#### Amendment No. 4

All Bidders shall make the following changes to the bid book:

- 1. The Schedule of Items included in the Bid Book shall be replaced by the attached, updated Schedule of Items.
- 2. All attached Special Provisions shall be added to the Bid Book, and shall replace Special Provisions of the same Item where applicable.
- 3. All attached revised plan sheets shall replace those in the original as-bid plan set.

Then following questions were received during the bidding period:

**Question:** Is there an updated bid form coming for this given the changes listed in the questions and answers? Quantities were changed on two items, as well as units.

**Response:** The Schedule of Items has been updated and is attached to this Amendment. This updated Schedule of Items shall replace the original Schedule of Items in the Bid Book.

**Question:** The special provision for 608 brick sidewalks with bituminous base states basis of payment is 608.15 brick sidewalks with bituminous base, but that item doesn't even exist on the bid form.

**Response:** The special provisions for items 608.15 and 608.16 have been updated and are attached to this amendment. The Brick 608 items have been added to the attached Schedule of Items update. There are separate items for pedestrian and vehicular areas.

**Question:** Please clarify scope of pavement installation on Elm Street/Front Street. It is clear that Water Street is a mill and fill, but currently Front/Elm shows milling on the demolition plan D100, but the materials plan shows Asphalt per detail DT1/C100, which is 4" of mix over gravel.

**Response:** The milling term was used incorrectly on the demolition plan. The notes should have indicated that the pavement would be removed. See revised Demolition plan (attached). The intent is that all pavement on Front and Elm Streets be removed. Excavation will occur down to the bottom of the proposed subbase layer. The ground will be reshaped to accommodate the proposed grading as shown on the grading plan. Then 18" of Aggregate Subbase – Course Gravel (Item 304.10) will be installed, followed by 2" of base pavement (12.5mm Hot Mix Asphalt – Item 403.2131) and 2" of surface pavement (12.5mm Hot Mix Asphalt – Item 403.2081). The Special Provision 403, Hot Mix Asphalt Pavement, in the bid book is correct. Quantities for Aggregate Subbase Course – Gravel have also been

#### Amendment No. 4

revised. Item 202.202 – Removing Pavement Surface has been removed from the Front and Elm Street Streetscape Segment. The existing pavement in that area will be removed under the Common Excavation item. An error was also found in the wording for item 206.07. The work "earth" has been revised to "rock" to match the MaineDOT standard specifications for that item. The Schedule of Items has been updated to account for all of the changes noted above.

**Question:** Please clarify Front/Elm bid items 403.2131/403.213. Both are for base, one with polymer one without. Was the intention to have one of these as a surface item? I was wondering because they both have the same quantity (210 Ton), which matches the asphalt area at 2" thick

**Response:** There was an error on the Schedule of Items. The 403.213 item should not have been included. This has been revised to 403.2081. See revised Schedule of Items (attached).

**Question:** Can you add a test pit item to verify existing utility conflicts?

**Response:** Item 803.01 – Test Pits have been added to the Schedule of Items.

**Question:** Is it anticipated ledge will be encountered at any of the light pole base locations? If we precast the bases, then find ledge, will structural ex be paid to hammer ledge in order to install the base versus pinning and pouring the foundation in place? If not, would the City still pay for the base and add it to their inventory?

**Response:** The Standard Specification for item 626.411, 18-inch Diameter Foundation shall be used for all foundations. The City has indicated that ledge is unlikely in the area. However, should ledge be found, the Basis of Payment section of the 626 specification indicates that the work includes any necessary bedrock removal. Amendment 2 allowed the contactor to use either Precast or Cast-in-place foundation. Either option would be paid for under item 626.411.

Should the contractor elect to use precast foundations, and then encounter ledge, they may remove the ledge and install the precast foundation, or switch to cast-in-place foundations pinned to the ledge. The City is willing to buy any unused precast base as long as the price is close to what they would normally pay to buy one.

**Question:** Can you clarify the limits of 304.10 aggregate subbase and 304.14 aggregate base? 304.10 says in the spec that aggregate subbase shall be used to regrade sidewalks, but

#### Amendment No. 4

this looks like this spec is only for the Water Street section. Most of the details for the Streetscape show aggregate base, very minimal mention of aggregate subbase, so I am wondering if these quantities are backwards?

**Response:** For the Front and Elm Street Streetscape section, Aggregate Subbase Course – Gravel is to be used under the roadway and under the sidewalks per the details on the plan sheets. The details calling out base and subbase have been updated to match bid item names (see attached, revised plan sheets). Item 304.14 Aggregate Base Course – Type A, has been included for use in shimming the roadway or sidewalk prior to paving.

**Question:** In both the Front/Elm bid and Water Street bid, can you identify the scope of work for each of the 604.161 alter catch basin item?

**Response**: The two locations for Altering Catch Basins are at 21+63 left Elm St and 30+14 right Water St. These basins will need to be adjusted to the new grade. In addition, the basin on Elm St will have a new frame and grate with the rim at a lower elevation that the existing rim. This item will include any work necessary to the basin to accept the new frame and grate at this lower elevation. For the basin on Water St, a new cascade grate will be installed. Any work necessary to the existing Catch Basin to accept the new grate will be covered by this item. Payment for the new grate will be included in this item.

**Question:** For Water Street, I assume this work is tied to the section in the spec "City of Bath, Water Street, Pedestrian Ramp Report". Where there is not a typical "reconstruct pedestrian ramp item", can you confirm these individual bid items will be used for this scope of work?

**Response:** Yes, individual items will be used.

**Question:** General Note #9 on sheet E300 call for 2" RMC conduit under areas with vehicular traffic, but there is no metallic conduit on the bid sheet. Please clarify if RMC is intended, where, and how it will be paid for.

**Response:** Amendment 2 answered this question as follows: MaineDOT specifications call out RMC conduit where it is subject to vehicular traffic, or concrete encased if it is PVC. Detail 6/E400 calls out both RMC OR PVC, and shows the PVC concrete encased. The notes on the drawings call out PVC, so under the roadways PVC conduit encased in concrete should be used per 6/E400 (not RMC per note #9). Payment for "Non-Metallic Conduit, Concrete Encased" shall be incidental to the 626.22 Non-Metallic Conduit item already in the Schedule of Items. The concrete encased conduit shall meet the requirements of MaineDOT

#### Amendment No. 4

item 626.221 Non-Metallic Conduit, Concrete Encased as outlined in the standard specifications.

This Amendment 4 changes the above to remove the sentence "Payment for "Non-Metallic Conduit, Concrete Encased" shall be incidental to the 626.22 Non-Metallic Conduit item already in the Schedule of Items". A pay item for Non-Metallic Conduit, Concrete Encased has been added to the Schedule of Items to cover this work and the quantities for both conduit items have been revised to reflect this change. An updated E-300 drawing is also attached which reflects these changes.

**Question:** (7) trees shown to remove but just (4) each on bid schedule for stumps/ tree top removal. Please confirm.

**Response:** Amendment 2 answered this question as follows: Update quantity of both Items 201.23 and 201.24 to (7) each.

This Amendment 4 has provided an updated Schedule of Items with these quantities revised to the correct numbers.

**Question**: The permanent striping is typical MDOT SF however the temp striping item is per LF, should the temp striping unit be LF or SF?

**Response:** Amendment 2 responded to this question as follows: For the temporary striping, the lines are LF which is correct. The temporary pavement and curb markings were listed as LF in the Schedule of Items, but should have been shown as SF. The "300" is correct.

This Amendment 4 has corrected this SF unit on the attached, revised Schedule of Items.

### **SCHEDULE OF ITEMS**

### Front and Elm Street Streetscape Segment

Item Description	Approximate Quantity and Units	Unit Price	Bid Amount
ITEM 201.23 - REMOVING SINGLE TREE - TOP ONLY	7 EA		
ITEM 201.24 - REMOVING STUMP	7 EA		
ITEM 202.15 - REMOVING MANHOLE OR CATCH BASIN	7 EA		
ITEM 203.20 - COMMON EXCAVATION	2150 CY		
ITEM 206.07 - STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	5 CY		
ITEM 304.10 - AGGREGATE SUBBASE COURSE - GRAVEL	1350 CY		
ITEM 304.14 - AGGREGATE BASE COURSE - TYPE A	100 CY		
ITEM 403.2081 – HOT MIX ASPHALT – 12.5 MM NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)	210 TON		
ITEM 403.209 – HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	165 TON		
ITEM 403.2131 - HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE BASE COURSE, POLYMER MODIFIED)	210 TON		
ITEM 409.15 - BITUMINIOUS TACK COAT- APPLIED	100 G		
ITEM 507.0842 - ORNAMENTAL PEDESTRIAN RAILING	233 LF		
ITEM 525.35 - GRANITE BOLLARD	21 EA		
ITEM 603.169 - 15 INCH CULVERT PIPE OPTION III	20 LF		
ITEM 603.179 - 18 INCH CULVERT PIPE OPTION III	310 LF		
ITEM 604.072 - CATCH BASIN TYPE A1-C	8 EA		

ITEM 604.15 - MANHOLE	3 EA	
ITEM 604.161- ALTERING CATCH BASIN	1 EA	
ITEM 604.18 - ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	8 EA	
ITEM 604.2402 – BEHIND CURB CATCH BASIN	1 EA	
ITEM 605.09 - 6 INCH UNDERDRAIN TYPE B	605 LF	
ITEM 605.13- 18 INCH UNDERDRAIN TYPE C	140 LF	
ITEM 608.15 – BRICK SIDEWALK WITH BITUMINOUS BASE	980 SY	
ITEM 608.15 – BRICK DRIVEWAY APRON WITH BITUMINOUS BASE	423 SY	
ITEM 608.26 - CURB RAMP DETECTABLE WARNING FIELD	320 SF	
ITEM 609.11 - VERTICAL CURB TYPE 1	634 LF	
ITEM 609.110 – SPECIAL GRANITE CURB – 18"	26 LF	
ITEM 609.112 – SPECIAL GRANITE CURB – 12"	273 LF	
ITEM 609.12 - VERTICAL CURB TYPE 1- CIRCULAR	44 LF	
ITEM 609.15 – SLOPED CURB TYPE 1	30 LF	
ITEM 609.221 - TERMINAL CURB TYPE 1	105 LF	
ITEM 609.222 - TERMINAL CURB TYPE 1- CIRCULAR	51 LF	
ITEM 615.086 – LOAM/COMPOST MIX	54 CY	
ITEM 615.12 – RAIN GARDEN SOIL ENGANCEMENT	52 CY	
ITEM 619.13 – BARK MULCH	14 CY	
ITEM 621.285 - LG DECID TR (3"-3.5" CAL) GPA	25 EA	
ITEM 621.714 - HERBACEOUS PERENNIALS GPA	410 EA	
ITEM 621.722 - HERBACEOUS WETLAND SPECIES GPA	800 EA	
ITEM 621.80 - ESTABLISHMENT PERIOD	1 LS	
ITEM 621.951 - BIKE RACK	15 EA	
ITEM 626.11 – PRECAST CONCRETE JUNCTION BOX	4 EA	

ITEM 626.22 – NON-METALLIC CONDUIT	1830 LF	
TIEM 020.22 INDIV-METALEIC CONDUIT	1030 L1	
ITEM 626.221 – NON-METALLIC CONDUIT, CONCRETE ENCASED	690 LF	
ITEM 626.411 – 18 INCH DIAMETER FOUNDATIONS	132 LF	
ITEM 627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	405 LF	
ITEM 627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	1550 SF	
ITEM 627.752 - TEMPORARY WHITE OR YELLOW PAVEMENT & CURB MARKING	300 SF	
ITEM 627.78 - TEMPORARY 4" PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	810 LF	
ITEM 629.05 - HAND LABOR (STRAIGHT TIME)	25 HR	
ITEM 631.12 - ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	15 HR	
ITEM 631.14 - GRADER (INCLUDING OPERATOR)	30 HR	
ITEM 631.172 - TRUCK- LARGE (INCLUDING OPERATOR)	15 HR	
ITEM 631.20 - STUMP CHIPPER RENTAL (INCLUDING OPERATOR)	8 HR	
ITEM 631.221 - SMALL FRONT END LOADER (INCLUDING OPERATOR)	10 HR	
ITEM 634.16 – HIGHWAY LIGHTING	1 LS	
ITEM 634.70 – ORNAMENTAL LIGHTING	1 LS	
ITEM 639.19 – FIELD OFFICE TYPE B	0.5 EA	
ITEM 641.12 - BENCH	4 EA	
ITEM 641.22 - TREE GRATE	18 EA	
ITEM 641.34 - TRASH RECEPTACLE	3 EA	
ITEM 652.33 - DRUM	15 EA	
ITEM 652.34 - CONE	40 EA	
ITEM 652.35 - CONSTRUCTION SIGNS	550 SF	
ITEM 652.361 - MAINTENANCE OF TRAFFIC CONTROL DEVICES	60 CD	
ITEM 652.38 - FLAGGER	3360 HR	
ITEM 652.41 - PORTABLE CHANGEABLE MESSAGE SIGN	1 EA	
ITEM 656.75 - TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1 LS	
ITEM 659.10 - MOBILIZATION	1 LS	
ITEM 803.01 – TEST PITS	3 EA	
ITEM 999.999 BUSINESS WAYFINDING SIGNS	10 EA	
The I Dill Could		
Total Bid for all Items		

### Water Street Mill & Fill Segment

Item Description	Approximate Quantity and Units	Unit Price	Bid Amount
ITEM 202.202 - REMOVING PAVEMENT SURFACE	3000 SY		
ITEM 203.20 - COMMON EXCAVATION	5 CY		
ITEM 304.10 - AGGREGATE SUBBASE COURSE - GRAVEL	5 CY		
ITEM 403.209 - HMA, 9.5MM NOM MAX. SIZE (SIDEWALKS, DRIVES & INCIDENTAL)	30 TON		
ITEM 403.2081 - HMA, 12.5MM NOM MAX. SIZE (POLYMER MODIFIED SURFACE)	305 TON		
ITEM 409.15- BITUMINIOUS TACK COAT- APPLIED	235 G		
ITEM 604.161- ALTERING CATCH BASIN	1 EA		
ITEM 604.18 - ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	6 EA		
ITEM 608.08 - REINFORCED CONCRETE SIDEWALK	40 SY		
ITEM 608.26 - CURB RAMP DETECTABLE WARNING FIELD	40 SF		
ITEM 608.46 - REGRADING SIDEWALK	360 SF		
ITEM 609.38 - RESET CURB TYPE 1	85 LF		
ITEM 615.07 - LOAM	1 CY		
ITEM 618.13 - SEEDING METHOD NUMBER 1	1 UN		
ITEM 619.12 - MULCH	1 UN		
ITEM 627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	575 LF		
ITEM 627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	615 SF		
ITEM 627.78 - TEMPORARY 4" PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	1150 LF		
ITEM 629.05 - HAND LABOR (STRAIGHT TIME)	5 HR		

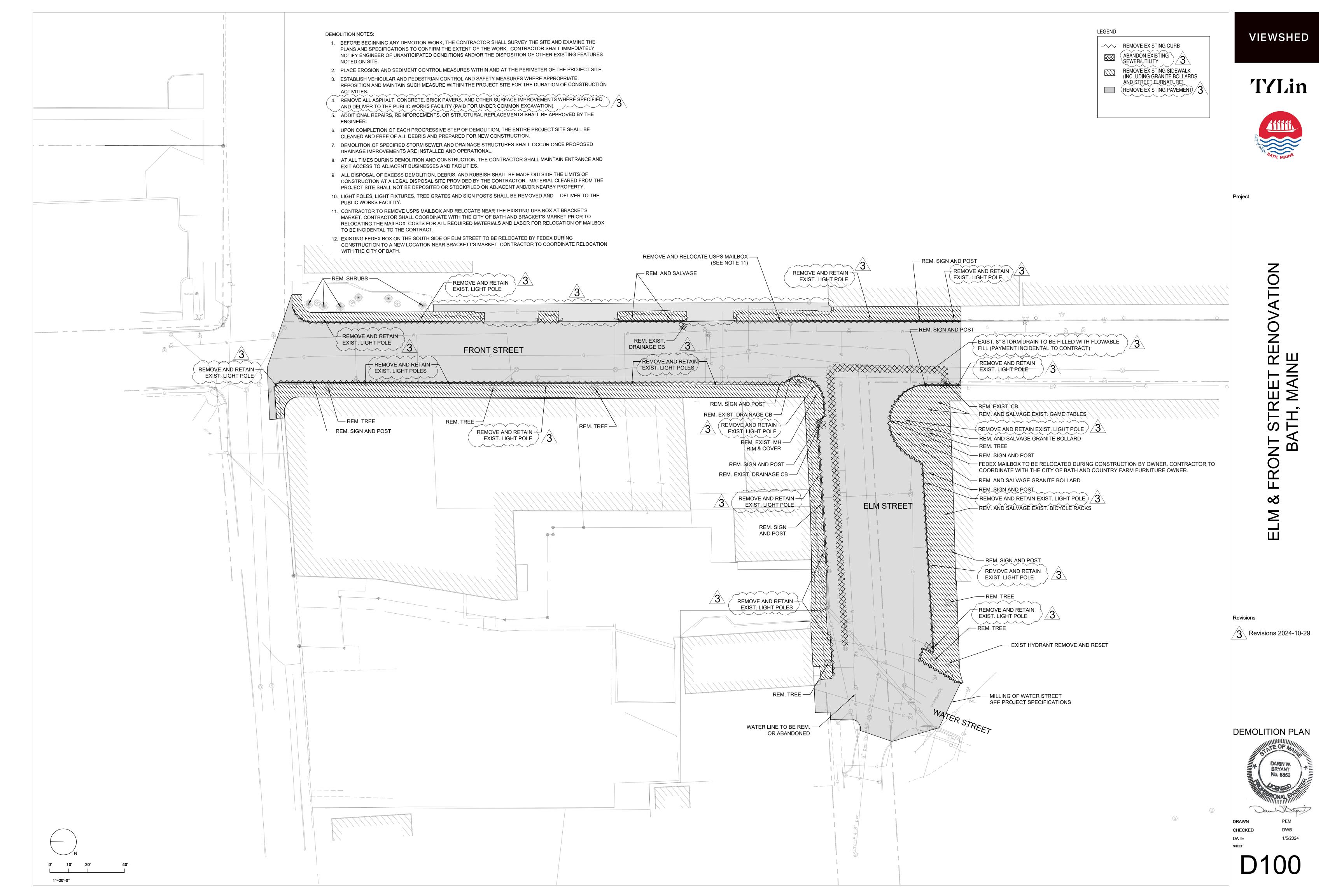
ITEM 639.19 – FIELD OFFICE TYPE B	0.5 EA	
ITEM 645.292 - REGULATORY. WARNING,	66 SF	
CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS TYPE II	00.51	
ITEM 652.35 - DRUM	20 EA	
ITEM 652.35 - CONE	50 EA	
ITEM 652.35 - CONSTRUCTION SIGNS	490 SF	
ITEM 652.36 - MAINTENANCE OF TRAFFIC CONTROL DEVICES	12 CD	
ITEM 652.38 - FLAGGER	400 HR	
ITEM 659.10 - MOBILIZATION	1 LS	
Total Bid for all Items		

### Bidders are required to bid all Items.

- > The Bid must be Delivered to the precise location and by the precise time set forth in the Notice to Contractors or any applicable Bid Amendment.
- Required unit prices, lump sum prices and/or bid amounts must be provided and legible.
   Do not make handwritten changes to the bid documents.

$\triangleright$	Paper bids must be signed in pen and ink.	Signatures sha	all be original.	Stamped and copie	d
	signatures will not be accepted.				

Signature	Date
(Print Respondent's Name of	and Title)



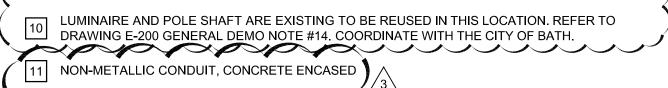
### **GENERAL NOTES:**

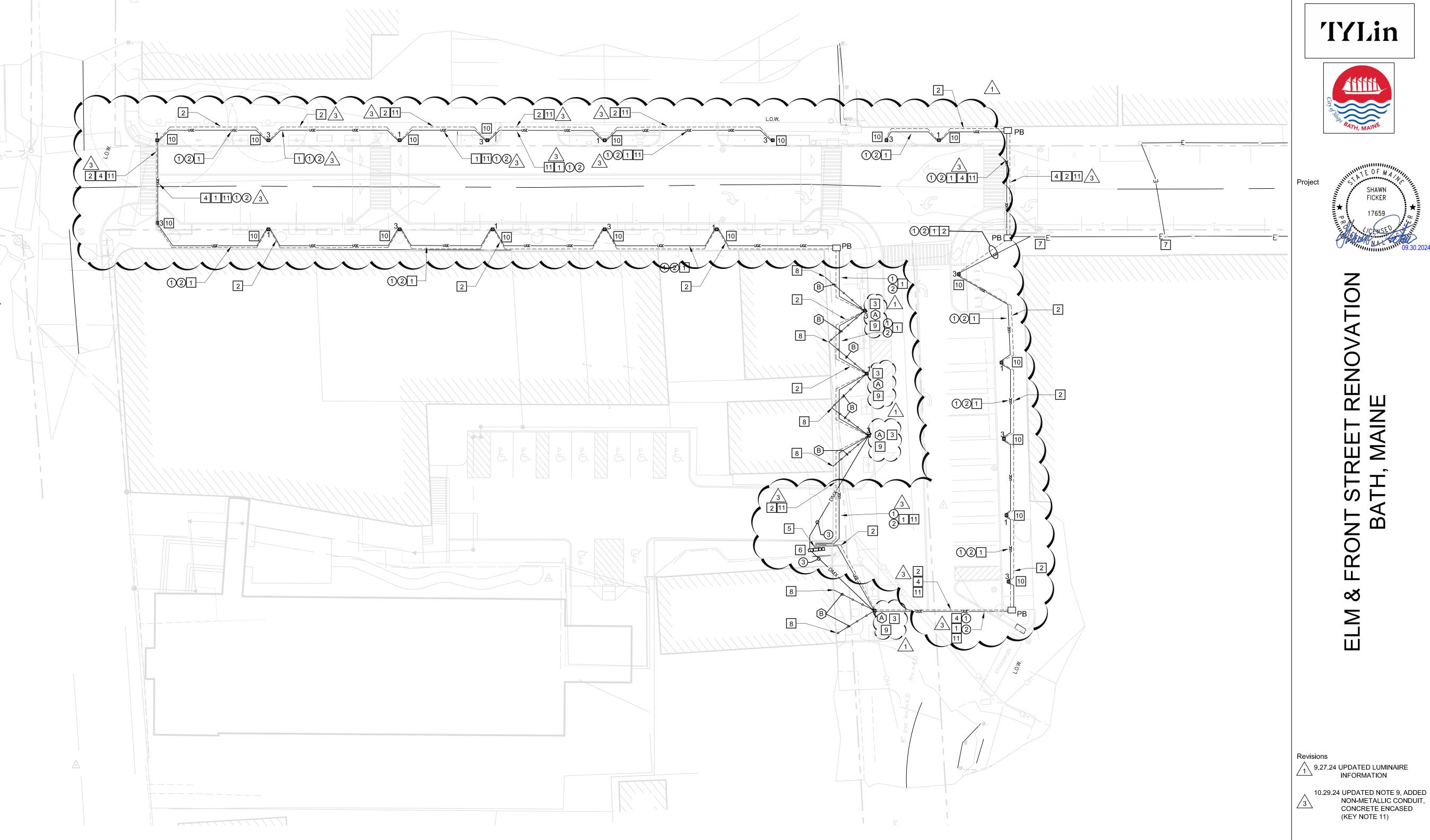
- ALL MATERIALS SHALL BE U.L. LISTED WHEN SUCH LISTINGS EXIST. ALL WORK AND MATERIALS SHALL CONFORM TO ALL APPLICABLE BUILDING CODES, REGULATIONS AND LAWS IN FORCE AS WELL AS THE ELECTRICAL SPECIFICATIONS.
- 2. EC SHALL FURNISH AND PROVIDE PAYMENT FOR ALL ELECTRICAL PERMITS.
- 3. CONTRACTOR SHALL INSTALL NEW ELECTRICAL DEVICES, ALONG WITH ANY SPECIAL INSTALLATION ATTRIBUTES, IN LOCATIONS SHOWN ON PLAN.
- 4. ALL ELECTRICAL WORK SHALL COMPLY IN EVERY RESPECT TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL GOVERNMENT AMENDMENTS.
- 5. CONTRACTOR SHALL CALL DIGSAFE 811 TO VERIFY ALL EXISTING UTILITY LOCATIONS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHOULD ALSO COORDINATE ALL UTILITY CONFLICTS WITH THE ENGINEER BEFORE INSTALLING THE NEW LIGHT POLES AND CONDUITS. THE CONTRACTOR SHOULD COORDINATE WITH THE CITY OF BATH TO VERIFY THE LOCATION OF THE ANY TRAFFIC SIGNAL CONDUIT AND LOOPS. IF A UTILITY IS DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL REPAIR THE UTILITY IN ACCORDANCE WITH THE LOCAL UTILITY AGENCY.
- ALL EXISTING BASEMAP INFORMATION SHOWN ON THIS DRAWING IS FROM VARIOUS RECORD PLANS PROVIDED BY THE CITY OF BATH AND CENTRAL MAINE POWER (CMP). CONTRACTOR SHOULD VERIFY ALL EXISTING CONDITIONS AND UTILITY LOCATIONS PRIOR TO STARTING WORK FOR THIS PROJECT. COORDINATE WITH SITE/CIVIL DRAWINGS.
- 7. CONTRACTOR TO MAINTAIN AND PROTECT ANY EXISTING UTILITY LINES WITHIN THE LIMITS OF WORK FOR THIS PROJECT. THE NEW STREET LIGHTING SYSTEM SHOULD BE PLACED AT LOCATIONS THAT WILL NOT IMPACT THE EXISTING UTILITY LINES. CONTRACTOR TO VERIFY THE LOCATION OF THE EXISTING UTILITY LINES PRIOR TO EXCAVATION TO INSTALL THE NEW STREET LIGHT SYSTEM. NO EXCAVATIONS SHALL BE LEFT OPEN OVER NIGHT.
- 8. CONTRACTOR SHALL MAINTAIN AND PROTECT EXISTING STREET SIGNS WITHIN THE PROJECT LIMITS. IF AN EXISTING SIGN IS IN CONFLICT WITH A PROPOSED LIGHTING CONDUIT/POLE INSTALLATION THE CONTRACTOR SHALL REMOVE/RELOCATE THE SIGN IN CONFORMANCE WITH THE CITY OF BATH. ALL SIGN WORK SHALL BE PAID FOR UNDER THE APPROPRIATE ITEM NUMBER FOR SIGN REMOVAL AND RELOCATION. ALL CONDUIT FOR ROADWAY LIGHTING SHALL BE NON METALLIC CONDUIT (2" SCHEDULE 80 PVC) WHERE NOT SUBJECT TO VEHICULAR TRAFFIC AND NON METALLIC CONDUIT, CONCRETE ENCASED WHERE SUBJECT TO TRAFFIC. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW INSULATION, CONDUCTOR SIZES SHALL MATCH EXISTING LIGHTING CIRCUIT CONDUCTORS.
- 10. ALL CONNECTION AND DISCONNECTION OF CIRCUIT CONDUCTORS TO THE CENTRAL MAINE (CMP) POWER SYSTEM SHALL BE COMPLETED BY THE UTILITY.
- 11. WHERE EXISTING LIGHTING CIRCUITS BRANCH OFF TO FEED LIGHTING ON OTHER STREETS, ENSURE THAT CIRCUIT CONTINUITY IS MAINTAINED. COORDINATE WITH THE CITY OF BATH STREET LIGHTING DIVISION FOR CIRCUIT DIAGRAMS.
- 12. POWER CIRCUITS SHALL BE AS SHOWN ON THE LIGHTING DRAWINGS AND DRAWING E400.
- 13. CONDUITS RUNS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWING. FINAL ROUTING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AND APPROVED BY THE OWNER.
- 14. ALL LIGHTING POLES SHALL BE GROUNDED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. SEE DETAIL ON DRAWING E400.
- 15. ALL EQUIPMENT AND WIRING SHALL BE WEATHERPROOF.
- 16. UNDERGROUND CABLE SHALL BE UL LISTED.
- 17. CONDUIT TRENCH SHALL BE 41" DEEP WITH 4" SAND BEDDING AND 12" SAND COVER INSTALLED OVER CONDUIT BEFORE BACKFILLING COORDINATE WITH MUNICIPALITY REQUIREMENTS.
- 18. CONDUIT RUNS SHALL BE MARKED WITH RED PLASTIC MARKING TAPE WITH METAL STRIP INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE.
- 19. BACKFILL SHALL BE FREE OF ROCKS AND OTHER OBJECTS WHICH MIGHT DAMAGE THE CONDUIT.
- 20. SCHEDULING OF THE TRENCHING AND INSTALLATION OF CONDUIT SHALL BE COORDINATED AND APPROVED BY THE OWNER.
- 21. SUFFICIENT LENGTH FOR WIRES CONNECTED TO CENTRAL MAIN POWER ELECTRICAL SERVICE MUST BE PROVIDED.
- 22. REFER TO CENTRAL MAINE POWER ELECTRIC DISTRIBUTION CONSTRUCTION STANDARDS MANUAL AS REQUIRED.

### **KEY NOTES:**

1"=20'-0"

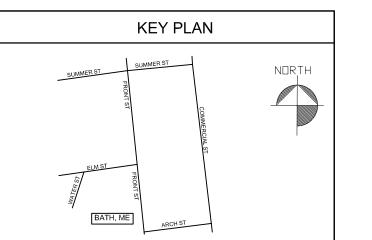
- POWER FEED FROM CITY OF BATH PROVIDED LOAD CENTER FOR LIGHTING AND POWER TO POLE MOUNTED RECEPTACLES. TYPICAL FOR ALL CONDUIT RUNS UNDER FRONT ST AND ELM ST. REFER TO DWG. E400 FOR DETAILS.
- SPARE 2" SCHEDULE 80 PVC CONDUITS. RUN PARALLEL WITH POWER AND LIGHTING CONDUIT. PROVIDE PULL STRINGS ON ALL SPARE CONDUITS.
- PROVIDE POWER TO FESTOON LIGHTING FROM DMX TRANSFORMER. REFER TO DRAWING E400 FOR DETAILS. PROVIDE CATENARY CABLE TO PROVIDE SUPPORT FOR DMX FEED.
- SEE GENERAL NOTES #9, & 10 ON ELECTRICAL NOTES (TYPICAL FOR ALL UNDERGROUND CONDUIT RUNS) RUN (2) SETS (1) EMPTY UNDER FRONT ST. AND ALL OTHER STREET CROSSINGS.
- REFER TO DRAWING E400 FOR FURTHER INFORMATION ON THE STREET LIGHTING LOAD CENTER ON THE SW CORNER OF THE "BEST THAI II" RESTAURANT BUILDING.
- CONNECT DMX CONTROL BOX TO EXISTING LIGHTING LOAD CENTER. REFER ALSO TO DRAWING E400.
- 7 EXISTING LIGHT POLES TO REMAIN. REPLACE EXISTING CONDUIT AND CONDUCTORS AND CONNECT TO LIGHTING FEED FROM EXISTING CIRCUIT BREAKERS 1,3.
- COORDINATE WITH MANUFACTURERS REP AND CITY OF BATH FOR ATTACHING FESTOON LIGHTING TO BUILDING (TYP)
- 9 LUMINAIRE AND POLE SHAFT ARE NEW AT THIS LOCATION. REFER TO DRAWING E-400 FOR INFORMATION.







WIRE AND CONDUIT SCHEDULE				
CALLOUT	CONDUIT AND CONDUCTORS	GOING TO	WIRE TY	/PE
1	(3) #6 + (1) #10 GND IN 2" SCHED. 80 PVC	LIGHTING PANEL FEEDING NEW POLE MOUNTED LUMINAIRES	XHHW	
2	(2) #8+ (1) #10 GND IN 2" SCHED. 80 PVC	LIGHTING PANEL FEEDING POLE MOUNTED DUPLEX RECEPTACLES	XHHW	
3	POWER FEED PER MFR UP THROUGH 2" SCHED. 80 PVC TO WEATHERHEAD TO OVERHEAD FOR FESTOON LIGHTING	DMX PANEL CONTROL FEEDS TO N SIDE ELM ST FESTOON LTG	PER MFR	





INFORMATION

**ELECTRICAL** 

**NEW WORK** 

PLAN

DRAWN

DATE

CHECKED SF

6/21/2024

NON-METALLIC CONDUIT, CONCRETE ENCASED (KEY NOTE 11)

## SPECIAL PROVISION <u>Section 507</u> <u>Ornamental Pedestrian Railings</u>

<u>Description</u>: This work shall consist of furnishing all materials, labor, equipment, and incidentals for transporting and installing powder coated stainless steel planter rails as shown on the Plans in accordance with this special provision or as directed by the Landscape Architect.

<u>Materials</u>: Planter rails shall conform to the dimensions and locations shown on the Plans. Planter rails, posts, and concrete surround shall be as follows, or approved equal:

Posts: Stainless steel, black powder coat finish, 2" diameter, welded to rails at 2' (24") O.C.

Rails: Stainless steel, black powder coat finish, 2" diameter

Concrete surround: Pour-in-place Class A Concrete

Pipe for rails and posts shall be grade 304L stainless steel and conform to the requirements of ASTM A240 and ASTM A666. If filler metal is required, Type 308 stainless steel may be used.

<u>Construction</u>: Notch top of posts to accept bottom half of top rail. Weld post to rail, leaving the top rail smooth and continuous. Weld shall be complete, sealing both the post and rail from exterior moisture penetrations.

<u>Installation</u>: Install as shown on the plans.

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

<u>Basis of Payment</u>: All items described herein, including concrete surround, are incidental to the following pay item:

Pay Item		Pay Unit
507.0842	Ornamental Pedestrian Railing	LF

### SPECIAL PROVISION Section 525 – Granite Masonry Granite Block Bollard

All work shall conform to Standard Specification Section 525, Granite Masonry, except as amended herein.

<u>525.35 Description</u>: This work also includes furnishing all labor, materials, equipment and incidentals for cutting, finishing, loading, transporting and installing Granite Block Bollards as shown on the Plans and in accordance with this special provision or as directed by the Landscape Architect.

Materials: Granite bollards shall conform to the dimensions shown on the Plans.

Granite color and finish shall match existing as follows, or approved equal:

North Jay® (gray); available from J.C. Stone, Inc., 539 Rockland Rd., Jefferson, ME 04348 (www.jcstoneinc.com)

Where shown in plans, chain and hardware to match existing as follows, or approved equal:

Heavy gauge iron chain 5/8" with 5/8" diameter iron eye bolt and ½" flat iron washer.

Epoxy used to anchor the stainless steel pins shall be non-shrink grout included on the MaineDOT Qualified Product List (QPL) and approved by the Landscape Architect.

Dowels shall conform to ASTM A276 Type 304 Stainless steel and in accordance with 709.01

Concrete footer shall be Class A concrete, 12" diameter, extending to frostline depth (48" min)

525.03 General: The granite shall be finished to match existing bollards in City of Bath.

The Contractor shall submit for review all product data and manufacturer specifications, and samples for all items furnished.

The Contractor shall take care to prevent scraping and damage to Granite Bollards during loading, transport, delivery and stockpiling, and installation. Damaged bollards shall be rejected and new bollards shall be delivered and installed to the satisfaction of the designated Landscape Architect. Bollards shall be installed to the height and in locations shown on the plans.

<u>525.09 Method of Measurement.</u> Granite Bollards will be measured for payment by each unit satisfactorily installed at locations as shown on the Plans or as directed by the designated Landscape Architect.

<u>Basis of Payment</u>: Granite Bollards will be paid for at the contract unit price each complete in place and accepted. Payment shall include all materials, equipment and labor necessary for furnishing, loading, delivering, stockpiling, fine grading, final placement of Granite Bollards, and other incidental labor, materials and equipment necessary to complete the work.

All items described herein, including concrete footer, are incidental to the following pay item:

Pay Item		<u>Pay Unit</u>
525.35	Granite Block Bollard	EA

### SPECIAL PROVISION <u>Section 608</u> Brick Sidewalk with Bituminous Base

Section 608 of the Standard Specifications is amended for this project by addition of the following:

<u>Description</u>: This work shall consist of furnishing all materials and labor for Brick Pavers with Bituminous Base to conform to the plans and as directed by the Landscape Architect.

<u>608.02 Materials</u>: Brick for Brick Sidewalk with Bituminous Base shall meet requirements of Section 704.02 and ASTM C-902. Bricks shall be as follows, or approved equal:

**Brick Pavers** – **Pedestrian** shall be Extruded Artisan Flashed Paver Paving Brick - 2 ¼" thick by Morin Brick Company, 130 Morin Brick Road, Auburn, ME, 04210 (https://www.morinbrick.com).

**Brick Pavers – Vehicular** shall be Extruded Artisan Flashed Paver Paving Brick - 2 <sup>3</sup>/<sub>4</sub>" thick by Morin Brick Company, 130 Morin Brick Road, Auburn, ME, 04210 (https://www.morinbrick.com).

Bricks shall be of comparable color, size and texture to the existing sidewalk paving bricks on Front and Elm Streets in Bath.

Prior to ordering, a final sample strap demonstrating full color range shall be submitted to the designated Landscape Architect for final approval.

<u>608.411 Brick Sidewalk Construction</u>: Subgrade shall be shaped parallel to the proposed surface of the walk and shall be thoroughly compacted. All depressions occurring shall be filled with a suitable material and again compacted until the surface is smooth and hard.

After the subgrade has been prepared, a foundation of Aggregate Subbase Course Gravel shall be placed to the specified compacted thickness.

A layer of hot mix asphalt (HMA) with minimum compacted thickness of two inches (2") shall be placed on the completed aggregate foundation course. The HMA surface shall be parallel to the proposed finish grade.

A sand-cement base course 1" thick made of thoroughly blended washed concrete sand mixed 6:1 with 1 part Portland Cement shall be placed on the HMA base course and thoroughly compacted to a hard, smooth surface parallel to the proposed finish slope and grade of the walk.

After the sand-cement base course has been installed, brick shall be placed in running bond pattern detailed with a single running edge course at the back side of the walkway, adjusted to full brick dimension as shown on the plan. The brick shall be set per pattern with a narrow hand set joint typical 1/16" width [min 1/32"- 3/32"]. Brick shall be saw cut to fit spaces requiring less than a whole brick; no cut shall be less than 2" in [two inches] length, and no open spaces will be allowed. Final patterns shall be running bond (pedestrian) or herringbone (vehicular) per plan or as directed by the Landscape Architect.

Individual bricks shall be hand placed with joints, and then set by hammering with a heavy rubber masonry mallet until the bricks reach a firm, unyielding, bedded set course. After this tamping a sufficient amount of sand-cement mix shall be spread over the surface and thoroughly swept to fill all joints.

After filling the joints the brick surface shall be covered by plywood and mechanically compacted with a plate vibrator with rubber pad to ensure filling of all the joints. Care shall be taken to avoid raking out the joints during removal of excess sand.

A final application of sand only shall be applied and wet with clean, potable water and left on the surface for several days before final sweeping. At the completion of the project, a final sand/sweeping operation will be overseen by the Landscape Architect.

<u>Basis of Payment</u>: Sand cement setting bed, polymeric sand swept joints and labor necessary to install said materials shall be considered incidental to the brick pay item. All items described herein are incidental to the following pay items:

Pay Item		Pay Unit
608.15	Brick Sidewalk with Bituminous Base	SY
608.16	Brick Driveway Apron with Bituminous Base	SY

### SPECIAL PROVISION <u>Section 609</u> Mountable Curb, Flush Curb, and Curb Inlet

Section 609 of the Standard Specifications is amended for this project by addition of the following:

<u>Description</u>: This work shall consist of furnishing all materials and labor for Mountable Curb, Flush Curb, and Curb Inlet to conform to the plans and as directed by the designated Landscape Architect. All curbs shall be Type 1 unless otherwise specified.

<u>609.02 Materials</u>: Mountable Curb (Item 609.110 – Special Granite Curb – 18"), Flush Curb (Item 609.112 – Special Granite Curb – 12"), and Curb Inlet (Item 609.15 – Sloped Granite Curb Type 1) shall meet requirements as specified in Section 712.04 b, Miscellaneous Stone Curb with the following amendments:

Mountable Curb shall have a top surface sawed or dressed to an approximate true plane with no depression or projection on that surface of over ½ inch. The top front arris line shall be chamfered to a 6" radius edge with no variations from a straight line greater than ¼ inch. The top back arris line shall be pitched straight and true with no variations from a straight line greater than ¾ inch will be allowed. There shall be no projection or depression on the back face that would exceed a batter of 1 horizontal on 3 vertical for a distance from the top of 3 inches.

Transition from Vertical Curb Type 1 to Mountable Curb shall conform to Standard Detail 609(02) Curb Transition with the following amendments:

Transition curb sections to be 4' in length (each) and shall gradually chamfer the front arris line from 90 degrees to a 6" radius edge.

The ends of the curb shall be approximately square with the planes of the top, back and face and so finished that when the sections are placed end to end with the required minimum spacing of ½ inch no more than ½ inch space shall show in the joint for the full width of the top surface and for the entire exposed front face. The remainder of the end may extend back no more than 8 inches from the plane of the joint.

Drill holes through the curb will be allowed providing they are at least 9 inches below the top and are mortared full with Portland cement mortar before placing the stone.

Flush Curb shall have a top surface sawed or dressed to an approximate true plane with no depression or projection on that surface of over 1/8 inch. The top front and back arris

lines shall be pitched straight and true with no variations from a straight line greater than  $\frac{3}{8}$  inch will be allowed.

The front face shall be at right angles to the top shall have no projections or depressions greater than 1 inch from the plane of the face.

The ends of the curb shall be approximately square with the planes of the top, back and face and so finished that when the sections are placed end to end with the required minimum spacing of ½ inch no more than 5% inch space shall show in the joint for the full width of the top surface and for the entire exposed front face. The remainder of the end may extend back no more than 8 inches from the plane of the joint.

Drill holes through the curb will be allowed providing they are at least 9 inches below the top and are mortared full with Portland cement mortar before placing the stone.

<u>Curb Inlets</u> (at rain gardens) shall have a top surface sawed or dressed to an approximate true plane with no depression or projection on that surface of over ½ inch. The top front arris line shall be pitched straight and true with no variations from a straight line greater than ¼ inch. The top back arris line shall meet the same requirement except that indentations of a maximum of ¾ inch will be allowed. There shall be no projection or depression on the back face that would exceed a batter of 1 horizontal on 3 vertical for a distance from the top of 3 inches.

The front face shall be at right angles to the top and shall be smooth split and have no projections greater than 1 inch or depressions greater than ½ inch, measured from the vertical plane of the face through the top arris line for a distance down from the top of 8 inches. The remainder of the face shall have no projections or depressions greater than inch from the plane of the face.

Inlets shall be 1' (12") in horizontal width and conform with the standards specified in Flush Curb. Two angled sections shall transition the inlet elevation to the surrounding top of curb elevation (as specified in the plans) at an angle of 45 degrees.

The ends of the inlet shall be approximately square with the planes of the top, back and face and so finished that when the sections are placed end to end with the required minimum spacing of ½ inch no more than 5% inch space shall show in the joint for the full width of the top surface and for the entire exposed front face. The remainder of the end may extend back no more than 8 inches from the plane of the joint.

Drill holes through the curb will be allowed providing they are at least 9 inches below the top and are mortared full with Portland cement mortar before placing the stone.

Basis of Payment: All items described herein are incidental to the following pay items:

Pay Item		Pay Unit
609.110	Special Granite Curb – 18"	LF
609.112	Special Granite Curb – 12"	LF
609.15	Sloped Granite Curb Type 1	LF

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# SPECIAL PROVISION SECTION 609 CURB

(Terminal Curb Type 1)

Basis of Payment. This section shall be amended with the addition of the following:

Pay Item		Pay Unit
609.221	Terminal Curb Type 1	Linear Foot
609.222	Terminal Curb Type 1 – Circular	Linear Foot

### SPECIAL PROVISION <u>Section 615</u> Planting Soil and Rain Garden Soil

Section 615 of the Standard Specifications is amended for this project by addition of the following:

<u>Description</u>: This work shall consist of furnishing all materials and labor for planting soil and rain garden soil enhancement to conform to the plans and as directed by the Landscape Architect.

#### 615.02 Materials:

**Planting Soil**: Planting Soil shall consist of 15% compost (humus) and 85% loam. Compost (humus) shall meet the requirements of Section 717.09. Loam shall meet the requirements of 615.02.

**Rain Garden Soil**: Rain Garden Soil shall consist of 1/3 (33.3%) perlite, 1/3 (33.3%) humus (compost), and 1/3 (33.3%) loam (topsoil). Humus shall meet the requirements of Section 717.09. Loam shall meet the requirements of 615.02. Perlite shall be of horticultural quality with a neutral pH level of 6.5-7.5 and have a granular size range between 2–5 mm.

#### 615 Installation:

**Planting Soil**: Contractor shall prepare planting soil in accordance with Section 615.03 and 615.04. Locations and depths shall conform to the plans and as directed by the designated Landscape Architect.

**Rain Garden Soil**: Contractor shall prepare rain gardens in accordance with Section 615.03 and 615.04. Locations and depths shall conform to the plans and as directed by the designated Landscape Architect.

Basis of Payment: All items described herein are incidental to the following pay item:

Pay Item		Pay Unit
615.086	Loam/Compost Mix	CY
615.12	Rain Garden Soil Enhancement	CY

## SPECIAL PROVISION Section 621 Landscape

Section 621 of the Standard Specifications is amended for this project by addition of the following:

<u>Description</u>: The following list of items provides the estimated quantities for use on this project. The scientific name of the plant material is provided along with the common name.

The contractor shall follow *MaineDOT Standard Specifications* Rev. March 2020 for landscape materials and installation procedures (sec. 621).

The Landscape Architect will be available to inspect plant materials and inspect planting at that time. This list anticipates project needs and requirements but should be verified with the Landscape Architect prior to scheduling and planting prior to completion of the project.

### Materials:

<b>ITEM</b>	DESCRIPTION /	SCIENTIFIC NAME	UNIT	QTY	<b>TOTAL</b>
	COMMON NAME				
621.285	<b>LG DECID TR (3" – 3.50'</b>	' CAL) GPA	EA		25
	Red Maple	Acer rubrum		7	
	Swamp White Oak	Quercus bicolor		12	
	Princeton Elm	Ulmus americana 'Princeton'		6	
621.714	HERBACEOUS PERENN	NIALS GPA	EA		220
	Coneflower	Echinacea purpurea		40	
	Daylily	Hemerocallis 'Happy		40	
		Returns' or 'Stella de Oro'			
	Catmint	Nepeta x faassenii		40	
	Fountain Grass	Pennisetum alopecuroides		100	
		'Hameln' or 'Piglet'			
621.722	HERBACEOUS WETLAND SPECIES GPA		EA		415
	Pennsylvania Sedge	Carex pensylvanica		80	
	Soft Rush	Juncus effusus		150	
	Blue Flag Iris	Iris versicolor		110	
	Green-headed Coneflower	Rudbeckia laciniata		75	

<u>621.80 Establishment Period</u>: Per Section 104.5.10, a One -Year Warranty Bond will be required for the full value of planting.

<u>Installation</u>: The contractor shall follow *MaineDOT Standard Details* Rev. March 2020 for installation procedures. Plant materials shall be installed per details 621(01) and 621(03).

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

Basis of Payment: All items described herein are incidental to the following pay item:

Pay Item		Pay Unit
621.285	Large Deciduous Tree (3"-3.5" Cal) GP A	EA
621.714	Herbaceous Perennials GP A	EA
621.722	Herbaceous Wetland Species GP A	EA
621.80	Establishment Period	LS

### SPECIAL PROVISION Section 621.951 Bike Rack

<u>Description</u>: This work shall consist of furnishing all materials, labor, equipment and incidentals for transporting and installing powdercoated metal bike rack as shown on the Plans in accordance with this special provision or as directed by the Landscape Architect.

<u>Materials</u>: Power coated metal bike rack shall conform to the dimensions shown on the Plans. Bike racks shall be as follows, or approved equal:

Bollard Bike Rack, in-ground mount, standard material (schedule 40 pipe), TGIC polyester powdercoat finish, black; available from The Park Catalog (Item #509-9159), 931 Village Blvd, Suite 905-354, West Palm Beach, FL 33409 (https://www.theparkcatalog.com)

Concrete footing shall be Class A concrete, 9" minimum diameter, extending to frostline depth.

<u>Bike Rack Installation</u>: Prepare a hole for each bike rack post. Hole diameter shall accommodate post diameter with 3" minimum clearance on all sides (approximately 9 inches diameter, minimum).

Insert the bike rack post into the hole. The top of the bike rack post must be 35" above the finished grade of the surrounding brick paving.

Suspend the fixture on a frame or other object to properly plumb and orient the post in the hole.

Pour the concrete into the hole at the depth specified in the construction details. Allow to set. Run surrounding brick pavement up to post base.

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

<u>Basis of Payment</u>: All items described herein, including concrete footer, are incidental to the following pay item:

Pay Item		Pay Unit
621.951	Bike Rack	LS

### SPECIAL PROVISION Section 641.12 Bench

<u>Description</u>: This work shall consist of furnishing all materials, labor, equipment and incidentals for transporting and installing powdercoated metal benches as shown on the Plans in accordance with this special provision or as directed by the Landscape Architect.

<u>Materials</u>: Powdercoated metal benches shall conform to the dimensions and locations shown on the Plans. Benches shall be as follows, or approved equal:

Landscape Forms Scarborough Bench Backless with horizontal strap seat, 72" Length, Gloss Black (Neutral Series – Powdercoated Metal); available from Landscape Forms, 7800 E. Michigan Avenue, Kalamazoo, MI 49048 (https://www.landscapeforms.com)

Anchor shall be non-corrosive threaded stainless steel, 3/8" diameter, 7" length, with stainless steel hex & stainless-steel washer.

Epoxy used to anchor the stainless-steel threaded anchor bolts shall be an epoxy bonding agent included on the Maine DOT Qualified Product List (QPL) and approved by the Landscape Architect.

Concrete pad shall be Class A concrete.

<u>Bench Installation</u>: Remove nylon glides from bottom of legs. Protect powdercoat finish from any potential damage. Take great care not to slide unit over concrete or other abrasive surfaces after glides have been removed. Place unit in desired position.

Mark hole location through anchor holes. Move unit to allow access for drilling holes.

Core drill concrete slab at marked position to accommodate anchor embedment & epoxy.

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

<u>Basis of Payment</u>: All items described herein, including concrete pad, are incidental to the following pay item:

Pay Item
641.12 Bench
EA

### SPECIAL PROVISION Section 641.22 Tree Grate & Guard

<u>Description</u>: This work shall consist of furnishing all materials, labor, equipment and incidentals for transporting and installing Tree Grates and Guards as shown on the Plans in accordance with this special provision or as directed by the Landscape Architect.

<u>Materials</u>: Cast iron metal tree grates, frames & tree guards shall conform to the dimensions and locations shown on the Plans. Grates & frames shall be as follows, or approved equal:

R-8802-A Tree Grate & Frame, 4' x 6'; cast gray iron ASTM A-48, Class 35B, 2 mils black powder coat paint finish; available from Neenah Foundry Company, 2121 Brooks Avenue, Neenah, WI, 54956 (https://www.groupnei.com)

Grates shall be bolted together with (2)  $\frac{1}{2}$ -13 x 3" stainless steel hex bolt and hex nut with washers. Frames shall be assembled using 6" x  $\frac{1}{4}$ " thick steel plate bolted to frame with (2)  $\frac{3}{8}$  – 16UNC x 1 stainless steel flat head cap screws.

Tree guards shall be as follows, or approved equal:

NF42636-2 B12; Type 'B' Tree guard; 43.5" height, 10" diameter, 8 vertical bars, hot rolled steel, 2 mils black powder coat paint finish (component no. 9996-1200); available from Neenah Foundry Company, 2121 Brooks Avenue, Neenah, WI, 54956 (https://www.groupnei.com)

Tree Grate, Frame & Guard Installation: Install per manufacturer's instructions.

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

<u>Basis of Payment</u>: For the basis of payment, the term 'tree grate' shall include the grate, frame, guard, & hardware as a single pay unit. All items described herein are incidental to the following pay item:

Pay Item		Pay Unit
641.22	Tree Grate	EA

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### SPECIAL PROVISION Section 641.34 Trash Receptacle

<u>Description</u>: This work shall consist of furnishing all materials, labor, equipment, and incidentals for transporting and installing powdercoated metal trash receptacle as shown on the Plans in accordance with this special provision or as directed by the Landscape Architect.

<u>Materials</u>: Power coated metal trash receptacles shall conform to the dimensions shown on the Plans. Trash receptacles shall be as follows, or approved equal:

36 Gallon Receptacles with Rain Cover Lid and Plastic Liner, TGIC Polyester powder coat finish, black; available from The Park Catalog (Item #263-1249), 931 Village Blvd, Suite 905-354, West Palm Beach, FL 33409 (https://www.theparkcatalog.com)

<u>Trash Receptacle Installation</u>: Receptacle to be unbolted to paving in locations as shown on the Plans.

At the completion of the project, a final inspection will be overseen by the Landscape Architect.

Basis of Payment: All items described herein are incidental to the following pay item:

Pay Item		<u>Pay Unit</u>
641.34	Trash Receptacle	EA

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### SPECIAL PROVISION SECTION 803 **TEST PITS**

### Description of Work

Item 803.01, Test Pits, shall consist of excavating and back filling test holes to locate existing utilities at locations shown on the plans or as directed by the Engineer.

#### Construction Requirements

The work shall be done in a manner that provides safe passage of the traveling public at all times. Coordination with the utilities is required prior and during the test pit activities. An authorized representative from the utility shall be present during the test pit activity. Test pits shall be completed in a manner that does not damage any utilities. Any damage to utilities or other roadway features by the test pit operations shall be repaired by the Contractor at no additional cost and shall be to the Engineer's satisfaction.

The Contractor shall coordinate with the Owner's surveyor on locating the utilities once exposed.

Once the location work is complete, the Contractor shall backfill the hole, place gravel and pavement over the test pits in a manner consistent with the existing conditions and in accordance with the standard specifications for backfilling.

#### Method of Measurement

Test Pits will be measured for payment by each.

#### Payment

The accepted quantity of Test Pits will be paid for at the contract unit price per each, which shall be full compensation for all labor, materials, tools, equipment, and incidentals necessary to the complete the work. Associated traffic control will not be paid for separately and is considered incidental to the test pit item.

Pay Item	Pay Unit
803.01 Test Pits	EA