



*City of Bristol
Board of Public Works*

*INFORMATION TO ACCESS THIS MEETING
Public Works is inviting you to a scheduled Zoom meeting.*

*Topic: Board of Public Works
Time: May 21, 2026 06:00 PM Eastern Time (US and Canada)
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1*

*Meeting ID: 815 6719 8456
Passcode: 584792*

The regular Board of Public Works Meeting will be held on May 21, 2026 at 6:00 p.m.. in City Hall Council Chambers, 111 North Main Street, Bristol, Connecticut.

AGENDA

1. Call to Order
2. Approval of Minutes
 - a. April Draft Minutes
3. Public Participation
4. Employee Recognition
 - a. Employee Anniversaries
5. Division Reports
 - a. Division Reports
 - b. Engineering Report
6. Project Lists
 - a. Building Project List

7. Director's Report
 - a. Directors Report
8. New Business
 - a. 110 Melinda Lane Mailbox Claim
 - b. Street Ordinance Draft
 - c. BPW Resiliency Grant
 - d. Frederick St. Sediment Removal
 - e. Transfer Station Building
 - f. Work Order Policy
 - g. Complete Streets Draft Policy
9. Old Business
10. Any other matter to come before said meeting
11. Adjournment

PER ORDER OF THE CHAIRPERSON
Ellen Zoppo-Sassu, Mayor

City of Bristol
Board of Public Works
Draft Meeting Minutes
for April 16, 2026
With Zoom Access

Members Present: Mayor Ellen Zoppo-Sassu
Council Member Greg Hahn
Commissioner Michael Dumas
Commissioner David Hartley

Absent: Council Member Steve Seymour
Council Member Eric Rosengren
Commissioner Frank Stawski

Staff Present: Raymond Rogozinski, P.E., Director of Public Works

1. Call to Order

Mayor Zoppo-Sassu, Chair called the meeting to order at 6:00 p.m.

2. Approval of Minutes

a. March Draft Minutes

MOTION: made by Commissioner Hartley and seconded by Council Member Hahn to accept as presented and place on file.
Motion passed.

3. Public Participation

None

4. Employee Recognition

a. Employee Anniversaries

Mayor Zoppo- Sassu reviewed the anniversaries.

5. Division Reports

a. Division Reports

Council Member Hahn stated he has had lots of questions about pot holes in town from residents.

Raymond Rogozinski, P.E., Director of Public Works stated that they can call the main number and we will put in a work order and then it goes to the pot hole crew.

MOTION: made by Commissioner Dumas and seconded by Commissioner Hartley to accept as presented and place on file.
Motion passed.

6. Public Works Project Lists

a. BldgComm Project List

Mayor Zoppo-Sassu asked how much longer will the temporary boiler be at the police department.

Raymond Rogozinski, P.E., Director of Public Works, stated it will be until the end of April which is consistent with the original

timeline and will have no increase for the cost.

MOTION: made by Commissioner Dumas and seconded by Council Member Hahn to accept as presented and place on file. Motion passed.

7. Directors Report

Raymond Rogozinski, P.E, Director of Public Works, reviewed the directors report with the board.

Commissioner Dumas asked when the budget will be finalized.

Mayor Zoppo-Sassu stated that it will be adopted by the board of finance on April 28th. She explained when the state determines how much we get, they can determine the board of education budget. She stated the public works budget went well. They did accept the leasing of vehicles plan. New Barrels will be purchased with nipper funds. She stated, we don't have a spending problem, we have a revenue problem, but there are revenue streams for the future and there are some projects we are working on. The red- light traffic camera revenue has specific uses for what it can be used for and will be a lot of cooperation from police and public works working together. We have some large projects coming off the tax abatement schedule. There are lots of good things in the pipeline that will help us in the future.

Commissioner Dumas asked about what may go in at the Chic Miller site.

Mayor Zoppo-Sassu, said there are no plans proposed, but they are talking about housing or a small retail space, but nothing is final.

Council Member Hahn asked about the rehab of the Main Street Bridge with Pam Am, who got a 1.9 million grant for rehabilitation and esthetic improvements.

Raymond Rogozinski, P.E., Director of Public Works, stated that he spoke to the representative today and the grant was awarded and Pan Am did acknowledge there are preliminary plans, but nothing set as of yet.

Council Member Hahn asked about the condo meeting and if there were anything further from a public works area that can help them

Raymond Rogozinski, P.E., Director of public works stated we are going thru the options discussed and are looking to see if we can address their concerns.

Mayor Zoppo-Sassu stated this meeting had good and bad things with getting them together. There are some of them that didn't understand that by agreeing going into a condo they were restricted for access, but now understand and they feel heard. We are working on a summary of the meeting discussion for the board. The hydrant flushing and testing they pay for was one item discussed. Another was discussed for smaller condos, they asked for a pass for the transfer station to use as a group for a number of times and pay by the condo association. There was also a discussion regarding the detention pond issues that were put there before a stormwater trust, that are not maintained by us and will be discussed during that part of tonight's agenda.

Councilman Hahn asked about working with vendors to get better trash removal rates.

Mayor Zoppo-Sassu stated that Ken Valera is a valuable person to talk to, they use two vendors and they do get our tipping fee. She asked if the condo associations are having that savings passed onto them? I think Ken Valera can work with them and give them guidance on this.

Raymond Rogozinski, P.E., Director of Public Works, stated there are 2200 to 2400 total condos in town and it's not feasible.

Council Member Hahn stated maybe they can all contract with one vendor. If we can help them just get organized with some of this, but not pay for it.

Mayor Zoppo-Sassu asked about the Brace Avenue update.

Raymond Rogozinski, P.E., Director of Public Work, Stated Laverio are working their way thru it, it is a tough project.

MOTION: made by Commissioner Hartley and seconded by Council Member Hahn to accept as presented and place on file. Motion passed.

8. New Business

a. MS4 Annual Report

Raymond Rogozinski, P.E., Director of Public Works, reviewed the MS4 annual Report. The biggest deficiency we have is the wet weather outfall screening. In 2026 the main item we need to address is wet weather sampling. We have to sample 25 outfalls to identify the worst six. This is to demonstrate that our water quality is getting better and our efforts are making a difference. One of the challenges is you have to test during a qualifying storm to get a sample that fits the criteria.

MOTION: made by Commissioner Hartley and Seconded by Council Member Hahn to approve the Director of Public Works to sign the MS4 report, accept as presented and place on file. Motion passed.

Jim Schaefer, BL Companies, stated that an improvement to be more proactive should be done. We revised the cities wet weather outfall sampling plan to include a map and a schedule and to coordinate with staff to get ahead, proactively plan and look at the ten- day weather forecast. In addition, we prioritized by picking the outfalls and plotting the data to help identify areas that require dry weather sampling.

b. Vision Zero-Safe Streets

Raymond Rogozinski, P.E., Director of Public Works, reviewed the Vision Zero Safe Streets program.

Richard Donovan, Transportation Planning Director, and Anthony Lagana, Transportation Planner, NVCOG, gave an overview of the Vision Zero Action Plan with a background of what vision zero is, the goal of it and the timeline for completion.

Raymond Rogozinski, P.E., Director of Public Works stated the only concern is the target date for zero fatalities because I see the program as a continuous work in progress. Traffic patterns always change. He said he did say the date of 2060 he is more comfortable with.

MOTION: made by Council Member Hahn and seconded by Commissioner Dumas to Authorize a request to the Board of Finance to fund NVCOG's preparation of a Municipal Safety Action Plan in the amount of \$32,000, subject to modifications of NVCOG proposal (Component 1). This will include rescinding funding from Account Department of Public Works | 860.584.6125 3023015-531000-25G33 in the amount of \$32,000 and requesting a corresponding appropriation to support this effort. Motion passed.

MOTION: made by Council Member Hahn and seconded by Commissioner Dumas to Authorize the Mayor or the Director of Public Works to execute an agreement with NVCOG, contingent upon Board of Finance approval of the funding.

Richard Donovan, Transportation Planning Director, NVCOG, stated 2050 is the most common target date.

Mayor Zoppo-Sassu stated we are in an interesting position. We do emergency planning with capital region and asked if there is a lot of conversation that we should all be united in. She asked if you also communicating with your council of governments and if there is there an overall arching plan with all of these issues?

Richard Donovan, Transportation Planning Director, NVCOG stated that a notable challenges for NVCOG is we cover 4 separate urban areas and all 4 are transportation management areas (TMA's) of a population of 200,000 residents or more. We are legally required for certification reviews by urban area, which include and work carefully with the capital region and CT River Cog which cover the Hartford area where Bristol is a member as we are federally required to do so. There are a number of state wide directives for this as well.

Mayor Zoppo-Sassu asked if there are some communities that are way ahead in this process or are they all aligning this far out for dates or choosing more aggressive dates.

Richard Donovan, Transportation Planning Director, NVCOG, stated there are a lot of variation to them, 2050 is the most common target. There are cities with target of 2035, 2040 and some beyond 2060. With the state of the infrastructure the number of crashes and types we are dealing with, we felt like 2060 was the fairest target to adopt. If we are seeing significant progress faster than we expected, we can revise that date down, but there are a number of hurdles to get thru.

Mayor Zoppo-Sassu, stated that in order to leverage resources and get the best information from a community engagement standpoint, because we are in ordinance to do a red- light ordinance and are using the same crash data from UConn and because there is this shared use of data, if we do public presentations we could align those priorities, it's a nice pairing. If we bill it and talk about red-light camera it's a better audience for you, and as this moves along, we are going to be on parallel paths and its shared goals.

Richard Donovan, Transportation Planning Director, NVCOG, stated one of the reasons our goal is so far out is because when we adopted that goal the state had yet to pass legislation allowing for automated enforcement. No one has gotten close to zero without automated enforcement. We can't put this plan together without having a meaningful conversation about the red-light camera program.

Mayor Zoppo-Sassu asked as we now emerge from this process with a safety action plan, what else can we do with it? Can we attach it to future applications when we expand red light or speed?

Richard Donovan, Transportation Planning Director, NVCOG, stated this is the goal, and the reason we do these, is it makes you more compelling in a competitive funding environment for federal and state. These are all becoming points in these programs now. Not only will it give you a list of the projects we suggest you go after funding opportunities for, part of our responsibilities is to help you with that. It also gives you the data, the public engagement to demonstrate you have gone in front of residents and it gives you a comprehensive strategy. It is a well-organized, well planned out to get towards zero to help with grant applications.

Mayor Zoppo-Sassu asked what the timeframe is for this.

Richard Donovan, Transportation Planning Director, NVCOG stated Within 12 months. The hardest part is getting the public notice done. Because of the amount of public notice, we want to do, we would want a lot of time in front of residents before we do concept development.

Mayor Zoppo-Sassu, asked what type of public engagement qualifies for this.

Richard Donovan, Transportation Planning Director, NVCOG, stated we will present a final plan for public notice, at the mum festival and council chambers. We will put boards with maps and have people put pins or notes on it and ask people to share ideas. We have a complete street's guide book we can bring and ask for comments. We can work together with Ray and the team to make it happen. Its important to get in front of as many people as possible.

Raymond Rogozinski, P.E., Director of Public Works, stated the study with the original grant is for state and local roads. I do think that the data is to identify the state roads and advocate for the state to fix them.

Richard Donovan, Transportation Planning Director NVCOG, stated we have the same radar systems police departments use and get real time traffic counts, type of vehicle and speeds. There is a data platform called streetlight which uses vehicles. Right now, it is every Honda, Toyota manufactured vehicle. We can get lots of real time data from it and eliminates a person counting in person. Many of these projects will be on state roads. We are able to do all the required data and give you a package effectively ready to go for project development.

C. Storm Water Trust Annual Report

Mayor Zoppo-Sassu, stated this is the annual report that shows where we are spending time and resources. I want to talk about Chimney Crest Condos and the catch basin after we the discussion.

Commissioner Dumas asked if the history has been good or fluctuates with the market.

Raymond Rogozinski, P.E., Director of Public Works stated it has been good.

Mayor Zoppo-Sassu stated with seeing the balance and what the typical disbursements are for maintenance expenditures, I would like to entertain a motion to add Chimney Crest detention pond that is located in the south east corner of Redstone Hill Road and Village St. She stated that thru no fault of the condo association, it wasn't eligible for storm water trust as we didn't have one then. Its not overly large complex and we do discharge to it.

MOTION: made by Commissioner Hartley and Council Member Hahn to include the Chimney Crest developments in the storm water trust and appropriate the proper expenses to perform required yearly inspections and maintenance from the storm water trust fund. The Director of Public Works to notify the condo board we are taking on that responsibility. Motion passed.

MOTION: made by Commissioner Hartley and seconded by Council Member Hahn to amend the previous motion to be send to city council and refer for informational purpose to storm water trust. Motion passed.

MOTION: made by Commissioner Hartley and seconded by Commissioner Dumas to accept as presented and place on file. Motion passed.

d. Fleet Replacement Plan

Raymond Rogozinski, P.E., Director of Public Works, stated that based on a review with the board of finance, they came up with a ten- year capital plan. He reviewed the plan with the board.

MOTION: made by Commissioner Dumas and Council Member Hahn to accept as presented with an endorsement of the fleet replacement plan and place on file. Motion passed.

e. Ambler Road and Grassy Road Acceptance

Mayor Zoppo-Sassu, stated that this is a timely item due to the proposed development of the Hoppers- Birge Pond Reserve. At the City Council meeting there was a vote to rest six acres of the 12 acres as open space and use capital land reserve funds to do that. This is the time to address the long- standing issues of Ambler and Grassy Road because of the development happening and we can leverage with what the developer is able and willing to do. We have been providing services on Grassy and Ambler forever. The council reps in district 2 are going to have one on one conversations with the residents and there have been previous motions made.

Raymond Rogozinski, P.E., Director of Public Works, stated he 100% agrees with this plan and the driver for it is the developments.

MOTION: made by Commissioner Hartley and seconded by Commissioner Dumas to refer a request to the City Council to formally accept portions of Ambler Road and Grassy Road, extending from the intersection of Ambler Road and Crescent Drive to the paved terminus of Grassy Road (approximately 1,480 feet). Acceptance will be limited to the paved portion of the existing roadway, which will be classified as a city street, and is not intended to otherwise increase existing property encumbrance. This approval will also formalize the Department's responsibility to provide roadway maintenance, solid waste collection, and snow removal and treatment services for the roadway. Motion passed.

Mayor Zoppo-Sassu, stated they are offering to make some improvements to the road as well and to abandon the unpaved section which will go to city council.

MOTION: made by Commissioner Hartley and seconded by Council Member Hahn to Refer a request to City Council to abandoned the unpaved section of Ambler Road from the intersection of Grassy Road and Ambler Road 660 ft to the north east to lot 60-15 and abutting lots 20-221, 20-219, 20-218 and 215. Motion passed.

9. Old Business

a. Bus Shelters

Mayor Zoppo-Sassu stated that we have permission to remove the bus shelter at Mt. Laurel Housing authority, but not permission for the Huntington Woods one. We have not secured permission as to where they will go. We have suggestions to put at Walmart and Chilis, and in front of Michael Jewelers on Route 6. I talked to Bristol Commons, and he wanted bus transportation data usage and a picture of the shelter before he would sign off on it.

Raymond Rogozinski, P.E., Director of Public Works stated that staff to make a motion to proceed with the bus shelters.

MOTION: made by Commissioner Dumas and seconded by Council Member Hahn to authorize public works and/or the Mayor to proceed with the execution of the three bus shelters to include moving to new locations. Motion passed.

10. Any other matter to come before said meeting

Mayor Zoppo-Sassu brought up a request from homeowners of a refund of yard waste barrel they renewed in February. They are moving out of town and the new owners on Nursey Circle will be using a lawn service. I had Cathy look through the website today and there was discussion of the deposit given, but these barrels pre-date that. I would like to ask for a motion to refund Mr. Colapietro a refund of \$277.96 and to pick up the barrels.

MOTION: made by Commissioner Hartley and seconded by Commissioner Dumas to refund \$277.96 for the return of the barrels. Motion passed.

Council Member Hahn asked if we should entertain having a policy on this for the future.

Mayor Zoppo-Sassu stated that this exposed that we have a policy in place for people that have made deposits, but for these long-time users, we need to say its non-refundable or make a policy that says this is the process for asking for a refund.

11. Adjournment

MOTION: made by Council Member Hahn and seconded by Commissioner Dumas to adjourn at 7:36 p.m.

Signature,

Raymond A. Rogozinski, P.E.
Director of Public Works

Employee Anniversaries

Chet Cyr	22 years
William Leon Pineda	6 years
Candice Owens	3 years
William Stango	3 years



Department of Public Works | 860.584.6125

Board of Public Works
Public Works Department Activity Report: Administration – April 2026

Public Works Monthly Metrics:

Number of Residential Transfer Station Visitors	4,633
Number of Bulk Collections	356

Current month activities:

- PAYT reporting and debt collection continues. In January our delinquent accounts total **\$7,246.60**.
- Communications, press releases, social media, website maintenance and enhancements are ongoing.
- Management of Street Light repair requests and Shopping Cart ordinance compliance.
- Educational outreach for Reduce & Reuse and training for the Recycle Coach application, which currently has 6,367 users.
- My office entered 430 work orders for the month of April 2026
- Pursued 87 abandoned shopping carts, \$360.00 in fines were written.
- Welcome packets are now on the All-heart website <https://bristolallheart.com/welcome> these letters are sent out monthly. My office sent out zero in the month of April waiting on Assessors office for a new list.
- Assisting Solid Waste with Illegal Bulk letters and fines. 29 complaints were received in April, resulting in \$216.00 in tickets.
- The 2026 Yard Waste season has begun. We have renewed 4364 residents for 2026.
- We have renewed 69 Additional Rubbish barrels for 2026.
- Continue the Food Scrap Collection campaign started 2024. Eastern High School began food waste collection for every lunch wave. In April 340 pounds of food waste was collected. This is their 2026 project that the national honor society.
- The 2023 National honor society project is still going strong with bottle collection throughout the school weekly and they give the bottles and cans that would otherwise be thrown away to Brian's Angels.
- Plastic collection for our Trex benches is still going strong. In the month of April we have dropped of 143 pounds. The city has received 7 benches since 2019. They are located at Page Park, Library, Senior Center and Pickle Ball courts.

111 North Main Street ♦ Ground Floor ♦ 860-584-6125

- Completed presentations for 26/27 Budget workshops.

Next month activities:

- Enforcement of Illegal Bulk, Street light repair requests, welcome letters, PAYT debt collections, collecting additional barrels NOT paid for, shopping cart enforcement and monitor illegal dumping areas.
- Continue outreach to increase awareness on residents' collection day Recycle Coach app will be disabled in June 2026. Adding more "report a problem" for residents to use the website vs calling in.
- Continue work on the Department's webpage, Facebook & Instagram accounts to enhance media presence. Everything is on our website and social media for residents to fill out or have their questions answered.
- The 2026 Yard Waste Season has begun. Our office has been very busy with Yard waste, Bulk pickups and transfer station.
- Getting prepared for the shredding event with the students at Eastern High School. May 30th is our date from 9am to 12pm or until truck is full at Eastern High School.

Administration staff or concerns: None

Administration Monthly OT Costs: \$438.35

Land Use activities for April 2026:

Zoning Commission

Special Permit for a motor vehicle repair or service facility at 16 Andrews Street; Assessor's Map 38, Lots 61/5; I (General Industrial) zone – APPROVED WITH STIPULATIONS.

Site Plan for the addition of a loading dock at 170 Enterprise Drive; Assessor's Map 4, Lot 41-A; IP-1 (Industrial Park) zone – APPROVED WITH STIPULATIONS.

Change of Zone from IP-3 (Industrial Park) zone to A (Multi- Family Residential) zone at 625 Clark Avenue; Assessor's Map 66, Lot 264 – DENIED.

Special Permit for a Religious Organization (Church) at 912 Terryville Avenue; Assessor's Map 66, Lot 16; BN (Neighborhood Business) zone – APPROVED WITH STIPULATIONS.

Inland Wetlands & Watercourses Agency

Wetlands Application for the development of a 2-story - 7,279 s.f. Data Center, with associated utility interconnection, landscaping improvements and parking areas within the upland review area at 234 Riverside Avenue; Assessor's Map 30, Lot 117A – APPROVED WITH STIPULATIONS.

Wetlands Application for the construction of a single-family dwelling unit at 111 Fox Hollow Lane; Map 58, Lot 24 – APPROVED WITH STIPULATIONS.

Wetlands Application for the renovation of the 41,483 sq. ft. Edgewood Pre-K Academy building and site improvements to include milling, paving, curbing reparation/replacement of storm structures and sidewalk repairs at 345 Mix Street; Map 53, Lot 140 – APPROVED WITH STIPULATIONS.

Floodplain Application for the renovation of the 41,483 sq. ft. Edgewood Pre-K Academy building and site improvements to include milling, paving, curbing reparation/ replacement of storm structures and sidewalk repairs at 345 Mix Street; Map 53, Lot 140 – APPROVED WITH STIPULATIONS.

Wetlands Application to build up the existing grade/elevate the backyard within the upland review area with the placement of concrete blocks at 40 Janice Lane – APPROVED WITH STIPULATIONS.

Planning Commission

Site Plan for a Fitness Club at 231 Century Drive; Assessor's Map 4, Lot 13 & 14; IP-1 (Industrial Park) zone – APPROVED WITH STIPULATIONS.

C.G.S. 8-24 Referral:

Ambler Road — Map 60, Lot 15
– POSITIVE REFERRAL SENT TO THE CITY COUNCIL.

Special Permit for the Adaptive Re-use of an Existing Non- Residential Building to allow 55 dwelling units at 122 Park Street; Assessor's Map 28, Lot 44; RM-5 (Mixed-Residential) zone; Ian Lagowitz, Trigild, Inc., Receiver for Bristol Investments, LLC, applicant – POSITIVE REFERRAL SENT TO THE ZONING COMMISSION.

Historic District Commission

The Commission did not meet in April.

Zoning Board of Appeals

Request for variances from Article II, Section 7.1.C. and Section 7.1.F. of the Zoning Regulations: 1. to reduce the 40' ft. minimum front yard to 24.1' ft. and 2. to reduce the 40' ft. minimum rear yard to 29.1' ft. for the construction of a single-family home with an attached two-car garage at the corner of Witches Rock Road and Donovan Court; Map 8, Lot 18; R-25 (Single-Family Residential) zone – APPROVED.

Request for a variance from Article III, Section 13.2 of the Zoning Regulations to reduce the minimum number of parking spaces required from 120 spaces to 52 spaces for a Fitness Club at 231 Century Drive; Assessor's Map 4, Lot 13 & 14; IP-1 (Industrial Park) zone – APPROVED.

Aquifer Protection Agency

The Agency did not meet in March.

Land Use staff or concerns:

Monthly overtime costs (Board/Commission Secretaries) at meetings: \$1337.20

Facilities – April 2026

Building Maintenance current month (April 2026) activities:

- Police Complex temporary trailer-mounted steam boiler (rental) employed until the end of April (disconnect work completed on 4/30)
- Bristol Fire Department officially shifted Fire House #3 from 81 Church Avenue to 163 Church Avenue on 4/1
- FlowTech replaced a damaged variable frequency drive (VFD) on air handler HVAC-1 at the Bristol Police Complex on 4/2, which was covered in full under the manufacturer's extended warranty
- Provided staffing support for Electronic Recycling event at Bristol Eastern High School on 4/4
- Annuli & Sons mobilized to the site for the renovation of the former BOE Early Childhood Center at the north wing of the Beals Community Center (initial stages of demolition work including abatement and electrical ongoing)
- Facilities Manager Oakes attending weekly project status meetings with Annuli & Sons, Department of Aging, Bristol-Burlington Health Department (BBHD), Phase Zero Design and Public Works Staff each Wednesday
- Manager Oakes and Facilities Staff participated in numerous training sessions at new Fire House #3 (building management systems, audio/visual, electrical, plumbing, HVAC, overhead doors, security system, generator, fire sprinklers and more)
- Continued to participate in FY26-27 Budget preparations and presentation meetings with Mayor's Office, Comptroller's Office and Board of Finance members
- Grounds Technician completed Spring clean-up activities at all City Buildings included: planting bed edging, hedge-trimming, planting bed mulching, curb line restorations and initial lawn grass cuttings
- Manager Oakes continued with spring site visits at City Buildings and Facilities supported by the Building Maintenance Division to address outstanding issues, discuss winter restoration required in parking areas and plan for transition to cooling season HVAC operations
- Facilities Staff in conjunction with AirTemp completed chiller/cooling tower preventative maintenance tasks and equipment start-ups at Police Complex, Main Library and the Beals Center
- Police Complex HVAC Upgrade Pre-bid meeting held on 4/23 in conjunction with Purchasing Department and Van Zelm Engineers (bids due on 5/4 – low bidder was ProMech Inc. of Bloomfield at \$4,486,000.00)
- Manager Oakes submitted final application submission to Department of Energy - Energy Efficiency Community Block Grant on 4/14 in the sum of \$119,452.11 for reimbursement (project included LED lighting upgrades at Public Works City Yard and Parks & Recreation field and office lighting)
- Collection of redeemable beverage containers from Bristol Eastern High School for Veteran Strong office staff
- CT DEEP conducted inspection at Police Complex standby generator underground storage tank on 4/16 and found a cracked spill bucket which resulted in a Notice of Violation, the City has 30 days to obtain a licensed contractor to replace the damaged unit
- Transitioned from HVAC heating season to cooling, including the removal of the temporary steam boiler serving the Bristol Police Complex on 4/30 & 5/1
- Manager Oakes met with City Engineer Lukasz Burkacki and RZ Design on 4/28 to discuss future Beals Center parking lot exterior pole lighting design and electrical requirements
- Eagle Environmental completed asbestos sampling in the future BBHD area of the Beals Center on 4/30, to properly delineate and determine if any demo waste materials need to be treated as hazardous materials and handling/disposal methods (all 46 samples submitted came back negative, no asbestos detected)

Building Maintenance next month (May 2026) activities:

- Receive final bids for Police Complex Mechanical Renovation to address the lingering HVAC and facility issues due to aged equipment and infrastructure at 131 North Main Street
- Provide continued support to Bristol Fire Department with the staff and equipment transition from old Fire House #3 (81 Church) to new Fire House #3 (163 Church Avenue)
- Continue spring site visits with Department and Division Heads at City Buildings for coordination purposes and planning communication, as requested
- Manager Oakes to work with Bristol Police and Skydio Staff pertaining to site visits and coordination for future BPD Drone Dock Station installations at City Hall, Fire House #4 and Fire House #5
- Facilities Staff to clear out all remaining unwanted items at former Fire House #3 for private sale and change out City ASSA keying cylinders for re-use in the future
- Facilities Staff broke down, transported and re-assembled a surplus cable weight machine from 81 Church Avenue to Chippens Hill Middle School to be used within their existing weight room
- IT Staff to reclaim data server rack and Avigilon control box and site access card readers from 81 Church Avenue (Avigilon system will be repurposed at Manross Library when site access is installed later this year)
- Manager Oakes to coordinate with BOE Facilities Staff in regard to use of 30 Cross Street for summer storage of Bristol Early Childhood Center equipment and materials to be temporarily removed from Giamatti Complex on Mix Street
- Continue daily worksite coordination and communication with Annulli & Sons renovation at Beals Community Center with Probate Court, Senior Center and BBHD Staff
- Accurate Door to replace door, frame and hardware in the Police Complex Parking Garage at 131 North Main Street which has exceeded life cycle and compromises site security and building envelope
- Staff to provide traffic control support and aid to various local community events (Duck Race, Hope Street Cinco de May Fiesta and others)

Building Maintenance Staff or Concerns:

- Anticipate moderate levels of Vacation/Miscellaneous time off during May
- Lack of a Library Senior Maintenance Technician has added and shifted additional duties to Public Works Maintenance Staff to keep both Libraries operationally sound
- Traffic Control Technician ending employment with the City on 9/29 which has caused overtime operations until a permanent replacement is hired, as existing contract relies on Building Maintenance staff in the absence of this position
- Temporary Custodian currently at Police Complex to cover for regular Custodian who is on extended medical leave

Building Maintenance OT Costs: \$2,189.52

Staffing coverage for after-hour maintenance service calls (Main Library side entrance door not securing properly/continuous hinge installed by Accurate Door, Main Library leak in Computer Lab and security alarm triggered, Main Library restroom leak, Hope Street Parking Garage elevator trouble response via Police Dispatch call), overtime weekend staffing on 4/4 at Police Complex due to personal leave taken, assist Public Work Engineering Division with signage/traffic signal lighting requests as required, support E-Waste Recycling Event at Bristol Eastern High School, continue HVAC filter and belt replacements at Main and Manross Libraries

Streets April 2026 Report

Streets current month activities:

- Continued with roadside maintenance of City properties, including litter and yard sign removal. This work will be on going throughout the seasons
Installed driveway aprons for engineering on new paved roads
- Serviced trees, including pruning, removals, and testing
 - **Tree take downs**- Crown St, Page Park-3, Cherry St, Tulip Place, Senior Center-5
- **Major Roads Engineering**- Crescent CB tops and Cypress CB tops. Started Senior Center parking lot job for drainage, utilities and rough grade.
- **Permanent Patch for Engineering**- N/A
- Stump Removals/ Loam
- Finished mulching all city properties
- Assisted the Parks Department with hanging their Downtown Live Banner on the pedestrian bridge over Rt. 72
- Continuing small road repair
- Addressing street signs
- Curb repair
- Vactor Work
- Cleaned out culverts throughout the city
- **Milling and Paving** – N/A
- Driveway Aprons
- Loam Feeder
- Patched Potholes
- Street Sweeping
- Storm Drainage
 - **Completed Basin Repairs/Sinkholes**- Deer Park, Jennings-3, Muzzy St and Hull St.
- **Winter Operations**-DONE!
- Salt deliveries are coming in just very frequently.
- Addressing mailbox work orders
- Continued making asphalt on our Bagela asphalt plant to pave/patch any asphalt related issues throughout the winter- OFF SEASON

Streets next month activities:

- Continue with roadside maintenance
 - Street Sweeping
 - Potholes
 - Curb repair
 - Loam
 - Tree removal
 - Tree trimming
 - Mowing
 - Driveway aprons
 - Milling and Paving
 - Catch basin repair
- Preparing for winter operations including plowing as well as snow removal-OFF SEASON
- Tilcon opening for asphalt
- Continue making salt brine-OFF SEASON
- Continuing Senior Center parking lot
- Permanent Patch List
- Milling and paving
- Winter Operations- OFF SEASON
 - Plowed and treated roads

- Service Requests
 - Mailbox installations
- Continue addressing street road name signage replacement
 - Installing new poles and or signage
 - Look into printing other road signage of other Departments
 - Fixing and installing signs for Police Department
- Maintenance of city properties
 - Litter clean up
 - Lawn Maintenance
 - Bridge clean up
- Continue tree take downs, trimming and stump grinding
- Continue to address seasonal maintenance activities, including preparation of seasonal operation equipment
- Assist other public work programs and departments as required

Streets staff or concerns:

Street Division is currently addressing service requests from the general public with our maintenance programs. We have been managing these requests throughout designated areas.

April OT Totals: \$2,880.49 Streets

Fleet Maintenance Current Activities:

Streets Div.

1. **C8** – (2016 JD roadside mower) New battery. Replaced roller, roller pin, bearings and lock nuts on mowing arm. New drive belt for blades. Realigned drive shifter rods to stop it from popping into neutral. Serviced.
2. **S27** – (1992 tri-axle dump truck) Replaced frozen alternator with new. Replaced some brittle air lines to brake cans. Fuel tank somehow spun in straps. Realigned tank and tightened down straps.
3. **PC1** – (2016 pickup) Installed step bars, strobe light on headache rack. Installed 2 way radio.
4. **S21**- (2003 10 wheeled dump) Replaced 2 faulty air cans. Lines leading to brake cans. Replaced faulty pressure differential valve for brake body.
5. **S13** – (2019 6 wheeled dump) Replaced rotted oil pan with stainless one. Repaired rotted out PTO lever. Replaced pugged up DPF filter, clamps and sensors.
6. **S3** – (2018 crew cab pickup) Replaced brakes and rotors all around. Replaced 2 faulty brake calipers. Serviced.
7. **C34** – (2006 Screening plant) Replaced 6 dry rotted hydro lines. Replaced pickup pump for fuel. Replaced fuel filters. Tank seems to have heavy rust on bottom when ran dry. May need replacement.
8. **S23** – (2019 10 wheeled dump truck) Truck was brought in for a bad rubbing sound. Fleet diagnosed the camel back system (or rear spring stack) on axle was rubbing due to a broken grease cover. Truck needs to have bushings replaced and is scheduled for May 12th for repair.

Solid Waste Div.

1. **R11** – (2017 automated rubbish truck) Replaced faulty hopper door sensor. Replaced both arm claw cylinders. Replaced some blown out bushings on lift arm.
2. **R5** – (2014 automated rubbish truck) Replaced packer cylinder main line. Replaced arm extension cylinder. Replaced a blown- out air line to cab control.
3. **R6** – (2021 automated rubbish truck) Truck was sent to body vendor to diagnose and repair a fault that was causing the hydraulic system to shut down.
4. **R18** – (2018 automated rubbish truck) Truck has damage from worn out bushings on gripper head for the lift arm. Packer rails and guides will need to be replaced. Truck also has holes in body flooring. Parts were ordered and will be scheduled for an extensive time for repairs to be made.

Engineering Div.

1. **E6** – (2016 retired police suv) Car was replaced with a 2018 DAS vehicle.

Fleet Maintenance Next Month's Activities:

- Continue scheduled service to our Fleet vehicles.
- Continue scheduled services to our other divisions as well as our P.D.
- Continue to keep Streets & Solid Waste Ops. Running strong.
- Samsura units are to be replaced with Geotab (T-Mobile) units.
- Trying to work on small equipment for mowing season.
- Looking into more used vehicles.
- Looking into replacing older snowplows.

Fleet Maintenance Staff or Concerns:

- 2 Mechanics helper positions awaiting hired staff.
- Mechanics position filled and is under probational period.
- Short staff especially the helpers positions are still pushing my services back.
- Overtime expenditures and totals: **\$2,801.66**

Solid Waste April 2026 Report

Solid Waste current month activities:

- Continued illegal bulk inspection and enforcement activities. We sent 29 letters to residents for illegal bulk and cleaned up 7 stops. Residents cleaned up 21 stops, with 1 still pending
- Continued curbside bulk collection, we collected 356 scheduled pick-ups.
- Continued the on-site management of barrels at the Transfer Station, disassembling, cleaning and reusing barrels.
- We currently have 4,364 new or renewed yard waste participants.
- Continued cleaning up areas with high amounts of litter.
- Started curbside yard waste collection, collecting 270 tons for the month.
- Started curbside leaf bag collection, collection 94 tons for the month.
- Worked Saturday overtime to make up for Good Friday curbside collections.
- Started mowing the landfill.

Solid Waste next month activities

- Continue illegal bulk inspection and enforcement activities.
- Continued the on-site management of barrels at the Transfer Station, disassembling, cleaning and reusing barrels
- Patrol known dumping areas for illegally dumped items.
- Continue cleaning up areas with high amounts of litter.
- Finish curbside spring leaf bag collection.
- Continue curbside yard waste collection.
- Deliver rubbish and recycling barrels for the Duck Race.
- Work Saturday overtime to make up for Memorial Day curbside collections.
- Deliver barrels for Memorial Day events.

Solid Waste staff or concerns:

- Manage Solid Waste Division staffing levels.
- Manage Division vehicle equipment needs.
- Continue to cross train Division employees.

<u>OT Costs/Revenue Generated:</u>	
Solid Waste OT =	\$6,096.13
Transfer Station OT =	\$7,147.44
TS Revenue (PAYT) =	\$41,597.09
Residential Permits =	\$25.00
Commercial Permits =	\$5,620.08
Yard Waste Revenue =	\$139,295.00
Iron Liberty Recycling =	\$2,013.71
Aluminum Liberty Rec =	\$0.00
Batteries Liberty Rec =	\$287.49
Electronics NewTech =	\$0.00
Compost Sale =	\$0.00
Bulk Pick-Up Revenue =	\$0.00
Book Box =	\$0.00
Misc. Revenue, Lost YW Sticker =	\$40.00
Border Street =	\$235.00
Illegal Bulk Fines =	\$0.00
Clothing Recycling =	\$0.00
Additional Barrel Sale =	\$1,395.00
Damaged barrel =	\$67.00
Special Pick up – 2 nd	\$1,475.00
<u>Rubbish Barrels</u>	
New Applications =	7
Retrieved =	3
Replacement Barrels =	52
Renewed =	2

Monthly Report

Engineering Division – May 2026

Summary of Work – April 2026

- **Park Street & Riverside Ave. Streetscape** – Currently under design by GM2. Two utility coordination meetings have been held with the City, GM2, Bristol Water, Eversource, and other utility providers to review relocation requirements and logistics. The project design remains on schedule. Park Street is planned for bidding in winter 2025 with construction in 2026. Riverside Avenue is scheduled for bidding in 2026 with construction in 2027.
- **Downtown Signal Modernization** – VHB currently addressing 60% Submission Review comments from the State of Connecticut.
- **East Street Bridge** – Project Complete. Contractor finalizing punch list items.
- **Broad Street Retaining Wall** – Design plans complete. Project awarded low bid contractor. The contractor is currently preparing submittal documents for construction staging. Anticipated June start date.
- **Stream Gauge**: Connection plans completed by DPW. Product installation to be complete early May.
- **Lake Avenue Culvert** – Project substantially complete and roadway open to public. Contractor planning final pave May 2026.
- **Field Street Culvert** – Currently under design by Cardinal Engineering. DPW has begun the structural design component of the culvert and is working toward 70% design with Cardinal Engineering. One of four easements obtained, DPW has engaged remaining property owners and has begun the process of procuring easements. State/Local Bridge Program funding in place.
- **Pleasant View / East Road Drainage** – DPW finalizing design plans. Proposed project includes installation of a new drainage outfall which will reroute water from the intersection of Pleasant View Avenue drainage system to an existing detention basin. This proposed outfall will significantly increase the overall capacity of the existing system.
- **Brace Avenue Drainage Improvements** – The Contractor continues to install pipe along Brace Avenue as well as address minor sink holes temporary pavement patches. Approximately 1,200 LF of pipe installed to date along Brace Avenue from the intersection of Vine Road to Vera Road.
- **Wolcott Street Reconstruction** – Final design plans have been completed. CTDOT Encroachment permit obtained. Project pending CTDOT approval and authorization to bid, anticipated bid date in Spring 2025.
- **Shrub Road Sidewalks and Road Diet** – Design of Shrub Road sidewalks complete. Project documents currently under review by Purchasing. Anticipated project bid by end of May.
- **Senior Center Parking Lot Improvements** – Final design plans complete. Phase 1 construction currently under way by City staff. City staff has stripped all overburden material to subgrade and continues to install proposed drainage structures. A lighting

Monthly Report

Engineering Division – May 2026

Summary of Work – April 2026 Continued

design has been complete and procurement of materials is underway. Coordination with pavement contractor complete. Phase 1 construction area is planned to be paved to binder course and utilized as temporary parking area during Phase 2 construction to account for lost parking due to construction activities. Phase 2 anticipated late June.

- **Proposed Community Connectivity ADA Sidewalk Ramps** – Laviero Construction has completed construction of Community Connectivity Project No. 0170-3513. Laviero has also been awarded the contract for the next round of Community Connectivity funding which includes improvements of ADA compliant sidewalk and sidewalk ramps in the Downtown and Federal Hill neighborhoods. Construction is expected to begin in Spring 2026.
- **Design of Mellon Street Culvert** – The City has awarded the design of this project to WMC Engineers and it is currently under design for preliminary engineering.
- **Design of Andrews Street Culvert** – The City has awarded the design of this project to KS Engineers and it is currently under design for preliminary engineering.
- **Mapping of Pequabuck River Outfalls** – DPW to locate, categorize, and develop testing schedule in support of MS4 permit.
- **City Wide Road Side Barrier Analysis** – Inventory and analysis by DPW is ongoing.
- **Bituminous Sidewalk Inventory** – Ongoing work by DPW.
- **Culvert Inventory and Preliminary Inspection** – Ongoing work by DPW.
- **Asset Management / GIS Upgrades** – DPW staff has begun using new GPS equipment to track asset data in the field. Integration of this data with our existing GIS is ongoing.

Engineering Division Staff or Concerns:

- Vacancies - Assistant City Engineer and Project Manager. Duties currently performed by City Engineer.



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 12, 2026

TO: Raymond Rogozinski P.E., Public Works Director

FROM: David Oakes, Public Works Facilities & Energy Manager

RE: City Building Project List Updates

Beals Center – Café & Card Room Upgrades \$38,000

Department of Aging Director Jason Krueger informed Manager Oakes that upgrades to the Café and Card Room are pending Bristol-Burlington Health Department office shifts and adjustments within the Beals Community Center. Weekly meetings are being held between Annulli & Sons, BBHD, Colliers Engineering & City Staff regarding project details and preparations for onsite renovation activities at the former BOE BECC area, which are anticipated to begin in the coming months.

Main Library Site Access System Upgrades \$25,000

Manross Library Site Access System Installation \$25,000

Manager Oakes, Bristol Police Department and Information Technology Staff will be meeting with Department of Homeland Security Cybersecurity & Infrastructure Security Agency (DHS CISA) Staff on May 21st to conduct site assessments at both Bristol Libraries, as well as Municipal Parking Garages located at 131 North Main Street, 30 Hope Street and 80 Meadow Street. These high-level and very detailed assessments will be used to provide best practices on security upgrades including site access and security camera monitoring systems. The assessment will be used to accurately position camera locations and security measures to strengthen existing City Facilities, via future bids for site access and security camera bids for installations at the Main and Manross Libraries. FY26-27 funding is being secured for security camera installations at Municipal Parking Garages.

Police Complex Doors/Frames & Locks Replacement \$50,000

Work continues to address remaining doorways in the Parking Garage that are exterior and prone to weather exposure and deterioration.

To date, complete door and frame replacements (including ancillary hardware) have been completed on the 4th level Parking Garage double door-set, 3rd level Parking Garage North & South Stairwell, replacement of a continuous hinge on the 1st level north exterior door of the Police Complex and window tinting to enhance Officer safety/operational security at the South Employee entrance. Total costs to date are \$23,074 and the remaining \$26,926 will address several other deteriorated exterior doors and then for interior doors that are crucial to Bristol Police site security (front lobby doors, exterior basement garage, southern employee entrance).



Department of Public Works | 860.584.6125

Police Complex Office Carpeting & Interior Painting \$20,000

Building Maintenance 2nd shift Staff completed wall repairs in the 2nd Floor Training Room and interior painting was completed on March 28th. Overtime and materials cost for the Training Room painting totaled \$1,707.20. \$18,292.80 remains to complete 1st Floor interior painting

Building Maintenance Staff will begin to complete 1st Floor interior hallway painting on May 15th & 16th. Due to length of hallways, four phases will be required to complete in full. Each phase will be completed on a Friday afternoon and Saturday when traffic flow is lower to expedite the task.

Phase 1 – North Administration Hallway

Phase 2 – West Holding Hallway

Phase 3 – South Lounge Hallway

Phase 4 – OIC, Scheduling & Sargent's Offices (including carpet replacements)

Sheetrock and wall repairs will be completed on 2nd shift to reduce overtime costs and ensure a timely completion of the project and within the remaining budget.

PUBLIC WORKS BOARD CITY BUILDING PROJECT LIST - MAY 2026

Funding Year	Location	Project Name	Contractor Name	Current Budget	Construction Estimated % Complete	Schedule/ Completion Date	Comments/Recommendations	Original Budget
FY23-24	Beals Center	Café & Card Room Upgrades	TBD	\$38,000.00	0%	TBD	Pending BBHD office shifts within Beals Center	\$38,000.00
FY25-26	Main Library	Site Access System Upgrades	TBD	\$25,000.00	0%	TBD	Developing bid scope with IT Dept & Library Staff	\$25,000.00
FY25-26	Manross Library	Site Access System Installation	TBD	\$25,000.00	0%	TBD	Developing bid scope with IT Dept & Library Staff	\$25,000.00
FY25-26	Police Complex	Door/Frame & Lock Replacements	Accurate Commercial Door	\$26,926.00	45%	TBD	Parking Garage Stairwells Doors being addressed currently	\$50,000.00
FY25-26	Police Complex	Office Carpeting & Interior Painting	TBD	\$18,292.80	10%	TBD	DPW Staff completed BPD Training Room painting on 3/28	\$20,000.00

\$133,218.80

Available as of July 2025	\$110,616.63
FY25-26 Funding	\$140,000.00
Spent 2025-2026	\$73,340.14
Less Committed Contracts	\$5,523.19
Less Committed Projects	\$106,292.80
Net Available	\$65,460.50

MEMORANDUM

DATE: May 12, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: BPW May 21, 2026 Meeting – Director’s Report

Please find attached a summary report of the Department’s activities, issues, and concerns for the May 21, 2026 Board of Public Works meeting.

1. **Staffing:** Solid Waste: it is with deep sadness that DPW announces the passing of Jeff Gargano, solid waste driver for the Department. With 15 years of service his dedication at work and his friendship will be missed. DPW Admin, Bldg. Maintenance and Streets fully staffed. DPW Solid Waste vacancy is Driver/Collector and Scale Operator. DPW Fleet mechanic helper vacancy, previous vacant positions of mechanic and mechanic helper filled. Candidate for current mechanic helper selected & currently being vetted by HR. DPW Engineering: Civil Engineer, Project Manager, Inspector and Traffic Signal Tech vacant. The Highway inspector is going on medical leave for approx. 6 weeks. Engineering intern started 5/11/26. DPW investigating hiring a part time engineer and increasing hours of existing part time DPW Admin staff to increase support of DPW Eng. Div. and DPW Land Use Assistant City Planner vacancies.

Jeff Gargano: It is with heavy hearts that we announce the passing of a dedicated member of our Public Works team on Friday 5/8/26. A valued employee since 2011, Jeff Gargano served the City as a Recycle Driver. Throughout his 15 years of service, he was known for his reliability and commitment to keeping our community clean. His presence will be deeply missed by his colleagues and the residents he served. Our thoughts and deepest sympathies are with his family and loved ones during this difficult time.

2. **PD Complex Boiler:** Bids opened and scheduled to be awarded by City Council at the May meeting to Pro-Mech Inc with a contract amount of \$4,486,000. There is an existing \$3,100,000 appropriation, BOF is approving \$2,800,000 of previously approved FY2026-27 CIP funding to make the funding available for project use prior to July 1, 2026. The HVAC project consists of the replacement of the two existing steam boilers with two new hot water boilers as well as replacement of the existing air handling units (AHU), hot water heater, air cooled chiller, unit heaters along with pumps, fans, and piping. In addition, the referenced work includes fire protection improvements associated with HVAC system equipment and emergency lighting.

The bid contract with Pro-Tech does NOT include the installation of a new switch gear. The switch gear replacement was removed from the bid via addendum due to information from Eversource that the existing transformer located within the building must be relocated to outside the building. The switch gear replacement is not required to support the HVAC replacement; therefore, the boiler replacement will proceed. With that said, replacing the switch gear is a high priority and the work will be bid separately. Sufficient funding is available within the \$2,800,000 BOF appropriation.

An additional \$200,000 will be approved as part of DPW’s FY2026-27 CIP appropriation, available on July 1, to fund structure improvements of the parking garage deck and parking areas.

4. **Shrub Road Sidewalks:** The Shrub Road Sidewalk project will be advertised for bid 5/15/26 with a bid opening 6/8/26. An RFP for engineering inspection services has been issued. A bid addendum is being issued to maintain the existing curb line/location “as is,” except in limited areas to maintain 28 ft roadway width.
5. **Spring/Fall Paving:** DPW annual spring paving program is ongoing. Milling is complete and paving is scheduled to be complete on June 3, 2026. DPW stockpiled excess milling at the Department’s Peacedale St site and will make a portion of the millings available to City contractors with on-call contracts (Laviero, Tabacco and D’Amato). In addition, milling will be provided to Shepard Meadows. The fall paving list is attached for reference purposes.
6. **Street Light Repairs:** There are currently 11 streetlight locations known by DPW to be out of service. Of the locations, 10 are for individual lights. However, due to an Eversource underground issue, multiple lights are out on Enterprise Drive.
 - a. 2 street lights (in addition to Enterprise Drive) have been referred to Eversource (no power)
 - b. Shock electric is scheduled to inspect & repair (if power is available) 8 street lights on 5/20/26

Report attached.

7. **Recycle Coach App:** As previously reported to the BPW, DPW is not scheduled to renew the Recycle Coach App due to increased cost (\$16,400). Approximately 3,400 of the City’s 18,000 recycling households utilize the app, which provides proactive collection notifications. Recycle Coach has re-contacted DPW with the following new pricing for the next three years (\$7,500; \$7,875; \$8,250). DPW requested 3-year pricing to reduce the potential of an increase after incentive pricing terminates. Based on the new pricing, **DPW recommends renewing the Recycle Coach App. in the amount of \$7,500.** The app is funded through the Reworld grant.



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8. **Broad St Retaining Wall:** Bid has been awarded to Dayton Construction in the Amount of \$1,966,610. The project budget is \$2,100,000. Contract award documents are being finalized and work will occur this summer. During construction, Broad Street will be one-way heading west from Central to Todd. **DPW is requesting a contract amendment to WMC Engineering for construction inspection and administrative services in the amount of \$44,716.97.** WMC inspection services will not be full time and will be supplemented by DPW engineering staff.
9. **CDS Grant:** As previously reported, the City has submitted a Congressional Directed Spending grant request to Senators Richard Blumenthal and Chris Murphy to fund structural improvements to the PD Parking Garage (\$6,717,633). The City has been notified that the requested grant funding for PD Parking Garage repairs has NOT been selected for funding.
10. **Brace Ave Storm Drainage:** The contractor Laviero has restarted construction on Brace Ave and O'Sullivan Ave; however, they have not worked on certain days and there have been utility conflicts that have delayed work. To date, the portion of piping on Brace Ave from Vine Road to 200 ft west of Vera Rd has been completed, approximately half the length of the large pipe.
11. **N. Main St Streetscape:** Modified granite curbing, concrete walks & ADA ramps installed. Pavement, landscaping, and lighting scheduled for installation by 5/27/26. RRFB scheduled for installation 6/10/26.
12. **MS4 Storm Water Sampling Plan:** DPW is required to sample 23 drainage outfalls, however, the sampling is required to occur during a qualifying rain storm event consisting of sufficient rain to sample with no rain prior to sampling. In addition, all samples must be delivered to the testing lab within 5 hours. As a result, the required sampling has been a challenge, however, DPW does have all of 2026 to complete testing.
13. **Landfill Solar:** The City's landfill provider CT Solar Inc. continues to coordinate with Eversource regarding the electrical connection from the 2.15 MW solar field to the Eversource grid. CT Solar has received verbal approval to provide the connection from Enterprise Drive in the area of Reworld. In addition, CT Solar has requested that the 1.5-acre RCRA portion of the landfill site, located along the northern property line, be divided and separated from the overall landfill. CT Solar is making the request and has indicated that they will incur mapping cost in order to obtain tax credits. Apparently, the tax credits are not available if the solar panels are located on a RCRA site. A subdivision is not required to separate the parcel, however, their concerns are associated with the potential impact to landfill closure environmental permits and deed restrictions. DPW is open to the creation of a separate parcel for the RCRA portion of the landfill to facilitate the solar panel installation and lease payments of \$50,000, provided DPW & Corp Counsel concerns are addressed. Therefore **DPW requests BPW support to divide and create a separate parcel for the RCRA portion of the landfill. Said approval shall be contingent on City Corp Counsel approval.**

Please feel free to contact me with any questions or concerns at 860-584-6113.

Raymond Rogozinski

Subject: Jeff Gargano
Attachments: IMG_4851(1).jpg

It is with heavy hearts that we announce the passing of a dedicated member of our Public Works team this past Friday.

A valued employee since 2011, Jeff Gargano served the City as a Recycle Driver. Throughout his 15 years of service, he was known for his reliability and commitment to keeping our community clean. His presence will be deeply missed by his colleagues and the residents he served.

Our thoughts and deepest sympathies are with his family and loved ones during this difficult time.





SCHEDULE	Pavement Management Program (Spring 2026)				
	2-Mar-26				
	Street Name	Street Length (Ft)	Street Width (Ft)	Mill	RSR
S 26	Federal Street (Maple to Summer)	745	33	Mill All	65
S 26	Lincoln Place	290	20	Mill All	65
S 26	Richmond Place	537	20	Mill All	63
S 26	Prospect Pl. (Summer to Richmond)	306	20	Mill All	65
S 26	James Drew Lane	369	33	Mill All	51
S 26	Drayla Drive	480	33	Mill All	63
S 26	Mechanic (Wash. to Beacan)	1,037	28	Mill All	33
S 26	Beacon Street	1,062	26	Mill All	55
S 26	East New Street	616	32	Mill All	49
S 26	Cozy Lane	274	33	Mill All	55
S 26	Plank Hill Road	1,783	34	Mill All	61
S 26	Weeping Hill Road	350	32	Mill All	63
S 26	Hillside Avenue	335	27	Mill All	58
S 26	Skyridge Road	630	33	Mill All	63
S 26	Skytop Drive	411	27	Mill All	65
S 26	Eugene Avenue	1,149	33	Mill All	63
S 26	May Street (Greystone to Dead End)	358	30	Mill All	51
S 26	Molzon Place	599	30	Mill All	60
S 26	Highland Street	917	28	Mill All	59
S 26	Dwight Street	329	24	Mill All	60
S 26	Conlon Street	662	33	Mill All	62
S 26	Irving Street	733	30	Mill All	60
S 26	Williams Street	647	28	Mill All	58
S 26	Hill Street (Marsh to Townline)	4,797	44	Mill All	62
S 26	Summer Street	3,345	25	Mill All	75
S 26	Sessions Street	497	29	Mill All	44
S 26	Puritan Road	623	30	Mill All	65
S 26	Fern Hill Road (Pilgrim to Oakridge)	1,859	30	Mill All	61
S 26	Pilgrim Road	2,136	30	Mill All	64
S 26	Cambridge Road	495	32	Mill All	63
S 26	Oakwood Circlce	1,348	31	Mill All	59

S 26	Oak Bluffs Road	363	31	Mill All	61
S 26	0	0	0	Mill All	0

[illegible]

5-12-2026

Street Light Report

Eversource Street Light Issues

- 12 Palmorr Place-Pole#8 No Power
- 335 Tiffany Lane- Pole#15394 No Power
- Enterprise Dr.- Multiple Street Lights Out/ Transformer issue/Eversource to replace transformer

Shock Electrical Light Issues

- 125 Brandon Run – Pole #15248 – Waiting on non-traditional parts/Parts on order
- 30 Isamay Drive- Pole #5098-
- 10 Broad Street- Pole #9917-Pole install (windstorm related)
- 5 Wolcott St- Pole# 14611 (Light Out)
- 6 Wolcott St Pole# 1873 (Light Out)
- 45 Christopher St Pole#7360 (Light Out)
- 10 Broad St Pole #9917 -Pole Install (accident related)
- Center St Railroad tracks -Pole Install (accident related)

Revisions since April's Report:

Since the last report, Shock Electric restored 9 street lights throughout the City of Bristol and inspected 2 additional street lights that were found to have no electrical power, resulting in service requests being submitted to Eversource. Eversource also restored power to 4 street lights by reconnecting electrical service to the cobra head fixtures. Shock Electric is scheduled to return to Bristol on 5/20/25 to continue addressing (8) outstanding street light complaints. In addition, the Department of Public Works currently has received 10 decorative street light heads that have been backordered since 2-2025.

-Joe Palmisano
Excavation Inspector



Municipal Media Corp.
1321 Upland Drive, PMB 1284
Houston, TX 77043
Email: sales@recyclecoach.com

SOFTWARE AS A SERVICE (SaaS) AGREEMENT

Client Name: City of Bristol	Contact: Lindsey Rivers, Public Works Analyst
Street address (City/State/Zip): 111 North Main St., Bristol, CT 06010	Email: publicworksap@bristolct.gov Phone: 860-584-6109
Accounts Payable Contact:	Email: publicworksap@bristolct.gov Phone: 860-584-6109
Does this contract require a PO#? n/a If YES, please provide. Who will provide an updated PO# each year?	Purchase Order Number: Name: Email: Phone:

Payment Summary

Name	Description	Fee Structure	Unit Price
Recycle Coach Web and Mobile App (RC-PLT-WMA)	See Platform details in Schedule A	Included	N/A
Essentials Bundle (RC-BDL-ESS)	Includes: Calendar, What Goes Where See Package Features in Schedule B	Yearly	Yr 1: \$7,500 Yr 2: \$7,875 Yr 3: \$8,250
Languages (RC-OPT-LANG)	Quantity: 1 (Spanish) Per Language Fee: \$300 See details in Schedule C	Yearly	\$300
Total Cash Due for Set Up*		Waived	Waived
Total Cash Due Annually*			Yr 1: \$7,500 Yr 2: \$7,875 Yr 3: \$8,250

*Plus applicable Taxes.

Terms and Agreement

Initial Term: 36 month(s)

Billing Start Date: June 1, 2026

Special Terms and Conditions:

- Payment is due annually on billing date.
- Once the initial term ends, the contract renews automatically on an annual term. Cancellation requests must be provided within 90-days notice from the end of the initial term. Send all notices to terminate to: sales@recyclecoach.com
- Agreement is subject to the [Terms of Use](#) posted on the Recycle Coach website.
- Above pricing is not valid if this Agreement is not signed within 90 days.
- Payment terms are Net 30 with annual invoicing.

Marketing & Communication:

- The main contact agrees to be added to the monthly newsletter communication list which features monthly marketing insights and creative assets you can use. This also includes monthly analytics on resident performance.
- Through the e-mail, the contact can opt-out at any time or add other contacts.

*If paying by credit card, a service fee of 4.5% will be added to the total upon processing.

As a Recycle Coach partner:

- You'll ask questions and seek to build value through data and insights. You'll have all the resources you need to help your residents become better recyclers, but it's up to you to use the tool and spread the word. You'll loop us in when you need help or schedule changes, and you'll help keep an open line of communication, whether that be with your CSM or by talking about Recycle Coach within your community.
- We'll adapt to *your* needs and meet you where you are. Our virtual door will always be open for a chat. We'll be busy working to make the Recycle Coach tool better for you and your residents, and we'll be a source of expertise for you within the industry. Empowerment is at the heart of what we do, and we'll share a wealth of resources to make sure you're successful. We'll always make the right decisions for the environment.

Signatures

By signing below, Client and Service Provider acknowledge that they have read the entire Agreement, the attached specific terms and conditions for use of the Services, and agree to be bound by the provisions thereof.

CLIENT

City of Bristol

By _____

Name & Title Lindsey Rivers, Public Works Analyst

I am a duly authorized officer, partner or principal with full authority to enter into this Agreement on behalf of Client.

Date _____
(MM/DD/YYYY)

SERVICE PROVIDER

Municipal Media Corp.

By _____

Name & Title Jeff J. Galad
CEO

Date _____
(MM/DD/YYYY)

Schedule A

Recycle Coach Web and Mobile App (RC-PLT-WMA)

****All Core Products include the Recycle Coach Web and Mobile App****

Web App:

- Web App is configured to contain any products and add-ons purchased by Client.
- Can be embedded on multiple web pages via a snippet of JavaScript (recycling page, community page, neighborhood websites, etc.).
- Responsive design: adapts to browsers on mobile devices ensuring a smooth user experience configured to their screen size.
- Custom branding: web app can be customized to match your website's color scheme to enhance your brand.
- Content can be displayed in multiple languages with purchase of language add-on.
- Meets accessibility requirements supported by WCAG certificate level AA. The system is audited by accessibility experts certified by the International Association of Accessibility Professionals every two years.
- Compatible with modern Content Management Systems, such as WordPress, Drupal, Webflow, etc.

Mobile App:

- Mobile App can be configured to contain any products and add-ons purchased by Client.
- Available for free download from the Apple App Store and Google Play
- Includes a search function for users to set their location (products purchased will automatically populate)
- Customizable splash screen appears once a location is selected (ie: city logo, etc.)
- Content can be displayed in multiple languages with purchase of language add-on.
- Meets accessibility requirements supported by WCAG certificate level AA. The system is audited by accessibility experts certified by the International Association of Accessibility Professionals.

Onboarding:

Client Provides:

- Any artwork you would like to appear on the mobile app splash screen.

Recycle Coach provides:

- Small snippet of JavaScript to place on as many websites as you desire.
- Dedicated listing in the Recycle Coach mobile app.
- Artwork if you are unable provide any for the mobile app splash screen, created by an in-house designer with up to 3 alterations.
- Recommendations on best practices for web app placement to increase engagement and adoption.
- Access to a Customer Success Manager who will provide a 1:1 kick-off call, training, quarterly check-ins, and ongoing support.

Schedule B

Essentials Bundle (RC-BDL-ESS)

Includes:

- Recycle Coach Web and Mobile App (RC-PLT-WMA)
- Calendar (RC-PKG-CAL)
- What Goes Where (RC-PKG-WGW-SI)

Calendar (RC-PKG-CAL)

Schedule search:

- Users can look up their collection schedule with a simple address search.
- Schedules can be formatted to provide information for various city services, events, and curbside collection, e.g. recycling, trash, yard waste, HHW events, street sweeping, and seasonal collections (Christmas trees, etc.)
- Schedules can be configured to reflect shifts in regular collection such as holidays.
- Schedules can be configured to display different collection zones by address search, e.g. residential vs. multi-family units.

Collection reminders:

- Users can opt-in for collection reminders via mobile app notifications, emails, text messages or automated phone calls (with SMS add-on)
- Users can export their calendar into Outlook, Apple Calendar or Google Calendar
- Reminders can be toggled on and off for various collection types and holiday shifts.
- Users can download a PDF calendar configured to their address.

Outbound Communication:

- Reminder Messages: clients can add extra educational content to collection reminders, such as recycling tips, upcoming events, or other information to help users stay informed about their waste program. Reminder messages can be configured to target specific collection zones or waste types.
- Notifications and Service Alerts: clients can send zone-specific alerts that can be scheduled or sent immediately to relay important information such as collection delays.

Inbound Communication:

- Includes access to a configurable Report A Problem tool to facilitate reporting on several topics such as: missed collection, broken cart, illegal dumping, and more.
- Problem reports can be sent via email to the appropriate department, linked to 311 webpages, or integrated into existing 311 platforms via API (with purchase of additional support package)

Perpetual Schedules:

- Calendars can be automatically carried over to the next year with approval by the client.
- Clients can define holidays that affect collections schedules and the impact of each holiday on weekly collections. The system will adjust the collections schedules based on this information.

Discovery Zone:

- Users can access our educational Discovery Zone, which includes:

- Weekly quizzes or polls pulled from our Content Allocation System (CASy) to test users' knowledge of their local waste and recycling program
- Blogs
- Annual Knowledge Survey
- Onboarding Survey
- Kids Activity Packets
- Recycling Fundamentals: a 5-part video series explaining recycling contamination and how to reduce it. Residents can earn a badge in the mobile app after completing the module.
- Misunderstood Materials: Ability to highlight the top ten materials that contribute to recycling contamination. Residents can earn a badge in the mobile app after completing the module.

Client Portal:

- Access to a personalized client portal to get detailed stats on web and mobile app usage and adoption.
- Send notifications and reminder messages to users.
- Analytics and Reporting: review over a dozen detailed reports.

Onboarding:

- Client provides any of the following:
- Address file: an Excel or .csv file which lists all addresses and their respective pickup schedule (i.e. zones)
- Map-based: A geographical map that identifies each zone in a collection schedule.
- List-based: Collection schedules identified through zones or days of the week and corresponding service type.
- If none of the above formats are readily available, we will work with you to find an ideal method of importing your address data.

Recycle Coach provides:

- An import of your address data to populate your collection calendar by address, zone, and service type.
- Access to a Customer Success Manager who will provide a 1:1 kick-off call, training, quarterly check-ins, and ongoing support.

Marketing Support:

- Includes hundreds of downloadable assets, available via our Client Portal, including customizable posters, social media assets, templated press releases, web banners, and more.

What Goes Where (RC-PKG-WGW-SI)

Material Search:

- Users can search a customizable database of 12+ waste categories, 400+ materials and 15,000+ search terms for localized disposal instructions.
- Mobile App includes image-recognition technology, which allows users to take a picture of an item and see disposal instructions.
- Client can add/edit details to disposal instructions at any time.
- Client can add/edit details such for drop-off locations and events, including links to maps so users can identify the nearest location to them.

- By material, users can customize answers to contain special drawer links with additional local information or resources.

Discovery Zone:

- Users can access our educational Discovery Zone, which includes:
 - Weekly quizzes or polls pulled from our Content Allocation System (CASy) to test users' knowledge of their local waste and recycling program.
 - Blogs
 - Annual Knowledge Survey
 - Onboarding Survey
 - Kids Activity Packets
 - Recycling Fundamentals: a 5-part video series explaining recycling contamination, and how to reduce it. Residents can earn a badge in the mobile app after completing the module.
 - Misunderstood Materials: Ability to highlight the top ten materials that contribute to recycling contamination. Residents can earn a badge in the mobile app after completing the module.

Client Portal:

- Access to a personalized client portal to get detailed stats on web and mobile app usage and adoption, as well as material search statistics.
- Send educational messages to mobile app users, such as recycling tips or to notify about local community events.
- Analytics and Reporting: review over a dozen detailed reporting dashboards.
- Update the What Goes Where tool by editing material categories, disposal instructions, and other details such as drawer links or drop off locations.
- Preview Recycle Coach educational campaigns such as upcoming blogs, quizzes and modules.
- Invite other users in your organization and grant specific permissions.

Onboarding:

Client provides:

- Information outlining the requirements of the What Goes Where tool, including the disposal methods for materials in your area.
- Other info as needed.

Recycle Coach provides:

- Access to our Onboarding Wizard to create an automated disposal database
- Assistance editing details such as drop-off locations, etc.
- Default disposal instructions and images for all materials in the database
- Access to a Customer Success Manager who will provide a 1:1 kick-off call, training, quarterly check-ins, and ongoing support

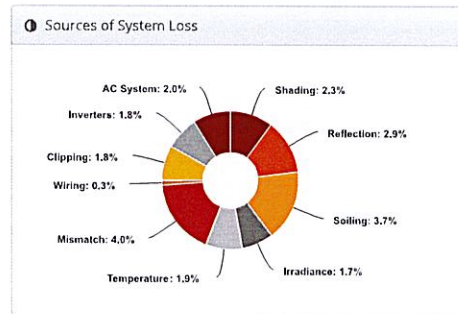
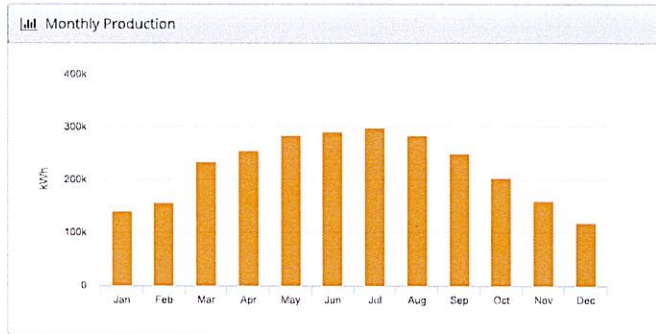
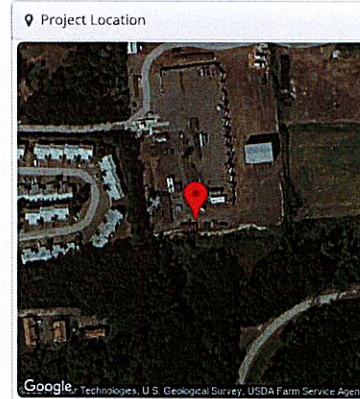
Marketing Support:

- Includes hundreds of downloadable assets in our client portal including customizable posters, social media assets, templated press releases, web banners, blog posts, and more.

480W Modules 25 Degree Tilt Bristol Landfill, 709 lake ave, bristol landfill

Report	
Project Name	Bristol Landfill
Project Address	709 lake ave, bristol landfill
Prepared By	CTEC Solar jeff.pipel@ctec solar.com

System Metrics	
Design	480W Modules 25 Degree Tilt
Module DC Nameplate	2.15 MW
Inverter AC Nameplate	1.50 MW Load Ratio: 1.43
Annual Production	2.680 GWh
Performance Ratio	79.7%
kWh/kWp	1,249.1
Weather Dataset	TMY, HARTFORD BRADLEY INTL AP, NSRDB (tmy3, I)
Simulator Version	122f07c144-8681935c6b-0f3930b611-978d9c5698



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,371.2	
	POA Irradiance	1,568.1	14.4%
	Shaded Irradiance	1,532.6	-2.3%
	Irradiance after Reflection	1,488.1	-2.9%
	Irradiance after Soiling	1,432.4	-3.7%
Energy (kWh)	Total Collector Irradiance	1,432.4	0.0%
	Nameplate	3,073,629.5	
	Output at Irradiance Levels	3,021,650.7	-1.7%
	Output at Cell Temperature Derate	2,962,860.7	-1.9%
	Output After Mismatch	2,844,091.8	-4.0%
	Optimal DC Output	2,836,708.7	-0.3%
	Constrained DC Output	2,784,311.2	-1.8%
	Inverter Output	2,734,836.8	-1.8%
	Energy to Grid	2,680,140.1	-2.0%
Temperature Metrics			
	Avg. Operating Ambient Temp		13.7 °C
	Avg. Operating Cell Temp		21.3 °C
Simulation Metrics			
	Operating Hours	4608	
	Solved Hours	4608	

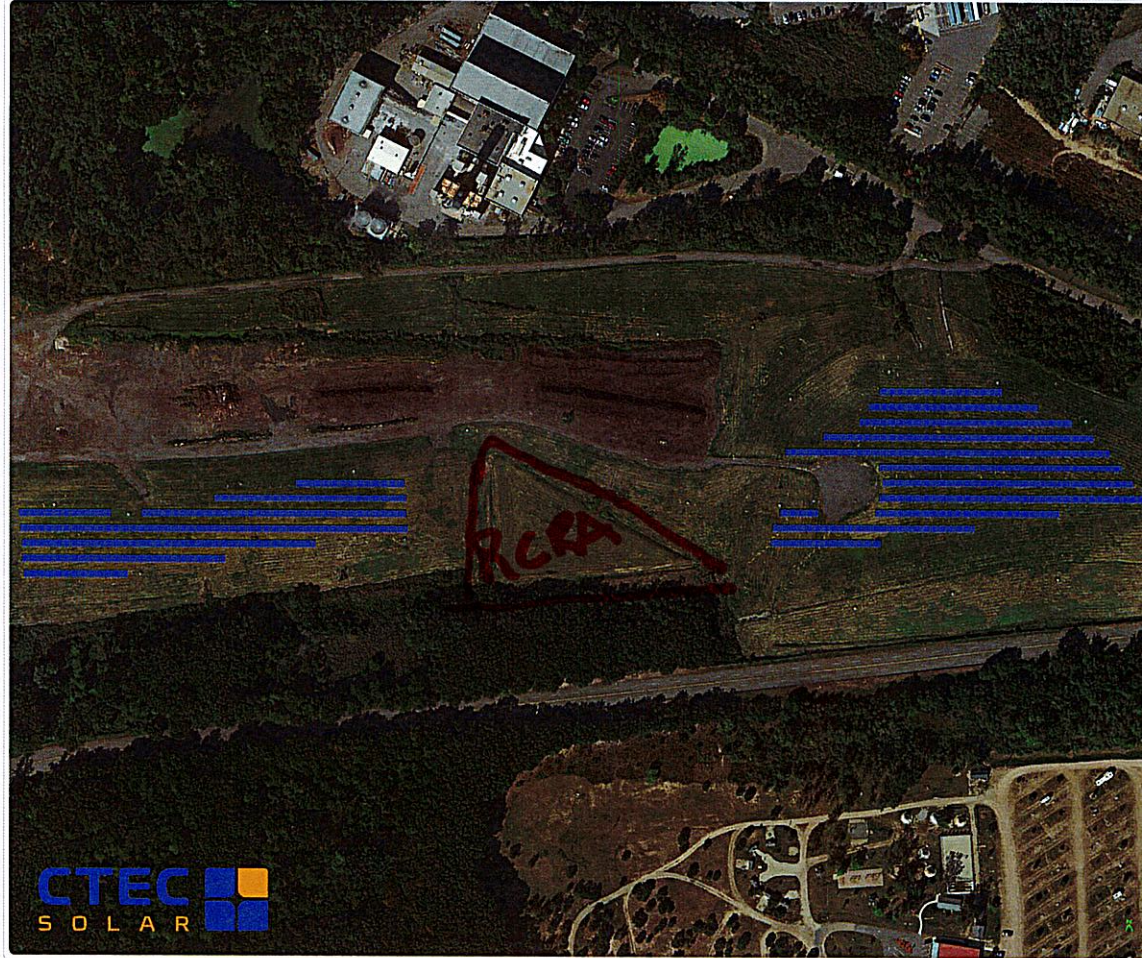
Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, HARTFORD BRADLEY INTL AP, NSRDB (tmy3, I)											
Solar Angle Location	Project Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Diffusion Model											
Temperature Model Parameters	Rack Type					U _{const}			U _{wind}			
	Fixed Tilt					29			0			
	Flush Mount					15			0			
	East-West					29			0			
	Carport					29			0			
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	12	16	7.6	1.7	1.2	1.2	1.3	1.3	1.4	1.4	1.1	10.1
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-3% to 3%											
AC System Derate	2.00%											
Module Characterizations	Module					Uploaded By		Characterization				
	Q-PEAK DUO XL-G10.3 480/BFG (Hanwha Q Cells)					C-TEC Solar, LLC		Qcells_QPEAK_DUO_XL-G10.3-BFG_480_Rev03.PAN, PAN				
Component Characterizations	Device			Uploaded By				Characterization				

Components		
Component	Name	Count
Inverters	CPS SCA125KTL-DO/US-600 (Apr19) (Chint Power Systems)	12 (1.50 MW)
Strings	10 AWG (Copper)	193 (62,220.6 ft)
Module	Hanwha Q Cells, Q-PEAK DUO XL-G10.3 480/BFG (480W)	4,470 (2.15 MW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	20-24	Along Racking
Wiring Zone 2	-	20-24	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	25°	180°	16.0 ft	2x1	908	1,816	871.7 kW
Field Segment 2	Fixed Tilt	Portrait (Vertical)	25°	180°	16.0 ft	2x1	1,327	2,654	1.27 MW

Detailed Layout



Add to agenda
Sent from my iPhone

Begin forwarded message:

From: Lindsey Rivers <LindseyRivers@bristolct.gov>
Date: May 7, 2026 at 3:06:06 PM EDT
To: Raymond Rogozinski <RaymondRogozinski@bristolct.gov>
Subject: FW: Mailbox Claim - David & Kelly Bombard 110 Melinda Lane

He wants more than the \$125.00 he will be going to BPW in May

From: Jennifer Broderick <JennBroderick@bristolct.gov>
Sent: Thursday, April 23, 2026 10:41 AM
To: CorpCounsel <CorpCounsel2@bristolct.gov>; Lindsey Rivers <LindseyRivers@bristolct.gov>
Subject: Mailbox Claim - David & Kelly Bombard 110 Melinda Lane

Good Morning,

Our office has received the attached mailbox claim from David & Kelly Bombard located at 110 Melinda Lane.

Have a great day,

Jennifer Broderick CCTC

Statute & Legislative Coordinator | Town & City Clerk
JennBroderick@bristolct.gov

Main: 860 584 6202

111 N Main Street | Bristol, CT 06010

Laura Leger

From: Lindsey Rivers
Sent: Friday, May 8, 2026 8:00 AM
To: Laura Leger
Subject: FW: Mailbox Claim - David & Kelly Bombard 110 Melinda Lane
Attachments: image001.png; Bombard, David & Kelly.pdf

Can you add on BPW

From: Emily Oparowski <EmilyOparowski@bristolct.gov>
Sent: Friday, May 8, 2026 7:38 AM
To: Lindsey Rivers <LindseyRivers@bristolct.gov>
Subject: Fw: Mailbox Claim - David & Kelly Bombard 110 Melinda Lane



Emily Oparowski

Accounts Payable

Public Works Department

111 North Main Street

Bristol, CT 06010

860-584-6109 (direct)

860-584-6125 (main office)

From: Raymond Rogozinski
Sent: Thursday, May 7, 2026 7:59 PM
To: Emily Oparowski; Lindsey Rivers
Subject: Fwd: Mailbox Claim - David & Kelly Bombard 110 Melinda Lane

To whom it may concern:

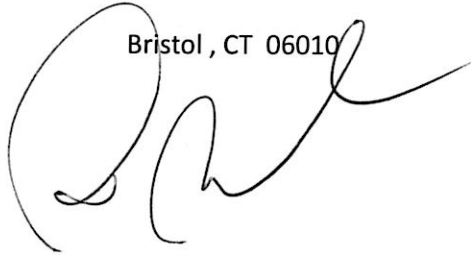
On 1/25/26 during a snowstorm our mailbox was knocked over and damaged by a snowplow. We do not want the town to replace it; we would like to replace it ourselves and file for a claim. Attached is a quote to replace our current mailbox with the same model from the same company who installed the current one.

Thank you.

David and Kelly Bombard

110 Melinda Lane

Bristol, CT 06010



860 940-1564

RECEIVED
2026 APR 23 AM 10:28
TOWN AND CITY CLERK
BRISTOL, CT

CT Mailbox LLC
525 Skerret Rd
Beacon Falls CT 06403

5550832
ctmailbox.com

CUSTOMER'S ORDER NO.

DEPARTMENT

DATE 4-15-28

NAME

Dave Bombard

ADDRESS

110 Melinda Lane

CITY, STATE, ZIP

Bristol CT 06010

SOLD BY

CASH

COD

CHARGE

ON ACCT

MDSE RETD

PAID OUT

QUANTITY

DESCRIPTION

PRICE

AMOUNT

1	1	Standard 4x4 Post		199.99
2		w/ Installation Included		
3		+ coffee stain		20 -
4		+ 4" #3 on Post	85.6	30 -
5	1	Medium Bronze Steel		39.99
6		Mailbox		-
7				289.98
8			tax	18.41
9			total	308.39
10				=

Quote

RECEIVED BY

Jeff 203 589 7915

GB1219-1

KEEP THIS SLIP FOR REFERENCE



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

**RE: Chapter 21: Streets, Sidewalks and Public Places – DRAFT
ORDINANCE**

Please find attached a draft of a complete rewrite and reorganization of the City's Chapter 21 Streets, Sidewalks, and Public Places Ordinance. The draft represents a comprehensive modernization of the existing ordinance. While portions of the current ordinance have been amended over the years, the core provisions and overall structure largely date back to 1965.

A link to the **EXISTING** City Street Ordinance is provided below:

https://library.municode.com/ct/bristol/codes/code_of_ordinances?nodeId=PTIICOOR_CH21STSI_PUPL

The proposed ordinance completely restructures the existing chapter and organizes the regulations into the following major sections:

1. Article I – Definitions
2. Article II – Department of Public Works Responsibilities and Authorities
3. Article III – Public and Property Owner Responsibilities
4. Article IV – Excavation and Utility Work Within the Public Right-of-Way
5. Article V – Construction Standards and Engineering Requirements
6. Article VI – Unaccepted Streets and Municipal Services
7. Article VII – City Trees

Although the ordinance has been comprehensively rewritten and reformatted, the draft intentionally preserves substantially all provisions of the existing ordinance. This approach was taken to ensure that existing requirements, authorities, and policies important to the City and Board of Public Works are not unintentionally omitted during the review process.

In addition to preserving existing provisions, the draft incorporates current departmental policies, engineering practices, and operational procedures that have evolved over time but are not presently reflected within the existing ordinance.

The ordinance is intended to serve as the primary governing policy document for the Department of Public Works. It should clearly define the responsibilities of the Department, establish the services residents may reasonably expect from the City, and identify the obligations of residents, contractors, utilities, and property owners. Department policies should support the ordinance, and Departmental procedures should support adopted policies. Public expectations regarding municipal services begin with the City ordinance.

The draft ordinance also introduces several new subject areas and operational responsibilities not comprehensively addressed in the current ordinance, including but not limited to:

- Pavement management programs
- MS4 stormwater compliance requirements
- Complete Streets policies
- Traffic control signs and pavement markings
- Traffic signal maintenance and operations
- Street lighting responsibilities
- ADA and PROWAG accessibility requirements
- Streetscape and multimodal transportation standards
- Utility coordination and excavation requirements
- Municipal services on unaccepted streets
- City tree management and Tree Warden authority

The draft further modernizes the ordinance by formally referencing current federal and state standards, including:

- Connecticut Department of Transportation (CTDOT) Standards
- MUTCD requirements
- ADA accessibility standards
- PROWAG accessibility guidelines
- CTDOT Drainage Manual requirements
- Connecticut Stormwater Quality Manual standards

The existing ordinance contains detailed roadway and utility construction specifications that are outdated and difficult to maintain within the ordinance itself. While many of these standards have been retained in the draft for review purposes, it is recommended that the final ordinance rely primarily upon formal adoption of CTDOT and related industry standards, with Bristol-specific exceptions, modifications, and supplemental requirements incorporated where necessary.

Examples of Bristol-specific standards that may differ from CTDOT standards include:

1. Placement of roadside barriers on roads with posted speed limits of 35 MPH or less at six (6) inches from face of curb.
2. Bristol-defined maximum lengths for permanent and temporary dead-end streets.
3. Residential subdivision sidewalk width requirements.
4. Catch basin spacing and placement requirements intended to facilitate future property drainage connections.

These examples are not intended to represent a complete list of local modifications but rather illustrate situations where Bristol-specific requirements may appropriately supplement or modify CTDOT standards.



Department of Public Works | 860.584.6125

CTDOT and related engineering standards are periodically revised and updated. Accordingly, the City ordinance should avoid unnecessarily restating technical specifications that may later become outdated. Instead, the ordinance should primarily reference and adopt current standards by incorporation, while reserving authority for the City to establish supplemental local requirements where appropriate.

The draft ordinance also attempts to consolidate and modernize enforcement authority, permit requirements, contractor licensing provisions, roadway restoration requirements, and municipal authority regarding work performed within the public right-of-way. Consideration should also be given to establishing a consolidated penalties and enforcement section applicable throughout the chapter rather than including penalties within individual sections. As such, attached are drafts of separate Enforcement and Construction Street Standard articles.

It should also be noted that the recently adopted City Ordinance Section 21-31 Illicit Discharges and Illegal Connections would be separated as separate Article as part of the Draft ordinance and is not included for clarity. Recent ordinance revisions with Sec 32-23 Ice and Snow to be removed by Abutting Owners a Sec 21-24.5 Removal of Obstructions and snow to eliminate vehicle sightline hazards will be integrated into the applicable draft ordinance. The existing Chapter 21: Steet, Sidewalks and Public Places also includes an Article for Open Space Land that will remain "as is" at this time.

ChatGPT was utilized to assist in the preparation and organization of the draft ordinance. However, due to the size, format, technical content, and comprehensive nature of the rewrite, substantial independent work was performed by myself to review, revise, reorganize, and incorporate updated operational, engineering, and policy information into the document.

In addition, I have included supplemental ChatGPT review and analysis of the draft ordinance, along with draft standalone ordinance articles addressing Construction Standards & Specifications and Enforcement & Penalties. The intent of these supplemental articles would be to remove applicable language currently repeated throughout the draft ordinance in order to reduce duplication, improve organization, and minimize potential conflicts between sections.

The draft ordinance is currently structured with separate sections outlining Department responsibilities and resident or property owner responsibilities. While this structure may inherently create some overlap or duplication between sections, I believe the format provides value by making responsibilities and expectations clearer and easier to understand for both the public and the Department.

The purpose of submitting this draft ordinance to the Board of Public Works at this time is not to request formal approval, but rather to obtain review comments, policy guidance, operational input, and direction from the Board prior to preparation of a final proposed ordinance.

Following review and input from the Board of Public Works, the Department of Public Works will revise the draft ordinance as appropriate and initiate a formal legal and policy review with the City's Corporation Counsel prior to submission of a final proposed ordinance for consideration and adoption.

Please feel free to contact me with any questions or concerns at 860-584-6113.

City of Bristol, Connecticut

Chapter 21 Streets, Sidewalks and Public Places Ordinance

Article I — General

21.105: Definitions

1. Accepted City Street. A public roadway constructed in accordance with City standards and formally accepted by vote of the City Council.
2. Unaccepted City Street. A roadway available for public use that has not been formally accepted by vote of the City Council.
3. Public Right-of-Way. Land dedicated, reserved, or otherwise available for public roadway purposes, including pavement, sidewalks, curbs, drainage, utilities, lighting, traffic control devices, and related infrastructure.
4. Sidewalk. The portion of the public right-of-way intended for pedestrian travel, including the area between the property line and the curb or edge of pavement, but not including the curb.
5. Curb. A raised or defined edge along a roadway or sidewalk used for drainage control, pavement edge support, pedestrian separation, or traffic guidance.
6. Curb Ramp. A sloped pedestrian access route connecting a sidewalk or pedestrian pathway to a street crossing.
7. Pedestrian Access Route. A continuous and unobstructed accessible path of travel within a sidewalk or public right-of-way.
8. Paper Street. Land shown on a map or subdivision plan as reserved for future roadway construction but not constructed or accepted as a City street.
9. Private Road. A roadway not formally accepted by vote of the City Council and not maintained by the City, except as otherwise expressly provided by ordinance or agreement.
10. State Road. A roadway owned or maintained by the State of Connecticut.
11. Roadside Barrier. A protective installation within or adjacent to a roadway, including guardrails, bridge parapets, retaining barriers, crash attenuators, bollards, or similar safety devices.
12. Traffic Authority. The Police Department or other authority designated by law to approve, regulate, install, modify, or remove traffic control signs, signals, and pavement markings.
13. Director. The Director of Public Works or the Director's authorized designee.
14. DPW. The City of Bristol Department of Public Works.
15. MUTCD. The Manual on Uniform Traffic Control Devices, as amended and adopted by applicable federal or state authority.
16. PROWAG. The Public Right-of-Way Accessibility Guidelines issued by the United States Access Board, as adopted or recognized for use in public rights-of-way.
17. MS4 Permit. The Municipal Separate Storm Sewer System General Permit issued by the Connecticut Department of Energy and Environmental Protection.
18. Permanent Pavement Patch. Final pavement restoration installed after excavation or utility work, constructed to City standards.

19. Temporary Pavement Patch. Interim pavement restoration installed to make an excavated area safe until permanent restoration is completed.
20. Utility Strip / Tree Belt. The area within the public right-of-way between the curb or roadway edge and the sidewalk, commonly used for trees, utilities, signs, lighting, and related infrastructure. ADA. The Americans with Disabilities Act and all applicable accessibility standards and regulations.
21. Complete Streets. A transportation policy and design approach that enables safe and convenient access for all users of the transportation system, including pedestrians, bicyclists, transit users, motorists, emergency responders, freight carriers, and persons of all ages and abilities.
22. Director of Public Works. The Director of Public Works of the City of Bristol or the Director's authorized designee.
23. Driveway Apron. The portion of a driveway extending from the street curb or edge of pavement to the property line.
24. Public Right-of-Way. Any public street, highway, sidewalk, alley, easement, or other public way owned or controlled by the City.
25. Streetscape. The visual and functional elements within the public right-of-way, including sidewalks, trees, lighting, landscaping, furnishings, bicycle facilities, transit accommodations, and pedestrian amenities.
26. Traffic Control. Measures used to regulate, warn, guide, or direct traffic through or around construction or maintenance activities.
27. Accepted Street. A street, highway, or roadway formally accepted by vote of the Bristol City Council for public ownership and maintenance.
28. Binder Course. One (1) course of bituminous concrete pavement installed to a compacted depth of one and one-half (1½) inches over the traveled portion of a roadway.
29. Certificate of Occupancy. A certificate issued pursuant to the Connecticut State Building Code authorizing occupancy or use of a building or structure.
30. Condominium Road. A privately owned roadway serving a condominium, common-interest community, homeowners association, or similar development that has not been accepted by the City.
31. Developer. Any person, partnership, corporation, limited liability company, or other legal entity responsible for subdivision or roadway construction activities.
32. Escrow Concentration Account. A financial account established with the City Comptroller containing funds equal to fifteen percent (15%) of bonded subdivision improvements to reimburse the City for maintenance, repairs, or emergency work associated with unaccepted streets.
33. Existing Level of Service. The level and type of municipal services historically provided by the City prior to adoption of this Article.
34. Municipal Services. Services provided by the City including snow plowing, ice control, solid waste collection, recycling collection, police protection, fire protection, and emergency medical response.
35. Performance Guarantee. A bond, letter of credit, escrow, or other financial surety acceptable to the Planning Commission guaranteeing completion of required public improvements.

36. Private Drive. A privately maintained driveway located within or accessing a public or private right-of-way that serves one or more properties and has not been accepted by the City.
37. Road Surface Rating (RSR). A roadway condition rating prepared by the Director of Public Works or City Engineer used to evaluate pavement condition and roadway suitability for acceptance.
38. Subdivision Road. A roadway constructed or proposed as part of an approved subdivision development.
39. Unaccepted Street. Any street, road, highway, or right-of-way that has not been formally accepted by the Bristol City Council for public ownership and maintenance.
40. Utilities. Public infrastructure systems including water mains, sanitary sewers, storm drainage systems, street lighting, hydrants, and related appurtenances.

Article II – City Responsibilities (Accepted Streets Only)

Section 21.205: Pavement

The City shall maintain a comprehensive pavement management program that includes pothole repair, preventive maintenance, and annual resurfacing planning. The program shall include the following components:

1. Maintain a Pavement Management Program

- a. The program shall be data-driven, assess road conditions at a regular interval, not to exceed 5 years.
- b. Pavement condition shall be evaluated using a standardized numerical rating system, such as the Pavement Condition Index (PCI) or an equivalent scale ranging from 0 to 100.
- c. Prioritize maintenance and rehabilitation activities
- d. Optimize lifecycle costs across the City's street network
- e. Planning for maintenance, rehabilitation, and reconstruction activities
- d. Budget forecasting and prioritization

2. Maintenance and Rehabilitation Standards

- a. The City shall perform routine maintenance activities, including but not limited to:
 - i. Crack sealing
 - ii. Patching
 - iii. Surface treatments

These activities are intended to preserve pavement condition and extend service life.

- b. Rehabilitation activities, including but not limited to milling and overlay or other structural or surface improvements, shall be performed as needed to restore pavement condition and extend useful life.
- c. The final course of pavement shall be Superpave HMA S0. 375 and the binder course shall be Superpave HMA S0. 500.
- d. Reconstruction—defined as full-depth replacement of the pavement structure—shall be undertaken when maintenance or rehabilitation is no longer cost-effective.
- e. Pavement work shall be prioritized based on:
 - i. Pavement condition ratings
 - ii. Traffic volume and functional classification
 - iii. Safety considerations
 - iv. Lifecycle cost-effectiveness
- f. Preference shall be given to preventive maintenance treatments that extend pavement life at a lower long-term cost.

4. Project Selection and Prioritization

- a. The Department of Public Works shall develop both annual and multi-year pavement improvement plans using data from the Pavement Management Program.
- b. Project selection and prioritization shall consider:
 - i. Pavement condition thresholds
 - ii. Coordination with utility work and other capital projects
 - iii. Available funding
- c. The pavement improvement plan may be updated annually to reflect changes in pavement conditions, infrastructure needs, and budget constraints.

Section 21.210: Storm Drainage

The City shall maintain, repair, replace, inspect, clean, construct, and improve storm drainage systems within the public right-of-way and within City-owned drainage easements as necessary to provide for the safe conveyance of stormwater.

- a. Maintenance of catch basins, storm drains, culverts, manholes, pipes, drainage swales, headwalls, and related stormwater infrastructure;
- b. Inspection and cleaning of drainage facilities on a scheduled and emergency basis;
- c. Repair or replacement of deficient drainage structures where failure creates a public safety hazard or causes roadway deterioration;
- d. Management of roadway drainage to minimize flooding, erosion, icing, and standing water conditions;

- e. Review and approval of drainage systems associated with roadway construction, subdivision development, utility work, and other activities affecting municipal drainage infrastructure;
- f. Coordination with State and Federal agencies regarding drainage permits, flood management, and water quality requirements;
- g. Enforcement of erosion and sedimentation controls associated with work within the public right-of-way;
- h. Implementation of stormwater quality measures and pollution prevention practices; and
- i. Compliance with applicable MS4 permit obligations and reporting requirements.

The City shall not be responsible for the maintenance or repair of privately owned drainage systems unless such systems are accepted by the City or are otherwise subject to a recorded maintenance agreement approved by the City.

Section 21.215: Roadway Curbing

1. City Responsibility

- a. The City shall be responsible for the installation, reconstruction, and maintenance of curbing within the public right-of-way along the City streets.
- b. The City shall have sole discretion to prioritize curbing projects based on roadway condition, traffic volume, drainage needs, public safety considerations, and available funding. Nothing in this section; priority shall be given to installing curbing to prevent the runoff of stormwater from a City street onto private property.
- c. No abutting property owner shall install or maintain any pipe or drainage connection discharging into a street gutter without prior written approval from the City. Such approval shall only be granted where no reasonable alternative drainage method exists.
- d. Cost Allocation for Combined Curb and Sidewalk Structures

Where a curb is integrated with or forms part of an adjoining sidewalk:

- i. The City shall be responsible only for the portion attributable to the curb;
- ii. The abutting property owner shall be responsible for the sidewalk portion.

2. Materials and Construction Standards

Acceptable curbing materials include bituminous, granite, and cast-in-place concrete.

- a. Bituminous curbing shall be constructed with a parabolic profile.
- b. The use of precast or slip-form concrete curbing is prohibited unless specifically approved by the Director of Public Works.

3. Inspections and Compliance

- a. The Director of Public Works or authorized designee shall inspect all curbing, sidewalks, driveways, and related work performed under this section.

b. Such inspection shall not relieve the permit holder or contractor from the obligation to complete all work in full compliance with approved plans, permits, and City standards.

Section 21.220: Roadside Barriers

1. City Responsibility and Definitions

For purposes of this section, “roadside barriers” shall include, but are not limited to, guardrails, safety rails, bridge parapets, retaining barriers, crash attenuators, bollards, curbing systems designed for vehicular redirection, and any similar protective installations located within a City accepted street right-of-way.

a. The City of Bristol shall be responsible for:

- i. The installation of roadside barriers on City accepted streets were determined necessary by the Director of Public Works or the Director’s designee based on applicable safety standards, engineering judgment, or federal and state guidelines;
- ii. Routine inspection of roadside barriers on a schedule established by the Department of Public Works, or more frequently as conditions warrant;
- iii. Maintenance and repair of roadside barriers to ensure structural integrity and safe condition, including timely response to reported damage;
- iv. Replacement of roadside barriers that are deemed structurally deficient, obsolete, or no longer meet applicable safety standards.

2. Standards and Compliance

All installation, maintenance, and replacement of roadside barriers shall be performed in accordance with applicable standards, including but not limited to those established by the Connecticut Department of Transportation (CTDOT), the Federal Highway Administration (FHWA), and the Manual on Uniform Traffic Control Devices (MUTCD), as amended.

3. Limitations of Liability

Nothing in this section shall be construed to impose liability upon the City for damages resulting from failure of roadside barriers where such failure is caused by extraordinary circumstances, third-party acts, or events beyond the City’s reasonable control, provided that the City has exercised reasonable diligence in inspection and maintenance.

4. Coordination with Private Property

Where roadside barriers are located adjacent to or partially within private property boundaries, responsibility shall be determined based on property ownership, easement agreements, or applicable state and municipal regulations. The City shall not be responsible for barriers installed solely for private benefit or access control unless formally accepted into the City infrastructure system.

Section 21.225: Roadway Pavement Markings

1. Standards and Design

- a. All pavement markings shall conform to the standards, specifications, and guidance set forth in the most current edition of the Manual on Uniform Traffic Control Devices (MUTCD), issued by the Federal Highway Administration (FHWA), as adopted and supplemented by the Connecticut Department of Transportation.
- b. Where state-specific amendments or supplemental standards exist, such standards shall take precedence over general MUTCD provisions where applicable.
- c. Markings shall be applied using durable materials designed to provide adequate visibility under varying weather and lighting conditions.
- d. Color, width, pattern, and placement of markings shall be consistent with recognized traffic control standards as defined by the MUTCD.

2. Installation and Maintenance

- a. The Police Department shall serve as the City's legal traffic authority and shall have final approval over the installation, modification, or removal of all pavement markings on public roadways.
- b. The Department of Public Works shall be responsible for the installation and maintenance of existing pavement markings
- c. No pavement marking shall be added, altered, or removed without prior authorization from the Police Department.
- d. Temporary markings used during construction or utility work must be approved by the Police Department and shall be promptly removed or replaced with permanent markings upon completion of work.

Section 21.230: Traffic Control Signs

1. Authority and Purpose

The Police Department is designated as the Traffic Authority, is hereby authorized to determine the need for, approve, and regulate official traffic control signs within all accepted City streets and rights-of-way. The Department of Public Works shall maintain and repair all existing signs and, as approved by the Traffic Authority, install new or modify existing traffic control signs

2. Conformance with Standards

All traffic control signs erected or maintained by the City shall conform, to the extent practicable, to the standards and specifications set forth in the most recent edition of the Manual on Uniform Traffic Control Devices (MUTCD), as adopted by the State of Connecticut.

3. Authority Over Installation, Modification, and Removal

- a. The Police Department, as the Traffic Authority, shall have sole authority to approve the installation, modification, relocation, or removal of any official traffic control sign.
- b. The Department of Public Works shall not install, modify, relocate, or remove any traffic control sign except upon direction or approval from the Traffic Authority.

c. The Department of Public Works shall be responsible for maintaining and repair all traffic control signs on accepted City streets and rights-of-way.

4. Placement and Visibility

- a. Traffic control signs shall be placed in locations approved by the Traffic Authority to ensure maximum effectiveness.
- b. All signs shall be installed and maintained to ensure adequate visibility and legibility under normal conditions.
- c. No person shall place, maintain, or display any unauthorized sign, signal, marking, or device that interferes with or imitates official traffic control signs.

5. Prohibited Acts

It shall be unlawful for any person to:

- a. Deface, damage, destroy, or remove any official traffic control sign.
- b. Obstruct the visibility of any traffic control sign.
- c. Install or display any sign or device resembling an official traffic control sign without authorization from the Traffic Authority.

6. Temporary Traffic Control

Temporary traffic control signs for construction, maintenance, emergencies, or special events may be authorized by the Traffic Authority. The Department of Public Works or other authorized agents may install such signs in accordance with that approval.

Section 21.235: Street Identification Signs

1. Requirement.

Street identification signs shall be installed and maintained at all intersections of public streets and at such other locations as deemed necessary by the Department of Public Works or the Police Department for the purpose of public safety and navigation.

2. Design Standards.

All street identification signs shall conform to the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD), as adopted and amended, including but not limited to requirements for size, color, reflectivity, lettering, and placement.

3. Installation Responsibility.

- a. The City shall be responsible for the installation and maintenance of street identification signs on public streets.
- b. For private streets or developments, the property owner, developer, or homeowners' association shall be responsible for installation and maintenance, subject to approval by the City.

4. Naming Consistency.

Street names displayed on identification signs shall match the official street names as recorded by the City. No sign shall be installed bearing an unapproved or unofficial street name.

5. Visibility and Placement.

Street identification signs shall be placed in a manner that ensures visibility for vehicular and pedestrian traffic, free from obstruction by vegetation, structures, or other impediments.

6. Private Road Designation.

The City reserves the right to install street identification or supplemental signage on any roadway not accepted as a public street for the purpose of public safety, navigation, and clarification of status. Such signage may include, but shall not be limited to, a designation indicating “Private Road” or similar language. The placement of such signage shall not be construed as acceptance of the roadway by the City.

7. No Implied Acceptance.

The installation, repair, replacement, or maintenance of any street identification sign by the City on any roadway shall not be deemed or construed to constitute acceptance of such roadway as a public or City street. Acceptance of any roadway as a City street shall occur only upon formal approval by the City Council, evidenced by an affirmative vote duly recorded in the official proceedings of the City Council.

8. Damage or Removal.

No person shall remove, deface, damage, or obstruct any street identification sign. Violations shall be subject to penalties as provided in this Code.

Section 21.240: Sidewalks & Ramps

1. General Accessibility Requirement

All public sidewalks, pedestrian access routes, pedestrian pathways, curb ramps, crosswalks, and related facilities within the City of Bristol shall be designed, constructed, altered, maintained, and repaired in compliance with the Americans with Disabilities Act (“ADA”), all applicable standards issued by the United States Access Board, and the Public Right-of-Way Accessibility Guidelines (“PROWAG”), as adopted or otherwise recognized for use in public rights-of-way.

The City shall incorporate accessibility improvements into all applicable public infrastructure projects, sidewalk programs, roadway projects, and maintenance operations.

2. ADA Transition Plan Requirement

The City shall maintain and periodically update an ADA Transition Plan for public rights-of-way in accordance with applicable federal law and regulations. Such plan shall identify barriers to accessibility, establish priorities for corrective action, provide implementation schedules where practicable, and identify responsible departments or officials for compliance activities.

Accessibility improvements identified through the ADA Transition Plan may be incorporated into the City’s capital improvement planning, roadway reconstruction projects, sidewalk construction programs, and maintenance activities.

3. Construction Standards

Except as otherwise authorized by the City Council for specific projects, all sidewalks, curb ramps, and related appurtenances shall be constructed of Portland cement concrete in accordance with the current edition of the Connecticut Department of Transportation Standard Specifications for Roads, Bridges, and Incidental Construction, as amended, together with any supplemental specifications, standard details, and engineering requirements adopted by the City.

The City Council may authorize the installation of bituminous concrete sidewalks for designated projects or areas where deemed appropriate based upon engineering, drainage, accessibility, maintenance, or financial considerations.

4. Curb Ramps and Pedestrian Crossings

- a. Curb ramps shall be installed at all intersections, marked or unmarked crosswalks, and all locations where pedestrian access routes cross curbs.
- b. All curb ramps shall include detectable warning surfaces and shall comply with applicable ADA and PROWAG standards relating to slope, width, landing areas, grade transitions, and accessibility features.
- c. Any new construction, reconstruction, resurfacing, rehabilitation, or substantial alteration of a public street, sidewalk, or pedestrian access route shall include the installation, replacement, or upgrade of curb ramps and associated pedestrian facilities as necessary to achieve compliance with applicable accessibility standards.
- d. Alterations and Triggering Requirements

Any alteration to a street, sidewalk, pedestrian access route, or facility within the public right-of-way that affects or could affect usability shall require the installation or upgrading of curb ramps and associated pedestrian facilities to current ADA and PROWAG compliance standards to the maximum extent technically feasible.

5. Sidewalk Location Authority

For specific projects or designated areas, the City Council may determine that sidewalks shall be installed on one side of a street only and may designate which side shall receive such sidewalks based upon public safety, accessibility, engineering, traffic, drainage, or financial considerations.

6. Duty of Adjacent Property Owners

The owner of property abutting a public sidewalk shall be responsible for the routine maintenance, repair, and replacement of such sidewalk as necessary to maintain safe and accessible pedestrian travel, except as otherwise provided herein or by state law.

Such responsibility shall include maintaining sidewalks free from hazardous conditions, vertical displacement, significant cracking, obstructions, and other defects that impair accessibility or pedestrian safety.

7. Inspection and Enforcement

The Superintendent of Public Works, City Engineer, or their authorized designee may inspect sidewalks, curb ramps, pedestrian access routes, and related facilities for compliance with this section and applicable accessibility standards.

Where a sidewalk or pedestrian facility is determined to be unsafe, inaccessible, damaged, deteriorated, or otherwise noncompliant, the City may issue written notice directing the abutting property owner to repair, replace, or correct the condition within a reasonable time specified in such notice.

Failure to comply with such notice may constitute a violation of this Code and may result in the City undertaking the required work pursuant to subsection (k) of this section.

8. Damage Caused by Trees Within Public Right-of-Way

Whenever a sidewalk becomes cracked, displaced, heaved, or otherwise unsafe as a result of the growth of trees located within the public street lines, tree belt, utility strip, or other City-controlled area, the Superintendent of Public Works, or designee, shall cause such sidewalk to be repaired or replaced at City expense.

The City may also undertake root mitigation, tree maintenance, removal, or other appropriate measures necessary to minimize future sidewalk damage and preserve accessibility.

9. Assessments for Sidewalk Construction and Repair

Whenever the City Council orders the installation, construction, reconstruction, repair, replacement, alteration, or improvement of sidewalks, curb ramps, pedestrian access routes, or related facilities, the Council may, by resolution, assess all or part of the cost thereof upon properties specially benefited thereby in accordance with the City Charter and applicable law.

Such assessments may include costs associated with:

- a. Sidewalk construction and replacement;
- b. Excavation and base preparation;
- c. Accessibility improvements required for ADA or PROWAG compliance;
- d. Curb ramps and detectable warning surfaces;
- e. Fine grading, topsoil, and seeding;
- f. Driveway transitions and regrading;
- g. Retaining walls and restoration work;
- h. Engineering, inspection, administrative, legal, and construction costs.

Unless otherwise determined by the City Council:

- i. The cost of sidewalk construction or repair, including base installation complete in place, may be assessed to the abutting property owner;
- ii. The cost of work within the utility strip, tree belt, or pole border between the sidewalk and curb shall be borne by the City; and
- iii. Costs associated with City-owned trees or tree root mitigation shall be borne by the City.

The City Council may assess such costs on a per front foot basis or such other equitable basis permitted by law.

Within sixty (60) days following adoption of a resolution authorizing such assessment, the Superintendent of Public Works shall cause caveats identifying affected properties and estimated maximum assessments to be filed upon the land records.

Upon determination of final costs, the Superintendent of Public Works shall cause liens to be filed against assessed properties unless payment is made in full within thirty (30) days following notice thereof.

Assessments shall be payable in ten (10) semiannual installments over a period of five (5) years and shall bear interest at the rate established by the City for municipal assessments.

For corner lots, the assessment shall be levied upon the lesser frontage, and any frontage not constituting a divisible building lot may be abated by the City Council. Costs associated with such abated frontage shall be borne by the City.

No deferment of sidewalk assessments shall be granted except as otherwise authorized by law or resolution of the City Council.

10. Failure to Repair; Municipal Work and Lien

If an abutting property owner fails to complete required sidewalk repairs, replacement, or corrective work within the time specified in a notice issued pursuant to this section, the City may cause such work to be completed.

The full cost of such work, including administrative, engineering, inspection, legal, and construction costs, may be assessed against the property owner and may become a lien upon the property in the same manner as municipal assessments authorized by law.

Section 21.241: Traffic Signals

1. Maintenance and Repair

The City, or its duly authorized contractor, shall be responsible for the maintenance, repair, and replacement of City-owned traffic control signals to ensure safe and efficient operation.

2. Interference Prohibited

It shall be unlawful for any person to damage, obstruct, tamper with, or otherwise interfere with the proper operation of any City-owned traffic control signal or associated equipment.

3. Emergency Authority

In the event of emergency conditions, construction activities, or public safety concerns, the City is authorized to temporarily modify or deactivate traffic control signals as necessary to protect public health and safety.

4. Ownership on State Highways

For purposes of this section, City-owned traffic control signals may include traffic signals located within or along state highways where ownership, operation, or maintenance responsibility has

been formally assigned or designated to the City by agreement with the State of Connecticut or other applicable authority.

5. Video Detection Equipment

Traffic control signals shall be equipped with video detection systems whenever feasible and practicable, as determined by the City Engineer or the Director's designee, based on site conditions, existing infrastructure, safety considerations, and available funding. Where video detection is not feasible, the City may authorize alternative detection technologies consistent with applicable engineering standards and the Manual on Uniform Traffic Control Devices (MUTCD).

Section 21.245: Street Lighting

1. Ownership and Maintenance Responsibility

The City of Bristol shall own, operate, maintain, repair, replace, and install street lighting systems located within the public right-of-way. This responsibility includes the timely repair or replacement of inoperable or damaged street light fixtures, poles (when applicable), and related appurtenances.

2. Installation of Additional Lighting

The City may install additional street lighting where determined necessary for public safety, traffic operations, or roadway illumination needs. Requests for additional lighting shall be reviewed and approved by the Director of Public Works in accordance with Board of Public Works policy, engineering judgment, safety considerations, and available funding.

3. Lighting Standards

The City does not maintain a fixed luminance, wattage, or illumination standard for street lighting. In general practice, street lights are installed in a consistent pattern along roadways, commonly approximating placement on every other utility pole, or at intervals determined appropriate for roadway classification, geometry, and surrounding conditions. Lighting design shall be based on general roadway illumination needs rather than a quantified photometric standard unless otherwise adopted by the City.

4. Purpose of Street Lighting

The primary purpose of City street lighting is to provide illumination of public roadways, intersections, and pedestrian areas within the public right-of-way for safety and traffic visibility. Street lighting is not intended or designed for the illumination of private property, driveways, or structures outside the public right-of-way.

5. Electrical Service and Utility Coordination

While the City owns and operates street lighting infrastructure, electrical power for street lights is supplied by the electric utility provider. The City shall coordinate with the electric utility to ensure the installation, energizing, repair, and restoration of electrical service to street lighting systems. In the event of outages or loss of power to street lighting, the City shall initiate coordination with the utility provider to restore service in a timely manner consistent with utility response procedures and agreements.

6. Utility Outages and Restoration

The City shall not be responsible for delays in street light operation caused by utility service interruptions; however, the City shall actively monitor outages and pursue restoration through coordination with the electric utility until service is restored.

Section 21.250: Culverts and Bridges

1. Culvert & Bridges General

- a. The City shall be responsible for the installation, inspection, maintenance, repair, and replacement of public culverts and bridges that:
 - i. Carry City-accepted streets; and/or
 - ii. Convey stormwater beneath City-accepted streets; and
 - iii. Serve a general public transportation or drainage function beyond a single property.
- b. The City shall utilize inspection reports prepared by the Connecticut Department of Transportation for culverts and bridges where such reports are available. The City reserves the right to perform additional inspections as deemed necessary and shall schedule inspections at such intervals as required to address field conditions, structural concerns, hydraulic performance, and public safety.
- c. Bridge design standards, load ratings, and hydraulic capacity shall comply with the Bridge Design Manual of the Connecticut Department of Transportation, as may be amended.
- d. The City may prioritize improvements based on structural condition, safety, hydraulic performance, traffic importance, and available funding.
- e. No property owner shall construct, alter, extend, or remove any culvert or bridge within the public right-of-way without a permit.

2. Prescriptive Easement for Existing Structures

- a. Where any portion of a culvert, including but not limited to headwalls, or any portion of a bridge, including but not limited to abutments, is located on private property and has been in continuous, open, visible, and adverse use by the City for a period of not less than thirty (30) years, such use shall be deemed to establish a municipal prescriptive easement for the purposes of access, inspection, maintenance, repair, and replacement.
- b. Said prescriptive easement shall extend to those areas reasonably necessary for the structural support and function of the culvert or bridge and for access thereto.
- c. Nothing herein shall be construed to expand the scope of such easement beyond the extent of historic use, nor to limit any rights otherwise available to the City under applicable law.

3. Emergency Authority: Inspections and Access

The City, its agents, employees, and contractors may enter upon private property at reasonable times, and without prior notice in the event of an emergency, for the purposes of inspecting, maintaining, repairing, replacing, or stabilizing any culvert or bridge that affects public

infrastructure, drainage, or safety. The City may take immediate action where a condition poses an imminent threat to public safety, roadway integrity, or property.

Sec. 21.255: Numbering of Buildings

The Department of Public Works shall have the sole authority to assign and maintain official building numbers within the City, and shall have the authority to reassign building numbers as necessary for the sole purpose of correcting or standardizing the numbering of properties.

1. Every property owner shall be responsible for numbering or renumbering their premises in accordance with the numbering system established by the City and as assigned by the Department of Public Works.
2. If a property owner fails or refuses to comply after receiving reasonable notice, the Director of Public Works, or the Director's designee, is authorized to remove any existing number and install the correct number as designated by the Department.
3. The cost of such removal and installation shall be charged to the property owner and may be recovered by the City through an action of debt or any other lawful means.

Article III – General Public & Property Owner Responsibilities & Limitations

Section 21.305: Winter Conditions; Snow and Ice Removal

1. Winter Parking Restrictions

- a. Pursuant to Section 14-32 of the Bristol Code of Ordinances, the City may prohibit on-street parking during the period extending from December 15 through March 15.
- b. During this designated period, overnight parking on public streets shall be prohibited between the hours of 2:00 a. m. and 6:00 a. m.

2. Emergency Snow Parking Ban

- a. Pursuant to Section 14-39 of the Bristol Code of Ordinances, the City may establish emergency parking restrictions during severe weather events or other emergencies.
- b. The Mayor, Chief of Police, or Director of Public Works is authorized to declare a snow emergency and prohibit parking on any public street within the City during and following a severe storm or other emergency until the emergency has ended and roadways have been cleared for safe passage.
- c. During a declared emergency, the City may remove or tow any vehicle parked in violation of the emergency parking restrictions.

Section 21.310: Sidewalk Snow and Ice Removal by Abutting Property Owners

1. Duty to Remove Snow and Ice

a. Every owner or occupant of property abutting a public street with a paved sidewalk, including sidewalks containing wheelchair ramps, shall maintain such sidewalks and ramps free and clear of snow and ice.

2. Definition of End of Storm

For purposes of this section, a storm shall be deemed to have ended upon completion of snow removal operations by the Department of Public Works ("DPW"). In most circumstances, this shall occur approximately four (4) hours after the cessation of winter precipitation, although the completion time may vary depending upon weather and roadway conditions.

3. Advisory Regarding Snow Removal Timing

Property owners and occupants are advised to wait until DPW roadway snow removal operations are complete before clearing sidewalks or driveway aprons adjacent to public streets, as snowplowing operations commonly deposit snow onto such areas during roadway clearing activities.

4. Time Requirements for Snow and Ice Removal

a. Snow shall be removed from sidewalks and wheelchair ramps:

- i. Within twelve (12) hours after the end of a storm when the storm ends between 3:00 a. m. and 9:00 p. m. ; or
- ii. Within nine (9) hours after the end of a storm when the storm ends between 9:00 p. m. and 3:00 a. m.

b. If ice has formed on sidewalks or wheelchair ramps, the owner or occupant shall, within the same time periods:

- i. Remove the ice; or
- ii. Apply sand, salt, or other suitable material sufficient to make the surface reasonably safe for pedestrian travel.

c. All sidewalks and wheelchair ramps shall be maintained in a condition reasonably safe for pedestrian use.

5. Liability for Snow and Ice on Sidewalks

a. Adoption of Connecticut General Statutes § 7-163a

- i. Pursuant to Connecticut General Statutes § 7-163a, the owner or person in possession and control of land abutting a public sidewalk shall have the same duty of care with respect to the presence of snow and ice on such sidewalk as the City previously had prior to adoption of this section.
- ii. Such owner or person in possession and control shall be liable for injuries to persons or property caused by a breach of such duty where the breach is the proximate cause of the injury.
- iii. Notwithstanding Connecticut General Statutes § 13a-149 or any other statute or special act, the City shall not be liable for injuries or damages caused by the presence of snow or ice on a

public sidewalk unless the City owns or controls the land abutting such sidewalk, excluding land used as a public highway or street. Nothing herein shall limit the City's liability for its own affirmative acts.

iv. Any action to recover damages for injuries caused by the presence of snow or ice on a public sidewalk against an owner or person in possession and control of abutting land shall be commenced within two (2) years from the date the injury was first sustained.

Section 21.320: Prohibited Placement of Snow

1. Placement of Snow on Streets or Other Property Prohibited

- a. . No person shall place, shovel, plow, blow, or otherwise deposit snow or ice into any public street or traveled roadway.
- b. Snow removed from sidewalks, wheelchair ramps, driveways, or private property shall not be deposited into the traveled portion of a public street.
- c. No person shall deposit snow or ice onto property owned or occupied by another person without the permission of the property owner or occupant.
- d. Any violation of this section may be enforced by the Bristol Police Department through issuance of an infraction pursuant to Section 1-11 of the Bristol Code of Ordinances.

Section 21.325: Sidewalk Maintenance

1. Responsibility of Abutting Property Owners

- a. The owner of any property abutting a public sidewalk shall be responsible for the maintenance, repair, replacement, and safe condition of such sidewalk at the owner's expense and not at the expense of the City or general taxpayers, regardless of whether such sidewalk is designated as a school walk or otherwise.
- b. Every property owner whose land abuts a public sidewalk, whether or not the sidewalk was originally constructed by such owner, shall at all times:
 - i. Maintain the sidewalk in a safe condition for public use;
 - ii. Repair any defects occurring within the sidewalk;
 - iii. Keep the sidewalk free and clear of all obstructions, debris, snow, ice, vegetation, or any substance that may impede or endanger pedestrian travel.

2. Permit Requirements and Construction Standards

- a. No person shall construct, reconstruct, replace, or substantially repair any sidewalk or driveway apron without first obtaining a permit from the Department of Public Works (DPW).
- b. Prior to the commencement of any such work, the contractor shall notify the Director of Public Works, or designee, who shall inspect the site to ensure compliance with all applicable specifications, standards, and requirements established by the City.

3. Sidewalk Assistance Programs

The Board of Public Works may establish programs or policies to assist property owners with sidewalk maintenance, repair, or replacement, subject to available funding and applicable regulations.

4. Failure to Repair; City Authority to Perform Work

- a. Whenever the owner of property abutting a public sidewalk neglects or refuses to maintain or repair such sidewalk after written notice from the Superintendent of Public Works, the Superintendent may cause the sidewalk to be repaired or replaced by the City or its contractors.
- b. Upon completion of such work, the full cost and expense thereof shall be assessed against the abutting property owner.
- c. Such assessment shall constitute an inchoate lien in favor of the City against the premises from the date of assessment. Said lien shall expire two (2) months thereafter unless a certificate of lien, containing the amount due and a legal description of the premises, is filed by the Tax Collector in the Office of the City Clerk in accordance with Section 46 of the City Charter.
- d. Upon receipt of the assessment from the Director of Public Works, the Tax Collector shall collect from the property owner the total cost of the work, together with an administrative overhead charge equal to six percent (6%) of the assessment amount, provided:
 - i. The minimum overhead charge shall be fifty dollars (\$50.00); and
 - ii. The maximum overhead charge shall be fifteen hundred dollars (\$1,500.00).

5. Grading and Adjacent Areas

During the construction or reconstruction of sidewalks by the City or under City contract, the City may excavate or fill areas adjacent to the sidewalk as necessary to establish a safe slope, generally not exceeding a ratio of two (2) horizontal feet to one (1) vertical foot.

The City shall be responsible, for all finish grading, property and driveway restoration. Property restoration shall be limited to loam and seeding.

6. Authority to Order Sidewalk Replacement

- a. Whenever the Director of Public Works determines that an existing sidewalk cannot be adequately repaired and that replacement is required for the protection of public safety and welfare, the Director may order the owner of property abutting such sidewalk to replace the sidewalk.
- b. The Director may prescribe the composition, dimensions, thickness, materials, construction standards, and time for completion of such replacement work.
- c. No such order shall be issued until the property owner has been provided:
 - i. Written notice of the required replacement; and
 - ii. An opportunity to be heard, provided not less than thirty (30) days prior to the issuance of the order.

7. Owners' Petition for Sidewalk Installation

Sidewalk installation proceedings may be initiated by:

- a. Petition of affected property owners; or
- b. Action of the City Council following public hearing.

All proceedings shall comply with applicable Charter provisions.

Section 21.340: Items and Business Within the Public Right-of-Way

1. General Provisions

- a. Private items placed within the public right-of-way (“ROW”) shall be minimized.
- b. Mailboxes shall be permitted; standard designs are encouraged.
- c. The City reserves the right to remove any item deemed unsafe or obstructive to public use, pedestrian travel, vehicular traffic, or municipal operations.

2. Temporary Obstructions Within the Right-of-Way

a. Permit Required

Any person seeking to place building materials, dumpsters, donation boxes, storage containers, or any other temporary obstruction upon a public street, sidewalk, or roadway shall obtain a permit from the Director of Public Works prior to placement.

The permit application shall specify:

- i. The proposed location;
- ii. The extent or dimensions of the area to be occupied; and
- iii. The duration of the proposed obstruction.

The Director of Public Works may approve, deny, or condition such permit as deemed necessary to protect public safety and convenience, including limitations on location, size, duration, and hours of occupancy.

d. Conditions of Permit

Any person granted a permit under this section shall:

- i. Maintain safe and convenient passage for pedestrians and vehicles around or through the obstruction;
- ii. Keep all adjacent areas free from debris, loose materials, and conditions hazardous to public travel;
- iii. Comply with all lawful directives issued by the Director of Public Works;
- iv. Ensure that no street gutter, catch basin, drainage structure, or natural water flow is obstructed; and
- v. Be liable to the City for any damage, injury, or expense resulting from failure to comply with this section or permit conditions.

e. Insurance Requirement

No permit shall be issued unless the applicant provides a current certificate of insurance, in a form acceptable to the City, demonstrating adequate public liability coverage and naming the City of Bristol as an additional insured.

f. Fire Hydrant Clearance

No obstruction shall be placed within ten (10) feet of a fire hydrant.

h. Permit Fees

The Board of Public Works may establish and revise permit fees for temporary obstructions regulated under this section.

h. Traffic and Pedestrian Protection

Any obstruction located within a roadway, or any sidewalk closure, shall be protected with appropriate traffic and pedestrian control devices, including but not limited to barriers, cones, warning lights, and signage, in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

Where a sidewalk closure occurs, signage shall direct pedestrians to an accessible alternate route or available sidewalk.

3. Trade or Business on Streets and Sidewalks

No person shall conduct business or sell, offer for sale, solicit, or distribute goods or services upon any public street or sidewalk except as expressly authorized below:

- a. The sale or distribution of newspapers, including newspaper vending boxes;
- b. Sales conducted during public holidays or officially designated public celebrations authorized by resolution of the City Council;
- c. Licensed peddlers, solicitors, and canvassers operating in accordance with Section 17-16 et seq. ; and
- d. Licensed restaurants and food establishments operating sidewalk café areas directly adjacent to their premises, provided that:
 - i. A clear and unobstructed paved pedestrian path at least four (4) feet in width is maintained at all times;
 - ii. The establishment maintains public liability insurance with a minimum aggregate limit of one million dollars (\$1,000,000), naming the City of Bristol as an additional insured;
 - iii. Proof of insurance shall be maintained on-site and produced upon request of the City;
 - iv. The establishment agrees to indemnify and hold harmless the City from claims arising out of its use of the sidewalk area; and
 - vi. The establishment registers such sidewalk use with the Bristol-Burlington Health District, obtains any required license endorsements, and complies with all applicable provisions of the Connecticut Public Health Code, including Section 19-13-B42, as amended.

vii. No person shall request, solicit, or collect money or donations within any public street, roadway, median, or sidewalk within the City, except as otherwise authorized by law.

5. Unlawful Deposits and Obstructions

- a. No person shall place, throw, sweep, or deposit any waste, refuse, rubbish, paper, clothing, bedding, ashes, dirt, vegetation, animal matter, or other debris upon any public street, sidewalk, or public way within the City.
- b. No person shall place, throw, spill, or permit to fall upon any public highway any material, substance, or object that may obstruct traffic or create an unsafe or unsightly condition, including but not limited to scrap metal, wire, crushed stone, sawdust, glass, or waste paper.
- c. This section shall not apply to materials lawfully placed in connection with authorized construction, excavation, repairs, or maintenance work.

6. Obstructions and Hazardous Conditions Prohibited

It shall be unlawful for any person:

- a. To fail or refuse to comply with the provisions of this section or any lawful order or regulation issued by the Director of Public Works pursuant thereto;
- b. To install, maintain, or use any drain, pipe, conductor, or discharge system in a manner that causes water to flow upon or across a public sidewalk;
- c. To intentionally discharge or permit water, waste, or any substance to flow onto a public sidewalk;
- d. To place or leave nails, spikes, screws, glass, or similar hazardous materials within any street, sidewalk, or driveway;
- e. To place unauthorized obstructions or displays upon any public sidewalk; or
- f. To plant, erect, maintain, or permit any hedge, shrub, fence, sign, wall, or other object exceeding three (3) feet in height within twenty-five (25) feet of an intersection in a manner that obstructs the sight lines of motorists approaching the intersection.

For purposes of this subsection:

- i. Height shall be measured from the existing grade to the uppermost projection of the object;
- ii. "Intersection" shall mean the area formed by the extension of lateral curb lines or roadway edges; and
- iii. The twenty-five-foot setback shall be measured from the nearest point of the intersection area.

7. Maintenance of Tree Borders

The owner of property abutting a public sidewalk shall maintain the tree border area located between the sidewalk and curb in a neat, properly graded, and reasonably safe condition, free from holes, defects, or hazardous conditions that may endanger pedestrians.

Section 21.345: Driveway Apron

1. Purpose

The purpose of this section is to establish uniform standards for residential and commercial driveway construction, driveway aprons, permitting requirements, contractor licensing requirements, and property owner maintenance responsibilities in order to protect public streets, improve drainage, and maintain the safety and appearance of public rights-of-way within the City.

2. Definitions

For the purposes of this ordinance, the following definitions shall apply:

- a. Driveway: A private vehicular access area located on private property connecting a property to a public street.
- b. Driveway Apron: The portion of the driveway located between the edge of the public roadway and the property line or right-of-way line.
- c. Right-of-Way: Public land dedicated for street and utility purposes.
- d. Lip: The vertical edge or rise at the transition between the street pavement and driveway surface.
- e. Licensed Contractor: A contractor approved, bonded, and licensed by the Department of Public Works to perform driveway or driveway apron work within the City.

3. Residential Driveway Requirements

- a. All residential driveways shall be constructed of asphalt pavement.
- b. Decorative driveway materials including, but not limited to, brick, pavers, stamped concrete, decorative concrete, or similar decorative surfaces shall not be permitted within the public right-of-way.
- c. Residential driveways shall maintain a lip of one and one-half (1.5) inches where the driveway surface meets the roadway.
- d. Any replacement or installation of a residential driveway shall comply with all applicable City zoning, engineering, and construction standards.
- e. Replacement or installation of any residential driveway shall require a permit issued by the Department of Public Works prior to commencement of work.
- f. The driveway apron area shall extend from the edge of the public roadway to the property line, right-of-way line, or a minimum distance of five (5) feet from the edge of pavement, whichever distance is greater.

4. Driveway Apron Requirements for Commercial Properties

- a. All driveway aprons for commercial properties shall be constructed of Portland cement concrete.
- b. Driveway aprons shall be installed in accordance with all City zoning, engineering, and construction specifications.

c. The maximum allowable lip at the roadway connection for all driveway aprons shall be one-half (0.5) inch.

d. The driveway apron area shall extend from the edge of the public roadway to the property line, right-of-way line, or a minimum distance of five (5) feet from the edge of pavement, whichever distance is greater.

5. Driveway Apron Permit Requirements

a. Replacement or installation of any driveway apron shall require a permit issued by the Department of Public Works prior to commencement of work.

b. All driveway aprons shall be installed by a contractor bonded and licensed with the Department of Public Works.

c. Any contractor performing driveway or driveway apron work without first obtaining the required permit may have their Department of Public Works license revoked, suspended, or otherwise subject to enforcement action by the City.

d. The Department of Public Works may inspect all permitted work to ensure compliance with City specifications and standards.

e. The Department of Public Works may require corrective action for any work not completed in accordance with approved standards.

6. Property Owner Responsibilities

a. Property owners shall be responsible for the maintenance, repair, and replacement of driveway aprons serving their property.

b. Property owners shall maintain driveway aprons in a safe condition and free from deterioration, settlement, cracking, or other defects that may create hazards to vehicles, pedestrians, or drainage.

7. City Responsibility

The City shall be responsible for repair or replacement of a driveway apron only under the following circumstances:

a. The driveway apron is substantially damaged as a direct result of City operations or activities;

b. Water runoff originating from the public street is flowing onto or into the driveway and causing damage due to improper street drainage conditions;

c. The repair or replacement work is associated with an authorized City street, utility, drainage, or infrastructure improvement project.

Article IV – Excavation & Work Within City Roadway Right of Way by Private Contractors and Public Utilities (formatting editing only)

Sec. 21.405: General.

No contractor, person or public utility shall work within any portion of the City roadway right of way without obtaining an excavation permit from the Department of Public Works. Work shall include, but is not limited to: the disturbance, excavation, construction, and demolition of roadway pavement, curbing, sidewalks, underground utilities (sewer, water, storm water, natural gas, electric or telecommunication conduits), roadside barriers, signs, lights, and structures of any kind. Minor repairs to sidewalks, such as filling cracks with mortar, are not required to be performed by a licensed contractor, along with the installation of mail boxes and landscaping.

All work performed within the City roadway right of way shall be performed in a safe manner in accordance with Department of Public Works standards and specifications.

All contractors and persons performing work within the City roadway right of way shall restore all disturbed roadway pavement, curbing, utilities, and sidewalks, including lawn & seed, and any roadside barriers, signs, lights, and structures of any kind to their original condition as they existed prior to any work being performed by the contractor or persons performing the work.

Sec 21.410. License.

In order to obtain an excavation permit, all contractors and/or persons shall be licensed by the Department of Public Works. To become licensed, contractors shall submit an application (prepared by the Department of Public Works) demonstrating that said contractor has the knowledge, experience, and equipment to perform work in accordance with City of Bristol requirements. In addition, the contractor shall provide to the Department a certificate of insurance and a bond. As part of the review process, contractors or persons may be required to submit for review an applicable valid trade license issued by the State or Federal government or trade organization. However, the license subject to this City Ordinance is an additional license issued by the City as part of the authorization process to work within the roadway right of way. All licensed contractors or persons require the approval of the Director of Public Works.

The Department of Public Works shall prepare and submit the license application form to the Board of Public Works for review and approval.

Each contractor or person submitting an application for an excavation permit shall provide a bond of a surety company authorized to do business in the City in the minimum amount of \$20,000 (or equal to the value of the work as determined by the Department of Public Works), and conditioned substantially that the applicant, its employees, or agents shall faithfully perform such work in all respects, and shall replace and restore that portion of any street in which the applicant, its servants, or

agents performed any excavation, to the original condition as before such work was performed. In accordance with the provisions of this ordinance, it is the intent of the City to authorize the Department of Public Works to set high bond limits based on the estimated value of the work as determined by the Department of Public Works.

Each contractor or person shall also file with the Department of Public Works a satisfactory public liability insurance certificate in the minimum amount of General liability \$1,000,000 (combined single limit) bodily injury/property damage coverage per occurrence and \$2,000,000 aggregate coverage, to indemnify and save the City and its agents harmless from all suits and actions brought against the City or any officer thereof, on account of any injuries sustained or damage caused by any person in consequence of, or resulting from, any negligence in guarding such work, or any act or omission of the licensee.

The Board of Public Works reserves the right to modify insurance and bonding requirements as required to safeguard the public.

Whenever, in the opinion of the Director of Public Works, any licensed contractor or person violates any of the provisions of this ordinance, or any of the rules, regulations, and specifications adopted by the Director, the Director may order the suspension or revocation of the license of such curb and walk contractor.

Sec 21.415: Permits.

All contractors or persons shall obtain a permit issued by the Department of Public Works prior to performing work within any portion of the City roadway right of way. Work shall include, but is not limited to: the disturbance, excavation, construction, and demolition of roadway pavement, curbing, sidewalks, underground utilities (sewer, water, storm water, natural gas, electric or telecommunication conduits), roadside barriers, signs, lights, and structures of any kind. Minor repairs to sidewalks, such as filling cracks with mortar, are not required to be performed by a licensed contractor, along with the installation of mail boxes and landscaping.

Contractors or persons performing work to replace or install a driveway apron within the roadway right of way shall obtain a Driveway Permit issued by the Department of Public Works. Contractors or persons performing work to replace and install sidewalks within the roadway right of way shall obtain a Sidewalk Permit issued by the Department of Public Works. Contractors or persons performing all other work such as: excavation, construction, and demolition of roadway pavement, curbing, sidewalks, underground utilities (sewer, water, storm water, natural gas, electric or

telecommunication conduits), roadside barriers, signs, lights, and structures of any kind shall obtain an Excavation Permit.

The Department of Public Works shall prepare and submit the permit application form (Sidewalk, Driveway, and Excavation permits) to the Board of Public Works for review and approval. All contractors and/or persons shall submit the applicable permit application prior to completing work. Permit application forms shall include the following:

a. Sidewalk and driveway permits:

- i. Name of licensed contractor or person performing work along with contact information.
- ii. Location and type of work to be performed.

b. Excavation Permit

- i. Name of licensed contractor or person performing work along with contact information.
- ii. Location and type of work to be performed.
- iii. Map indicating proposed work. Note that an A-2 survey may not be required by the Department of Public Works. However, the map shall indicate proposed work and existing roadway utilities and facilities. In addition, for house utility laterals, a field walk performed by the applicant and a Department of Public Works representative may be substituted for the submittal of a map.
- iv. All utilities shall be installed in accordance with City standards with respect to size, depth, location, materials, and bedding.

All contractors or persons shall provide the Department of Public Works information regarding the impact the work will have on traffic. The Department of Public Works may require a traffic control plan. Contractors or persons are advised that every road closure requires authorization and approval from the Director of Public Works or the Chief of Police, no other City entity or person is authorized to approve the closure of a City Street.

No work shall be performed prior to the approval of the permit by the Department of Public Works. Public Utilities performing emergency work shall submit a permit to the Department of Public Works within 48 hours of an emergency.

An application fee shall be charged to each contractor obtaining a Department of Public Works permit, issued in accordance with this ordinance. The application fee shall be set by the Board of Public Works. In accordance with the ordinance a separate application fee shall be established for work performed by public utility companies.

Sec. 21.420: Excavation of newly paved roadways.

Contractors shall be advised that the City enforces a moratorium on the issuance of excavation permits on newly-paved roads. No permit will be issued for a period of five (5) years after a roadway is paved to install main line utilities, and three (3) years to install laterals. If required, restoration shall include the milling and paving of the roadway curb-to-curb, or a full lane width at the contractor's expense, as agreed upon by the utility company and the Department of Public Works. Said work shall be performed by the Department of Public Works. Restoration of pavement for lateral installation, during the moratorium period, shall consist of milling a larger patch (2 ft. around perimeter of temporary patch) and repaving in accordance with Department of Public Works specifications. Work shall include the installation of a full pavement depth (4-inch min) in the area of the temporary patch.

Sec 21.430: Excavation within City streets.

Pavement and/or sidewalks shall be cut or sawn to straight neat lines. Excavation without cutting or sawing is not allowed. Cutline shall be parallel, and six (6) inches minimum, outside either edge of the proposed trench.

Tunneling under pavement or sidewalks is not allowed. Bituminous material, cement concrete, ledge, rocks and boulders over six (6) inches in any dimension, shall be removed from the job, together with any clay, silt, or organic material. The Public Works Inspector will check the material excavated and will allow re-use as backfill, sandy and/or gravelly material. Material not approved of shall be disposed of from the job site. Backfill shall be approved sandy gravelly material with no stones over six (6) inches in any dimension. Backfill shall be compacted in fifteen-inch lifts or layers using mechanical compaction equipment approved by the Department of Public Works.

The trench shall be filled to within eleven (11) inches of the finished grade, consisting of nine (9) inches of approved processed gravel which shall be spread and compacted, then two (2) inches of bituminous concrete temporary pavement which shall be spread and compacted, and the finished material flush with the adjacent existing surface.

The limits of permanent patch shall be established/confirmed at the completion of work/installation of temporary asphalt patch. Permanent patches shall extend 6-inches beyond the temporary patch, and require the contractor to re-cut the roadway asphalt. The City of Bristol may require the installation of additional roadway asphalt patch to improve road conditions, and may extend the permanent patch limits to include older patches or road defects. If the City requires the replacement of additional roadway, the cost of the additional work will be paid for by the City, or the utility company will pay the City the application cost of the required patch (not including the additional work) and the City will install the entire/desired permanent patch that is required to repair the utilities work and the road defect. All utility boxes shall be installed flush with pavement.

Bituminous concrete material shall be "hot mix," except during the winter season when plants are closed. "Cold patch" may be used with prior authorization and approval by the Department of Public Works. During the period between temporary patch and permanent patch, the utility contractor shall be responsible for maintaining the patch, and shall promptly correct all defects upon order of the Director of Public Works. Failure by the contractor to maintain the trench in a safe condition will result in the Department of Public Works performing the work and charging the contractor for said repairs.

The storage of materials or equipment within the City's right of way is not allowed, unless authorized by the Public Works Engineering Division, or the Director of Public Works. The site shall be cleaned and swept at the end of each day. The blocking of private driveways is prohibited.

Sec 21.435: Permanent patching and restoration of City streets.

All temporary pavement patches shall be removed and replaced after one year with a permanent pavement patch or pavement restoration.

Annually, the Department of Public Works will procure the services of a paving contractor to remove temporary pavement patches installed as part of the Department of Public Works permit defined in this ordinance. The procured paving contractor will install all permanent pavement patches installed within the last year. Permit holders are not authorized or permitted to install permanent roadway patches unless otherwise approved by the Board of Public Works.

At the time of issuance of an Excavation Permit, the contractor shall deposit a fee equal to the estimated cost of the permanent patch. Upon completion, the actual patch will be measured, and the contractor shall be billed for any permanent patch cost to the City that exceeds the amount deposited by the contractor. If the permanent patch cost to the

City is less than the amount deposited with the City, the contractor will receive a credit. Calculation of estimated patch costs will be based on trench length and width (width shall be diameter of pipe plus thirty-six (36) inches, minimum forty-eight (48) inches, plus twelve (12) inches for every foot to depth of trench). Permits will not be issued to contractors owing the City any permanent patch fees. The City may institute legal action against contractors and those responsible for nonpayment of any permanent patch costs owed to the City if any permanent patch fee is not paid within ninety (90) days of the due date. The Department of Public Works shall calculate the unit pavement cost based on the pavement contractor's cost with a twenty (20) percent escalator for charging contractors, that year, for trench permanent patching.

The Public Works Department shall keep a written record of all trenches including: the dates of excavation, temporary patches and permanent patches, deposit fees received, estimated final fees and actual final fees, the balances owed or the credits due, and the exact locations and types of utilities. The City shall maintain a separate non-interest-bearing fund for permanent patching of all City streets. All payments by contractors or persons excavating in a public right of way shall be deposited in the fund, and payments for completed permanent patching shall be disbursed from the fund.

All contractors shall be required to identify the temporary pavement trenches by spray painting the company's name at several locations, based on the size of the trench, as determined by the Department of Public Works. Work performed by Public Utility companies, or contractors performing the work for the public utility, shall identify the trench using the public utility companies' name.

Public utility contractors authorized by the Department of Public Works are permitted to install their own permanent patch. However, all work must be performed in accordance with Department of Public Works requirements and specifications. Based on roadway pavement, Public Utility Companies may be required by the Department of Public Works to restore roadway pavement by milling and paving roadway sections, either curb to curb or full travel lane widths. Said pavement restoration (milling and paving) shall be paid for at the sole expense of the public utility company or the utility company may fund the City performing the work.

All permanent pavement installation and roadway pavement restoration shall conform with City standards and specifications. Existing bituminous material shall be removed, existing pavement shall be cut to reasonably straight longitudinal lines, transverse jogs within ten (10) feet of each other shall not be accepted, and transverse cuts shall be perpendicular to the longitudinal cut. Several small excavations shall be widened into one. If existing pavement has cracked due to trench settlement, the edge of the trench shall be cut beyond such cracks to firm true pavement. The subgrade shall be graded and compacted to four (4) inches below finished grade. The contractor shall add any

necessary processed gravel to bring trench to subgrade, care shall be taken to keep processed gravel tight under adjacent pavement. The edge of existing bituminous shall be painted with hot liquid asphalt prior to paving. Transverse joints in new patch shall be cut square and painted with hot liquid asphalt. Bituminous material shall be placed in two (2) equal compacted layers of one and one-half inches. Finished surface shall meet existing surface neat and true. The edges of completed patch shall be sealed with an application of hot liquid asphalt three (3) inches minimum wide.

The Department of Public Works may expand the permanent patch limits and increase the area of the permanent patch to correct roadway defects that existed prior to work performed in accordance with the permit. Said work shall be paid for by the City.

ARTICLE V — STREETS, ROADWAYS, SIDEWALKS, AND PUBLIC RIGHTS-OF-WAY

Sec. 21.505: Applicability

1. This Article shall apply to all work performed within or affecting any public street, sidewalk, highway, easement, or public right-of-way within the City of Bristol, including, but not limited to:
 - a. Street construction and reconstruction;
 - b. Utility installation and maintenance;
 - c. Excavations and openings;
 - d. Sidewalk and curb construction;
 - e. Driveway aprons and curb cuts;
 - f. Streetscape improvements;
 - g. Storm drainage systems;
 - h. Traffic control activities; and
 - i. Any work requiring occupancy or disturbance of the public right-of-way.

Sec. 21.510: Governing Standards

1. All work governed by this Article shall conform to the most current applicable editions of:
 - a. Connecticut Department of Transportation (CTDOT) Standard Specifications;
 - b. Connecticut Department of Transportation Roadway Design Manual;
 - c. Connecticut Department of Transportation Drainage Manual;
 - d. Manual on Uniform Traffic Control Devices (MUTCD);
 - e. American Association of State Highway and Transportation Officials (AASHTO) standards;

- f. Connecticut Stormwater Quality Manual;
- g. Connecticut Guidelines for Soil Erosion and Sediment Control;
- h. Americans with Disabilities Act (ADA) standards; and

2. City of Bristol Complete Streets Policy.

Where conflicts exist between standards, the stricter requirement shall apply, as determined by the Director of Public Works.

All technical standards, specifications, standard details, and construction requirements shall comply with CTDOT standards except where modified, revised, or adopted by the City of Bristol Department of Public Works.

Sec. 21.515: Complete Streets Policy

1. General Requirement

All transportation projects undertaken within the City shall incorporate Complete Streets principles to the maximum extent practicable.

2. Considerations

Projects shall consider accommodations for:

- a. Pedestrians;
- b. Bicyclists;
- c. Transit users;
- d. Motorists;
- e. Emergency vehicles;
- f. Freight movement; and
- g. Persons of all ages and abilities.

3. Exceptions

The Board of Public Works may approve modifications or waivers where:

- a. Physical constraints prohibit compliance;
- b. Cost is disproportionate to need;
- c. Public safety would be adversely affected; or
- d. The accommodation is demonstrated to be unnecessary.

All exceptions and deviations shall be documented in writing together with the justification supporting such determination.

Sec. 21.525. Permits Required

1. Permit Requirement

No person shall perform work within the public right-of-way without first obtaining all required permits from the Department of Public Works.

2. Permit Activities

Permits shall be required for:

- a. Excavations;
- b. Utility installations;
- c. Sidewalk construction;
- d. Curb installation;
- e. Driveway aprons and curb cuts;
- f. Street occupancy;
- g. Pavement cuts;
- h. Drainage work; and
- i. Traffic control activities.

3. Permit Conditions

Permit holders shall comply with all permit conditions, approved plans, traffic control requirements, and restoration standards.

Sec. 21.530: Traffic Control During Construction

1. General Requirement

All construction activities affecting traffic shall comply with MUTCD requirements and any directives issued by the Police Department or the Director of Public Works.

2. Police Officers and Flaggers

Traffic control personnel shall be required where determined necessary by the Chief of Police or the Chief's designee.

The Police Department may maintain and distribute a list of streets where police officers are typically required due to traffic volume, roadway classification, or safety concerns.

3. Contractor Responsibility

Contractors shall provide:

- a. Warning signs;
- b. Barricades;
- c. Cones;
- d. Flaggers;
- e. Temporary pedestrian access; and
- f. Any other devices necessary to protect public safety.

4. Safety Apparel

All flaggers and traffic control personnel shall wear high-visibility safety apparel compliant with applicable federal and state standards.

Flaggers shall utilize approved fluorescent flags during daylight operations and illuminated signaling devices during nighttime operations.

5. Advance Notice

Any contractor, utility, or person planning work affecting the public right-of-way shall notify the Department of Public Works at least forty-eight (48) hours prior to commencing work whenever practicable.

6. Extended Duration Projects

For projects anticipated to exceed sixteen (16) work hours, the Director of Public Works may require submission of work schedules, traffic control plans, sequencing plans, and coordination with utilities or outside agencies.

7. Emergency Work

Utilities performing emergency work may commence operations immediately but shall notify the Department of Public Works and Police Department as soon as practicable.

8. Police Enforcement

Police officers may take enforcement action, including issuance of citations or other lawful actions, where violations of traffic control requirements create unsafe conditions for pedestrians, bicyclists, motorists, or workers.

Sec. 21.535. Excavations and Openings

1. Safety

No excavation or opening shall be maintained in a manner that endangers public safety.

2. Protection

All excavations shall be protected with adequate:

- a. Barriers;
- b. Railings;
- c. Warning lights;
- d. Covers; and
- e. e. Traffic control devices.

3. Access

No excavation shall block access to any property for more than sixty (60) minutes without approval from the Director of Public Works.

4. Restoration

All disturbed areas shall be restored to City standards.

Sec. 21.540. Street Classification and Design Standards

1. Street Classifications

Streets shall be classified as:

- a. Principal Arterials;
- b. Minor Arterials;
- c. Major Collectors;
- d. Minor Collectors; and

- e. Local Roads (Commercial or Residential).

2. Design Standards

Design standards, including right-of-way width, pavement width, grades, radii, turnaround dimensions, and geometric requirements, shall conform to City Engineering Standards.

a. Connectivity

Street layouts shall promote connectivity and safe circulation for all transportation modes. Gaps in pedestrian, bicycle, and transit networks shall be addressed where feasible.

b. Vertical and Horizontal Curves

- j. All tangent grade changes shall be connected by vertical curves.
- ii. All horizontal tangents shall be connected by horizontal curves.
- iii. The minimum vertical curve length shall be one hundred (100) feet unless otherwise approved
- iv. No point of curvature or point of tangency of a horizontal or vertical curve shall be located within one hundred fifty (150) feet of the intersection of street centerlines unless approved by the Director of Public Works.

c. Cross Slopes and Transition Grading

Cross slopes, warped transitions, and intersection grading shall be designed to provide proper roadway drainage. The roadway crown cross slope shall be six (6) inches unless otherwise approved by the City Engineer.

- d. Commercial and arterial streets shall govern grading transitions where there are intersecting local streets.

e. The maximum profile grade for one hundred fifty (150) feet approaching an intersection shall be three (3) percent.

g. Side Slopes and Retaining Walls

- i. Side slopes adjacent to roadways shall not exceed two (2) horizontal to one (1) vertical unless otherwise approved.
- ii. Rock slopes shall generally not exceed one (1) horizontal to two (2) vertical.
- iii. Where steeper slopes are necessary, retaining walls, guide rails, or other protective measures may be required.
- iv. No retaining walls shall be installed within the City right-of-way to support private property. The City shall not be responsible or liable for private retaining walls located within the City right-of-way.
- v. Guide rails shall be required where determined necessary for public safety.
- vi. Retaining walls supporting public roadways shall be designed by a licensed professional engineer.

(h) Permanent and Temporary Dead-End Streets

i. Permanent dead-end streets shall not exceed one thousand (1,000) feet in length and shall terminate in an approved turnaround.

ii. Temporary dead-end streets shall not exceed one thousand five hundred (1,500) feet in length and shall terminate in an approved turnaround.

(i) Street Intersections

a. Street intersections shall generally be spaced not less than three hundred (300) feet apart.

b. No more than two (2) streets shall intersect at a single point unless otherwise approved.

Street centerlines shall intersect at approximately ninety (90) degrees unless otherwise approved.

Sec. 21.550. Streetscape and Multimodal Design Standards

1. General Requirements

All roadway projects shall:

- a. Provide safe multimodal access;
- b. Comply with ADA accessibility standards;
- c. Promote pedestrian and bicycle connectivity;
- d. Incorporate context-sensitive design; and
- e. e. Support traffic calming where appropriate.

2. Sidewalks

- a. Sidewalks shall be a minimum of five (5) feet in width unless otherwise approved.
- b. Sidewalks shall be constructed along the full frontage of the lot unless waived by the Board of Public Works. When waived, the owner shall sign a caveat, to be filed on the land records, acknowledging that the deferral created by this subsection may be revoked at any time upon written demand by the City Council. Such revocation shall require the owner to install sidewalks to current City specifications at the owner's expense within three hundred sixty (360) days from the date of revocation.
- c. Sidewalks shall include ADA-compliant curb ramps and continuous accessible routes.

3. Sidewalk Construction Standards

- a. Residential sidewalks shall generally consist of Portland cement concrete not less than six (6) inches thick reinforced with 6×6 No. 6 wire fabric.
- b. Sidewalks on arterial and collector streets shall generally consist of Portland cement concrete not less than five (5) inches thick over eight (8) inches of processed gravel base.
- c. Driveway sections crossing sidewalks shall consist of reinforced Portland cement concrete not less than eight (8) inches thick over processed gravel base.

4. Bicycle Facilities

Bicycle accommodations shall be incorporated where feasible.

5. Transit Accommodations

Transit infrastructure shall be incorporated where appropriate.

6. Crosswalks and Pedestrian Features

Projects shall include marked crosswalks and pedestrian safety improvements where warranted.

7. Streetscape Elements

- a. Street lighting, landscaping, trees, furnishings, and buffer areas shall be installed where appropriate.
- b. Pedestrian-scale lighting shall be considered in urban or high-activity areas.
- c. Streetscape furnishing zones may include brick, concrete, landscaping, or other approved materials.
- d. Street tree species, spacing, and sizes shall be subject to approval by the City.

Sec. 21.555. Stormwater and Drainage Standards

1. Location of Catch Basins

All streets shall be properly drained. Catch basins shall be located at such points as necessary to intercept water so that no surface flow shall drain more than three hundred fifty (350) feet along the street and through an intersection. Catch basins shall be constructed on both sides of the street opposite each other except as necessary to meet alignment requirements of the street. On newly constructed roads catch basin shall be installed at every other property line to facilitate drainage connections to private property.

a. Minimum Size and Grade of Pipe

The minimum size of pipe shall be fifteen (15) inches inside diameter. The minimum grade of pipe shall be five-tenths of one (0.5) percent.

b. Underdrains

In high-runoff or groundwater situations, the City Engineer may require special placement of underdrains where the cross slope extending fifty (50) feet off the street line, measured perpendicular to the street line, exceeds three (7) percent.

c. Minimum Cover Over Pipe

The minimum cover over the top of the pipe shall be eighteen (18) inches.

d. Location of Manholes

All intersections of pipes, deflections in pipeline alignment, or changes in grade not located in a catch basin shall be constructed within a standard storm drain manhole. Tee or wye connections shall not be permitted.

e. Leakoffs and Ditches

Leakoffs from the gutter shall not be permitted. No water shall be carried within the street line in an open ditch or channel.

f. Headwalls

Inlets and outlets of pipes not located within a catch basin or manhole shall include a standard concrete headwall or approved slope paving.

g. Drainage Easement

All storm drainage facilities located outside street lines shall have a minimum right-of-way width of twenty (20) feet. Such right-of-way shall grant the City the right of entry for maintenance purposes.

Sec 21.460: Storm Frequency and Drainage Design Standards

1. Storm Drainage Analysis

All stormwater drainage analysis, hydrologic calculations, hydraulic design, culvert sizing, storm sewer systems, gutter flow calculations, detention systems, and related drainage infrastructure shall be designed in accordance with the current edition of the Connecticut Department of Transportation (CTDOT) Drainage Manual, the Connecticut Stormwater Quality Manual, NOAA Atlas 14 precipitation data, and applicable CT DEEP and MS4 permit requirements.

Where conflicts exist between standards, the more stringent requirement shall govern.

Infrastructure Element	Minimum Design Storm
Closed drainage systems, catch basins, gutters, and storm drains for local streets	10-year storm
Sag locations and depressed roadway sections	25-year storm without roadway overtopping
Arterial roadway drainage systems	10-year storm minimum
Culverts under local roads	25-year storm
Culverts under collector or arterial roads	50-year storm
Emergency overflow and drainage easements	100-year storm
Detention basin emergency spillways	100-year storm
Bridge hydraulic openings	As required by the CTDOT Drainage Manual

2. Additional Drainage Analysis Requirements

- a. Hydrologic calculations shall include 2-, 10-, 25-, 50-, and 100-year storm event analysis as applicable.
- b. Post-development runoff rates shall not exceed pre-development runoff rates unless specifically approved by the City Engineer.
- c. Stormwater management systems shall safely convey the 100-year storm event without structural failure.
- d. Roadway drainage systems shall be designed to limit gutter spread and roadway encroachment consistent with CTDOT standards.

- e. All drainage design shall utilize the most current NOAA Atlas 14 precipitation-frequency data.
- f. The City Engineer may require higher design standards where historical flooding, public safety concerns, or future watershed development warrant additional protection.

Sec. 21.565. Utility Locations and Coordination

1. Utility Coordination

All utility installations shall be coordinated with the City and designed to minimize conflicts with existing or future infrastructure.

2. Standard Utility Locations

Unless otherwise approved:

- a. Sanitary sewer: centerline of roadway;
- b. Water main: north or east side approximately seven (7) feet offset;
- c. Gas main: south or west side approximately seven (7) feet offset;
- d. Electrical ducts: north or east side approximately eleven (11) feet offset; and
- e. Telecommunications ducts: south or west side approximately eleven (11) feet offset.

3. Dig Safe Compliance- Call Before You Dig

All excavators and utility contractors shall comply with Connecticut Dig Safe requirements.

Sec. 21.570. Sidewalks, Curbs, and Driveway Aprons

1. Sidewalk Requirement

- a. Sidewalks shall be installed along both sides of streets unless waived by the City Council or otherwise exempted by law.
- b. No building permit for commercial or industrial development shall be issued unless submitted site plans include sidewalks, curbs, driveway aprons, curb cuts, drainage improvements, and required parking improvements.

No certificate of occupancy shall be issued until required public improvements are installed or secured by acceptable financial guarantee.

The Planning Commission or Zoning Commission may approve waivers or deferrals

2. Curbing

- a. Granite, concrete, or approved bituminous curbing shall be installed as required.
- b. Granite curbing shall generally be not less than eighteen (18) inches deep, five (5) inches wide at the top, and six (6) inches wide at the bottom.
- c. Existing curb may be reused where determined suitable by the Director of Public Works.
- d. Granite, precast, or cast-in-place concrete curb shall generally be required in commercial and industrial areas.
- e. Bituminous curb may be permitted in residential areas and approved commercial areas.

3. Driveway Aprons and Curb Cuts

- a. Driveway openings shall be no less than twelve (12) feet and no greater than thirty (30) feet in width unless otherwise approved.
- b. Residential driveway radii shall be between three (3) and five (5) feet.
- c. Nonresidential driveway radii shall be between ten (10) and twenty (20) feet.
- d. No curb cut shall be located within fifty (50) feet of an intersection unless approved.
- e. Driveway openings shall maintain the following minimum setbacks from property lines:
- f. Ten (10) feet for frontage of eighty-five (85) feet or greater;
- g. Five (5) feet for frontage between sixty (60) and eighty-five (85) feet; and
- h. Three (3) feet for frontage less than sixty (60) feet.
- i. Curb cuts shall, where practicable, remain at least three (3) feet from catch basins, utility poles, hydrants, and similar infrastructure.
- j. Residential driveway aprons shall include a one and one-half (1.5) inch lip above gutter elevation.
- k. Nonresidential driveway aprons shall generally include a one-half (0.5) inch lip above gutter elevation.
- l. Driveway aprons shall extend a minimum of five (5) feet into the property from the street line.
- m. Driveway aprons shall maintain the sidewalk profile whether or not sidewalks are currently installed.

4. Variances

The Board of Public Works may approve variances where strict compliance creates hardship.

Sec. 21.575. Pavement Construction Standards

1. Residential and Collector Streets

- a. Residential and collector streets shall consist of:
 - i. Four (4) inches compacted two-course bituminous concrete pavement;
 - ii. Six (6) inches processed gravel base; and
 - iii. Eight (8) inches bank-run gravel subbase or approved equivalent.

b. Arterial, Commercial, and Industrial Streets

Arterial, commercial, and industrial streets shall generally consist of:

- i. Five (5") inches compacted bituminous concrete pavement;
- ii. Six (6) inches Class 4 bituminous concrete base; and
- iii. Eight (8) inches processed gravel subbase or approved equivalent.

Sec. 21.580. Inspection and Acceptance

1. Inspection Authority

The City may inspect all work and materials governed by this Article.

- a. Rejected Work

Any work or materials failing to comply with applicable standards shall be corrected or removed.

b. Final Acceptance

No work shall be deemed accepted until approved by the Director of Public Works.

c. Warranty

The City may require warranty periods for roadway restorations and improvements.

2. Layout and Survey Control

- a. Contractors shall be responsible for layout, line, and grade unless otherwise specified.
- b. Layout work shall be performed by a licensed land surveyor or professional engineer.
- c. Layout stakes and reference points shall be preserved until completion of construction.

3. Salvageable Materials

Salvageable materials removed from accepted City streets during construction activities shall remain the property of the City unless otherwise released by the Director of Public Works.

4. Work Performed Pursuant to Approved Plans

All work shall be performed in accordance with approved plans, specifications, grades, alignments, and written directives issued by the Director of Public Works.

5. Changes to Specifications

The Board of Public Works may approve project-specific modifications to engineering standards upon written request and recommendation of the Director of Public Works.

Sec. 21.585. Survey Monuments and Markers

1. Protection of Survey Monuments

Any contractor or person performing work within the public right-of-way shall protect all survey monuments, markers, merestones, benchmarks, and reference points encountered during construction.

2. Notification Requirement

Any disturbance or potential disturbance of survey monuments shall immediately be reported to the Director of Public Works.

3. Replacement

Any monument disturbed, damaged, removed, or rendered inaccurate shall be replaced at the responsible party's expense by a licensed land surveyor in accordance with City requirements.

Sec. 21.590. Enforcement and Penalties

1. Stop-Work Orders

The Director of Public Works may issue stop-work orders for violations of this Article or unsafe conditions.

2. Violations

Any person violating this Article shall be subject to:

- a. Permit suspension or revocation;
- b. Civil penalties;
- c. Restoration costs;
- d. Legal action; and

Any other remedy authorized by law.

3. Emergency Action

Where an unsafe condition exists, the City may perform emergency corrective work and recover costs from the responsible party.

ARTICLE VI

Unaccepted City Streets, Municipal Services, and Road Acceptance

Section 21.605: Purpose and Intent

The purpose of this Article is to establish standards governing:

- 1. Municipal services on unaccepted streets;
- 2. Issuance of building permits and certificates of occupancy on unaccepted streets;
- 3. Acceptance of certain nonconforming roadways; and
- 4. Responsibilities of developers, property owners, and the City.

It is the intent of this ordinance to protect public health, safety, and welfare while limiting municipal liability associated with streets not formally accepted by the City Council.

Section 21.615: General Policy

Unaccepted streets are streets or highways that have not been formally accepted by the Bristol City Council and do not fully conform to City construction standards.

The City shall provide only those municipal services expressly authorized under this Article.

Section 21.620: Streets Under Construction (Subdivision Roads)

The City may provide limited municipal services to occupied dwellings located on subdivision roads under construction only when all of the following conditions are satisfied:

- 1. The roadway has been completed to binder course consisting of a minimum one and one-half (1½) inch bituminous concrete surface;

2. The binder course is continuous from an accepted public street to the occupied dwelling;
3. Catch basins and manholes are properly graded and installed;
4. Work qualifying for winter services is completed prior to November 15;
5. A valid Certificate of Occupancy has been issued;
6. A subdivision performance guarantee approved by the Planning Commission is on file;
7. An escrow concentration account equal to fifteen percent (15%) of the bonded subdivision improvements has been established; and
8. The developer remains responsible for all required infrastructure improvements.

Municipal services authorized under this section may include solid waste collection, recycling collection, snow plowing, and ice control operations.

Failure to satisfy the requirements of this section shall result in denial or discontinuation of services.

Section 21.625: Existing Occupied Unaccepted Streets

For occupied unaccepted streets existing prior to adoption of this ordinance:

1. The City shall maintain only the historical level of municipal services previously provided;
2. Such services may include snow plowing and solid waste collection where historically performed;
3. No new or expanded municipal services shall be added without approval of the Board of Public Works; and
4. The Board of Public Works reserves the right to evaluate City services provided to unaccepted City streets and reduce or eliminate services provided if the unaccepted city street services as a private driveway and provides no public benefit.

Section 21.630: Areas Ineligible for Municipal Services

The City shall provide no municipal services to paper streets, private driveways located within rights-of-way, private roads, or condominium roads unless formally accepted by the City.

Section 21.635: Road Classification Disputes

Any dispute regarding whether a roadway has been accepted by the City shall be

submitted in writing to the Director of Public Works together with documentation evidencing formal acceptance by the Bristol City Council.

Section 21.640: Building Permits and Certificate of Occupancy on Unaccepted Streets

1. No building permit shall be issued for any building or structure abutting an unaccepted street unless the property owner has obtained subdivision approval and posted a subdivision bond or acceptable surety guaranteeing completion of required public improvements.
2. No certificate of occupancy shall be issued for a building abutting an unaccepted street unless:
 - a. An escrow concentration account equal to fifteen percent (15%) of all bonded subdivision improvements has been established with the City Comptroller;
 - b. The roadway has been completed to binder course and properly tapered at manholes and catch basins;
 - c. The binder course extends continuously from an accepted street to the furthest occupied structure;
 - d. Written application for certificate of occupancy has been submitted at least ten (10) days prior to requested issuance date;
 - e. All requirements of the Connecticut State Building Code have been satisfied; and
 - f. The building is connected to accepted public sewer and water systems or approved private systems.

Upon satisfaction of these requirements, the City may provide normal municipal services including trash collection and snow removal.

Section 21.645: Acceptance to Existing (non-subdivision) Unaccepted City Streets

The City recognizes that certain streets and roads were constructed prior to adoption of current roadway standards and may not fully comply with existing ordinances. Where strict compliance is impracticable, and where acceptance serves the public interest, such roads may be accepted pursuant to this Division.

1. Eligibility Requirements

The City Council may accept a nonconforming roadway provided the following conditions are met:

- a. No valid subdivision bond exists that can reasonably fund required improvements;
- b. A majority of abutting property owners petition for acceptance;
- c. The right-of-way is not less than twenty-five (25) feet wide;
- d. The traveled way is generally not less than sixteen (16) feet wide;
- e. The Director of Public Works and City Engineer certify that the roadway is reasonably safe and structurally adequate;
- f. The roadway receives a Road Surface Rating (RSR) score of at least sixty (60);
- g. Access exists from an accepted City street or state highway;
- h. Petitioners provide turnaround easements where necessary; and
- i. Petitioners provide a Class A-2 survey acceptable to the City Engineer.

1. City Responsibility Following Acceptance

Acceptance of a roadway pursuant to this section shall not obligate the City to reconstruct the roadway to current standards. The City's responsibility shall be limited to maintaining the roadway in a condition reasonably safe for travel consistent with its existing nonconforming condition.

Article VII

City Trees

Sec. 21-705: Protection and Preservation of City Trees

1. Purpose

The purpose of this section is to protect public health, safety, and general welfare by regulating the planting, maintenance, and removal of trees and shrubs on public property within the city.

2. Intent

This section is intended to:

- a. Encourage the planting, maintenance, restoration, and survival of appropriate trees and shrubs on city property;
- b. Protect residents from personal injury and property damage; and
- c. Protect the city from damage caused by improper planting, maintenance, or removal of trees and shrubs on public property.

3. Authority of Tree Warden

In accordance with Section 23-58 of the Connecticut General Statutes and Section 46 of the City of Bristol Charter, the Director of Public Works is designated as the Tree Warden.

The authority of the Tree Warden under this section shall be limited to trees and shrubs located within the City's road rights-of-way and on City-owned property under the control and jurisdiction of the Department of Public Works, except as otherwise provided in subsection (6A) regarding shared ownership trees.

4. Duties of the Tree Warden

a. Enforce all laws and ordinances related to the protection and preservation of trees and shrubs within the City's road rights-of-way and on City-owned property under the control of the Department of Public Works.

b. Remove, or arrange for removal of, any unauthorized signs or advertisements placed on trees or shrubs within such areas under the Tree Warden's jurisdiction.

c. Tree Removal – Posting and Hearing

For any tree located within the City's road rights-of-way or on City-owned property under the control of the Department of Public Works that is proposed for removal, the Tree Warden shall comply with Connecticut General Statutes § 23-59, as may be amended:

- i. The Tree Warden shall post a notice of proposed removal on the tree at least ten (10) days prior to removal.
- ii. Any person, firm, or corporation may file a written objection within ten (10) days from the date of posting.
- iii. Upon receipt of a timely objection, the Tree Warden shall schedule and conduct a public hearing to consider the proposed removal.
- iv. No tree shall be removed until the hearing process is completed and a final determination is made by the Tree Warden.
- v. The Tree Warden may waive the posting and hearing requirements when a tree presents an immediate hazard or public safety risk, consistent with state law.

d. Plant, maintain, protect, and remove trees and shrubs within the City's road rights-of-way and on City-owned property under the control of the Department of Public Works as necessary to maintain safety, appearance, and proper condition.

e. The Department of Public Works, Parks and Recreation Department, and other appropriate city agencies shall assist the Tree Warden in carrying out these duties, provided that such assistance does not expand the Tree Warden's authority beyond the areas described in subsection (3).

5. Applicability

This section applies to all trees and shrubs located within the City's road rights-of-way and on City-owned property under the control of the Department of Public Works, except as otherwise provided in subsection (6A).

6. Tree Protection

The following provisions apply only within the City's road rights-of-way and on City-owned property under the control of the Department of Public Works.

No person shall perform the following actions without prior authorization from the Tree Warden:

- a. Plant, treat, prune, remove, or otherwise disturb any tree, shrub, or forested area on city property.
- b. Trim, prune, or remove any tree or shrub (or part thereof) if it may reasonably be expected to fall onto city property and cause damage to persons or property.
- c. Place any container for trees or shrubs on city property, whether above or below ground level.
- d. Damage, cut, tap, carve, transplant, or otherwise injure any tree or shrub on city property.
- e. Damage the root zone of any city tree or shrub by trenching, tunneling, storing equipment or materials, or altering ground elevation within the drip line.
- f. Attach any sign, notice, advertisement, rope, wire, climbing spurs, or other materials to any public tree or shrub, except in emergencies such as storms or accidents.

7. Shared Ownership Trees

a. Definition

For the purposes of this section, a shared ownership tree means any tree whose trunk at ground level is located on, or crosses, the boundary line between City property (including the City's road right-of-way or property under the control of the Department of Public Works) and adjacent private property.

b. Authority of Tree Warden

Notwithstanding any other provision of this section, the Tree Warden shall have full authority to trim, prune, or remove a shared ownership tree, including portions of the tree located on private property, when such work is necessary to eliminate or mitigate a hazard to the City roadway, right-of-way, or City-owned property under the control of the Department of Public Works.

c. Limitation of Authority

The Tree Warden's authority over the portion of a shared ownership tree located on private property shall be limited to the extent reasonably necessary to address or prevent a hazard to the City roadway, right-of-way, or City-owned property. Such authority shall not extend beyond what is required to correct the hazardous condition.

d. Responsibility for Maintenance

- i. The City shall be responsible for work performed to address hazards within the City's roadway, right-of-way, or City-owned property.
- ii. The adjacent private property owner shall be responsible for routine maintenance, pruning, and care of portions of the tree located on private property that do not present a hazard to the City.
- iii. Branches and limbs extending over or located on private property shall be the responsibility of the adjacent private property owner, unless such branches or limbs pose a hazard to the City roadway, right-of-way, or City-owned property.

e. Coordination of Work

When practicable, the Tree Warden may notify or coordinate with the adjacent property owner prior to performing work on a shared ownership tree; however, such coordination shall not be required when immediate action is necessary to address a hazard.

f. Authorization

No person shall perform work on any portion of a shared ownership tree within the City's jurisdiction without prior authorization from the Tree Warden.

8. Prohibitions and Penalties

a. Interference

No person shall obstruct, delay, or interfere with the Tree Warden or authorized personnel while they are carrying out duties under this section.

b. Violations and Penalties

- i. Any person who violates any provision of this section or fails to comply with a notice issued under this section shall be subject to a fine not to exceed ninety dollars (\$90. 00) for each offense.
- ii. Each day a violation continues shall constitute a separate offense.
- iii. If a violation results in injury, mutilation, or death of a tree or shrub located on city property, the cost of repair or replacement shall be borne by the party in violation.

9. Citations

The Tree Warden shall refer violations of this section to any officer or employee of the city authorized to issue citations under the Bristol Code of Ordinances.

10. Appeals

Any person issued a citation under this section shall have the right to appeal pursuant to Chapter 23 of the Bristol Code of Ordinances.

Alternate Draft Ordinance – Streets, Sidewalks, Right of Way, Construction Standards and Infrastructure Requirements

Section extracted from proposed ordinance

City of Bristol Ordinance Draft

ARTICLE V

Streets, Sidewalks, Public Rights-of-Way, Construction Standards, and Infrastructure Requirements

Sec. 21-500. Purpose and Intent.

The purpose of this Article is to establish uniform standards governing work within public streets, sidewalks, highways, easements, and public rights-of-way within the City of Bristol in order to protect public health, safety, welfare, accessibility, transportation infrastructure, drainage systems, utilities, and municipal operations.

This Article establishes permit requirements, construction obligations, inspection authority, maintenance responsibilities, restoration standards, traffic control requirements, roadway acceptance standards, and enforcement authority applicable to all work affecting public infrastructure within the City.

It is the intent of this Article that the City of Bristol primarily rely upon and adopt by reference established Connecticut Department of Transportation (CTDOT), Federal Highway Administration (FHWA), Connecticut Department of Energy and Environmental Protection (CT DEEP), Americans with Disabilities Act (ADA), and other recognized engineering and transportation standards rather than maintaining independent municipal engineering specifications except where specifically authorized by ordinance, regulation, permit condition, or administrative policy.

Sec. 21-505. Applicability.

This Article shall apply to all persons, contractors, utilities, developers, property owners, public agencies, and other entities performing work within or affecting any:

1. Public street;
2. Highway;
3. Sidewalk;
4. Curb;
5. Driveway apron;
6. Utility installation;
7. Storm drainage system;

8. Traffic control device;
9. Streetscape improvement;
10. Easement;
11. Public right-of-way;
12. Pedestrian facility;
13. Bicycle facility;
14. Traffic signal system;
15. Street lighting system;
16. Roadside barrier;
17. Bridge or culvert;
18. Landscaping or tree installation; or
19. Municipal infrastructure improvement

located within the City of Bristol.

Sec. 21-510. Adoption of Engineering, Construction, Accessibility, and Environmental Standards.

Except as otherwise expressly provided herein, all work governed by this Article shall conform to the most current applicable editions of the following standards, manuals, specifications, policies, drawings, and guidelines, as amended:

1. Connecticut Department of Transportation Standard Specifications for Roads, Bridges, and Incidental Construction;
2. Connecticut Department of Transportation Standard Drawings;
3. Connecticut Department of Transportation Roadway Design Manual;
4. Connecticut Department of Transportation Drainage Manual;
5. Connecticut Department of Transportation Bridge Design Manual;
6. Connecticut Department of Transportation Traffic Control Signal Design Manual;
7. Connecticut Department of Transportation Utility Accommodation Policy;
8. Manual on Uniform Traffic Control Devices (MUTCD);
9. Americans with Disabilities Act (ADA);

10. Public Rights-of-Way Accessibility Guidelines (PROWAG);
11. Connecticut Stormwater Quality Manual;
12. Connecticut Guidelines for Soil Erosion and Sediment Control;
13. Connecticut Municipal Separate Storm Sewer System (MS4) Permit requirements;
14. Applicable Connecticut General Statutes;
15. Applicable Federal Highway Administration (FHWA) requirements;
16. Applicable American Association of State Highway and Transportation Officials (AASHTO) standards;
17. National Electrical Safety Code where applicable;
18. National Fire Protection Association standards where applicable;
19. OSHA construction and worker safety regulations; and
20. Any other applicable federal or state engineering, transportation, accessibility, environmental, or public safety standard adopted by law.

Where conflicts exist between standards, the stricter requirement shall govern, as determined by the Director of Public Works or City Engineer.

Sec. 21-515. Authority of the Director of Public Works.

The Director of Public Works, or designee, shall administer and enforce this Article and shall have authority to:

1. Review and approve permit applications;
2. Approve construction methods and materials;
3. Require compliance with adopted standards;
4. Inspect work performed within the public right-of-way;
5. Issue stop-work orders;
6. Require corrective work;
7. Approve traffic control plans;
8. Coordinate utility work;
9. Establish restoration requirements;
10. Determine roadway restoration limits;

11. Require roadway milling and resurfacing where necessary;
12. Require emergency repairs;
13. Coordinate work with state and federal agencies;
14. Protect municipal infrastructure;
15. Regulate occupancy of the public right-of-way;
16. Enforce accessibility requirements;
17. Protect drainage systems and water quality;
18. Review erosion and sedimentation control measures;
19. Review and approve utility locations;
20. Review and approve streetscape improvements;
21. Regulate temporary obstructions;
22. Establish inspection schedules;
23. Determine acceptance of completed work; and
24. Adopt administrative procedures, permit forms, inspection procedures, and supplemental technical requirements consistent with this Article.

Sec. 21-520. City of Bristol Supplements and Exceptions to State and Federal Standards

(1) Pavement and Roadway Standards

- a. Final pavement courses shall consist of Superpave HMA S0.375 and binder courses shall consist of Superpave HMA S0.500.
- b. Roadside barriers in areas with posted speed limits of thirty-five (35) MPH or less shall be installed six (6) inches from the face of curb or edge of roadway.
- c. Where City streets intersect state roads, pavement markings installed by the City shall generally be limited to the City street unless otherwise approved by the Director of Public Works.

(2) Curbs, Sidewalks, and Driveway Connections

- a. Acceptable curbing materials shall include granite, cast-in-place concrete, and approved bituminous curbing. Bituminous curbing shall utilize a parabolic profile. Precast or slip-form concrete curb shall not be permitted unless specifically approved by the Director of Public Works.

b. Where curb and sidewalk are integrated, the City shall be responsible only for the curb portion and the abutting property owner shall remain responsible for the sidewalk portion.

c. Residential driveway aprons shall maintain a one and one-half (1.5) inch lip above gutter elevation or roadway grade. Nonresidential driveway aprons and all roadway apron connections shall maintain a maximum one-half (0.5) inch lip unless otherwise approved.

(3) Drainage Infrastructure Requirements

All streets shall be properly drained and designed in accordance with the current editions of the Connecticut Department of Transportation Drainage Manual, Connecticut Stormwater Quality Manual, NOAA Atlas 14 precipitation data, applicable CT DEEP regulations, and MS4 permit requirements. Where standards conflict, the more stringent requirement shall govern.

a. Catch basins shall be installed at locations necessary to intercept surface water so that no flow travels more than three hundred fifty (350) feet along a street or through an intersection. Catch basins shall generally be located opposite one another on both sides of the roadway except where alignment conditions require otherwise.

b. On newly constructed roads, catch basins shall generally be installed at every other property line to facilitate private drainage connections.

c. Minimum storm drainage pipe size shall be fifteen (15) inches inside diameter with a minimum grade of five-tenths of one (0.5) percent and a minimum cover of eighteen (18) inches.

d. All pipe intersections, alignment deflections, and grade changes not located within a catch basin shall be constructed within a standard storm drain manhole. Tee and wye connections shall not be permitted.

e. Leakoffs from gutters and open drainage ditches or channels within street lines shall not be permitted.

f. Pipe inlets and outlets not located within catch basins or manholes shall include standard concrete headwalls or approved slope paving.

g. Drainage facilities located outside street lines shall be protected by a minimum twenty (20) foot drainage easement granting the City maintenance access.

h. The City Engineer may require underdrains, enhanced drainage facilities, or increased design standards where groundwater conditions, steep slopes, historical flooding, public safety concerns, or future watershed development warrant additional protection.

Sec. 21-560. Storm Frequency and Drainage Design Standards

(1) General Design Requirements

Stormwater drainage analysis, hydrologic and hydraulic calculations, culvert sizing, storm sewer systems, gutter flow calculations, detention systems, and related infrastructure shall be designed to safely convey required storm events without structural failure and in accordance with applicable CTDOT standards.

Hydrologic calculations shall include analysis of applicable 2-, 10-, 25-, 50-, and 100-year storm events utilizing current NOAA Atlas 14 precipitation-frequency data.

Post-development runoff rates shall not exceed pre-development runoff rates unless specifically approved by the City Engineer.

Roadway drainage systems shall limit gutter spread and roadway encroachment consistent with CTDOT standards.

(2) Minimum Design Storm Frequencies

- Local street drainage systems, catch basins, gutters, and storm drains — 10-year storm
- Sag locations and depressed roadway sections — 25-year storm without roadway overtopping
- Arterial roadway drainage systems — 10-year storm minimum
- Culverts under local roads — 25-year storm
- Culverts under collector or arterial roads — 50-year storm
- Emergency overflow systems and drainage easements — 100-year storm
- Detention basin emergency spillways — 100-year storm
- Bridge hydraulic openings — As required by CTDOT

Sec. 21-565. Utility Locations and Coordination

(1) Utility Coordination

All utility installations shall be coordinated with the City and designed to minimize conflicts with existing and future infrastructure.

(2) Standard Utility Locations

- Sanitary sewer — Roadway centerline
- Water main — North or east side, approximately seven (7) feet offset
- Gas main — South or west side, approximately seven (7) feet offset
- Electrical ducts — North or east side, approximately eleven (11) feet offset

- Telecommunications ducts — South or west side, approximately eleven (11) feet offset

(3) Dig Safe Compliance

All excavators and utility contractors shall comply with Connecticut Dig Safe requirements.

Sec. 21-570. Sidewalks, Curbs, and Driveway Aprons

(1) Sidewalk and Public Improvement Requirements

- a. Sidewalks shall generally be installed along both sides of streets unless waived by the City Council or otherwise exempted by law.
- b. Commercial and industrial development applications shall include sidewalks, curbs, driveway aprons, curb cuts, drainage improvements, and required parking improvements as part of submitted site plans.
- c. No certificate of occupancy shall be issued until required public improvements are completed or secured by acceptable financial guarantee.
- d. The Planning Commission, Zoning Commission, or Board of Public Works may approve waivers, deferrals, or variances where strict compliance creates hardship or where public interest considerations warrant modification.

(2) Curbing Standards

- a. Granite, concrete, or approved bituminous curb shall be installed where required.
- b. Granite curb shall generally be not less than eighteen (18) inches deep, five (5) inches wide at the top, and six (6) inches wide at the bottom.
- c. Existing curb may be reused where determined suitable by the Director of Public Works.
- d. Granite, precast concrete, or cast-in-place concrete curb shall generally be required in commercial and industrial areas, while bituminous curb may be permitted in residential or approved commercial areas.

(3) Driveway Aprons and Curb Cuts

- a. Driveway openings shall generally be between twelve (12) and thirty (30) feet in width unless otherwise approved.
- b. Residential driveway radii shall generally range from three (3) to five (5) feet, while nonresidential driveway radii shall generally range from ten (10) to twenty (20) feet.
- c. No curb cut shall be located within fifty (50) feet of an intersection unless approved.
- d. Driveway openings shall maintain minimum setbacks from property lines as follows:
 - 85 feet or greater — 10 feet
 - 60 to 85 feet — 5 feet

- Less than 60 feet — 3 feet

e. Where practicable, curb cuts shall remain at least three (3) feet from catch basins, hydrants, utility poles, and similar infrastructure.

f. Driveway aprons shall extend a minimum of five (5) feet into the property from the street line and shall maintain the sidewalk profile whether or not sidewalks presently exist.

Sec. 21-575. Pavement Construction Standards

(1) Residential and Collector Streets

Residential and collector streets shall generally consist of:

1. Four (4) inches compacted two-course bituminous concrete pavement;
2. Six (6) inches processed gravel base; and
3. Eight (8) inches bank-run gravel subbase or approved equivalent.

(2) Arterial, Commercial, and Industrial Streets

Arterial, commercial, and industrial streets shall generally consist of:

1. Five (5) inches compacted bituminous concrete pavement;
2. Six (6) inches Class 4 bituminous concrete base; and
3. Eight (8) inches processed gravel subbase or approved equivalent.

Sec. 21-580. Inspection, Acceptance, and Construction Control

(1) Inspection and Acceptance

The City may inspect all work and materials governed by this Article. Any work or materials failing to comply with applicable standards shall be corrected or removed. No work shall be deemed accepted until approved by the Director of Public Works. The City may require warranty periods for roadway restorations and related improvements.

(2) Layout and Survey Control

Contractors shall be responsible for construction layout, line, and grade unless otherwise specified. Layout work shall be performed by a licensed land surveyor or professional engineer, and all layout stakes, monuments, benchmarks, and reference points shall be preserved until completion of construction.

(3) Salvageable Materials

Salvageable materials removed from accepted City streets during construction shall remain City property unless otherwise released by the Director of Public Works.

(4) Compliance with Approved Plans

All work shall be performed in accordance with approved plans, specifications, grades, alignments, and written directives issued by the Director of Public Works.

(5) Modifications to Standards

The Board of Public Works may approve project-specific modifications to engineering standards upon written request and recommendation of the Director of Public Works.

Sec. 21-585. Survey Monuments and Markers

- a. Any contractor or person performing work within the public right-of-way shall protect all survey monuments, markers, merestones, benchmarks, and reference points encountered during construction.
- b. Any disturbance or potential disturbance of survey monuments shall immediately be reported to the Director of Public Works.
- c. Any monument disturbed, damaged, removed, or rendered inaccurate shall be replaced at the responsible party's expense by a licensed land surveyor in accordance with City requirements.

Alternate Draft Ordinance – Combined Enforcement, Violations, Penalties and Municipal Remedies

Section extracted from proposed ordinance

City of Bristol Ordinance Draft

ARTICLE VIII

Enforcement, Violations, Penalties, and Municipal Remedies

Sec. 21-800. Purpose.

The purpose of this Article is to establish uniform enforcement procedures, penalties, municipal remedies, permit enforcement authority, stop-work authority, cost recovery procedures, and administrative enforcement mechanisms applicable to all provisions of this Chapter.

This Article is intended to centralize enforcement authority and penalties applicable to streets, sidewalks, public rights-of-way, drainage systems, utilities, excavation work, traffic control, accessibility requirements, municipal infrastructure, and related activities regulated under this Chapter.

Sec. 21-805. Applicability.

The provisions of this Article shall apply to all persons, contractors, utilities, developers, corporations, partnerships, property owners, occupants, public agencies, and other entities subject to any provision of this Chapter.

Sec. 21-810. Enforcement Authority.

The Director of Public Works, City Engineer, Superintendent of Public Works, Tree Warden, Police Department, Building Official, Zoning Enforcement Officer, and any other municipal official authorized by law shall have authority to enforce the provisions of this Chapter within the scope of their respective duties.

Such officials may:

1. Inspect property and work sites;
2. Issue notices of violation;
3. Issue stop-work orders;
4. Suspend permits;
5. Revoke permits;
6. Require corrective work;
7. Require restoration of public infrastructure;
8. Issue citations and infractions where authorized by law;

9. Order removal of obstructions or hazardous conditions;
10. Require emergency corrective measures;
11. Deny future permits;
12. Seek injunctive relief;
13. Recover municipal costs and damages; and
14. Pursue any other remedy authorized by law.

Sec. 21-815. Stop-Work Orders.

1. Authority.

The Director of Public Works, or designee, may issue a stop-work order whenever:

- a. Work is being performed without a required permit;
- b. Work violates approved plans or permit conditions;
- c. Work violates applicable standards adopted by this Chapter;
- d. Unsafe conditions exist;
- e. Traffic control requirements are not maintained;
- f. Accessibility requirements are not maintained;
- g. Drainage or environmental violations occur; or
- h. Work threatens public safety or municipal infrastructure.

2. Compliance.

Upon issuance of a stop-work order, all work shall immediately cease except work authorized to stabilize or secure the site.

3. Removal of Stop-Work Order.

Work shall not resume until the violation has been corrected and authorization to proceed has been issued by the Director of Public Works.

4. Emergency Work.

Nothing herein shall prohibit emergency work necessary to protect life, safety, utilities, or property, provided the City is notified as soon as practicable.

Sec. 21-820. Permit Suspension and Revocation.

1. Grounds.

Any permit issued pursuant to this Chapter may be suspended or revoked for:

- a. Violation of permit conditions;
- b. Failure to comply with approved plans;
- c. Failure to maintain safe conditions;
- d. Failure to maintain required insurance or bonding;
- e. Failure to restore disturbed areas;
- f. Failure to comply with stop-work orders;
- g. Fraud or material misrepresentation in permit applications; or
- h. Repeated violations of this Chapter.

2. Notice.

Written notice of suspension or revocation shall be provided to the permit holder stating the reasons for such action.

3. Reinstatement.

Permits may be reinstated upon correction of violations and payment of all outstanding costs, fees, penalties, or damages.

Sec. 21-825. Violations.

It shall be unlawful for any person to:

1. Perform work without required permits;
2. Violate permit conditions;
3. Damage municipal infrastructure;
4. Fail to restore disturbed areas;
5. Obstruct traffic or pedestrian access in violation of this Chapter;
6. Remove, alter, or damage traffic control devices;
7. Fail to maintain required traffic control;
8. Violate accessibility requirements;
9. Deposit materials or debris within the public right-of-way without authorization;
10. Damage drainage systems or water quality facilities;

11. Obstruct catch basins, gutters, or drainage structures;
12. Violate erosion and sedimentation control requirements;
13. Interfere with municipal inspections;
14. Fail to comply with lawful orders issued pursuant to this Chapter;
15. Damage City trees or landscaping;
16. Damage survey monuments or markers;
17. Fail to maintain temporary pavement patches in safe condition;
18. Fail to comply with roadway restoration requirements; or
19. Otherwise violate any provision of this Chapter.

Sec. 21-830. Municipal Infractions and Civil Penalties.

1. Municipal Infractions.

Any violation of this Chapter may be enforced through issuance of municipal citations or infractions where authorized by Connecticut General Statutes and City ordinance.

2. Civil Penalties.

Unless otherwise specifically provided herein or by state law, violations of this Chapter may be subject to:

- a. A fine not exceeding ninety dollars (\$90.00) per violation;
- b. Additional fines authorized by state statute;
- c. Civil penalties established by ordinance or resolution; and
- d. Recovery of municipal damages and costs.

3. Continuing Violations.

Each day a violation continues shall constitute a separate offense.

4. Separate Violations.

Each distinct violation, location, excavation, obstruction, unsafe condition, or damaged facility may constitute a separate violation.

Sec. 21-835. Emergency Municipal Action.

1. Authority.

Where the City determines that an unsafe condition exists affecting public infrastructure, accessibility, drainage systems, transportation facilities, utilities, or public safety, the City may enter upon property or perform emergency corrective work without prior notice where necessary to protect public safety.

2. Recovery of Costs.

All costs incurred by the City, including labor, equipment, engineering, inspection, legal, administrative, contractor, police, traffic control, restoration, and emergency response costs, may be charged to the responsible party.

3. Failure to Reimburse.

Failure to reimburse the City may result in:

- a. Municipal liens;
- b. Denial of future permits;
- c. Civil collection actions;
- d. Withholding of certificates or approvals; or
- e. Any other remedy authorized by law.

Sec. 21-840. Restoration and Cost Recovery.

1. Restoration Responsibility.

Any person performing work regulated by this Chapter shall restore all disturbed public infrastructure and property to a condition equal to or better than that existing prior to commencement of work.

2. Failure to Restore.

If the responsible party fails to complete required restoration, the City may perform such work or cause such work to be performed.

3. Recoverable Costs.

Recoverable costs may include:

- a. Labor;
- b. Equipment;
- c. Materials;
- d. Engineering;
- e. Inspection;

- f. Administrative overhead;
 - g. Contractor costs;
 - h. Legal fees where authorized by law;
 - i. Traffic control;
 - j. Pavement restoration;
 - k. Landscaping restoration; and
 - l. Any other municipal expense associated with corrective work.
4. Municipal Liens.

The City may file liens against benefited or responsible properties in accordance with the City Charter and applicable law.

Sec. 21-845. Contractor Responsibility.

1. General Responsibility.

Contractors and permit holders shall remain fully responsible for all work performed under permits issued pursuant to this Chapter.

2. Responsibility for Subcontractors.

Permit holders shall be responsible for the acts and omissions of subcontractors, agents, employees, and utility contractors working under their authority.

3. Damage to Infrastructure.

Any contractor causing damage to public infrastructure shall immediately notify the Department of Public Works and shall repair such damage at the contractor's expense.

4. Failure to Correct Deficiencies.

Failure to correct deficiencies identified by the City may result in permit suspension, revocation, denial of future permits, or municipal corrective work at the contractor's expense.

Sec. 21-850. Appeals.

1. Right to Appeal.

Any person aggrieved by an order, determination, permit denial, permit revocation, enforcement action, or interpretation issued pursuant to this Chapter may appeal to the Board of Public Works unless otherwise provided by law.

2. Filing Deadline.

Appeals shall be filed in writing within fifteen (15) days of the action being appealed.

3. Effect of Appeal.

The filing of an appeal shall not automatically stay emergency orders, stop-work orders, or actions necessary to protect public safety unless otherwise determined by the Board of Public Works.

4. Final Decision.

The decision of the Board of Public Works shall constitute the final municipal administrative decision.

Sec. 21-855. Additional Remedies.

The remedies provided in this Article shall be cumulative and not exclusive.

Nothing herein shall prevent the City from pursuing:

1. Injunctive relief;
2. Civil actions;
3. Criminal enforcement where authorized by law;
4. Municipal blight or nuisance enforcement;
5. Recovery under bonds or insurance;
6. Collection of unpaid fees or assessments; or
7. Any other remedy authorized by law.

Sec. 21-860. No Waiver of Municipal Rights.

Failure of the City to enforce any provision of this Chapter shall not constitute a waiver of the City's authority to enforce such provision or any other provision at a later time.

Review & Analysis of Draft City Street Ordinance

Review & Analysis — City of Bristol Draft Street Ordinance

Document reviewed: *City Ordinance Edited rar 050726 night(1).docx*

This is a strong and unusually comprehensive municipal public works ordinance draft. It reflects significant operational knowledge and appears designed to consolidate fragmented standards into a modernized, enforceable framework. The ordinance demonstrates strong awareness of:

- ADA/PROWAG compliance
- CTDOT standards
- Municipal liability concerns
- Utility coordination
- Pavement management
- Stormwater/MS4 obligations
- Complete Streets policy integration
- Long-term roadway maintenance realities

Overall, the draft is substantially above average compared with many municipal roadway ordinances.

Major Strengths / Good Points

1. Strong Definitions Section

The ordinance begins with an extensive definitions section that creates clarity and enforceability.

Particularly strong definitions:

- Accepted vs. Unaccepted Streets
- Public Right-of-Way
- Utility Strip/Tree Belt
- Roadside Barrier
- Complete Streets
- Performance Guarantee
- Escrow Concentration Account

These definitions reduce ambiguity and strengthen legal defensibility.

Recommendation

Consolidate duplicate definitions:

- “Accepted City Street” and “Accepted Street”
- “Public Right-of-Way” appears twice
- “Director” and “Director of Public Works” overlap

This will tighten readability and avoid interpretation conflicts.

2. Excellent ADA / PROWAG Integration

The ordinance does an excellent job incorporating federal accessibility standards throughout.

Strong elements:

- Explicit ADA transition plan requirement
- Triggering language for resurfacing/alteration projects
- Continuous pedestrian access route requirements
- Detectable warning requirements
- Maximum extent technically feasible language

This is legally smart and highly defensible.

Recommendation

Add one sentence clarifying:

“Compliance shall be interpreted consistent with the most current applicable federal guidance and case law.”

This protects the City against evolving ADA interpretations.

3. Pavement Management Program Is Very Well Structured

The pavement management section is one of the strongest parts of the ordinance.

Positive features:

- Data-driven requirement

- Regular assessment intervals
- Lifecycle cost approach
- Preventive maintenance emphasis
- Integration with utility coordination
- Multi-year planning framework

This aligns with best practices in municipal asset management.

Suggested Improvement

The numbering structure needs correction:

You currently have:

- 1.
-
- 2.
-
- 2.

There is no subsection 3.

This appears throughout the document in several places.

4. Strong Liability Protection Language

The ordinance repeatedly and intelligently limits implied City liability.

Excellent examples include:

- Roadside barriers section
- Street identification signs not constituting acceptance
- Snow/ice liability transfer under CGS 7-163a
- Unaccepted street provisions

This is one of the ordinance's biggest strengths.

5. Excavation and Restoration Standards Are Operationally Excellent

Article IV is highly practical and reflects real field experience.

Strong operational details:

- Moratorium on newly paved roads
- Temporary vs permanent patch procedures
- DPW-managed permanent patching
- Contractor funding mechanism
- Straight saw-cut requirements
- Lift compaction requirements
- Utility trench accountability
- Expanded patch authority

This is exceptionally good municipal infrastructure protection language.

Particularly smart provision:

The City-controlled permanent patch program. This avoids poor contractor patches and protects pavement lifecycle.

6. Complete Streets Integration Is Modern and Flexible

The ordinance successfully incorporates Complete Streets without overcommitting the City.

Good balance:

- Multimodal accommodation
- Waiver authority
- Cost disproportionality exemption
- Public safety exception
- Written justification requirement

Very professionally drafted.

7. Tree Warden Section Is Excellent

Article VII is particularly strong legally and operationally.

Especially good:

- Shared ownership tree provisions
- Emergency hazard authority
- CGS alignment
- Limitation of jurisdiction
- Root zone protections
- Practical maintenance responsibilities

This section is among the best-written parts of the ordinance.

Major Areas Needing Improvement

1. Significant Grammar / Typographical Cleanup Needed

The document needs a full legal-editorial pass.

Examples:

Incorrect wording:

- “were determined necessary” → should be “where determined necessary”
- “a. . No person” double punctuation
- “f Driveway transitions” missing punctuation
- inconsistent spacing around decimals and parentheses
- inconsistent capitalization
- repeated subsection letters
- inconsistent use of semicolons

Recommendation

Before adoption:

- Have Corporation Counsel perform legal formatting review
- Have one editor standardize:
 - punctuation
 - numbering
 - capitalization
 - citation format
 - indentation

- spacing
- cross references

This is critical before codification.

2. Some Provisions May Be Overly Rigid

Example: Residential driveways must be asphalt only

This could create:

- political pushback
- aesthetic objections
- zoning conflicts
- enforcement issues

Recommendation

Consider:

“Alternative decorative materials may be approved outside the traveled public right-of-way where drainage, accessibility, and maintenance are not adversely impacted.”

3. Potential Legal Risk — “No Liability” Language

Some immunity language may be too broad and could conflict with Connecticut municipal liability law.

Example:

- Roadside barrier liability disclaimer

Courts generally dislike blanket immunity clauses.

Recommendation

Have Corporation Counsel review all immunity-related sections carefully.

Safer phrasing:

“Nothing herein shall be construed to create a duty beyond those imposed by applicable law.”

4. Some Technical Standards Should Be Moved to Administrative Standards

Several sections contain very detailed engineering specifications:

- pavement section depths
- curb dimensions
- drainage spacing
- utility offsets
- slope ratios
- storm design frequencies

Concern

Every future technical change would require ordinance amendment.

Better approach

Move highly technical standards into:

- DPW Standards & Specifications Manual
- Engineering Design Manual
- Administrative regulations

Then ordinance can state:

“In accordance with standards adopted by the Director of Public Works.”

This creates flexibility.

5. Potential Conflict Between City Council and BPW Authority

Several sections alternate authority among:

- City Council
- Board of Public Works
- Director of Public Works
- Police Department
- Planning Commission

Recommendation

Add an administrative hierarchy section clarifying:

- who establishes policy
- who administers standards
- who grants variances
- who interprets ordinance conflicts

This would reduce procedural disputes.

6. Enforcement Section Needs More Detail

Current enforcement language is somewhat general.

Missing items:

- appeal process
- notice procedures
- violation timelines
- administrative hearing authority
- fine schedules
- repeat offender provisions

Recommendation

Expand enforcement procedures or cross-reference Chapter 1 enforcement provisions.

7. Unaccepted Street Provisions Are Strong but Politically Sensitive

Article VI is legally smart but may generate resident opposition.

Especially:

- limiting services
- denial of expanded services
- requirement for escrow accounts
- acceptance conditions

Recommendation

Add:

- hardship waiver process
- public petition hearing procedure
- phased compliance authority

This would improve political defensibility.

Structural / Organizational Recommendations

1. Reduce Repetition

Several topics appear in multiple locations:

- sidewalks
- driveway aprons
- permits
- traffic control
- utility standards

Recommendation

Create:

- one consolidated permitting section
- one consolidated sidewalk section
- one consolidated enforcement section

This improves usability.

2. Add Administrative Appeals Section

Strongly recommended.

Include:

- appeals to Board of Public Works
 - filing deadlines
 - hearing procedures
 - standards of review
-

3. Add Severability Clause

Strongly recommended.

Example:

“If any provision of this ordinance is held invalid, such invalidity shall not affect remaining provisions.”

Very important legally.

4. Add Effective Date / Transition Provisions

You should clarify:

- existing permits
- projects already under construction
- pending applications
- prior approvals

Without this, implementation may become messy.

5. Add Explicit State Law Supremacy Clause

Recommended language:

- Enforceability: 8/10
-

Final Recommendation

Before adoption, the ordinance should undergo:

1. Full legal review by Corporation Counsel
2. Comprehensive editorial cleanup
3. Technical specification consolidation
4. Cross-reference verification
5. Public administration/process review
6. Codification formatting review

The substantive framework is excellent. Most remaining issues are:

- formatting
- redundancy
- legal fine-tuning
- procedural clarification

The ordinance reflects strong practical public works experience and is considerably more sophisticated than many municipal roadway ordinances currently in effect.

“Where state or federal law conflicts with this ordinance, the stricter or controlling law shall govern.”

Most Impressive Sections

Best Technical Section

Article IV — Excavation & Restoration

Best Legal Section

Article VI — Unaccepted Streets

Best Modernization Section

Complete Streets + ADA integration

Best Risk Management Section

Snow/Ice liability transfer

Best Administrative Section

Tree Warden authority

Overall Assessment

Overall Quality:

Very strong municipal infrastructure ordinance draft

Estimated Readiness:

- Technical content: 8.5/10
- Legal structure: 7.5/10
- Editorial quality: 5.5/10
- Operational practicality: 9/10



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works
Flood Erosion Control Board

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: **Flood Erosion Control Board - CT DEEP Climate Resilience Grant Study**

The City has received a grant in the amount of \$250,000 (3023011-432153-25G26) from the Connecticut Department of Energy and Environmental Protection (CT DEEP) to perform a Climate Resilience Study for the City of Bristol. The purpose of the grant is to evaluate and address flooding concerns within the Coppermine Brook and Pequabuck River watersheds. The City has retained the engineering firm Stantec, Inc. to complete the study in accordance with the attached scope of services contained within the RFP.

To date, a public information meeting has been conducted to solicit input from residents, and meetings have been held with first responders, including Police, Fire, Ambulance, and Emergency Management personnel. In addition, the consultant has prepared draft sections of the proposed final report addressing sediment removal, flood ordinance recommendations, low-impact development practices, and modifications to stormwater regulations.

A proposed outline for the final report is provided below:

City of Bristol – Resiliency Study

1. Introduction and Bristol’s Approach to Flooding

This section will capture the DPW’s philosophy regarding flooding and support for residents. The City of Bristol will provide as much support as possible for businesses and residents

City of Bristol
Public Work Department
111 North Main Street
Bristol, CT 06010
www.bristolct.gov



Department of Public Works | 860.584.6125

experiencing flooding but is primarily concerned with flooding associated with public infrastructure. DPW is committed to handling all public runoff to ensure that no water escapes from public roadways and other infrastructure to impact private property.

2. Baseline Conditions

Identifying the locations outlined in the RFP, during meetings with DPW, and from community engagement, this section of the report will set the stage for the recommendations and programs/policies recommended later in the report.

3. Standards for Storm Sewer Improvements

Stantec has developed a number of recommendations for storm sewer improvement standards.

4. Sediment Removal Plan

Stantec has developed a sediment removal plan that outlines potential permitting requirements for activities associated with sediment removal activities.

5. Community Emergency Plan

Stantec is developing a Community Emergency Plan informed by the City's emergency response team. A first responders' workshop was held to hear from the professionals on the front line when flooding that isolates Bristol neighborhoods occurs.

6. Flood Ordinance Recommendations

Recommendations for revisions and amendments to the City's Flood Ordinance will be outlined in this section.

7. Low-Impact Development Recommendations

This section provides recommendations and examples of how low impact development (green infrastructure) techniques can be deployed in public and private settings to decrease runoff and manage flood waters.



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8. Flood Intervention Recommendations

Provides recommendations for addressing flooding at specific locations throughout the City.

9. Program and Operational Resources (additional information will be added as work progresses)

a) Public Education and Outreach

A key focus of this report will be increasing the community's knowledge and understanding of flooding in the City.

▪ City or Resident: Whose Responsibility Is It?

When Flooding is the City's Responsibility: Water Originates from City-Owned Infrastructure, Blocked or Poorly Maintained Public Drainage Facilities, Flooding Caused by City Construction or Capital Projects.

When Flooding is the Property Owner's Responsibility: Water Originates on Private Property, Flooding Caused by Private Alterations, Private Streams, Ditches, or Drainage Systems

When Responsibility is Shared or Requires Coordination: Drainage that Crosses Public and Private Land, Watershed-Scale or Neighborhood Flooding

What the City Can Do to Help (Without Assuming Responsibility)

a) When Can FEMA Help?

It is understandable that residents often immediately think of FEMA to help when they have experience flooding, but the reality is that FEMA events in Bristol are very rare. FEMA only gets involved in limited circumstances. This section will outline these circumstances and identify criteria residents should consider before reaching out to the City or FEMA for support.

b) Regular Maintenance Schedule



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Documenting routine maintenance can help the City more clearly articulate activities taken to prevent flooding and prepare the City for future applications for disaster relief and mitigation funding.

c) Pre-Storm Checklist

Similar to activities taken before a large snow storm, establishing a set of activities and locations to check in the days prior to a predicted rain event.

d) Illegal Backyard Filling Management

Many residents are unaware of their property's location within a floodplain or other wetland resource area. Building on the report's theme of public outreach and education, this recommendation suggests a variety of strategies to increase public knowledge and coordination between property owners and the City.

e) Neighborhood Maintenance Agreement / Cooperative and Community Initiatives

A creative approach to help neighbors coordinates regular maintenance, this section outlines tools that can be established to help neighborhoods address private flooding that affects multiple property owners.

10. Property Acquisition Recommendations

This section will establish criteria the City can use to determine whether a property should be considered for public acquisition (either in title or an easement). Establishing set criteria to evaluate all potential acquisitions will ensure that the process is transparent, consistent, and predictable.

11. Public Engagement Summary

This section summarizes public engagement and outreach that occurred to support the development of the report. A public workshop was held in February 2026, a first responders' workshop was held in April 2026, and a second public workshop will be held. Each workshop included online mapping and surveys to inform the study's progress and outcomes.



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One of the primary objectives of the CT DEEP Resiliency Grant is to provide preliminary drainage design concepts to address localized flooding throughout the City as the Board is aware, Bristol has experienced flooding events in the past. However, the Department has prioritized drainage improvements on City streets to mitigate isolated flooding concerns. Widespread flooding associated with the Pequabuck River and Coppermine Brook is largely the result of downstream restrictions outside the City of Bristol and is neither economically nor environmentally feasible to fully address. As a result, significant storm events will continue to cause flooding along the Pequabuck River and Coppermine Brook corridors.

In addition, despite improvements to the City's storm drainage system that increase capacity beyond a 25-year storm frequency, larger storm events can and will continue to occur, resulting in localized flooding conditions.

One of the primary purposes of the resiliency study is to update City regulations to reduce long-term flooding impacts, provide public education, and prepare emergency management plans for future flood events. A continuing challenge for Bristol residents is that flooding within the City adversely impacts property and quality of life; however, the Department is generally unaware of residential flooding occurring above the first-floor elevation of homes. Flooding impacts are typically limited to basements, landscaped areas, and City roadways. As a result, FEMA assistance opportunities are often limited or non-existent.

For reference purposes, attached is a prior Department of Public Works memorandum to the Board regarding localized flooding, along with a brief summary of FEMA assistance programs.

It should also be noted that NVCOG, the City's regional planning agency, has obtained a CT DEEP PROTECT Grant that provides an additional opportunity to evaluate and address localized flooding concerns. The Department intends to request that NVCOG evaluate the following areas:

1. Burlington Avenue (CT Route 72) north of Lewis Street to the CT DOT storm drainage system near the railroad crossing at Maple End
2. Sheffield Lane stream corridor along the rear of the northern properties and the Tout Brook Road outfall to Coppermine Brook
3. Stafford Avenue at Jewel Street, Charles Street, Milton Road, Mark Street, and French Street



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The City is currently completing drainage improvements on Brace Avenue and O’Sullivan Drive (\$1,908,532). In addition, storm drainage projects on Collins Road (\$310,000) and East Street from Pleasantview Avenue to Union Street (\$575,000) are scheduled to be completed as part of the Department’s FY 2026–2027 Capital Improvement Program. The referenced drainage projects involve the installation of substantially larger storm drainage piping, often 36 inch and 42 inch in diameter, requiring extensive exaction, impact to residents and relocation of utilities.

Stantec, the City’s resiliency study consultant, is scheduled to provide a presentation to the Board at its May 21, 2026 meeting.

Please feel free to contact me at 860-584-6113 with any questions.



Request for Proposals 2P25-016

The City of Bristol is accepting proposals for the following:

Consultant/Engineering Services for Climate Resiliency Flooding/Storm Drainage

All submissions must be made in accordance with the specifications supplied by

The City of Bristol
Purchasing Department
111 North Main Street
Bristol, CT 06010

Submissions will be received until **1:00 pm, February 26, 2025.**

Roger D. Rousseau
Purchasing Agent, City of Bristol
Tel (860)584-6195
rogerrousseau@bristolct.gov
<http://www.bristolct.gov/bids>

City of Bristol CT
Request for Proposals 2P25-016
Consultant/Engineering Services for Climate Resiliency Flooding/ Storm Drainage

The City of Bristol is seeking to prepare its community for climate resiliency with regard to flooding in vulnerable population areas, and is accepting proposals for assistance in educating and preparing the community for climate resiliency, and preparation of engineering solutions, via funding provided by the CT Dept of Energy and Environmental Protection ("DEEP").

Proposal submission documents are available at no charge by downloading from the City of Bristol web site via the following link:

<https://www.bristolct.gov/Bids.aspx?BidID=1368>

A non-mandatory pre-submission meeting will be held on February 12, 2025 at 9:00 am in Meeting Room 3-1 at Bristol City Hall, 111 North Main Street, Bristol CT 06010.

Proposal submissions will be accepted by the Purchasing Department until **February 26, 2025 at 1:00 pm**; submissions received after this date and time will not be considered. The City reserves the right to waive any informalities in any submission, to reject any and/or all submissions, and to accept the proposal that in its judgment is in its best interest. Interested firms are required to submit one original copy via digital media of the proposal to the Purchasing Department no later than the date and time noted above. Submissions may be made via email, shared file service, or USB drive; the City does not assume responsibility for failure of submissions to be received by the City by the date and time noted above.

The awarded firm will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, gender, or national origin.

Roger D. Rousseau, Purchasing Agent
City of Bristol Purchasing Department
111 North Main Street
Bristol CT 06010
Tel. (860) 584-6195
Email rogerrousseau@bristolct.gov
<http://www.bristolct.gov/bids>

City of Bristol, Connecticut
RFP 2P25-016
Consultant/Engineering Services
for Climate Resiliency Flooding/Storm Drainage

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City of Bristol CT

RFP 2P25-016 Climate Resiliency

Links to materials noted in Section 1.4 Resources Available

- 01 <https://www.bristolct.gov/DocumentCenter/View/48611/2P25-016-Bristol-DCRF-Application-TRACK-1>
- 02 https://www.bristolct.gov/DocumentCenter/View/48608/Pequabuck-Final-Summary-Report_09_14_15-No-Appendix
- 02 https://www.bristolct.gov/DocumentCenter/View/48609/Pequabuck-Appendix_09-14-2015
- 03 <https://www.bristolct.gov/Admin/DocumentCenter/Document/View/5507/Coppermine-Study>
- 03 <https://www.bristolct.gov/Admin/DocumentCenter/Document/View/5506/Coppermine-Study-Indexes>
- 04 <https://bristol.mapxpress.net/>
- 04 <https://ct-bristol2.civicplus.com/DocumentCenter/View/41436/FEMAMap466?bidId=>
- 04 <https://ct-bristol2.civicplus.com/DocumentCenter/View/41437/FEMAMap467?bidId=>
- 05 <https://experience.arcgis.com/experience/e492db86d9b348399f4bd20330b4b274>
- 06 <https://www.bristolct.gov/DocumentCenter/View/48063/Inland-Wetlands-Proposed-Amendment-to-Regulations-and-City-Wetland-Map>
- 07 <https://www.bristolct.gov/DocumentCenter/View/19065/Zoning-Regulations---effective-51324>
- 08 <https://ct-bristol2.civicplus.com/DocumentCenter/View/496/Wetlands-Regulations-amended-to-1209?bidId=>
- 09 <https://ct-bristol2.civicplus.com/DocumentCenter/View/6668/Bristol-POCD-Effective-063015-RFS?bidId=>
- 09 <https://ct-bristol2.civicplus.com/DocumentCenter/View/481/1996-Subdivision-Regulations-amended-to-11513?bidId=>
- 10 <https://ct-bristol2.civicplus.com/DocumentCenter/View/498/Flood-Control-Ordinance?bidId=>
- 11 <https://www.bristolct.gov/DocumentCenter/View/48612/2P25-016-Drainage-and-Flooding-Update-2024-07-08>
- 12 <https://www.bristolct.gov/DocumentCenter/View/48610/2P25-016-2018-03-27-Flood-and-Erosion-Board>



**Request For Proposals
City of Bristol, Connecticut**

2P25-016

**Consultant/Engineering Services
Climate Resiliency Flooding/Storm Drainage**

I. PROJECT SPECIFICATIONS

I.1 INTRODUCTION

The City of Bristol has received funding for a CT DEEP Resilience Fund Grant. The objective of the grant is to determine if there are engineering solutions that will mitigate flooding within the City, in particular, areas of vulnerable population located with the City's "opportunity zone" census tract 4061, as well as census tracts 4057, 4052, and 4060.01. In addition to engineering solutions, the City sees community outreach and public education as a critical task in addressing the community's climate resiliency as it relates to flooding.

The City of Bristol (the "City") is accepting proposals from firms to assist in educating and preparing the community for climate resiliency, as noted within this document and within the City's grant.

I.2 BACKGROUND

The City has participated in comprehensive studies for both the Coppermine Brook and the Pequabuck River, however, neither study proposed projects that would substantially reduce water surface elevations or reduce flooding. The studies did recommend the creation of water storage areas. However, given the size of the watershed, the proposed storage areas would have resulted in lowering flooding less than 0.2 ft., and the lower water surface elevations would not have been sustained to populated areas. The lack of a previously identified engineering solution for City flooding may be a result of consultant's determination that implementing various engineering solutions to mitigate flooding were too costly or not permissible, however, the task as part of this RFP is to determine a solution if at all possible.

The City is receptive to implementing a number of potential engineering flood mitigation measures, however, the focus should be increasing storm water conveyance, dredging and widening streams/rivers, increasing pipe size, or acquisition of properties. The City understands permitting and cost challenges associated with dredging/widening streams and rivers, but sees such projects as a long-term planning and public education process. The City believes that the acquisition of properties prone to flooding is a viable mitigation measure, and sees the potential identification of properties as part of the work associated with this RFP, along with a preliminary evaluation of BCAs, and the long-term economic impact of the City purchasing a house within the City. For example, what is the final impact if the City purchased a typical 3-bedroom house and the property became open space, considering education costs and loss of tax revenue?

Although the objective of the grant is to determine if there is an engineering solution, the primary focus of the study is not anticipated to be on engineering hydraulics. It is not the intent of the City to redo or replicate the previously performed Pequabuck River or Coppermine Brook studies.

Instead, the grant is focused on resilience planning, especially natural hazard mitigation planning. This could include things such as modifications to City land use regulations, with a long-term goal of removing structures; focusing on ways to protect City assets, especially storm water systems, during flood events; developing plans to offset isolating events such as road blockages during storms; addressing drainage issues, some of which can involve revisions to Zoning, Planning, and Inland-Wetland regulations and flood and erosion controls, and street ordinances; and educating the public about other mitigation efforts that businesses and homeowners can make to offset the impact of flooding.

The City sees public outreach and education as an integral part of the work associated with this RFP. If it is determined that there are no viable engineering solutions, or if implementing the proposed measures will take an extended period of time to mitigate flooding within the City, the City does not want to provide “false hope.” Rather, work associated with the RFP shall provide realistic, practical measures to mitigate the impact of flooding, such as: insurance requirements/provisions, utility location, flood monitoring measures, and flood insurance reduction methods. Public outreach shall also include measures and agencies that are available for assistance after a flooding event. Once again, the purpose of public education is not to provide “false hope”, the intent would be to provide guidance associated with Presidential Declared Disasters and state assistance available for various flood events (if any).

Work associated with this RFP shall also include the development of community emergency planning to address roadway closures that occur during flooding events, such as the closure of King St, Mix St., CT Route 6 that isolates the northeast section of the City, and the common closure of East Main St east of Forestville. The selected consultant shall also provide an evaluation with recommendations to revisions (if any) to current City land use drainage regulations (Zoning, Planning, Inland Wetland, and City Street Ordinances). For example, current regulations require detention to prevent increases of the peak rate of runoff, however, they do not require LID measures, and City storm drainage is sized for 25-year storms. The selected consultant shall also provide guidance to the long-term maintenance of streams by the City to reduce flooding, which shall include permit requirements (if any).

The City is concerned with flooding that occurs during both high rainfall events (in inches) that occur over a 24 hr. storm period, and high intensity storms that occur over a short period of time. Some of the specific areas of concern consist of the following:

1. East Main St east of Forestville
2. Central St at the Pequabuck River
3. Frederick St
4. Broad St at Todd St
5. Farmington Ave at Mix St including the Coventry Rd & Vincent Rd area
6. Sharon St
7. Collins Rd
8. Madison Dr
9. King St at Bristol Eastern High School
10. West End (intersection of CT Route 72/69)
11. Jacob St
12. Terryville Rd west of Waterbury Rd
13. Hardwick Rd

It should be noted that flooding in Bristol generally does not extend above the first-floor elevation. However, flooding severely impacts the quality of life within the City with damage to utilities/personal property located in basements, and impacting property access.

I.3 SCOPE OF SERVICES

Present potential remediation options that may include but not limited to the creation of a no-build flood plain.

Evaluate and rank potential mitigation projects be based on multi-benefits such as creating passive recreation/ park areas along the river (after purchase and demolition of frequently flooded homes), promoting pedestrian/ bike use, and addressing environmental justice concerns.

Develop a community emergency plan to address roadway flooding that cuts off and isolates sections of the City during large storm events. Leaders of the City's Police, Fire, and Emergency Management Departments would participate in plan development along with input from the community.

Conduct community-based meetings to define in detail level of flooding and provide public education as to the available FEMA, State, and local resources available to residents after flooding events.

Provide public education to residents of the flood-prone areas to assist in the development of individual action plans. These plans would address evacuation routes, alternate housing, moving of vehicles, and plans for the retention of important papers (e.g. insurance policies and bank records).

Evaluate and prepare sediment removal plan for the Pequabuck River, Coppermine Brook and the unnamed brook that crosses Mechanic St, Andrew St, West Washington, Stonecrest Dr, Carpenter Ave, and Louisiana Ave. The sediment removal plan shall be based on available mapping and field inspections and shall include identification of areas of sediment removal, quantity, required environmental permits and recommunication to acquire property rights and estimated cost.

Develop a strategy for identification of potential property acquisitions that would alleviate the impact of flooding or mitigate flooding (in particular, properties along the Pequabuck River and Coppermine Brook).

Develop stormwater design standards for use by the City in construction of storm sewer improvements.

Develop strategies for consistent application of Low Impact Development ("LID") measures. Work shall include an analysis of potential LID impact, reduction of flooding associated with LID implementation on currently undeveloped and anticipated rate of Bristol developed properties.

Review and make recommendations for revision to the City of Bristol flood ordinance.

I.4 RESOURCES AVAILABLE

The City has available the following materials for review:

1. DEEP Climate Resilience Grant Application
2. Pequabuck River Study
3. Coppermine Brook Study
4. City GIS mapping with layers for City storm drainage, current wetlands, & FEMA flood plan map
5. FEMA proposed (pending) revised map
6. City proposed (pending) wetland map revisions
7. Bristol Zoning Regulations
8. Bristol Inland Wetland Regulations
9. Bristol Planning Regulations
10. City Street Ordinances
11. Summary of Flooding July 16, 2023 dated July 11, 2024
12. Flood Erosion control Board – Resident Assistance Programs

I.5 PROJECT SCHEDULE

The following is the proposed schedule, primarily relevant to the selection process. Please be advised that as part of your firm's proposal, it is anticipated that a project schedule will be included, using the following as a general guideline, incorporating any adjustments that your firm may feel to be appropriate to successfully complete the project.

Date of RFP Issuance	January 28, 2025
Pre-submission site visit	February 12, 2025
Due date for submissions	February 26, 2025
Recommendation for Award	April 8, 2025

There will be an opportunity to discuss the project with City staff on **February 12, 2025 at 9:00 am**. Interested firms are asked to report to Meeting Room 3-1 within Bristol City Hall, located on the third floor at 111 North Main Street, Bristol CT.

The meeting will additionally be accessible via Zoom:

<https://bristolct-gov.zoom.us/j/88240621294?pwd=aclarJafbhlGxVQFeNGaWK0r9IWxTh.1>

II. SUBMISSION REQUIREMENTS

II.1 SUBMISSION DUE DATE

Submissions will be accepted by the City of Bristol Purchasing Department until **1:00 pm, February 26, 2025**. Submissions received after that time will not be considered. Submissions may be withdrawn 120 days after opening if no award has been made.

The City may invite a short list of responding firms for an interview based upon its review of submissions.

Unless otherwise indicated, submissions are assumed to be valid for one hundred twenty (120) days from the date that Submissions are due.

II.2 DIRECTIONS FOR WRITTEN SUBMISSION

Interested firms are required to submit **one original copy via digital media** of the proposal to Roger Rousseau, Purchasing Agent, no later than the date and time noted above. Submissions may be made via email, shared file service, or USB drive; the City does not assume responsibility for failure of submissions to be received by the City by the date and time noted above. Submittals shall consist of the following:

- a. A transmittal letter signed by the appropriate officer of the firm offering the proposal and certifying that the proposal and any cost projection included will remain in effect for 120 days after the due date.
- b. A concise and complete description of the work to be performed, including:
 1. An explanation of your firm's understanding of the project, its approach to the work, the key issues to resolve and the level of detail that can be accomplished for the work within the available time.
 2. A detailed work program and time schedule for the project.
 3. A list of personnel who will be assigned to the project, including resumes for professionals expected to provide at least 20% of the person hours on the project. Support staff contracted by your firm for this project should additionally be included for review and consideration. List shall include alternate lead person in the absence of the assigned lead person, or methodology for providing continuity of services due to temporary absence of the lead person.
 4. A description of similar projects which your firm has been involved in, including references.
 5. A summary of your firm as outlined in Section II.3 of this document. Please note that joint ventures are acceptable for submission.
- c. A fee schedule for the services, and/or method for fee schedule development for services to be provided (e.g. hourly rate structures with potential staffing requirements). Please note that evaluation and subsequent award of a resultant contract is primarily based on qualifications and not based on fee schedule; however, the cost for your firm's services is one of the criteria outlined in this document. If your firm is selected for an interview, and as a result of the interview certain clarifications and adjustments need to be made to the fee schedule submitted, your firm will be allowed to adjust the fee schedule submitted, if so directed by the City. Please note that travel between the consultant's offices and those of the City will not be considered reimbursable.
Please note that submission of fees shall be made via a document separate from the qualifications/scope, to permit review of fees subsequent to review of all other aspects of the proposal.

II.3 VENDOR INFORMATION

A. Vendor Overview

Please provide the following:

- The name and location of your company, including the office location that will be serving the City.
- A brief general description of your business.
- The number of years your company has been in business.
- Is your company a subsidiary of another corporation? If so, what is the name of the parent company?
- The number of personnel employed by your company (please include the number of staff dedicated to provide requested services).
- The primary line of business of your firm.

B. Client Base

Provide specific reference information for three clients you have served, relevant to the work proposed, to include:

- Client name and location
- Starting date of service and completion date
- Contact name, title and telephone number

The references must be relevant to service in the last forty-eight (48) months, and shall include specific details on how the project represents a project of similar scope. Information on your firm's specific role must be included.

II.4 EVALUATION CRITERIA

Evaluation will be based upon the written submittals and selected presentations and interviews. The factors, which will be evaluated, include the following:

1. The proposed staffing plan and specialized experience of the individual(s) or firm(s) and its (their) assigned personnel.
2. The firm's understanding of and approach to the project.
3. Capability to work collaboratively with the City, the State of Connecticut, community groups, and other parties associated with the project.
4. The firm's experience in resiliency planning for a similar project, as may be relative to this project.
5. The firm's ability to effectively communicate to the community on behalf of the City.
6. The firm's ability to assess reasonability of costs associated with potential mitigation efforts.
7. The content of the firm and its consultants, support staff, etc. and their ability to work effectively together and with the City.
8. Clarity, organization, and effective presentation of submittal.
9. Current and anticipated workload.
10. Review of references listed.
11. Proposed fee schedule or fee schedule methodology, received subsequent to initial submission. Please note that evaluation and subsequent award of a resultant contract is primarily based on qualifications and not based on fee schedule; however, the cost for your firm's services will be a factor.

The City expects to invite a short list of responding firms for an interview based upon its review of the written submissions.

Final recommendations regarding award of contract(s) for services will be made after the City and firm(s) have negotiated reasonable fee schedule(s) for services to be provided, and have concurrence on the methods to be used for payment for services rendered.

II.5 ADDENDA

If it becomes necessary to revise any part of this request or if additional data is necessary to enable interpretation of provisions of this document, revisions or addenda will be provided to all prospective firms who receive this document; such revisions or addenda will additionally be posted on the following website:
<http://www.bristolct.gov/bids>

This document includes an acknowledgement page; this page must be faxed back to the Purchasing Department, to ensure proper notification of changes to the published documents. The City of Bristol does not assume responsibility for any vendor that does not receive revisions or addenda, where the vendor has not acknowledged receipt of any portion thereof.

Questions regarding this document should be referred to Roger D. Rousseau at (860) 584-6195 or at rogerrousseau@bristolct.gov.

A summary of all questions and answers will be made available to each firm if they might influence the award of the contract.

III. CONTRACT CONSIDERATIONS

III.1 EQUAL OPPORTUNITY – AFFIRMATIVE ACTION

The successful firm shall comply in all aspects with the Equal Employment Opportunity Act. A firm with 15 or more employees shall be required to have an Affirmative Action Plan which declares that the contractor does not discriminate on the basis of race, color, religion, gender, national origin or age, and which specifies goals and target dates to assure the implementation of equal employment. A firm with fewer than 15 employees shall be required to have a written equal opportunity policy statement declaring that it does not discriminate on the basis of race, color, religion, gender, national origin or age.

Findings of noncompliance with applicable State and Federal equal opportunity laws and regulations could be sufficient reason for revocation or cancellation of this contract.

III.2 INDEMNIFICATION

The awarded firm agrees to indemnify, defend, and save harmless, the City of Bristol, as well as its officers, agents and employees from any and all claims and losses to the extent caused by the negligent act, error or omission of the awarded firm resulting from the performance of this contract, except to the extent caused by the negligent acts of the City of Bristol or its officers, agents or employees.

The City, as a sovereign government, cannot indemnify businesses or individuals.

III.3 INSURANCE

Prior to the execution of any contract, the City of Bristol requires that any awarded contractor providing materials, equipment or services to the City, must provide to the City a certificate of insurance (Acord or other

approved format) naming the City of Bristol and the State of Connecticut as additional insured, for the following:

- General liability (including completed operations coverage) in the amounts of \$1,000,000 Bodily Injury/Property Damage coverage per occurrence, and \$2,000,000 general aggregate coverage.
- Automobile Liability in the amount of \$1,000,000 (combined single limit), Property Damage and Bodily Injury coverage.

In addition to the above, the awarded contractor shall provide a certificate of insurance in the minimum amounts as specified herein.

- Professional Liability, in an amount not less than \$500,000 per occurrence and \$2,000,000 aggregate.
- Worker's Compensation as defined in the Connecticut General Statutes.

Umbrella coverage for all of the above, in an amount not less than \$5,000,000.00.

All above said insurance shall be provided at the sole expense of the contractor with an insurance company which is licensed to do business in the State of Connecticut, and which shall have a minimum AM Best rating of not less than "A". Any subcontractor to a contracted firm shall be likewise covered, and shall furnish certificates of coverage acceptable to the City before starting work.

The awarded firm shall maintain insurance coverage until the expiration of the statute of limitations. In the event there is no statute of limitations specifically applicable to this project, the awarded firm shall maintain coverage for a reasonable period after the date of substantial completion of the project as agreed to by the City and the awarded firm.

Please note that the City of Bristol will directly secure Builders Risk coverage for the project, at its own expense.

III.4 INVOICING AND PAYMENT

Invoices shall be paid promptly by the City unless any items thereon are questioned, in which case payment will be withheld pending verification of amount claimed and the validity of the claim. Standard payment terms are Net 30 Days from receipt of properly executed invoice(s). If your firm submits a proposal that includes payment schedules based on the completion of designated phases, those stages must be clearly outlined in your proposal. The City cannot make payments for "execution of contract" (payments due upon contract signing).

III.5 AWARD CONSIDERATIONS

The City may reject any or all submissions for such reason as it may deem proper or for its sole convenience. The City reserves the right to not accept any submissions. In acceptance of submissions, the City will be guided by consideration of the interests of the City. The City also reserves the right to negotiate further with one or more of the firms as to any features of their submissions and to accept modifications of the work and price when such action will be in the best interests of the City.

Firms selected for interview will be provided with the content of the interview panel; the selected firms will be required to submit affidavits relating to their relationship(s) with members of the panel. The names of interview committee members will be released solely for the purpose of preparation of affidavits; the selected firms shall not directly contact the panel members prior to immediately following the interview process.

The individual signing this submittal hereby declares that no person or persons other than members of his/her own organization are interested in this Project or in the contract proposed to be taken; that it is made without any connection with any other person or persons making a submission for the same work and is in all respects fair and without collusion or fraud; that no person acting for or employed by the City of Bristol is directly or indirectly interested therein, or in the supplies or works to which it relates or will receive any part of the profit or any commission there from in any manner which is unethical or contrary to the best interests of the City of Bristol.

Unless otherwise noted, submissions received in response to this document, including proposed fee schedules if applicable, are assumed to be valid and binding for one hundred twenty (120) days from receipt of the submission. If award is not made within such time, the submission can be deemed to be either no longer valid, or can be extended with mutual consent of the City and the firm making submission.

Any contract resulting from this solicitation shall be governed by the laws of the State of Connecticut.

Documents/reports/data become property of the City of Bristol.

III.6 TERMINATION

A. Termination by the Consultant

If the City fails to make payment as provided in Section 5.1 for a period of 30 days, the Consultant may, upon seven additional days' written notice to the City, terminate the Contract and recover from the City payment for work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

B. Termination by the City for Cause

The City may terminate the Contract if the Consultant:

1. Repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
2. fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Consultant and its Subcontractors;
3. repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of a public authority; or
4. Otherwise is guilty of substantial breach of a provision of the Contract Documents.

When any of the above reasons exists, the City may, without prejudice to any other remedy the City may have and after giving the Consultant seven days' written notice, terminate the Contract and take possession of all materials prepared by the Consultant relative to this contract and may finish the work by whatever reasonable method the City may deem expedient. During the seven day notice period, the Consultant shall have the option to present to the City a plan to remedy the notice for termination for cause, which may be accepted by the City at its sole discretion. Upon request of the Consultant, the City shall furnish to the Consultant a detailed accounting of the costs incurred by the City in finishing the work.

When the City terminates the Contract for one of the reasons stated above in this section, the Consultant shall not be entitled to receive further payment until the work is finished.

C. Termination by the City for Convenience

The City may, at any time, terminate the Contract for the City's convenience and without cause, upon thirty (30) days' advance notice. Under such circumstances, this Agreement shall terminate on the date set forth in the notice from the City. The Consultant agrees to immediately prepare to cease performing all services on

the date of termination and shall otherwise cease, to the extent practicable, incurring costs chargeable to the City under this Contract as of the date of termination. To the extent that the City elects (and Consultant hereby grants to the City the right to elect to do so in connection with termination of this Contract) to take legal assignment of subcontracts, the Consultant shall, as a condition of receiving the payments referred to in this Article and otherwise under this Agreement, at the City's sole cost and expense, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Consultant, as the City may require for the purpose of fully vesting in the City the rights and benefits of the Consultant under such subcontracts. In the event an attempted termination by the City or excuse is not justified, it shall be deemed a termination under this Paragraph. The Consultant shall be entitled to receive payment for work executed, and costs incurred by reason of such termination of convenience, along with reasonable overhead and profit on the work not executed.

III.7 FREEDOM OF INFORMATION

All submittals are subject to public inspection, subject to the provisions of Section 1-210 of the Connecticut General Statutes (Freedom of Information). Consistent with Article 1-210 (b) 24, copies of information resulting from this RFP are generally not available until a contract has been formally awarded

III.8 FORM OF CONTRACT

The City intends to use a Bristol standard contract for professional services for the purposes of engaging a firm to provide the requested services (template attached).

**Request for Proposals
City of Bristol, Connecticut 06010**



**Consultant/Engineering Services for
Climate Resiliency Flooding/Storm Drainage
2P25-016**

Due Date: 1:00 pm, February 26, 2025

Mailing address:

City of Bristol, Connecticut
Purchasing Department
111 North Main Street
Bristol, CT 06010

In accordance with the City's requirements, the undersigned agrees to provide services as defined herein.

The undersigned is familiar with the conditions surrounding this Request for Proposals, is aware that the City reserves the right to reject any and all submissions, and is making submission without collusion with any other person, individual or corporate.

Witness

Signature

Company Name

Printed Name

Address

Title

Town

State

Zip

Date

Federal ID #

Telephone Number

Email address

RETURN THIS FORM IMMEDIATELY!

**City of Bristol, Connecticut
Acknowledgment: Receipt of RFP Documents**

**Request For Proposals 2P25-016
Consultant/Engineering Services
Climate Resiliency Flooding/Storm Drainage**

Please take a moment to acknowledge receipt of the attached documents. Your compliance with this request will help us to maintain proper follow-up procedures while ensuring that all recipients have the opportunity to submit submissions.

Date issued: January 28, 2025

Date documents received ____/____/____

Do you plan to submit a response? Yes____ No____

Print or type the following information:

Company name: _____

Address: _____

City or Town: _____

Phone: _____

Email: _____

Received by: _____

Note: acknowledgments are requested!
purchasing@bristolct.gov



City of Bristol, Connecticut Non-Collusion Certification

The undersigned certifies under penalty of false statement that this proposal or contract has been made, submitted and executed in good faith and without collusion or fraud with any other person, and without any agreement designed to limit independent bidding or competition. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

I further certify that I have not provided or directed to be provided gifts, meals, or gratuities, as defined in Sec. 2-129(b) of the Bristol Code of Ordinances to any official or employee of the City of Bristol responsible for awarding or administering this bid or contract.

Please complete and sign

Legal Name of Bidder: _____

Business Address: _____

Name of Authorized Agent _____ Title: _____

Phone: _____ Email: _____

Signature: _____ Date: _____

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES
CONTRACT COMPLIANCE REGULATIONS
NOTIFICATION TO BIDDERS

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n.” “Minority” groups are defined in Section 32-9n of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

INSTRUCTIONS AND OTHER INFORMATION

The following BIDDER CONTRACT COMPLIANCE MONITORING REPORT must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) Definition of Small Contractor

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists.

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category..

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

<u>White</u> (not of Hispanic Origin)- All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East. <u>Black</u>(not of Hispanic Origin)- All persons having origins in any of the Black racial groups of Africa. <u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.	<u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa. <u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
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BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART I - Bidder Information

Company Name Street Address City & State Chief Executive	Bidder Federal Employer Identification Number _____ Or Social Security Number _____
Major Business Activity (brief description)	Bidder Identification (response optional/definitions on page 1) -Bidder is a small contractor. Yes ___ No ___ -Bidder is a minority business enterprise Yes ___ No ___ (If yes, check ownership category) Black ___ Hispanic ___ Asian American ___ American Indian/Alaskan Native ___ Iberian Peninsula ___ Individual(s) with a Physical Disability ___ Female ___
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes___ No___
Other Locations in Ct. (If any)	

PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes___ No___	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes___ No___
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes___ No___	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes___ No___
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes___ No___	9. Does your company have a mandatory retirement age for all employees? Yes___ No___
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes ___ No ___	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes ___ No ___ NA ___
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes ___ No ___	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes ___ No ___ NA ___
6. Does your company have a collective bargaining agreement with workers? Yes___ No___ 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes___ No___ 6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of Ct? Yes___ No___	12. Does your company have a written affirmative action Plan? Yes ___ No ___ If no, please explain. 13. Is there a person in your company who is responsible for equal employment opportunity? Yes ___ No ___ If yes, give name and phone number. _____

Part III - Bidder Subcontracting Practices

(Page 4)

1. Will the work of this contract include subcontractors or suppliers? Yes__ No__

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

Yes__ No__

PART IV - Bidder Employment Information

Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service					Work Experience	
Private Employment Agencies					Ability to Speak or Write English	
Schools and Colleges					Written Tests	
Newspaper Advertisement					High School Diploma	
Walk Ins					College Degree	
Present Employees					Union Membership	
Labor Organizations					Personal Recommendation	
Minority/Community Organizations					Height or Weight	
Others (please identify)					Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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CONTRACT FOR PROFESSIONAL SERVICES
BRISTOL, CONNECTICUT
Contract 2P25-016
[Contract Name]

This Agreement made this _____th day of _____ 2025, by and between the **City of Bristol**, a municipal corporation located in the County of Hartford and State of Connecticut, hereinafter termed "City", and **[Company name]**, a Connecticut company qualified to do business in the State of Connecticut, with an office at **123 Main Street, Anytown CT 06010** hereinafter termed "Consultant".

WITNESSETH:

WHEREAS, the City seeks to mitigate flooding within the City, with particular focus on vulnerable populations within the opportunity zones noted as census tracts 4057 and 4060.01, and educate and prepare the community for climate resiliency;

WHEREAS, the Consultant is to perform engineering services as needed and as requested by the City of Bristol, as outlined in the City of Bristol Request For Proposals 2P25-016 and the Consultant Proposal dated **January 7, 2025**, representing that the Consultant is experienced and qualified to carry on such work;

NOW, THEREFORE, the City and the Consultant, for the consideration and in accordance with the terms and conditions hereinafter set forth, hereby agree as follows:

1. The Consultant hereby represents, warrants and covenants to the City as of the date hereof the following:
 - A. The undersigned representative of the Consultant has been authorized and empowered to execute this Contract by a Resolution of its Board of Directors.
 - B. The Consultant is experienced in the services required for the completion of services required within this contract, and the Consultant and its agents and employees are qualified to perform the duties contemplated under the Contract.
 - C. The Consultant employs and will maintain employment of during the term of the Contract, appropriate staff to complete the services outlined herein.

- D. No statement of fact made by or on behalf of the Consultant in this Contract, in the Contract Specifications, or in any certificate or exhibit furnished to the City pursuant hereto contains any untrue statements of a material fact or omits to state any material fact necessary to make statements contained therein or herein not misleading.
- E. The Consultant understands all the terms and conditions of this Contract, including the Contract Specifications, and hereby agrees to adhere to the Contract Specifications and attached Exhibits which are hereby made a part of the Contract.

2. EMPLOYMENT OF CONSULTANT:

The City hereby engages the Consultant and the Consultant hereby agrees to perform all of the services and furnish all of the records, materials, forms and supplies required by and in complete accordance with the City of Bristol's Request For Proposals ("RFP"), entitled 2P25-016, a copy of which is attached hereto marked Exhibit A, and the Consultant's proposal dated [Proposal due date], a copy of which is attached hereto marked Exhibit B.

In the event that exhibits have different standards as to any performance requirement, the more stringent requirement shall prevail.

The following scope of services is considered within the responsibility of the Consultant:

- Present potential remediation options that may include but not limited to the creation of a no-build flood plain.
- Evaluate and rank potential mitigation projects be based on multi-benefits such as creating passive recreation/ park areas along the river (after purchase and demolition of frequently flooded homes), promoting pedestrian/ bike use, and addressing environmental justice concerns.
- Develop a community emergency plan to address roadway flooding that cuts off and isolates sections of the City during large storm events. Leaders of the City's Police, Fire, and Emergency Management Departments would participate in plan development along with input from the community.

- Conduct community-based meetings to define in detail level of flooding and provide public education as to the available FEMA, State, and local resources available to residents after flooding events.
- Provide public education to residents of the flood-prone areas to assist in the development of individual action plans. These plans would address evacuation routes, alternate housing, moving of vehicles, and plans for the retention of important papers (e.g. insurance policies and bank records).

3. COMMENCEMENT AND COMPLETION:

- A. Following execution of this Contract, the Consultant shall commence work within five (5) working days from the date of an assignment of work, for which a purchase order shall be issued for said work assignment.
- B. The Consultant agrees to complete the work in accordance with the Contract Specifications set forth in Exhibits A and B.
- C. The Consultant agrees to adhere to the time schedule for the work as set forth in the Contract Specifications set forth in Exhibits A and B.

4. USE OF DOCUMENTS:

All files and/or drawings developed through this Contract shall be considered the property of the City of Bristol, whether or not an assignment is completed.

5. RESPONSIBILITIES OF THE CITY:

The City shall do the following in a timely manner so as not to delay the services of the Consultant and shall bear all costs incident thereto:

- 5.1 Pay the Consultant in accordance with the terms of this Contract.
- 5.2 Designate in writing a person to act as the City's representative with respect to the services to be performed or furnished by the Consultant under this Contract. Such person will have complete authority to transmit instructions, receive information, interpret, and define the City's policies and decisions with respect to the Consultant's services for the Project.

5.3 Assist the Consultant by placing at its disposal all available information pertinent to the work, including previous drawings or reports and, as applicable to the services, any other data relative to design or construction of a work assignment, all of which the Consultant shall be entitled to rely upon.

6. COMPENSATION:

The City agrees to pay to the Consultant the amount of **[amount in words] [amount in numbers]**, in accordance with amounts as outlined in Exhibit B, as compensation for the Consultant's services to be performed and the records, materials, forms and supplies to be furnished by the Consultant.

The Consultant and the City agree that payment for work completed shall be made within thirty days of performance of such services, or within thirty (30) days of receipt of properly executed invoice, whichever comes later.

Reimbursement for mileage and other associated travel costs that are solely relevant to travel to Bristol CT are specifically identified as not compensable.

7. INDEMNIFICATION:

The Consultant agrees to indemnify and save harmless, the City of Bristol, as well as its officers, agents and employees from any and all claims and losses to the extent caused by the negligent act, error or omission of the Consultant resulting from performance under this Contract, except to the extent caused by the negligent acts of the City of Bristol, or its officers, agents or employees.

8. INSURANCE:

The Consultant shall provide to the City a certificate of insurance, naming the City of Bristol and the State of Connecticut as additional insured, for the following:

- General liability (including completed operations coverage) in the amounts of \$1,000,000 (combined single limit) Bodily Injury/Property Damage coverage per occurrence, and \$2,000,000 general aggregate coverage.

- Automobile Liability in the amount of \$1,000,000 (combined single limit), Property Damage and Bodily Injury coverage.

Additionally, the Consultant shall provide to the City a certificate of insurance reflecting the following coverage:

- Professional Liability, in an amount not less than \$500,000.00 per occurrence and \$1,000,000.00 aggregate.
- Worker's Compensation as defined in the Connecticut General Statutes.

The Consultant shall maintain professional liability insurance until the expiration of the statute of limitations. In the event there is no statute of limitations specifically applicable to an assignment, the Consultant shall maintain coverage for a reasonable period after the date of substantial completion of the project, as agreed to by the City and the Consultant. The Consultant shall provide renewed certificates of insurance to the City thirty (30) days prior to the expiration of a certificate.

Any sub-consultant to the Consultant shall be likewise covered, and shall furnish certificates of coverage acceptable to the City before starting work.

9. ASSIGNMENT OF CONTRACT:

The Consultant agrees that it shall not assign, transfer or sublet the Contract, or any interest or part therein, without first receiving written approval from the City, and further agrees that any such assignment or transfer or subletting without prior written approval of the City shall, in every case, be null and void, and further agrees that such approval by the City shall not release the Consultant from any responsibility or liability as set forth in this Contract and the Contract Specifications.

10. TERMINATION:

A. *TERMINATION BY THE CONSULTANT*

If the City fails to make payment as provided in Section 5.1 for a period of 30 days, the Consultant may, upon seven additional days' written notice to the City, terminate the Contract

and recover from the City payment for work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

B. *TERMINATION BY THE CITY FOR CAUSE*

The City may terminate the Contract if the Consultant

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Consultant and its Subcontractors;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

When any of the above reasons exists, the City may, without prejudice to any other remedy the City may have and after giving the Consultant seven days' written notice, terminate the Contract and take possession of all materials prepared by the Consultant relative to this contract and may finish the work by whatever reasonable method the City may deem expedient. During the seven day notice period, the Consultant shall have the option to present to the City a plan to remedy the notice for termination for cause, which may be accepted by the City at its sole discretion. Upon request of the Consultant, the City shall furnish to the Consultant a detailed accounting of the costs incurred by the City in finishing the work.

When the City terminates the Contract for one of the reasons stated above in this section, the Consultant shall not be entitled to receive further payment until the work is finished.

C. *TERMINATION BY THE OWNER FOR CONVENIENCE*

The City may, at any time, terminate the Contract for the City's convenience and without cause, upon thirty (30) days' advance notice. Under such circumstances, this Agreement shall terminate on the date set forth in the notice from the City. The Consultant agrees to immediately prepare to cease performing all services on the date of termination and shall otherwise cease, to the extent practicable, incurring costs chargeable to the City under this Contract as of the date of termination. To the extent that the City elects (and Consultant

hereby grants to the City the right to elect to do so in connection with termination of this Contract) to take legal assignment of subcontracts, the Consultant shall, as a condition of receiving the payments referred to in this Article and otherwise under this Agreement, at the City's sole cost and expense, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Consultant, as the City may require for the purpose of fully vesting in the City the rights and benefits of the Consultant under such subcontracts. In the event an attempted termination by the City or excuse is not justified, it shall be deemed a termination under this Paragraph. The Consultant shall be entitled to receive payment for work executed, and costs incurred by reason of such termination of convenience, along with reasonable overhead and profit on the work not executed.

11. SEVERABILITY:

In the event that any part of any clause or provision of the Contract or Contract Specifications as set forth in Exhibits A and B are judicially determined to be invalid or unenforceable, it shall be deemed severable from the remainder of that clause or provision, and such remainder shall be binding upon the parties to this Contract.

12. WAIVER:

No action or failure to act by the City shall constitute a waiver of any right or duty afforded it under the Contract or Contract Specifications, nor shall it prohibit the City from future exercises of any such right.

13. ENTIRE AGREEMENT:

This Contract, including Exhibits A and B, contains the complete and entire agreement between the parties and may not be modified or amended except in a writing executed by the parties hereto.

14. GOVERNING LAW:

This Contract shall be interpreted and governed under the laws of the State of Connecticut and by the courts of the State of Connecticut.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals this
_____th day of _____, 2025.

City of Bristol, Connecticut

[Company Name]

By _____
Mayor Jeffrey Caggiano date

By _____
[Name], date
[Title]

This Contract was approved by vote of the City Council of Bristol, Connecticut, on the _____th day of _____, 2025.

Erica Cabiya
City Clerk

Approved as to form:
CORPORATION COUNSEL

Approved as to Technical Content:
PUBLIC WORKS DEPARTMENT

By _____
Corporation Counsel

By _____
Director of Public Works

Date: _____

Date: _____

Approved as to Appropriations:
BOARD OF FINANCE, CITY OF BRISTOL

By _____
Comptroller

Date: _____

STATE OF CONNECTICUT)
) ss. Bristol
COUNTY OF HARTFORD)

On this ____th day of _____, 2025, before me, the undersigned officer, personally appeared **[Name]**, who acknowledged himself/herself to be **the Mayor of the City of Bristol**, a municipal corporation, and that he/she, as such Mayor, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself/herself as Mayor of the City of Bristol.

IN WITNESS WHEREOF, I have hereunto set my hand.

Notary Public

STATE OF CONNECTICUT)
) ss. Bristol
COUNTY OF HARTFORD)

On this ____th day of _____, 2025, before me, the undersigned officer, personally appeared **[Name]**, who acknowledged himself/herself to be **[Title]** of **[Company name]** a corporation, and that he/she, as such **[Title]**, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself/herself as **[Title]**.

IN WITNESS WHEREOF, I hereunto set my hand.

Notary Public



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: September 7, 2021

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: City Flooding / Drainage Issues

The City has experienced a number of large storm events over the summer. Specifically, the City received heavy rains on: July 19 (4 inches), August 19 (approx. 4.5 inches of rain within 1 hr.), August 29 (Tropical Storm Henri 5.5 inches of rain) and September 2 (Tropical Storm Ida 7 inches of rain). Storm Henri did not impact Bristol severely, therefore the following correspondence is focused on the events of July 19, August 19 and September 2.

Flooding is a function of both the quantity (number of inches of rain) and the intensity / rate of rainfall. The storm events of July 19 and August 19 were short-duration, high-intensity events which resulted in the flooding of localized areas where City drainage did not have sufficient capacity to receive or convey storm flows. In contrast, the flooding on September 2 was a function of our major rivers, such as Pequabuck and Coppermine Brook, exceeding their capacity which resulted in direct flooding and water backing up into the City storm drainage system.

As engineers, we often speak of and describe storms in terms of year's frequency of an event. We refer to storms as 100, 50, 25 and 10 year storms. In the State of Connecticut that equates to 7.98, 7.05, 6.20, and 5.05 inches of rainfall. However, it is important to understand that storm event years equate to inches of rainfall over a 24 hour period. Since the intensity of rainfall matters, the 4.5 inches of rainfall on August 19, 2021, over a 1-hour period can create more flooding than a 100-year storm, which is defined as 7.98 inches of rainfall over a 24-hour period. It is also important to understand what a 100, 50, 25 and 10 year storm actually means. A 100-year storm does not mean that it will only occur once every 100 years, rather it means that there is a 1 percent chance that Connecticut will experience 7.98 inches of rain during a 24-hour period EACH year. Likewise, a 50-year storm equates to a 2 percent chance each year, and 25 & 10-year storms equates to a 4 & 10 percent chances respectively, EACH year. It should also be noted, in accordance with City Ordinance 21-119, roadway storm drainage is sized for a 25-year storm event. A number of the City's existing drainage systems predate the ordinance and are much



Department of Public Works | 860.584.6125

smaller. The DOT design drainage manual requires State storm drainage systems to be designed for 10-year storms with culverts sized for a 50- & 100-year storms, depending on the size of the drainage area.

Many residents incorrectly believe that the City owns all the rivers, streams and wetlands located in the City. Through the City's network of roads, drainage easements and City property, we do own a portion of them. However, they are generally owned by private property owners as defined by the property description delineated in their deeds. If there is a stream in the back yard of a property in Bristol, it is generally on private property and the responsibility of the property owner to maintain. That said, work in areas of streams and wetlands does require a permit from the City's Inland Wetland Commission, as designated by the CT DEEP.

When the DPW receives a drainage or flooding complaint, the standard procedure is to contact the property owner to obtain additional information, perform a field inspection, and review available mapping of the area. If the problem is associated with City storm drainage, our first step is to jet and clean the storm lines to ensure that the drainage system is operating as designed. If the problem persists, we video the storm drainage system to confirm there is no blockage. If the problem is due to lack of catch basins on a road within existing storm drainage, we typically add catch basins or storm drainage piping. Resolving storm drainage issues becomes more problematic when there is either no existing storm drainage in the area, a drain pipe is undersized for a long length of roadway, or the receiving stream or waterbody has insufficient capacity to accept the City discharge during storm events. In these cases, formulating a capital project and obtaining BOF appropriation is required. Between procuring funding, developing a design, obtaining environmental permits and bidding, a capital project typically takes 2-3 years prior to the start of construction.

One of the most common storm drainage complaints in the City is roadway storm water entering private property from driveway aprons. The City standard is to have a 1.5 inch lip where the driveway meets the edge of the road. It also requires the entire driveway apron (portion 4 ft. closest to road) to be higher than the road which results in the back of apron being 4 inch higher than the road. In order to prevent road runoff from entering the driveways, DPW often replaces driveway aprons to establish a lip.

A summary of the identified flooding areas which have occurred over the summer is provided below. Please note, they are not in priority or severity of flooding order. In addition, the summary is a preliminary assessment. DPW is still receiving reports, therefore the list may not be complete.



Department of Public Works | 860.584.6125

It may be updated as additional information is obtained and additional engineering analysis is performed.

1. Brace Avenue; Portion of Brace Avenue (south side) from Vera road to Cabot Street: water jumping the curb. They experienced flooding on the July 19 and August 29 storm events (high intensity). DPW jetted and cleaned the storm drainage system. Problem persists. DPW provided sandbags to contain water within roadway. DPW scheduled to confirm piping configuration in area of 106 Brace Ave. The catch basin is adequate. Appears section of storm drainage piping is undersized. Engineering evaluation/capital project may be required to upgrade system to stream west of Vine Road.
2. Vine road / Duncan Street intersection: Standing water /flooding of intersection due to backup/capacity of receiving stream west of Vine Road. DPW to inspect stream located west of Vine Road to Stafford Ave to ensure there are no blockages.
3. Beth Avenue/Hiltbrand Road intersection: Standing water flooding of intersection due to piping in intersection and capacity of receiving stream. DPW jetted / cleaned lines in intersection. DPW will video inspect drainage piping and evaluate pipe sizing.
4. Carolina Road: Area of 65 & 75 Carolina Road experiencing flooding from water entering their property from the road. The garages are lower than the road, therefore water enter the basement. The problem is that there is a large amount of water runoff from the rear of the property located on the east side of Carolina Road that is bypassing storm drainage systems and overloading the City storm drainage which results in water exiting the roadway. DPW has cleaned and jetted the storm drainage system. The problem persist. Grading east of Carolina is difficult to access due to private fencing. DPW recommends a neighborhood meeting to obtain access to rear yards to evaluate grading/drainage. Potential capital improvement project required.
5. Clark Avenue: Approximately 400 ft. north of Terryville Road (Route 72) water from private property (Ross Auto Parts) is eroding the embanking resulting in sediment & runoff entering Clark Avenue. DPW has notified the property owner and as of this writing the property owner has initiated corrective action. If the problem is not resolved, DPW will issue enforcements fines until corrective action is completed.



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6. Balsam Road: DPW has been contacted by property owner indicated that the City storm drainage is clogged. DPW cleaned and jetting the drainage system, however the property owner indicates that the problem persists. DPW expanded the area of storm drainage cleaned to include the interconnection to Hemlock Street and Hemlock Street to Pine Street. In addition, WPC is scheduled to assist DPW with videoing the storm line to confirm that there is no blockage.
7. Hardwick Road: Area of ponding flooding at the intersection of Hardwick Road and Meadowbrook Drive along with the rear of the properties located on the north side of Harwick Road. Both issues are related to the backup of the stream that flows toward Brook Street. DPW will jet & clean the storm drainage system, remove sediment from the Brook Street culvert and inspect the stream for blockages that flows from Brook Street to the Coppermine Brook north of Artisan Street.
8. Louisiana Avenue: The area of Louisiana Avenue at the intersection with John Avenue experienced standing water. The bridge did not overtop. The ponding is a result of City storm drainage at the John Avenue intersection backing up when the water surface of the Coppermine Brook rises and submerges the City outfall. The issue is not pipe capacity of the City's system it is function of the low elevation of the Louisiana Avenue & John Avenue intersection. Correction would require raising the elevation of the intersection that is not practical due to the impact to private property. It should be noted that the City storm drain on the east side of the bridge is also submerged, however the area does not flood due to the higher elevation of the area and storm drain catch basin grates. Louisiana Avenue storm drains have been replaced and the road is scheduled to be paved this September.
9. Trout Brook Road/ Sheffield Road: The intersection of Sheffield Road and Trout Brook Road floods due to the high water surface elevation of the Coppermine Brook. City storm drainage currently discharges directly into the Coppermine Brook and backs up with the Coppermine Brook floods. The City storm drainage previously discharged into a drainage channel that runs in the rear of Trout Brook Road property. The referenced channel has not been maintained by DPW, however DPW will contact property owner to arrange to clear the channel to provide a degree of storage.
10. Frederick Street Bridge: The area initially flooded during tropical storm Ida due to the Pequabuck River overtopping in the area between Andrew Street and the Frederick Bridge. The bridge did not overtop, the area west of the bridge is the low point of the roadway and



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experienced flooding. It has been reported by a property owner that the berm upstream of the bridge overtopped and flooded private property. DPW has provided regular maintenance of the area on the bridge to ensure flow during storm events. The existing debris will be removed along with the sediment under the bridge (Inland Wetland permit required to remove sediment). The property owner did request assistance from the City to pump water out from behind the berm. The City did perform a similar task approximately 16 year ago when the berm broke, however since the area is private property and the berm was not breached City resources were not deployed. A potential project to provide future assistance to the property owner would consist of installing a manually operated drain pipe across the berm that would enable the area to be drained without the use of a pump.

11. 125 East Road: The property of 125 East Road is accessed via a driveway that crosses a large culvert. The downstream headwall of the culvert has failed and will continue to deteriorate. The approximate cost of replacement is \$80,000-110,000. DPW is coordinating with the City's Building Department, Corporation Counsel and ECD to provide assistance to the property owner, however to date the means to facilitate corrective action/assistance is unclear.
12. George Street: In the rear of the properties in the area of 44 George Street a stone walled concrete bottom channel (approx. 5 ft. x 5 ft.) has/is failing. A garage constructed over the channel has been condemned. Repairs are required throughout the channel, therefore corrective repairs performed by a single property owner may not result in a long term sustained solution. Unrepaired upstream sections of the channel may result in water from above flowing behind downgradient channel section causing failure. A review of property records indicate no City easements in the area, the drainage channel in question is private. DPW has scheduled a meeting with a consultant engineer to review evaluate conceptual design solutions. Ultimately any long term solution will require work on multiple properties. Although it is important for DPW not to provide false expectations to residents by implying that the City will perform corrective action or fund work on private property, there is a potential role the City can provide by facilitating a resolution among the multiple property owners. DPW will continue to coordinate action with the Building Department and the City's Corporation Counsel.
13. Litchfield road: The road was paved in 2020 and as a result multiple driveway were impacted (lost driveway lip). Water runoff from the City road is entering driveways. DPW has replaced three driveway aprons. The driveway apron at 44 Litchfield Road requires



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additional work that will be performed the week of September 12. In order to prevent runoff into the referred driveway DPW has provided sandbags. The driveway at 33 Litchfield Rd is also receiving runoff. Due to the low slope (flatness) of the existing driveway the enter driveway is being replaced to obtain positive flow (\$2,200).

14. Divinity Street: The culvert located east of Peck Lane overtopped and eroded the downstream property (316 Divinity Street). The culvert is currently in the design phase of a project to replace the culvert. The erosion occurred on private property and is not the type of repairs performed by DPW. The property owner has obtained an estimate of \$10,500 from the same contractor that performs City storm drainage work Tabacco & Sons. In order for DPW to proceed with the culvert replacement project an easement from the property owner on the impacted area is required, therefore consideration should be made to cover repair cost subject to acquisition of an drainage easement.
15. Broad Street/ Todd Street intersection: The area of the Broad Street / Todd Street intersection floods. The flooding occurs when City storm drainage backs up due to a high water surface elevation of the Pequabuck River. Since the catch basin grate elevations on Crowley Auto are lower than the Todd Street storm drainage water exist the City's system and flows into Crowley / Broad Street and the Pequabuck River (as water recedes).
16. Middle Street / Riverside Ave: The intersection of Riverside Avenue and Middle Street flooded. It is a state roadway and DPW is currently contact the State to obtain additional information and potential DOT corrective action.
17. King Street / Page Park Road & Bristol Eastern entrance: King Street is a State Road and is not maintained by the DPW, however flooding occurs due to the capacity of the downstream culvert and stream that crosses Bristol Eastern. DPW will inspect the stream from Bristol Eastern to Carpenter Ave/ Stonecrest Drive & West Washington for blockages, however the depth of the King Street roadway flooding can be reduced if the area on Bristol Eastern is excavated/lowered behind the sidewalk approximately 12 inches. Lower the grade behind the sidewalk will result in flooding of the adjacent athletic fields but is critical to maintaining vehicle passage along King Street. The roadway is currently unpassable and as the Route 6 closes due to flooding the closing of this section of King St effectively prevent a detour from Route 6 to route 72.



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18. Royal Drive / Chippanee Golf Course: Properties along the north side of Royal Drive receive runoff from Chippanee Golf Course (10th hole). Chippanee has performed corrective work in the area, replacing approx. 300 lf of piping & installed sandbags along Royal Drive. Although the referenced action has been performed additional work is required to prevent the runoff. The golf course area continue to drain to the pond area south of the 10th green and there appears to be insufficient capacity of the drainage system/piping to convey required flow to the pond located on the 11th hole. An engineering evaluation by Chippanee is required to confirm determine and size system. The IWC has contact Chippanee and has schedule a special wetland meeting on 9/15/21 to address the issue. DPW is coordinating with Building Department (Property Maintenance Ordinance) and Corporation Counsel to pursue corrective action.
19. Chippenwood Lane / Chippanee Golf Course: The properties at the eastern end of Chippenwood Lane receive runoff from Chippanee Golf Course. The drainage channel that discharges from the 11th hole pond runs along the eastern properties of Chippenwood Lane properties. The drainage channel in area has silted in and appears to have insufficient capacity to convey flow to the north. As a result storm water jumps the channel and flows into the Chippenwood lane properties. The drainage channel is on Chippanee property and corrective action would appear to consist of removing sediments/ excavating channel to provide original capacity. An engineering evaluation by Chippanee is required to confirm determine and size channel. The IWC has contact Chippanee and has schedule a special wetland meeting on 9/15/21 to address the issue. DPW is coordinating with Building Department (Property Maintenance Ordinance) and Corporation Counsel to pursue corrective action.
20. East Main Street: The north side of East Main Street from Lincoln Avenue to the town line flooded. The Pequabuck River overflowed and resulted in 28 residents being evacuated. DPW is scheduling a meeting with Police, Fire and Emergency Management to obtain additional information and coordinate resources for future events.
21. James Street: The culvert at the end of James Street was blocked during the August 19 storm by debris. The stream jumped the river embankment, crossed James Street flooded three James Street properties before the flow returned to the stream. DPW cleared the debris and cleaned the road. The culvert pipe section are metal corrugated and sections have failed. The property owner has made repairs. DPW will continue to monitor.



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22. Stonecrest Drive: The area of Stonecrest Drive adjacent to Sheriden Woods flooded due to the capacity of the downstream channel. DPW Engineering will inspect the area from Stonecrest to West Washington for blockages and DPW Street Division is scheduled to remove sediment in the area of the culvert.
23. Lake Avenue Culvert: The property owner of 706 Lake Avenue contacted DPW indicating that the condition of culvert has resulted in damage to his property. Based on a preliminary evaluation the property of 706 Lake Ave is approx. 100 ft. upstream of the City culvert and it appears water will overtop the culvert prior to backing up on the subject property. However the property owner is experiencing extensive flooding. The stream located on the property of 706 Lake Ave has silted up in areas and water jumps the stream around a bend upgrade of the house. As a result it appears water from the stream flow between the house and the garage during large flows. The flow erodes portions of the subject property and appears to flow into Lake Avenue where it enters the City storm drainage system (does not cross Lake Ave). The stream is on private property and requires an Engineer to evaluate capacity and corrective action, however the property owner has stated that he does not have the financial means to take corrective action. In addition the potential damage to the private property there is also a potential of damage to Lake Ave due to the redirected stream. DPW will be coordinating with the City's Building Department, Corporation Counsel and ECD to provide assistance to the property owner, however to date the means to facilitate corrective action/assistance is unclear.
24. DPW landfill: An area of DPW's landfill along the northern section adjacent to Covanta eroded during the 9/2/21 storm. A section of the liner is exposed. A project to repair the erosion in areas throughout the landfill is currently being designed by the engineering firm of Fuss and O'Neil Inc. They will advised DPW on the proposed recommended corrective action.
25. Glenn Street: The southern gutter of Glenn Street was eroded. DPW will be repairing the roadway (filling with surge stone), however additional investigation is required to control up gradient water flow. The water eroding Glenn Street is bypassing the stream that discharges to 706 Lake Ave.
26. Battle Street: Multiple properties on Battle Street south of Hill Street access their property via drainage culverts. The culverts are private. A number of the culverts eroded during the



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9/2/21 storm. It appears that property owners are making repairs and DPW has not been contacted regarding this issue.

27. Minor St: The gravel portion of Minor Street adjacent to Richie's ice cream eroded along the northern gutter line. DPW is regrading the road and is scheduled to pave the roadway section with funding obtained from the solar farm.
28. Mix St: The area of Mix Street / Farmington Avenue and Coventry flooded during the 9/2/21 storm. Farmington Ave was closed to traffic. Flooding was a result of the high water surface elevation of the Coppermine Brook. The area of Coventry and Tolland flooded, not as a result of City piping having insufficient capacity rather flooding occurred due to the low elevation of the area (water back upped from the Coppermine Brook). This section of river was the focus of the Coppermine Brook study prepared by MMI. They investigated several project to improve conditions such as the creation of upstream detention area, removal of the private bridge at Harbor Freight and channel improvements along the river upstream of Farmington Avenue, however none of the project where determined to be feasible and effective in reducing flooding.
29. 595 King Street: The referenced property is receiving runoff from Page Park. There is an up gradient drainage channel that run along the western property lines of the Marilyn Drive houses and crosses the old ski slope. The flow through the swale was shorts circuiting and a portion of the runoff flows towards the property of 595 King Street. Based on an on-site meeting, the Park Department will perform repairs to the existing swale/piping system to facilitate diversion of runoff across the old sky slope. However, the northern end of Marilyn Drive and the down gradient area between the swale and the 595 King Street will flow to the property. The option of installing an addition diversion channel closer to the King St property does not appear viable due to the grade south of play scape, need to remove trees and the need to direct additional water to the State's drainage system. One potential option is to fill the existing swale that directs flow to 595 King Street, however that would require work within an existing tree area that will limit use of equipment.
30. Jerome Avenue: The home at 396 Jerome Avenue (in floodplain) immediately south of Willow Brook Road experiences regular flooding into structure. The City is investigating options to assist the homeowner.



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31. Hopmeadow Road: 199 Hopmeadow Road experienced rising stream waters. DPW will investigate downstream culvert condition for maintenance.
32. Perkins Street: Property owners at 135 Perkins Street and 120 Perkins Street (west and east of the street culvert) complained about excessive water, high stream velocities and erosion. The City has inspected the properties and culvert, as well as the upstream pond system.
33. Sonstrom Road: The property owner at 280 Sonstrom Road indicated there was flooding in the rear lot. A private system traversing the neighbor's rear lot to the City's catch basin has not been maintained. The City's storm drain system appears to be draining properly.
34. Burlington Avenue: The property owner at 1192 Burlington Avenue (two lots north of Shrub Road on the east side of the state road) is looking for assistance for storm relief. DPW will investigate whether there is information on possible storm drain connection/state referral option.
35. 67 Gregory Place: Property owner is experiencing erosion in rear lot/possible blockage of pipe. Property owner has been granted approval for stream erosion improvements. Downstream culvert may need maintenance. PW to investigate maintenance responsibility of pipe, as the rear lot stream is privately maintained.

The summary provided above does not include the names of property owners, however each flooding issue has impacted residents. Although we speak of storm frequency and flooding events occurring once every 3-5 years, I have noticed over my 20-plus years with the City the emotional impact that flooding has on property owners. In addition to the work they are required to perform cleaning up after a storm they also experience a degree of stress each time it rains, not knowing if it will result in flooding. That said, although DPW can address multiply projects at one time, as Director it is important that Department resources are allocated to maximize public benefit. Therefore, flooding is addressed along the following priorities:

1. Flooding of public infrastructure/roadways entering private property (homes/buildings)
2. Flooding of private property entering/impacting public infrastructure/roadways
3. Flooding of private property impacting multiply private properties
4. Flooding of private property impacting single property

Please feel free to contact me with any question at 860-584-6113.

City of Bristol
Public Work Department
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October 12, 2021

Raymond A Rogozinski, P.E.
Director of Public Works
City of Bristol Public Works Department
111 North Main Street
Bristol, CT 06010

Re: Flood Assistance
Reference Number 1003.001

Dear Mr. Rogozinski:

Resilient Land And Water, LLC (“Resilient Land & Water”) has developed the subject memorandum to describe appropriate sources of aid or support for residents that have suffered various types of flood damage, from riverine flooding (i.e., the Pequabuck River) to flooding caused by overwhelmed drainage systems.

Situation

Connecticut was adversely affected by several flood events that occurred in summer 2021. Specifically, flood events occurred on the following dates:

- T.S. Elsa - July 9, 2021
- T.S. Fred - August 19, 2021
- T.S. Henri - August 22-23, 2021
- T.D. Ida - September 1, 2021

However, not all four events caused damage in Bristol. Based on various reports, the rainfall associated with Storm Ida was the most damaging event in Bristol in summer 2021. According to the City, the type of damaged typically experienced in Bristol is nonstructural and often does not exceed 50% value of the house. Damage could include the following:

- Flooding of basements from surface water
- Damage to stored materials in basements
- Damage requiring replacement of HVAC equipment in basement
- Basement flooding due to groundwater
- Basement flooding due to sewage backups
- Sewage backup into first floor living area
- Trees down on property
- Flooding of yards with or without erosion
- Flooding within first floor that damages contents but not the structure
- Damage to culverts that are in place to facilitate to access property/house (such as a driveway culvert)

Although the City has undertaken considerable steps to address methods of reducing flood damage by evaluating improvements in the Pequabuck River and Coppermine Brook watersheds, intense rain events nevertheless can cause flooding. Residents and business owners have reportedly requested information about how to receive financial assistance to address recent damage and minimize future flood damage. However, the appropriate sources of aid or support can often be difficult to identify.

Types of Assistance

Flood Insurance

Flood insurance can be purchased from the National Flood Insurance Program (NFIP) either directly, or through a variety of insurance companies. The Federal government has financial responsibility for underwriting losses. Flood insurance is available anywhere in a community – in or out of mapped floodplains – and changes in the NFIP (“Risk Rating 2.0”¹) will soon result in new calculations of premiums based on a number of factors.

The maximum limits of coverage available for a residence is \$250,000 for the building and \$100,000 for contents. Specific items covered can be researched in FEMA’s resources related to flood insurance². A property with a mortgage is required to carry flood insurance, as the insurance helps the lender protect its investment. The amount of coverage is determined by the lender, and whether the coverage includes the building or contents is also determined by the lender. If a mortgage has been paid, a property owner can drop flood insurance. However, carrying flood insurance is often advisable given the protections provided.

Damage from mold and/or mildew resulting from the after-effects of a flood is typically covered by flood insurance, but each case is evaluated on an individual basis. Mold/mildew conditions that existed prior to a flooding event are not covered. After a flood, the policyholder is responsible for taking reasonable and appropriate mitigation actions to eliminate mold and mildew.

Flood insurance does not cover basement improvements or items that are not necessary to make the home safe, sanitary, and functional. In other words, items in the basement that are *not* covered include carpeting, finished walls, floors, ceilings, furniture, or personal belongings that are kept in the basement. Necessary items are included under building coverage and some under contents coverage.

NFIP figures for a community are available from FEMA. According to the NFIP profile dated August 31, 2021, Bristol hosts 137 flood insurance policies. Total coverage is \$28,937,800 and the total annual premiums paid was \$272,604.

A total of 213 flood losses have been paid in Bristol. This is not the number of properties; some properties have filed multiple losses, so the number of properties with losses is lower than 213. However, the breakdown is not visible in the data table. Furthermore, the dates of payment are not provided by FEMA in the data table. To date, the total payout for losses in Bristol is \$3,573,886. This equates to an average payout of \$16,779 per loss.

¹ <https://www.fema.gov/flood-insurance/risk-rating>

² <https://www.floodsmart.gov/how/what-is-covered>

The former CCRPA Hazard Mitigation Plan (2016) reported that 32 repetitive loss properties were located in Bristol, with a total of 95 losses adding to \$1,594,955. Neglecting changes over the last five years, this demonstrates that losses submitted for repetitive loss properties are about 45% of total losses in Bristol whether calculated from the number of claims (95/213) or when calculated from the losses paid (\$1,594,955/\$3,573,886).

The NVCOG Hazard Mitigation Plan (2021) notes that the City reports 32 RL properties whereas FEMA's list from 2018 reports 26 RL properties. The discrepancy can be cleared up as needed by the City's floodplain manager through the completion of specific forms issued by FEMA to the City.

While the flood loss profiles for Bristol are not insignificant, the data shows that only a very small percentage of properties in the city (137 properties out of thousands) are carrying flood insurance and claiming losses to be paid under the NFIP.

- ***Recommendation #1: Given that flood insurance is the first line of defense in assisting property owners and residents with responding to flood damage, the City should promote a wider purchase of flood insurance.***

Homeowners Insurance

Flood damage is not covered by homeowners insurance policies. In this context, a flood is defined as water affecting more than one property where the ground surface is normally not submerged³. Examples could include an overflowing stream or river, a rapidly expanding pool of water along a road that cannot drain quickly, or sheet flow downhill along a slope into nearby basements.

Some flood coverage can be provided as part of some renters' insurance policies (i.e., USAA), but this is not standard practice and ultimately would not apply to property owners. Additionally, some types of water damage can be covered by homeowners insurance policies, such as a broken pipe, sewage backup, or sump pump failure. The specific details will vary, and a property owner should become familiar with the terms of his or her policy.

- ***Recommendation #2: Property owners should contact their homeowners insurance companies to inquire about add-on coverages such as sump pump failure.***

Not Covered by Insurance

If a flood occurs and adversely impacts a building that is insured with flood insurance, the owner may be able to claim a loss and seek reimbursement for damage to the building or contents. If a building is not insured with flood insurance, the owner cannot seek reimbursement for damage to the building or contents using homeowners insurance. In both cases – *with or without flood insurance* – damage to

³ The National Flood Insurance Program (NFIP) defines a flood as "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is the policyholder's property)"

property outside the building such as landscaping, a driveway, or a vehicle is not covered by insurance. However, flood damage to passenger vehicles is sometimes covered by auto insurance.

- ***Recommendation #3: Property owners should contact their auto insurance companies to inquire about covering flood damage to vehicles.***

FEMA Public Assistance (PA)

PA funding is available to municipalities when expenses are incurred during an event that is later declared a major disaster. If a severe event affects Connecticut and the declaration of a disaster is made, FEMA will specify which counties are eligible for PA reimbursement. If Hartford County is part of the region covered by PA, Bristol can participate. In order to obtain reimbursement under the PA program, the City of Bristol will need to compile detailed records of costs such as cleaning up trees after a wind event or repairing a washed-out road after a flood event.

Reimbursement for private property damage is not available from PA. Community costs are typically divided into the following categories allowed by FEMA:

- Emergency Work:
 - Category A: Debris removal
 - Category B: Emergency protective measures
- Permanent Work:
 - Category C: Roads and bridges
 - Category D: Water control facilities
 - Category E: Public buildings and contents
 - Category F: Public utilities
 - Category G: Parks, recreational, and other facilities

Perhaps of significant interest in Bristol, FEMA may determine that certain emergency protective measures conducted on private property are eligible under the PA Program if:

- The immediate threat is widespread, affecting numerous homes and businesses such that it is a threat to the health and safety of the general public;
- The municipality has legal authority to perform the work; and
- The municipality obtained rights-of-entry and agreements to indemnify and hold harmless the Federal government.

Situations where this may occur are generally limited to:

- Demolition of unsafe private structures that endanger the public
- Installation of fiber-reinforced sheeting to cover damaged roofs
- Provision of emergency access
- Pumping of flooded basements
- Pumping of septic tanks or decontamination of wells causing a pollution threat
- Residential electric meter repair
- Safety inspections

- Stabilizing a slope

The fourth item, pumping of flooded basements, is potentially a suitable tool that the City of Bristol can use to assist property owners will mitigating damage from floods.

We recommend that the City evaluate this possibility in the short-term. To be successful in reimbursement under PA, the City must include the following support documentation: a detailed explanation documenting the City's legal authority and responsibility to enter private property; the basis for the determination that a threat exists to the general public; and copies of the rights-of-entry and agreements to indemnify and hold harmless the Federal government. If the rights-of-entry and agreements to indemnify and hold harmless take time to develop, the City should begin looking into this soon, so they may be in place before the next severe storm.

- ***Recommendation #4: Take steps to ensure that pumping of flooded basements is eligible for PA reimbursement if a disaster is later declared.***

FEMA Individual Assistance (IA)

IA funding is available to properties owners in municipalities when exceptional individual expenses are incurred during an event that is later declared a major disaster. If a disaster affects Connecticut, FEMA will specify which counties are eligible for IA reimbursement. If Hartford County is part of the region covered by IA, Bristol individuals can participate. Unfortunately, IA is not a typical outcome for a flood disaster in Connecticut. Consider the following:

- The State's most recent disaster declaration for a flood (for the events of September 25, 2018) *did not include IA eligibility anywhere in the State*. Furthermore, Hartford County was not eligible for PA reimbursement for this event.
- Hurricane Sandy was the last time IA was available in Connecticut, but Hartford County was not included as an eligible area.

The last three flood events that resulted in the availability of IA in Hartford County were:

- T.S. Irene, DR-4023-CT, August 2011
- Nor'easter, DR-1700-CT, April 2007
- T.S. Floyd, DR-1302-CT, August 1999

More than ten years have passed since IA was available in Hartford County and, therefore, in Bristol. This demonstrates that long periods of time may occur between floods that are sufficiently severe for FEMA to make IA possible.

The specific types of assistance under the IA program are found within the following broad categories:

- Mass Care/Emergency Services
- Individuals and Households Program (IHP)
- Disaster Case Management
- Crisis Counseling Assistance and Training Program

- Disaster Legal Services
- Disaster Unemployment Assistance
- Voluntary Agency Coordination

We will focus here on IHP because that is the category typically employed in Connecticut during the rare occurrences that IA has been available, and is also the category that includes reimbursement for repairs. FEMA is clear in its statements that “IHP assistance is not a substitute for insurance and cannot compensate for all losses.” IHP assistance comprises two provisions: Housing Assistance and Other Needs Assistance (ONA):

- Housing Assistance may be provided in the form of financial assistance (funds provided to an applicant) or direct assistance (housing provided to the applicant by FEMA). Examples of financial assistance include lodging reimbursement, rental assistance, home repair assistance, and home replacement assistance. *The most important factor to understand is that the housing assistance part of IHP is for home repair services. This can include the foundation, walls, windows, roofing, heating systems, and utilities but will not fencing or landscaping.* In some cases, Housing Assistance may include access and egress, including privately-owned roads and bridges. This is a potentially intriguing use of IA, as flood insurance and homeowners insurance do not cover driveways. However, a person should never assume that IA will be available for access-related repairs.
- The ONA provision of the IHP provides financial assistance for disaster-related necessary expenses and needs that are not covered by insurance or provided by any other source. Some covered expenses are funeral assistance, medical assistance, childcare, assistance for moving, and assistance for cleaning. Personal property assistance is available if Small Business Administration (SBA) coverage does help (see Page 8 for more about SBA). Personal property assistance can help pay for things like appliances and bedding, but only for mobility-impaired residents. In general, ONA is rarely used and only nominally helpful in Bristol as presented below.

IA figures for the City of Bristol were accessed from the following FEMA data sets⁴:

- Housing Assistance Program Data for Owners
- Housing Assistance Program Data for Renters
- Registration Intake and Individuals Household Program

According to these data sets, the nor’easter of April 2007 resulted in 45 individual registrations in Bristol. A figure of \$27,078 was approved for the IHP, split into a figure of \$26,585 for Housing Assistance and a figure of \$492 for ONA. Renters’ assistance was *not* approved through IA for the April 2007 nor’easter. Without further details about how reimbursements were used, only broad conclusions can be made about the levels of individual assistance that each property may have obtained. Dividing \$27,078 by 45 properties, the amount per property averages \$602. This is significantly lower than the averages discussed on Page 2-3 for flood insurance payouts.

Detailed data were also available for T.S. Irene of August 2011. Approximately 115 owners were approved for \$434,416 in total damage, and 16 renters were approved for \$29,709 in total damage. The breakdown for Housing Assistance and ONA was not available for T.S. Irene as it was for the nor’easter

⁴ Data were not available for floods prior to the early 2000s.

of April 2007. Without details available, only broad conclusions can be made about the levels of individual assistance that each property may have obtained. Dividing \$434,416 by 115 owner-occupied properties, the amount per property averages \$3,778. While the per-property average after T.S. Irene is certainly larger than the \$602 per property after the nor'easter of April 2007, neither figure is significant relative to replacement of walls, floors, heating equipment, etc.; and they are significantly lower than the averages discussed on Page 2-3 for flood insurance payouts. Turning to the rental payouts, and dividing \$29,709 by 16 renters, the reimbursement per applicant is about \$1,800; this probably covers only a couple months of rent.

The bottom line regarding the IA reimbursements in the City of Bristol after the flood events of 2007 and 2011 is that they were likely much lower than the flood insurance reimbursements received by neighbors who carried flood insurance.

- ***Recommendation #5: Given that flood insurance can be accessed more frequently than IA reimbursements and tends to result in higher reimbursement, the City should promote a wider purchase of flood insurance (this is the same as Recommendation #1).***

In order to help the State of Connecticut facilitate eligibility under the IA program, a municipality such as Bristol must compile detailed records about specific private property damages. These records are then sent to DEMHS to aggregate with other communities and build a case for IA assistance in the affected counties. At the same time, DEMHS may conduct its own damage assessments. This is reportedly occurring in October 2021 to help determine whether IA should be available for the flood following T.S. Ida.

Increased Cost of Compliance (ICC)

ICC is available to property owners that have flood insurance. If a property owner receives a determination from the City's floodplain administrator that the home or building is substantially or repetitively damaged, the owner (flood insurance policy holder) may file a claim for ICC coverage. A policyholder may receive up to \$30,000 to help offset the costs to bring a home or business into compliance with floodplain management ordinance or regulations through elevation, floodproofing, etc.

- ***Recommendation #6: The City's floodplain manager should work with owners of damaged property to address ICC on a case-by-case basis, since the substantial damage threshold is likely not reached during most flood events.***

Commercial Flood Insurance and Business Interruption Insurance

Damage from flooding typically is not covered under a standard commercial insurance policy for a business. Some *private* insurance companies offer commercial flood insurance to small and medium-sized business owners and commercial buildings. Typical private flood insurance policies include the coverages offered by the NFIP with the additional option of business interruption coverage. With business interruption coverage, a business can be covered up to a maximum payout or reimbursement based on a set rate (\$ per day) for up to a maximum number of days.

Flood damage to vehicles owned by a business and used for business purposes would typically be covered by the vehicle insurance policies, as explained above for residential vehicles.

- ***Recommendation #7: The City's business outreach teams (i.e., a chamber of commerce and/or the Economic and Community Development Department) should be prepared to provide information about private insurance companies that can be contacted to purchase insurance.***

Small Business Administration (SBA) Disaster Loans

Businesses located in declared disaster areas, private nonprofit organizations, homeowners, and renters affected by declared disasters may be eligible for SBA loans. Loans can be used for losses not covered by insurance or FEMA IA. Losses can include physical damage or business interruption. As with PA and IA, the eligibility is tied to a declared disaster. A property must be in a declared disaster area to be eligible for SBA disaster assistance.

Homeowners may apply for up to \$200,000 to replace or repair a primary residence. Renters and homeowners may borrow up to \$40,000 to replace or repair personal property such as clothing, furniture, cars, and appliances. An important point is that proceeds from insurance coverage on a home or property will be deducted from the total damage estimate to determine the eligible loan amount. In other words, SBA loans are used for expenses in excess of flood insurance and other insurance reimbursements.

SBA can issue physical disaster loans of up to \$2 million to qualified businesses or most private nonprofit organizations. These loan proceeds may be used for the repair or replacement of real property, machinery and equipment, fixtures, and inventory. Like the homeowner assistance described in the preceding paragraph, the SBA Business Physical Disaster Loan covers disaster losses that are not fully covered by insurance.

- ***Recommendation #8: The City's outreach teams (i.e., the floodplain manager and the Economic and Community Development Department) should be prepared to provide information about SBA loans if a disaster declaration is activated.***

State Funds and Programs Available to Avoid Future Flood Damage

Two types of approaches are generally available to avoid future damages: developing capacity for response and securing funds to develop and administer programs to reduce future flooding. The following are ideas for future consideration.

- Response mechanisms to have in place prior to a flood could include acquiring more pump-out vehicles and securing mutual assistance MOUs to get help from other communities and/or organizations. If response can be deployed rapidly and across a wider area, then the duration of exposure of building materials and contents to water can be shortened, perhaps reducing the cost to recover. Various state and federal grant programs can be accessed for pump-out vehicles, such as the Assistance to Firefighters grant program administered by FEMA.

- The development of programs to pay for flood control and mitigation is currently receiving increased attention in the State of Connecticut. The State has taken an interest in the capacities of Flood and Erosion Control Boards, and has set aside resources to help set up stormwater utilities in Connecticut municipalities. The City of New London has recently implemented a stormwater utility that will collect fees from property owners and pay for stormwater management improvements that can reduce flooding caused by impaired or overwhelmed drainage systems. The Connecticut Institute for Resilience and Climate Adaptation (CIRCA) plans to administer a municipal assistance grant program in 2022 to help municipalities get started with stormwater utilities.

Summary

The following table provides a summary of coverage for each of the types of damage listed on Page 1.

Item	Coverage or Reimbursement Possible?					
	Flood Insurance	Homeowners Insurance	Commercial/ Business Insurance	FEMA PA*	FEMA IA*	SBA*
Flooding of basements from surface water	Yes	No	Yes, if included in a private policy	No	Yes	Yes
City's efforts to pump water from basements	No	No	No	Yes	No	No
Damage to stored materials in basements	No	No	Yes, if included in a private policy	No	No	Yes
Damage requiring replacement of HVAC equipment in basement	Yes	No	Yes, if included in a private policy	No	Yes	Yes
Basement flooding due to groundwater	Yes, if related to the flood event	No	Yes, if included in a private policy	No	Yes, if related to the flood event	Yes, if related to the flood event
Basement flooding due to sewage backups	Yes, if related to the flood event	Yes, if <i>not</i> related to a flood event	Yes, if included in a private policy	No	Yes, if related to the flood event	Yes, if related to the flood event
Sewage backup into first floor living area	Yes, if related to the flood event	Yes, if <i>not</i> related to a flood event	Yes, if included in a private policy	No	Yes, if related to the flood event	Yes, if related to the flood event
Trees down on property	No	Yes, depending on damage	Yes, if included in a private policy	No	No	No
Flooding of yards with or without erosion	No	No	Yes, if included in a private policy	No	No	No

Item	<i>Coverage or Reimbursement Possible?</i>					
	Flood Insurance	Homeowners Insurance	Commercial/ Business Insurance	FEMA PA*	FEMA IA*	SBA*
Flooding within first floor that damages contents but not the structure	Yes	No	Yes, if included in a private policy	No	Yes	Yes
Damage to culverts that are in place to facilitate to access property/house (such as a driveway culvert)	No	No	Yes, if included in a private policy	Depends on ownership and location	Possibly, if approved	No

*Disaster declaration is needed for IA, PA, and SBA

In summary, the approach to reducing and addressing flood damage may be complex and require a multi-faceted approach. At a minimum, the City should promote more widespread purchase of flood insurance, as the reimbursements from flood insurance will tend to exceed reimbursements from the FEMA IA program; and are not merely loans like the SBA programs.

Please contact the undersigned if you have any questions.

Sincerely,



David Murphy, P.E, Certified Floodplain Manager (CFM)



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works
Flood Erosion Control Board

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: **Flood Erosion Control Board – Frederick St Sediment Removal**

The Department of Public Works has procured the services of D'Amato Construction to remove sediment that have accumulated beneath the Frederick Street Bridge. The cost of the work is \$13,730, and completion is scheduled for May 14, 2026.

Due to the required dewatering operations, the work could not be performed by Department forces. Photographs of the current sediment accumulation beneath the Frederick Street Bridge are attached for reference purposes.

The Department will also be removing sediment from the Louisiana Avenue Bridge. This work, estimated to cost \$13,730, is scheduled to be performed in the fall of 2026. Photographs of the current sediment accumulation in the area of the Louisiana Avenue Bridge are also attached.

The removal of sediment from the Frederick St Bridge was prioritized over the Louisiana St Bridge due to the fact that Frederick St is downstream of Louisiana. As a result, sediment at the Frederick St bridge adversely affect a larger watershed.

No action by the Board of Public Works is required. This information is being provided to the Board of Public Works, acting as the Flood Erosion Control Board, for record purposes only.

Please feel free to contact me at 860-584-6113 with any questions.

City of Bristol
Public Work Department
111 North Main Street
Bristol, CT 06010
www.bristolct.gov

Raymond Rogozinski

From: Raymond Rogozinski
Sent: Tuesday, May 12, 2026 9:03 AM
To: Raymond Rogozinski



FREDERICK ST BRIDGE
SEDIMENT



Sent from my iPhone

LOUISIANA ST
BRIDGE

SEDIMENT



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: DPW Transfer Station Recycling Building Fire

There was a fire at the City's Recycling Material Processing Building located at the City Transfer Station on April 29, 2026. The building is a 58-foot by 90-foot structural steel facility with corrugated metal siding and roofing and an approximate height of 30 feet. The building has no power, water, or sanitary service connections. It was constructed in 2016 and is used by the Department of Public Works (DPW) for the temporary storage and loading of single-stream curbside recycling materials collected throughout the City.

DPW recycling trucks deposit collected recycling material into the building, where it is loaded into large roll-off containers for transport to Murphy Road Recycling, LLC in Hartford, Connecticut. At that facility, the single-stream recycling is processed and separated into individual recyclable commodities for resale.

The fire began at approximately 1:30 PM on April 29, 2026, at the facility located at 685 Lake Avenue. DPW personnel on site observed the fire and immediately contacted 911 to request Fire Department assistance. The Bristol Fire Department arrived within minutes and initiated fire suppression operations. Fire Department operations concluded at approximately 8:30 PM that evening.

During the incident, Connecticut DEEP emergency response personnel inspected the site and expressed no concerns or requests for corrective action.

A link to video footage of the fire is provided below (Image 4876)

[Document Center • Bristol, CT • CivicEngage](#)

Following the fire, the Department of Public Works commissioned a structural engineering evaluation of the building. As indicated in the attached report, the structural engineer determined that the primary structural framing and supports were not compromised and that the building could

safely be returned to service. The report did identify damage to secondary structural members, corrugated metal wall panels, roof panels and the need to repaint structural members.

The building was returned to DPW operational use on May 5, 2026, and is currently functioning in the same capacity as prior to the fire. During the temporary closure, DPW recycling collection vehicles transported recyclable material directly to the Murphy Road Recycling facility in Hartford. No additional overtime costs were incurred during this period.

The facility also receives municipally collected recycling from the Town of Wolcott for a fee. That service continued uninterrupted, with materials loaded into roll-off containers and transported to Murphy Road Recycling, LLC. The City of Bristol continued billing the Town of Wolcott accordingly.

Site cleanup was performed by DPW personnel. The partially burned recycling material (207 tons) was removed from the building and transported to Reworld Inc. for disposal as municipal solid waste. The disposal cost at Reworld (\$77.48 per ton) was lower than the recycling processing cost at Murphy Road LLC (\$99.51 per ton); therefore, there was no increase in solid waste disposal or processing costs.

Links to post-fire videos and photographs of the building are provided below:

https://www.bristolct.gov/DocumentCenter/View/51685/20260504_074440 video

<https://www.bristolct.gov/DocumentCenter/Index/788> photos

The Department also contacted the City’s property insurance carrier, Travelers Insurance, regarding the fire. A property adjuster conducted a site inspection and is expected to provide a repair cost estimate within approximately three weeks. The estimate will represent the costs necessary to restore the building to its pre-fire condition and will include both labor and material costs, as well as applicable depreciation calculations from the original construction date in 2016.

The City’s insurance reimbursement from Travelers will consist of the total eligible repair costs, including recoverable depreciation, less the City’s \$50,000 deductible for fire damage coverage.

The following example illustrates the potential insurance reimbursement calculation:

Description	Amount
Estimated building repair costs (labor and materials)	\$200,000
Building depreciation recovery	\$30,000
Less City deductible	(\$50,000)
Estimated total insurance reimbursement	\$180,000

If the building is not fully restored to its pre-fire condition, the City will not receive reimbursement for depreciation. In that case, the estimated insurance payment would be approximately \$150,000 before consideration of any additional adjustments.

Please note that these figures are preliminary estimates only. Final reimbursement amounts will be based on the insurance company’s formal estimate and subsequent verification by the City. Any repair work exceeding \$25,000 will be publicly bid in accordance with City purchasing requirements.



Department of Public Works | 860.584.6125

It is the intent of the Department of Public Works to restore the building to its pre-fire condition. However, certain cosmetic items, such as repainting siding or cleaning concrete surfaces, may not be necessary for operational purposes. Several corrugated metal siding sections are missing and must be replaced to restore full operational functionality of the building. The estimated cost for this work is approximately \$25,000 to \$30,000.

Please feel free to contact me with any questions at 860-584-6113.

MEMORANDUM

Attention: Raymond Rogozinski, PE
Director of Public Works, City of Bristol (City)

From: Dennis M. Quinit, PE
Lead Structural Engineer, Project Manager

Copy: W. Stango (City of Bristol)
A. Chakraborty (KSE)

Date: May 4, 2026

Project: Recycling Center Fire Damage
Transfer Station, 685 Lake Ave
Bristol, Stamford, Connecticut
KSE Project No. 2023-2660

Subject: Emergency Inspection and Structural Condition Assessment of Recycling Center

Introduction

A fire ignited inside the recycling center processing building on the morning of Thursday April 30, 2026, which was eventually suppressed later that day. The recycling center is within the compound of the Transfer Station, which is located at 685 Lake Avenue, Bristol, Connecticut.

Due to safety concerns resulting from potential structural damage to the building caused by the fire, the City of Bristol (City) wanted a structural condition assessment of the building before resuming their recycling operation. Subsequently, the City directed KS Engineers, PC (KSE) to perform an emergency visual inspection and to structurally assess the building's current condition. On Friday May 1, 2026, KSE performed an emergency visual inspection of the building's primary and secondary structural components. Accordingly, the inspection focused on the following:

- Structural steel portal frames including connections,
- Roof framing system,
- Siding framing system

Additionally, this task also observed and assessed the conditions of bolted and welded connections, conditions of lateral bracing cables, presence or signs of deformations / deflections and warping of structural steel members that might have been caused by excessive heat from the fire, and signs of structural distress. The objective of this task is to evaluate the building's structural integrity and to determine whether the building is still structurally sound to serve its intended purpose. This task also notes observed deteriorations and provides recommendations for repairs and/or rehabilitation that could be performed to extend its service life and to provide a structurally sound and safe facility.

The following components were not inspected:

- Roofing,
- Sidings, and
- Foundations

The results of KSE's field observations indicate that the building is in fair to satisfactory condition.

Accordingly, recommended repairs are provided in the “Recommendations for Rehabilitation” section of this memorandum. Additionally, recommendations were also provided for repair and rehabilitation work on other components that would maintain if not improve the structural integrity of the building and extend its service life.

Building Description

The recycling center building is a 60' x 90' x 31.5' high single-story steel-framed structure that is situated within the City's Transfer Station compound. The building's main framing system consists of two main interior portal frames and two exterior steel frames. The roof purlins consist of Z-shaped structural steel spanning from one portal frame to the other and supporting a steel roofing. The siding framing system consists of similar framing members as the roof. The structural steel portal frames and the structural steel roof framing system are considered primary structural members while the steel siding framing system are considered secondary members. The portal frames are laterally braced with diagonal wire bracing system. The bridge is generally oriented longitudinally along the east-west direction with its front entrance on the north side.

Field Observations

Structural Steel Portal Frames (Condition Rating = 6, Satisfactory Condition): The two main interior structural steel portal frames appear to be in satisfactory to good condition for the most part. They are generally and structurally unaffected by the fire. The crest section of the portal frames exhibits some discoloration, which is attributed to soot from the fire directly below it. No signs of member warping and/or deformations were observed, and no sign of yielding or large deflections that might have been caused by excessive heat was observed. Bolted and welded connections appear to be intact and exhibit no signs of deformation nor signs of distress.

The columns of the portal frames were observed to be in fair to good condition and appear to be structurally stable. No buckling, warping, deformation, or signs of distress on the columns were observed. The lower sections of the columns exhibit significant discoloration, which is attributed to soot from the fire adjacent to it.

The corrosion protection of the framing system appears to be intact and no peeling or bubbling of the coating was observed.

Structural Steel Roof Framing System (Condition Rating = 6, Satisfactory Condition): The structural steel roof framing system is in satisfactory to good condition. No warping, yielding deformation, or excessive deflections were observed. The corrosion protection appears intact and is generally unaffected by the fire below. Presence of soot from the fire beneath it is nominal and not easily visible.

While it wasn't inspected, visual observation from under the roof indicates that the roofing material appears to be in satisfactory to good condition.

Structural Steel Siding Framing System (Condition Rating = 0, Failed Condition): The horizontal steel siding framing system, particularly along the south side of the building, exhibits significant warping and yielding deformations of the horizontal framing members. These deformations are the result of excessive heat from the fire, which is immediately adjacent to the framing system. The horizontal members, however, are only used to attaching and supporting the building's siding material. These members are considered secondary members and are not integral to the building's structural stability.

Structure Evaluation

Structural Steel Portal Frame

The structural steel portal frames, which are the building's primary load bearing elements, are generally in satisfactory condition, and no repairs and/or improvements are required to maintain or improve their structural integrity. The steel paint is intact and can still effectively provide corrosion protection for the structural steel.

Structural Steel Roof Framing System

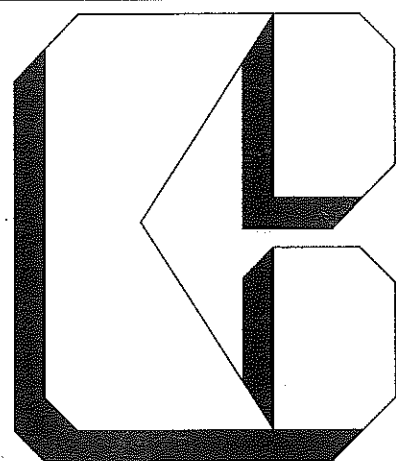
The structural steel roof framing system is generally in satisfactory condition, and no repairs and/or improvements are required to maintain or improve its structural integrity. The steel paint is intact and can still effectively provide corrosion protection for the structural steel.

Based on our observations, the structural integrity and stability of the building's primary structural members remain largely unaffected by the fire. Accordingly, we assess that the subject building is still structurally sound and stable and can still serve its intended purpose.

Recommendations for Rehabilitation

Based on field observations and assessment of the building's current condition, KSE recommends the following maintenance, repairs, and rehabilitation for continued safe operation of the facility:

1. Remove and replace horizontal siding framing members.
2. Soot, being a toxic by-product of fire, is considered environmentally hazardous material and should be removed from surfaces of the steel and other parts of the facility.



KIRBY BUILDING SYSTEMS

A **NUCOR** COMPANY

BETTER SOLUTIONS. BETTER BUILDINGS.
124 KIRBY DRIVE, PORTLAND, TN. 37148



METAL BUILDING MANUFACTURERS ASSOCIATION
MEMBER



ACCREDITED
AC472

GENERAL NOTES:

- MATERIALS**
STRUCTURAL STEEL PLATE
HOT ROLLED MILL SHAPES
COLD FORM SHAPES
ROOF AND WALL SHEETING
BOLTS
CABLE
RODS

ASTM DESCRIPTION
A529 / A572 / A1011
A36 / A529 / A572 / A500
A653 / A1011
A653 / A792
A307 / A325
A475
A572 / A108
- A325 BOLT TIGHTENING REQUIREMENTS**
BOLTED JOINTS SHALL BE CONNECTED AND INSPECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," JUNE 30, 2004, RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. UNLESS NOTED OTHERWISE ON THE KIRBY ERECTION DRAWINGS, ALL A325 BOLTS LARGER THAN 1/2" ARE USED IN CONNECTIONS DEFINED AS SNUG TIGHT.
- STRUCTURAL SHOP COAT PAINT**
THE COAT OF SHOP PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR ONLY A SHORT PERIOD OF EXPOSURE TO ATMOSPHERIC CONDITIONS. SHOP COAT PRIMER DOES NOT PROVIDE THE APPEARANCE, DURABILITY AND/OR PROTECTION OF AN APPROPRIATE FIELD APPLIED FINISH. KIRBY STANDARD SHOP COAT PAINT SHALL MEET OR EXCEED THE REQUIREMENTS OF FEDERAL SPECIFICATION TTP-636.
- TEMPORARY PANEL STORAGE**
PAINTED BUILDING PANELS WITH FLUOROPOLYMER FINISH ARE HIGH-QUALITY CONSTRUCTION MATERIALS. WHILE IN THE BUNDLE, PANELS SHOULD BE PROTECTED FROM HIGH TEMPERATURE, HUMIDITY AND MOISTURE, OTHERWISE, DAMAGE CAN OCCUR TO THE PAINTED SURFACE OF THE PANEL. PLEASE REFER TO THE "WARNING LABEL" THAT KIRBY APPLIES TO EACH BUNDLE OF FLUOROPOLYMER FINISHED PANELS FOR PROPER STORAGE PROCEDURES.
- TEMPORARY BRACING**
BUILDER/CUSTOMER SHALL SPECIFICALLY NOTE THAT BRACING FURNISHED BY KIRBY IS INTENDED TO BE USED FOR THE COMPLETED BUILDING; KIRBY DOES NOT REPRESENT OR GUARANTEE THAT THE BRACING WILL BE ADEQUATE AS TEMPORARY BRACING DURING ERECTION OF THE BUILDING.
- PANEL HANDLING**
METAL BUILDING PANELS ARE WAXED OR OILED FOR FINISH PROTECTION DURING SHIPPING AND STORAGE. THE WAX OR OIL MAKES THE PANELS SLIPPERY AND HAZARDOUS TO WALK ON OR STAND ON. THE WAX OR OIL CAN BUILD UP ON SHOES, GLOVES, AND CLOTHING MAKING CLIMBING OR WALKING ON OTHER COMPONENTS HAZARDOUS.
- ERECTION NOTES**
THE BUILDING MUST BE ERECTED ACCORDING TO THE FRAMING PLANS, STANDARD DETAILS, SPECIAL DETAILS, AND NOTES TO ASSURE COMPLIANCE WITH DESIGN LOADS AND BUILDING CODE REQUIREMENTS. FIELD MODIFICATION OF THE BUILDINGS OR BUILDING COMPONENTS WHICH WILL AFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY AN AUTHORIZED REPRESENTATIVE OF KIRBY BUILDING SYSTEMS.
- WELDING SPECIFICATIONS**
ALL SHOP WELDS ON MATERIALS GREATER THAN OR EQUAL TO 0.125" IN THICKNESS WERE PRODUCED IN ACCORDANCE WITH THE 2010 AWS D1.1 STRUCTURAL WELDING CODE - STEEL. THE REMAINING WELDS ON OTHER THINNER MATERIALS WERE PRODUCED IN ACCORDANCE WITH THE 2008 AWS D1.3 STRUCTURAL WELDING CODE - SHEET STEEL. ALL WELDING WAS PERFORMED BY AWS CERTIFIED WELDERS.
- BUILDING MAINTENANCE MANUAL**
AVAILABLE AT http://www.kirbybuildingsystems.com/for_metal_building_systems_builders.asp

JOB NUMBER: K14B0688A
BUILDER: XENELIS CONSTRUCTION
CUSTOMER: BRISTOL TRANSFER STATION
LOCATION: BRISTOL, CT

PLEASE VERIFY ALL COLORS ON
RETURNED APPROVALS
ROOF PNL: _____
WALL PNL: _____
EAVE/RAKE TRIM: _____
BASE FLASH: _____
DOWNSPOUTS: _____
F.O. TRIM: _____

TABLE OF CONTENTS

DRAWING NO.	DRAWING TITLE
C1	FASTENER CHART
E1	ANCHOR BOLT PLAN
E2	CROSS SECTION @ F.L. 2
E3	CROSS SECTION @ F.L. 3
E4	ROOF FRAMING PLAN
E5	BACK SIDEWALL
E6	FRONT SIDEWALL
E7	LEFT ENDWALL
E8	RIGHT ENDWALL
D1-D3	ERECTION DETAILS

PRIMER COLOR DESIGNATION

RD - STANDARD RED PRIMER
GP - GRAY PRIMER
GZ - GALVANIZED

BUILDING LOADS / DESCRIPTION:

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, INC., IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT. DESIGN LOADS HAVE BEEN APPLIED IN ACCORDANCE WITH THE FOLLOWING.

THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED
AND APPLIED AS REQUIRED BY: 2005 CONNECTICUT BUILDING CODE

THE CONTRACTOR IS TO CONFIRM THAT THESE LOADS COMPLY
WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT.

ROOF DEAD LOAD: 3.250 PSF (ROOF PANELS & PURLINS)
OCCUPANCY CATEGORY: II - Normal
COLLATERAL LOAD: 3 PSF
GROUND SNOW LOAD: 35 PSF Is: 1.00 Ct: 1.20 Ce: 1
ROOF SNOW LOAD: 30 PSF MINIMUM SNOW LOAD: N/A PSF
RAIN ON SNOW SURCHARGE: N/A PSF RAIN W/ SNOW (IF REQ'D) N/A PSF
ROOF LIVE LOAD: 20.00 PSF TRIBUTARY REDUCTION Yes
FRAME LIVE LOAD: 12 PSF
BASIC WIND SPEED: 100 MPH EXPOSURE: B Iw: 1.00 KZT: 1.0
SEISMIC CRITERIA: Ss: 0.24 S1: 0.06 SDS: 0.25 SD1: 0.10
SEISMIC USE GROUP: I - Normal SITE CLASS: D Ie: 1.00
SEISMIC DESIGN CATEGORY: B TL: 6

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

LATERAL DIRECTION - BASE SHEAR: 4.04 KIPS R:3.0 CS:0.0743

STRUCTURAL SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCEPT CCS

LONGITUDINAL DIRECTION - BASE SHEAR: 3.72 KIPS R:3.0 CS:0.0743

STRUCTURAL SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCEPT CCS

DEAD LOAD: NORMAL WEIGHT OF METAL BUILDING

COMPONENTS AS SUPPLIED BY THE MANUFACTURER

THIS BUILDING IS DESIGNED AS A PARTIALLY ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE DESIGN CODE LISTED ABOVE.

OTHER LOADS

ENGINEER NOTES

BUILDING HAS BEEN DESIGNED W/ FSW OPENINGS OPEN FOR PASSAGE. NO DOORS
OR SHEATHING SHALL BE ADDED TO THESE OPENINGS W/O ENGINEERING REVIEW.

PRIMER:

STRUCTURAL FRAMING: RD

SECONDARY FRAMING: RD

ROOF PANELS:

TYPE: KL (KIRBYLOK) - 24 Ga. (W/ LOW CLIPS)

COLOR: SLATE GRAY

WALL PANELS:

TYPE: KR2 (KIRBY RIB) - 26 Ga.

COLOR: FOX GRAY

SOFFIT PANELS:

TYPE: N/A

COLOR: N/A

LINER PANELS:

TYPE: N/A

COLOR: N/A

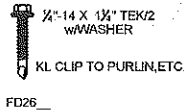
SPECIAL NOTES:

ENGINEER SEAL

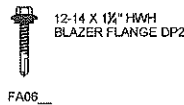
STANDING SEAM ROOF SYSTEMS INSULATION & FASTENER RECOMMENDATIONS					
INSULATION / FASTENERS	KLS/KLM "LOW SYSTEM"	KLS/KLM "HIGH SYSTEM"	KLM W/ 5" Tall Clip	RL/RL+ "LOW SYSTEM"	RL/RL+ "HIGH SYSTEM"
NO INSULATION THERMAL BLOCK FASTENER	OK 3/8" SYB05A FD26CP	N/R	N/R	OK 3/8" SYB11 FA07CP	N/R
R10 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R11 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R13 THERMAL BLOCK FASTENER	OK NONE FD26CP	OK 1" SYB09 FD26CP	N/R	OK NONE FA07CP	OK 5/8" SYB12 FA07CP
R16 THERMAL BLOCK FASTENER	OK* NONE FD29CP	OK 3/4" SYB07 FD29CP	N/R	N/R	OK 3/8" SYB11 FC09CP
R19 THERMAL BLOCK FASTENER	OK* NONE FD29CP	OK 3/4" SYB07 FD29CP	N/R	N/R	OK 3/8" SYB11 FC09CP
R25 THERMAL BLOCK FASTENER	N/R	OK 3/4" SYB07 FD29CP	N/R	N/R	N/R
R30 THERMAL BLOCK FASTENER	N/R	N/R	OK 1" SYB05C FD29CP	N/R	N/R
REFERENCE NOTES OK - Kirby approved application. OK* - Kirby application conditionally approved. Application requires extra effort during erection to hold panel coverage and may induce oil canning or pillo wing. (REQUIRES DISCLAIMER) N/R - Not Recommended due to aesthetic issues or difficulty of installation. (REQUIRES MANAGEMENT APPROVAL)					
FASTENERS FD26CP 1/4 - 14 x 1 1/2" TEK2 W/ WASHER (CADMIUM PLATED) FD29CP 1/4 - 14 x 1 1/2" TEK2 W/ WASHER (CADMIUM PLATED) FA07CP 12 - 14 x 1 1/2" HWH BLAZER DP2 NO WASHER (CADMIUM PLATED) FC09CP 12 - 14 x 1 1/2" HWH BLAZER DP2 NO WASHER (CADMIUM PLATED)					
Nominal Insulation Thicknesses R10 - 3.25" (range of 2.95" to 3.4") R11 - 3.5" (range of 3.3" to 3.75") R13 - 4.25" (range of 3.85" to 4.375") R16 - 5" (range of 5.0" to 5.30") R19 - 8.25" (range of 5.6" to 6.375") R25 - 8" (range of 7.5" to 8.0") R30 - 9.25" (range of 8.7" to 9.50")					

FASTENER REQUIREMENTS

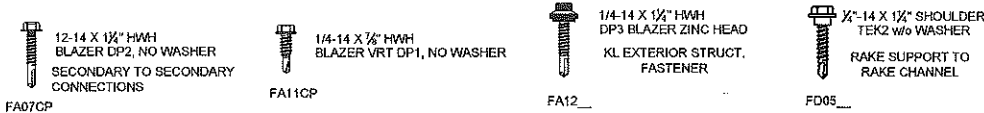
ROOF MEMBER FASTENERS



WALL MEMBER FASTENERS

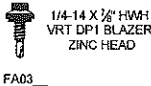


MISCELLANEOUS FASTENERS

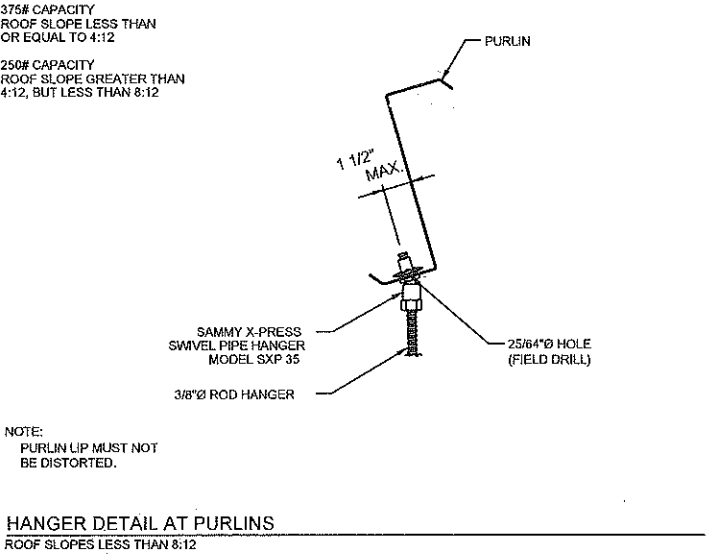
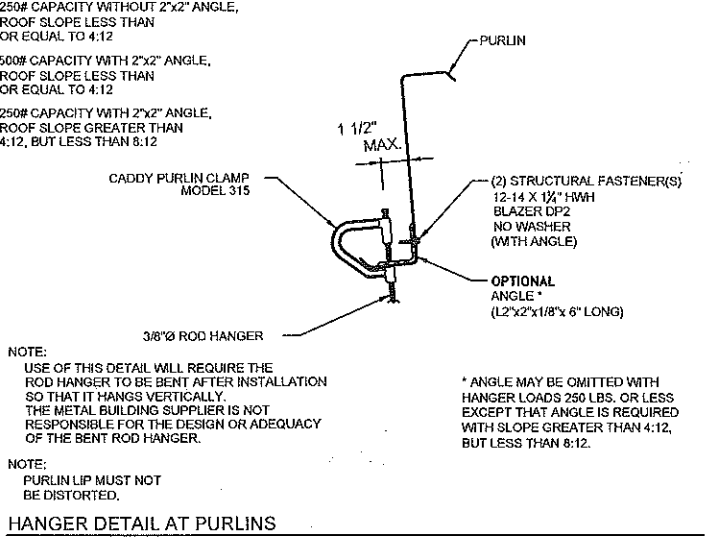
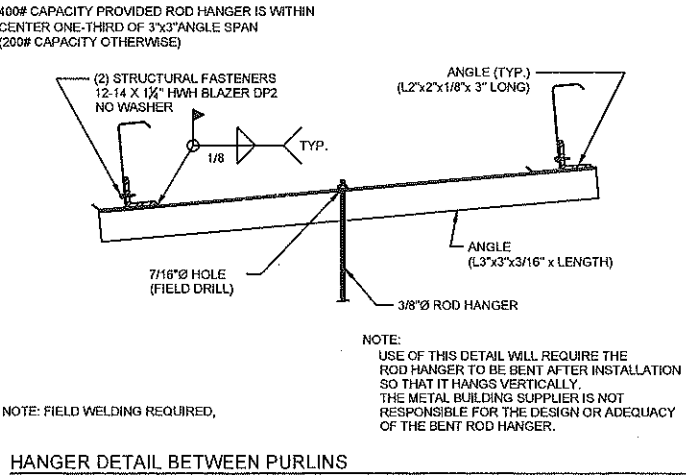
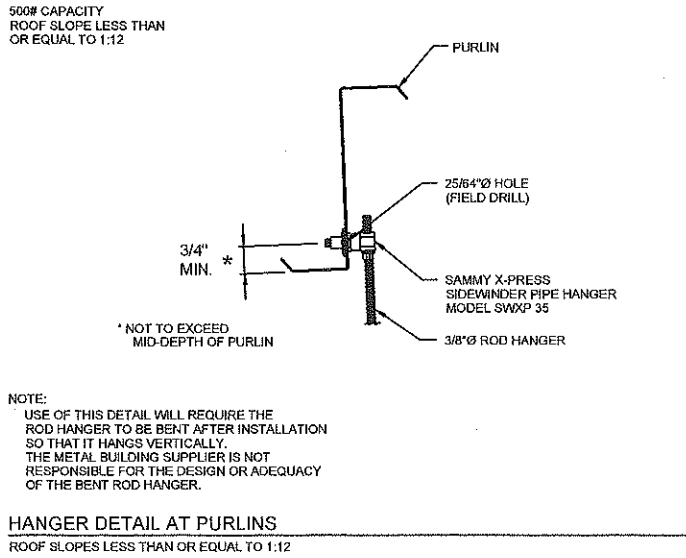
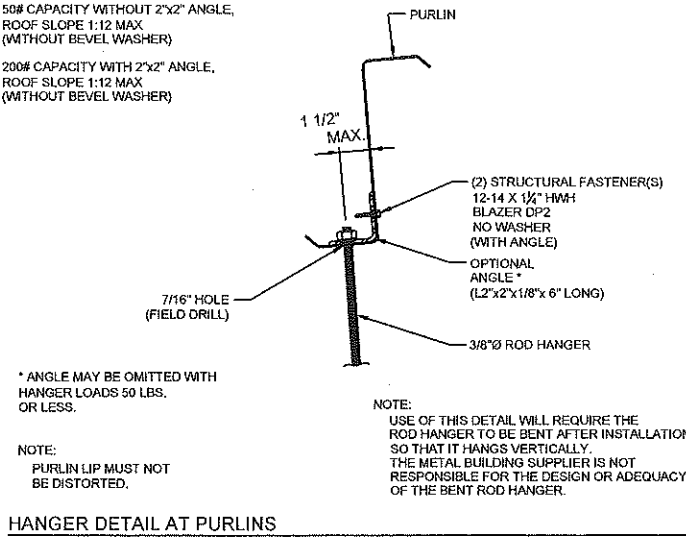
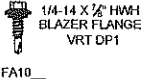


THRU-FASTENED ROOF & WALL SYSTEMS INSULATION & FASTENER RECOMMENDATIONS		
INSULATION / FASTENERS	KIRBY RIB ROOF PANEL	KR, KW & KRP WALL PANELS
NO INSULATION FASTENER	OK FA01	OK FA07
R19, R11 FASTENER	OK FA01	OK FA07
R13, R16 FASTENER	OK FA01	OK FC08
R19 FASTENER	OK* FA02	OK* FC08
R19 THERMAL BLOCK FASTENER	OK* 1" SYB08 FA14	N/R
REFERENCE NOTES: Insulation thicknesses are nominal OK - Kirby approved application OK* - Kirby application conditionally approved. Application requires extra effort during erection to hold panel coverage and may induce oil canning, dimpling or pillo wing. (REQUIRES DISCLAIMER) N/R - Not Recommended due to aesthetic issues or difficulty of installation. (REQUIRES MANAGEMENT APPROVAL)		
FASTENERS FA01 12 - 14 x 1 1/2" HWH DP2 BLAZER ZINC HEAD FA02 12 - 14 x 1 1/2" HWH DP2 BLAZER ZINC HEAD FA07 12 - 14 x 1 1/2" HWH BLAZER DP2 NO WASHER FC08 12 - 14 x 1 1/2" HWH BLAZER FLANGE DP3 FA14 12 - 14 x 2" HWH DP2 BLAZER ZINC HEAD		
Nominal Insulation Thicknesses R10 - 3.25" (range of 2.95" to 3.4") R11 - 3.5" (range of 3.3" to 3.75") R13 - 4.25" (range of 3.85" to 4.375") R16 - 5" (range of 5.0" to 5.30") R19 - 8.25" (range of 5.6" to 6.375") R25 - 8" (range of 7.5" to 8.0") R30 - 9.25" (range of 8.7" to 9.50")		

ROOF STITCH/TRIM FASTENERS

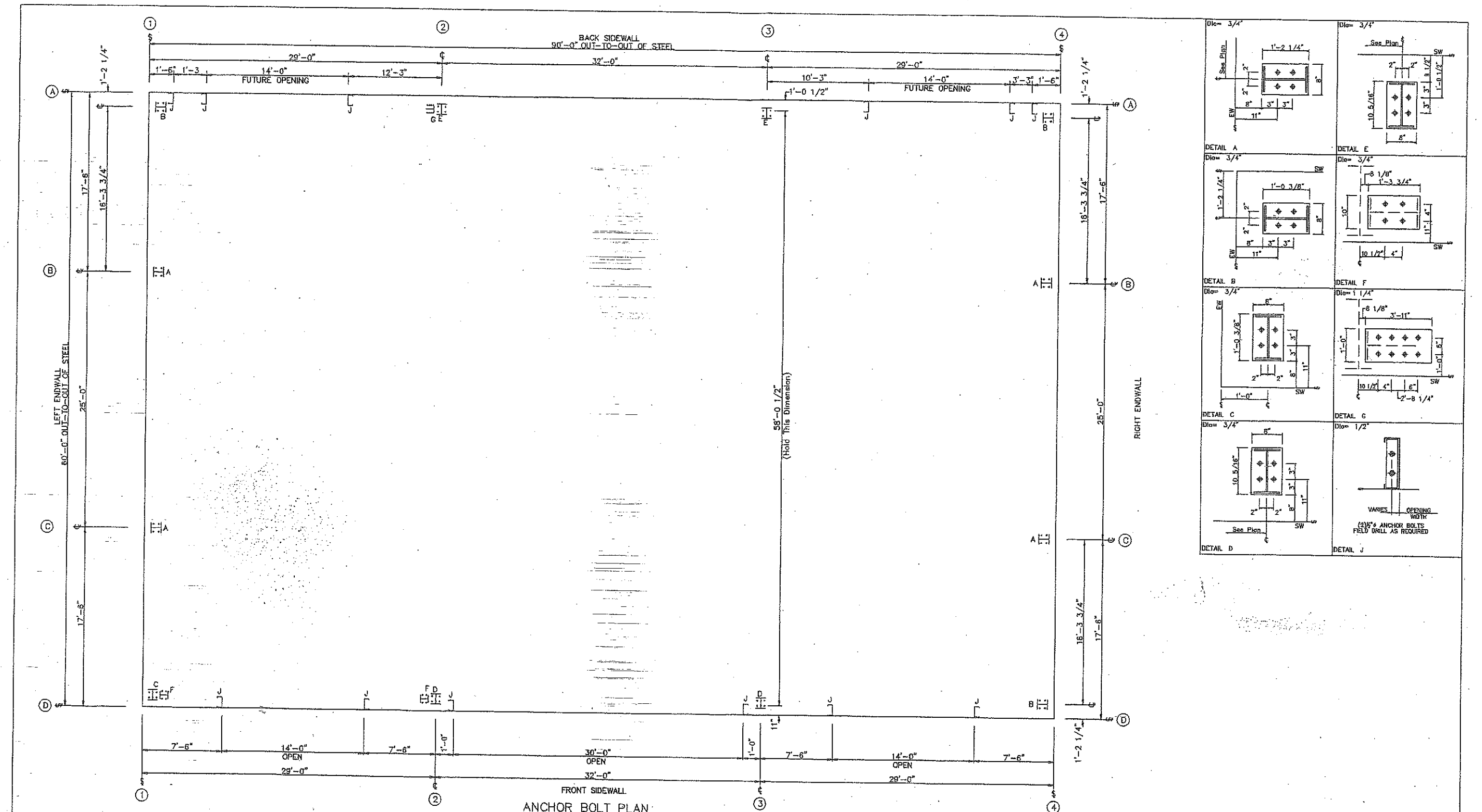


WALL STITCH/TRIM FASTENERS

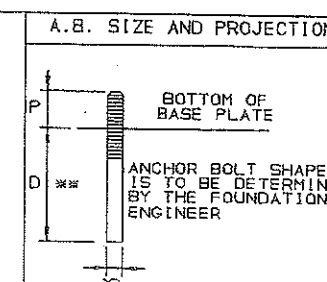


NOTE:
ALL CAPACITIES THAT ARE SHOWN ON THIS DRAWING ARE MAXIMUM HANGER LOADS FOR THESE DETAILS ONLY. THE PURLINS MAY OR MAY NOT BE DESIGNED FOR THE REQUIRED HANGER LOADS. CONTACT KIRBY BUILDING SYSTEMS FOR SUSPENDED LOADS THAT EXCEED THE DESIGN COLLATERAL LOAD SPECIFIED FOR THIS PROJECT.

ISSUE	DESCRIPTION	BY	DATE
S	STRUCTURAL	JDS	11/24/14
A	APPROVAL	JDS	ADATE
KIRBY BUILDING SYSTEMS			
KIRBY BUILDING SYSTEMS 124 KIRBY DRIVE PORTLAND, TN 37148			
TITLE: FASTENER CHART			
BUILDER: XENELIS CONSTRUCTION			
CUSTOMER: BRISTOL TRANSFER STATION			
LOCATION: BRISTOL, CT			
JOB NO: K14B0688A			
DWG. NO: C1			



- GENERAL NOTES:**
- ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF CONCRETE NOTCH IS REQUIRED, THEN THE APPROPRIATE DIMENSIONS SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.
 - CONCRETE STRENGTH = 3000 PSI MINIMUM.
 - ANCHOR BOLTS ARE NOT FURNISHED BY THE MANUFACTURER.
 - DRAWINGS ARE NOT TO SCALE.



A.B. SIZE AND PROJECTION		ANCHOR BOLT QUANTITY		ALLOW. LOAD TO BOLTS (LBS.)	PROJ. P (IN.)	MIN. EMBED D (IN.)	ISSUE	DESCRIPTION	BY	DATE
QTY.	BOLT DIA.	AS REQ'D	1"				0	CONSTRUCTION	NLT	3/4/16
56	1"			8400	2 1/2"	***				
8	1 1/2"			23,400	3 1/2"	***				
	1 3/4"			33,700	3 1/2"	***				

BOLT MATERIAL = ASTM A36
** - ANCHOR BOLT EMBEDMENT LENGTH "D" IS TO BE DETERMINED BY THE FOUNDATION ENGINEER.

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS. IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

KIRBY BUILDING SYSTEMS
A TROOP COMPANY
BETTER SOLUTIONS. BETTER BUILDINGS.

KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148

TITLE: ANCHOR BOLT PLAN DRN. BY: NLT

BUILDER: XENELIS CONSTRUCTION DATE: 3/4/16

CUSTOMER: BRISTOL TRANSFER STATION CKD. BY: CTT

LOCATION: BRISTOL, CT DATE: 3-7-16

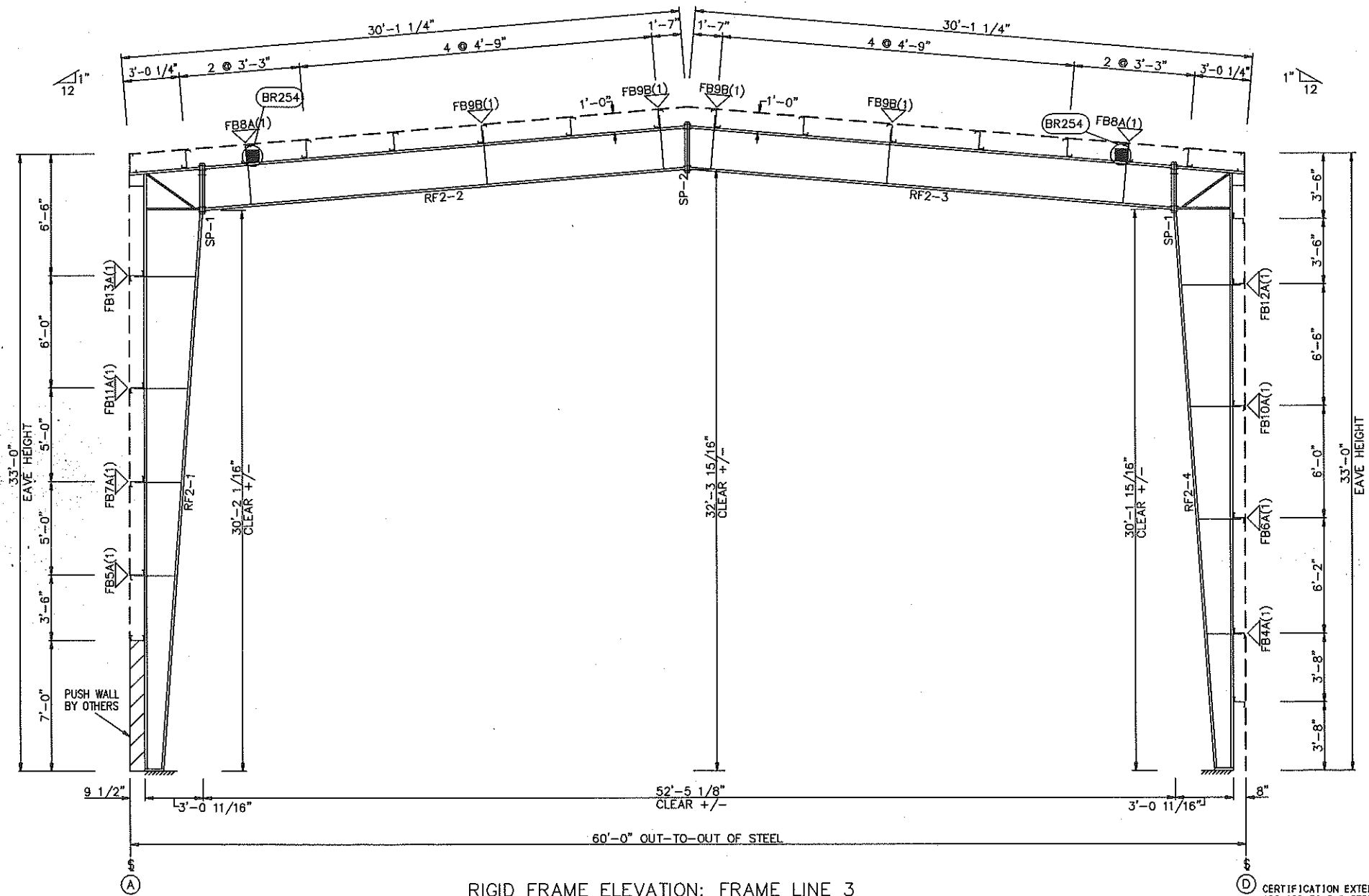
ID NUMBER: K1480688A MBS JOB NO: K1480688A DWG. NO: E1 OF 8

SPlice PLATE & BOLT TABLE									
Mark	Qty	Top	Bot	Int	Type	Dia	Length	Width	Thick
SP-1	6	4	0	0	A325	7/8"	2 1/2"	6"	5/8"
SP-2	4	4	0	0	A325	1"	2 3/4"	8"	3/4"

STIFFENER TABLE				
Mark	Stiff	Mark	Plate Size	Length
RF2-1	St-1	4.000	0.500	35.88
RF2-1	St-2	4.000	0.500	39.25
RF2-4	St-2	4.000	0.500	39.25
RF2-4	St-1	4.000	0.500	35.88

MEMBER TABLE						
Mark	Weight	Web Depth	Web Plate	Outside Flange		Inside Flange
		Start/End	Thick	Length	W x Thk x Length	W x Thk x Length
RF2-1	1068	9.0/27.1	0.164	240.0	6 x 5/16" x 246.0	6 x 1/2" x 246.6
		27.1/36.0	0.164	147.0	6 x 1/4" x 138.0	6 x 3/8" x 112.4
RF2-2	1130	25.0/25.0	0.250	135.3	6 x 3/8" x 45.7	6 x 3/8" x 129.3
		25.0/25.0	0.220	180.0	6 x 5/8" x 127.2	6 x 1/2" x 183.9
RF2-3	1135	25.0/25.0	0.220	180.0	6 x 5/8" x 186.0	6 x 1/2" x 183.9
		25.0/25.0	0.250	136.8	6 x 5/8" x 128.7	6 x 3/8" x 130.8
RF2-4	1069	36.0/27.1	0.164	146.9	6 x 3/8" x 44.2	6 x 3/8" x 112.2
		27.1/ 9.0	0.164	240.0	6 x 1/4" x 137.9	6 x 1/2" x 246.6

▽ FLANGE BRACES: (1) One Side; (2) Two Sides
FBxxA(1)
A - L175x075
B - L2X2X1/8

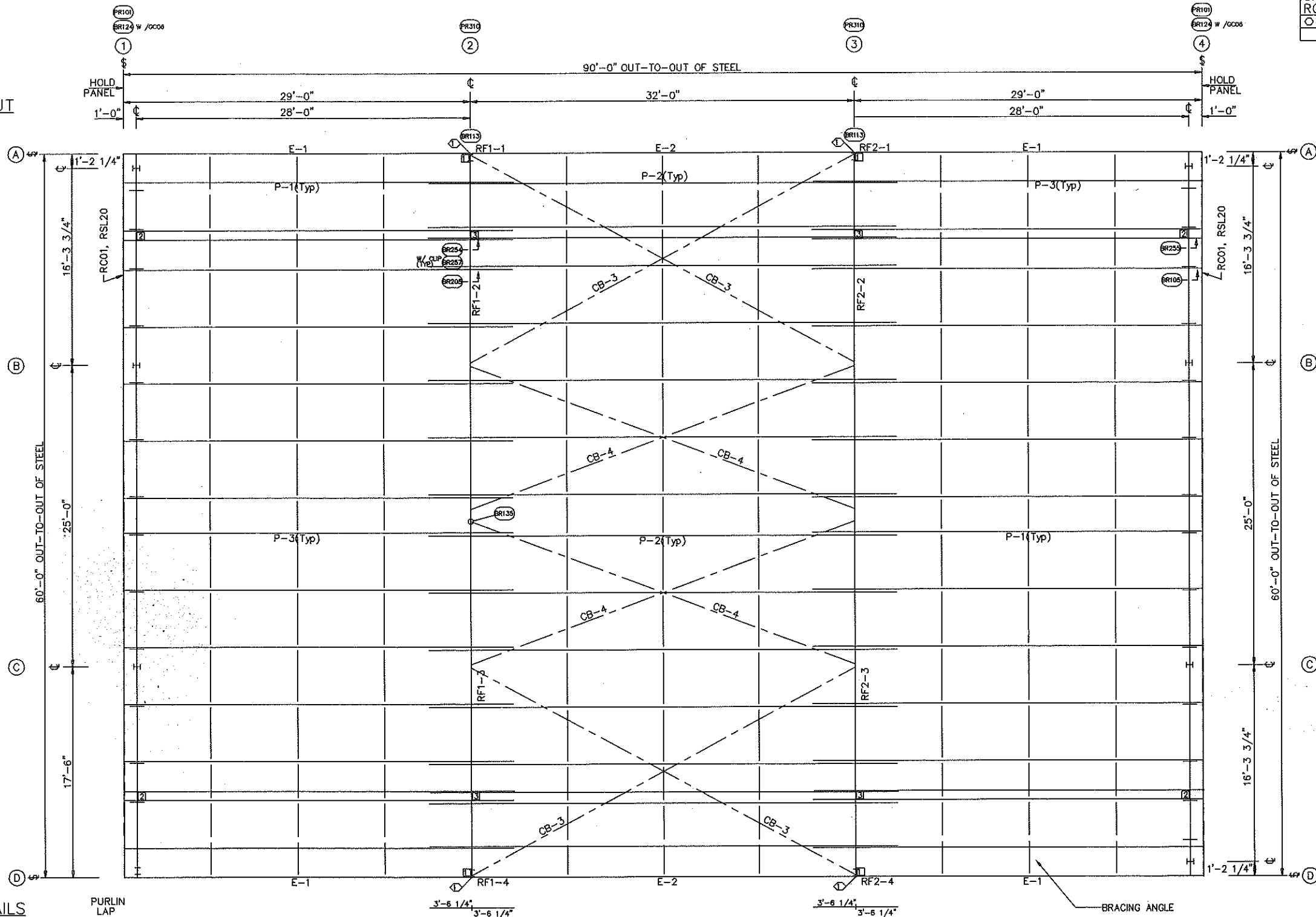


- REFERENCE ELEVATION = 100'0".
- ALL BASE PLATES AT REFERENCE ELEVATION UNLESS NOTED.
- SEE ANCHOR BOLT PLAN FOR ANCHOR BOLT SIZES AND DETAILS.
- FLANGE BRACES ARE REQUIRED ON TWO SIDES (2) OR ONE SIDE (1) AS NOTED.
- ALL MAIN FRAME CONNECTION BOLTS ARE A325 BOLTS.
- FOR FLANGE BRACE CONNECTIONS IN THE ROOF, SEE DETAIL [BR105] FOR FLANGE BRACE CONNECTIONS IN THE WALLS, SEE DETAIL [BR205]
- ALL FLANGE BRACE LOCATIONS MARKED TWO SIDES (2) AT EXPANDABLE END FRAMES REQUIRE ONE FLANGE BRACE TO BE INSTALLED AT THE TIME OF ERECTION, WHILE THE OTHER IS TO BE STORED AND USED AT THE TIME OF A FUTURE ADDITION.
- ALL CONNECTION BOLTS OR FIELD WELDS, PURLINS AND ALL FLANGE BRACES MUST BE PROPERLY INSTALLED ON MAIN FRAMES AS THEY ARE ERECTED AND BEFORE ERECTION LOADS ARE APPLIED.

ISSUE	DESCRIPTION	BY	DATE
A	APPROVAL	JDS	11/24/14
O	CONSTRUCTION	TSK	3/9/16
 KIRBY BUILDING SYSTEMS A FULCRUM COMPANY BETTER SOLUTIONS. BETTER BUILDINGS.			
KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148			
TITLE: CROSS SECTION			DRN. BY: TSK
BUILDER: XENELIS CONSTRUCTION			DATE: 3/9/16
CUSTOMER: BRISTOL TRANSFER STATION			CKD. BY: <i>LD</i>
LOCATION: BRISTOL, CT			DATE: <i>3-16-16</i>
ID NUMBER: K14B0688A		MBS	JOB NO: K14B0688A
			DWG. NO: E3 OF E8

ES012	
	SR080211
	PB030511
	PB020506
	PB041108
	PB041108
	PB041108
	PB041108
	PB030306
	PB041108
	PB041108
	PB041108
	PB041108
	PB020506
	PB030511
	SR080211
ES012	

(BR111) (BR158) (BR210) (BR112)



ROOF SHEETING

PANELS: 24 Ga. KLM
LOW CLIP W/T-BLOCKS
COLOR: SLATE GRAY

SPECIAL BOLTS ROOF PLAN				
Ø ID	QUAN	TYPE	DIA	LENGTH WASH
1	4	A325	1/2"	1 1/2" 0

CONNECTION PLATES ROOF PLAN		
□ ID	QUAN	MARK/PART
1	4	FSC02
2	4	PC16
3	4	PC13(SHOP WELDED)

- GENERAL NOTES:

1. USE 1/2" DIA. X 14" A325 BOLTS FOR ALL PURLIN LAP CONNECTIONS.
2. USE 1/2" DIA. X 14" A325 BOLTS FOR PURLIN AND EAVE STRUT TO FRAME CONNECTIONS.
3. THE DIAMETER OF THE BRACING IS DENOTED BY THE THIRD AND FOURTH DIGITS OF THE PIECE MARK.
(CABLE EX. 08 = 3/8" Ø AND 10 = 5/8" Ø)
(ROD EX. 08 = 1/2" Ø AND 10 = 3/4" Ø)
4. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
5. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE ROOF PANELS.

6. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.
7. DO NOT STAND OR WALK ON SECONDARY FRAMING MEMBERS SUCH AS GIRTS, PURLINS AND EAVE STRUTS UNLESS THEY ARE FIRMLY SECURED AT BOTH ENDS AND LaterALLY SUPPORTED.
8. DO NOT USE METAL BUILDING PANELS AS WALK BOARDS OR WORKING PLATFORMS. NEVER STAND OR WALK ON METAL BUILDING PANELS BETWEEN SUPPORTS UNLESS THE PANELS ARE FIRMLY FASTENED AT BOTH ENDS AND BOTH SIDES.
9. DRAWINGS ARE NOT TO SCALE.
10. FOR KIRBYLOK OR ROOFLOK ROOF PANELS, REF. APPROPRIATE ERECTION MANUAL FOR ERECTION PROCEDURES.

11. WARNING, PENCIL LEAD WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE PENCILS TO MARK ON PARTS.

- A COPY OF KIRBY'S STANDING SEAM CHECKLIST CAN BE FOUND IN THE STANDING SEAM ERECTION MANUAL SENT WITH EACH PROJECT. TO ENSURE YOUR INSTALLER HAS A THOROUGH UNDERSTANDING OF THE STANDING SEAM SYSTEM, PLEASE REVIEW THE DETAILS PROVIDED IN THE ERECTION DRAWINGS AND THE STANDING SEAM MANUAL. HAVE THE ERECTOR OR YOUR PROJECT SUPERINTENDENT COMPLETE THE CHECKLIST.

DETAIL KEY

DETAIL NO.

REFERENCE
ERECTION
DETAILS

[illegible]

ID NUMBER: K14B0688A

MBS

MBS	JOB NO:	K14B0688A
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**KIRBY
BUILDING
SYSTEMS**

BETTER SOLUTIONS. BETTER BUILDINGS

KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148

TITLE: ROOF FRAMING PLAN

BUILDER: XENELIS CONSTRUCTION

CUSTOMER: BRISTOL TRANSFER STATION

LOCATION: BRISTOL, CT

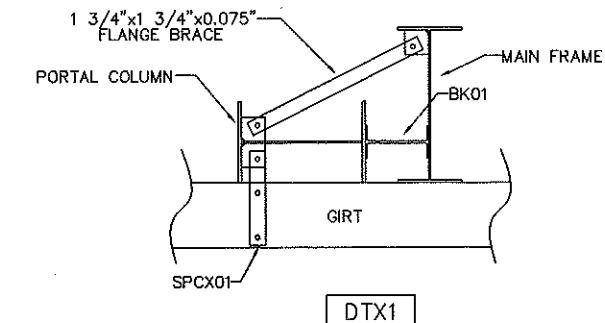
JOB NO: K14B0688A

DRN.BY: TSK

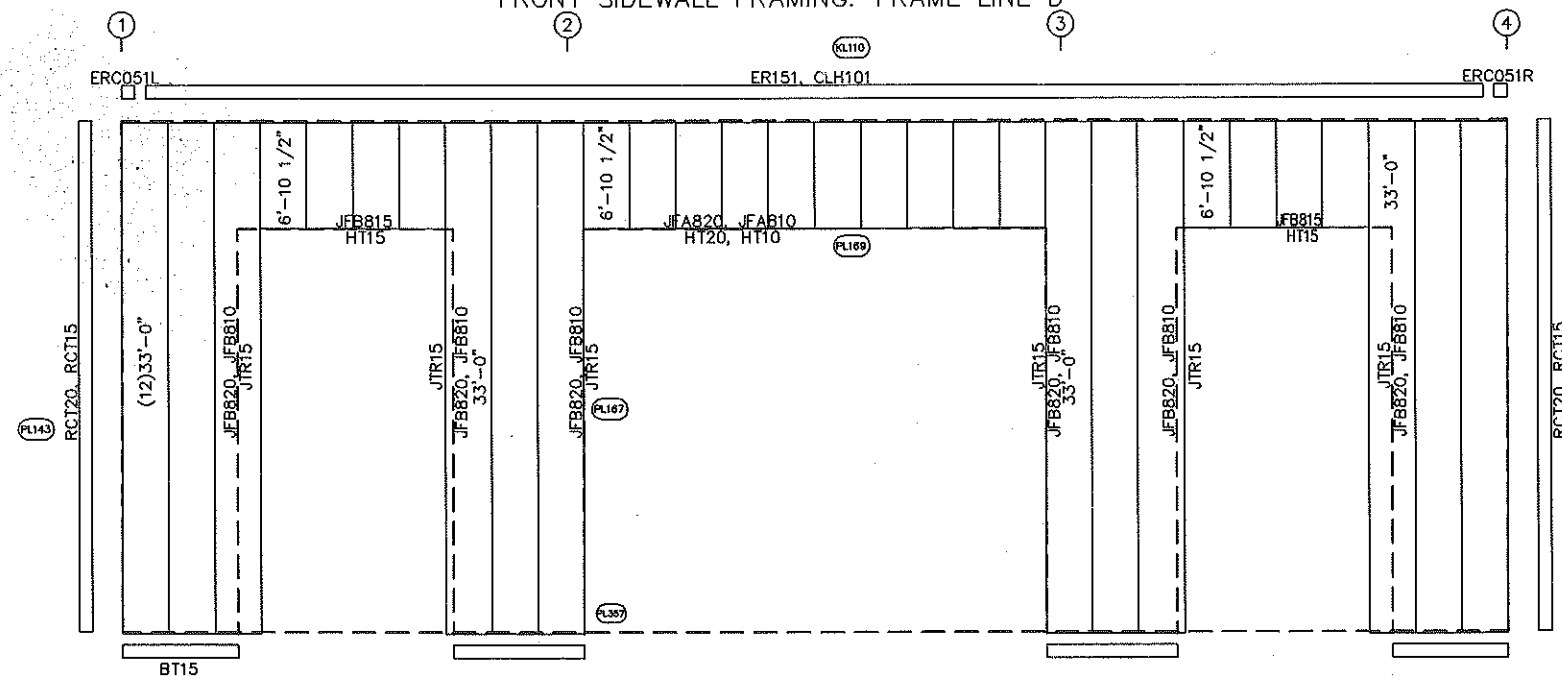
DATE: 3/9/16

CKD.BY:	LD
DATE:	3-16-16

DWG.NO: E4 OF E8



FRONT SIDEWALL FRAMING: FRAME LINE D



FRONT SIDEWALL SHEETING & TRIM: FRAME LINE D

PANELS: 26 Ga. KR2 - FOX GRAY
EAVE TRIM: FOREST GREEN
OTHER TRIM: FOX GRAY

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.

GENERAL NOTES:

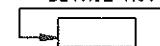
- GENERAL NOTES:
1. USE $\frac{1}{2}" \times 1\frac{1}{2}"$ A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
 2. THE DIAMETER OF THE BRACING IS DENOTED BY THE THIRD AND FOURTH DIGITS OF THE PIECE MARK.
(EX. 08 = $\frac{1}{2}" \times 10 = \frac{1}{2}" \times 10$)
 3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
 4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE PANELS.
 5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.

6. ERECTOR TO FIELD SLOT FLUSH FRAME GIRTS FOR CABLE BRACING.
7. BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
8. BEFORE INSTALLATION OF WALL PANELS, IT IS IMPORTANT TO REFERENCE WALL PANEL FASTENER LAYOUT DETAILS (PL153 KIRBYWALL PL149 KIRBYRIB I1) TO INSURE CORRECT USAGE OF FASTENERS.
9. USE RVTCP AT 5'0" C/C FOR TEMPORARY INSTALLATION OF CLH TRIM.
10. DRAWINGS ARE NOT TO SCALE.
11. REF. PL357 FOR CAULKING AT TRIM LAPS
12. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

NOTE: ALL GIRT LAPS NOT
INDICATED WILL BE 0'2½"
DOOR GIRTS:
ALL GIRTS ATTACHED AT ONE
END TO A DOOR JAMB ARE 16 GAGE
UNLESS NOTED OTHERWISE.

DETAIL KEY

DETAIL NO.



REFERENCE ERECTION DETAILS

ISSUE	DESCRIPTION	BY	DATE
A	APPROVAL	JDS	11/24/14
O	CONSTRUCTION	TSK	3/9/16
ID NUMBER: K14B0688A MBS			



KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148

TITLE:	FRONT SIDEWALL
--------	----------------

BUILDER: XENELIS CONSTRUCTION

CUSTOMER: BRISTOL TRANSFER STATION

LOCATION: BRISTOL, CT

JOB NO: K14B0688A

DRN.BY: TSK

DATE: 3/9/16

CKD.BY: LD

DATE: 3-16-16

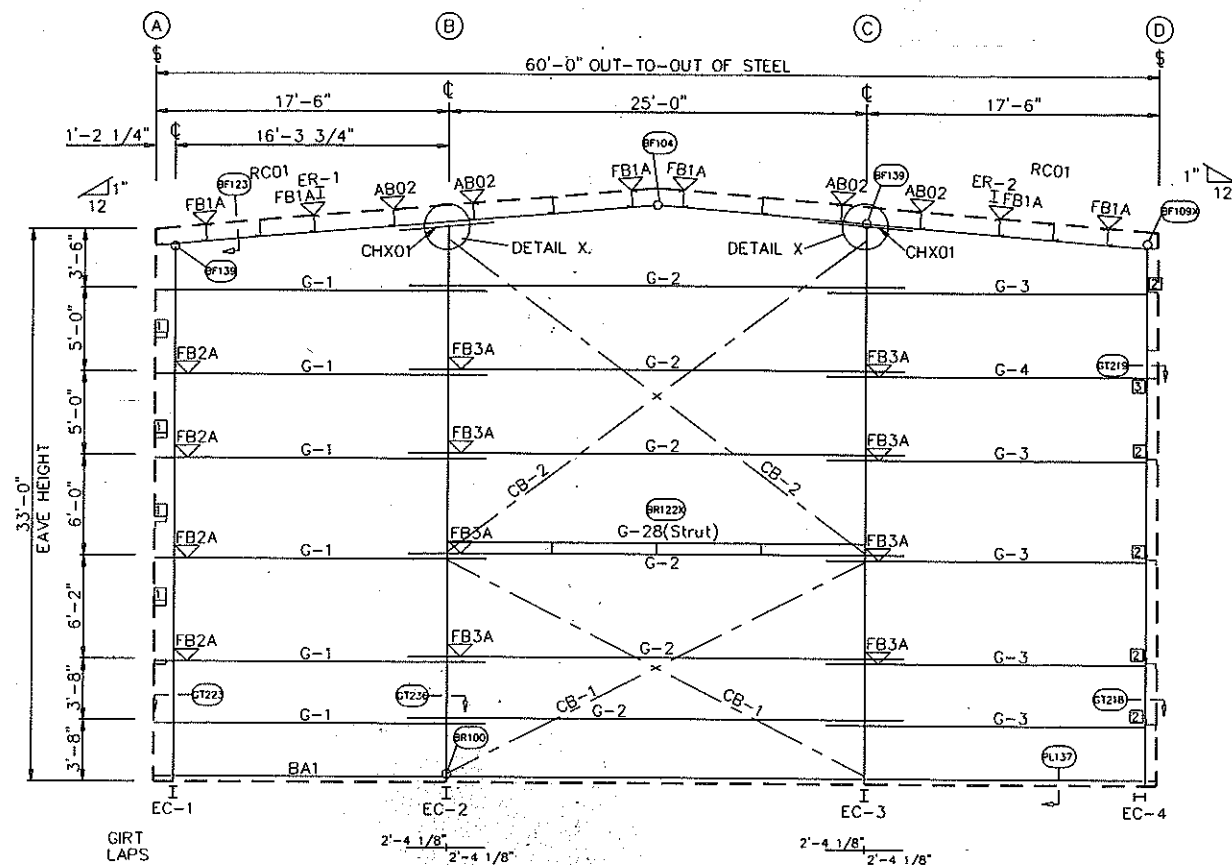
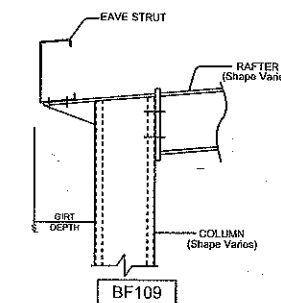
DWG.NO: E6 OF:E8

BOLT TABLE FRAME LINE 1				
LOCATION	QUAN	TYPE	DIA	LENGTH
EC-4/ER 2	4	A325	1/2"	1 1/2"
ER 1/ER 2	8	A325	5/8"	2 1/4"
EC-1/ER 1	4	A325	1/2"	1 1/4"
Int. Column/Raf	* 2	A325	1/2"	1 1/2"

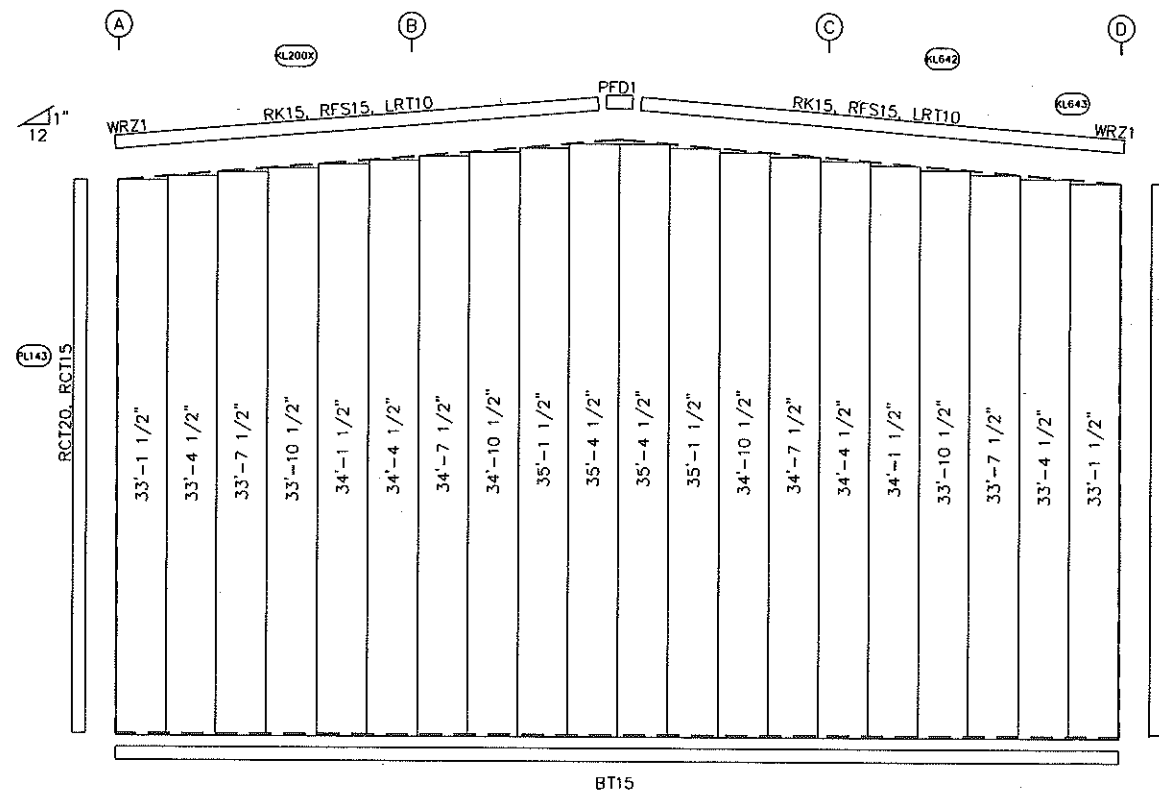
*w/WASHERS

CONNECTION PLATES FRAME LINE 1		
ID	QUAN	MARK/PART
1	5	GC92C/SA014A
2	5	GC03/SA014A
3	1	GC92B/SA014A

FLANGE BRACE TABLE FRAME LINE 1		
VID	MARK	LENGTH
1	FB1A	2'-4 1/8"
2	FB2A	2'-5 3/8"
3	FB3A	2'-6 1/8"

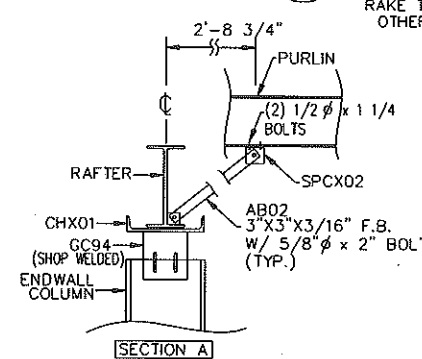
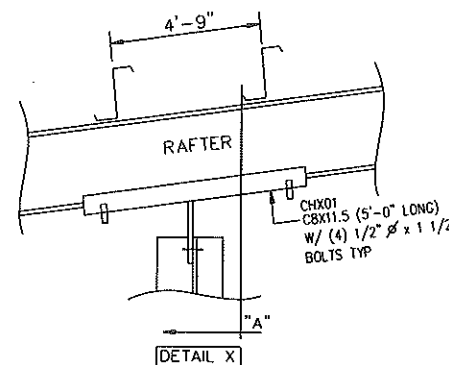
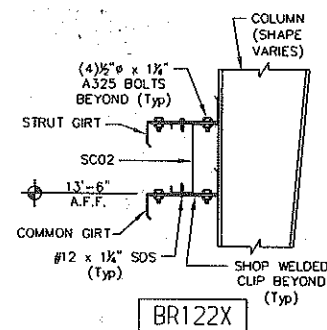


LEFT ENDWALL FRAMING: FRAME LINE 1



LEFT ENDWALL SHEETING & TRIM: FRAME LINE 1

CL100 PANELS: 26 Ga. KR2 - FOX GRAY
RAKE TRIM: FOREST GREEN
OTHER TRIM: FOX GRAY



GENERAL NOTES:

- USE 1/2" x 14" A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
- REFER TO BEARING FRAME DETAILS [BF] FOR CONNECTION REQUIREMENTS OF RAFTER TO RAFTER AND RAFTER TO COLUMN.
- ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
- ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE WALL PANELS.
- IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.

- BUILDER TO FIELD CUT OR BACK LAP PANELS AS REQUIRED.
- BUILDER TO FIELD CUT PANELS AS REQ'D
- DRAWINGS ARE NOT TO SCALE.
- REF. [PL357] FOR CAULKING AT TRIM LAPS
- WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

NOTE: ALL GIRT LAPS NOT INDICATED WILL BE 0'2 1/2"
DOOR GIRTS,
ALL GIRTS ATTACHED AT ONE END TO A DOOR JAMB ARE 16 GAGE UNLESS NOTED OTHERWISE.

DETAIL KEY	ISSUE	DESCRIPTION	BY	DATE
DETAIL NO.	A	APPROVAL	JDS	11/24/14
REFERENCE ERECTION DETAILS	0	CONSTRUCTION	TSK	3/9/16

CERTIFICATION EXTENDS ONLY FOR THE LOADS SPECIFIED ON KIRBY'S PURCHASE ORDER AS APPLIED TO THE STRUCTURAL COMPONENTS OF THE BUILDING DESIGNED AND SUPPLIED BY KIRBY BUILDING SYSTEMS, IF ERECTED AS INDICATED. NOTE THAT KIRBY'S ENGINEER IS NOT ACTING AS THE ENGINEER OF RECORD FOR THIS CONSTRUCTION PROJECT.



KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148

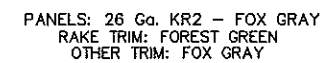
TITLE: LEFT ENDWALL	DRN.BY: TSK
BUILDER: XENELIS CONSTRUCTION	DATE: 3/9/16
CUSTOMER: BRISTOL TRANSFER STATION	CKD.BY: [Signature]
LOCATION: BRISTOL, CT	DATE: 3-16-16
JOB NO: K14B0688A	DWG. NO: E7 OF: E8

ID NUMBER: K14B0688A

MBS

CONNECTION PLATES		
FRAME LINE 4		
QID	QUAN	MARK/PART
1	5	GC92C/SAO14A
2	5	GC03/SAO14A
3	1	GC92B/SAO14A

FLANGE BRACE TABLE		
FRAME LINE 4		
VID	MARK	LENGTH
1	FB1A	2'-4 1/8"
2	FB2A	2'-5 3/8"
3	FB3A	2'-6 1/8"



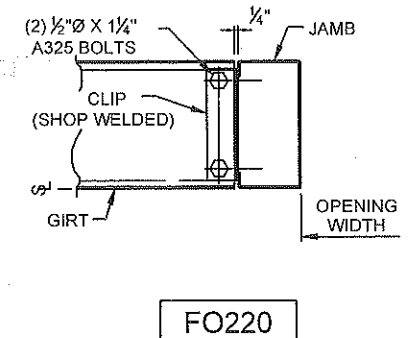
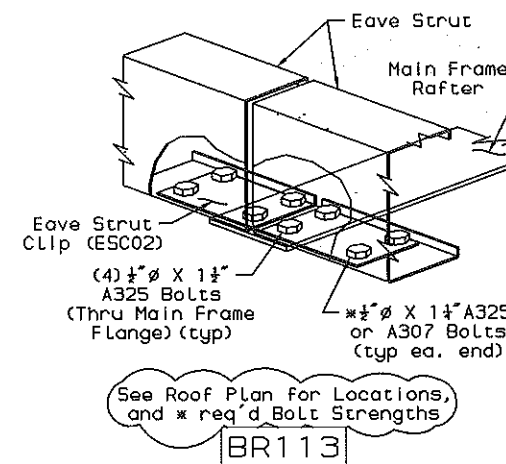
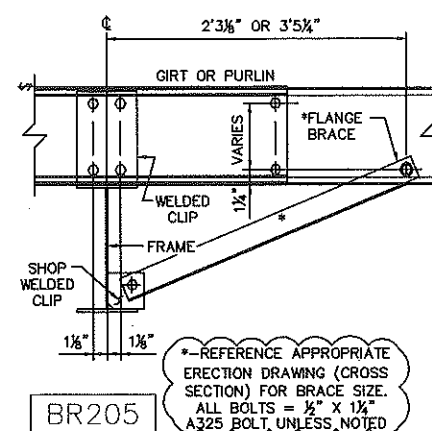
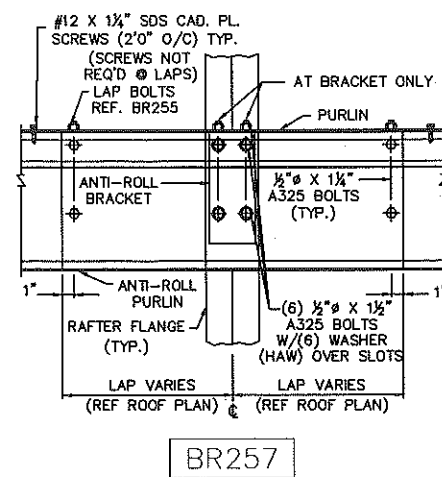
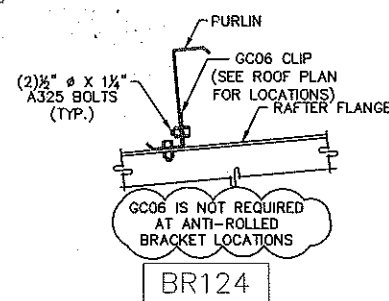
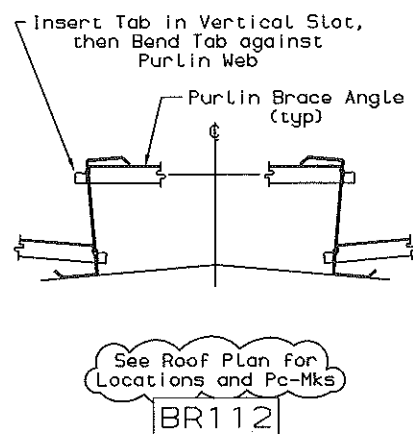
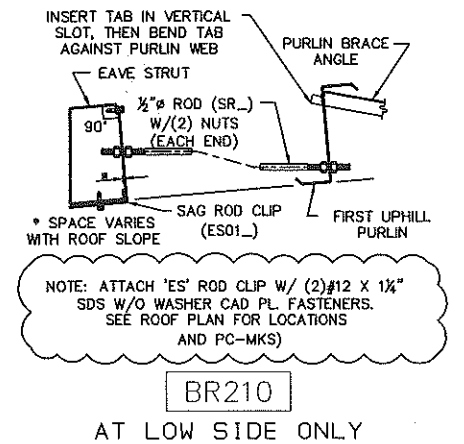
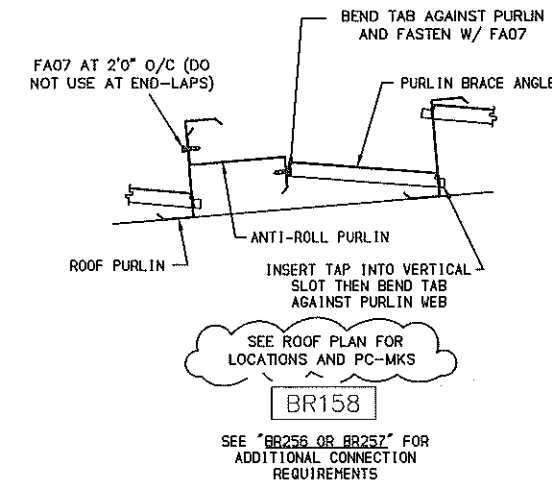
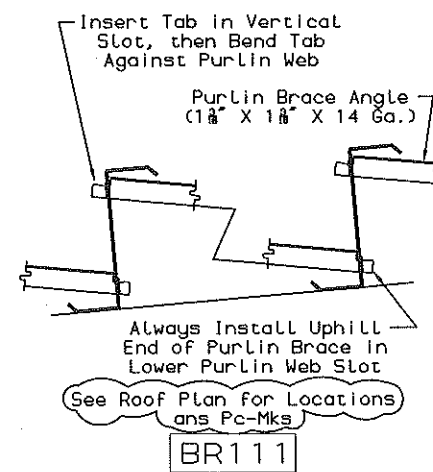
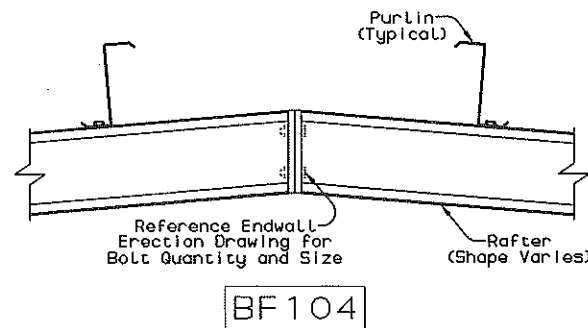
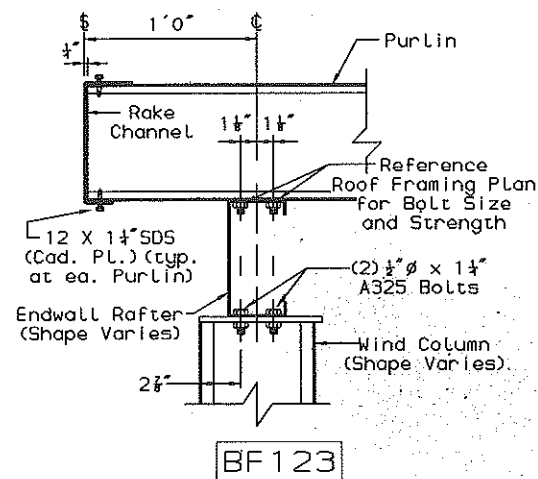
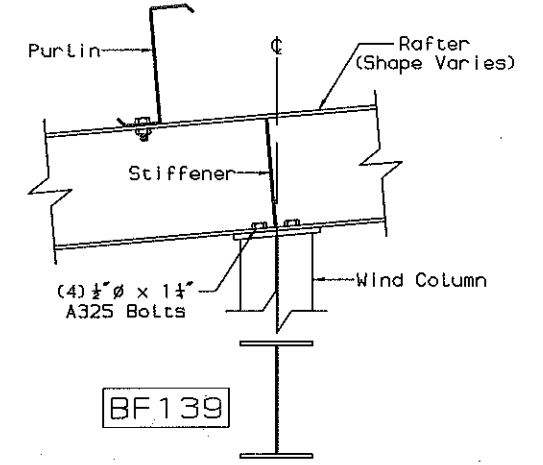
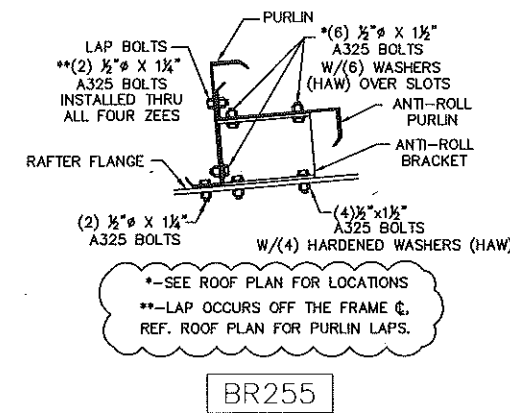
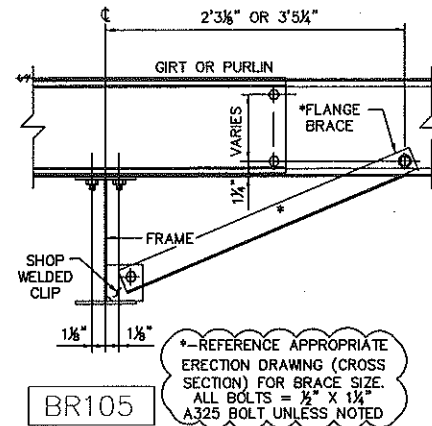
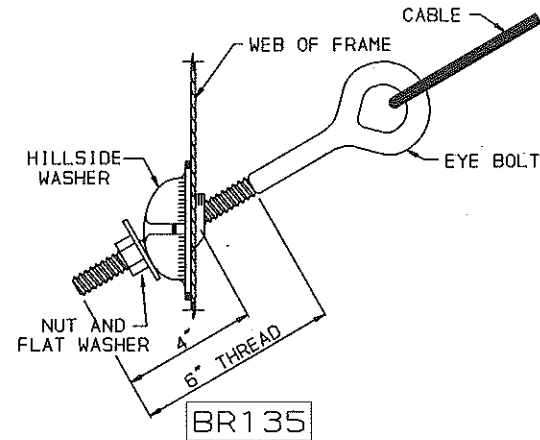
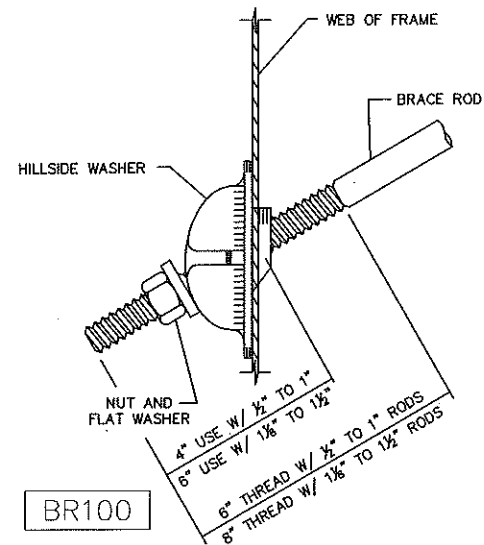
**KIRBY
BUILDING
SYSTEMS**
A NUCOR COMPANY
BETTER SOLUTIONS. BETTER COSTS.

TITLE: RIGHT ENDWALL	DRN. BY: TSK
BUILDER: XENELIS CONSTRUCTION	DATE: 3/9/16
CUSTOMER: BRISTOL TRANSFER STATION	CKD. BY: LD
LOCATION: BRISTOL, CT	DATE: 3-16-16
JOB NO: K14B0688A	DWG. NO: EB OF, EB

1. USE $\frac{1}{2}$ " x $\frac{1}{4}$ " A325 BOLTS FOR ALL GIRT LAP AND GIRT TO CLIP CONNECTIONS.
2. REFER TO BEARING FRAME DETAILS [BF] FOR CONNECTION REQUIREMENTS OF RAFTER TO RAFTER AND RAFTER TO COLUMN.
3. ADEQUATE TEMPORARY BRACING MUST BE PROVIDED BY THE ERECTOR DURING THE ERECTION OF THE BUILDING.
4. ALL PRIMARY AND SECONDARY FRAMING, WIND BRACING, ETC. MUST BE INSTALLED, PROPERLY ALIGNED, BOLTED OR WELDED PRIOR TO THE INSTALLATION OF THE WALL PANELS.
5. IT MAY BE NECESSARY DURING ERECTION TO MAKE MINOR ADJUSTMENTS AND ALIGNMENTS TO BOTH PURLINS AND GIRTS PRIOR TO INSTALLING PANELS.

- NOTE: ALL GIRT LAPS NOT
INDICATED WILL BE 0'2 1/2"
DOOR GIRTS:
ALL GIRTS ATTACHED AT ONE
END TO A DOOR JAMB ARE 16 GAGE
UNLESS NOTED OTHERWISE.

[illegible]

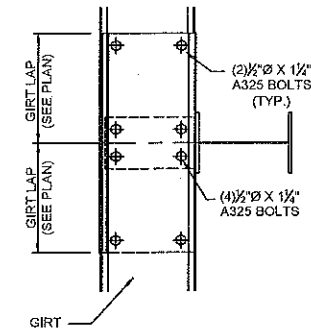


NOTES:
1. SHEETING AND TRIM FASTENERS ARE THE SAME COLOR AS THE FIRST PIECE OF SHEET METAL THROUGH WHICH THE FASTENER PASSES.
2. BLIND RIVETS ARE PROVIDED IN ALL FLUOROPOLYMER COLORS.
3. BRONZE COLORED TUBE SEALANT IS PROVIDED FOR DARK BRONZE SHEETING AND TRIM APPLICATIONS. WHITE TUBE SEALANT IS PROVIDED FOR ALL OTHER COLORS.
4. FASTENERS FOR ALL TRIM ARE REQUIRED AT 10" ON CENTER UNLESS NOTED OTHERWISE. USE TUBE SEALANT AT ALL TRIM SPLICES.

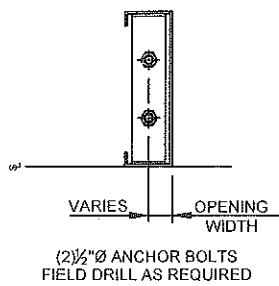
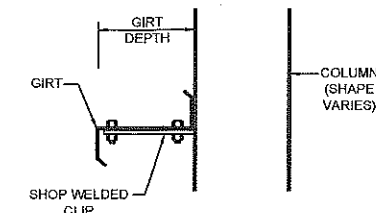
5. BOLT LENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
6. BOLT STRENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
7. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN LAPS.
8. USE 1/2" X 1 1/4" A325 BOLTS AT ALL PURLIN TO FRAME CONNECTIONS.
9. DRAWINGS ARE NOT TO SCALE.
10. WARNING: PENCIL LEAD AND MARKER WILL CAUSE GALV. PANELS AND TRIM PIECES TO RUST. DO NOT USE THESE TO MARK ON PARTS.

ISSUE	DESCRIPTION	BY	DATE
A	APPROVAL	JDS	11/24/14
O	CONSTRUCTION	TSK	3/9/16

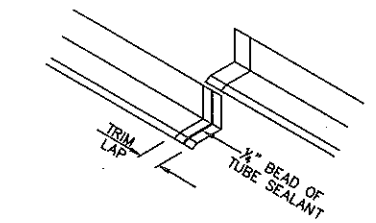
KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148	
TITLE: SPECIAL DETAILS	DRN. BY: TSK
BUILDER: XENELIS CONSTRUCTION	DATE: 3/9/16
CUSTOMER: BRISTOL TRANSFER STATION	CKD. BY: JD
LOCATION: BRISTOL, CT	DATE: 3-16-16
ID NUMBER: MBS###	MBS
JOB NO: K14B0688A	DWG. NO: D1 OF 03



GT236

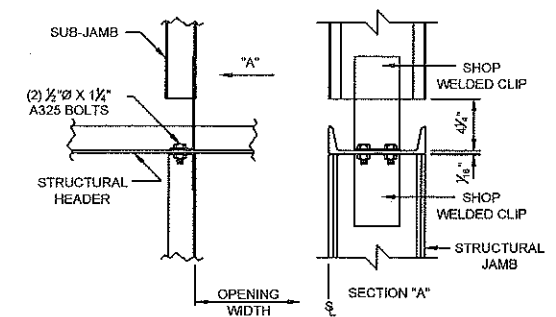


FO201

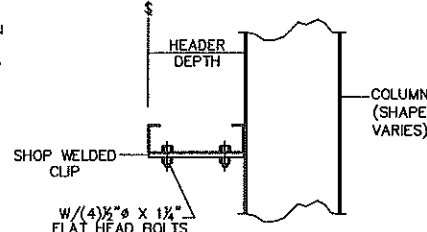


CERTAIN TRIMS ARE MORE ACCESSIBLE TO WATER THAN OTHERS. THESE TRIMS WILL REQUIRE A 1/4\"/>

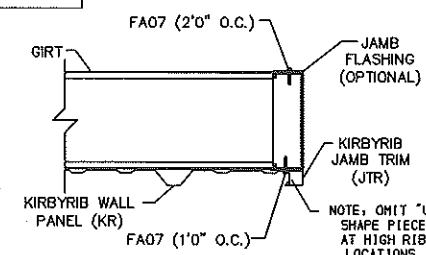
PL357



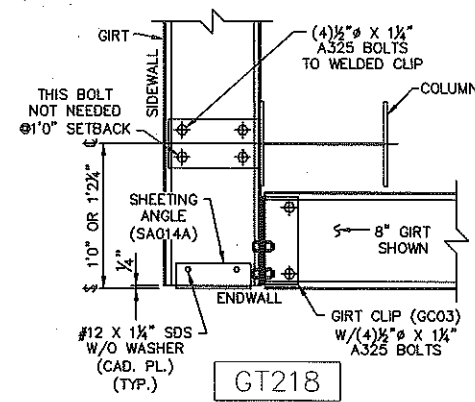
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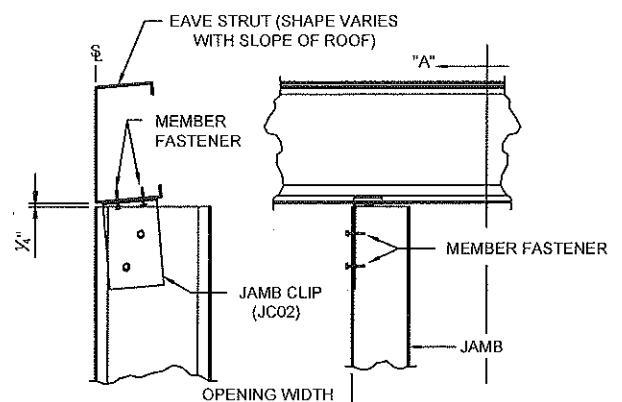
GT247



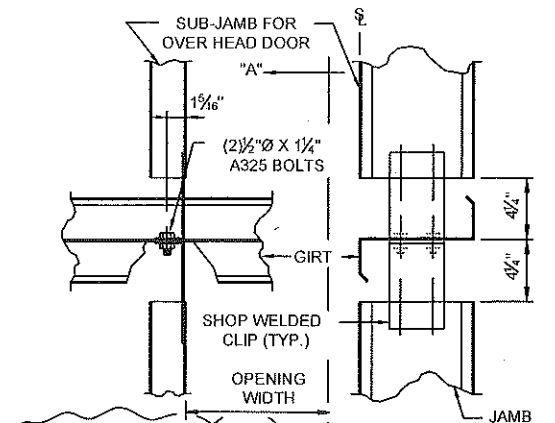
PL167



GT218

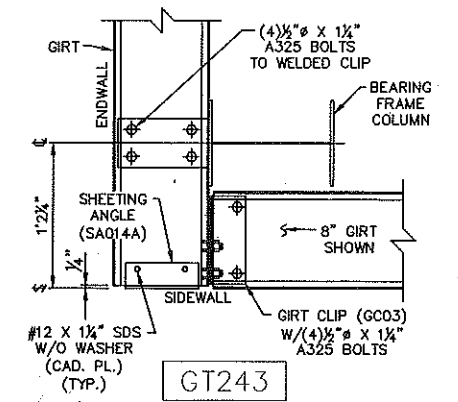


FO226

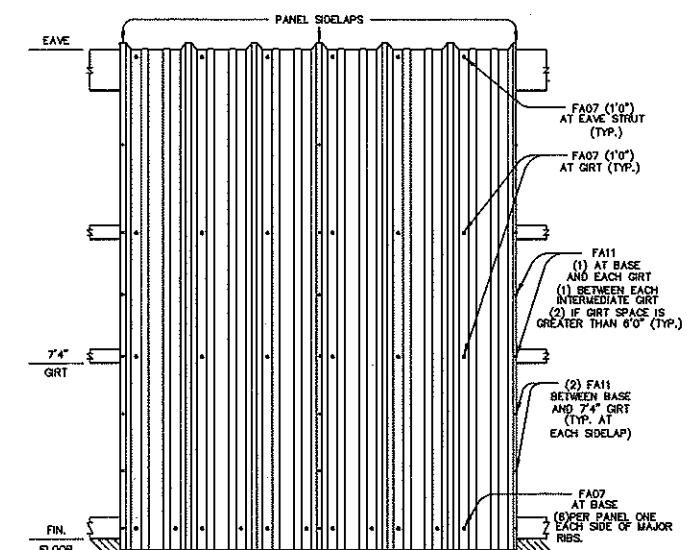


FO202

NOTE: FIELD DRILL (2) 1/8\"/>

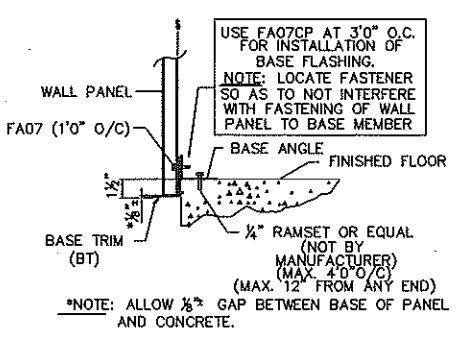


GT243

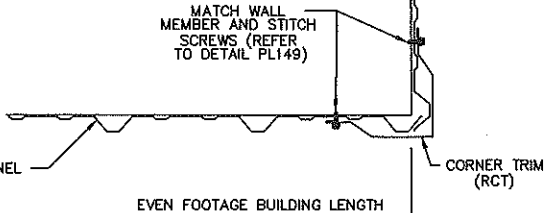


- GENERAL NOTES:
1. BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING PANEL ERECTION. MAINTAIN BLOCKING UNTIL PANEL TO STRUCTURAL FASTENERS ARE INSTALLED.
 2. ALIGN AND PLUMB FIRST WALL PANEL WITH ROOF PANEL.
 3. TO PREVENT "OR-CHANNING", ALL PANEL FASTENERS SHOULD START FROM BASE ANGLE AND SECURED TO EACH STRUCTURAL GIRT TOWARD EAVE.
 4. THERE IS A PLUS OR MINUS TOLERANCE BUILT INTO THE KIRBY WALL PANEL. MEASURE AND MARK 36\"/>

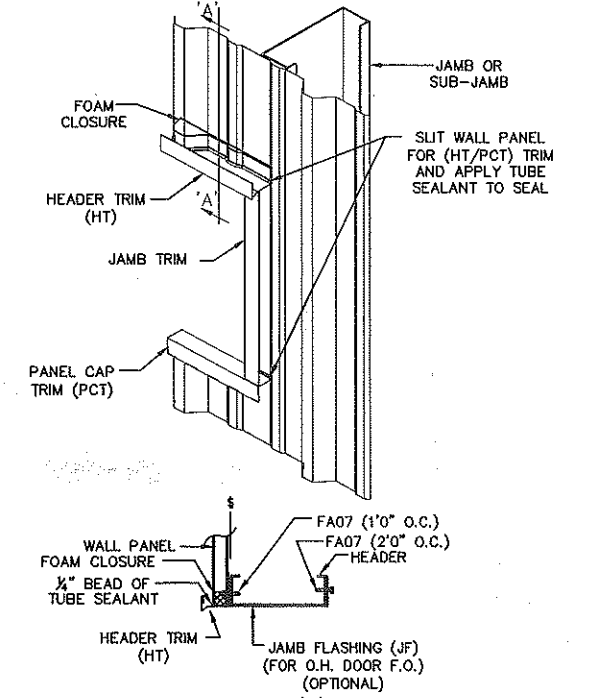
PL149



PL137



PL143



PL169

- NOTES:
1. SHEETING AND TRIM FASTENERS ARE THE SAME COLOR AS THE FIRST PIECE OF SHEET METAL THROUGH WHICH THE FASTENER PASSES.
 2. BLIND RIVETS ARE PROVIDED IN ALL FLUOROPOLYMER COLORS.
 3. BRONZE COLORED TUBE SEALANT IS PROVIDED FOR DARK BRONZE SHEETING AND TRIM APPLICATIONS. WHITE TUBE SEALANT IS PROVIDED FOR ALL OTHER COLORS.
 4. FASTENERS FOR ALL TRIM ARE REQUIRED AT 1'0\"/>

5. BOLT LENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
6. BOLT STRENGTH MAY VARY IF NOTED ON ERECTION DRAWINGS.
7. USE 1/2\"/>

ISSUE	DESCRIPTION	BY	DATE	 KIRBY BUILDING SYSTEMS A FLUOROPOLYMER COMPANY BETTER SOLUTIONS. BETTER BUILDINGS.	
A	APPROVAL	JDS	11/24/14		
O	CONSTRUCTION	TSK	3/9/16		
				KIRBY BUILDING SYSTEMS • 124 KIRBY DRIVE • PORTLAND, TN 37148	
				TITLE: SPECIAL DETAILS	DRN. BY: TSK
				BUILDER: XENELIS CONSTRUCTION	DATE: 3/9/16
				CUSTOMER: BRISTOL TRANSFER STATION	CKD. BY: <u>LD</u>
				LOCATION: BRISTOL, CT	DATE: <u>3-16-16</u>
ID NUMBER: MBS###				MBS	JOB NO: K14B0688A
					DWG. NO: D2 OF 03



A NUCOR Company

Date: November 19, 2014

Project Name: BRISTOL TRANSFER STATION
Project Location: BRISTOL, CT
Building:
A) RF: 60'-0" x 90'-0" EH: 33'-0" 1:12 Slope

XENELIS CONSTRUCTION
33 OLD INDIAN TRAIL
MIDDLEFIELD, CT 06455
Attn.: DAVID GAGLIARDI

KBS Project # K14B0688

MBMA Building End Use: 4.2 COMMERCIAL WAREHOUSING/STORAGE

This Letter of Design Certification ensures that the materials supplied by Kirby Building Systems are designed in accordance with the information specified to Kirby on the order documents and summarized by the loading information listed below. The Project Engineer of Record (not Kirby Building Systems' Design Engineer) is responsible for verifying that the building code and design loads meet any and all applicable local requirements.

Kirby Building Systems is a member of MBMA

Kirby Building Systems is IAS AC-472 Accredited MB-159

DESIGN CODE CRITERIA:

Structural Loads Applied in General Conformance with: 2003 IBC W/ 2005 & 2009 CONNECTICUT AMENDMENTS

Occupancy Importance Classification: II

PROJECT-WIDE LOADING INFORMATION:

Ground Snow Load: 35.0 PSF Snow Exposure Factor, Ce: 1.0 Snow Imp. Factor, Is: 1.0

Roof Live Load: 20.0 PSF WITH TRIBUTARY REDUCTION, MINIMUM 12.0 PSF

Wind Velocity: 100 MPH

Wind Exposure: B

Site is Not Located Within The Wind-Borne Debris Region.

Wind Imp. Factor, Iw: 1.0

UL 90: Construction #205

Ss: 0.24

S1: 0.06

Sds: 0.25

Sd1: 0.10

Seismic Imp. Factor, Ie: 1.0

Seismic Design Category: B

Site Class: D

Analysis Procedure: EQUIVALENT LATERAL FORCE PROCEDURE

BUILDING-SPECIFIC LOADING INFORMATION

Bldg	Roof Dead (psf)*	Collateral		Snow			Wind		Seismic (Lateral)				Seismic (Longitudinal)			
		Pri (psf)	Sec (psf)	Ct	Cs	Ps (psf)	Enclosure	GCpi	R	Cs	V (kips)	**	R	Cs	V (kips)	**
A	3.25	3.0	3.0	1.2	1.0	30.0	PART. ENC	0.55	3.0	0.0743	4.04	E	3.0	0.0743	3.72	E

* Primary Structural Not Included

** Seismic Force Resisting System

A: Ordinary Steel Moment Frames, OSMF

B: Intermediate Steel Moment Frames, ISMF

C: Ordinary Steel Concentrically Braced Frames, OSCBF

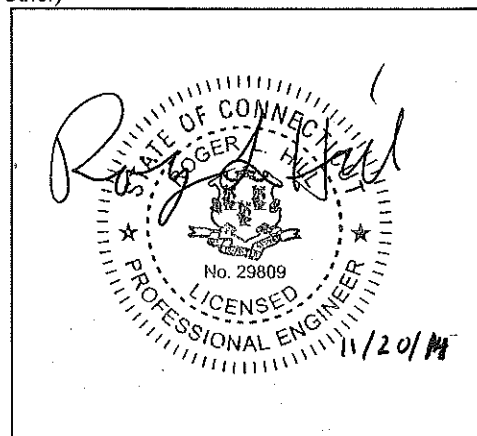
D: Cantilevered Column System to Conform to the Requirements of OSMF, CCS

E: Steel Systems Not Specifically Detailed for Seismic Resistance, Except CCS

F: Other (Steel Panel Diaphragm / Shear Wall / Other)

AUXILIARY LOADING INFORMATION:

The design of structural members supporting roof gravity loads is controlled by the more critical effect of roof live or roof snow load applied in accordance with the governing building code.



All A325/A490 bolts greater than 1/2" diameter are used in connections defined as SNUG TIGHT.

DESIGN STANDARDS REFERENCED:

- AISC Specification for Structural Steel Buildings - Allowable Stress Design, Ninth Edition, 1989
- AISI North American Specification for the Design of Cold-Formed Steel Structural Members, 2001
- MBMA Low Rise Building Systems Manual, 2002 Ed.
- AWS D1.1-10 and D1.3-08 Structural Welding Codes

Design Engineer: CHRIS TUCKER

Sealing Engineer: WAYNE GREGORY, PE



A **NUCOR** Company

PO Box 390
124 Kirby Drive
Portland, TN 37148
Ph: (615) 325-4165
Fax: (800) 231-3460
www.kirbybuildingsystems.com

Date: November 19, 2014

COLUMN BASE REACTIONS

☐ PRELIMINARY

☒ FOR CONSTRUCTION

Job Name:

BRISTOL TRANSFER STATION

Kirby Job Number:

K14B0688

Customer:

XENELIS CONSTRUCTION

Kirby Engineer:

CTT 11-19-14

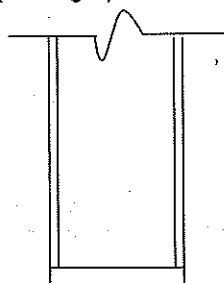
RLH 11/20/14

Column base reactions are included in this packet for a building designed by Kirby Building Systems. These reactions result from frame analysis done by a Kirby Engineer for this specific project. They reflect all loading to which the building may be subject, per the building code and loading information provided to Kirby Building Systems at the date of design. Reaction packets marked "PRELIMINARY" are subject to change and are usually provided at the request of the customer, although the Kirby Engineer believes he is working with undefined, incomplete or assumed information.

Reactions are provided by load case in order to aid the foundation engineer in determining the appropriate load factors and combinations to be used with either Working Stress or Ultimate Strength design methods. Wind load cases are given for each primary wind direction, and the case which produced the largest reaction at a particular column should be used for design.

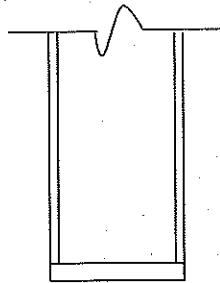
Sign conventions for computer generated frame reactions are as follows and should be taken in the sense of the frame sketch given on the reactions sheets.

GLOBAL X
(+ to right)



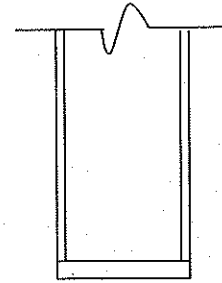
→
+ X

Global Y
(+ upward)



↑
+ Y

Global Z
(+ counter-clockwise)



↺
+ Z

Anchor bolt diameter, grade, location and projection are provided on the Anchor Bolt Plan. Anchor bolt embedment lengths and types are not provided by Kirby Building Systems. This information is closely related to the complete foundation design which should be done by a Registered Professional Engineer familiar with the local site conditions and construction practices.

 Kirby Building Systems A HUBBARD COMPANY	Job No.	K14B0688A	Date	11/19/2014
	Customer	BRISTOL TRANSFER STATION	Engineer	CTT
	Address	685 LAKE AVENUE	Checker	
		BRISTOL, CT	Revision #	

Revision:

Standard Load Nomenclature:

Note: Not all load conditions are applicable to all buildings.

DL - DEAD LOAD	WL1 - WIND LEFT W/ INT. PRESS.
LL - LIVE LOAD	WR1 - WIND RIGHT W/ INT. PRESS.
CL - COLLATERAL LOAD	WL2 - WIND LEFT W/ INT. SUCT.
SL - SNOW LOAD	WR2 - WIND RIGHT W/ INT. SUCT.
DRIFT - SNOW DRIFT	LW1/LNWIND1 = LONG. WIND W/ INT. PRESS.
SLIDE - SLIDING SNOW	LW2/LNWIND2 = LONG. WIND W/ INT. SUCT.
FxPAT_LLx - PATTERN LIVE	LWIND1_L2E - LONG. WIND W/ INT. PRESS. + ZONE 2E
FxPAT_SLx - PATTERN SNOW	LWIND1_R2E - LONG. WIND W/ INT. PRESS. + ZONE 2E
FxUNB_SL_L - UNBALANCED SNOW LEFT	LWIND2_L3E - LONG. WIND W/ INT. SUCT. + ZONE 3E
FxUNB_SL_R - UNBALANCED SNOW RIGHT	LWIND2_R3E - LONG. WIND W/ INT. SUCT. + ZONE 3E
FxCRANEA1 - MAX LEFT W/ THRUST RIGHT	WINDP/WP - WIND PRESS. W/ INT SUCT. ENDWALL & SC
FxCRANEA2 - MAX LEFT W/ THRUST LEFT	WINDS/WS - WIND SUCT. W/ INT PRESS. ENDWALL & SC
FxCRANEA3 - MAX RIGHT W/ THRUST RIGHT	SEISMIC LEFT - SEISMIC LEFT
FxCRANEA4 - MAX RIGHT W/ THRUST LEFT	SEISMIC RIGHT - SEISMIC RIGHT

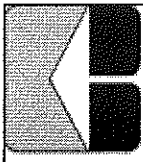
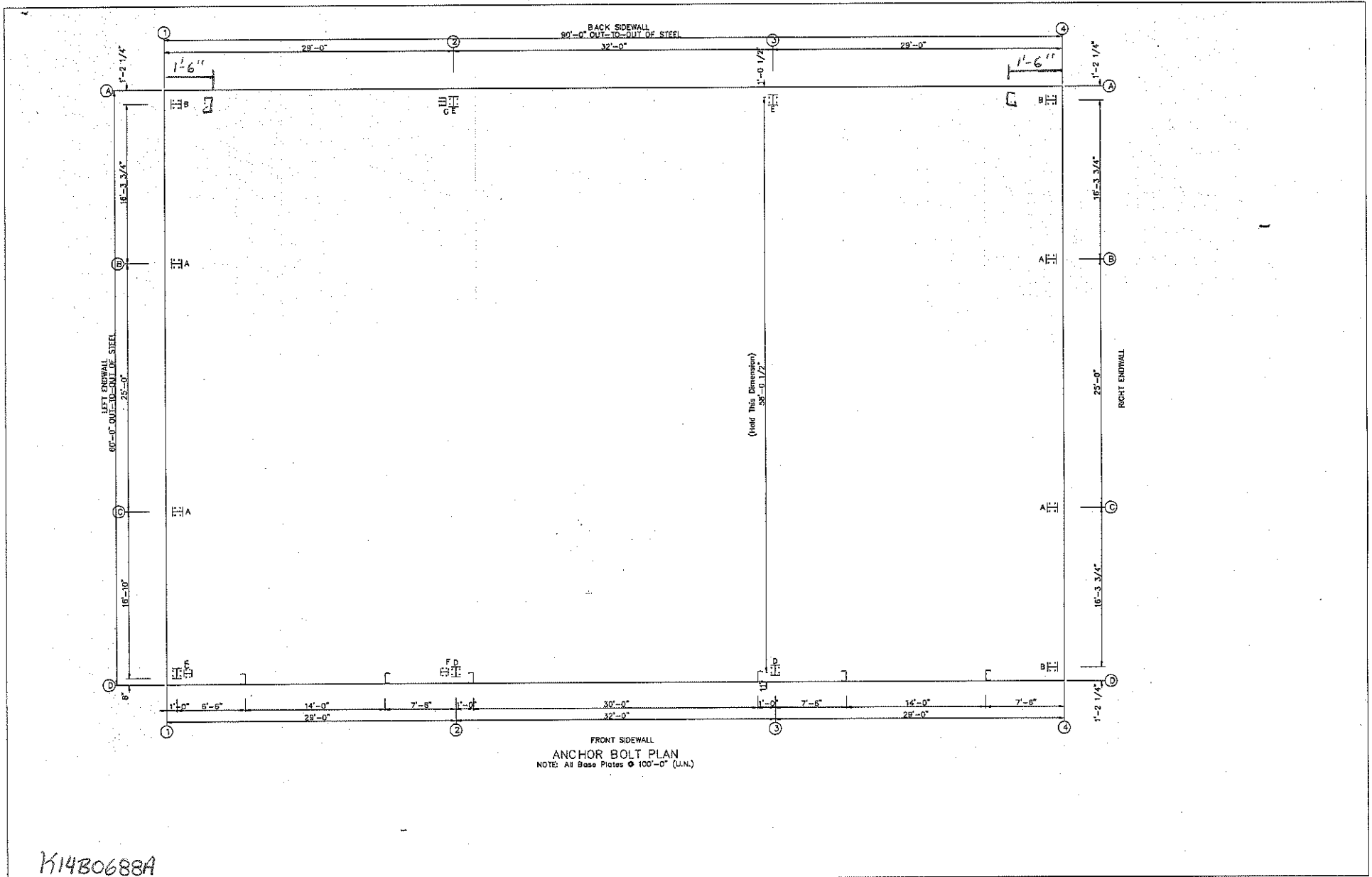
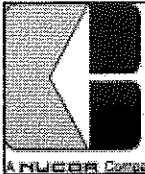
 Kirby Building Systems A HUECO Company	Job No.	K14B0688A	Date	11/19/2014
	Customer	BRISTOL TRANSFER STATION	Engineer	CTT
	Address	685 LAKE AVENUE	Checker	
		BRISTOL, CT	Revision #	*

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REACTIONS	5 - 13



K1480688A

 Kirby Building Systems A Hilti Company	Job No.	K14B0688A	Date	11/19/2014
	Customer	BRISTOL TRANSFER STATION	Engineer	CTT
	Address	685 LAKE AVENUE	Checker	
		BRISTOL, CT	Revision #	

Kirby Building Systems
 124 Kirby Dr.
 Portland, TN 37148

REACTIONS, ANCHOR BOLTS, & BASE PLATES
 FOR
 XENELIS CONSTRUCTION
 33 OLD INDIAN TRAIL
 MIDDLEFIELD, CT

Bristol, CT
 685 LAKE AVENUE
 BRISTOL, CT
 K14B0688A

BUILDING LAYOUT

Width (ft) = 60.0
 Length (ft) = 90.0
 Eave Height (ft) = 33.0/ 33.0
 Roof Slope (rise/12) = 1.00/ 1.00

BUILDING LOADS

Roof Dead Load (psf) = 3.3
 Wall Dead Load
 Left Endwall (psf) = 2.0
 Right Endwall (psf) = 2.0
 Front Sidewall (psf) = 2.0
 Back Sidewall (psf) = 2.0
 Roof Live Load (psf) = 20.0
 Frame Live Load (psf) = 12.0
 Collateral Load (psf) = 3.0
 Snow Load (psf) = 30.0
 Wind Speed (mph) = 100.0
 Wind Code = CTBC 05 (IBC 03)
 Closed/Open = P
 Exposure = B
 Internal Wind Coeff = -0.55, +0.55
 Importance - Wind = 1.00
 Importance - Seismic = 1.00
 Seismic Design Category = B



Job No.	K14B0688A	Date	11/19/2014
Customer	BRISTOL TRANSFER STATION	Engineer	CTT
Address	685 LAKE AVENUE	Checker	
	BRISTOL, CT	Revision #	

Seismic Coeff (Fa*Ss) = 0.38

Designer : CTT

Detailer : CTT

11/19/14

K14B0688A

Reactions, Anchor Bolts, & Base Plates: 11/19/14 10:12am

Frame Line	Col Line	Foundation Loads(k)						Anc. Bolt		Base Plate		
		Max_Pos_Val Id	Horz	Vert	Max_Neg_Val Id	Horz	Vert	No.	Diam	Width	Len	Thick
1	A	13	3.1	-1.7	14	-2.8	-1.7	4	0.750	8.00	12.44	0.375
		15	0.0	5.8	13	3.1	-1.7					
1	B	13	7.1	-10.7	14	-6.6	-10.7	4	0.750	8.00	14.25	0.375
		15	0.0	18.2	13	7.1	-10.7					
1	C	16	7.1	-10.7	17	-6.6	-10.7	4	0.750	8.00	14.25	0.375
		18	0.0	18.2	16	7.1	-10.7					
1	D	16	3.1	-1.7	17	-2.8	-1.7	4	0.750	8.00	12.44	0.375
		18	0.0	5.8	16	3.1	-1.7					
4	D	13	3.1	-1.7	14	-2.8	-1.7	4	0.750	8.00	12.44	0.375
		19	0.0	5.8	13	3.1	-1.7					
4	C	13	7.1	-10.7	14	-6.6	-10.7	4	0.750	8.00	14.25	0.375
		19	0.0	18.2	13	7.1	-10.7					
4	B	16	7.1	-10.7	17	-6.6	-10.7	4	0.750	8.00	14.25	0.375
		20	0.0	18.2	16	7.1	-10.7					
4	A	16	3.1	-1.7	17	-2.8	-1.7	4	0.750	8.00	12.44	0.375
		20	0.0	5.8	16	3.1	-1.7					
2	A	1	10.7	13.6	2	-9.1	-1.1	4	0.750	8.00	10.31	0.375
		3	8.1	50.4	4	3.6	-16.8					
2	D	5	9.1	-1.1	6	-10.7	13.6	4	0.750	8.00	10.31	0.375
		7	-8.1	50.4	8	-3.6	-16.8					
3	A	9	10.7	13.6	2	-9.1	-1.1	4	0.750	8.00	10.31	0.375
		10	8.1	50.4	4	3.6	-16.8					
3	D	5	9.1	-1.1	11	-10.7	13.6	4	0.750	8.00	10.31	0.375
		12	-8.1	50.4	8	-3.6	-16.8					

LOAD COMBINATIONS:

 Kirby Building Systems A HUECO Company	Job No.	K14B0688A	Date	11/19/2014
	Customer	BRISTOL TRANSFER STATION	Engineer	CTT
	Address	685 LAKE AVENUE	Checker	
		BRISTOL, CT	Revision #	

Id Combination

-
- 1 Dead+Collateral+0.75Wind_Right1+0.75F1UNB_SL_R
 - 2 0.6Dead+Wind_Left2
 - 3 Dead+Collateral+F1UNB_SL_L
 - 4 0.6Dead-Wind_Long1+LWIND1_L2E
 - 5 0.6Dead+Wind_Right2
 - 6 Dead+Collateral+0.75Wind_Left1+0.75F1UNB_SL_L
 - 7 Dead+Collateral+F1UNB_SL_R
 - 8 0.6Dead-Wind_Long1+LWIND1_R2E
 - 9 Dead+Collateral+0.75Wind_Right1+0.75F2UNB_SL_R
 - 10 Dead+Collateral+F2UNB_SL_L
 - 11 Dead+Collateral+0.75Wind_Left1+0.75F2UNB_SL_L
 - 12 Dead+Collateral+F2UNB_SL_R
 - 13 0.6Dead+Wind_Left2+Wind_Suction
 - 14 0.6Dead+Wind_Left2+Wind_Pressure
 - 15 Dead+Collateral+E1UNB_SL_L
 - 16 0.6Dead+Wind_Right2+Wind_Suction
 - 17 0.6Dead+Wind_Right2+Wind_Pressure
 - 18 Dead+Collateral+E1UNB_SL_R
 - 19 Dead+Collateral+E2UNB_SL_L
 - 20 Dead+Collateral+E2UNB_SL_R

K14B0688A

Bracing Reactions Report:

11/19/14

10:12am

BUILDING BRACING REACTIONS:

		-----Reactions(k)-----							
---Wall---		Col	---Wind---		---Seismic---		Panel_Shear(lb/ft)		
Loc	Line	Line	Horz	Vert	Horz	Vert	Wind	Seismic	
L_EW	1	B ,C	3.21	4.21	0.72	0.94			
F_SW	D	Wind Bent In Wall							
R_EW	4	C ,B	3.21	4.21	0.72	0.94			
B_SW	A	Wind Column In Wall							

WIND BENTS:

		-----Reaction(k)-----								
---Wall---	Col	---Wind---		---Seismic---		Anc Bolt		---Base Plate(in)---		
Loc Line	Line	Horz	Vert	Horz	Vert	No	Dia	Width	Length	Thick
F_SW D	1 ,2	3.3	7.7	0.9	2.2	4	0.750	10.000	15.75	0.375

 Kirby Building Systems A HUBBARD COMPANY	Job No.	K14B0688A	Date	11/19/2014
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WIND COLUMNS:

---Wall--- Col				--Reaction(k , f-k)--			Anc. Bolt		---Base Plate(in)---		
Loc	Line	Line	Load_Id	Horz	Vert	Moment	No.	Dia	Width	Length	Thick
B_SW	A	2	Wind	6.6	65.8	211.3	8	1.250	12.000	47.00	1.000
			Seismic	1.9	18.5	59.4					

Reaction values shown are unfactored. Maximum load combination factors are:

Wind : 1.00

Seismic: 0.70

K14B0688A Additional Reactions Report: 11/19/14 10:12am

Rigid Frame Column Reactions(k)

Frame Line	Col Line	----Dead---		Collateral		----Live---		----Snow---		Wind_Left1	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2	A	0.8	4.7	0.6	2.8	2.4	11.0	5.9	27.5	-5.2	-19.6
2	D	-0.8	4.7	-0.6	2.8	-2.4	11.0	-5.9	27.4	-5.6	-11.3

Frame Line	Col Line	Wind_Right1		Wind_Left2		Wind_Right2		Wind_Long1		Wind_Long2	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2	A	5.6	-11.3	-9.6	-3.9	1.2	4.5	3.1	-17.7	-1.1	-2.0
2	D	5.2	-19.6	-1.2	4.5	9.6	-3.9	-3.1	-17.7	1.1	-2.0

Frame Line	Col Line	-Seis_Left-		-Seis_Right		LWIND1_L2E		LWIND1_R2E		LWIND2_L2E	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
2	A	-0.7	-0.7	0.7	0.7	0.0	-1.9	-0.2	-0.3	0.0	-1.9
2	D	-0.7	0.7	0.7	-0.7	0.2	-0.3	0.0	-1.9	0.2	-0.3

Frame Line	Col Line	LWIND2_R2E		F1UNB_SL_R		F1UNB_SL_L	
		Horz	Vert	Horz	Vert	Horz	Vert
2	A	-0.2	-0.3	6.8	19.4	6.6	42.9
2	D	0.0	-1.9	-6.6	42.9	-6.8	19.4

Frame Line	Col Line	----Dead---		Collateral		----Live---		----Snow---		Wind_Left1	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
3	A	0.8	4.7	0.6	2.8	2.4	11.0	5.9	27.5	-5.2	-19.6
3	D	-0.8	4.7	-0.6	2.8	-2.4	11.0	-5.9	27.4	-5.6	-11.3

 Kirby Building Systems ARTURCO Company	Job No.	K14B0688A	Date	11/19/2014
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Frame Line	Col Line	Wind_Right1		Wind_Left2		Wind_Right2		Wind_Long1		Wind_Long2	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
3	A	5.6	-11.3	-9.6	-3.9	1.2	4.5	3.1	-17.7	-1.1	-2.0
3	D	5.2	-19.6	-1.2	4.5	9.6	-3.9	-3.1	-17.7	1.1	-2.0

Frame Line	Col Line	-Seis_Left-		-Seis_Right		LWIND1_L2E		LWIND1_R2E		LWIND2_L2E	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
3	A	-0.7	-0.7	0.7	0.7	0.0	-1.9	-0.2	-0.3	0.0	-1.9
3	D	-0.7	0.7	0.7	-0.7	0.2	-0.3	0.0	-1.9	0.2	-0.3

Frame Line	Col Line	LWIND2_R2E		F2UNB_SL_R		F2UNB_SL_L	
		Horz	Vert	Horz	Vert	Horz	Vert
3	A	-0.2	-0.3	6.8	19.4	6.6	42.9
3	D	0.0	-1.9	-6.6	42.9	-6.8	19.4

Endwall Column Reactions(k)

Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert
1	A	0.8	0.3	1.7	2.8	-2.2	-1.7	-2.2	-1.7
1	B	2.2	1.1	6.6	10.5	-7.8	-5.5	-7.8	-5.5
1	C	2.2	1.1	6.6	10.5	-5.5	-7.8	-5.5	-7.8
1	D	0.8	0.3	1.7	2.8	-1.7	-2.2	-1.7	-2.2

Frame Line	Col Line	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seismic Left Vert	Seismic Right Vert	-E1UNB_SL_R-	
								Horz	Vert
1	A	-2.8	3.1	-1.8	-0.2			0.0	0.5
1	B	-6.6	7.1	-6.7	-0.8			0.0	4.6
1	C	-6.6	7.1	-6.7	-0.8			0.0	15.1
1	D	-2.8	3.1	-1.8	-0.2			0.0	4.7

Frame Line	Col Line	-E1UNB_SL_L-		-E1PAT_LL_1-		-E1PAT_LL_2-		-E1PAT_LL_3-	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
1	A	0.0	4.7	0.0	2.3	0.0	-0.6	0.0	1.7
1	B	0.0	15.1	0.0	2.5	0.0	4.1	0.0	6.9
1	C	0.0	4.6	0.0	2.5	0.0	4.1	0.0	3.8
1	D	0.0	0.5	0.0	2.3	0.0	-0.6	0.0	-0.5

Frame	Col	-E1PAT_LL_4-	--LWIND1_L--	--LWIND1_R--	--LWIND2_L--
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 Kirby Building Systems A HUBB Corporation		Job No.	K14B0688A		Date	11/19/2014	
		Customer	BRISTOL TRANSFER STATION		Engineer	CTT	
		Address	685 LAKE AVENUE		Checker		
			BRISTOL, CT		Revision #		

Line	Line	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
1	A	0.0	-0.5	0.0	-0.7	0.0	0.0	0.0	-0.7
1	B	0.0	3.8	0.0	-0.4	0.0	0.1	0.0	-0.4
1	C	0.0	6.9	0.0	0.1	0.0	-0.4	0.0	0.1
1	D	0.0	1.7	0.0	0.0	0.0	-0.7	0.0	0.0

Frame Line	Col Line	--LWIND2_R--	Horz	Vert
1	A		0.0	0.0
1	B		0.0	0.1
1	C		0.0	-0.4
1	D		0.0	-0.7

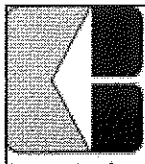
Frame Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert
4	D	0.8	0.3	1.7	2.8	-2.2	-1.7	-2.2	-1.7
4	C	2.2	1.1	6.6	10.5	-7.8	-5.5	-7.8	-5.5
4	B	2.2	1.1	6.6	10.5	-5.5	-7.8	-5.5	-7.8
4	A	0.8	0.3	1.7	2.8	-1.7	-2.2	-1.7	-2.2

Frame Line	Col Line	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert	Seismic Left Vert	Seismic Right Vert	-E2UNB_SL_R- Horz	-E2UNB_SL_R- Vert
4	D	-2.8	3.1	-1.8	-0.2			0.0	0.5
4	C	-6.6	7.1	-6.7	-0.8			0.0	4.6
4	B	-6.6	7.1	-6.7	-0.8			0.0	15.1
4	A	-2.8	3.1	-1.8	-0.2			0.0	4.7

Frame Line	Col Line	-E2UNB_SL_L- Horz	-E2UNB_SL_L- Vert	-E2PAT_LL_1- Horz	-E2PAT_LL_1- Vert	-E2PAT_LL_2- Horz	-E2PAT_LL_2- Vert	-E2PAT_LL_3- Horz	-E2PAT_LL_3- Vert
4	D	0.0	4.7	0.0	2.3	0.0	-0.6	0.0	1.7
4	C	0.0	15.1	0.0	2.5	0.0	4.1	0.0	6.9
4	B	0.0	4.6	0.0	2.5	0.0	4.1	0.0	3.8
4	A	0.0	0.5	0.0	2.3	0.0	-0.6	0.0	-0.5

Frame Line	Col Line	-E2PAT_LL_4- Horz	-E2PAT_LL_4- Vert	--LWIND1_L-- Horz	--LWIND1_L-- Vert	--LWIND1_R-- Horz	--LWIND1_R-- Vert	--LWIND2_L-- Horz	--LWIND2_L-- Vert
4	D	0.0	-0.5	0.0	-0.7	0.0	0.0	0.0	-0.7
4	C	0.0	3.8	0.0	-0.4	0.0	0.1	0.0	-0.4
4	B	0.0	6.9	0.0	0.1	0.0	-0.4	0.0	0.1
4	A	0.0	1.7	0.0	0.0	0.0	-0.7	0.0	0.0

Frame Line	Col Line	--LWIND2_R--	Horz	Vert
4	D		0.0	0.0

 Kirby Building Systems ANUECA Company	Job No.	K14B0688A	Date	11/19/2014
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4	C	0.0	0.1
4	B	0.0	-0.4
4	A	0.0	-0.7

K14B0688A Seismic Design Report: 11/19/14 10:12am

Building Data

Code = IBC 03
Length = 90.00
Width = 60.00
Left Eave Height = 33.00
Right Eave Height = 33.00

Seismic Formula

Base Shear, V = $0.667 \cdot I_e \cdot F_a \cdot S_s \cdot W/R$

Vmin = $0.044 \cdot S_d \cdot I_e \cdot W$

Vmax = $S_{d1} \cdot I_e \cdot W / (T \cdot R)$

T(Moment Frame) = 0.459

T(Braced Frame) = 0.275

Shear Force, E = $\rho \cdot V$

(Rigid frame, endwall frame, wind bent, wind column & base reactions)

Shear Force, Em = $\Omega \cdot V$

(Wall diagonal bracing, splice at rigid frame & wind bent knee)

Note: Applied load is seismic force multiplied by load combination

Fa*Ss = 0.382

Zone/Design Category = B

Ie = 1.000

S1 = 0.064

Sd1 = 0.102

Sds = 0.255

Seismic Dead Load, W

Snow Factor = 0.000

Roof Dead+Collateral = 6.25 (psf)

Frame Dead = 2.50 (psf)

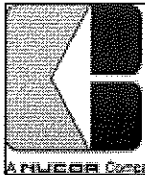
Roof Total = 8.75 (psf) , Weight = 47.25 (k)

L_EW Dead = 2.00 (psf) , Weight = 2.06 (k)

F_SW Dead = 2.00 (psf) , Weight = 2.97 (k)

R_EW Dead = 2.00 (psf) , Weight = 2.06 (k)

B_SW Dead = 2.00 (psf) , Weight = 2.97 (k)

 Kirby Building Systems ANUECO Company	Job No.	K14B0688A	Date	11/19/2014
	Customer	BRISTOL TRANSFER STATION	Engineer	CTT
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Total = 57.30 (k)

Seismic Forces

Roof Bracing

R = 3.00, Rho= 1.00
Cs = 0.0850
W = 51.36 (k)
Force, V = 4.37 (k)
Force, E = 4.37 (k)

Wind Bents

Front R = 3.00, Rho= 1.00
Cs = 0.0743
W = 25.01 (k)
Force, V = 1.86 (k) (Vmax)
Force, E = 1.86 (k)

Wind Columns

Back R = 3.00, Rho= 1.00
Cs = 0.0743
W = 25.00 (k)
Force, V = 1.86 (k) (Vmax)
Force, E = 1.86 (k)

Endwall Bracing

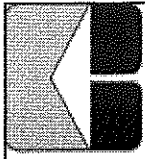
Left R = 3.00, Rho= 1.00, Omega= 1.00
Cs = 0.0850
W = 8.47 (k)
Force, V = 0.72 (k)
Force, Em = 0.72 (k)
Force, E = 0.72 (k)
Right R = 3.00, Rho= 1.00, Omega= 1.00
Cs = 0.0850
W = 8.47 (k)
Force, V = 0.72 (k)
Force, Em = 0.72 (k)
Force, E = 0.72 (k)

Rigid Frames

R = 3.00, Rho= 1.00
Cs = 0.0743
Frame 1 W = 17.50 (k)
Force, V = 1.30 (k) (Vmax)
Force, E = 1.30 (k)
Frame 2 W = 17.50 (k)
Force, V = 1.30 (k) (Vmax)
Force, E = 1.30 (k)

End Plates

Frame R = 3.00, Omega= 1.00
Wind Bent R = 3.00, Omega= 1.00

 Kirby Building Systems A HUECO Company	Job No.	K14B0688A	Date	11/19/2014
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Total Base Shear

Longitudinal

Force, V = 3.72 (k)

Transverse

Force, V = 4.04 (k)



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: DPW Draft Work Order Management Policy

The Draft Policy 24.06 establishes the procedures and expectations for receiving, documenting, prioritizing, responding to, and closing complaints and work orders within the City of Bristol Public Works Department. The policy is intended to ensure accountability, consistency, professionalism, and efficient service delivery across all divisions.

The policy applies to all Public Works divisions, employees, customers, other City departments, and individuals seeking permits. It defines complaints as customer-reported concerns or dissatisfaction and work orders as formal requests for maintenance, repair, inspection, or service. The Brightly Asset Management System (AMS) is designated as the official system of record for trackable service requests.

A major emphasis of the policy is customer service and communication. Highlights of the policy are provided below:

1. The policy stresses the importance of active listening to properly identify underlying issues rather than relying solely on the initial complaint description.
2. States good customer service is not defined solely by customer satisfaction but by accurate and consistent information provided in accordance with department policy, procedures, and City ordinances.
3. Employees are prohibited from deviating from established procedures or offering personal opinions regarding policy.
4. Staff are not required to continue communication with individuals who become verbally abusive, hostile, or threatening.
5. The policy requires that all actionable complaints and service requests requiring follow-up, scheduling, inspection, or coordination be entered into Brightly AMS as work orders.
6. Telephone complaints must receive an initial response within two business days, while email complaints must receive a response within three business days.

7. Referrals to other departments should only occur when responsibility is clearly known, and DPW maintains ownership of issues until proper routing is confirmed.
8. Complaints involving the same issue received three separate times must be escalated for supervisory review to evaluate trends and determine whether corrective action is needed.

Subject to Board of Public Works review, the Department of Public Works requests the following action:

Approve Proposed DPW Policy 24.06 Work Order Management as presented.

Please feel free to contact me with any questions or concerns at 860-584-6113.

CITY OF BRISTOL – PUBLIC WORKS

24.06 WORK ORDER MANAGEMENT

1. Purpose

The purpose of this policy is to establish a consistent, accountable, and efficient process for receiving, prioritizing, addressing, and documenting complaints and work orders within the Public Works Department.

2. Scope

This policy applies to all Public Works Department Divisions, employees, and customers, including:

- The general public
- Other City departments
- Public Works staff
- Individuals seeking permits

3. Definitions

- **Complaint:** A report from a customer identifying a concern, deficiency, or dissatisfaction with infrastructure, services, or operations.
- **Work Order:** A formal, trackable request for inspection, maintenance, repair, or service.
- **Service Request System:** Brightly Asset Management System (AMS), used for tracking work orders and service requests when required.
- **Response:** Initial communication acknowledging receipt of an issue; does not constitute resolution.
- **Customer:** Any party receiving Public Works services.

4. Policy Statement

The Department shall use Brightly AMS as the official system of record for all trackable service requests. Work shall be managed in a timely, consistent, and professional manner with clear accountability.

5. Customer Service Standard and Listening

- Staff shall provide professional, respectful service at all times.
- Good customer service is not defined solely by customer satisfaction but by accurate and consistent information provided in accordance with department policy, procedures, and City ordinances.
- Active listening is essential to identifying the true nature of a concern. Initial complaints may not clearly reflect the underlying issue. Through communication and clarification, staff shall work to identify the core problem.

- Staff shall follow all Department policies and City ordinances and shall not deviate from established procedures or provide personal opinion of Department policy or procedures.
- Staff are encouraged to provide suggestions for improving policies, procedures, and ordinances to improve service delivery.

6. Safety, Staff Conduct, and Interaction Limits

- Staff are **not** required to engage with individuals who are verbally abusive, hostile, or threatening, or where behavior suggests potential escalation to violence.
- Staff shall:
 - Discontinue communication
 - Inform the individual of termination of contact
 - Document and report the incident to a supervisor
- Supervisors shall determine follow-up actions as appropriate.

7. Intake and Documentation

- All DPW Administration and Dispatch calls shall be logged into Brightly AMS within one (1) business day unless exempt under Section 8.
- Supervisors, engineers, and inspectors may address issues directly but shall ensure administrative staff enter required AMS records when tracking is needed.
- Emails and service requests shall be documented when appropriate.

8. Routine Immediate Resolution (AMS Exemption Standard)

Routine requests resolved immediately by staff at the point of contact shall not require entry into Brightly AMS provided ALL of the following apply:

- No follow-up is required
- No safety risk exists
- No scheduling or dispatch is required
- No repeat or recurring issue is known
- No supervisory review is required

Examples include minor, one-time issues, resolved immediately through staff action.

9. Work Order Creation

- Work orders shall be created in Brightly AMS for all trackable service requests.
- All actionable complaints requiring follow-up, scheduling, inspection, or coordination shall be logged.
- Duplicate requests shall be consolidated.

10. Prioritization of Work

Work orders shall be prioritized as follows:

- Emergency: Immediate threat to public safety or infrastructure failure
- Urgent: Significant service disruption or hazard
- Routine: Standard maintenance
- Planned: Scheduled work

11. Response Time Standards and Communication

- All complaints received via telephone shall receive an initial response within two (2) business days.
- All complaints or requests for service received via email shall receive an initial response within (3) business days.
- A full response shall be provided within five business days, or staff shall notify and update supervisor.
- If additional time is required, staff shall:
 - Acknowledge receipt
 - Explain delay
 - Provide a follow-up timeframe
- Call backs of sale and solicitation calls are not required

12. Email Communication Protocol

- Emails shall be monitored regularly during business hours.
- Complaint emails shall be acknowledged within one (3) business day as indicated in 11 above.
- Service-related emails shall be entered into Brightly AMS when required.
- Action requests shall be assigned to a single responsible individual.
- Group emails shall be limited to necessary recipients only.

13. Referral to Other Departments

- Referrals shall only occur when the responsible department is clearly known.
- Staff shall avoid unnecessary transfers of responsibility to prevent customer confusion or perceived “runaround.”
- Ownership of the issue shall remain with DPW until proper routing is confirmed.

14. Assignment and System Access

- DPW inspectors and engineers without direct AMS access shall coordinate with administrative staff for:
 - Opening work orders
 - Updating records
 - Closing work orders
- Administrative staff maintain system responsibility based on field input.

15. Compliance with Policies and Ordinances

- Staff shall follow all City ordinances, policies, and procedures without deviation.

- Freelancing or informal deviation from policy is not permitted.
- Staff are encouraged to provide recommendations for improvement.

18. Closure of Work Orders

Work orders may be closed when:

- Work is completed and documented
- No further action is required. Documentation shall include reason for no further action.

19. Complaint Resolution and Escalation

- Complaints are resolved when work is completed or deemed non-actionable.
- If **three (3) separate complaints of the same issue** are received, the matter shall be escalated to supervisory review for trend evaluation and potential corrective action.

20. Tracking and Performance Monitoring

The Department shall track:

- Response times
- Completion times
- Work order volume
- Recurring complaint trends

21. Coordination and Escalation

Complex or delayed issues shall be escalated through supervisory channels as needed.

22. Records Management

All AMS records and related communications shall be maintained per City record retention policy and applicable law.

23. Training and Continuous Improvement

Staff shall be trained in:

- AMS procedures
- Customer service and communication
- Active listening and de-escalation

24. Policy Review

This policy shall be reviewed every 2–3 years.

25. Appeal Process

Decisions made by Public Works staff may be appealed to the **Director of Public Works**. If unresolved, the customer may further appeal to the **Board of Public Works** for review.



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: May 11, 2026

TO: Mayor Ellen Zoppo-Sassu
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: DPW Complete Street Project Review North Main St Streetscape & Emmett St Sidewalk Installation

The Complete Streets Committee convened on April 21, 2026, at 2:07 PM to review proposed revisions to the North Main Street Streetscape Project and discuss the proposed Emmett Street Sidewalk Project. Attendees included representatives from the Department of Public Works, Engineering Division, Public Works Board, Recreation Department, and Surveying Division.

Committee Purpose

In accordance with the Board of Public Works approved Complete Street Policy all department of Public Work project shall be reviewed by a committee to ensure that the project substantially complies with the Complete Street Policy and addresses the needs of pedestrian accessibility, multimodal transportation, and public safety.

The approved Complete Street Policy is attached for reference purposes.

North Main Street Streetscape Revisions

Ryan Heller presented revisions to the west side of the North Main Street streetscape area adjacent to the Bristol Police Department and U.S. Post Office. While the original concept was developed by Benesch, the revised plans were fully surveyed and redesigned by the City Engineering Department.

The revisions are intended to increase downtown resident parking capacity while supporting ongoing business growth and improving walkability. Proposed improvements include:

- Multiple ADA-accessible curb ramps
- Two oversized van-accessible handicap parking spaces

- A pedestrian refuge island with a marked crosswalk
- Solar-powered Rapid Rectangular Flashing Beacons (RRFBs) for pedestrian safety near Carrier Development buildings

The committee also discussed future expansion of shared bicycle lanes to connect surrounding neighborhoods and Rockwell Park. Drainage upgrades are included in the project to address stormwater concerns associated with the proposed islands, and the design prioritizes reuse of existing materials where feasible.

A plan of the proposed North Main Street Streetscape improvements is attached for review.

The Committee members expressed support for the revisions to the North Main Street Streetscape project and agreed that the project complies with the BPW's Complete Street Policy and will be a positive improvement for the downtown area.

Emmett Street Sidewalk Project

Lukasz Burkacki presented the proposed Emmett Street Sidewalk Project extending from the intersection of Sycamore Street and Emmett Street southward approximately 500 feet beyond Surrey Drive. The project includes approximately 3,000 feet of sidewalk installation, including 500 feet of entirely new sidewalk construction where none currently exists.

Project improvements focus primarily on installation of ADA-compliant sidewalks and curb ramps. The corridor currently serves CTtransit Route 502; however, the project does not presently include bus stop signage or transit amenities. The possibility of future bicycle accommodations was discussed, although no existing bicycle infrastructure currently connects to the corridor.

The project is funded through the Community Connectivity Grant Program and is intended to improve pedestrian connectivity between the southern portion of Emmett Street, including access to a local soccer club, and the northern residential section of the corridor.

Construction sequencing will maintain pedestrian access and preserve two-way traffic throughout the duration of the project by constructing one sidewalk side at a time.

A plan of the proposed Emmett Street Sidewalk Installation is attached for review.

The Committee members expressed support for the propose Emmett Street Sidewalk installation project and agreed that the project complies with the BPW's Complete Street Policy and will be a positive improvement for the downtown area.

No Board of Public Work Action is required, this information is submitted for record policy indicating compliance with the City's Complete Street Policy

Please feel free to contact me with and questions or concerns at 860-584-6113.

CITY OF BRISTOL COMPLETE STREET POLICY

1.0 SCOPE

Complete Streets is an approach to planning, designing, and building streets that enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. This approach also emphasizes the needs of those who utilize multi-modes of transportation, mostly in City areas with low-income levels and the highest housing and population density.

An objective of the Complete Street policy is to maximize City investments in areas where existing multi-model roadway infrastructure is required, due to lack of long-term investment, and is needed due to high population density. With that said, the Complete Street policy will be incorporated into ALL Department of Public Works project to ensure that all modes of transportation and needs of all residents are met.

While Complete Streets is a **process** and **approach** to street design, there is no singular design prescription for Complete Streets. Each one is unique and responds to its community context. A complete street may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crosswalks, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.

The March 2022 USDOT and FHWA Report to Congress Entitled “Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges,” defines Complete Streets as “Complete Street is safe, and feels safe, for everyone using the street. The Infrastructure, Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), Section 11206, defines Complete Streets standards or policies as those which “ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.”

The report also states: “Building Complete Streets encompasses planning, designing, constructing, maintaining, and operating roadways and public rights-of-way with all users in mind to make the transportation network safer. In principle, Complete Streets are multimodal and provide safe access for all roadway users. In practice, it is not always possible to accommodate all modes in a single street due to right-of-way constraints, so a practical approach to Complete Streets also focuses broadly on building Complete Networks to provide connectivity for different modes of travel. Complete Networks may use parallel routes to facilitate access that variously prioritizes different modes throughout an area while ensuring the safety of all roadway users. Creating Complete Streets also requires safety data analysis and safety countermeasure identification and implementation. “In summary the report states that: “Complete Streets provide users with essential access to the transportation network, regardless of mode choice, access, or connectivity, determines how easily people can move throughout the transportation system. At its simplest level, network connectivity addresses how travelers can move safely and easily from place to place. Safety and comfort for those who use transit, walk, bike or roll are integral to the objective of providing connections and access for those who choose to use those modes.”

The City of Bristol Planning commission is required by statute to develop a Plan of Development every 10 years to act as a blue print for the city. The 2015 Plan of Conservation and Development chapter 13 addresses the future transportation needs of the city. Section 13.2 lists the Overall Transportation System Goals. The first goal is to provide a comprehensive and integrated system to best meet the needs of Bristol residents, businesses, and visitors. Other overall goals of the plan are vehicular, pedestrian, bicycle circulation, and transit. These items are expressed more thoroughly as policies in section 13.3. Section 13.3.1 Comprehensive System, promotes a “Complete Streets” approach to ensure that local roadways are designed to accommodate multiple modes of transportation (motor vehicles, pedestrians, bicycles, public

transit, etc.) where and when appropriate.” The development a of a Complete Streets Policy will make the City Eligible for Future Community Connectivity Funding that is being administered by The State of Connecticut Department of Transportation (CTDOT), and help the city to incorporate Complete Street Elements in state funded projects.

2.0 VISION – GOAL

This Complete Streets policy shall be considered as an integral component of the project design for all City owned public street right of ways including sidewalks and pathways. The transportation network shall be safe, accessible, comfortable, accommodating, and welcoming to all users including pedestrians, people with mobility challenges, cyclists, motorists, commercial vehicles, and emergency vehicles.

A Complete Streets approach will encourage non-motorized modes of transportation and a Complete Streets culture that promotes an inter-connected community, healthy living, and a thriving City.

Specific benefits include the following:

- i. Makes roads safer through development of separate pedestrian and cyclist facilities where possible, that will improve safety and increase capacity for vulnerable users.
- ii. Enables healthier lifestyle choices by providing an expanding variety of safer and convenient walking and bicycling options;
- iii. Expands or completes the network of safe walking and bicycling routes to schools, parks, and other community services;
- iv. Encourages Economic Development;
- v. Provides for uniformity from project to project and from state to city streets;
- vi. Potentially reduces vehicular traffic volumes and improved air quality;
- vii. To make the roadway and street environment safer and more inviting by reducing the frequency and severity of vehicular, bicycle, and pedestrian-related accidents.

Complete Streets are necessary to promote an integrated and balanced transportation network. Complete Streets strive to provide the best possible blend of service, mobility, convenience, and safety while reinforcing a positive social, economic, and environmental influence.

Complete Streets shall be a vital component of the City’s transportation network and contribute directly to the health, safety, economic vitality and quality of life in the City. Through implementation of Complete Streets principles, the transportation network in the City will be safe, accessible, comfortable, and convenient for all transportation users.

Implementing a Complete Street policy shall ensure all people can comfortably travel to and from their destinations safely, in a reasonable amount of time, in a cost-effective manner. A Complete Streets policy is both about prioritizing the most vulnerable users of the transportation system (people walking, rolling,

and biking), and fostering a paradigm shift away from prioritizing speedy car travel. The Complete Street policy shall ensure City roadways complement and enhance the surrounding land use and neighborhood character and accommodate all users, including drivers, bicyclists, pedestrians and transit patrons, older residents, children, and persons with mobility impairments.

3.0 EQUITY – PRIORITIZATION OF UNDERSERVED COMMUNITIES

There are populations and communities within our City that face higher transportation burdens and experience greater barriers to accessing resources and opportunities, as well as disenfranchised populations, and communities that have traditionally been underrepresented in City planning and decision-making processes. These populations include low-income individuals, people of color, senior residents, children, youth, people with disabilities, and people living in households without access to a private automobile. Each of these groups are either at higher risk of injury or death while walking or biking, and are more likely to walk, bike, or use public transit than the population as a whole. Therefore, this population needs to be considered specifically when improving the transportation environment. To begin to address these inequities, the City shall incorporate equity criteria into the project prioritizing process and developing an inclusive community engagement process to reach our most vulnerable users and underrepresented populations. It is important to incorporate equity criteria when evaluating maintenance in order to maintain accessibility for everybody, including the most vulnerable users.

All users and all transportation modes shall benefit from Complete Streets improvements.

The City of Bristol's ADA Transition plan prioritizes the Downtown District of the City and access to municipal facilities. The Downtown District is an economically disadvantaged area prioritized for new accessible sidewalk facilities. The City is utilizing Community Connectivity funding through (CTDOT) for pedestrian improvements in the Downtown District, Federal Hill, and West End, along with Bristol Housing Authority properties in the Lillian Road, Vance Drive, and other areas.

4.0 CHOOSING COMPLETE STREET PROJECTS - APPLIES TO ALL PROJECTS AND PHASES

A strong and effective Complete Streets policy starts to reshape the process by which projects are chosen for funding and advancement. An objective of the Complete Street Policy shall be to reduce the focus on prioritizing vehicle level of service (how many cars can be moved through a corridor), or account for potential impacts to vehicle travel time, while ignoring the more holistic impacts of improving access to jobs and services. The City's Complete Street policy shall establish the following project criteria priorities:

- a. Safety
- b. Mobility
- c. Pedestrians
- d. Cyclists (within reestablished priority zones)
- e. Motor Vehicles

We recognize that all modes of transportation cannot always have separate code compliant accommodations within every publicly owned right of way due to physical restraints. However, the overall goal is for all users to safely and conveniently use the transportation system. The City shall establish criteria to encourage funding prioritization for Complete Streets implementation with at least the following principles in mind:

- i. Connectivity— connecting existing infrastructure to existing infrastructure and creating additional connections to community assets (including but not limited to: businesses, schools, community centers, city halls, medical facilities, parks, voting locations, and libraries).
- ii. Multimodality— implementing projects that expand infrastructure for modes of transportation other than the car.
- iii. Economic Development— proposed project supports broader efforts to enhance economic development. In addition to these criteria, the City shall work to gather community input on projects being considered to determine which projects should be developed first.

An important aspect of this Complete Streets policy is to ensure that City bicycle riders feel safe traveling within and throughout the City. The City currently lacks defined bicycle routes for convenient and easily accessible transportation through and around the City. To address this, the Board of Public Works shall establish a City Bicycle Advisory Committee, and the Committee shall develop a Bicycle Facility Plan. Such Plan shall be presented to the Board of Public Works no later than nine (9) months from the adoption of this Complete Streets Policy, and shall be reviewed and/or updated every three years.

5.0 EXCEPTIONS

Each project shall be approached as an opportunity to improve the safety and accessibility of the street and public right of way for all users.

However, exceptions shall be made if any of the following criteria will render Complete Streets improvements unworkable:

- a. Where specific users are prohibited by law from using the ROW (e.g. pedestrians and bicyclists within a limited access highway). However, exclusion of certain users on particular ROW's shall not exempt projects from accommodating other permitted users;
- b. Cost is disproportionate to the current need or projected future need for Complete Streets improvements, or unusual circumstances, such as where natural features (e.g. steep hills, ledge, flood plains, wetlands) make it very costly or impossible to accommodate all modes, or funding is not available;
- c. There is an absence of current and future need with an Average Daily Traffic (ADT) of 1000 or less and is more than a mile from neighborhoods, schools, or points of interest.
- d. Emergency repairs, such as a water main leak, that require an immediate, rapid response; however, temporary accommodations for all modes should still be made. Depending on the severity of the repairs, opportunities to improve multimodal access should still be considered where possible.
- e. Transit accommodations are not required where there is no existing or planned transit service.
- f. Routine maintenance of the transportation network that does not change the roadway geometry or operations, such as mowing, sweeping, and spot repair.
- g. Where a reasonable and equivalent project along the same corridor is already programmed to provide facilities exempted from the project at hand.

Requested exceptions shall be evaluated initially by the Director of Public Works in consultation with the City Engineer or City Planner, and then presented at a regularly scheduled Board of Public Works meeting for action.

Notwithstanding the above, in accordance with the Connecticut General Statutes, as amended, where a transportation project includes state or federal transportation funding, the determination of the applicability of the exception request must be made by the Board of Public Works. Once the Bicycle Facilities Plan is adopted by the Board of Public Works, any recommendation for an exception to this policy that is objected to when concerning the Bicycle Facilities Plan, shall be brought to the Board of Public Works. All granted exceptions shall be posted to the City's Department of Public Works website. Where exceptions are granted, parallel accommodations for the category of users excluded shall be considered on alternate routes within the transportation system.

6.0 MANDATORY COORDINATION BETWEEN AGENCIES

A Complete Street is defined as a street that meets the needs of all users: motor vehicles, pedestrians, cyclists, and including populations of low-income individuals, people of color, senior residents, children, youth, people with disabilities, and people living in households without access to a private automobile. In order to meet their needs, it is imperative that the Complete Street policy includes outreach programs to receive input from the organizations within the City representing the various communities and City Departments such as the following:

1. Senior Center
2. Veterans Strong
3. Commission on Disability
4. Parks Department and Youth Services
5. Economic Community Development

The Complete Street policy also recognizes that all streets within the City are not under the jurisdiction of the City. The State of Connecticut highway system includes CT Route 69, 72, 6, and 229 within the City. Although the City does not have authority over state roads, and requires permits to work on said roads, the City's Complete Street policy shall require the Department of Public Works to provide input and recommendations to the State of Connecticut to perform and construct state roadway projects within the City in accordance with the City's Complete Street policy.

In addition, there are private roads, typically constructed to support private developments such as condominiums or private unit developments. Although private, these roads require approval by the City's Zoning Commission or Planning Commission, therefore coordination of the land use commissions shall be included in this policy to ensure private property developments are constructed in accordance with City Complete Street requirements. It is anticipated that compliance with City Complete Street policies will require revisions to City Zoning and Planning Commission regulations. In accordance with this policy, the Department of Public Works shall review all applicable Zoning and Planning Commission regulations. Within two years of adoption of this policy, the Department of Public Works shall submit any and all required regulation revisions to the Zoning and Planning Commissions for review and approval.

7.0 ADOPTION OF DESIGN GUIDANCE DOCUMENTS AND STANDARDS

Complete Streets is not just a set of projects, it's a holistic approach and process to the transportation system, which by definition, applies to all kinds of projects. Implementing Complete Streets requires more than just isolated projects here and there. It requires building a *complete network* of streets that are safe for all users. With that said, current City roadway design standards shall be reviewed and will require

anticipated modifications and revisions to implement Complete Streets best practices design standards. As such, this policy shall require a complete review and revisions to City current roadway design standards. Complete Street design standards shall comply with and be part of the following design standards:

All Complete Streets improvements within public ROWs shall conform to the following standards. Of the following list, AASHTO and MUTCD are considered the definitive design guides for changes within the State ROW. Because Complete Streets design is an evolving field, the latest edition of these standards shall be referenced for design guidance:

- 1). City of Bristol Roadway Design Standards
- 2). CT DOT Highway Design Manual, and supplements, including City of Bristol approved modifications
- 3). U.S. Access Board - Accessible Public Rights-of-Way Accessibility Guidelines 4). CT DOT Standard Specification Form 819, and supplements, including City of Bristol approved modifications
- 5). CT DOT Traffic Control Signal Design Manual
- 6). American Association of State Highway and Transportation Officials (AASHTO)
A Policy on Geometric Design of Highways and Streets (“Green Book”)
- 7). AASHTO Guide for the Development of Bicycle Facilities
- 8). AASHTO Guide for the Planning, Design and Operations of Pedestrian Facilities
- 9). ASSHTO Guide on Achieving Flexibility in Highway Design
- 10). ASSHTO Guide on Geometric Design of Transit Facilities on Highways and Streets
- 11). Connecticut Department of Transportation (CTDOT)
Comprehensive Pedestrian Safety Strategy
- 12). Federal Highway Administration (FHWA)
Manual on Uniform Traffic Control Devices (MUTCD)
- 13). FHWA Lighting Handbook
- 14). FHWA Achieving Multimodal Networks
- 15). FHWA Bikeway Selection Guide
- 16). FHWA Incorporating On-Road Bicycle Networks into Resurfacing Projects
- 17). Institute of Transportation Engineers (ITE)
Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
- 18). National Association of City Transportation Officials (NACTO)

Urban Bikeway Design Guide

The City of Bristol is committed to applying Complete Streets principles to all transportation and roadway projects. Each project shall be approached as an opportunity to improve the safety and accessibility of the transportation network for all users.

Periodic maintenance activities, such as re-striping and re-surfacing, which have potential to allow for low-cost improvements, e.g. “road diets” that narrow the vehicle travel lanes and provide space for the addition or widening of bike and pedestrian lanes, shall be considered. This means that small and routine tasks, not just the larger construction and reconstruction projects, provide opportunities to implement Complete Streets. Many small, low-cost improvements will, when thoughtfully implemented over time, create a much friendlier and safer environment for everyone.

Traffic Signal timing adjustments can be used to improve pedestrian safety.

Preventive maintenance activities, such as mowing, cleaning, sweeping, spot repair, concrete joint repair, pothole filling, water, sewer and drainage, or other utility installation or repairs taking place without any other tangible improvements, illumination addition, signing only, landscaping, guiderail installation and repair, traffic signal repairs, do not mandate Complete Streets Improvements. To the maximum extent possible, however, provisions for safe access shall be made for all modes of transportation during maintenance activities.

Roadway and Transportation improvement projects, such as road widening and intersection improvements, shall be thoroughly evaluated for Complete Streets improvements, and are subject to the exception criteria outlined in the following section.

8.0 COMMITMENT TO PROACTIVE LAND USE PLANNING

Land use context and flexibility shall be considered relative to potential Complete Streets improvements. The overall goal of this approach is to preserve and enhance scenic, aesthetic, historical, and environmental resources while improving or maintaining safety, mobility, and infrastructure conditions.

It is the intent of this Policy that the City will endeavor to incorporate Complete Streets policies into the zoning regulations, subdivision regulations, the Plan of Conservation & Development, and all other relevant planning and regulatory documents to help support the community's Complete Streets vision. Additionally, the Planning & Zoning Commissions are encouraged to review all private development proposals with the goal of helping facilitate the community's Complete Streets vision. All City projects that have land use considerations shall consider how such actions may impact the community's Complete Streets vision. Biking and walking facilities to City owned facilities including schools and parks, shall be prioritized.

The endeavor to support the City's Complete Streets Policy and principles shall also necessitate a greater consideration for how transportation intersects with broader land use decisions. As a result, all new or revised land use policies, plans, zoning ordinances, and other documents shall be required to specify how they will support Complete Streets. The overall goal of this approach is to preserve and enhance scenic, aesthetic, historic, and environmental resources while improving accessibility and promoting a sense of place.

9.0 Jurisdiction

This Complete Streets Policy shall apply to all City owned streets and land within public ROWs. All Complete Streets improvements must be coordinated between all relevant City of Bristol departments such as Public Works, Police, Fire, Economic Development, Mayor's Office, Parks Recreation and Youth, Water, Emergency Management, Public Health, and Senior Services. In particular, the Police Department is the designated Legal Traffic Authority for the City and therefore plays a critical role in evaluating, supporting, and potentially permitting Complete Street components.

All new private development projects, which propose improvements within the public ROW, shall be encouraged to comply with this Complete Streets policy. The issuance of all Department of Public Works permits shall be contingent upon meeting the Complete Streets requirements. Private development projects proposing work within the City's roadway right of way shall be reviewed for consistency with the Complete Street policy as part of the approval process.

Owners of private streets and ways shall also be encouraged to adhere to this policy.

The State of Connecticut Department of Transportation (CTDOT) controls several principal transportation corridors within the City. The City shall work cooperatively with CTDOT to plan and implement Complete Streets improvements within these ROWs.

Public Act PA 09-154 and the CTDOT Complete Streets Policy shall be applied to all planning, design, construction and major maintenance within State controlled ROWs.

Utility companies operate within City and State ROWs. Their planning, construction, and major maintenance can create both opportunities and barriers to Complete Streets improvements. The City shall coordinate with utility companies to ensure that utility projects and Complete Streets improvements are coordinated wherever possible.

The City shall also coordinate Complete Streets planning and construction with transit agencies, the NVCOG (Naugatuck Valley Council of Governments), and adjacent municipalities to facilitate effective application of resources.

10. Performance Measurement

Measurement of Complete Streets improvements will require periodic and sustained evaluation to measure progress and effectiveness. The Department of Public Works will complete a yearly review of performance measures and report said measures to the Board of Public Works each calendar year. The measurement of all Complete Streets improvements for the previous calendar year are to include the following:

- a) Funding: Total dollar amount spent on Complete Street Improvements
 - 1. Total funds
 - 2. Town funds
 - 3. Grant funds or other source
 - 4. Roadway Infrastructure Improvement Fund expenditures

b) Sidewalks/Pedestrian/Transit Improvements:

1. Linear feet of sidewalks replaced or new and other pedestrian accommodations built by the city
2. Linear feet of sidewalk built by others
3. Number and description of crosswalks installed or improved, include Rectangular Rapid Flashing Beacons (RRFB'S)
4. Number and description of Americans with Disabilities Act (ADA) accommodations installed or improved
5. Number and description of public or private transit accessibility improvements installed or improved by type and number

c) Bicycling Improvements:

1. Linear feet of bicycle lanes, routes, or trails built by width and type
2. Number and description of bicycle parking facilities installed

d) Traffic Calming:

1. Number and description of traffic calming measures implemented
2. Number of new traffic control signs/signals installed that assist with the Town's Complete Streets policies

e) Maintenance Activities:

1. Description of Maintenance Activities of existing Complete Streets facilities

f) User and Crash Data:

1. Motor vehicle, bicycle and pedestrian crash data

g) Exceptions:

1. Number of Exceptions requested and approved, including Board of Public Works approval dates.

h) Lighting

1. Number of street lights added/removed or modified

i) Mass Transit Route

1. Mass transit routes servicing City (additions/modifications, including bus stops)

j) Number of Community Engagements, including summary of action.

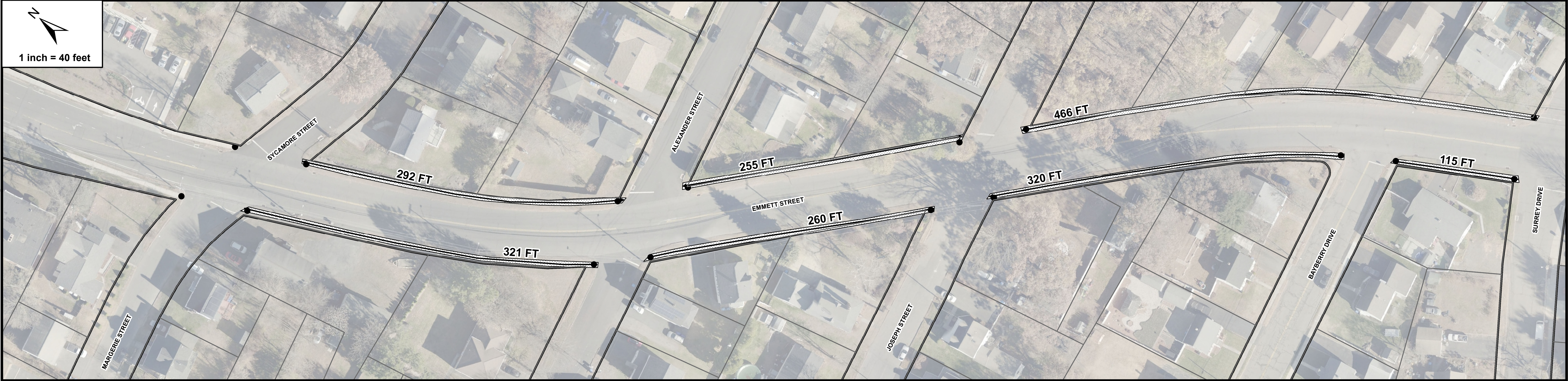
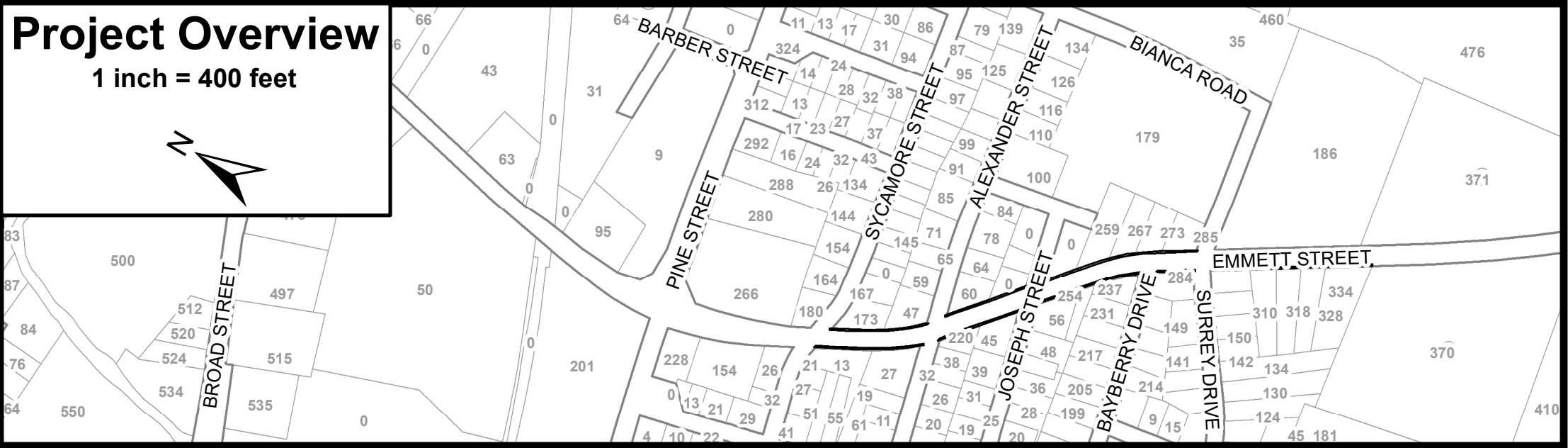
11. City Implementation Plan

The implementation of Complete Streets will require cooperation and collaboration between many stakeholders on a regular basis. The City will take the following steps to facilitate the process:

- a) The City will develop an ordinance establishing complete streets, establishing the Department of Public Works as the implementors of Complete Streets. Said ordinance shall be completed ten (10) months from adoption of ordinance.
- b) The Board of Public Works shall oversee implementation of the Complete Streets policy with quarterly reports from the Board of Public Works.
- c) The Director of Planning and the Planning & Zoning Commissions shall review and propose revisions to all appropriate land use regulations to support the implementation of Complete Streets.
- d) The Director of Public Works and City Engineering shall establish necessary procedures to ensure the application of Complete Streets principles at the earliest design stage.
- e) The City shall encourage staff professional development in the area of Complete Streets through attendance at seminars, conferences, and workshops. An annual budget will be established for training.
- f) The City shall actively promote public information and education and solicit feedback about Complete Streets from the community using outreach strategies that make use of both electronic media and print media.
- g) The Department of Public Works shall prepare a Complete Street Evaluation checklist. Each Department of Public Works project shall be subject to completion of the Complete Street checklist. The checklist shall address community engagement.
- h) Within twelve (12) months of adoption of this policy, the Department of Public Works shall prepare and submit for approval from the Board of Public Works Complete Street design guidance standards.

Proposed Sidewalk Project Emmett Street

- Legend**
- Handicap Curb Ramp Required
 - ↔ Extent of Proposed Sidewalk Repair
 - ▨ Sidewalk to be Replaced (Areas Identified by Bristol DPW - Engineering)
 - ▧ New Sidewalk (Areas Identified by Bristol DPW - Engineering)
 - New Sidewalk (Areas Identified without Existing Sidewalk)



Complete Streets Checklist

Project Name NORTH MAIN STREET - STREETSCAPE

Date: APRIL 21, 2020

Project Location/Limits: NORTH MAIN ST., BRISTOL

Tax Parcel Map/Lot #: N/A - ROADWAY R.O.W.

Project Description: PARKING REVISIONS

Street Classification (street/streets within the project area)

Urban Principal Arterial ☐

Urban Minor Arterial ☐

Urban Major Collector ☒

Urban Minor Collector ☐

Urban Local Road ☐

Annual Average Daily Traffic: 10,500 Posted Speed Limit: 25 MPH

85th Percentile Speed: 42 MPH % Heavy Vehicles (classes F4-F13): N/A

5-yr total pedestrian crashes: 0 5-yr total bicycle crashes: 0

Pedestrian count (if available): N/A Bicycle count (if available): N/A

Instructions: For each box checked, please briefly describe how the item is addressed, not addressed, or not applicable, and include supporting documentation. Refer to best practice design standards as needed, including but not limited to, guidelines from the American Association of State Highway Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD), the Connecticut Department of Transportation (CTDOT), the Institute of Transportation Engineers (ITE), the National Association of City Transportation Officials (NACTO), the Americans with Disabilities Act (ADA), and the US Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG).

EXISTING CONDITIONS				
Items to be Addressed/Considered	YES	NO	N/A	Required Description
Existing Walking & Bicycling Facilities				
Do walking or bicycling facilities exist within 500 feet of the project area?	☒	☐	☐	
Is there public parking within 300 feet of the project area?	☒	☐	☐	
Existing Roadway Facilities				
Are road shoulder widths adequate for walking and bicycling? If not, please specify travel lane and road shoulder widths.	☒	☐	☐	ONE SIDE (NORTHBOUND) ONLY AT 5.9' WIDE. SOUTHBOUND 2' WIDE.
Are road shoulder surfaces in good condition for walking and bicycling? If not, please specify.	☒	☐	☐	
Is on-street parking present on the road?	☒	☐	☐	
Existing Transit Facilities				
Is the project area on a transit route?	☒	☐	☐	
Are there bus stops within 500 feet of the project area?	☒	☐	☐	
Existing Access and Mobility/ADA				
Do all sidewalks, ramps, signals, and other facilities within the project area meet ADA standards?	☒	☐	☐	
Existing Walking/Bicycling Issues				
Have local leaders, residents, or organizations been contacted to discuss issues related to walking, bicycling, or transit?	☒	☐	☐	
Existing Safety Issues				
Has the Bristol Police Traffic Division and/or road owner been contacted to discuss any safety issues in the project area?	☒	☐	☐	
Key Destinations				
Are there shopping, employment centers, cultural centers, historic sites, landmarks, recreation areas, or	☒	☐	☐	

other key destinations that could be connected to the project area?	☒	☐	☐	
Are there schools, hospitals, senior centers, community centers or centers for persons with disabilities within a half-mile of the project area?	☒	☐	☐	
Planned Facilities				
Is there a planned walking, bicycling, or transit facility within a radius of 500 feet around the project area?	☒	☐	☐	
Plans & Policies				
Briefly describe relevant recommendations from municipal planning or policy documents addressing walking, bicycling, transit, or truck/freight travel in or near the project area and how the project incorporates them, or if not, why not.				

Attach a project plan & map of the surrounding context, including existing & planned facilities and destinations.

PROPOSED DESIGN				
Complete Streets Elements: what will be included in the Proposed design?				
Bicycling Facilities:			Walking Facilities:	
Off-roadway path/trail	☐ Yes	☐ No	☒ NA	Sidewalks (preferred on both sides of the street or path)
Dedicated on-street bike lane	☐ Yes	☒ No	☐ NA	Paved Shoulders (4 feet minimum; 5+ feet preferred)
Shared-lane markings (sharrows)	☒ Yes	☐ No	☐ NA	High-visibility crosswalks
Paved Shoulders (4 feet minimum; 5+ feet preferred)	☒ Yes	☐ No	☐ NA	Curb extensions to reduce crossing distance
Bike detection at actuated traffic signals, including at turn lanes	☐ Yes	☒ No	☐ NA	Pedestrian traffic signals with adequate crossing time
Signals with adequate minimum green time for bicyclists to cross the intersection	☒ Yes	☐ No	☐ NA	Signal timing: protected left turn phases, leading pedestrian interval, no right turn on red, etc.
Bicycle-safe inlet grates	☐ Yes	☒ No	☐ NA	Raised median with refuge islands (especially on roads with 2 or more lanes in each direction)
Bicycle parking (racks, lockers)	☐ Yes	☒ No	☐ NA	Traffic calming elements, lighting & signage, especially at uncontrolled crossings
Transit Facilities:			Connectivity:	

Transit vehicle access into site	☐ Yes ☒ No ☐ NA
Bus pull-offs or curb extensions	☐ Yes ☒ No ☐ NA
Bus stop signs/marked stops	☐ Yes ☒ No ☐ NA
Bus stop shelters	☐ Yes ☒ No ☐ NA
Has transit agency/ies been contacted to discuss options?	☐ Yes ☒ No ☐ NA

Access and Mobility/ADA Facilities:

ADA-compliant sidewalk/path	☒ Yes ☐ No ☐ NA
Accessible pedestrian traffic signals (push-buttons with audible tones)	☒ Yes ☐ No ☐ NA
Curb ramps with detectable warning surface	☒ Yes ☐ No ☐ NA
ADA-compliant slopes and cross-slopes for driveway ramps, sidewalks, & crossings	☒ Yes ☐ No ☐ NA
Access management: reduce conflict points between pedestrians, bicyclists, and vehicles	☒ Yes ☐ No ☐ NA

Freight & Emergency Vehicles:

Loading/unloading zones	☐ Yes ☒ No ☐ NA
Emergency vehicle access	☐ Yes ☒ No ☐ NA

Diminished Access

Will the proposed project remove an existing walking or bicycling facility or hinder pedestrian or bicycle access?

☐ Yes, Temporary ☐ Yes, Permanent ☒ No

If yes, describe why this is necessary and how access will be provided.

Connections to bicycling, walking, or transit facilities	☒ Yes ☐ No ☐ NA
Connections to key destinations (see page 2)	☒ Yes ☐ No ☐ NA
Connections to neighborhoods	☒ Yes ☐ No ☐ NA

Streetscape Elements:

Landscaping, street trees, planters, buffer strips, etc.	☒ Yes ☐ No ☐ NA
Pedestrian-scale lighting	☒ Yes ☐ No ☐ NA
Public seating or benches	☒ Yes ☐ No ☐ NA
Wayfinding signage for walking, bicycling, & transit	☒ Yes ☐ No ☐ NA
Utilities: relocate poles or wires	☒ Yes ☐ No ☐ NA

Responsible Agencies:

Construction-period pedestrian/bicycle access:	☒ Yes ☐ No ☐ NA
Ongoing facility maintenance:	☒ Yes ☐ No ☐ NA
Law Enforcement:	☒ Yes ☐ No ☐ NA
Road Owner:	☒ Yes ☐ No ☐ NA

Reviewer Notes:

Prepared by: RYAN J. HELLER
Title: SURVEYOR Date: 4.21.20
Email: RYANHELLER@ Phone: 800.584.
Bristol CT. GOV 4119

Public Works Dept Reviewer: _____

Title: _____ Date: _____

Email: _____ Phone: _____

Public Works Dept Approval: _____

Planning Dept Consulted: _____

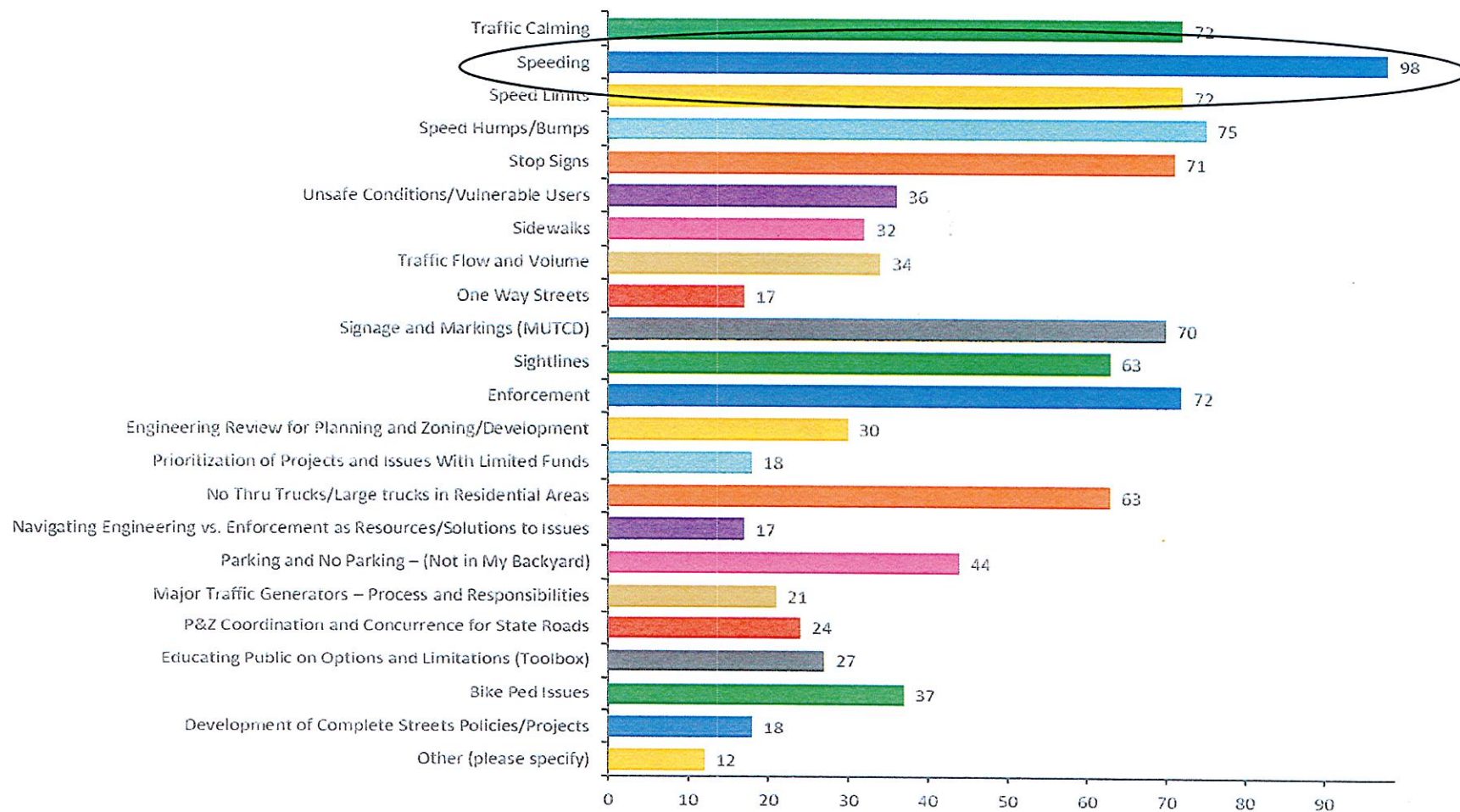
Police Consulted: _____

Exception Requested: ☐ Yes ☐ No

Exception Granted: ☐ Yes ☐ No

Justification Attached: ☐ Yes ☐ No

(exception required only if checklist is not to be completed; otherwise not required)



Complete Streets Checklist

Project Name Proposed Sidewalk Project - Emmett Street

Date: 04/21/2026

Project Location/Limits: Sycamore St. & Emmett St. to 500' South of Surrey Dr.

Tax Parcel Map/Lot #: _____

Project Description: ADA Compliant Ramp and Sidewalk Installation

Street Classification (street/streets within the project area)

Urban Principal Arterial ☐

Urban Minor Arterial ☐

Urban Major Collector ☐

Urban Minor Collector ☐

Urban Local Road ☒

Annual Average Daily Traffic: ≈ 8,000 Posted Speed Limit: 35 MPH

85th Percentile Speed: ≈ 42 MPH % Heavy Vehicles (classes F4-F13): _____

5-yr total pedestrian crashes: 2 5-yr total bicycle crashes: 0

Pedestrian count (if available): N/A Bicycle count (if available): N/A

Instructions: For each box checked, please briefly describe how the item is addressed, not addressed, or not applicable, and include supporting documentation. Refer to best practice design standards as needed, including but not limited to, guidelines from the American Association of State Highway Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD), the Connecticut Department of Transportation (CTDOT), the Institute of Transportation Engineers (ITE), the National Association of City Transportation Officials (NACTO), the Americans with Disabilities Act (ADA), and the US Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG).

EXISTING CONDITIONS				
Items to be Addressed/Considered	YES	NO	N/A	Required Description
Existing Walking & Bicycling Facilities				
Do walking or bicycling facilities exist within 500 feet of the project area?	☐	☒	☐	
Is there public parking within 300 feet of the project area?	☐	☒	☐	
Existing Roadway Facilities				
Are road shoulder widths adequate for walking and bicycling? If not, please specify travel lane and road shoulder widths.	☐	☒	☐	Shoulder width is < 5'. Curb to centerline ≈ 18.5'
Are road shoulder surfaces in good condition for walking and bicycling? If not, please specify.	☒	☐	☐	
Is on-street parking present on the road?	☐	☒	☐	
Existing Transit Facilities				
Is the project area on a transit route?	☒	☐	☐	502 Black Rock Avenue
Are there bus stops within 500 feet of the project area?	☒	☐	☐	
Existing Access and Mobility/ADA				
Do all sidewalks, ramps, signals, and other facilities within the project area meet ADA standards?	☐	☒	☐	
Existing Walking/Bicycling Issues				
Have local leaders, residents, or organizations been contacted to discuss issues related to walking, bicycling, or transit?	☐	☒	☐	
Existing Safety Issues				
Has the Bristol Police Traffic Division and/or road owner been contacted to discuss any safety issues in the project area?	☐	☒	☐	
Key Destinations				
Are there shopping, employment centers, cultural centers, historic sites, landmarks, recreation areas, or	☒	☐	☐	

other key destinations that could be connected to the project area?				
Are there schools, hospitals, senior centers, community centers or centers for persons with disabilities within a half-mile of the project area?	☐	☒	☐	
Planned Facilities				
Is there a planned walking, bicycling, or transit facility within a radius of 500 feet around the project area?	☒	☐	☐	Local bus route stops every 2-3 blocks
Plans & Policies				
Briefly describe relevant recommendations from municipal planning or policy documents addressing walking, bicycling, transit, or truck/freight travel in or near the project area and how the project incorporates them, or if not, why not.				

Attach a project plan & map of the surrounding context, including existing & planned facilities and destinations.

PROPOSED DESIGN			
Complete Streets Elements: what will be included in the Proposed design?			
Bicycling Facilities:		Walking Facilities:	
Off-roadway path/trail	☐ Yes ☒ No ☐ NA	Sidewalks (preferred on both sides of the street or path)	☒ Yes ☐ No ☐ NA
Dedicated on-street bike lane	☐ Yes ☒ No ☐ NA	Paved Shoulders (4 feet minimum; 5+ feet preferred)	☐ Yes ☒ No ☐ NA
Shared-lane markings (sharrows)	☐ Yes ☒ No ☐ NA	High-visibility crosswalks	☐ Yes ☒ No ☐ NA
Paved Shoulders (4 feet minimum; 5+ feet preferred)	☐ Yes ☒ No ☐ NA	Curb extensions to reduce crossing distance	☐ Yes ☒ No ☐ NA
Bike detection at actuated traffic signals, including at turn lanes	☐ Yes ☒ No ☐ NA	Pedestrian traffic signals with adequate crossing time	☐ Yes ☒ No ☐ NA
Signals with adequate minimum green time for bicyclists to cross the intersection	☐ Yes ☒ No ☐ NA	Signal timing: protected left turn phases, leading pedestrian interval, no right turn on red, etc.	☐ Yes ☒ No ☐ NA
Bicycle-safe inlet grates	☐ Yes ☒ No ☐ NA	Raised median with refuge islands (especially on roads with 2 or more lanes in each direction)	☐ Yes ☒ No ☐ NA
Bicycle parking (racks, lockers)	☐ Yes ☒ No ☐ NA	Traffic calming elements, lighting & signage, especially at uncontrolled crossings	☐ Yes ☒ No ☐ NA
Transit Facilities:		Connectivity:	

Transit vehicle access into site	☒ Yes ☐ No ☐ NA	Connections to bicycling, walking, or transit facilities	☒ Yes ☐ No ☐ NA
Bus pull-offs or curb extensions	☐ Yes ☒ No ☐ NA	Connections to key destinations (see page 2)	☒ Yes ☐ No ☐ NA
Bus stop signs/marked stops	☐ Yes ☒ No ☐ NA	Connections to neighborhoods	☒ Yes ☐ No ☐ NA
Bus stop shelters	☐ Yes ☒ No ☐ NA	Streetscape Elements:	
Has transit agency/ies been contacted to discuss options?	☐ Yes ☐ No ☐ NA	Landscaping, street trees, planters, buffer strips, etc.	☐ Yes ☒ No ☐ NA
Access and Mobility/ADA Facilities:		Pedestrian-scale lighting	☐ Yes ☒ No ☐ NA
ADA-compliant sidewalk/path	☒ Yes ☐ No ☐ NA	Public seating or benches	☐ Yes ☒ No ☐ NA
Accessible pedestrian traffic signals (push-buttons with audible tones)	☐ Yes ☒ No ☐ NA	Wayfinding signage for walking, bicycling, & transit	☐ Yes ☒ No ☐ NA
Curb ramps with detectable warning surface	☒ Yes ☐ No ☐ NA	Utilities: relocate poles or wires	☐ Yes ☒ No ☐ NA
ADA-compliant slopes and cross-slopes for driveway ramps, sidewalks, & crossings	☒ Yes ☐ No ☐ NA	Responsible Agencies:	
Access management: reduce conflict points between pedestrians, bicyclists, and vehicles	☒ Yes ☐ No ☐ NA	Construction-period pedestrian/bicycle access:	☒ Yes ☐ No ☐ NA
Freight & Emergency Vehicles:		Ongoing facility maintenance:	☒ Yes ☐ No ☐ NA
Loading/unloading zones	☐ Yes ☒ No ☐ NA	Law Enforcement:	☐ Yes ☒ No ☐ NA
Emergency vehicle access	☒ Yes ☐ No ☐ NA	Road Owner:	☐ Yes ☒ No ☐ NA
Diminished Access			
Will the proposed project remove an existing walking or bicycling facility or hinder pedestrian or bicycle access?			
☒ Yes, Temporary ☐ Yes, Permanent ☐ No			
If yes, describe why this is necessary and how access will be provided.			
Replacing existing sidewalk will take place one side of Emmett Street at a time.			

Reviewer Notes:

Prepared by: Lukasz W. Buracki
Title: Civil Engineer Date: 04/21/2026
Email: Lukasz.Buracki@bristolct.gov Phone: (860)-584-6122

Public Works Dept Reviewer: _____

Title: _____ Date: _____

Email: _____ Phone: _____

Public Works Dept Approval: _____

Planning Dept Consulted: _____

Police Consulted: _____

Exception Requested: ☐ Yes ☐ No

Exception Granted: ☐ Yes ☐ No

Justification Attached: ☐ Yes ☐ No

(exception required only if checklist is not to be completed; otherwise not required)