



Municipality of Anchorage, Alaska
Parks & Recreation Department

632 W. 6th Avenue, Suite 630
P.O. Box 196650
Anchorage, AK 99519
Tel 907-343-4355

URL www.muni.org/departments/parks



MEMORANDUM

Date: August 9, 2018

To: Parks & Recreation Commission

From: Maeve Nevins-Lavtar, Senior Park Planner

Project: PRC 18-22 South Westchester Lagoon Bridge Replacement

OVERVIEW

The South Westchester Lagoon Bridge is located within the Turnagain Community Council, and also borders the South Addition Community Council in the Westchester Lagoon area along the Tony Knowles Coastal Trail. This well-used bridge was originally designed and constructed in the late 1980s. In 2014, it was identified by USKH structural engineers to be in need of replacement. In 2017, the PRD used residual funds to initiate the survey and engineering design for the replacement bridge. In 2018, the project was put on the Parks Bond and approved by voters in April.

BRIDGE PROPOSAL

Anchorage Parks and Recreation is proposing to replace the existing wood structure with a corten steel truss bridge structure. Most of the existing pilings will be re-used resulting in a cost savings. There will be a 50 ft. by 40 ft. (2,000 sf) expanded viewing platform. The surfacing will include asphalt along the main trail corridor except at the viewing platform, where the trail corridor surfacing will then become brushed concrete. The intent of this material change is to slow bike or wheeled traffic in the viewing platform area where higher amounts of users tend to gather. The viewing platform will include fibergrate decking to match the other viewing platforms along the trail. There will be a "Westchester Lagoon Logo" pattern on ¼ inch weathering steel plate to be located in the center of the railing on the viewing platform. This logo design was developed by the Anchorage Trails Initiative and is part of the overall wayfinding improvements along all Anchorage greenbelt trails. The rail height along the entire bridge will be 42 inches high. The railing within the viewing platform will include a 4 in. x 10 in. thick IPE wood top railing angled to improve viewing comfort. The existing benches will be replaced once construction is complete.

PLANNING PROCESS AND FUNDING

Funding: \$950,000 in funding for this project was approved by Anchorage voters as part of the 2018 Park Bond package. Additional funding will be provided from the APD Service Area Bond Funds for an estimated total of \$1.2 million. The current engineer's estimate for the construction replacement is just under \$1 million. The project construction bid is tentatively scheduled for award in late August.

Proposed upgrades were presented to and approved by the Turnagain Community Council and the South Addition Community Council during their spring 2018 meetings. Additionally, community input city-wide has been collected over the years during various bridge replacement projects and trail improvement public outreach events. This bridge is a beloved landmark location for all and as such, PRD Staff has

incorporated recommendations specifically on the design height of the railings which resulted in a lowered height to 42 inches.

Impacts to the community at-large during the construction are of great concern for the PRD. As such, PRD has identified the late fall and/or the early spring season as optimal replacement timelines for reducing impacts to users and event schedules. The construction schedule will accommodate this preferred timeline. Detours will also be identified to reduce impacts to users. The PRD utilizes social media and its project website, in addition to signage to communicate detour routes and trail closures. Once the contractor has been selected, the final detour route and schedule will be shared with the community.

RECOMMENDATION

The Anchorage Parks and Recreation Department recommends approval of this project. The renovation of this trail bridge will improve safety, access and minimize year round trail and bridge maintenance for this popular portion of the Tony Knowles Coastal Trail.



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PRC RES NO. 2018-16
South Westchester Lagoon Bridge Replacement

WHEREAS, the Anchorage Parks and Recreation Commission serves in an advisory capacity to both the Mayor and the Assembly; and

WHEREAS, the Anchorage Parks and Recreation Commission has the responsibility and duty to provide for the long term vision of our park system by ensuring that a balance of parks, natural resources, and recreation facilities provides for the health, welfare, and safety of all residents of the Anchorage Bowl; and

WHEREAS, the South Westchester Lagoon Bridge is located along the Tony Knowles Coastal Trail which is located within the Turnagain Community Council side of the Westchester Lagoon and significantly impacts residents of both the Turnagain and South Addition Community Councils; and

WHEREAS, the Bridge structure was designed and constructed in the late 1980s and per the structural engineering assessment in 2014 it was identified as being in need of replacement; and

WHEREAS, due to congestion, and opportunities for sightseeing and birdwatching at the lagoon, the design includes an expanded bird viewing platform; and

WHEREAS, the design aesthetic is similar to the vernacular of other recent trail bridge replacement projects, including the modification of railing height to 42" to accommodate improved viewing into the lagoon; and

WHEREAS, the residents of both the Turnagain and South Addition Community Councils provided design input on the bridge structure and surfacing materials during Spring 2018 Community Council meeting; and

WHEREAS, the project was identified by the Park and Recreation Department as a maintenance priority and was included in the 2018 Parks Bond, which was approved by voters.

NOW, THEREFORE, BE IT RESOLVED that the Anchorage Parks and Recreation Commission approves the proposal to replace the South Westchester Lagoon Bridge.

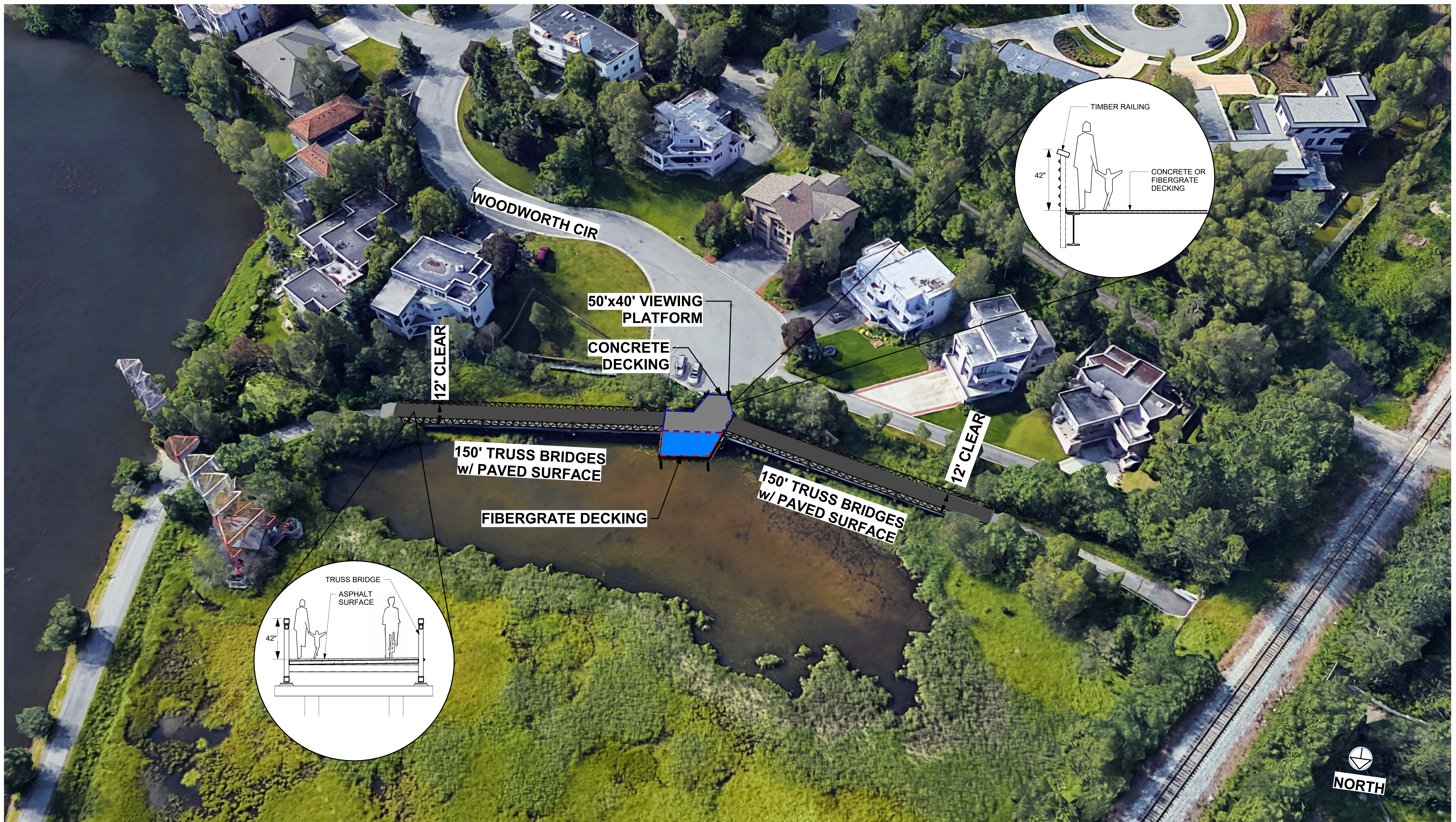
PASSED AND APPROVED by the Anchorage Parks and Recreation Commission this 9th day of August, 2018.

Chair
Parks and Recreation Commission

ATTEST:

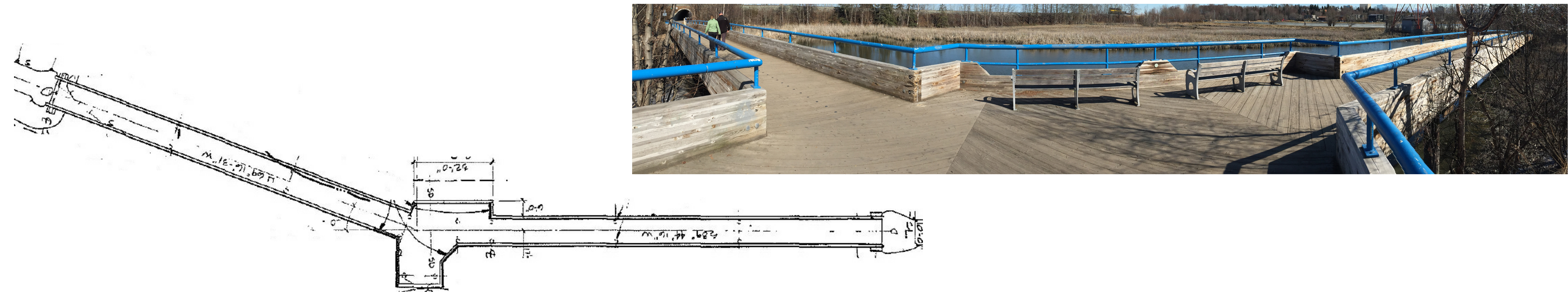
John Rodda, Director
Parks & Recreation Department

PARKS & RECREATION COMMISSION
Municipality of Anchorage, Alaska

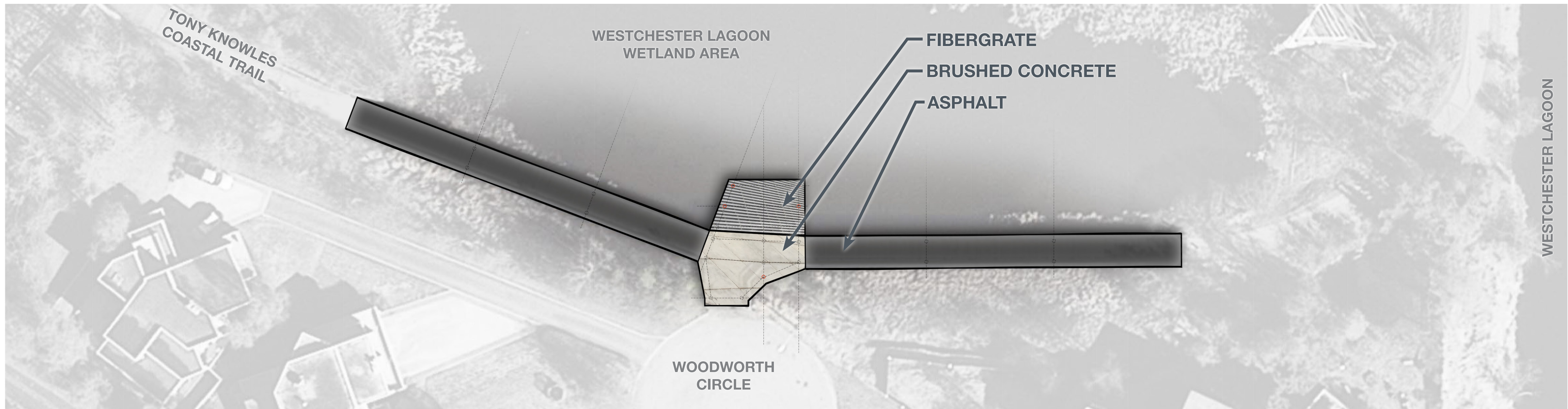


WESTCHESTER LAGOON SOUTH BRIDGE

EXISTING CONDITIONS

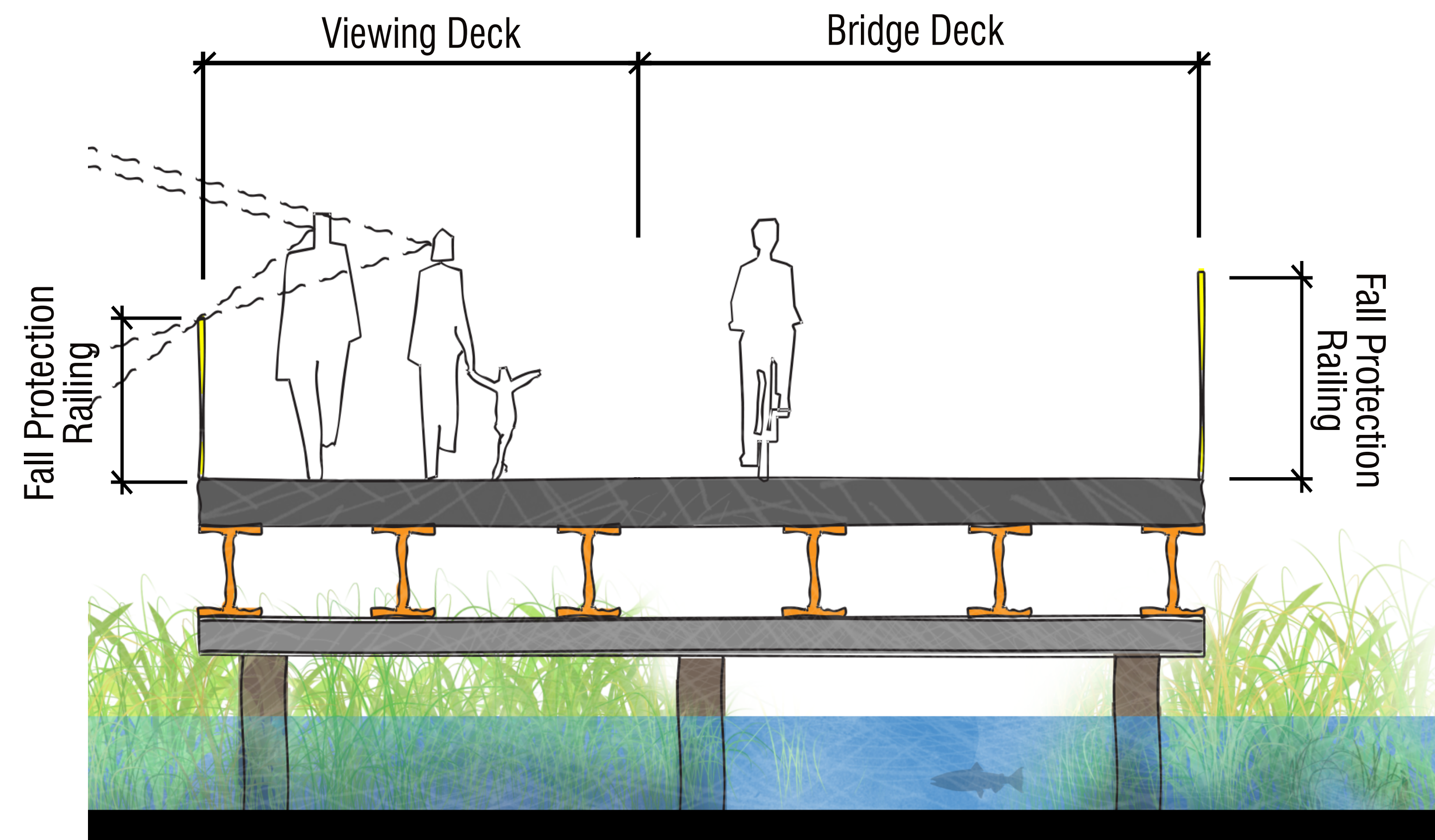


PROPOSED BRIDGE REPLACEMENT

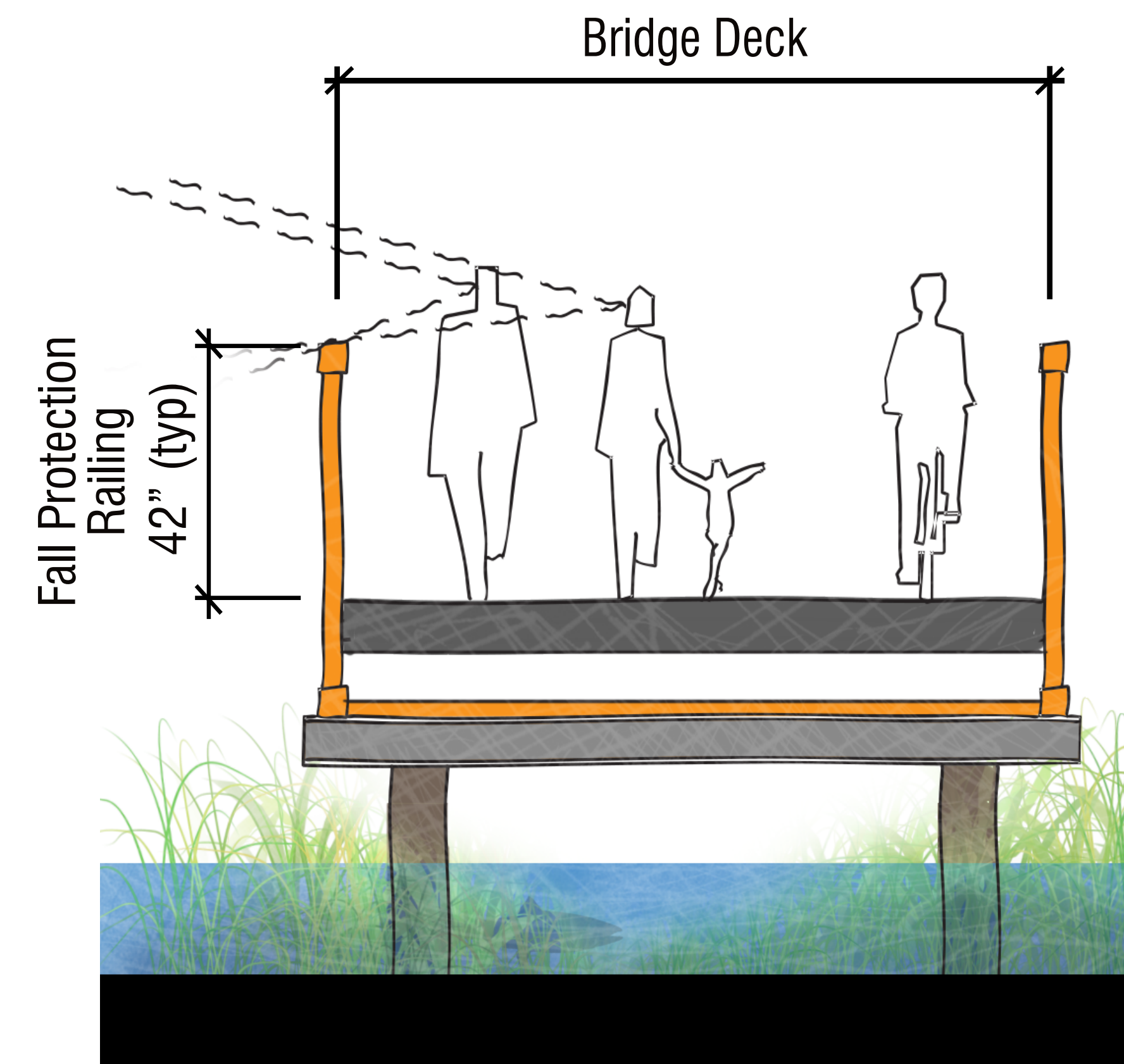


WESTCHESTER LAGOON SOUTH BRIDGE

RAILING OPTIONS



**Girder
(with custom rail and expanded deck)**



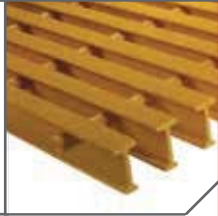
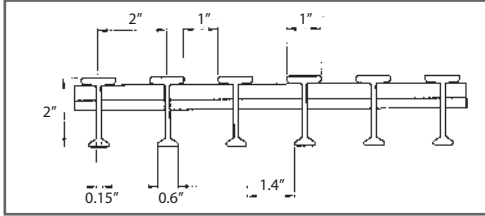
Open Top Truss



Safe-T-Span® Industrial Grating Details

2" Deep T5020

# of Bars/ Ft of Width	Load Bar Depth	Open Area	Load Bar Centers	Approximate Weight
6	2"	50%	2"	3.4 psf

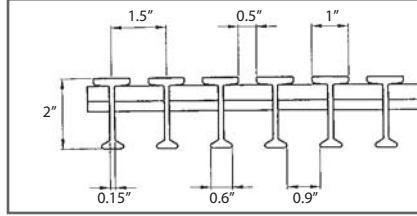


Section Properties per Ft of Width: $A = 3.2 \text{ IN}^2$ $I = 1.68 \text{ IN}^4$ $S_t = 1.96 \text{ IN}^3$ $S_b = 1.47 \text{ IN}^3$
Average EI = 7,600,000 lb - in² (SPAN ≥ 24")

2" Deep T3320 (ADA Compliant)



# of Bars/ Ft of Width	Load Bar Depth	Open Area	Load Bar Centers	Approximate Weight
8	2"	33%	1-1/2"	3.7 psf

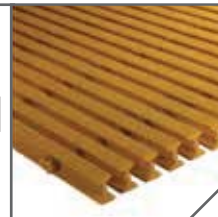
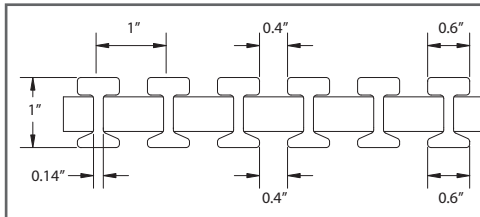


Section Properties per Ft of Width: $A = 4.28 \text{ IN}^2$ $I = 2.24 \text{ IN}^4$ $S_t = 2.61 \text{ IN}^3$ $S_b = 1.96 \text{ IN}^3$
Average EI = 9,200,000 lb - in² (SPAN ≥ 24")

1" Deep I4010 (ADA Compliant)



# of Bars/ Ft of Width	Load Bar Depth	Open Area	Load Bar Centers	Approximate Weight
12	1"	40%	1"	3.8 psf

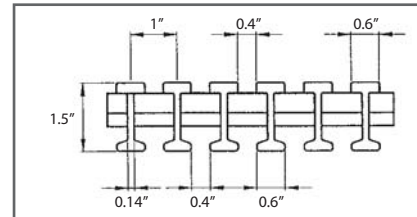


Section Properties per Ft of Width: $A = 3.96 \text{ IN}^2$ $I = 0.5 \text{ IN}^4$ $S = 0.95 \text{ IN}^3$
Average EI = 2,500,000 lb - in² (SPAN ≥ 24")

1-1/2" Deep I4015 (ADA Compliant)



# of Bars/ Ft of Width	Load Bar Depth	Open Area	Load Bar Centers	Approximate Weight
12	1-1/2"	40%	1"	4.6 psf



Section Properties per Ft of Width: $A = 4.8 \text{ IN}^2$ $I = 1.41 \text{ IN}^4$ $S = 1.8 \text{ IN}^3$
Average EI = 7,000,000 lb - in² (SPAN ≥ 24")

Safe-T-Span® High Load Capacity Grating

High Load Capacity (HI) pultruded grating is yet another product in the arsenal of engineered fiberglass reinforced plastic (FRP) solutions by Fibergrate. While capitalizing on some of the traditional benefits of pultruded grating products - high strength, corrosion resistance, slip resistance, fire retardancy, non conductivity and low maintenance - this pultruded FRP product has been engineered to carry the forklift and tractor trailer loads that traditional pultruded FRP grating products are unable to support.

- 47% and 58% open surface area
- Available in 1", 1-1/2", 2", 2-1/2" and 3" depths
- Rated for up to H20 loads in all five depths
- Flame spread rating of 25 or less (when tested in accordance with ASTM E-84) and a Class 1 Fire Rating



- Standard panels consist of:
 - Fire retardant vinyl ester resin system
 - Dark gray in color
 - Aluminum oxide grit top surface

Each HI grating is specially engineered to meet specific requirements. Contact the Fibergrate engineering team to determine which grating offers the best solution for your high load needs. (Applications with traffic perpendicular to trench or with turning wheel loads, contact Fibergrate engineering for design assistance.)

Plotted: 7/16/2018 11:03:38 AM File Location: Z:\project\2428.06 MOA PRD Term S Westchester Bridge\Civil\ACAD REVIT\2428.06 WESTCHESTER BRIDGE.rvt

THE FOLLOWING NOTES APPLY UNLESS INDICATED OTHERWISE:

GOVERNING CODE: 2012 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE MUNICIPALITY OF ANCHORAGE (MOA)

DESIGN SPECIFICATIONS:

- AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, DECEMBER 2009
- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
- AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS

DESIGN LOADS:

LIVE LOAD	PEDESTRIAN LIVE LOAD	90 PSF
	VEHICLE LIVE LOAD H10 VEHICLE <ul style="list-style-type: none">4 KIPS FRONT AXLE / 16 KIPS REAR AXLE	
SNOW LOAD	GROUND SNOW LOAD, Pg	50 PSF
WIND	AASHTO (2009) BASIC WIND SPEED WIND IMPORTANCE FACTOR, Ir	100 MPH 1.15
SEISMIC	PGA = 0.6, Ss = 1.5, S1 = 0.5 As = 0.6, Csm = Sds = 1.5, Sd1 = 0.75 SITE CLASS D	

GENERAL:

REFERENCE STANDARDS: REFER TO CHAPTER 35 OF THE IBC. WHERE OTHER STANDARDS ARE NOTED IN THE DRAWINGS, USE THE LATEST EDITION OF THE STANDARD UNLESS A SPECIFIC DATE IS INDICATED. REFERENCE TO A SPECIFIC SECTION IN A CODE DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE ENTIRE STANDARD.

DEFINITIONS: THE FOLLOWING DEFINITIONS COVER THE MEANINGS OF CERTAIN TERMS USED IN THESE NOTES:
"STRUCTURAL ENGINEER OF RECORD" (SER) –THE STRUCTURAL ENGINEER WHO IS LICENSED TO STAMP & SIGN THE STRUCTURAL DOCUMENTS FOR THE PROJECT. THE SER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM.
"SUBMIT FOR REVIEW" - SUBMIT TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION.
"PER PLAN"- INDICATES REFERENCES TO THE STRUCTURAL PLANS, ELEVATIONS AND STRUCTURAL GENERAL NOTES.

SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

SOILS AND FOUNDATIONS:

DESIGN SOIL VALUES:

FOUNDATION DESIGN IS BASED ON A NOMINAL SOIL BEARING PRESSURE OF 2000 PSF PER R&M CONSULTANTS GEOTECHNICAL INVESTIGATION REPORT FOR THE SOUTH WESTCHESTER BRIDGE REPLACEMENT PROJECT, DATED JUNE 26, 2018.

AFTER EXCAVATION & PRIOR TO STRUCTURAL FILL, SPECIAL INSPECTION OF FOUNDATION EXCAVATION IS REQUIRED.

CAST -IN-PLACE CONCRETE:

MATERIALS:

REINFORCING BARS ASTM A615, GRADE 60, DEFORMED BARS.
BAR SUPPORTS CRSI MSP-09 28TH EDITION, CHAPTER 3 "BAR SUPPORTS."
TIE WIRE 16 GAGE OR HEAVIER, BLACK ANNEALED.
ASTM A706, GRADE 60, REINFORCING STEEL SHALL BE USED FOR WELDED BARS.
WELDED WIRE FABRIC PER ASTM A185.
REINFORCING IN EXTERIOR CONCRETE SLABS & LANDINGS SHALL BE EPOXY-COATED.

CONCRETE COVER: CONFORM TO THE FOLLOWING COVER REQUIREMENTS UNLESS NOTED OTHERWISE IN THE DRAWINGS.

CONCRETE CAST AGAINST EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	1.5

FIELD BENDING: CONFORM TO ACI 301 SECTION 3.3.2.8. "FIELD BENDING OR STRAIGHTENING." BAR SIZES #3 THROUGH #5 MAY BE FIELD BENT COLD THE FIRST TIME. OTHER BARS REQUIRE PREHEATING. DO NOT TWIST BARS. BARS SHALL NOT BE BENT PAST 45 DEGREES.

GROUT:

GROUT - 5000 PSI MINIMUM 7-DAY CUBE STRENGTH. ROUT TO BE PREMIXED, NON-METALIC NON-SHRINK. ICBO CERTIFICATION REQUIRED. USE SPECIFIC GROUT MIX RECOMMENDED BY MANUFACTURER FOR EACH GROUT APPLICATION AND FOLLOW MANUFACTURER'S INSTRUCTIONS.

ANCHOR BOLTS:

ANCHOR BOLTS, ASTM A307, OR F1554 GRADE 36, HOT DIP GALVANIZED. SPECIAL INSPECTION REQUIRED. SET ALL ANCHOR BOLTS BY TEMPLATE.

STRUCTURAL STEEL:

MATERIALS WITH HOT DIP GALVANIZED FINISH:

WIDE FLANGE, TEE SHAPES	ASTM A992 Fy=50 KSI
ANGLES, BARS & PLATES	ASTM A529, Fy=50 KSI
HOLLOW STRUCTURAL SECTION (HSS)	ASTM A500 Gr B, Fy=46 KSI
PIPE	ASTM A53, Gr B, Fy=35 KSI
PIPE PILES	ASTM A252 Gr 3, Fy=45 KSI

MATERIALS WITH WEATHERING STEEL FINISH:

WIDE FLANGE, ANGLE, BARS & PLATES	ASTM A588
HSS AND PIPE	ASTM A847

HIGH STRENGTH BOLTS	ASTM A325
THREADED RODS (ANCHOR BOLTS)	F1554 GRADE 36
WELDING ELECTRODES	E70XX, E71TXX UNO

FINISH:

PREFABRICATED TRUSS BRIDGES	WEATHERING STEEL
APPROACH GUARDRAIL	WEATHERING STEEL
PLATFORM RAILING	WEATHERING STEEL
METAL DECK	HOT DIP GALVANIZED
PLATFORM STRUCTURAL FRAMING	HOT DIP GALVANIZED
STEEL PILES	HOT DIP GALVANIZED

DEFERRED SUBMITTALS:

DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE SER AND SHALL BE REVIEWED FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND FORWARD TO THE AHJ. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE FABRICATED OR INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE ENGINEER OF RECORD AND THE AHJ.

DEFERRED SUBMITTAL ITEMS INCLUDE:

- PREFABRICATED TRUSS BRIDGES

SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS SHALL BE PERFORMED BY QUALIFIED PERSONNEL EMPLOYED BY THE OWNER OR THE OWNER'S AGENT. SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS WHO DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION PER 1704.1.

CONTRACTOR RESPONSIBILITY: THE CONTRACTOR IS REQUIRED TO PROVIDE THE AUTHORITY HAVING JURISDICTION A SIGNED, WRITTEN ACKNOWLEDGEMENT OF THE CONTRACTOR'S RESPONSIBILITIES ASSOCIATED WITH THE ABOVE STATEMENT OF SPECIAL INSPECTIONS ADDRESSING THE REQUIREMENTS LISTED IN IBC SECTION 1714.

STATEMENT OF SPECIAL INSPECTIONS PER 1704 AND 1705. SPECIAL INSPECTIONS AND TESTING ARE REQUIRED BY 1704, 1706, 1707 AND 1708 FOR THE FOLLOWING:

FABRICATORS PER IBC SECTION 1704.2 AND THE FOLLOWING:

SPECIAL INSPECTIONS AS REQUIRED BY SECTION 1704.2 SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.

STEEL CONSTRUCTION PER IBC SECTION 1705.2, THE ATTACHED TABLES AND THE FOLLOWING:

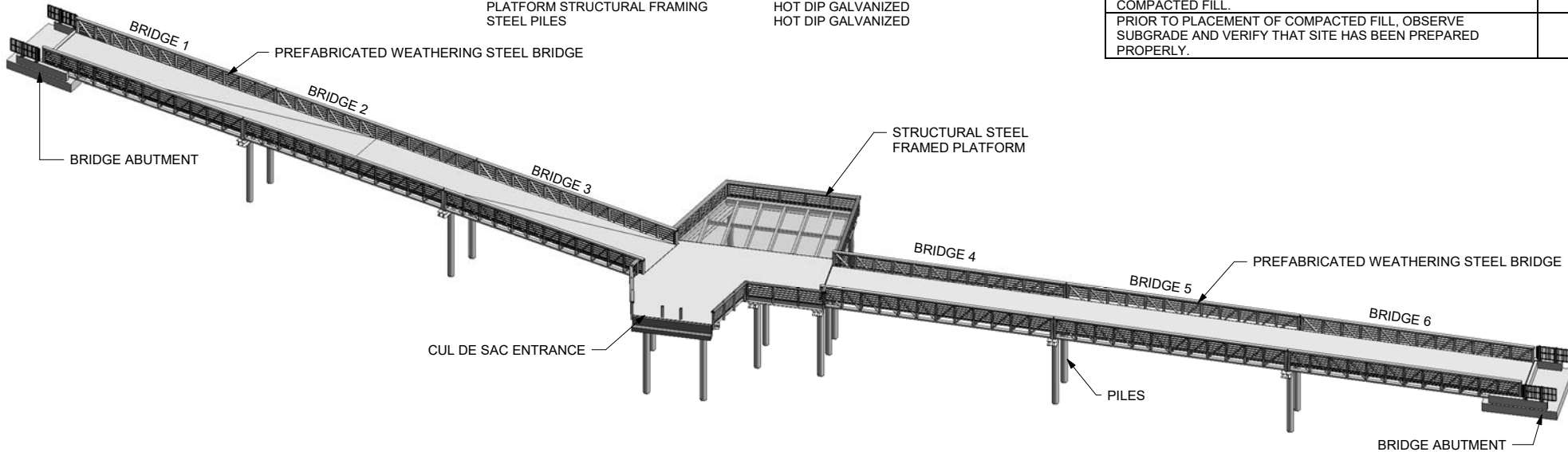
THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE CONDITIONS OF SECTION 1705.2 EXCEPTIONS ARE MET:

SINGLE-PASS FILLET WELDS NOT EXCEEDING 5/16" IN SIZE
FLOOR AND ROOF DECK WELDING
WELDING OF STAIRS AND RAILING SYSTEMS

SOILS & FOUNDATION CONSTRUCTION PER IBC SECTION 1705.6 AND THE ATTACHED TABLES.

CONCRETE CONSTRUCTION PER IBC SECTION 1705.3 AND THE ATTACHED TABLES.

REQUIRED VERIFICATION & INSPECTION OF SOILS	
VERIFICATION & INSPECTION	FREQUENCY OF INSPECTION
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC
VERIFY USE OF PROPER MATERIALS, DENITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS
PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC



1 SHEET ISOMETRIC

FIELD BOOKS											
BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION
DESIGN:	D 75	MOA Benchmark Book, D-8	53.94'	BASE	R&M	TELEPHONE:	R&M				
STAKING:				TOPOGRAPHY	R&M	ELECTRIC	R&M				
ASBUILT:				PROFILE		CABLE TV					
CONTRACTOR:	BASIS OF THIS DATUM: 1972 N.G.S. ADJUSTED DATUM			SANITARY SEWER	R&M	TRAFFIC SIGNAL					
INSPECTOR:				STORM SEWER	R&M	DESIGN	JC	JZ			
				WATER		QUANTITIES					
				GAS	R&M	MUN. FINAL CHECK					
CONSTRUCTION RECORD				VERTICAL DATUM				PLAN CHECK			
								REVISIONS			



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9101 Vanguard Drive
Anchorage, Alaska 99507
907 522 1707 voice
907 522 3404 fax
www.rmconsult.com



STATE OF ALASKA
49 TH
Joshua A. Zellmer
No. CE 14053
7/11/18
REGISTERED PROFESSIONAL ENGINEER

Department of
Parks and
Recreation

Municipality of
Anchorage



Healthy
Parks
Healthy
People



MUNICIPALITY OF ANCHORAGE

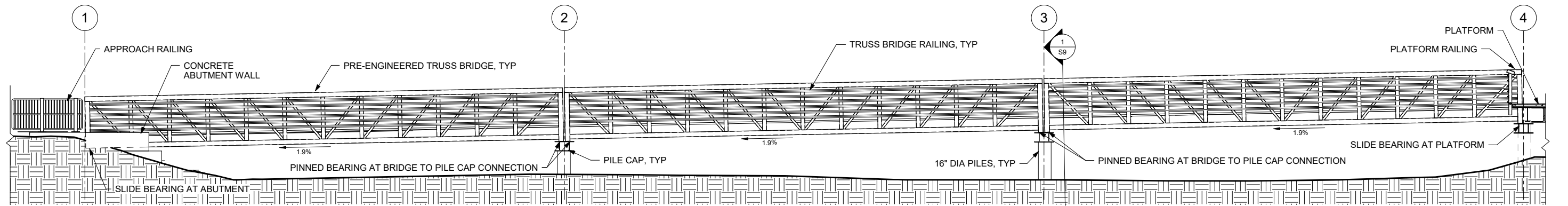
PARKS AND RECREATION DEPARTMENT

SOUTH WESTCHESTER BRIDGE REPLACEMENT

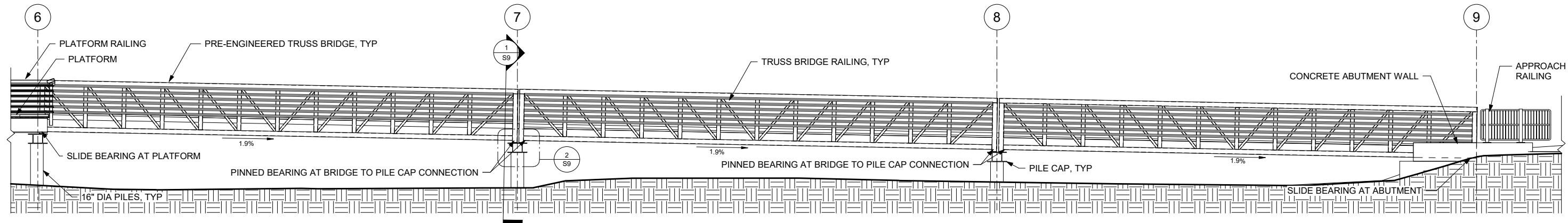
STRUCTURAL NOTES

SCALE:	DATE: 07/11/2018	GRID: SW1428	SHEET S1 of S9
	STATUS: BID PLAN SET		

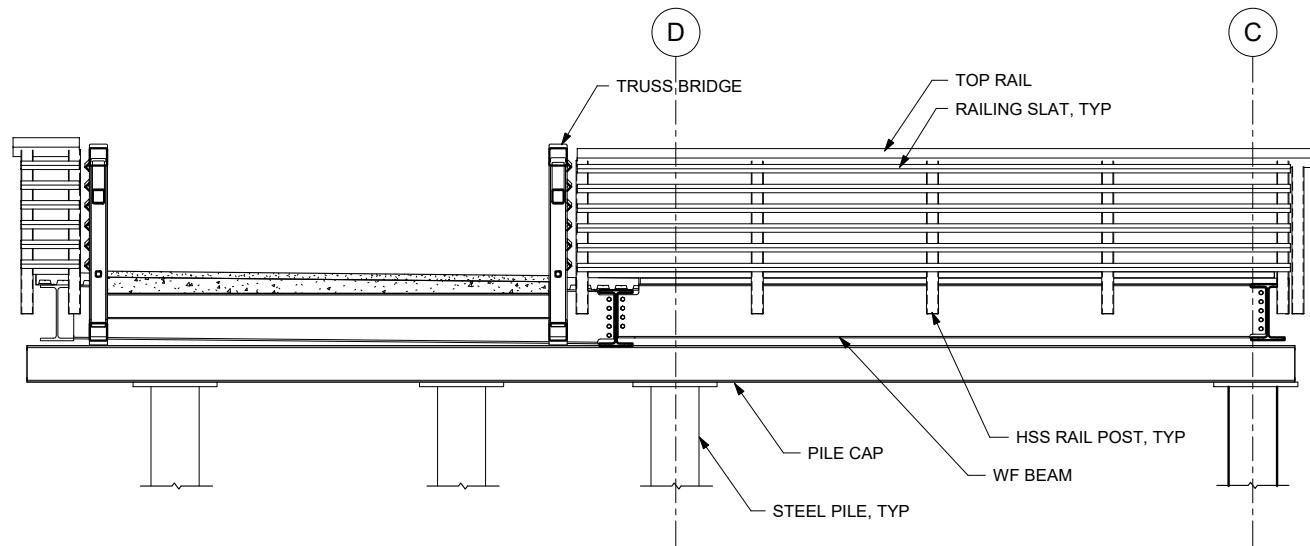
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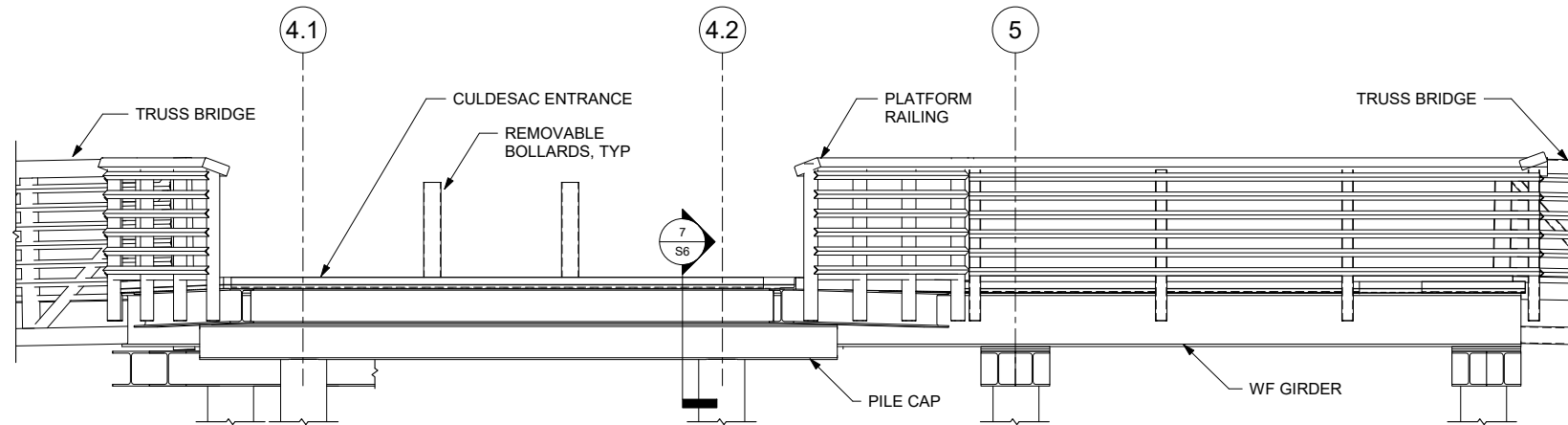
1 TRUSS BRIDGE ELEVATION 1
3/16" = 1'-0"



2 TRUSS BRIDGE ELEVATION 2
3/16" = 1'-0"



3 PLATFORM WEST ELEVATION
3/8" = 1'-0"

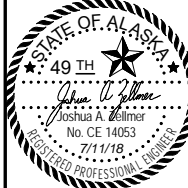


4 PLATFORM SOUTH ELEVATION
3/8" = 1'-0"

FIELD BOOKS		BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV				
DESIGN:		D 75	MOA Benchmark Book, D-8	53.94'	BASE	R&M		TELEPHONE:	R&M										
STAKING:					TOPOGRAPHY	R&M		ELECTRIC	R&M										
					PROFILE			CABLE TV											
ASBUILT:		BASIS OF THIS DATUM: 1972 N.G.S. ADJUSTED DATUM			SANITARY SEWER	R&M		TRAFFIC SIGNAL											
CONTRACTOR:					STORM SEWER	R&M	DESIGN	JC	JZ										
INSPECTOR:					WATER		QUANTITIES												
					GAS	R&M	MUN. FINAL CHECK												
CONSTRUCTION RECORD					VERTICAL DATUM					PLAN CHECK					REVISIONS				

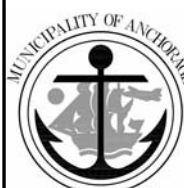


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Department of
Parks and
Recreation

Municipality of
Anchorage

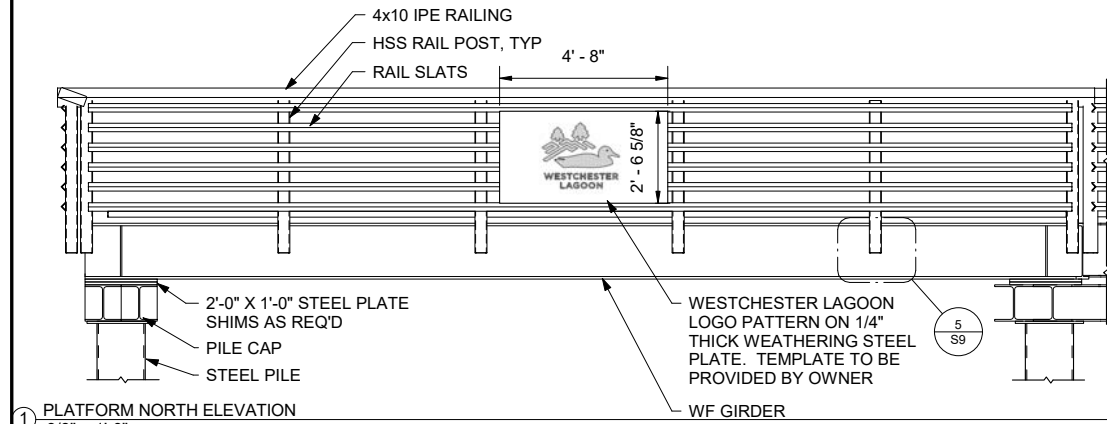


PARKS AND RECREATION DEPARTMENT
SOUTH WESTCHESTER BRIDGE REPLACEMENT

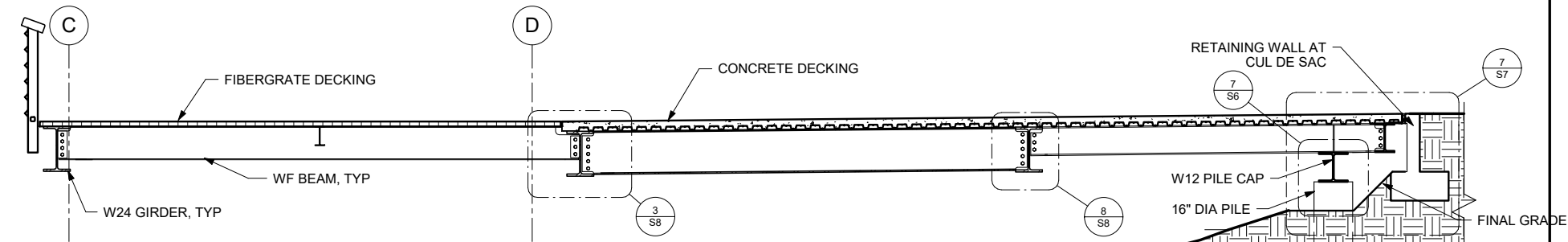
ELEVATIONS

SCALE: DATE: 07/11/2018 GRID: SW1428 SHEET S5 of S9
STATUS: BID PLAN SET

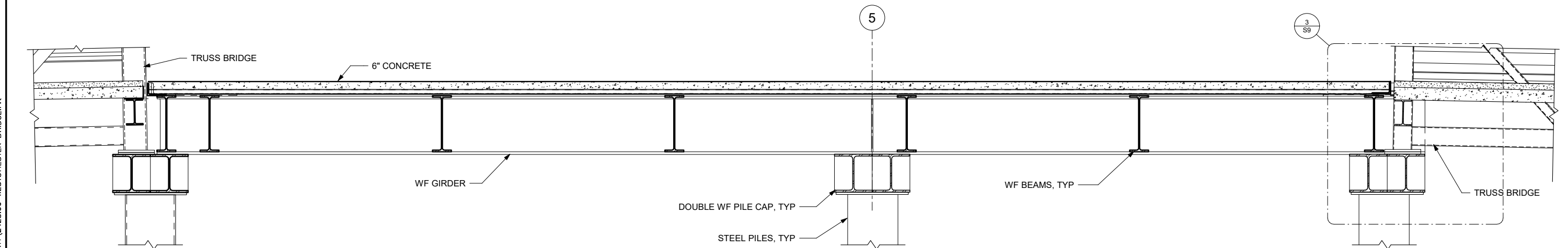
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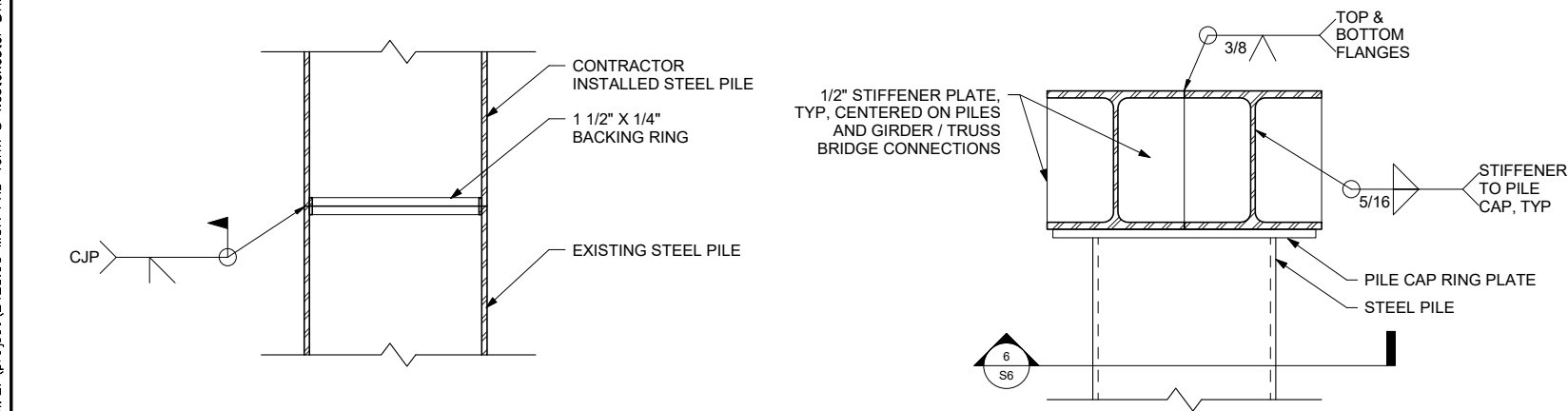
1 PLATFORM NORTH ELEVATION
3/8" = 1'-0"



2 PLATFORM NORTH-SOUTH SECTION
3/8" = 1'-0"

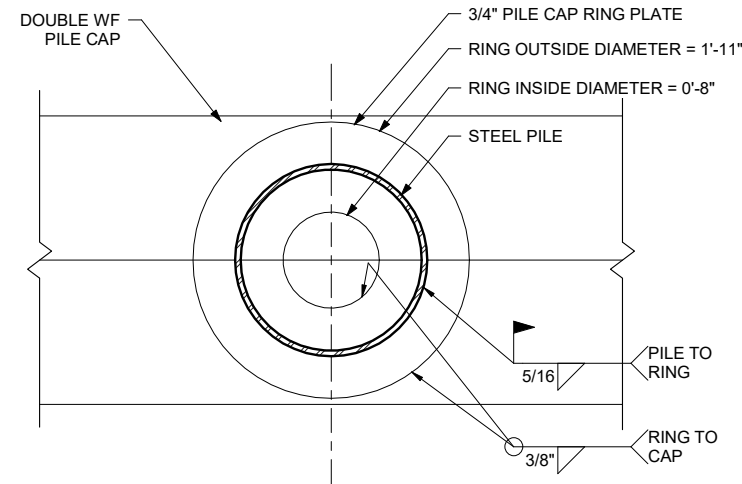


3 PLATFORM EAST-WEST SECTION
3/4" = 1'-0"

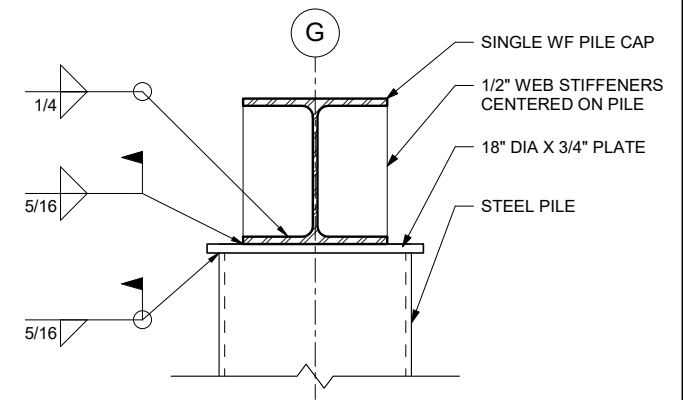


4 PILE SPLICE DETAIL
1 1/2" = 1'-0"

5 PILE CAP ASSEMBLY
1 1/2" = 1'-0"

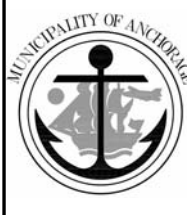
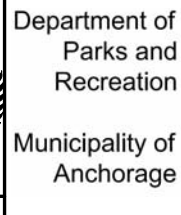
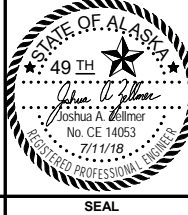


6 DOUBLE WF PILE CAP CONNECTION DETAIL
1 1/2" = 1'-0"



7 SINGLE WF PILE CAP CONNECTION DETAIL
1 1/2" = 1'-0"

FIELD BOOKS		BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV
DESIGN:		D 75	MOA Benchmark Book, D-8	53.94'	BASE	R&M		TELEPHONE:	R&M						
STAKING:					TOPOGRAPHY	R&M		ELECTRIC	R&M						
ASBUILT:					PROFILE			CABLE TV							
CONTRACTOR:					SANITARY SEWER	R&M		TRAFFIC SIGNAL	JC	JZ					
INSPECTOR:					STORM SEWER	R&M		DESIGN							
					WATER			QUANTITIES							
					GAS	R&M		MUN. FINAL CHECK							
CONSTRUCTION RECORD		VERTICAL DATUM			PLAN CHECK		REVISIONS		CONSULTANT		SEAL				



PARKS AND RECREATION DEPARTMENT			
SOUTH WESTCHESTER BRIDGE REPLACEMENT			
SECTIONS, ELEVATIONS AND PILE DETAILS			
SCALE:	DATE: 07/11/2018	GRID: SW1428	SHEET S6 of S9
	STATUS: BID PLAN SET		