K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

TECHNICAL ASSISTANCE REVIEW REQUEST

To: Margaret Brunette, WDNR

From: Richard Gnat, KPRG and Associates, Inc.
Patrick Allenstein, KPRG and Associates, Inc.

CC: Brenna Bellmer, Komatsu Mining Corp.
William Stuckey, Komatsu Mining Corp.
Glenn Luke, Wisconsin Energy
Scott Hansen, USEPA

Date: January 17, 2025

RE: Komatsu Manufacturing Property – Bay 5 F5790 Foundation Extension Project
BRRTS #02-41-466662

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In accordance with the Materials Management Plan for the former Solvay Site/current Komatsu Manufacturing Property Section 5, Komatsu is notifying the interested parties and seeking approval for their intention to remove and replace a section of flooring from within the Manufacturing Building for the purposes of footing expansion.

Komatsu is intending to expand the existing interior Bay 5 F5790 Foundation located on the west side of the manufacturing building (see attached drawings). Since this will include a disturbance of the existing barrier (the removal of a portion of the existing floor slab and some excavation beneath the slab), Komatsu is requesting WDNR review/approval of this proposed work in accordance with the approved Direct Contact Surface Barrier Maintenance and Materials Management Plan. The construction work specifications are summarized in the attached drawings provided to KPRG and Associates, Inc. (KPRG) by Hunzinger Construction Company which has been contracted by Komatsu as the General Contractor for this work. It is noted that the specification drawings include the requirement details for reattaching and sealing the existing vapor barrier to the new foundation based on manufacturer specifications. Also, any impacted subsurface materials that will be encountered during the excavation will be temporarily staged in lined roll-off containers, sampled for waste profiling purposes and subsequently classified and properly disposed of at an off-site, WDNR approved landfill. KPRG will be present on site as Komatsu's environmental consultant during excavating and soil staging activities and will be collecting a representative sample of materials for waste profiling. Photodocumentation will be

kept. A summary report will be drafted and kept on file at the Manufacturing Building upon completion of this expansion project to document the completed work.

A review fee will be paid for this request. Please reach out if you have any questions and we look forward to hearing from you on this matter.

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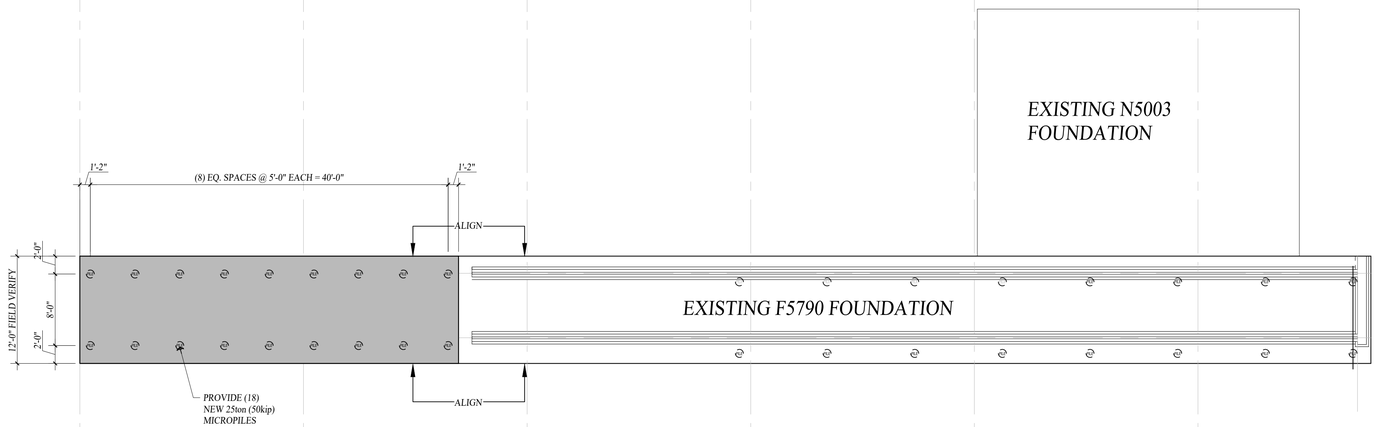
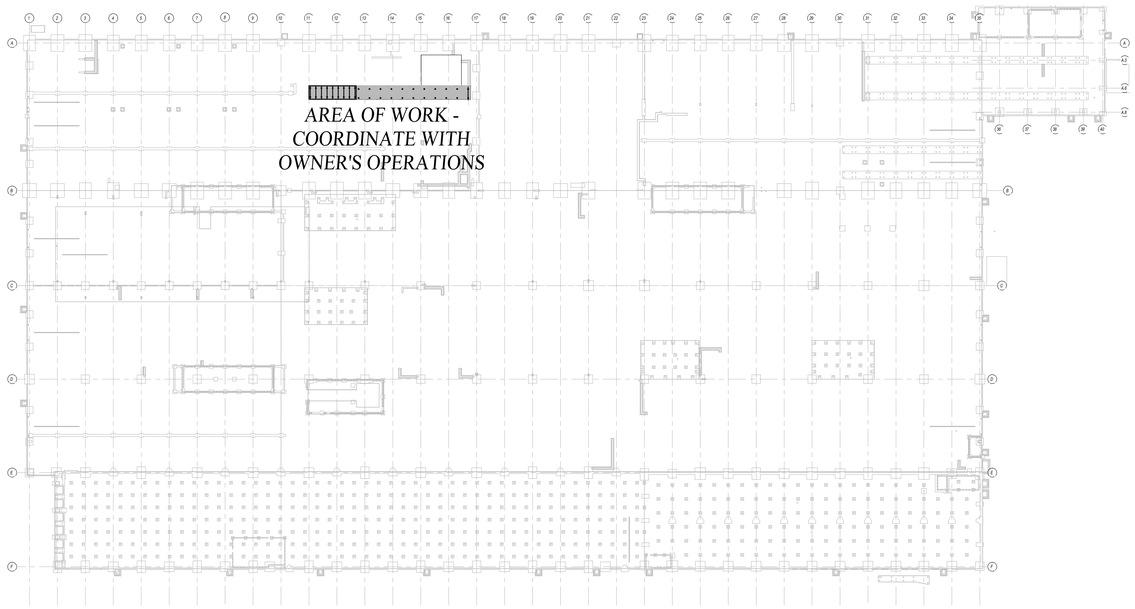
262-781-0475 (office)



1 OVERALL FOUNDATION PLAN

SCALE: 1/8" = 1'-0"



2 AREA OF WORK BUILDING KEY PLAN

SCALE: 1/64" = 1'-0"

STRUCTURAL DESIGN DATA:

APPLICABLE CODES:

1. WISCONSIN COMMERCIAL BUILDING CODE
2. 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY CHAPTERS SPS 361-366, ADOPTED APRIL 01, 2018
3. INTERNATIONAL EXISTING BUILDING CODE - 2015
4. ASCE 7-10 - MINMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE/SEI

APPLICABLE STANDARDS:

5. ACI 316 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY
6. ACI 530/530.1 - BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES
7. AISC 360 - SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS
8. AWS D1.1/D1.1M STRUCTURAL WELDING CODE - STEEL
9. NDS - NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION
10. AISI S100 - NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS.

GENERAL NOTES:

1. ALL MATERIALS, WORKMANSHIP AND DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE 2015 INTERNATIONAL BUILDING CODE.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS ELEVATIONS AND CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.
3. THE TYPICAL DETAILS SHOWN ON THE DRAWINGS SHALL BE APPLICABLE TO ALL PARTS OF THE CONTRACT DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SAFETY DURING CONSTRUCTION.
5. COORDINATE ALL WORK WITH THE OWNER'S OPERATIONS.
6. ALL WORK SHALL BE CONSISTENT WITH ORIGINAL FOUNDATION CONSTRUCTION FOR MATERIALS, TOLERANCES AND FINISHES.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL BE ASTM A992 (50 KSI), ALL OTHER SHAPES AND PLATES SHALL BE ASTM A36.
2. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH THE LATEST RECOMMENDED PRACTICE OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
3. ALL RAILS AND SUPPORT STRUCTURE SHALL BE INSTALLED PER OEM AND OWNER STANDARDS, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THEIR WORK WITH THE OEM AND OWNER REQUIREMENTS
4.

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING STANDARDS:
   - 1.1. ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
   - 1.2. ACI MCP - "MANUAL OF CONCRETE PRACTICE"
   - 1.3. ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   - 1.4. ACI 318.1 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE
2. CONCRETE SHALL HAVE A MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH AS FOLLOWS:
   - 2.1. FOUNDATION 4,000 PSI
   - 2.2. GROUT 5,000 PSI
   - 2.3. LEAN MIX 1,500 PSI
3. CONCRETE MIX DESIGN (INCLUDING AGGREGATE SIZE, WATER/CEMENT RATIO, AIR ENTRAINMENT, ADMIXTURES AND SLUMP) MAXIMUM WATER/CEMENT RATIO PERMITTED IS:
   - 3.1. 0.50 FOR STRUCTURAL SLABS
   - 3.2. 0.54 FOR BELOW GRADE CONCRETE
   - 3.3. 0.48 FOR EXPOSED CONCRETE
4. CONCRETE STRENGTH SHALL BE EVALUATED ACCORDING TO METHOD 1 OR METHOD 2 AS DESCRIBED IN ACI 301. THE RESULTS OF THESE ANALYSES SHALL BE SUBMITTED TO THE ARCHITECT FOR ENGINEER PRIOR TO ANY WORK.
5. CONTRACTOR SHALL MAKE PROVISIONS TO ALLOW AN INDEPENDENT TESTING AGENCY, HIRED BY THE CONTRACTOR, TO CAST 4 TEST CYLINDERS FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED OR FOR ANY ONE DAY'S POUR. THE TESTING AGENCY SHALL BE RESPONSIBLE FOR CASTING AND CURING SPECIMENS IN CONFORMANCE TO ASTM C31 AND TESTING SPECIMENS IN CONFORMANCE TO ASTM C39.
6. GROUT USED TO SET PLATES SHALL BE NON-SHRINK AND NON-METALLIC.
7. CONTRACTOR SHALL USE SMOOTH FORMS FOR EXPOSED CONCRETE SURFACES UNLESS APPROVED BY THE OWNER. BOARD FORMS MAY BE USED FOR UNEXPOSED CONCRETE SURFACES. EARTH FORMS ARE FORBIDDEN.
8. FLOOR FLATNESS AND LEVELNESS: CONCRETE SLABS-ON-GRADE SHALL HAVE MINIMUM F-NUMBERS OF FY 35/FL25 AS RECOGNIZED BY THE MOST CURRENT VERSIONS OF ASTM E 1155 AND ACI 302.1. SEE ARCHITECTURAL SPECIFICATION FOR FURTHER RESTRICTIONS IF APPLICABLE.

REINFORCEMENT NOTES

1. DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING:
   - 1.1. ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
   - 1.2. ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   - 1.3. MSP2 - "CRSI MANUAL OF STANDARD PRACTICE"
   - 1.4. AWS D1.4 - "STRUCTURAL WELDING CODE - REINFORCING STEEL"
   - 1.5. WRI - "WELDED WIRE FABRIC MANUAL OF STANDARD PRACTICE"
2. STEEL REINFORCING BARS SHALL CONFORM TO ASTM (GRADE 60) DEFORMED
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185
4. REINFORCEMENT FABRICATOR SHALL PROVIDE AND SCHEDULE ON SHOP DRAWINGS ALL REQUIRED REINFORCING STEEL AND THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN PLACE AT THE CORRECT LOCATIONS
5. CLEARANCES FOR REINFORCEMENT:
   - 5.1. CONCRETE PLACED DIRECTLY ON EARTH (FOOTINGS, SLABS, ETC.) 3" FROM BOTTOM
   - 5.2. ALL OTHER CONCRETE PROVIDE 2" CLEAR TO REINFORCING, UNLESS SHOWN OTHERWISE ON DRAWINGS
6. CONTRACTOR SHALL REFER TO TYPICAL DETAILS SHOWN ON THE CONTRACT DRAWINGS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS.
7. WHERE REINFORCEMENT IS REQUIRED IN SECTIONS, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER SECTION APPLIES.
8. WELDED WIRE FABRIC SHALL LAP A MINIMUM OF 6" AND BE TIED TOGETHER.

FIELD VERIFY ALL DIMENSIONS

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PROJECT:

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SOUTH HARBOR
311 EAST GREENFIELD AVE.
MILWAUKEE, WI 53204

F5790 FOUNDATION EXTENSION
ESAB WELDING EQUIPMENT

REVISION:

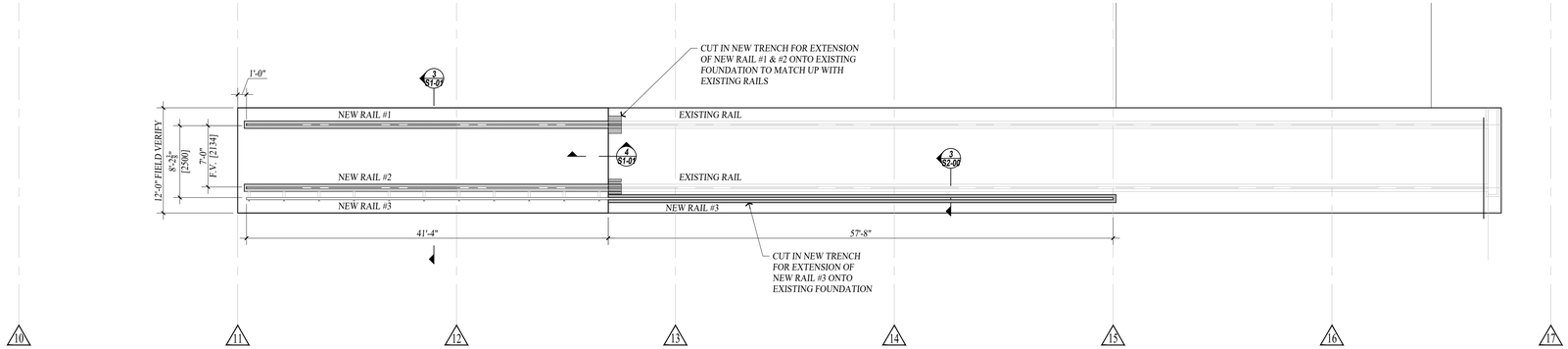
00	12.20.24 - ISSUED FOR PROCUREMENT	
1	01.16.26	ADDED VAPOR BARRIER DETAILS

DATE ISSUED: 01.16.2025

SHEET NAME:

OVERALL FOUNDATION PLAN

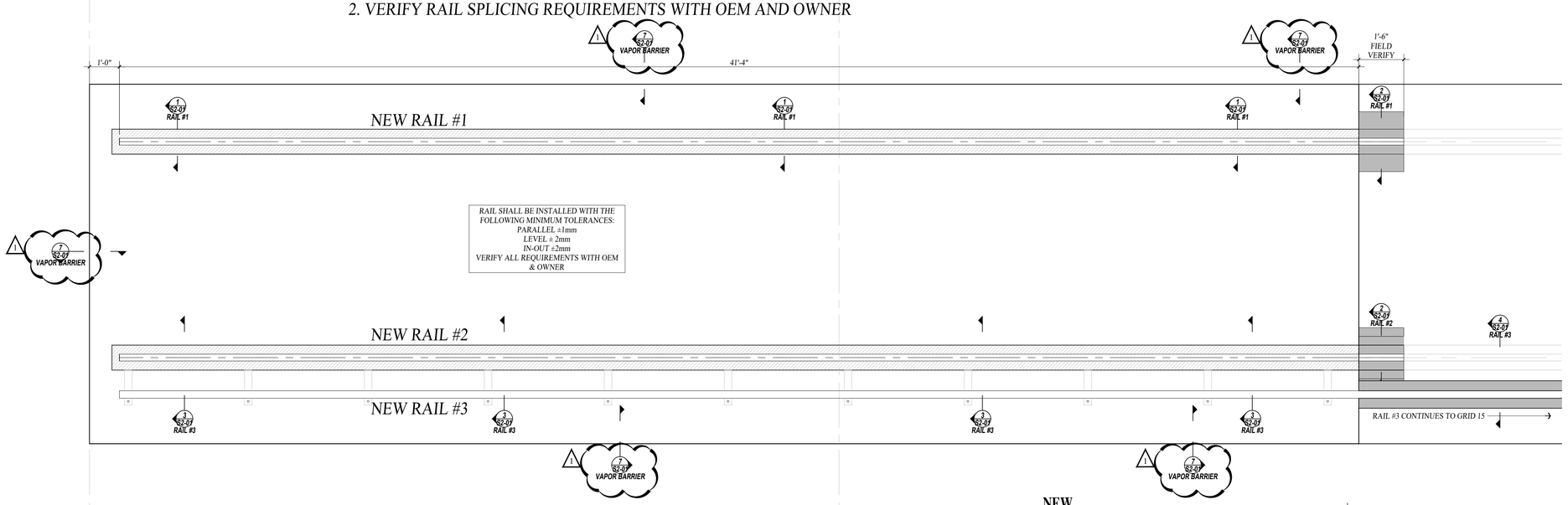
SHEET NUMBER: **S1-00**



NOTE:
1. FOUNDATION SHALL RECEIVE A TROWEL FINISH WITH CURE-N-SEAL PRODUCT CONSISTENT WITH ORIGINAL F5790 CONSTRUCTION.
2. VERIFY RAIL SPLICING REQUIREMENTS WITH OEM AND OWNER

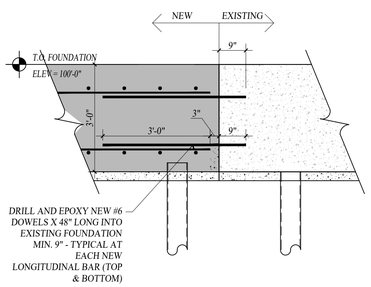
1 NEW OVERALL RAIL LAYOUT PLAN

SCALE: 1/8" = 1'-0"



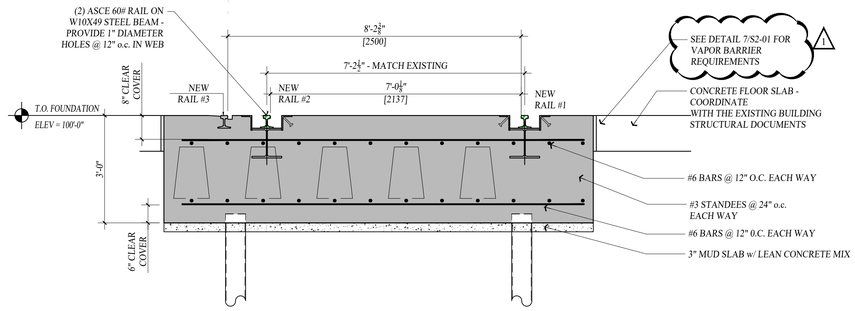
2 NEW ENLARGED RAIL LAYOUT PLAN

SCALE: 1/2" = 1'-0"



4 NEW TO EXISTING FOUNDATION SECTION

SCALE: 1/2" = 1'-0"



3 NEW FOUNDATION SECTION

SCALE: 1/2" = 1'-0"

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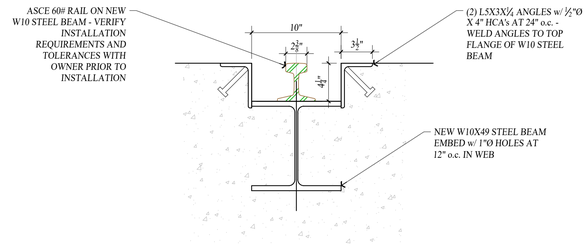
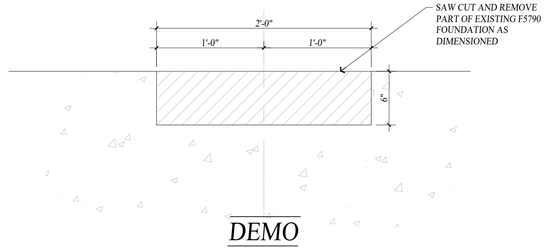
SHEET NAME:
FOUNDATION PLANS & SECTION

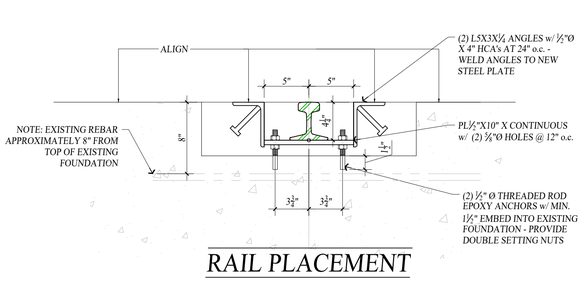
SHEET NUMBER: **S1-01**

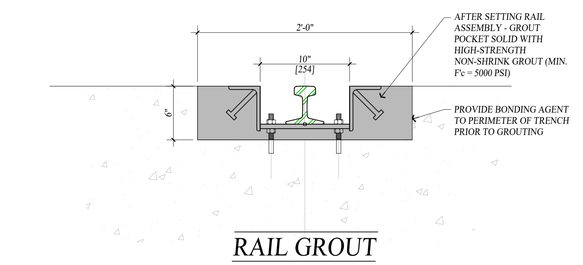


1 RAIL #1
NEW RAIL SECTION @ NEW FOUNDATION

SCALE: 1-1/2" = 1'-0"

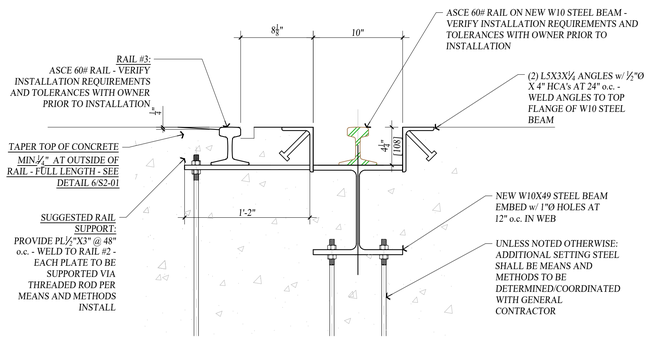






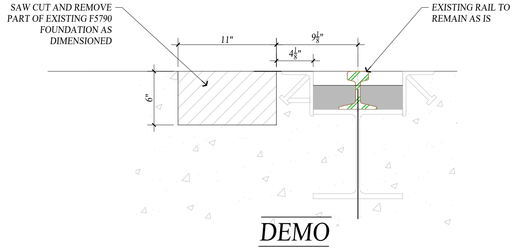
2 RAIL #1
RAIL SECTION @ EXISTING FOUNDATION

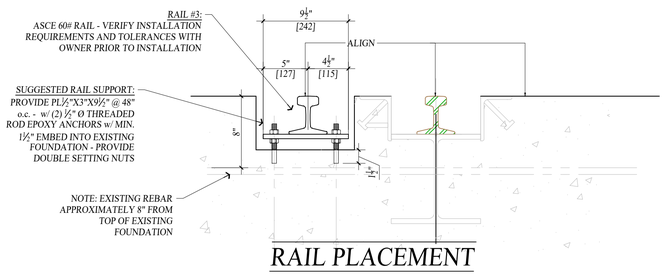
SCALE: 1-1/2" = 1'-0"

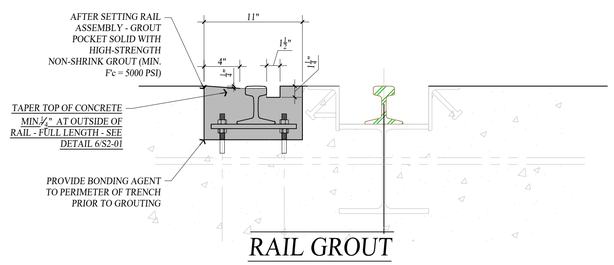


3 RAIL #2 & #3
NEW RAIL SECTION @ NEW FOUNDATION

SCALE: 1-1/2" = 1'-0"

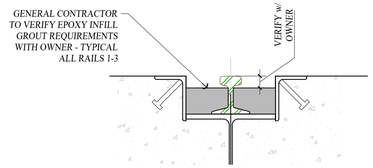






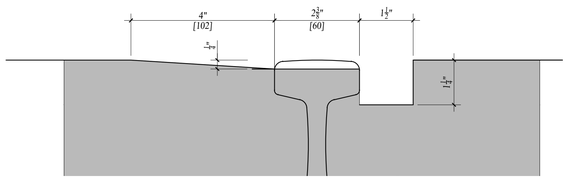
4 RAIL #3
RAIL SECTION @ EXISTING FOUNDATION

SCALE: 1-1/2" = 1'-0"



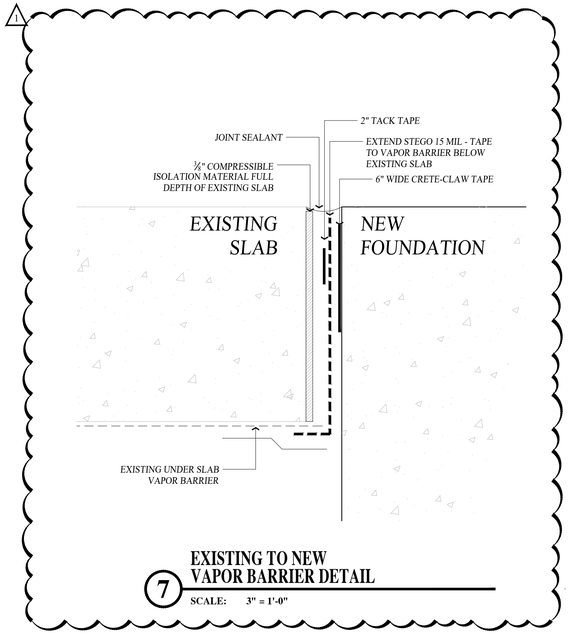
5 TYPICAL RAIL
FINAL EPOXY GROUT DETAIL

SCALE: 1-1/2" = 1'-0"



6 ENLARGED RAIL #3 DIMENSIONS

SCALE: 6" = 1'-0"



7 EXISTING TO NEW
VAPOR BARRIER DETAIL

SCALE: 3" = 1'-0"

FIELD VERIFY ALL DIMENSIONS

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SHEET NAME:
RAIL SECTIONS AND DETAILS

SHEET NUMBER: S2-01