ALL TYPICAL DETAILS AND NOTES SHOWN ON DRAWINGS SHALL APPLY UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE DRAWINGS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.

BUILDING CODE

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. THE PUBLICATIONS LISTED BELOW ARE THE GOVERNING CODES AND STANDARDS AND ARE REFERENCED BY THEIR BASIC DESIGNATION. IN THE CASE OF CONFLICTING REQUIREMENTS, THE BUILDING CODE

APPLICABLE CODES AND STANDARDS

| BUILDING CODE | INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION, INCLUDING THE STATE OF MINNESOTA BUILDING CODE AMENDMENTS. |
|---------------|---|
| AISC | AMERICAN INSTITUTE OF STEEL CONSTRUCTION, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", 2010 EDITION |
| AISI | AMERICAN IRON AND STEEL INSTITUTE, "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD- FORMED STEEL STRUCTURAL MEMBERS", 2007 EDITION, INCLUDING 2010 SUPPLEMENT NO. 2 |
| ASCE 7 | AMERICAN SOCIETY OF CIVIL ENGINEERS, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", 2010 EDITION |
| ASTM | AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM INTERNATIONAL) |
| AWS A2.4 | AMERICAN WELDING SOCIETY, "SYMBOLS FOR WELDING AND NONDESTRUCTIVE TESTING", 2007 EDITION |
| AWS D1.1 | AMERICAN WELDING SOCIETY, "STRUCTURAL WELDING CODE – STEEL," 2010 EDITION |
| AWS D1.3 | AMERICAN WELDING SOCIETY, "STRUCTURAL WELDING CODE - SHEET STEEL", 1998 EDITION |
| NDS | NATIONAL DESIGN SPECIFICATION FOR WOOD |

STRUCTURAL DESIGN DATA

LOAD COMBINATIONS

LOAD COMBINATIONS ARE IN ACCORDANCE WITH SECTION 1605 OF THE BUILDING CODE.

CONSTRUCTION (NDS), 2012 EDITION

COUNCIL - EVALUATION SERVICES (ICC-ES)

INTERNATIONAL CODE COUNCIL, INTERNATIONAL CODE

LIVE LOADS

ICC

LIVE LOADS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE (SECTION 1607) OR AS NOTED ON THE PLANS.

PEDESTRIAN TRAFFIC: LL = 100 PSF

SNOW LOADING AND SNOW DRIFT LOADING SHALL BE IN ACCORDANCE WITH THE BUILDING CODE (SECTION 1608).

GROUND SNOW LOAD: Pg = 60 PSF IMPORTANCE FACTOR: Is = 1.0 SNOW EXPOSURE FACTOR: Ce = 1.0 THERMAL FACTOR: Ct = 1.2 FLAT-SURFACE SNOW LOAD: Pf = 50 PSF

WIND PRESSURE SHALL BE IN ACCORDANCE WITH THE BUILDING CODE (SECTION 1609).

BASIC WIND SPEED: V = 115 / 120 / 105 MPH (3-SECOND GUST)RISK CATEGORY: II / III / IV / I EXPOSURE: ENCLOSURE CLASSIFICATION: OPEN INT. PRESSURE COEFFICIENT: GCpi = 0.18

STRUCTURAL STEEL

ALL STEEL SHALL CONFORM TO THE FOLLOWING:

W-SHAPES ASTM A992, Fy=50 KSI ALL ANGLES AND PLATES ASTM A36, Fy=36 KSI UNLESS NOTED OTHERWISE SQUARE OR RECTANGULAR ASTM A500, GRADE B. STRUCTURAL TUBE (HSS) Fy=46 KSI

ALL OTHER STEEL UNLESS ASTM A572, Fy=50 KSI NOTED OTHERWISE ASTM A588, Fy=50 KSI ASTM A441, Fy=50 KSI

- 1. GENERAL NOTES FOR STEEL CONNECTIONS SHALL APPLY TO ALL STEEL CONNECTIONS UNLESS NOTED OTHERWISE.
- 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATION. SHOP DRAWINGS SHALL BE SUBMITTED AND REVIEWED BY THE ARCHITECT/ENGINEER BEFORE COMMENCING FABRICATION.
- 3. ALL STEEL ANCHORS AND TIES AND OTHER MEMBERS EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED. DIMENSIONAL TOLERANCE FOR BUILT-UP MEMBERS SHALL BE PER AWS D1.1.
- 4. STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS AT THE MAXIMUM DECK SPAN LOCATION UNLESS NOTED OTHERWISE.
- 5. MINIMUM CONNECTIONS SHALL BE A TWO-BOLT CONNECTION USING 3/4 INCH DIAMETER A325 BOLTS IN SINGLE SHEAR. ALL HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED AND INSPECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS. BOLTS IN CONNECTIONS OF BEAM-TO-BEAM/GIRDER MAY BE SNUG TIGHT, UNLESS SPECIFICALLY CALLED OUT AS SLIP CRITICAL (SC). WHERE CONNECTIONS ARE NOTED AS SNUG-TIGHT, THE CONTRACTOR MAY INSTALL PER THE CRITERIA FOR SNUG-TIGHT BOLTS. ALL ASTM A307 BOLTS SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS NOTED
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SELECTION OF OPTIONAL DETAILS SHOWN ON THE DRAWINGS.
- 7. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL ERECTION AIDS THAT INCLUDE, BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDS.

STRUCTURAL STEEL WELDING

AWS A2.4 SYMBOLS.

OTHERWISE.

- 1. STRUCTURAL STEEL SHOP DRAWINGS SHALL SHOW ALL WELDING WITH
- 2. ALL WELDING SHALL BE DONE BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH AWS D1.1. WELDS SHOWN ON THE DRAWINGS ARE THE MINIMUM SIZES. INCREASE WELD SIZE TO AWS MINIMUM SIZES. BASED ON PLATE THICKNESS. THE MINIMUM WELD SIZE SHALL BE 3/16 INCH.
- 3. FIELD WELDING SYMBOLS HAVE NOT NECESSARILY BEEN INDICATED ON THE DRAWINGS. WHERE SHOWN, PROPER FIELD WELDING PER AWS D1.1 SHALL BE USED. WHERE NO FIELD WELDING SYMBOLS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF SHOP AND FIELD WELDS.
- 4. ALL PARTIAL PENETRATION GROOVE WELD SIZES SHOWN ON THE DRAWINGS REFER TO EFFECTIVE THROAT THICKNESS.

- 5. ALL WELDS SHALL BE MADE USING LOW HYDROGEN ELECTRODES WITH MINIMUM TENSILE STRENGTH PER AWS D1.1 (MINIMUM 70 KSI). LOW HYDROGEN SMAW ELECTRODES SHALL BE USED WITHIN 4 HOURS OF OPENING THEIR HERMETICALLY SEALED CONTAINERS, OR SHALL BE REDRIED PER AWS D1.1, SECTION 4.5. ELECTRODES SHALL BE REDRIED NO MORE THAN ONE TIME, AND ELECTRODES THAT HAVE BEEN WET SHALL NOT BE USED.
- 6. ALL WELDING SHALL BE PERFORMED IN STRICT ADHERENCE TO A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS) PER AWS D1.1 ALL WELDING PARAMETERS SHALL BE WITHIN THE ELECTRODE MANUFACTURER'S RECOMMENDATIONS. WELDING PROCEDURES SHALL BE SUBMITTED TO THE OWNER'S TESTING AGENCY FOR REVIEW BEFORE STARTING FABRICATION OR ERECTION. COPIES OF THE WPS SHALL BE ON SITE AND AVAILABLE TO ALL WELDERS AND THE SPECIAL
- 7. ALL COMPLETE-PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED UPON COMPLETION OF THE CONNECTION, EXCEPT PLATE LESS THAN OR EQUAL TO 1/4 INCH THICK SHALL BE MAGNETIC PARTICLE TESTED. REDUCTION IN TESTING MAY BE MADE IN ACCORDANCE WITH THE BUILDING CODE WITH APPROVAL OF THE
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOINT PREPARATIONS AND WELDING PROCEDURES THAT INCLUDE, BUT ARE NOT LIMITED TO: REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPES, SURFACE ROUGHNESS VALUES, AND TAPERS AND TRANSITIONS OF UNEQUAL

WOOD FRAMING LUMBER

1. FRAMING LUMBER SHALL BE KILN DRIED OR MC-15, AND GRADED AND MARKED IN CONFORMANCE WITH WEST COAST LUMBER INSPECTION BUREAU STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 16, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

SOUTHERN PINE / SPF BOLTED STUDS, LEDGERS AND PLATES STANDARD GRADE WOOD DECKING IPE REGULAR E4E S4S BRAZILIAN WALNUT LAPACHO GROUP

TREATED WOOD

- 1. ALL WOOD PLATES, LEDGERS AND BLOCKING FOR THIS PROJECT SHALL BE PRESSURE-TREATED WITH AN AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) APPROVED PRESERVATIVE.
- 2. ALL METAL FASTENERS IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED OR STAINLESS STEEL. WHEN USING GALVANIZED FASTENERS, THE CONTRACTOR SHALL COORDINATE THE GALVANIZATION PROCESS WITH THE CHEMICAL COMPOSITION OF THE WOOD TREATMENT.

TIMBER CONNECTORS

- TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE BY SIMPSON STRONG-TIE COMPANY, INC. AS SPECIFIED IN THE LATEST EDITION OF THEIR CATALOG. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE CURRENT ICC-ES EVALUATION REPORTS DEMONSTRATING THAT THE PRODUCTS HAVE EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER.
- 2. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.
- 3. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.
- 4. ALL NAILS SHALL BE COMMON, GALVANIZED, UNLESS NOTED
- 5. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

1. STANDARD TOLERANCES SHALL BE BASED ON THE REQUIREMENTS OF THE AISC CODE OF STANDARD PRACTICE AND ACI 117. "STANDARI SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."

EXISTING STRUCTURE

- 1. EXISTING STRUCTURAL DIMENSIONS AND MEMBER SIZES ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION. THE CONTRACTOR SHALL VERIFY THE ACTUAL CONFIGURATION OF EXISTING CONSTRUCTION. AND THE CONDITION OF THE STRUCTURE BEFORE BEGINNING WORK.
- 2. ANY DISCREPANCIES OF UNSOUND CONDITIONS SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION BEFORE BEGINNING WORK.
- 3. TEMPORARY SHORING AND BRACING MAY BE NECESSARY IN ORDER TO PERFORM THE NECESSARY STRUCTURAL MODIFICATIONS TO THE EXISTING STRUCTURE SHOWN ON THE STRUCTURAL AND PLANS AND DETAILS. THE CONTRACTOR MUST PROVIDE TEMPORARY SHORING WHERE REQUIRED.

MISCELLANEOUS

- 1. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND RESOLVE DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
- 2. WHERE SECTIONS ARE INDICATED ON THE PLAN BY A NUMBER AND A DRAWING NUMBER THUS, 1/S5.01, THE INDICATED SECTION (1) IS SHOWN ON STRUCTURAL DRAWING \$5.01.

SPECIAL INSPECTION

- 1. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION AND TESTING PER IBC SECTION 1704.
- 2. THIS WORK SHALL BE PERFORMED BY A SPECIAL INSPECTOR CERTIFIED BY THE GOVERNING BUILDING OFFICIAL TO PERFORM THE TYPES OF INSPECTIONS AND TESTS SPECIFIED.
- 3. THE FREQUENCY OF INSPECTIONS AND TESTING SHALL BE AS OUTLINED IN THE IBC TABLE ITEMS LISTED BELOW.
- 4. DEFICIENCIES SHALL BE REPORTED DAILY TO THE CONTRACTOR.
- SUMMARY REPORTS SHALL BE DISTRIBUTED WEEKLY TO THE OWNER, ARCHITECT, CONTRACTOR, BUILDING OFFICIAL, AND STRUCTURAL ENGINEER. THE CONCRETE SUPPLIER SHALL BE INCLUDED IN THE DISTRIBUTION OF ALL SUMMARY REPORTS FOR CONCRETE TESTING.

SPECIAL INSPECTION TABLE

| SPECIAL INSPECTION TABLE | | | | |
|--------------------------|---|---|--|--|
| ITEM | DESCRIPTION (SEE IBC SECTS. 1704 & 1705) | IBC REQUIREMENT | | |
| STRUCTURAL STEEL | A. STRUCTURAL STEEL THAT IS PART OF THE STRUCTURE | IBC SECTION 1705.2.1 AISC 360 CHAPTER N | | |
| | B. WELDING, HIGH STRENGTH BOLTING, AND DETAILS | AISC 360 SECTION N5 | | |
| | C. FIELD CUT SURFACES | AISC 360 SECTION M2.2 | | |
| | D. TOLERANCES FOR FIELD ERECTION | CODE OF STANDARD PRACTICE SECTION 7-13 | | |

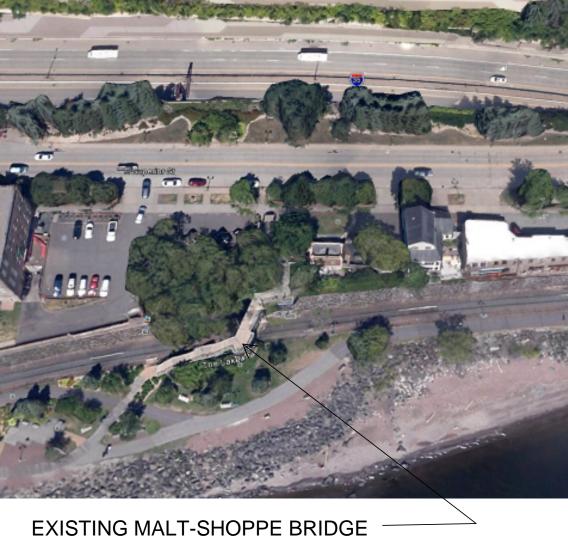
- 1. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION:
- A. IPE DECKING
- B. STRUCTURAL STEEL
- 2. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD; THEREFORE, THEY SHALL BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY THE ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE ONE REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED.
- 3. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED, AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWINGS SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE

ARCHITECTURAL SPECIFICATIONS

- 1. THE GENERAL CONDITIONS OF THIS CONTRACT IS THE AMERICAN INSTITUTE OF ARCHITECTS (AIA) DOCUMENT A201-2007. "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", INCLUDED BY REFERENCE, EXCEPT IN INSTANCES WHERE THE CITY OF DULUTH INFORMATION FOR BIDDERS ADDRESS THE SAME SUBJECT MATTER.
- 2. THE BRIDGE SPANS RAILROAD RIGHT OF WAY. OBTAIN PERMISSION AND COORDINATE CONSTRUCTION ACTIVITIES WITH NORTHSHORE SCENIC RAILROAD/LAKE SUPERIOR RAILROAD MUSEUM.
- 3. CONTRACTOR TO OBTAIN PERMITS AND ARRANGE FOR THE SUBSEQUENT INSPECTIONS RELATED TO THE CONSTRUCTION.
- KEEP DRIVEWAYS, ENTRANCES, AND SIDEWALKS CLEAR AT ALL TIMES. DO NOT USE THESE AREAS FOR PARKING OR STORAGE OF MATERIALS. SCHEDULE DELIVERIES TO MINIMIZE REQUIREMENTS FOR STORAGE OF MATERIALS.
- 5. CONTRACTOR SHALL EXAMINE THE PROJECT SITE TO BECOME FAMILIAR WITH EXISTING AND VISIBLE CONDITIONS PRIOR TO SUBMISSION OF BID.
- 6. PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTURCTION AREAS AND TO PROTECT EXISTING FACILITES AND ADJACENT PROPERTIES FROM DAMAGE.
- 7. SHOULD UNUSUAL OR UNEXPECTED CONDITIONS BE ENCOUNTERED NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY BY TELEPHONE, AND IN WRITING WITHIN FIVE (5) WORKING DAYS.
 - 8. DO NOT DISTURB OR DAMAGE AREAS NOT INDICATED TO BE DEMOLISHED UNLESS REQUIRED BY THE WORK. EXISTING STRUCTURAL SUPPORT WALLS OR COLUMNS SHALL NOT BE
 - 9. CONTRACTOR SHALL REPAIR DAMAGE TO EXISTING CONSTRUCTION AND AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. REPAIR FINISH TO EQUAL THAT EXISTED PRIOR TO THE WORK.
- 10. SUBMIT SCHEDULE INDICATING PROPOSED SEQUENCE OF OPERATIONS; COORDINATION FOR WORKING WITHIN THE RAILROAD RIGHT-OF-WAY AS REQUIRED. TOGETHER WITH DETAILS FOR DUST
- 11. ENVIRONMENTAL CONTROLS
- A. PROVIDE TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN AIR TO THE LOWEST PRACTICABLE LEVEL.
- B. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 10. PROVIDE SHOP DRAWINGS FOR THE ARCHITECTS AND ENGINEERS REVIEW.
- 11. WOOD DECKING TO BE IPE REGULAR E4E S4S BRAZILIAN WALNUT; 12. SEALANT TO BE MASTERSEAL HP1 MANUFACTURED BY BASE CHEMICAL COMPANY OR EQUIVALENT. COLOR SELECTED FROM MANUFACTURER
- 13. BASE BID SCOPE FOR FINISH:
- SURFACE PREPARATION FOR EXISTING STEEL POWER TOOL CLEANING SSPC-SP3.
- SURFACE PREPARATOIN FOR NEW STEEL BRUSH-OFF BLAST CLEANING SSPC-SP7/NACE 4.
- FINISH COATING COROTECH HIGH PERFORMANCE OR EQUIVALENT – COLOR SELECTED FROM MANUFACTURER
- PRIMER (1 COAT) UNIVERSAL METAL PRIMER V131
- TOPCOAT (2 COATS) ALKYD URETHANE ENAMEL SEMI GLOSS

14. ALTERNATE BID SLOPE FOR FINISH:

- SURFACE PREPARATION FOR EXISTING STEEL COMMERCIAL BLAST CLEANING SSPC-SP6.
- SURFACE PREPARATION FOR NEW STEEL BRUSH-OFF BLAST CLEANING SSPC-SP7/NACE 4.
- FINISH COATING COROTECH HIGH PERFORMANCE OR EQUIVALENT.
 - PRIMER (1 COAT) POLYAMIDE EPOXY PRIMER V150 TOPCOAT (2 COATS) POLYAMIDE EPOXY V400



LOCATION - ADJACENT TO 716 EAST SUPERIOR STREET. **DULUTH. MN 55802**



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NCE Project # 15-071s Date: 3-25-15

Drawn By: GDB

Checked By: JEA MARCH 26, 2015 IRevisions:



I hereby certify that this plan, specification, or

supervision and that I am a duly licensed

Architect under the laws of the State of

Minnesota

WILLIAM B. SCALZO

LICENSE NO: 18130

report was prepared by me or under my direct

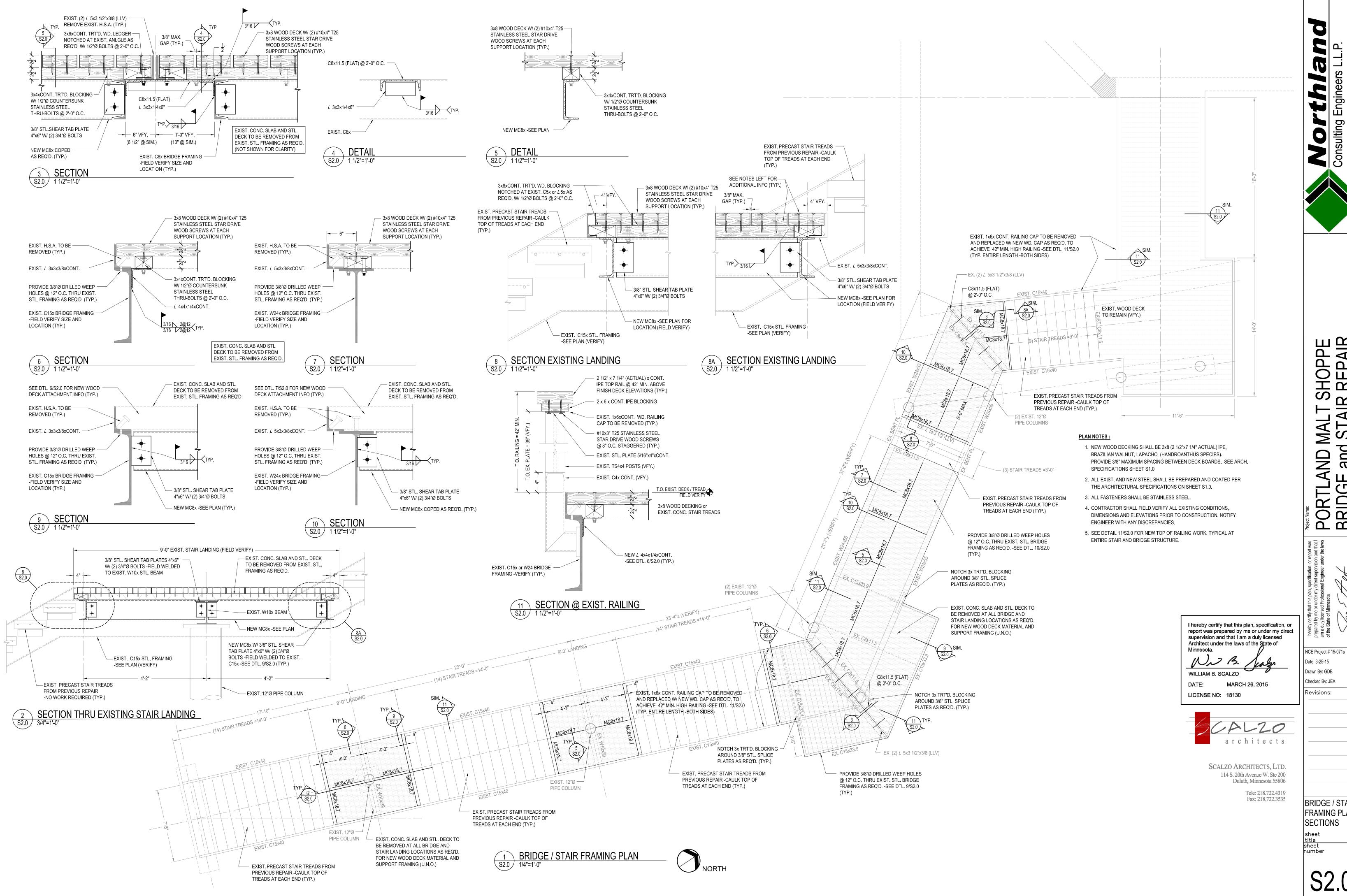
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SHEET INDEX

| STILL I INDEX | | | | |
|---------------|---|--|--|--|
| SHEET NO. | DESCRIPTION | | | |
| S1.0 | GENERAL NOTES / SHEET INDEX | | | |
| S2.0 | BRIDGE / STAIR FRAMING PLANS / SECTIONS | | | |

GENERAL NOTES SHEET INDEX



IOPPE EPAIR and PORTLAN BRIDGE &

BRIDGE / STAIR FRAMING PLAN