

J:\PROJECTS\2023\20231010\431_COW_WDGS BRIDGE REPLACEMENT AT 15TH STREET\100-230431_CAD\SHOTS\06_CIVIL\BRIDGE\BRIDGE RAIL\230431_RAIL NOTES.DWG
 PLOTTED: Friday, August 01, 2025 @ 02:50PM

COMBINATION RAIL & APPURTENANCES ASSEMBLY TABLE

15th Street Pedestrian Bridge over the Wichita Drainage Canal									
POST NO.	POST TYPE	BASE PLATE	LT. POST ATTACHMENT	RT. POST ATTACHMENT	RAIL ATTACHMENT	POSTS REQUIRED	COMPLETED ASSY.	ASSEMBLIES REQ.	
1	60A	4-BOLT	REMOVABLE PANEL (BOLTED)	STD. PANEL, 4" BAR & CASSETTE	CAP (BOLTED) RO	2			
2	60A	3-BOLT LO	STD. PANEL, 4" BAR & CASSETTE	NONE	SLEEVE (WELDED) RO	3	A	2	
3	55B	3-BOLT RO	NONE	STD. PANEL, 2" BAR & CASSETTE	NONE	2	B	2	
4	55B	3-BOLT LO	STD. PANEL, 2" BAR & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
5	50C	3-BOLT RO	NONE	STD. PANEL, 2" BAR & CASSETTE	NONE	2	C	2	
6	50C	3-BOLT LO	STD. PANEL, 2" BAR & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
7	45D	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	2	D	2	
8	45D	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
9	40E	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	2	E	2	
10	40E	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
11	35F	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	2	F	2	
12	35F	4-BOLT	STD. PANEL & CASSETTE	REMOVABLE PANEL (BOLTED)	CAP (WELDED) LO	2			
13	30G	4-BOLT	REMOVABLE PANEL (BOLTED)	STD. PANEL & CASSETTE	CAP (BOLTED) RO	2	G	2	
14	30G	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	10			
FOUR IDENTICAL INTERIOR ASSEMBLIES IN SPAN 2 ON EACH SIDE.								H	8
15	30G	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	10	J	2	
16	30G	4-BOLT	STD. PANEL & CASSETTE	REMOVABLE PANEL (BOLTED)	CAP (WELDED) LO	2			
17	35F	4-BOLT	REMOVABLE PANEL (BOLTED)	STD. PANEL & CASSETTE	CAP (BOLTED) RO	2	K	2	
18	35F	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
19	40E	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	2	L	2	
20	40E	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
21	45D	3-BOLT RO	NONE	STD. PANEL & CASSETTE	NONE	2	M	2	
22	45D	3-BOLT LO	STD. PANEL & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
23	50C	3-BOLT RO	NONE	STD. PANEL, 2" BAR & CASSETTE	NONE	2	N	2	
24	50C	3-BOLT LO	STD. PANEL, 2" BAR & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
25	55B	3-BOLT RO	NONE	STD. PANEL, 2" BAR & CASSETTE	NONE	2	O	2	
26	55B	3-BOLT LO	STD. PANEL, 2" BAR & CASSETTE	NONE	SLEEVE (WELDED) RO	2			
27	60A	3-BOLT RO	NONE	STD. PANEL, 4" BAR & CASSETTE	NONE	3	P	2	
28	60A	4 BOLT	STD. PANEL, 4" BAR & CASSETTE	REMOVABLE PANEL (BOLTED)	CAP (WELDED) LO	2			
29	60A	4 BOLT	BAR PANEL (WELDED)	REMOVABLE PANEL (BOLTED)	CAP (WELDED) LO	2	Q	2	
30	60A	3-BOLT RO	NONE	BAR PANEL (WELDED)	NONE	5	Q, S, & U	2, 2, & 1	
31	60A	3-BOLT LO	BAR PANEL (WELDED)	NONE	SLEEVE (BOLTED) RO	4	R, S, & T	2, 2, & 1	
32	60A	3-BOLT LO	BAR PANEL (WELDED)	NONE	SLEEVE (WELDED) RO	1	V	1	
33	60A	4 BOLT	REMOVABLE PANEL (BOLTED)	BAR PANEL (WELDED)	CAP (BOLTED) RO	2	R & V	1 & 1	
34	60A	4 BOLT	NONE	BAR PANEL (WELDED)	CAP (BOLTED) RO	1	T	1	
35	60A	4 BOLT	BAR PANEL (WELDED)	NONE	CAP (BOLTED) LO	1	U	1	
36	60A	4 BOLT	INSPIRATION / INFORMATION PANEL	NONE	CAP (BOLTED) LO	1	W	1	
37	60A	4 BOLT	NONE	INSPIRATION / INFORMATION PANEL	CAP (BOLTED) RO	1	X	1	

KEY TO TERMS AND ACRONYMS
##X FOR POSTS (XX IS SWEEP ANGLE, X IS ALPHA DESIGNATOR)
LO = LEFT ORIENTATION (LO BASE PLATES MAKE AND "L")
RO = RIGHT ORIENTATION (RO BASE PLATES 180° FROM LO)
**FOR CAPS, LO & RO REFER TO THE DIRECTION OF THE OPEN SIDE)
**FOR SLEEVES, LO & RO REFER TO THE DIRECTION OF THE LONG SIDE

NOTE:
 ALL MATERIALS EQUIPMENT AND LABOR REQUIRED FOR ASSEMBLY, HANDLING, AND INSTALLATION OF RAILING SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "COMBINATION RAIL"

STRUCTURAL STEEL		
ASTM A36		
FOR INFORMATION ONLY (SEE NOTE)		
PART GROUP	GROUP WEIGHT (LBS.)	SEE SHEET NO.
RAIL POSTS	6,754	61
BASE PLATES	598	62
STANDARD PANELS	6,655	63
REMOVABLE PANELS	823	65
BAR PANELS	1,002	67
CAPS AND SLEEVES	234	70
END RAILS	297	72
TOTAL	16,363	

INDEX TO RAIL SHEETS

- 59 COMBINATION RAIL GENERAL NOTES AND ASSEMBLY TABLE
- 60 COMBINATION RAIL PLAN
- 61 COMBINATION RAIL POST DETAILS
- 62 COMBINATION RAIL BASE PLATE DETAILS
- 63 STANDARD PANEL DETAILS
- 64 STANDARD PANEL BAR DETAILS
- 65 REMOVABLE PANEL DETAILS AT ABUTMENT
- 66 REMOVABLE PANEL DETAILS AT PIER
- 67 PANEL DETAILS AT COMBINATION RAIL ENDS
- 68 RUBRAIL SLEEVE CONNECTION DETAILS AT STANDARD PANELS
- 69 RUBRAIL CAP CONNECTION DETAILS AT REMOVABLE PANELS
- 70 RUBRAIL SLEEVE & CAP DETAILS
- 71 FRP TUBING DETAILS
- 72 STEEL TUBING DETAILS
- 73 END RAIL COLUMN DETAILS

COMBINATION RAIL GENERAL NOTES

- THE FABRICATOR SHALL BE AISC CERTIFIED FOR BUILDINGS OR BRIDGES. IF ALTERNATE WELDS ARE DESIRED IN VARIOUS LOCATIONS, IT IS THE RESPONSIBILITY OF THE FABRICATOR TO PRODUCE SHOP DRAWINGS AND CONNECTION STRENGTH CALCULATIONS FOR THE ENGINEER'S REVIEW PRIOR TO FABRICATION.
- STRUCTURAL STEEL FOR COMBINATION RAIL SHALL BE ASTM A36 AS A MINIMUM.
- ALL WELDING FOR THESE STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1 SPECIFICATIONS USING E70XX ELECTRODES.
- THE EXPOSED EDGES OF ALL PLATES SHALL BE SOFTENED AND WELDS SHALL BE PROPERLY CLEANED AND PREPARED FOR PAINTING OPERATIONS.
- THE FABRICATOR SHALL SUBMIT A SCHEDULE OF COATINGS TO THE ENGINEER FOR REVIEW PRIOR TO PAINTING OPERATIONS AND APPLY SHOP COATS OF PRIMER AND PAINT, WHERE APPLICABLE, PER THE COATING MANUFACTURER'S RECOMMENDATIONS.
- THE ENGINEER RECOMMENDS THE FABRICATOR COORDINATES WITH THE BRIDGE CONTRACTOR TO ENSURE THAT THE SPACING FOR EMBEDDED RAIL ANCHORS IN THE BRIDGE DECK IS INTENDED TO BE PER PROJECT PLANS (SEE SHEET 44). PROVIDE ENGINEER WITH SHOP DRAWINGS OF FABRICATION DETAILS AFFECTED IF CHANGES ARE REQUIRED.
- THE FABRICATOR SHALL COORDINATE ART GLASS CASSETTE LAYER THICKNESSES AND FRAME DESIGN AND WITH THE PROJECT ARTIST PRIOR TO MOCK UP OR FABRICATION.
- THE ENGINEER RECOMMENDS THE FABRICATOR MOCK UP A STANDARD RAIL SECTION, GLASS CASSETTE FRAME, AND TYPICAL CONNECTIONS FOR CASSETTES TO ESTABLISH ART GLASS PANEL SIZES TO BE ORDERED BY THE PROJECT ARTIST.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR GLASS CASSETTE FRAMES AND TYPICAL CONNECTIONS OF CASSETTES AND PROJECT INSPIRATION/INFORMATION SIGNS AT THE LOCATIONS SHOWN ON SHEET 60 TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

INFORMATION / INSPIRATION PANEL NOTES

- INFORMATION PANELS ARE TO BE CUSTOM HIGH-PRESSURE LAMINATE (CHPL) CONSISTING OF DIGITAL PRINT PAPERS ENCAPSULATED IN MELAMINE RESINS PRESSED OVER A PHENOLIC RESIN PAPER CORE. PANELS SHALL BE MANUFACTURED BY IZONE IMAGING OR APPROVED EQUAL.
- PANELS SHALL BE OF THE DIMENSIONS DETERMINED THROUGH COORDINATION BETWEEN THE PROJECT ARTIST AND THE FABRICATOR AND 0.75 INCHES THICK. PANEL CORNERS SHALL BE ROUNDED AS DIRECTED BY THE ARTIST AND THE MANUFACTURER.
- PANELS SHALL MEET OR EXCEED NEMA LD3-1991 STANDARDS. PANELS SHALL BE RESISTANT TO COMMON HOUSE-HOLD PRODUCTS, SOLVENTS, MILD ALKALIS, AND DILUTED MILD ACIDS. SOME STAINING AGENTS, ESPECIALLY THOSE WITH GREASE BASES PAINT OR INK, WILL REQUIRE THE USE OF A SOLVENT FOR REMOVAL. THESE STAINS CAN BE REMOVED USING TURPENTINE, 100% MINERAL SPIRITS, ISOPROPYL "RUBBING ALCOHOL", GOOF OFF "GRAFFITI REMOVER" OR WD-40, LACQUER THINNER, ACETONE OR MEK.
- PANELS SHALL FEATURE GRAPHIC DISPLAYS PROVIDED BY THE ARTIST. COORDINATE THE MANUFACTURE OF THE PANELS WITH THE ARTIST AND THE MANUFACTURER.
- PANELS SHALL BE MANUFACTURED WITH PRE-DRILLED HOLES FOR MOUNTING TO THE COMBINATION RAIL. HOLES FOR SCREWS OR BOLTS SHALL BE OVERSIZED AND SLIGHTLY COUNTERSUNK INTO THE FACE SIDE OF THE LAMINATE-CLAD SUBSTRATE TO ALLOW FOR EXPANSION AND CONTRACTION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUBMIT SHOP DRAWINGS DETAILING HOW PANELS ARE TO BE FASTENED TO THE COMBINATION RAIL.
- PANELS SHALL HAVE A MATTE FINISH.
- THE CONTRACTOR SHALL PROVIDE STORAGE OF THE PANELS UPON DELIVERY BY THE MANUFACTURER. THE PANELS SHALL BE SAFELY STORED FREE OF DAMAGE AND DEGRADATION FROM THE TIME OF DELIVERY THROUGH THE COMPLETED INSTALLATION.
- INFORMATION PANELS WILL BE PAID FOR AS "INFORMATION PANELS" AND BID PER EACH. WORK COVERED UNDER THIS BID ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND COORDINATION TO INSTALL THE PANELS ON THE COMBINATION RAIL AS SHOWN ON THE PLANS.



IMPROVEMENT PLANS FOR
15TH STREET BRIDGE OVER THE
WICHITA DRAINAGE CANAL
 WICHITA, KS

COMBINATION RAIL GENERAL NOTES AND ASSEMBLY TABLE

PROJECT NO.	472-2023-085864	
SCALE	NONE	
DRAWN	DESIGNED	CHECKED
RAM	DMU	JRA
ISSUED FOR CONSTRUCTION	8-1-2025	
NO.	REVISION	DATE
SHEET NO.		59 OF 114

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