Stantec

CITY OF ANN ARBOR

LESLIE PARK AND SYLVAN PARK BRIDGE REPLACEMENTS

BID SET
AUGUST, 2024
PROJECT NUMBER: 2075153906

PROJECT LOCATION MAP
NOT TO SCALE

GENERAL SHEETS

G-001	01	COVER SHEET
G-002	02	GENERAL NOTES, LEGEND, AND SYMBOLS
G-003	03	SOIL EROSION CONTROL AND CONSTRUCTION DETAILS

CIVIL SHEETS

C-100	04	LESLIE PARK BRIDGE - EX. COND, DEMO, SESC & CONSTRUCTION PLAN
C-101	05	CONTECH BRIDGE DETAILS - LESLIE PARK BRIDGE
C-102	06	CONTECH BRIDGE DETAILS - LESLIE PARK BRIDGE
C-103	07	LESLIE PARK BRIDGE - ABUTMENT DETAILS
C-104	08	SYLVAN PARK BRIDGE - EX. COND, DEMO, SESC & CONSTRUCTION PLAN
C-105	09	SYLVAN PARK BRIDGE - ABUTMENT DETAILS

CONSTRUCTION NOTES

1. PRE-CONSTRUCTION MEETING
   A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO ANY WORK BEING PERFORMED ON THE PROJECT. THE MEETING TIME, PLACE, AND ATTENDEES SHALL BE ARRANGED BY THE PROJECT ENGINEER. ANN ARBOR PARKS & RECREATION SHALL BE INVITED, AT A MINIMUM TO THE PRE-CONSTRUCTION MEETING.
2. SHOP DRAWINGS AND MATERIAL CERTIFICATES
   PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL FURNISH MATERIAL SOURCE LISTS AND CERTIFICATIONS TO THE PROJECT ENGINEER, VERIFYING THAT ALL MATERIALS USED ON THE PROJECT ARE IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION. SHOP DRAWINGS SHALL BE REQUIRED FOR MAJOR MATERIALS.
3. MISS DIG UTILITY ALERT AND FIELD LOCATION OF UTILITIES
   THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISS DIG UTILITY PROTECTION SERVICE (811) TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES. UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THE PLANS WERE OBTAINED FROM UTILITY OWNERS AND WERE NOT FIELD LOCATED. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH LIKE MATERIAL IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. THE CONTRACTOR SHALL VERIFY THE DEPTH AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE DETERMINED BY HAND DIGGING.
4. UTILITY INFORMATION
   PUBLIC UTILITY INFORMATION IS DELINEATED IN ACCORDANCE WITH LOCATIONS PROVIDED BY UTILITY OWNERS. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR THE LOCATION AT WHICH THESE SERVICES EXIST. DIFFERING FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

   THE LOCATION OF ALL PUBLIC UTILITIES SHOWN ON THE PLANS ARE TAKEN FROM THE BEST AVAILABLE DATA. THE OWNER WILL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATIONS FROM THE LOCATIONS SHOWN.

   CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN A MANNER AS TO INSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED. REPARATIONS OF UTILITIES DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE AFFECTED UTILITY OWNERS REQUIREMENTS.

   ALL PRIVATE UTILITY STRUCTURES WILL BE ADJUSTED TO GRADE BY THE OWNER OF THE FACILITY. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THREE (3) WORKING DAYS NOTICE PRIOR TO THE START OF SUCH WORK.
5. STORMWATER DRAINAGE DURING CONSTRUCTION
   THE CONTRACTOR SHALL MAINTAIN DITCH DRAINAGE DURING CONSTRUCTION AND SHALL NOT OBSTRUCT SUMP PUMP LEADS DISCHARGING TO THE DITCH. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL STORM SEWER FACILITIES SUCH AS CATCH BASINS, CULVERTS AND HEADWALLS DURING CONSTRUCTION. CULVERTS AND CATCH BASINS CONTAMINATED DURING CONSTRUCTION SHALL BE CLEANED AND THE COSTS SHALL BE INCLUDED IN THE EROSION CONTROL AND PROJECT CLEAN UP PAY ITEMS.
6. CULVERTS
   CONTRACTOR TO MARK ALL CULVERT LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY WITH ANN ARBOR PARKS & RECREATION THAT NO CULVERTS WERE DAMAGED DURING CONSTRUCTION. ALL CULVERT EXTENSIONS SHALL MATCH EXISTING SIZE AND CULVERT MATERIAL. RIP-RAP SHALL BE PLACED AT CULVERTS WITH HIGH FLOWS. QUANTITY SHALL BE DETERMINED BY THE ENGINEER.
7. EXISTING UTILITIES
   THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SANITARY SEWER, WATER OR STORM SEWER SERVICE CONNECTIONS IN SERVICE THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE OR ARRANGE FOR TEMPORARY SUPPORT OF GAS MAIN AND UTILITY POLES WHERE NEEDED. ALL STORM SEWERS DAMAGED OR REMOVED OR RELOCATED BY THE CONTRACTOR SHALL BE REPLACE WITH THE SAME SIZE AND QUALITY PIPE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. ALL UTILITIES UNDERMINED BY THE EXCAVATION SHALL HAVE COMPACTED CLASS II SAND BACKFILL PLACED UNDER THEM.
8. UTILITY COORDINATION
   COORDINATION OF RELOCATED UTILITIES WILL BE PERFORMED AND COMPLETED PRIOR TO INSTALLATION OF THE PATH. FOR UTILITIES THAT NEED TO BE RELOCATED DURING CONSTRUCTION, THE CONTRACTOR WILL COORDINATE WITH THE RESPECTIVE UTILITY OWNER TO COMPLETE THIS TASK. THE COST TO RELOCATE UTILITIES WILL BE PAID FOR BY OTHERS. NO ADDITIONAL COST FOR COORDINATION EFFORTS INCURRED BY THE CONTRACTOR WILL BE PROVIDED.
9. PROTECTION OF HAZARDOUS AREAS / OPEN EXCAVATIONS
   EXCAVATIONS AND HAZARDOUS AREAS SHALL BE PROTECTED BY BARRICADES OR SNOW FENCE.
   THE PLACEMENT OF PROTECTIVE FENCING MEETING MIOSHA STANDARDS IS REQUIRED AROUND ALL OPEN EXCAVATIONS, PAID FOR AS; FENCE, PROTECTIVE.
10. DISPOSAL OF EXCESS EXCAVATED MATERIAL
    ALL EXCESS EXCAVATED MATERIALS SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AT A LOCATION PROVIDED BY THE CONTRACTOR. ADJACENT PROPERTY OWNERS SHALL BE GIVEN PREFERENCE FOR DISPOSAL SITES.
11. SALVAGED MATERIALS
    SALVAGEABLE MATERIALS SHALL BECOME THE PROPERTY OF THE OWNER, AND SHALL BE STORED AS DIRECTED BY THE ENGINEER.
12. SIGNS
    ALL ANN ARBOR PARKS & RECREATION SIGNS RELOCATED BY CONSTRUCTION SHALL BE REPLACED, RELOCATED OR SALVAGED. SIGNS AND POSTS REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR.
13. REMOVING PAVEMENT AND HMA SURFACES
    THIS PROJECT INCLUDES PAVEMENT REMOVED OR MODIFIED AS BASIS OF PAYMENT FOR REMOVING EXISTING HOT MIX ASPHALT (HMA), CONCRETE, AND/OR MASONRY PAVEMENTS WITHIN THE CONSTRUCTION LIMITS. THE INFORMATION SHOWN ON THE PLANS AND THE QUANTITY FOR EACH OF THESE ITEMS IS APPROXIMATE AND BASED ON FIELD TESTS AND/OR HISTORICAL RECORDS. ACTUAL PAYMENT WILL BE BASED ON FIELD MEASUREMENTS IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION.
14. SAW CUTS
    ALL SAW CUTS SHOWN ON THE PLANS OR AS SPECIFIED WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT UNIT PRICE BID FOR PAVEMENT OR CURB REMOVAL.
15. GRADING LIMITS
    THE GRADING/CLEARING LIMIT LINES SHOWN ON THE PLANS ARE GENERAL LIMITS PROVIDED IN ADDITION TO THE PATH PROFILE TO GUIDE THE CONTRACTOR IN ESTIMATING DISTURBANCE AREAS, AS WELL AS EXCAVATION AND EMBANKMENT. AREAS TO BE GRADED MAY EXTEND PAST THESE LIMITS WHEN WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN DESIGNATED PATHWAY EASEMENTS AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ESTIMATE RESTORATION IMPACTS BASED ON THEIR ANALYSIS OF THE INFORMATION PROVIDED, AND NOT NECESSARILY THE GRADING LIMIT LINES SHOWN ON THE PLANS, AND SHALL BE RESPONSIBLE FOR PROVIDING ALL SITE RESTORATION FOR A SQUARE YARD AMOUNT AS PROVIDED IN TURF ESTABLISHMENT, PERFORMANCE AND PROJECT CLEAN UP PAY ITEMS. DISTURBANCE LIMITS SHALL BE MINIMIZED TO PROTECT ALL NATURAL AREAS. ALL DISTURBED AREAS SHALL BE RESTORED AS NEW.
16. COVERS AND CASTINGS
    ALL FINAL ELEVATIONS OF MANHOLE CASTINGS, HYDRANTS, VALVES AND VALVE BOXES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. CASTINGS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR, WITH MATERIALS APPROVED BY THE ENGINEER.
17. TURF ESTABLISHMENT
    ALL AREAS OF SLOPE RESTORATION SHALL BE SEEDED WITH MDOT TYPE TURF (TURF URBAN FREEWAY) SEED MIXTURE. AT AREAS OF EROSIVE SOILS AND SLOPES, THE SEEDING MIXTURE SHALL CONTAIN ADDITIONAL CEREAL RYE WITHIN THE SEED MIXTURE FOR FASTER GROWTH POTENTIAL.
18. RIPRAP, PLAIN
    RIPRAP MATERIAL SHALL BE NATURAL STONE AS SPECIFIED IN SECTION 916.01 OF THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION.
19. SUBBASE
    THE CONTRACTOR SHALL PROVIDE A SAMPLE OF PATHWAY SUBBASE FOR TESTER TO CALIBRATE NUKE GAUGE.

BID ITEM QUANTITY TABLE (MISC. QUANTITIES):

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL EST. QTY.
1100001	MOBILIZATION, MAX 10%	LUMP SUM	1.0
2080036	EROSION CONTROL, SILT FENCE	FT	500.0
2090001	PROJECT CLEANUP	LUMP SUM	1.0
2097051	_AUDIO VISUAL FILE, SPECIAL	LUMP SUM	1.0
8080007	FENCE, PROTECTIVE	FT	100.0
8120026	PEDESTRIAN TYPE II BARRICADE, TEMP	EACH	4.0
8167002	_TURF ESTABLISHMENT, PERFORMANCE	SYD	250.0

GENERAL SITE NOTES

1. THE WORK COVERED BY THESE PLANS INCLUDES BRIDGE REMOVAL, FOUNDATION EXCAVATION, ABUTMENT BACKFILL, ABUTMENT CONSTRUCTION, FURNISHING AND INSTALLATION PREFABRICATED STRUCTURE AND RELATED WORK.
2. THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
3. PLANS REFER TO NAVD 88 DATUM.
4. WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING A DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.
5. MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE. IF DEBRIS FALLS INTO THE WATERWAY, IT SHALL BE REMOVED WITHIN 24 HOURS. SINCE DISTURBANCE OF THE WATERWAY BOTTOM MAY BE AS HARMFUL AS THE DEBRIS ITSELF THE PREVENTATIVE MEASURES MUST BE EFFECTIVE.
6. IMMEDIATELY AFTER THE CONSTRUCTION OF AN ABUTMENT IS COMPLETED, SLOPE PROTECTIONS AND SEEDING OR SODDING SHALL BE PLACED ON THE ADJACENT EMBANKMENT SLOPES.

GENERAL BRIDGE NOTES

1. DESIGN AND CONSTRUCTION OF ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS PROVIDED AND APPLICABLE LOCAL AND STATE CODES, ORDINANCES, AND REGULATIONS INCLUDING THOSE OF THE COUNTY BUILDING DEPARTMENT.
2. DO NOT SCALE THIS DRAWING, USE APPROVED PLANS FOR DIMENSIONS.
3. PROPOSED SCOPE OF WORK IS TO DESIGN THE FOUNDATION FOR THE PROPOSED BRIDGES AS SHOWN ON THIS PLAN. THE REST OF THE STRUCTURE SHALL BE ADEQUATELY DESIGNED BY OTHERS.
4. LOADING INFORMATION IS TAKEN FROM DRAWING PROVIDED BY THE BRIDGE MANUFACTURER. THE ENGINEER MUST BE NOTIFIED OF FINAL LOADING DURING SHOP DRAWING REVIEW.
5. USE GRADE 60,000 PSI STEEL, EPOXY COATED.
6. USE CONCRETE MIX WITH fc = 4,000 PSI (CONC. CUBE STRENGTH).
7. CLEAR DISTANCE BETWEEN PARALLEL BARS IN A LAYER SHALL BE NOT LESS THAN A BAR DIAMETER NOR 1".
8. MINIMUM OVERLAP LENGTH OF THE REINFORCEMENT SHALL BE 2'.
9. ALL REINFORCING DETAILS SHALL BE AS SHOWN IN APPROPRIATE SECTION OF THESE DRAWINGS UNLESS OTHERWISE SPECIFIED.
10. CONCRETE MIX SHALL BE COMPACTED (VIBRATED) CONTINUOUSLY WHILE POURING CONCRETE.
11. FORM AND REINFORCEMENTS SHALL BE ERECTED PER SPECIFICATIONS SO THE FINISHED SMOOTH SURFACE SHALL BE ACHIEVED.
12. WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE INTERFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 1/4".
13. AT THE ASSUMED ELEVATION, IE @ THE FOUNDATION LEVEL, GROUND SHALL BE THOROUGHLY COMPACTED BEFORE POURING CONCRETE TO ACHIEVE A MAXIMUM DENSITY (OR AS DIRECTED BY ENGINEER).
14. AT THE BOTTOM OF THE FOOTING, SIX INCHES OF CRUSHED STONE SHALL BE PLACED TO CREATE WORKING CONDITIONS. THE TRENCHES SHALL BE KEPT DRY DURING CONSTRUCTION.
15. ALL CONCRETE WORK SHALL CONFORM TO ACI 301-72.
16. ALL STRUCTURE REINFORCEMENT SHALL CONFORM TO ASTM-A615-60.
17. WHILE POURING CONCRETE, THE AREA SHALL KEPT DRY, IE NEEDS TO BE DEWATERED BY WELL POINTS OR EQUIVALENT METHOD, IF POSSIBLE.
18. FORMS FOR THE WALLS SHALL BE KEPT IN PLACE FOR AT LEAST 7 DAYS AFTER POURING THE CONCRETE.
19. ANY DEVIATION FROM THE NOTED/DISCUSSED SUB-SURFACE CONDITIONS ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
20. IT IS TO BE NOTED THAT IN CASE OF DEEP EXCAVATION, SHORING AND BRACING OF THE TRENCHES SHALL BE REQUIRED BY OSHA CODES.
21. MATERIALS REMOVED FROM THE EXCAVATION SHALL NOT BE STOCKPILED IMMEDIATELY ADJACENT TO THE EXCAVATION TO PREVENT SUDDEN COLLAPSE OF THE EMBANKMENT.
22. THE EXCAVATION WIDTH OF TRENCHES FOR THE FOOTING SHALL BE AS REQUIRED FOR PROPER CONSTRUCTION.

LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
835	EXIST. CONTOUR		EXIST. CURB AND GUTTER
835	PROP. CONTOUR		PROP. CURB AND GUTTER
× 854.6	EXIST. SPOT ELEVATION		CENTERLINE OF DITCH
× 854.6	PROP. SPOT ELEVATION		EDGE OF WATER
T/C	TOP OF CURB		EDGE OF WETLAND
T/P	TOP OF PAVEMENT		EXISTING FENCE
G	GUTTER		PROPOSED FENCE
12"ST	EXIST. STORM SEWER		TREE PROTECTION FENCE
12"ST	PROP. STORM SEWER		SILT FENCE
	EXIST. MANHOLE		CLEARING LIMITS
	PROP. MANHOLE		EXIST. GUARDRAIL
	PROP. EDGE DRAIN		PROP. GUARDRAIL
	EXIST. CATCH BASIN/INLET		PROPERTY LINE
	PROP. CATCH BASIN/INLET		CENTERLINE
	END SECTION/HEAD WALL		EXIST. SIGN
	CULVERT		PROP. SIGN
	INLET FILTER		ENCLOSED TRASH AREA
C.O.	PROP. CLEANOUT		DRAINAGE DIRECTION
8"S	EXIST. SANITARY SEWER		SIDEWALK RAMP
8"S	PROP. SANITARY SEWER		BARRIER FREE PARKING
8"W	EXIST. WATER MAIN	F.F.	FINISH FLOOR ELEV.
8"W	PROP. WATER MAIN	F.G.	FINISH GRADE ELEV.
	EXIST. HYDRANT	B.F.	BASEMENT FLOOR ELEV.
	PROP. HYDRANT	G.F.	GARAGE FLOOR ELEV.
P.I.V.	EXIST. POST INDICATOR VALVE		SECTION CORNER
	EXIST. GATE VALVE AND BOX/STOP BOX		CONTROL POINT
	PROP. CURB STOP BOX		FOUND IRON PIPE
	EXIST. GATE VALVE AND WELL	S	SET IRON PIPE
	PROP. GATE VALVE AND WELL		FOUND CONCRETE MONUMENT
	PROP. REDUCER	S	SET CONCRETE MONUMENT
	END CAP	F	FOUND PK NAIL
OHP	EXIST. OVERHEAD ELECTRIC	S	SET PK NAIL
OHP	PROP. OVERHEAD ELECTRIC	F	FOUND LEADED CHISEL HOLE
UGE	EXIST. UNDERGROUND ELECTRIC	S	SET LEADED CHISEL HOLE
UGE	PROP. UNDERGROUND ELECTRIC	F-RR	FOUND REROD
	EXIST. LIGHT POLE		APPROX. LOCATION OF SOIL BORING
	PROP. LIGHT POLE		APPROX. LOCATION OF MONITORING WELL
U.P.	EXIST. UTILITY POLE		APPROX. LOCATION OF PENETRATION TEST
	GUY WIRE		EXIST. DECIDUOUS TREE
	EXIST. ELECTRIC TRANSFORMER		EXIST. EVERGREEN TREE
	PROP. ELECTRIC TRANSFORMER		EXIST. SHRUB
OHT	EXIST. OVERHEAD TELEPHONE		EXIST. TREE OR BRUSH LIMIT
OHT	PROP. OVERHEAD TELEPHONE		TREE TO BE REMOVED
UGT	EXIST. UNDERGROUND TELEPHONE		REMOVE AND REPLACE
UGT	PROP. UNDERGROUND TELEPHONE		
2"G	EXIST. GAS		BITUMINOUS PAVEMENT
2"G	PROP. GAS		
	EXIST. MAILBOX		GRAVEL PAVEMENT
	EXIST. GAS RISER		
	EXIST. TELEPHONE RISER		CONCRETE PAVEMENT
	COMPACTED SAND BACKFILL		
			BRICK PAVERS

STANDARD PLANS NOT TO BE PRINTED

SHEET NO.	TITLE
R-28-J	CURB RAMP AND DETECTABLE WARNING DETAILS
R-29-I	DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALKS
R-82-D	BEDDING AND FILLING AROUND PIPE CULVERTS
R-83-C	UTILITY TRENCHES
R-86-F	PRECAST CONCRETE END SECTION FOR PIPE CULVERTS
R-95-G	CULVERT SLOPED END SECTIONS
R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES
R-100-I*	SEEDING AND TREE PLANTING
R-1-G	DRAINAGE STRUCTURES
R-35-E	CONCRETE SHOULDER GUTTER & SPILLWAY

*DENOTES SPECIAL DETAIL INCLUDED IN PROPOSAL

TRAFFIC AND SAFETY STANDARD PLANS NOT TO BE PRINTED

SHEET NO.	TITLE
*WZD-100-A	GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS
*WZD-125-E	TEMPORARY TRAFFIC CONTROL DEVICES
SIGN-120-E	ROADSIDE SIGN LOCATIONS & SUPPORT SPACING
SIGN-200-E	STEEL POSTS
PAVE-900-G	PAVEMENT ARROW AND MESSAGE DETAILS
PAVE-945-D	INTERSECTION, STOP BAR & CROSSWALK MARKINGS
SIGN-740-B	MISCELLANEOUS SIGN CONNECTION DETAILS

AGENCY & UTILITY CONTACTS

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Notes

D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10
Issued		By	Appd	YYYY.MM.DD
File Name: 153906_G-002		JA	CW	MP	2023.11.09
		Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Permit/Seal

811 Know what's below. Call before you dig.

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Client/Project
CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT

Ann Arbor, MI

GENERAL NOTES, LEGEND AND SYMBOLS

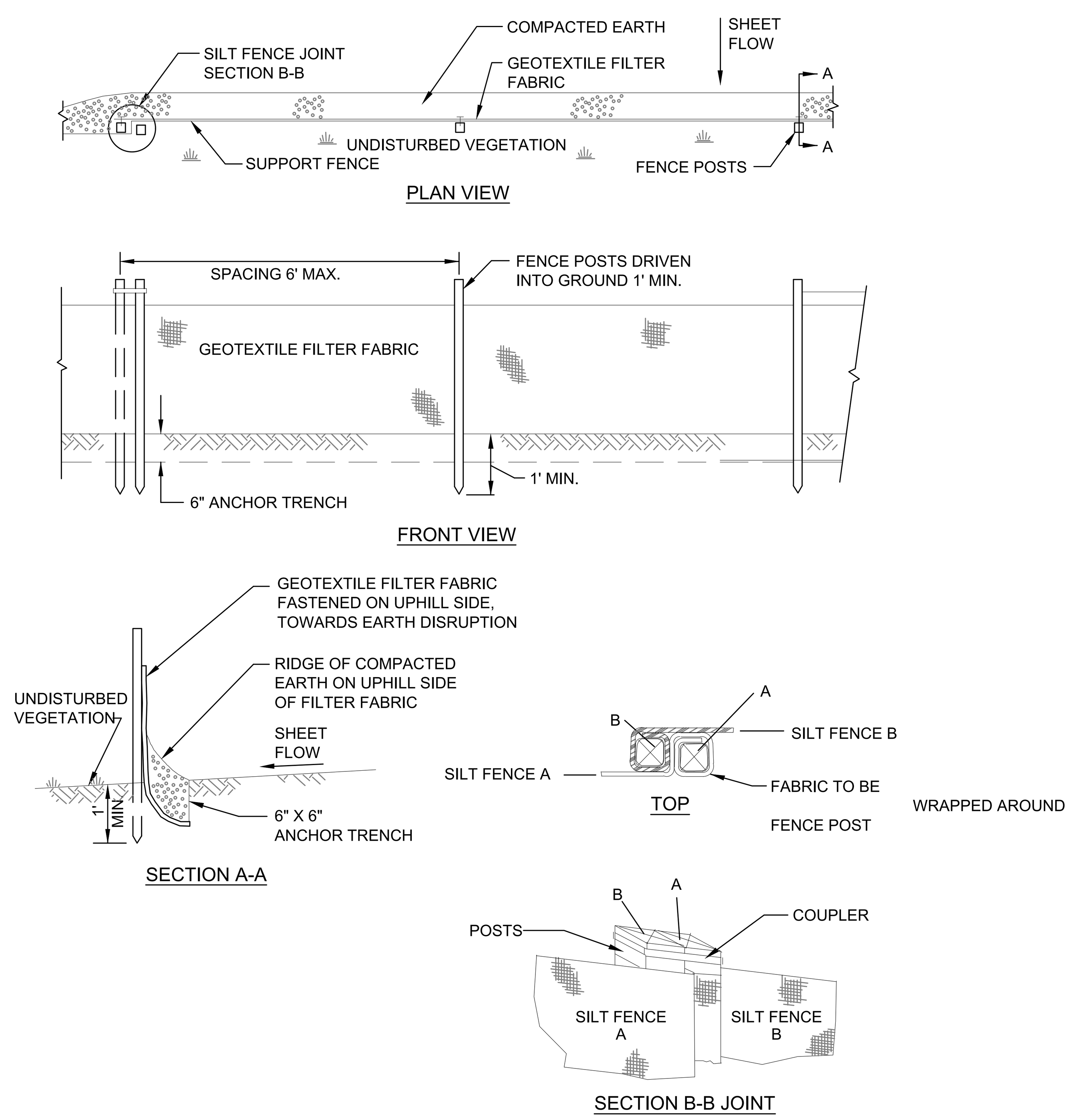
Project No.
2075153906

Scale:

Revision
0

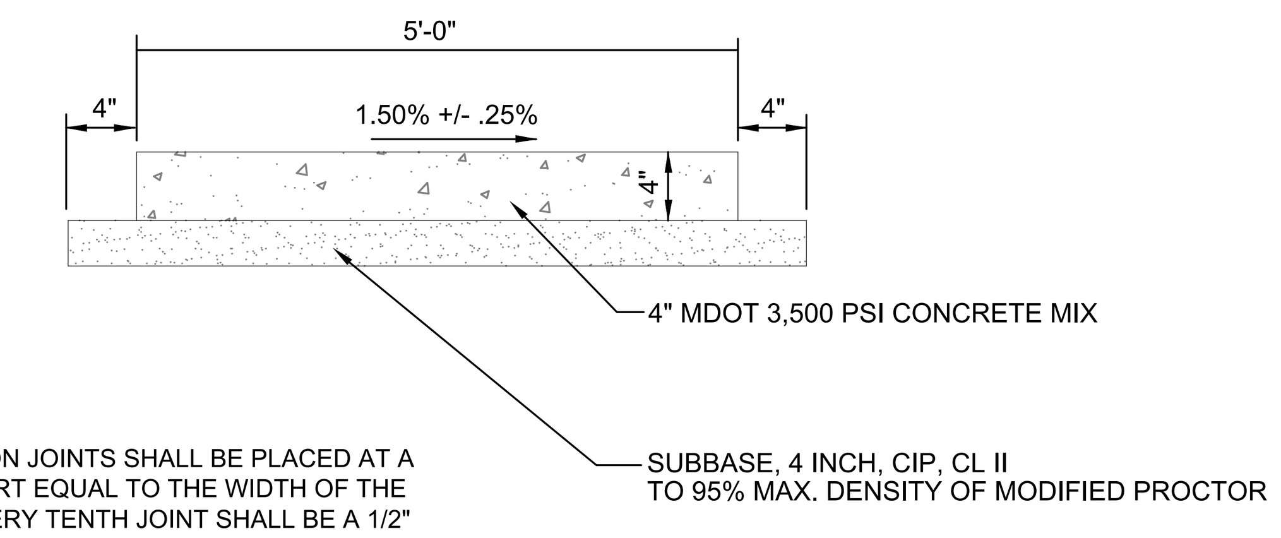
Sheet
02 of 09

Drawing No.
G-002



SILT FENCE

SCALE: NONE



NOTES:

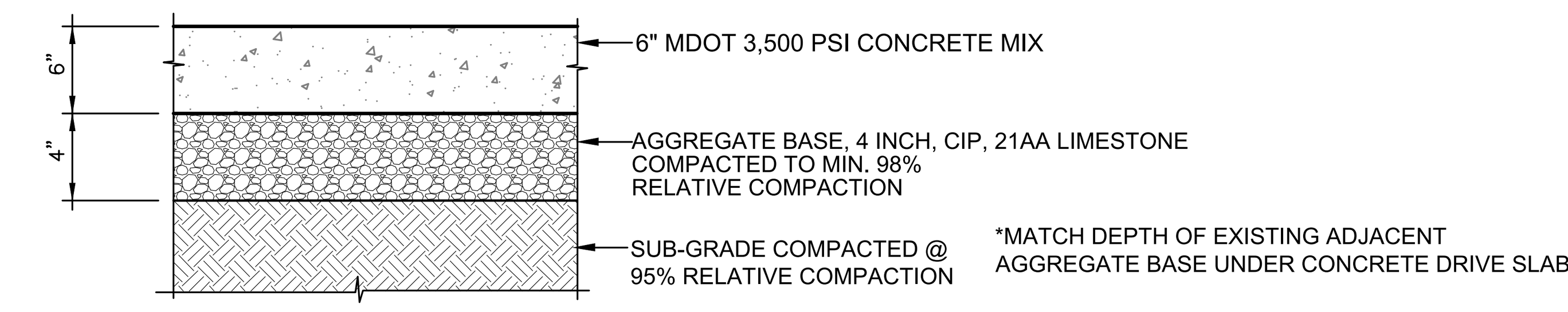
1. CONTRACTION JOINTS SHALL BE PLACED AT A DISTANCE APART EQUAL TO THE WIDTH OF THE SIDEWALK. EVERY TENTH JOINT SHALL BE A 1/2" EXPANSION JOINT.

2. WHERE SIDEWALK CROSSES A DRIVEWAY WALK SHALL BE THICKENED TO 6" THICK CONCRETE SECTION.

3. SUBBASE SHALL BE INCLUDED WITH THE SIDEWALK PAY ITEM.

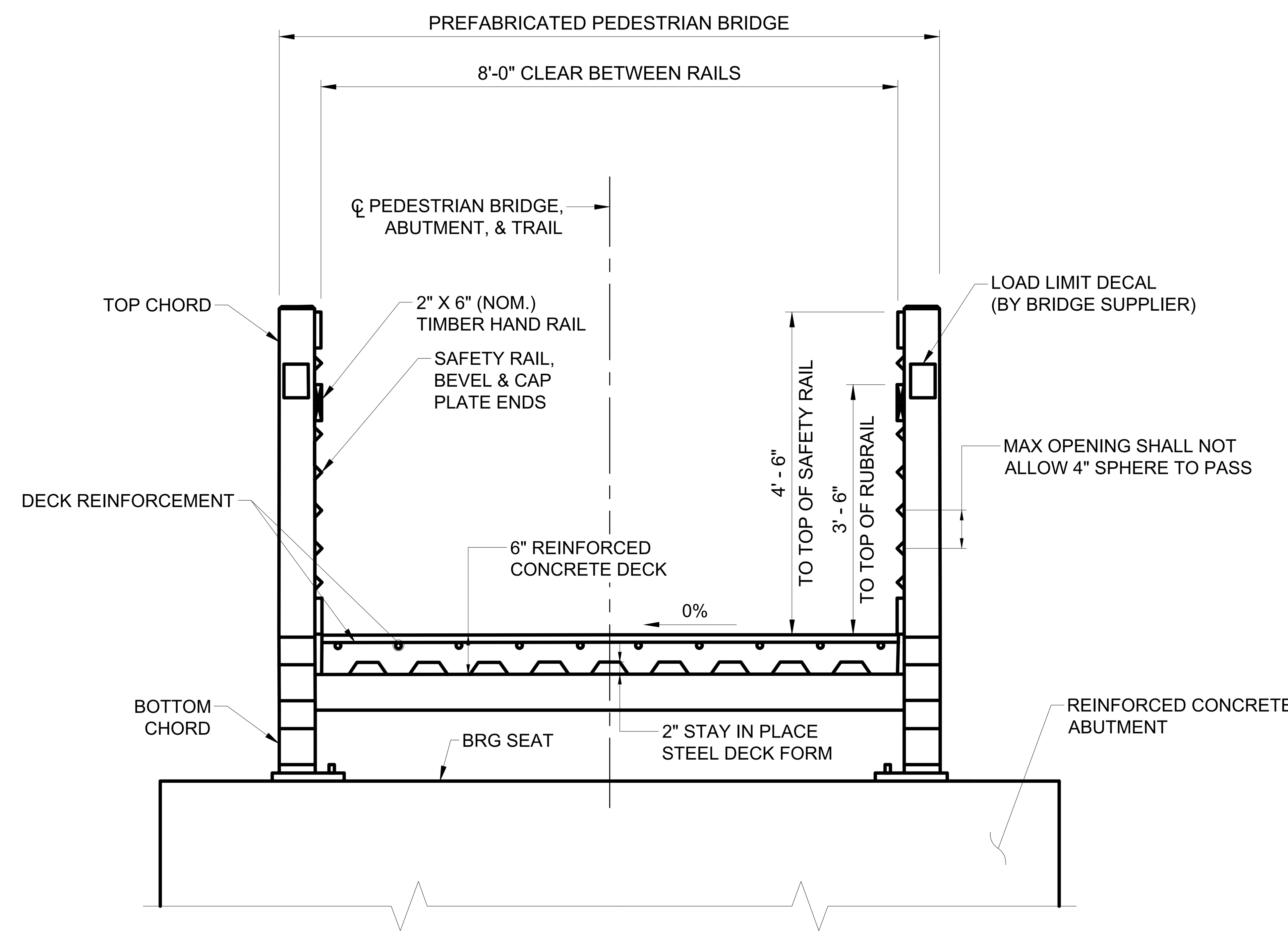
TYPICAL CONCRETE SIDEWALK SECTION [SYLVAN PARK]

SCALE: NONE



6" CONCRETE SIDEWALK [LESLIE PARK]

SCALE: NONE



TYPICAL BRIDGE CROSS SECTION DETAIL

SCALE: NONE

Stantec

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Notes

		By	Appd	YYYY.MM.DD
D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10

Issued

	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD
File Name: 153906_G-003	JA	CW	MP	2023.11.09

Permit/Seal

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CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT

Ann Arbor, MI

SOIL EROSION CONTROL AND CONSTRUCTION DETAILS

Project No. 2075153906

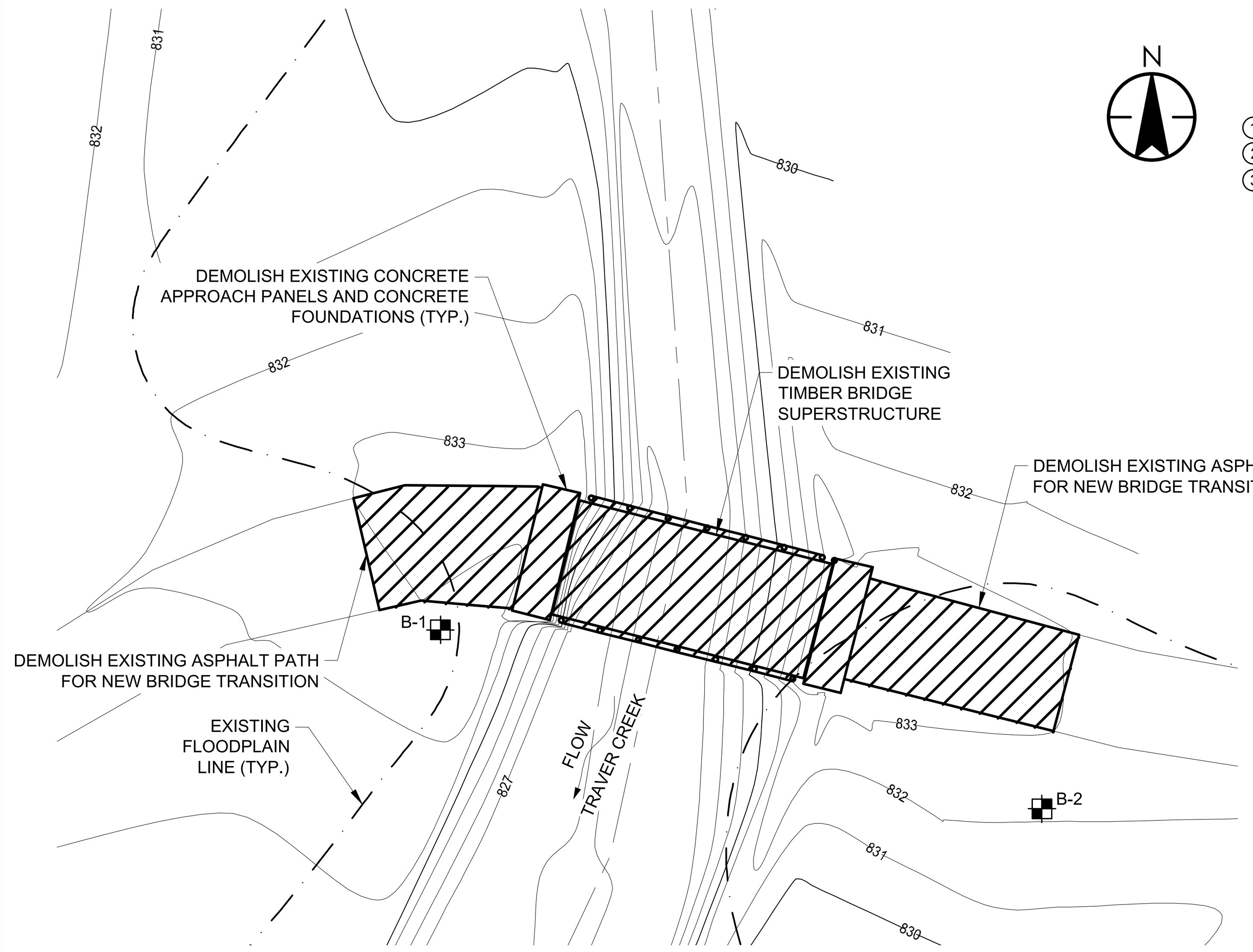
Scale:

Revision 0

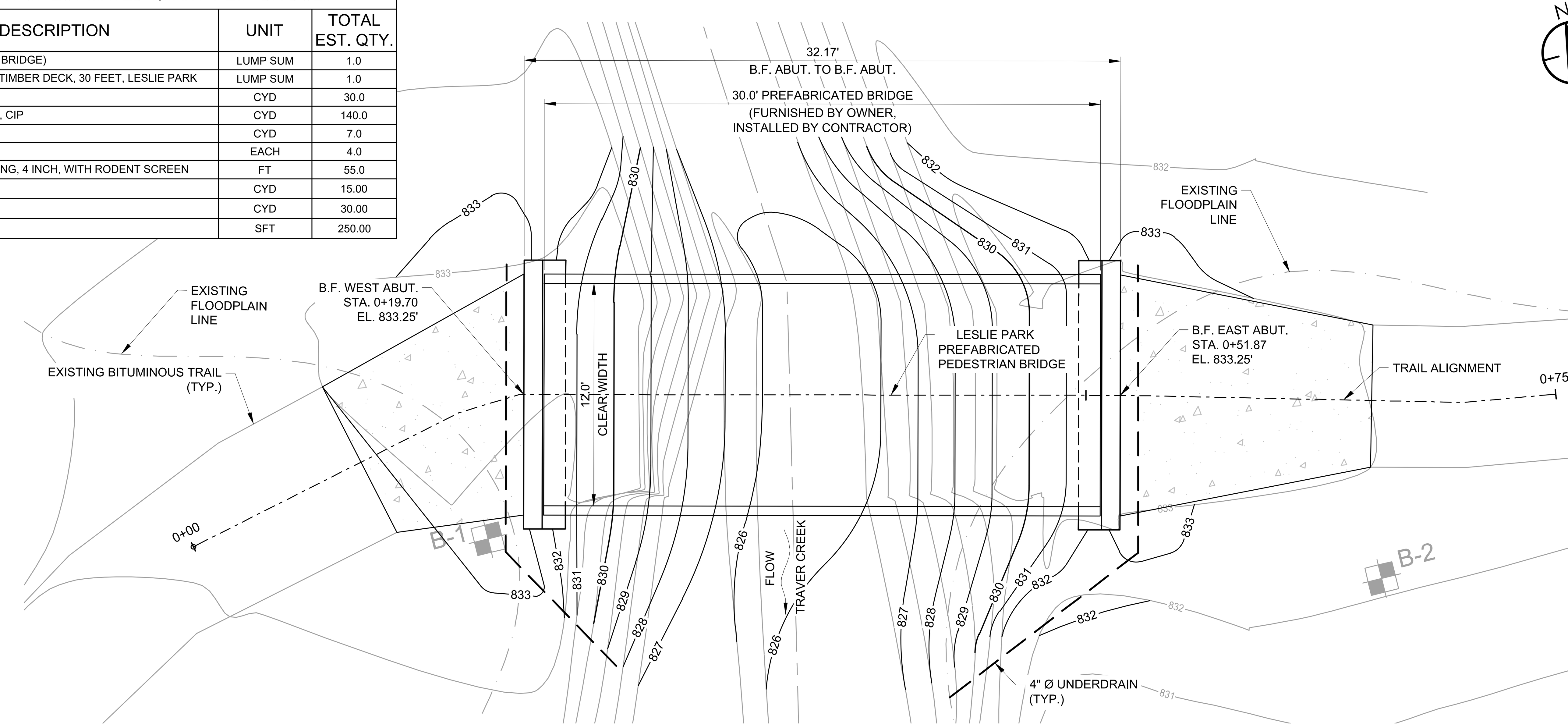
Sheet 03 of 09

Drawing No. **G-003**

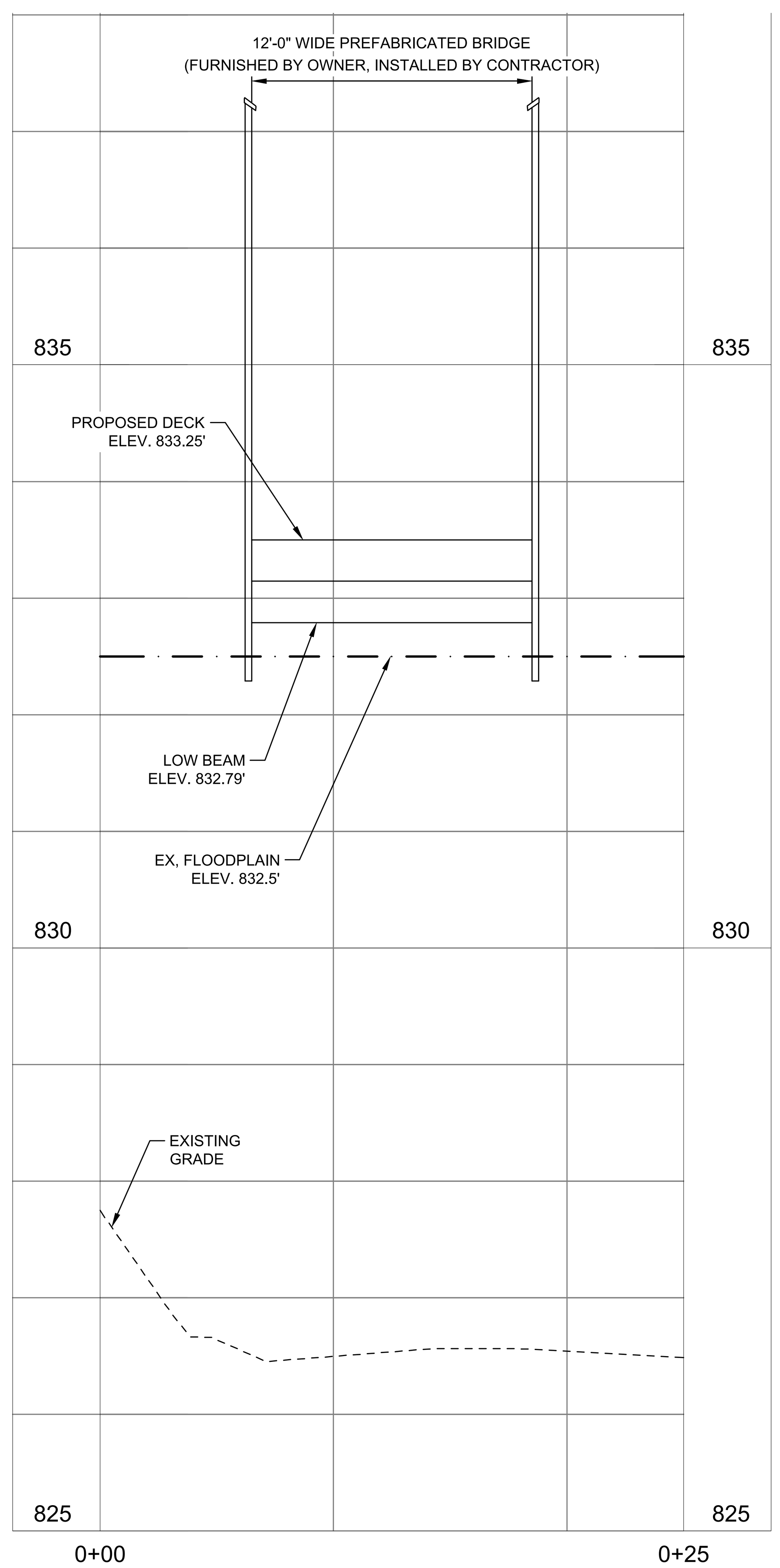
STATEMENT OF ESTIMATED QUANTITIES - BRIDGE			
	ITEM DESCRIPTION	UNIT	TOTAL EST. QTY.
1	STRUCTURES, REM (LESLIE BRIDGE)	LUMP SUM	1.0
2	_PREFABRICATED BRIDGE, TIMBER DECK, 30 FEET, LESLIE PARK	LUMP SUM	1.0
3	SUBSTRUCTURE CONC	CYD	30.0
	EMBANKMENT, STRUCTURE, CIP	CYD	140.0
	AGGREGATE, 6A	CYD	7.0
	UNDERDRAIN, BANK, 4 INCH	EACH	4.0
	UNDERDRAIN, OUTLET ENDING, 4 INCH, WITH RODENT SCREEN	FT	55.0
	RIPRAP, PLAIN	CYD	15.00
	HMA SURFACE, REM	CYD	30.00
	SIDEWALK, CONC, 6 INCH	SFT	250.00



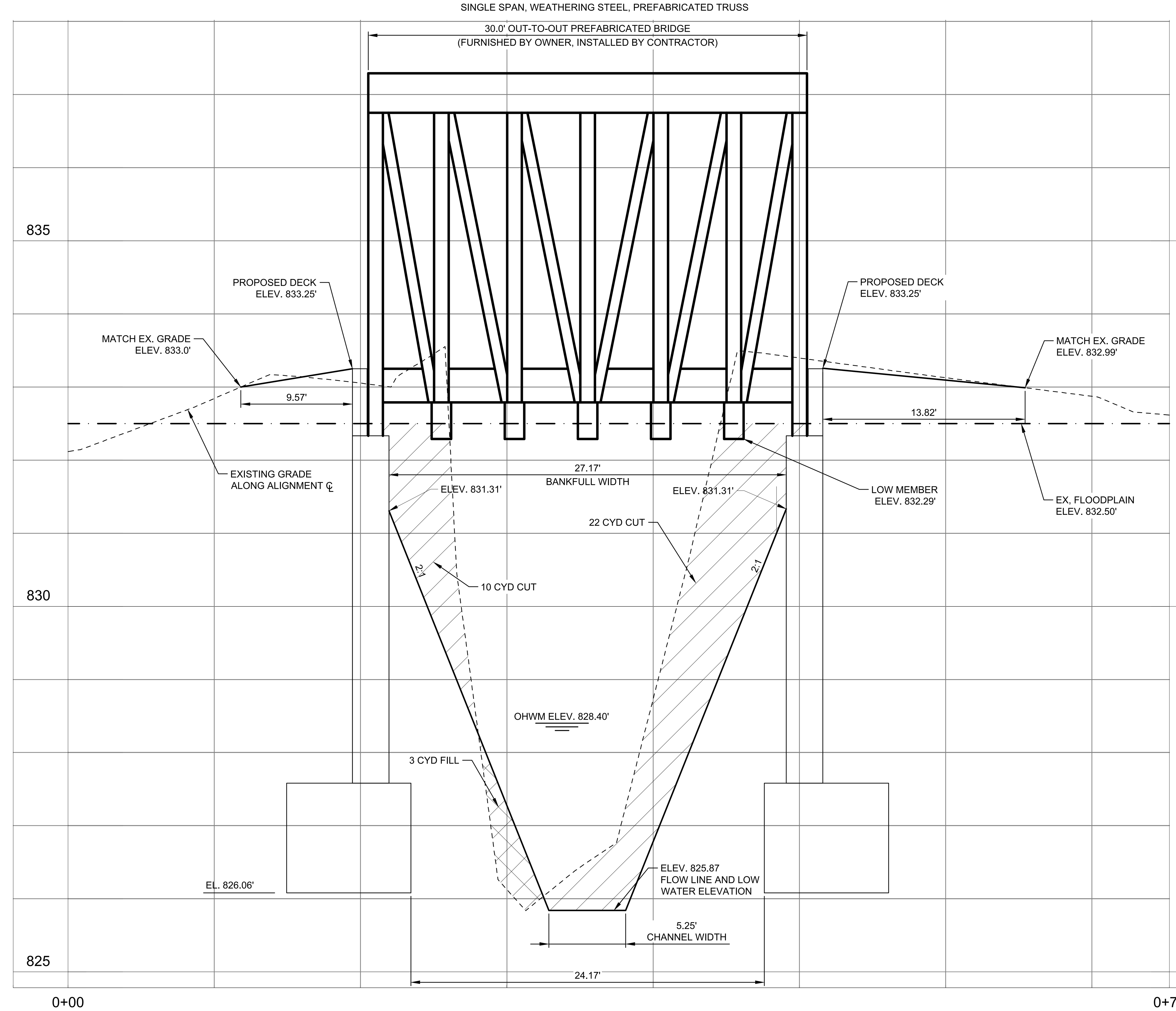
EXISTING CONDITIONS AND DEMOLITION PLAN VIEW
SCALE: 1" = 10'



CONSTRUCTION PLAN VIEW
SCALE: 1" = 5'
SINGLE SPAN, WEATHERING STEEL, PREFABRICATED TRUSS



CONSTRUCTION SECTION VIEW
SCALE: 1" =5' HORZ. / 1" = 1' VERT.



CONSTRUCTION PROFILE VIEW
SCALE: 1" =5' HORZ. / 1" = 1' VERT.

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Ann Arbor MI 48108-2771
Tel: (734) 761-1010
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CONSTRUCTION NOTES:

SEE GENERAL SITE NOTES AND GENERAL BRIDGE NOTES ON SHEET G-002.

DRAWINGS SHALL NOT BE SCALED.

EXCAVATE TO THE BOTTOM ELEVATION SHOWN FOR EACH SUBSTRUCTURE UNIT AS THE LOWER LIMIT AND TO EXISTING GRADE AS THE UPPER LIMIT. THE EXTENT OF THE EXCAVATION INCLUDING BACK SLOPE ANGLE TO BE DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR DEPENDING ON SOIL PROPERTIES AND/OR OSHA SAFETY FACTORS.

VERIFY PREFABRICATED BRIDGE DIMENSIONS PRIOR TO CONSTRUCTING CONCRETE ABUTMENTS.

DRESS SLOPES AND PLACE FILTER MATERIALS AND RIPRAP IN THE APPROXIMATE AREAS SHOWN AS DIRECTED BY THE ENGINEER.

KEY NOTES:

1. ITEM INCLUDES REMOVAL OF EXISTING TIMBER BRIDGE, CONCRETE ABUTMENTS, AND APPROACH PANELS. MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OFF SITE.
2. ITEM INCLUDES ALL LABOR AND MATERIALS TO INSTALL THE PREFABRICATED BRIDGE, BEARINGS, ANCHOR BOLTS, AND INCIDENTALS.

   THE SUPERSTRUCTURE FOR THIS BRIDGE IS AN EXISTING BRIDGE THAT WILL BE REFURBISHED AND REUSED FOR THIS SITE. THE BRIDGE IS LOCATED AT:

   ANN ARBOR FIELD OPERATIONS
   4251 STONE SCHOOL RD
   ANN ARBOR, MI 48108

   THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE CITY, TRANSPORT, AND INSTALLATION OF REFURBISHED BRIDGE. THE CONTRACTOR SHALL VERIFY THE EXISTING BRIDGE DIMENSIONS AND FIT WITH THE PROPOSED ABUTMENTS PRIOR TO CONSTRUCTION OF THE ABUTMENTS. SHOP DRAWINGS FOR REFURBISHED BRIDGE ARE PROVIDED ON SHEETS C-101 AND C-102 FOR REFERENCE.
3. ITEM INCLUDES ALL MATERIALS AND LABOR TO CONSTRUCT THE CAST-IN-PLACE REINFORCED CONCRETE ABUTMENTS, INCLUDING CONCRETE, CURING, REINFORCEMENT, EXCAVATION, DEWATERING, AND SITE PREPARATION.

		By	Appd	YYYY.MM.DD
D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10

Issued

File Name: 153906C-100	JA	CW	MP	2023.11.09
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

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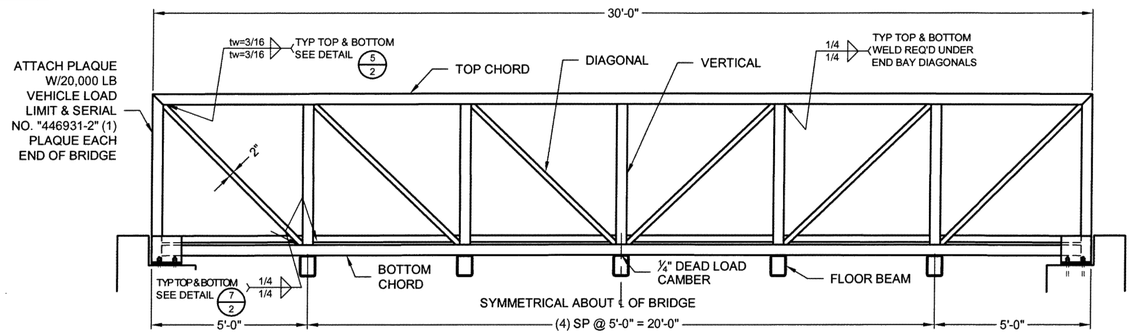
NOTE:
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

Client/Project
CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT
Ann Arbor, MI

LESLIE PARK BRIDGE - EX. COND, DEMO, SESC & CONSTRUCTION PLAN

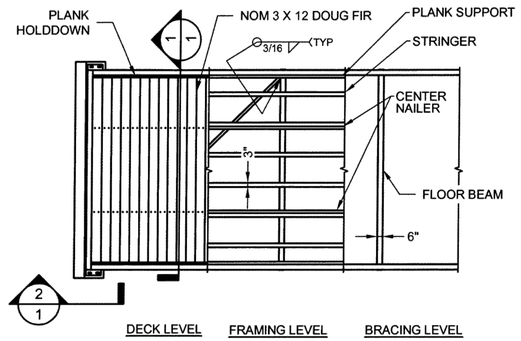
Project No. 2075153906
Scale: AS NOTED
Revision 0
Sheet 04 of 09
Drawing No. C-100



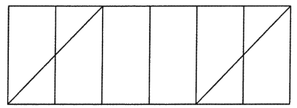
BRIDGE SECTION

SAFETY RAILS AND TOE PLATE NOT SHOWN IN ELEVATION SEE BRIDGE SECTION FOR QUANTITY & LAYOUT

CAUTION:
WE ARE PROVIDING A WOOD DECK ON THIS STRUCTURE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR THE CONTRACT DOCUMENTS. BE AWARE THAT MOST PEDESTRIAN BRIDGE LIABILITY CLAIMS ARE STATISTICALLY SLIP AND FALL CLAIMS. IT IS THE OWNER'S RESPONSIBILITY TO KEEP THE DECK FREE FROM SLIP OR TRIP HAZARDS DUE TO CUPPING, SPLITS, GAPS AND SMOOTH SURFACES.



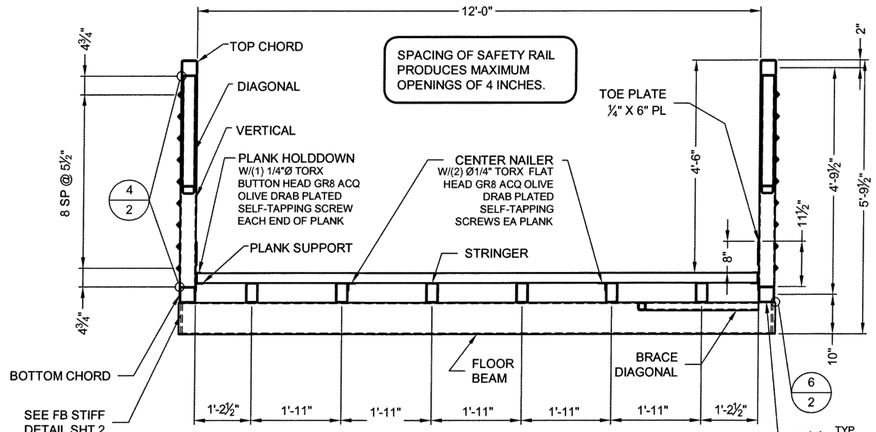
BRIDGE PLAN



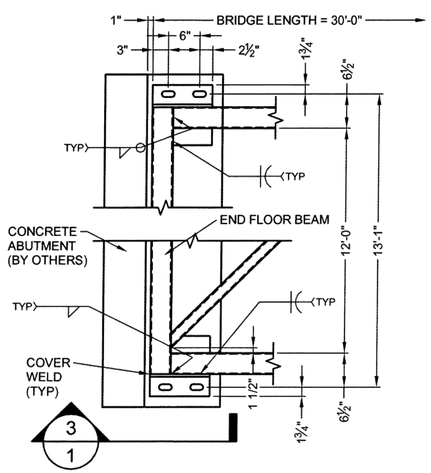
BRACE DIAGONAL LAYOUT

(BRACES RUN OVER 2 BAYS ALL ONE DIRECTION OMIT AT CENTER 2 BAYS)

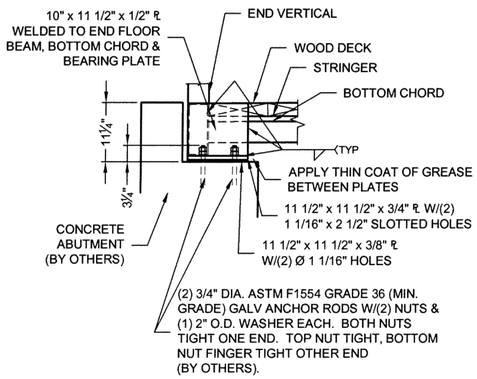
SHOP NOTE:
GRIND THE INSIDE WELD OF VERTICAL TO BOTTOM CHORD TO ACCOMODATE PLANK SUPPORT PLACEMENT.



BRIDGE SECTION



BEARING ASSEMBLY - PLAN



BEARING ASSEMBLY - SIDE VIEW

SCHEDULE OF MEMBERS

TOP CHORD	HSS 4 X 4 X ¼
BOTTOM CHORD	HSS 4 X 4 X ¼
VERTICAL	HSS 4 X 4 X 3/16
END VERTICAL	HSS 4 X 4 X ¼
DIAGONAL	HSS 2 X 2 X 3/16 *
BRACE DIAGONAL	HSS 2 X 2 X 3/16
FLOOR BEAM	HSS 8 X 6 X 3/8
STRINGER	HSS 5 X 3 X 3/16
END FLOOR BEAM	HSS 10 X 4 X ¼
PLANK SUPPORT	∠ 2 X 2 X 3/16
PLANK HOLDDOWN	∠1 1/4 X 1 1/4 X ⅛
CENTER NAILER	∠ 2 X 2 X 3/16
SAFETY RAIL	∠ 1 1/4 X 1 1/4 X ⅛

* USE HSS 3 x 2 x 3/16 END BAY ONLY, TYP. EACH END DOUBLE MITER ALL DIAGONALS

CONTECH
CONTRACT
DRAWING

STATE OF MICHIGAN
ADAM K. HOMELVIG
No. 50212
LICENSED PROFESSIONAL ENGINEER

8 Sept 11

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MARK	DATE	REVISION DESCRIPTION	BY

30'-0" X 12'-0" ARGO DAM HEADRACE IMPROVEMENTS PEDESTRIAN BRIDGE ANN ARBOR, MI

CONTECH CONSTRUCTION PRODUCTS INC.
www.contech-cpi.com
8301 State Highway 29 North, Alexandria, MN 56308
800-338-2047 320-852-7600 320-852-7087 FAX

CONTINENTAL BRIDGE

DATE: 9/8/2011

DESIGNED:	DRAWN:
DAN	MDM
CHECKED:	APPROVED:
DAN	AKH
PROJECT No.: 446931	SEQUENCE No.: 2
SHEET: 1 OF 2	

Stantec

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Tel: (734) 761-1010
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NOTES:

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D	BID SET	CW	MP	2024.08.16
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B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10
Issued		By	Appd	YYYY.MM.DD
File Name: 153906C-101		JA	CW	MP 2023.11.09
		Dwn.	Dsgn.	Chkd. YYYY.MM.DD

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Client/Project
CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT
Ann Arbor, MI

CONTECH EXISTING BRIDGE DETAILS - LESLIE PARK

Project No.
2075153906

Scale:

Revision 0 | Sheet 05 of 09

Drawing No.
C-101

GENERAL NOTES

1. DESIGN STRESSES ARE IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION FOR ALLOWABLE STRESS DESIGN AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).

2. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).

3. BRIDGE DECKING NOMINAL 3-INCH THICK SELECT STRUCTURAL FIR (fb=1400 PSI MIN) TIMBER DECK SHALL BE TREATED WITH ALKALINE COPPER QUATERNARY (ACQ) TO A 0.4 PCF RETENTION OR TO REFUSAL.

4. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED.

5. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE COMPLETE PENETRATION TYPE WELDS ON BOTH SIDES WITH A PARTIAL PENETRATION GROOVE WELD ON THE TOP SIDE AND A FILLET WELD ON THE BOTTOM SIDE.

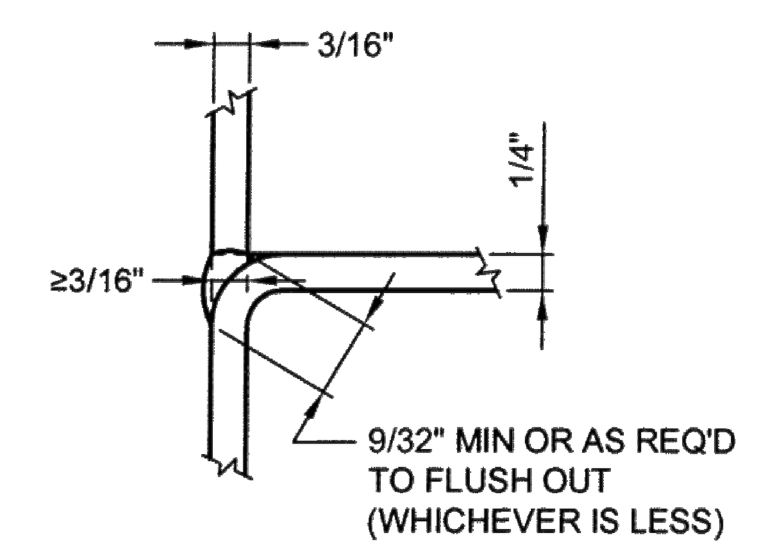
6. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:

   A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
   B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
   C. BOTTOM OF STRINGERS WILL BE STITCH WELDED TO TOP OF FLOOR BEAMS.
   D. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS.

7. BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.

   A. 85 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 20,000 POUND VEHICLE LOAD. THE VEHICLE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 80% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 14'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESS IN EACH MEMBER, INCLUDING DECKING.
   B. 25 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
   C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).

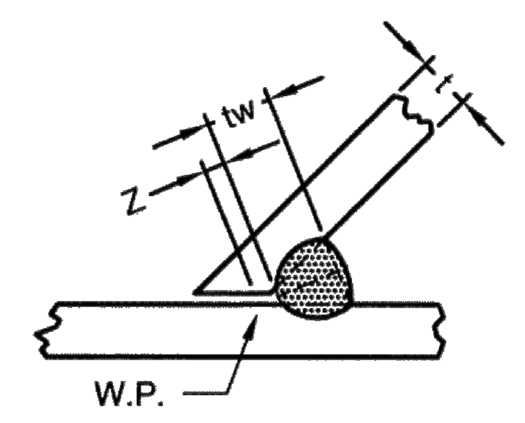
8. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.



MATCHED EDGES OF:
1. VERTICALS TO BOTH CHORDS

TO BE PARTIAL PENETRATION WELDS.

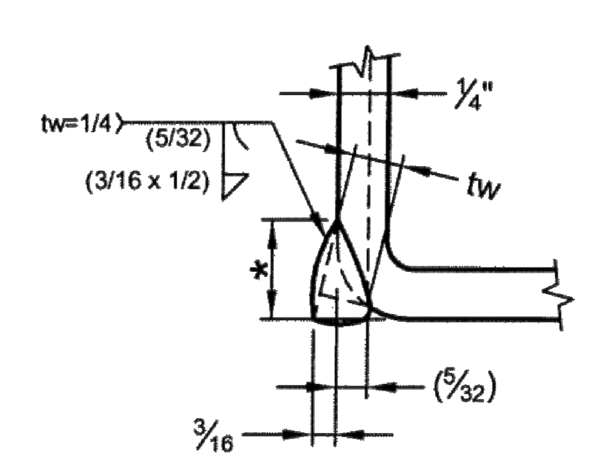
4 / 1 WELD DETAIL



"Z" LOSS DIMENSION TO BE DETERMINED IN ACCORDANCE WITH AWS D1.1 - TABLE 2.8

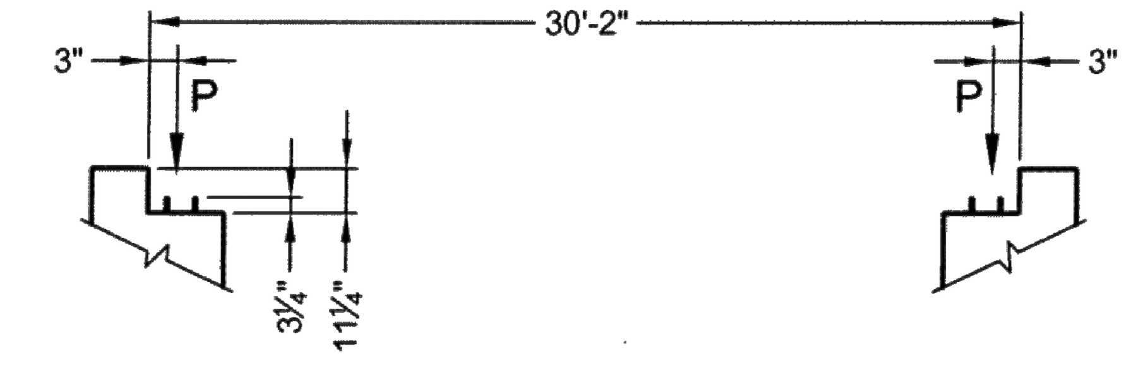
5 / 1 WELD DETAIL

NOTE: IF THE OUTSIDE RADIUS OF THE TUBE IS LESS THAN 1.5 TIMES THE WALL THICKNESS, CONTACT THE ENGINEER FOR APPROPRIATE WELD MODIFICATIONS.



1/4" WALL THICKNESS
* ½" MINIMUM OR AS REQUIRED TO FLUSH OUT RADIUS, WHICHEVER IS GREATER

6 / 1 WELD DETAIL



ANCHOR BOLT ELEVATION

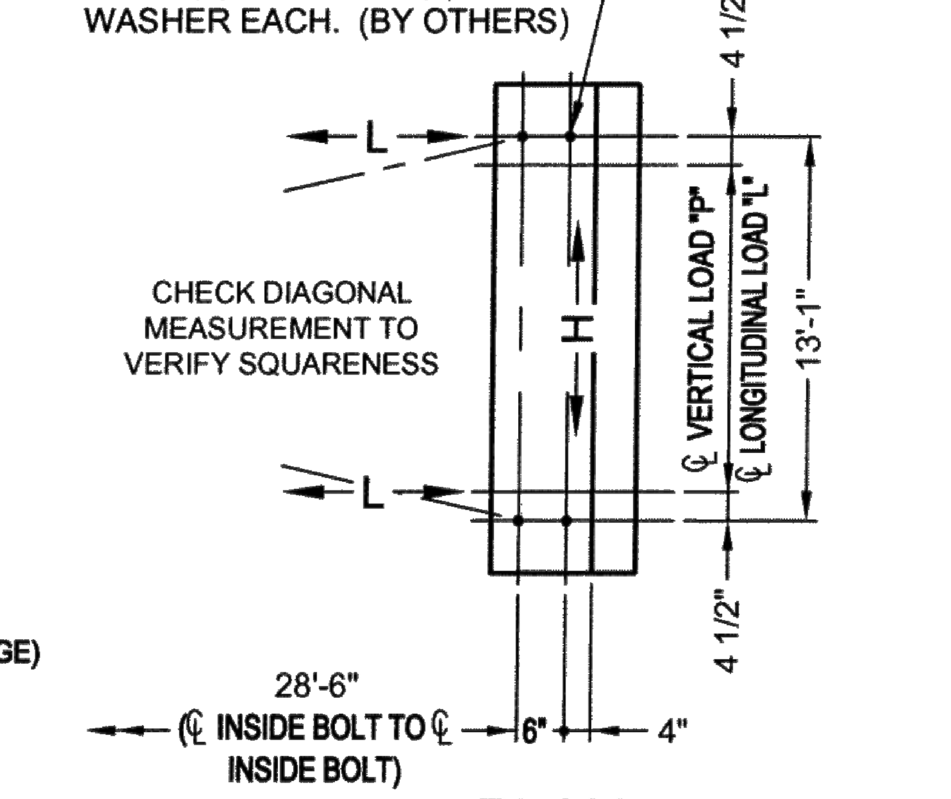
COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS (+ DOWNWARD LOAD / - UPWARD LOAD)	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD	3,025		
UNIFORM LIVE LOAD	7,650		
VEHICLE LOAD	10,000		
WIND UPLIFT 20 PSF WINDWARD / LEEWARD	-2,850 / -950		
WIND	±515	2,175	
THERMAL			1,060

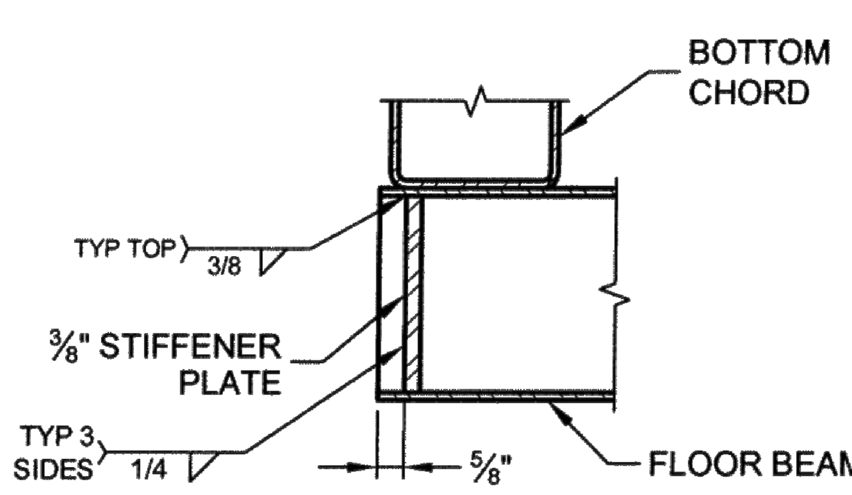
"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
"H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
"L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

BRIDGE LIFTING WEIGHT: 12,100 LBS

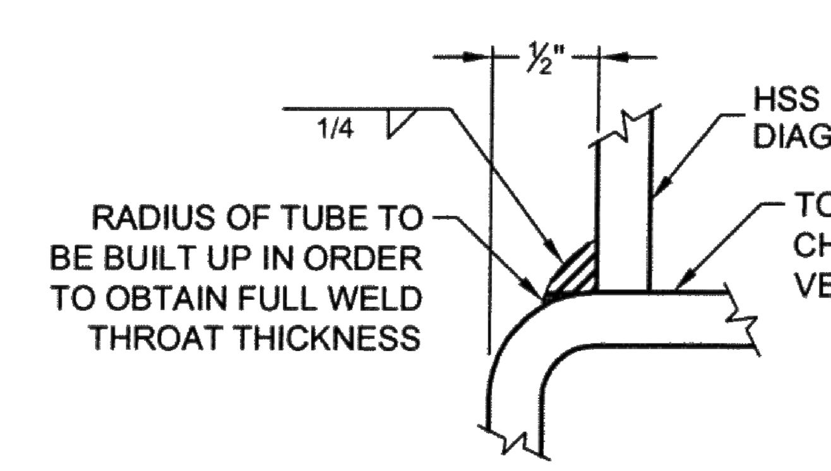
(8) Ø¾" ASTM F1554 GRADE 36 (MIN GRADE) GALV. ANCHOR RODS W/(2) NUTS AND (1) 2" O.D. WASHER EACH. (BY OTHERS)



PLAN



STIFFENER PLATE DETAIL
TYP BOTH ENDS OF EVERY FLOOR BEAM



7 / 1 WELD DETAIL

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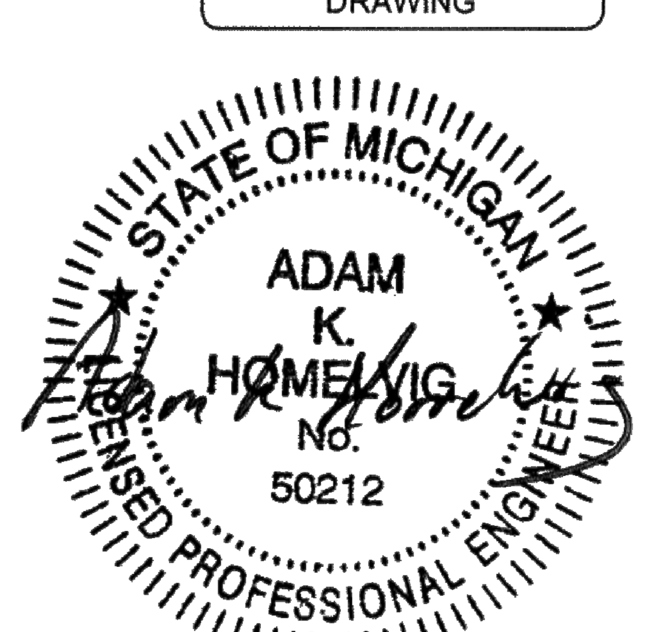
DRAWING



8 Sept 11

REVISION DESCRIPTION			
MARK	DATE	REVISION DESCRIPTION	BY

30'-0" X 12'-0"
ARGO DAM HEADRACE IMPROVEMENTS
PEDESTRIAN BRIDGE
ANN ARBOR, MI

CONTECH CONSTRUCTION PRODUCTS INC.
www.contech-cpi.com
8301 State Highway 29 North, Alexandria, MN 56308
800-328-2047 320-852-7500 320-852-7067 FAX
CONTINENTAL BRIDGE

DATE: 9/8/2011	
DESIGNED: DAN	DRAWN: MDM
CHECKED: DAN	APPROVED: AKH
PROJECT No.: 446931	SEQUENCE No.: 2
SHEET: 2 OF 2	

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Tel: (734) 761-1010
www.stantec.com

NOTES:

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		By	Appd	YYYY.MM.DD
D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10

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File Name: 153906C-102	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD
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Client/Project
CITY OF ANN ARBOR

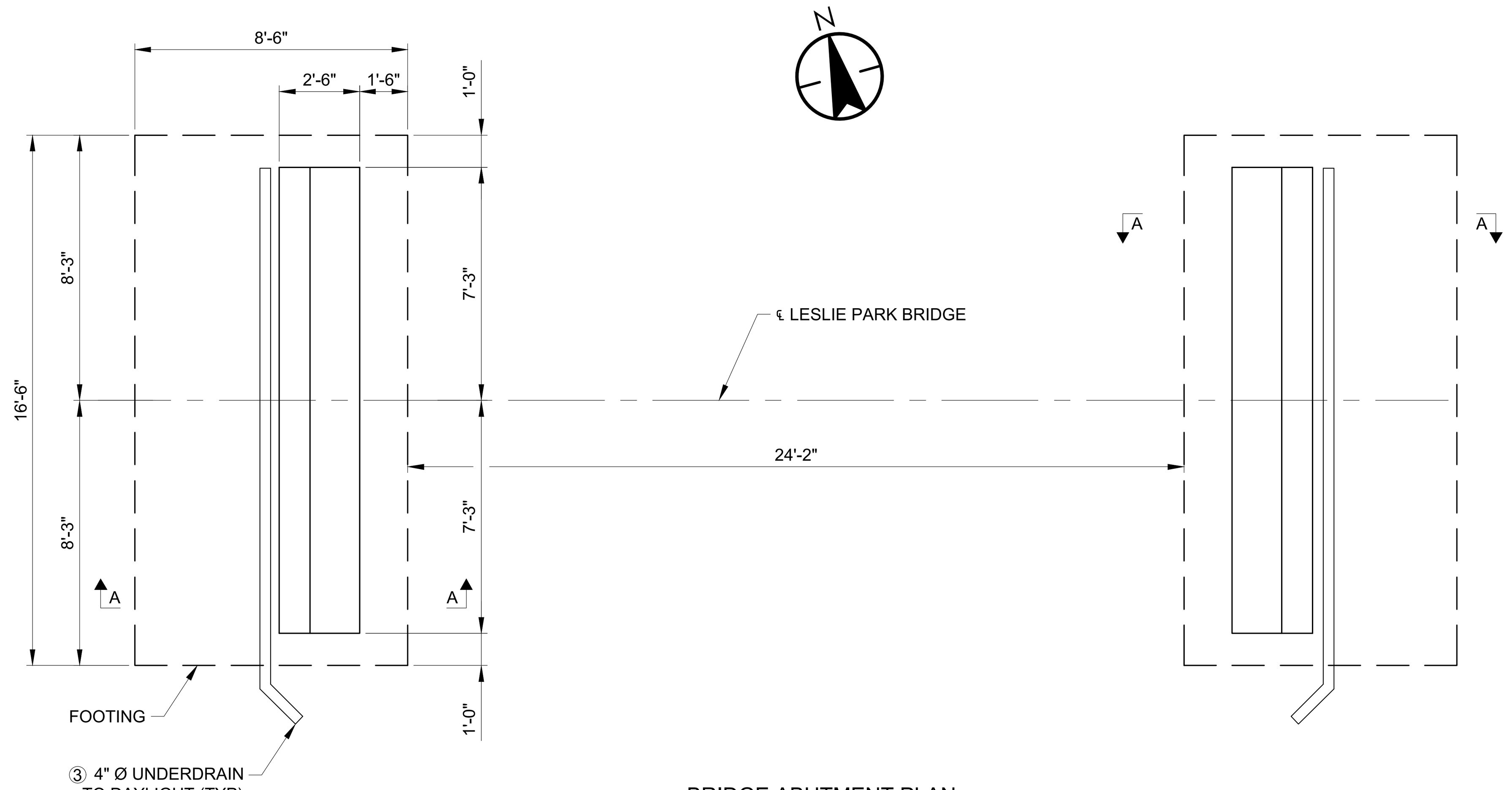
ANN ARBOR PARKS
BRIDGE REPLACEMENT

Ann Arbor, MI

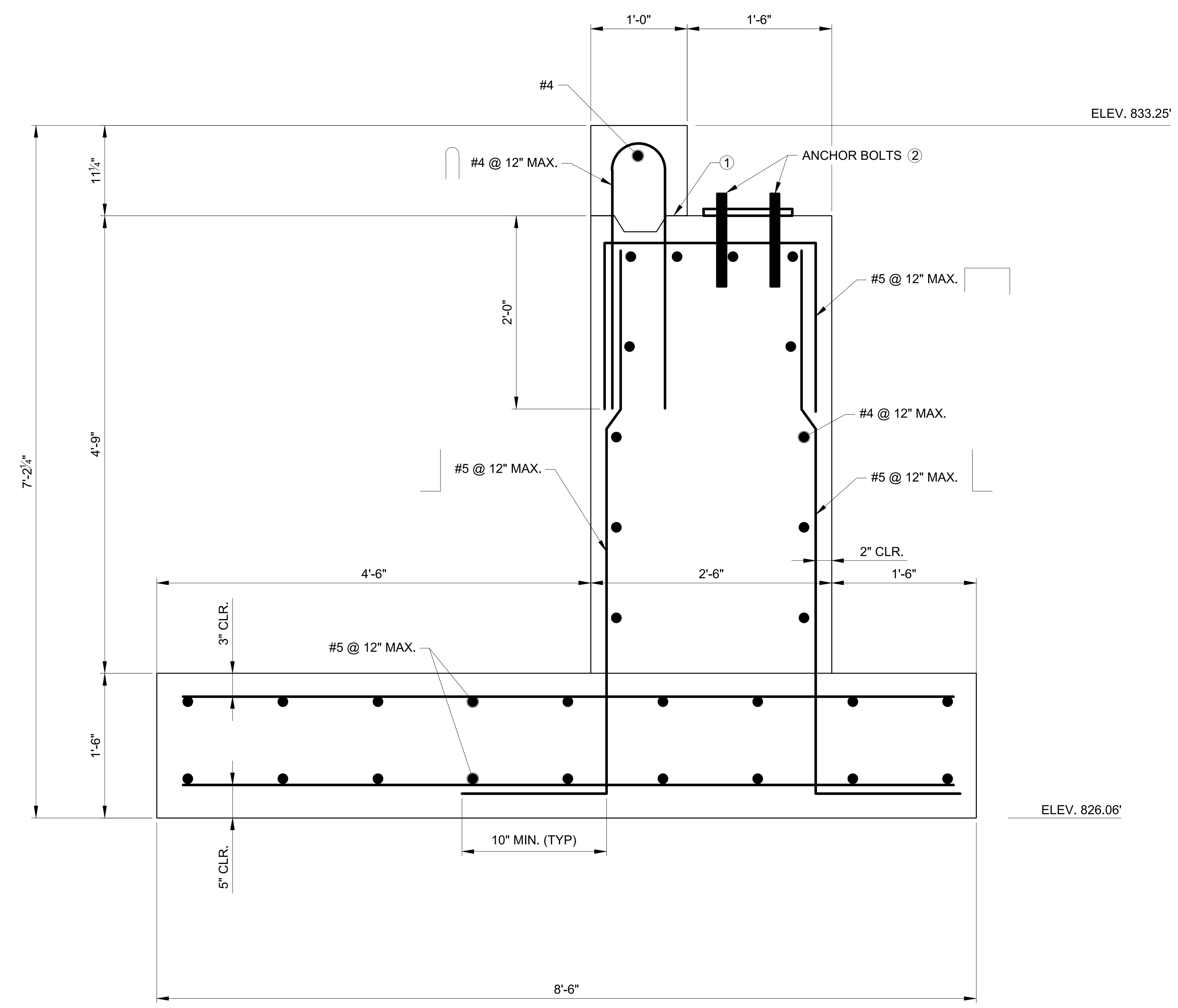
CONTECH EXISTING BRIDGE DETAILS II - LESLIE PARK

Project No. 2075153906
Scale:

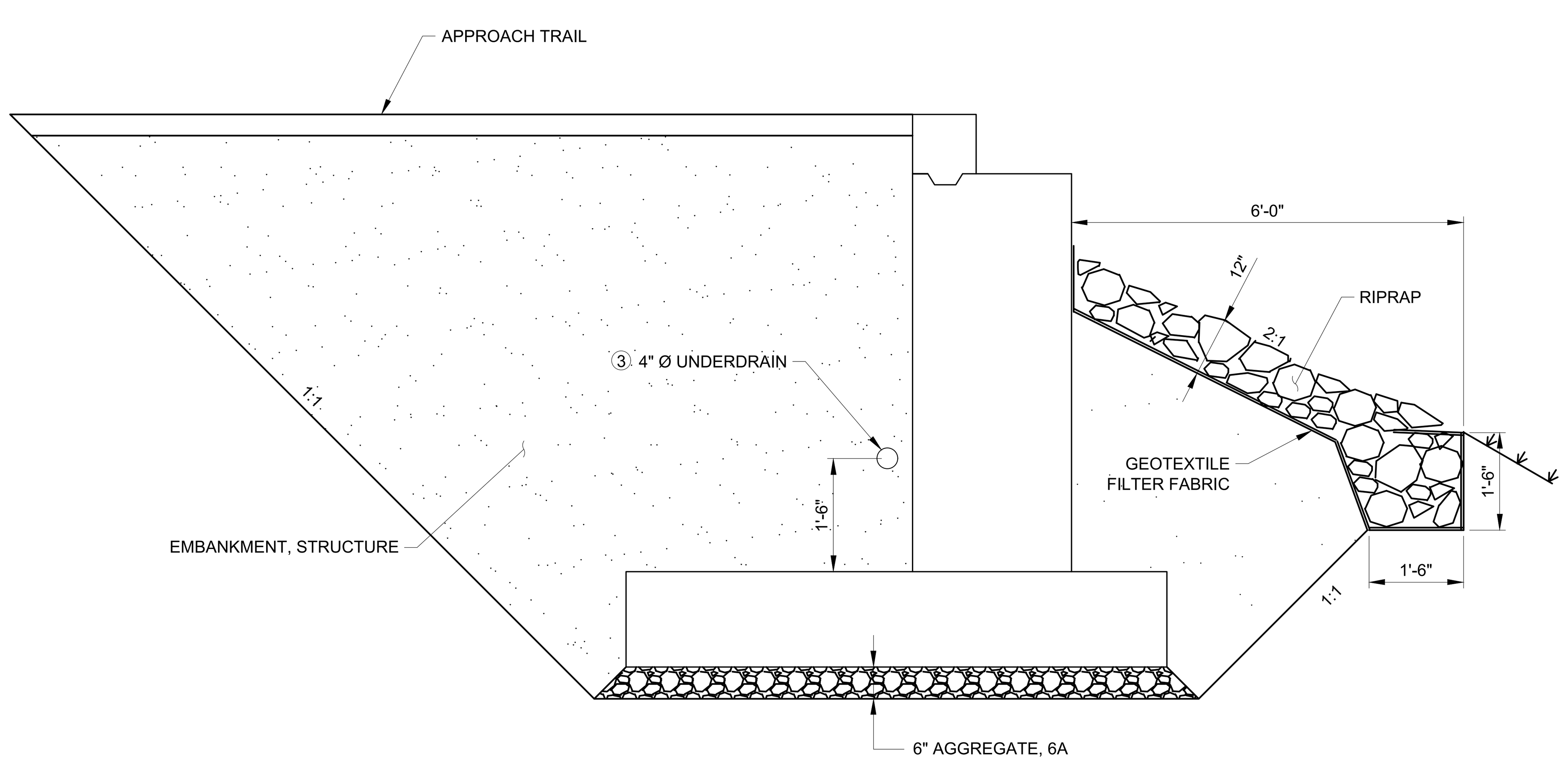
Revision 0
Sheet 06 of 09
Drawing No. C-102



BRIDGE ABUTMENT PLAN



SECTION A-A



COMPLETED SECTION

Stantec

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Ann Arbor MI 48108-2771
Tel: (734) 761-1010
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KEY NOTES:

① 2X6 BEVELED CONSTRUCTION JOINT.

② SEE CONTECH SHOP DRAWINGS ON SHEETS C-101 AND C-102 FOR ANCHOR BOLT LOCATIONS. PROVIDE A MINIMUM CLEARANCE OF 2" BETWEEN ABUTMENT REINFORCEMENT AND ANCHOR BOLTS.

③ PROVIDE $\frac{1}{8}$" PER FOOT MINIMUM RUNNING SLOPE TO DAYLIGHT. CAP WITH RODENT SCREEN.

ABUTMENT NOTES:

VERIFY ABUTMENT LAYOUT, INCLUDING ANCHOR BOLT LOCATIONS, WITH BRIDGE SUPPLIER PRIOR TO CONSTRUCTION.

PLACE CONCRETE WITHOUT CONSTRUCTION JOINTS EXCEPT AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.

FORM ALL EXPOSED CONCRETE EDGES WITH A $\frac{1}{2}$" OR $\frac{3}{4}$" CHAMFER UNLESS OTHERWISE NOTED.

PLACE REINFORCEMENT WITH A MINIMUM 2" CLEARANCE TO FACE OF CONCRETE UNLESS SHOWN OTHERWISE.

BACKFILL ABUTMENT WITH EQUAL LIFTS ON EACH SIDE.

THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS AND BAR LISTS OF ALL REINFORCEMENT MATERIALS TO BE FURNISHED AND INSTALLED. SHOW BAR SIZES, SPACINGS, LOCATIONS, BENDING DETAILS, AND QUANTITIES REQUIRED.

	Issued	By	Appd	YYYY.MM.DD
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	JA	CW	MP	2023.11.09

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Client/Project
CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT

Ann Arbor, MI

LESLIE PARK BRIDGE
ABUTMENT DETAILS

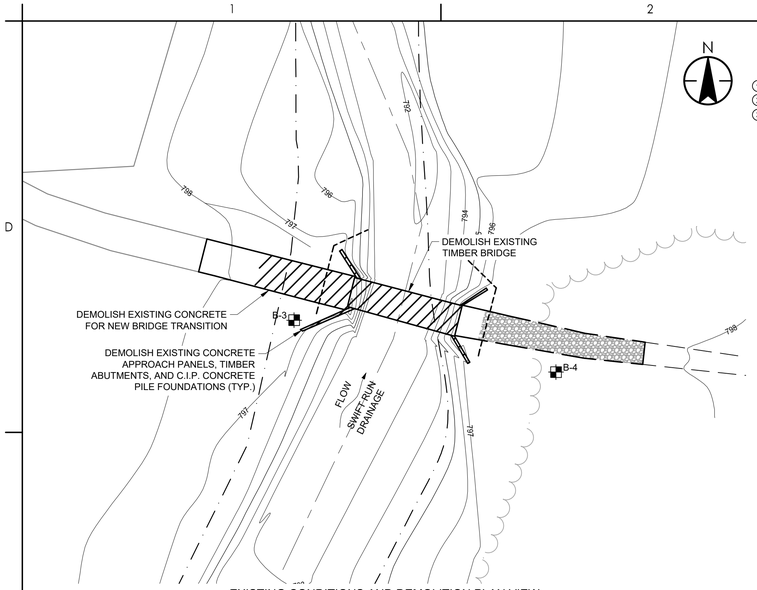
Project No. 2075153906

Scale:

Revision 0

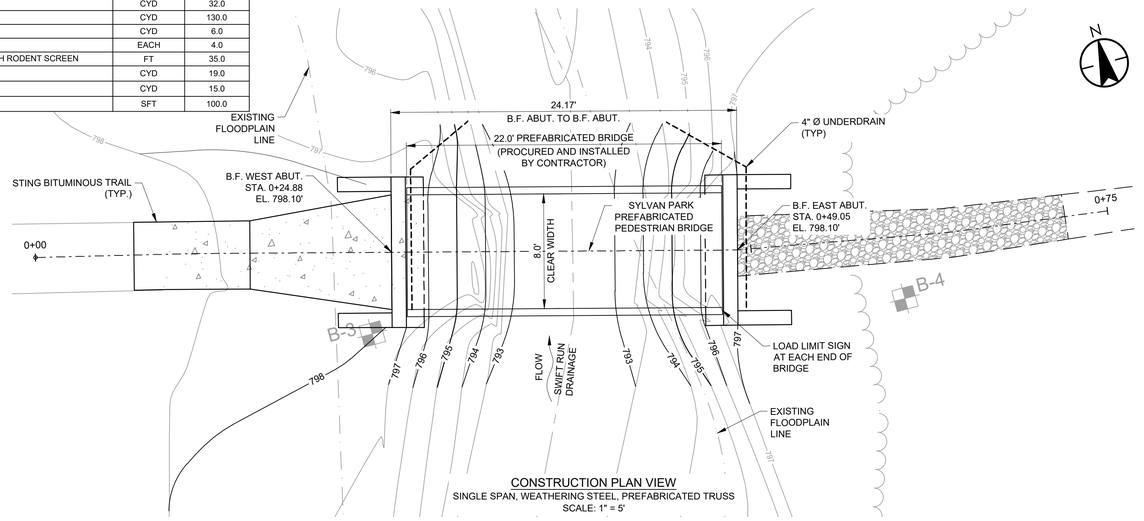
Sheet 07 of 09

Drawing No. C-103

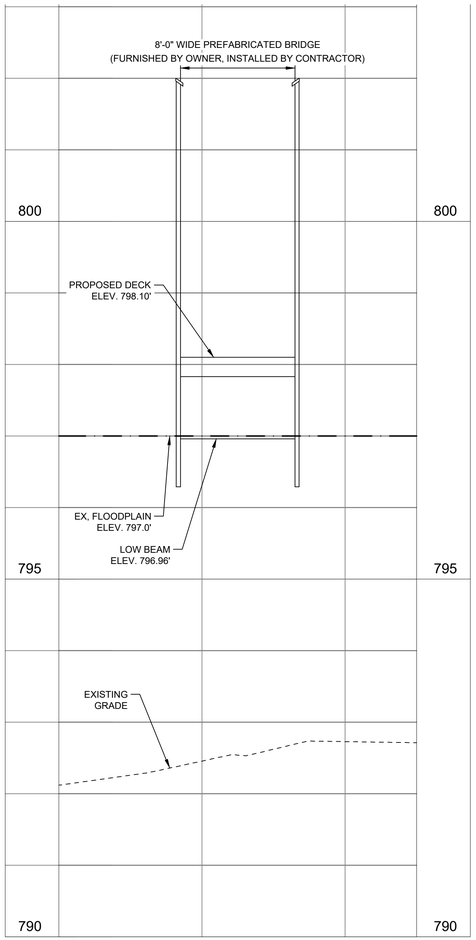


EXISTING CONDITIONS AND DEMOLITION PLAN VIEW
SCALE: 1" = 10'

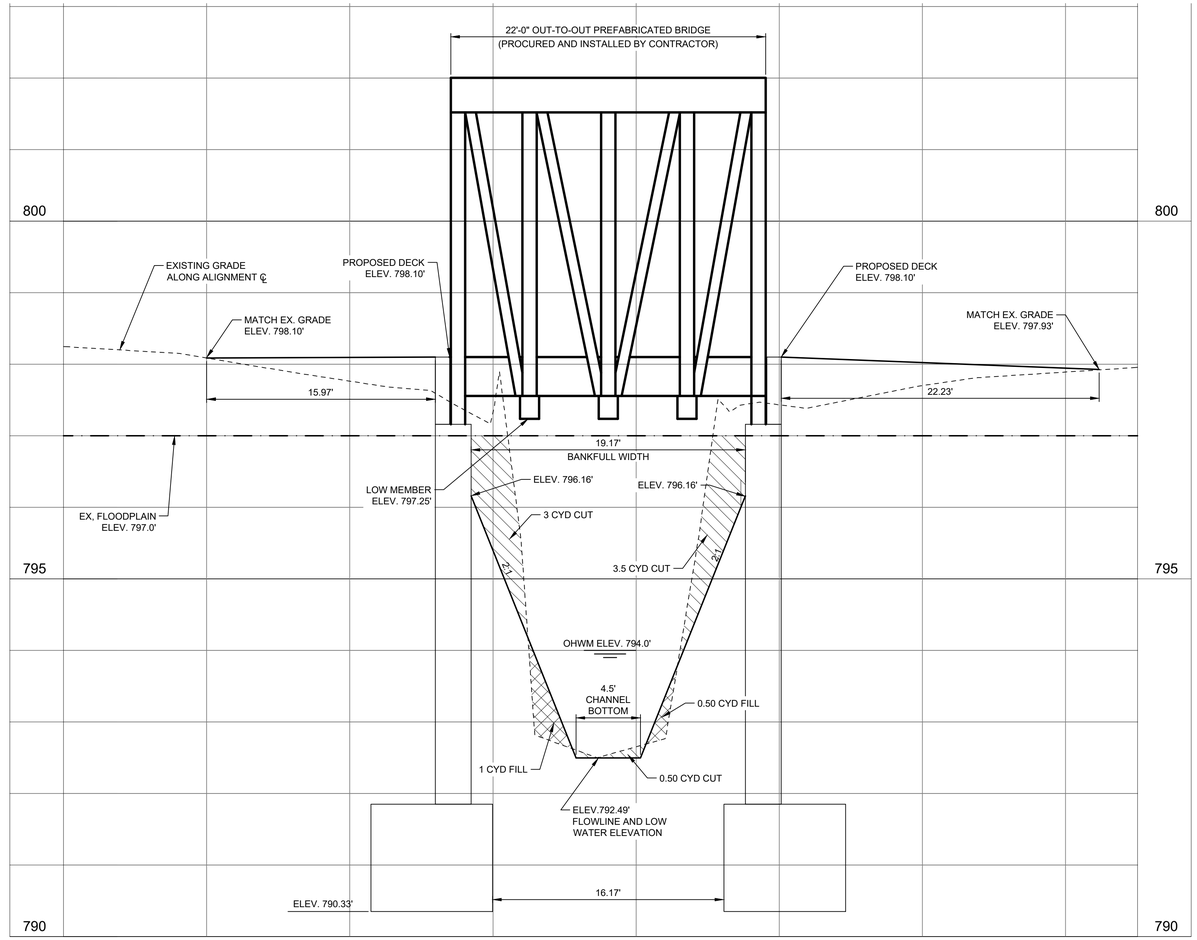
STATEMENT OF ESTIMATED QUANTITIES - BRIDGE		
ITEM DESCRIPTION	UNIT	TOTAL EST. QTY.
① STRUCTURES, REM (SYLVAN BRIDGE)	LUMP SUM	1.0
② _PREFABRICATED BRIDGE, CONC DECK, 22 FEET, SYLVAN PARK	LUMP SUM	1.0
③ SUBSTRUCTURE CONC	CYD	32.0
EMBANKMENT, STRUCTURE, CIP	CYD	130.0
AGGREGATE, 6A	CYD	6.0
UNDERDRAIN, BANK, 4 INCH	EACH	4.0
UNDERDRAIN, OUTLET ENDING, 4 INCH, WITH RODENT SCREEN	FT	35.0
RIPRAP, PLAIN	CYD	19.0
SIDEWALK, REM	CYD	15.0
SIDEWALK, CONC, 4 INCH	SFT	100.0



CONSTRUCTION PLAN VIEW
SINGLE SPAN, WEATHERING STEEL, PREFABRICATED TRUSS
SCALE: 1" = 5'



CONSTRUCTION SECTION VIEW
SCALE: 1" =5' HORZ. / 1" = 1' VERT.



CONSTRUCTION PROFILE VIEW
SCALE: 1" =5' HORZ. / 1" = 1' VERT.

Stantec

Stantec Consulting Michigan Inc.
3754 Ranchero Drive
Ann Arbor MI 48108-2771
Tel: (734) 761-1010
www.stantec.com

CONSTRUCTION NOTES:

SEE GENERAL SITE NOTES AND GENERAL BRIDGE NOTES ON SHEET G-002.

DRAWINGS SHALL NOT BE SCALED.

EXCAVATE TO THE BOTTOM ELEVATION SHOWN FOR EACH SUBSTRUCTURE UNIT AS THE LOWER LIMIT AND TO EXISTING GRADE AS THE UPPER LIMIT. THE EXTENT OF THE EXCAVATION INCLUDING BACK SLOPE ANGLE TO BE DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR DEPENDING ON SOIL PROPERTIES AND/OR OSHA SAFETY FACTORS.

VERIFY PREFABRICATED BRIDGE DIMENSIONS PRIOR TO CONSTRUCTING CONCRETE ABUTMENTS.

DRESS SLOPES AND PLACE FILTER MATERIALS AND RIPRAP IN THE APPROXIMATE AREAS SHOWN AS DIRECTED BY THE ENGINEER.

KEY NOTES:

1. ITEM INCLUDES REMOVAL OF EXISTING TIMBER BRIDGE, ABUTMENTS, SIDEWALK, AND CONCRETE PILES. REMOVE CONCRETE PILES TO A DEPTH OF 2 FEET BELOW FINISHED GRADE/EXCAVATION LIMITS. MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OFF SITE.
2. ITEM INCLUDES ALL DESIGN, MATERIALS, AND LABOR TO PROVIDE AND INSTALL THE PREFABRICATED BRIDGE, BEARINGS AND ANCHOR BOLTS, REINFORCED CONCRETE DECK, AND INCIDENTALS.
3. ITEM INCLUDES ALL MATERIALS AND LABOR TO CONSTRUCT THE CAST-IN-PLACE REINFORCED CONCRETE ABUTMENTS, INCLUDING CONCRETE, REINFORCEMENT, EXCAVATION, DEWATERING, AND SITE PREPARATION.

D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10
Issued		By	Appd	YYYY.MM.DD
File Name: 153906C-104		JA	CW	MP 2023.11.09
		Dwn.	Dsgn.	Chkd. YYYY.MM.DD

Permit/Seal

811 Know what's below. Call before you dig.

NOTE:
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

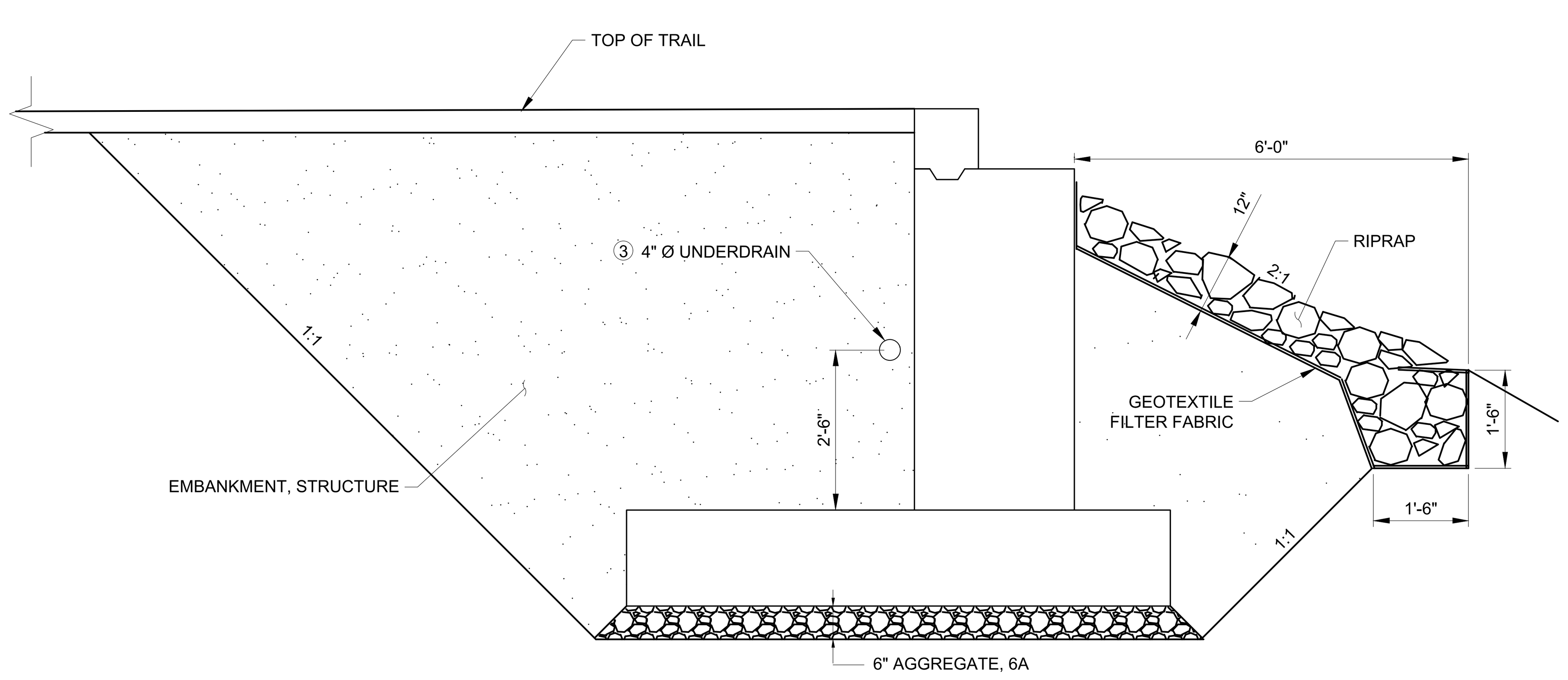
Client/Project
CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT

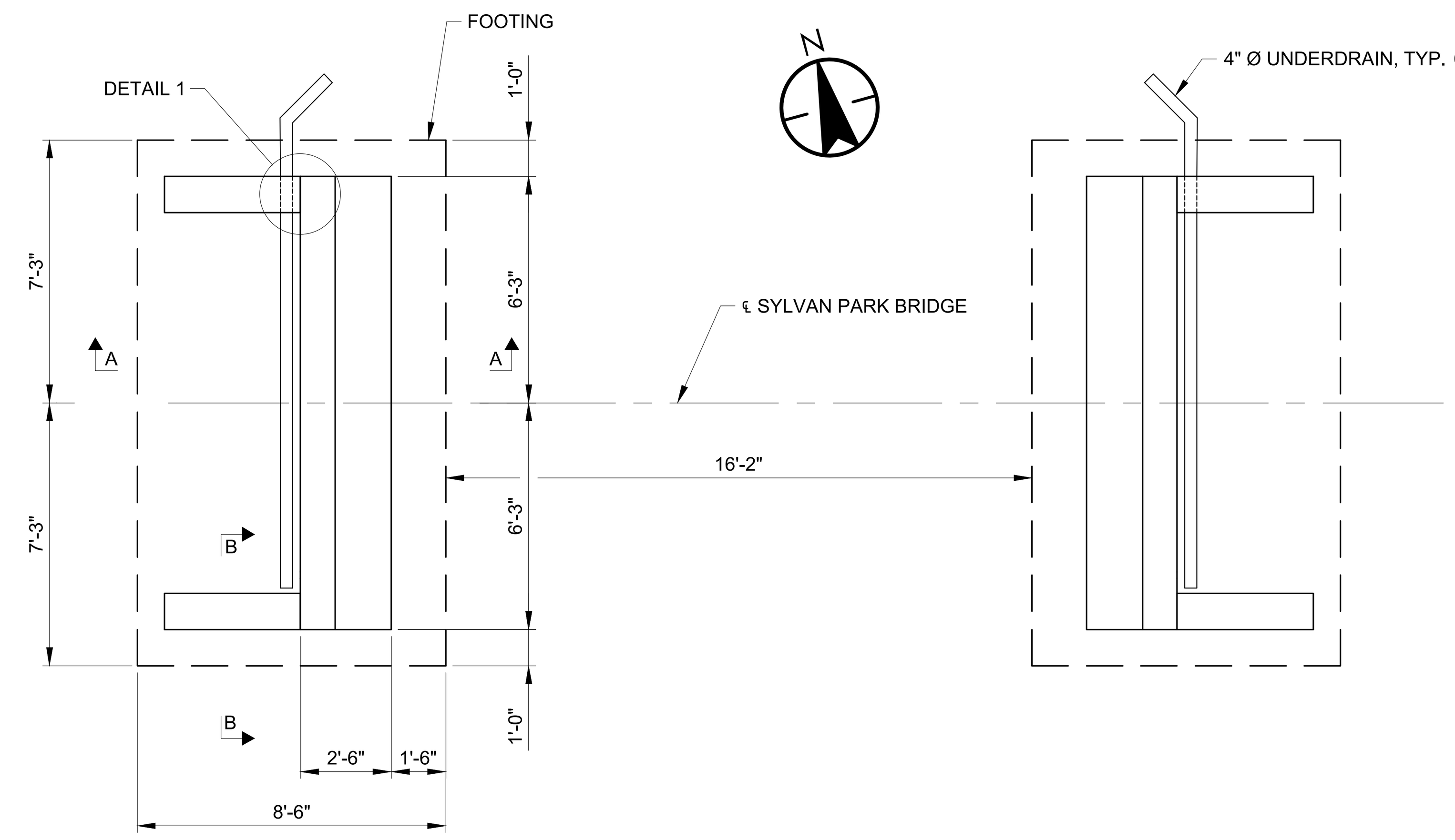
Ann Arbor, MI

SYLVAN PARK BRIDGE - EX. COND, DEMO SESC & CONSTRUCTION PLAN

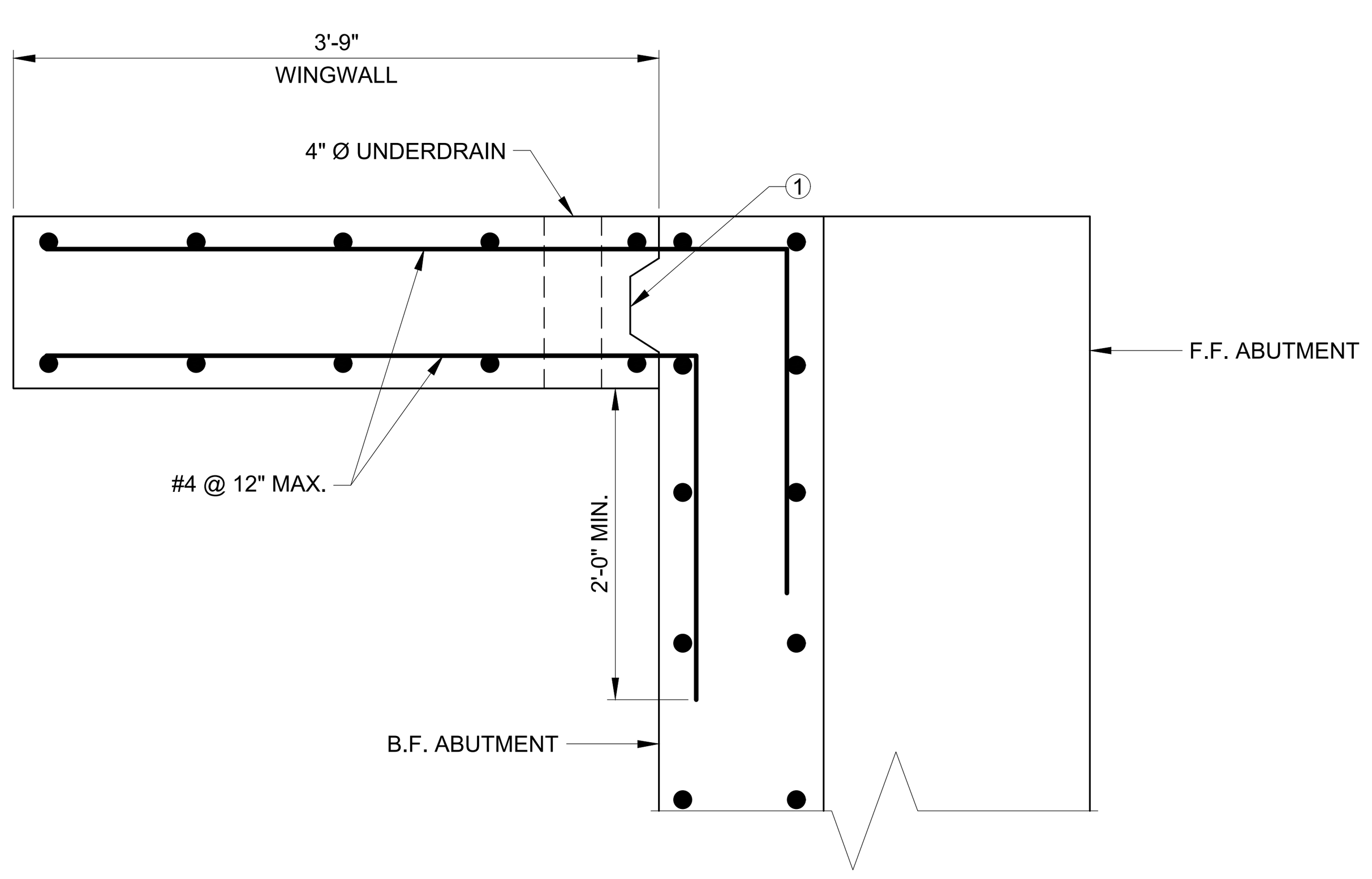
Project No. 2075153906
Scale: AS NOTED
Revision 0
Sheet 08 of 09
Drawing No. **C-104**



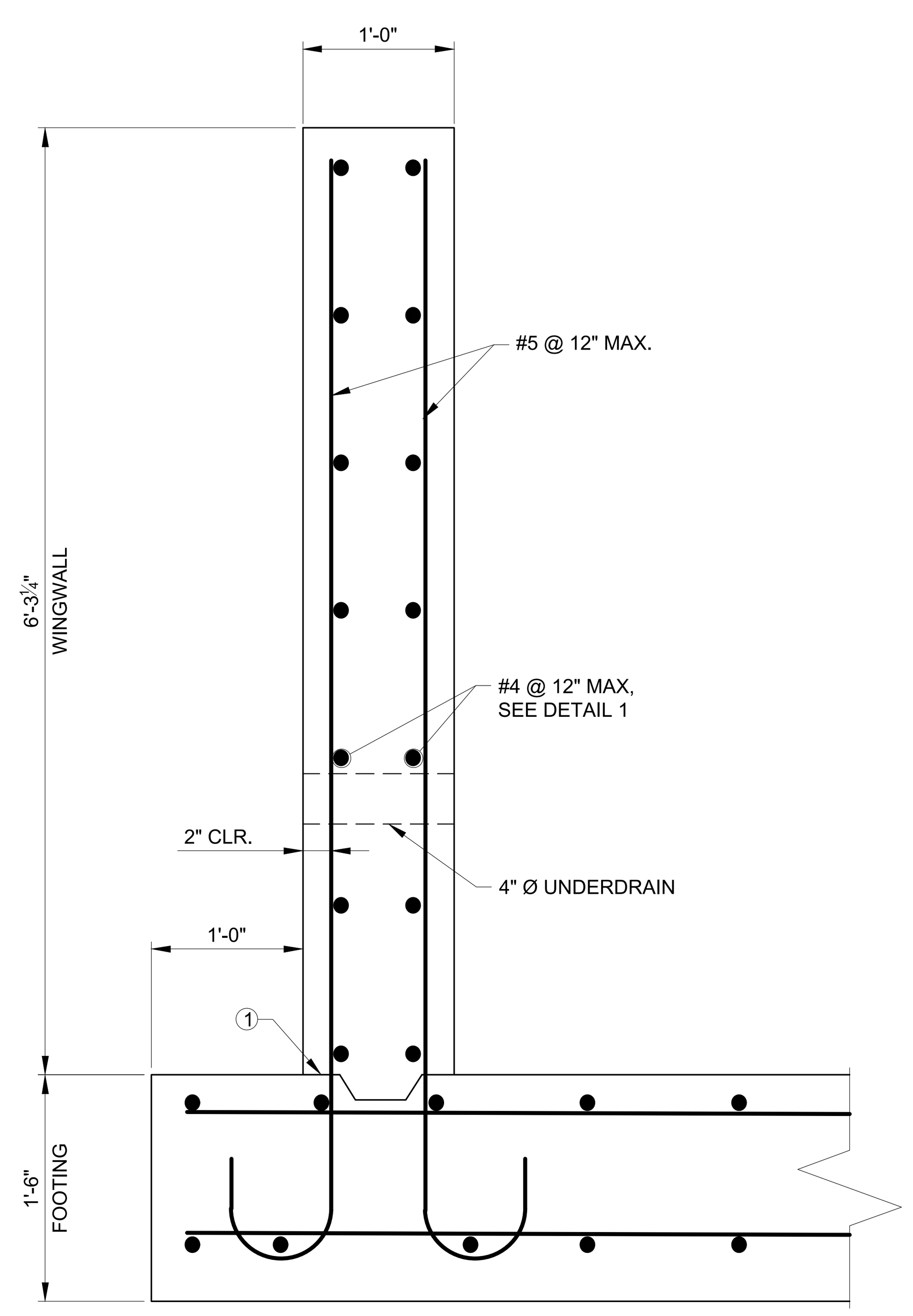
COMPLETED SECTION



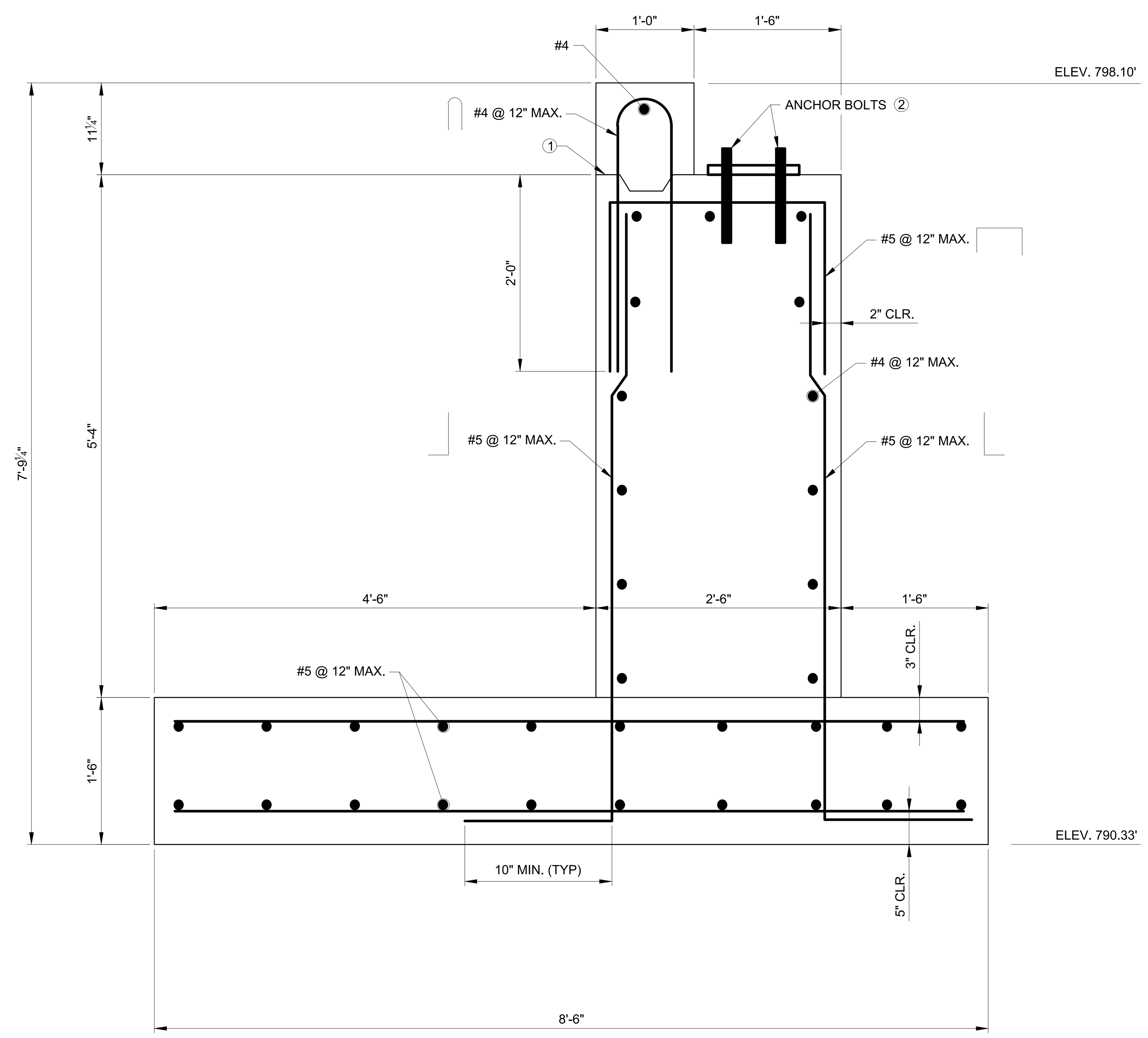
BRIDGE ABUTMENT PLAN



DETAIL 1 - WINGWALL PLAN



SECTION B-B



SECTION A-A

Stantec

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www.stantec.com

KEY NOTES:

① 2X6 BEVELED CONSTRUCTION JOINT.

② PROVIDE A MINIMUM CLEARANCE OF 2" BETWEEN ABUTMENT REINFORCEMENT AND ANCHOR BOLTS.

③ PROVIDE $\frac{1}{8}$" PER FOOT MINIMUM RUNNING SLOPE TO DAYLIGHT. CAP WITH RODENT SCREEN.

ABUTMENT NOTES:

VERIFY ABUTMENT LAYOUT, INCLUDING ANCHOR BOLT LOCATIONS, WITH BRIDGE SUPPLIER PRIOR TO CONSTRUCTION.

PLACE CONCRETE WITHOUT CONSTRUCTION JOINTS EXCEPT AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.

FORM ALL EXPOSED CONCRETE EDGES WITH A $\frac{1}{2}$" OR $\frac{3}{4}$" CHAMFER UNLESS OTHERWISE NOTED.

PLACE REINFORCEMENT WITH A MINIMUM 2" CLEARANCE TO FACE OF CONCRETE UNLESS SHOWN OTHERWISE.

BACKFILL ABUTMENT WITH EQUAL LIFTS ON EACH SIDE.

THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS AND BAR LISTS OF ALL REINFORCEMENT MATERIALS TO BE FURNISHED AND INSTALLED. SHOW BAR SIZES, SPACINGS, LOCATIONS, BENDING DETAILS, AND QUANTITIES REQUIRED.

		By	Appd	YYYY.MM.DD
D	BID SET	CW	MP	2024.08.16
C	PERMIT SET	CW	MP	2024.05.15
B	REVIEW SET	CW	MP	2024.03.15
A	PRELIMINARY PLANS	CW	MP	2023.11.10

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	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD
File Name: 153906C-105	JA	CW	MP	2023.11.09

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NOTE:

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

Client/Project

CITY OF ANN ARBOR

ANN ARBOR PARKS
BRIDGE REPLACEMENT

Ann Arbor, MI

SYLVAN PARK BRIDGE ABUTMENT DETAILS

Project No.
2075153906

Scale:

Revision 0

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C-105