2023

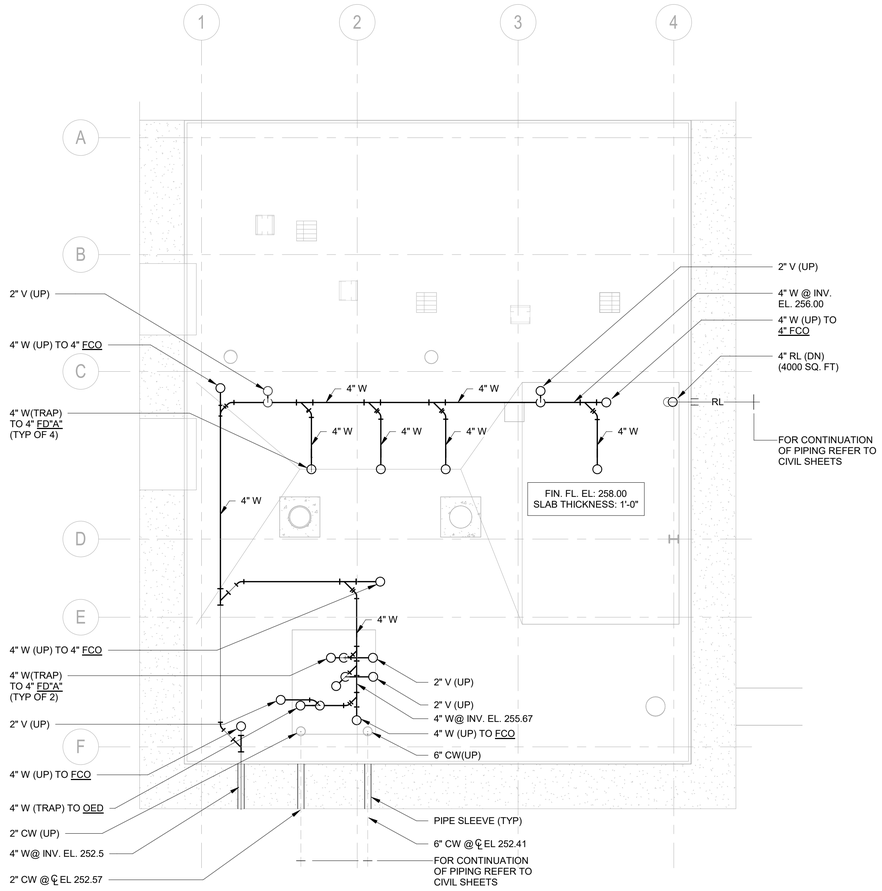
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Tel: (860) 529-7615

CITY OF NEW BRITAIN, CONNECTICUT
WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS
AND POND PUMPING STATION

POND PUMPING STATION
SECTIONS II

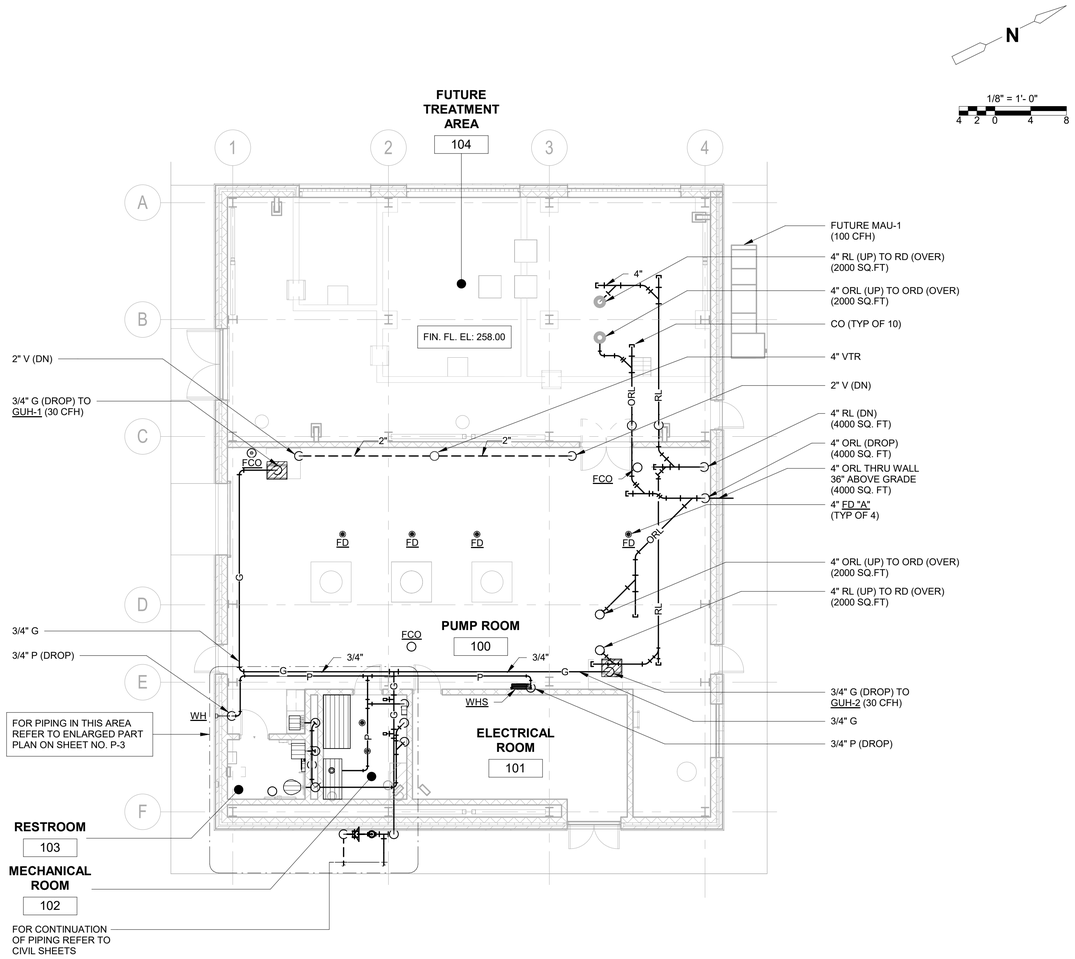
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FILE NAME: M004PSSC.DWG
SHEET NO. M-4

REGULATORY REVIEW SUBMITTAL - NOT FOR CONSTRUCTION



BURIED PIPING

1/8" = 1'-0"



FLOOR PLAN

1/8" = 1'-0"

NOTES:

1. ALL PIPES PASSING THROUGH THE FOUNDATION WALL SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND THOUGH THE WALL 2" ON EITHER SIDE OF THE FOUNDATION WALL IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
2. ALL PIPES PASSING UNDERNEATH THE FOUNDATION SHALL BE INSTALLED IN A SLEEVE THAT IS 2" IN DIAMETER LARGER THAN THE PIPE AND SHALL EXTEND 12" BEYOND THE ANGLE OF REPOSE OF THE FOUNDATION FOOTING ON BOTH SIDES OF THE FOOTING.

NOTES:

1. ALL BURIED PIPING WITHIN THE BUILDING SHALL BE ENCASED IN CONCRETE AS SHOWN ON THE DETAIL ON THE STRUCTURAL DETAIL SHEET.
2. IN LIEU OF TRAP PRIMERS WHERE ALLOWED BY CODE, CONTRACTOR SHALL INSTALL A TRAP RESEALER MADE OF ELASTOMERIC MATERIAL.
3. 1/2" SOFT ROLLED COPPER TUBING SHALL BE INSTALLED TO FEED THE WATER FROM THE TRAP PRIMER UNIT TO THE TRAPS FOR THE FLOOR DRAINS WHERE REQUIRED. THE SOFT ROLLED COPPER TUBING SHALL BE WRAPPED WITH ARMAFLEX TO PROTECT IT FROM THE CONCRETE. THE TUBING IS NOT SHOWN ON THE DRAWING FOR CLARITY SAKE. BUT THE PIPING SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
4. SANITARY PIPING SHALL EXTEND BEYOND THE BUILDING 5'-0" UNDER THE PLUMBING CONTRACTOR'S SCOPE OF WORK.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. SHEEHAN
DRAWN BY: P. MANI
SHEET CHK'D BY: B. BUCCHIANERI
CROSS CHK'D BY: K. WAGNER
APPROVED BY: D. FLAHERTY
DATE: JANUARY 2024

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77 Hartland Street, Suite 200
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CITY OF NEW BRITAIN, CONNECTICUT

WHITE BRIDGE WATERWORKS FACILITIES
UPPER AND LOWER WELLFIELDS AND
POND PUMPING STATION

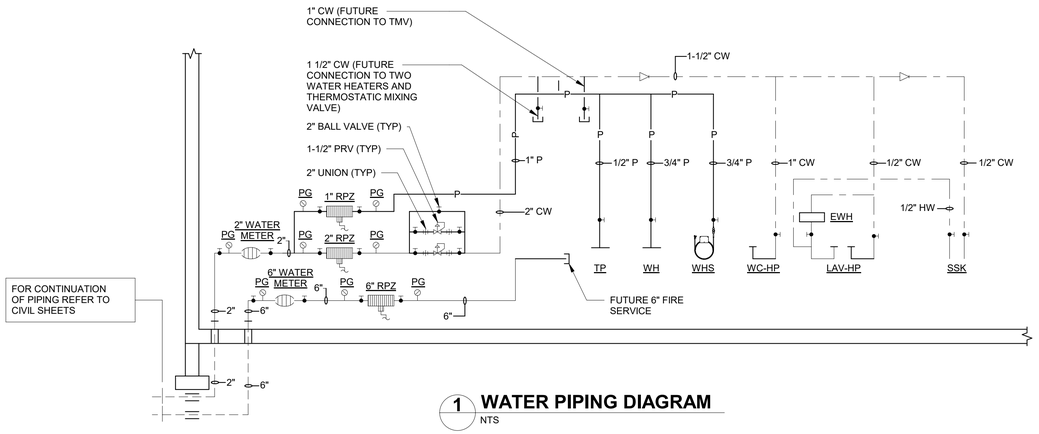
BURIED PIPING AND FLOOR PLANS

PROJECT NO. 10739-264571
FILE NAME: HPWZ001PS.RVT

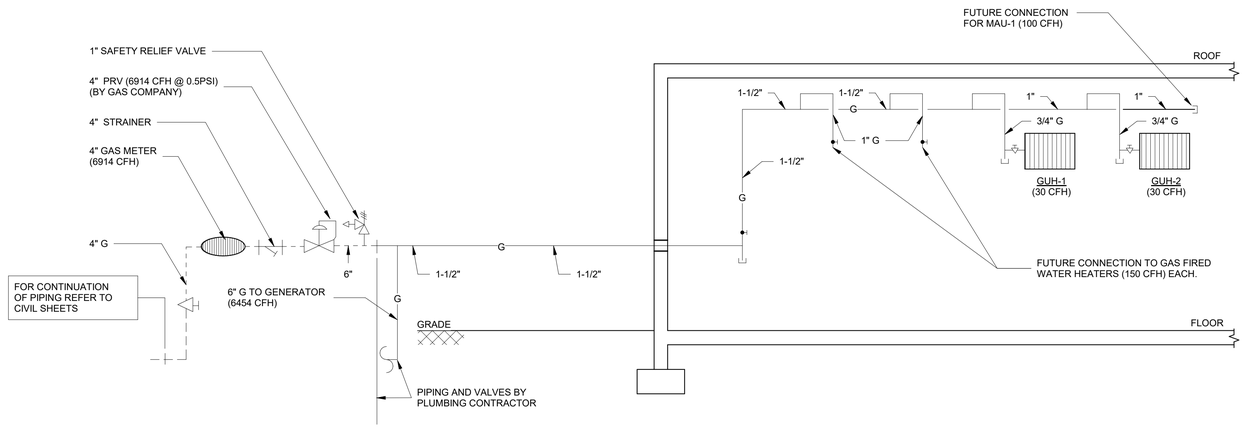
SHEET NO.
P-2

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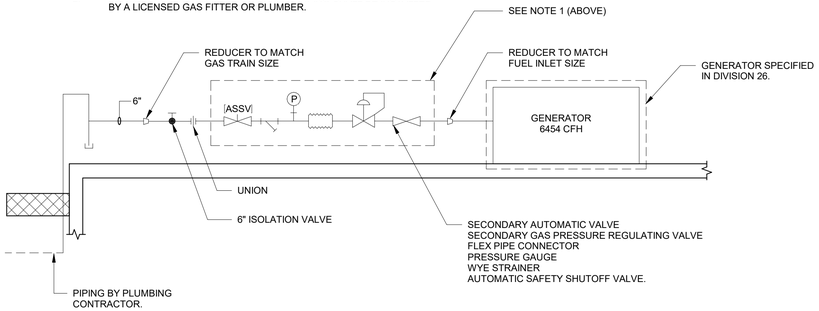
1 WATER PIPING DIAGRAM
NTS



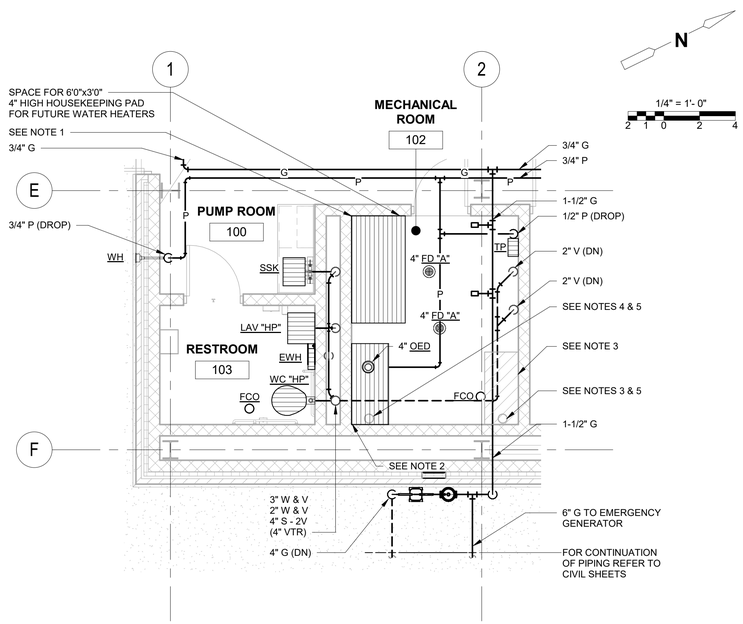
2 GAS PIPING DIAGRAM
NTS

NOTES:

1. GAS TRAIN COMPONENTS SHALL BE PROVIDED BY THE GENERATOR MANUFACTURER AND INSTALLED BY THE PLUMBING CONTRACTOR.
2. INSTALL 6" G LINE TO GENERATOR. GAS PIPING SHALL BE INSTALLED BY A LICENSED GAS FITTER OR PLUMBER.



3 GAS PIPING DIAGRAM FOR STANDBY GENERATOR
NTS



4 ENLARGED FLOOR PLAN
1/4" = 1'-0"

NOTES:

1. SPACE ALLOCATED FOR FUTURE WATER HEATERS, TEPID WATER MIXING VALVE AND TEPID WATER RECIRCULATION PUMP.
2. SPACE ALLOCATED FOR DOMESTIC WATER SERVICE. FOR VALVES AND APPURTENANCES REFER TO THE WATER PIPING DIAGRAM ON SHEET NO. P-3. WATER SERVICE HAS BEEN SIZED TO INCLUDE FUTURE ADDITION OF CHEMICALS AND TEPID WATER HEATING SYSTEM.
3. SPACE ALLOCATED FOR FUTURE FIRE PROTECTION SERVICE SHALL SERVE AN AUTOMATIC FIRE PROTECTION SYSTEM WHEN THE FUTURE CHEMICAL SYSTEMS ARE INSTALLED ON THE PROJECT. 6" FIRE SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR.
4. 2" DOMESTIC WATER SERVICE SHALL BE BROUGHT INTO THE BUILDING AND LEFT AS A FLANGED CONNECTION 8"-12" ABOVE FINISHED FLOOR BY GENERAL CONTRACTOR. A 2" CAPPED WATER CONNECTION SHALL BE LEFT IN THE MECHANICAL ROOM 102.
5. 6" RPZ FOR FUTURE FIRE SERVICE SHALL BE INSTALLED 36" AFF. 2" RPZ FOR DOMESTIC POTABLE WATER SHALL BE INSTALLED 36" AFF AND THE 1" RPZ FOR NON-POTABLE WATER SHALL BE INSTALLED AT 54" AFF.

PLUMBING FIXTURE SCHEDULE

FIXTURE	DESCRIPTION	WASTE (INCH) MIN	VENT (INCH) MIN	TRAP (INCH) MIN	CW (INCH) MIN	HW (INCH) MIN	TW (INCH) MIN	REMARKS
WC-HP	TOILET, FLUSH VALVE, WALL MOUNTED, WALL OUTLET	4	2	4	1	-	-	SEE SECTION 224213.13
SSK	SERVICE SINK	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
LAV-HP	LAVATORY, COUNTER MOUNTED	2	2	2	1/2	1/2	-	SEE SECTION 224216.13
WHS	WASH HOSE STATION	-	-	-	3/4	-	-	SEE SECTION 221119
EWH	ELECTRIC WATER HEATER	-	-	-	1/2	1/2	-	SEE SECTION 223300
TP	TRAP PRIMER	-	-	-	1/2	-	-	SEE SECTION 221119

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PIPING DIAGRAMS, ENLARGED FLOOR PLAN AND PLUMBING SCHEDULE

PROJECT NO. 10739-264571
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