

# PLANS FOR THE CONSTRUCTION OF ARCADIA TRAIL CONNECTION

PREPARED FOR

**PARK & RECREATION DEPARTMENT  
CITY OF FORT WORTH, TEXAS**

PREPARED BY

# Jacobs



MATTIE PARKER  
MAYOR

DAVID COOKE  
CITY MANAGER

JACOBS ENGINEERING GROUP INC.,  
TEXAS REG. NO. 2966

777 MAIN STREET SUITE 2500  
FORT WORTH, TX 76102  
(817) 735-6000

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\_\_\_\_\_  
MICHAEL OWEN, PE, CITY ENGINEER      DATE  
TRANSPORTATION & PUBLIC WORKS DEPARTMENT

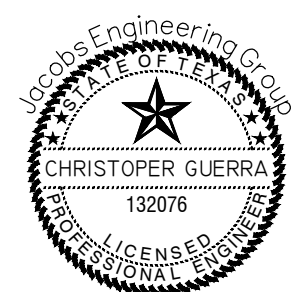
\_\_\_\_\_  
RICHARD ZAVALA, DIRECTOR      DATE  
PARKS & RECREATION DEPARTMENT

\_\_\_\_\_  
JING YANG, PROJECT MANAGER      DATE  
PARK & RECREATION DEPARTMENT



MAPSCO NO.  
CITY COUNCIL DISTRICT 4

LOCATION MAP  
(N.T.S.)



06.18.2021  
F-2966



06.18.2021

CITY OF FORT WORTH  
PROJECT NUMBER: 101339-1

## 100% Design

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF  
INTERIM REVIEW UNDER THE AUTHORITY OF RANDY  
SORENSEN, TEXAS REGISTERED LANDSCAPE ARCHITECT  
NUMBER 2291.

MAY 28, 2021

NOT FOR REGULATORY APPROVAL, PERMITTING, OR  
CONSTRUCTION.

Bid list Item No.	Item Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value	Notes
	<b>Site Demolition</b>						
I-01	Clearing and Grubbing	CFW 31 10 00	AC	1.57			
I-02	Concrete Walkway Removal	CFW 02 41 13	SY	498			
I-03	Guardrail Removal	CFW 02 41 13	LF	14			
I-04	Tree Removal	CFW 31 10 00	EA	11			
I-05	Construction Mobilization	General Conditions	LS	1			
I-06	Trail Closed Sign (install and remove)	CFW 34 41 30	EA	2			
I-07	Construction Limits Fence (install and remove)	CFW 32 31 13	LF	671			
I-08	Construction Project Sign (install and remove)	CFW 34 41 30	EA	2			
I-09	Construction Entrances (install and remove)	CFW 02 41 13	EA	1			
I-10	Traffic Control	CFW 34 71 13	LS	1			
I-11	Erosion Control Fence (install and remove)	CFW 31 25 00	LF	3024			
I-12	Soil Retention Blanket	CFW 32 92 13	SY	2695			
I-13	SWPPP	CFW 31 25 00	EA	1			
I-14	Tree Protection	CFW 32 01 90	EA	8			
	<b>Trail Construction</b>						
I-15	5" Reinf. Concrete Trail	CFW 32 13 20	SF	11048			8' wide trail
I-16	Native Seeding	CFW 32 92 13	SF	61975			no topsoil
I-17	Temporary Irrigation	CFW 32 92 13	SF	61975			
	<b>Hardscape</b>						
I-18	Unclassified Excavation Moved to On Site Fill (Borrow)	CFW 31 23 23	CY	222			
I-19	Unclassified Excavation Hauled Off Site	CFW 31 23 16	CY	3740			
I-20	Placed Stone Rip Rap	CFW 31 37 00	CY	10			
	<b>Site Amenities</b>						
I-21	Drain Headwalls & Wingwalls 18 inch RCP	CFW 33 49 40	EA	2			
I-22	Drainage Pipe 18 Corrugated HDPE Pipe	CFW 33 41 11	LF	50			
I-23	Concrete Piers	31 63 29	LF	240			
I-24	Bridge Deck	06 10 63	SF	440			
I-25	Abutment Walls	03 30 00	CY	24			
I-26	Steel I Beam	05 12 00	Ton	5.5			

**ESTIMATED QUANTITY NOTES**

ITEMS INDICATED AS CFW IN THE TABLES SHALL CONFORM TO CITY OF FORT WORTH STANDARD CONSTRUCTION SPECIFICATION DOCUMENTS. ITEMS INDICATED AS TXDOT SHALL CONFORM TO TXDOT 2014 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAY, STREETS, AND BRIDGES.

SUMMARY OF ESTIMATED QUANTITIES ARE FOR CONTRACTOR'S INFORMATION ONLY. ACTUAL QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

**NOTES**

- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN AND PAY ALL COSTS.
- CONTRACTOR SHALL PROVIDE SWPPP PLAN AND PAY ALL COSTS.

**ARCADIA TRAIL CONNECTION**  
 PARK AND RECREATION DEPARTMENT  
 CITY OF FORT WORTH, TX



**Jacobs**  
 JACOBS ENGINEERING GROUP, INC.  
 TEXAS REG. NO. 2886  
 777 MAIN STREET  
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**100% SUBMITTAL PLANS**

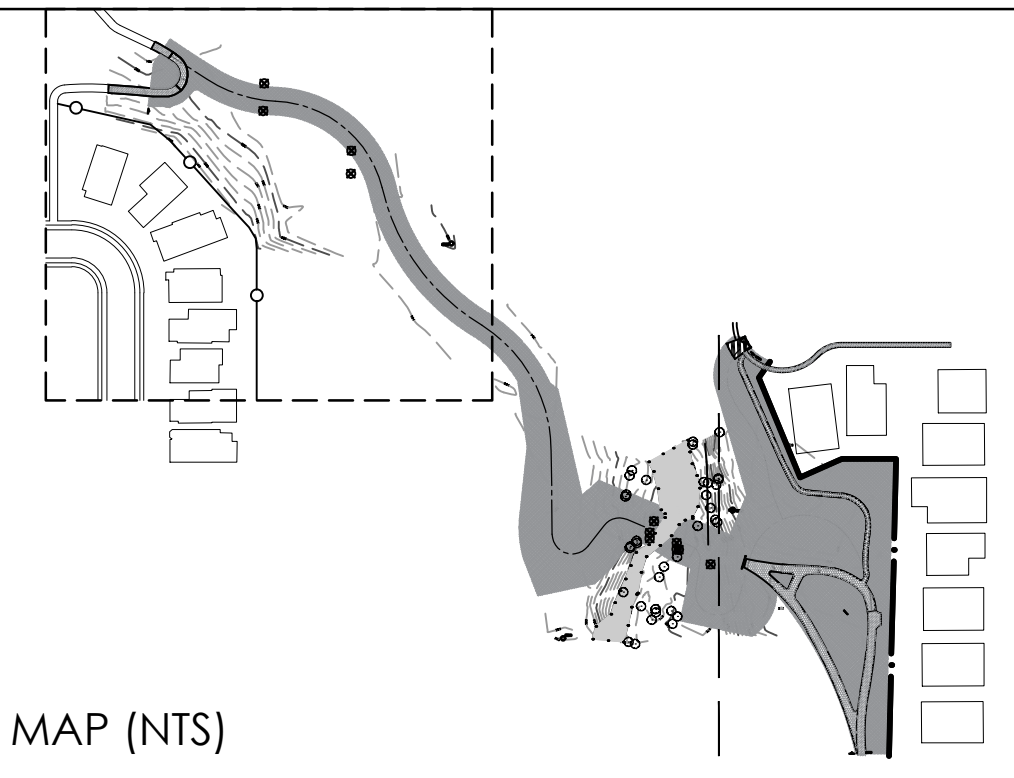


Project No.: F7X99200  
 Issued: 06/18/2021  
 Drawn By: CZ  
 Checked By: RS

Sheet Title  
**ESTIMATED QUANTITIES**

Sheet Number  
**L1.0**

TREE REMOVAL SHEET L1.1			
ID	CAL. INCH	SPECIES	MITIGATION
DT1	--	TREE CLUSTER	NO
DT2	--	TREE CLUSTER	NO
DT3	--	TREE CLUSTER	NO
DT4	--	TREE CLUSTER	NO



KEY MAP (NTS)

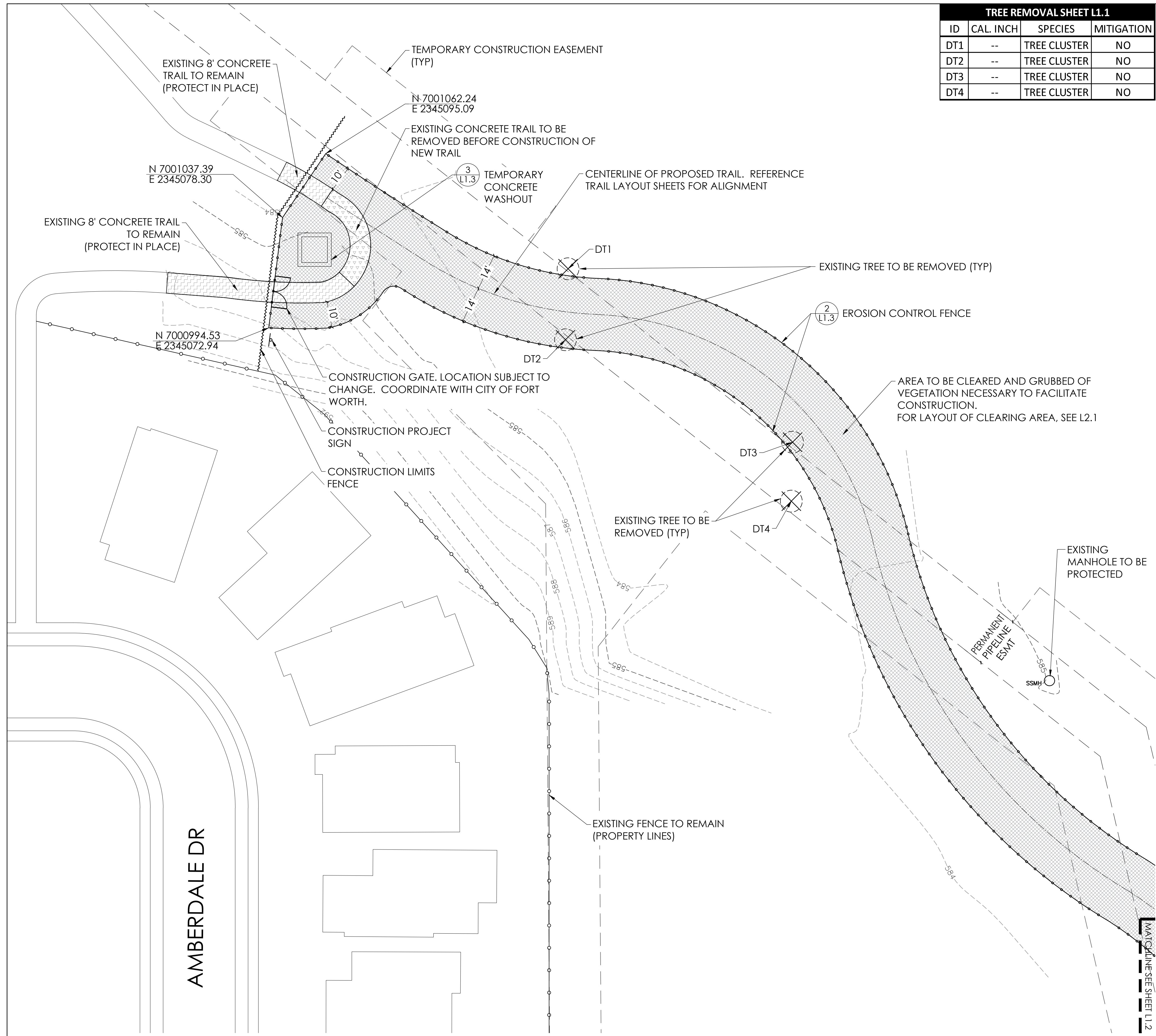
LEGEND

- PROPERTY LINE
- EROSION CONTROL FENCE (2 LI.3)
- CONSTRUCTION LIMITS FENCE
- TREE PROTECTION FENCE (4 LI.3)
- CONSTRUCTION ENTRANCE (1 LI.3)
- CONSTRUCTION GATE
- CONSTRUCTION PROJECT SIGN
- AREA TO BE CLEARED AND GRUBBED OF VEGETATION NECESSARY TO FACILITATE CONSTRUCTION
- EXISTING CONCRETE TRAIL TO BE REMOVED BEFORE CONSTRUCTION OF NEW TRAIL
- EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
- EXISTING WATER BODY
- EXISTING FENCE TO REMAIN
- EXISTING TREE TO BE PRESERVED (TYP)
- EXISTING TREE TO BE REMOVED (TYP)

DEMOLITION & EROSION CONTROL NOTES

- CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL UNIMPROVED SITE AREAS AND ELEMENTS TO "PRIOR TO CONSTRUCTION" CONDITION
- EXISTING SITE ELEMENTS NOT MARKED FOR REMOVAL SHALL BE PROTECTED BY CONTRACTOR.
- CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES, INCLUDING FLOODING DAMAGE, WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. AT THE CONCLUSION OF ANY PROJECT, ALL CHANNELS, DRAINAGEWAYS AND BORROW DITCHES IN THE WORK ZONE SHALL BE DREGDED OF ANY SEDIMENT GENERATED BY THE PROJECT OR DEPOSITED AS A RESULT OF EROSION CONTROL MEASURES.
- CONTRACTOR SHALL LOCATE AND MAINTAIN EQUIPMENT STAGING AREA AND EQUIPMENT LAYDOWN AREA IN ACCORDANCE WITH WRITTEN PLAN PROVIDED TO AND APPROVED IN WRITING BY CITY.
- CONTRACTOR IS RESPONSIBLE TO SUBMIT THE NOI, UPKEEP AND MAINTAIN THE CONSTRUCTION SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL. (TCEQ TXR150000) CONTRACTOR RESPONSIBLE TO PREPARE AND SUBMIT SWPPP PLAN
- CONSTRUCTION ENTRANCES SHALL BE IN ACCORDANCE WITH CURRENT CITY REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN
- CONTRACTOR SHALL TAKE ALL MEANS NECESSARY TO PREVENT SILT FROM ENTERING STREAM, PARTICULARLY AFTER A STORM EVENT, REPAIR FENCE WHEN DAMAGED AT NO ADDITIONAL COST.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.



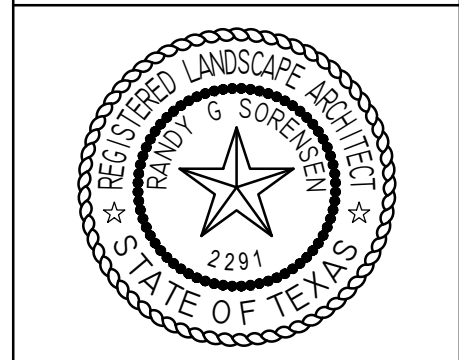
1 EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN 1  
SCALE: 1"= 20'-0

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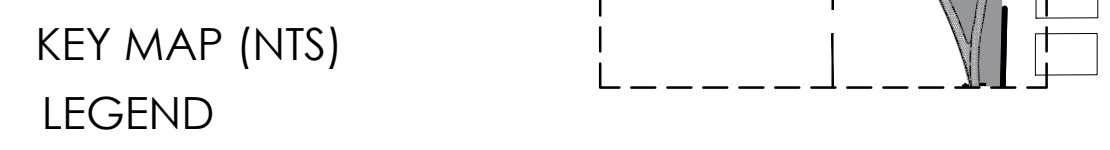
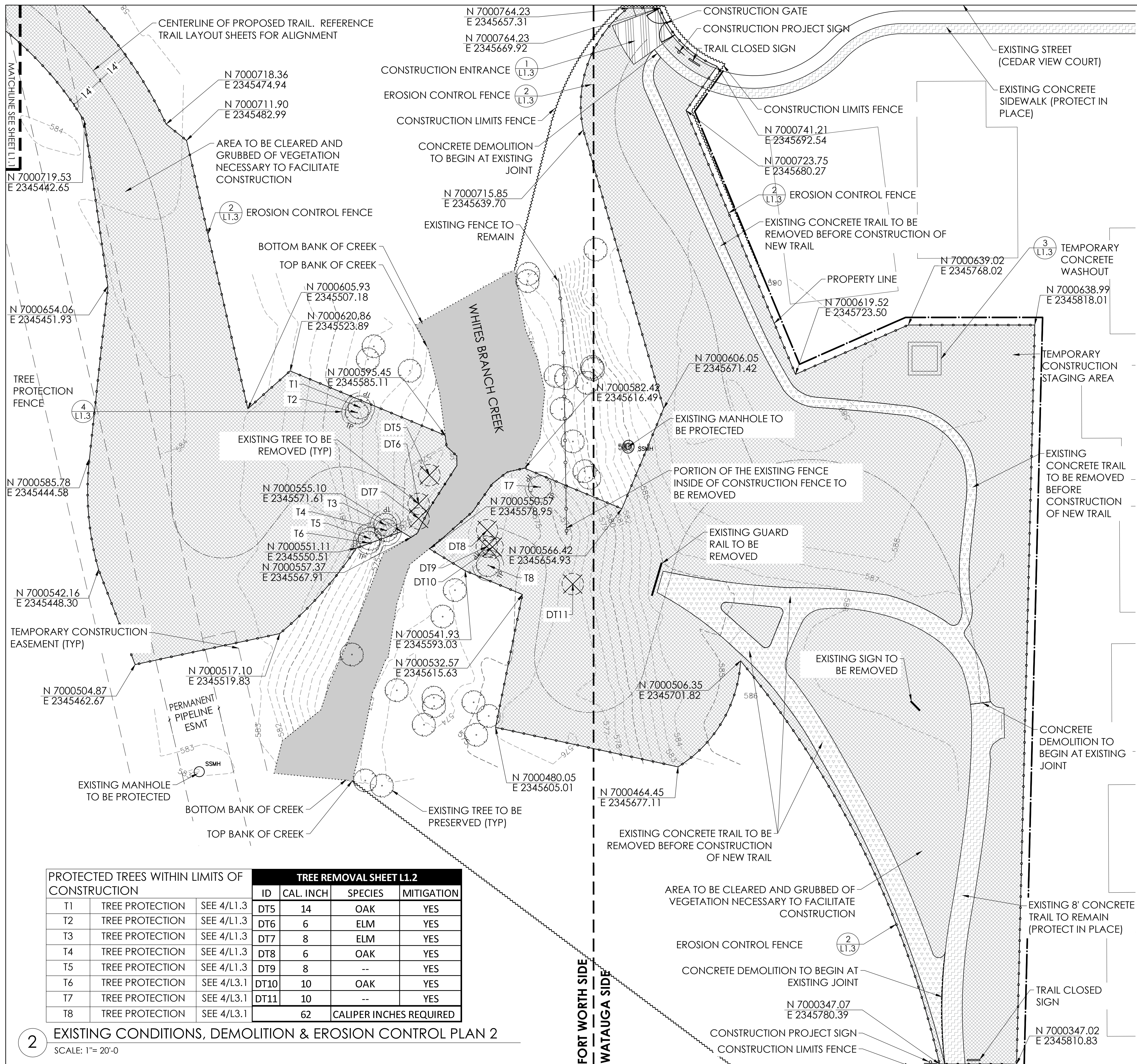
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Checked By: RS

Sheet Title  
EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN 1

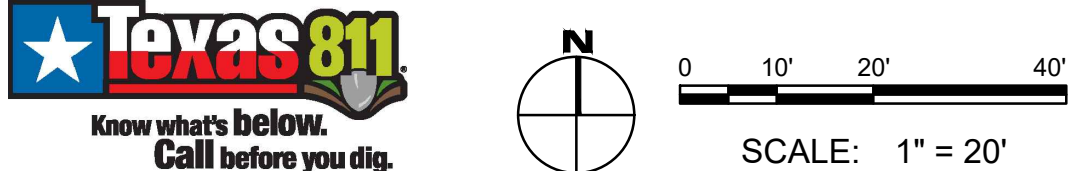
Sheet Number  
**L1.1**



- KEY MAP (NTS) LEGEND**
- — — — — PROPERTY LINE
  - — — — — EROSION CONTROL FENCE (2) (LT.3)
  - — — — — CONSTRUCTION LIMITS FENCE
  - TP — TREE PROTECTION FENCE (4) (LT.3)
  - ▨ CONSTRUCTION ENTRANCE (1) (LT.3)
  - ⌢ CONSTRUCTION GATE
  - ⊙ CONSTRUCTION PROJECT SIGN
  - ▨ AREA TO BE CLEARED AND GRUBBED OF VEGETATION NECESSARY TO FACILITATE CONSTRUCTION
  - ▨ EXISTING CONCRETE TRAIL TO BE REMOVED BEFORE CONSTRUCTION OF NEW TRAIL
  - ▨ EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
  - ▨ EXISTING WATER BODY
  - — — — — EXISTING FENCE TO REMAIN
  - ⊙ EXISTING TREE TO BE PRESERVED (TYP)
  - ⊗ EXISTING TREE TO BE REMOVED (TYP)

- DEMOLITION & EROSION CONTROL NOTES**
1. CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL UNIMPROVED SITE AREAS AND ELEMENTS TO "PRIOR TO CONSTRUCTION" CONDITION
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  5. CONTRACTOR IS RESPONSIBLE TO SUBMIT THE NOI, UPKEEP AND MAINTAIN THE CONSTRUCTION SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL. (TCEQ TXR 150000) CONTRACTOR RESPONSIBLE TO PREPARE AND SUBMIT SWPPP PLAN
  6. CONSTRUCTION ENTRANCES SHALL BE IN ACCORDANCE WITH CURRENT CITY REQUIREMENTS.
  7. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN
  8. CONTRACTOR SHALL TAKE ALL MEANS NECESSARY TO PREVENT SILT FROM ENTERING STREAM, PARTICULARLY AFTER A STORM EVENT, REPAIR FENCE WHEN DAMAGED AT NO ADDITIONAL COST.

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PROTECTED TREES WITHIN LIMITS OF CONSTRUCTION			TREE REMOVAL SHEET L1.2			
			ID	CAL. INCH	SPECIES	MITIGATION
T1	TREE PROTECTION	SEE 4/L1.3	DT5	14	OAK	YES
T2	TREE PROTECTION	SEE 4/L1.3	DT6	6	ELM	YES
T3	TREE PROTECTION	SEE 4/L1.3	DT7	8	ELM	YES
T4	TREE PROTECTION	SEE 4/L1.3	DT8	6	OAK	YES
T5	TREE PROTECTION	SEE 4/L1.3	DT9	8	--	YES
T6	TREE PROTECTION	SEE 4/L3.1	DT10	10	OAK	YES
T7	TREE PROTECTION	SEE 4/L3.1	DT11	10	--	YES
T8	TREE PROTECTION	SEE 4/L3.1		62	CALIPER INCHES REQUIRED	

**2 EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN 2**  
SCALE: 1" = 20'-0"

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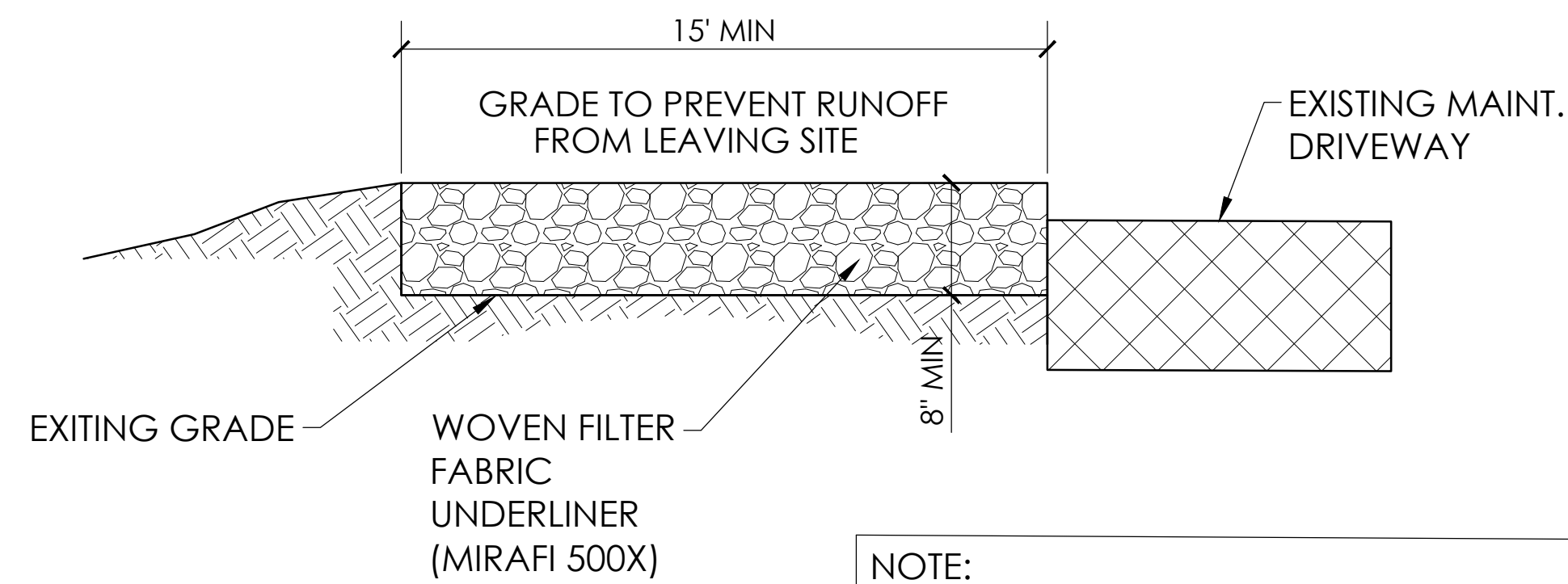
100% SUBMITTAL PLANS



Project No.: F7X9200  
Issue: 06/18/2021  
Drawn By: CZ  
Checked By: RS

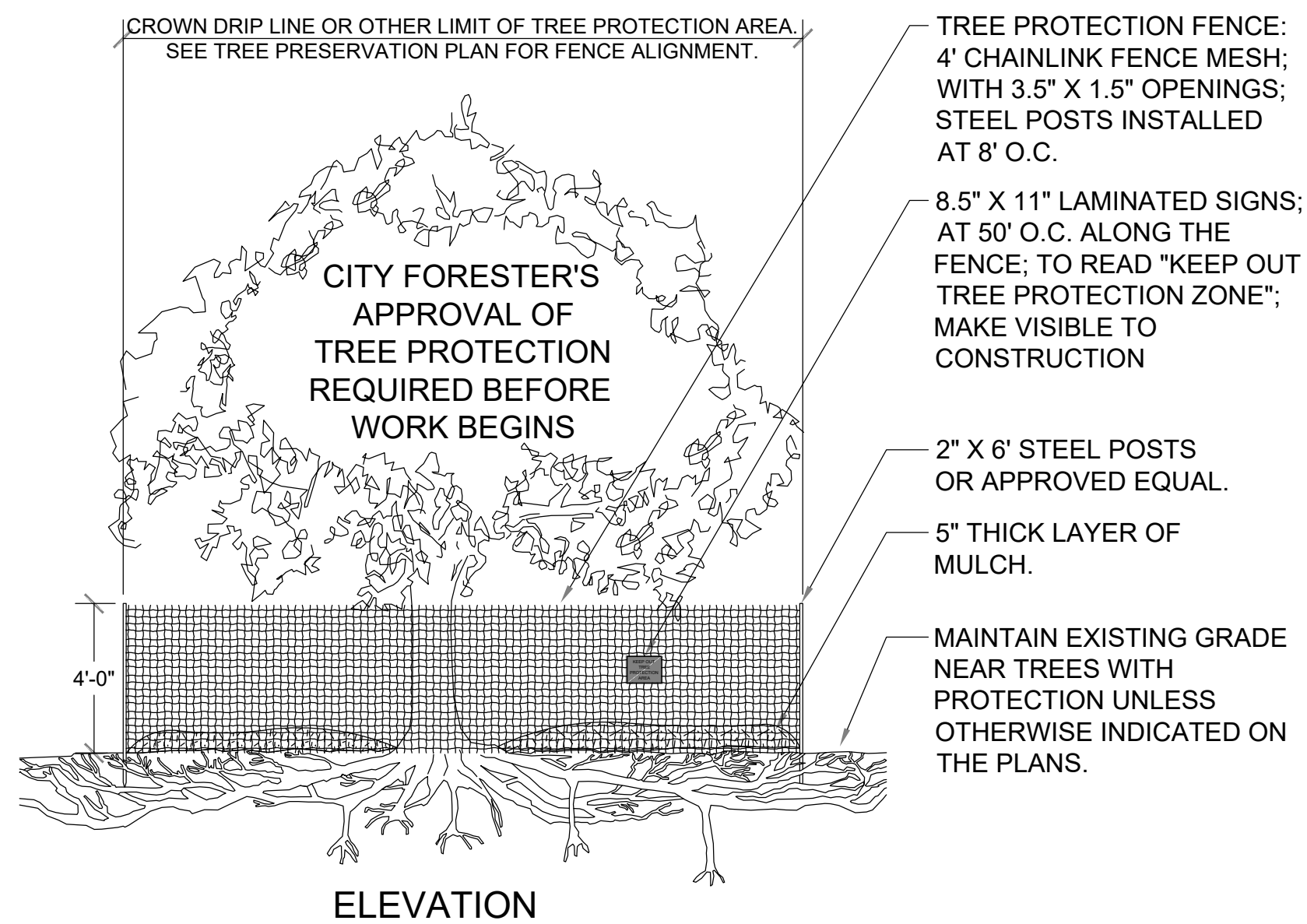
Sheet Title  
EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN 2

Sheet Number  
**L1.2**



- NOTE:**
1. REMOVE STONE AT THE END OF CONSTRUCTION
  2. RESTORE GRADE
  3. RESEED LAWN

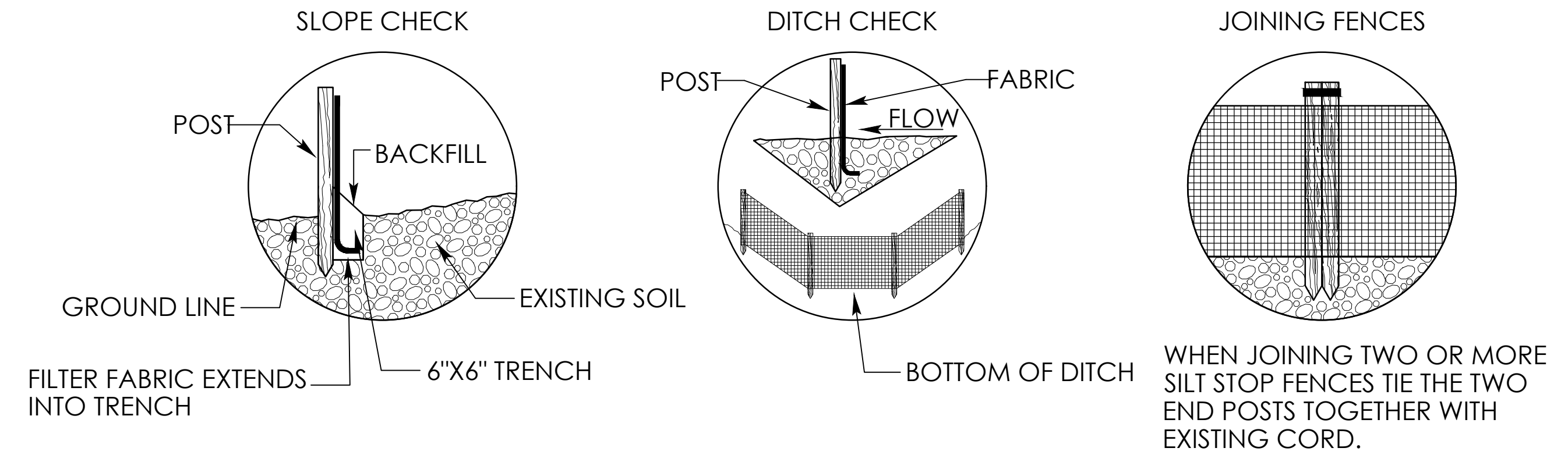
**1 CONSTRUCTION ENTRANCE SECTION**  
N.T.S.



**TREE PROTECTION FENCING NOTES:**

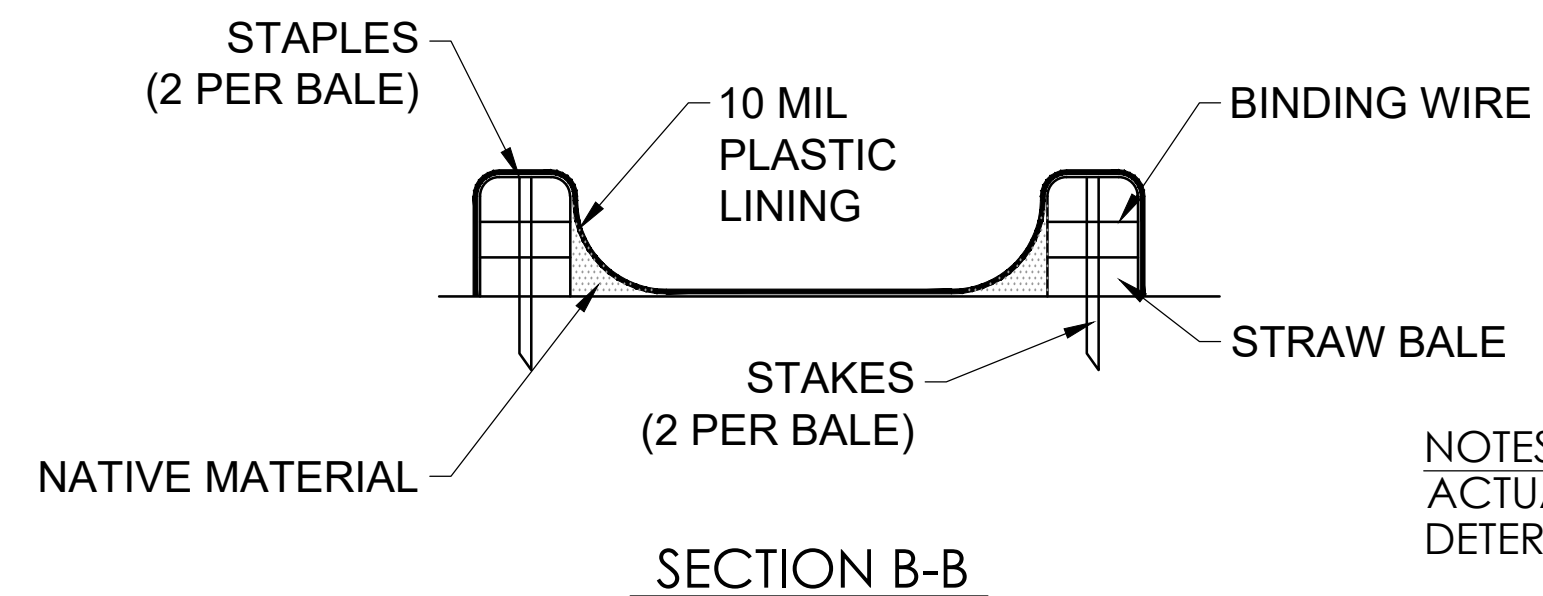
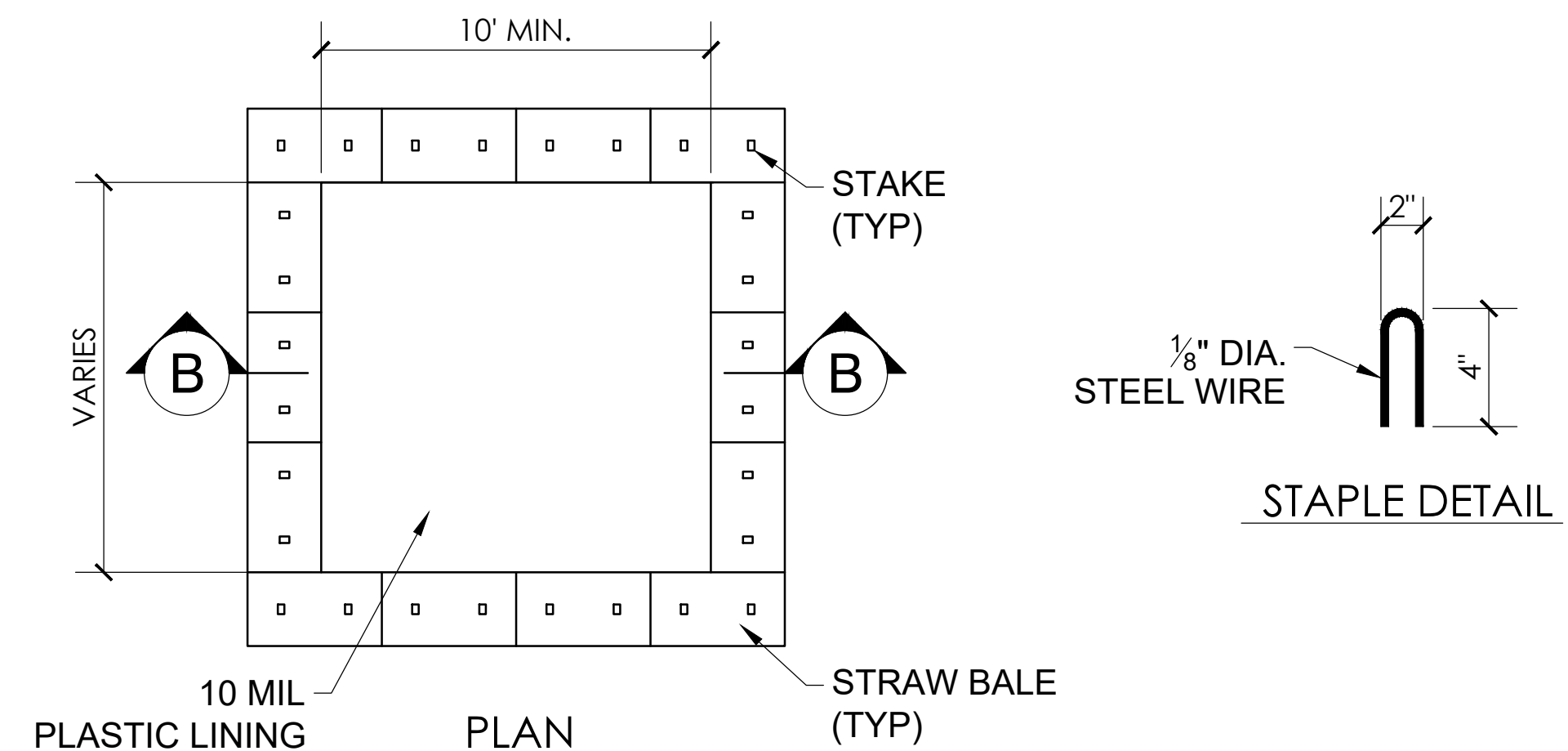
1. LOCATE AND MARK FENCING ALIGNMENT BY HAND BEFORE INSTALLATION. NO HEAVY EQUIPMENT/VEHICLES SHALL OPERATE ON THE TREE SIDE OF THE FENCING BEFORE, DURING INSTALLATION/MAINTENANCE, OR DURING REMOVAL OF THE FENCING. THIS INCLUDES ACCESS ROUTES, SUPPLY STORAGE, AND SOIL CONTAMINATES.
2. NO PRUNING SHALL BE PERFORMED UNTIL AFTER THE CITY FORESTER HAS GIVEN APPROVAL. ALL PRUNING SHALL BE PERFORMED BY AN APPROVED ARBORIST.
3. SEE SITE PREPARATION PLAN FOR ANY MODIFICATIONS TO THE TREE PROTECTION AREA.
4. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
5. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
6. PARD DAMAGE ASSESSMENTS MAY APPLY FOR INCORRECT PROTECTION MEASURES.

**4 TREE PROTECTION FENCE - CITY OF FORT WORTH STANDARD DETAIL**  
N.T.S.



- NOTE:**
1. SILT FENCE FABRIC SHALL BE MIRAFI 100 X OR EQUAL.
  2. INSTALL SILT FENCES AT LOCATIONS SHOWN ON PLAN AND APPROVED IN WRITING BY OWNER.
  3. FENCE POSTS SHALL BE GALVANIZED STEEL AND MAY BE ROLLED, FORMED OR TUBULAR IN CROSS-SECTION. "T" POSTS MAY BE USED WHEN IN CONFORMANCE WITH SPECIFICATION.
  4. CONTRACTOR SHALL PROVIDE SWPPP PLAN

**2 EROSION CONTROL FENCE DETAIL**  
N.T.S.

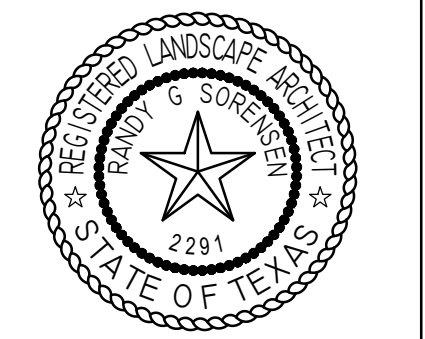


**NOTES:**  
ACTUAL LAYOUT DETERMINED IN FIELD.

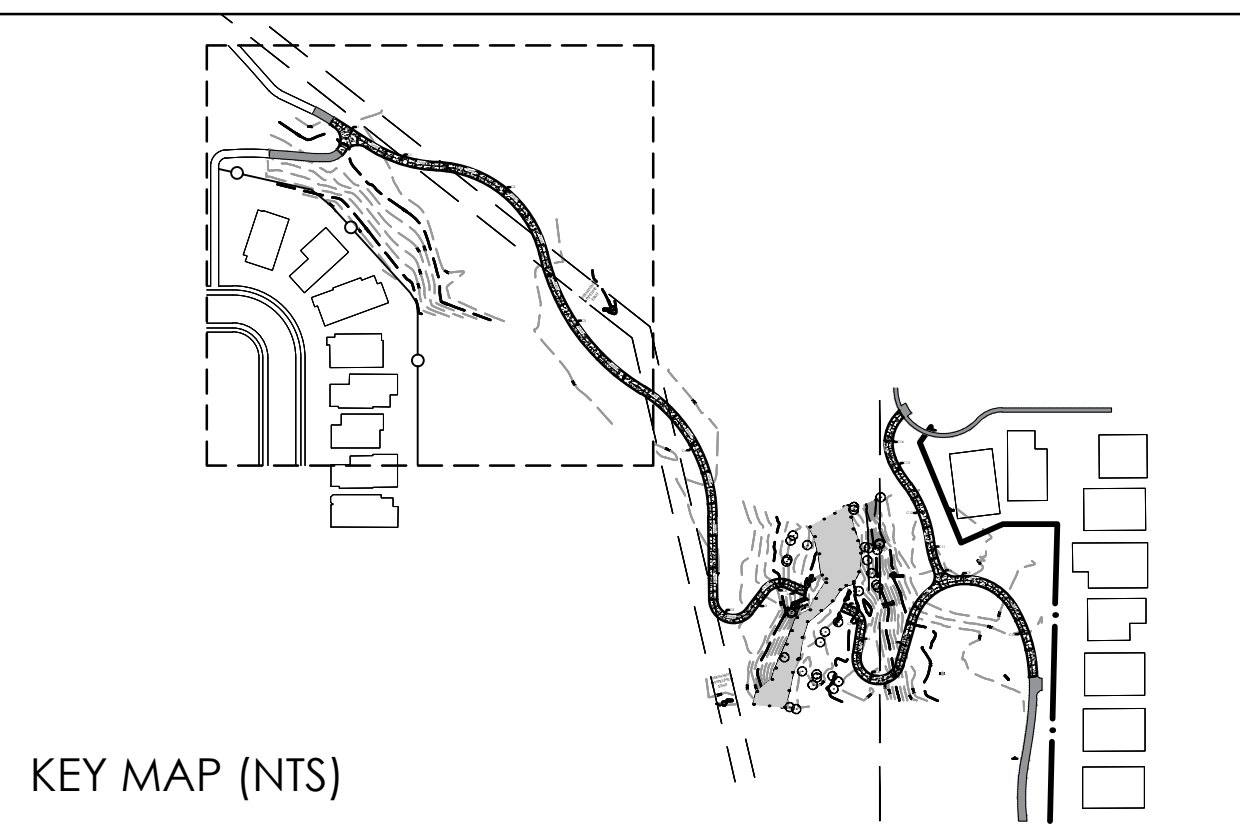
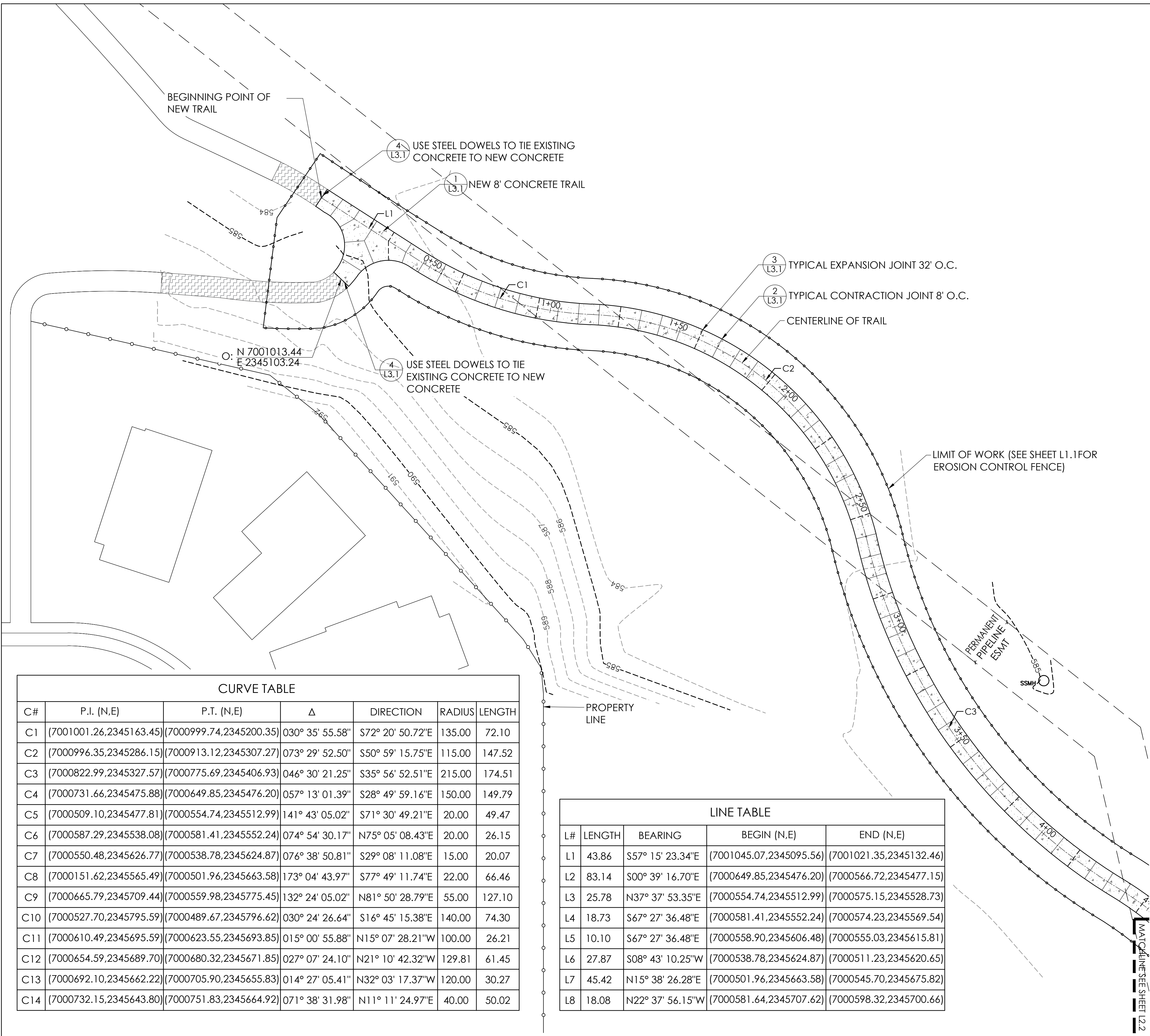
**3 TEMPORARY CONCRETE WASHOUT DETAIL**  
N.T.S.

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**LEGEND**

- LIMIT OF WORK (EROSION CONTROL FENCE)
- NEW 8' CONCRETE TRAIL (1/13.1)
- TYPICAL EXPANSION JOINTS 32' O.C. (3/13.1)
- TYPICAL CONTRACTION JOINTS 8' O.C. (2/13.1)
- CENTERLINE OF TRAIL
- 1+00 STATION POINT
- EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
- EXISTING WATER BODY
- EXISTING FENCE TO REMAIN
- EXISTING TREE TO BE PRESERVED (TYP)

PC= POINT OF CURVATURE  
 PT= POINT OF TANGENCY  
 O= BEGINNING POINT OF CURVE

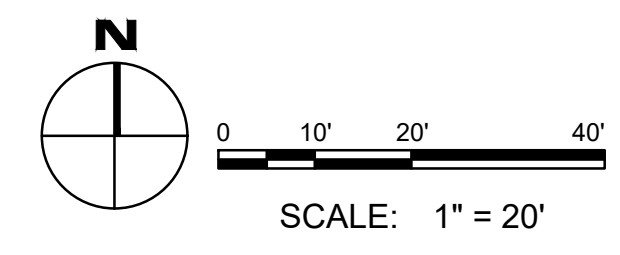
NOTE: REFERENCE SHEET L2.1 FOR TRAIL LINE AND CURVE DATA TABLES

- LAYOUT NOTES**
- WRITTEN DIMENSIONS AND COORDINATES SHALL GOVERN OVER SCALED DRAWINGS.
  - ALL IMPROVEMENTS SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY CITY IN WRITING PRIOR TO CONSTRUCTION.
  - ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF FORT WORTH STANDARDS AND SPECIFICATIONS.
  - ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
  - ALL NORTHING AND EASTING COORDINATE POINTS TRAIL CENTERLINE.
  - LAYOUT AND GRADING FOR THE IMPROVEMENTS SHALL OCCUR AS DIRECTED BY CITY WITH THE FOLLOWING GUIDELINES: ALL WALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.5% IN THE DIRECTION OF THE DOWNHILL SIDE. THE LONGITUDINAL SLOPE OF THE WALKS SHALL BE NO GREATER THAN 4.5%. ALL GRADES SHALL BE FINISHED TO A SMOOTH FLOWING CONTOUR, MAINTAINING EXISTING FLOW PATTERNS UNLESS DIRECTED OTHERWISE BY CITY. THE CONTRACTOR SHALL VERIFY ALL EASEMENT LINES, AND VISIBILITY LINES IN THE FIELD PRIOR TO CONSTRUCTION.
  - ALL PROPOSED GRADES INDICATED ARE FINISHED GRADES. THE PROPOSED PAVING IS SHOWN TO FINISHED GRADE AND THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATIONS FOR IMPROVEMENTS AS PART OF OVERALL MASS GRADING.

CURVE TABLE						
C#	P.I. (N,E)	P.T. (N,E)	Δ	DIRECTION	RADIUS	LENGTH
C1	(7001001.26,2345163.45)	(7000999.74,2345200.35)	030° 35' 55.58"	S72° 20' 50.72"E	135.00	72.10
C2	(7000996.35,2345286.15)	(7000913.12,2345307.27)	073° 29' 52.50"	S50° 59' 15.75"E	115.00	147.52
C3	(7000822.99,2345327.57)	(7000775.69,2345406.93)	046° 30' 21.25"	S35° 56' 52.51"E	215.00	174.51
C4	(7000731.66,2345475.88)	(7000649.85,2345476.20)	057° 13' 01.39"	S28° 49' 59.16"E	150.00	149.79
C5	(7000509.10,2345477.81)	(7000554.74,2345512.99)	141° 43' 05.02"	S71° 30' 49.21"E	20.00	49.47
C6	(7000587.29,2345538.08)	(7000581.41,2345552.24)	074° 54' 30.17"	N75° 05' 08.43"E	20.00	26.15
C7	(7000550.48,2345626.77)	(7000538.78,2345624.87)	076° 38' 50.81"	S29° 08' 11.08"E	15.00	20.07
C8	(7000151.62,2345565.49)	(7000501.96,2345663.58)	173° 04' 43.97"	S77° 49' 11.74"E	22.00	66.46
C9	(7000665.79,2345709.44)	(7000559.98,2345775.45)	132° 24' 05.02"	N81° 50' 28.79"E	55.00	127.10
C10	(7000527.70,2345795.59)	(7000489.67,2345796.62)	030° 24' 26.64"	S16° 45' 15.38"E	140.00	74.30
C11	(7000610.49,2345695.59)	(7000623.55,2345693.85)	015° 00' 55.88"	N15° 07' 28.21"W	100.00	26.21
C12	(7000654.59,2345689.70)	(7000680.32,2345671.85)	027° 07' 24.10"	N21° 10' 42.32"W	129.81	61.45
C13	(7000692.10,2345662.22)	(7000705.90,2345655.83)	014° 27' 05.41"	N32° 03' 17.37"W	120.00	30.27
C14	(7000732.15,2345643.80)	(7000751.83,2345664.92)	071° 38' 31.98"	N11° 11' 24.97"E	40.00	50.02

LINE TABLE				
L#	LENGTH	BEARING	BEGIN (N,E)	END (N,E)
L1	43.86	S57° 15' 23.34"E	(7001045.07,2345095.56)	(7001021.35,2345132.46)
L2	83.14	S00° 39' 16.70"E	(7000649.85,2345476.20)	(7000566.72,2345477.15)
L3	25.78	N37° 37' 53.35"E	(7000554.74,2345512.99)	(7000575.15,2345528.73)
L4	18.73	S67° 27' 36.48"E	(7000581.41,2345552.24)	(7000574.23,2345569.54)
L5	10.10	S67° 27' 36.48"E	(7000558.90,2345606.48)	(7000555.03,2345615.81)
L6	27.87	S08° 43' 10.25"W	(7000538.78,2345624.87)	(7000511.23,2345620.65)
L7	45.42	N15° 38' 26.28"E	(7000501.96,2345663.58)	(7000545.70,2345675.82)
L8	18.08	N22° 37' 56.15"W	(7000581.64,2345707.62)	(7000598.32,2345700.66)

**1 LAYOUT PLAN 1**  
 SCALE: 1" = 20'-0"

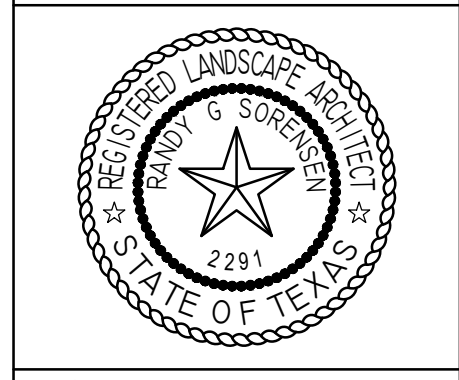


**ARCADIA TRAIL CONNECTION**  
 PARK AND RECREATION DEPARTMENT  
 CITY OF FORT WORTH, TX

**Jacobs**  
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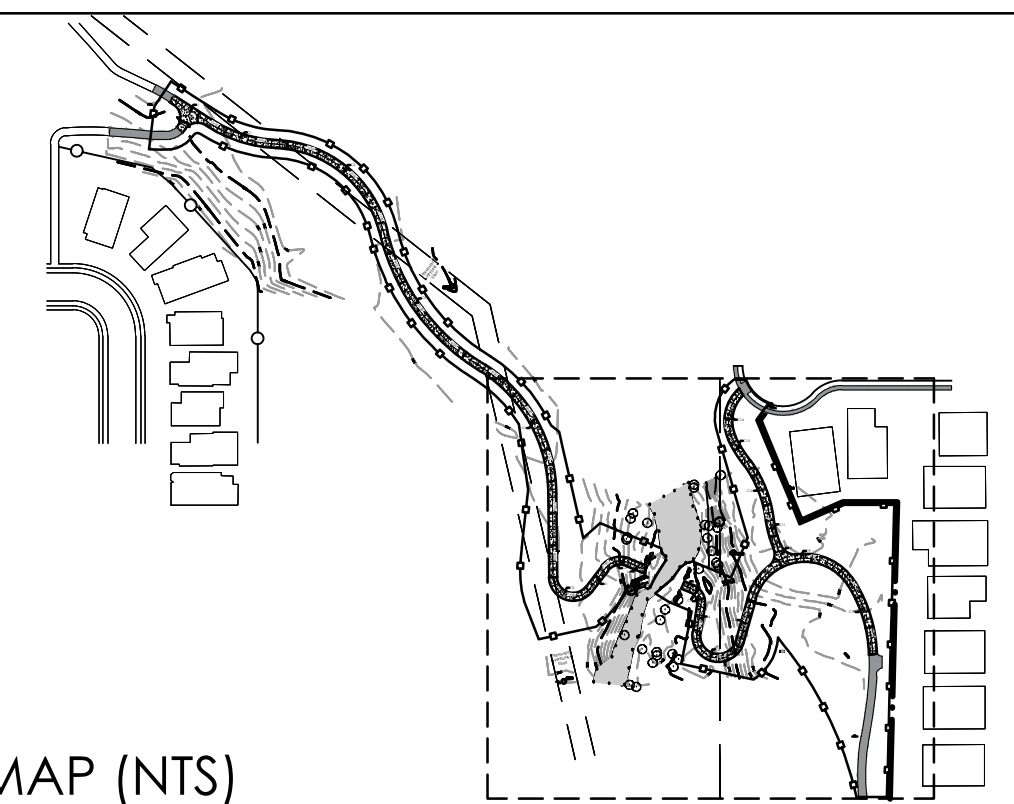
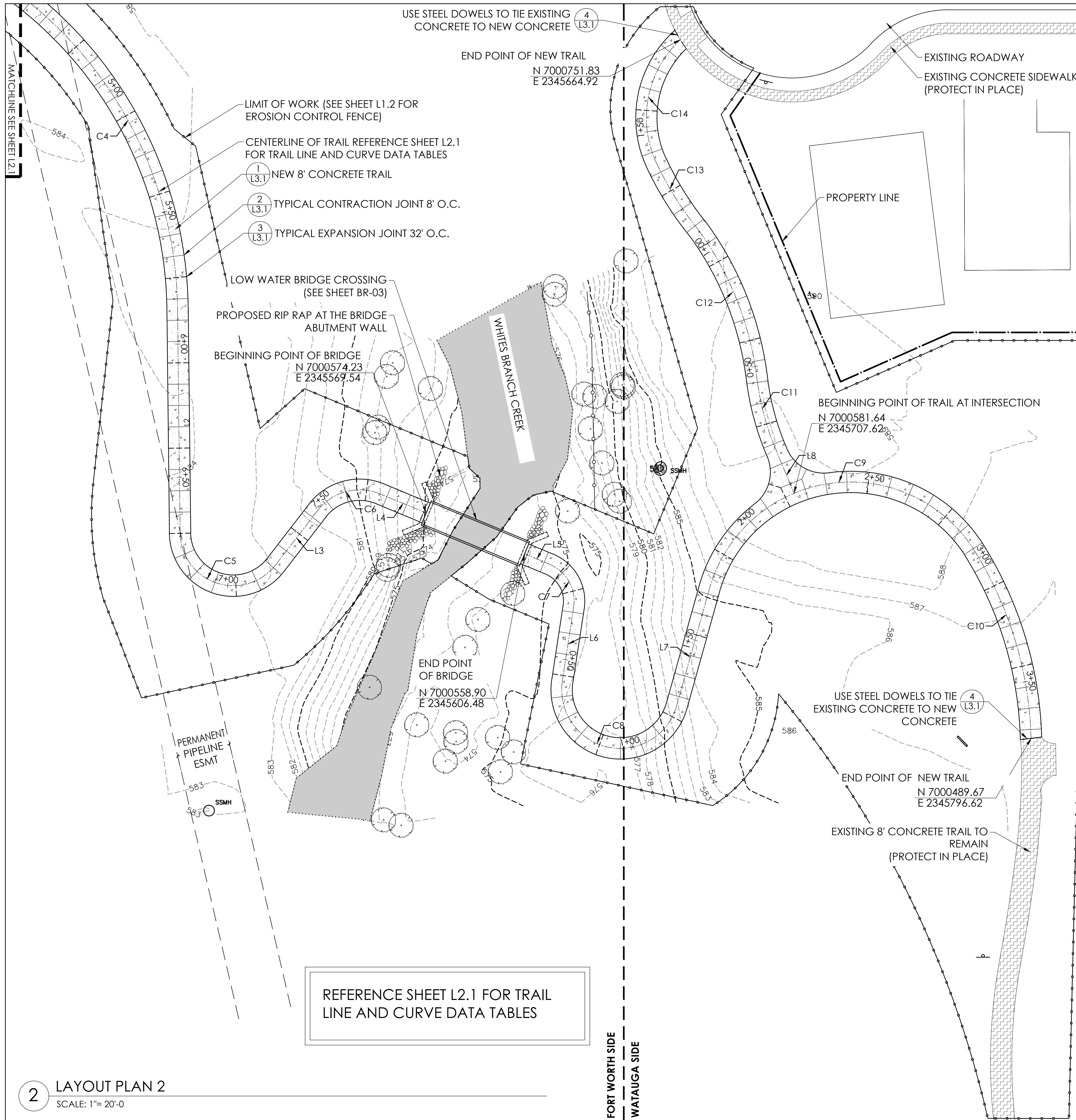
Revision No.	Date	Description

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 JUNE 18, 2021  
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 Checked By: RS  
 Sheet Title

LAYOUT PLAN 1  
 Sheet Number  
**L2.1**



KEY MAP (NTS)

LEGEND

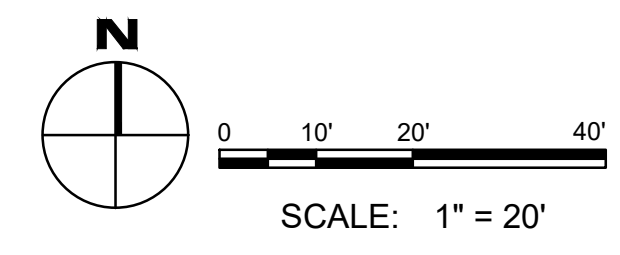
- LIMIT OF WORK (EROSION CONTROL FENCE)
- NEW 8' CONCRETE TRAIL (1/L3.1)
- TYPICAL EXPANSION JOINTS 32' O.C. (3/L3.1)
- TYPICAL CONTRACTION JOINTS 8' O.C. (2/L3.1)
- CENTERLINE OF TRAIL
- 1+00 STATION POINT
- EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
- EXISTING WATER BODY
- EXISTING FENCE TO REMAIN
- EXISTING TREE TO BE PRESERVED (TYP)
- PC= POINT OF CURVATURE
- PT= POINT OF TANGENCY
- O= BEGINNING POINT OF CURVE

NOTE: REFERENCE SHEET L2.1 FOR TRAIL LINE AND

LAYOUT NOTES

1. WRITTEN DIMENSIONS AND COORDINATES SHALL GOVERN OVER SCALED DRAWINGS.
2. ALL IMPROVEMENTS SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY CITY IN WRITING PRIOR TO CONSTRUCTION.
3. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF FORT WORTH STANDARDS AND SPECIFICATIONS.
4. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. ALL NORTHING AND EASTING COORDINATE POINTS TRAIL CENTERLINE.
6. LAYOUT AND GRADING FOR THE IMPROVEMENTS SHALL OCCUR AS DIRECTED BY CITY WITH THE FOLLOWING GUIDELINES: ALL WALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.5% IN THE DIRECTION OF THE DOWNHILL SIDE. THE LONGITUDINAL SLOPE OF THE WALKS SHALL BE NO GREATER THAN 4.5%. ALL GRADES SHALL BE FINISHED TO A SMOOTH FLOWING CONTOUR, MAINTAINING EXISTING FLOW PATTERNS UNLESS DIRECTED OTHERWISE BY CITY. THE CONTRACTOR SHALL VERIFY ALL EASEMENT LINES, AND VISIBILITY LINES IN THE FIELD PRIOR TO CONSTRUCTION.
7. ALL PROPOSED GRADES INDICATED ARE FINISHED GRADES. THE PROPOSED PAVING IS SHOWN TO FINISHED GRADE AND THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATIONS FOR IMPROVEMENTS AS PART OF OVERALL MASS GRADING.

REFERENCE SHEET L2.1 FOR TRAIL LINE AND CURVE DATA TABLES



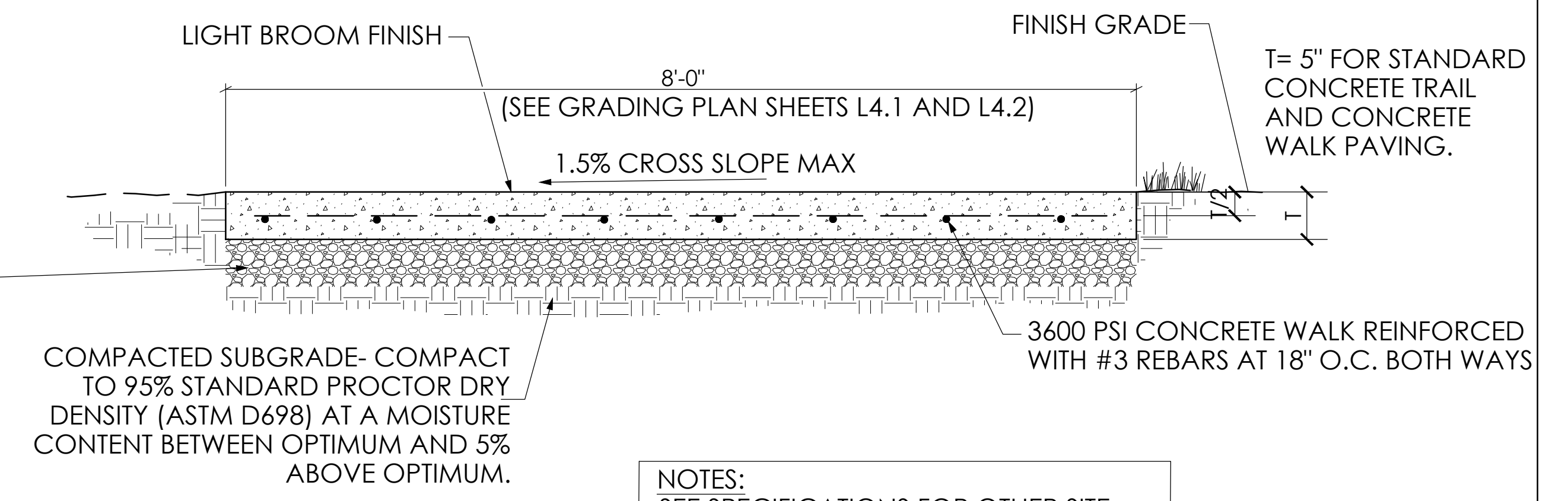
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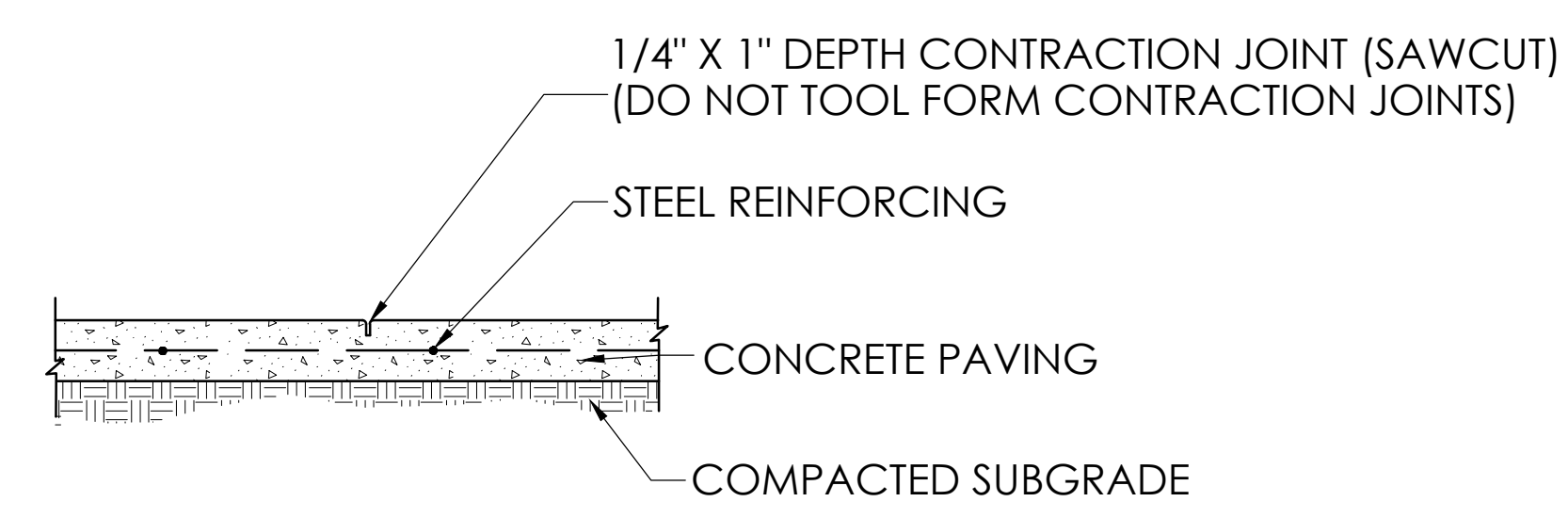
Project No.: F7X99200  
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NEW CONCRETE TRAIL BASE WITH A MAXIMUM AGGREGATE BASE THICKNESS OF 5 INCHES BETWEEN BOTTOM OF PAVING CONCRETE AND TOP OF COMPACTED SUBGRADE

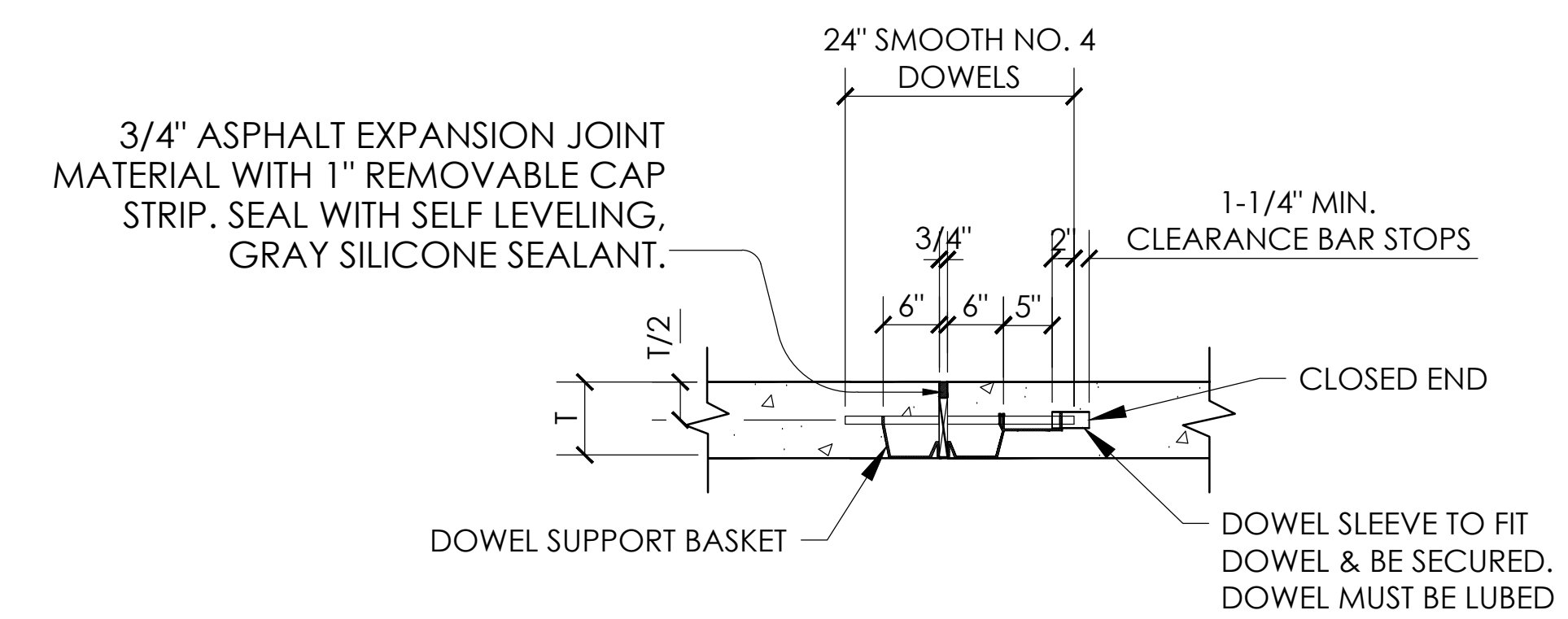


NOTES:  
SEE SPECIFICATIONS FOR OTHER SITE PREPARATION AND DESIGN CONSIDERATIONS.  
CJ AT 8'-0" O.C.  
(TYP) - 10'-0" MAX.  
EJ AT 32'-0" O.C.

1 CONCRETE TRAIL PAVING DETAIL  
N.T.S.

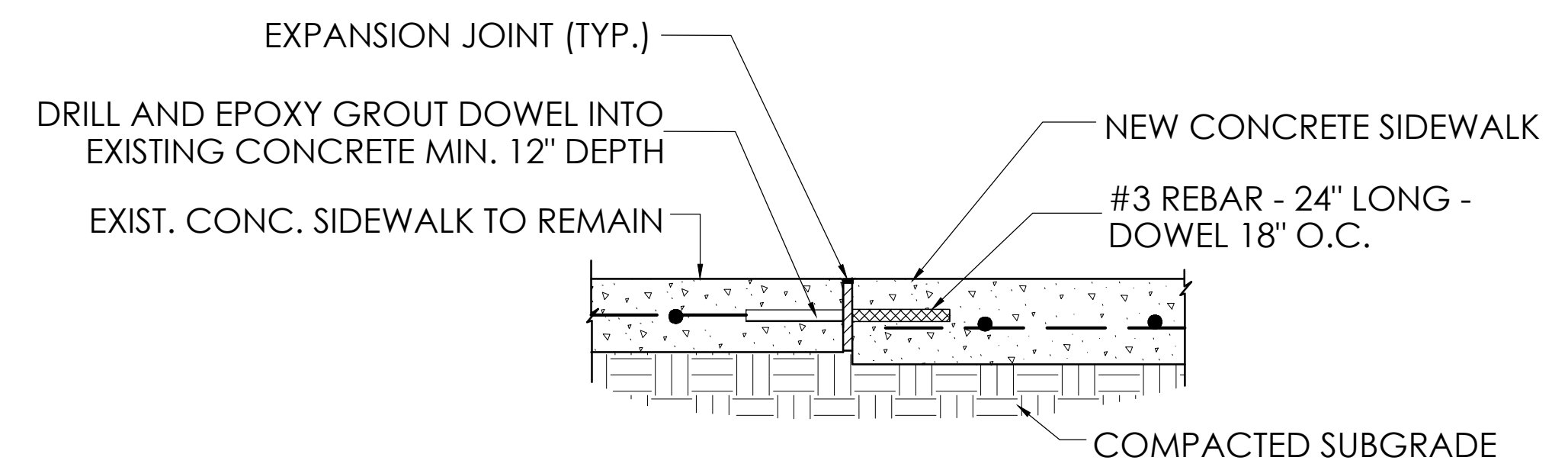


2 TYPICAL CONTRACTION JOINT DETAIL  
SCALE: 1"=1'-0"



NOTES:  
1. SPACING OF DOWEL SHALL BE 12" ON CENTER.  
2. SIDEWALK REINFORCING STEEL NOT SHOWN FOR CLARITY AND SHALL STOP 3" FROM DOWEL BAR.  
3. T=5"

3 TYPICAL EXPANSION JOINT DETAIL  
SCALE: 1"=1'-0"



4 STEEL DOWELS TO TIE EXISTING CONCRETE TO NEW CONCRETE  
SCALE: 1"=1'-0"

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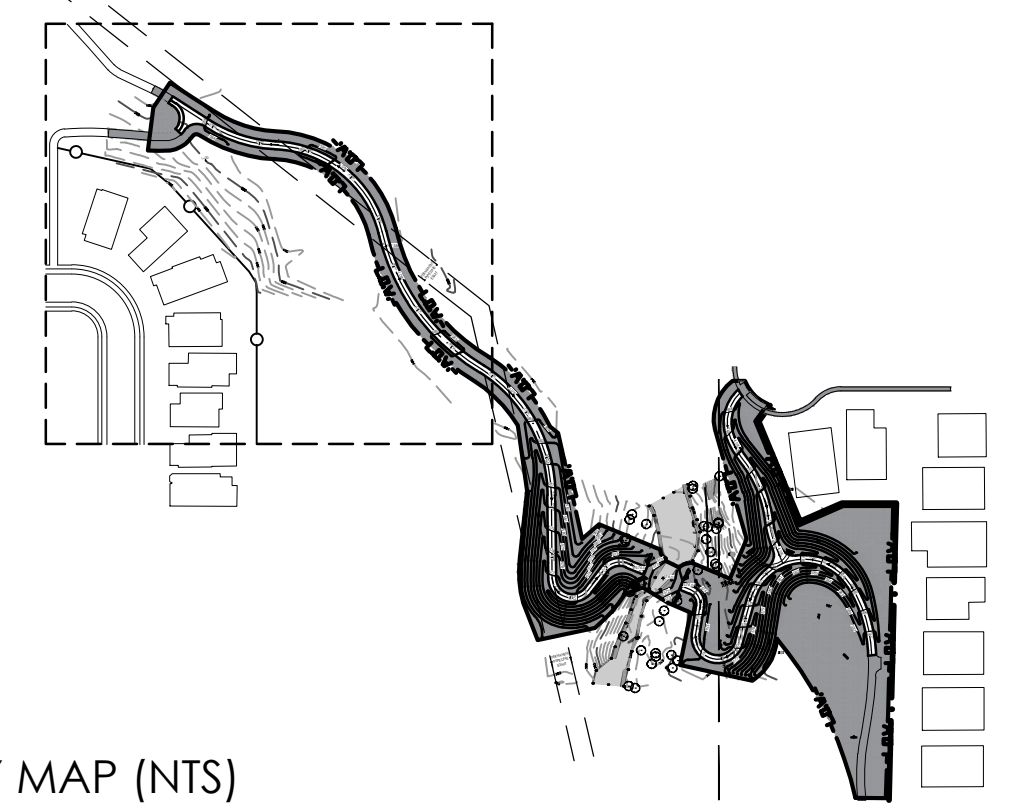
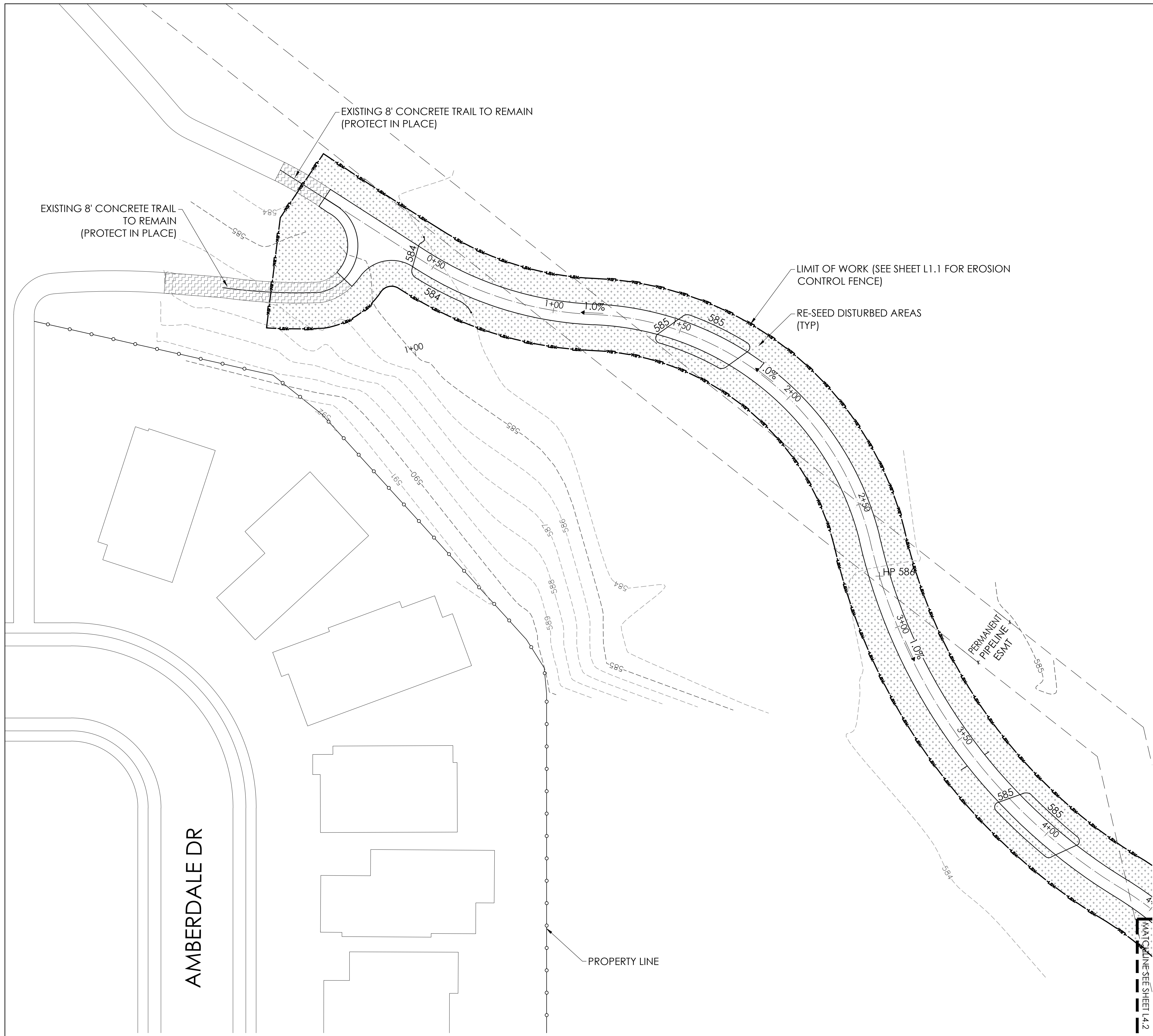


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Checked By: RS

Sheet Title  
TRAIL PAVING DETAILS

Sheet Number  
**L3.1**





KEY MAP (NTS)

LEGEND

- LIMIT OF GRADING
- RE-SEED DISTURBED AREAS (TYP)
- SOIL RETENTION BLANKET
- NEW 8' CONCRETE TRAIL
- CENTERLINE OF TRAIL
- 1+00 STATION POINT
- EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
- EXISTING WATER BODY
- EXISTING FENCE TO REMAIN
- EXISTING TREE TO BE PRESERVED (TYP) AND PROTECTED

GRADING NOTES

1. ALL PROPOSED GRADES INDICATED ARE FINISHED GRADES. CONTRACTOR SHALL REVIEW PROPOSED GRADES WITH CITY INSPECTOR ON SITE AFTER REMOVAL OF EXISTING CONCRETE PAVING AND BEFORE INSTALLATION OF NEW CONCRETE PAVING.
2. ALL AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES TO BE RE-VEGETATED PER SPECIFICATION. REPAIR AREAS TO RECEIVE TEMPORARY IRRIGATION UNTIL VEGETATION IS ESTABLISHED UNLESS OTHERWISE DIRECTED BY OWNER.
3. ALL WALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.9% IN THE DIRECTION OF THE DOWNHILL SIDE.
4. THE LONGITUDINAL SLOPE OF THE WALKS/TRAILS SHALL BE NO GREATER THAN 4.5%.
5. ALL GRADES SHALL BE FINISHED TO A SMOOTH, FLOWING CONTOUR, MAINTAINING EXISTING FLOW PATTERNS UNLESS DIRECTED OTHERWISE.

**ARCADIA TRAIL CONNECTION**  
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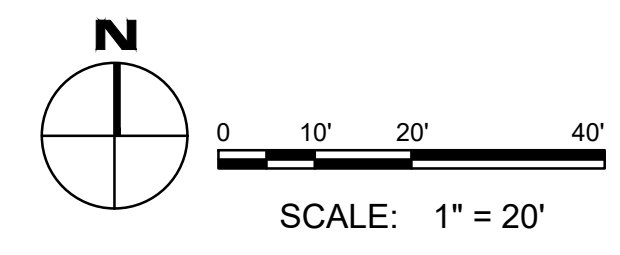
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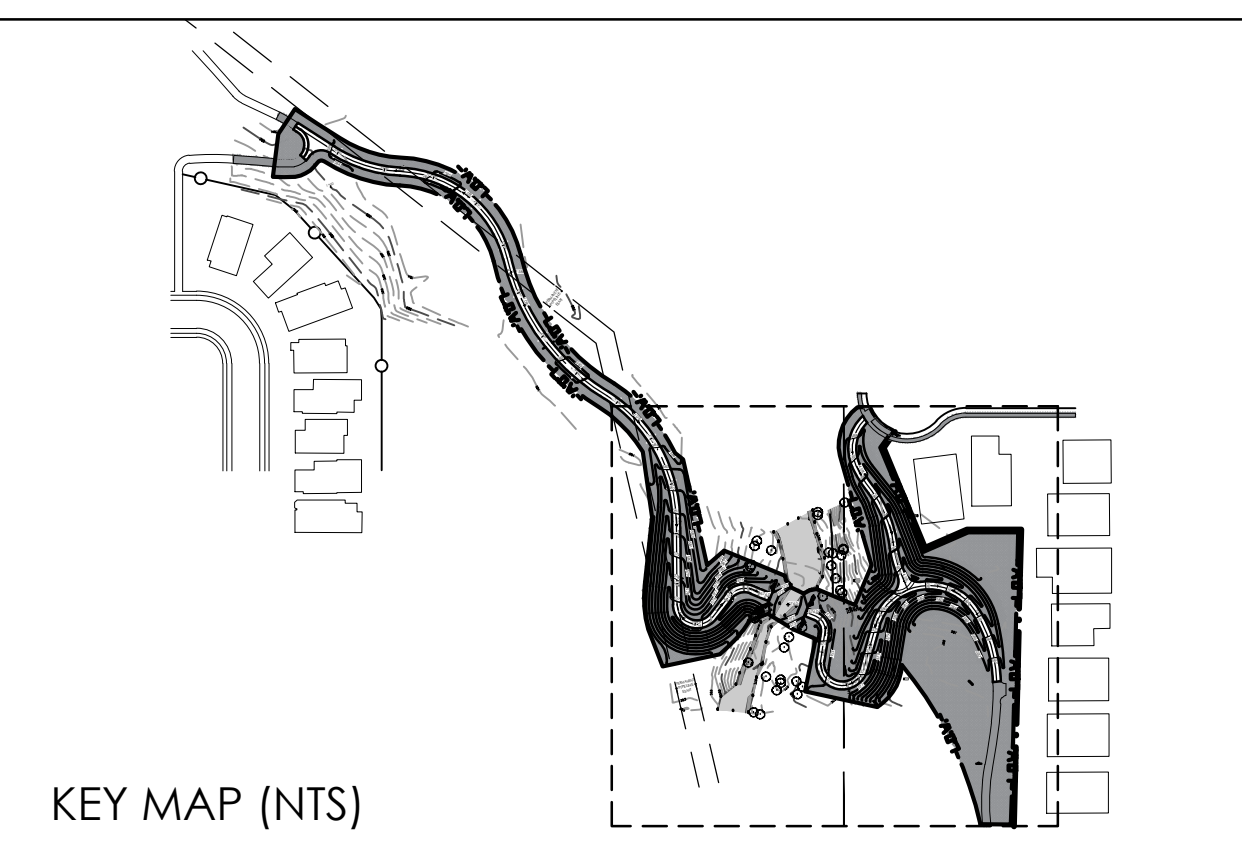
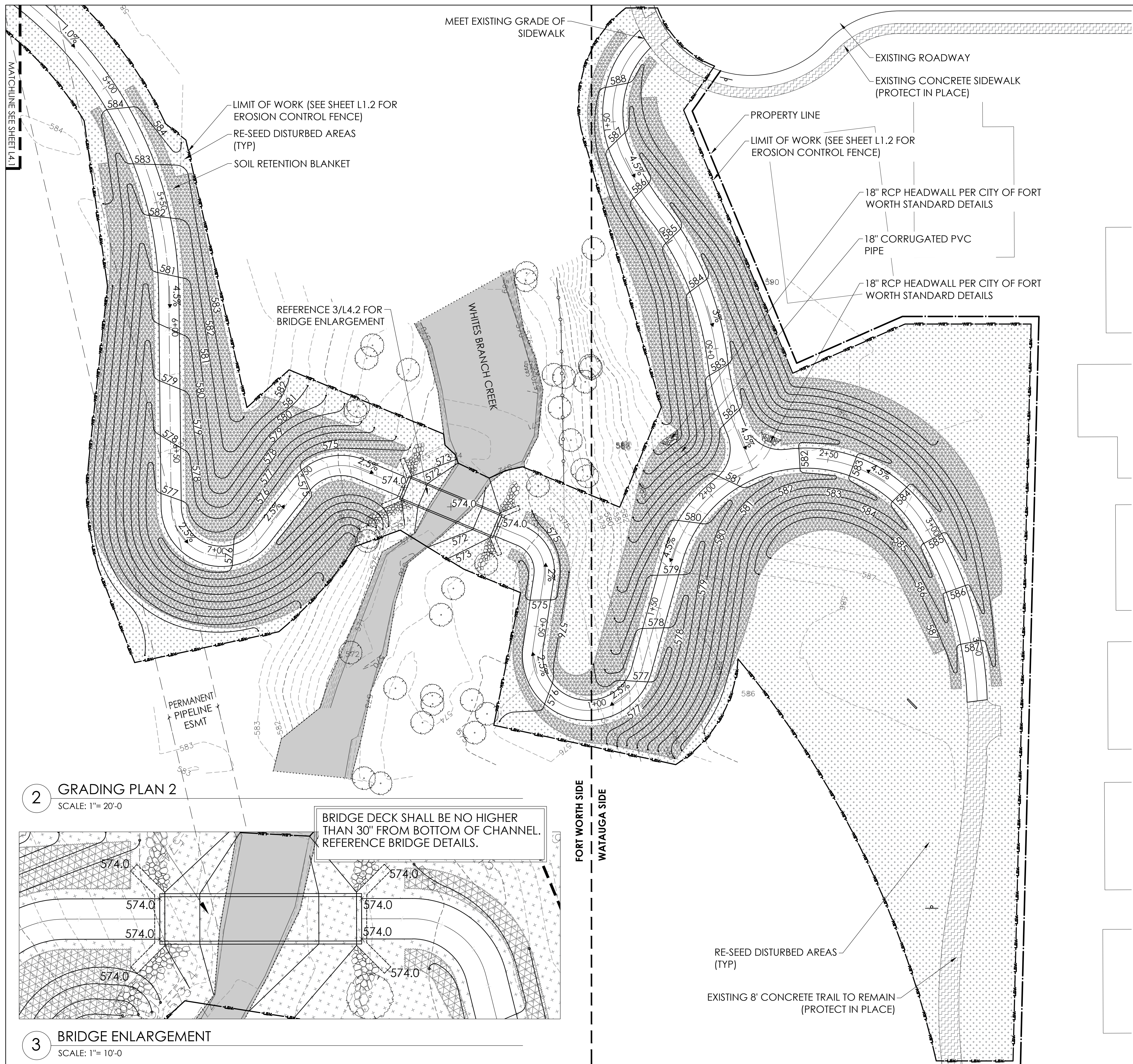


Project No.: F7X99200  
 Issued: 06/18/2021  
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Sheet Title  
**GRADING PLAN 1**  
 Sheet Number  
**L4.1**

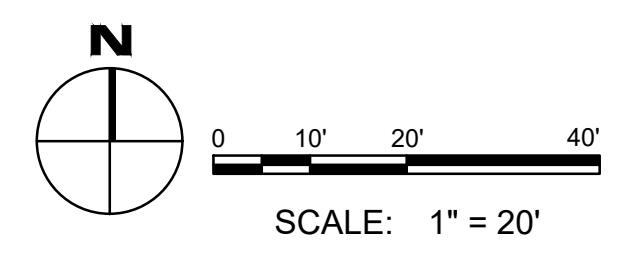
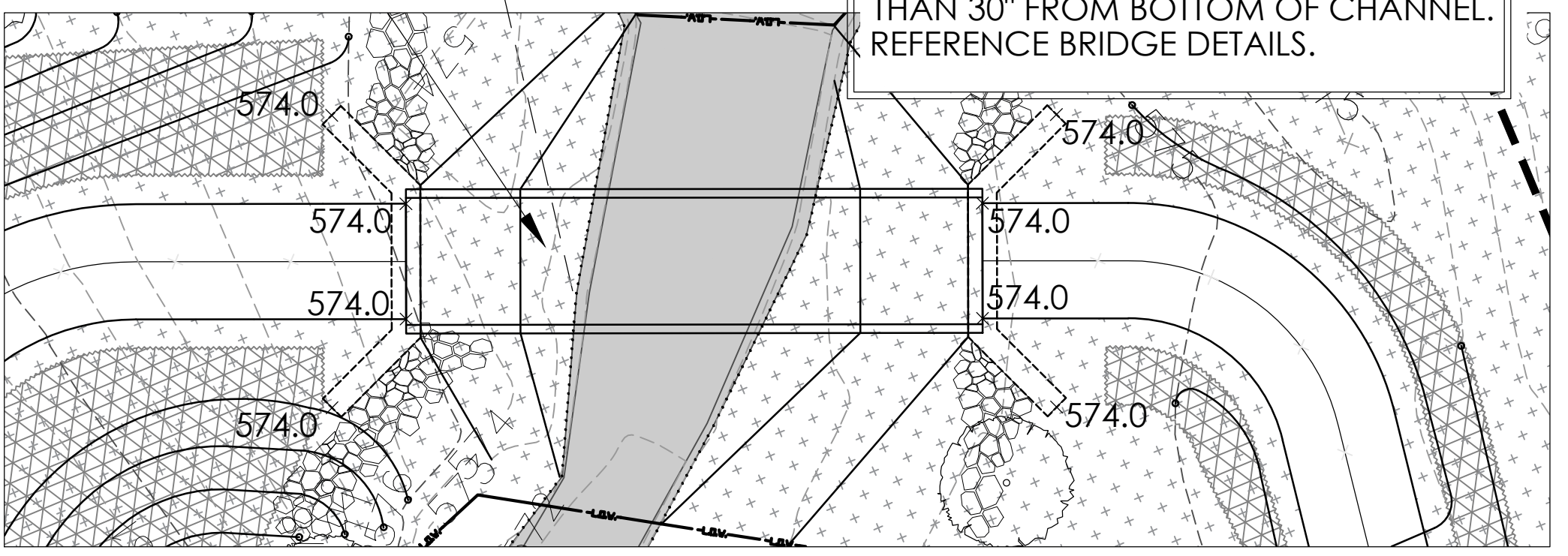
**1 GRADING PLAN 1**  
 SCALE: 1" = 20'-0"





- LEGEND
- LIMIT OF GRADING
  - RE-SEED DISTURBED AREAS (TYP)
  - SOIL RETENTION BLANKET
  - NEW 8' CONCRETE TRAIL
  - CENTERLINE OF TRAIL
  - 1+00 STATION POINT
  - EXISTING 8' CONCRETE TRAIL TO REMAIN (PROTECT IN PLACE)
  - EXISTING WATER BODY
  - EXISTING FENCE TO REMAIN
  - EXISTING TREE TO BE PRESERVED (TYP) AND PROTECTED
- GRADING NOTES
1. ALL PROPOSED GRADES INDICATED ARE FINISHED GRADES. CONTRACTOR SHALL REVIEW PROPOSED GRADES WITH CITY INSPECTOR ON SITE AFTER REMOVAL OF EXISTING CONCRETE PAVING AND BEFORE INSTALLATION OF NEW CONCRETE PAVING.
  2. ALL AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES TO BE RE-VEGETATED PER SPECIFICATION. REPAIR AREAS TO RECEIVE TEMPORARY IRRIGATION UNTIL VEGETATION IS ESTABLISHED UNLESS OTHERWISE DIRECTED BY OWNER.
  3. ALL WALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.9% IN THE DIRECTION OF THE DOWNHILL SIDE.
  4. THE LONGITUDINAL SLOPE OF THE WALKS/TRAILS SHALL BE NO GREATER THAN 4.5%.
  5. ALL GRADES SHALL BE FINISHED TO A SMOOTH, FLOWING CONTOUR, MAINTAINING EXISTING FLOW PATTERNS UNLESS DIRECTED OTHERWISE.

2 GRADING PLAN 2  
SCALE: 1" = 20'-0"



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Project No.: F7X99200  
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GENERAL NOTES

- A. DESIGN CODES, STANDARDS, AND CRITERIA:
  - 1. 2018 INTERNATIONAL BUILDING CODE
  - 2. ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
  - 3. ANSI/AISC 360-16, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
  - 4. AISC 303-16 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
  - 5. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- B. DESIGN LOADS:
  - 1. LIVE LOADS: PEDESTRIAN LOADING - 100PSF (NON-REDUCIBLE)

ABUTMENT NOTES

- A. REFER TO THE GEOTECHNICAL REPORT AND SPECIFICATIONS FOR GENERAL REQUIREMENTS OF EARTHWORK, OVER EXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION.
- B. ABUTMENT DESIGN IS BASED UPON THE SOILS EXPLORATION AND REPORT BY HJV ASSOCIATES, DALLAS TEXAS DATED APRIL 20, 2020, RPT NO.FG-18-101139.2
- C. ABUTMENTS ARE DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 1500 PSF.
- D. MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL ABUTMENTS ARE PLACED.
- E. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.
- F. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.
- G. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.
- H. KEEP OPEN EXCAVATIONS AROUND BUILDING PERIMETER DRY. BACKFILL AGAINST ABUTMENTS AND GRADE BEAMS AS SOON AS PRACTICAL. PUMP WATER OUT OF OPEN EXCAVATIONS IF FLOODED PRIOR TO BACKFILLING.
- I. FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE END BEARING OF 9 TSF (FOR DRILLED PIERS BEARING IN BEDROCK) AND AN ALLOWABLE SKIN FRICTION OF 2000 PSF. SKIN FRICTION TO RESIST UPLIFT LOADS IS.
- J. PLACE CONCRETE FOR PIER HOLES WITHIN 8 HOURS AFTER DRILLING. DO NOT LEAVE HOLE OPEN OVERNIGHT.
- K. USE TEMPORARY CASING IF REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE HOLE. OR TO PREVENT INFILX OF WATER.
- L. CLEAN BOTTOM OF EACH PIER HOLE OF LOOSE MATERIAL.

ABUTMENT NOTES CONT

- P. PLACE CONCRETE USING A HOPPER AND CHUTE PIPE. PROVIDE CONCRETE FREE FALL OF LESS THAN 10 FEET.
- Q. REMOVE LAITANCE MATERIAL FROM THE TOP OF EACH PIER PRIOR TO PLACING CONCRETE.
- R. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO INSPECT PIER HOLES PRIOR TO PLACING CONCRETE AND VERIFY PIER SIZE, REINFORCING, DEPTH, BEARING STRATA, EMBEDMENT DEPTH AND REMOVAL OF CUT MATERIAL.
- S. REMOVE EXCESS CONCRETE AT TOP OF PIERS BEYOND THE LIMITS OF THE PIER DIAMETER.
- T. FORM SIDES OF BEAMS STRAIGHT AND TO SPECIFIED DIMENSIONS. EARTH FORMS WILL NOT BE PERMITTED.
- U. REFER TO LAYOUT DRAWINGS FOR LIMITS OF EXCAVATIONS.
- V. WHERE SHOWN ON DRAWINGS, CONSTRUCT BEAMS OVER A MINIMUM VOID SPACE OF 12 INCHES. USE SOIL RETAINERS TO MINIMIZE THE POTENTIAL FOR INFILLING OF THE VOID SPACE OVER TIME.
- W. EARTHWORK: ALL DEBRIS, VEGETATION AND TOPSOIL CONTAINING ORGANIC MATERIALS SHALL BE CLEARED AND GRUBBED FROM THE BUILDING SITE. AFTER REMOVAL OF VEGETATION AND EXCAVATION, THE EXPOSED SURFACE SHALL BE PROOF ROLLED AND ANY SORT OF COMPRESSIBLE MATERIAL SHALL BE REMOVED OR IMPROVED BY DENSIFICATION AS RECOMMENDED FOR COMPACTED FILL BELOW ABUTMENTS. AFTER COMPLETION OF PROOF ROLLING THE SURFACE SHALL BE SCARIFIED FOR A MINIMUM DEPTH OF SIX (6) INCHES AND RECOMPACTED AS PER COMPACTION NOTE.
- X. SELECT FILL: SELECT FILL SHALL BE USED TO OBTAIN ROUGH GRADE OF GRADE SLAB. SELECT FILL MATERIALS SHOULD BE A SILTY, CLAYEY SAND TO A VERY SANDY CLAY WITH A MAXIMUM LIQUID LIMIT (LL) OF THIRTY (30) AND A PLASTICITY INDEX (PI) BETWEEN FOUR (4) AND FIFTEEN (15). ALL FILL SHALL BE FREE OF ORGANIC MATTER AND DEBRIS.
- Y. COMPACTION: SELECT FILL REQUIRED BENEATH THE GRADE SLAB SHALL BE PLACED IN SIX (6) INCH TO EIGHT (8) INCH THICK LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AT OR SLIGHTLY ABOVE ITS OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD, ASTM SPECIFICATION D698.

CONCRETE NOTES

- A. PROVIDE CONCRETE AS SHOWN BELOW. PROVIDE BATCH MIXING, TRANSPORTATION, PLACING AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301, ACI 318 AND ASTM C94. USE TYPE I PORTLAND CEMENT UNLESS OTHERWISE NOTED. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED.
  - 1. NORMAL WEIGHT (150 PCF), F<sub>c</sub> = 3,000 PSI CONCRETE AT 28 DAYS
    - a. ALL CONCRETE GRADE SUPPORTED SLABS AND GRADE BEAMS
    - b. DRILLED PIERS AND PIER CAPS
    - c. FOOTINGS
    - d. RETAINING WALLS
    - e. ALL CONCRETE NOT SPECIFICALLY COVERED
  - 2. LIGHT WEIGHT (115 PCF), F<sub>c</sub> = 3,000 PSI CONCRETE AT 28 DAYS
    - a. COMPOSITE SLAB ON METAL DECK
    - b. NON-COMPOSITE SLAB ON METAL DECK
  - 3. NORMAL WEIGHT (150 PCF), F<sub>c</sub> = 4,000 PSI CONCRETE AT 28 DAYS
    - a. ALL CONCRETE FOR SUSPENDED BEAMS, JOISTS, AND SLABS
    - b. COLUMNS AND WALLS
  - 4. NORMAL WEIGHT (150 PCF), F<sub>c</sub> = 5,000 PSI CONCRETE AT 28 DAYS
    - a. ALL CONCRETE FOR PRECAST CONSTRUCTION
- B. UNLESS SPECIFIED BELOW, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28 DAY COMPRESSIVE STRENGTH (F<sub>c</sub>) BEFORE FORMS MAY BE REMOVED:
  - 1. WALLS, COLUMNS AND BEAM SIDES - 40 PERCENT
  - 2. JOIST PANS, AND BEAM BOTTOMS - 70 PERCENT
  - 3. SHORING FOR FLOOR SYSTEM - 85 PERCENT
- C. PROVIDE CONCRETE MIXES DESIGNED BY A QUALIFIED TESTING LABORATORY FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.
- D. CHAMFER EXPOSED EDGES 3/4 INCH UNLESS OTHERWISE NOTED.

STRUCTURAL WOOD

A. WOOD FRAMING:

- 1. ALL WOOD STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- 2. ALL DIMENSIONAL LUMBER SHALL BE <DOUGLAS FIR> STAMPED BY A MEMBER OF THE <SPIB> <WWPA> AND KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT. THE GRADES OF LUMBER TO BE USED ARE AS FOLLOWS
  - a. STUDS AND BLOCKING STUD
  - b. JOISTS AND RAFTERS <NO. 2>
  - c. HEADERS AND LEDGERS <NO. 2>
  - d. BEAMS AND STRINGERS <NO. 1> <NO. 2>
  - e. COLUMNS AND POSTS <NO. 1> <NO. 2>
- 3. PRESSURE TREAT ALL WOOD PRODUCTS PER SPECIFICATIONS.

REINFORCING STEEL

- A. PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 315 AND ACI 318.
- B. PROVIDE NEW BILLET STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.
- C. MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS OTHERWISE NOTED:
  - 1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH - 3 INCHES
  - 2. CONCRETE EXPOSED TO WEATHER
    - a. NO. 6 AND LARGER - 2 INCHES
    - b. NO. 5 AND SMALLER - 1-1/2 INCHES
  - 3. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
    - a. SLABS AND WALLS
      - i. NO. 14 AND NO. 18 - 1-1/2 INCHES
      - ii. NO. 11 AND SMALLER - 3/4 INCH
    - b. JOISTS WITH CLEAR SPACINGS LESS THAN 30 INCHES - 3/4 INCH
    - c. JOISTS WITH CLEAR SPACINGS MORE THAN 30 INCHES - 1-1/2 INCHES
    - d. BEAM STIRRUPS AND COLUMN TIES - 1-1/2 INCHES
    - e. SHELLS AND FOLDED PLATE MEMBERS
      - i. NO. 6 AND LARGER - 3/4 INCH
      - ii. NO. 5 AND SMALLER - 1/2 INCH

ARCADIA TRAIL CONNECTION

PARK AND RECREATION DEPARTMENT  
CITY OF FORT WORTH, TX



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Revision No.	Date	Description

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MAY 28, 2021  
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Checked By:	CG

Sheet Title
BRIDGE PLANS GENERAL NOTES 1
Sheet Number
BR-01

**REINFORCING STEEL CONT FROM BR-01**

- H. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER.
- I. WHEN SPECIFICALLY APPROVED, PROVIDE WELDED REINFORCEMENT IN ACCORDANCE WITH ASTM A 706. USE LOW HYDROGEN ELECTRODES FOR WELDING OF REINFORCEMENT IN CONFORMANCE WITH "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL", AMERICAN WELDING SOCIETY, AWS D12.1. PROVIDE ASTM GRADE 40 REINFORCING BARS WHERE DETAILED BARS ARE TO BE WELDED TO A STEEL SECTION.
- J. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING.
- K. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR COLUMN SCHEDULE, SPLICE VERTICAL REINFORCEMENT IN COLUMNS A MINIMUM OF [30/48] BAR DIAMETERS.
- L. PROVIDE BUTT SPLICE CONNECTIONS FOR THE COMPRESSION SPLICES OF NO. 14 AND NO. 18 BARS. SAW CUT ENDS OF BUTT SPLICE BARS, INSURE PROPER ALIGNMENT, TRUE BEARING OF BARS AND MAKE SPLICES WITH G-LOC OR SPEED CLAMP ASSEMBLIES OR EQUIVALENT. STAGGER BUTT SPLICES OF COLUMN VERTICAL REINFORCEMENT. SPLICE APPROXIMATELY ONE-THIRD OF BARS WITHIN HALF OF COLUMN CLEAR HEIGHT. PROVIDE [3'-0"/4'-0"] MINIMUM SPACING BETWEEN SPLICE POINTS.
- M. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

**STRUCTURAL STEEL**

- A. PROVIDE STRUCTURAL STEEL OF THE FOLLOWING ASTM DESIGNATIONS UNLESS OTHERWISE NOTED:
  - 1. STRUCTURAL STEEL WIDE FLANGE AND WT SHAPES - ASTM A 992 (ASTM A 36)
  - 2. STRUCTURAL STEEL STANDARD SHAPES, CHANNELS AND ANGLES - ASTM A 36 (ASTM A 572, GRADE 50)
  - 3. EDGE ANGLES, BENT PLATES, HANGER AND BRACES - ASTM A 36
  - 4. STRUCTURAL PIPE - ASTM A 53, GRADE B
  - 5. STRUCTURAL TUBING (SQUARE OR RECTANGULAR) - ASTM A 500, GRADE B
  - 6. BASE PLATES AND MISCELLANEOUS STEEL PLATES - ASTM A 36 (ASTM A 572, GRADE 50)
  - 7. CONNECTION MATERIALS:
    - a. BEAM COLUMN STIFFENER PLATES AND DOUBLER PLATES TO MATCH THE GRADE STEEL OF STRUCTURAL ELEMENT
    - b. ALL CONNECTION MATERIALS, EXCEPT AS OTHERWISE NOTED HEREIN OR IN THE DRAWINGS, INCLUDING BEARING PLATES, GUSSET PLATES, STIFFENER PLATES, ANGLES, ETC. - ASTM A 36
  - 8. HIGH STRENGTH BOLTS (SLIP CRITICAL JOINTS FOR ALL BRACES WHERE SPECIFIED) - ASTM A 325 (A 490)
  - 9. HARDENED STEEL WASHERS - ASTM F 436
  - 10. HEAVY HEX NUTS - ASTM A 563
- B. WELD MINIMUM SIZE AND STRENGTH
  - 1. PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.
  - 2. PROVIDE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.

**STRUCTURAL STEEL CONT**

- 3. DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED ON ALL SHOP AND FIELD WELDS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 4. WHERE CONNECTIONS ARE NOTED ON DRAWINGS AS MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP FULL FLEXURAL CAPACITY OF THE LESSER MEMBER.
- 5. PROVIDE ELECTRODES FOR FIELD OR SHOP WELDING THAT CONFORM TO AWS D1.1 CLASS E70XX.
- C. PROVIDE MINIMUM OF TWO BOLTS PER CONNECTION. MINIMUM BOLT DIAMETER TO BE 3/4 INCH.
- D. PROVIDE BOLTS, NUTS AND WASHERS THAT ARE HOT DIP GALVANIZED ACCORDING TO ASTM A 153, CLASS C WHEN USED TO CONNECT STEEL ELEMENTS THAT ARE HOT DIP GALVANIZED AFTER FABRICATION.
- E. PROVIDE SIMPLE SHEAR CONNECTIONS FOR STEEL CONNECTIONS NOT OTHERWISE SPECIFIED UTILIZING HIGH STRENGTH BEARING BOLTS IN SINGLE OR DOUBLE SHEAR. PROVIDE DOUBLE ANGLE OR SINGLE PLATE SHEAR TAB BOLTED CONNECTIONS.
  - 1. UNLESS LARGER REACTION IS SHOWN ON DRAWINGS, PROVIDE MINIMUM DESIGN FORCES AS FOLLOWS:
    - a. NONCOMPOSITE BEAMS: BEAM-TO-BEAM OR BEAM-TO-COLUMN CONNECTION TO DEVELOP THE REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM UNIFORM LOAD TABLES OF THE AISC MANUAL OF STEEL CONSTRUCTION. PROVIDE MINIMUM SHEAR CAPACITY OF 12,000 POUNDS FOR BEAMS 8 INCHES AND 10 INCHES DEEP. PROVIDE MINIMUM SHEAR CAPACITY OF 8,000 POUNDS FOR BEAMS LESS THAN 8 INCHES DEEP.
    - b. COMPOSITE BEAMS: BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTION TO DEVELOP REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM UNIFORM LOAD TABLES OF AISC MANUAL OF STEEL CONSTRUCTION. PROVIDE MINIMUM SHEAR CAPACITY OF 12,000 POUNDS FOR BEAMS 8 INCHES TO 10 INCHES DEEP. PROVIDE MINIMUM SHEAR CAPACITY OF 8,000 POUNDS FOR BEAMS LESS THAN 8 INCHES DEEP. OBTAIN END REACTION FOR COMPOSITE BEAMS, FROM AISC MANUAL PART 2, MULTIPLIED BY THE FOLLOWING FACTORS:
 

BEAM SIZE FACTOR			
W8	3.30	W21	2.10
W10	3.10	W24	2.10
W12	2.80	W27	1.90
W14	2.40	W30	1.80
W16	2.30	W33	1.80
W18	2.20	W36	1.70
  - 2. ADD TO REACTIONS LISTED ABOVE LOADS OR REACTIONS OF MEMBERS SUPPORTED BY BEAM WITHIN THREE FEET OF BEAM END AND VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO BEAM.
- F. STEEL FABRICATION
  - 1. FABRICATE AND ASSEMBLE STRUCTURAL MEMBERS/ASSEMBLIES IN SHOP TO GREATEST EXTENT POSSIBLE.

**ARCADIA TRAIL CONNECTION**

PARK AND RECREATION DEPARTMENT  
CITY OF FORT WORTH, TX

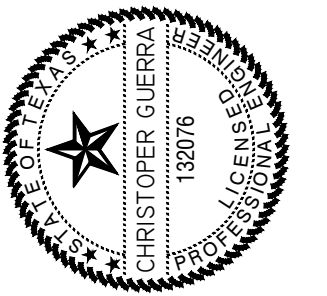


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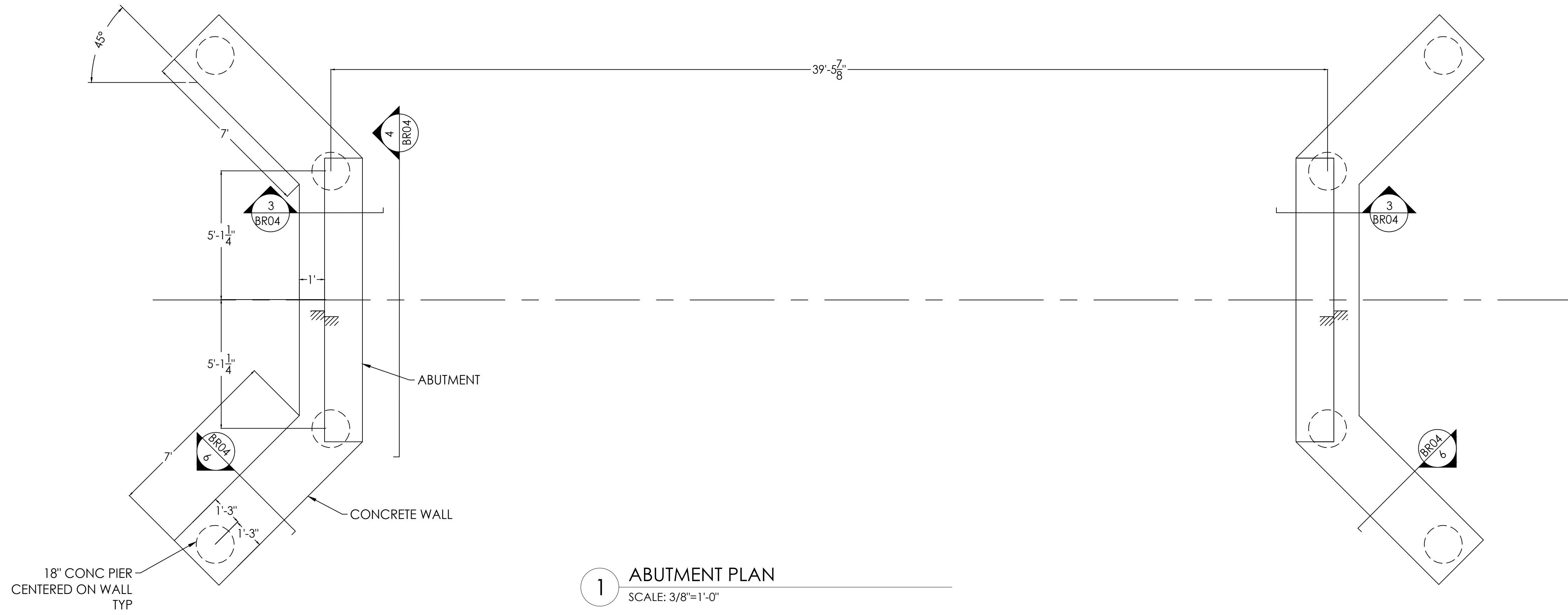
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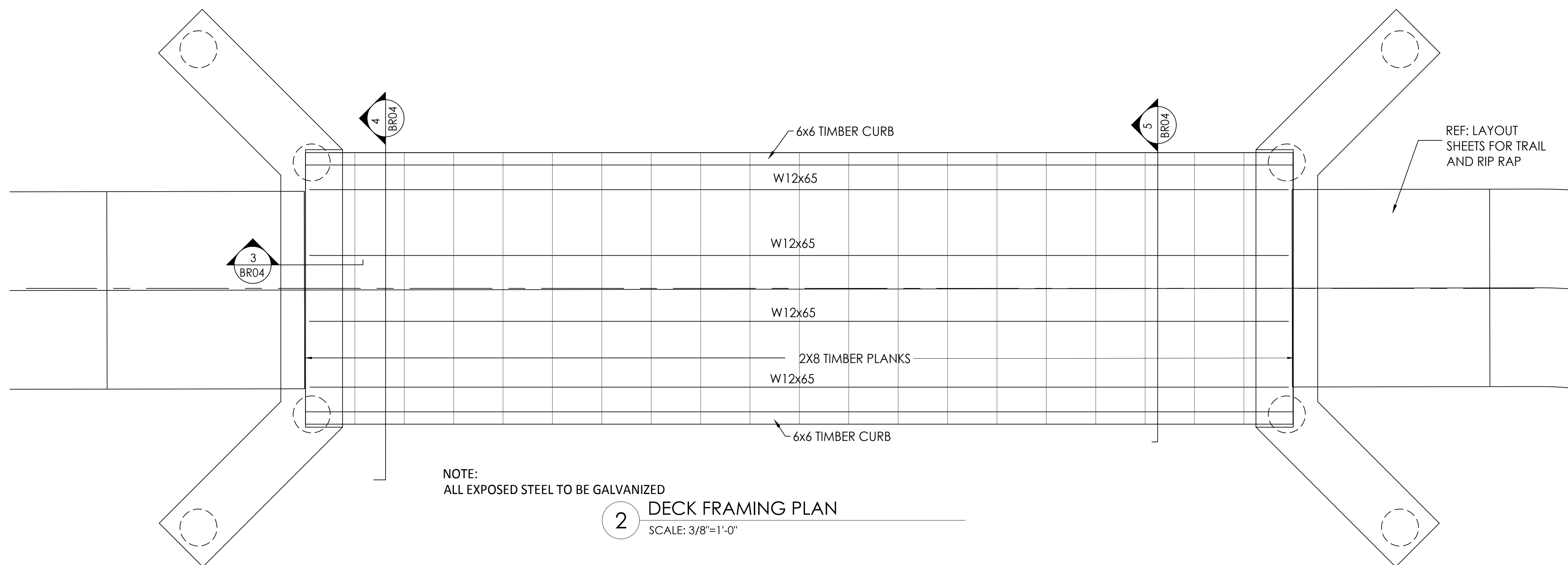
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Sheet Title  
**BRIDGE PLANS  
GENERAL NOTES 2**

Sheet Number  
**BR-02**



**1** ABUTMENT PLAN  
SCALE: 3/8"=1'-0"



NOTE:  
ALL EXPOSED STEEL TO BE GALVANIZED

**2** DECK FRAMING PLAN  
SCALE: 3/8"=1'-0"

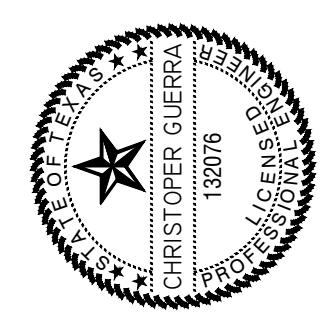
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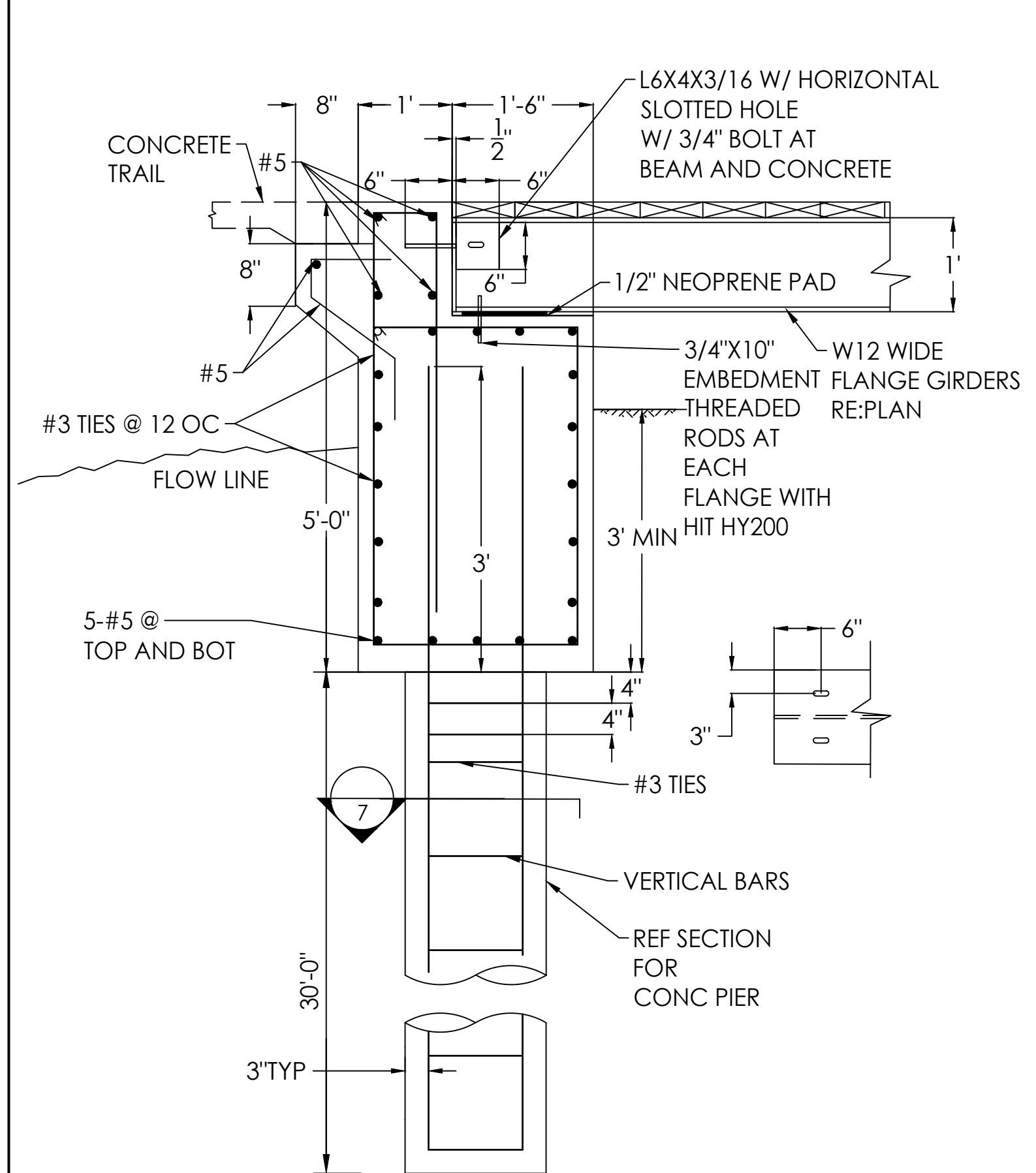
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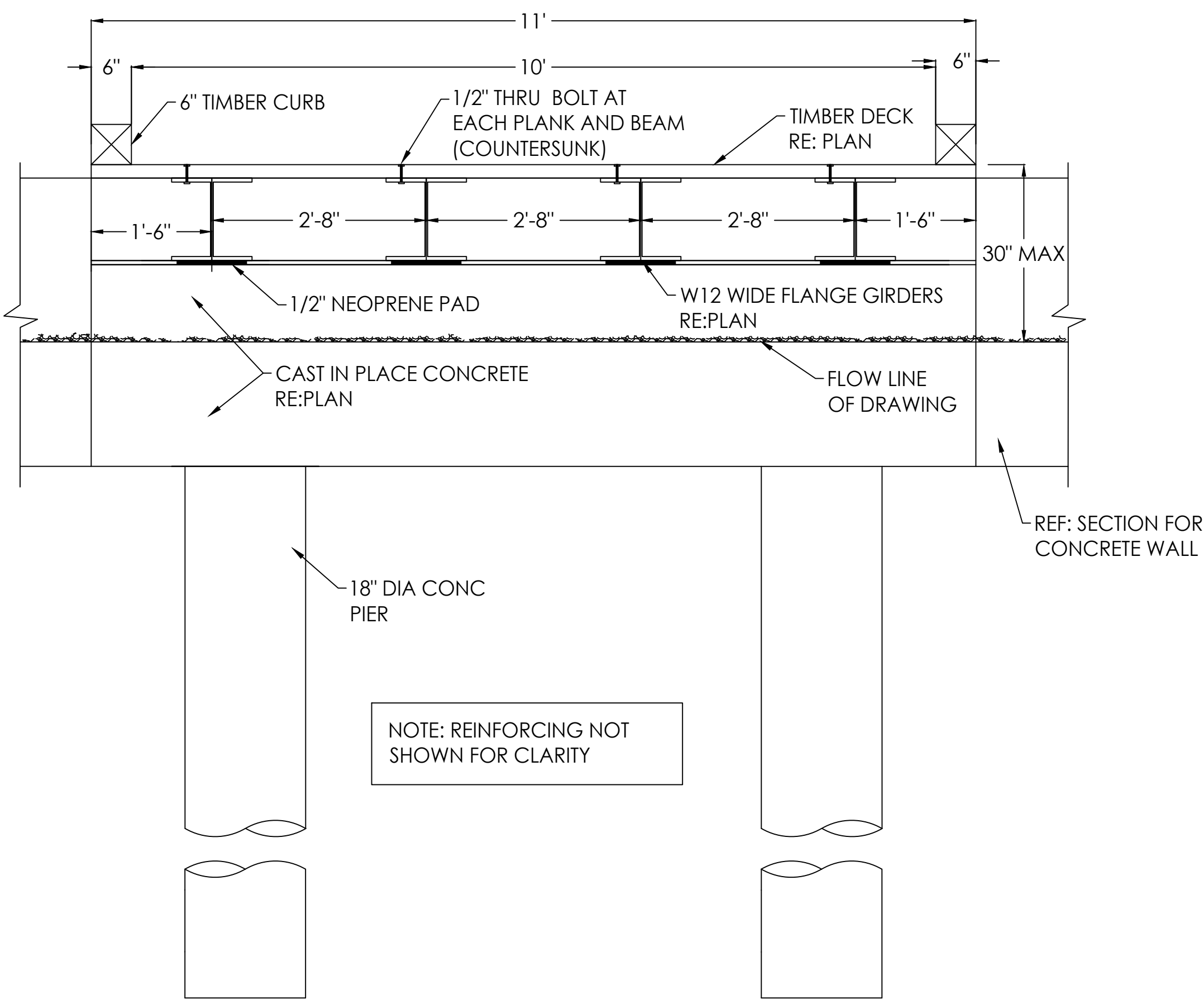
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Sheet Title  
**LOW WATER CROSSING BRIDGE PLAN**

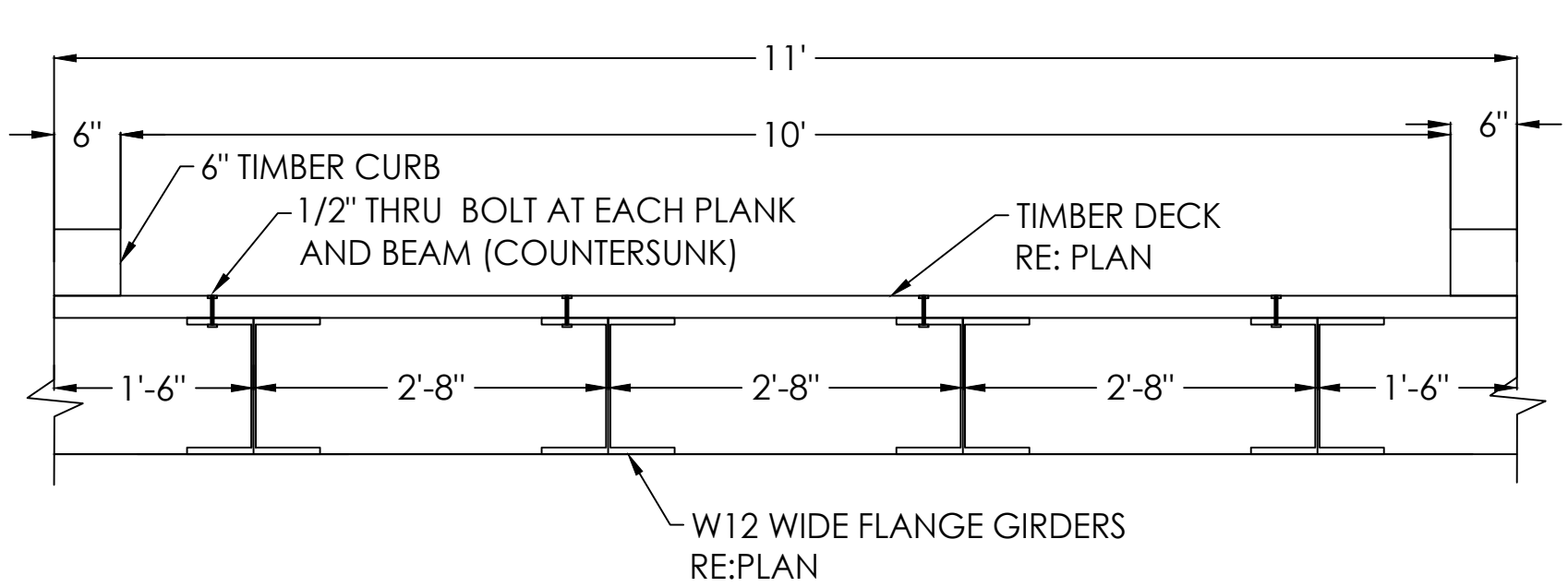
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**BR-03**



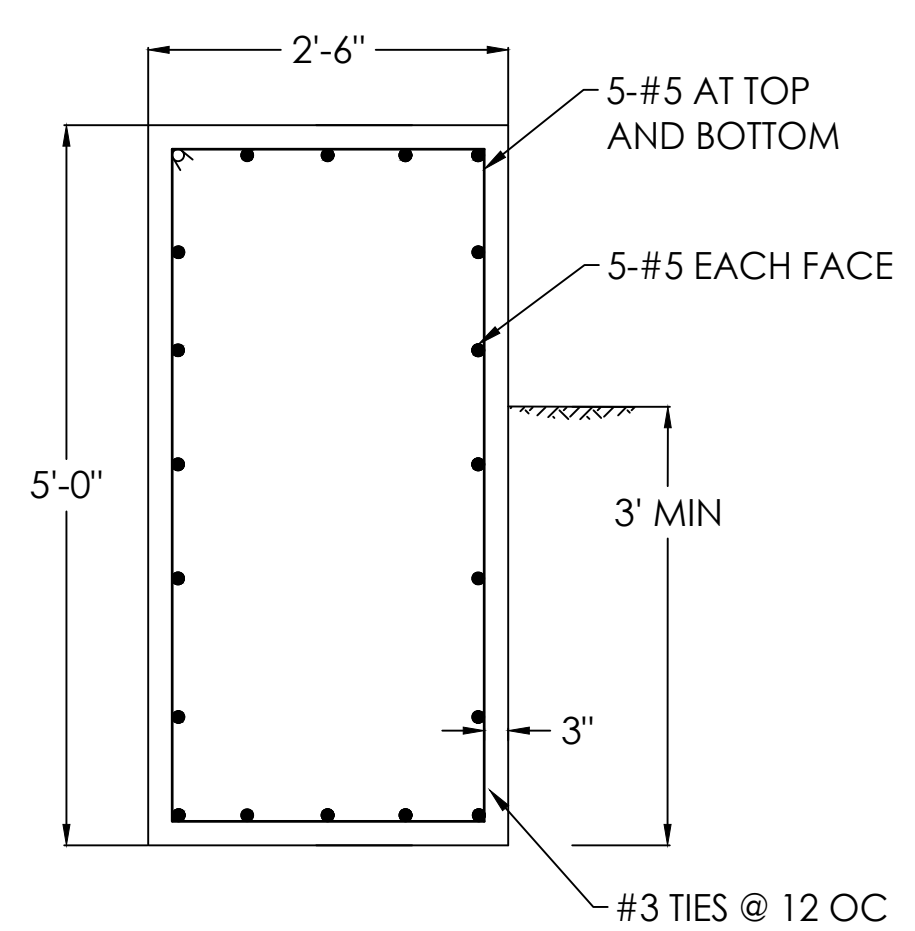
**3 SECTION**  
SCALE: 3/4" = 1'-0"



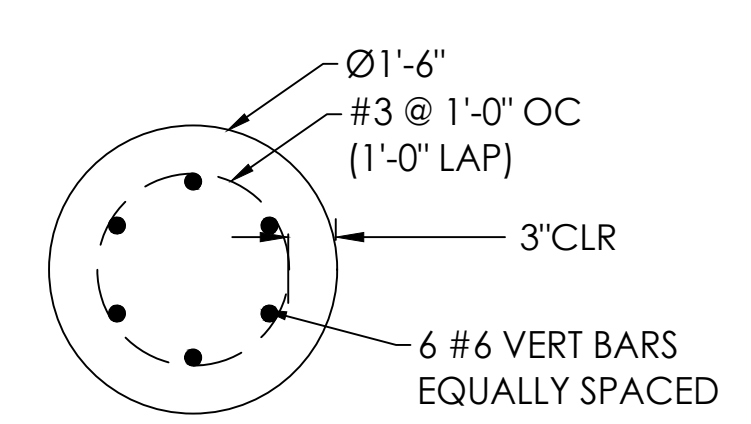
**4 ABUTMENT FRONT ELEVATION**  
SCALE: 3/4" = 1'-0"



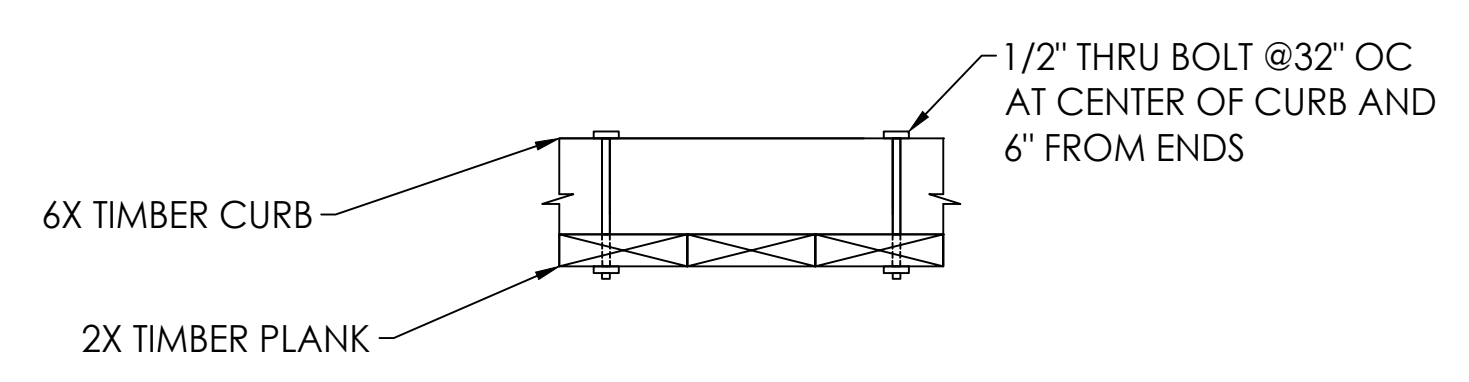
**5 SPAN SECTION**  
SCALE: 3/4" = 1'-0"



**6 WALL SECTION**  
SCALE: 3/4" = 1'-0"



**7 CONCRETE PIER SECTION**  
SCALE: 1 1/2" = 1'-0"



**8 TIMBER DECK / CURB DETAIL**  
SCALE: 1 1/2" = 1'-0"

NOTE: REINFORCING NOT SHOWN FOR CLARITY

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Sheet Title  
**LOW WATER CROSSING BRIDGE DETAILS**

Sheet Number  
**BR-04**