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108+00 109+00

(+)2.6000% (-)0.5405%

-L1- VERTICAL CURVE DATA

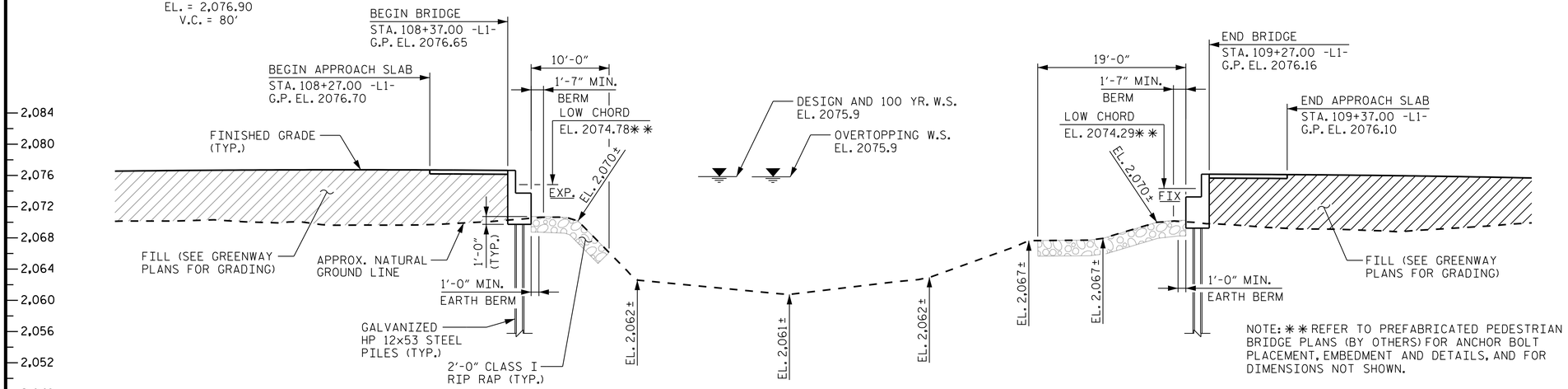
P.I. STA. = 107+90.00
EL. = 2,076.90
V.C. = 80'

(-)0.5405% (-)4.3200%

-L1- VERTICAL CURVE DATA

P.I. STA. = 109+75.00
EL. = 2,075.90
V.C. = 80'

SPAN A



END BENT 1 END BENT 2

NOTE: ** REFER TO PREFABRICATED PEDESTRIAN BRIDGE PLANS (BY OTHERS) FOR ANCHOR BOLT PLACEMENT, EMBEDMENT AND DETAILS, AND FOR DIMENSIONS NOT SHOWN.

SECTION ALONG -L1-

BOTTOM OF CAP ELEVATIONS AND LOW CHORD ELEVATIONS ARE NOT FINAL UNTIL FURTHER PREFABRICATED BRIDGE DESIGN IS PERFORMED.

-L1- HORIZONTAL CURVE DATA

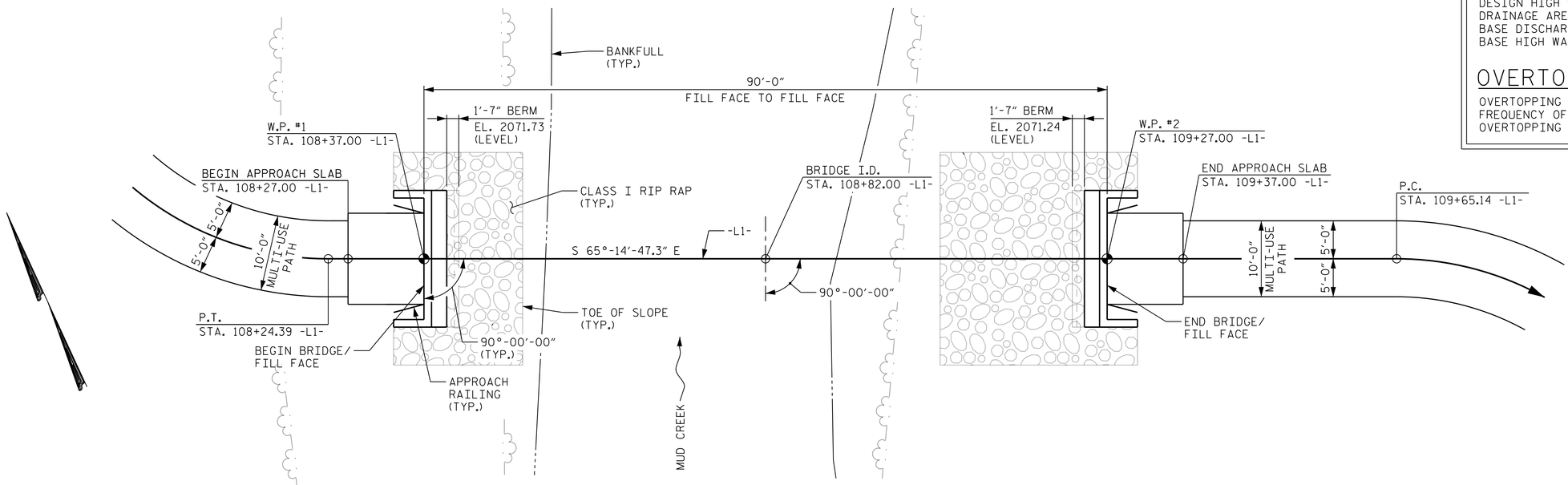
P.I. STA. 108+01.56	P.I. STA. 109+75.55
Δ = 88°-44'-39.3" (LT)	Δ = 29°-10'-10.8" (RT)
D = 143°-14'-22.0"	D = 143°-14'-22.0"
L = 61.96'	L = 20.36'
T = 39.13'	T = 10.41'
R = 40.00'	R = 40.00'

HYDRAULIC DATA

DESIGN DISCHARGE ----------8,860 CFS
FREQUENCY OF DESIGN FLOOD -------100-YR
DESIGN HIGH WATER ELEVATION-----2075.9 FT
DRAINAGE AREA----------53.4 SQ. MI
BASE DISCHARGE (Q100)----------8,860 CFS
BASE HIGH WATER ELEVATION-------2075.9 FT

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE----------->12,740 CFS
FREQUENCY OF OVERTOPPING FLOOD---->500-YR
OVERTOPPING FLOOD ELEVATION-------2075.9 FT



PLAN

(PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

I HEREBY CERTIFY THESE PLANS ARE THE AS-BUILT PLANS.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REV. No.:	REVISION:	DATE:	DRAWN BY:	CHECKED BY:

PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000
©2025

GENERAL DRAWING
STRUCTURE #1

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 015574013
SHEET NUMBER: S-1

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9/30/2025

F.A. PROJECT NO. STBGDA-1413019

146+00 147+00

(+)0.5000% (-)4.5000%

-L1- VERTICAL CURVE DATA

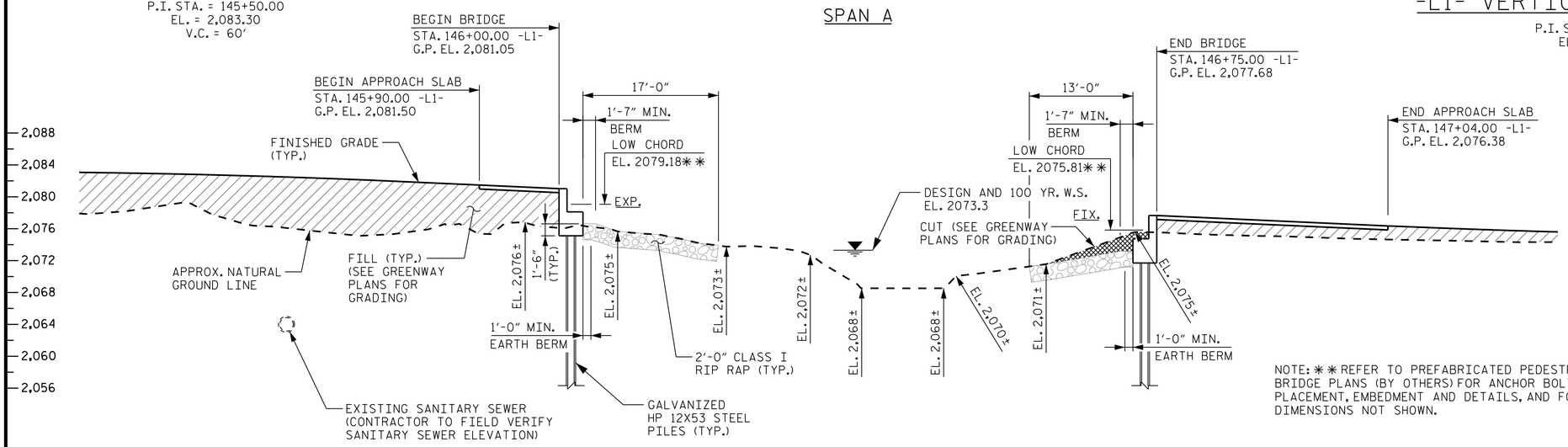
P.I. STA. = 145+50.00
EL. = 2,083.30
V.C. = 60'

(-)4.5000% (-)0.6471%

-L1- VERTICAL CURVE DATA

P.I. STA. = 147+30.00
EL. = 2,075.20
V.C. = 60'

SPAN A



END BENT 1 END BENT 2

SECTION ALONG -L1-

BOTTOM OF CAP ELEVATIONS AND LOW CHORD ELEVATIONS ARE NOT FINAL UNTIL FURTHER PREFABRICATED BRIDGE DESIGN IS PERFORMED.

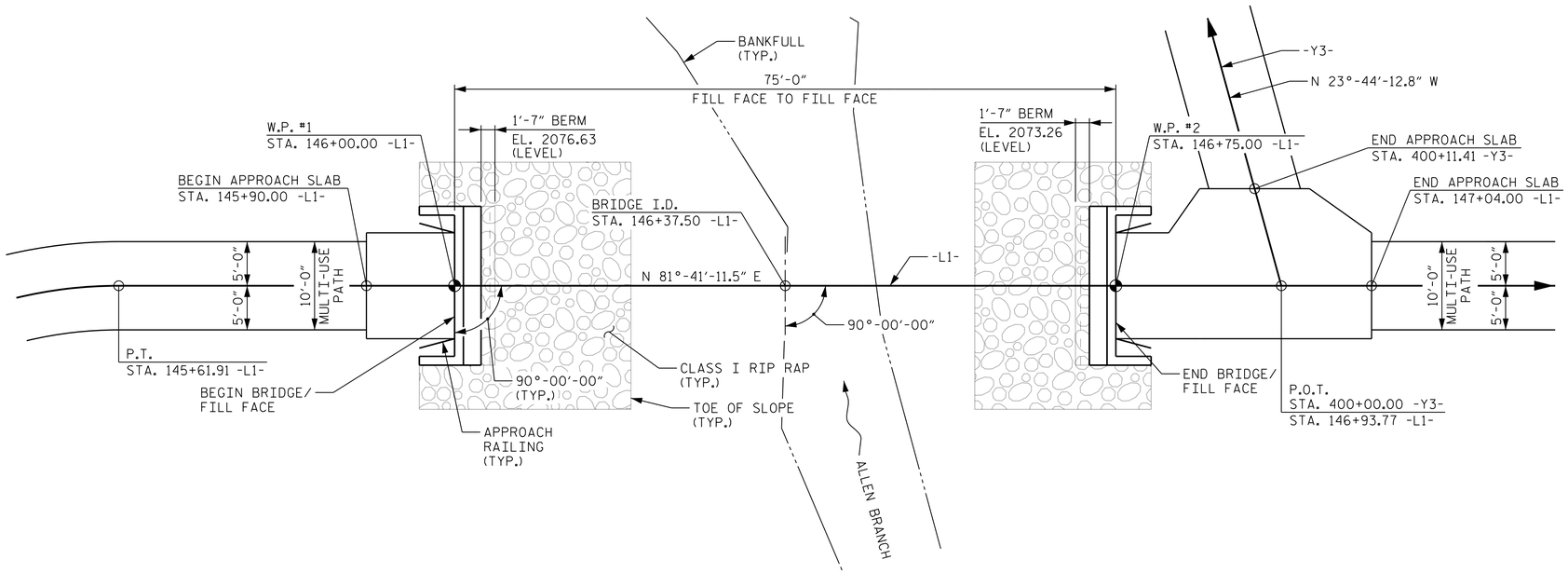
NOTE: ** REFER TO PREFABRICATED PEDESTRIAN BRIDGE PLANS (BY OTHERS) FOR ANCHOR BOLT PLACEMENT, EMBEDMENT AND DETAILS, AND FOR DIMENSIONS NOT SHOWN.

-L1- HORIZONTAL CURVE DATA

P.I. STA. 145+50.37
Δ = 26°-57'-04.5" (RT)
D = 114°-35'-29.6"
L = 23.52'
T = 11.98'
R = 50.00'

HYDRAULIC DATA

DESIGN DISCHARGE	870 CFS
FREQUENCY OF DESIGN FLOOD	100-YR
DESIGN HIGH WATER ELEVATION	2073.3 FT
DRAINAGE AREA	1.28 SQ. MI
BASE DISCHARGE (Q100)	870 CFS
BASE HIGH WATER ELEVATION	2073.3 FT



PLAN

(PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

I HEREBY CERTIFY THESE PLANS ARE THE AS-BUILT PLANS.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

GENERAL DRAWING
STRUCTURE #2

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-2

9/30/2025

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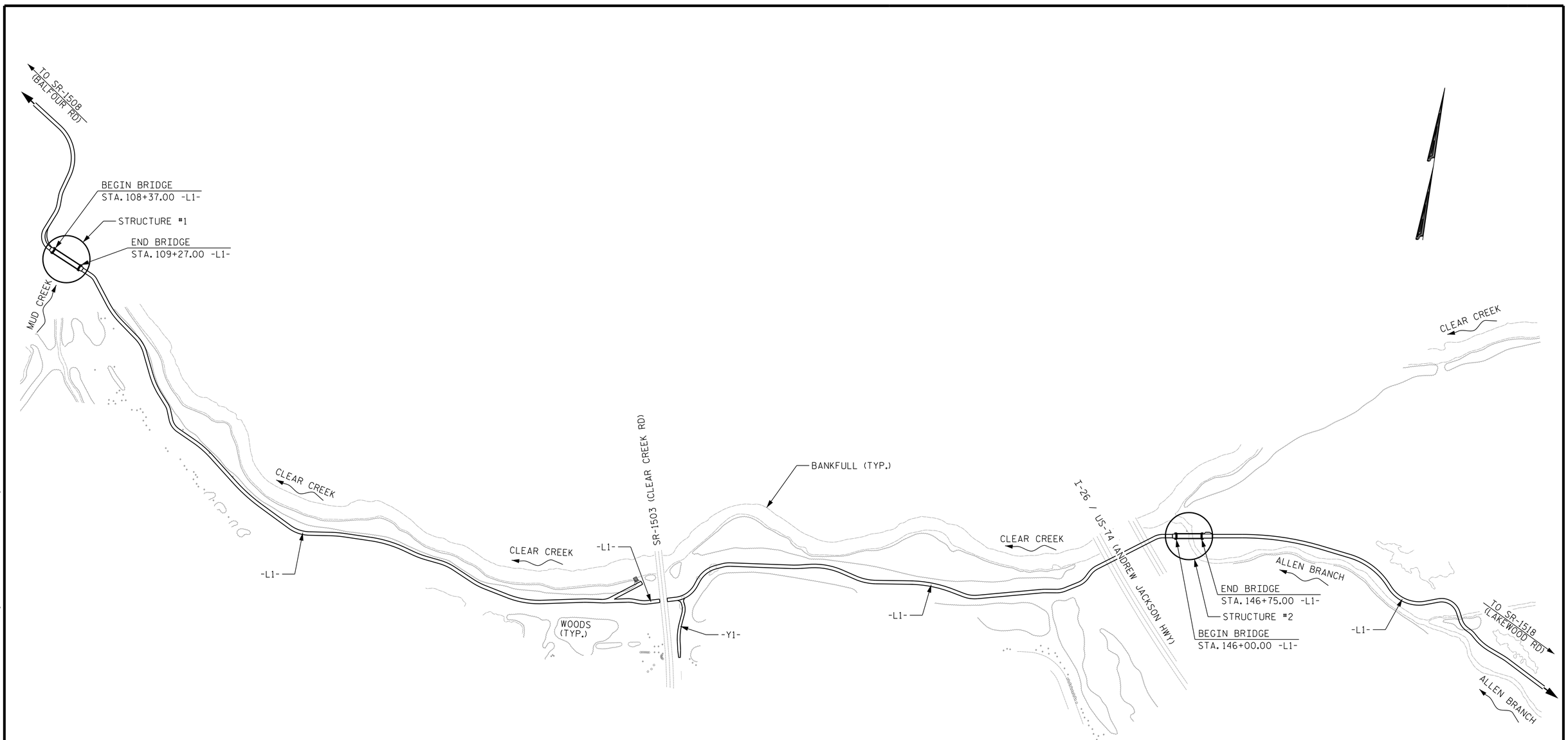

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

GENERAL DRAWING
LOCATION SKETCH

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740I3
SHEET NUMBER: S-3

NOTES

FOR GENERAL NOTES, SEE ''GENERAL NOTES'' SHEET.

TOTAL BILL OF MATERIAL - STRUCTURE #1

	CLASS A CONCRETE (BRIDGE)	BRIDGE APPROACH SLABS @ STA. 108+82.00 -L1-	REINFORCING STEEL (BRIDGE)	PILE DRIVING EQUIPMENT SETUP FOR HP 12 x 53 GALVANIZED STEEL PILES	HP 12 x 53 GALVANIZED STEEL PILES		RIP RAP CLASS I (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	* PREFABRICATED PEDESTRIAN BRIDGE @ STA. 108+82.00 -L1-	ANCHOR BOLTS	APPROACH RAILINGS
	CU. YDS.	LUMP SUM	LBS.	EA.	NO.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
SUPERSTRUCTURE		LUMP SUM							LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
END BENT 1	12.6		1523	3	3	75	40	45				
END BENT 2	12.6		1523	3	3	105	70	78				
TOTAL	25.2	LUMP SUM	3046	6	6	180	110.0	123.0	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM

* SEE SPECIAL PROVISIONS

TOTAL BILL OF MATERIAL - STRUCTURE #2

	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	CLASS A CONCRETE (BRIDGE)	BRIDGE APPROACH SLABS @ STA. 146+37.50 -L1-	REINFORCING STEEL (BRIDGE)	PILE DRIVING EQUIPMENT SETUP FOR HP 12 x 53 GALVANIZED STEEL PILES	HP 12 x 53 GALVANIZED STEEL PILES		RIP RAP CLASS I (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	* PREFABRICATED PEDESTRIAN BRIDGE @ STA. 146+37.50 -L1-	ANCHOR BOLTS	APPROACH RAILINGS
	LIN. FT.	LIN. FT.	CU. YDS.	LUMP SUM	LBS.	EA.	NO.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
SUPERSTRUCTURE				LUMP SUM							LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
END BENT 1	15	36	10.3		1347	3	3	75	60	67				
END BENT 2	15	25.8	10.3		1347	3	3	75	50	56				
TOTAL	30	61.8	20.6	LUMP SUM	2694	6	6	150	110.0	123.0	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM

* SEE SPECIAL PROVISIONS

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REV. No.:	REVISION:	DATE:	DRAWN BY:	CHECKED BY:

PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

GENERAL DRAWING
TOTAL BILL OF MATERIALS

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
3/2/2026

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-4

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3/2/2026

SUMMARY OF PILE INFORMATION/INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Number of Piles per Line	Factored Resistance per Pile KIPS	Pile Cut-Off (Top of Pile) Elevation FT	Estimated Pile Length per Pile FT	Scour Critical Elevation FT	Driven Piles			Predrilling for Piles **			Drilled-In Piles		
						Minimum Pile Tip (Tip No Higher Than) Elevation FT	Required Driving Resistance (RDR)* per pile KIPS	Pile Redrives Quantity EACH	Predrilling Length per Pile LIN FT	Predrilling Elevation (Elevation Not To Predrill Below) FT	Maximum Predrilling Diameter INCHES	Pile Excavation (Bottom of Hole) Elevation FT	Pile Excavation Not In Soil per Pile LIN FT	Pile Excavation In Soil per Pile LIN FT
End Bent No. 1, Piles 1-3	3	75	2071.70	25			125							
End Bent No. 2, Piles 1-3	3	75	2071.20	35			125							
TOTAL QUANTITY:														

* $RDR = \frac{Factored\ Resistance\ +Factored\ Drag\ Load\ +\ Factored\ Dead\ Load}{Dynamic\ Resistance\ Factor} + Nominal\ Drag\ Load\ Resistance + \ Nominal\ Resistance\ from\ Scourable\ Material$

** Predrilling for Piles is required for end bents/bents with a predrilling length and at the Contractor's option for end bents/bents with predrilling information but no predrilling length.

PILE DESIGN INFORMATION

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Factored Axial Load per Pile KIPS	Factored Drag Load per Pile KIPS	Factored Dead Load * per Pile KIPS	Dynamic Resistance Factor	Nominal Drag Resistance per Pile KIPS	Nominal Scour Resistance per Pile KIPS
End Bent No. 1, Piles 1-3	71			0.60		
End Bent No. 2, Piles 1-3	71			0.60		

* Factored Dead Load is factored weight of pile above the ground line.

SUMMARY OF PILE ACCESSORIES

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Pipe Pile Plates EACH	Steel Pile Points		
		Pipe Pile Cutting Shoes EACH	Pipe Pile Conical Points EACH	H-Pile Points EACH
TOTAL QUANTITY:				

SUMMARY OF DPT/PILE ORDER LENGTHS

(Blank entries indicate item is not applicable to structure)

Dynamic Pile Testing (DPT)		
End Bent / Bent No (e.g., "Bent 1 - Bent 3")	DPT Test Pile Length FT	DPT Testing Quantity EACH
TOTAL QUANTITY:		

Pile Order Lengths for Concrete Piles	
End Bent / Bent No (e.g., "Bent 1 - Bent 3")	Pile Order Length Basis* EST or DPT

* EST = Pile order lengths from estimated pile lengths; DPT = Pile order lengths based on Dynamic Pile Testing. For groups of end bents/bents with pile order lengths based on DPT testing, the first end bent/bent no. listed for each group is the representative end bent/bent with the DPT.

NOTES:

1. The Pile Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer (Stephen C. Crockett, #048207) on 010-30-2024.
2. Total Pile Driving Equipment Setup quantity (not shown in Pile Foundation Tables) equals the number of driven piles, i.e., the number of piles with a Required Driving Resistance.
3. The Engineer may adjust the quantity for DPT Testing and Pipe Pile Plates when necessary.

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

STRUCTURE #1 PILE FOUNDATION TABLES

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
Clay T. Poole
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 I3

SHEET NUMBER: S-5

SUMMARY OF PILE INFORMATION/INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Number of Piles per Line	Factored Resistance per Pile KIPS	Pile Cut-Off (Top of Pile) Elevation FT	Estimated Pile Length per Pile FT	Scour Critical Elevation FT	Driven Piles			Predrilling for Piles **			Drilled-In Piles		
						Minimum Pile Tip (Tip No Higher Than) Elevation FT	Required Driving Resistance (RDR)* per pile KIPS	Pile Redrives Quantity EACH	Predrilling Length per Pile LIN FT	Predrilling Elevation (Elevation Not To Predrill Below) FT	Maximum Predrilling Diameter INCHES	Pile Excavation (Bottom of Hole) Elevation FT	Pile Excavation Not In Soil per Pile LIN FT	Pile Excavation In Soil per Pile LIN FT
End Bent No. 1, Piles 1-3	3	60	2076.10	25			100						5	12
End Bent No. 2, Piles 1-3	3	60	2072.70	25			100						5	8.6
TOTAL QUANTITY:													30	61.8

$$^{*}RDR = \frac{Factored\ Resistance\ +Factored\ Drag\ Load\ +\ Factored\ Dead\ Load}{Dynamic\ Resistance\ Factor} + Nominal\ Drag\ Load\ Resistance + \ Nominal\ Resistance\ from\ Scourable\ Material$$

** Predrilling for Piles is required for end bents/bents with a predrilling length and at the Contractor's option for end bents/bents with predrilling information but no predrilling length.

PILE DESIGN INFORMATION

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Factored Axial Load per Pile KIPS	Factored Drag Load per Pile KIPS	Factored Dead Load * per Pile KIPS	Dynamic Resistance Factor	Nominal Drag Resistance per Pile KIPS	Nominal Scour Resistance per Pile KIPS
End Bent No. 1, Piles 1-3	58			0.60		
End Bent No. 2, Piles 1-3	58			0.60		

* Factored Dead Load is factored weight of pile above the ground line.

SUMMARY OF PILE ACCESSORIES

(Blank entries indicate item is not applicable to structure)

End Bent / Bent No, Pile(s) #(-#) (e.g., "Bent 1, Piles 1-5")	Pipe Pile Plates EACH	Steel Pile Points		
		Pipe Pile Cutting Shoes EACH	Pipe Pile Conical Points EACH	H-Pile Points EACH
TOTAL QUANTITY:				

SUMMARY OF DPT/PILE ORDER LENGTHS

(Blank entries indicate item is not applicable to structure)

Dynamic Pile Testing (DPT)		
End Bent / Bent No (e.g., "Bent 1 - Bent 3")	DPT Test Pile Length FT	DPT Testing Quantity EACH
TOTAL QUANTITY:		

Pile Order Lengths for Concrete Piles	
End Bent / Bent No (e.g., "Bent 1 - Bent 3")	Pile Order Length Basis* EST or DPT

* EST = Pile order lengths from estimated pile lengths; DPT = Pile order lengths based on Dynamic Pile Testing. For groups of end bents/bents with pile order lengths based on DPT testing, the first end bent/bent no. listed for each group is the representative end bent/bent with the DPT.

NOTES:

1. The Pile Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer (Stephen C. Crockett, #048207) on 11-13-2024.
2. Total Pile Driving Equipment Setup quantity (not shown in Pile Foundation Tables) equals the number of driven piles, i.e., the number of piles with a Required Driving Resistance.
3. The Engineer may adjust the quantity for DPT Testing and Pipe Pile Plates when necessary.

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9/30/2025

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

STRUCTURE #2 PILE FOUNDATION TABLES

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
Clay T Poole
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740I3
SHEET NUMBER: S-6

GENERAL NOTES

SPECIFICATION

1. CURRENT EDITION OF THE AASHTO LRFD GUIDE SPECIFICATIONS FOR PEDESTRIAN BRIDGES, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BICYCLE FACILITIES PLANNING AND DESIGN GUIDELINES, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN MANUAL, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THE INCORPORATED PROJECT SPECIAL PROVISIONS.
2. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
3. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
4. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
5. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISONS.
6. FOR PREFABRICATED PEDESTRIAN BRIDGE, SEE SPECIAL PROVISIONS.
7. FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
8. FOR STRUCTURAL STANDARD NOTES, SEE SHEET S-16.

MATERIAL AND WORKMANSHIP

1. PROVIDE ALL MATERIAL AND WORKMANSHIP IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, 2024 EDITION, UNLESS OTHERWISE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS.

DESIGN DATA

1. UNIFORM PEDESTRIAN LIVE LOAD______________90 PSF
2. VEHICULAR LIVE LOAD________________________AASHTO H-10
3. WIND LOAD___________________________________PER AASHTO
4. WATER LOAD__________________________________PER AASHTO

   STREAM VELOCITIES:
   A. STRUCTURE #1: 1.38 FEET/SEC
   B. STRUCTURE #2: 7.13 FEET/SEC
5. SEISMIC LOAD________________________________PER AASHTO
6. TEMPERATURE LOAD___________________________PER AASHTO

WATER ELEVATIONS

1. THE WATER ELEVATIONS SHOWN IN THE PLANS ARE FOR INFORMATION ONLY AND THE ACTUAL WATER ELEVATION DURING CONSTRUCTION MAY VARY DEPENDING ON WEATHER CONDITIONS AND SEASONAL FLUCTUATIONS.
2. ADDITIONAL PAYMENT FOR DEWATERING WILL NOT BE ALLOWED. PAYMENT FOR DEWATERING SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

FOUNDATIONS

1. FOR FOUNDATION RECOMMENDATIONS AND DESIGN INFORMATION, REFER TO THE FALCON ENGINEERING FOUNDATION RECOMMENDATIONS DATED OCTOBER 30, 2024 AND NOVEMBER 13, 2024.
2. SEE "PILE FOUNDATION TABLES" SHEET FOR FOUNDATION NOTES.

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE SHALL BE CLASS A, UNLESS OTHERWISE NOTED.
2. CONCRETE WORK SHALL FOLLOW THE PROVISIONS OF SECTIONS 420 AND 1000 OF THE STANDARD SPECIFICATIONS.
3. CHAMFER ALL EXPOSED EDGES 3/4" UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

REINFORCEMENT

1. REINFORCING BARS AND BAR SUPPORTS SHALL FOLLOW THE PROVISIONS OF SECTION 1070 OF THE STANDARD SPECIFICATIONS.
2. REINFORCING BARS SHALL CONFORM TO ASTM A615 FOR GRADE 60.
3. STANDARD HOOKS SHALL BE USED UNLESS OTHERWISE NOTED.
4. ALL LAP AND SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH THE DESIGN CRITERIA AND CRSI STANDARD PRACTICES, EXCEPT AS OTHERWISE NOTED.
5. PROVIDE A MINIMUM OF 2" OF COVER TO ALL REINFORCING BARS, UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL SUBMIT REINFORCEMENT SHOP DRAWINGS TO THE ENGINEER SEALING THESE BRIDGE PLANS FOR REVIEW AND APPROVAL FOR ALL CAST-IN-PLACE PROJECT ELEMENTS PRIOR TO FABRICATION OR INSTALLATION.

PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE

1. PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE, ANCHOR BOLTS, AND BEARING PADS SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER BASED UPON THE SPECIFIED DESIGN CRITERIA IN THE PLANS AND PROJECT SPECIAL PROVISIONS. THE PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE PLANS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA. PLANS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. THE PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE CALCULATIONS SHALL INCLUDE A SUMMARY OF REACTIONS. THE PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE FABRICATION SHALL NOT BEGIN UNTIL ALL APPROVALS HAVE BEEN RECEIVED.
2. PREFABRICATED PEDESTRIAN BRIDGE SHALL BE A STEEL PRATT TYPE TRUSS.
3. THE BRIDGE CLEAR PATH WIDTH SHALL BE 12'-0" AND SHALL BE MEASURED BETWEEN THE INSIDE FACES OF SAFETY RAILING ELEMENTS OR TOP CHORDS, WHICHEVER IS MORE RESTRICTIVE.
4. SAFETY RAILING SYSTEM SHALL BE A MINIMUM OF 4'-6" ABOVE THE TOP OF BRIDGE DECK.
5. ALL STRUCTURAL STEEL FOR PREFABRICATED PEDESTRIAN BRIDGE SHALL BE WEATHERING STEEL AND SHALL CONFORM TO NCDOT STANDARD SPECIFICATIONS AND PREFABRICATED PEDESTRIAN BRIDGE PROJECT SPECIAL PROVISIONS.

   A. ALL STRUCTURAL STEEL TUBE SHAPES SHALL CONFORM TO ASTM A847.
   B. ALL STRUCTURAL STEEL CHANNELS AND ANGLES SHALL CONFORM TO ASTM A588.
   C. ALL OTHER STEEL PLATES, SHAPES AND BARS SHALL CONFORM TO ASTM A588.
   D. ALL ANCHOR BOLTS SHALL BE GALVANIZED AND SHALL CONFORM TO ASTM A499.
   E. ALL HIGH STRENGTH BOLTS SHALL BE WEATHERING STEEL AND CONFORM TO F3125 GRADE A325. WASHERS & NUTS SHALL MATCH FINISH OF BOLT.
6. ALL STRUCTURAL STEEL WELDS SHALL CONFORM TO THE LATEST PROVISIONS OF THE STRUCTURAL WELDING CODE, ANSI/AWS D1.1. ALL WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH THE ABOVE AWS CODE.
7. SPLICES, IF REQUIRED FOR THE PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE, SHALL BE CLEARLY NOTED ON THE SHOP DRAWINGS, AND NECESSARY CALCULATIONS PROVIDED.
8. WEEP HOLES SHALL BE PROVIDED FOR DRAINAGE OF BRIDGE TUBULAR MEMBERS, AND SHALL BE CLEARLY NOTED ON THE SHOP DRAWINGS.
9. THE BRIDGE DECK SHALL BE REINFORCED CAST-IN-PLACE CONCRETE (DESIGNED BY OTHERS).
10. A 1" COMPRESSION JOINT EXPANSION SEAL SHALL BE PROVIDED ON EACH END OF THE BRIDGE BETWEEN THE APPROACH SLAB AND THE BRIDGE DECK. CONTRACTOR SHALL SUBMIT EXPANSION JOINT SHOPS AND PRODUCT DATA FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR INSTALLATION.

PREFABRICATED PEDESTRIAN BRIDGE SUBSTRUCTURE

1. THE SUBSTRUCTURE DESIGN WAS BASED UPON THE INFORMATION AVAILABLE FROM THE PREFABRICATED PEDESTRIAN BRIDGE MANUFACTURERS. ALL REACTIONS ARE ALLOWABLE LOADS. VERTICAL REACTIONS SHOWN ARE PER BASE PLATE (4 PER BRIDGE). POSITIVE REACTIONS ARE DOWNWARD AND NEGATIVE REACTIONS ARE UPWARD. LATERAL REACTIONS SHOWN ARE PER BENT (2 PER BRIDGE SPAN). LONGITUDINAL REACTIONS SHOWN ARE PER BASE PLATE (4 PER BRIDGE). LOADS SHOWN CANNOT BE EXCEEDED WITHOUT APPROVAL BY THE ENGINEER SEALING THESE BRIDGE PLANS. IF LOADS DIFFER FROM THOSE SHOWN, NOTIFY ENGINEER SEALING THESE BRIDGE PLANS IMMEDIATELY AND PRIOR TO FABRICATION SO THAT LOADS CAN BE REVIEWED AND PLAN DETAILS REVISITED.

   STRUCTURE #1 PREFABRICATED TRUSS:

   A. VERTICAL LOADS:
      DEAD LOAD________________________ 25,000 LBS
      UNIFORM LIVE LOAD (PL)___________ 24,300 LBS
      VEHICLE LOAD (LL)________________ 11,300 LBS
      WIND (WS WINDWARD)_______________ -8,000 LBS
      WIND (WS LEEWARD)________________ -2,900 LBS
      WIND UPLIFT______________________ ±6,000 LBS
      BUOYANCY_________________________ -4,750 LBS

PREFABRICATED PEDESTRIAN BRIDGE SUBSTRUCTURE (CONT.)

   B. LATERAL LOADS:
      WIND (WS)________________________ 22,600 LBS
      STREAM FLOW______________________ 500 LBS

   C. LONGITUDINAL LOADS:
      TEMPERATURE______________________ 3,500 LBS

   STRUCTURE #2 PREFABRICATED TRUSS:

   A. VERTICAL LOADS:
      DEAD LOAD________________________ 21,400 LBS
      UNIFORM LIVE LOAD (PL)___________ 21,600 LBS
      VEHICLE LOAD (LL)________________ 11,300 LBS
      WIND (WS WINDWARD)_______________ -7,100 LBS
      WIND (WS LEEWARD)________________ -2,600 LBS
      WIND UPLIFT______________________ ±4,800 LBS

   B. LATERAL LOADS:
      WIND (WS)________________________ 19,500 LBS
      STREAM FLOW______________________ 1,500 LBS

   C. LONGITUDINAL LOADS:
      TEMPERATURE______________________ 3,000 LBS

2. PEDESTRIAN BRIDGE END BENT DETAILS SHALL BE COORDINATED WITH THE PREFABRICATED PEDESTRIAN BRIDGE PLANS, TO BE PROVIDED BY THE PREFABRICATED PEDESTRIAN BRIDGE MANUFACTURER. NOTIFY ENGINEER IMMEDIATELY IF CONFLICTS ARE IDENTIFIED. CONSTRUCTION OF THE END BENTS SHALL NOT BEGIN UNTIL SUPERSTRUCTURE SHOP DRAWINGS ARE APPROVED AND ALL CONFLICTS RESOLVED.
3. REINFORCEMENT IN CAP MAY BE SHIFTED TO CLEAR ANCHOR BOLTS.
4. THE TOP SURFACE OF THE END BENT CAPS, EXCEPT AT BRIDGE SEAT BUILD-UPS, SHALL BE SLOPED LONGITUDINALLY AT A MINIMUM RATE OF 2% AS SHOWN ON THE PLANS.
5. END BENT BACKWALL SHALL BE PLACED AFTER BRIDGE HAS BEEN ERECTED. TOP OF BACKWALL SHALL FOLLOW BRIDGE DECK GRADE.
6. THE TOP SURFACE OF THE END BENTS SHALL BE CURED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS, EXCEPT THAT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.
7. APPLY AN EPOXY PROTECTIVE COATING TO THE TOP SURFACE OF THE END BENTS, EXCEPT UNDER BEARINGS. PAYMENT FOR THE EPOXY PROTECTIVE COATING SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.
8. END BENT BACKWALL SHALL BE PLACED PRIOR TO APPLICATION OF EPOXY PROTECTIVE COATING.

APPROACH RAILINGS

1. APPROACH RAILINGS SHALL BE PROVIDED AT EACH CORNER OF THE BRIDGES AS SHOWN ON THE PLANS, AND PER PREFABRICATED PEDESTRIAN BRIDGE SPECIAL PROVISIONS.

CONSTRUCTION

1. SPECIAL NOTE TO CONTRACTOR: CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURES NECESSARY TO ENSURE THAT NO DEBRIS IS DROPPED INTO THE WATERWAY. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW SHALL NOT BE ALLOWED TO ENTER THE CREEK AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OF REMOVAL AND DISPOSAL OF DEBRIS SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

FOUNDATIONS

1. FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
2. STRUCTURE #2:

   A. PILE EXCAVATION MAY BE REQUIRED TO INSTALL HP 12X53 PILES AT END BENTS NO. 1 & 2. IF PILES CANNOT BE DRIVEN TO A DEPTH OF AT LEAST 20 FEET BENEATH BOTTOM OF CAP, EXCAVATE HOLES AT PILE LOCATIONS TO AN ELEVATION AT LEAST 5 FEET BELOW TOP OF WEATHERED ROCK AT EACH PILE LOCATION. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
   B. BEFORE FILLING HOLES FOR PILE EXCAVATION AT BRIDGE END BENTS, DRIVE PILES TO THE REQUIRED DRIVING RESISTANCE.
   C. FILL THE BOTTOM 5 FEET OF HOLES FOR PILE EXCAVATION AT END BENTS NO. 1 & 2 WITH CONCRETE OR GROUT AND THE REST OF THE HOLES WITH CLASS II OR III SELECT MATERIAL THAT MEETS SECTION 1016 OF THE STANDARD SPECIFICATIONS. AT THE CONTRACTOR'S OPTION, FILL HOLES FOR PILE EXCAVATION AT END BENTS NO. 1 & 2 ENTIRELY WITH CONCRETE OR GROUT.

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PREPARED IN THE OFFICE OF:

Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000
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GENERAL NOTES

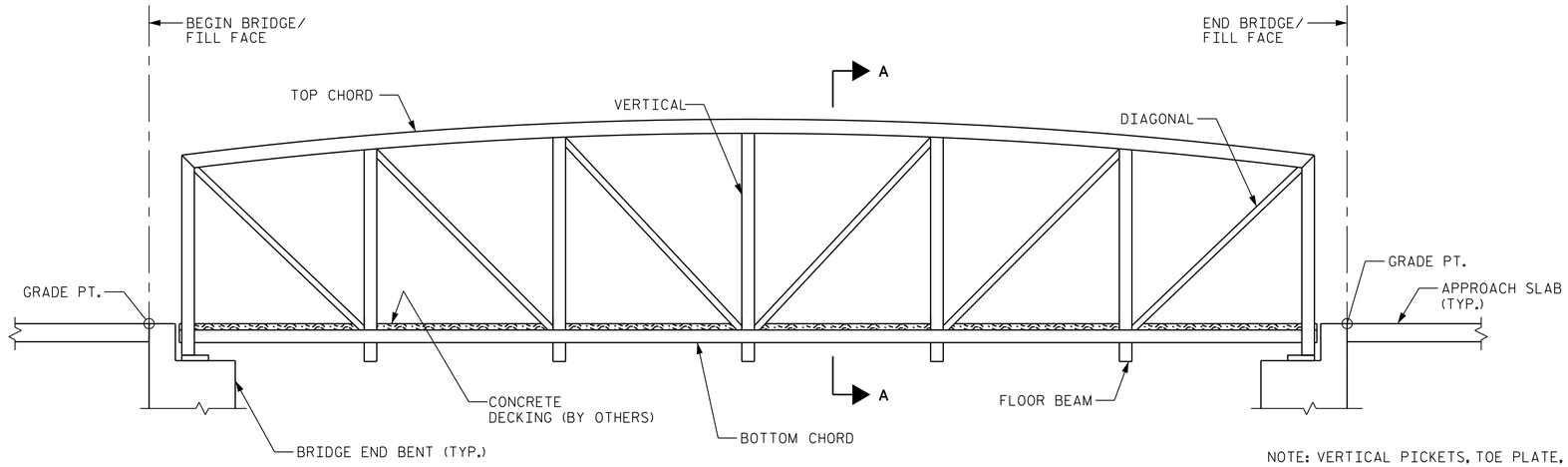
NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 015574013
SHEET NUMBER: S-7

NOTES

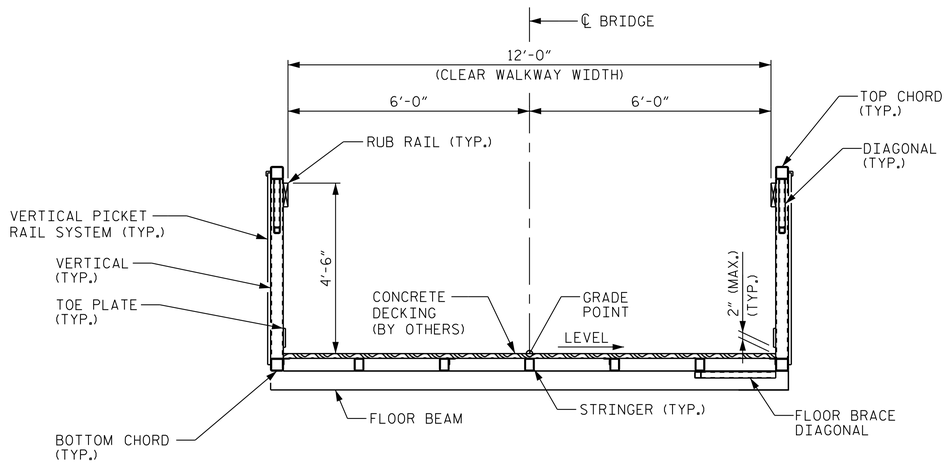
PREFABRICATED PEDESTRIAN BRIDGE DETAILS SHOWN FOR AESTHETIC REQUIREMENT ONLY AND MINIMUM LAYOUT REQUIREMENTS. CONTRACTOR'S ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAIL OF THE SUPERSTRUCTURE.



NOTE: VERTICAL PICKETS, TOE PLATE, AND ANCHOR BOLTS NOT SHOWN FOR CLARITY.

PREFABRICATED PEDESTRIAN BRIDGE ELEVATION

(PRATT TRUSS)



SECTION A-A

NOTE:
AT ENDS OF PREFABRICATED PEDESTRIAN BRIDGE, TAPER SLOPE SUCH THAT IT IS A CONSTANT THICKNESS ACROSS THE JOINT AND CONSISTENT WITH GREENWAY PLANS. ENSURE THAT THERE ARE NO LOCALIZED LOW POINTS IN THE TRANSITION AREA.

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PREPARED IN THE OFFICE OF:

Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

PREFABRICATED PEDESTRIAN BRIDGE DETAILS

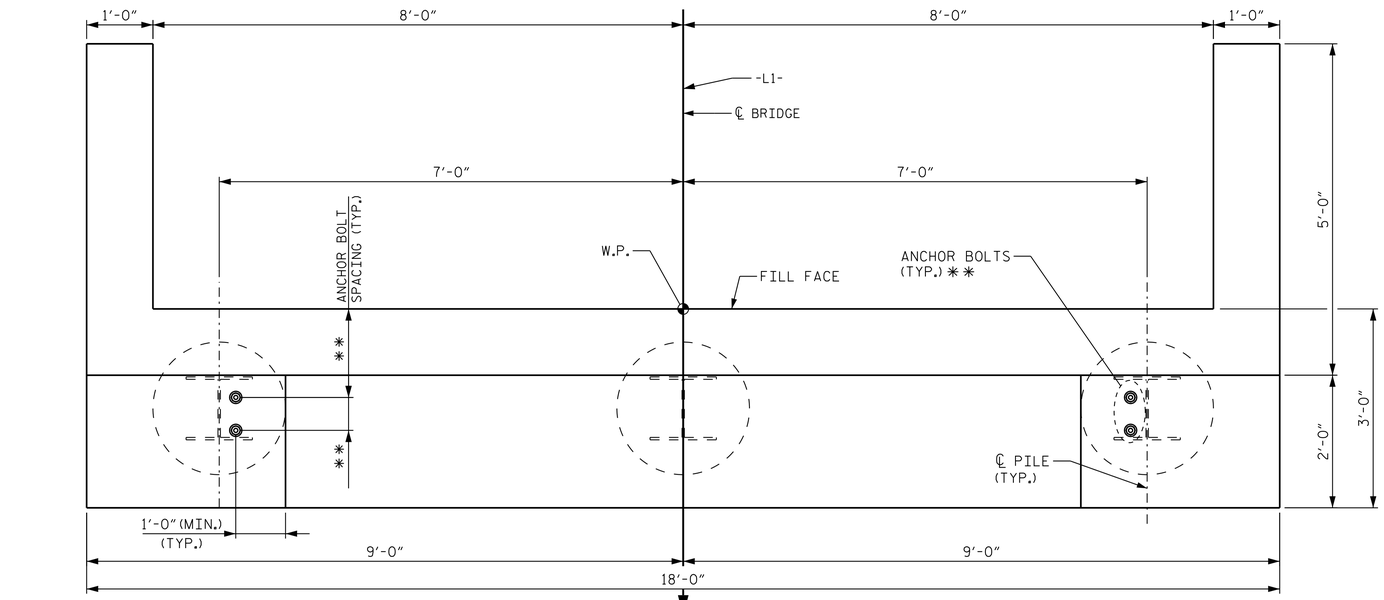
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:

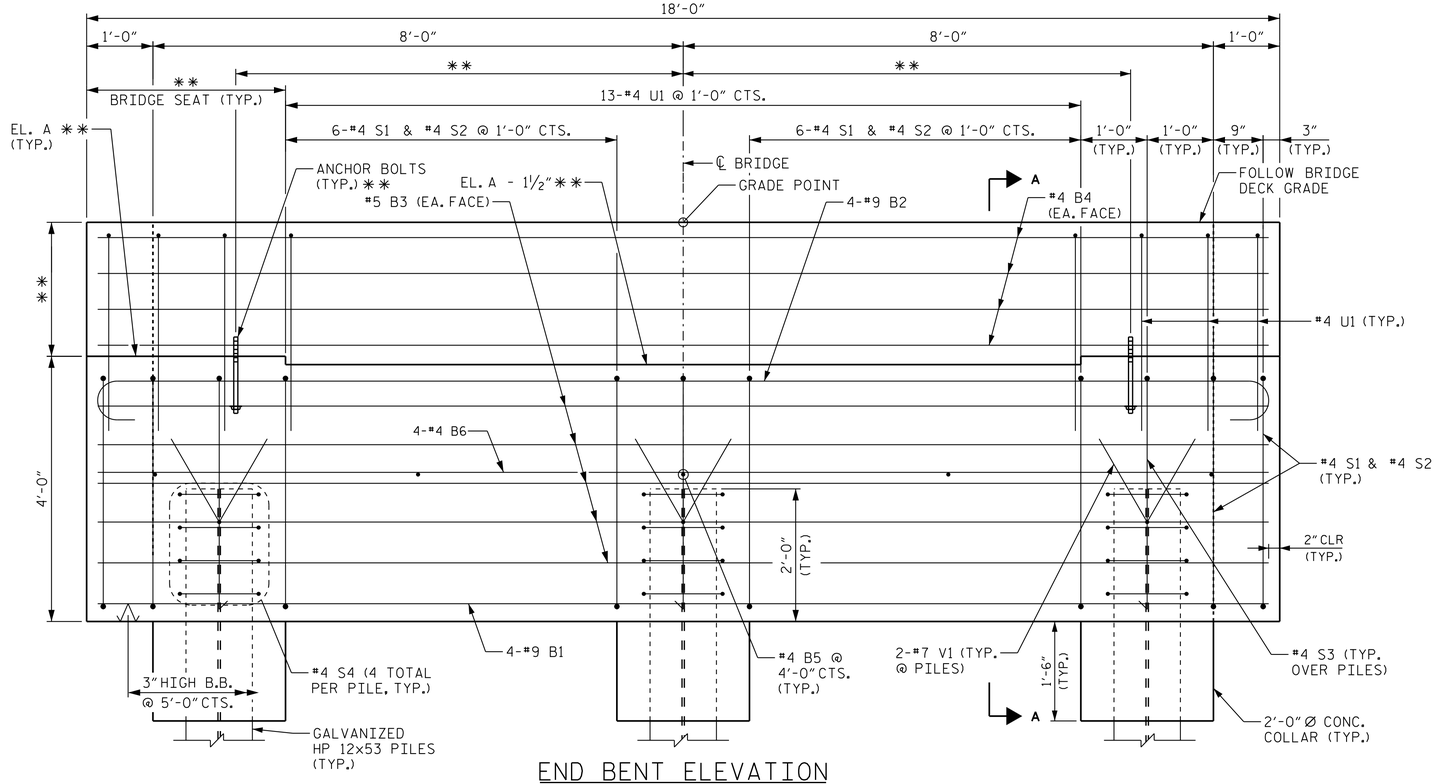
CLEAR CREEK GREENWAY

JOB NUMBER: 01557403

SHEET NUMBER: S-8



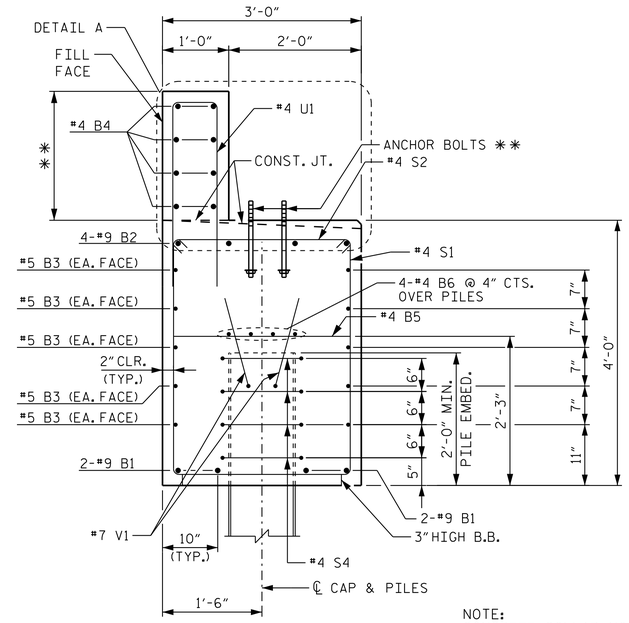
END BENT PLAN



END BENT ELEVATION

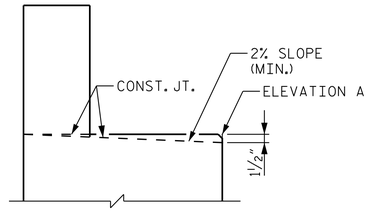
NOTES

** REFER TO PREFABRICATED PEDESTRIAN BRIDGE PLANS (BY OTHERS) FOR ANCHOR BOLT PLACEMENT, EMBEDMENT AND DETAILS, AND FOR DIMENSIONS NOT SHOWN.



NOTE:
CONCRETE COLLAR NOT SHOWN FOR CLARITY.

SECTION A-A



DETAIL A

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NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000
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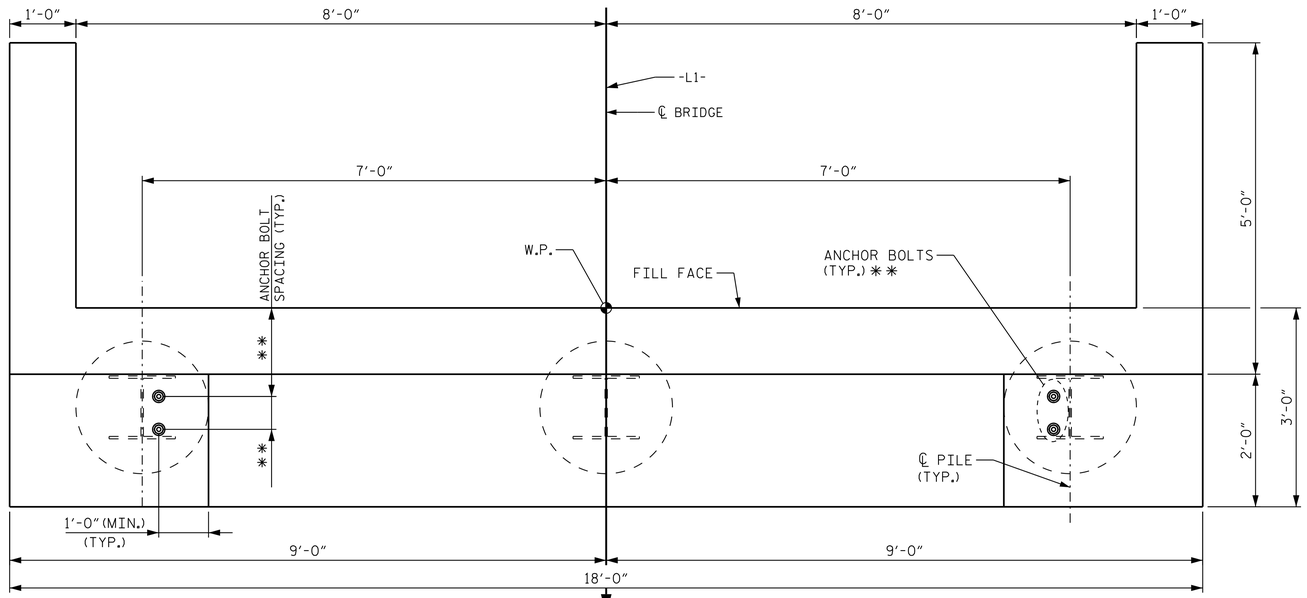
STRUCTURE #1
BRIDGE END BENT
DETAILS

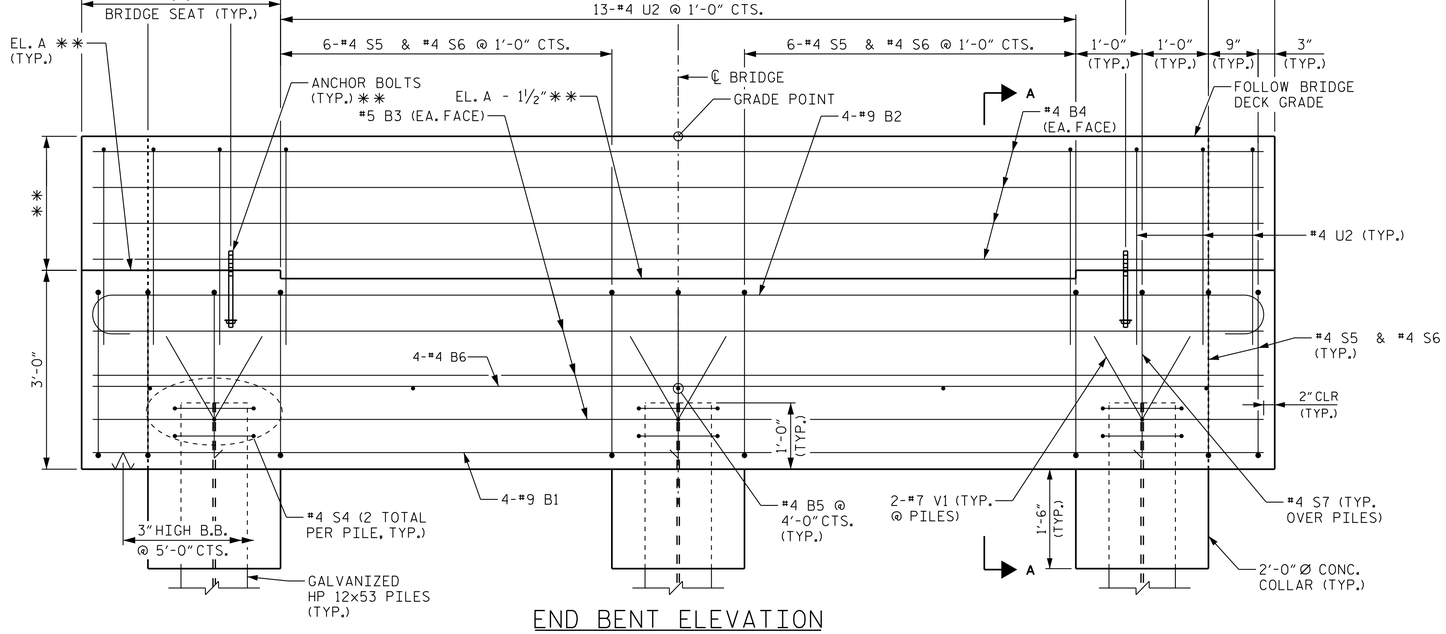
NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740I3
SHEET NUMBER: S-9



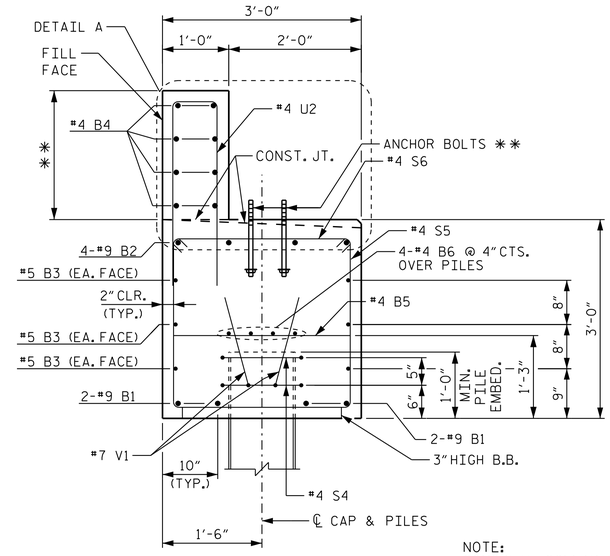
END BENT PLAN



END BENT ELEVATION

NOTES

** REFER TO PREFABRICATED PEDESTRIAN BRIDGE PLANS (BY OTHERS) FOR ANCHOR BOLT PLACEMENT, EMBEDMENT AND DETAILS, AND FOR DIMENSIONS NOT SHOWN.



NOTE:
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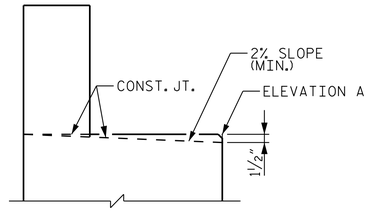
SECTION A-A



DETAIL A

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NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000
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STRUCTURE #2
BRIDGE END BENT
DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-10

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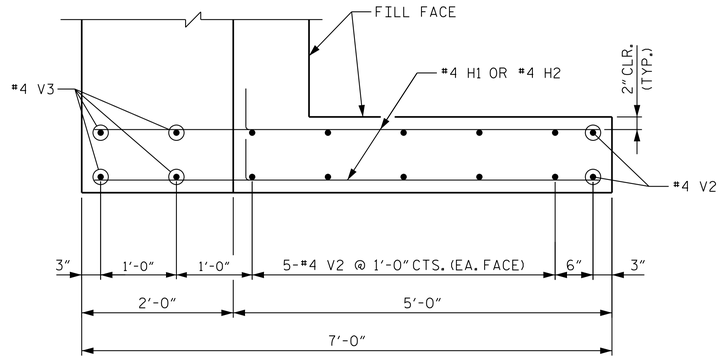
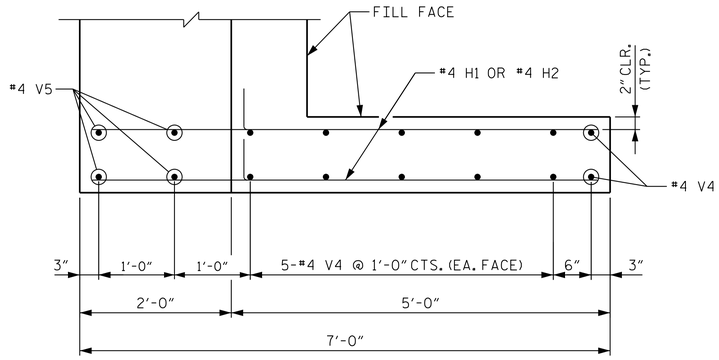
NOTES

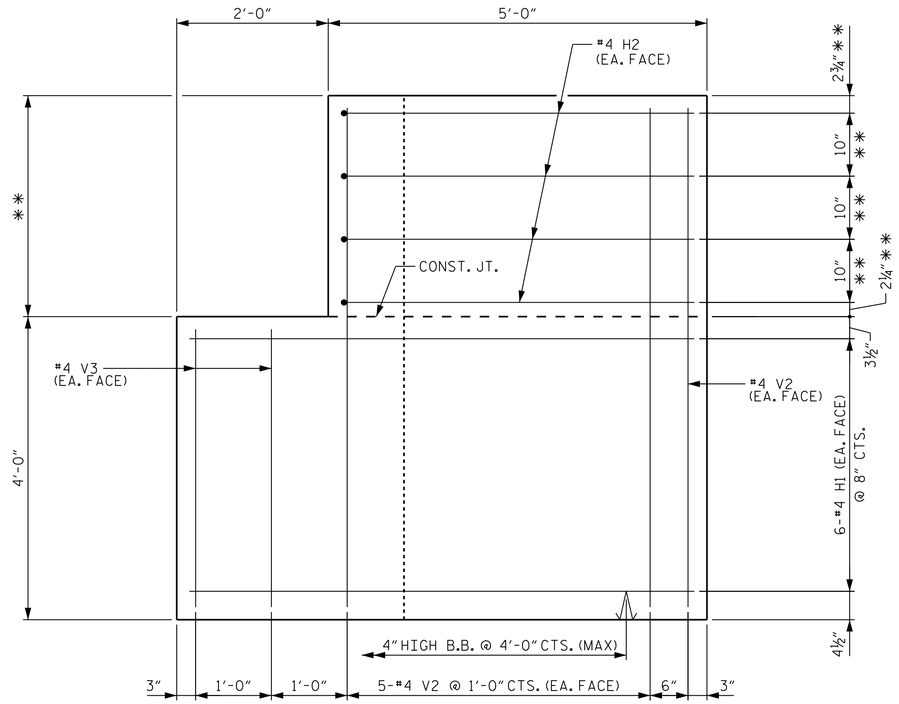
** REFER TO PREFABRICATED PEDESTRIAN BRIDGE (BY OTHERS) FOR ANCHOR BOLT PLACEMENT AND DETAILS, AND FOR DIMENSIONS NOT SHOWN OR REQUIRING VERIFICATION BY THE PREFABRICATED BRIDGE ENGINEER.



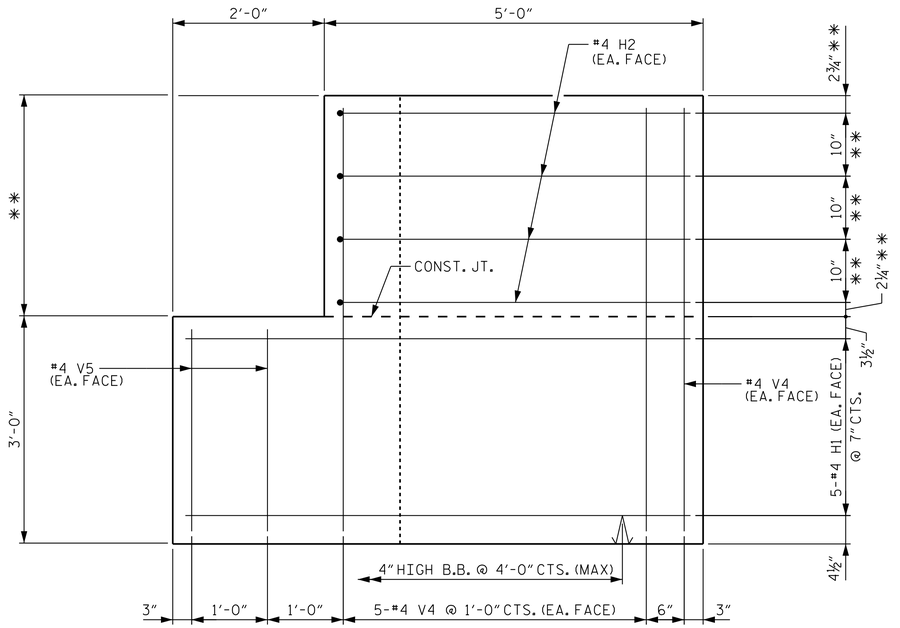
BRIDGE END BENT WING PLAN - STRUCTURE #1



BRIDGE END BENT WING PLAN - STRUCTURE #2



BRIDGE END BENT WING ELEVATION - STRUCTURE #1



BRIDGE END BENT WING ELEVATION - STRUCTURE #2

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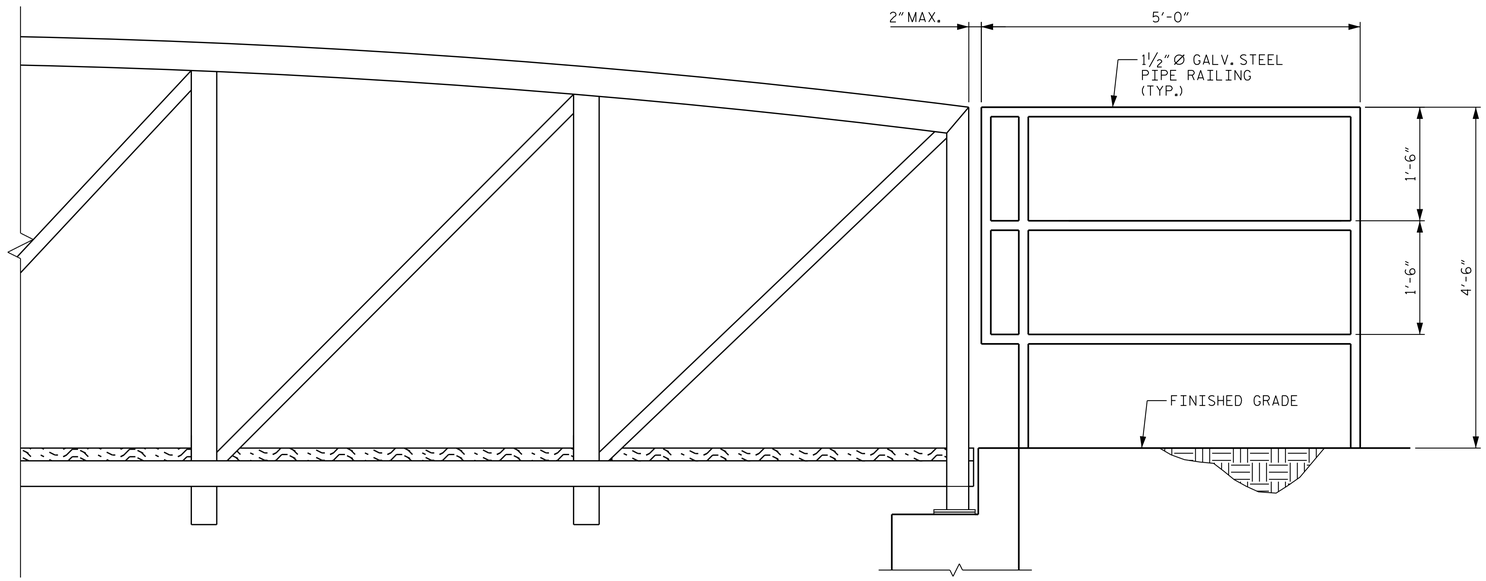
PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

BRIDGE END BENT DETAILS

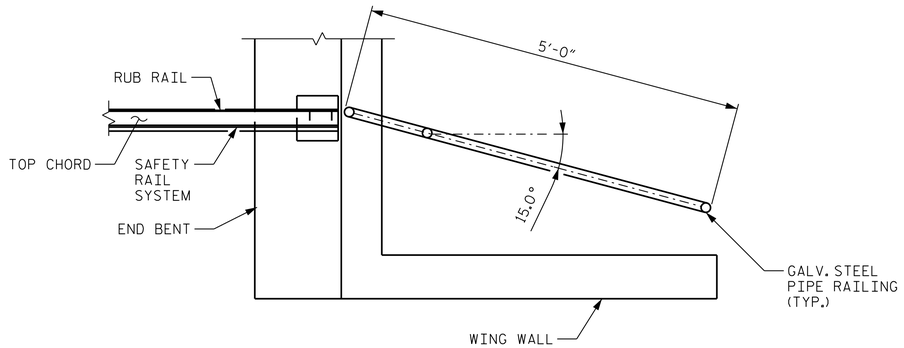
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-11



TYPICAL APPROACH RAIL ELEVATION



TYPICAL APPROACH RAIL PLAN

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Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

BRIDGE END BENT DETAILS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 I3
SHEET NUMBER: S-12

BILL OF MATERIAL

FOR ONE END BENT
(STRUCTURE #1)
(2 REQ'D)

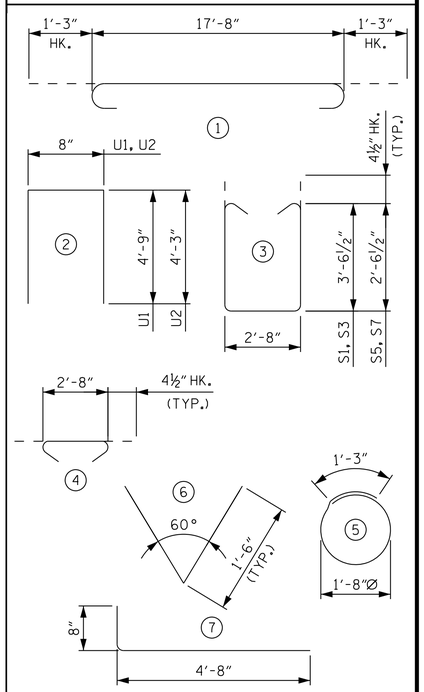
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	9	STR	17'-8"	240
B2	4	9	1	20'-2"	274
B3	10	5	STR	17'-8"	184
B4	8	4	STR	17'-8"	94
B5	5	4	STR	2'-8"	9
B6	4	4	STR	17'-8"	47
H1	24	4	STR	6'-8"	107
H2	16	4	7	5'-4"	57
S1	16	4	3	10'-6"	112
S2	16	4	4	3'-5"	37
S3	3	4	3	10'-6"	21
S4	12	4	5	6'-6"	52
U1	19	4	2	10'-2"	129
V1	6	7	6	3'-0"	37
V2	24	4	STR	6'-6"	104
V3	8	4	STR	3'-7"	19
REINFORCING STEEL			LBS.		1,523
STRUCTURE #1 CLASS A CONCRETE			C.Y.		12.6

BILL OF MATERIAL

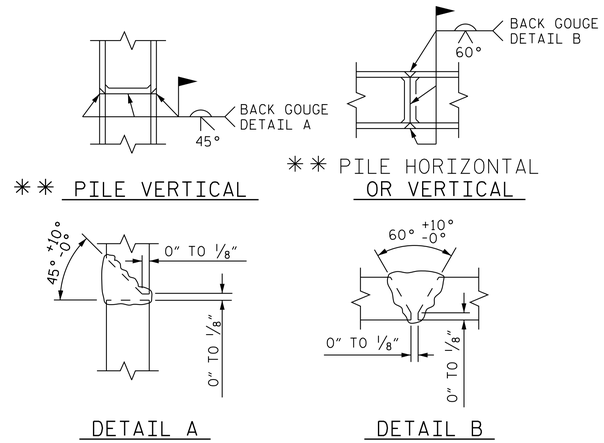
FOR ONE END BENT
(STRUCTURE #2)
(2 REQ'D)

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	9	STR	17'-8"	240
B2	4	9	1	20'-2"	274
B3	6	5	STR	17'-8"	111
B4	8	4	STR	17'-8"	94
B5	5	4	STR	2'-8"	9
B6	4	4	STR	17'-8"	47
H1	20	4	STR	6'-8"	89
H2	16	4	7	5'-4"	57
S4	6	4	5	6'-6"	26
S5	16	4	3	8'-6"	91
S6	16	4	4	3'-5"	37
S7	3	4	3	8'-6"	17
U2	19	4	2	9'-2"	116
V1	6	7	6	3'-0"	37
V4	24	4	STR	5'-6"	88
V5	8	4	STR	2'-7"	14
REINFORCING STEEL			LBS.		1,347
STRUCTURE #2 CLASS A CONCRETE			C.Y.		10.3

BAR TYPES



ALL BAR DIMENSIONS ARE OUT-TO-OUT.



HP PILE SPLICE DETAILS

** POSITION OF PILE DURING WELDING.

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

BILL OF MATERIAL

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-13

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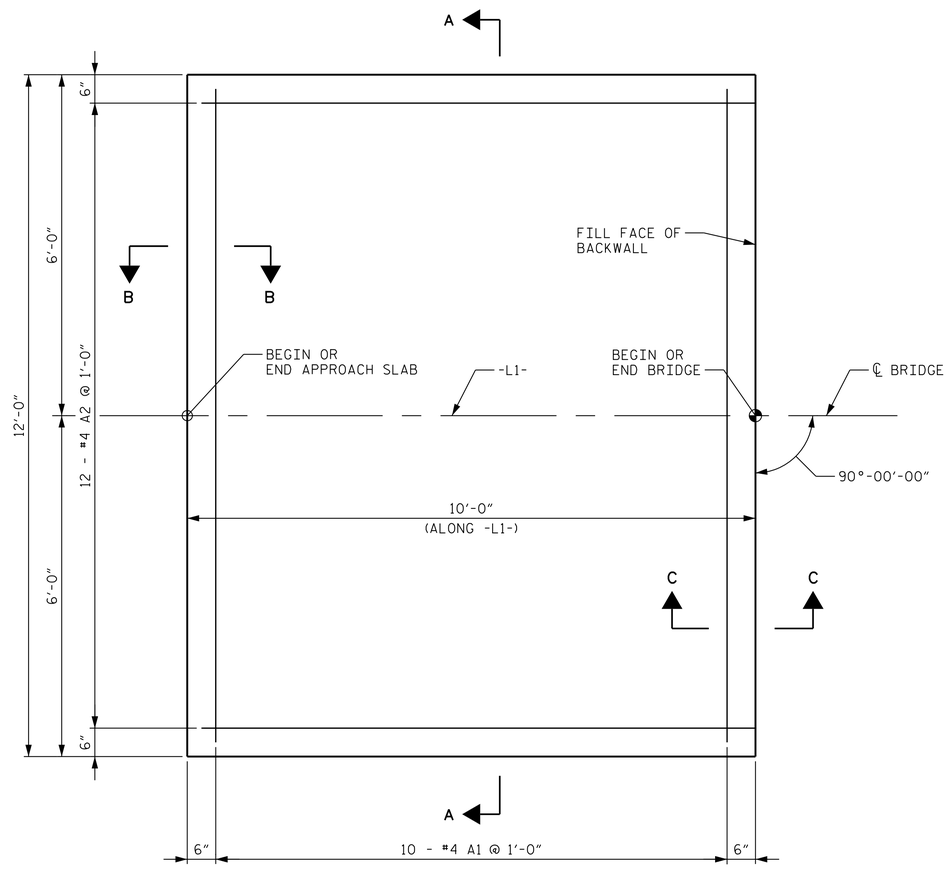
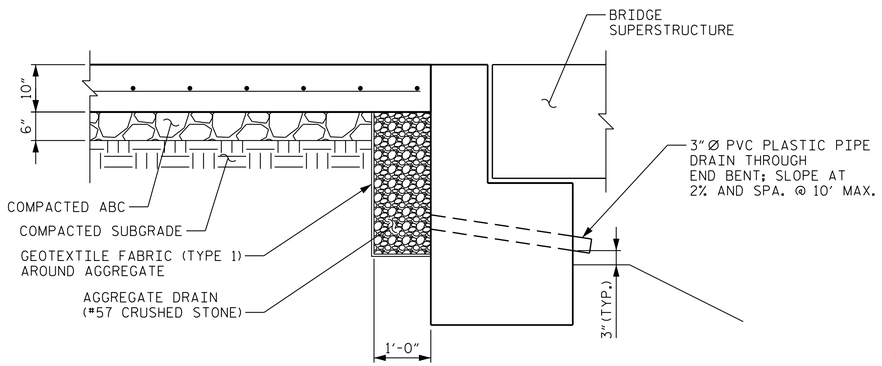
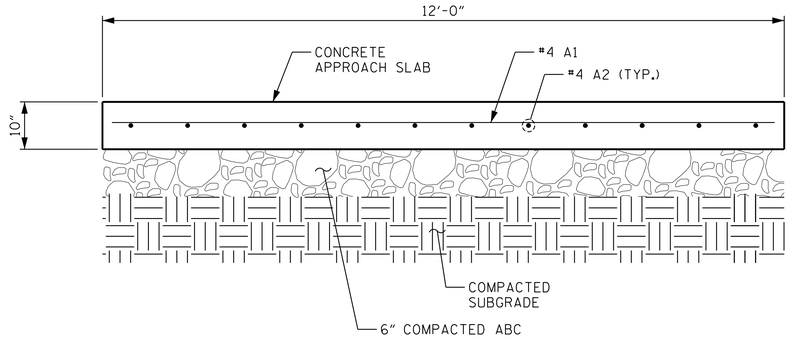


APPROACH SLAB PLAN

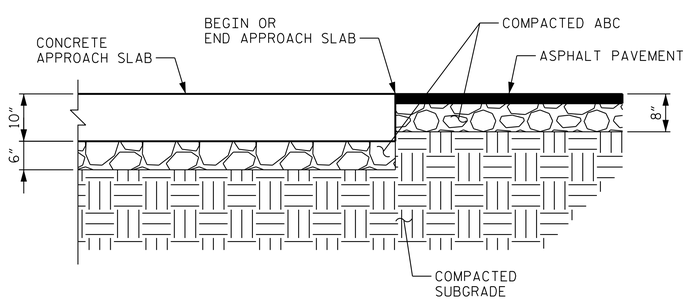
NOTE: APPROACH SLAB AT BEGIN BRIDGE (STRUCTURES #1 AND #2) SHOWN, APPROACH SLAB AT END BRIDGE (STRUCTURE #1 ONLY) SIMILAR.



SECTION C-C



SECTION A-A



SECTION B-B

NOTES:

1. APPROACH SLABS SHALL BE CONSTRUCTED OF CLASS A CONCRETE.
2. WRAP ENDS OF PVC DRAIN IN MESH FABRIC TO PERMIT FREE FLOW OF WATER BUT PREVENT LOSS OF AGGREGATE.
3. ABC = AGGREGATE BASE COURSE.

BILL OF MATERIAL

APPROACH SLAB @ END BENT 1, STRUCTURE #1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
✱ A1	10	4	STR	11'-8"	78
✱ A2	12	4	STR	9'-8"	77
REINFORCING STEEL					155 LBS.
TOTAL CLASS A CONCRETE					3.7 C.Y.

APPROACH SLAB @ END BENT 2, STRUCTURE #1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
✱ A1	10	4	STR	11'-8"	78
✱ A2	12	4	STR	9'-8"	77
REINFORCING STEEL					155 LBS.
TOTAL CLASS A CONCRETE					3.7 C.Y.

APPROACH SLAB @ END BENT 1, STRUCTURE #2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
✱ A1	10	4	STR	11'-8"	78
✱ A2	12	4	STR	9'-8"	77
REINFORCING STEEL					155 LBS.
TOTAL CLASS A CONCRETE					3.7 C.Y.

✱ - EPOXY COATED

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REV. No.:	REVISION:	DATE:	DRAWN BY:	CHECKED BY:

PREPARED IN THE OFFICE OF:

Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

APPROACH SLAB DETAILS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:

CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13

SHEET NUMBER: S-14

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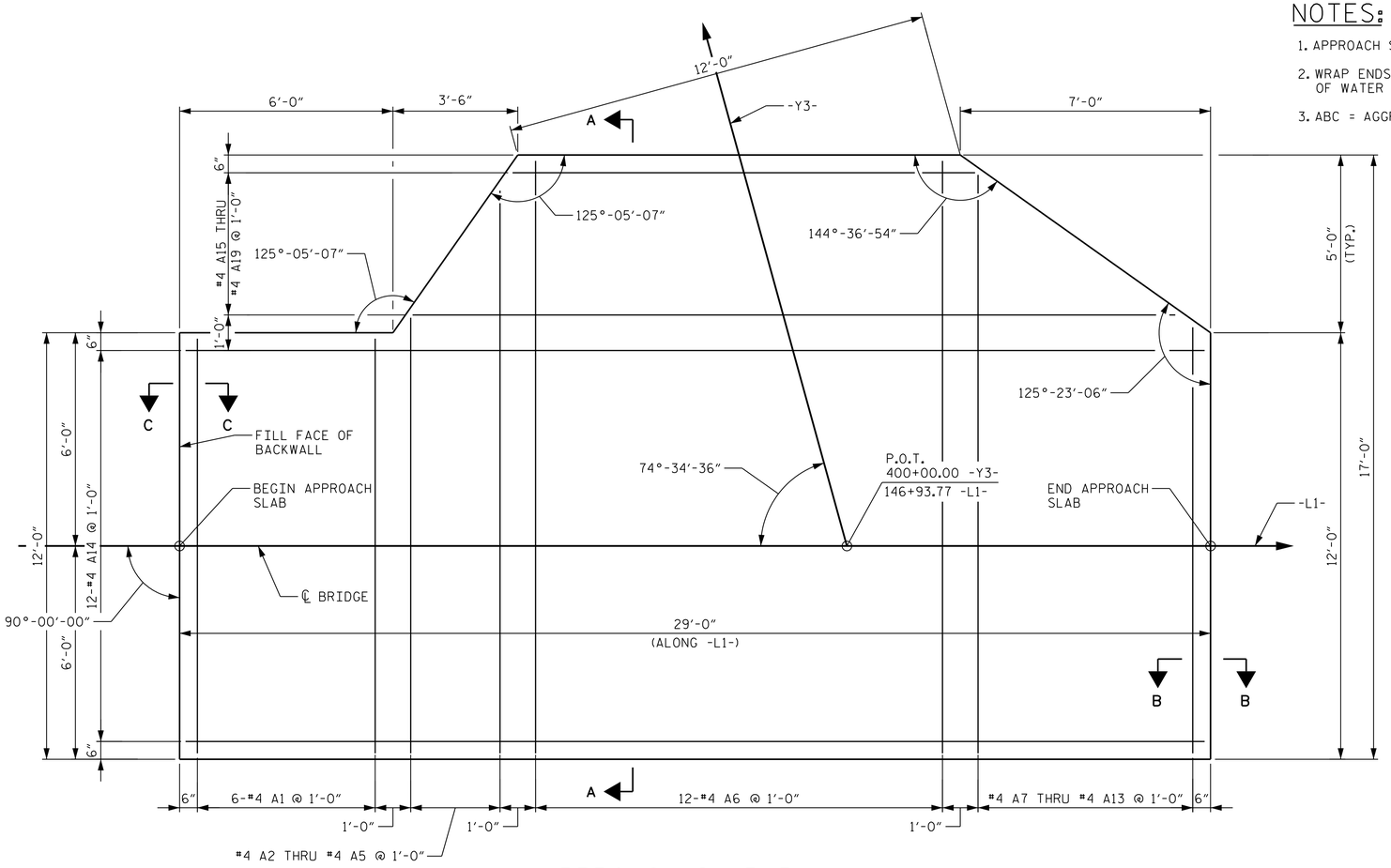
9/30/2025

NOTES:

1. APPROACH SLABS SHALL BE CONSTRUCTED OF CLASS A CONCRETE.
2. WRAP ENDS OF PVC DRAIN IN MESH FABRIC TO PERMIT FREE FLOW OF WATER BUT PREVENT LOSS OF AGGREGATE.
3. ABC = AGGREGATE BASE COURSE.



APPROACH SLAB PLAN

NOTE: APPROACH SLAB AT END BRIDGE (STRUCTURE #2 ONLY) SHOWN.

BILL OF MATERIAL

APPROACH SLAB @ END BENT 2, STRUCTURE #2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
✳ A1	6	4	STR	11'-8"	47
✳ A2	1	4	STR	12'-3"	8
✳ A3	1	4	STR	13'-8"	9
✳ A4	1	4	STR	15'-1"	10
✳ A5	1	4	STR	16'-6"	11
✳ A6	12	4	STR	16'-8"	134
✳ A7	1	4	STR	16'-3"	11
✳ A8	1	4	STR	15'-6"	10
✳ A9	1	4	STR	14'-9"	10
✳ A10	1	4	STR	14'-1"	9
✳ A11	1	4	STR	13'-4"	9
✳ A12	1	4	STR	12'-8"	8
✳ A13	1	4	STR	11'-11"	8
✳ A14	12	4	STR	28'-8"	230
✳ A15	1	4	STR	21'-5"	14
✳ A16	1	4	STR	19'-4"	13
✳ A17	1	4	STR	17'-2"	11
✳ A18	1	4	STR	15'-1"	10
✳ A19	1	4	STR	13'-0"	9
REINFORCING STEEL					571 LBS.
TOTAL CLASS A CONCRETE					13.5 C.Y.

✳ - EPOXY COATED

SECTION B-B

SECTION C-C

SECTION A-A

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PREPARED IN THE OFFICE OF:

Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

STRUCTURE #2 END BRIDGE APPROACH SLAB DETAILS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE 11/17/2025

PROJECT:

CLEAR CREEK GREENWAY

JOB NUMBER: 015574013

SHEET NUMBER: S-15

9/30/2025

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STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2024 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED ¾" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1½" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A ¼" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A ¼" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE ⅞" Ø SHEAR STUDS FOR THE ¾" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - ⅞" Ø STUDS FOR 4 - ¾" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF ⅞" Ø STUDS ALONG THE BEAM AS SHOWN FOR ¾" Ø STUDS BASED ON THE RATIO OF 3 - ⅞" Ø STUDS FOR 4 - ¾" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

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PREPARED IN THE OFFICE OF:
Kimley»Horn
NC LICENSE #F-0102
200 S TRYON ST., SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (919) 677-2000

STANDARD NOTES

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047653 CLAY T. POOLE
11/17/2025

PROJECT:
CLEAR CREEK GREENWAY

JOB NUMBER: 0155740 13
SHEET NUMBER: S-16

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