GENERAL NOTES

1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE THE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO THE GENERAL NOTES. INCONSISTENCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED WORK.

2. ALL WORK SHALL COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AND 2009 INTERNATIONAL EXISTING BUILDING CODE (IEBC).

   A. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL EQUIPMENT USED DOES NOT EXCEED EXISTING BUILDING DESIGN LOADS. MAXIMUM EQUIPMENT LOAD 8,000 LBS.

3. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS.

5. 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 IT'S COMPONENTS DURING THE RESTORATION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, TEMPORARY PARTITIONS, VEHICLE AND PEDESTRIAN PROTECTION, GUYS OR TIE DOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF PROJECT.

6. SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE STRUCTURAL ENGINEER.

7. THE CONTRACTOR SHALL SUBMIT COMPLETE SUBMITTALS (AS NOTED IN THE SPECIFICATIONS) 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 STRUCTURAL ENGINEER

8. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO VEHICLES, PROPERTY AND PUBLIC CAUSED BY THEIR WORK.

10. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES AND GOVERNMENT FEES AS REQUIRED. THE CONTRACTOR SHALL COMPLY WITH CODES, ORDINANCES, RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF THE PUBLIC AUTHORITY, WHICH BEAR ON THE PERFORMANCE OF THE WORK.

11. THE EXISTING BUILDING SHALL REMAIN IN OPERATION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CONTROLS NECESSARY TO ALLOW FOR THE BUILDING OPERATIONS.

12. CONTRACTOR SHALL PROVIDE AND MAINTAIN REQUIRED DUST BARRIERS, BARRICADES, PROTECTION AND WARNING LIGHTS IN GOOD WORKING CONDITION UNTIL COMPLETION OF WORK REQUIRING SUCH PROTECTION AND THEN REMOVE THE SAME. ALL SIGNS, BARRIERS, AND BARRICADES SHALL COMPLY WITH FEDERAL STATE AND LOCAL LAWS AND REGULATIONS.

13. CONTRACTOR SHALL MAINTAIN PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIAL AND RUBBISH. PRECAUTIONS SHOULD BE TAKEN TO MINIMIZE DUST FROM ENTERING THE BUILDING. ALL DUST AND DEBRIS CREATED BY THE WORK WITHIN THE BUILDING SHALL BE REMOVED AND THE WORK AREAS CLEANED. CONTRACTOR TO HAVE DETAILED CONTROLS TO CONTAIN DUST IN ALL WORK AREAS. CONTRACTOR SHALL ENSURE THAT THE WORK AREA AND SITE CONFORM WITH OSHA RESPIRABLE CRYSTALLINE SILICA IN CONSTRUCTION STANDARD, 29 CFR 1926.1153.

14. ON DECK STORAGE OF DEBRIS WILL BE LIMITED AND SHALL BE REMOVED AT END OF EACH DAY.

15. CONTRACTOR SHALL DETERMINE THE NEED FOR ALL DISCONNECTION AND/OR TEMPORARY OR PERMANENT REROUTING OF EXISTING UTILITIES, INCLUDING ELECTRICAL AND PLUMBING AND COORDINATE WITH THE GARAGE OWNER/MANAGER.

16. IF WORK RESTRICTS ACCESS TO ANY MEANS OF EGRESS CONTRACTOR SHALL SUPPLY ALL TEMPORARY SIGNAGE, BARRIERS TO REDIRECT PATRONS TO THE NEAREST EXIT OR DOWN THE RAMP. A MINIMUM OF TWO STAIR TOWERS MUST REMAIN COMPLETELY ACCESSIBLE DURING THE WORK. IF ACCESS TO THE ELEVATOR IS RESTRICTED AT ANY LEVEL PROVIDE SIGNAGE INDICATING NO ACCESSIBLE PARKING ON THAT LEVEL.

17. 5 PARKING SPACES WILL BE AVAILABLE TO THE CONTRACTOR MONDAY THROUGH FRIDAY. ADDITIONAL PARKING SPACES ARE AVAILABLE ON THE WEEKEND. CONTRACTOR TO PROVIDE ALL TRAFFIC OPERATIONS AND PEDESTRIAN SIGNAGE DURING CONSTRUCTION.

PRECAST CONCRETE TREAD NOTES

MATERIAL:
1. CONCRETE:
   1.1. f'c = 5,000 PSI MIN.
   1.2. AIR CONTENT = 6% +/-1%
   1.3. PROVIDE A MINIMUM OF ONE TEST RESULT FOR STRENGTH AND AIR.
2. REINFORCEMENT: GALVANIZED BARS CONFORMING WITH ASTM A 615, GRADE 60. PROVIDE MINIMUM TOP COVER OF 1 1/2"
3. CONNECTIONS: HOT DIPPED GALVANIZED PER ASTM A 123 OR ASTM A 153.
4. EMBEDMENTS: ALL EMBEDMENTS SHALL BE HOT DIPPED GALVANIZED OR ON-CORROSIVE MATERIAL.

FABRICATION:
1. PRECAST UNITS SHALL BE FABRICATED BY A CURRENT APA CERTIFIED PLANT.
2. EACH TREAD SHALL BE CAST WITH WOOSTER PRODUCTS TYPE 231BF NOSING WITH ABRASIVE FILLER. HOLD BACK 2" FROM EACH SIDE.
3. FINISH:
   3.1. TOP, BACK AND FRONT SURFACES TO RECEIVE FORM FINISH WITH MEDIUM EXPOSURE SAND BLAST.
   3.2. BOTTOM TO RECEIVE TROWEL FINISH WITH MEDIUM SAND BLAST.
   3.3. PROVIDED 1/4" RADIUS AT NOSING.

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE.
2. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
3. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
4. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
5. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
   A) CONCRETE SLABS: 1.5"
6. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPLICES PER THE SCHEDULE THIS DRAWING, FOR ALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN.
7. WELDING OF REINFORCEMENT IS NOT PERMITTED.
8. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.
9. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDED ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITIONS OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS INTO CONCRETE IS STRICTLY PROHIBITED. EMBEDMENTS INCLUDE, BUT NOT BY LIMITATION, REINFORCEMENT, REINFORCING DOWELS, EMBEDDED PLATES, ANCHOR RODS, ANCHOR INSERTS, SLEEVES LOAD TRANSFER PLATES, DIAMOND DOWELS AND SHELF BULK HEADS.

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
3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
4. 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)
5. 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.
6. ALL FASTENERS SHALL BE HOT-DIPPED GALVANIZED.
7. ALL STEEL SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123 UNLESS OTHERWISE NOTED.

FABRICATION

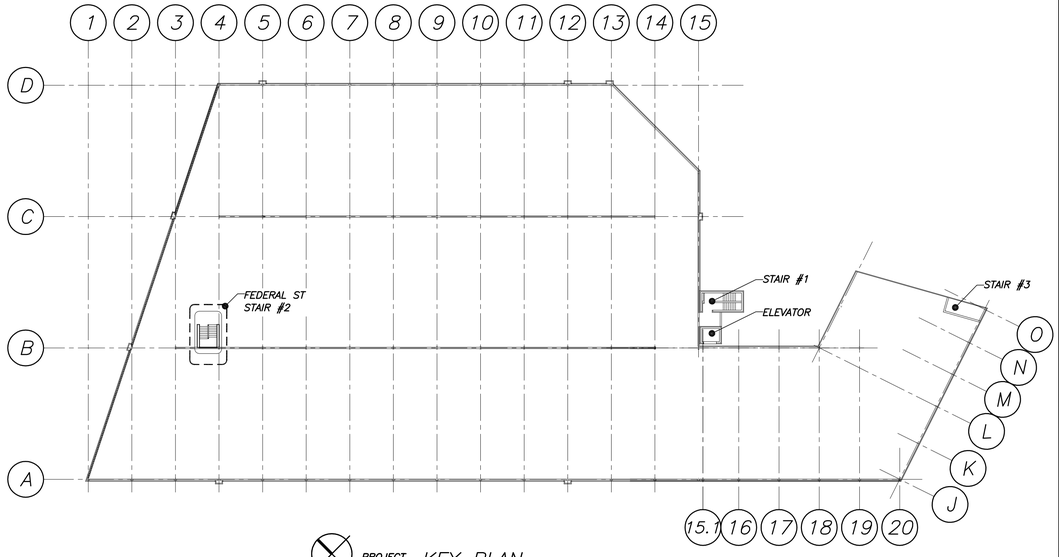
1. SHOP ASSEMBLY: PRE-ASSEMBLE ITEMS IN THE SHOP TO GREATEST EXTENT POSSIBLE PRIOR TO GALVANIZING. DISASSEMBLE UNITS ONLY AS NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES. CLEARLY MARK UNITS FOR REASSEMBLE AND COORDINATED INSTALLATION.
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. FABRICATE 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.

PAINTING NEW & 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. FIELD PAINT ALL FIELD WELDED CONNECTIONS AND PUNCHED HOLES. PROVIDE THREE COAT SYSTEM ON ALL FIELD PAINTING.
3. OLD COATINGS SHOULD BE TESTED FOR LIFTING. IF LIFTING OCCURS, REMOVE THE LIFTED COATING. REMOVE ALL CRACKED AND PEELING PAINT.
3. PREP ALL EXPOSED STEEL TO SSPC-SP3 POWER TOOL CLEANING. CLEAN STEEL TO REMOVE ALL RUST AND CORROSION. NOTIFY ENGINEER OF SECTION LOSS OF STEEL ELEMENTS.
4. 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.
5. COMPLY WITH ALL MANUFACTURERS RECOMMENDATIONS.
6. PRIMER, INTERMEDIATE AND TOP COAT ARE TO BE DIFFERENT COLORS SO OWNER REPRESENTATIVE CAN CONFIRM THAT EACH COAT HAS BEEN APPLIED.
7. MANUFACTURER: SHERWIN WILLIAMS, PPG PITTSBURGH PAINTS OR TNEMEC. REFERENCE SPECIFICATIONS FOR APPROVED PRODUCTS.
8. STEEL PLATES, ANGLES, STAIR FRAMING AND MISCELLANEOUS ITEMS APPLY THREE COAT PAINT SYSTEM.

ABBREVIATIONS

BM – BEAM
CIP – CAST-IN-PLACE CONCRETE
CJ – CONTROL/CONSTRUCTION JOINT
CMU – CONCRETE MASONRY UNIT
CONC – CONCRETE
EA – EACH
EX – EXISTING
EJ – EXPANSION JOINT
FD – FLOOR DRAIN
MISC – MISCELLANEOUS
PC – PRECAST CONCRETE
PL – PLATE
PREP – PREPARE
REF – REFERENCE
STL – STEEL
TRDS – TREADS
TYP – TYPICAL



PROJECT NORTH

KEY PLAN

BECKER
STRUCTURAL ENGINEERS
75 York Street, Portland, Maine 04101
207.879.1838 • beckerstructural.com

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

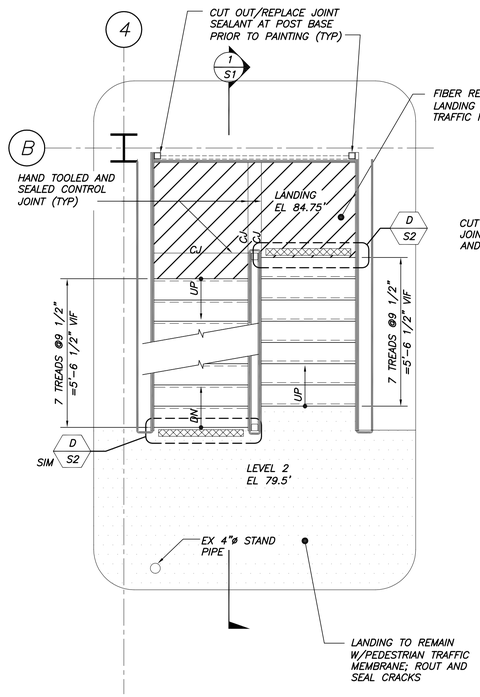
Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
04/13/2018

Rev No	Date	Issued For
Addend		
	2/5/18	FOR BID
	4/9/18	FOR PERMIT

TEMPLE ST PARKING GARAGE
STAIR #2 FEDERAL ST REPAIRS
PORTLAND, ME
GENERAL NOTES

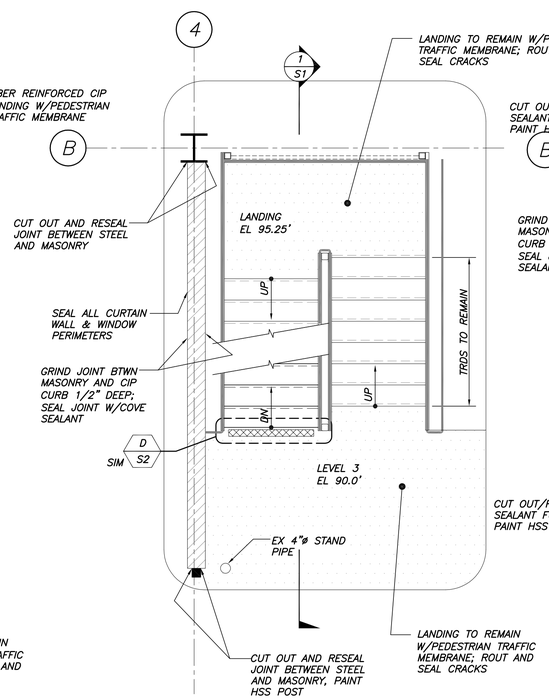
Designed: JMM	Scale: AS NOTED
Drawn: JMM	Date: 2/5/18
Checked: TMN	Becker Job Number: 4267

S0



STAIR #2 – LEVEL 2 PLAN

3/8"=1'-0"



STAIR #2 – LEVEL 3 PLAN

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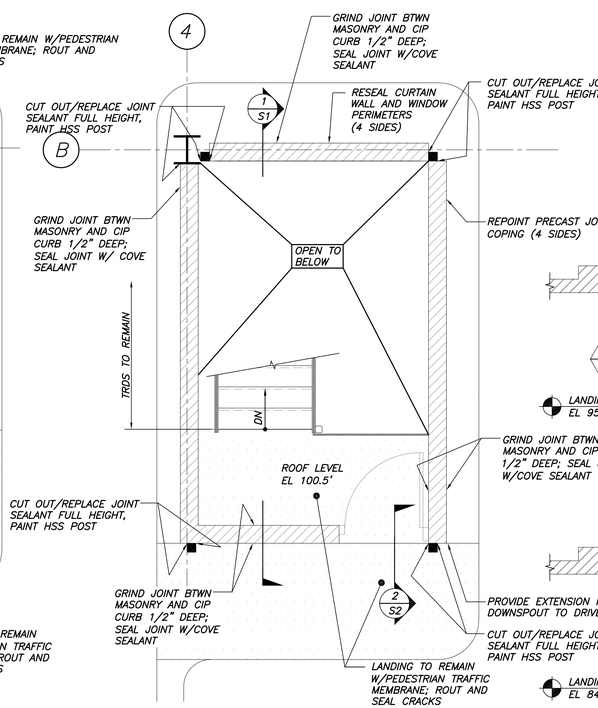

STAIR #2 – ROOF LEVEL PLAN

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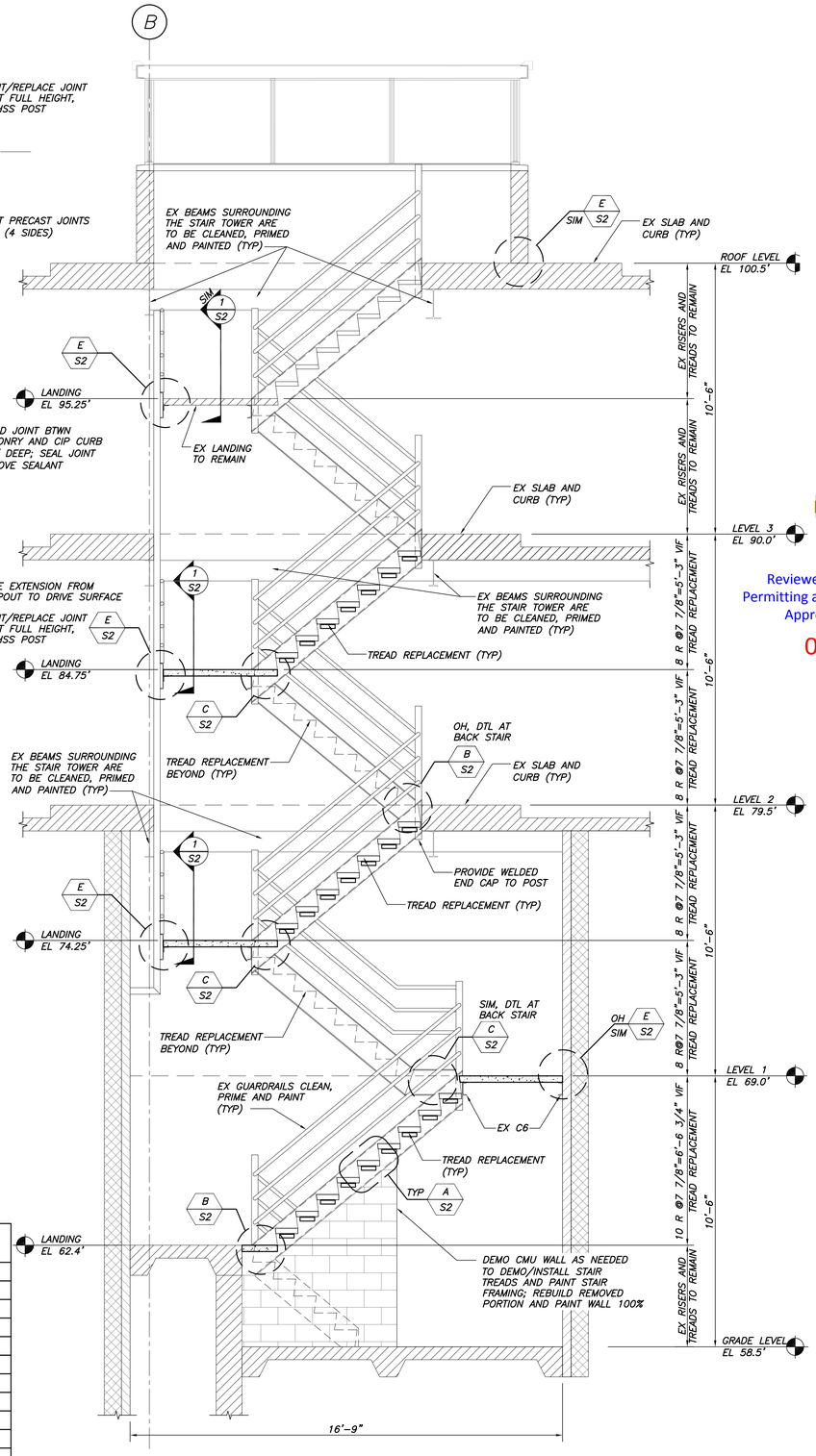


SECTION

3/8"=1'-0"

1
S1

KEY

TRAFFIC MEMBRANE OVER EXISTING CIP LANDING

TRAFFIC MEMBRANE OVER NEW CIP LANDING

DEMOLITION NOTES:

1. REMOVE EXISTING RISERS, CONCRETE FILLED TREAD PANS, TREAD SUPPORTS AND CONCRETE LANDINGS AS INDICATED.
2. EXISTING STRINGERS, HANDRAILS AND LANDING SUPPORTS ARE TO REMAIN (ALL LEVELS).
3. REMOVE AND TEMPORARILY SUPPORT ELECTRICAL CONDUIT/BOXES, LIGHTS, LIGHT GUARDS AND HVAC LINES FROM WALLS AND UNDERSIDE OF LANDINGS. REINSTALL AFTER COMPLETION OF WORK. COORDINATE WORK WITH GARAGE MANAGEMENT
4. REMOVE EXISTING TREAD COVERS AND STORE IN LOCATION DIRECTED BY OWNER OR THEIR REPRESENTATIVE.

PAINTING NOTES:

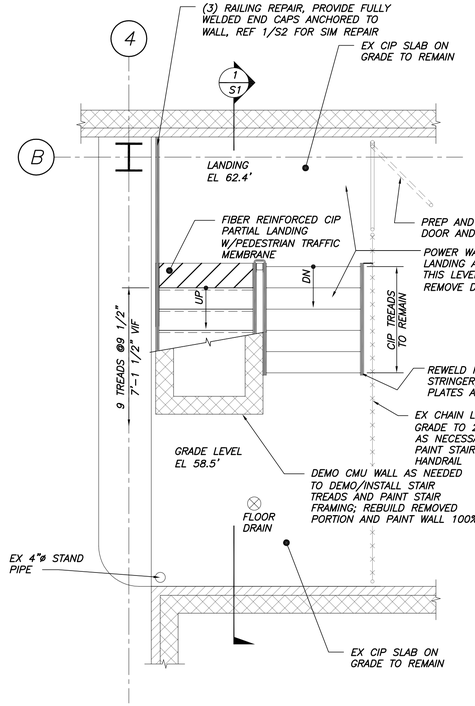
1. REFERENCE DRAWING S0 AND SPECIFICATIONS FOR ADDITIONAL PAINTING AND SURFACE PREPARATION REQUIREMENTS.
2. ALL EXPOSED STEEL WITHIN THE STAIR TOWER IS TO PREPPED AND PAINTED INCLUDING BUT NOT LIMITED TO STAIR FRAMING, HANDRAILS, COLUMNS, SURROUNDING BEAMS (4 SIDES), HSS POSTS, HANGERS AND MISCELLANEOUS STEEL. PAINT STAIR FRAMING AFTER INSTALLATION OF NEW STEEL TREAD SUPPORTS BUT PRIOR TO THE INSTALLATION OF PRECAST TREADS, RISERS AND LANDING PANS.
3. AT EXISTING TREADS TO REMAIN, REMOVE TREAD COVERS PRIOR TO STEEL PREPARATION AND PAINTING. RESET TREAD COVERS.
4. EXISTING VERTICAL STANDPIPE TO BE PREPPED AND PAINTED.

SCOPE OF WORK – STAIR #2

ITEM	DESCRIPTION	QUANTITY	UNIT
1	DEMOLITION OF LANDINGS AND TREADS	1	LS
2	PRECAST CONC TREADS (INCLUDING SUPPORTING STL)	37	EA
3	CIP CONCRETE LANDINGS	3	EA
4	PREP AND PAINT STEEL STAIR FRAMING (ALL LEVELS)	1	LS
5	TRAFFIC MEMBRANE AT LANDINGS (ALL LEVELS)	400	SF
6	CRACK CHASE REPAIR	60	LF
7	RAILING REPAIRS	28	LF
8	REPOINT PRECAST COPPING JOINTS (LVL 4)	60	LF
9	CURTAIN WALL AND WINDOW PERIMETER SEAL (LVL 4)	400	LF
10	JOINT SEALANT REPLACEMENT AND MISC REPAIR (LVL 3 & 4)	250	LF

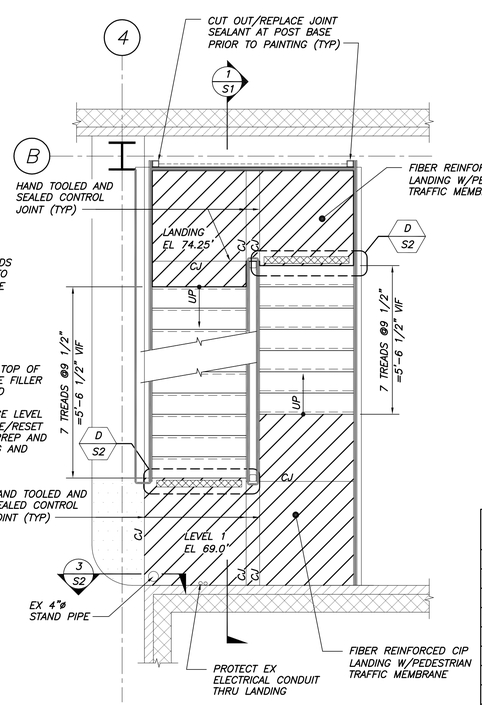
NOTES:

1. QUANTITIES SHOWN IN THE SCHEDULE ABOVE MAY BE GREATER THAN WHAT ARE SHOWN ON THE PLAN.
2. ALL QUANTITIES SHOULD BE FIELD VERIFIED.



STAIR #2 – GRADE LEVEL PLAN

3/8"=1'-0"



STAIR #2 – LEVEL 1 PLAN

3/8"=1'-0"

BECKER STRUCTURAL ENGINEERS
75 York Street, Portland, Maine 04101
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STATE OF MAINE — TODD M. NEAL — NO. 9406 — LICENSED PROFESSIONAL ENGINEER

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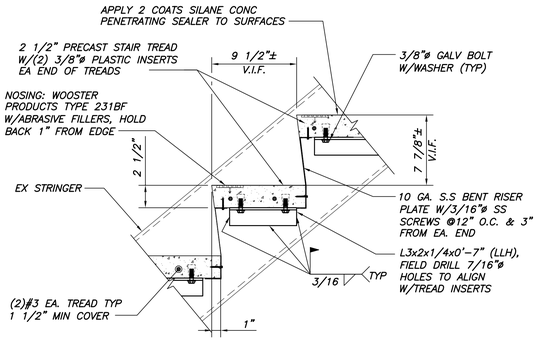
TEMPLE ST PARKING GARAGE
STAIR #2 FEDERAL ST REPAIRS
PORTLAND, ME
PLANS & SECTIONS

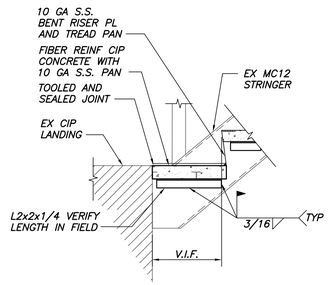
Designed	Scale
JMM	AS NOTED
Drawn	Date
RJB	2/5/18
Checked	Becker Job Number
TMN	4267

S1

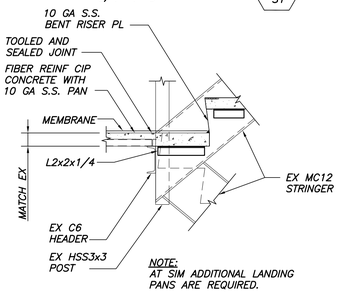


NOTE:
PAINT STAIR FRAMING AFTER INSTALLATION OF NEW STEEL TREAD SUPPORTS BUT PRIOR TO THE INSTALLATION OF PRECAST TREADS, RISERS AND OF LANDINGS PANS.

DETAIL A
1 1/2"=1'-0" S1

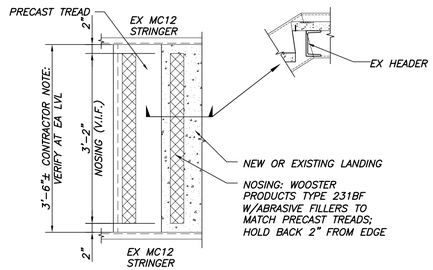


DETAIL B
3/4"=1'-0" S1



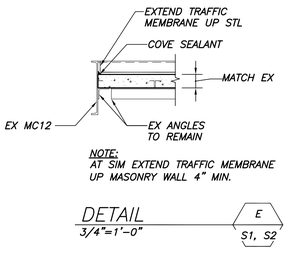
NOTE:
AT SIM ADDITIONAL LANDING PANS ARE REQUIRED.

DETAIL C
3/4"=1'-0" S1



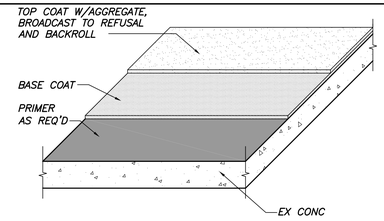
NOTE:
AT SIM, REMOVE/REPLACE STL RISER BELOW LANDING AND CUT BACK/DEMO CONCRETE LANDING EDGE AS NEEDED TO INSTALL NEW NOSING.

DETAIL D
3/4"=1'-0" S1



NOTE:
AT SIM EXTEND TRAFFIC MEMBRANE UP MASONRY WALL 4" MIN.

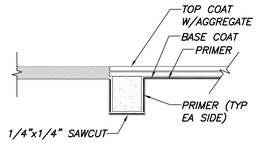
DETAIL E
3/4"=1'-0" S1, S2



STAIR LANDING MEMBRANE DETAIL

N.T.S.

NOTES:
1. REFERENCE SPECS FOR APPLICATION RATES.
2. PRIMER AND PER-STRIPPING SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS.



MEMBRANE TERMINATION DETAIL

N.T.S.

MEMBRANE NOTES
PROJECT CONDITIONS:
1. DO NOT PROCEED WITH APPLICATION OF MATERIALS WHEN DECK TEMPERATURE IS LESS THAN 40 DEGREES F OR WHEN DEW POINTS ARE WITHIN 5'F OF THE SURFACE TEMPERATURE.
2. DO NOT APPLY MATERIALS UNLESS SURFACE TO RECEIVE COATING IS CLEAN AND DRY.
3. REMOVE ALL LOOSE AND DELAMINATED MEMBRANE.
4. CONTRACTOR SHALL COORDINATE A MEETING WITH OWNER, ENGINEER AND MATERIAL MANUFACTURER'S REPRESENTATIVE TO REVIEW APPLICATION, MAINTENANCE REQUIREMENTS, MATERIAL LIMITATIONS AND WARRANTY.
5. PROVIDE IN WRITING FROM MANUFACTURER THAT TRAFFIC BEARING MEMBRANE SYSTEM IS COMPATIBLE WITH EXISTING CONDITIONS.
6. ENSURE TRAFFIC STRIPING PAINT IS COMPATIBLE WITH THE SELECTED TRAFFIC BEARING MEMBRANE.
7. APPLICATOR SHALL BE APPROVED BY TRAFFIC MEMBRANE MANUFACTURER WITH A MINIMUM OF 5 YEARS OF EXPERIENCE WITH SUBMITTED MATERIAL AND APPLICATION.
8. CONTRACTOR SHALL VERIFY THAT ALL REPAIR/PATCH MATERIALS AND JOINT SEALANTS ARE COMPATIBLE WITH MEMBRANE.
9. MATERIAL SUPPLIER SHALL PERFORM AN ADHESION TEST TO EXISTING TRAFFIC MEMBRANE AND CONCRETE SURFACES (REFERENCE MOCKUP).

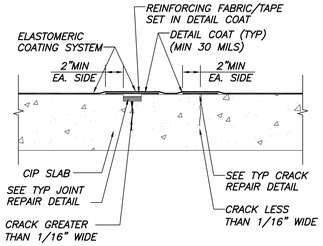
WARRANTY:
1. SUBMIT SAMPLE WARRANTY THAT STATES THAT THE MATERIAL AND LABOR/WORKMANSHIP INVOLVED IN THIS APPLICATION WILL BE WARRANTED FOR 5 YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION BY THE INSTALLER AND MANUFACTURER. FULLY EXECUTED WARRANTY REQUIRED PRIOR TO FINAL PAYMENT.

CODES AND QUALITY CONTROL:
1. COMPLY WITH PROVISIONS OF THE FOLLOWING EXCEPT AS OTHERWISE INDICTED:
   A. ICRI GUIDELINES NO. 03732 "SELECTING AND SPECIFYING CONCRETE SURFACE PREPARATION FOR SEALERS, COATINGS AND POLYMER OVERLAYS"
   B. CODE OF FEDERAL REGULATIONS, PART 1926 PER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), DEPARTMENT OF LABOR (LATEST EDITION).
   C. REQUIREMENT OF REGULATORY AGENCIES: MATERIALS USED IN THE TRAFFIC COATING SYSTEM SHALL MEET EXISTING FEDERAL, STATE, AND LOCAL VOC REGULATIONS.

SYSTEM DESCRIPTION:
1. TRAFFIC MEMBRANE SHALL BE A COMPLETE SYSTEM OF COMPATIBLE MATERIALS SUPPLIED BY THE MANUFACTURER TO CREATE A SEAMLESS WATERPROOF MEMBRANE.

EXAMINATION:
1. CONCRETE: VERIFY THAT THE WORK DONE UNDER OTHER SECTIONS MEETS THE FOLLOWING REQUIREMENTS:
   A. THAT THE CONCRETE DECK SURFACE IS FREE OF RIDGES AND SHARD PROJECTIONS.
   B. THAT THE CONCRETE WAS CURED FOR A MINIMUM OF 28 DAYS (MINIMUM OF 5,000 PSI COMPRESSIVE STRENGTH). WATER-CURED TREATMENT OF CONCRETE IS PREFERRED. THE USE OF CONCRETE CURING AGENTS REQUIRE WRITTEN APPROVAL THE TRAFFIC MEMBRANE MANUFACTURER.
   C. THAT THE CONCRETE WAS FINISHED BY A POWER OF HAND STEEL TROWEL FOLLOWED BY SOFT HARD BROOM TO OBTAIN LIGHT TEXTURE OR "SIDEWALK" FINISH.
   D. THAT DAMAGED AREAS OF THE CONCRETE DECK BE RESTORED AS PER CONTRACT DRAWINGS.

STEEL SURFACE PREPARATION
1. REMOVE ALL DUST, DEBRIS AND OTHER CONTAMINANTS FROM ALL STEEL SURFACES TO RECEIVE MEMBRANE.
2. SURFACES MUST BE CLEANED BY MECHANICAL MEANS TO BRIGHT METAL AND PRIMED IMMEDIATELY.



TYP MEMBRANE JOINT/CRACK DETAIL

N.T.S.

NOTES:
1. INSTALLATION OF THE TRAFFIC MEMBRANE DETAIL COATS OVER JOINTS AND CRACKS IS A REQUIREMENT AND MUST BE INSTALLED AFTER THE PRIMER HAS BEEN APPLIED BUT PRIOR TO APPLICATION OF FULL MEMBRANE SYSTEM.

PREPARATION:
1. PROTECT PLANTS, VEGETATION, VEHICLES AND PEDESTRIANS WHICH MIGHT BE AFFECTED BY COATING. USE DROP CLOTHS OR MASKING AS REQUIRED.
2. ADHERE TO SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
3. CLEANING: SURFACES CONTAMINATED WITH OIL OR GREASE SHALL BE VIGOROUSLY SCRUBBED WITH A POWER BROOM AND A STRONG NON-SUDSING DETERGENT. THOROUGHLY WASH, CLEAN, AND DRY. AREAS WHERE OIL OR OTHER CONTAMINANTS PENETRATE DEEP INTO THE CONCRETE MAY REQUIRE REMOVAL BY MECHANICAL MEANS.
4. ALL SURFACE PREPARATION WORK SHALL BE COMPLETED PRIOR TO THE COATING APPLICATION. INSTALLATION OF MEMBRANE SHALL INDICATE ACCEPTANCE OF SURFACE.
5. SHOT BLASTING: REQUIRED SURFACE PREPARATION METHOD FOR REMEDIAL CONSTRUCTION, IS ALSO THE PREFERRED METHOD FOR NEW CONSTRUCTION. MECHANICALLY PREPARE SURFACE BY SHOT BLASTING TO INDUSTRY STANDARD SURFACE TEXTURE (ICRI'S CSP3-4).
6. SUBSTRATE SHALL BE TESTED FOR ACCEPTABLE MOISTURE CONTENT.
7. CRACKS AND COLD JOINTS: VISIBLE HAIRLINE CRACKS (UP TO 1/16") IN CONCRETE AND COLD JOINTS SHALL BE CLEANED, PRIMED AS REQUIRED AND TREATED WITH MEMBRANE COATING A MINIMUM DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS. ALL CRACKS SHALL BE ROUTED AND SEALED. WHERE SEALANT IS USED IT SHALL BE APPLIED TO INSIDE AREA OF CRACK ONLY, NOT APPLIED TO DECK SURFACE. DETAIL SEALED CRACKS WITH MEMBRANE COATING A DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS.
8. CONTROL DETAIL SEALED JOINTS WITH REINFORCING FABRIC/TAPE SET IN MEMBRANE DETAIL COAT A DISTANCE OF 2" ON EACH SIDE OF CRACK TO YIELD A TOTAL THICKNESS OF 30 DRY MILS
9. FLASHING TAPE: INSTALL FLASHING TAPE OR REINFORCING FABRIC WHERE REQUIRED BY MANUFACTURER PRIOR TO THE APPLICATION OF COATING.
10. SURFACE CONDITIONS: SURFACE SHALL BE CLEAN AND DRY PRIOR TO COATING.

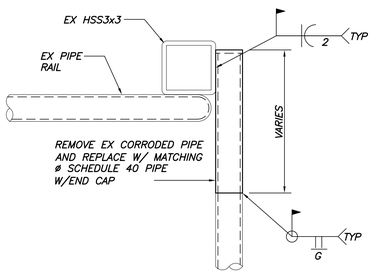
APPLICATION:
1. ENSURE THE PROPER WET FILM THICKNESS BY THE USE OF A GRID SYSTEM. DIVIDE SURFACE INTO GRIDS AND CALCULATE THE SQUARE FOOTAGE AND REFERENCE MANUFACTURERS COVERAGE CHART TO DETERMINE THE QUANTITY OF MEMBRANE REQUIRED TO ACHIEVE NOTED WET MIL THICKNESS.
2. PRIMER: APPLY PRIMER AT A MINIMUM RATE OF 300 SF/GAL TO ALL CONCRETE AND EXISTING MEMBRANE SURFACES. WITHIN 24 HOURS OF APPLICATION OF PRIMER BASE COAT OR WEARING COURSE MUST BE APPLIED. IF BASE COAT CANNOT BE APPLIED WITHIN 24 HOURS, RE-PRIME.
3. REFERENCE SPECS FOR APPLICATION RATES AND MIL THICKNESS OF BASE COAT AND WEARING COURSES.
4. BASE COAT: EXTEND BASE COAT OVER CRACKS AND JOINTS WHICH HAVE RECEIVED DETAIL TREATMENT.
5. TOP COAT: FOLLOW MANUFACTURERS APPLICATION RECOMMENDATIONS.
6. MASK OFF AREAS THAT IS NOT TO RECEIVE TRAFFIC MEMBRANE. CONTRACTOR IS TO RUN STRAIGHT UNIFORM MEMBRANE TERMINATIONS.

PROTECTION:
1. AFTER COMPLETION OF APPLICATION DO NOT ALLOW TRAFFIC ON COATED SURFACES FOR A PERIOD OF AT LEAST 36 HOURS AT 75 'F AND 50% R.H. OR UNTIL COMPLETELY CURED.

MOCKUP:
1. A 4 SQUARE FOOT MOCKUP OF EACH TYPICAL TRAFFIC MEMBRANE INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCING WORK FOR EACH SYSTEM. MOCKUP SHALL BE TESTED BY MEMBRANE MANUFACTURER OR SUPPLIER FOR TOTAL SYSTEM THICKNESS AND ADHESION AS PER ASTM D-903.

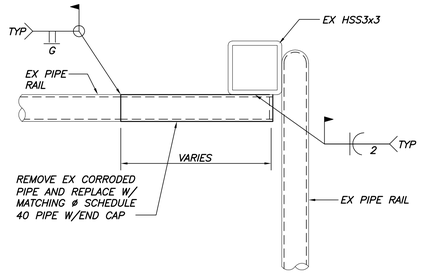
NOTE: AT SIM NO REPAIRS TO EXISTING HANDRAILS OR LANDING REPLACEMENT.

SECTION 1
3/4"=1'-0" S1



RAILING REPAIR #1

N.T.S.



RAILING REPAIR #2

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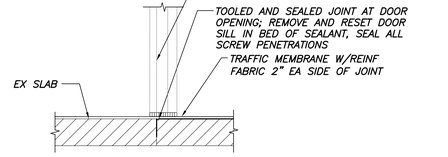
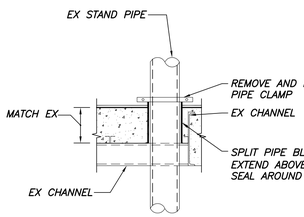
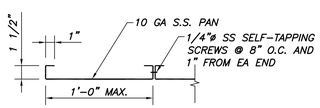


SECTION 2
3/4"=1'-0" S1



SECTION 3
3/4"=1'-0" S1



LANDING PAN PROFILE

N.T.S.

NOTE:
1. PROVIDE SMALLER WIDTH INFILL PANS AS NEEDED.
2. ORIENTATION OF NEW PANS IS TO MATCH EXISTING LAYOUT

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

CITY OF PORTLAND, MAINE
Reviewed for Code Compliance
Permitting and Inspections Department
Approved with Conditions
04/13/2018

Rev. No	Date	Issued For
	2/5/18	FOR BID
	4/9/18	FOR PERMIT

TEMPLE ST PARKING GARAGE
STAIR #2 FEDERAL ST REPAIRS
PORTLAND, ME
DETAILS & SECTIONS

Designed	Scale
JMM	AS NOTED
Drawn	Date
RJB	2/5/18
Checked	Becker Job Number
TMN	4267

S2