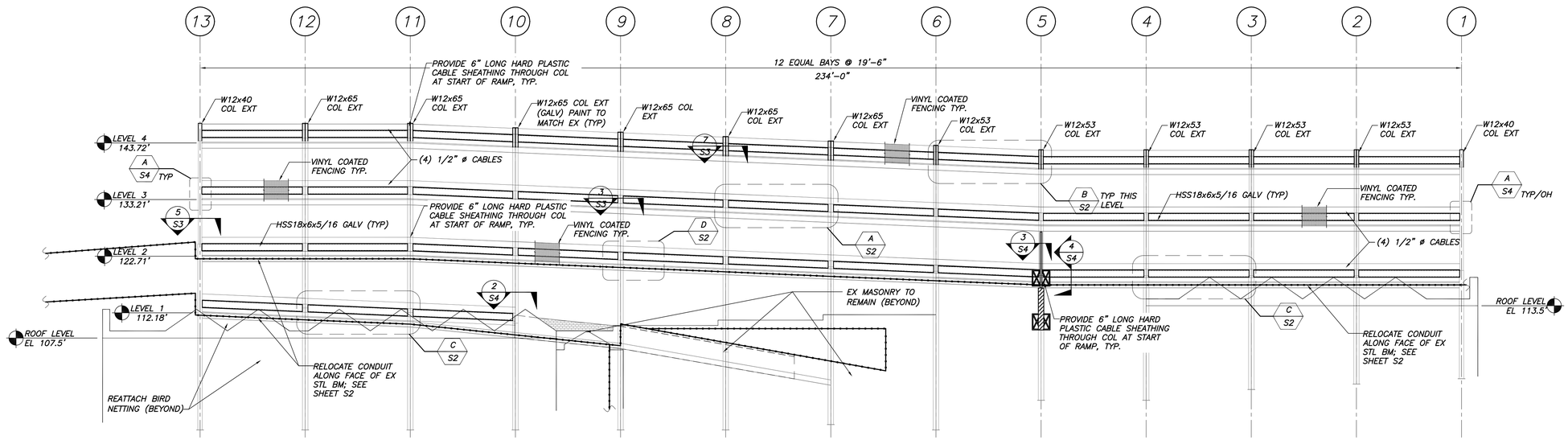
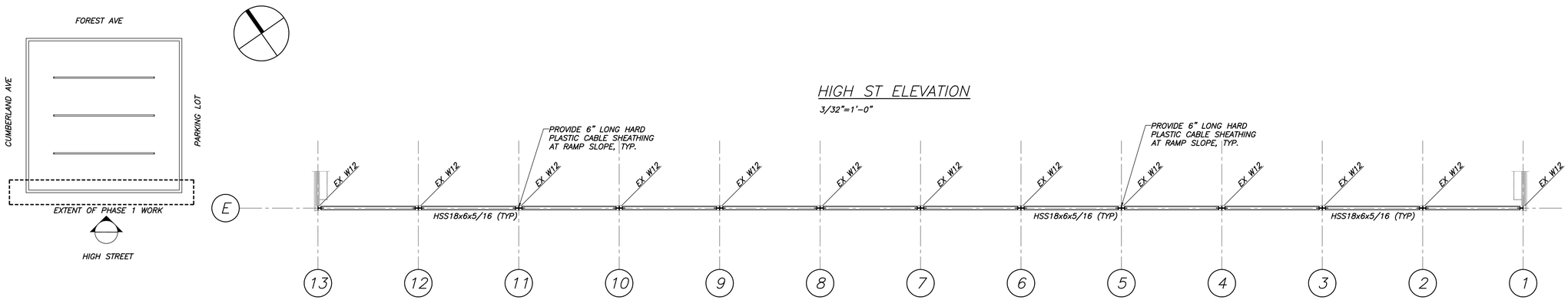


HIGH ST ELEVATION

3/32"=1'-0"



HIGH ST TYPICAL PLAN

3/32"=1'-0"

GENERAL NOTES

1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS.
3. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
4. THE REPAIRS TO THIS STRUCTURE HAVE BEEN DESIGNED TO RE-ESTABLISH THE STRUCTURAL INTEGRITY OF THE STRUCTURE AFTER THE REPAIRS ARE COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING THE RESTORATION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE ENGINEER.
6. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT AND ENGINEER. SUBMIT ONE DIGITAL COPY. THE DIGITAL COPY WILL BE REVIEWED AND A DIGITAL COPY BE RETURNED.
7. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF BECKER STRUCTURAL ENGINEERS INC. IT SHALL NOT BE REPRODUCED, COPIED, LENT OR DISPOSED OF DIRECTLY OR INDIRECTLY NOR USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS SPECIFICALLY FURNISHED AND MUST BE RETURNED TO BECKER STRUCTURAL ENGINEERS INC. ON COMPLETION OF WORK, IF REQUESTED.

DESIGN:

1. BUILDING CODE: IBC 2009
   IEBC 2009
2. VEHICLE BARRIER DESIGN LOADS: 6,000 LBS CONCENTRATED LOAD
3. PEDESTRIAN GUARDL DESIGN LOADS: 50 PLF OR 200 LB CONCENTRATED LOAD
4. THE EXISTING MASONRY FACADE SYSTEM IS TO BE REMOVED AND REPLACED WITH A STEEL BUMPER AND CABLE GUARDRAIL SYSTEM. GRAVITY AND LATERAL FORCES IMPARTED ONTO THE EXISTING STRUCTURE HAVE BEEN DETERMINED NOT TO INCREASE WITH THE WORK THAT IS SCHEDULED TO BE PERFORMED. THE LOAD-CARRYING CAPACITY OF THE STRUCTURE WILL NOT BE DECREASED WITH THE WORK THAT IS SCHEDULED TO BE PERFORMED.
5. EXISTING BUILDING HAS BEEN EVALUATED USING THE "PRESCRIPTIVE METHOD" PER CHAPTER 3 OF IEBC.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" LATEST EDITION, AND THE "CODE OF STANDARD PRACTICE", LATEST EDITION.
2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36 UNLESS NOTED OTHER WISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON THE DRAWINGS FOR WIDE-FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50 WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997)
3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
4. FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE SLIP CRITICAL (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED. USE A490 BOLTS WHERE INDICATED.
5. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN)
6. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHOR BLOTS ETC., SHOWN ON THE DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.
7. ALL FASTENERS SHALL BE GALVANIZED.
8. ALL STEEL SHALL BE GALVANIZED UNLESS OTHERWISE NOTED.

FABRICATION

1. SHOP ASSEMBLY: PRE-ASSEMBLE ITEMS IN THE SHOP TO GREATEST EXTENT POSSIBLE. DISASSEMBLE UNITS ONLY AS NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES. CLEARLY MARK UNITS FOR REASSEMBLE AND COORDINATED INSTALLATION.
2. CUT, DRILL, AND PUNCH METALS CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH, UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
3. FORM BENT-METAL CORNERS TO SMALLEST RADIUS POSSIBLE WITHOUT CAUSING GRAIN SEPARATION OR OTHERWISE IMPAIRING WORK.
4. FORM EXPOSED WORK TRUE TO LINE AND LEVEL WITH ACCURATE ANGLES AND SURFACES AND STRAIGHT EDGES.
5. WELD CORNERS AND SEAMS CONTINUOUSLY TO COMPLY WITH THE FOLLOWING:
   A. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS.
   B. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP.
   C. REMOVE WELDING FLUX IMMEDIATELY.
   D. AT EXPOSED CONNECTIONS, FINISH EXPOSED WELDS AND SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS SHOWS AFTER FINISHING AND CONTOUR OF WELDED SURFACE MATCHES THAT OF ADJACENT SURFACE.
6. PROVIDE FOR ANCHORAGE OF TYPE INDICATED; COORDINATE WITH SUPPORTING STRUCTURE. SPACE ANCHORING DEVICES TO SECURE METAL FABRICATIONS RIGIDLY IN PLACE AND TO SUPPORT INDICATED LOADS.
7. ALL STEEL ELEMENTS ARE TO BE HOT-DIPPED GALVANIZED INCLUDING PLATES, ANGLES AND TUBING UNLESS OTHERWISE NOTED.

PREPARATION OF EXISTING STEEL:

1. OLD COATINGS SHOULD BE TESTED FOR LIFTING. IF LIFTING OCCURS, REMOVE THE LIFTED COATING.
2. REMOVE ALL CRACKED AND PEELING PAINT.
3. PREP ALL EXPOSED STEEL TO SSPC-SP2.
4. WHERE RUSTY SURFACES STILL REMAIN AFTER CLEANING USE DEVOE PRE-PRIME 167 SEALER BEFORE APPLICATION OF BAR-RUST 235.
5. PRIOR TO COATING ALL SURFACES MUST BE DRY, CLEAN, FREE OF OIL, GREASE, FORM RELEASE AGENTS, CURING COMPOUNDS, LAITANCE, OTHER FOREIGN MATTER AND BE STRUCTURALLY SOUND.
6. COMPLY WITH ALL MANUFACTURERS RECOMMENDATIONS FOR SURFACE PREPARATION.

PAINTING EXISTING STEEL:

1. MAINTAIN ENVIRONMENTAL CONDITIONS (TEMP, HUMIDITY, AND VENTILATION) WITHIN THE LIMITS RECOMMENDED BY THE MANUFACTURER FOR OPTIMUM RESULTS. DO NOT APPLY COATINGS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S ABSOLUTE LIMITS.
2. MANUFACTURER: ICI-DULUX/DEVOE COATINGS, STRONGVILLE, OH, 800-654-2616, WWW.ICIDULUXPAINTS.COM OR WWW.DEVOECOATINGS.COM.
3. EXISTING STEEL BEAMS, COLUMNS, AND MISC ITEMS.
   A. 1ST COAT: DEVOE PRE-PRIME 167, RUST PENETRATING SEALER.
   B. 2ND COAT: DEVOE BAR-RUST 235, EPOXY COATING
   C. 3RD COAT: DEVOE DEVETHANE 379, POLYURETHANE FINISH
   D. COLD WEATHER NOTES:
      i. PRE-PRIME 167 WILL NOT CURE AT TEMPS BELOW 50 DEGREES.
      ii. FOR TEMPS BELOW 50 AND HIGHER THAN 10 DEGREES SUBSITUTE PRE-PRIME WITH BAR-RUST 235, TWO TOTAL COATS OF BAR-RUST 235.
      iii. PROVIDE COLD WEATHER ADDITIVE 070 TO DEVETHANE 379 FOR TEMPS DOWN TO 25 DEGREES F.

BECKER STRUCTURAL ENGINEERS
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STATE OF MAINE
TODD M. NEAL
NO. 9406
LICENSED
PROFESSIONAL ENGINEER

Reviewed for Code Compliance
Inspection Division
Department of Building Safety
Date: 09/04/15

Rev. No	Date	Issued For	Apprd
	5/27/15	FOR BID	
	6/30/15	FOR PERMIT	

GATEWAY PARKING GARAGE
PORTLAND, MAINE
FACADE REPAIRS PHASE 1

TYP PLAN AND ELEVATION

Designed JMM	Scale AS NOTED
Drawn ATS	Date 5/27/15
Checked TMN	Becker Job Number 3521

S1