06-13-2025 LETTING ITEM 163

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
--	21-00020-00-BR	LASALLE	34	1
FED. ROAD DIST. NO. _	ILLINOIS	CONTRACT NO. 87882		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

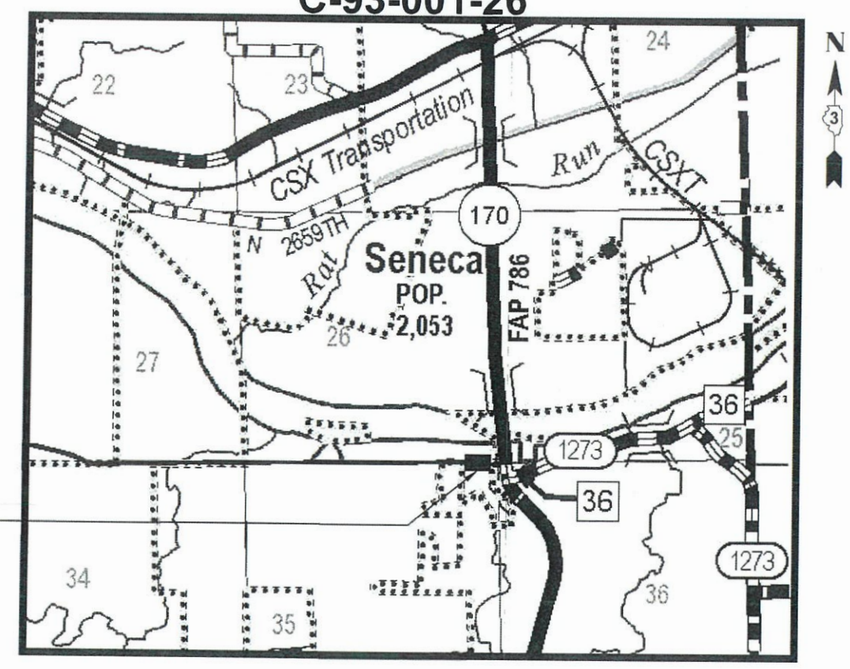
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

ILLINOIS SPECIAL BRIDGE PROGRAM
MS 2300 (RIVER ROAD)
SECTION 21-00020-00-BR
PROJECT DB9I(402)
VILLAGE OF SENECA
LASALLE COUNTY
C-93-001-26

INDEX OF SHEETS

HIGHWAY STANDARDS

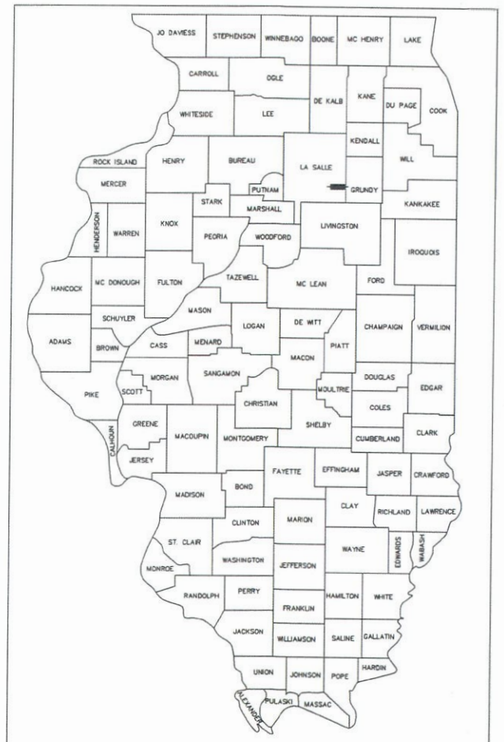
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
515001-04	NAME PLATE FOR BRIDGES
630001-13	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINAL
631032-10	TRAFFIC BARRIER TERMINAL, TYPE 6A
701901-10	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICE FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL HIGHWAYS



PROJECT LOCATION
STA 17+16.39
PROPOSED SN 050-7800
EXISTING SN 050-3050

PROJECT LOCATION MAP

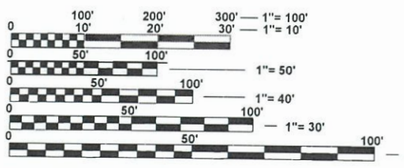
NET LENGTH OF SECTION 257' (0.049 MILES)
GROSS LENGTH OF SECTION 257' (0.049 MILES)



LOCATION OF SECTION INDICATED THUS: -

FUNCTIONAL CLASSIFICATION

MAJOR COLLECTOR
ADT = 1600 (2020)
POSTED SPEED 45 MPH
DESIGN SPEED 45 MPH



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

3/27/25
date

JAMES K. CLINARD
LICENSED PROFESSIONAL ENGINEER
NO. 062-041793
STATE OF ILLINOIS
expires 11-30-2025

signature
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-001717

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 27 20 25
PRESIDENT, VILLAGE OF SENECA

April 10, 2025
DISTRICT 3 LOCAL ROADS AND STREETS ENGINEER

RELEASED FOR BID BASED ON LIMITED REVIEW April 10, 2025
Trisha Thompson
REGION 2 ENGINEER

JAMES K CLINARD
CHAMLIN & ASSOCIATES
815.223.3344

CONTRACT NO. 87882

TOWNSHIP SECTION LASALLE COUNTY SECTION: ROUTE:

GENERAL NOTES

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

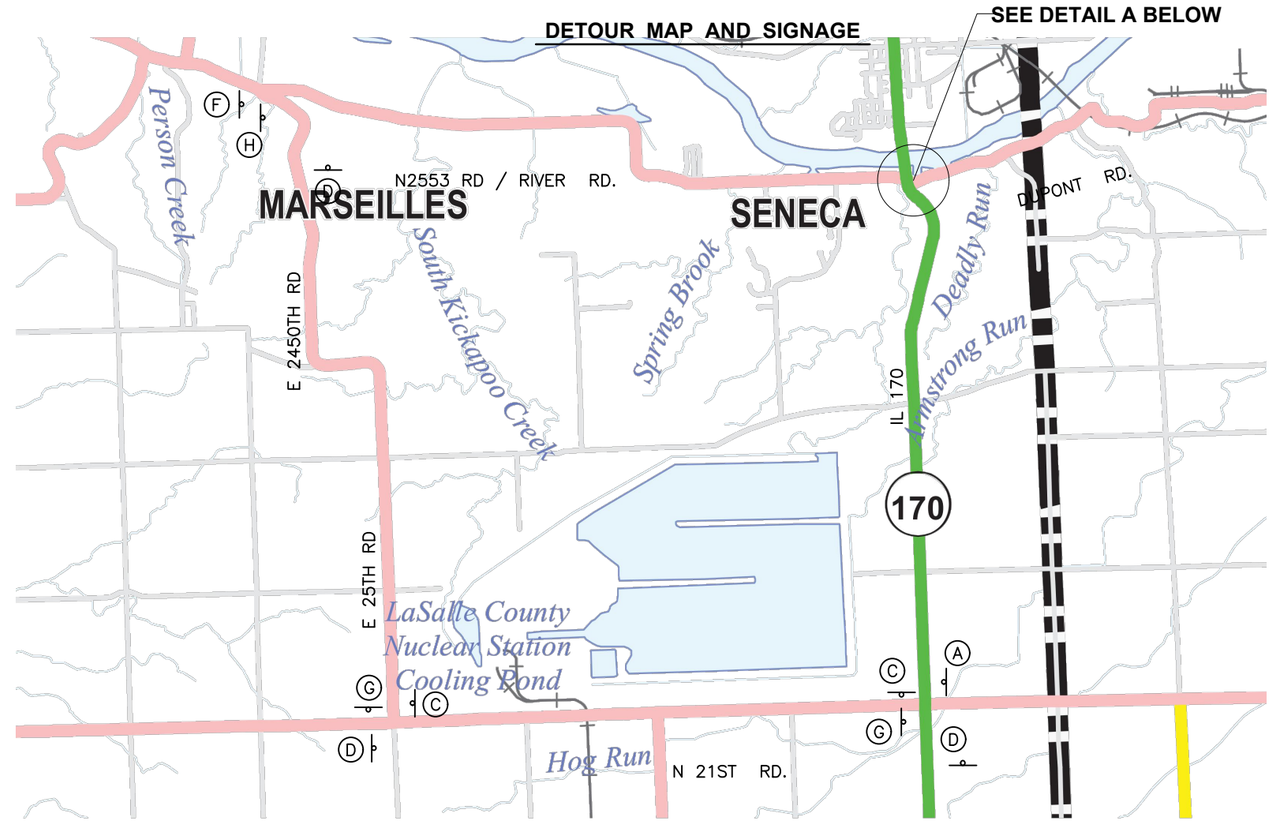
GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT /100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

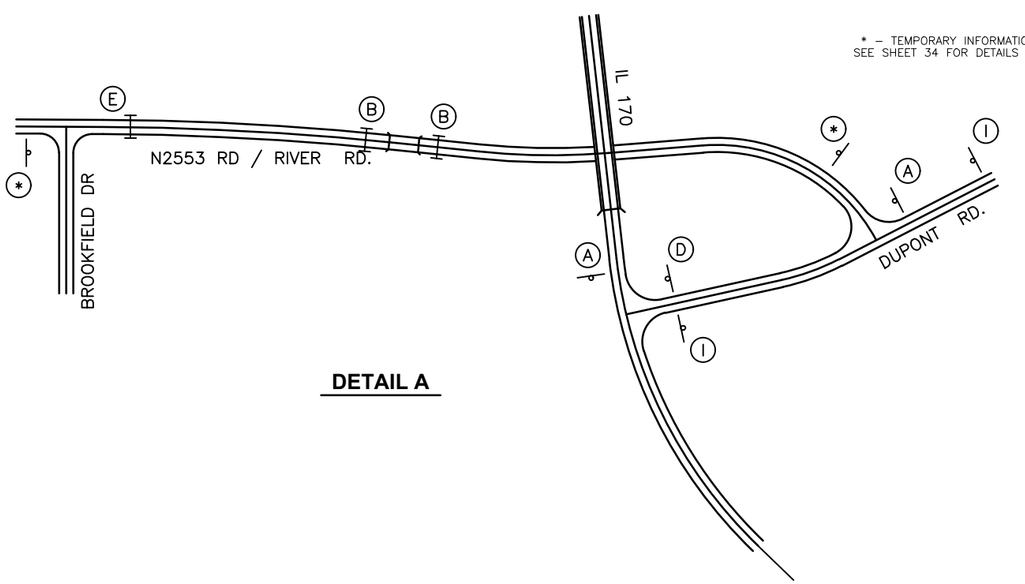
MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

AT&T
COMED
MTCO COMMUNICATIONS
NICOR GAS

COMMITMENTS

THE CONTRACTOR SHALL COORDINATE WITH POLICE, FIRE, EMS, SCHOOLS, USPS, IDOT DISTRIC 3, THE CITY OF MARSEILLES, AND THE LASALLE COUNTY HIGHWAY DEPARTMENT 48 HOURS PRIOR TO CLOSURE OF THE ROAD.





DETAIL A

* – TEMPORARY INFORMATION SIGNS
SEE SHEET 34 FOR DETAILS (2 REQ'D)

Ⓐ

NW QUADRANT IL 170 & DUPONT ROAD
WB N21ST AT IL 170
WB DUPONT AT RIVER ROAD

Ⓑ

FULL CLOSURE OF RIVER ROAD
ON BOTH SIDES OF BRIDGE
PER HIGHWAY STANDARD BLR 21

Ⓒ

SB IL 170 AT N21ST
WB N21ST AT E25TH

Ⓓ

NB E2450TH AT N2553RD
EB N21ST AT E25TH
NB IL 170 AT N21ST
WB DUPONT RD AT IL 170

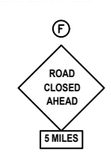
DETOUR SIGNS TO BE FLOURESCENT ORANGE AND 48X48

NOTIFY DISTRICT 3 OPERATIONS STAFF 48 HOURS BEFORE DETOUR IS IMPLEMENTED

Ⓔ

TYPE III BARRICADES PER HIGHWAY
STANDARDS BLR 22 AND 701901
IMMEDIATELY EAST OF BROOKFIELD ROAD

Ⓕ



EB N2553TH ROAD
WEST OF E2450TH

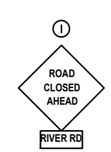
Ⓖ

EB 21ST AT IL 170
SB E25TH AT N21ST

Ⓗ

EB N2553RD AT E2450TH

Ⓘ



2 DUPONT ROAD LOCATIONS

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

Chamlin & Associates

PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

GENERAL NOTES

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025		
SCALE: AS NOTED	SHEET 2	
FILE NO.: 111441.00 Y–	OF 34	

CONSTR. CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0010 050-7800
20400800	FURNISHED EXCAVATION	CU YD	144	144
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	22	22
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	22	22
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	22	22
25100630	EROSION CONTROL BLANKET	SQ YD	50	50
28100107	STONE RIPRAP, CLASS A4	SQ YD	44	44
28200200	FILTER FABRIC	SQ YD	44	44
35101400	AGGREGATE BASE COURSE, TYPE B	TON	16	16
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	79	79
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	90	90
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	10	10
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	1	1
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	36	36
44000100	PAVEMENT REMOVAL	SQ YD	88	88

* SPECIALTY ITEM

CONTRACT NO. 87882

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0010 050-7800
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	149	149
48101200	AGGREGATE SHOULDERS, TYPE B	TON	7	7
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	374	374
50300225	CONCRETE STRUCTURES	CU YD	28.7	28.7
50300280	CONCRETE ENCASEMENT	CU YD	2.1	2.1
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	1876	1876
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3140	3140
* 50901050	STEEL RAILING, TYPE SM	FOOT	176	176
51201400	FURNISHING STEEL PILES HP10X42	FOOT	500	500
51202305	DRIVING PILES	FOOT	500	500
51204650	PILE SHOES	EACH	13	13
51500100	NAME PLATES	EACH	1	1
58100210	FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	208	208

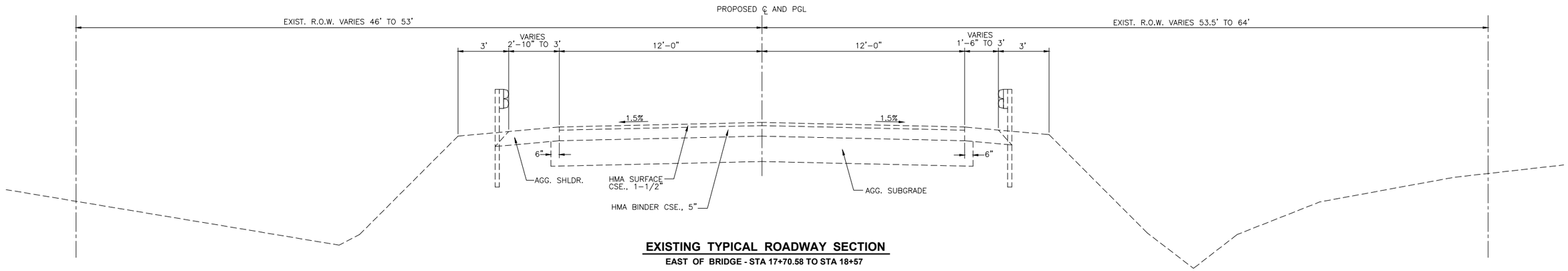
* SPECIALTY ITEM

CONTRACT NO. 87882

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0010 050-7800
	58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	402	402
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	26	26
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
	63200310	GUARDRAIL REMOVAL	FOOT	430	430
	67100100	MOBILIZATION	L SUM	1	1
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1364	1364
*	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	6	6
	X5110304	SLOPE WALL (SPECIAL)	SQ YD	28	28
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
	X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	42	42
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
#	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	
#	Z0076600	TRAINEES	HOUR	500	

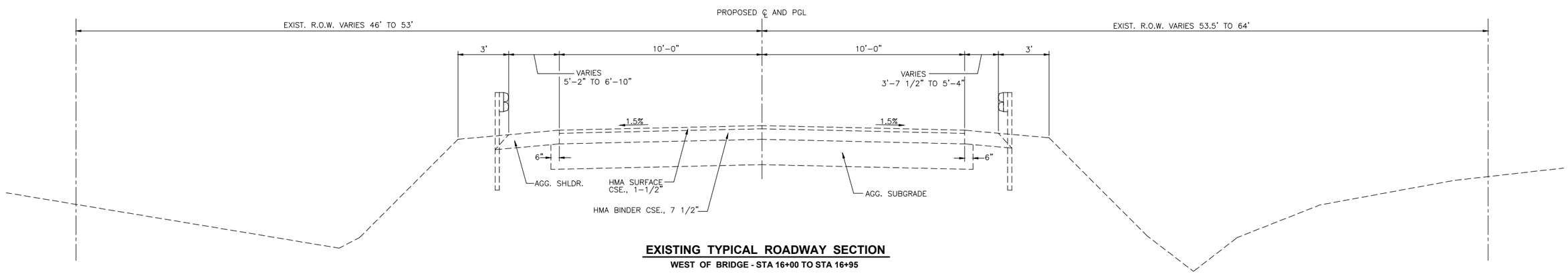
* SPECIALTY ITEM # 0042

CONTRACT NO. 87882



EXISTING TYPICAL ROADWAY SECTION

EAST OF BRIDGE - STA 17+70.58 TO STA 18+57



EXISTING TYPICAL ROADWAY SECTION

WEST OF BRIDGE - STA 16+00 TO STA 16+95

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS					
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION		
DATE: 10/2021						

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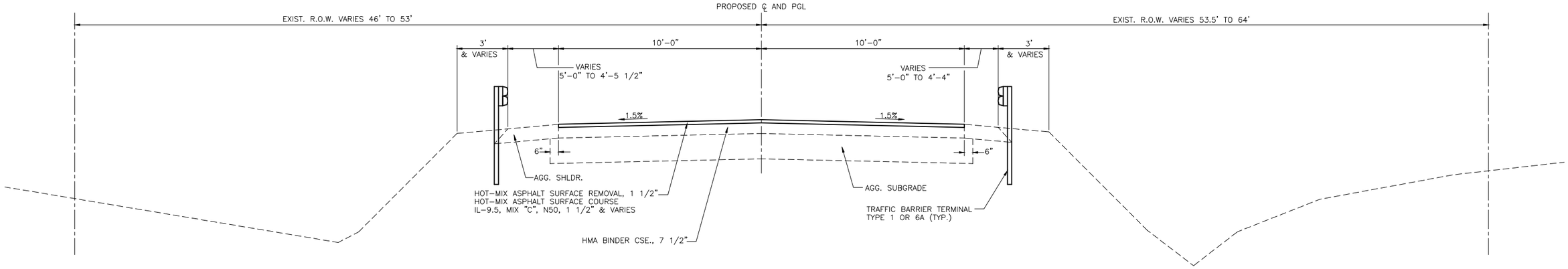
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

TYPICAL SECTIONS
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

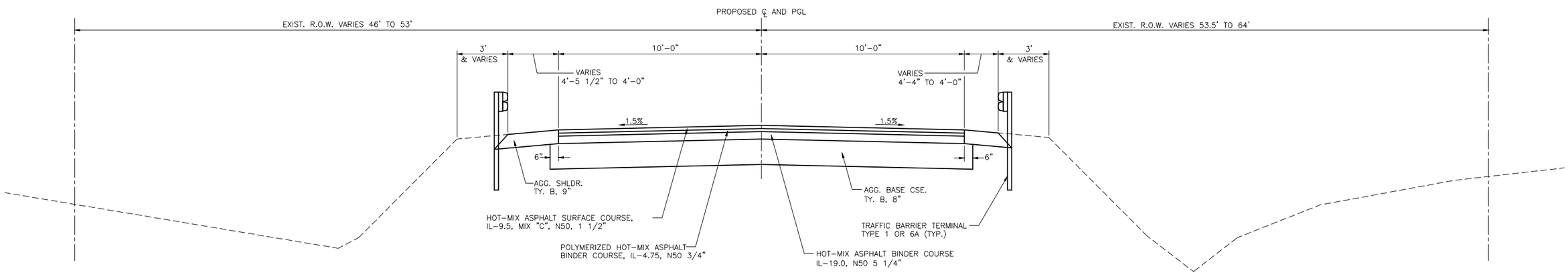
CURRENT AS OF: 03/24/2025	
SCALE: AS NOTED	SHEET 6
FILE NO.: 111441.00 Y-	OF 34



PROPOSED TYPICAL ROADWAY SECTION

STA 16+00 TO STA 16+66.88

HMA MIXTURE REQUIREMENT TABLE			
LOCATIONS:	STA 16+66.88 TO 16+81.88 TOP LIFT	STA 16+66.88 TO 16+81.88 BOTTOM LIFTS	ENTIRE PROJECT
MIXTURE USE(S):	HMA	HMA	HMA
	BINDER	BINDER	SURFACE
BINDER GRADE (PG):	SBS PG 70-28	PG 70-28	PG70-28
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION:	IL 4.75	IL 19.0	SMA 9.5
(MIXTURE GRADATION)			
FRICTION AGGREGATE:			MIXTURE C
MIXTURE WEIGHT:	112.0 LB/SY/IN	112.0 LB/SY/IN	112.0 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QCQA	QCQA	QCQA
SUBLOT SIZE:	NA	NA	NA
DENSITY TEST METHOD:	NUCLEAR	NUCLEAR	NUCLEAR
MATERIAL TRANSFER DEVICE (REQUIRED):	NO		NO



PROPOSED TYPICAL ROADWAY SECTION

STA 16+66.88 TO STA 16+81.88

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION			
DATE: 10/2021				

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OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

TYPICAL SECTIONS
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025		
SCALE: AS NOTED	SHEET 7	
FILE NO.: 111441.00 Y-	OF 34	

PAVING SCHEDULE

LOCATION	AGGREGATE BASE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	AGGREGATE SHOULDERS, TYPE B
	TON	POUND	POUND	TON	TON	TON	TON
STA 16+00 TO STA 16+66.88	---	---	82	---	---	---	---
STA 16+66.88 TO STA 16+81.88	15.9	79	8			---	---
STA 16+00 TO STA 16+81.88	---	---	---	9.8	1.4	15.3	7
BRIDGE	---	---	---	---	---	21.0	---
TOTAL	16	79	90	10	1	36	7

PAVEMENT MARKING SCHEDULE

LOCATION	PAINT PAVEMENT MARKING - LINE 4" * WHITE	YELLOW
LT STA 16+00 TO STA 17+70.5	341	---
RT STA 16+00 TO STA 17+70.5	341	---
CENTERLILNE STA 16+00 TO STA 17+70.5 (DOUBLE YELLOW)	---	682
SUBTOTAL	682	682
TOTAL	1364	

GUARDRAIL & GUARDRAIL MARKER SCHEDULE

LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE B
	FOOT	EACH	EACH	EACH	EACH
LT STA 15+97.5 TO EXISTING BRIDGE	101	---	---	---	---
LT EXISTING BRIDGE TO STA 18+55	114	---	---	---	---
RT STA 15+97 TO EXISTING BRIDGE	101	---	---	---	---
RT EXISTING BRIDGE TO STA 18+55	114	---	---	---	---
LT STA 15+95 TO NEW BRIDGE	---	1	1	1	---
LT NEW BRIDGE TO STA 18+57	---	1	1	1	---
RT STA 15+94 TO NEW BRIDGE	---	1	1	1	---
RT NEW BRIDGE TO STA 18+57	---	1	1	1	---
LT STA 15+95 TO STA 18+57	---	---	---	---	3
RT STA 15+94 TO STA 18+57	---	---	---	---	3
TOTAL	430	4	4	4	6

SURFACE REMOVAL SCHEDULE

LOCATION	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
	SQ YD
STA 16+00 TO STA 16+66.88	148.8
TOTAL	149

PAVEMENT REMOVAL SCHEDULE

LOCATION	PAVEMENT REMOVAL
	SQ YD
STA 16+66.88 TO STA 16+95.59	63.7
STA 17+43.47 TO STA 17+50.88	24.3
TOTAL	88

EROSION CONTROL SCHEDULE

LOCATION	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	EROSION CONTROL BLANKET
	ACRE	POUND	POUND	POUND	SQ YD
WEST BRIDGE APPROACH	0.25	22	22	22	50
TOTAL	0.25	22	22	22	50

CONTRACT NO. 87882

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CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

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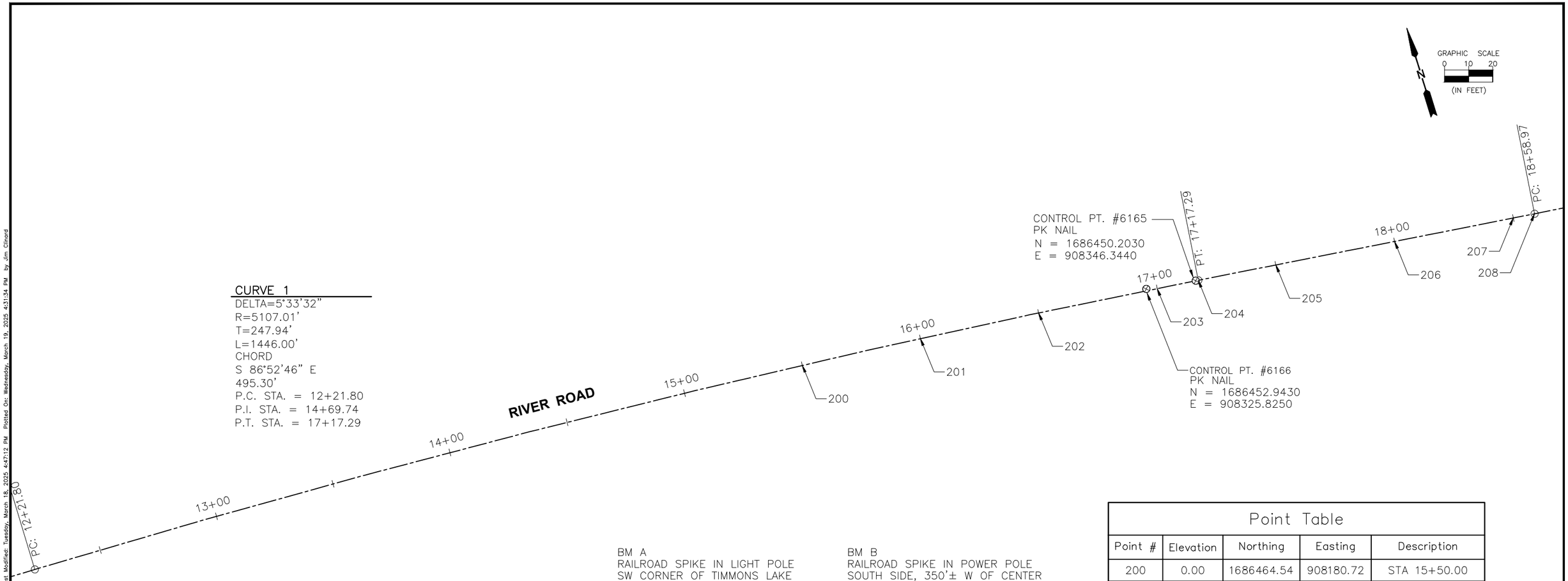
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

SCHEDULE OF QUANTITIES

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 8
FILE NO.: 111441.00 Y-
OF 34



BM A
RAILROAD SPIKE IN LIGHT POLE
SW CORNER OF TIMMONS LAKE
ELEV. = 499.25

BM B
RAILROAD SPIKE IN POWER POLE
SOUTH SIDE, 350'± W OF CENTER
OF BRIDGE
ELEV. = 498.59

Point Table

Point #	Elevation	Northing	Easting	Description
200	0.00	1686464.54	908180.72	STA 15+50.00
201	0.00	1686460.79	908230.58	STA 16+00.00
202	0.00	1686456.55	908280.40	STA 16+50.00
203	0.00	1686451.82	908330.17	STA 17+00.00
204	0.00	1686450.07	908347.37	PT STA 17+17.29
205	0.00	1686446.71	908379.91	STA 17+50.00
206	0.00	1686441.57	908429.65	STA 18+00.00
207	0.00	1686436.43	908479.38	STA 18+50.00
208	0.00	1686435.51	908488.31	PC STA 18+58.97

CONTRACT NO. 87882

DRAWN BY: NV
CHECKED BY: JKC
DATE: 10/2021

REVISIONS

LEVEL	BY	DATE	DESCRIPTION

Chamlin & Associates

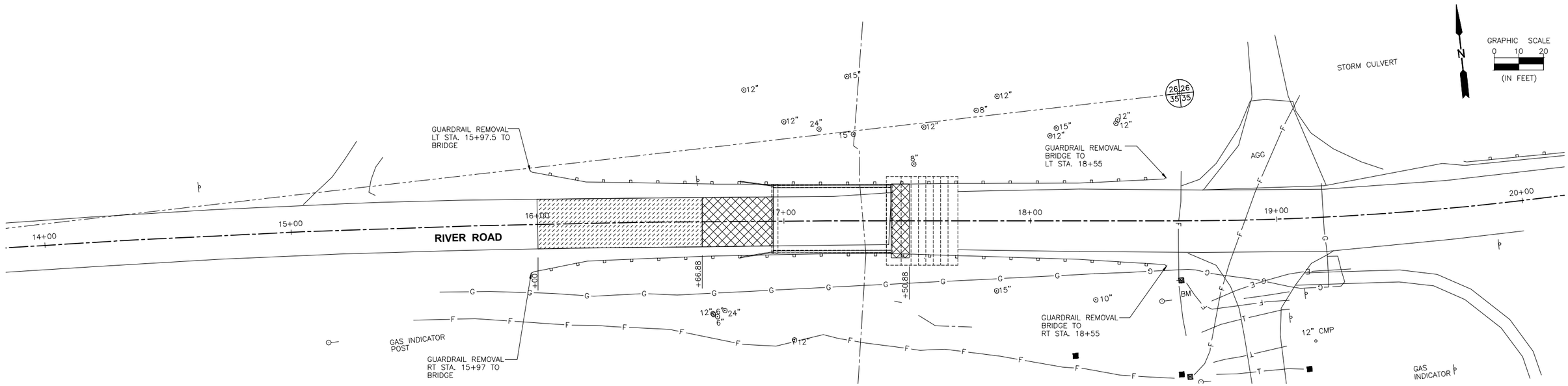
PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

HORIZONTAL AND VERTICAL CONTROL

CONSTRUCTION PLANS

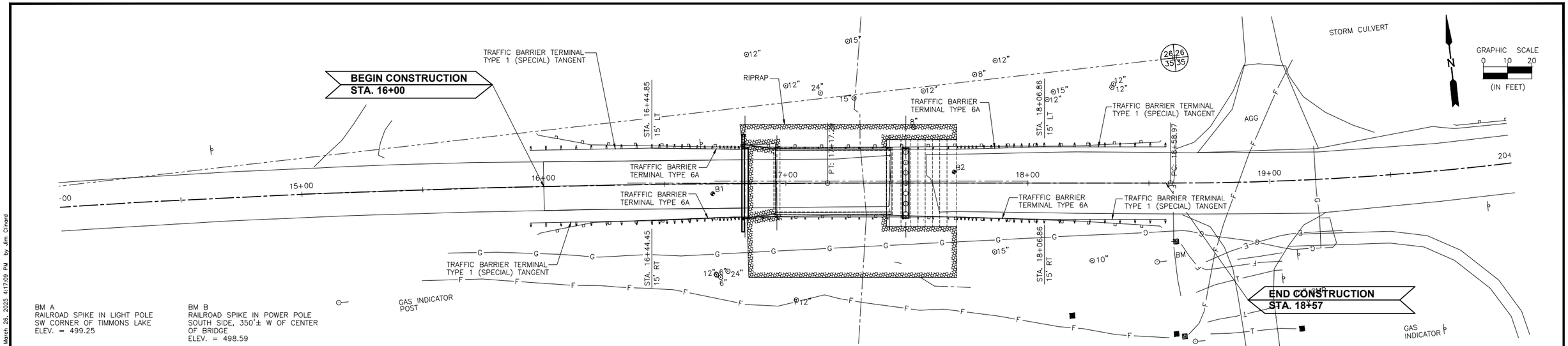
CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 9
FILE NO.: 111441.00 Y-
OF 34

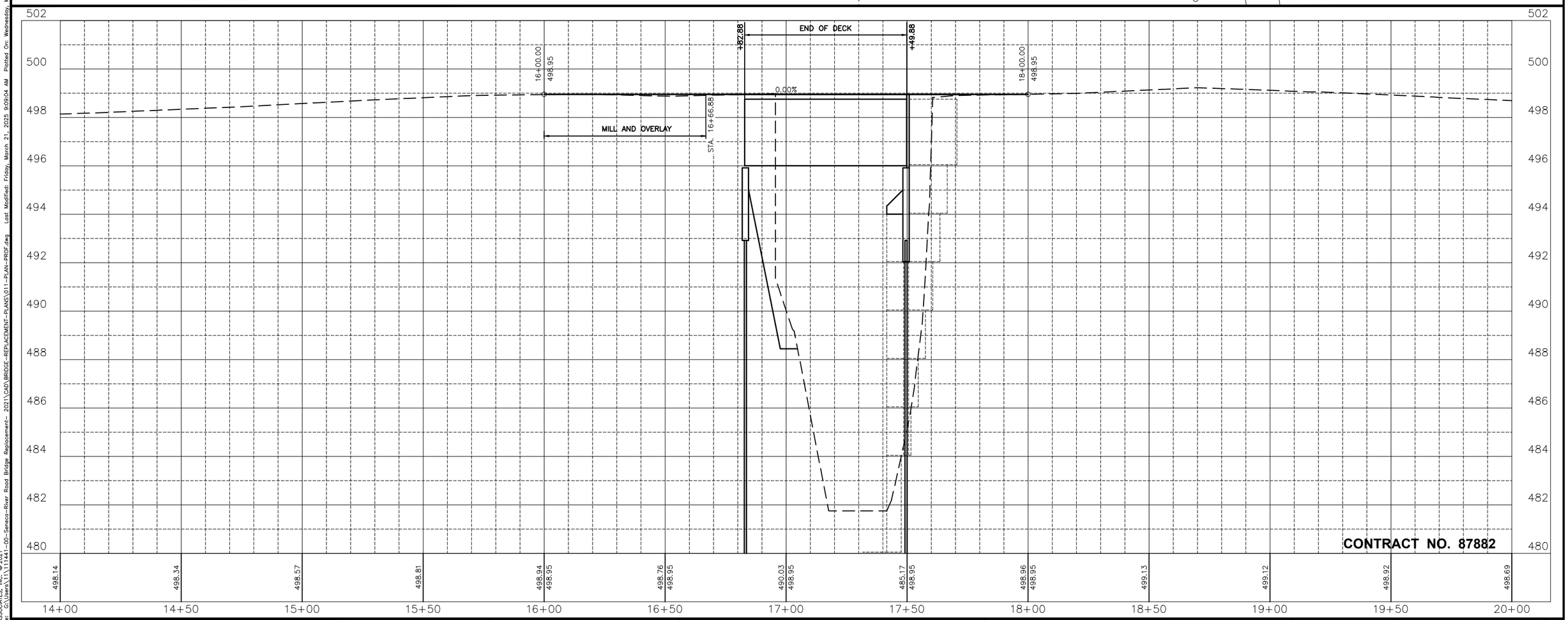


CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	**VILLAGE OF SENECA** **RIVER ROAD BRIDGE REPLACEMENT** **SECTION 21-00020-00-BR**	**REMOVAL PLAN**	CONSTRUCTION PLANS
CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION						CURRENT AS OF: 03/24/2025
DATE: 10/2021							SCALE: AS NOTED / SHEET 10
							FILE NO.: 111441.00 Y– / OF 34

Chamlin & Associates





DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

Chamlin & Associates

PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

PLAN AND PROFILE

CONSTRUCTION PLANS

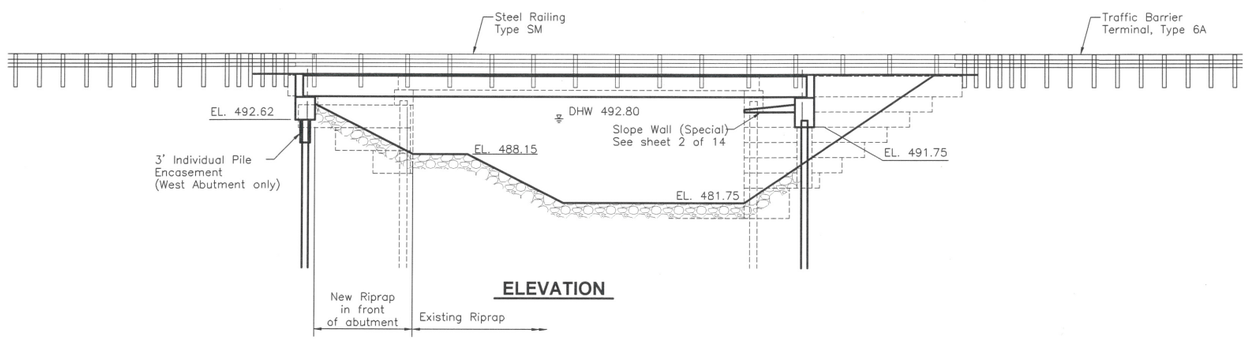
CURRENT AS OF: 03/24/2025	
SCALE: AS NOTED	SHEET 11
FILE NO.: 111441.00 Y-	OF 34

BENCHMARKS:

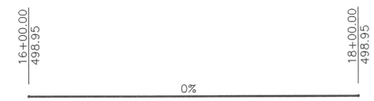
BM A
RAILROAD SPIKE IN LIGHT POLE
SW CORNER OF TIMMONS LAKE
ELEV. = 499.25

BM B
RAILROAD SPIKE IN POWER POLE
SOUTH SIDE, 350'± W OF CENTER
OF BRIDGE
ELEV. = 498.59

EXISTING STRUCTURE: SINGLE SPAN PPC DECK BEAM BRIDGE BUILT 1965
BY SECTION 79-63B. 49'-0" BACK TO BACK OF ABUTMENT. SUPPORTED BY TIMBER PILES.
EAST ABUTMENT REPAIRED 2022 BY SECTION 21-00020-01-BR



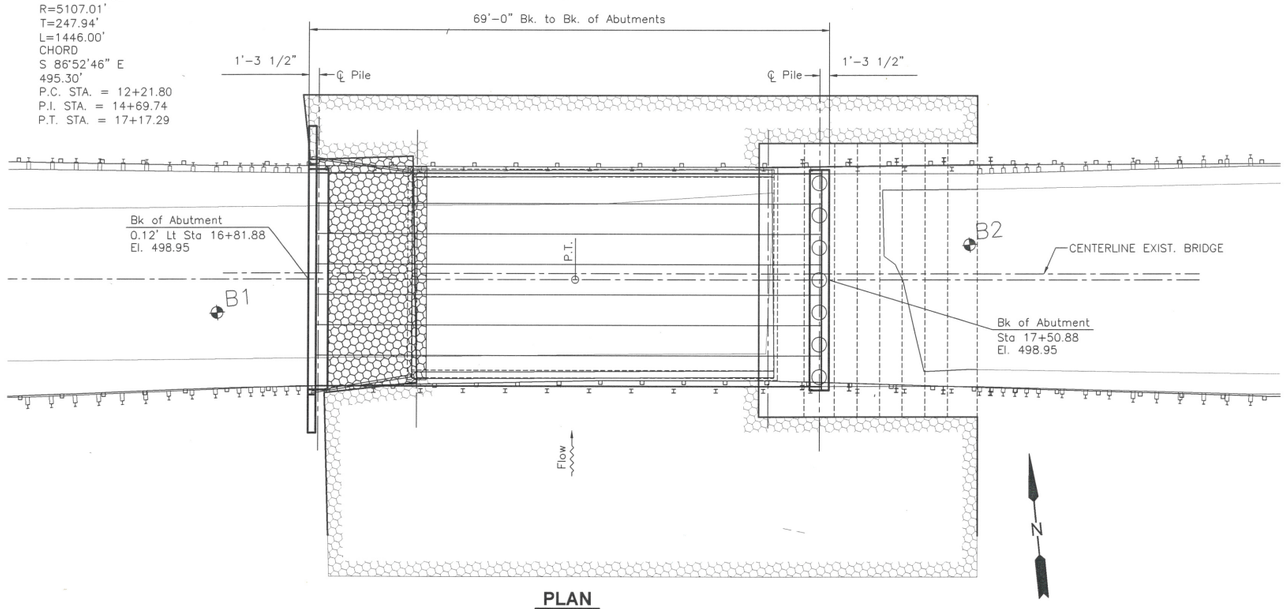
ELEVATION



PROFILE GRADE

INDEX OF SHEETS

CURVE 1
DELTA=5°33'32"
R=5107.01'
T=247.94'
L=1446.00'
CHORD
S 86°52'46" E
495.30'
P.C. STA. = 12+21.80
P.I. STA. = 14+69.74
P.T. STA. = 17+17.29



PLAN

DRAINAGE DITCH
BUILT 20__ BY
LASALLE COUNTY
SEC 21-00020-00-BR
MS RTE 2300 STA 17+16.38
STR. NO. 050-7800 LOADING HL-93

NAME PLATE

See Std. 515001

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.116
Design Spectral Acceleration at 2.0 sec. (SDS) = 0.154
Soil Site Class = D

LOADING HL-93

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications
9th Edition No interims

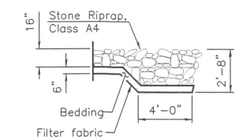
DESIGN STRESSES

FIELD UNITS

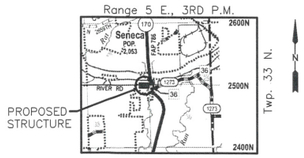
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2"ø low lax strands)
fpbt = 201,960 psi (1/2"ø low lax strands)
fy = 60,000 psi (Reinforcement)



SECTION B-B



LOCATION SKETCH

WATERWAY INFORMATION TABLE

Drainage Area = 4.25 Square Miles						Overtopping Elev. = 497.95' / 497.95' (Exist/ Prop.) @ STA 13+00							
Flood	Freq.	Q	Opening (ft.²)						Nat.	Head (ft.)		Headwater Elev.	
	(Yr.)	C.F.S.	Exist.			Prop.			H.W.E.	Exist.	Prop.	Exist.	Prop.
			Bridge	O.T.R.	Total	Bridge	O.T.R.	Total					
	10	215	293	0	293	421	0	421	**492.8**	0.0	0.0	492.8	492.8
Design	30	287	293	0	293	421	0	421	**492.8**	0.0	0.0	492.8	492.8
Base	100	365	293	0	293	421	0	421	**492.8**	0.0	0.0	492.8	492.8
Overtopping	---	---	---	---	---	---	---	---	---	---	---	---	---
Max. Calc.	500	473	293	0	293	421	0	421	**492.8**	0.0	0.0	492.8	492.8

Max. H.W.E.: Unknown (ft.)
Existing 10 Year Velocity Through Bridge: 3.7 (ft./sec.)
Proposed 10 Year Velocity Through Bridge: 2.3 (ft./sec.)

Max. H.W.E. Date: 7/12/2021

DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elevations (ft)	
	West Abutment	East Abutment
Q_{100}	Not Computed	478.72
Q_{200}	Not Computed	478.45
Design	492.62	478.72
Check	492.62	478.45
Item 113	B	5
Item 113B	B	A

I certify that to the best of 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 LRFD Bridge Design Specifications.

3/20/25
date

JAMES K. CLINARD
LICENSED STRUCTURAL ENGINEER NO. 081-004655
STATE OF ILLINOIS
expires 11-30-2026
signature
PROFESSIONAL DESIGN FIRM LICENSE NO. 184-001717

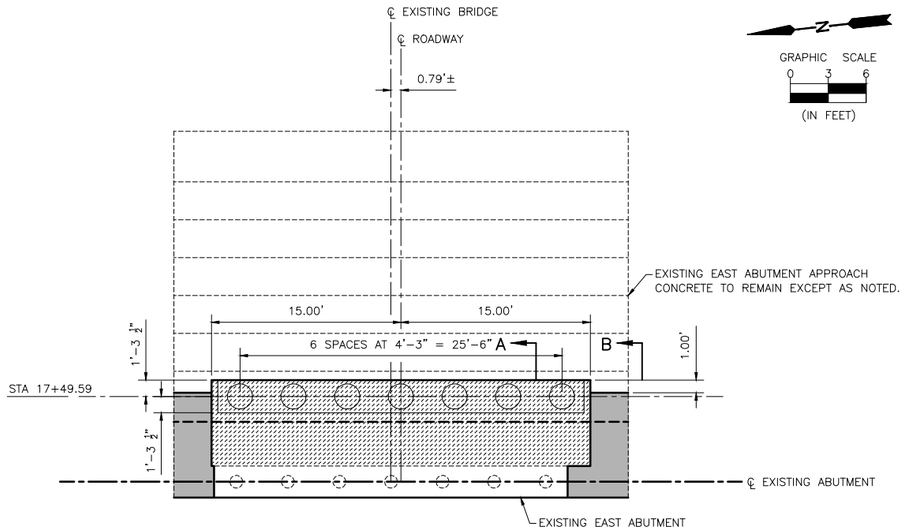
GENERAL PLAN & ELEVATION
RIVER ROAD
OVER DRAINAGE DITCH
SEC. 21-00020-00-BR
LASALLE COUNTY
STATION 17+16.38
STRUCTURE NO. 050-7800

SHEET 1 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS				PERU MORRIS	VILLAGE OF SENECA	PLAN AND ELEVATION	CONSTRUCTION PLANS	CURRENT AS OF: 03/24/2025
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION	OTTAWA MENDOTA	RIVER ROAD BRIDGE REPLACEMENT	STRUCTURE NO. SN 050-7800		SCALE: AS NOTED / SHEET 12
DATE: 10/2021					ILLINOIS	SECTION 21-00020-00-BR			FILE NO.: 111441.00 Y- / OF 34

Chamlin & Associates



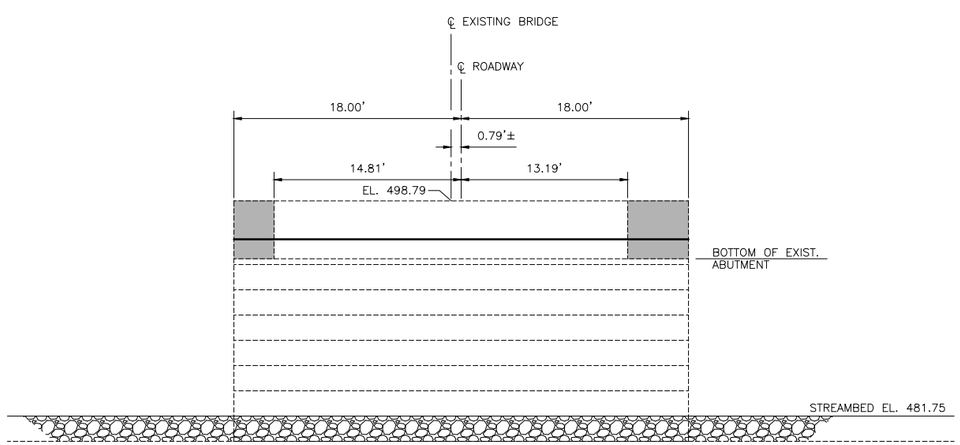
EAST ABUTMENT LAYOUT

A B

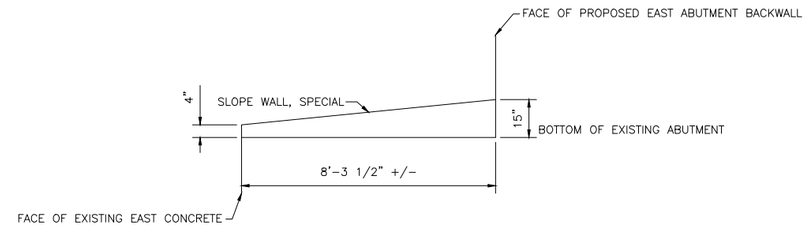
EXISTING STONE RIPRAP

PAVEMENT REMOVAL AND STRUCTURE EXCAVTION.

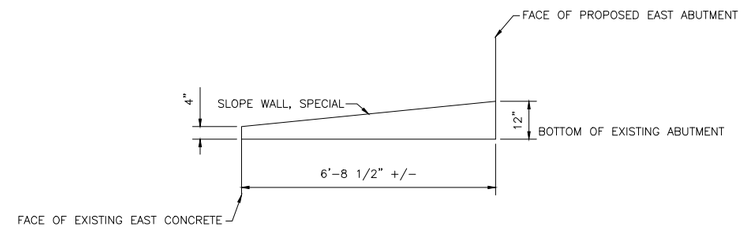
CONCRETE REMOVAL INCLUDED IN COST OF REMOVAL OF EXISTING STRUCTURE



ELEVATION LOOKING EAST



SECTION B-B



SECTION A-A

NOTE: SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6 IN. X 6 IN. – W4.0 X W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

BILL OF MATERIALS

Item	Unit	Super.	Sub.	Total
STONE RIPRAP, CLASS A4	SQ YD	--	44	44
FILTER FABRIC	SQ YD	--	44	44
REMOVAL OF EXISTING STRUCTURES	EACH	1	--	1
STRUCTURE EXCAVATION	CU YD	--	374	374
CONCRETE STRUCTURES	CU YD	--	28.7	28.7
CONCRETE ENCASEMENT	CU YD	--	2.1	2.1
PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	--	1876	1876
REINFORCEMENT BARS, EPOXY COATED	POUND	--	3140	3140
STEEL RAILING, TYPE SM	FOOT	176	--	176
FURNISHING STEEL PILES HP10X42	FOOT	--	500	500
DRIVING PILES	FOOT	--	500	500
PILE SHOES	EACH	--	13	13
NAME PLATES	EACH	1	--	1
FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	208	--	208
PORTLAND CEMENT CONCRETE FAIRING COURSE	FOOT	402	--	402
GRANULAR BACKFILL FOR STRUCTURES	CU YD	--	26	26
SLOPE WALL (SPECIAL)	SQ YD	--	28	28

SHEET 2 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS				
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION	
DATE: 10/2021					

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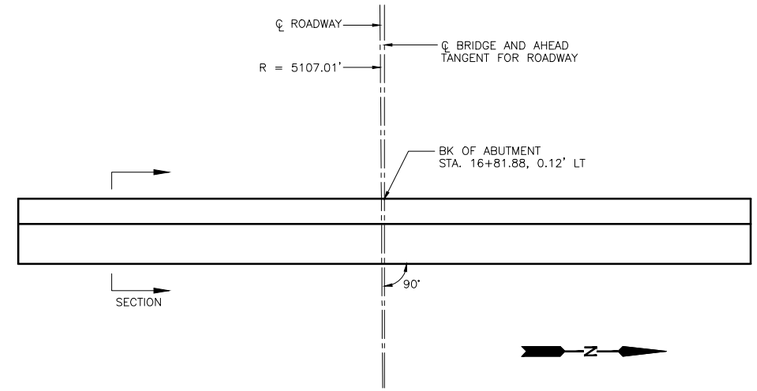
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

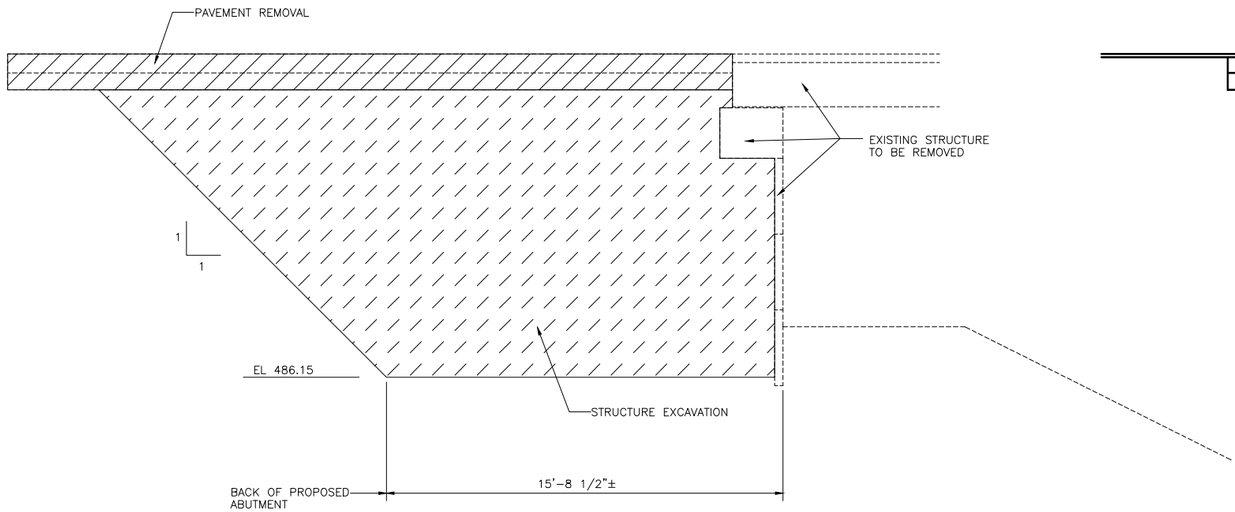
EAST ABUTMENT LAYOUT AND BILL OF MATERAILS
SN 050-7800

CONSTRUCTION PLANS

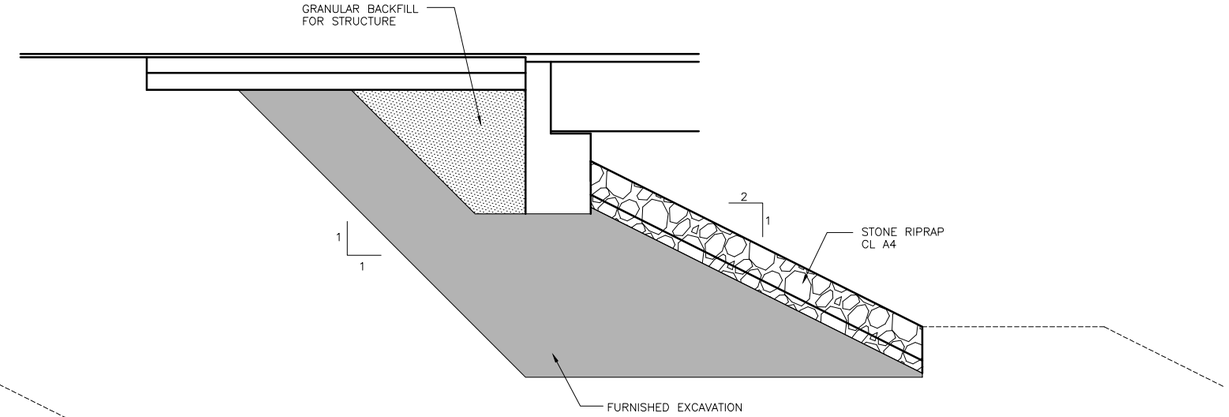
CURRENT AS OF: 03/24/2025	
SCALE: AS NOTED	SHEET 13
FILE NO.: 111441.00 Y-	OF 34



PLAN AT WEST ABUTMENT



SECTION THROUGH EXISTING ABUTMENT



SECTION THROUGH NEW ABUTMENT

SHEET 3 OF 14 **CONTRACT NO. 87882**

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	WEST ABUTMENT LAYOUT SN 050-7800	CONSTRUCTION PLANS
CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION						CURRENT AS OF: 03/24/2025
DATE: 10/2021							SCALE: AS NOTED / SHEET 14
							FILE NO.: 111441.00 Y- / OF 34

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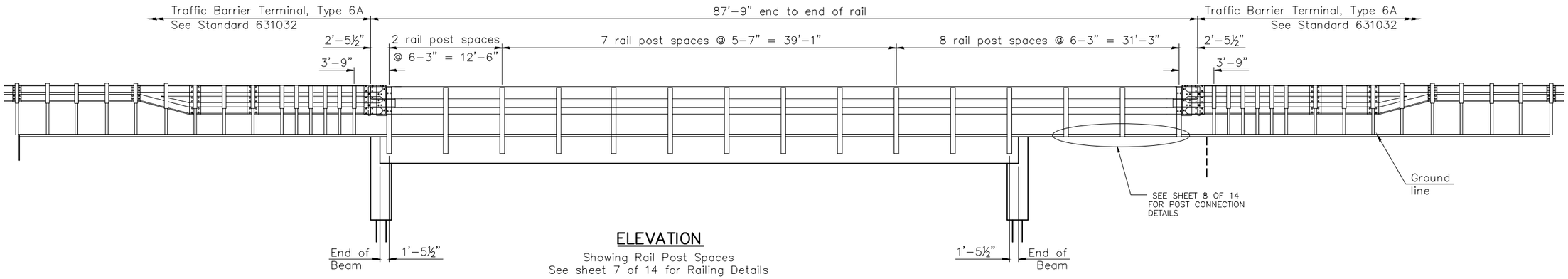
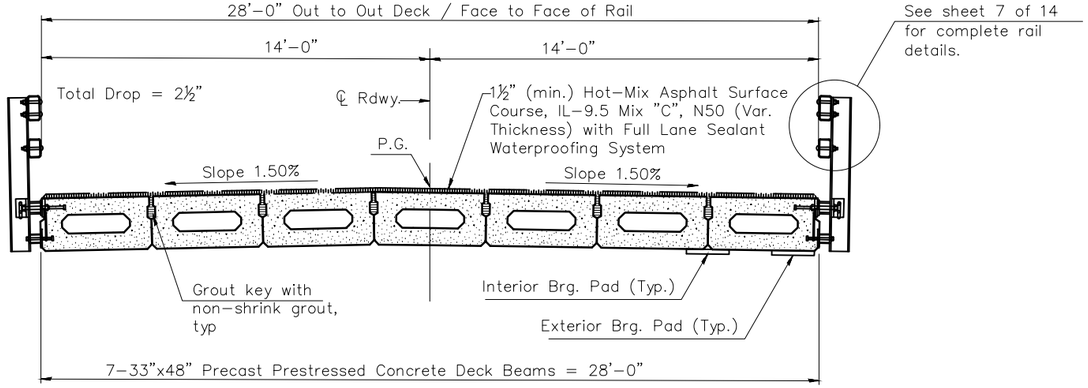
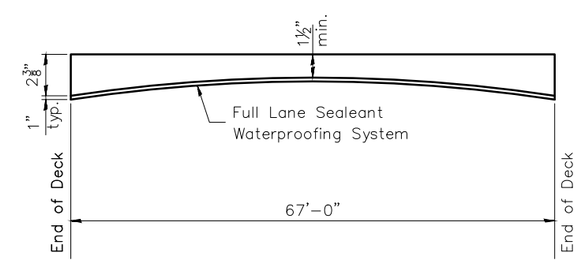


ELEVATION

Showing Rail Post Spaces
See sheet 7 of 14 for Railing Details



CROSS SECTION



ANTICIPATED HMA WEARING SURFACE PROFILE

(For information only – beam camber may vary in field)

SHEET 4 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

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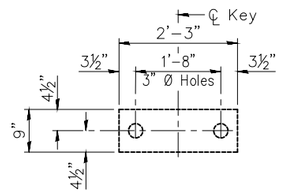
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

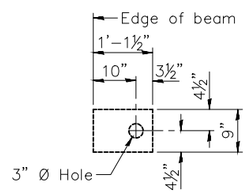
SUPERSTRUCTURE
STRUCTURE NO. SN 050-7800

DRAFT
NOT FOR CONSTRUCTION

CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 15 OF 34
FILE NO.: 111441.00 Y-



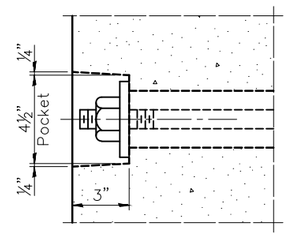
FABRIC BEARING PAD
(Interior)



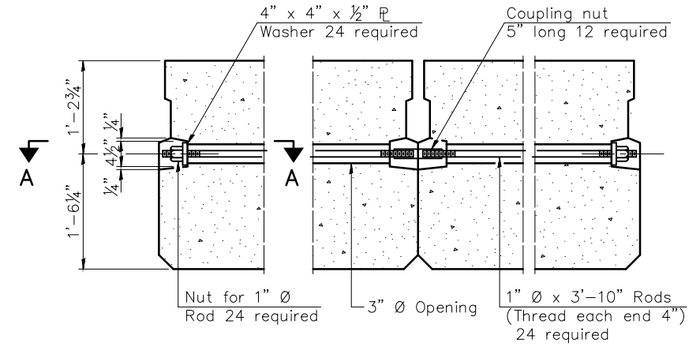
FABRIC BEARING PAD
(Exterior)

FIXED

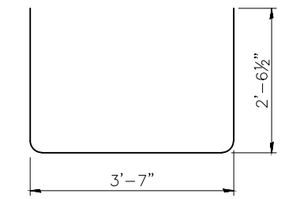
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pads shall be bonded to the substructure.



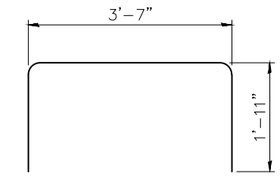
SECTION A–A



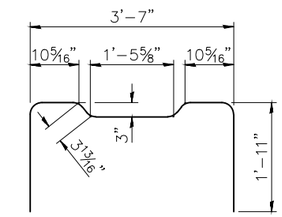
TYPICAL TRANSVERSE TIE ASSEMBLY



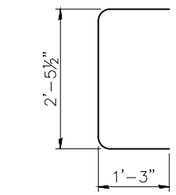
BAR S(E)



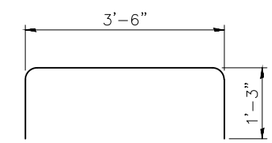
BAR S1(E)



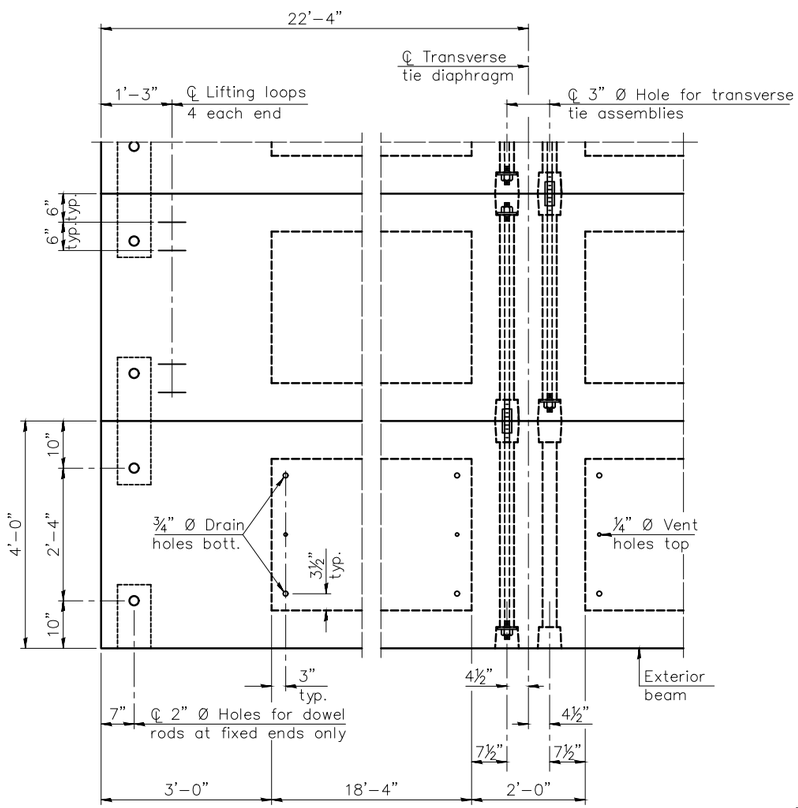
BAR S2(E)



BAR U(E)

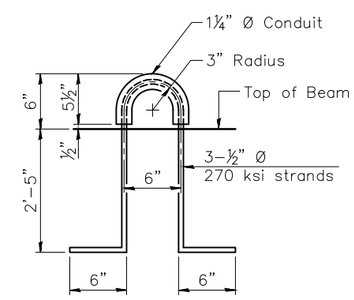


BAR U1(E)



PLAN VIEW

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



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7–wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross–sectional area shall be 0.153 sq. in.

The 1" Ø 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 ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" Ø 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 prestressed 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. (33" depth)	Sq. Ft.	1876

PDD–3348–0 1–1–2020

SHEET 5 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS		
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

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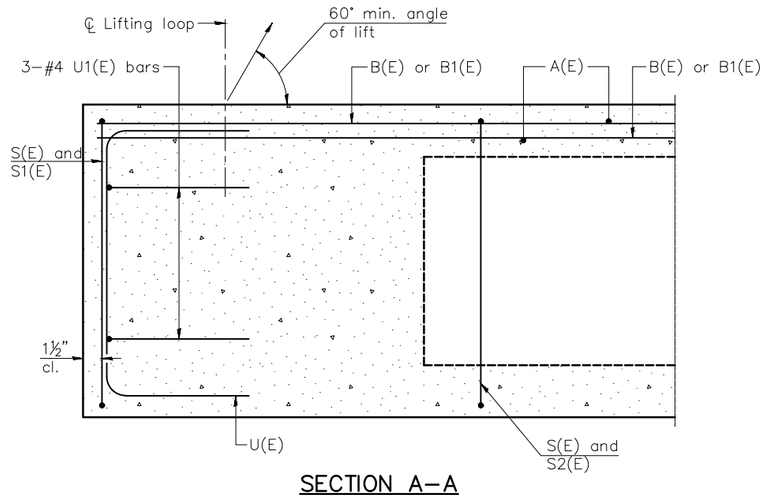
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

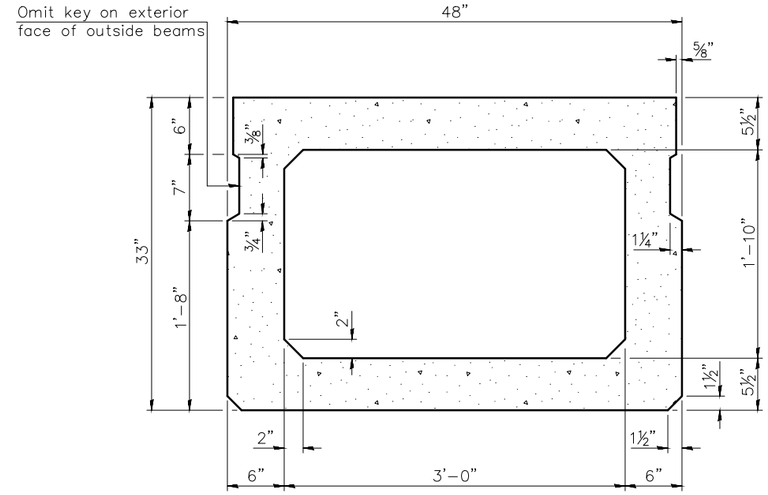
33" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

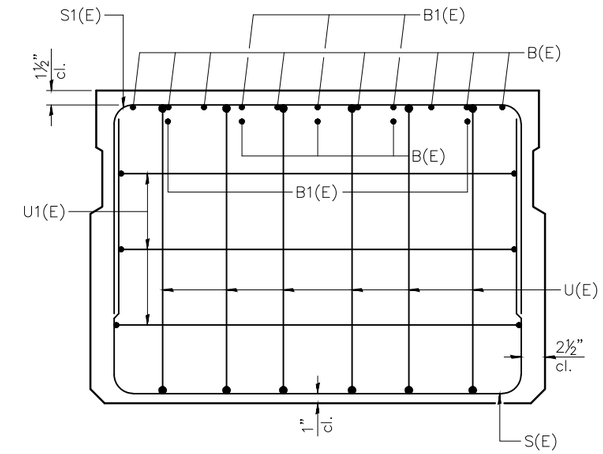
CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 16
FILE NO.: 111441.00 Y–
OF 34



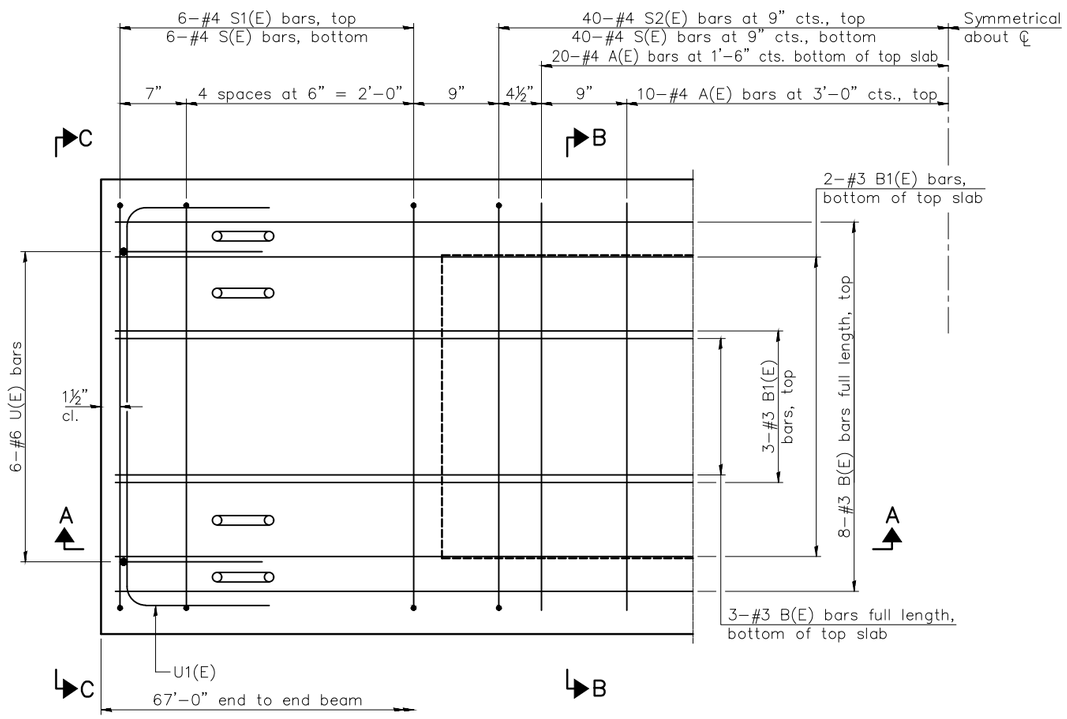
SECTION A–A



SECTION B–B
(Showing dimensions)

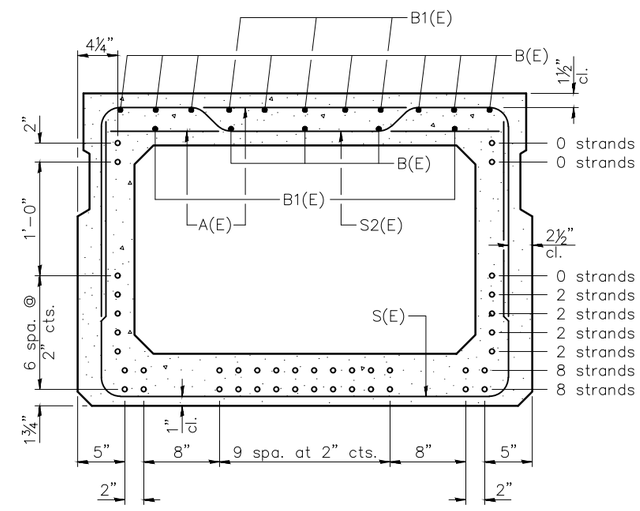


VIEW C–C



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 row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP
#3 bar = 1'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	62	#4	3'-7"	—
B(E)	33	#3	23'-3"	—
B1(E)	10	#3	10'-0"	—
S(E)	93	#4	8'-8"	⊔
S1(E)	12	#4	7'-5"	⊓
S2(E)	81	#4	7'-8"	⊓
U(E)	12	#6	5'-0"	⊏
U1(E)	6	#4	6'-0"	⊓

Note:
See sheet 5 of 14 for additional details and Bill of Material.

PD–3348–0 1–1–2020

SHEET 6 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

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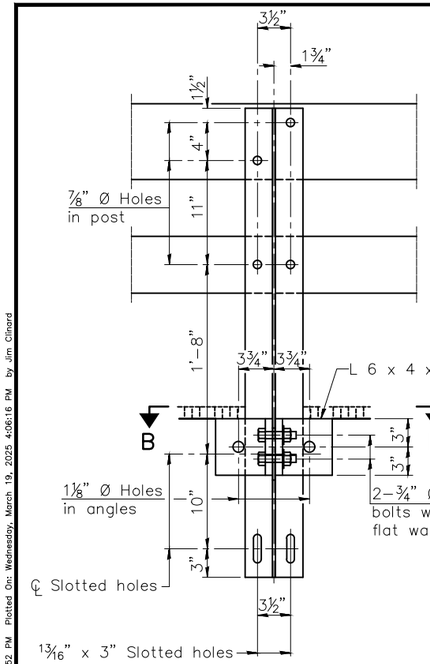
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

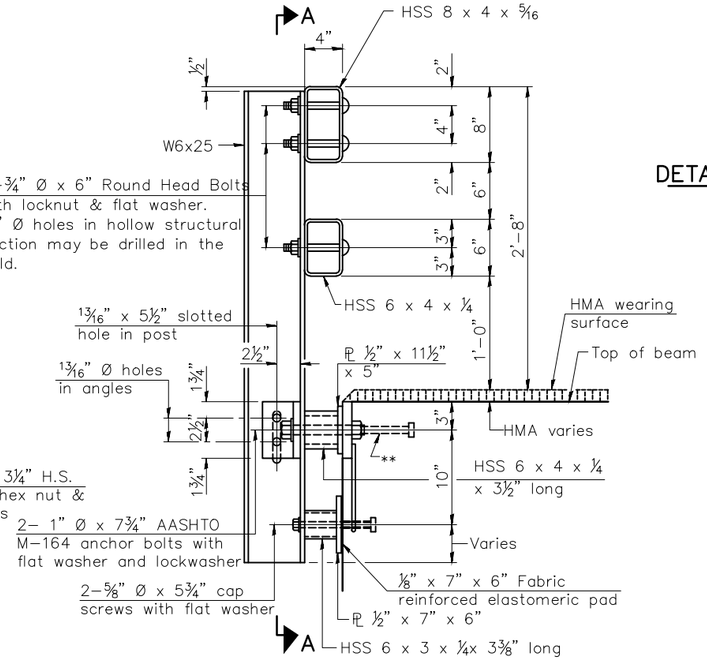
33" x 48" PPC DECK BEAM
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025	
SCALE: AS NOTED	SHEET 17
FILE NO.: 111441.00 Y–	OF 34

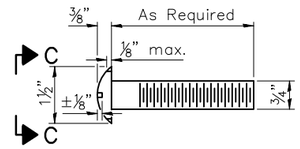


SECTION A-A

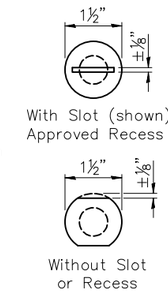


SECTION AT RAIL POST

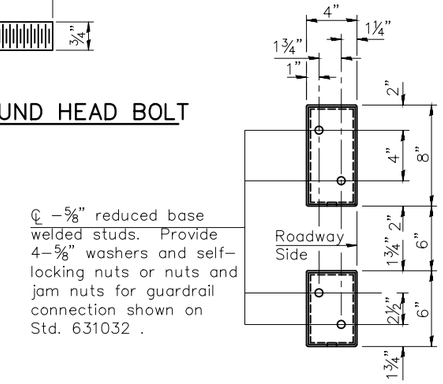
(See sheet 8 of 14 for Special Rail Post Details at east end of bridge)



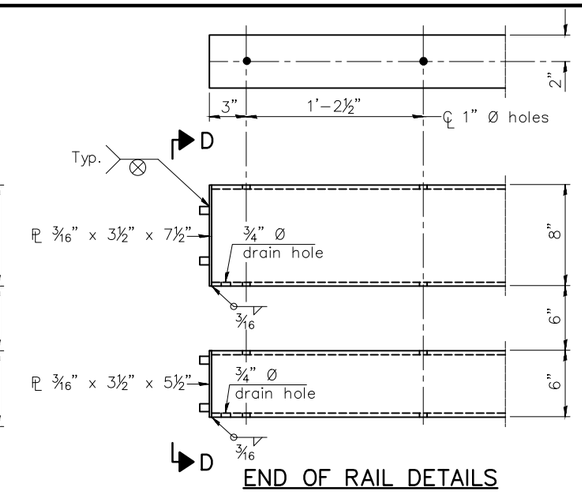
DETAIL OF ¾" Ø ROUND HEAD BOLT



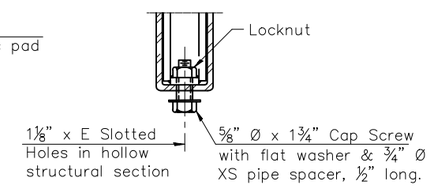
VIEW C-C



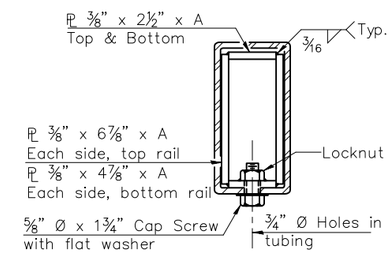
VIEW D-D



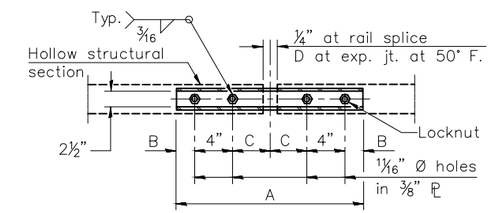
END OF RAIL DETAILS



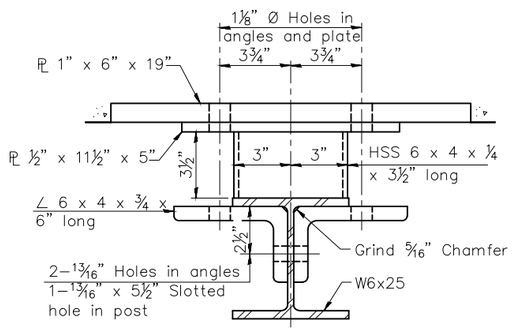
RAIL SPLICE CONNECTION AT EXPANSION JT.



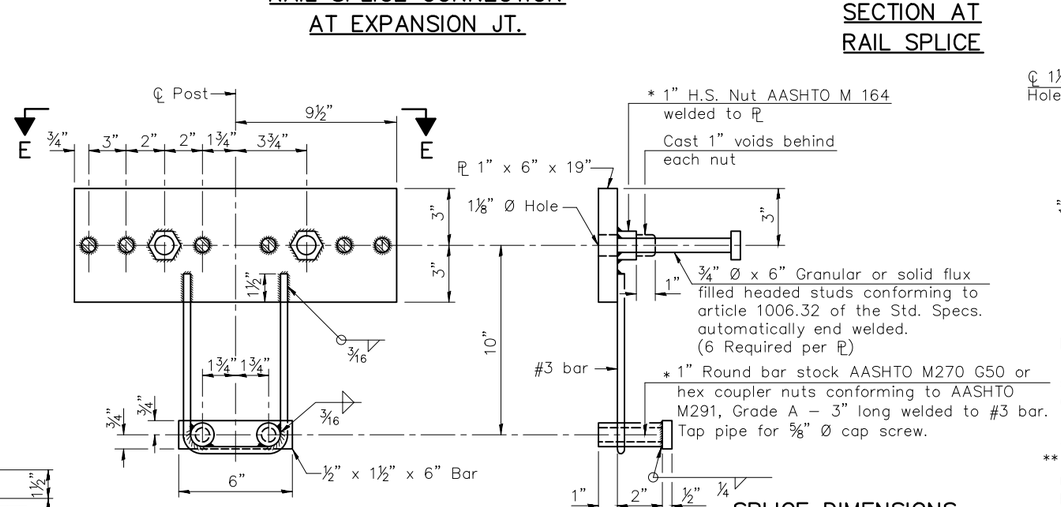
SECTION AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL

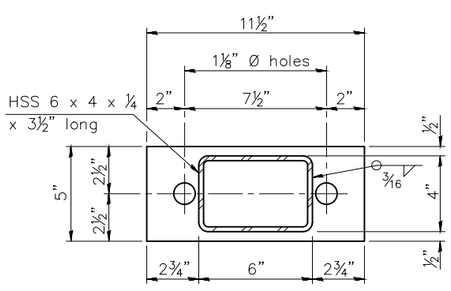


SECTION B-B

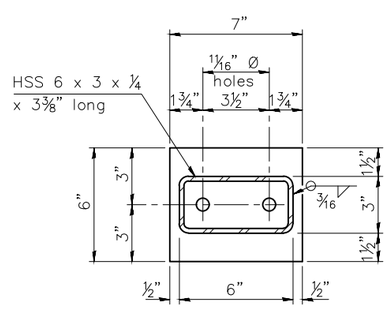


ANCHOR DEVICE

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



PL ½" x 11½" x 5"

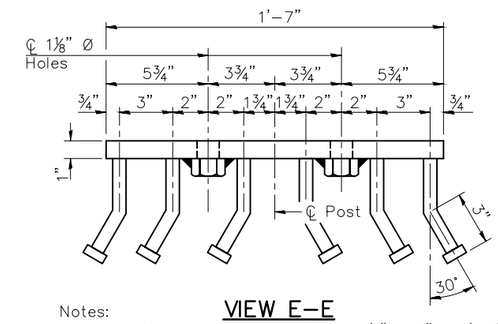


PL ½" x 7" x 6"

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2½"	1'-8"	2"	4"	2½"
> 4" ≤ 6½"	3¾"	2'-0"	2½"	5½"	3½"
> 6½" ≤ 9"	5"	2'-4"	3½"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	4½"	8½"	11"
Rail Splice	¼"	1'-8"	2"	4"	——

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



VIEW E-E

Notes:

For multi-span bridges, sufficient ¼" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.

All steel rail members 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 ½" to accommodate the top reinforcement bar placement.

All HSS tubing serving as railing shall be CVN tested according to Artical 1006.34(b) of the Standard Specification.

BILL OF MATERIAL

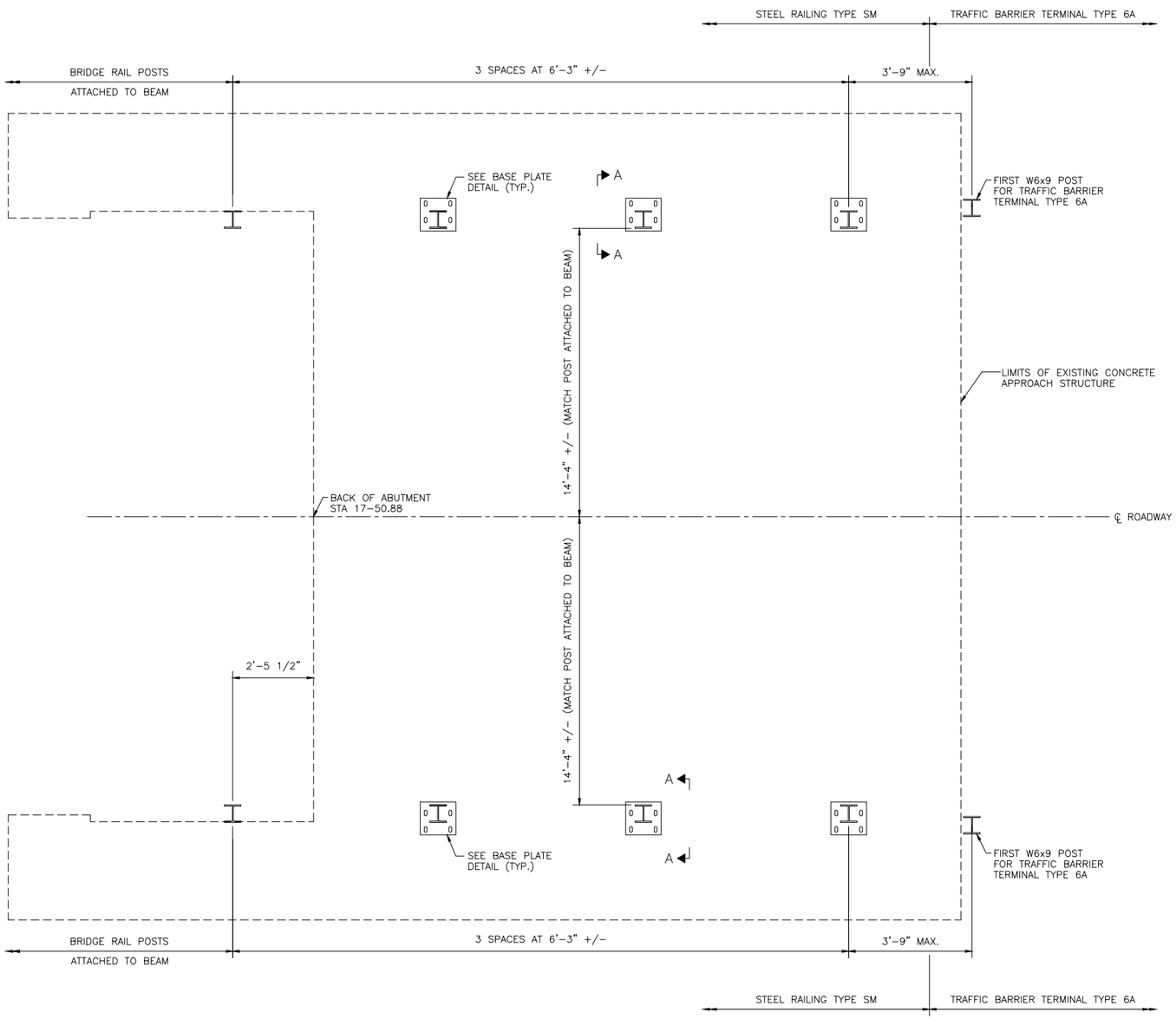
Item	Unit	Quantity
Steel Railing, Type SM	Foot	176

SHEET 7 OF 14

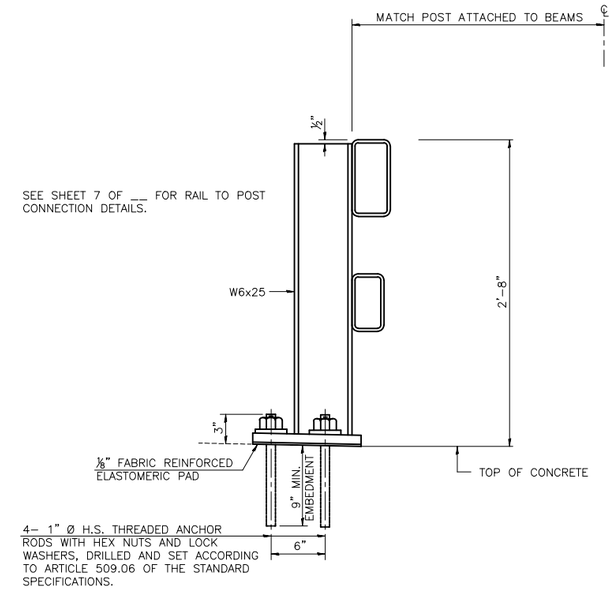
CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS				PERU MORRIS	VILLAGE OF SENECA	STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT	CONSTRUCTION PLANS	CURRENT AS OF: 03/24/2025
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION	OTTAWA MENDOTA	RIVER ROAD BRIDGE REPLACEMENT	WEARING SURFACE STRUCTURE NO. SN 050-7800		SCALE: AS NOTED / SHEET 18
DATE: 10/2021					ILLINOIS	SECTION 21-00020-00-BR			FILE NO.: 111441.00 Y- / OF 34

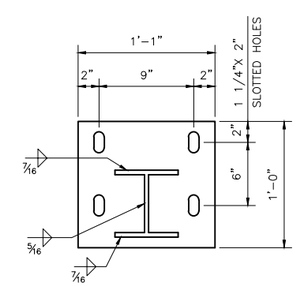
Chamlin & Associates



PLAN AT EAST ABUTMENT



SECTION A-A



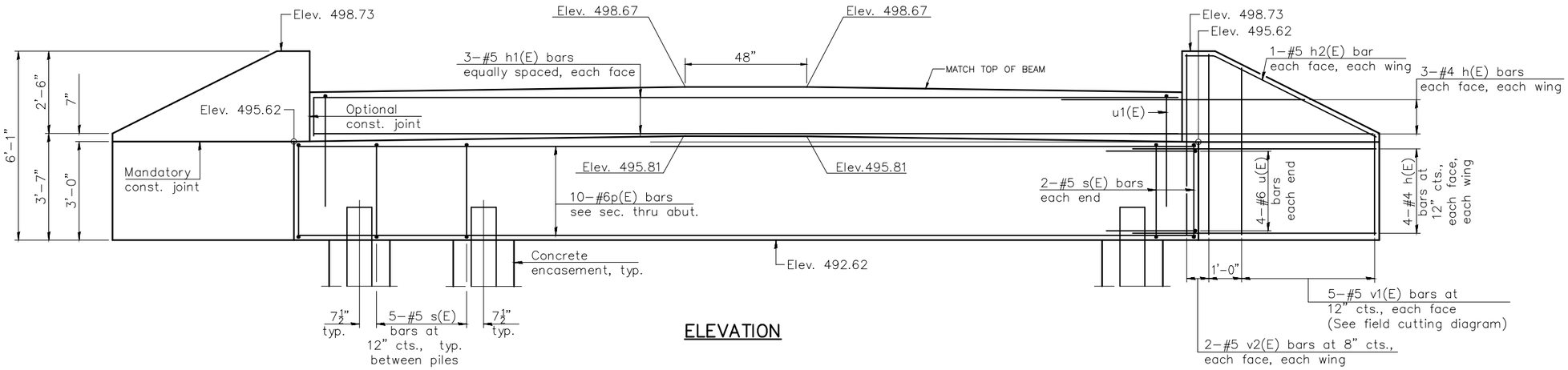
BASE PLATE DETAIL

SHEET 8 OF 14

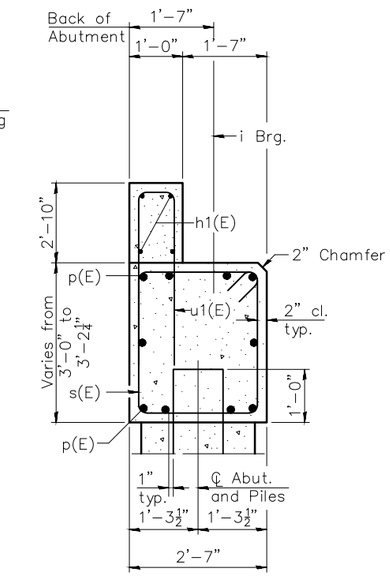
CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	STEEL RAILING POST DETAILS SN 050-7800	CONSTRUCTION PLANS
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION			CURRENT AS OF: 03/24/2025
DATE: 06/2024							SCALE: AS NOTED — SHEET 19
							FILE NO.: 111441.00 Y- — OF 34

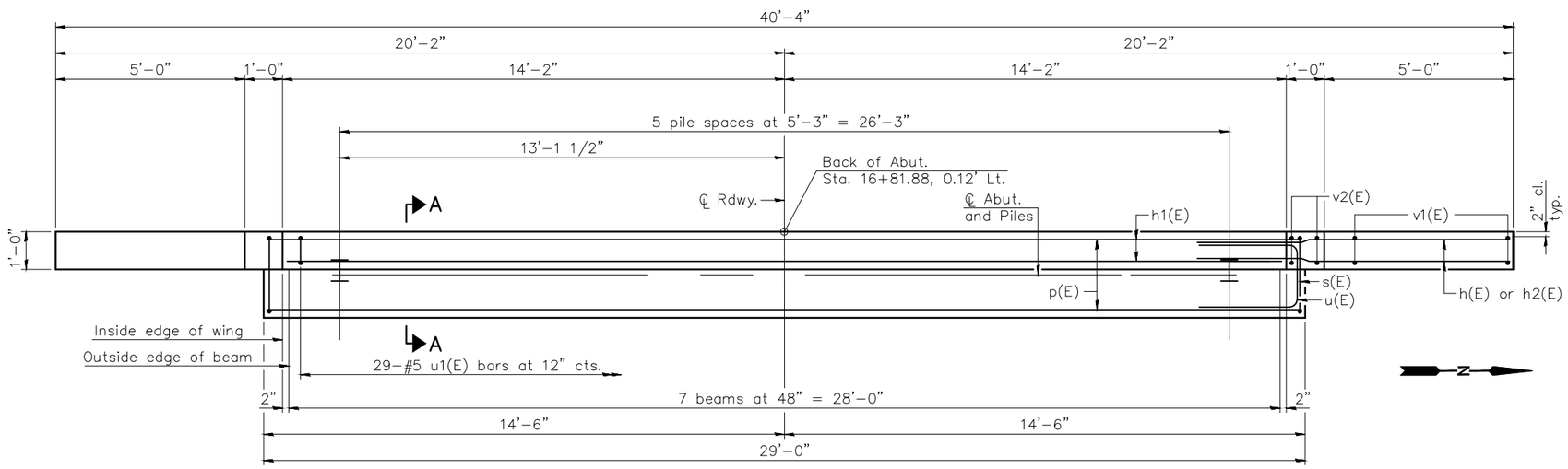
Chamlin & Associates



ELEVATION



SECTION A–A



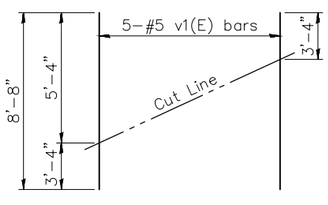
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	28	#4	7'–9"	
h1(E)	6	#5	28'–0"	
h2(E)	4	#5	6'–2"	
p(E)	10	#6	28'–9"	
s(E)	29	#5	10'–9"	
u(E)	8	#6	10'–9"	
u1(E)	29	#5	10'–4"	
v1(E)	10	#5	8'–8"	
v2(E)	8	#5	5'–10"	
Structure Excavation			Cu. Yd.	321
Concrete Structures			Cu. Yd.	13.8
Reinforcement Bars, Epoxy Coated			Pound	1680
Furnishing Steel Piles, HP 10x42			Foot	234
Driving Piles			Foot	234
Concrete Encasement			Cu. Yd.	2.1
Pile Shoes			Each	6

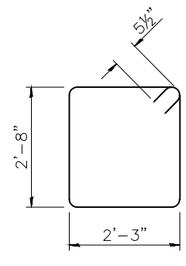
PILE DATA

Type: HP 10x42 with pile shoes
Nominal Required Bearing: 297 kips
Factored Resistance Available: 163 kips
Est. Length: 39
No. Production Piles: 6

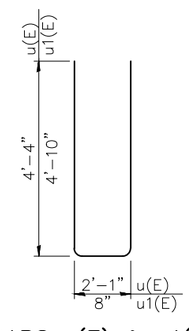


FIELD CUTTING DIAGRAM

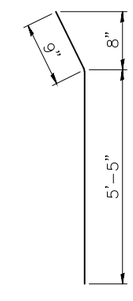
Order v1(E) bars full length. Cut as shown and use remainder of bars in opposite wing.



BAR s(E)



BARS u(E) & u1(E)



BAR h2(E)

Notes:
For details of piles and Concrete Encasement, see sheet 11 of 14.
Cast backwall and tops of wingwalls after beams have been erected.

AD–SB–0 6–15–2019

SHEET 9 OF 14 **CONTRACT NO. 87882**

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

Chamlin & Associates

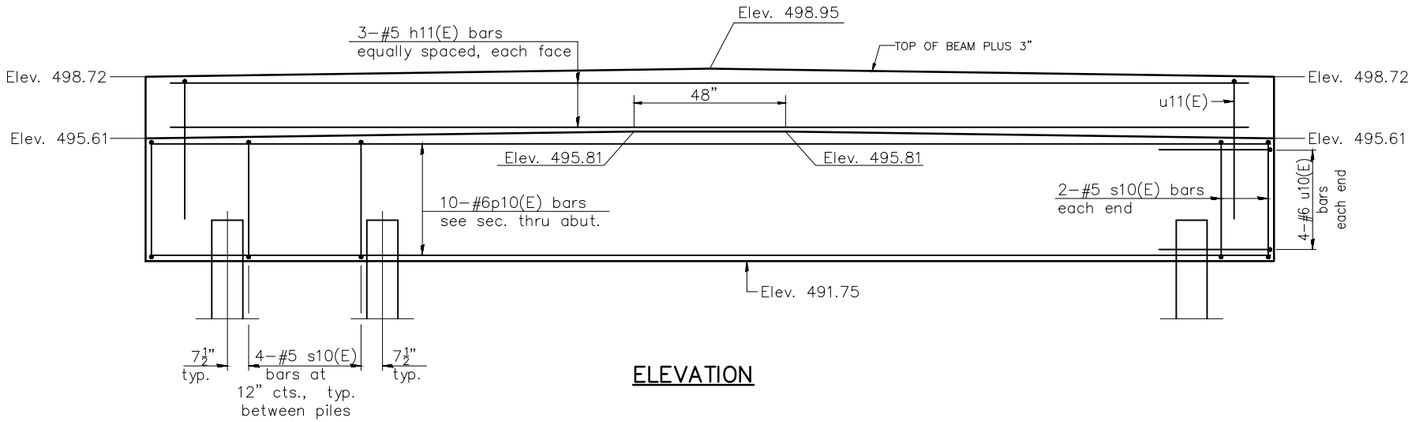
PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

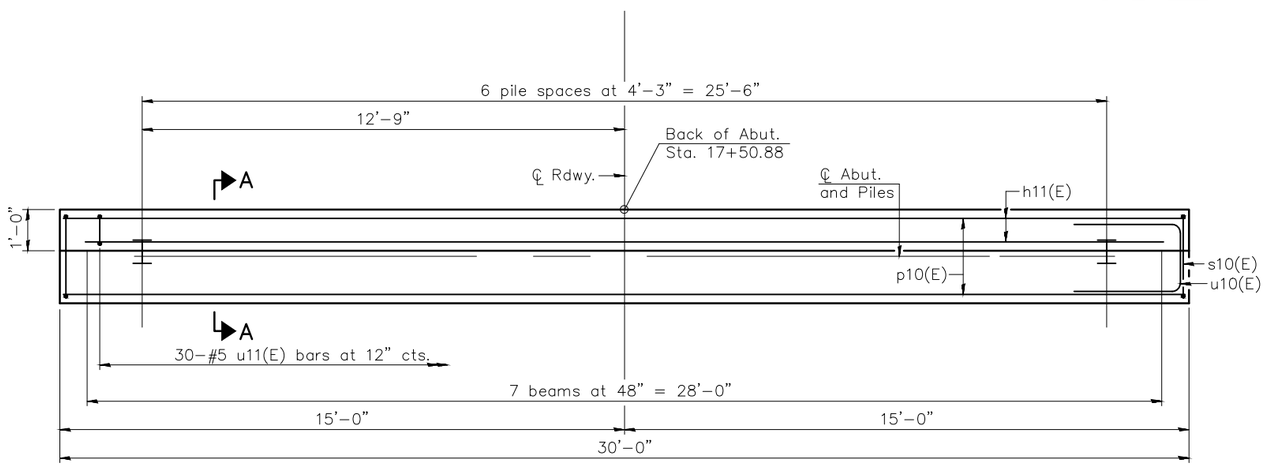
WEST ABUTMENT
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

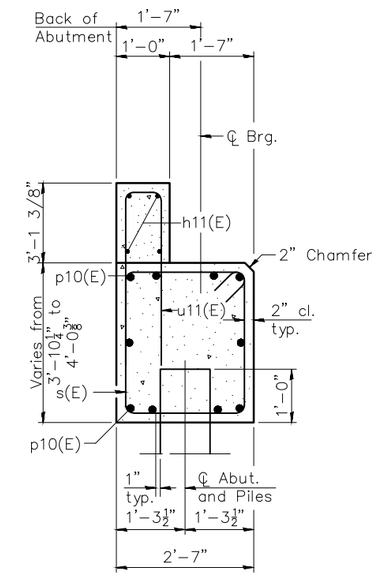
CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 20 OF 34
FILE NO.: 111441.00 Y–



ELEVATION



PLAN



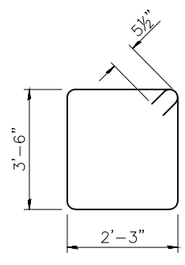
SECTION A–A

BILL OF MATERIAL

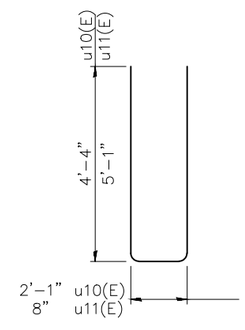
Bar	No.	Size	Length	Shape
h11(E)	6	#5	29'-9"	
p10(E)	10	#6	29'-9"	
s10(E)	28	#5	12'-5"	
u10(E)	8	#6	10'-9"	
u11(E)	30	#5	10'-10"	
Structure Excavation			Cu. Yd.	53
Concrete Structures			Cu. Yd.	14.9
Reinforcement Bars, Epoxy Coated			Pound	1460
Furnishing Steel Piles, HP 10x42			Foot	266
Driving Piles			Foot	266
Pile Shoes			Each	7

PILE DATA

Type: HP 10x42 with pile shoes
Nominal Required Bearing: 333 kips
Factored Resistance Available: 183 kips
Est. Length: 38
No. Production Piles: 7



BAR s10(E)



BARS u10(E) & u11(E)

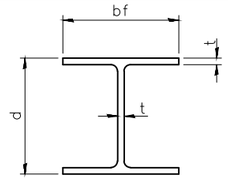
Notes:
Cast backwall and tops of wingwalls after beams have been erected.

SHEET 10 OF 14

CONTRACT NO. 87882

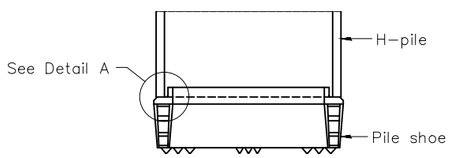
DRAWN BY: NV	REVISIONS				PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	EAST ABUTMENT STRUCTURE NO. SN 050-7800	CONSTRUCTION PLANS	CURRENT AS OF: 03/24/2025
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION					SCALE: AS NOTED / SHEET 21
DATE: 10/2021									FILE NO.: 111441.00 Y– / OF 34

Chamlin & Associates

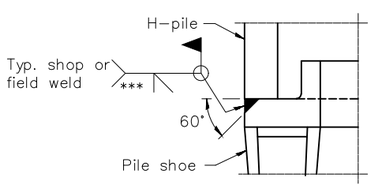


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	13/16"	30"
x102	14"	14¾"	11/16"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	11/16"	24"
x74	12⅛"	12¼"	⅝"	24"
x63	12"	12⅛"	½"	24"
x53	11¾"	12"	7/16"	24"
HP 10x57	10"	10¼"	9/16"	24"
x42	9¾"	10⅛"	7/16"	24"
HP 8x36	8"	8⅛"	7/16"	18"



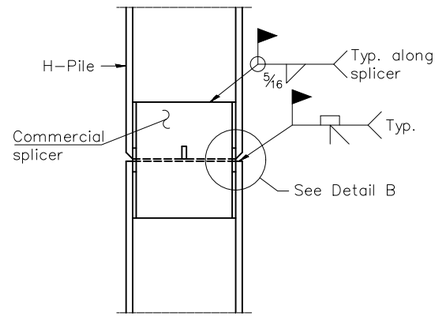
ELEVATION



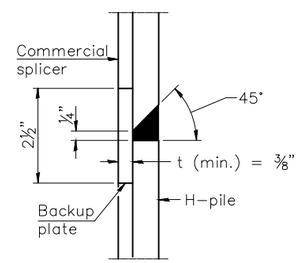
DETAIL A

SHOE ATTACHMENT

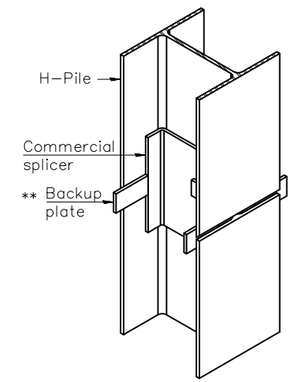
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

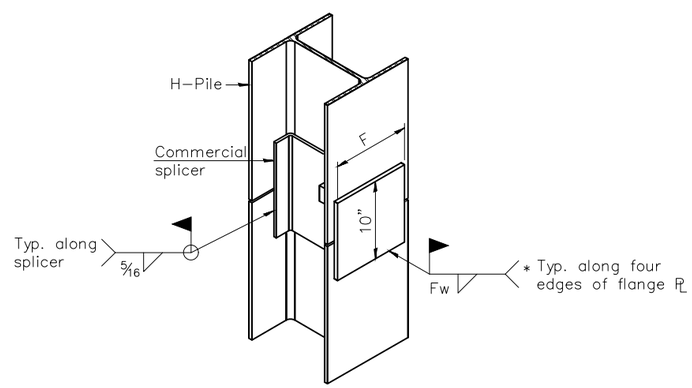


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



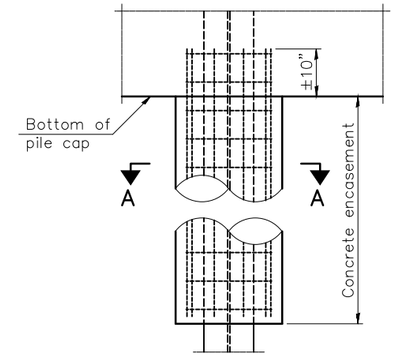
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

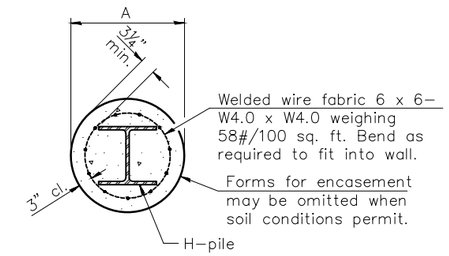
* Interrupt welds ¼" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).

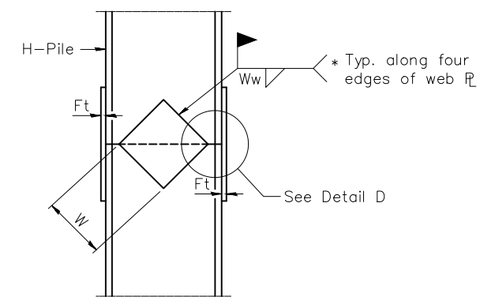


ELEVATION

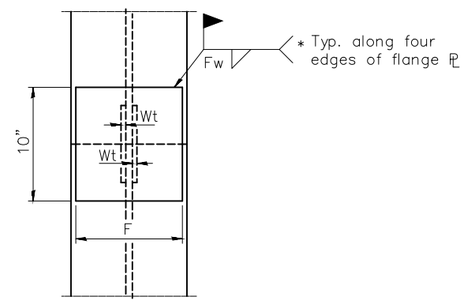


SECTION A-A

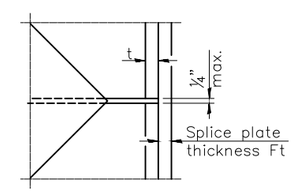
INDIVIDUAL PILE CONCRETE ENCASEMENT
(when specified)



ELEVATION



END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	11/16"	7¾"	⅝"	½"
x73	12½"	⅝"	9/16"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	11/16"	6½"	⅝"	½"
x74	10"	⅞"	11/16"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	9/16"	5¼"	½"	⅜"
x42	8"	⅝"	9/16"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	7/16"	4¼"	½"	⅜"

WELDED PLATE FIELD SPLICE

F-HP 1-1-2020

SHEET 11 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	HP PILE DETAIL STRUCTURE NO. SN 050-7800	CONSTRUCTION PLANS
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION			CURRENT AS OF: 03/24/2025
DATE: 10/2021							SCALE: AS NOTED / SHEET 22
							FILE NO.: 111441.00 Y- / OF 34

Chamlin & Associates

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-1
Surface Elev. 498.95
Auger Depth 46' Rotary Depth NA
Start Date 08/14/21 Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) *ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
498.95											
497.95	8.5" Bituminous Over 12.5' Aggregate		1								
496.95			2								
495.95	Medium Brown Fine To Coarse Gravel Mixed with Clay		3	1	SS	---	15	---	10		
494.95			4								
493.95			5								
492.95			6	2	SS	---	11	---	12		
491.95			7								
490.95			8	3	SS	---	4	---	18		
489.95	Very Loose Brown Fine Sand With with Clay Seams		9								
488.95			10	4	SS	---	3	---	21		
487.95			11								
486.95			12								
485.95			13	5	SS	---	3	---	21		
484.95			14								
483.95			15								
482.95			16	6	SS	---	3	---	22		Water
481.95			17								
480.95	Very Loose Brown Fine Sand		18	7	SS	---	2	---	---		
479.95			19								
478.95			20	8	SS	---	2	---	---		

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-1
Surface Elev. 498.95
Auger Depth 46' Rotary Depth NA
Start Date 08/14/21 Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
477.95											
476.95			22								
475.95			23	9	SS	---	13	---	---		
474.95	Medium Brown Fine To Coarse Sand		24								
473.95			25								
472.95			26	10	SS	---	21	---	---		
471.95			27								
470.95			28	11	SS	---	25	---	---		
469.95			29								
468.95			30								
467.95			31	12	SS	---	36	---	---		
466.95	Dense Brown Fine To Coarse Sand With Cobbles At 38' Depth		32								
465.95			33								
464.95			34								
463.95			35								
462.95			36	13	SS	---	39	---	---		
461.95			37								
460.95			38								
459.95	Cobbles		39								
458.95			40								
457.95	Very Dense Dark Gray Shale		41	14	SS	---	100/9"	---	9		

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments:

SHEET 12 OF 14 CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	SOIL BORINGS STRUCTURE NO. SN 050-7800	CONSTRUCTION PLANS	CURRENT AS OF: 03/24/2025
CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION							SCALE: AS NOTED / SHEET 23
DATE: 10/2021								FILE NO.: 111441.00 Y- / OF 34

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-1
Surface Elev. 498.95
Auger Depth 46' Rotary Depth NA
Start Date 08/14/21 Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
456.95											
455.95	Very Dense Dark Gray Shale		43								
454.95			44								
453.95			45	16	SS	---	100 / 2"	---	8.0		
452.95			46								
451.95			47								
450.95			48								
449.95			49								
448.95			50								
447.95			51								
446.95			52								
445.95			53								
444.95			54								
443.95			55								
442.95			56								
441.95			57								
440.95			58								
439.95			59								
438.95			60								
437.95			61								
436.95			62								

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments: 0

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-2
Surface Elev. 498.79
Auger Depth 46' Rotary Depth NA
Start Date 08/14/21 Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) *ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
498.79											
497.79	8.5" Bituminous Over 12.5' Aggregate		1								
496.79			2								
495.79	Medium Brown Fine To Coarse Gravel Mixed With Clay		3	1	SS	---	20	---	10		
494.79			4								
493.79			5	2	SS	---	14	---	10		
492.79			6								
491.79			7								
490.79	Medium Brown Fine To Coarse Sand		8	3	SS	---	12	---	8		
489.79			9								
488.79			10	4	SS	---	10	---	8		
487.79			11								
486.79			12								
485.79	Loose Brown Fine Sand With Clay Seams		13	5	SS	---	6	---	9		
484.79			14								
483.79			15								
482.79			16	6	SS	---	8	---	9		Water
481.79			17								
480.79	Loose To Very Loose Brown Fine Sand		18	7	SS	---	4	---	---		
479.79			19								
478.79			20								
				8	SS	---	3	---	---		

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments:

SHEET 13 OF 14

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPLACEMENT SECTION 21-00020-00-BR	SOIL BORINGS STRUCTURE NO. SN 050-7800	CONSTRUCTION PLANS	CURRENT AS OF: 03/24/2025
CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION							SCALE: AS NOTED — SHEET 24
DATE: 10/2021								FILE NO.: 111441.00 Y– — OF 34

Chamlin & Associates

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-2
Surface Elev. 498.79
Auger Depth 46'
Rotary Depth NA
Start Date 08/14/21
Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 477.79	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
476.79	Medium To Brown Fine To Coarse Sand		22								
475.79			23	9	SS	---	16	---	---		
474.79			24								
473.79			25								
472.79			26	10	SS	---	19	---	---		
471.79			27								
470.79			28	11	SS	---	33	---	---		
469.79			29								
468.79			30								
467.79			31	12	SS	---	37	---	---		
466.79	Dense Brown Fine To Coarse Sand With Cobbles At 37' Depth		32								
465.79			33								
464.79			34								
463.79			35								
462.79			36	13	SS	---	34	---	---		
461.79			37								
460.79	Cobbles		38								
459.79			39								
458.79	Very Dense Dark Gray Shale		40								
457.79			41	14	SS	---	87	---	10		

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 3

Client: Chamlin & Associates, Inc.
Project Name: Seneca River Road Bridge
Project Site: Seneca, IL.

Boring No. B-2
Surface Elev. 498.79
Auger Depth 46'
Rotary Depth NA
Start Date 08/14/21
Finish Date 08/14/21

Location: As staked by Chamlin & Associates

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV. 456.79	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
455.79			43								
454.79	Very Dense Dark Gray Shale		44								
453.79			45								
452.79			46	16	SS	---	100 / 3"	---	---		
451.79			47								
450.79			48								
449.79			49								
448.79			50								
447.79			51								
446.79			52								
445.79			53								
444.79			54								
443.79			55								
442.79			56								
441.79			57								
440.79			58								
439.79			59								
438.79			60								
437.79			61								
436.79			62								

Groundwater Data: Static water level at time of soil borings - Elevation 482.95
Comments:

DRAWN BY: NV	REVISIONS			
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION
DATE: 10/2021				

Chamlin & Associates

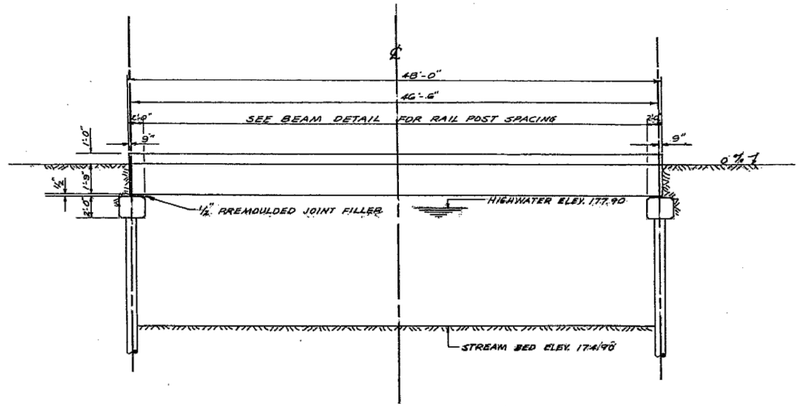
PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

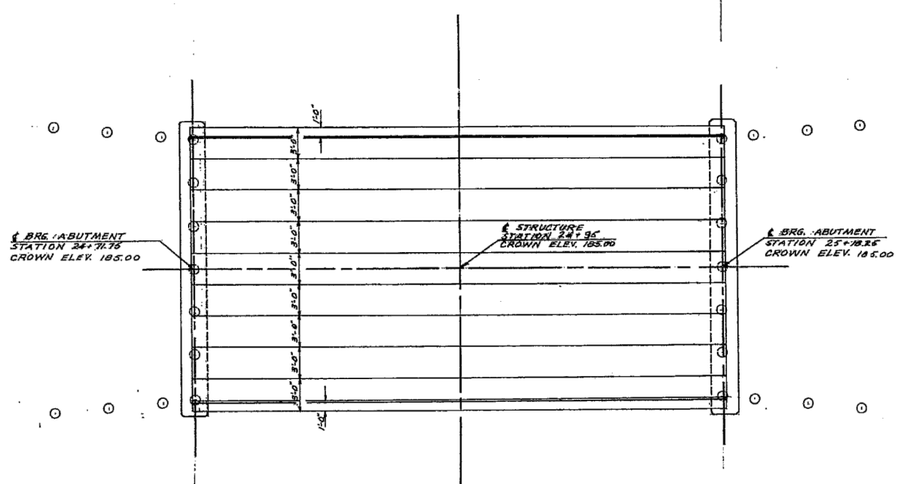
SOIL BORINGS
STRUCTURE NO. SN 050-7800

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025
SCALE: AS NOTED
SHEET 25
FILE NO.: 111441.00 Y-
OF 34



ELEVATION



PLAN

GENERAL NOTES

— SEE SPECIAL PROVISIONS FOR ITEMS "PRECAST PRESTRESSED CONCRETE BRIDGE SLABS" AND "PRECAST CONCRETE CAPS.

— ALL PILES AND HARDWARE SHALL BE FURNISHED AND PAID FOR ACCORDING TO SEC. 57 OF THE STANDARD SPECIFICATIONS, STATE OF ILLINOIS

— ALL WASHERS, NUTS, BOLTS AND RODS SHALL BE HOT DIPPED GALVANIZED STEEL AND SHALL BE INCLUDED FOR PAYMENT AS HARDWARE WITH THE EXCEPTION THE HARDWARE NECESSARY FOR INSTALLMENT OF THE PRECAST PRESTRESSED CONCRETE PLANK AND PRECAST PRESTRESSED CONCRETE BRIDGE SLAB WHICH SHALL BE PAID FOR IN THE UNIT PRICE BID FOR SAID ITEMS.

— SEE SPECIAL PROVISIONS FOR ITEMS "METAL PLATE BRIDGE RAIL AND PRECAST PRESTRESSED CONCRETE PLANK.

— CONTRACTOR TO DRIVE 2 TEST PILE AS DIRECTED BY THE ENGINEER BEFORE ORDERING REMAINDER OF PILES.

— FOR PLACING BACKFILL SEE ART. 501.10 OF THE STANDARD SPECIFICATIONS.

— ALL PILES AND LUMBER SHALL BE CREOSOTED.

— ALL STEEL AND LUMBER IN THE EXISTING STRUCTURE SHALL REMAIN THE PROPERTY OF THE COUNTY AND SHALL BE STOCKPILED AT THE BRIDGE SITE AS DIRECTED BY THE ENGINEER.—

WATERWAY INFORMATION

DRAINAGE AREA ..	1,760	AC.
PROPOSED OPENING	133	SQ. FT.
REQUIRED OPENING	132	SQ. FT.
EXISTING OPENING	120	SQ. FT.
CHARACTER	ROLLING, TIMBER	

PILE DATA

TYPE - 12" ϕ CREOSOTED TIMBER
ESTIMATED LENGTH — 25'-0"
NO. REQUIRED .. 24 + 2 TEST PILES
MIN. CAP (ABUT. PILE: 20 TON/PILE X WING PILE: 10 TON/PILE)

NAME PLATE

SECTION 78-65 B:
BUILT 1963 BY:
LA SALLE COUNTY,
BROOKFIELD TWP.
LOADING: H15-S12.

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS						
	LEVEL	BY	DATE	DESCRIPTION			
CHECKED BY: JKC							
DATE: 10/2021							

Chamlin & Associates

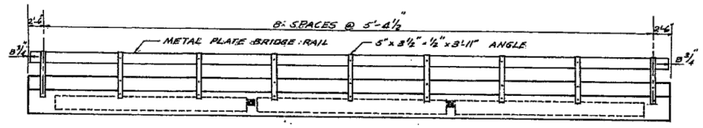
PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

EXISTING PLANS
FOR INFORMATION ONLY

CONSTRUCTION PLANS

CURRENT AS OF: 03/24/2025			
SCALE: AS NOTED	SHEET	26	
FILE NO.: 111441.00 Y-	OF	34	



ELEVATION

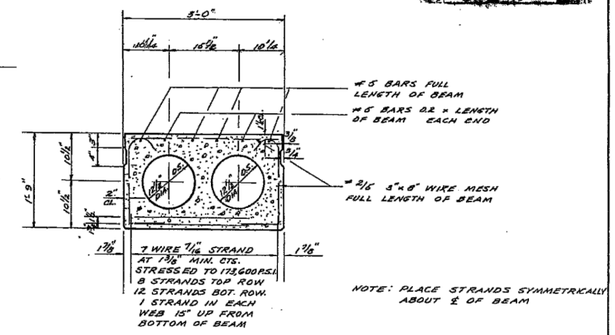
GENERAL NOTES

FOR ITEM "PRECAST CONCRETE BRIDGE DECK" SEE SPECIAL PROVISIONS.

STRAND USED AS PRESTRESSING ELEMENT SHALL BE NON-GALVANIZED HIGH STRENGTH, STRESS-RELIEVED 7-WIRE STRAND. THE NOMINAL DIAMETER OF THE STRAND SHALL NOT EXCEED 7/16" AND THE NOMINAL CROSS-SECTION AREA SHALL BE 0.108859 IN.

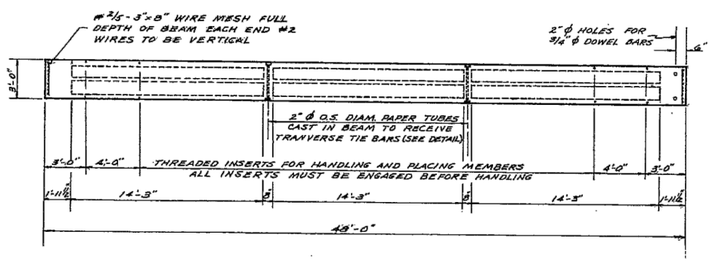
POCKETS THAT RECEIVE TRANVERSE TIE BAR ON OUTSIDE BEAMS SHALL BE FILLED WITH GROUT AFTER TRANSVERSE TIE ASSEMBLY IS IN PLACE.

THE 1" ϕ RODS IN THE TRANSVERSE TIE ASSEMBLY SHALL BE TIGHTENED TO A SNUG FIT AND THE THREADS SET.

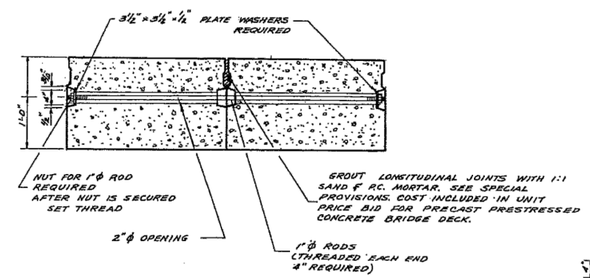


NOTE: PLACE STRANDS SYMMETRICALLY ABOUT ℄ OF BEAM

TYPICAL SECTION THRU 21" BEAM

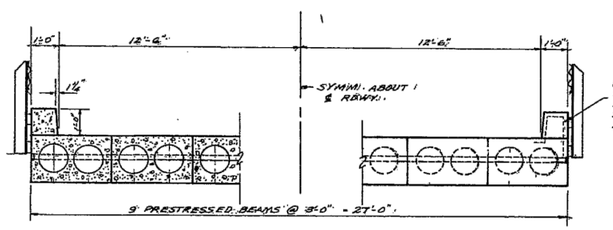


PLAN



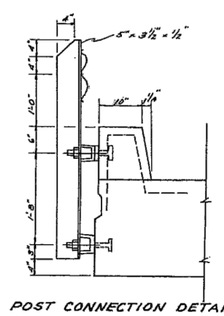
TYPICAL TRANVERSE TIE ASSEMBLY

COST AND ASSEMBLY OF TRANVERSE TIES IS INCLUDED IN UNIT PRICE BID FOR "PRECAST PRESTRESSED CONCRETE BRIDGE DECK



HALF SECTION

HALF END ELEVATION



RAIL POST CONNECTION DETAIL

LOADING H-15-S12

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS						
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION			
DATE: 10/2021							

Chamlin & Associates

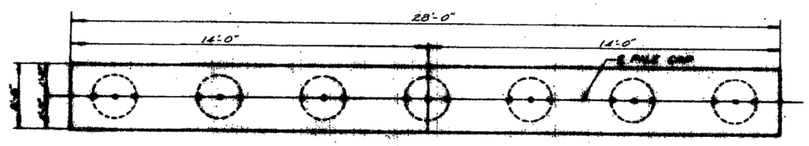
PERU MORRIS
OTTAWA MENDOTA
ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

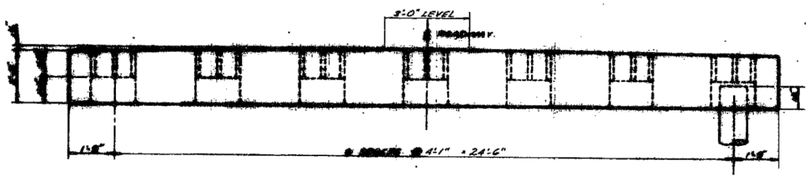
EXISTING PLANS
FOR INFORMATION ONLY

CONSTRUCTION PLANS

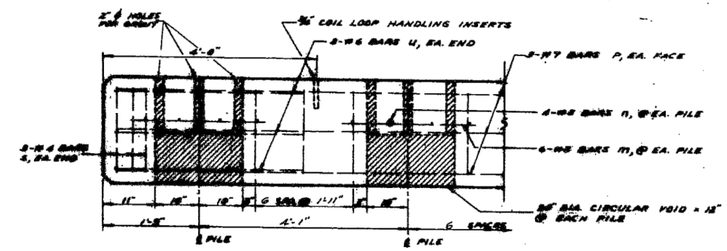
CURRENT AS OF: 03/24/2025		
SCALE: AS NOTED	SHEET	27
FILE NO.: 111441.00 Y-	OF	34



PLAN

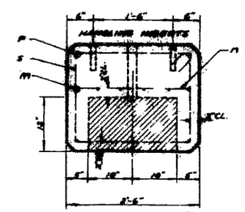


ELEVATION

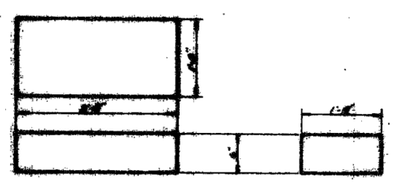


NOTE: CROSS HATCHED AREAS TO BE FILLED WITH GROUT AFTER PILE CAP HAS BEEN POSITIONED OVER PILES.

PARTIAL ELEVATION
SHOWING REINFORCEMENT



END VIEW
SHOWING REINFORCEMENT



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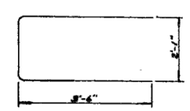
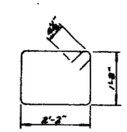


BAR u



BAR s

BILL OF MATERIAL
PRECAST CONCRETE GAP

BAR	NO.	SIZE	LENGTH	SHAPE
m	42	#5	2'-6"	
n	28	#5	2'-2"	
P	4	#7	2'-2"	
s		#4	1'-3"	
u	4	#6	3'-1"	
CL. X CONCRETE			CU. YDS.	
REINFORCEMENT BARS			LBS.	
3/4 COIL LOOPS			EA.	4

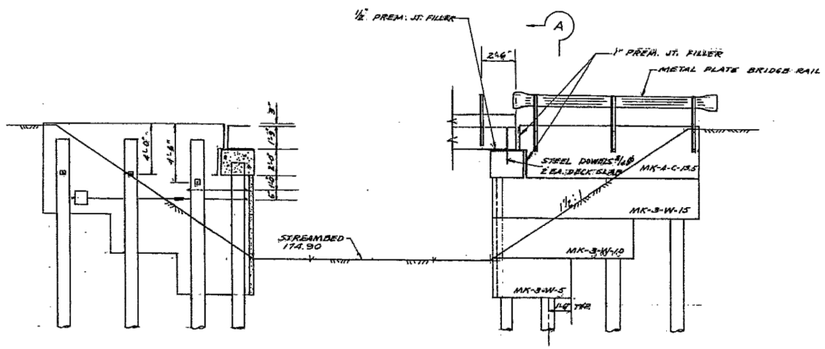
THIS INFORMATION FOR FABRICATOR OF PRECAST CONCRETE GAP HARDWARE IS FOR 1 GAP ONLY.

NOTE: PRECAST CONCRETE GAP IS NOT PRESTRESSED

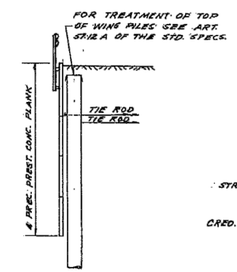
CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS				PERU MORRIS	VILLAGE OF SENECA	EXISTING PLANS	CONSTRUCTION	CURRENT AS OF: 03/24/2025	
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION	OTTAWA MENDOTA	RIVER ROAD BRIDGE REPLACEMENT	FOR INFORMATION ONLY	PLANS	SCALE: AS NOTED	SHEET 28
DATE: 10/2021					ILLINOIS	SECTION 21-00020-00-BR			FILE NO.: 111441.00 Y-	OF 34

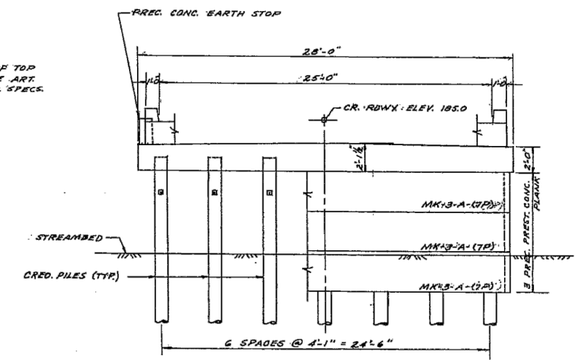
Chamlin & Associates



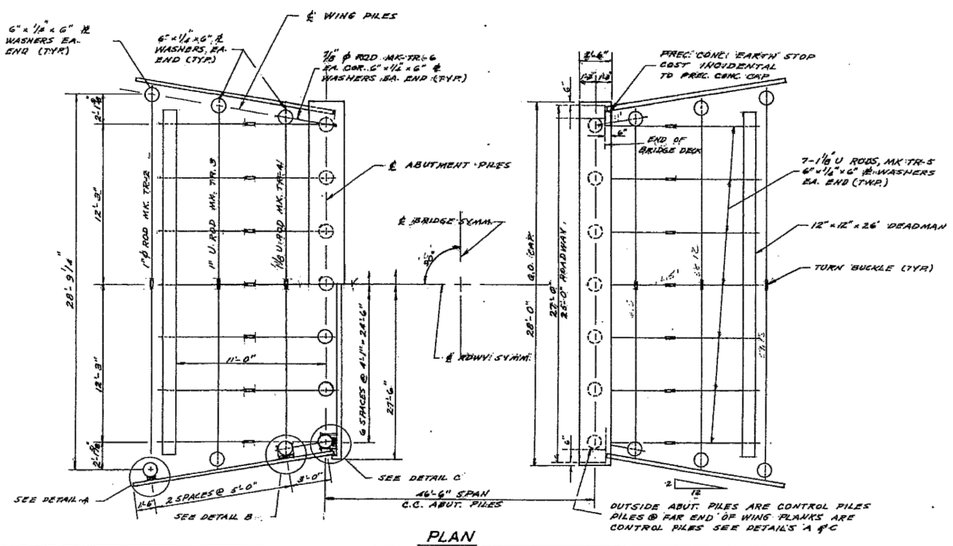
SIDE ELEVATION



SECTION A-A



FRONT ELEVATION



PLAN

BILL OF LUMBER
2 ABUTMENTS

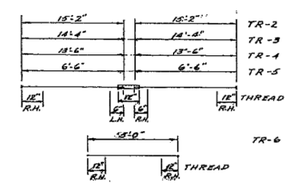
ITEM	NO.	SIZE	LENGTH
DEADMAN	2	12" x 12"	26'-0"
WEDGES (PR.)	180	4" x 6"	1'-0"

BILL OF CONCRETE PLANKS
2 ABUTMENTS

MK.	NO.	WIDTH	SQ. FT. EA.
4-C-18.5 (R.H.)	2	4	53
4-C-18.5 (L.H.)	2	4	53
3-W-15	4	3	45
3-W-10	4	3	30
3-W-5	4	3	15
3-A-(TP)	6	3	82.5

BILL OF HARDWARE
2 ABUTMENTS

ITEM	MK.	NO.	SIZE
TIE RODS	TR-2	2	1" Ø
	TR-3	2	1" U
	TR-4	12	1 1/8" U
	TR-5	14	1 1/8" U
	TR-6	4	7/8" Ø
⊥ WASHERS	—		
	—	48	6" x 1/2" x 6"
NUTS FOR RODS	—	8	7/8" Ø
	—	4	1" Ø
	—	4	1" U
	—	52	1 1/8" U
TURN BUCKLES	—	2	1" Ø
	—	2	1" U
	—	16	1 1/8" U



TIE RODS

CONTRACT NO. 87882

DRAWN BY: NV	REVISIONS			PERU MORRIS	VILLAGE OF SENECA	EXISTING PLANS	CONSTRUCTION	CURRENT AS OF: 03/24/2025	
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION	OTTAWA MENDOTA	RIVER ROAD BRIDGE REPLACEMENT	FOR INFORMATION ONLY	PLANS	SCALE: AS NOTED	SHEET 29
DATE: 10/2021					ILLINOIS	SECTION 21-00020-00-BR			FILE NO.: 111441.00 Y-	OF 34

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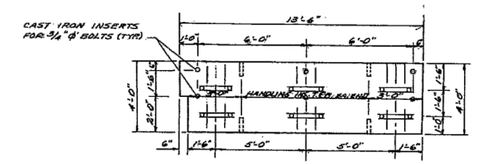
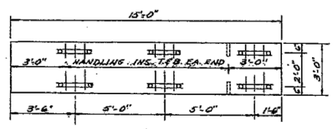
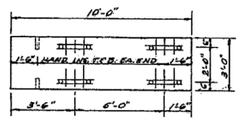


4-C-13.5
4 REQUIRED



3-W-15
4 REQUIRED



3-W-10
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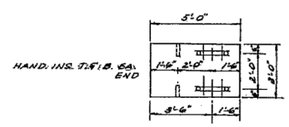
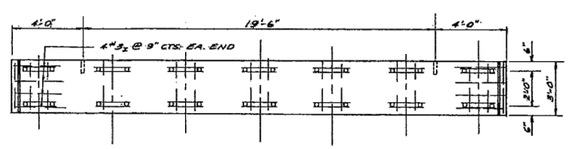
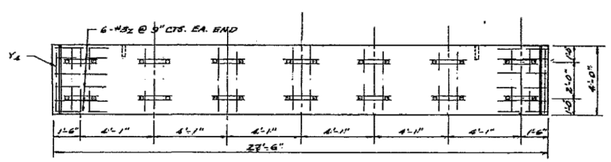


3-W-5
4 REQUIRED

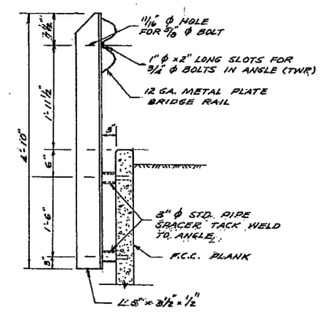


3-A-(7P)
6 REQUIRED

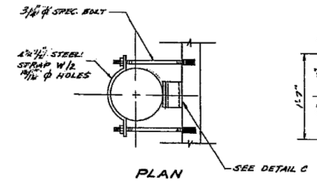


4-A-(7P)
0 REQUIRED

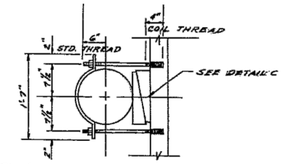
PRECAST PRESTRESSED CONCRETE PLANKS



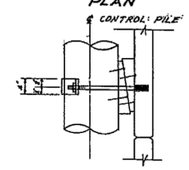
HANDRAIL POST DETAILS



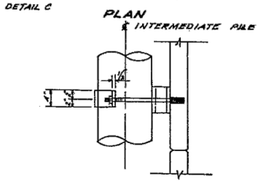
PLAN



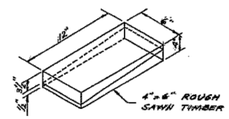
PLAN



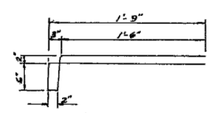
ELEVATION
DETAIL A



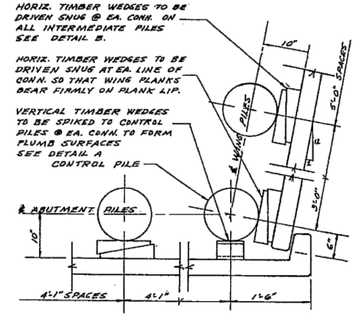
ELEVATION
DETAIL B



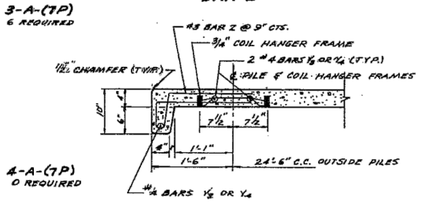
TIMBER WEDGES



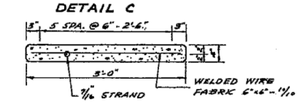
BAR Z



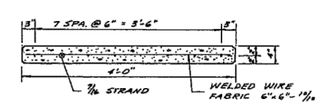
DETAIL C



SECTION B-B



SECTION-3' WIDE PLANK



SECTION-4' WIDE PLANK

CONTRACT NO. 87882

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CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION				SCALE: AS NOTED	SHEET 30
DATE: 10/2021								FILE NO.: 111441.00 Y–	OF 34

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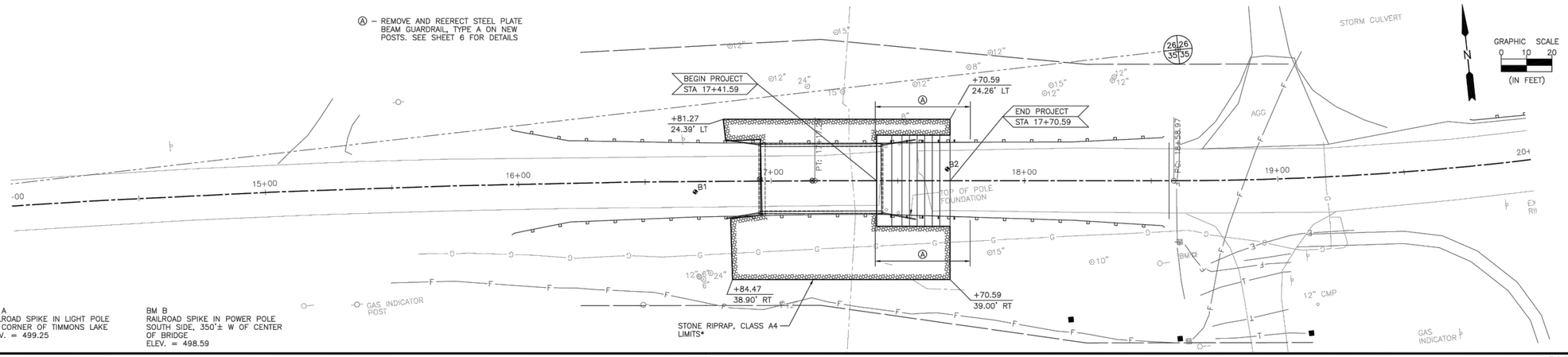
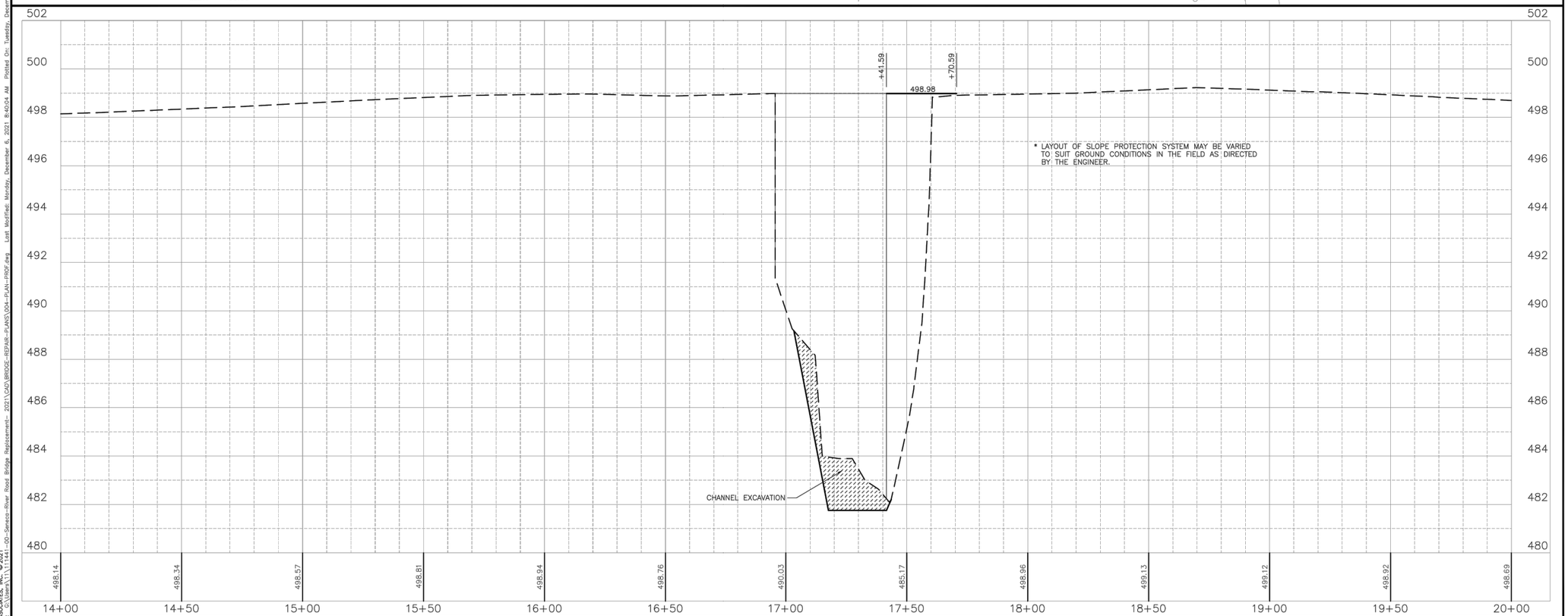


BM A
RAILROAD SPIKE IN LIGHT POLE
SW CORNER OF TIMMONS LAKE
ELEV. = 499.25

BM B
RAILROAD SPIKE IN POWER POLE
SOUTH SIDE, 350'± W OF CENTER
OF BRIDGE
ELEV. = 498.59



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DATE: 10/2021				

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VILLAGE OF SENECA
RIVER ROAD BRIDGE REPAIR
SECTION 21-00020-01-BR

PLAN AND PROFILE

CONSTRUCTION PLANS

CURRENT AS OF: 12/07/2021
SCALE: AS NOTED | SHEET 4
FILE NO.: 111441.00 Y– | OF 14

CONTRACT NO. 87882

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DATE: 10/2021				

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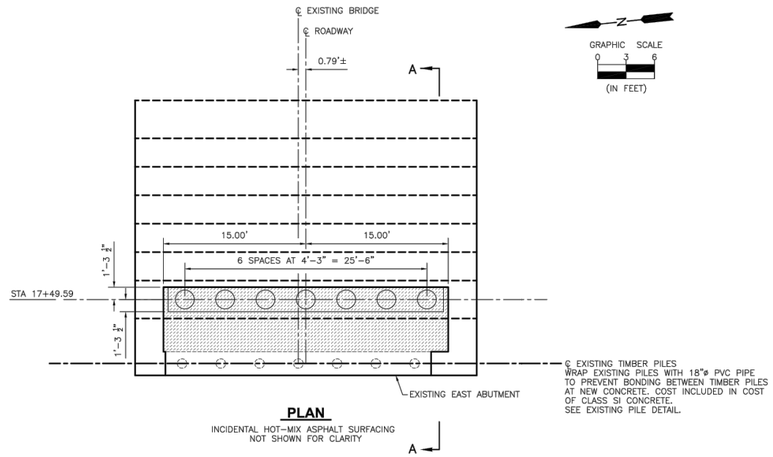
RIVER ROAD BRIDGE REPLACEMENT
SECTION 21-00020-00-BR

EXISTING PLANS
FOR INFORMATION ONLY

CONSTRUCTION PLANS

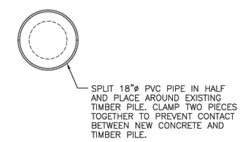
CURRENT AS OF: 03/24/2025
SCALE: AS NOTED | SHEET 31
FILE NO.: 111441.00 Y– | OF 34



PLAN

INCIDENTAL HOT-MIX ASPHALT SURFACING NOT SHOWN FOR CLARITY

GRAPHIC SCALE
0 3 6
(IN FEET)



EXISTING PILE DETAIL

NOTES

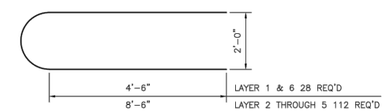
A. REMOVE DEBRIS FROM BEHIND THE EXISTING ABUTMENT, CUT EXISTING TIE-BACKS/ CROSS-TIES AND REMOVE THEM, REMOVE PRECAST PANEL ATTACHED TO TIMBER PILES, REMOVE TIMBER PILES FOR WING WALLS AND POUR CLASS SI CONCRETE (INCLUDED IN THE COST OF CLASS SI CONCRETE).

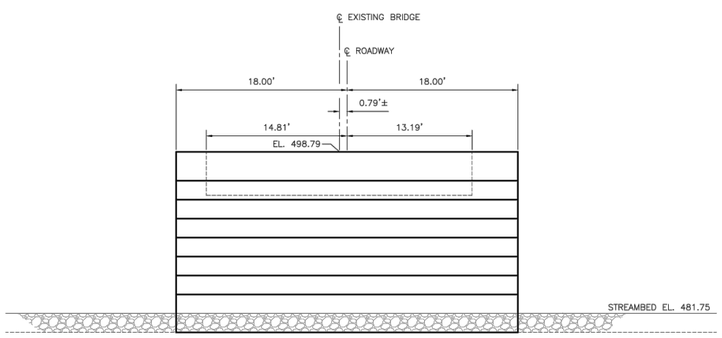
B. PROVIDE 2-#6 HAIRPIN REINFORCEMENT BARS IN EACH CONCRETE LAYER AT EACH TIMBER PILE.

C. EXCLUDING OF LAYERS 1 AND 8, AT THE CONTRACTOR'S OPTION UP TO TWO LAYERS OF CLASS SI CONCRETE MAY BE POURED AT THE SAME TIME. NO ADDITIONAL COMPENSATION FOR EXTRA EXCAVATION OR SI CONCRETE WILL BE ALLOWED.

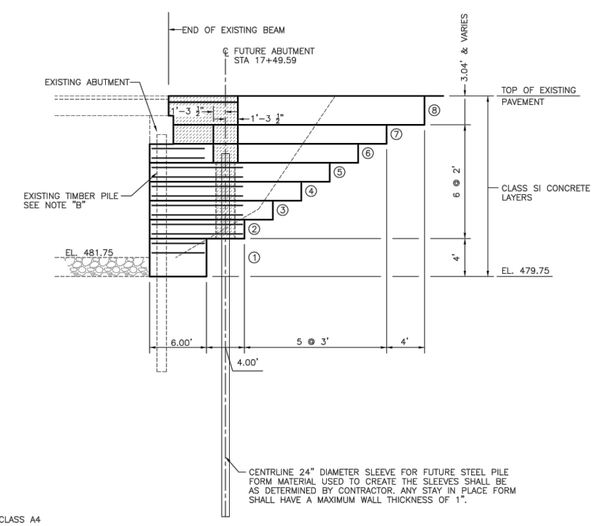
D. THE SURFACE OF LAYER 8 SHALL BE FINISHED IN ACCORDANCE WITH SECTION 420 OF THE STANDARD SPECIFICATIONS AND INCLUDE A LONGITUDINAL SAWED JOINT ALONG THE CENTERLINE OF ROADWAY.

E. EXCEPT AS NOTED NO CONSTRUCTION JOINTS WILL BE ALLOWED.



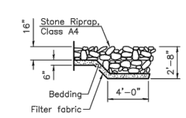


ELEVATION LOOKING EAST



7 DAYS SHALL ELAPSE BETWEEN LAYER POURS

SECTION A - A ALONG CENTERLINE



SECTION B-B

STONE RIPRAP CLASS A4

PORTLAND CEMENT CONCRETE PAVEMENT 8" AND BLOCKOUT FOR FUTURE ABUTMENT AND PILES BACKFILL WITH POROUS GRANULAR EMBANKMENT. A LONGITUDINAL SAWED JOINT SHALL BE CUT AT THE CENTERLINE OF ROADWAY. THE JOINT SHALL INCLUDE #6 TIE BARS AT 30" CTS.

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DATE: 10/2021				

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ILLINOIS

VILLAGE OF SENECA
RIVER ROAD BRIDGE REPAIR
SECTION 21-00020-01-BR

REPAIR DETAILS
SN 050-3050

CONSTRUCTION PLANS

CURRENT AS OF: 12/07/2021
SCALE: AS NOTED | SHEET 5
FILE NO.: 111441.00 Y- | OF 14

CONTRACT NO. 87882

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SECTION 21-00020-00-BR

EXISTING PLANS
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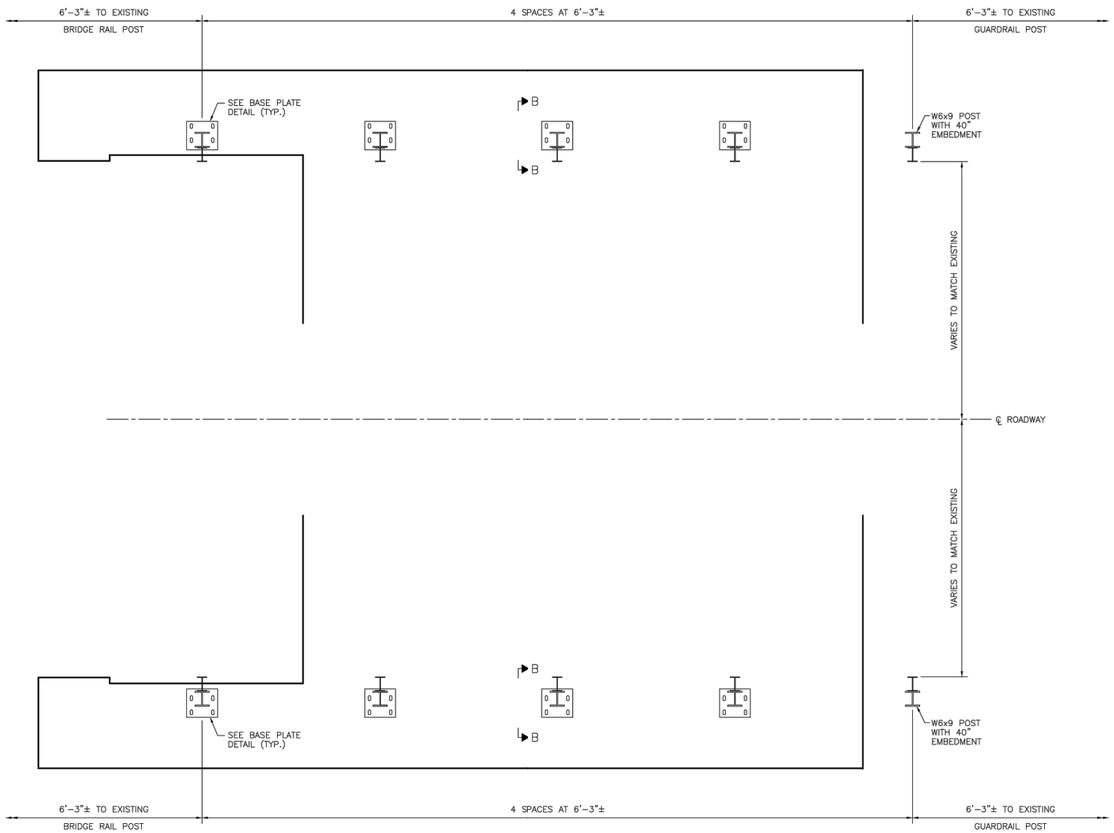
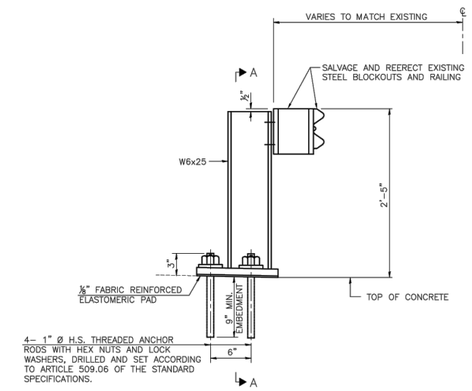
CONSTRUCTION PLANS

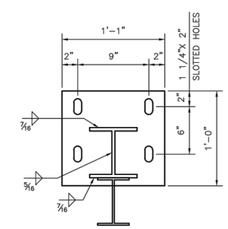
CURRENT AS OF: 03/24/2025
SCALE: AS NOTED | SHEET 32
FILE NO.: 111441.00 Y- | OF 34



PLAN



SECTION B-B



BASE PLATE DETAIL

DRAWN BY: NV	REVISIONS				PERU MORRIS OTTAWA MENDOTA ILLINOIS	VILLAGE OF SENECA RIVER ROAD BRIDGE REPAIR SECTION 21-00020-01-BR	GUARDRAIL DETAILS SN 050-3050	CONSTRUCTION PLANS	CURRENT AS OF: 12/07/2021
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION					SCALE: AS NOTED / SHEET 6
DATE: 10/2021									FILE NO.: 111441.00 Y– / OF 14

CONTRACT NO. 87882

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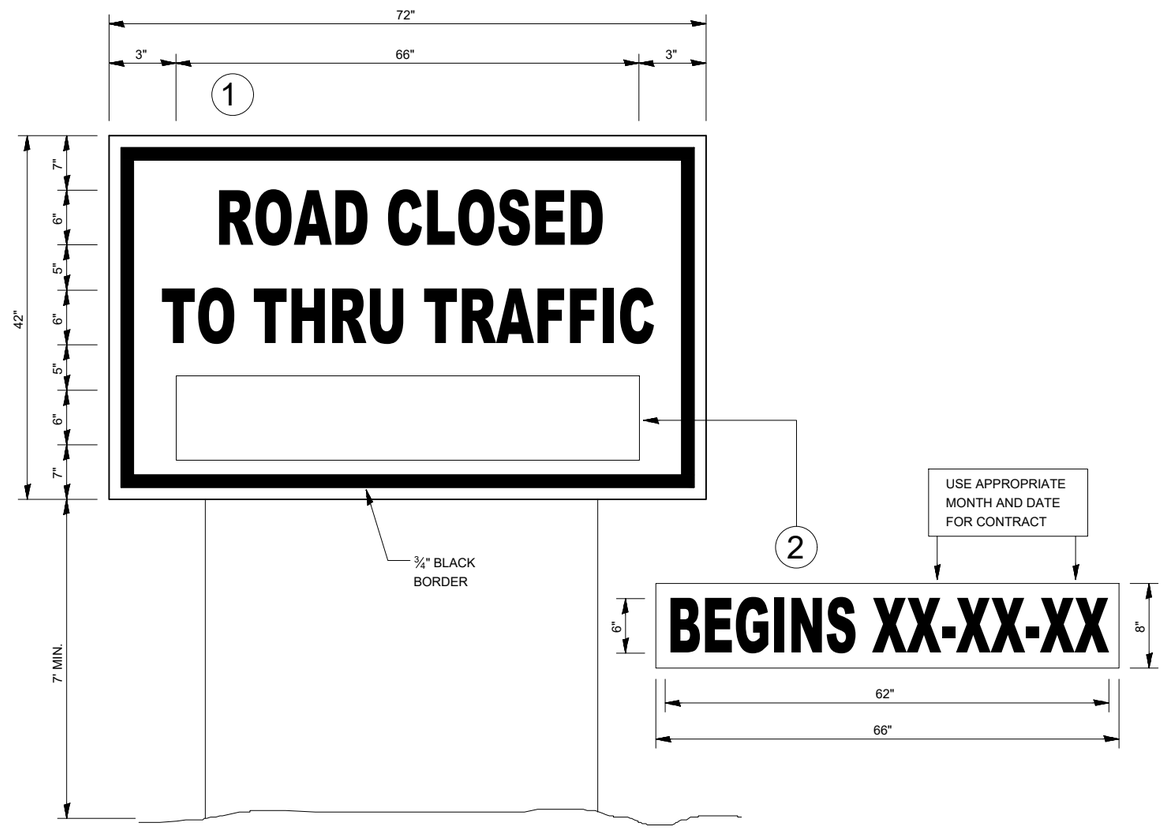
CHECKED BY: JKC	LEVEL	BY	DATE	DESCRIPTION					SCALE: AS NOTED / SHEET 33
DATE: 10/2021									FILE NO.: 111441.00 Y– / OF 34



TEMPORARY INFORMATION SIGNING

NOTES:

1. USE 6" D BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND.
2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN①WITH INSTALLED PANEL②A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE ROAD CLOSURE.
4. REMOVE PANEL②ON THAT DATE.
5. SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. WILL BE PAID FOR PER SQ FT AS "TEMPORARY INFORMATION SIGNING". EACH SIGN = 21 SQ FT AND THE DATE PANEL②WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

CONTRACT NO. 87882

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CHECKED BY: JKC	LEVEL / BY / DATE / DESCRIPTION						CURRENT AS OF: 03/24/2025
DATE: 10/2021							SCALE: AS NOTED / SHEET 34
							FILE NO.: 111441.00 Y– / OF 34