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2025/08/13 12:02 PM By: F. Fellberg, Axi

ORIGINAL SHEET - ISO ARCH D - v17.05

A GENERAL NOTES

- THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH, AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH, THE NATIONAL BUILDING CODE OF CANADA 2020 (NBCC 2020) AND THE MANITOBA BUILDING CODE 2024 (MBC 2024).
- DESIGN LOADS ARE INDICATED ON THE DRAWINGS.
- DESIGN LIVE LOADS SHALL NOT BE EXCEEDED AT ANY TIME DURING CONSTRUCTION.
- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS, ELEVATIONS, SLOPES, DETAILS, CONDITIONS, ETC., SHOWN ON THE DRAWINGS AND VERIFIED WITH SITE CONDITIONS, PRIOR TO CONSTRUCTION OR PREFABRICATION OF ANY BUILDING COMPONENT.
- MODIFICATIONS, ALTERNATIONS OR SUBSTITUTIONS MUST BE AUTHORIZED IN WRITING BY THE ENGINEER.
- LOCATE ALL EXISTING SUBGRADE SERVICES PRIOR TO CONSTRUCTION.
- DESIGN AND INSTALL ALL NECESSARY SHORING, BRACING AND FORMWORK. FORMWORK FOR CONSTRUCTION SHALL BE BRIDGED OVER EXISTING SERVICES. PROCEDURE MUST BE APPROVED BY THE ENGINEER.
- FOR OPENINGS IN SLAB, FLOOR, WALLS, ROOF, ETC. REFER TO ARCHITECTURAL, MECHANICAL, AND/OR OTHER PERTINENT DRAWINGS.
- REVIEW LOCATION OF INTENDED AND PROPOSED CONSTRUCTION JOINTS WITH ENGINEER PRIOR TO PROCEEDING.
- CONSTRUCTION SAFETY REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- DEFECTIVE OR UNACCEPTABLE WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE PROJECT.
- WHERE THERE IS A DISCREPANCY BETWEEN DRAWINGS, SUBMIT A FORMAL RFI TO THE ENGINEER PRIOR TO MANUFACTURING OR INSTALLATION.
- ALL SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE ENGINEER.
- ALL SHOP DRAWINGS REQUIRED TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA SHALL BE ACCOMPANIED BY A CERTIFICATE OF AUTHORIZATION FROM "ESW".
- WHERE THERE IS A DISCREPANCY BETWEEN PROJECT SPECIFICATIONS AND GENERAL NOTES, INFORMATION SHOWN IN SPECIFICATIONS SHALL GOVERN.

B STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL CONFORM TO CSA G40.20-13/G40.21-13 (R2018).
- WIDE FLANGE SECTIONS TO BE TO CSA G40.21-13, 350MPa (R2018).
- HOLLOW STRUCTURAL SECTIONS TO BE TO CSA G40.21-13, 350MPa CLASS C.
- ALL OTHER ROLLED OR WELDED STRUCTURAL SECTIONS AND PLATES TO BE TO CSA G40.21-13, 300MPa.
- FABRICATION AND ERECTION SHALL CONFORM TO CSA S16-19.
- ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS FULLY APPROVED FOR STRUCTURAL WELDING BY THE CANADIAN WELDING BUREAU IN ACCORDANCE WITH CSA W47.1-19 (R2014), CSA 47.2-11 (R2015), AND CSA W59-18.
- SPLICING OF MEMBERS NOT PERMITTED UNLESS OTHERWISE NOTED, WHERE BEAMS ARE CONTINUOUS OVER SUPPORTS, NO HOLES PERMITTED IN TOP FLANGE.
- PROVIDE (2) 10mm (3/8") WELDED WEB STIFFENER PLATES EACH SIDE OF BEAM, ALIGNED WITH COLUMN FLANGES OR WALL EDGES.
- COLUMN BASE AND CAP PLATES SHALL BE WELDED TO COLUMNS. PROVIDE MINIMUM 20mm (3/4") BASE PLATE C/W MINIMUM (4) 20mm (3/4") DIA. BOLTS FOR ALL COLUMNS UNLESS NOTED OTHERWISE.
- STRUCTURAL STEEL ERECTOR SHALL SUPPLY AND INSTALL ALL TEMPORARY GUYING AND BRACING NECESSARY TO PROVIDE STABILITY FOR THE STRUCTURE AS A WHOLE. THESE SHALL REMAIN IN PLACE UNTIL FLOOR SLABS ARE WELL CURED, STEEL FLOOR AND ROOF DECKS ARE FULLY WELDED AND/OR PERMANENT BRACING IS INSTALLED.
- STRUCTURAL STEEL SUPPLIER SHALL SUBMIT SHOP DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA, SHOWING ALL DESIGN AND FABRICATION DETAILS OF CONNECTIONS, TO THE ENGINEER FOR REVIEW PRIOR FABRICATION.
- SUPPLY ALL COMPONENTS WITH ONE (1) COAT OF SHOP PRIMER CONFORMING TO CISC/CPMA 1-73A OR EQUIVALENT UNLESS NOTED OTHERWISE.
- GALVANIZING AS INDICATED SHALL BE HOT DIPPED GALVANIZED TO ASTM A123/A123M-17 FOR SHAPES AND ASTM A153/A153M-16 FOR HARDWARE.
- INSTALL 76 x 76 x 9.5mm ANGLE FRAMING AROUND ALL ROOF OPENINGS GREATER THAN 450mm (18") UNLESS NOTED OTHERWISE. REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS FOR LOCATION AND NUMBER OF OPENINGS REQUIRED.
- ALL WELDS TO BE MINIMUM 6.4mm (1/4") WELD UNLESS NOTED OTHERWISE.
- ALL STEEL CONNECTIONS TO BE DESIGNED FOR MINIMUM 50% OF SHEAR CAPACITY UNLESS NOTED OTHERWISE.

C STEEL DECK

- DESIGN, FABRICATE AND ERECT STEEL DECK IN ACCORDANCE WITH CSA S136-16 PACKAGE AND CSSBI STANDARDS.
- SHEET STEEL TO BE MINIMUM GRADE A STRUCTURAL QUALITY CONFORMING TO THE ASTM A653/A653M-18.
- STEEL DECK PROFILE TO BE AS NOTED ON THE DRAWINGS. MAXIMUM FLUTE SIZE TO BE 150mm (6").
- STEEL DECK MATERIAL TO BE GALVANIZED STEEL TO CONFORM TO ASTM A653/A653M-18, GRADE A:
 - GALVANIZING TO BE HOT-DIP CONFORMING TO ASTM A653/A653M-18, DESIGNATION Z275.
 - FLUTE SPACING MAXIMUM 150mm (6").
 - REFER TO DRAWINGS FOR DECK DEPTH AND THICKNESS.
- FASTEN DECK WITH HILTI POWDER ACTUATED FASTENERS WITH SUPPORT PATTERN 36/4 AND SIDE LAP WITH HILTI SLC-01 SCREWS AT 450mm (18") o/c UNLESS NOTED OTHERWISE.
- HILTI POWDER ACTUATED FASTENER REQUIREMENTS:
 - FASTEN ROOF DECK TO THE TOP FLANGE OR CHORD SECTIONS OF STEEL FRAME WITH HILTI X-HSN 24 FASTENER WHERE TOP FLANGE OR CHORD THICKNESS ARE BETWEEN 3-10mm (1/8"-3/8") OR HILTI X-ENP-19 L15 FASTENER WHERE TOP FLANGE OR CHORD THICKNESS ARE MORE THAN 10mm (3/8").
- STEEL ROOF DECK IS DESIGNED AS A DIAPHRAGM DECK WITH A MAXIMUM LIVE LOAD DEFLECTION OF 1/240 OF THE SPAN.
- SUBMIT STEEL DECK SHOP DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA, TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. DRAWINGS TO INDICATE STEEL DECK LAYOUT, STEEL DECK TYPE AND PROFILE, AND CONNECTIONS TO FRAMING MEMBERS.

D HILTI ANCHORS

- ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE ENGINEER. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO USE.
CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
- INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE ENGINEER MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- CUTTING OF REINFORCING BARS FOR INSTALLATION OF ANCHORS IS NOT PERMITTED UNLESS APPROVED BY THE ENGINEER. FOR NEW CONSTRUCTION CONTRACTOR SHALL COORDINATE PLACEMENT OF REINFORCING BARS AND ANCHORS. FOR EXISTING CONSTRUCTION THE CONTRACTOR SHALL UNDERTAKE TO LOCATE THE POSITION OF REINFORCING BARS BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING, OR OTHER MEANS.



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Consultants

Notes

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Revision	By	Appd.	YY.MM.DD	
D				
E				
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A	50% SUBMISSION FOR CLIENT REVIEW	AF	BF	23.10.27
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Permit-Seal



Client/Project

ASSINIBOINE RIVERWALK CANOPY
UNDER CNR BRIDGE

FORKS CANOPY

FORKS, WINNIPEG, MB

Title

GENERAL NOTES

Project No. 116810290	Scale AS NOTED	
Drawing No. S-001	Sheet 1 of 2	Revision 0