

STATE OF ILLINOIS
COUNTY OF STEPHENSON

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	21-01132-00-BR	STEPHENSON	20	1
		ILLINOIS		

THE PROPOSED IMPROVEMENT CONSISTS OF THE REMOVAL OF THE EXISTING SINGLE SPAN STRUCTURE (24' x 45'). THE EXISTING STRUCTURE IS CLOSED DUE TO STRUCTURAL DEFICIENCIES ON THE EAST TIMBER ABUTMENT. APPROXIMATELY 95' OF ROADWAY WILL BE RECONSTRUCTED, NOT INCLUDING BRIDGE LENGTH.

THE NEW STRUCTURE IS A SINGLE SPAN (27' x 65') DECK ON PPC DECK BEAMS WITH 2:1 SLOPING ABUTMENTS AND A 0 DEGREE SKEW. IN-STREAM WORK INCLUDES CHANNEL EXCAVATION TO PROVIDE AN ADEQUATE WATERWAY AND RIP-RAP PLACEMENT.

PLANS FOR PROPOSED
FEDERAL BRIDGE PROJECT

TR 59 (BABLER ROAD)
OVER BRUSH CREEK
STEPHENSON COUNTY
BUCKEYE TOWNSHIP
SECTION 21-01132-00-BR
PROJECT NO. HYNE (852)
JOB NO. C-92-018-24

COUNTY ENGINEER

DALE RASMUSSEN, P.E., P.L.S.
STEPHENSON COUNTY HIGHWAY DEPARTMENT
COUNTY ENGINEER
295 W. LAMM ROAD
FREEPORT, IL 61032
(815) 235-7497

SEE SHEET 2 FOR INDEX OF SHEETS

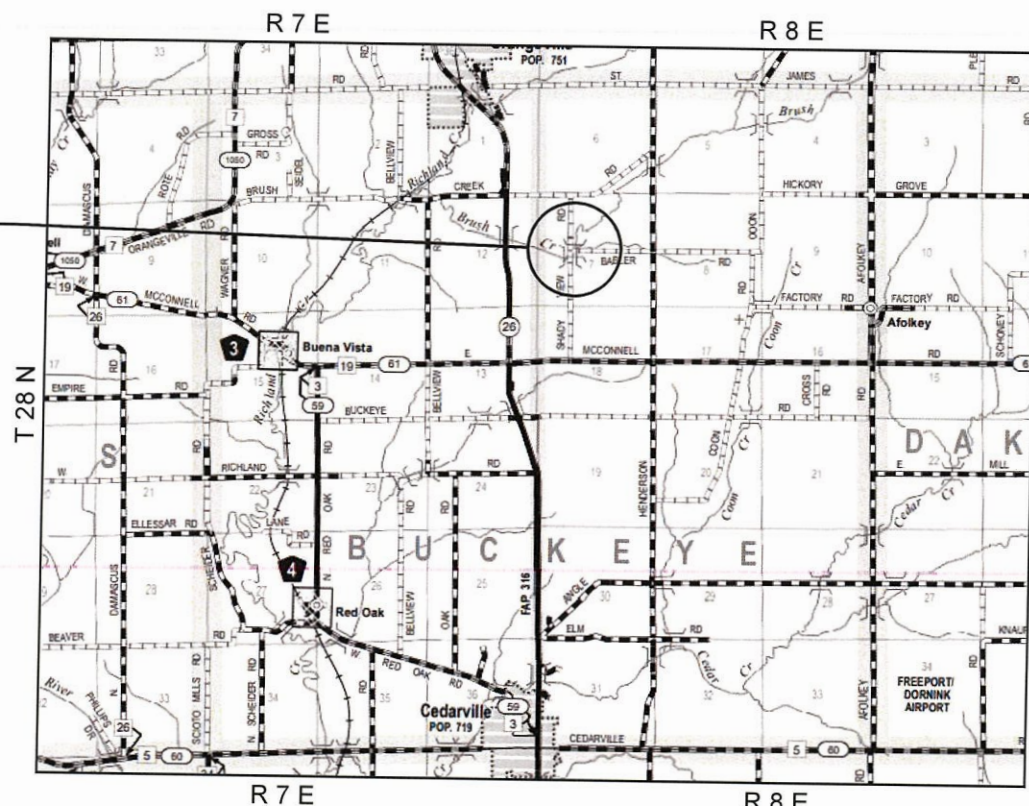


UTILITIES

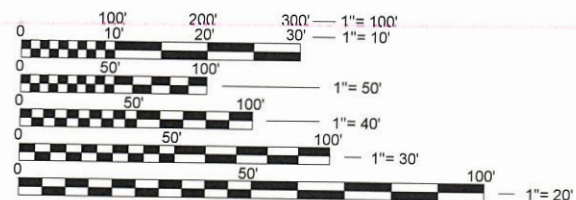
COMED
2900 US BUSINESS 12 W
FREEPORT, IL 61032
(877) 426-6331

FRONTIER COMMUNICATIONS
947 E CLINTON ST
FREEPORT, IL 61032
(815) 756-8998

PROJECT LOCATION
BEGIN STA. 19+05
END STA. 20+75
PROPOSED SN 089-3299
EXISTING SN 089-3087



SEC. 7
4TH MERIDIAN



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION
FOR EXCAVATION
1-800-892-0123
OR 811

CONTRACT NO. 85748

GROSS LENGTH = 170 FT. = 0.032 MILE

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397



TREVOR LARSON, P.E.
LICENSE EXPIRES: 11/30/25

10/25/2023
DATE

TRAFFIC DATA

TR 59 (BABLER ROAD)
FUNCTIONAL CLASSIFICATION: LOCAL ROAD
2024 ADT = 50 | 2% TRUCKS
DESIGN SPEED = 30 MPH

APPROVED: [Signature] OCTOBER 18, 2023

COUNTY ENGINEER

PASSED: [Signature] 20 23

DISTRICT TWO ENGINEER OF
LOCAL ROADS AND STREETS

Releasing For Bid Based on Limited Review: [Signature] 20 23

DEPUTY DIRECTOR OF HIGHWAYS
REGION TWO ENGINEER

STATE OF ILLINOIS DEPARTMENT
OF TRANSPORTATION

GENERAL NOTES

INDEX OF SHEETS	
Sheet Number	Sheet Title
1	COVER
2	INDEX OF SHEETS, GENERAL NOTES, AND SOQ
3	TYPICAL SECTIONS
4	BABLER ROAD PLAN AND PROFILE
5	GRADING AND EROSION CONTROL PLAN
6	BRIDGE PLAN AND ELEVATION
7	SUPERSTRUCTURE DETAILS
8	STEEL RAILING, TYPE S-1
9	HP PILE DETAILS
10	27 x 36 PPC DECK BEAM
11	27 x 36 PPC DECK BEAM DETAILS
12	WEST ABUTMENT DETAILS
13	EAST ABUTMENT DETAILS
14	BORING LOGS (1)
15	BORING LOGS (2)
16	BORING LOGS (3)
17	BABLER ROAD CROSS-SECTIONS (1)
18	BABLER ROAD CROSS-SECTIONS (2)
19	BABLER ROAD CROSS-SECTIONS (3)
20	BABLER ROAD CROSS-SECTIONS (4)

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (ADOPTED JANUARY 1, 2022 AND ALL REVISIONS AND SUPPLEMENTS THERETO), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS", AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 1-800-892-0123 FOR FIELD LOCATION OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, SANITARY. STORM SEWER, AND OTHER FACILITIES AT LEAST 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE COUNTY DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL VERIFY THE DEPTHS OF EXISTING UTILITIES WHERE NECESSARY. FIELD VERIFICATIONS, RELOCATIONS, AND / OR LOWERING OF EXISTING UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR AS TO NOT IMPEDE PROJECT PROGRESS. THERE ARE NO KNOWN UNDERGROUND UTILITIES LOCATED WITHIN THE PROJECT AREA THAT WILL REQUIRE RELOCATION OR LOWERING AS PART OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES, EVEN IF NOT SHOWN ON PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE UTILITY COMPANY AND THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE COUNTY A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE ENGINEER.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL A LICENSED LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THE LOCATIONS.
- MAINTAINING DRAINAGE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING THE PERFORMANCE OF WORK. THE CONTRACTOR SHALL SUPPLY A PLAN AS A SUBMITTAL REVIEW THAT WILL MAINTAIN FLOW THAT MEETS ALL LOCAL, STATE, AND FEDERAL REGULATIONS, TO THE SATISFACTION OF THE COUNTY.
 - THE PLAN SHALL NOT CAUSE ANY DAMAGE UPSTREAM, NOR TO ANY ADJACENT WATERSHED.
 - THE PLAN SHALL BE SUBMITTED TO THE COUNTY AND THE ENGINEER OF RECORD A MINIMUM OF TWO (2) WEEKS PRIOR TO THE COMMENCEMENT OF WORK.
 - THE COST OF MAINTAINING FLOW SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS PAY ITEMS IN THE CONTRACT.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM FIELD MEASUREMENTS AND AS-BUILT PLANS. THE CONTRACTOR SHALL VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF THE MATERIALS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS.
- ALL WORK SHALL BE COMPLETED WITHIN THE PUBLIC RIGHT-OF-WAY WITH NO EQUIPMENT OR MATERIALS STORAGE ON PRIVATE PROPERTY.
- THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS.
- COORDINATE ANY REQUIRED SIGN REMOVAL WITH THE COUNTY ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF WORK.
- NO CHANNEL GRADING OR BRIDGE CONSTRUCTION ACTIVITIES WILL BE ALLOWED IN STANDING WATER OR DURING PERIODS OF HIGH FLOWS AND EXCESSIVE CHANNEL FLOW VELOCITIES.
- THE FOLLOWING BMPS SHALL BE IMPLEMENTED TO CONTROL RESIDUAL CONCRETE, CONCRETE SEDIMENTS, AND RINSE WATER:
 - TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED FOR RINSING OUT CONCRETE TRUCKS. SIGNS SHALL BE INSTALLED DIRECTING CONCRETE TRUCK DRIVERS WHERE DESIGNATED WASHOUT FACILITIES ARE LOCATED.
 - THE CONTRACTOR SHALL HAVE THE LOCATION OF TEMPORARY CONCRETE WASHOUT FACILITIES APPROVED BY THE RESIDENT ENGINEER.
 - ALL TEMPORARY CONCRETE WASHOUT FACILITIES ARE TO BE INSPECTED BY THE CONTRACTOR AFTER EACH USE AND ALL SPILLS MUST BE REPORTED TO THE RESIDENT ENGINEER AND CLEANED UP IMMEDIATELY.
 - CONCRETE WASTE SOLIDS/LIQUIDS SHALL BE DISPOSED OF PROPERLY.
- THE ADJACENT ROADWAY SHALL BE KEPT FREE OF MUD AND DEBRIS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITIES FOR A PERIOD OF THIRTY (30) DAYS FOR ALL SEEDED AREAS, INCLUDING: WATERING, WEEDING, RE-SEEDING (WASH-OFFS), REPLACEMENT (SOD), OR OTHER OPERATIONS NECESSARY TO OBTAIN A SATISFACTORY STRAIN OF GRASS. UPON FINAL ACCEPTANCE, OWNER SHALL ASSUME ALL MAINTENANCE RESPONSIBILITIES.

HIGHWAY STANDARDS

- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-04 NAME PLATE FOR BRIDGES
- 631026-06 TRAFFIC BARRIER TERMINAL, TYPE 5
- 701011-04 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- 701901-09 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- BLR 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

SUMMARY OF QUANTITIES			
CONSTRUCTION TYPE CODE: 0010			
CODE NUMBER	PAY ITEM	UNIT	TOTAL
20100500	TREE REMOVAL, ACRES	ACRE	0.05
20300100	CHANNEL EXCAVATION	CU YD	129
20700220	POROUS GRANULAR EMBANKMENT	CU YD	99
21101615	TOPSOIL, FURNISH AND PLACE, 4"	SQ YD	344
25000200	SEEDING, CLASS 2	ACRE	0.07
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	19
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	19
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	19
25100630	EROSION CONTROL BLANKET	SQ YD	344
28000400	PERIMETER EROSION BARRIER	FOOT	321
28200200	FILTER FABRIC	SQ YD	452
40200900	AGGREGATE SURFACE COURSE, TYPE B	CU YD	223
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	260
50300225	CONCRETE STRUCTURES	CU YD	24.1
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1720
50800105	REINFORCEMENT BARS	POUND	4260
50900205	STEEL RAILING, TYPE S1	FOOT	130
51201400	FURNISHING STEEL PILES HP10X42	FOOT	352
51202305	DRIVING PILES	FOOT	352
51203400	TEST PILE STEEL HP10X42	EACH	2
51204650	PILE SHOES	EACH	10
51500100	NAME PLATES	EACH	1
67100100	MOBILIZATION	L SUM	1
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
XX004565	GROUTED RIPRAP	SQ YD	444
XX004566	CONCRETE CUT-OFF WALL	CU YD	8.6
XX006821	CONCRETE TRUCK WASHOUT	L SUM	1
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1

*SPECIALTY ITEMS

CONVERSION FACTORS FOR PLAN QUANTITY CALCULATIONS	
ITEMS	RATE OF APPLICAITON
RIPPRAP	2.05 TONS / CU YD
AGGREGATE BASE COURSE, TYPE B	2.05 TONS / CU YD

BENCHMARKS				
BENCHMARK #	DESCRIPTION	ELEVATION	NORTHING	EASTING
400	COTTON SPINDLE IN NE SIDE OF PP	833.94	2103172.20	2441797.78
401	SET ON WINGWALL AT SW CORNER OF BRIDGE	816.27	2103160.32	2442024.85
402	COTTON SPINDLE IN N SIDE OF PP EAST OF BRIDGE	814.61	2103147.76	2442331.51

EARTHWORK SCHEDULE			
LOCATION	EXCAVATION* (CY)	EMBANKMENT (CY)	NET = EMBANKMENT - EXCAVATION
STA. 18+89 to 19+25	2.1	2.4	0.3
STA. 19+25 to 19+50	3.6	5.1	1.5
STA. 19+50 to 19+75	2.4	11.0	8.6
STA. 19+75 to 19+90	0.2	13.4	13.2
STA. 19+90 to 20+00	9.0	12.7	3.7
STA. 20+00 to 20+25	66.6	16.9	-49.7
STA. 20+25 to 20+50	44.3	7.5	-36.8
STA. 20+50 to 20+55	0.1	4.4	4.3
STA. 20+55 to 20+75	0.2	19.6	19.4
STA. 20+75 to 20+90	0.1	6.1	6.0
TOTAL (C.Y.)	128.7	99.2	-29.5

EXCAVATION AND EMBANKMENTS CALCULATED AS AVERAGE BETWEEN LISTED STATIONS
 EARTHWORK EXCLUDES STRUCTURE EXCAVATION AT ABUTMENTS
 *EXCAVATION SHRINKAGE FACTOR ASSUMED TO BE 25%

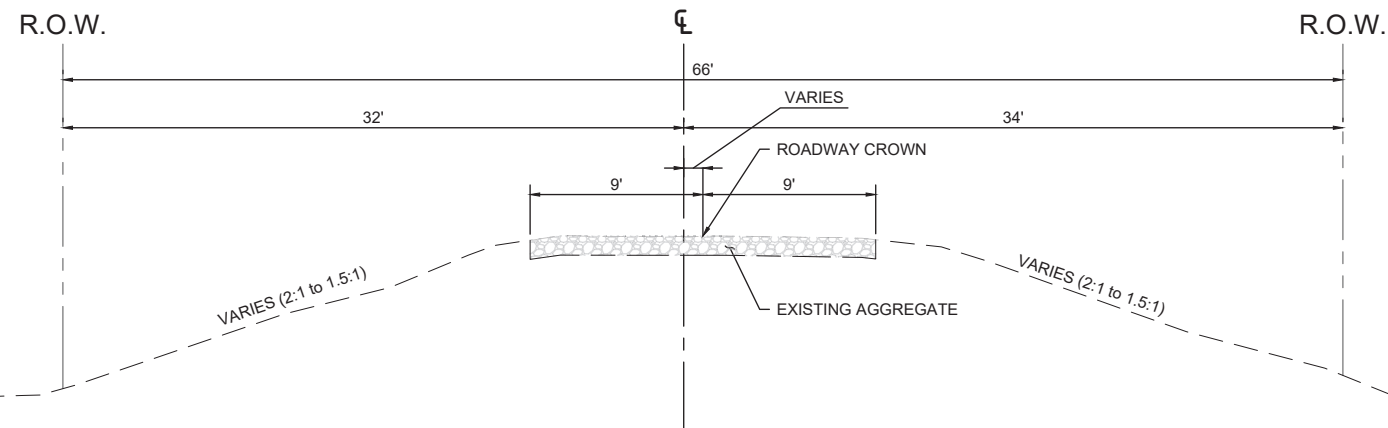
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USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

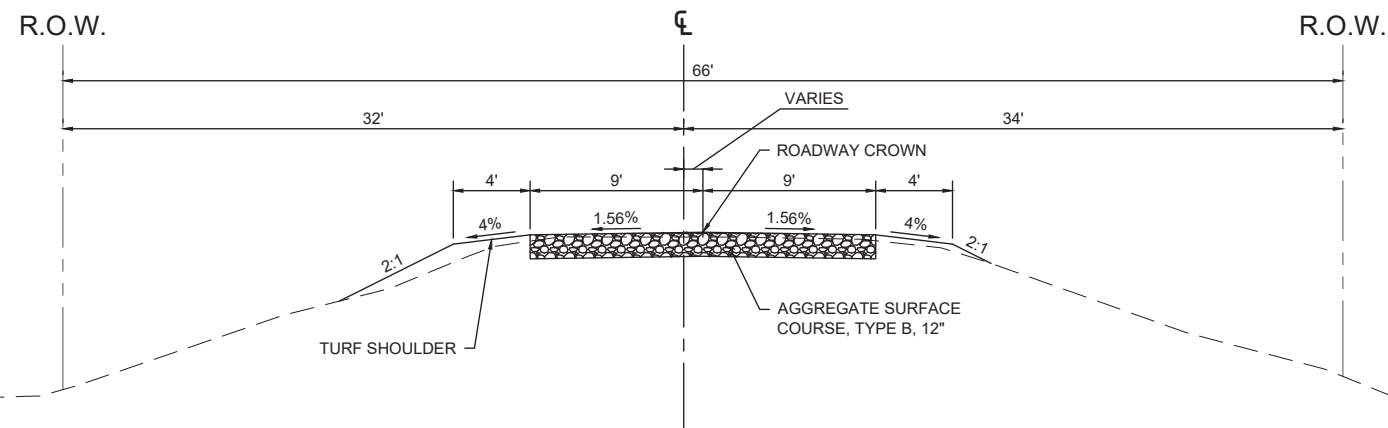
CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS

DECATUR (217) 422-8544
 SCHAUMBURG (773) 714-0050
 ROCKFORD (815) 489-0050
 184-001397

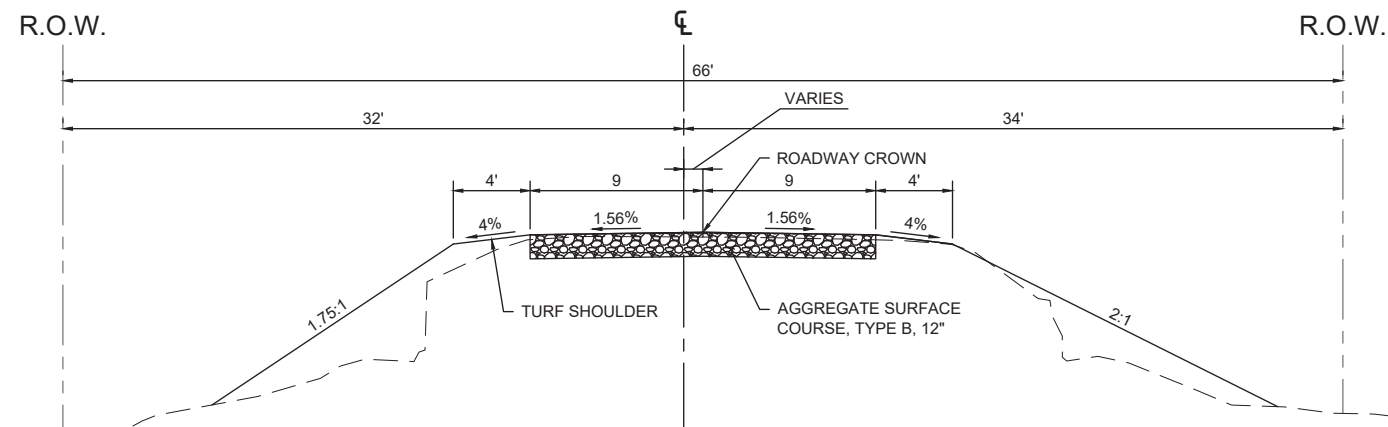
INDEX OF SHEETS, GENERAL NOTES, AND SOQ			RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: _____	SHEET NO. 2 OF 20 SHEETS	STA. _____ TO STA. _____	TR59	20-01132-00-BR	STEPHENSON	20	2
						CONTRACT NO. 85748	
						STRUCTURE 089-3299	



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION STA. 19+05 to 19+90 (WEST BRIDGE ABUTMENT)



PROPOSED TYPICAL SECTION STA. 20+55 (EAST BRIDGE ABUTMENT) to 20+75

Plot Date: 26 October 2023 | File Name: R:\P\County\A254_Stephenson County\089-3087_Basker Rd\CADD\CADD_Civil\Plan_Sheets | User Name: Thurston

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
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CONSULTING ENGINEERS

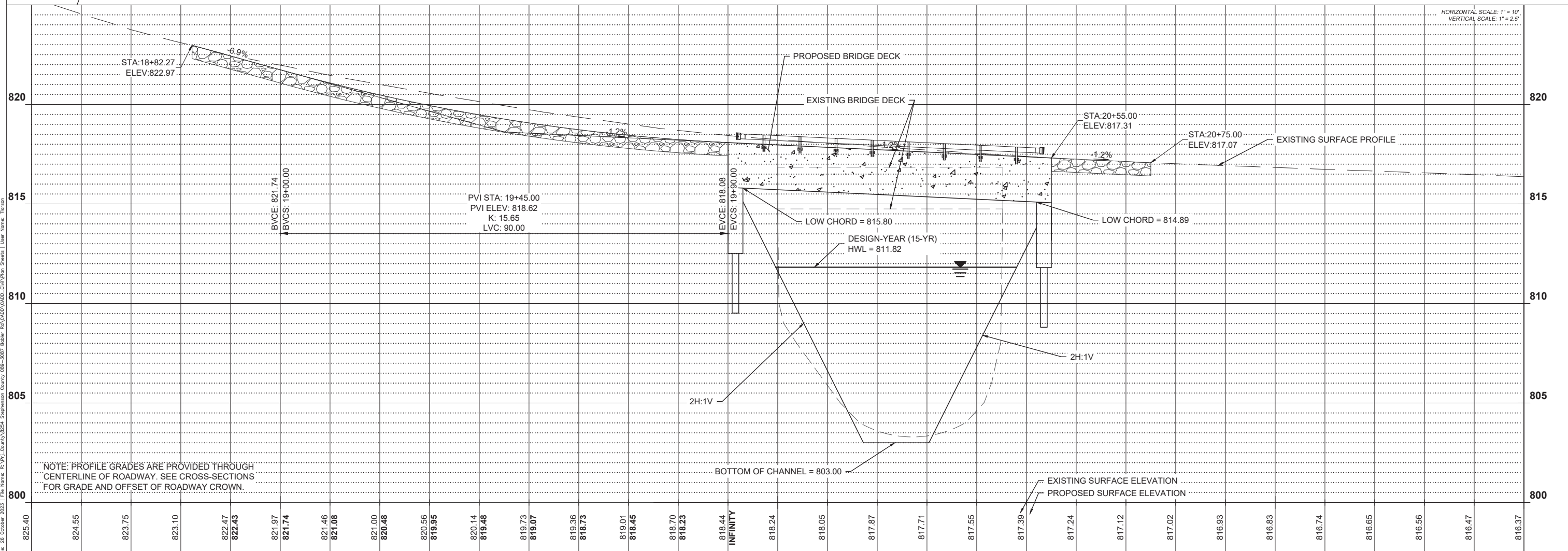
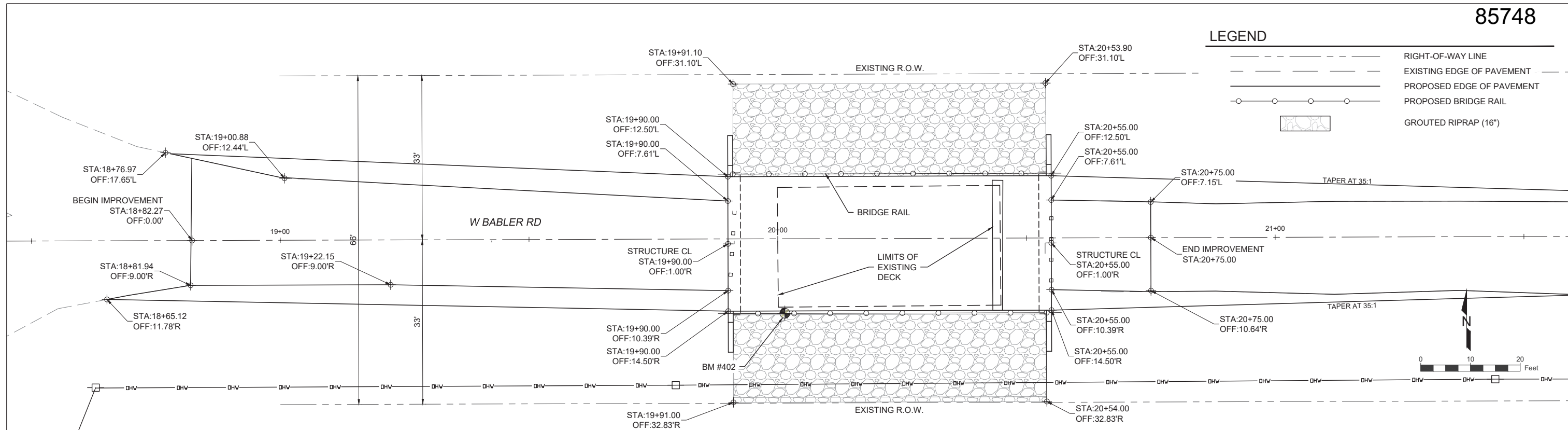
DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

TYPICAL SECTIONS	
SCALE: _____	SHEET NO. 3 OF 20 SHEETS
STA. _____ TO STA. _____	

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	3
PROJ. HYNE (852) ILLINOIS			CONTRACT NO. 85748	
			STRUCTURE 089-3299	

LEGEND

-  RIGHT-OF-WAY LINE
-  EXISTING EDGE OF PAVEMENT
-  PROPOSED EDGE OF PAVEMENT
-  PROPOSED BRIDGE RAIL
-  GROUTED RIPRAP (16")



NOTE: PROFILE GRADES ARE PROVIDED THROUGH CENTERLINE OF ROADWAY. SEE CROSS-SECTIONS FOR GRADE AND OFFSET OF ROADWAY CROWN.

825.40	824.55	823.75	823.10	822.47	822.43	821.97	821.74	821.46	821.08	821.00	820.48	820.56	819.95	820.14	819.48	819.73	819.07	819.36	818.73	819.01	818.45	818.70	818.23	818.44	INFINITY	818.24	818.05	817.87	817.71	817.55	817.39	817.24	817.12	817.02	816.93	816.83	816.74	816.65	816.56	816.47	816.37							
18+50			19+00																							20+00																						21+00

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED = TWL	REVISED = .
DRAWN = TWL	REVISIONS = .	
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED = TWO	REVISED = .
PLOT DATE = October 26, 2023	DATE = 2023 10-25	REVISED = .

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS

DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397









BABLER ROAD PLAN AND PROFILE	
SCALE: _____	SHEET NO. 4 OF 20 SHEETS
STA. _____	TO STA. _____

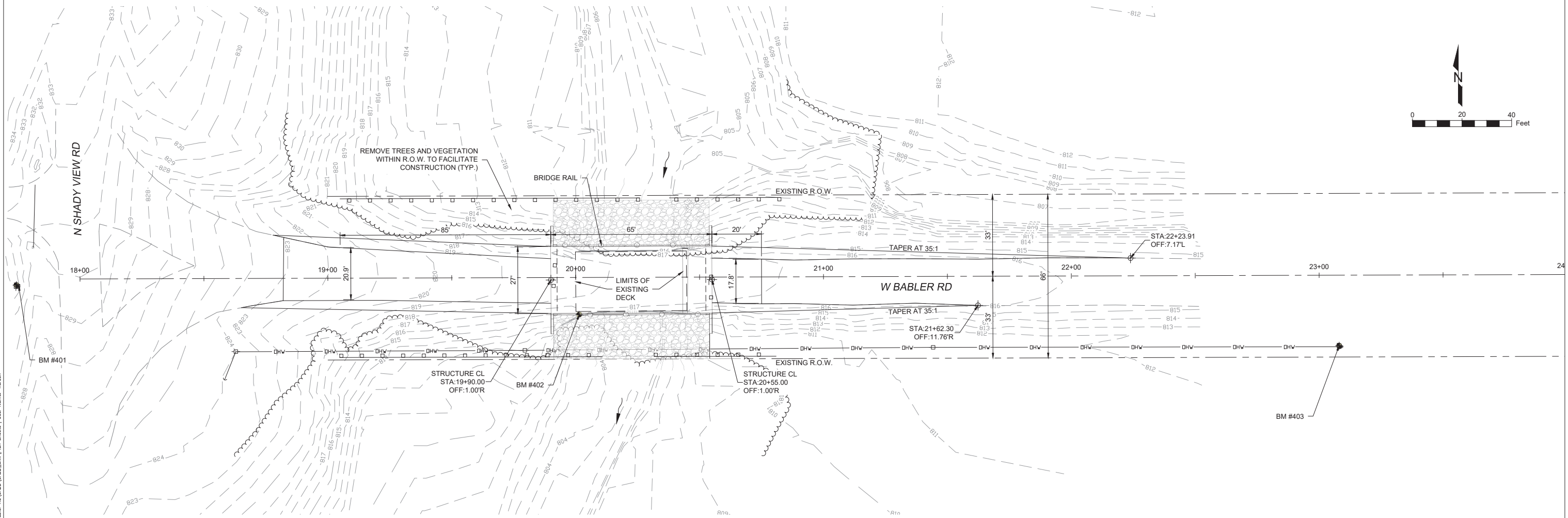
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	4
PROJ. HYNE (852) ILLINOIS		CONTRACT NO. 85748		
		STRUCTURE 089-3299		

NOTES

1. ALL AREAS TO BE RESTORED WITH TURF SHALL RECEIVE THE FOLLOWING:
 - 1.1. 4" OF TOPSOIL
 - 1.2. LONG-TERM EROSION CONTROL BLANKET
 - 1.3. CLASS 2 SEEDING
 - 1.4. FERTILIZER AT A RATE OF 270 LBS/ACRE WITH A 1:1:1 RATIO BETWEEN NITROGEN FERTILIZER NUTRIENTS, PHOSPHORUS FERTILIZER NUTRIENTS, AND POTASSIUM FERTILIZER NUTRIENTS.
2. THE CONTRACTOR MAY PERMANENTLY REMOVE ANY PORTION OF THE SILT FENCE AFTER ESTABLISHMENT OF FINAL GRADE AND FINAL STABILIZATION RENDERS THE RESPECTIVE PORTION OF THE PERIMETER SILT FENCE INEFFECTIVE AS A BEST MANAGEMENT PRACTICE.

LEGEND

-  RIGHT-OF-WAY LINE
-  EXISTING EDGE OF PAVEMENT
-  PROPOSED EDGE OF PAVEMENT
-  EXISTING DRIPLINE
-  PERIMETER EROSION BARRIER
-  EXISTING CONTOUR
-  PROPOSED CONTOUR
-  PROPOSED STONE RIPRAP, CLASS A4 (16")



Plot Date: 26 October 2023 | File Name: R:\P\I\County\85748\Stephenson County\089-007\Babler Rd\CADD\CADD_004\Plan_Sheets | User Name: Thurston

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS

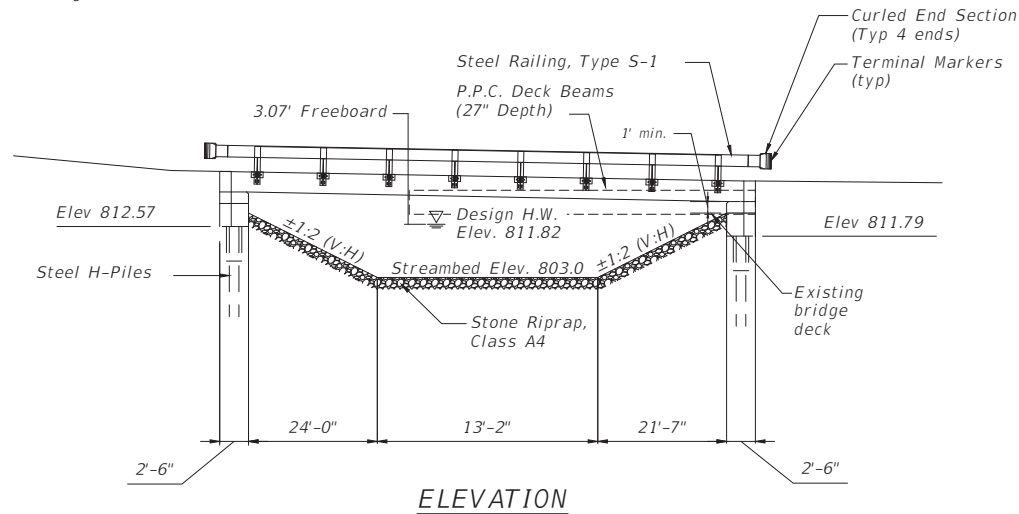
DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

GRADING AND EROSION CONTROL PLAN		
SCALE: -----	SHEET NO. 5 OF 20 SHEETS	STA. 19+05 TO STA. 20+75

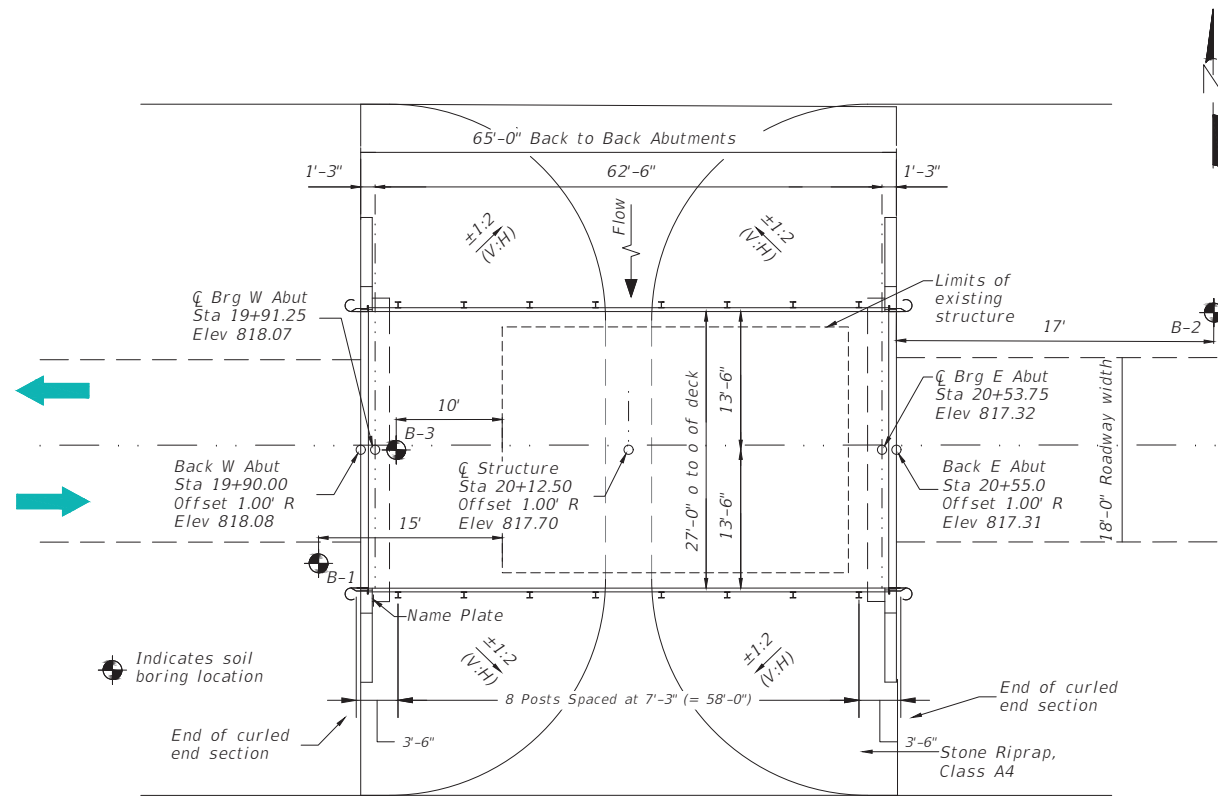
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	5
CONTRACT NO. 85748				
PROJ. HYNÉ (852) ILLINOIS		STRUCTURE 089-3299		

Existing Structure (089-3087):
Single span concrete deck bridge
on closed abutments

Road to be closed during construction



ELEVATION

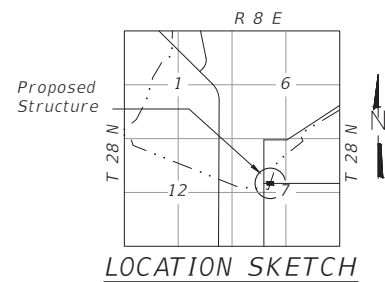


PLAN

WATERWAY INFORMATION

Drainage Area = 7.93 sq mi		Exist. Low Grade Elev. 817.40 @ Sta. 20+45		Prop. Low Grade Elev. 817.31 @ Sta. 20+55					
Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.	Headwater El.		Head - Ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Overtopping	--	7,200	421	600	816.30	821.48	818.82	5.18	2.52
Design	15	1,750			811.17	812.19	811.82	1.02	0.65
Base	100	2,860			812.49	814.04	813.49	1.55	1.00
Max Calc Scour	200	3,320			812.97	814.77	814.10	1.80	1.13

15 Year Velocity Through Existing Bridge = 6.59 ft/s
15 Year Velocity Through Proposed Bridge = 5.75 ft/s



LOCATION SKETCH

BRUSH CREEK TRIBUTARY BRIDGE
BUILT 20 BY
STEPHENSON COUNTY
SEC. 21-01132-00-BR
TR 59 STA. 20+12.50
STR. NO. 089-3299 LOADING HL-93

NAME PLATE
See Std. 515001

LOADING HL-93

DESIGN SPECIFICATIONS
2018 AASHTO LRFD Bridge Design
Specifications, 8th Edition with 2018 Interims

DESIGN STRESSES
FIELD UNITS

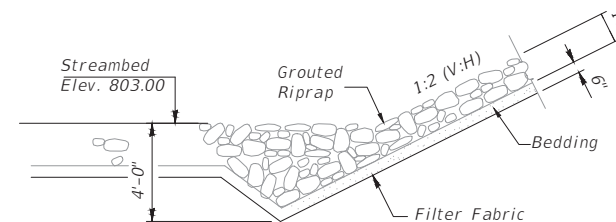
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" Ø low-relaxation strands)
f'si = 202,000 psi (1/2" Ø low-relaxation strands)

SEISMIC DATA

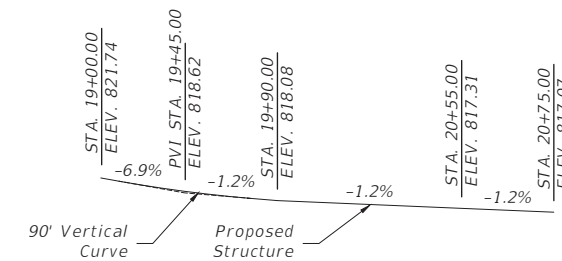
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec (S_s) = 0.0985
Design Spectral Acceleration at 0.2 sec (S₁) = 0.0519
Soil Site Class = D



STONE RIPRAP ANCHOR DETAIL

GENERAL NOTES:

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the ENGINEER.
All Construction joints shall be bonded.
See Roadway Plans for channel excavation limits and quantities.
See Roadway Plans for additional riprap limits and quantities.



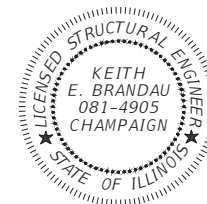
PROFILE GRADE

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)		
	W. Abut.	E. Abut.	Item 113
Q100	812.57	811.79	
Q200	812.57	811.79	
Design	812.57	811.79	
Check	812.57	811.79	

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures	Each	1
Structure Excavation	Cu Yd	260
Concrete Structures	Cu Yd	24.1
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq Ft	1720
Reinforcement Bars	Pound	4260
Steel Railing, Type S-1	Foot	130
Furnishing Steel Piles HP 10x42	Foot	352
Driving Steel Piles HP 10x42	Foot	352
Test Pile Steel HP 10x42	Each	2
Pile Shoes	Each	10
Name Plates	Each	1
Terminal Marker - Direct Applied	Each	4
Concrete Cut-off Wall	Cu Yd	8.6
Grouted Riprap	Sq Yd	444



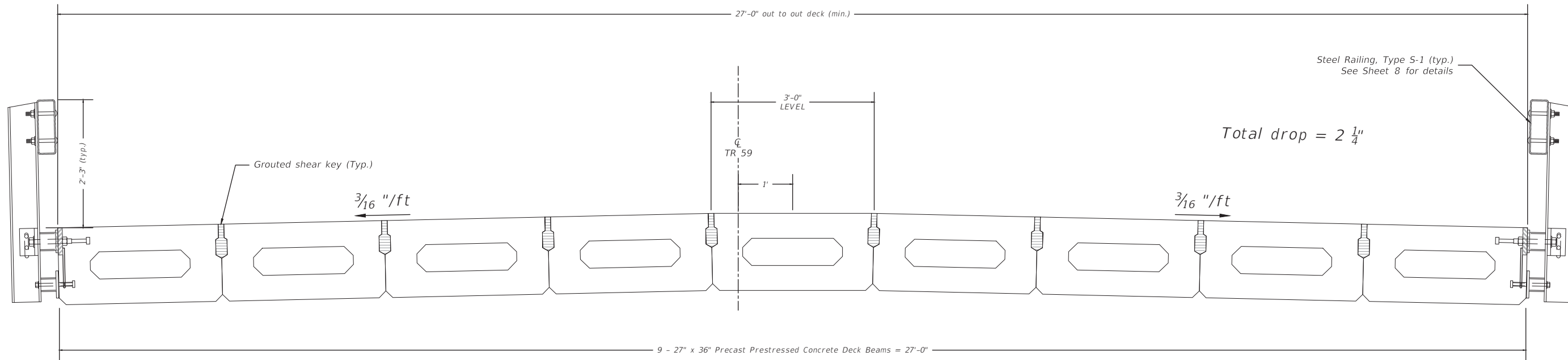
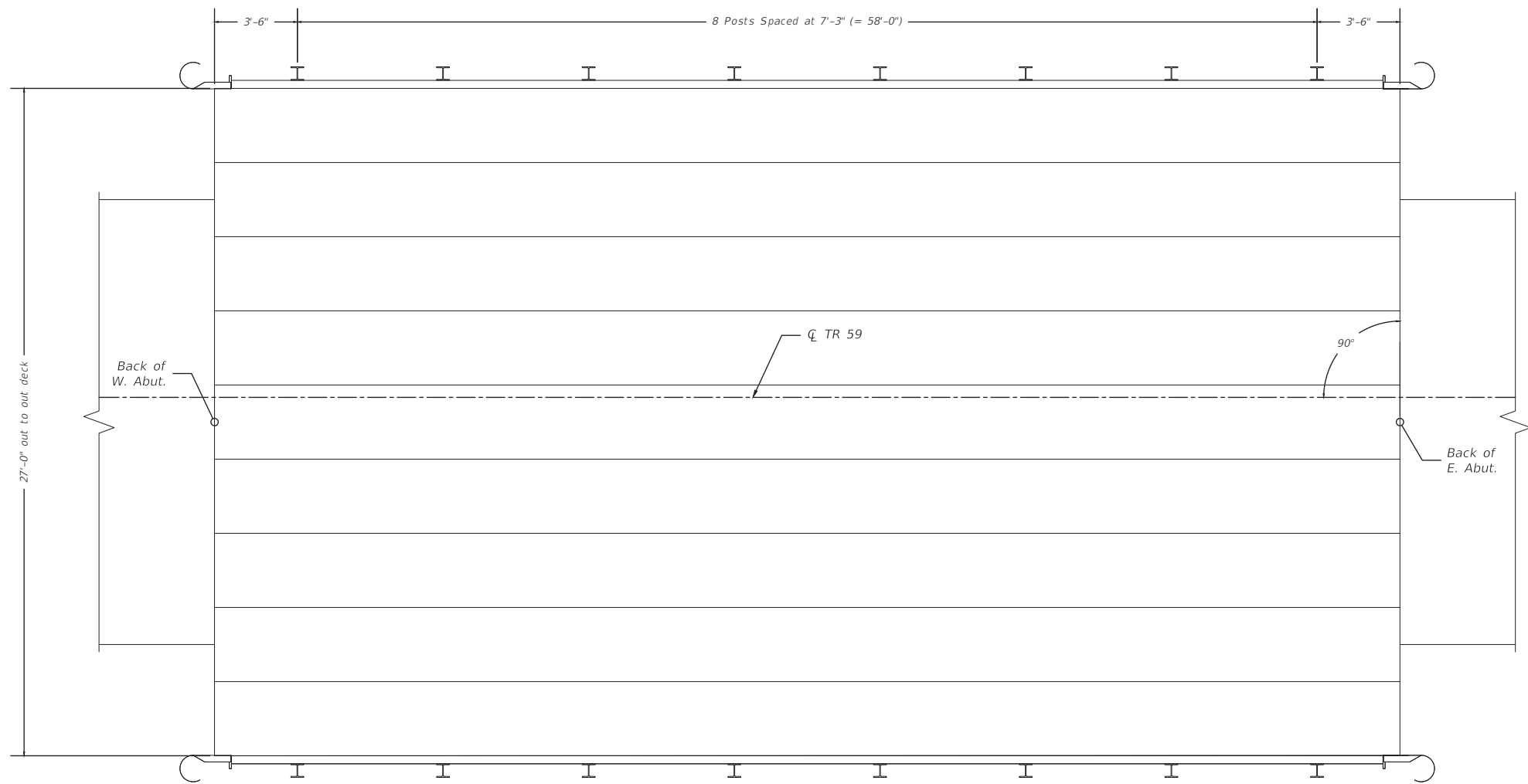
Keith E. Brandau
Keith E. Brandau, P.E., S.E. Date 10/17/2023
Expires 11/30/2024

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Bridge Design Specifications.

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED --
	DRAWN -- TWL	REVISED --
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED --
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED --

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184-001397

BRIDGE PLAN AND ELEVATION		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: _____	SHEET NO. 6 OF 20 SHEETS	TR59	20-01132-00-BR	STEPHENSON	20	6
STA. _____ TO STA. _____		CONTRACT NO. 85748		STRUCTURE 089-3299		



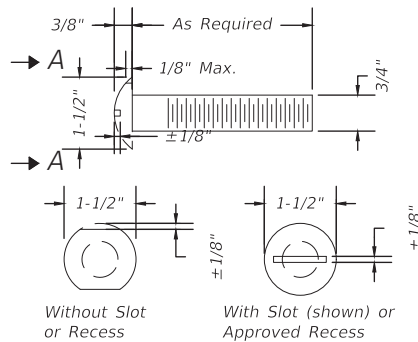
Plot Date: 26 October 2023 | File Name: R:\P\I\County\8254_Stephenson County\089-1087 Baker Rd\CADD\CADD_Structure\Sheets | User Name: Brian

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED — TWL	REVISED — .
	DRAWN — TWL	REVISED — .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED — TWO	REVISED — .
PLOT DATE = October 26, 2023	DATE — 2023 10-25	REVISED — .

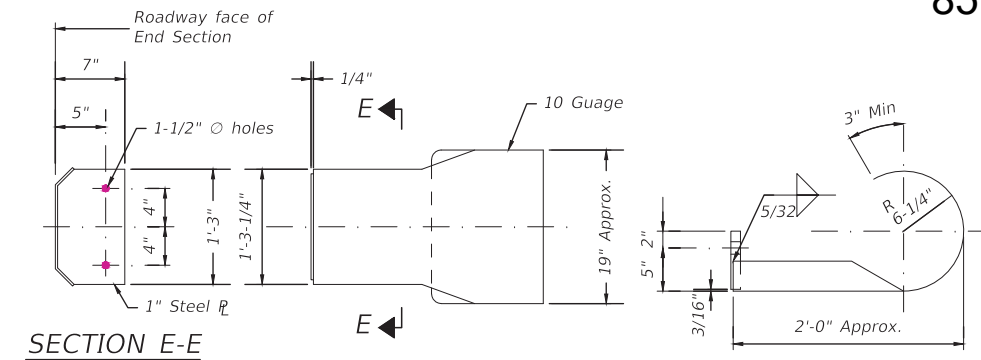
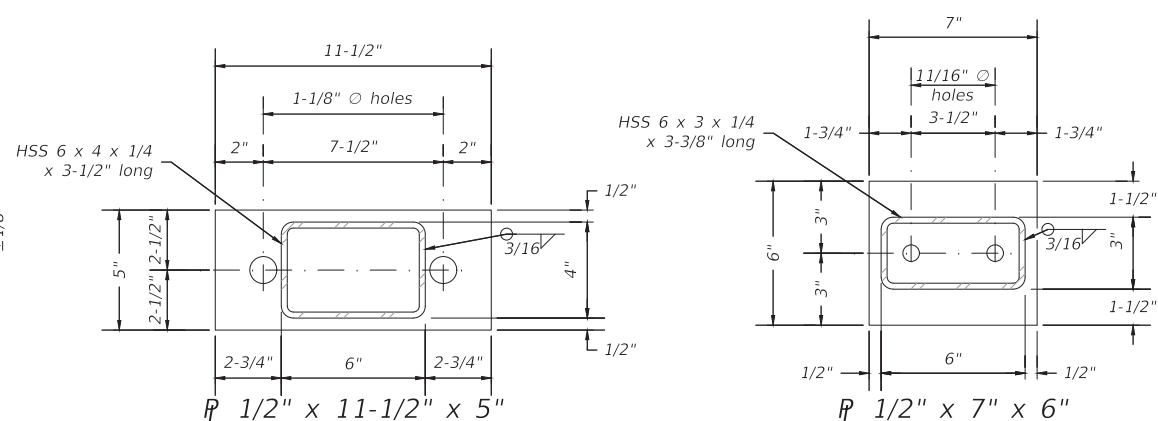
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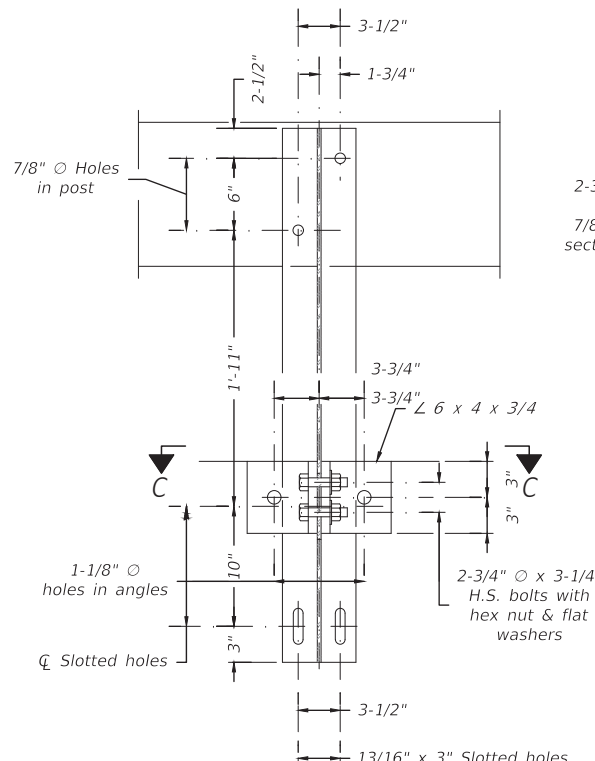
SUPERSTRUCTURE DETAILS		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: _____	SHEET NO. 7 OF ## SHEETS	TR59	20-01132-00-BR	STEPHENSON	20	7
STA. _____ TO STA. _____		PROJ. HYNE (852) ILLINOIS		CONTRACT NO. 85748 STRUCTURE 089-3299		



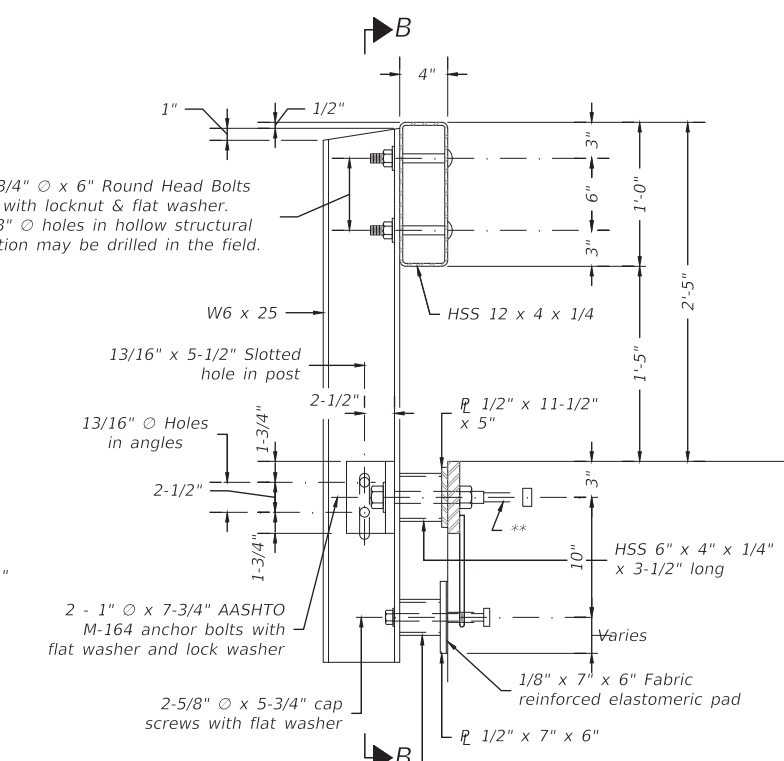
VIEW A-A
ROUND HEAD BOLT



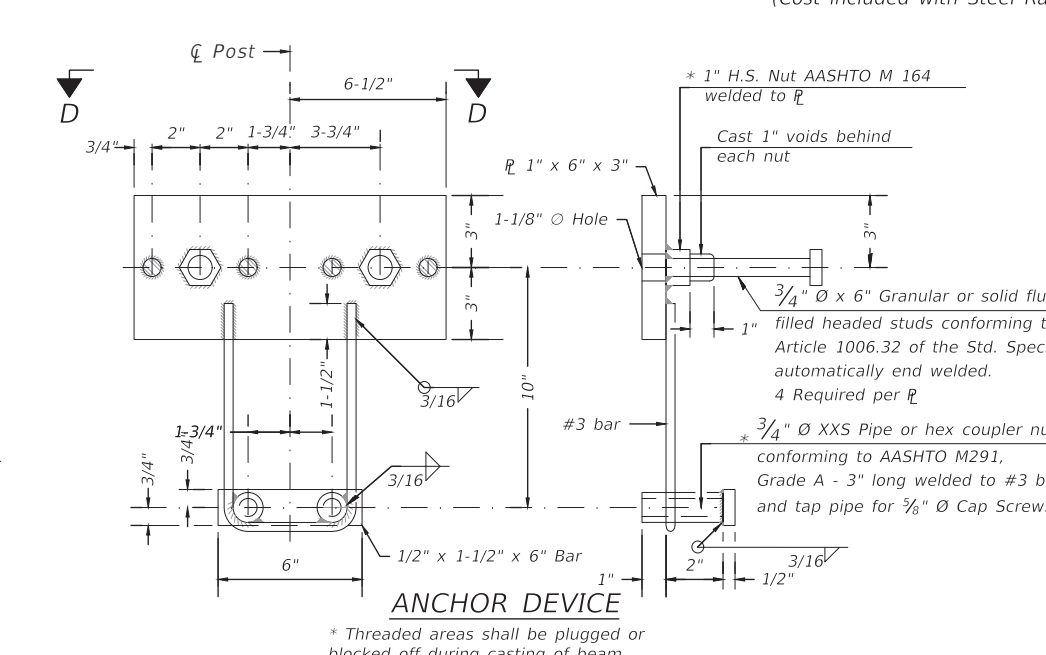
DETAILS OF CURLED END SECTION - 4 EACH
(Cost included with Steel Railing, Type S-1)



SECTION B-B



SECTION AT RAILING POST



ANCHOR DEVICE

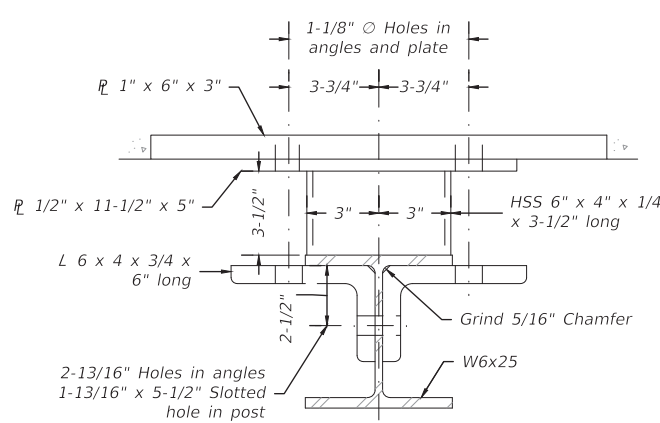
SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

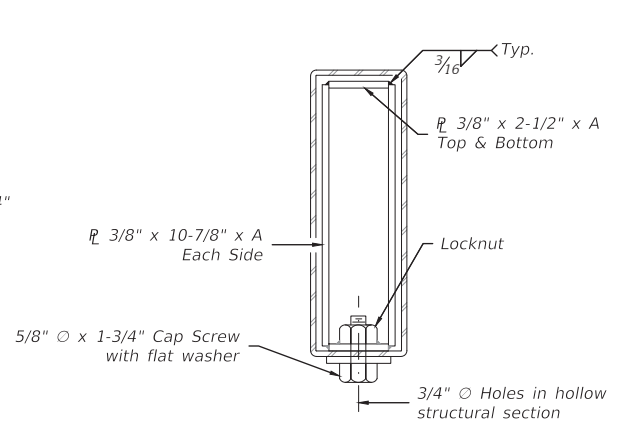
T = Total movement at expansion joint as shown on the design plans.

Notes:
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

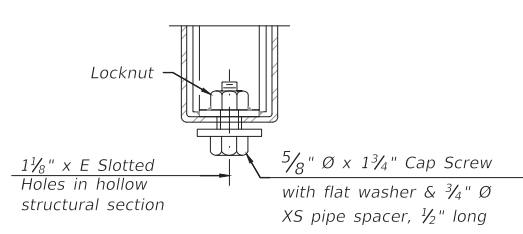
**The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down 1/2" to accommodate the top reinforcement bar placement.



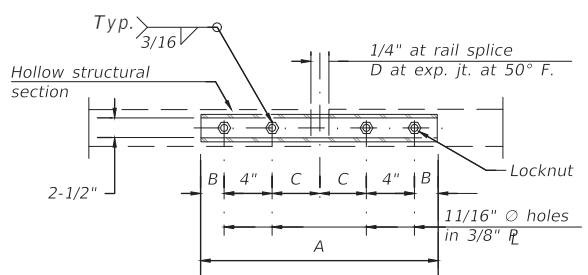
SECTION C-C



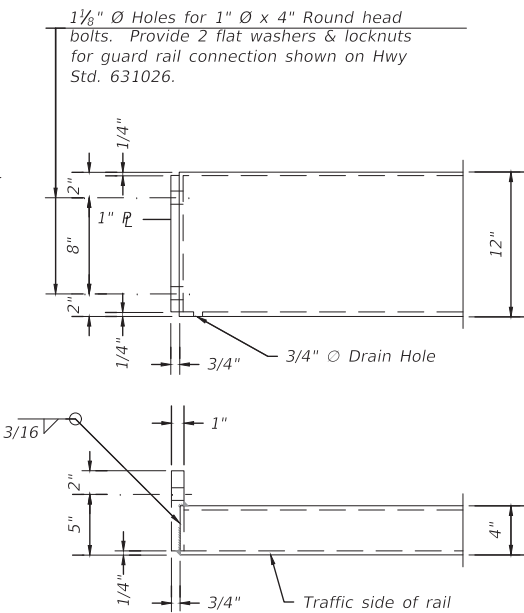
SECTIONS AT RAIL SPLICE



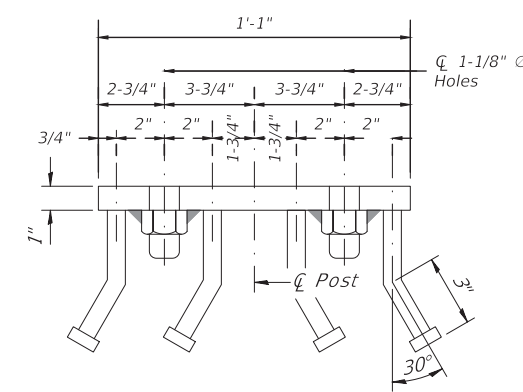
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	130

R-23A 2-17-2017 (10'-9" Maximum Post Spacing)

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED = TWL	REVISED =
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	DRAWN = TWL	REVISED =
PLOT DATE = October 26, 2023	CHECKED = TWO	REVISED =
	DATE = 2023 10-25	REVISED =

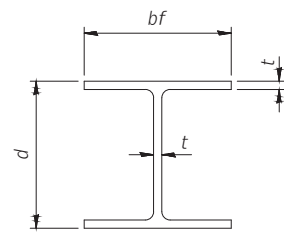
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STEEL RAILING, TYPE S-1

SCALE: _____ SHEET NO. 8 OF ## SHEETS STA. _____ TO STA. _____

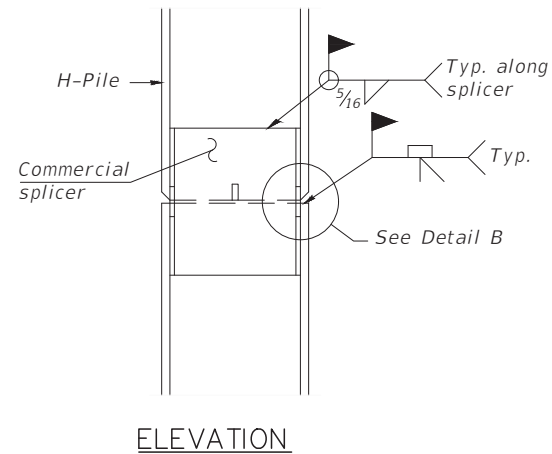
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	8
CONTRACT NO. 85748			STRUCTURE 089-3299	

Plot Date: 26 October 2023 | File Name: R:\P\County\8544 Stephenson County 089-3299-0087 Basker Rd\CADD\CADD_Structure\Sheets | User Name: Tiranon

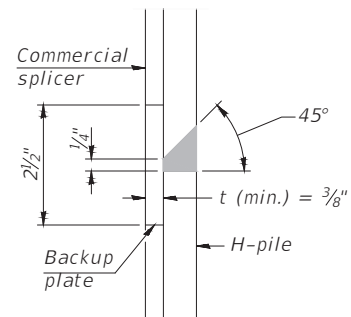


STEEL PILE TABLE

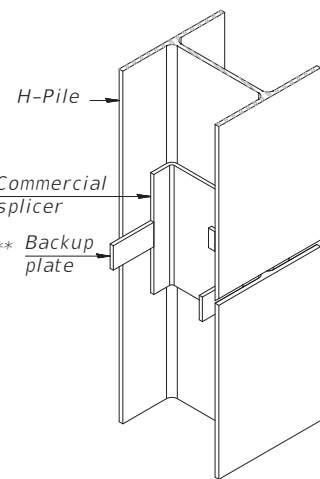
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 5/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

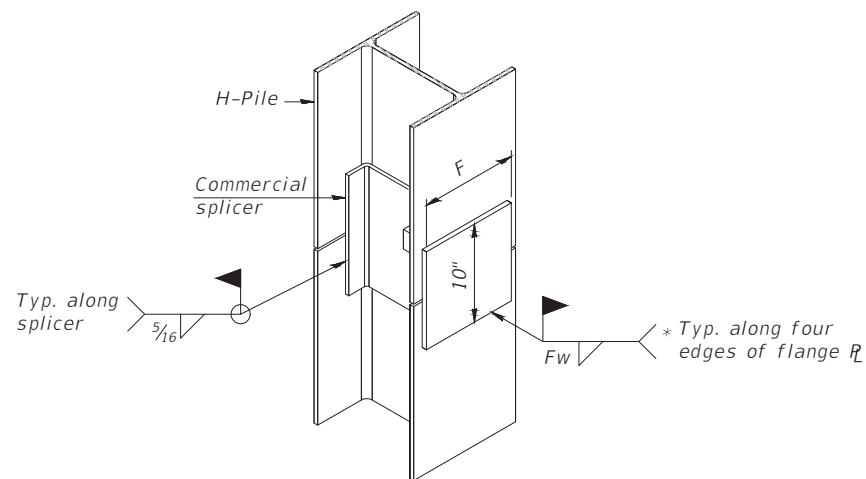


DETAIL "B"



ISOMETRIC VIEW

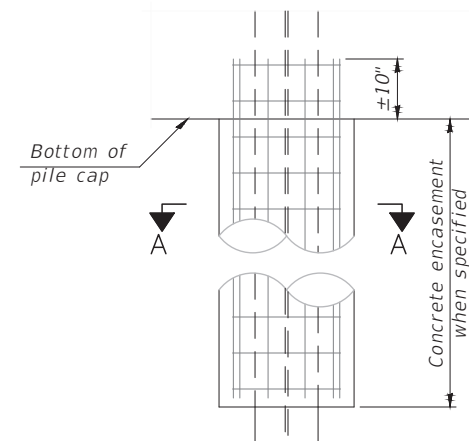
WELDED COMMERCIAL SPLICE



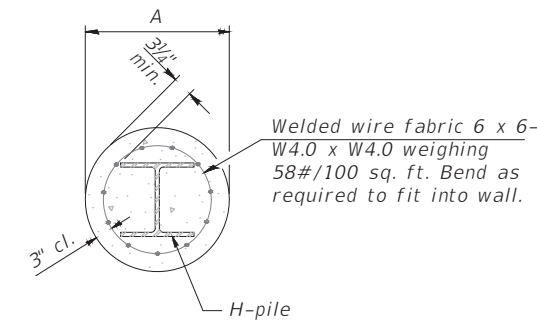
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

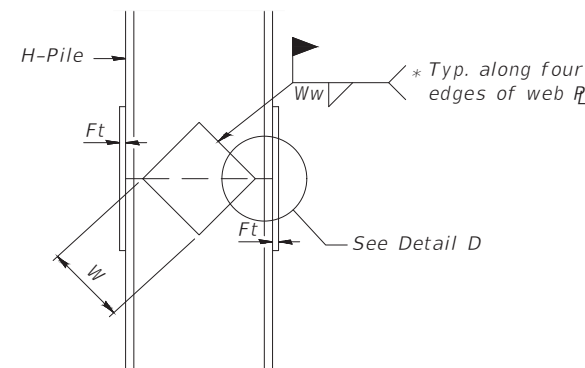


ELEVATION

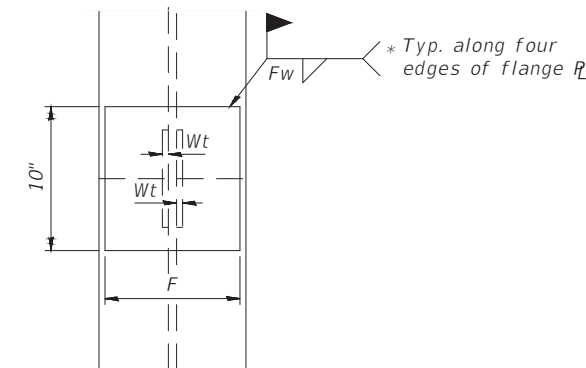


SECTION A-A

INDIVIDUAL PILE
CONCRETE ENCASUREMENT
(Forms for encasement may be omitted when soil conditions permit).



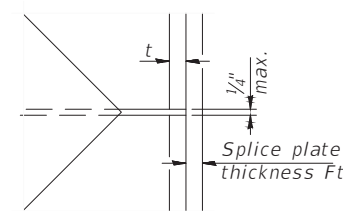
ELEVATION



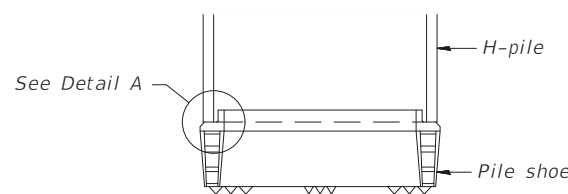
END VIEW

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

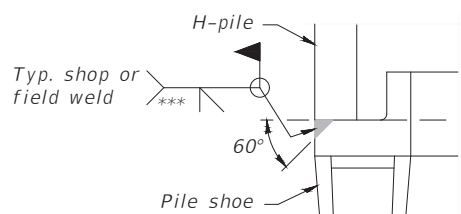
WELDED PLATE FIELD SPLICE



DETAIL D



ELEVATION



DETAIL A

SHOE ATTACHMENT

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP

2-17-2017

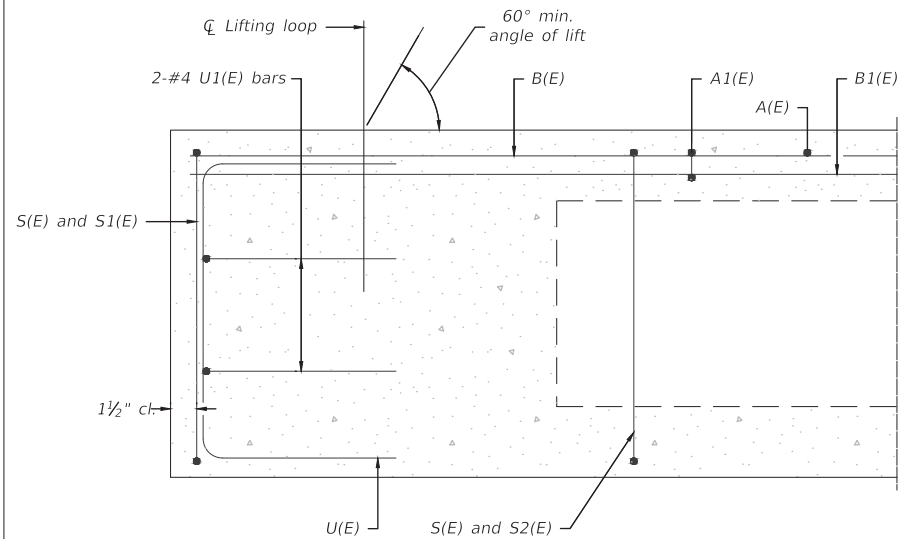
USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

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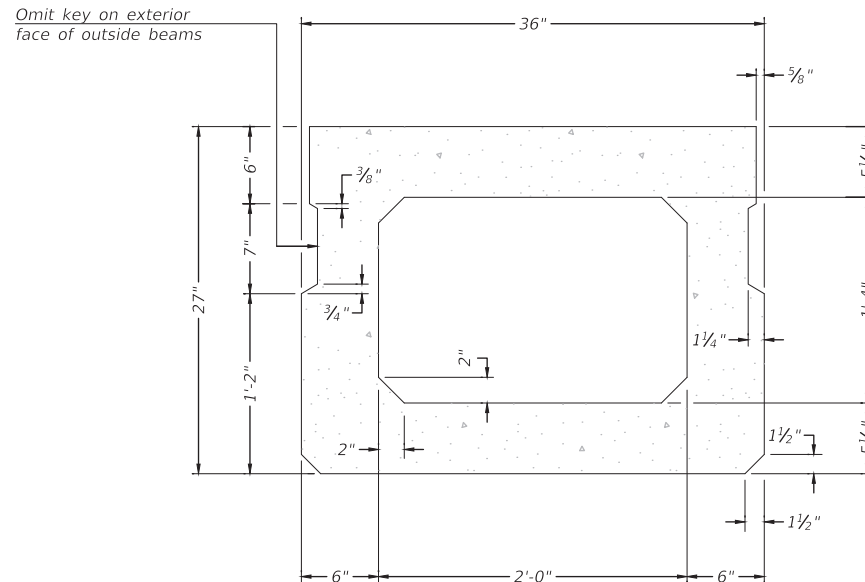
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SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

HP PILE DETAILS		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: -----	SHEET NO. 9 OF 20 SHEETS	TR59	20-01132-00-BR	STEPHENSON	20	9
STA. ----- TO STA. -----	PROJ. HYNE (852) ILLINOIS	CONTRACT NO. 85748		STRUCTURE 089-3299		

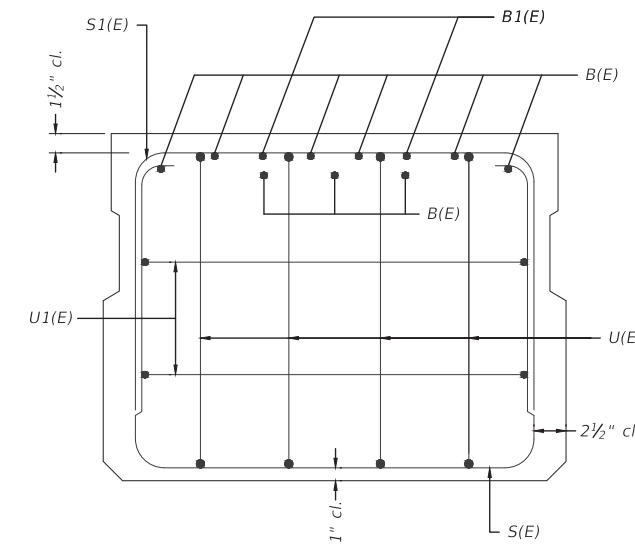
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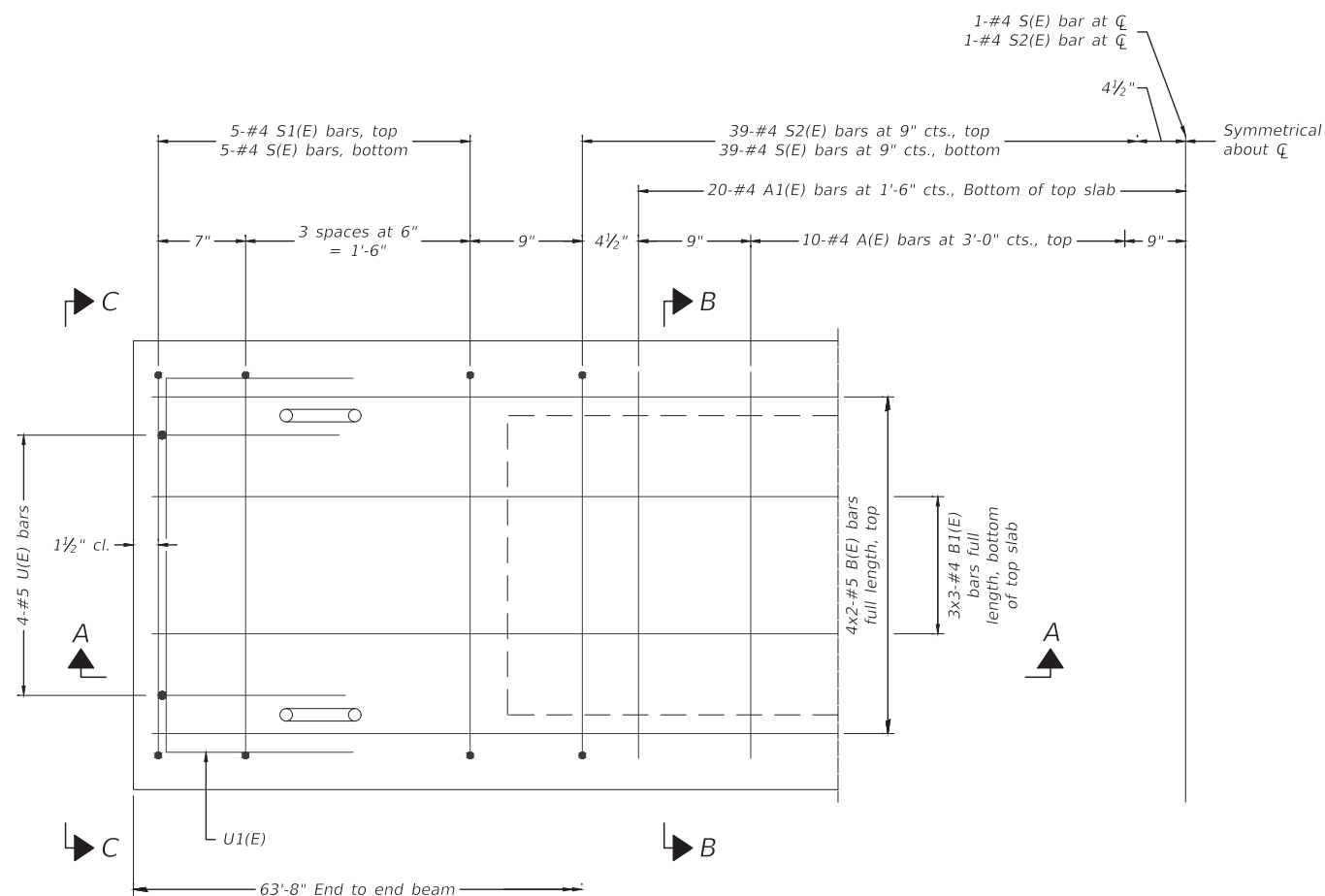
SECTION A-A



SECTION B-B
(Showing dimensions)

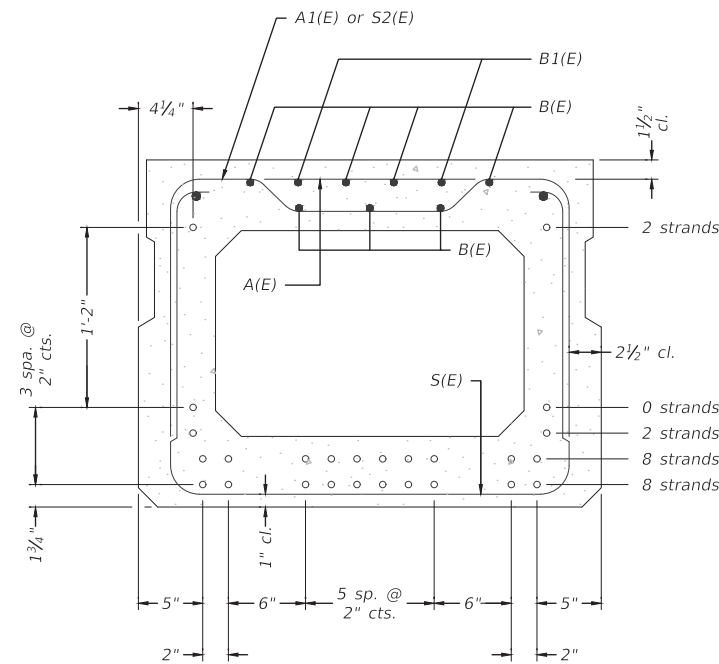


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION B-B
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each road symmetrically about the centerline of beam in the permissible stand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	20	#4	2'-7"	—
A1(E)	39	#4	2'-10"	~
B(E)	8	#5	33'-0"	—
B1(E)	9	#4	22'-6"	—
S(E)	89	#4	7'-5"	⌈
S1(E)	10	#4	5'-11"	⌈
S2(E)	79	#4	6'-2"	⌈
U(E)	8	#5	4'-6"	⌈
U1(E)	4	#4	5'-0"	⌈

Note: See sheet 11 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"

Plot Date: 26 October 2023 | File Name: R:\PI\County\B254_Stephenson County\089-3087_Basker Rd\CADD\CADD_Structure\Sheets | User Name: Titon

PD-2736-0

1-1-2020

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED — TWL	REVISED — .
	DRAWN — TWL	REVISED — .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED — TWO	REVISED — .
PLOT DATE = October 26, 2023	DATE — 2023 10-25	REVISED — .

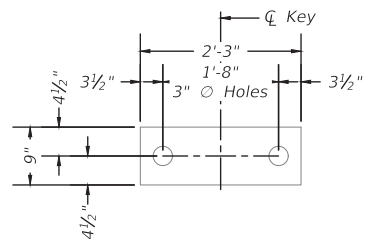
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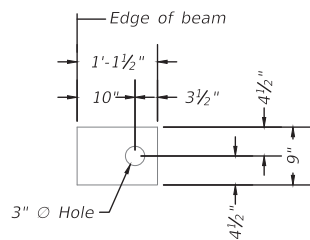
27 x 36 PPC DECK BEAM

SCALE: _____ SHEET NO. 10 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	10
CONTRACT NO. 85748			STRUCTURE 089-3299	



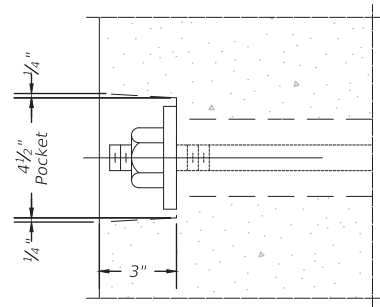
FABRIC BEARING PAD
(Interior)



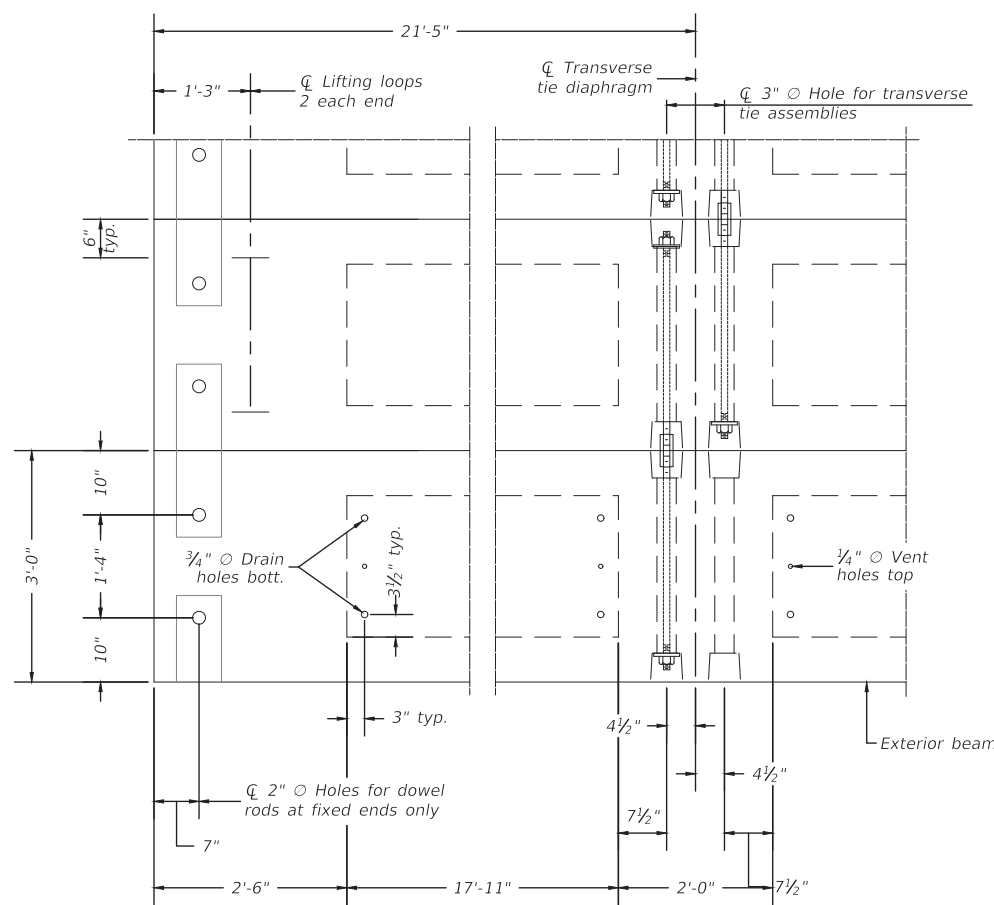
FABRIC BEARING PAD
(Exterior)

FIXED

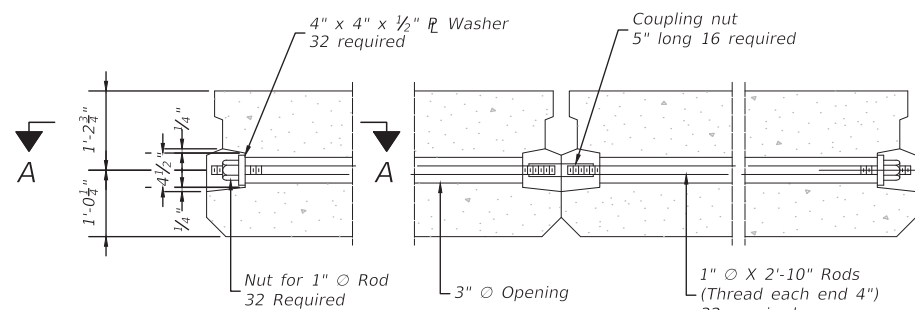
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pads shall be bonded to the substructure.



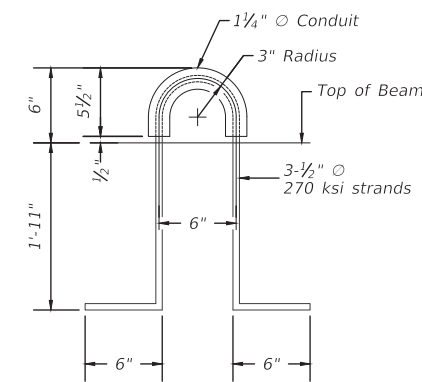
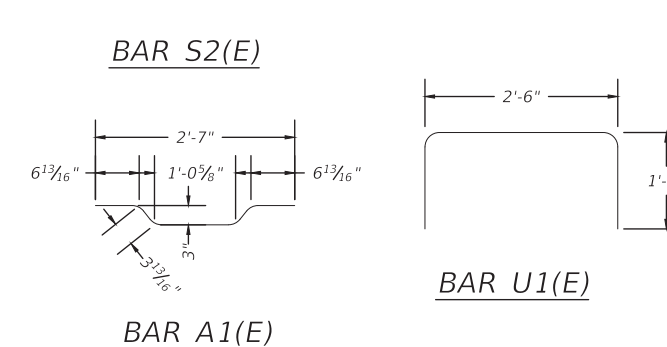
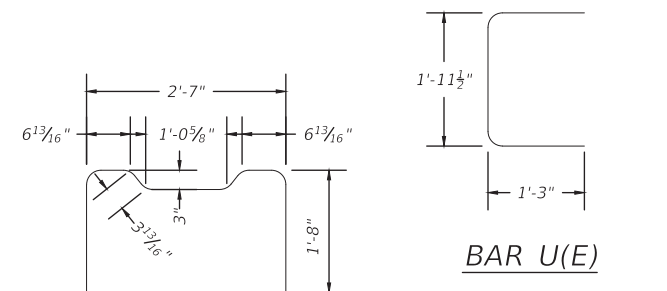
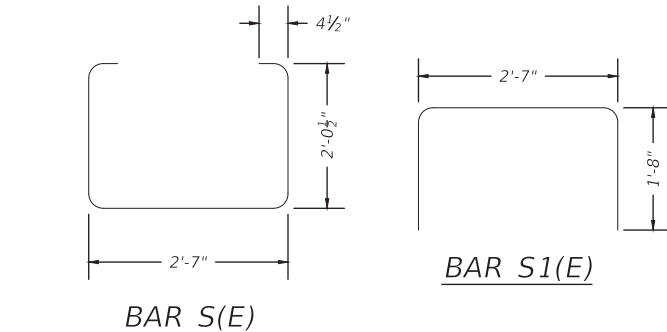
SECTION A-A



Note: Connect beams in pairs with the transverse tie configuration shown.



TYPICAL TRANSVERSE TIE ASSEMBLY



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1720
---	---------	------

Plot Date: 26 October 2023 | File Name: R:\P\I\County\A254 Stephenson County 089-3087 Baker Rd\CADD\CADD_Structure\Sheets | User Name: Titran

PDD-2736-0

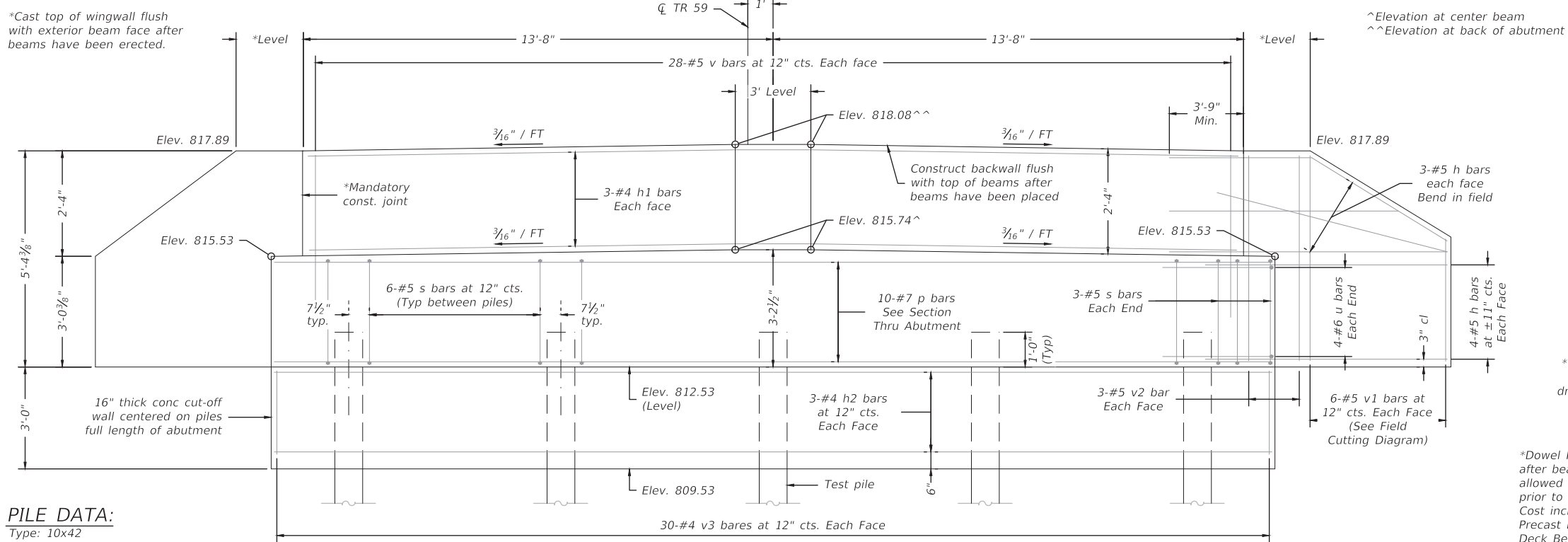
1-1-2020

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
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ROCKFORD (815) 489-0050
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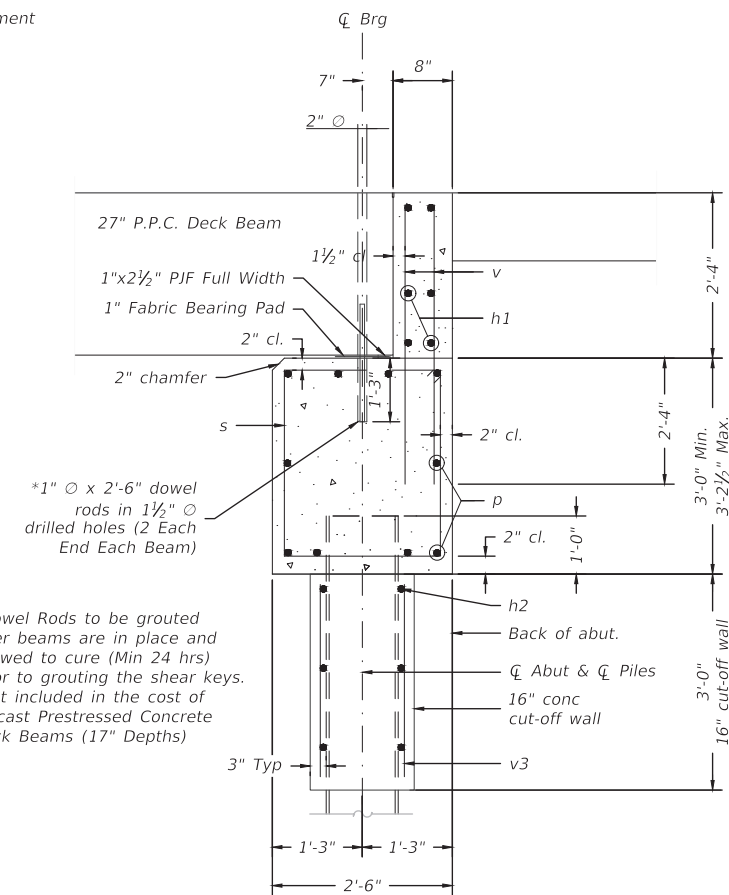
27 x 36 PPC DECK BEAM DETAILS

SCALE: _____	SHEET NO. 11 OF 20 SHEETS	STA. _____ TO STA. _____	RTE. TR59	SECTION 20-01132-00-BR	COUNTY STEPHENSON	TOTAL SHEETS 20	SHEET NO. 11
			PROJ. HYNE (852) ILLINOIS		CONTRACT NO. 85748 STRUCTURE 089-3299		



PILE DATA:
 Type: 10x42
 Nominal Required Bearing: 260 k
 Factored Resistance Available: 143 k
 Est. Length: 44'
 No. Production Piles: 4
 No. Test Piles: 1

ELEVATION

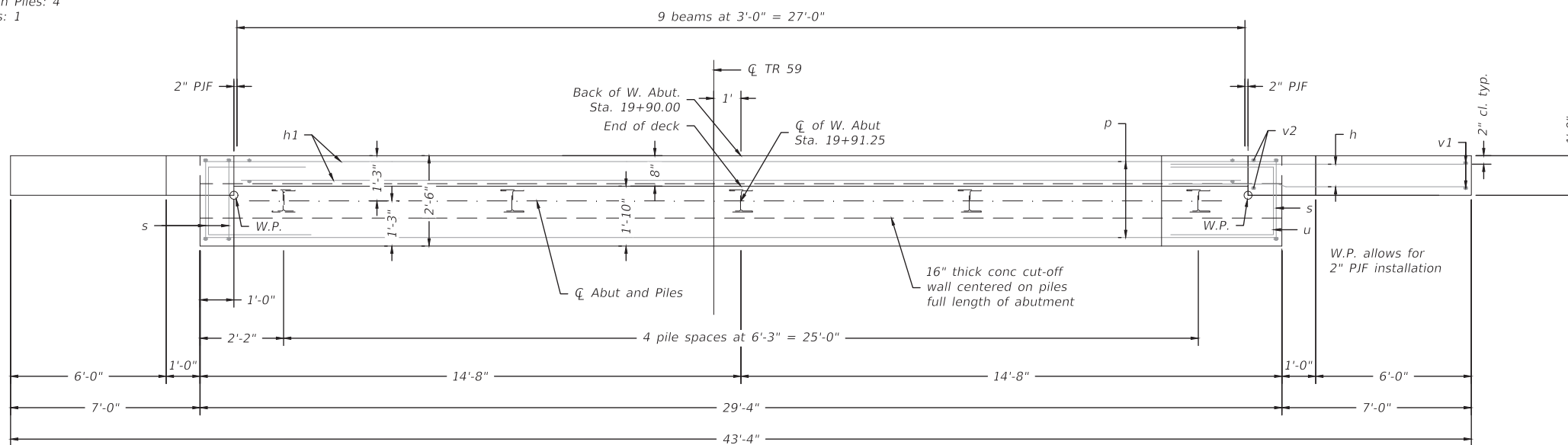


SECTION THRU ABUTMENT
 (Dimensions at Rt L's)

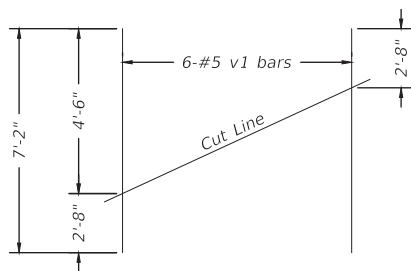
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	28	#5	12'-0"	—
h1	6	#4	27'-0"	—
h2	6	#4	29'-0"	—
p	10	#7	29'-0"	—
s	30	#5	10'-7"	□
u	8	#6	12'-0"	□
v	56	#5	4'-0"	—
v1	12	#5	6'-9"	—
v2	12	#5	4'-1"	—
v3	60	#5	2'-8"	—
Structure Excavation		Cu. Yd.	130	
Concrete Structures		Cu. Yd.	12.1	
Reinforcement Bars		Pound	2130	
Furnishing Steel Piles HP 10x42		Foot	176	
Driving Piles		Foot	176	
Test Pile HP 10x42		Each	1	
Piles Shoes		Each	5	
Concrete Cut-off Wall		Cu. Yd.	4.3	

Notes:
 For details of piles see sheet 9.

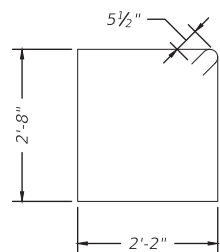


PLAN

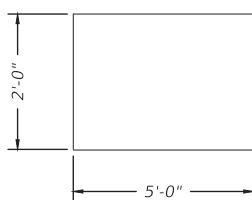


FIELD CUTTING DIAGRAM

Order v1 full length. Cut as shown and use remainder of bars in opposite face



BARS s



BARS u

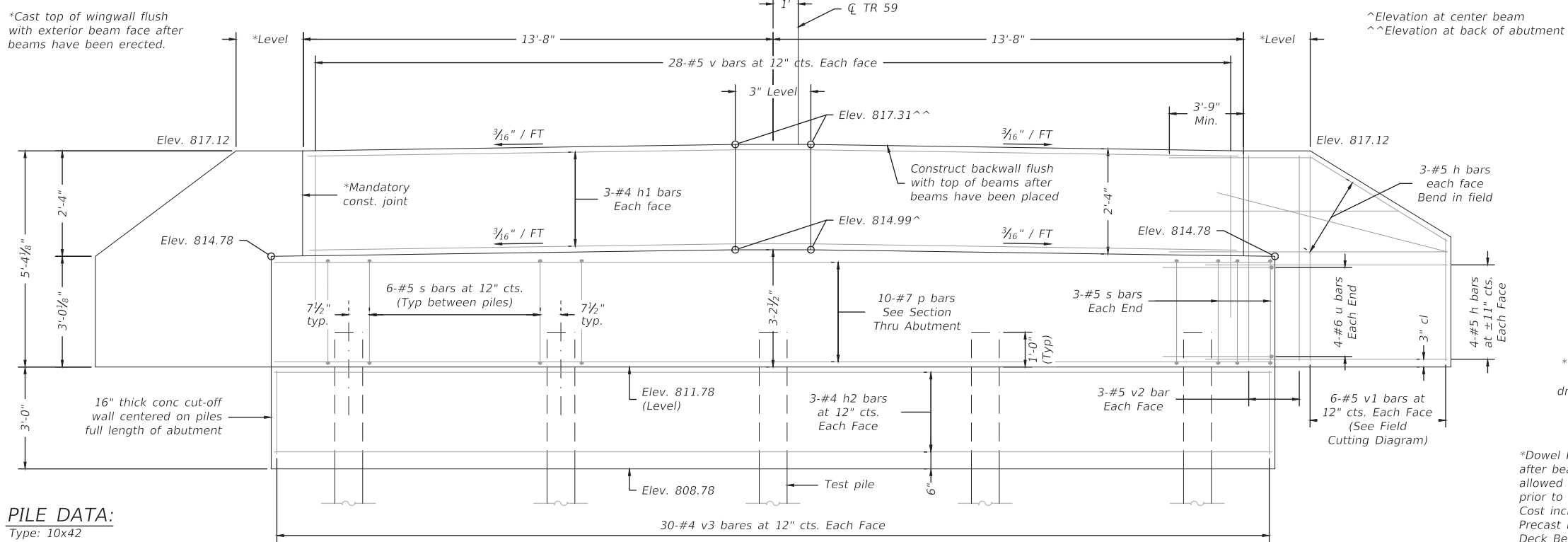
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USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED — TWL	REVISED — .
	DRAWN — TWL	REVISED — .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED — TWO	REVISED — .
PLOT DATE = October 26, 2023	DATE — 2023 10-25	REVISED — .

CHASTAIN & ASSOCIATES LLC
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 SCHAUMBURG (773) 714-0050
 ROCKFORD (815) 489-0050
 184-001397

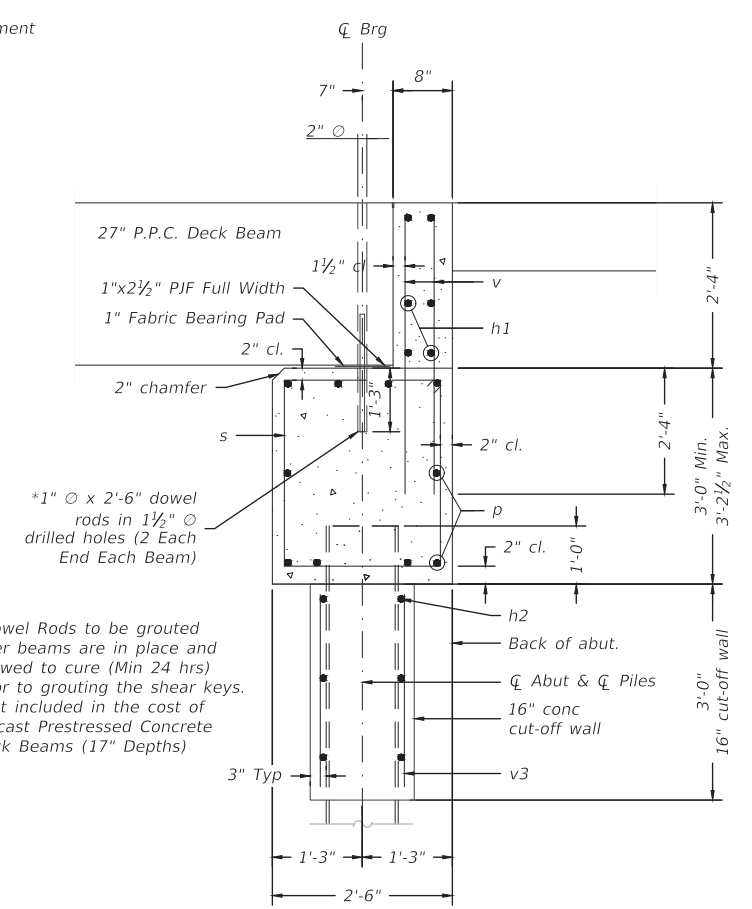
WEST ABUTMENT DETAILS	
SCALE: _____	SHEET NO. _____ OF _____ SHEETS
STA. _____ TO STA. _____	

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	12
CONTRACT NO. 85748			STRUCTURE 089-3299	



PILE DATA:
 Type: 10x42
 Nominal Required Bearing: 260 k
 Factored Resistance Available: 143 k
 Est. Length: 44'
 No. Production Piles: 4
 No. Test Piles: 1

ELEVATION

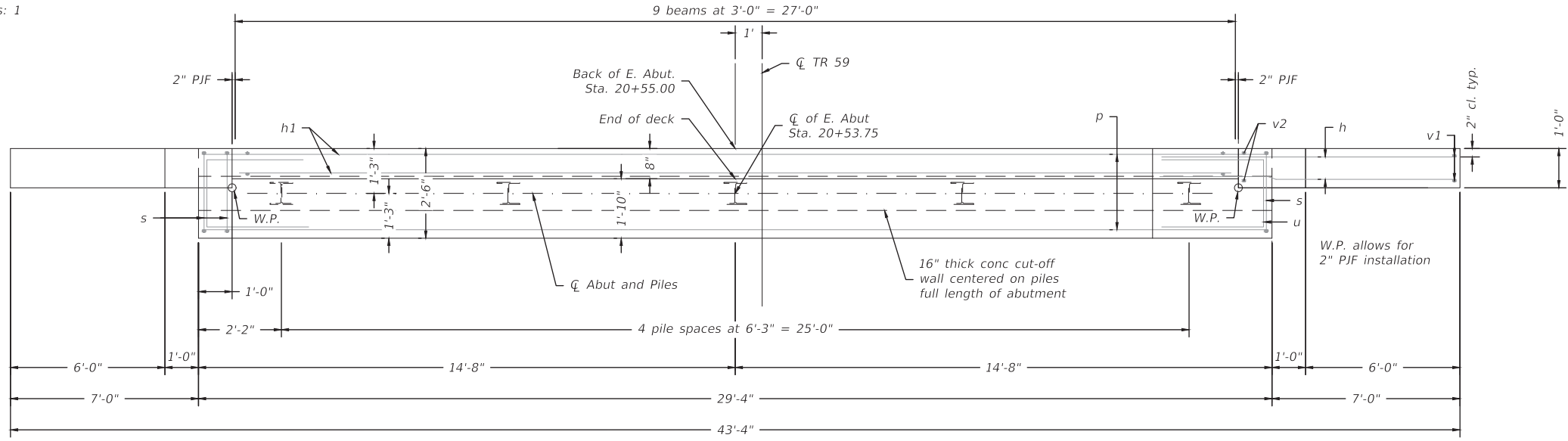


SECTION THRU ABUTMENT
 (Dimensions at Rt L's)

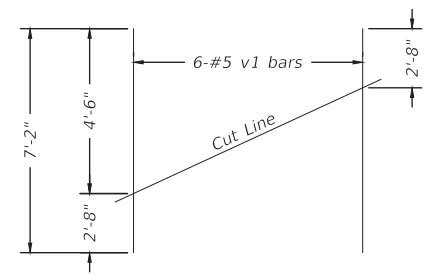
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	28	#5	12'-0"	—
h1	6	#4	27'-0"	—
h2	6	#4	29'-0"	—
p	10	#7	29'-0"	—
s	30	#5	10'-7"	□
u	8	#6	12'-0"	□
v	56	#5	4'-0"	—
v1	12	#5	6'-9"	—
v2	12	#5	4'-1"	—
v3	60	#5	2'-8"	—
Structure Excavation		Cu. Yd.	130	
Concrete Structures		Cu. Yd.	12.1	
Reinforcement Bars		Pound	2130	
Furnishing Steel Piles HP 10x42		Foot	176	
Driving Piles		Foot	176	
Test Pile HP 10x42		Each	1	
Piles Shoes		Each	5	
Concrete Cut-off Wall		Cu. Yd.	4.3	

Notes:
 For details of piles see sheet 9.

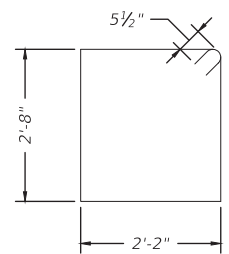


PLAN

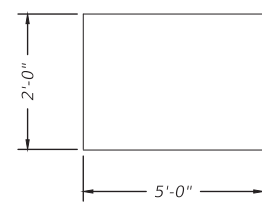


FIELD CUTTING DIAGRAM

Order v1 full length. Cut as shown and use remainder of bars in opposite face



BARS s



BARS u

Plot Date: 26 October 2023 | File Name: R:\P\I\County\B254_Stephenson County\089-3087\Baker Rd\CADD\CADD_Structure\Sheets | User Name: Tiranon

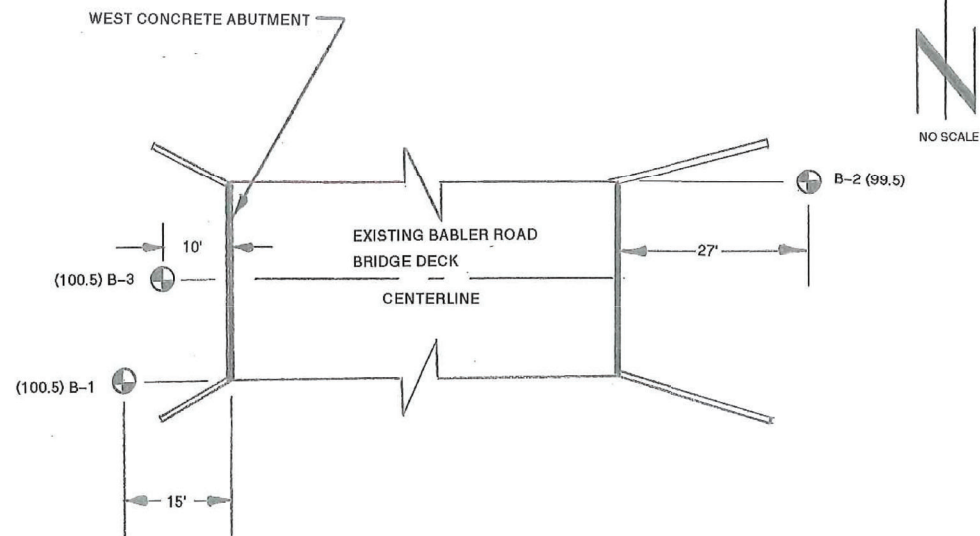
USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED — TWL	REVISED — .
PLLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	DRAWN — TWL	REVISED — .
PLLOT DATE = October 26, 2023	CHECKED — TWO	REVISED — .
	DATE — 2023 10-25	REVISED — .

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 184-001397

EAST ABUTMENT DETAILS	
SCALE: _____	SHEET NO. _____ OF _____ SHEETS
STA. _____ TO STA. _____	

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	13
CONTRACT NO. 85748			STRUCTURE 089-3299	

BORING LOCATION SKETCH
PROPOSED BABLER ROAD BRIDGE REPLACEMENT
STRUCTURE NUMBER 089-3087
BABLER ROAD OVER BRUSH CREEK
BUCKEYE TOWNSHIP, STEPHENSON COUNTY, ILLINOIS
SEPTEMBER, 2022
TSC JOB NO. L-94,617



PROJECT **Babler Road Bridge over Brush Creek, Stephenson County, Illinois**
 CLIENT **Chastain & Associates, LLC, Rockford, Illinois**
 BORING **1** DATE STARTED **9-9-22** DATE COMPLETED **9-9-22** JOB **L-94,617**

ELEVATIONS	WATER LEVEL OBSERVATIONS
GROUND SURFACE 100.5	▽ WHILE DRILLING 15.5'
END OF BORING 53.5	▽ AT END OF BORING 15.5'
	▽ 24 HOURS



LENGTH RECOVERY	SAMPLE NO.	TYPE	N	WC	Qu	γ DRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
0	1	SS	26	6.6					FILL - Tan silty SAND and GRAVEL (crushed limestone), moist (SM/GM)
3.0	2	SS	2	17.9	0.5*	113		97.5	FILL - Brown very silty CLAY, little to some sand and gravel, trace organic, occasional silt seams, very moist (CL)
5.5	3	SS	1	25.4	0.5*			95.0	FILL - Brown silty CLAY, trace sand and gravel and organic, occasional silt seams, very moist (CL)
8.0	4	SS	5	22.8	0.75*	100		92.5	FILL - Brown and black silty CLAY, trace sand and gravel, trace organic seams, very moist (CL)
10.5	5	SS	3	30.2	0.75*			90.0	Medium stiff black silty CLAY, trace sand and organic, very moist (OL)
13.0	6	SS	10	8.5				87.5	Medium dense brown silty SAND and gray clayey SILT layers, trace to little gravel, very moist (SM/ML)
15.5	7	SS	3	24.6				85.0	Very loose brownish-gray SILT, some fine sand, moist to very moist (ML)
18.0	8	SS	3	13.6	0.75*			82.5	Very loose gray clayey SILT, some sand, trace gravel, very moist (ML)
20.5	9	SS	10	13.0	1.0*			80.0	Stiff gray very silty CLAY, some sand, trace gravel, very moist (CL-ML)
23.0	10	SS	11	19.4	3.5*			77.5	Very stiff gray silty CLAY, trace sand, moist (CL)
25.5	11	SS	7	14.8	1.5*			75.0	Stiff gray silty CLAY, some sand, trace gravel, moist (CL)
28.0	12	SS	17	18.9	5.18 4.5+*			72.5	Hard gray silty CLAY, trace sand, moist (CL)
30	End of Boring at 47.0'								

TSC_EOB_34617.GPJ, TSC_ALL.GDT 9/29/22
 DRILL RIG NO. **334**
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

Plot Date: 26 October 2023 | File Name: R:\P\I\County\8544 Stephenson County\089-3087 Babler Rd\CADD\CADD_Civil\Plan_Sheets | User Name: Thurston

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS

DECATUR (217) 422-8544
 SCHAUMBURG (773) 714-0050
 ROCKFORD (815) 489-0050
 184-001397

BORING LOGS (1)

SCALE: _____ SHEET NO. 14 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	14
CONTRACT NO. 85748			STRUCTURE 089-3299	

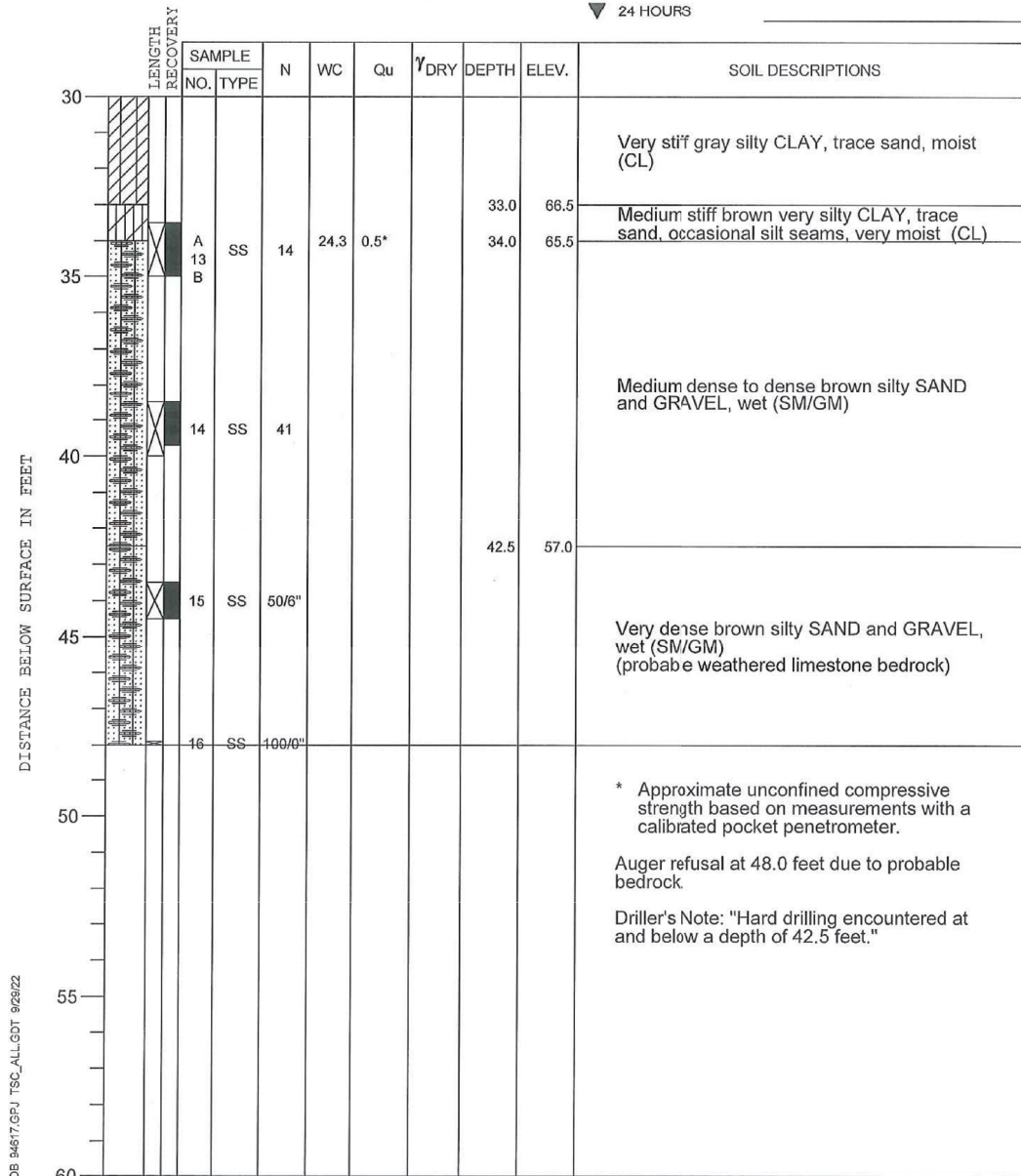
PROJECT **Babler Road Bridge over Brush Creek, Stephenson County, Illinois**

CLIENT **Chastain & Associates, LLC, Rockford, Illinois**



BORING **2** DATE STARTED **9-9-22** DATE COMPLETED **9-9-22** JOB **L-94,617**

ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **99.5** WHILE DRILLING **13.0'**
 END OF BORING **51.5** AT END OF BORING **13.0'**
 24 HOURS



DRILL RIG NO. **334** Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. End of Boring at 48.0' Page 2 of 2

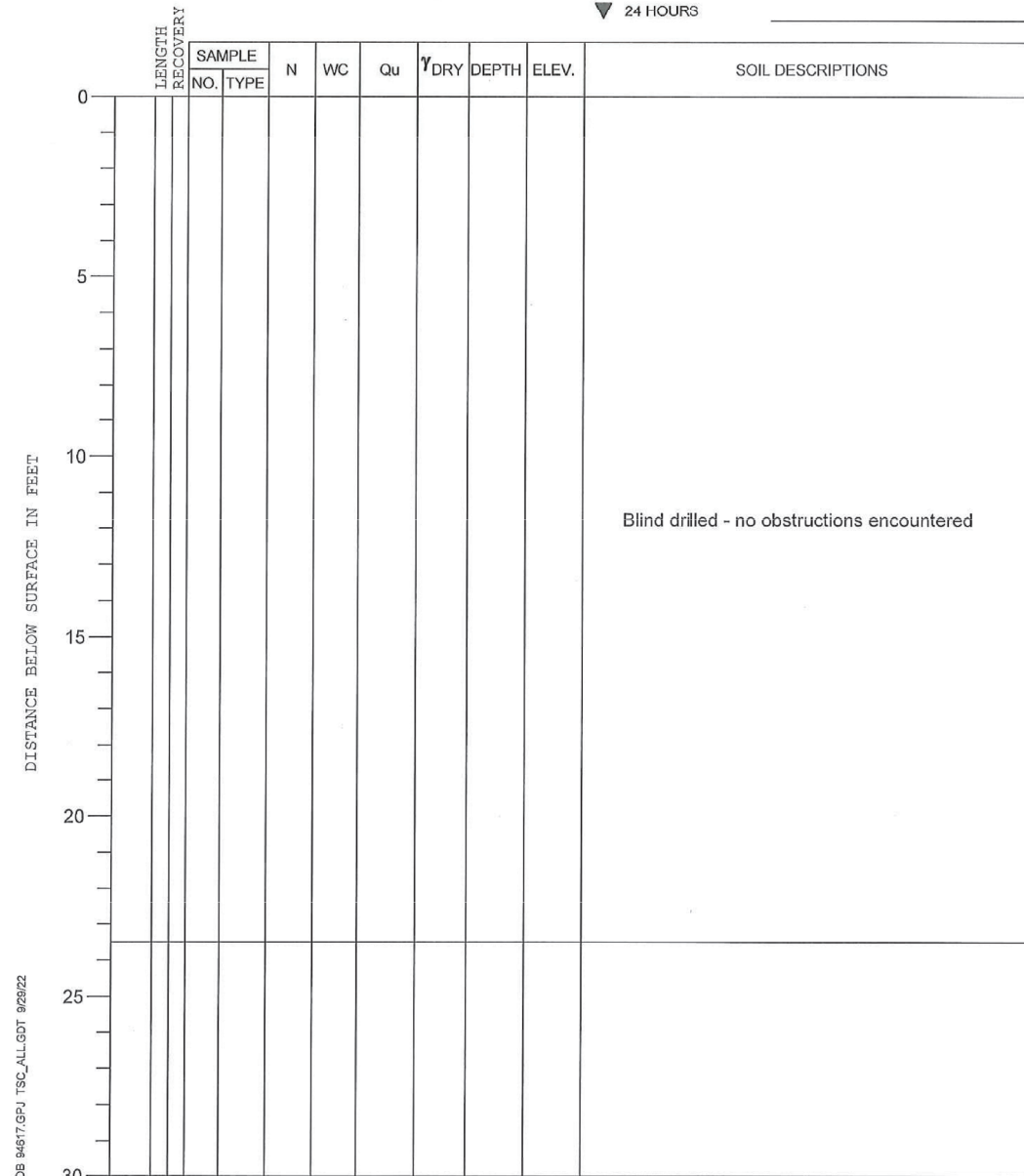
PROJECT **Babler Road Bridge over Brush Creek, Stephenson County, Illinois**

CLIENT **Chastain & Associates, LLC, Rockford, Illinois**



BORING **3** DATE STARTED **9-9-22** DATE COMPLETED **9-9-22** JOB **L-94,617**

ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **100.5** WHILE DRILLING
 END OF BORING **77.0** AT END OF BORING
 24 HOURS



DRILL RIG NO. **334** Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. End of Boring at 23.5'

Plot Date: 26 October 2023 | File Name: R:\PJ\County\B254 Stephenson County 089-3087 Babler Rd\CADD\CADD_Civil\Plan_Sheets | User Name: Thurston

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED = TWL	REVISED = .
	DRAWN = TWL	REVISED = .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED = TWO	REVISED = .
PLOT DATE = October 26, 2023	DATE = 2023 10-25	REVISED = .

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 CONSULTING ENGINEERS
 DECATUR (217) 422-8544
 SCHAUMBURG (773) 714-0050
 ROCKFORD (815) 489-0050
 184-001397

BORING LOGS (2)
 SCALE: _____ SHEET NO. 15 OF 20 SHEETS STA. _____ TO STA. _____

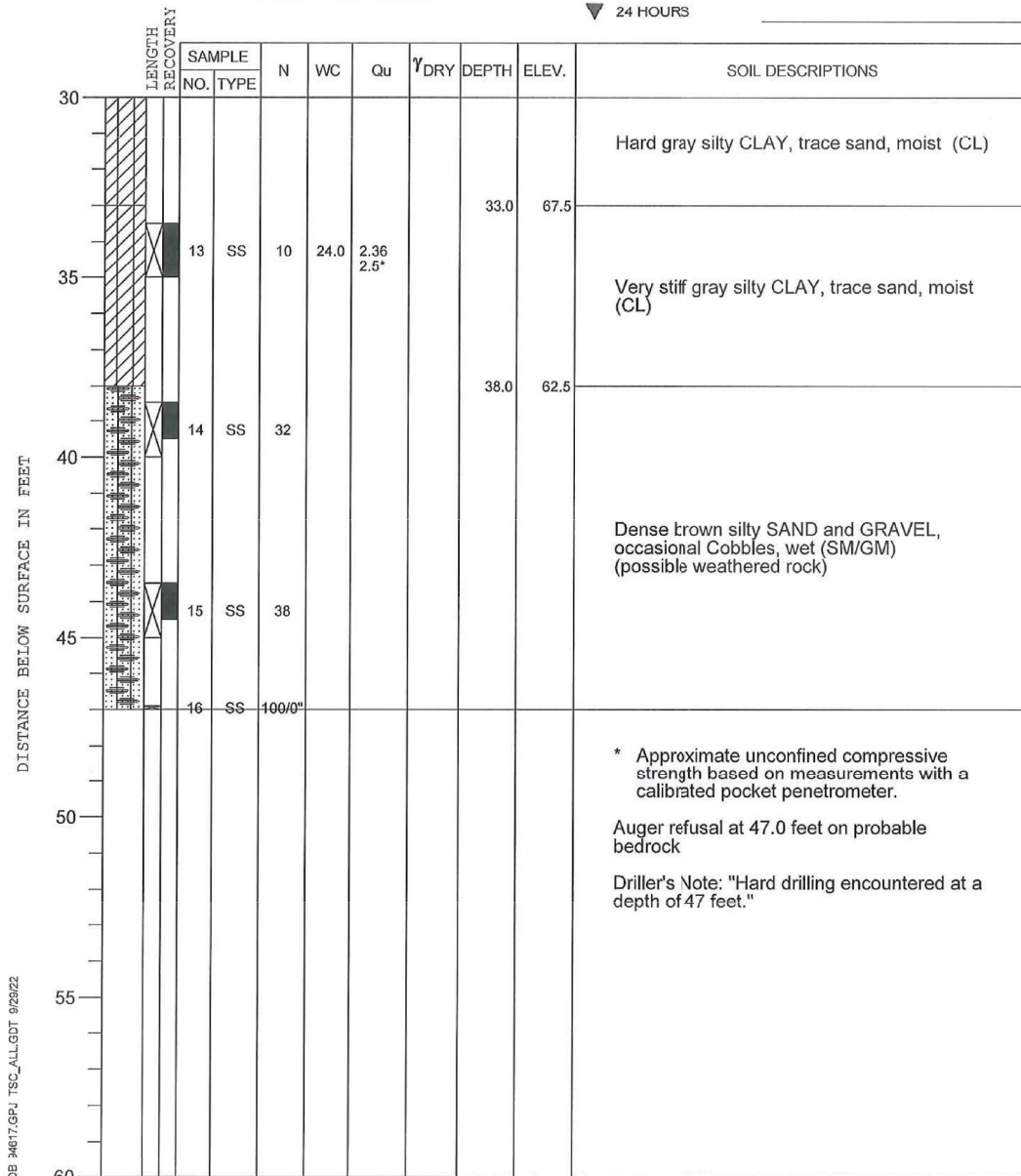
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	15
CONTRACT NO. 85748			STRUCTURE 089-3299	

PROJECT **Babler Road Bridge over Brush Creek, Stephenson County, Illinois**
 CLIENT **Chastain & Associates, LLC, Rockford, Illinois**



BORING **1** DATE STARTED **9-9-22** DATE COMPLETED **9-9-22** JOB **L-94,617**

ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **100.5** WHILE DRILLING **15.5'**
 END OF BORING **53.5** AT END OF BORING **15.5'**
 24 HOURS



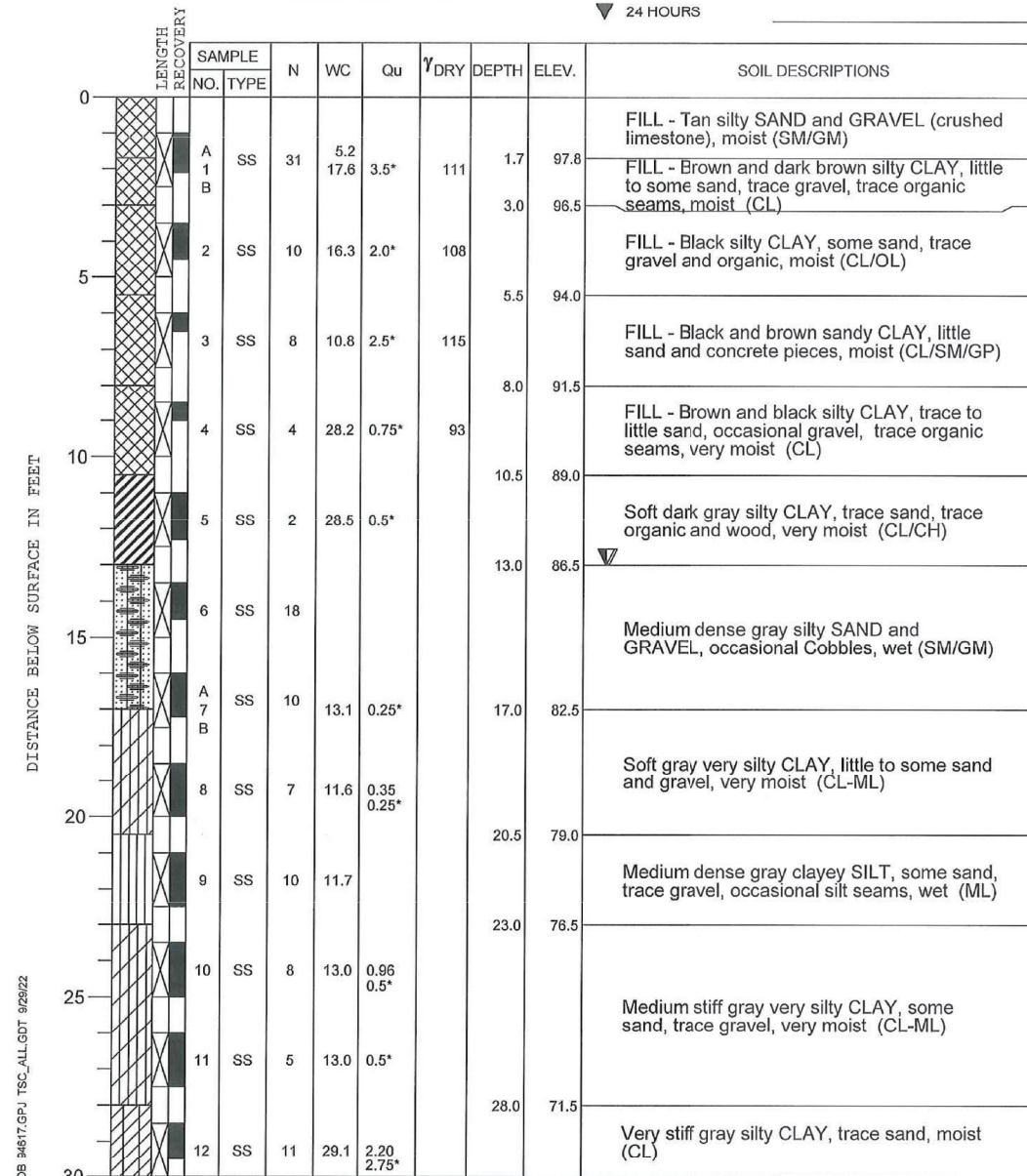
DRILL RIG NO. **334** End of Boring at 47.0' Page 2 of 2

PROJECT **Babler Road Bridge over Brush Creek, Stephenson County, Illinois**
 CLIENT **Chastain & Associates, LLC, Rockford, Illinois**



BORING **2** DATE STARTED **9-9-22** DATE COMPLETED **9-9-22** JOB **L-94,617**

ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **99.5** WHILE DRILLING **13.0'**
 END OF BORING **51.5** AT END OF BORING **13.0'**
 24 HOURS



DRILL RIG NO. **334** End of Boring at 48.0' Page 1 of 2

Plot Date: 26 October 2023 | File Name: R:\VPL\County\B254 Stephenson County\089-3087 Babler Rd\CAD\CAD_CAD_VPlot_Sheets | User Name: Thurston

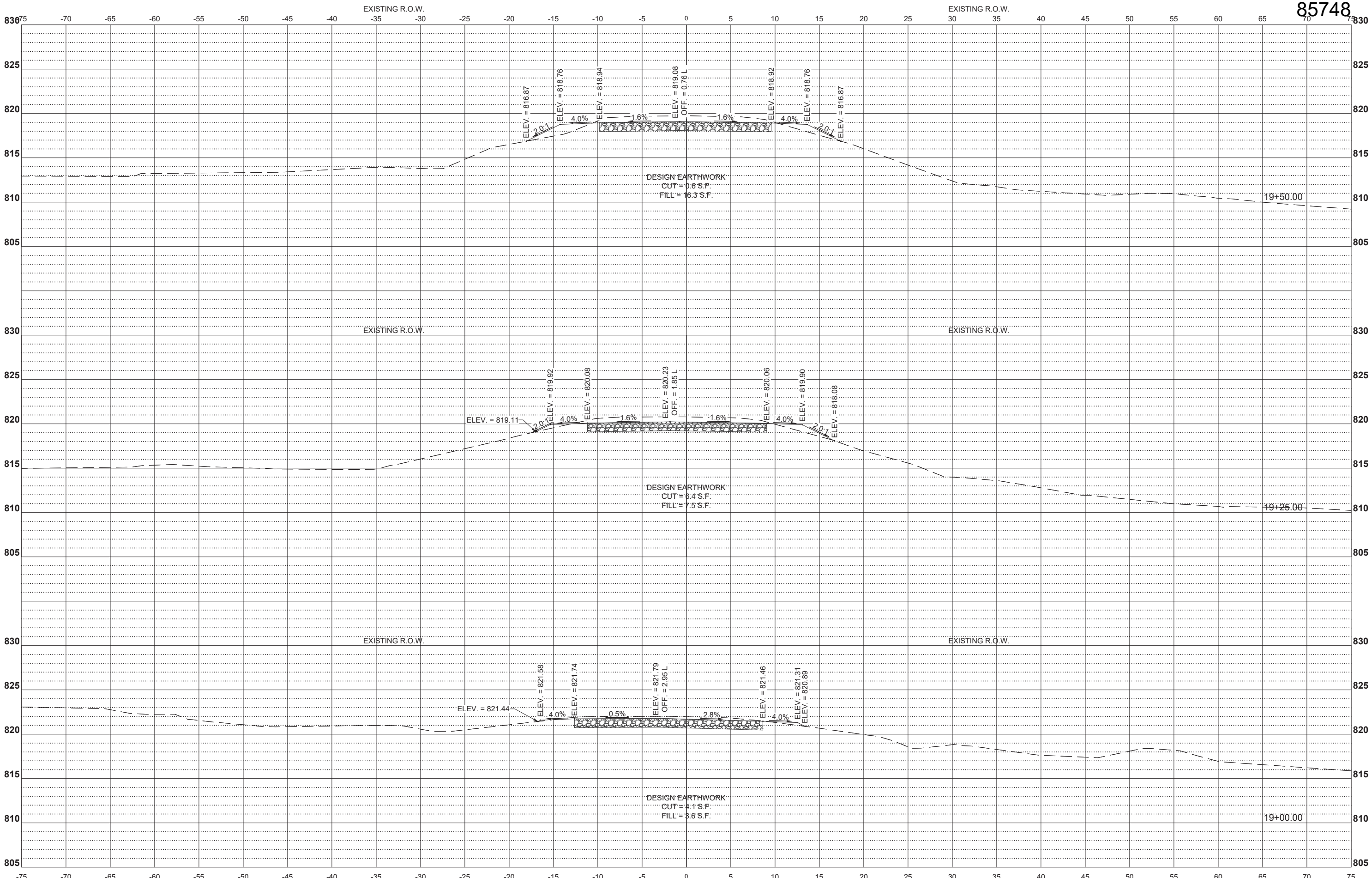
USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

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 ROCKFORD (815) 489-0050
 184-001397

BORING LOGS (3)

SCALE: _____ SHEET NO. 16 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	16
CONTRACT NO. 85748			STRUCTURE 089-3299	



Plot Date: 26 October 2023 | File Name: R:\P\I\County\A254_Stephenson County 089-007 Babler Rd\CADD\CADD_VPlan_Sheets | User Name: Thurston

USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

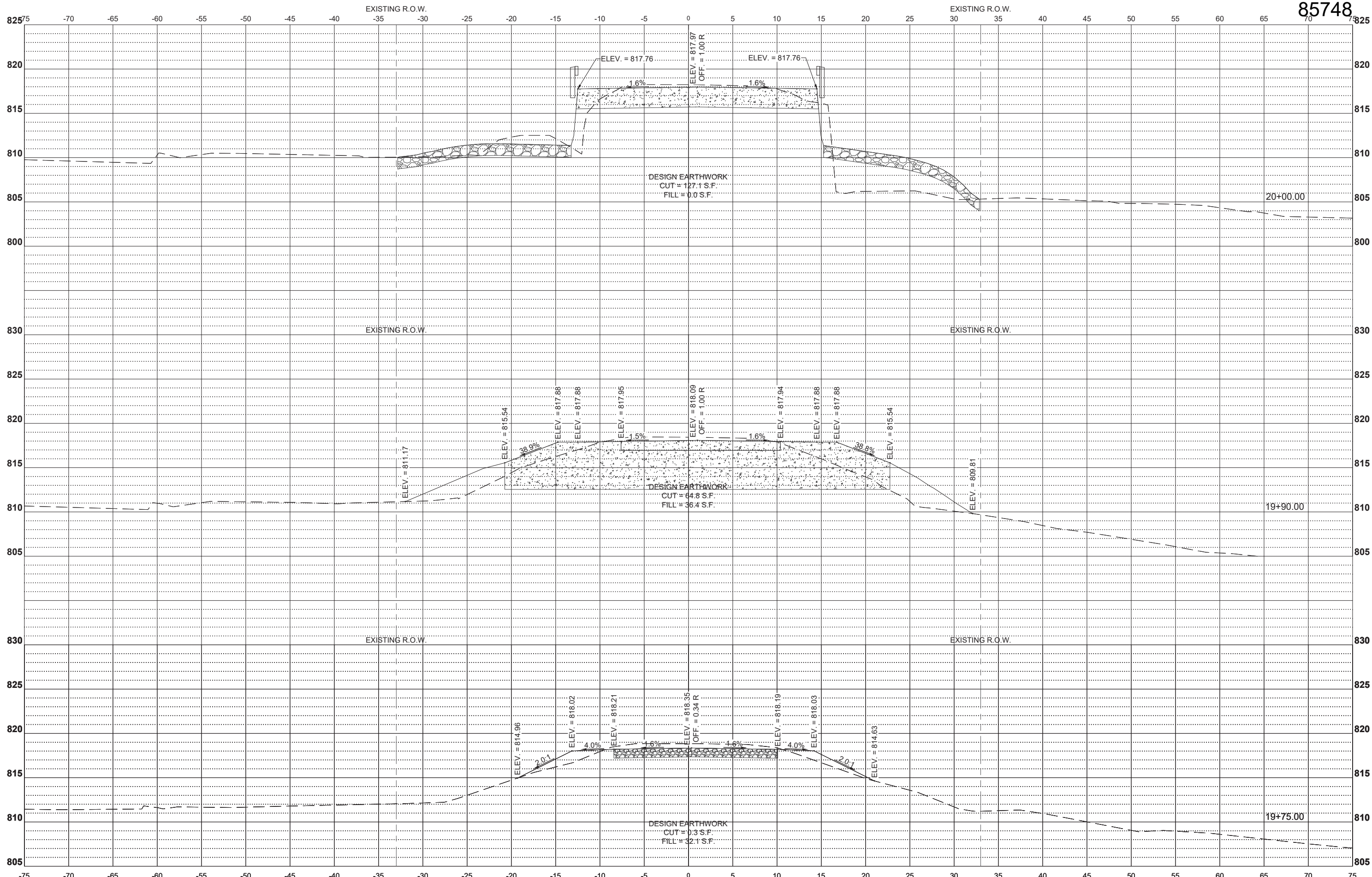
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SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

BABLER ROAD CROSS-SECTIONS (1)

SCALE: _____ SHEET NO. 17 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	17
CONTRACT NO. 85748			STRUCTURE 089-3299	



USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED --
	DRAWN -- TWL	REVISED --
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED --
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED --

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS

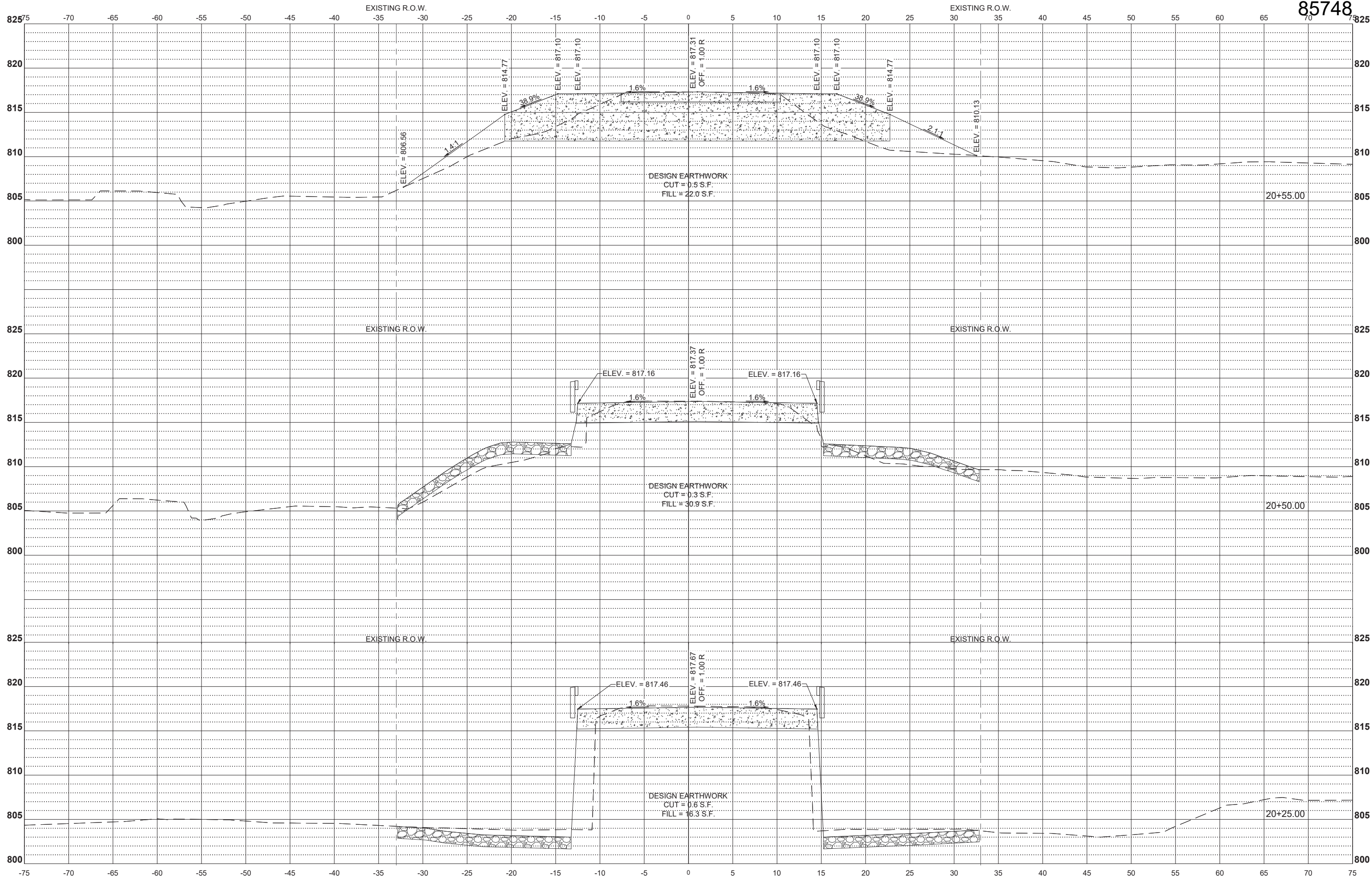
DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
184-001397

BABLER ROAD CROSS-SECTIONS (2)

SCALE: _____ SHEET NO. 18 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	18
CONTRACT NO. 85748			STRUCTURE 089-3299	

Plot Date: 26 October 2023 | File Name: R:\P\County\A854 - Stephenson County 089-3299-007 Babler Rd\CADD\CADD_Cross\Plan_Sheets | User Name: Thorsen



USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED --
	DRAWN -- TWL	REVISED --
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED --
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED --

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS

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ROCKFORD (815) 489-0050
184-001397

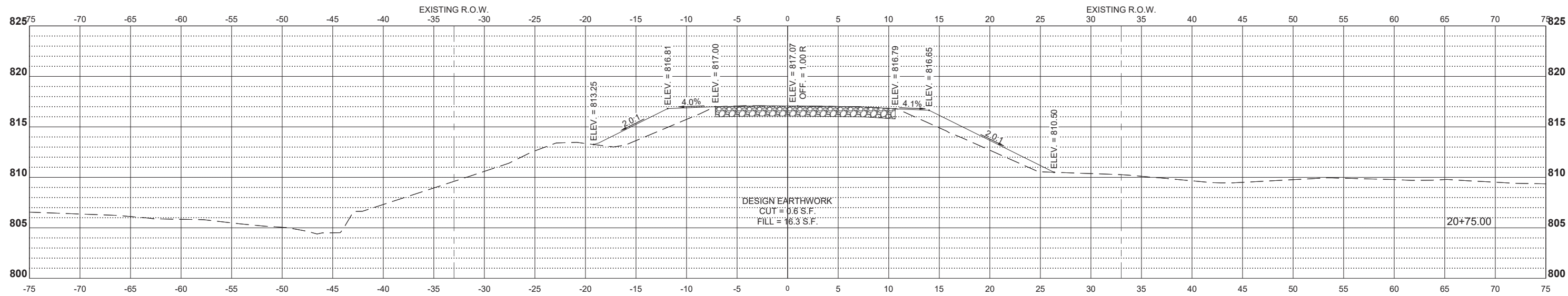
BABLER ROAD CROSS-SECTIONS (3)

SCALE: _____ SHEET NO. 19 OF 20 SHEETS STA. _____ TO STA. _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	19
CONTRACT NO. 85748			STRUCTURE 089-3299	

Plot Date: 26 October 2023 | File Name: R:\P\County\85748\Stephenson County\089-3299-007\Babler Rd\CADD\CADD_VPlan_Sheets | User Name: Tharson

Plot Date: 26 October 2023 | File Name: R:\P\I\County\8544_Stephenson County\089-007\Babler Rd\CADD\CAD_Cross\Plan_Sheets | User Name: Thorson



USER NAME = TREVOR LARSON, P.E., PTOE	DESIGNED -- TWL	REVISED -- .
	DRAWN -- TWL	REVISED -- .
PLOT SCALE = ANSI FULL BLEED D (34.00 X 22.00 INCHES)	CHECKED -- TWO	REVISED -- .
PLOT DATE = October 26, 2023	DATE -- 2023 10-25	REVISED -- .

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CONSULTING ENGINEERS

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BABLER ROAD CROSS-SECTIONS (4)	
SCALE: _____	SHEET NO. 20 OF 20 SHEETS
STA. _____ TO STA. _____	

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR59	20-01132-00-BR	STEPHENSON	20	20
CONTRACT NO. 85748			STRUCTURE 089-3299	