

08-03-2018 LETTING ITEM 060

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	48	1
		ILLINOIS	CONTRACT NO. 66E24	

**INDEX OF SHEETS**

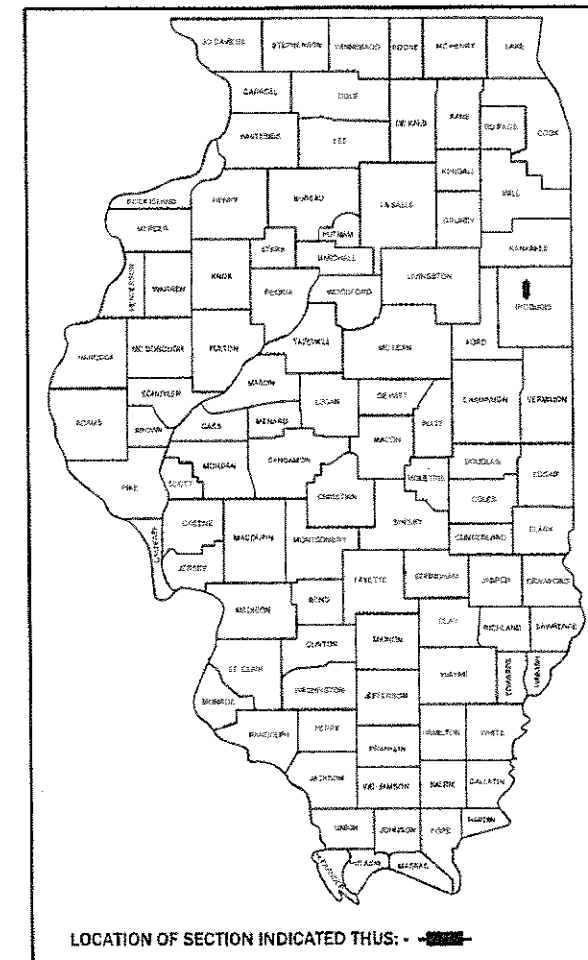
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FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

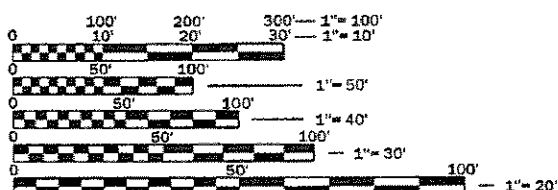
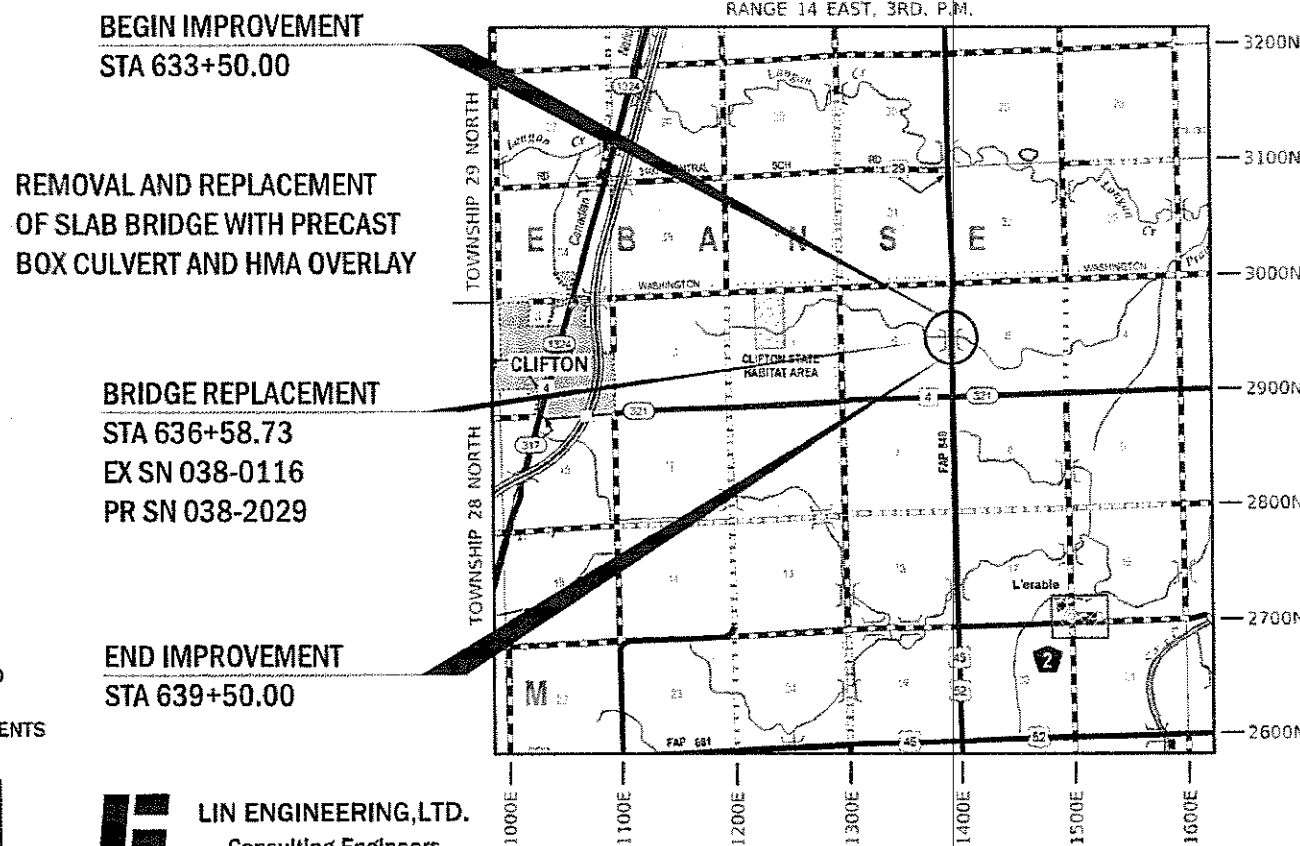
FAP ROUTE 840 (US 45/52)  
SECTION (138 BR-1)BR  
PROJECT STP-TPOQ(367)  
STRUCTURE REPLACEMENT  
IROQUOIS COUNTY

P-93-019-15  
D-93-044-17



C-93-079-17

RANGE 14 EAST, 3RD. P.M.

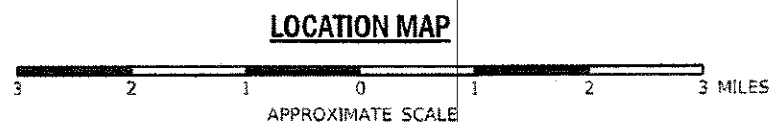


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

**Lin Engineering, Ltd.**  
Consulting Engineers  
Westmont, Illinois

**Farnsworth Group**  
2709 McGraw Drive  
Bloomington, Illinois 61704  
309/663-8435, 309/663-1571 fax



GROSS LENGTH = 600 FT. = 0.114 MILE  
NET LENGTH = 600 FT. = 0.114 MILE



SIGNATURE: *Eric R. Bachman*  
EXPIRES: 11/30/2019  
DATE: 01/2/2018

FUNCTIONAL CLASSIFICATION  
RURAL MINOR ARTERIAL  
2015 ADT = 3,700  
P.V.=84.2% S.U.=3.3% M.U.=12.5%

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED: 2-1 2018  
*K. Markel*  
REGIONAL ENGINEER

Mar 23 2018  
*Eric R. Bachman*  
ENGINEER OF DESIGN AND ENVIRONMENT

Mar 23 2018  
*Eric R. Bachman*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

DISTRICT 3 NO. (815) 434-6131  
PROJECT ENGINEER: BRAD DUNCAN, PE  
UNIT CHIEF: JESSY JEAN  
CONTRACT NO. 66E24

A:\2016\0160134.01 - UN IDOT DISTRICT 3 US 45-52

**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630101-10	STRONG POST GUARDRAIL ATTACHED TO CULVERT
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
642006	SHOULDER RUMBLE STRIPS, 8 IN.
666001-01	RIGHT-OF-WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**GENERAL NOTES**

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

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.

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

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

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

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

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

THE CONTRACTOR SHALL VERIFY AND CONFIRM WITH THE ENGINEER PRIOR TO ORDERING PIPE DRAIN 12" AND STORM SEWER PROTECTED, CLASS A, 12" MATERIALS.

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

- FRONTIER COMMUNICATIONS
- EASTERN ILLINI ELECTRIC

THE CONTRACTOR SHALL CONTACT J.U.I.E. AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

**COMMITMENTS:**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

REVIEWED BY: *Paul Borial*  
DISTRICT STUDIES & PLANS ENGINEER

DATE: 02/02/18

EXAMINED BY: *Kyle Vidale*  
DISTRICT CONSTRUCTION ENGINEER

*Michael A. Shea*  
DISTRICT MATERIALS ENGINEER

*Tom Huprey*  
DISTRICT OPERATIONS ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE  
AS BUILT INFORMATION

\_\_\_\_\_  
SUPERVISING CONSTRUCTION FIELD ENGINEER

\_\_\_\_\_  
RESIDENT ENGINEER / TECHNICIAN

START & END DATES  
OF CONSTRUCTION: \_\_\_\_\_

INSPECTORS: \_\_\_\_\_

**HMA MIXTURE REQUIREMENT TABLE**

LOCATION(S):	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	HMA LEVEL BINDER	HMA SURFACE & TOP LIFT SHOULDER	SHLD BOTTOM LIFTS & BASE COURSE	HMA BINDER (GRADE RAISE)
BINDER GRADE (PG):	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE:	MIXTURE C			
MIXTURE WEIGHT:	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A	N/A	N/A
DENSITY TEST METHOD:	SATISFACTION OF ENGINEER	CORES	CORES	CORES

CONTRACT 66E24

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				FEDERAL = 80% STATE = 20%
				0010
				S.N. 038-2029
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	57	57
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	70	70
20200100	EARTH EXCAVATION	CU YD	1,124	1,124
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	49	49
20400800	FURNISHED EXCAVATION	CU YD	1,514	1,514
20700220	POROUS GRANULAR EMBANKMENT	CU YD	456	456
25000210	SEEDING, CLASS 2A	ACRE	1.5	1.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	136	136
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	136	136
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	136	136
25100630	EROSION CONTROL BLANKET	SQ YD	6,970	6,970
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	432	432
28000305	TEMPORARY DITCH CHECKS	FOOT	144	144
28000400	PERIMETER EROSION BARRIER	FOOT	1,180	1,180

\* SPECIALTY ITEM

**Farnsworth**  
GROUP  
2709 MCGRAW DRIVE  
BLOOMINGTON, ILLINOIS 61704  
(309) 563-5435 / info@f-w.com

USER NAME = jjo  
PLOT SCALE = 2,000' / in.  
PLOT DATE = 2/1/2018

DESIGNED - JJO  
DRAWN - JJO  
CHECKED - PSA/ERB  
DATE - 01/12/18

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
SUMMARY OF QUANTITIES

SCALE: NTS SHEET 1 OF 8 SHEETS STA TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IRROUOIS	46	3
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				FEDERAL = 80% STATE = 20%
				0010
				S.N. 038-2029
28100107	STONE RIPRAP, CLASS A4	SQ YD	549	549
28200200	FILTER FABRIC	SQ YD	549	549
31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	184	184
31100910	SUBBASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	195	195
35501317	HOT-MIX ASPHALT BASE COURSE, 8 1/4"	SQ YD	184	184
35600708	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	SQ YD	690	690
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	794	794
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3,124	3,124
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	1	1
40600525	LEVELING BINDER (HAND METHOD), N50	TON	1	1
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	148	148
40600990	TEMPORARY RAMP	SQ YD	36	36
40603080	HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N50	TON	599	599
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	230	230

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\* SPECIALTY ITEM



USER NAME = jsoe	DESIGNED - JJO	REVISED -
PLOT SCALE = 2,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 2/1/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
SUMMARY OF QUANTITIES

SCALE: NTS SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	4
ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 68E24				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				FEDERAL = 80% STATE = 20%
				0010
				S.N. 038-2029
44000100	PAVEMENT REMOVAL	SQ YD	324	324
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	2,371	2,371
44004250	PAVED SHOULDER REMOVAL	SQ YD	32	32
48101600	AGGREGATE SHOULDERS, TYPE B, 8"	SQ YD	284	284
48203100	HOT-MIX ASPHALT SHOULDERS	TON	489	489
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
51500100	NAME PLATES	EACH	1	1
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	261	261
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2
60100945	PIPE DRAIN 12"	FOOT	50	50
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	100	100
61100605	MISCELLANEOUS CONCRETE	CU YD	6	6
61101013	STORM SEWER PROTECTED, CLASS A, 12"	FOOT	50	50
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA.	EACH	2	2

M

\* SPECIALTY ITEM



USER NAME = jeanj	DESIGNED - JJO	REVISED -
	DRAWN - JJO	REVISED -
PLOT SCALE = 2.0000 1/in.	CHECKED - PSA/ERB	REVISED -
PLOT DATE = 2/12/2018	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
SUMMARY OF QUANTITIES

SCALE: NTS SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	5
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				FEDERAL = 80% STATE = 20%
				0010
				S.N. 038-2029
61133200	FIELD TILE JUNCTION VAULTS, 3' DIA.	EACH	2	2
61133300	FIELD TILE JUNCTION VAULTS, 4' DIA.	EACH	2	2
61140200	STORM SEWERS (SPECIAL), 12"	FOOT	50	50
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	187.5	187.5
* 63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	62.5	62.5
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	722	722
64200108	SHOULDER RUMBLE STRIPS, 8"	FOOT	960	960
* 66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	8	8
* 66700205	PERMANENT SURVEY MARKERS, TYPE 1	EACH	1	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	LSUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1

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\* SPECIALTY ITEM



USER NAME = [jean]	DESIGNED - JJO	REVISED -
	DRAWN - JJO	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - PSA/ERB	REVISED -
PLOT DATE = 2/1/2018	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
SUMMARY OF QUANTITIES

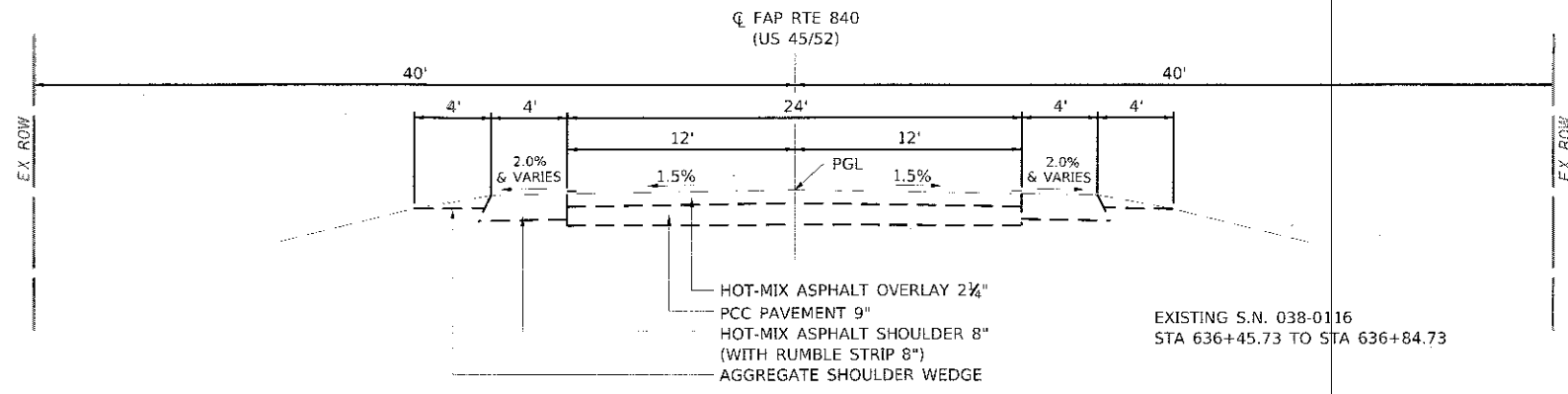
SCALE: NTS SHEET 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 8
CONTRACT NO. 66E24			ILLINOIS FED. AID PROJECT	





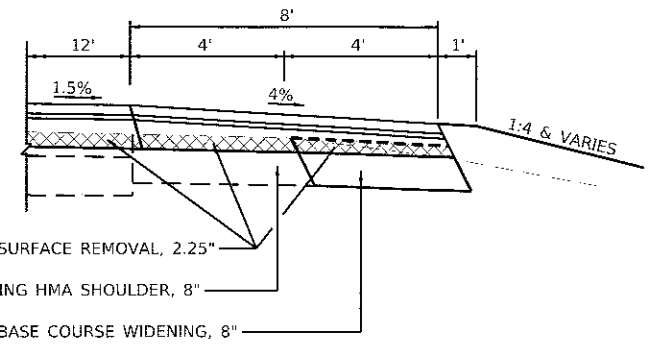




**EXISTING TYPICAL CROSS SECTION**

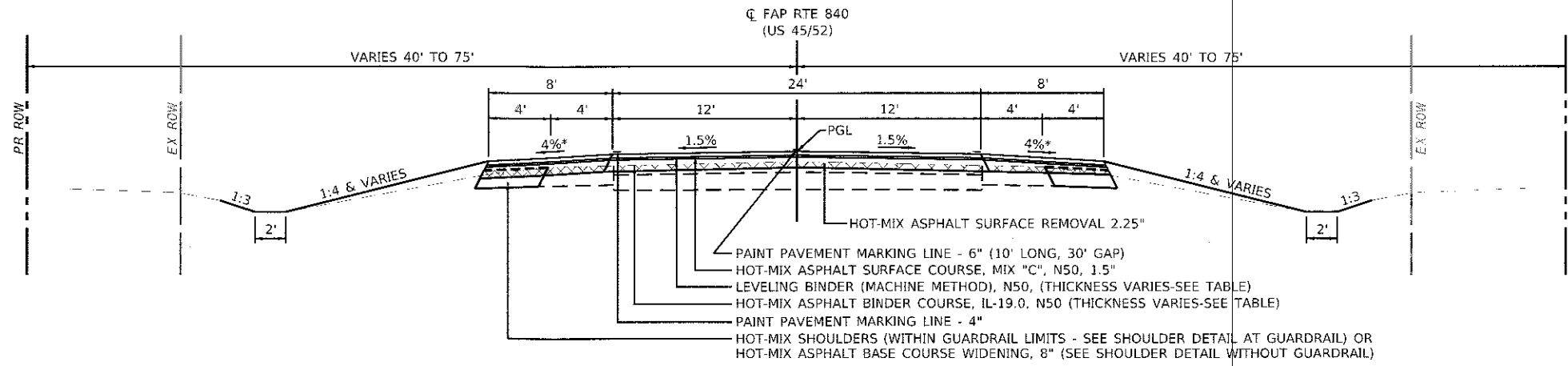
(LOOKING SOUTH)  
 F.A.P. RTE. 840 (U.S. 45/52)  
 STA 633+50 TO STA 639+50

EXISTING S.N. 038-0116  
 STA 636+45.73 TO STA 636+84.73



**SHOULDER DETAIL WITHOUT GUARDRAIL**

F.A.P. RTE. 840 (U.S. 45/52)

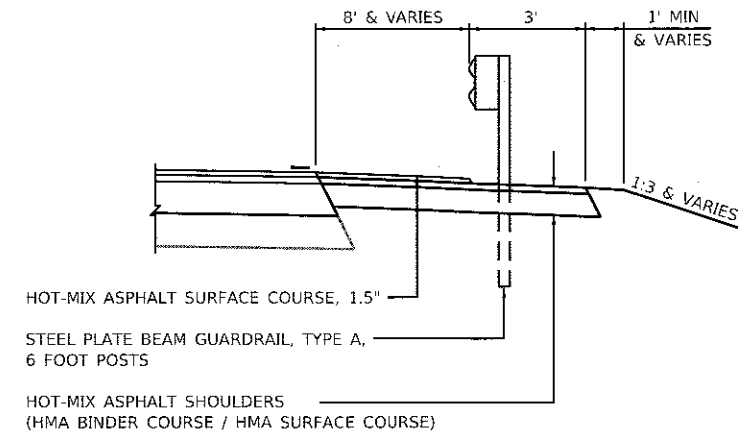


**PROPOSED TYPICAL CROSS SECTION 1**

(LOOKING SOUTH)  
 F.A.P. RTE. 840 (U.S. 45/52)  
 STA 633+50 TO STA 636+25.47  
 STA 636+91.91 TO STA 639+50

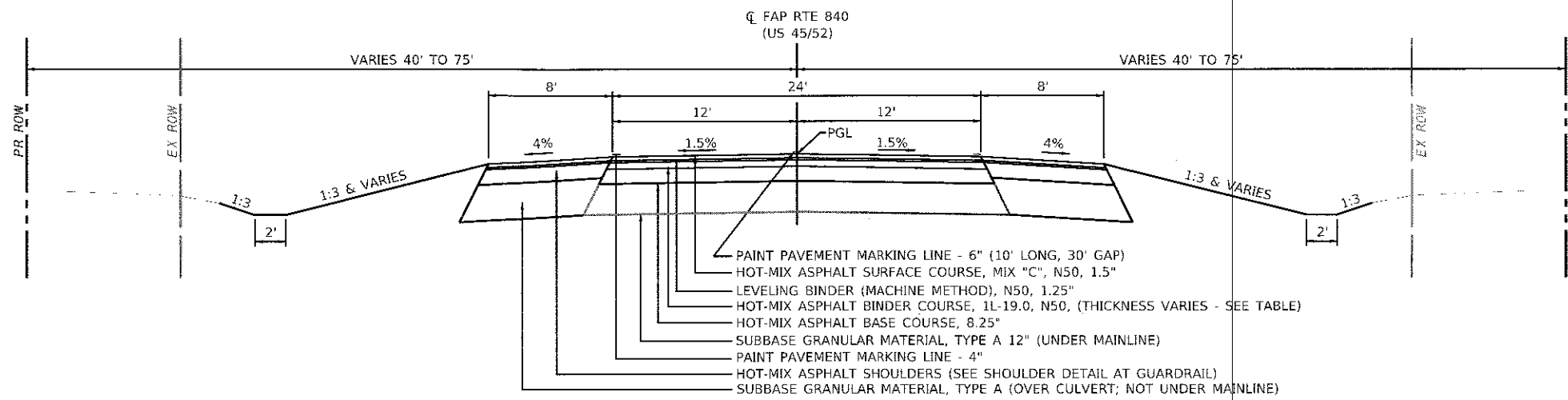
\* RT SHOULDER SLOPE  
 TRANSITIONS FROM  
 STA 633+50.00 (EX 2.0% TYP)  
 TO STA 633+70.00 (4.0%)  
 AND STA 639+30.00 (4.0%)  
 TO STA 639+50.00 (EX 2.0% TYP)

\* LT SHOULDER SLOPE  
 TRANSITIONS FROM  
 STA 633+50.00 (EX 2.0% TYP)  
 TO STA 633+70.00 (4.0%)  
 AND STA 639+30.00 (4.0%)  
 TO STA 639+50.00 (EX 2.0% TYP)



**SHOULDER DETAIL AT GUARDRAIL**

F.A.P. RTE. 840 (U.S. 45/52)



**PROPOSED TYPICAL CROSS SECTION 2**

(LOOKING SOUTH)  
 F.A.P. RTE. 840 (U.S. 45/52)  
 STA 636+25.47 TO STA 636+91.91

GUARDRAIL	LOCATION
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	STA 635+18.10 RT TO STA 635+68.10 RT
	STA 635+74.35 LT TO STA 636+24.35 LT
	STA 636+93.10 RT TO STA 637+43.10 RT
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STA 637+49.35 LT TO STA 637+99.35 LT
	STA 635+68.10 RT TO STA 636+43.10 RT
	STA 636+24.35 LT TO STA 636+43.10 LT
STRONG POST GUARDRAIL ATTACHED TO CULVERT	STA 636+74.35 RT TO STA 636+93.10 RT
	STA 636+74.35 LT TO STA 637+49.35 LT
	STA 636+43.10 RT TO STA 636+74.35 RT
	STA 636+43.10 LT TO STA 636+74.35 LT

**PAVING THICKNESS TABLE**

STATION	EXISTING C.L. ELEVATION	EXISTING C.L. AFTER 2.25" MILLING	PROPOSED C.L. ELEVATION	DIFFERENCE BETWEEN PROPOSED C.L. TO MILLED C.L.	PROPOSED HMA SURFACE COURSE THICKNESS	PROPOSED HMA BINDER COURSE THICKNESS	PROPOSED HMA LEVELING BINDER THICKNESS	TOP GRANULAR MATERIAL SUBBASE ELEVATION	TOP HMA BASE COURSE ELEVATION	TOP CONCRETE BOX SLAB ELEVATION
				FEET	FEET	FEET	FEET			
633+50.00	636.93	636.74	636.93	0.19	0.13	0	0.06	N/A	N/A	N/A
633+75.00	636.95	636.76	636.99	0.23	0.13	0	0.1	N/A	N/A	N/A
634+00.00	636.97	636.78	637.05	0.27	0.13	0	0.14	N/A	N/A	N/A
634+25.00	636.93	636.74	637.11	0.37	0.13	0.19	0.05	N/A	N/A	N/A
634+50.00	636.89	636.70	637.18	0.48	0.13	0.25	0.1	N/A	N/A	N/A
634+75.00	636.86	636.67	637.26	0.59	0.13	0.36	0.1	N/A	N/A	N/A
635+00.00	636.82	636.63	637.34	0.71	0.13	0.48	0.1	N/A	N/A	N/A
635+25.00	636.78	636.59	637.43	0.84	0.13	0.61	0.1	N/A	N/A	N/A
635+50.00	636.75	636.56	637.53	0.97	0.13	0.74	0.1	N/A	N/A	N/A
635+75.00	636.71	636.52	637.62	1.1	0.13	0.87	0.1	N/A	N/A	N/A
636+00.00	636.68	636.49	637.69	1.2	0.13	0.97	0.1	N/A	N/A	N/A
636+25.47	636.63	636.44	637.73	1.29	0.13	1.06	0.1	N/A	N/A	N/A
636+25.47			637.73		0.13	0.26	0.1	N/A	N/A	N/A
636+58.73			637.75		0.13	0.28	0.1	636.55	637.24	N/A
636+75.00			637.74		0.13	0.27	0.1	636.55	637.24	635.55
636+91.91			637.72		0.13	0.25	0.1	636.55	637.24	N/A
636+91.91	636.54	636.35	637.72	1.37	0.13	1.14	0.1	636.55	637.24	N/A
637+00.00	636.53	636.34	637.7	1.36	0.13	1.13	0.1	N/A	N/A	N/A
637+25.00	636.58	636.39	637.64	1.25	0.13	1.02	0.1	N/A	N/A	N/A
637+50.00	636.63	636.44	637.55	1.11	0.13	0.88	0.1	N/A	N/A	N/A
637+75.00	636.69	636.50	637.44	0.94	0.13	0.71	0.1	N/A	N/A	N/A
638+00.00	636.74	636.55	637.34	0.79	0.13	0.56	0.1	N/A	N/A	N/A
638+25.00	636.77	636.58	637.24	0.66	0.13	0.43	0.1	N/A	N/A	N/A
638+50.00	636.80	636.61	637.14	0.53	0.13	0.3	0.1	N/A	N/A	N/A
638+75.00	636.83	636.64	637.04	0.4	0.13	0.19	0.08	N/A	N/A	N/A
639+00.00	636.86	636.67	636.95	0.28	0.13	0	0.15	N/A	N/A	N/A
639+25.00	636.82	636.63	636.87	0.24	0.13	0	0.11	N/A	N/A	N/A
639+50.00	636.78	636.59	636.78	0.19	0.13	0	0.06	N/A	N/A	N/A

NOTE: MINIMUM THICKNESS OF HMA BINDER COURSE IS 0.19' (2.25").

**STRUCTURAL PAVEMENT DESIGN INFORMATION**

STRUCTURAL DESIGN TRAFFIC: Year 2029

PV = 3,660 SU = 143 MU = 543

ROAD/STREET CLASSIFICATION: Class II

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:

P = 50% S = 50% M = 50%

TRAFFIC FACTOR: Actual TF = 2.26 Minimum TF = 3.17

PG GRADE: Top Binder = PG 64-22 Lower Binder = PG 64-22  
Surface = PG 64-22

SUBGRADE SUPPORT RATING:

SSR = POOR

TREE REMOVAL			
LOCATION		TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
		20100110	20100210
STATION	OFFSET	UNIT	UNIT
632+97.00	35.0' RT		40
633+92.15	39.1' LT	6	
634+02.02	39.1' LT	8	
636+10.00	34.3' RT		30
636+11.00	27.7' RT	7	
636+11.16	37.5' LT	6	
636+13.30	27.7' RT	6	
636+13.40	29.5' RT	7	
637+03.70	48.7' RT	8	
637+14.70	34.5' RT	9	
TOTAL		57	70

SCHEDULE OF EARTHWORK				
LOCATION	EARTH EXCAVATION	ESTIMATED CUT MATERIAL FOR EMBANKMENT ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	FURNISHED EXCAVATION
		20200100		20400800
STATION TO STATION	CU YD	CU YD	CU YD	CU YD
631+88.00 TO 633+50.00 (TEMP. WIDENING)	38	28		
633+00.00 TO 640+00.00 (MAINLINE IMPROVEMENT)	1,049	787	2,357	1,514
639+50.00 TO 641+12.00 (TEMP. WIDENING)	37	28		
TOTAL	1,124	843	2,357	1,514

LANDSCAPING ITEMS								
LOCATION					SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
					25000210	25000400	25000500	25000600
STATION	OFFSET	TO	STATION	OFFSET	ACRE	POUND	POUND	POUND
633+00.00	LT		640+00.00	LT	0.75	68	68	68
633+00.00	RT		640+00.00	RT	0.75	68	68	68
TOTAL					1.5	136	136	136

SCHEDULE OF EROSION CONTROL					
LOCATION		EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER
		25100630	28000250	28000305	28000400
STATION TO STATION	OFFSET	SQ YD	POUND	FOOT	FOOT
633+00.00 TO 640+00.00	LT	3,485	216		
633+00.00 TO 640+00.00	RT	3,485	216		
633+10.00 TO 636+33.00	RT				329
633+10.00 TO 636+33.00	LT				329
634+00.00	LT/RT			24	
635+00.00	LT/RT			24	
636+20.00	LT/RT			24	
636+84.00 TO 639+40.00	LT				261
636+84.00 TO 639+40.00	RT				261
637+00.00	LT/RT			24	
638+00.00	LT/RT			24	
639+00.00	LT/RT			24	
TOTAL		6,970	432	144	1,180

REMOVAL ITEMS											
LOCATION						PAVMENT REMOVAL	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT REMOVAL 2 1/4"	GUARDRAIL REMOVAL	RAISED REFLECTIVE PAVMENT MARKER REMOVAL	APPROACH SLAB REMOVAL
						44000100	44004250	44000158	63200310	78300200	Z0004552
STATION	OFFSET	TO	STATION	OFFSET	TO	SQ YD	SQ YD	SQ YD	FOOT	EACH	SQ YD
631+88.00	RT		633+50.00	RT		72					
631+88.00	LT		633+50.00	LT		72					
633+50.00			636+25.50					1224			
633+50.00			639+50.00							9	
634+31.70	23.9' RT		637+91.00	22.9' RT					360		
635+16.70	20.0' LT		638+78.10	22.7' RT					362		
635+57.89	LT		638+15.81	LT							
636+25.47			636+43.73			20	16				37
636+73.73			636+91.91			20	16				38
636+91.91			639+50.00					1147			
639+50.00	LT		641+03.00	LT		68					
639+50.00	RT		641+12.00	RT		72					
TOTAL						324	32	2371	722	9	75

PAVEMENT ITEMS													
LOCATION	HOT-MIX ASPHALT BASE COURSE, 8 1/4"	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	LEVELING BINDER (HAND METHOD), N50	LEVELING BINDER (MACHINE METHOD), N50	TEMPORARY RAMP	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	HOT-MIX ASPHALT SHOULDERS	SHOULDER RUMBLE STRIPS, 8"	
		35501317	35600708	40600275	40600290	40600400	40600525	40600625	40600990	40603080	40603310	48203100	64200108
STATION TO STATION	SQ YD	SQ YD	POUND	POUND	TON	TON	TON	TON	SQ YD	TON	TON	TON	FOOT
631+88.00 TO 636+43.73 (RT)			203										
631+88.00 TO 635+57.90 (LT)			164										
633+50.00 TO 636+25.47													
633+50.00 TO 639+50.00					2,671	1	1	148	36	599		960	
635+01.64 TO 637+59.56 (RT)					226						245		
635+57.89 TO 638+15.81 (LT)					227						244		
636+25.47 TO 636+91.91	184		794							30			
636+73.73 TO 641+12.00 (RT)													
636+91.91 TO 639+50.00										97			
638+15.80 TO 641+00.00 (LT)					128								
TOTAL	184	690	794	3,124	1	1	148	36	599	230	489	960	

AGGREGATE ITEMS				
LOCATION	SUBBASE GRANULAR MATERIAL, TYPE A	SUBBASE GRANULAR MATERIAL, TYPE A, 12"	AGGREGATE SHOULDERS, TYPE B, 8"	
		31100100	31100910	48101600
STATION TO STATION	TON	SQ YD	SQ YD	
631+88.00 TO 633+50.00 (RT)			72	
631+88.00 TO 633+50.00 (LT)			72	
636+25.47 TO 636+91.91	184		195	
639+50.00 TO 641+12.00 (RT)			72	
639+50.00 TO 641+03.00 (LT)			68	
TOTAL	184	195	284	



USER NAME = dmeyer  
 DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERB  
 DATE - 01/12/18

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
 SCHEDULE OF QUANTITIES

SCALE: NTS SHEET 1 OF 2 SHEETS STA. 633+50 TO STA. 639+50

F.A.P. RTE. 840 SECTION (138 BR-1)BR COUNTY IROQUOIS TOTAL SHEETS 46 SHEET NO. 11 CONTRACT NO. 66E24 ILLINOIS FED. AID PROJECT

GUARDRAIL ITEMS										
LOCATION					STEEL PLATE GUARDRAIL, TYPE A, 6 FOOT POSTS	STRONG POST GUARDRAIL ATTACHED TO CULVERT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TERMINAL MARKER, DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE B	
STATION	OFFSET	TO	STATION	OFFSET	63000001	63000030	63100169	72501000	78200006	
STATION	OFFSET	TO	STATION	OFFSET	FOOT	FOOT	EACH	EACH	EACH	
635+18.10	RT		635+68.10	RT			1	1	1	
635+68.10	RT		636+43.10	RT	75				2	
635+74.35	LT		636+24.35	RT			1	1		
636+24.35	LT		636+43.10	LT	18.75				1	
636+43.10	RT		636+74.35	RT		31.25				
636+43.10	LT		636+74.35	LT		31.25			1	
636+74.35	RT		636+93.10	RT	18.75				1	
636+74.35	LT		637+49.35	LT	75				2	
636+93.10	RT		637+43.10	RT			1	1		
637+49.35	LT		637+99.35	LT			1	1		
TOTAL					187.5	62.5	4	4	8	

TEMPORARY PAVEMENT MARKING							
LOCATION					SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL - WATER BLASTING
STATION	OFFSET	TO	STATION	OFFSET	70300100	70300150	X0327980
STATION	OFFSET	TO	STATION	OFFSET	FOOT	SQ FT	SQ FT
633+50.00	LT/RT		639+50.00	LT/RT	72	24	475
TOTAL					72	24	475

IMPACT ATTENUATOR ITEMS		
LOCATION	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (SEVERE USE, NARROW), TEST LEVEL 3
STATION	EACH/OS	EACH/OS
632+12.50	1/LT	1/RT
640+87.50	1/LT	1/RT
TOTAL		

PAVEMENT MARKING ITEMS								
LOCATION						PAINT PAVEMENT MARKING - LINE 4"	PAINT PAVEMENT MARKING - LINE 6"	RAISED REFLECTIVE PAVEMENT MARKER
STATION	OFFSET	TO	STATION	OFFSET	DESCRIPTION	78001110	78001130	78100100
STATION	OFFSET	TO	STATION	OFFSET	DESCRIPTION	FOOT	FOOT	EACH
633+50.00	CL		639+50.00	CL	YELLOW SKIP		300	9
633+50.00	LT/RT		639+50.00	LT/RT	WHITE EDGE LINE	2,400		
TOTAL						2,400	300	9

2 APPLICATIONS OF PAINT PAVEMENT MARKING PAY ITEMS

TEMPORARY TRAFFIC CONTROL								
LOCATION				TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	
STATION	OFFSET	TO	STATION	OFFSET	70106500	70106700	70400100	
STATION	OFFSET	TO	STATION	OFFSET	EACH	EACH	FOOT	
STAGE I CONSTRUCTION								
613+37.00	RT		623+37.00	RT		3		
630+87.00	RT				1*			
631+12.00	LT				1*			
632+12.50	LT		640+87.50	LT			875	
641+18.00	LT				1*			
641+32.00	RT				1*			
641+79.00	RT				1*			
642+04.00	LT				1*			
649+54.00	LT		659+54.00	LT		3		
STAGE II CONSTRUCTION								
613+43.00	RT		623+43.00	RT		3		
630+93.00	RT				1*			
631+18.00	LT				1*			
632+12.50	RT		640+87.50	RT			875	
641+18.00	LT				1*			
641+32.00	RT				1*			
641+91.00	RT				1*			
642+16.00	LT				1*			
649+66.00	LT		659+66.00	LT		3		
TOTAL					1	12	875	875

\* SPECIFIES LOCATION OF SIGNALS

PINNING TEMPORARY CONCRETE BARRIER			
			X7040125
STATION	TO	STATION	EACH
STAGE I CONSTRUCTION			
632+12.50		632+25.00	6
632+25.00		632+50.00	3
635+87.50		636+12.50	3
636+12.50		637+00.00	21
637+00.00		637+25.00	3
640+50.00		640+75.00	3
640+75.00		640+87.50	6
STAGE II CONSTRUCTION			
632+12.50		632+25.00	6
632+25.00		632+50.00	3
635+87.50		636+12.50	3
636+12.50		637+00.00	21
637+00.00		637+25.00	3
640+50.00		640+75.00	3
640+75.00		640+87.50	6
TOTAL			90



USER NAME = dimeyer  
 DESIGNED - JJO  
 DRAWN - JJO  
 PLOT SCALE = 2.0000 / in.  
 CHECKED - PSA/ERB  
 PLOT DATE = 1/12/2018  
 DATE - 01/12/18

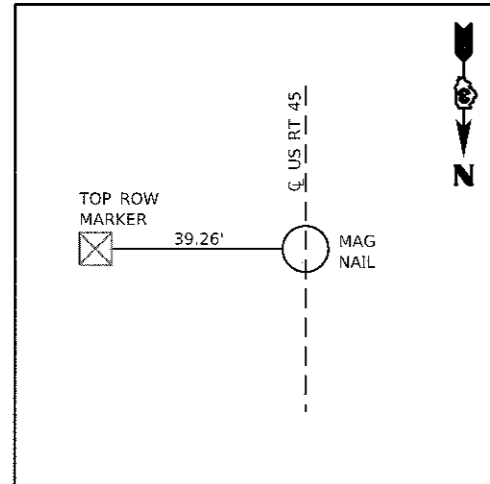
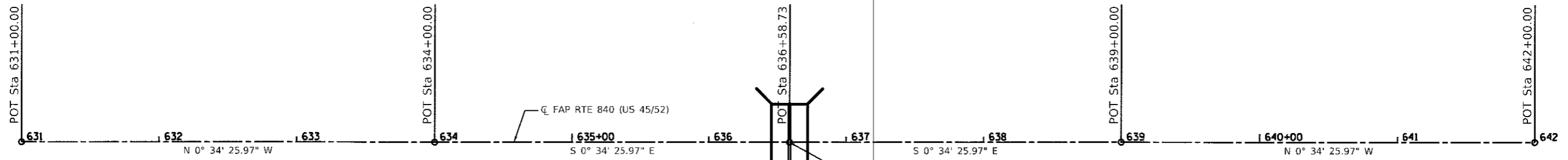
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 REVISION -  
 REVISION -  
 REVISION -  
 REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

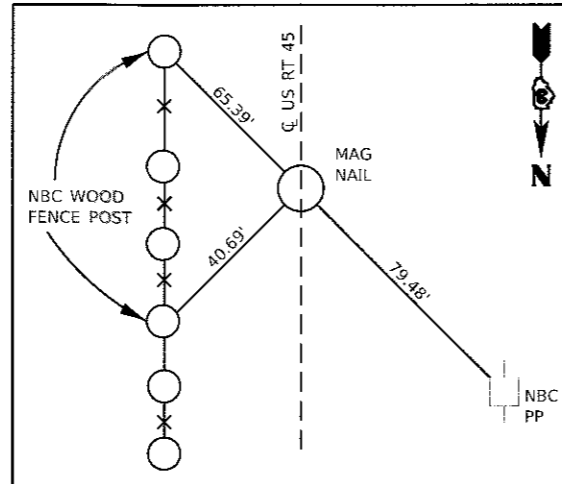
FAP ROUTE 840 (US 45/52)  
 SCHEDULE OF QUANTITIES

SCALE: NTS SHEET 2 OF 2 SHEETS STA. 633+50 TO STA. 639+50

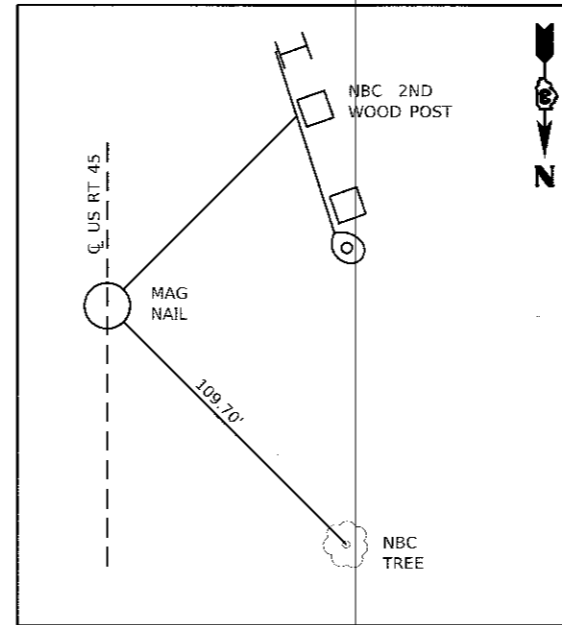
F.A.P. RTE. 840 SECTION (188 BR-1)BR COUNTY IROQUOIS TOTAL SHEETS 46 SHEET NO. 12 CONTRACT NO. 66E24 ILLINOIS FED. AID PROJECT



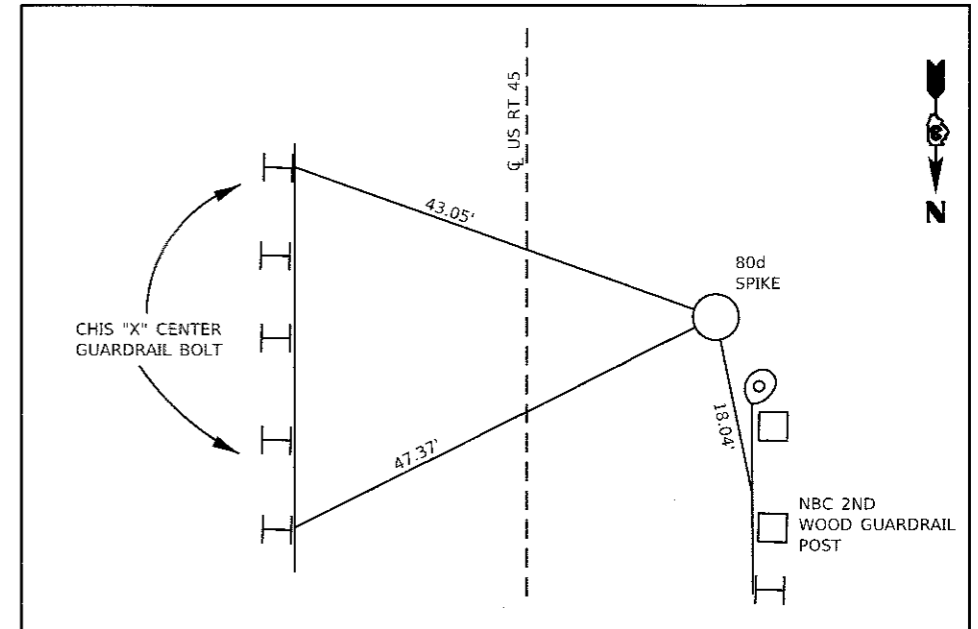
**POT STA. 627+26.48**  
 N 1556945.7700  
 E 1113159.0462



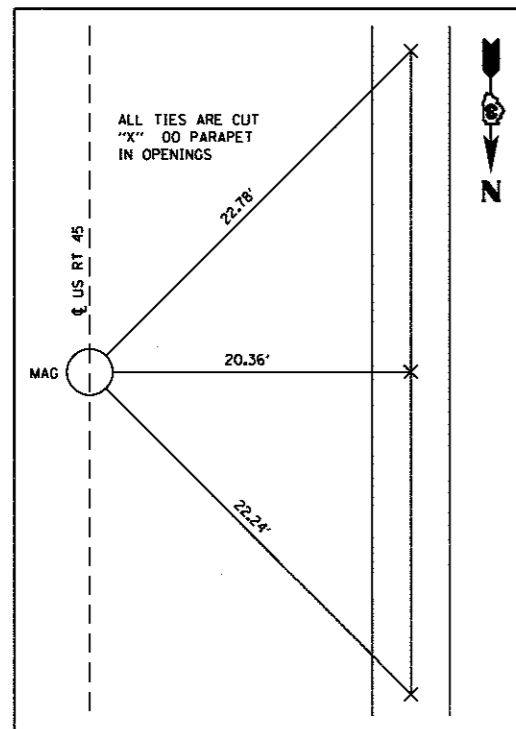
**POT STA. 631+00.00**  
 N 1556572.2687  
 E 1113162.7873



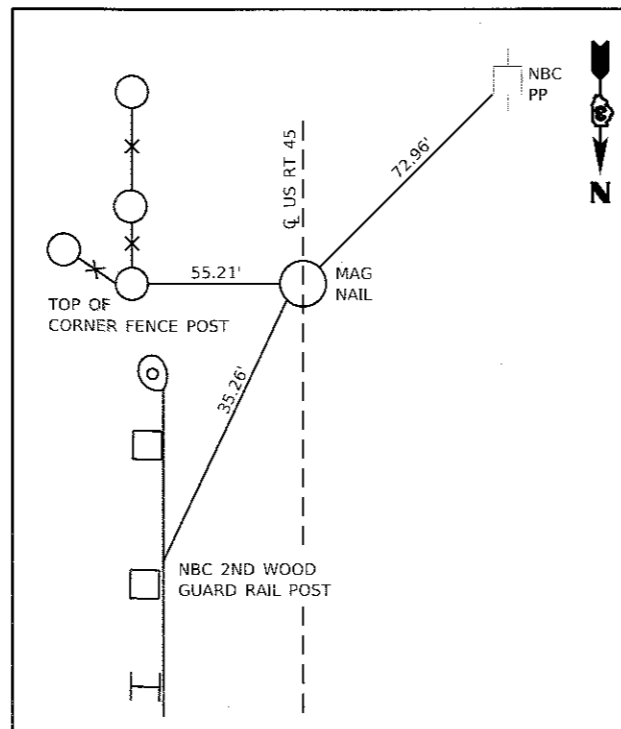
**POT STA. 634+00.00**  
 N 1556272.2838  
 E 1113165.7921



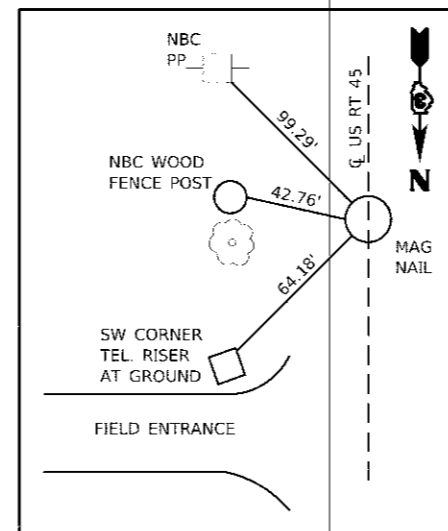
**CONTROL POINT #45525**  
 80d SPIKE  
 STA. 638+02.95/20.94' RT.  
 N 1555869.1410  
 E 1113148.8870  
 ELEV. 635.475



**POT STA. 636+58.73**  
 N 1556013.5667  
 E 1113168.3835



**POT STA. 639+00.00**  
 N 1555772.3088  
 E 1113170.8001



**POT STA. 642+00.00**  
 N 1555472.9239  
 E 1113173.8048

**BENCHMARK #2**  
 ELEV. 636.20  
 CUT "□" TOP EAST CONCRETE HEADWALL,  
 15" RCCP UNDER OLD ROAD.  
 APPROX. STA. 618+12/8.8' LT.  
 APPROX. 1845' NORTH OF CL STRUCTURE

**BENCHMARK #5**  
 ELEV. 634.16  
 RAILROAD SPIKE IN POWER POLE,  
 STA. 632+54.21/37.85' RT.

**BENCHMARK #7**  
 ELEV. 635.92  
 CUT "□" TOP NORTHWEST  
 WINGWALL S.N. 038-0116,  
 STA. 636+46.03/22.04' RT.

CONTRACT NO. 66E24

US RTES 45/52 LOCATION: DRAINAGE DITCH, 3.5 MILES NORTH OF US 52 IROQUOIS COUNTY

INDEX NUMBER	DESCRIPTION	EXISTING MONUMENT TYPE	PROPOSED MONUMENT TYPE	MONUMENT RECORD TO BE RECORDED	RESPONSIBILITY
045101	W QTR COR SECTION 5, T28N, R13W, 2ND PM	NONE	TYPE 1	YES	1

COORDINATE FOR LISTED MONUMENT IS KNOWN. PRE CONSTRUCTION TIES BY THE R.E. ARE NOT REQUIRED. THE R.E. MUST TIE AND BRING TO THE ATTENTION OF THE PLATS AND PLANS MANAGER ANY ADDITIONAL UNLISTED MONUMENTS FOUND. UPON PAVING COMPLETION, THE R.E. WILL DIRECT THE PLATS AND PLANS MANAGER TO STAKE THE LOCATION FOR MONUMENT CORING. PLATS AND PLANS WILL PREPARE AND RECORD THE REQUIRED MONUMENT RECORD.

- RESPONSIBILITY:
- 1) RESIDENT TO RE-ESTABLISH MONUMENT (PAY ITEM REQUIRED. PERMANENT SURVEY MARKER, TYPE 1)
  - 2) PLATS AND PLANS TO RE-ESTABLISH MONUMENT

**Farnsworth GROUP**  
 2709 MCGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-9435 / info@f-w.com

USER NAME = dmeyer  
 PLOT SCALE = 80.0000' / in.  
 PLOT DATE = 1/12/2018

DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERS  
 DATE - 01/12/18

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)  
 ALIGNMENT, TIES AND BENCHMARKS

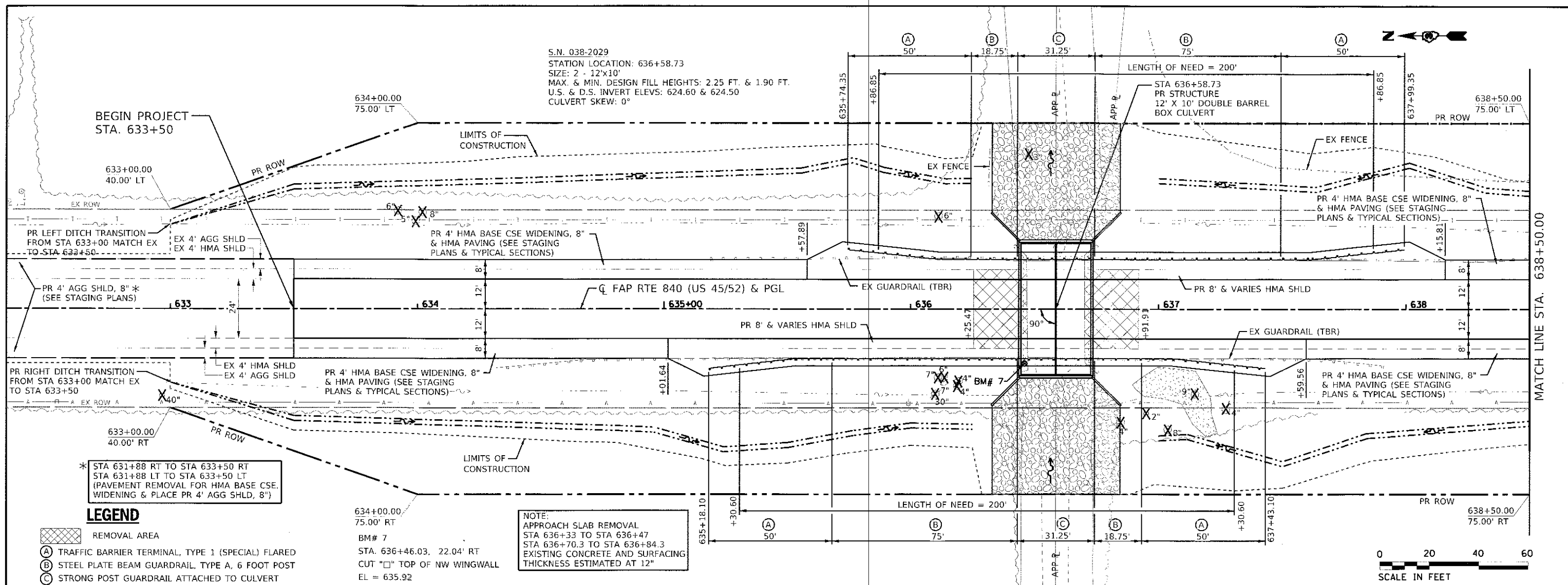
SCALE: NTS SHEET 1 OF 1 SHEETS STA. 633+50 TO STA. 639+50

F.A.P. RTE. 840 SECTION (138 BR-1)BR COUNTY IROQUOIS TOTAL SHEETS 46 SHEET NO. 13 CONTRACT NO. 66E24 ILLINOIS FED. AID PROJECT

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 CAD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 B.M. NOTED: \_\_\_\_\_  
 STRUCTURE NOTATION: CHFD  
 NO. \_\_\_\_\_

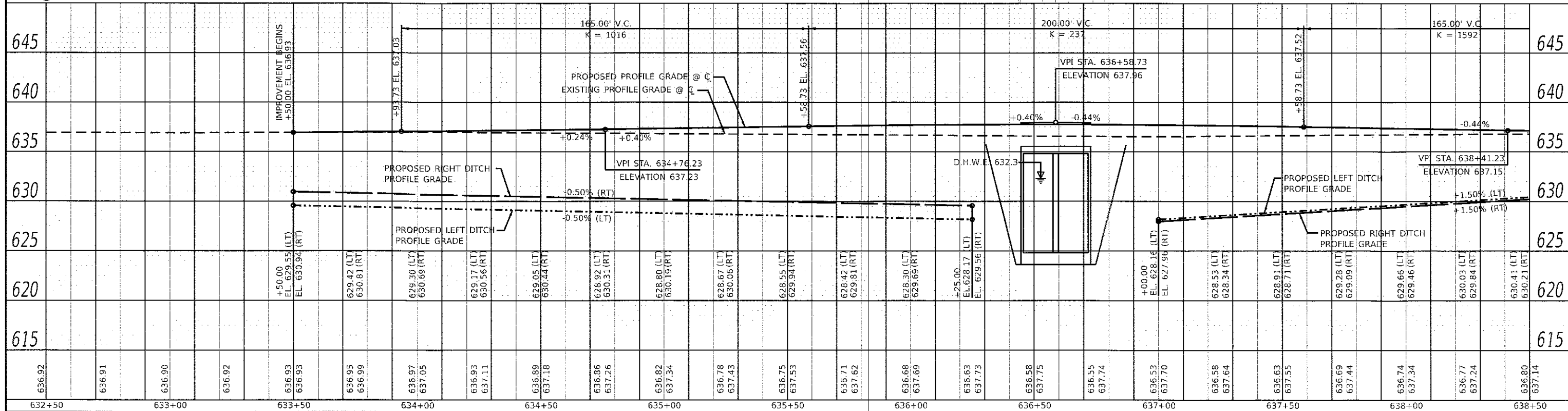
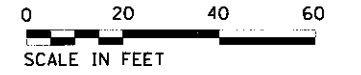
S.N. 038-2029  
 STATION LOCATION: 636+58.73  
 SIZE: 2 - 12"x10"  
 MAX. & MIN. DESIGN FILL HEIGHTS: 2.25 FT. & 1.90 FT.  
 U.S. & D.S. INVERT ELEV.: 624.60 & 624.50  
 CULVERT SKEW: 0°



**LEGEND**

- REMOVAL AREA
- (A)** TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED
- (B)** STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POST
- (C)** STRONG POST GUARDRAIL ATTACHED TO CULVERT

NOTE:  
 APPROACH SLAB REMOVAL  
 STA 636+33 TO STA 636+47  
 STA 636+70.3 TO STA 636+84.3  
 EXISTING CONCRETE AND SURFACING  
 THICKNESS ESTIMATED AT 12"



**Farnsworth GROUP**  
 2708 MCGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 653-8435 / info@fsg.com

USER NAME = dmeyer  
 PLOT SCALE = 40.0000' / in.  
 PLOT DATE = 1/12/2018

DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERB  
 DATE - 01/12/18

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

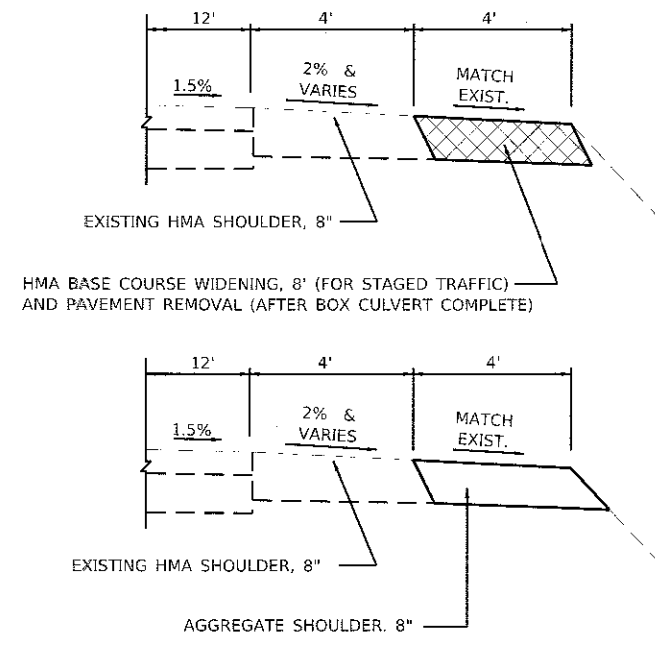
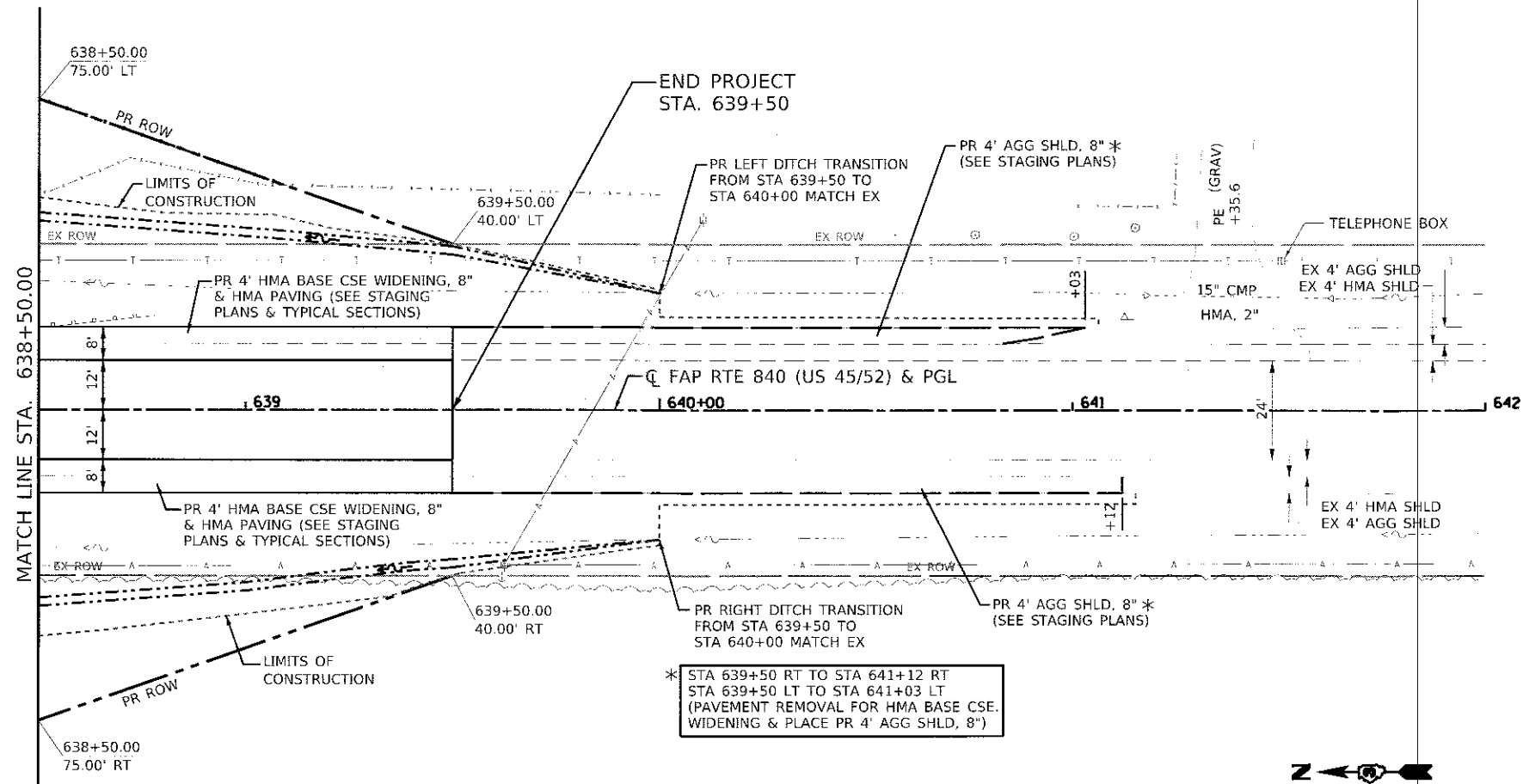
**FAP ROUTE 840 (US 45/52)  
 PLAN & PROFILE**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 633+50.00 TO STA. 638+50.00

F.A.P. RTE. 840 SECTION (138 BR-1)BR COUNTY IROQUOIS TOTAL SHEETS 46 SHEET NO. 14 CONTRACT NO. 66E24 ILLINOIS FED. AID PROJECT

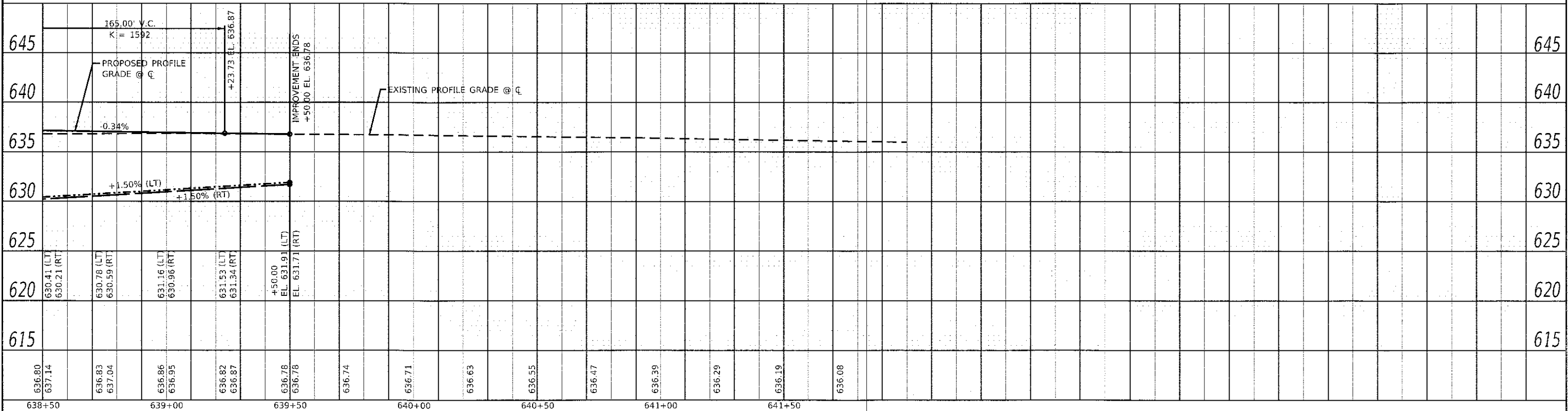
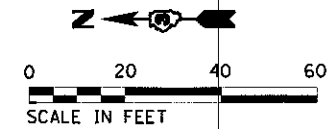
DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SUPERVISOR: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 ALIGNMENT CHECKED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SUPERVISOR: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_



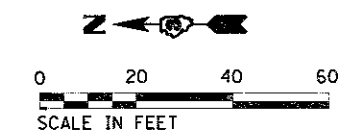
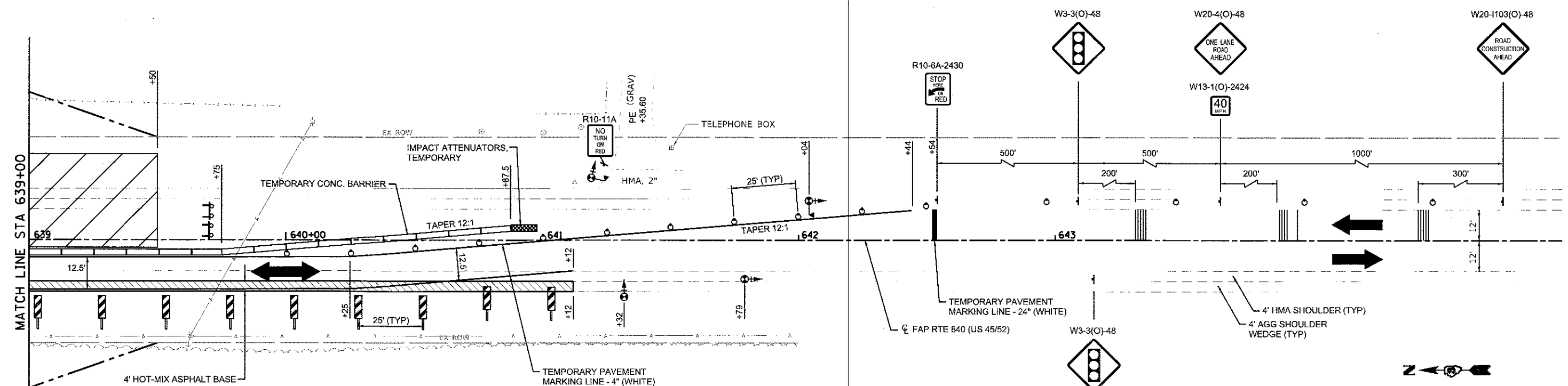
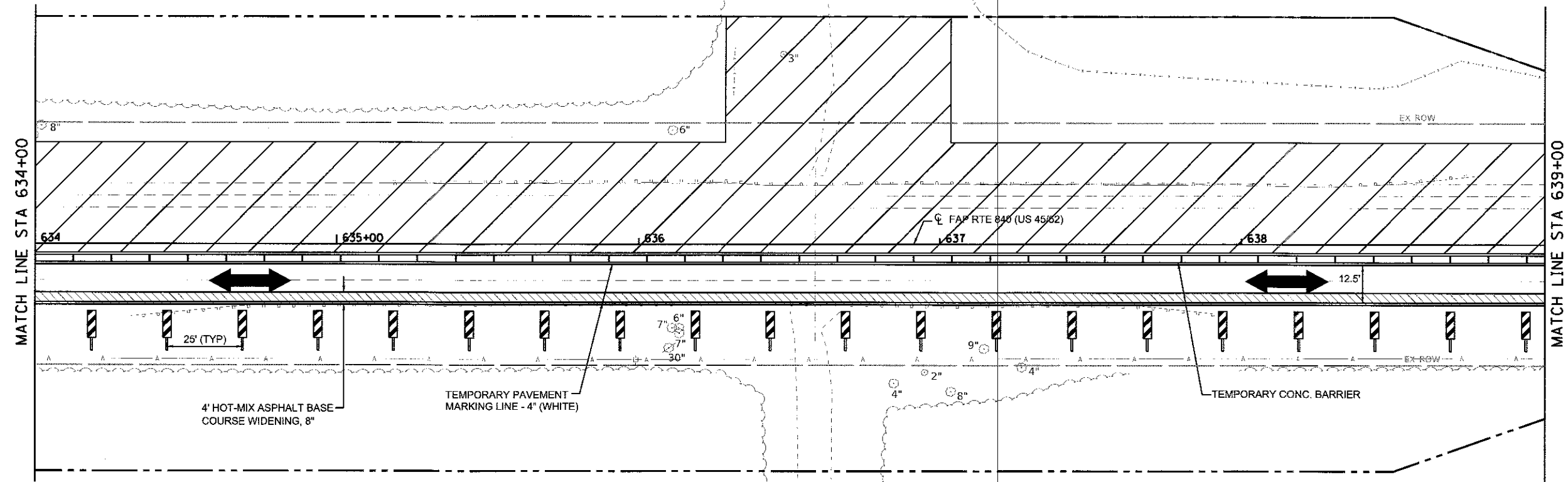
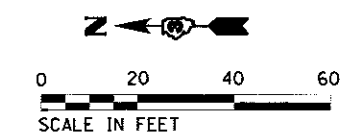
**DETAIL WITH AGGREGATE SHOULDER OUTSIDE PROJECT LIMITS**

F.A.P. RTE. 840 (U.S. 45/52)  
 STA 631+88 TO STA 633+50 LT/RT  
 STA 639+50 TO STA 641+12 RT  
 STA 639+50 TO STA 641+03 LT









NOTES:  
 1. SEE STANDARD 701321 FOR ITEMS AND DETAILS NOT SHOWN  
 2. SEE SHEET #16 FOR MAINTENANCE OF TRAFFIC LEGEND.

**Farnsworth GROUP**  
 2705 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 883-8435 / info@f-w.com

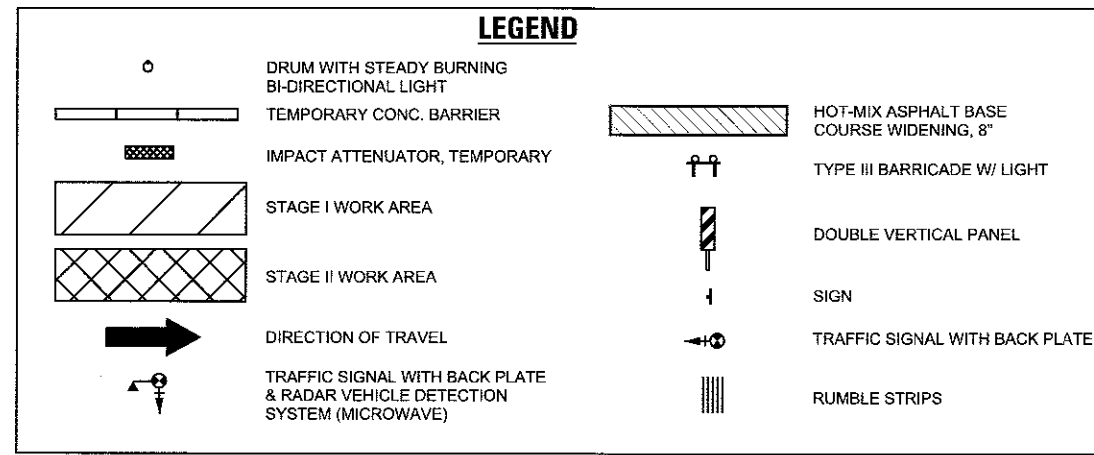
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 DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERB  
 DATE - 01/12/18  
 PLOT SCALE = 40.0000" = 1 in.  
 PLOT DATE = 1/12/2018

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

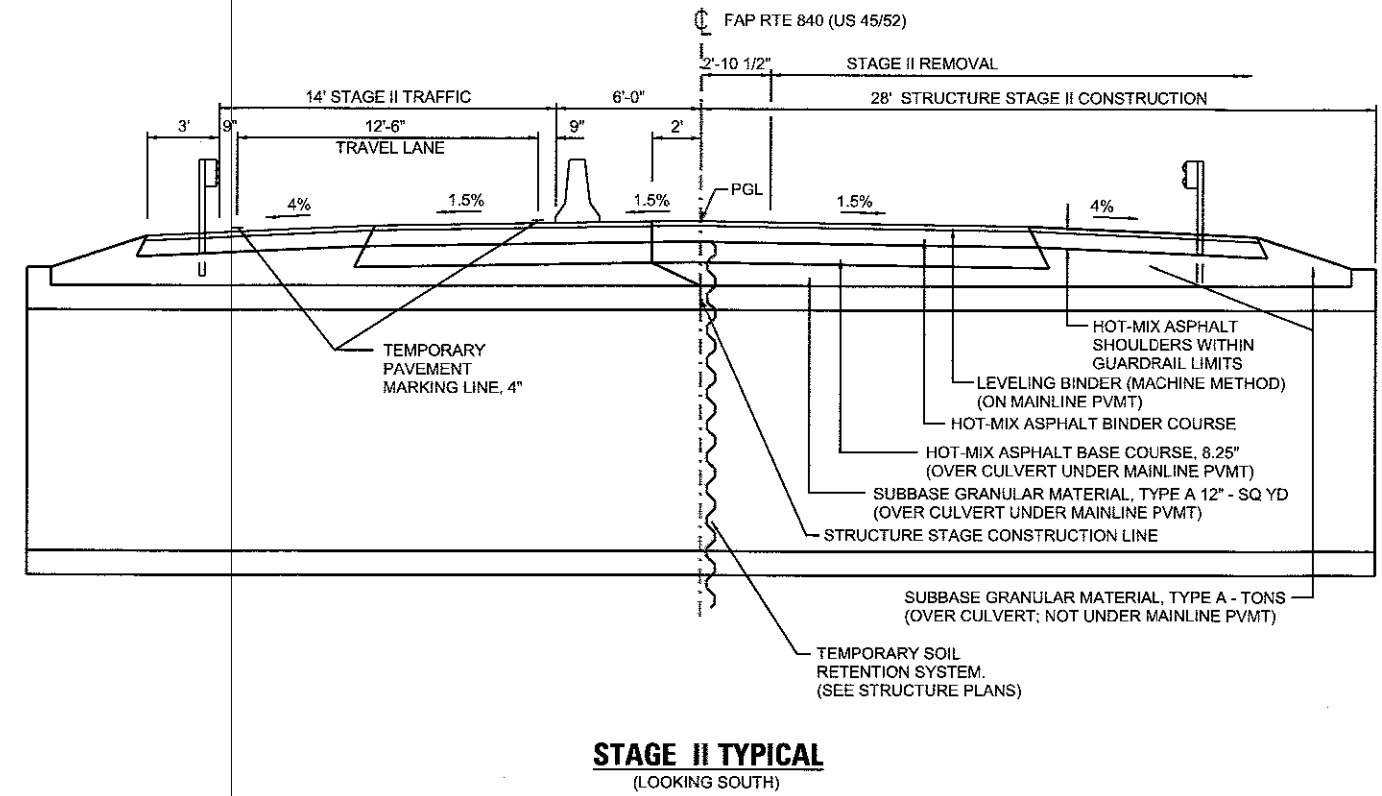
**FAP ROUTE 840 (US 45/52)  
 MAINTENANCE OF TRAFFIC PLAN - STAGE I**  
 SCALE: 1"=20' SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 17
CONTRACT NO. 66E24				ILLINOIS FED. AID PROJECT

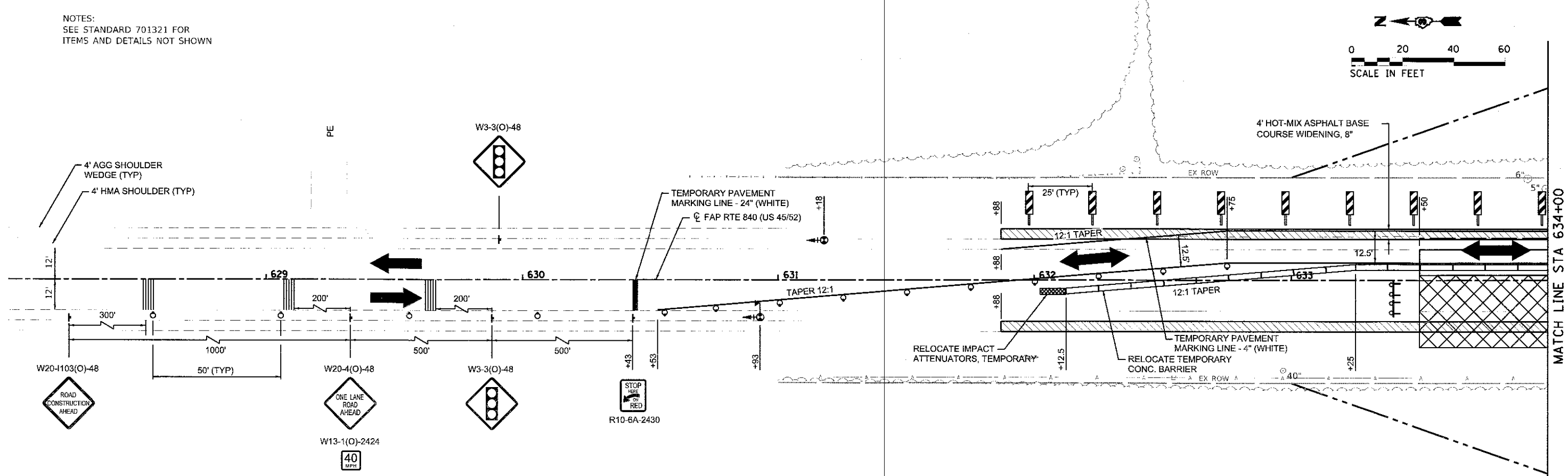


### PINNING TEMPORARY CONCRETE BARRIER - STAGE II

A.	STA 632+12.5 TO STA 632+25	6 EACH (END SECTION)
B.	STA 632+25 TO STA 632+50	3 EACH (TRANSITION)
C.	STA 635+87.5 TO STA 636+12.5	3 EACH (TRANSITION)
D.	STA 636+12.5 TO STA 637+00	21 EACH (DROP OFF LIMITS)
E.	STA 637+00 TO STA 637+25	3 EACH (TRANSITION)
F.	STA 640+50 TO STA 640+75	3 EACH (TRANSITION)
G.	STA 640+75 TO STA 640+87.50	6 EACH (END SECTION)
STAGE II TOTAL		45 EACH



NOTES:  
SEE STANDARD 701321 FOR  
ITEMS AND DETAILS NOT SHOWN



**Farnsworth GROUP**  
2708 MCGRAW DRIVE  
BLOOMINGTON, ILLINOIS 61704  
(309) 863-8435 / info@f-w.com

USER NAME = dmsayer  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 1/12/2018

DESIGNED - JJO  
DRAWN - JJO  
CHECKED - PSA/ERB  
DATE = 01/12/18

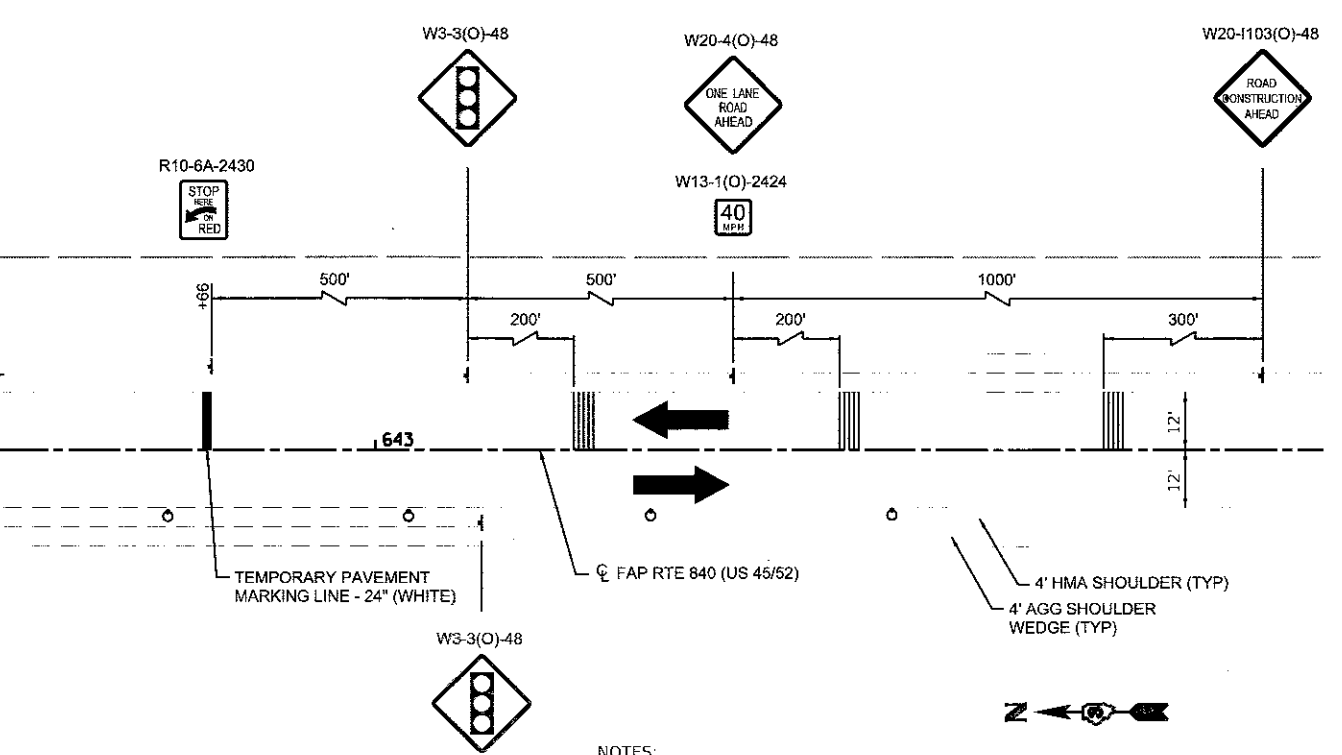
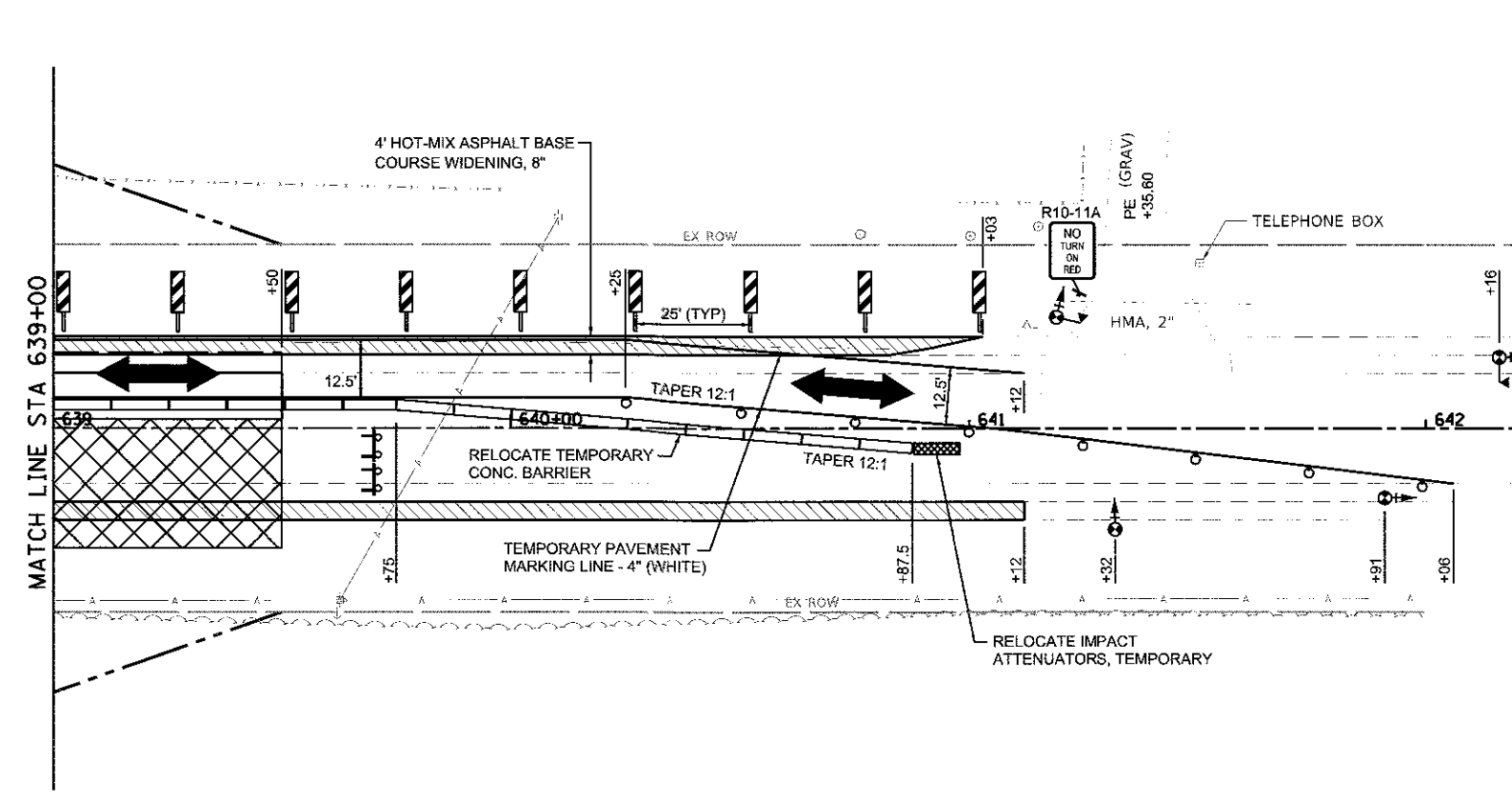
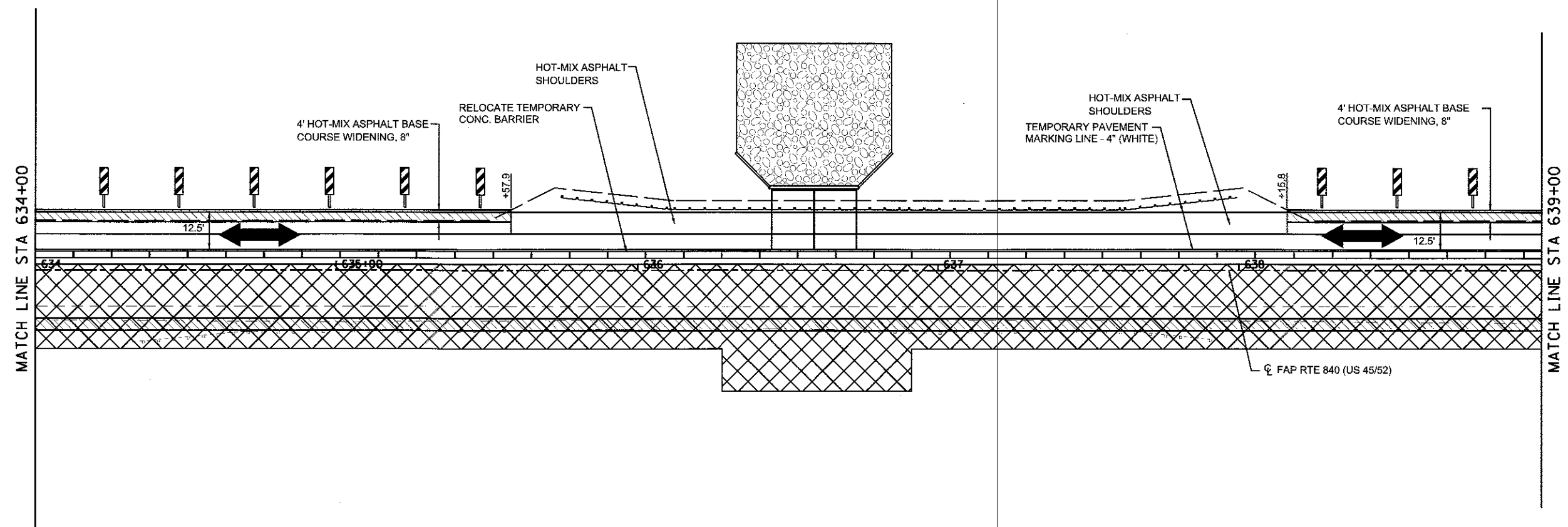
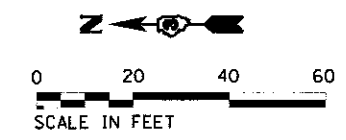
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

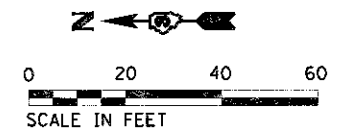
**FAP ROUTE 840 (US 45/52)  
MAINTENANCE OF TRAFFIC PLAN - STAGE II**

SCALE: 1"=20'    SHEET 3 OF 4 SHEETS    STA. TO STA.

F.A.P. RTE. 840	SECTION (188 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 18
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66E24	



NOTES:  
 1. SEE STANDARD 701321 FOR ITEMS AND DETAILS NOT SHOWN  
 2. SEE SHEET #18 FOR MAINTENANCE OF TRAFFIC LEGEND.



**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-8425 / info@f-w.com

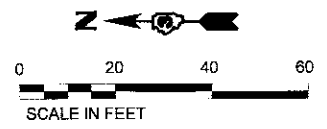
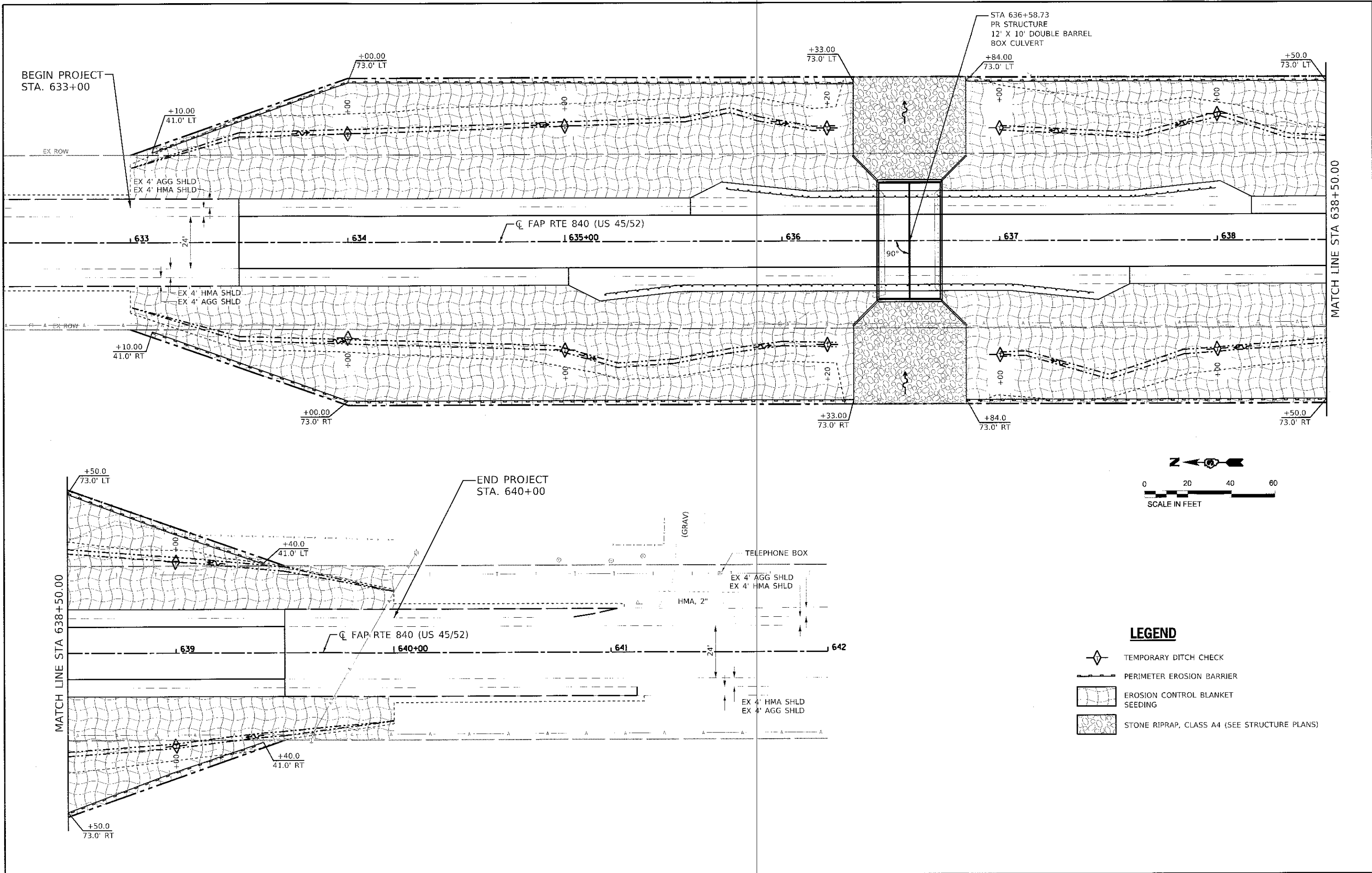
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 DESIGNED - JJO  
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 CHECKED - PSA/ERS  
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 PLOT SCALE = 40,000 / 1 in.  
 PLOT DATE = 1/12/2018





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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)  
 MAINTENANCE OF TRAFFIC PLAN - STAGE II**  
 SCALE: 1"=20' SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	19
CONTRACT NO. 66E24				
ILLINOIS   FED. AID PROJECT				



- LEGEND**
-  TEMPORARY DITCH CHECK
  -  PERIMETER EROSION BARRIER
  -  EROSION CONTROL BLANKET SEEDING
  -  STONE RIPRAP, CLASS A4 (SEE STRUCTURE PLANS)

**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-8435 / info@f-g.com

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)  
 EROSION AND SEDIMENT CONTROL PLAN**  
 SCALE: 1"=20'  
 SHEET 1 OF 1 SHEETS  
 STA. 633+00 TO STA. 640+00

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 20
			CONTRACT NO. 66E24	
ILLINOIS FED. AID PROJECT				

NW 1/4 OF SECTION 5, T. 28 N., R. 13 W., 2ND. P.M.

SW 1/4 OF SECTION 5, T. 28 N., R. 13 W., 2ND. P.M.

PARCEL NO. 3YM0001

M. JEANETTE WYSS, et al  
M. JEANETTE WYSS FRITZ

TOTAL HOLDING = 80.000 AC.±  
TOTAL R.O.W. REQUIRED = 0.554 AC.±  
AREA IN EXISTING R.O.W. = 0.321 AC.±  
NET R.O.W. REQUIRED = 0.233 AC.±  
REMAINDER = 79.446 AC.±

PARCEL NO. 3YM0003

GLORIA ANNE GULLQUIST

TOTAL HOLDING = 38.500 AC.±  
TOTAL R.O.W. REQUIRED = 0.462 AC.±  
AREA IN EXISTING R.O.W. = 0.272 AC.±  
NET R.O.W. REQUIRED = 0.190 AC.±  
REMAINDER = 38.038 AC.±

PARCEL NO. 3YM0002

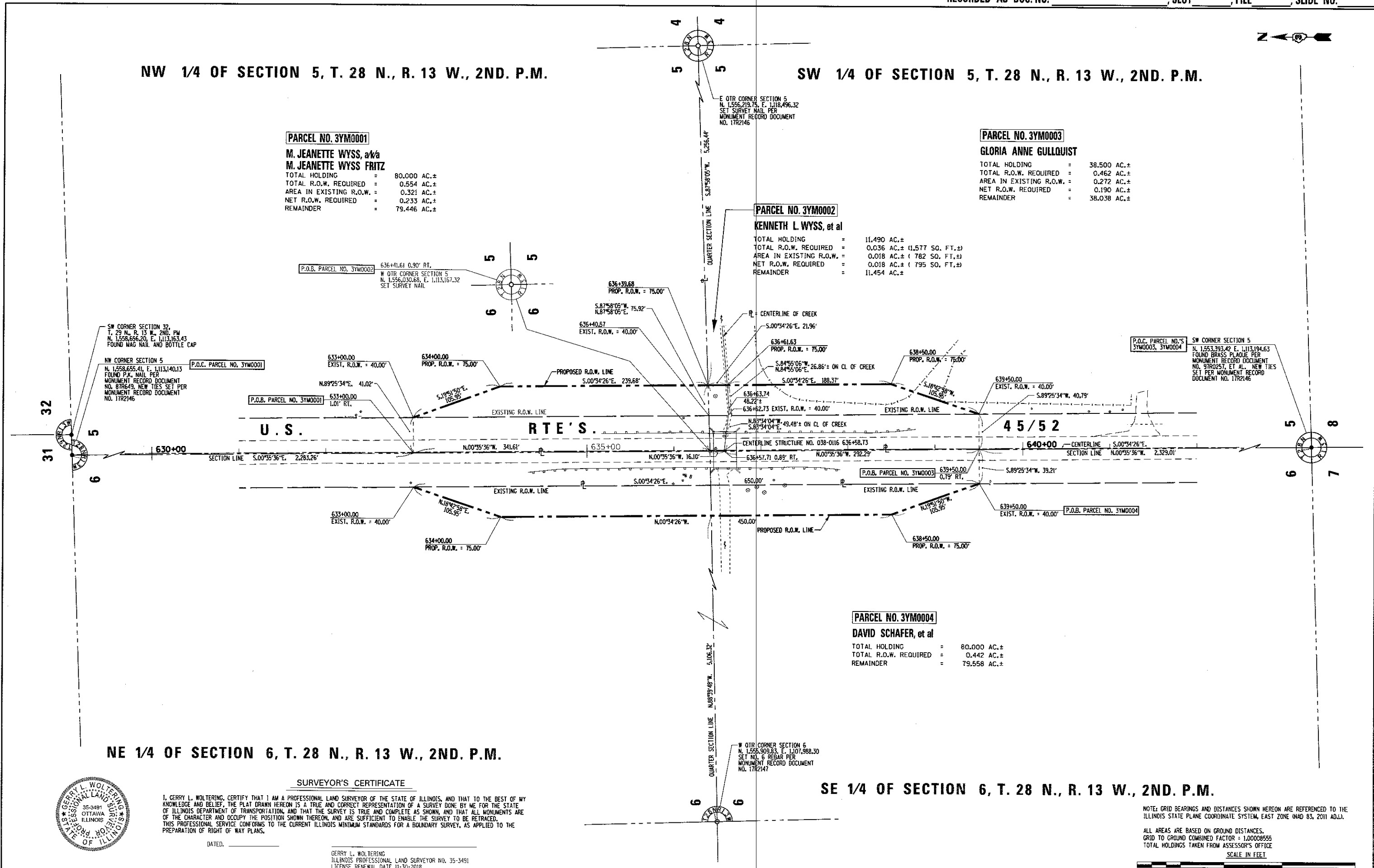
KENNETH L. WYSS, et al

TOTAL HOLDING = 11.490 AC.±  
TOTAL R.O.W. REQUIRED = 0.036 AC.± (1,577 SQ. FT.±)  
AREA IN EXISTING R.O.W. = 0.018 AC.± ( 782 SQ. FT.±)  
NET R.O.W. REQUIRED = 0.018 AC.± ( 795 SQ. FT.±)  
REMAINDER = 11.454 AC.±

PARCEL NO. 3YM0004

DAVID SCHAFER, et al

TOTAL HOLDING = 80.000 AC.±  
TOTAL R.O.W. REQUIRED = 0.442 AC.±  
REMAINDER = 79.558 AC.±



NE 1/4 OF SECTION 6, T. 28 N., R. 13 W., 2ND. P.M.

SE 1/4 OF SECTION 6, T. 28 N., R. 13 W., 2ND. P.M.

SURVEYOR'S CERTIFICATE

I, GERRY L. WOLTERING, CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE PLAT DRAWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY DONE BY ME FOR THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN, AND THAT ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY, AS APPLIED TO THE PREPARATION OF RIGHT OF WAY PLANS.

DATED, \_\_\_\_\_

GERRY L. WOLTERING  
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3491  
LICENSE RENEWAL DATE 11-30-2018

NOTE: GRID BEARINGS AND DISTANCES SHOWN HEREON ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83, 2011 ADJ.).

ALL AREAS ARE BASED ON GROUND DISTANCES.  
GRID TO GROUND COMBINED FACTOR = 1.00008555  
TOTAL HOLDINGS TAKEN FROM ASSESSOR'S OFFICE

SCALE IN FEET



USER NAME = duncenbd	DESIGNED -	REVISED - 05-11-17 ADDED M.R. Nos. G.W.
PLOT SCALE = 100.0000' / in.	DRAWN - GW	REVISED - 08-12-17 REV. PAR. 3 TOPO G.W.
PLOT DATE = 1/16/2018	CHECKED -	REVISED - 08-12-17 REV. PAR. 3 AREA G.W.
	DATE - 05-11-17	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PROJECT	JOB NO. R93-006-17	840	(138 BR-11BR)	IROQUOIS	46	21
SCALE: 1" = 50'	SHEET 1 OF 1 SHEETS	STA. 633+00.00 TO STA. 639+50.00		CONTRACT NO. 66E24		
		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

Benchmark: BM 7 - Cut square on top of NW wingwall on S.N. 038-0116 over Langan Creek Sta. 636+46.03, 22.04' Rt., Elev. 635.92.  
 Existing Structure: S.N. 038-0116 was built in 1928 under SBI 49, Section 138-B at Sta. 632+85. The wearing surface was modified under three different contracts between 1970 and 2000. Existing structure is a single span slab bridge with a deck thickness of 30.5", 26'-0" bk. to bk. abutments, 42'-2" out to out deck with no skew. The Contractor shall remove and replace the existing structure. Stage Construction shall be utilized to maintain one lane of traffic during construction.  
 No salvage.

**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Data
3. Stage Construction Details
- 4.-5. Box Culvert End Section Details
6. Bar Splicer Details
7. Soil Boring Logs
- 8.-9. 404 Permit Causeway/Work Pad
- 10.-15. Existing Structure Plans

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	49
Porous Granular Embankment	Cu. Yd.	456
Stone Riprap, Class A4	Sq. Yd.	549
Filter Fabric	Sq. Yd.	549
Removal of Existing Structures	Each	1
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	261
Box Culvert End Sections, Culvert No. 1	Each	2
Strong Post Guardrail Attached to Culvert	Foot	62.5
Membrane Waterproofing for Buried Structures	Sq. Yd.	182
Precast Concrete Box Culverts 12'x10' (Special)	Foot	106.0
Temporary Support System	Each	1

\*Limits of removal and replacement of hard till soils with porous granular material meeting the gradation requirements of Std. Specifications Section 540.02, Note 1. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field. Cost of furnishing and installing the porous granular material shall be included in the cost of the end section.



Vincent P. Tabor 12/21/2017  
 Vincent P. Tabor  
 Licensed Structural Engineer  
 State of Illinois No. 081-007047  
 Expires 11/30/2018

**DESIGN SPECIFICATIONS**

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

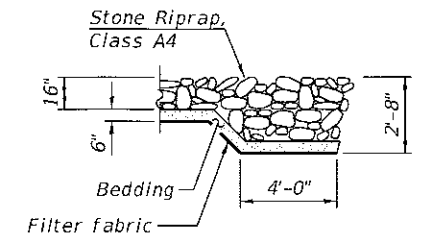
**DESIGN STRESSES**

**PRECAST UNITS**

f'c = 5,000 psi  
 fy = 65,000 psi (Welded Wire Rein.)

**FIELD UNITS**

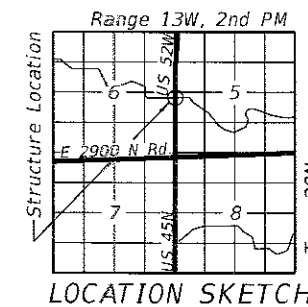
f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)  
 fy = 50,000 psi (Sheet Piling)



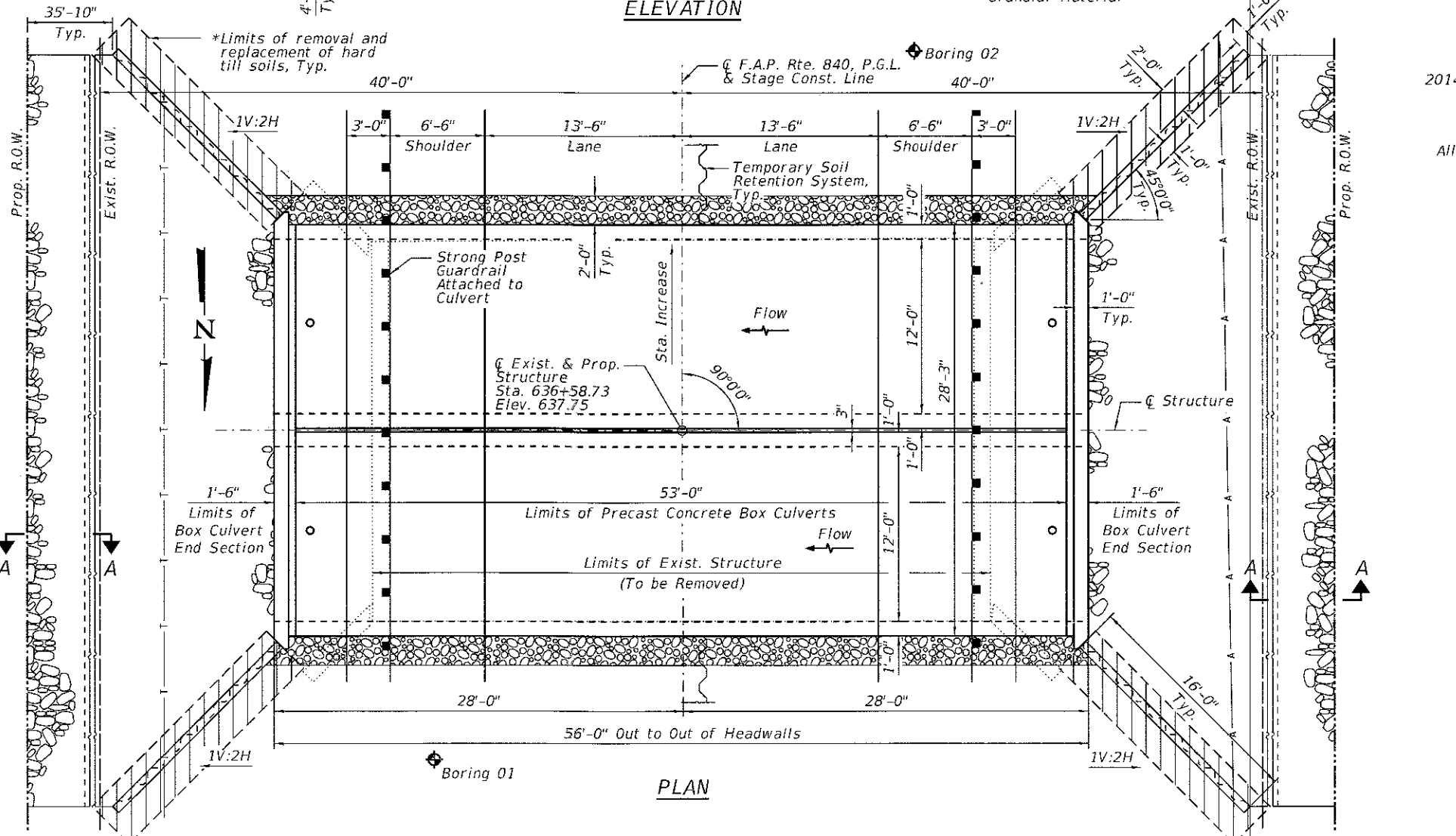
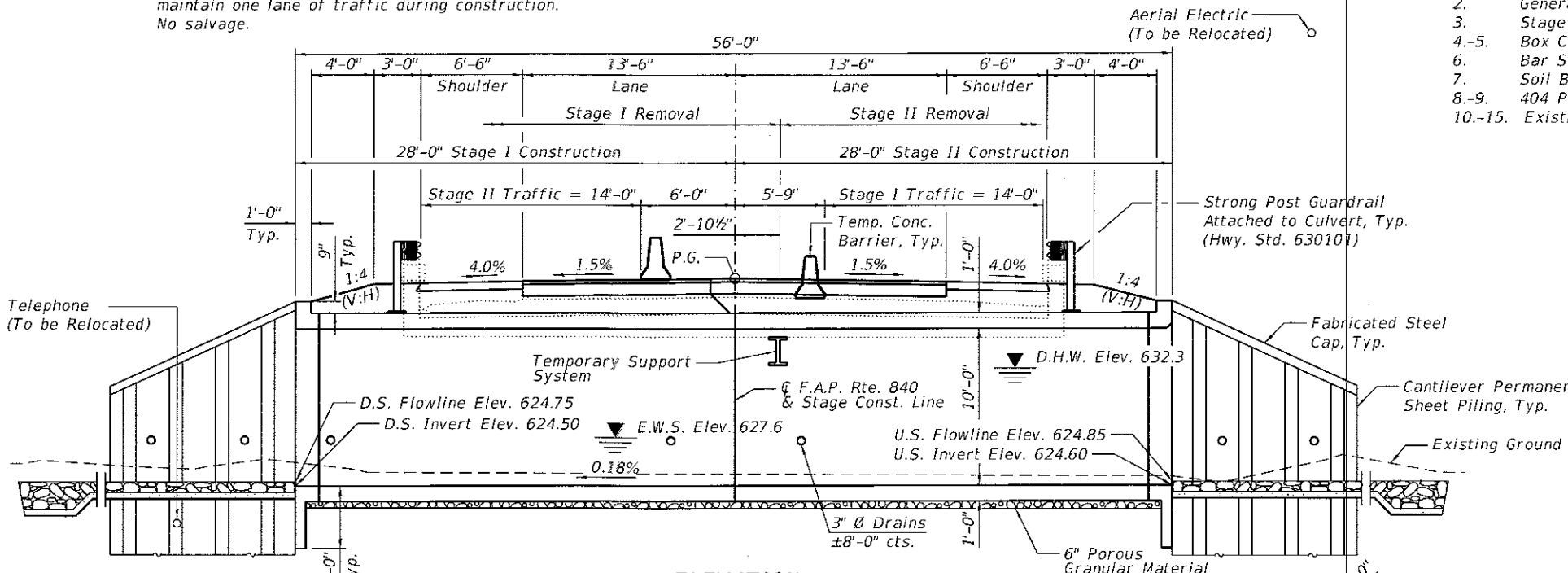
**WATERWAY INFORMATION**

Drainage Area = 2.64 sq. mi. Low Grade Elev. = 635.39 @ Sta. 642+90

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	50	439	155	185	632.3	0.3	0.2	632.6	632.5
Base	100	524	162	192	632.6	0.4	0.3	633.0	632.9
Scour	200	593	166	196	632.8	0.4	0.3	633.2	633.1
Overtopping									
Max. Calc.	500	690	172	202	633.0	0.6	0.4	633.6	633.4



**GENERAL PLAN AND ELEVATION**  
 US 45 / 52 OVER LANGAN CREEK TRIB.  
 F.A.P. RTE. 840 SEC. (138 BR-1)BR  
 IROQUOIS COUNTY  
 STATION 636+58.73  
 S.N. 038-2029



**LI ENGINEERING, LTD.**  
 Consulting Engineers  
 Springfield, Illinois

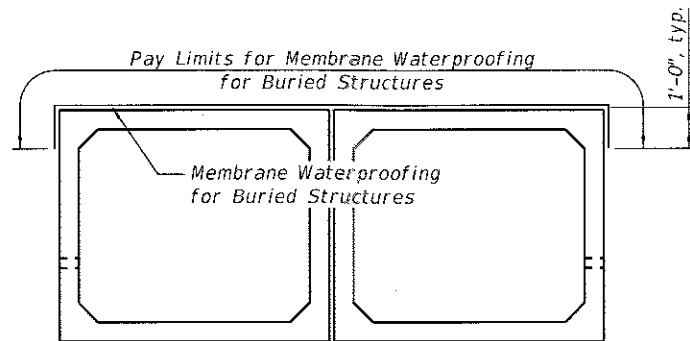
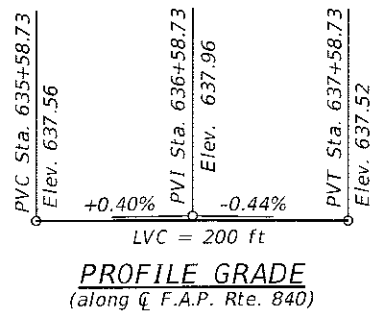
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PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

**STATE OF ILLINOIS**  
 DEPARTMENT OF TRANSPORTATION

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 22
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

STATION 636+58.73  
 BUILT 20 BY  
 STATE OF ILLINOIS  
 F.A.P. RTE. 840 SEC. (138 BR-1)BR  
 LOADING HL-93  
 STR. NO. 038-2029

**NAME PLATE**  
 See Std. 515001



**LIMITS OF MEMBRANE WATERPROOFING**

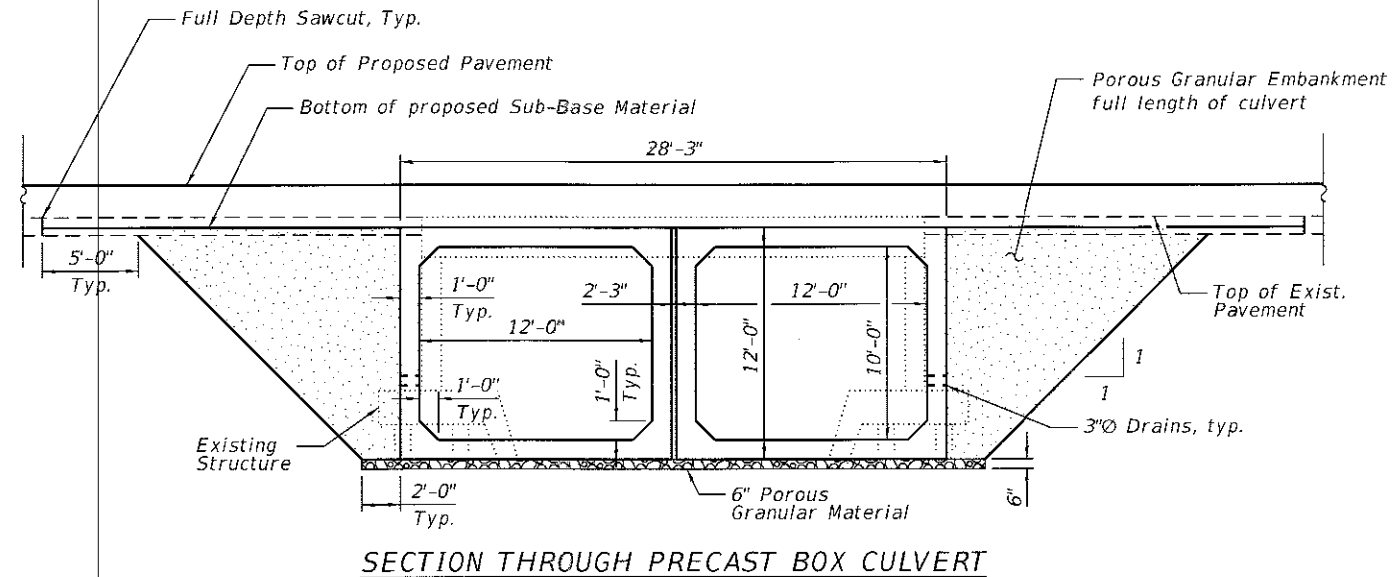
**GENERAL NOTES**

The design fill height for this box varies between 1.90 ft minimum and 2.25 ft maximum. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specifications.

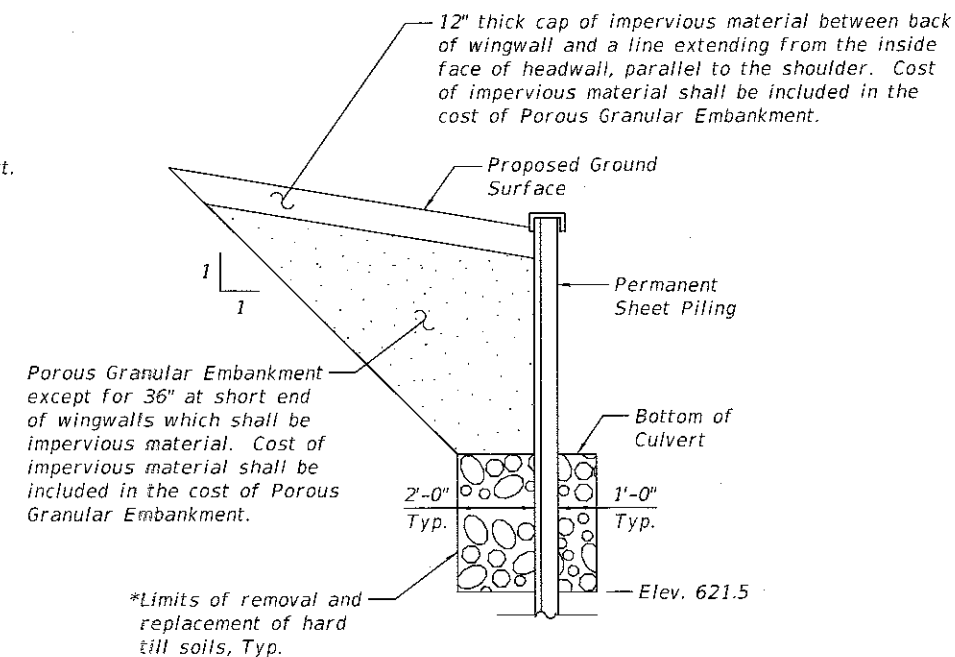
Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard, unless noted otherwise.

All hardware required for mounting of guardrail to top of culvert shall be included in the cost of Strong Post Guardrail Attached to Culvert.



**WINGWALL CONSTRUCTION SEQUENCE**

1. Remove hard till soils above elevation 621.5.
2. Install steel sheet pile wingwalls.
3. Place porous granular material up to the bottom of culvert and complete grading in front of the sheet pile wingwalls.
4. Place porous granular material on the back side of the sheet pile wingwalls up to the bottom of the culvert.
5. Install weep holes in the sheet pile wingwalls.
6. Complete backfill and grading on the back side of the sheet pile wingwalls.



**SECTION THROUGH WING WALL**

\*Limits of removal and replacement of hard till soils with porous granular material meeting the gradation requirements of Std. Specifications Section 540.02, Note 1. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field. Cost of furnishing and installing the porous granular material shall be included in the cost of the end section. A sheet pile section depth of 12" was assumed in order to estimate the quantity of Removal and Disposal of Unsuitable Material.

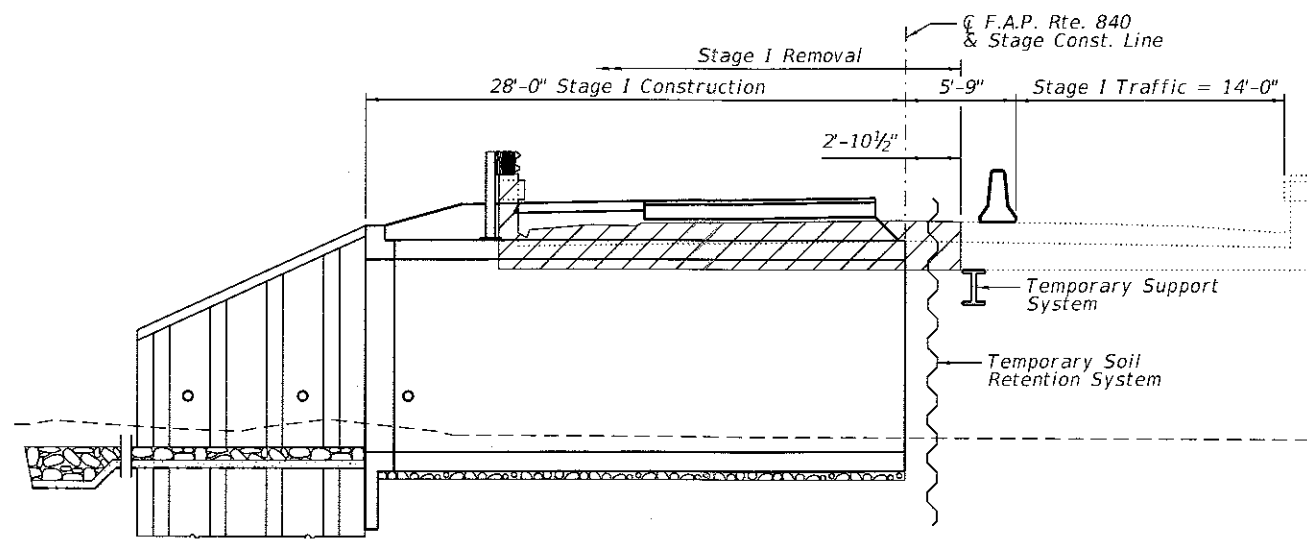
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	FILE NAME =	CHECKED - MTH	REVISED -
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	PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

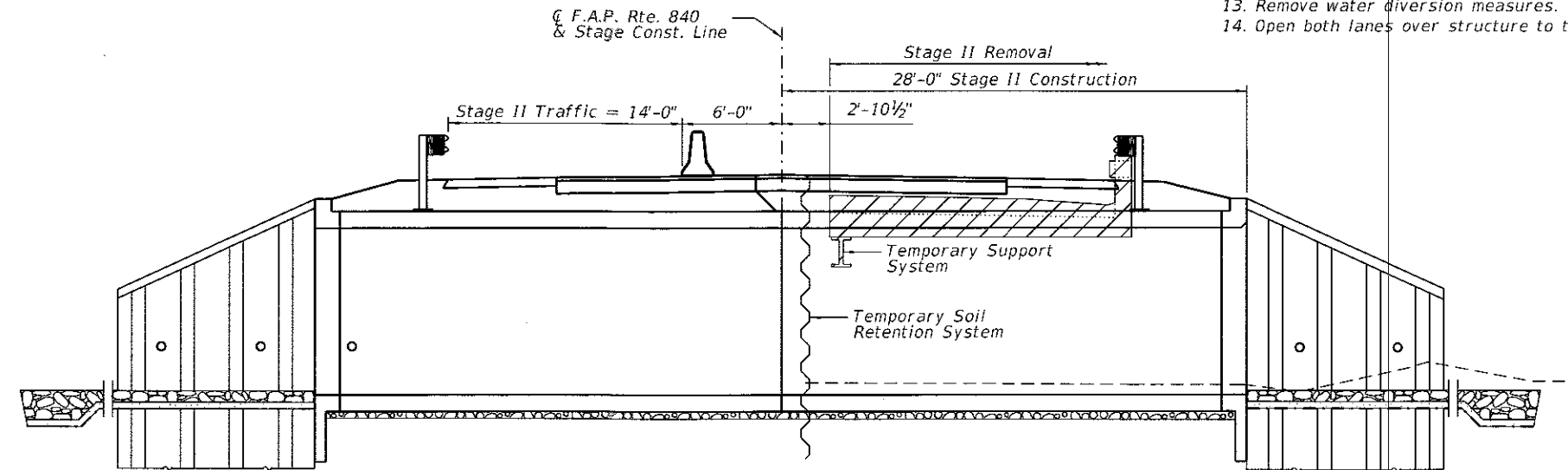
GENERAL DATA  
 STRUCTURE NO. 038-2029

SHEET NO. 2 OF 15 SHEETS

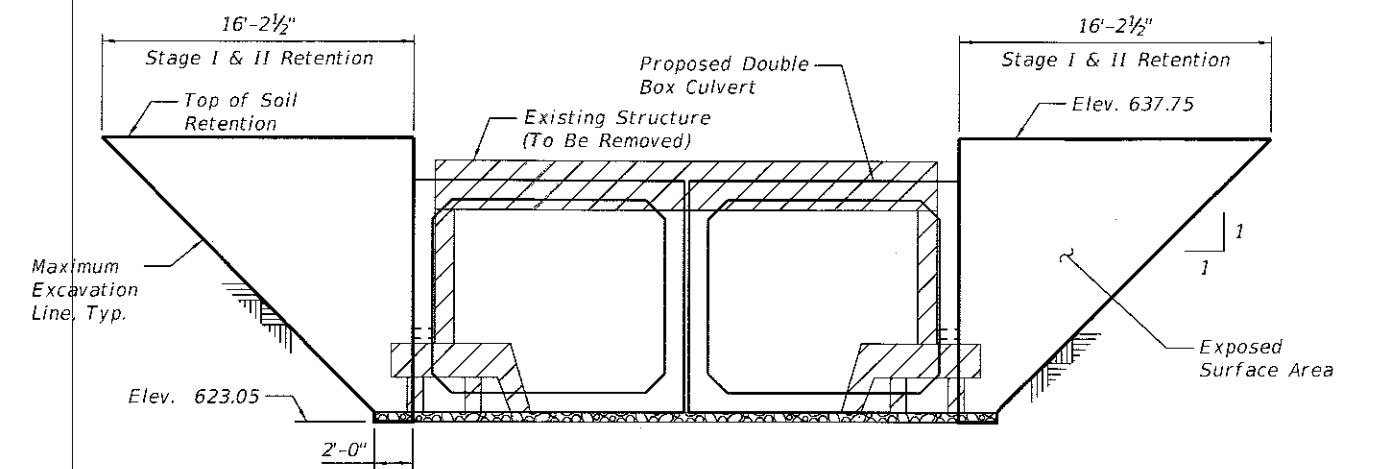
F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 23
			CONTRACT NO. 66E24	
ILLINOIS FED. AID PROJECT				



**STAGE I REMOVAL & CONSTRUCTION**



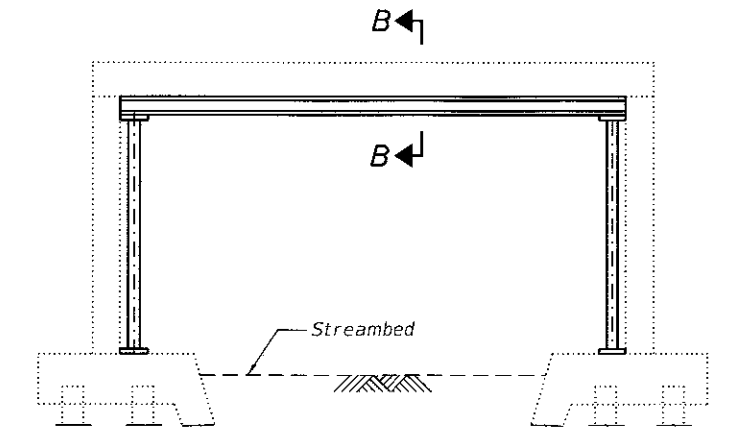
**STAGE II REMOVAL & CONSTRUCTION**



**TEMPORARY SOIL RETENTION SYSTEM**  
(Dimensions along Stage Construction Line)

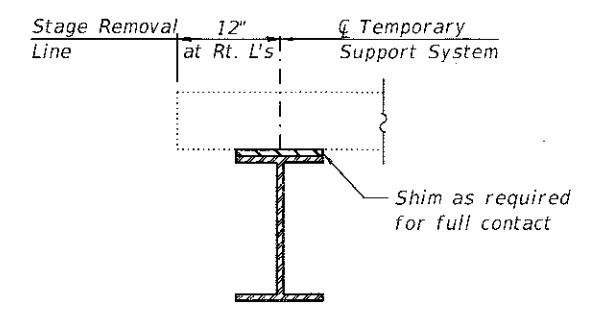
**CULVERT CONSTRUCTION SEQUENCE**

1. Close Stage I construction zone to traffic and restrict vehicles to the Stage I traffic zone.
2. Install Temporary Soil Retention System.
3. Divert water from construction area.
4. Install Temporary Support System.
5. Perform Stage I removal of existing structure.
6. Perform Stage I construction of replacement structure.
7. Open Stage II traffic zone to vehicles and close the Stage II construction zone.
8. Adjust Temporary Soil Retention System at stage construction line if necessary.
9. Remove Temporary Support System.
10. Perform Stage II removal of existing structure.
11. Perform Stage II construction of replacement structure.
12. Remove Temporary Soil Retention System.
13. Remove water diversion measures.
14. Open both lanes over structure to traffic.



**TEMPORARY SUPPORT SYSTEM**

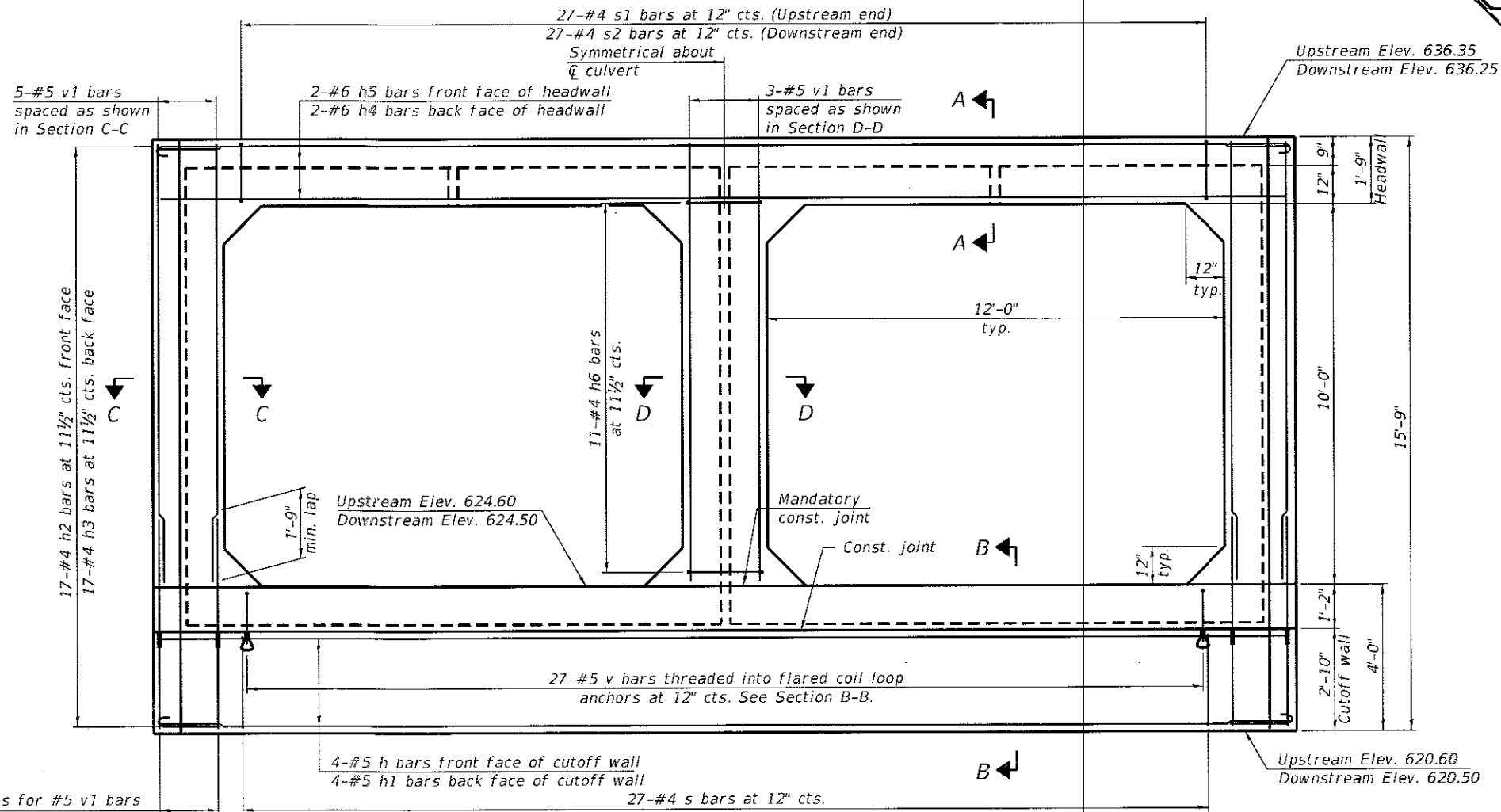
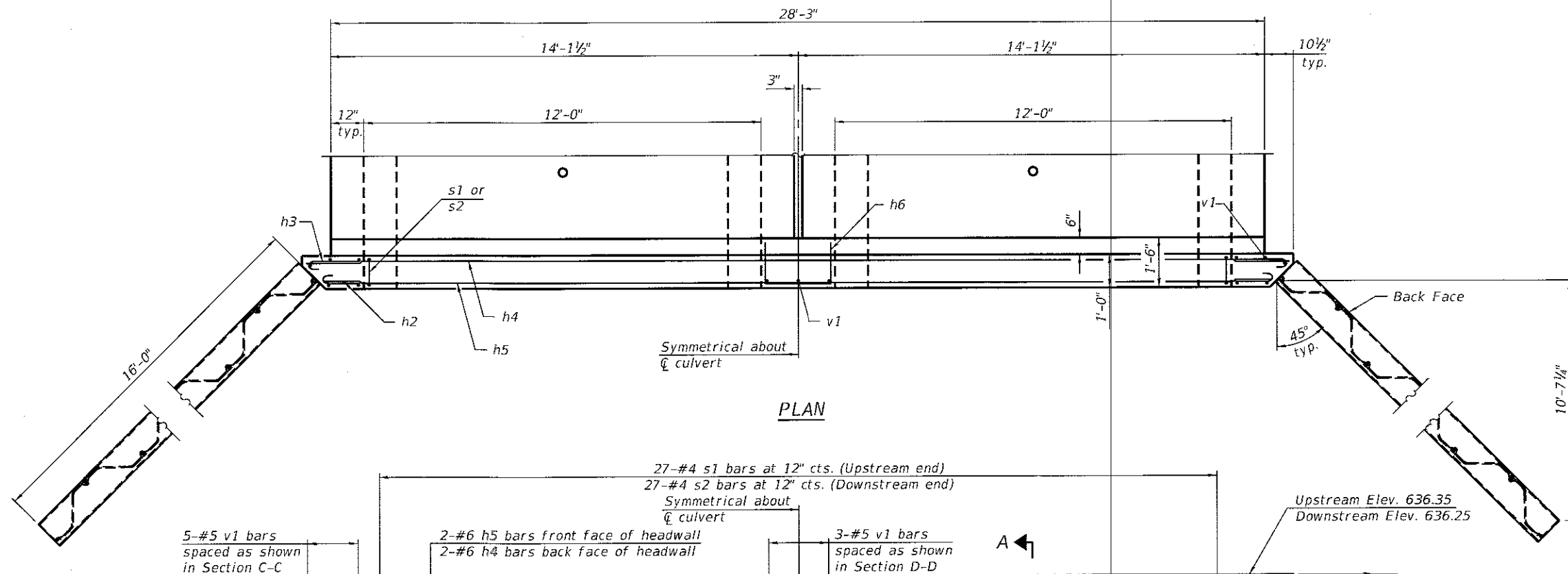
- Notes:
1. Place Temporary Support System prior to Stage I Removal.
  2. Place Temporary Support System along skew.
  3. Temporary Support System shall not be painted.



**SECTION B-B**

- Notes:
1. All staging cross sections are looking south.
  2. All dimensions are at Rt. L's to  $\bar{C}$  of roadway unless noted otherwise.
  3. For quantity of temporary concrete barrier, see roadway plans.
  4. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.





5 Bar Splicers for #5 v1 bars spaced as shown in Section C-C. Stage I threaded splicer bar shall extend to bottom of cutoff wall, less 1/2" clear cover.

**END ELEVATION**  
(Wingwalls omitted in this view for clarity.)

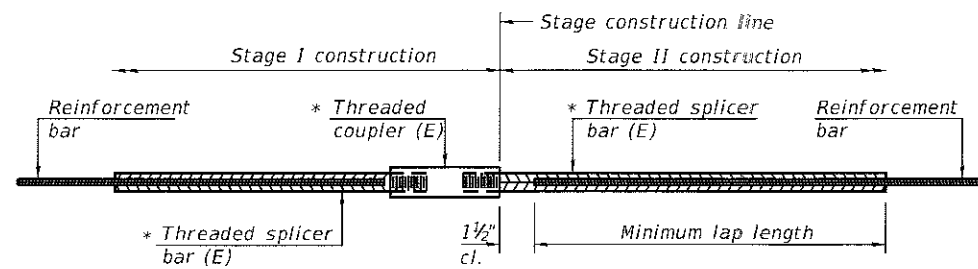
- Notes:**
- The design fill height for this structure varies between 1.90 ft minimum and 2.25 ft maximum. The precast concrete box culvert sections shall conform to the standard designs of ASTM C 1577.
  - The box culvert end section shall be built in the field and a precast option is not allowed except the cutoff wall may be precast. If the Contractor elects to use a precast cutoff wall, shop drawings and a proposed construction sequence shall be submitted to the Engineer for approval.
  - Areas of the precast box culvert in contact with cast-in-place concrete shall be sandblasted, cleaned, and wetted prior to placing concrete in the field according to Article 503.09(b).
  - The ends of the precast box sections adjacent to the end section shall be formed without male and female shapes.
  - The joints between precast box sections shall be sealed, all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected during the backfilling process.
  - Tilt h2 and h3 bars as required to maintain clearance.
  - Extend precast concrete box culvert welded wire fabric into end section. Bend as necessary to provide 1" clear cover.
  - See sheet 3 of 15 for culvert construction sequence.
  - See sheet 5 of 15 for Section A-A, B-B, C-C and D-D.
  - See sheet 5 of 15 for additional wing wall details.

**BILL OF MATERIAL**

Item	Unit	Total
Box Culvert End Sections, Culvert No. 1	Each	2

(Sheet 1 of 2)



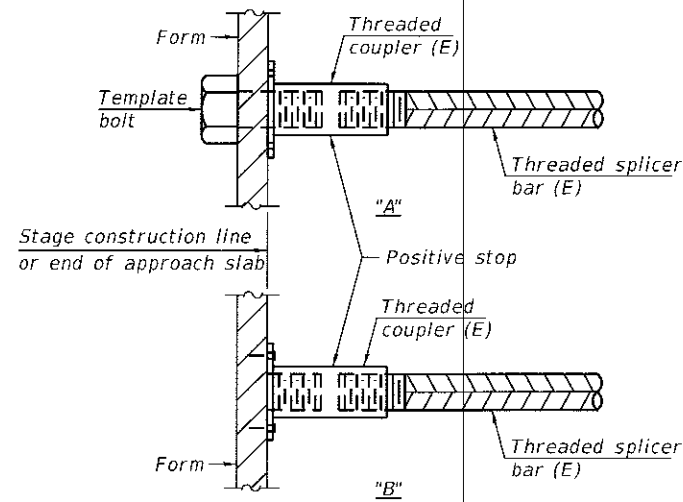


**STANDARD BAR SPLICER ASSEMBLY**

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

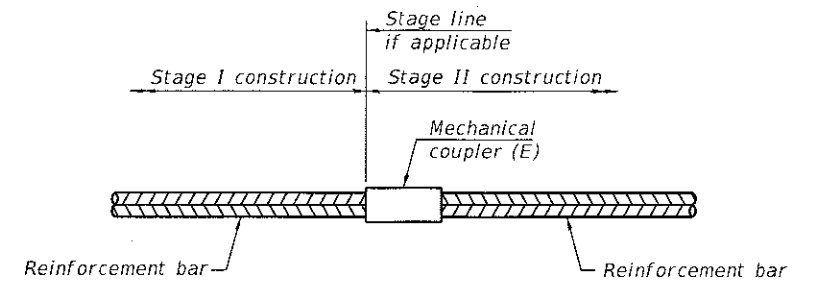
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Cutoff Wall	#5	20	1'-9"



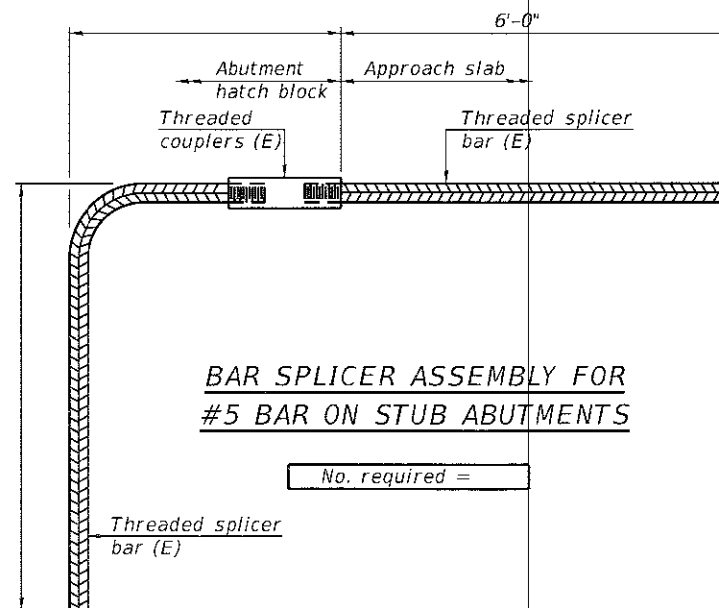
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 2-17-2017



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:54:37 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

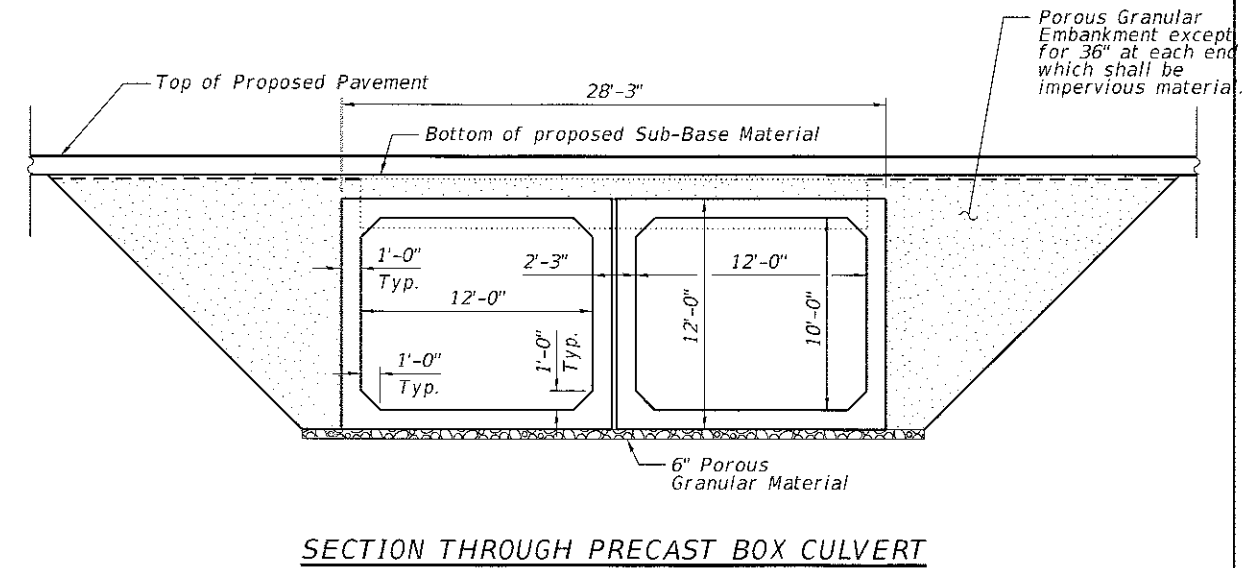
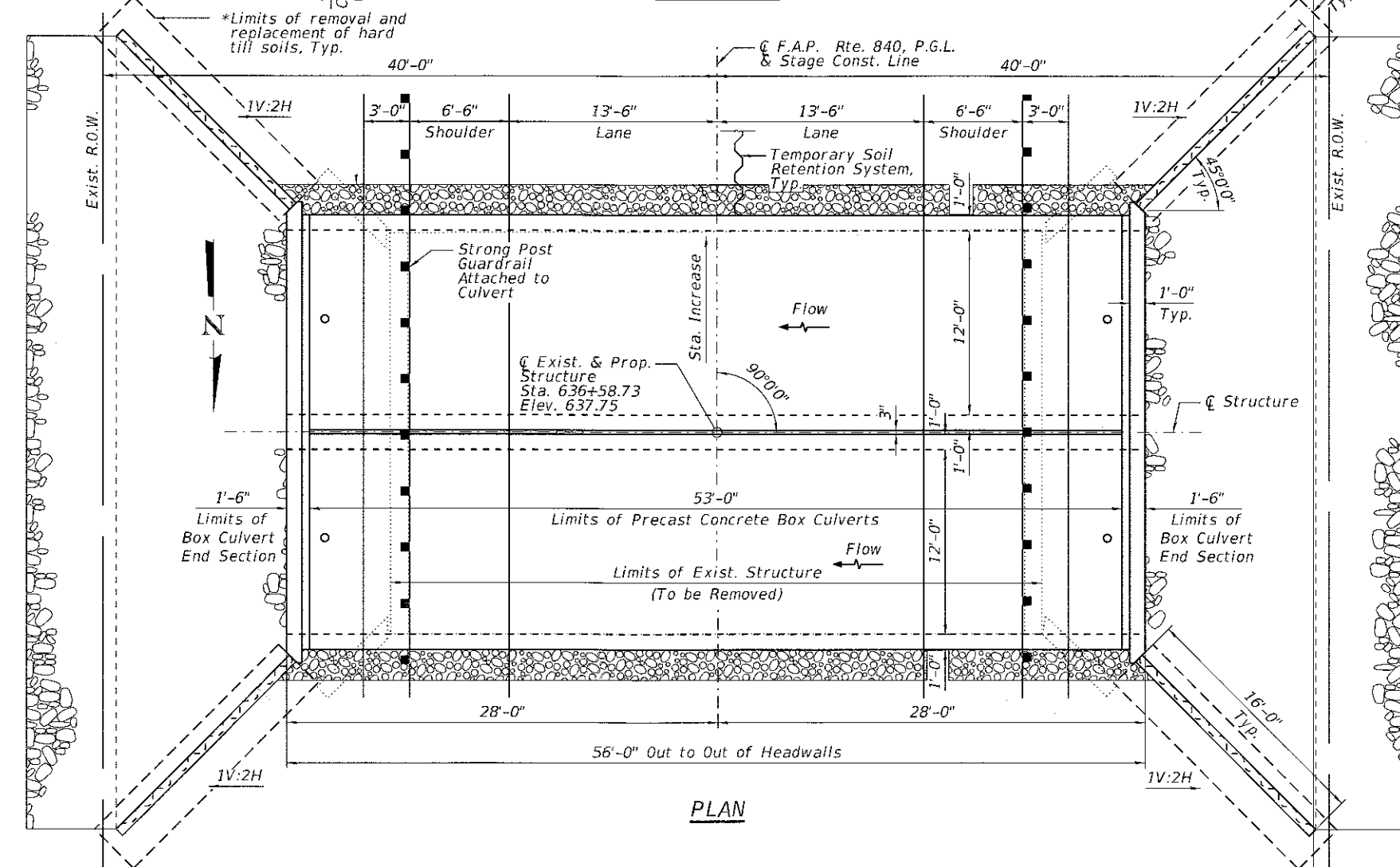
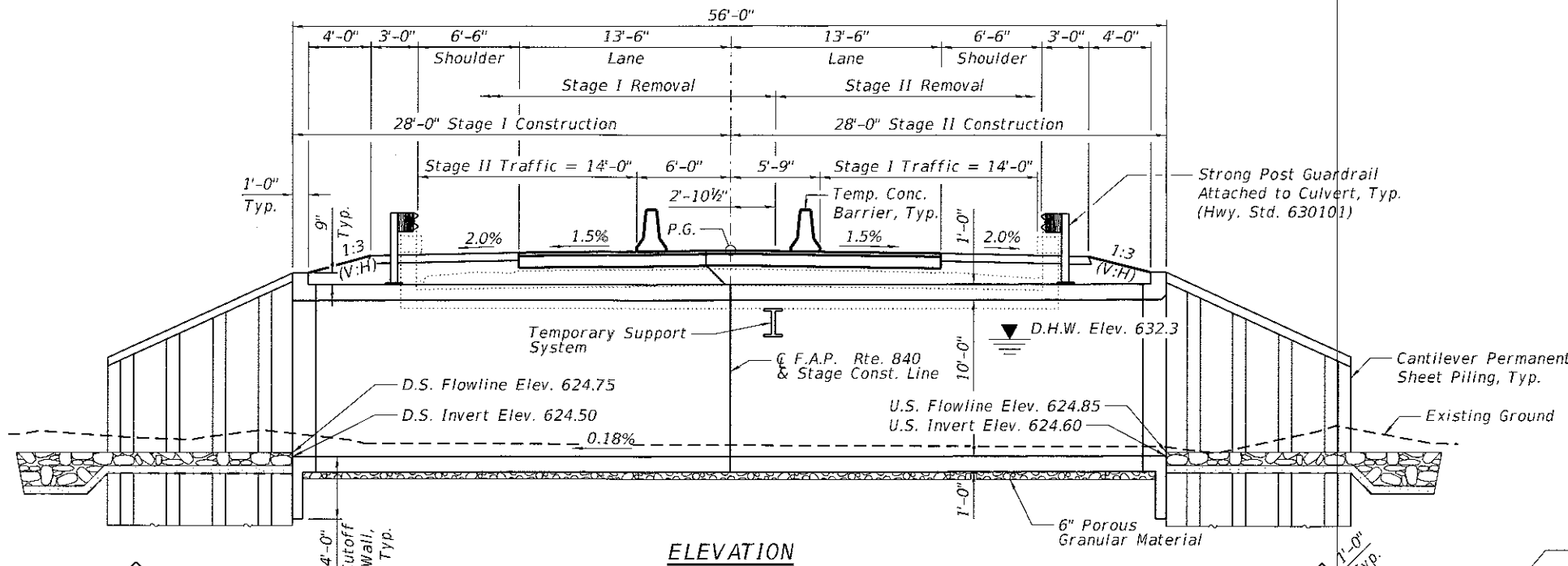
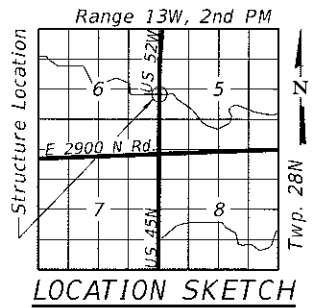
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 038-2029

SHEET NO. 6 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-118R	IROQUOIS	46	27
CONTRACT NO. 66E24				ILLINOIS FED. AID PROJECT



# EXHIBIT



## FOR INFORMATION ONLY

GENERAL PLAN AND ELEVATION  
US 45 / 52 OVER LANGAN CREEK TRIB.  
F.A.P. RTE. 840 SEC. (138 BR-1)BR  
IROQUOIS COUNTY  
STATION 636+58.73  
EXISTING S.N. 038-0116  
PROPOSED S.N. 038-2029

Not to Scale

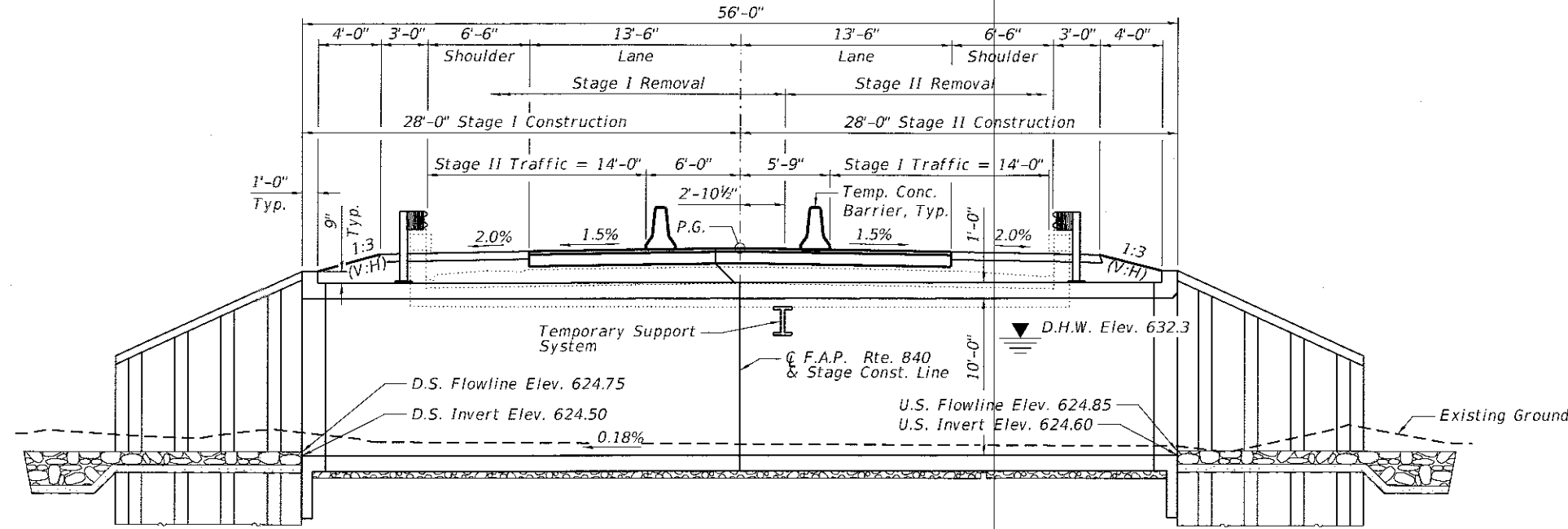
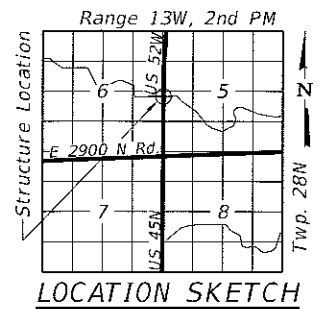
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FILE NAME =	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE =	CHECKED - VPT	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

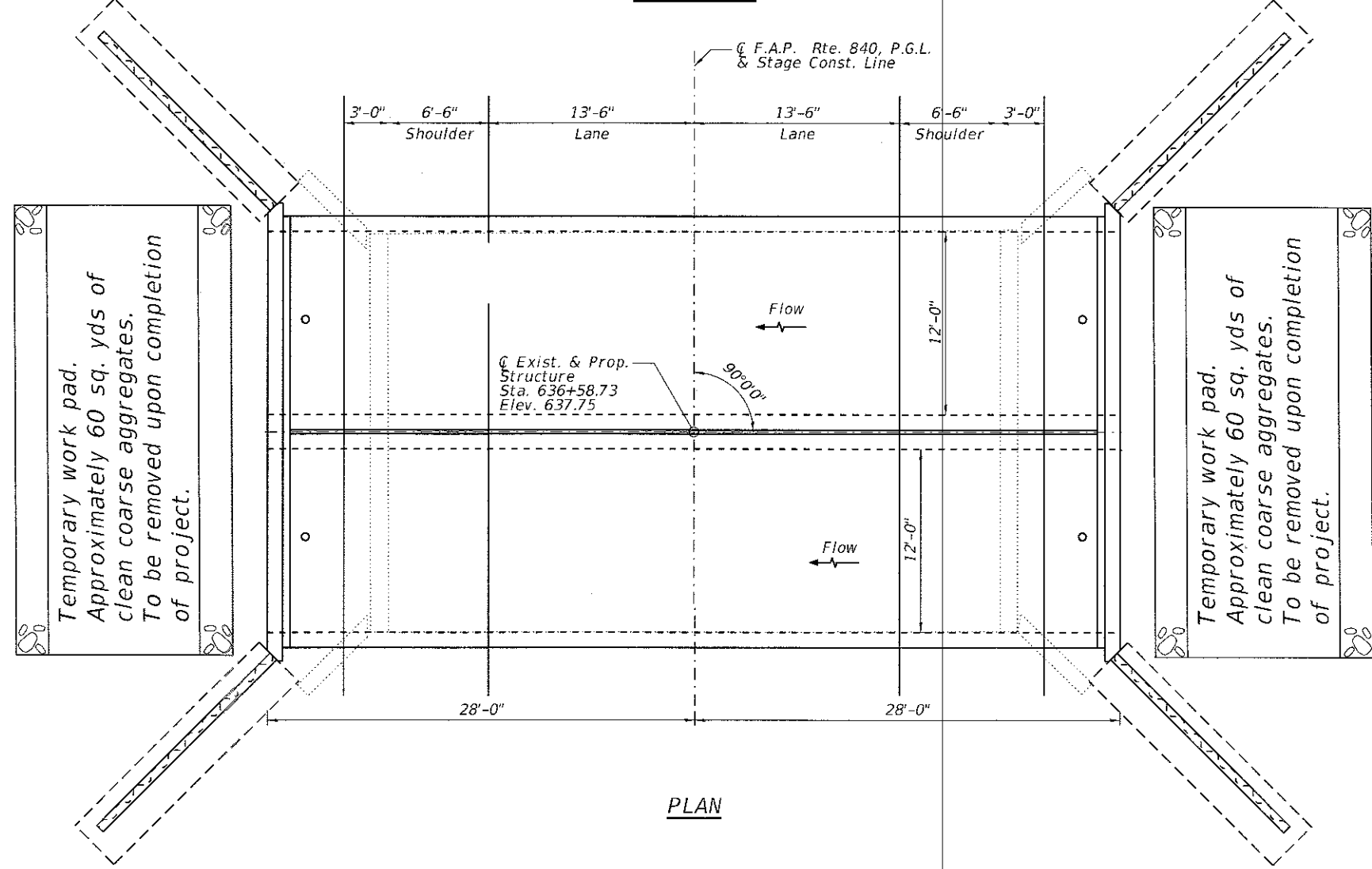
EXISTING S.N. 038-0116 404 PERMIT  
CAUSEWAY / WORK PAD PLAN

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 29
ILLINOIS FED. AID PROJECT CONTRACT NO. 66E24				

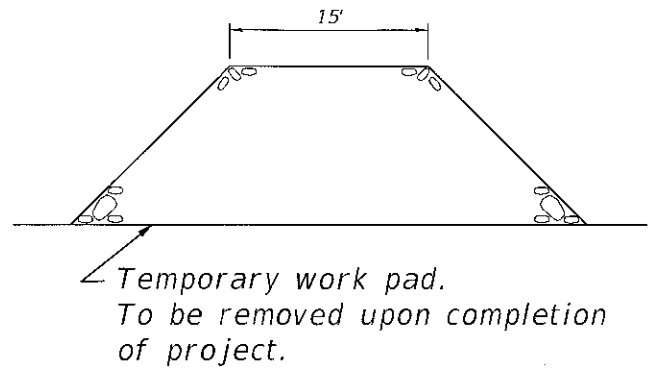
EXHIBIT



ELEVATION



PLAN



**FOR INFORMATION ONLY**

GENERAL PLAN AND ELEVATION  
US 45 / 52 OVER LANGAN CREEK TRIB.  
F.A.P. RTE. 840 SEC. (138 BR-1)BR  
IROQUOIS COUNTY  
STATION 636+58.73  
EXISTING S.N. 038-0116  
PROPOSED S.N. 038-2029

Not to Scale	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING S.N. 038-0116 404 PERMIT CAUSEWAY / WORK PAD PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	FILE NAME =	CHECKED - MTH	REVISED -			840	(138 BR-1)BR	IROQUOIS	46	30	
	PLOT SCALE =	DRAWN - CGY	REVISED -			CONTRACT NO. 66E24					
	PLOT DATE =	CHECKED - VPT	REVISED -			[ILLINOIS] FED. AID PROJECT					

### INDEX TO SHEETS

Sheet No. - Title Page

- 2 - Standard Cross Section, No. 1257
- 2 - Detail Sketch of Intersection, S.A. Route 4 A.S.B.I.R. 49
- 2 - Detail Sketch of Intersection, S.B.I. Rt. 116 A.S.B.I.R. 49
- 5 - Plan Profile, Station 396+77 to Sta. 446+00
- 4 - Station 446+00 to Sta. 506+00
- 5 - Station 506+00 to Sta. 566+00
- 6 - Station 566+00 to Sta. 626+00
- 7 - Station 626+00 to Sta. 686+00
- 8 - Station 686+00 to Sta. 746+00
- 9 - Station 746+00 to Sta. 806+00
- 10 - Station 806+00 to Sta. 827+00
- 11-35 Inclusive - Cross Sections
- 36 - Standard Culvert Design, No. 828-1, 828-3, 1204-1
- 36 - Special Culvert Design, Sta. 443+87, 450+60
- 37 - Sta. 476+00, 529+00, 618+12, 715+76, 794+00
- 37 - Sta. 559+83, 608+00, 610+20
- 38 - Sta. 662+47, 701+00, 737+64, (680+67, 822+00)
- 39 - Sta. 822+50
- 39 - Special Bridge Design, Sta. 632+85 (Sheets 1, 2 & 3 of 3 sheets)
- 40 - Sta. 550+22 (Sheet 1 of 4 sheets)
- 41 - Sta. 550+22 (Sheet 2 of 4 sheets)
- 42 - Sta. 550+22 (Sheet 3 of 4 sheets)
- 43 - Sta. 550+22 (Sheet 4 of 4 sheets)
- 44 - Sta. 752+43 (Sheet 1 of 2 sheets)
- 45 - Sta. 752+43 (Sheet 2 of 2 sheets)
- 46 - Sta. 412+24 (Sheets 1 & 2 of 2 sheets)
- 46 - Standard No. 845, 1203
- 47 - Standard No. 1162, 1178

### SUMMARY OF QUANTITIES

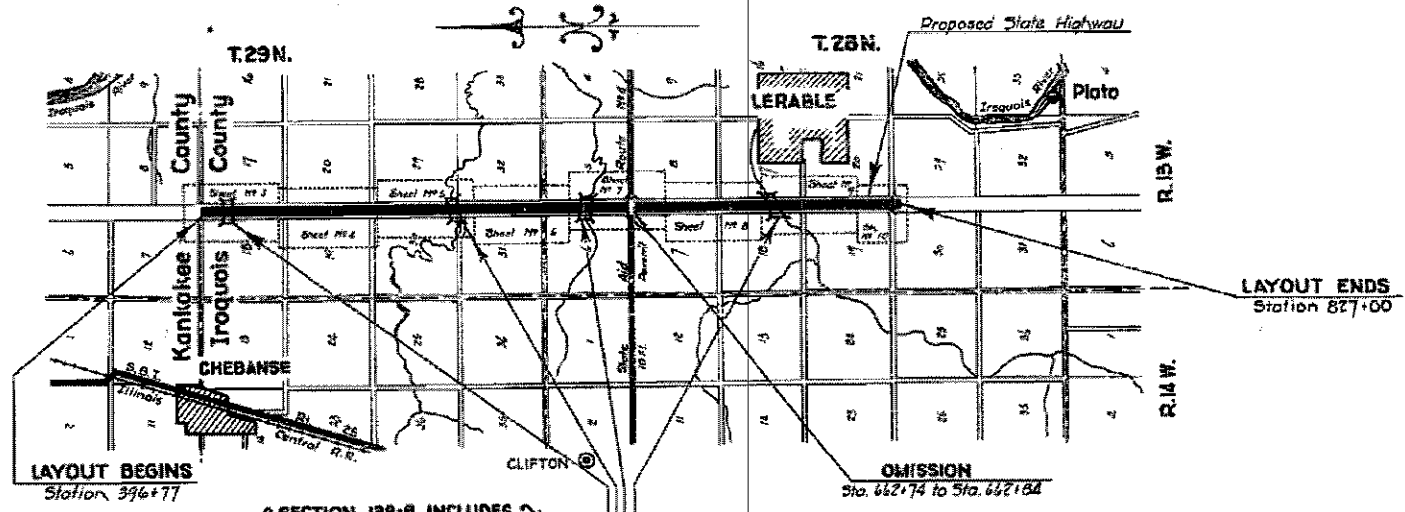
SECTION - 138	SECTION 138-B
44481 - Cu.Yds. Class A Excavation	730.2 - Cu.Yds. Class A Concrete
15098 - Cu.Yds. Borrow Excavation	103.1 - Cu.Yds. Class B Concrete
1164 - Rods Hedge Pulling	332.0 - Cu.Yds. Class X Concrete (Footings)
86497 - Sq.Yds. Pavement	6.9 - Cu.Yds. Class X Concrete (Rail)
160 - Each Setting Right of Way Markers	143710 - Pounds Reinforcing Steel
104620 - Sq.Yds. Earth Shoulders	3390 - Lin. Ft. Piling (10 Ton Units)
366.3 - Cu.Yds. Class A Concrete	1160 - Lin. Ft. Piling (12 Ton Units)
27300 - Pounds Reinforcing Steel	2200 - Lin. Ft. Piling (15 Ton Units)
	5059 - Pounds Rockers and Plates
	780 - Pounds Structural Steel (Exp)
	3 - Each Name Plates

### SUMMARY OF CONCRETE

SECTION 138	SECTION 138-B
41 - Standard Culvert Des. No. 828-1-3 --- 77.9	730.2 - CLASS A - CLASS B - CLASS X (FOOTINGS) - CLASS (RAIL)
1 - No. 828-3-3 --- 2.2	Special Bridge Des. Sta. 412+24 --- 56.7 --- 103.1 --- 116.2 --- 29
4 - No. 1204-1-3 --- 18.8	Sta. 550+22 --- 397.4 --- 100.1 --- 114.2
2 - No. 1204-1-5 --- 11.2	Sta. 632+85 --- 87.4 --- 42.5 --- 4.0
1 - No. 1204-1-8 --- 7.4	Sta. 752+43 --- 186.7 --- 85.6
Special Culvert Design, Station 443+87 --- 12.0	Total Cu.Yds. Concrete --- 730.2 --- 103.1 --- 332.0 --- 6.9
Station 450+60 --- 12.0	
Station 476+00 --- 6.7	
Station 529+00 --- 6.7	
Station 559+83 --- 20.6	
Station 608+00 --- 8.9	
Station 610+20 --- 11.6	
Station 618+12 --- 6.7	
Station 662+47 --- 18.1	
Station 680+67 --- 39.1	
Station 701+00 --- 25.1	
Station 715+76 --- 6.7	
Station 737+64 --- 22.1	
Station 746+00 --- 6.7	
Station 822+00 --- 39.1	
Station 822+50 --- 6.7	
Total Cu.Yds. Concrete --- 366.3	

## Route 49, Sections 138 & 138-B, Iroquois Co.

From a point near the N.E. corner of Sec. 18, T.29 N., R.13 W. of the 2nd Prime Meridian to a point near the N.E. corner of Sec. 30, T.29 N., R.13 W. of the 2nd D.M.



SECTION 138-B INCLUDES

- 1 R.C. Slab Bridge, 1 span @ 16'-0" at Sta. 412+24
- 1 R.C. Girder Bridge, 2 spans @ 60'-0" on @ Sta. 550+22
- 1 R.C. Slab Bridge, 1 span @ 24'-0" at Station 632+85
- 1 R.C. Girder Bridge, 1 span @ 60'-0" at Station 752+43

LAYOUT  
Approximate Scale: 1 inch = 1 mile.  
Net Length of Layout = 43010.4 Feet = 8.146 Mi.

### SECTION 138-B

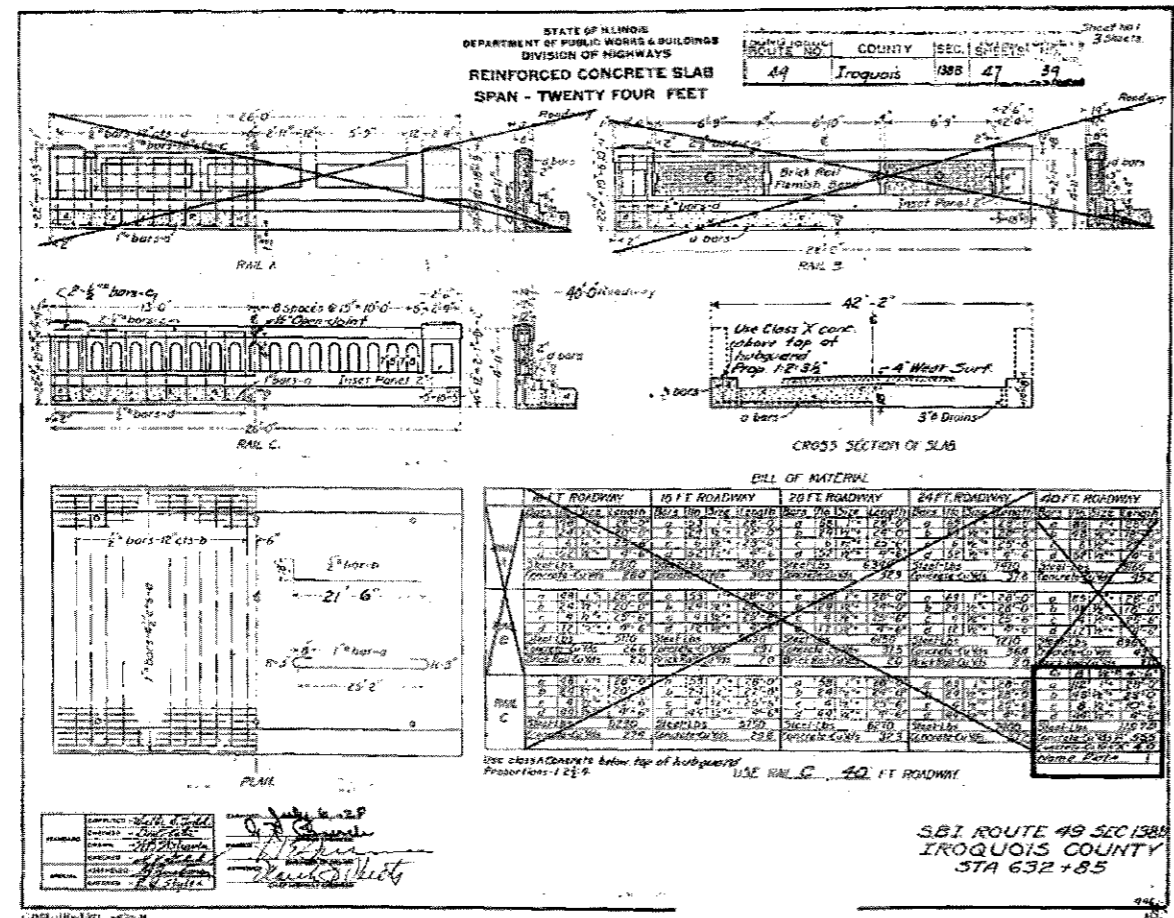
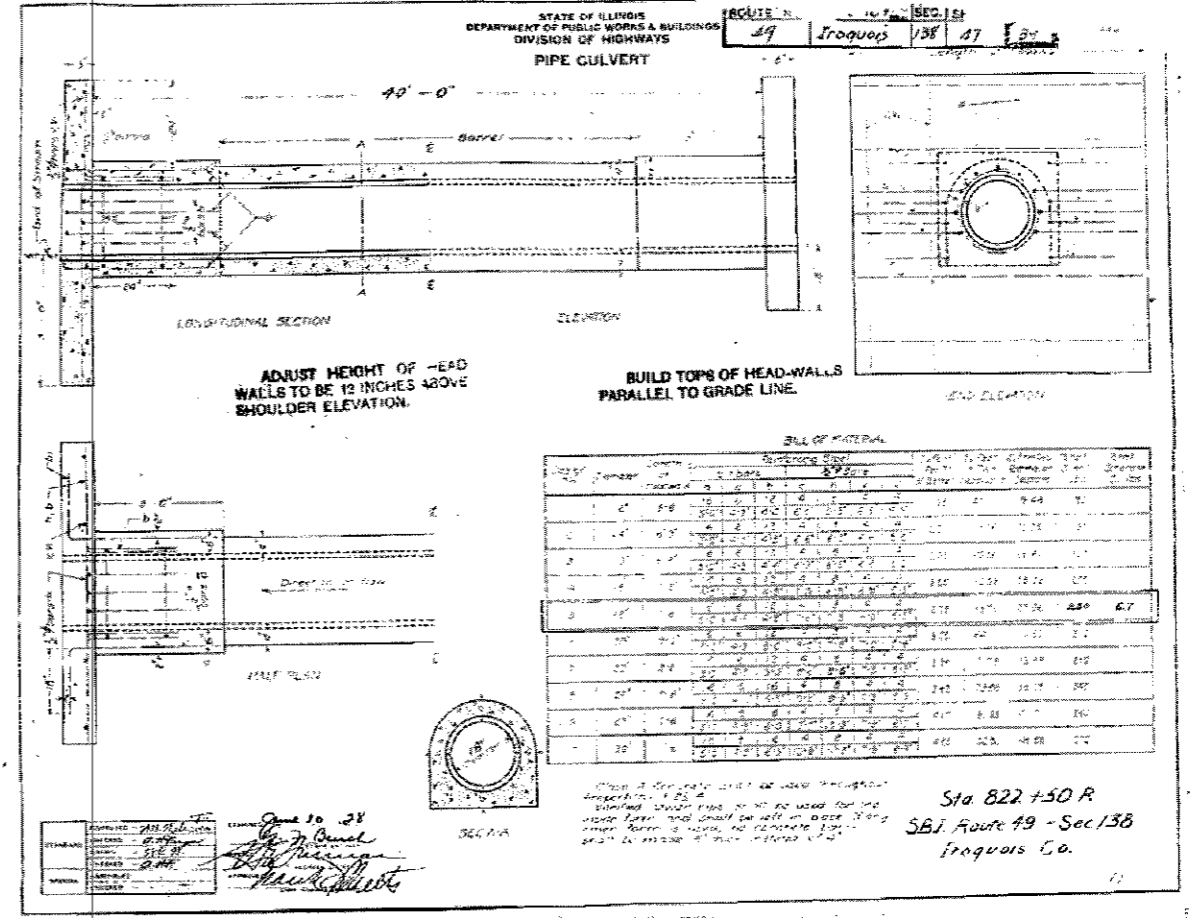
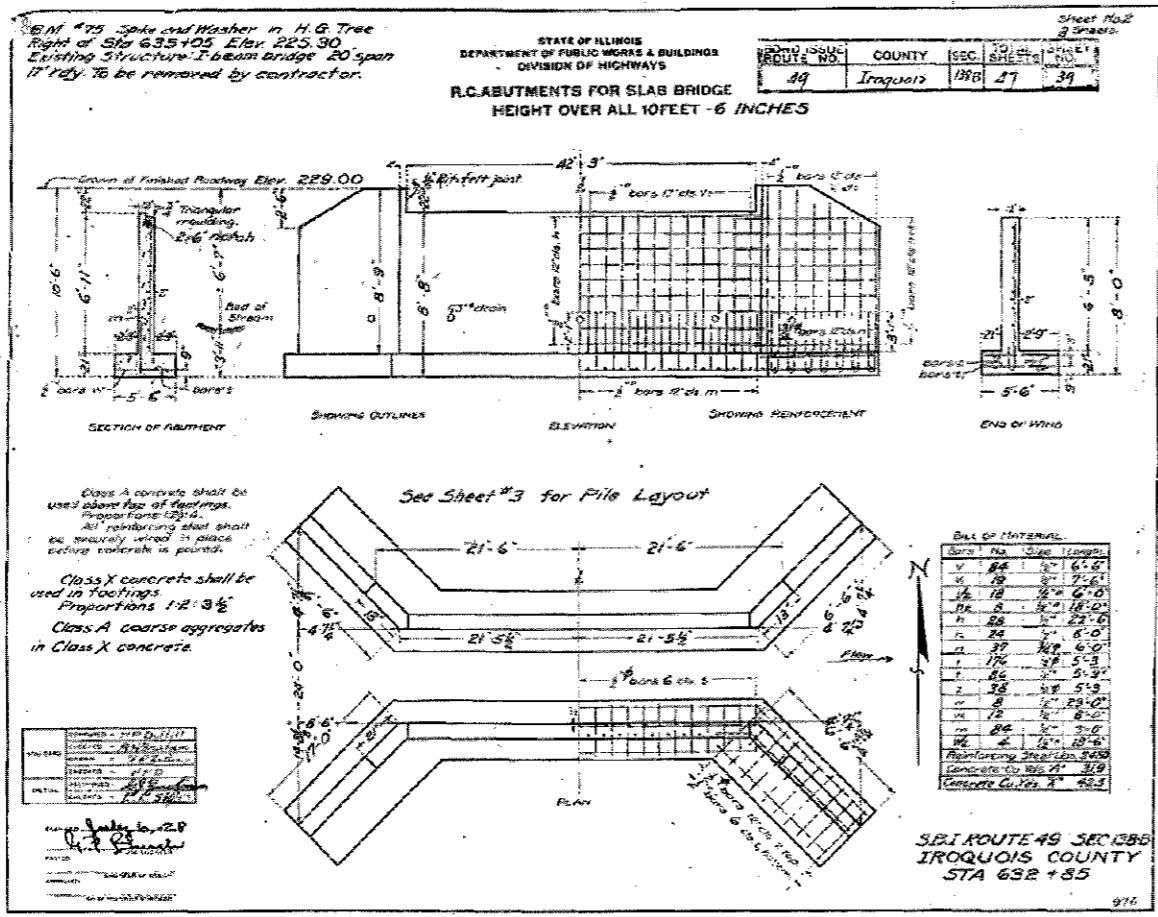
CLASS A - CLASS B - CLASS X (FOOTINGS) - CLASS (RAIL)
Special Bridge Des. Sta. 412+24 --- 56.7 --- 103.1 --- 116.2 --- 29
Sta. 550+22 --- 397.4 --- 100.1 --- 114.2
Sta. 632+85 --- 87.4 --- 42.5 --- 4.0
Sta. 752+43 --- 186.7 --- 85.6
Total Cu.Yds. Concrete --- 730.2 --- 103.1 --- 332.0 --- 6.9

### SUMMARY

Station to Station	Gross Length Along Transit Line		Corrections for Curves		Corrections for Relocations		Net Length Along Single Center Line	Omissions	Net Length to be Improved in Feet		Pavement Over Bridges		Sq. Yds. of Pavement	
	Feet	Feet	Sta. of PI	Feet	Sta. = Sta.	Feet			Feet	Sta.	Feet	Wideria	18 Ft.	Total
396+77	500+00	18	10313				10323		10323	10323	412+24	18	20646	20646
500+00	620+00	18	12000	610+00	1.7		11998.3		11998.3	11998.3	550+22	107.8	23446.6	24035.2
620+00	700+00	18	8000	622+20	0.9		7999.1	662+74	662+84	10			15978.2	16202.2
700+00	760+00	18	6000				6000		6000		752+43	63	12000	12021
760+00	827+00	18	6700				6700		6700				13400	13788
TOTALS			43023		2.6		43020.4		43010.4	43010.4	234.8	476.6	66020.8	86676.4

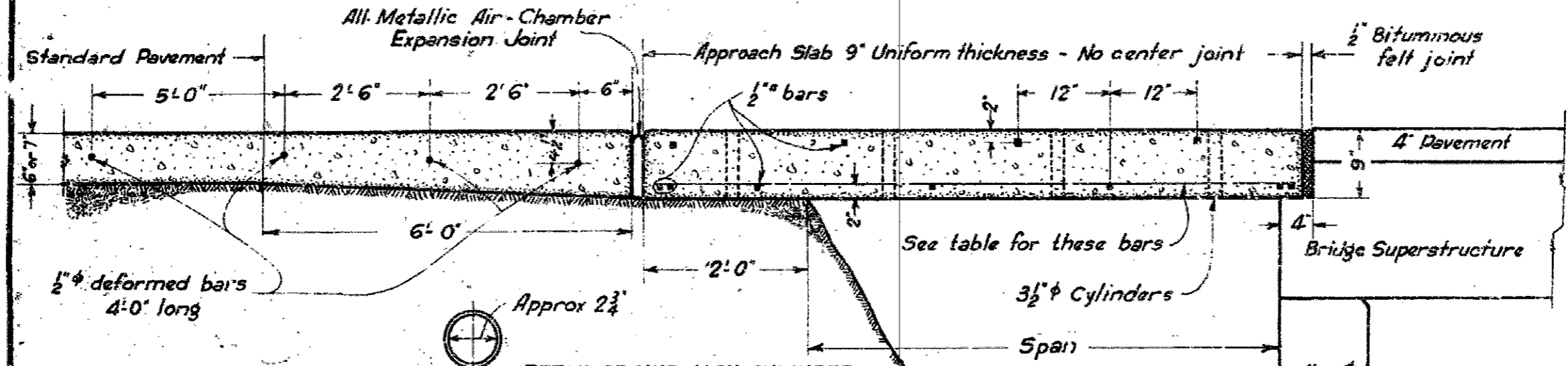
a - Widening over Bridges.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
June 25 1922  
June 25 1922  
June 25 1922  
June 25 1922  
June 25 1922





STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS



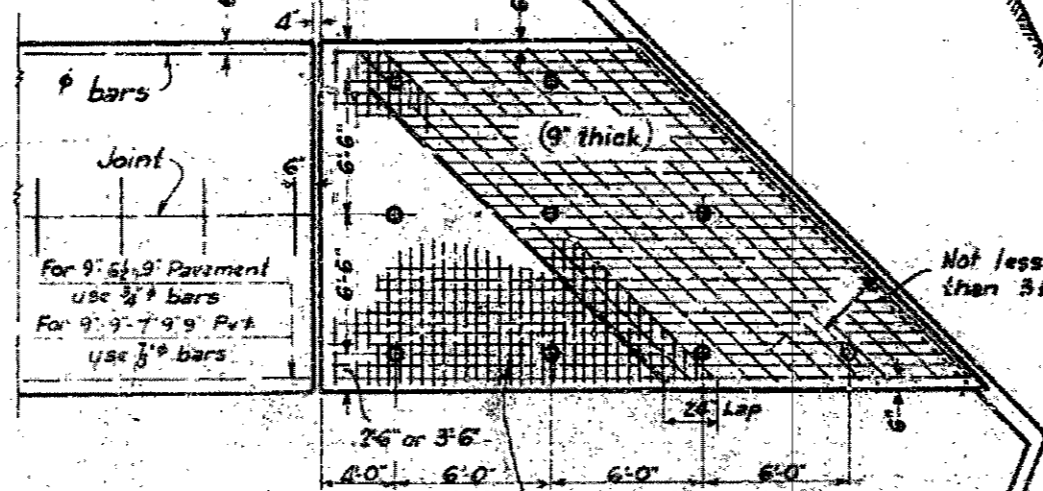
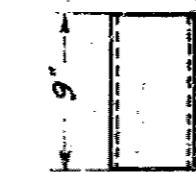
BARS PARALLEL TO  $\phi$

SPAN	LENGTH	SIZE	SP'CG.
7'-0"	9'-0"	2" $\phi$	6"
8'-0"	10'-0"	2" $\phi$	5"
9'-0"	11'-0"	2" $\phi$	5"
10'-0"	12'-0"	3" $\phi$	5"
11'-0"	13'-0"	3" $\phi$	4"
12'-0"	14'-0"	3" $\phi$	4"
13'-0"	15'-0"	3" $\phi$	5"
14'-0"	16'-0"	3" $\phi$	5"
15'-0"	17'-0"	3" $\phi$	4"
16'-0"	18'-0"	3" $\phi$	4"
17'-0"	19'-0"	7" $\phi$	5"
18'-0"	20'-0"	7" $\phi$	4"

DETAIL OF MUD JACK CYLINDER

Standard black iron pipe cylinder to be filled with clay, tamped & hardened

NOTE: A welded bar mat weighing not less than 78 lbs. per 100 sqft. having members of equal size in both directions and spaced not over 8 inches apart, may be used in place of the #2 welded wire fabric 6'x6', provided that, the bar mat is furnished at no additional cost to the State



NOTE - The cost of constructing the pavement in accordance with this design at such points as are designated on the detail plans, including all extra materials except reinforcement, shall be included in the unit price bid for pavement. No extra compensation will be allowed except for reinforcement, which will be paid for at the contract unit prices for Reinforcement Bars and Welded Wire Fabric

NOTE: If more than one reinforced approach slab is used the All-Metallic Air Chamber Expansion Joint shall be installed between the standard pavement and the last reinforced slab. Sealed Metal Contraction joints shall be used between the reinforced slabs

EXAMINED *H. F. Burch*  
BRIDGE ENGINEER  
PASSED *A. E. Durman*  
ENGINEER OF DESIGN

APRIL 11, 1932  
RETRACED - 1-26-37 H.G.F.

STANDARD DETAILS  
FOR  
PAVEMENT AND CONSTRUCTION JOINT  
ADJACENT TO BRIDGES

STANDARD No 1203

SHEET NO.	DESCRIPTION
1	COVER SHEET
2-3	TYPICAL SECTIONS & TAPERS
4	SUMMARY OF QUANTITIES & GENERAL NOTES
5-6	SCHEDULE OF QUANTITIES
7-9	CULVERT SCHEDULE
10	GUARDRAIL SCHEDULE
11	SCHEMATIC LAYOUT OF PORTABLE SCALE TURNOUT
12-26	AERIAL VIEWS
27-28	BOX CULVERT EXTENSION STA 450+05 (TR 7A)
29-30	CULVERT EXTENSION DETAILS
31	PRECAST CONCRETE BOX SECTION & GRATING DETAILS
32	PRECAST CONCRETE BOX CULVERT END SECTION
33	HEADWALL & GRATE DETAIL FOR CROSS ROAD CULVERT RT STA 607+85
34	SLOPE WALL DETAIL FOR PE LT STA 629+95
35-40	DETAILS
41	CROSS SECTIONS FOR PORTABLE SCALE TURNOUT
42-43	RCWV INFORMATION

STANDARDS

1527-9	MANHOLE, TYPE A
1683-4	INLET, TYPE A
1686-4	SYMBOLS AND ABBREVIATIONS
1744-4	RIGHT-OF-WAY MARKERS
2135	PERMANENT SURVEY MARKERS
2171	MAILBOX TURNOUT
2179-19	24" P.C.C. PAVEMENT
2213-4	FRAME AND LIDS, TYPE 1
2217-3	GRATE, TYPE B
2226-4	METAL END SECTION FOR PIPE CULVERTS
2229-5	METAL END SECTION FOR PIPE ARCHES
2230-15	STEEL PLATE BEAM GUARDRAIL
2262-9	REINFORCED CONCRETE ELBOW AND PRECAST REINFORCED CONCRETE FLARED END SECTION
2298-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-10	DESIGN OF TRAFFIC CONTROL DEVICES
2300-3	FLAGMAN TRAFFIC CONTROL SIGN
2301-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2302-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2303-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY
2305-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES RURAL, MOVING OPERATION, DAY
2307-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES SHORT-TIME OPERATION, DAY OR NIGHT
2308-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE VIII), RURAL, MOVING OPERATION, MULTILANE DIV., DAY
2309-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, BRIDGE, DAY OR NIGHT
2311-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WIDENING, DAY OR NIGHT
2312-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WORK IN SERIES, DAY OR NIGHT
2323-10	PAVEMENT JOINTS
2336-4	TRAFFIC BARRIER TERMINAL, TYPE 1 AND 1A
2340-4	TRAFFIC BARRIER TERMINAL, TYPE 5 & 5A
2347-4	PAVEMENT FABRIC FOR FULLY REINFORCED JOINTED P.C.C. PAVEMENT
2354-1	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
2359-2	WIDENING AND SHOULDERS FOR PAVEMENT RESURFACING (WITH AGGREGATE SHOULDERS)
2381	TEMPORARY EROSION CONTROL SYSTEMS
2399-1	STEEL RAIL RETROFIT FOR BRIDGES
2427	CLASS C AND D PATCHES

MICROFILMED \_\_\_\_\_  
 REEL NUMBER \_\_\_\_\_  
 AWARDED \_\_\_\_\_  
 RESIDENT ENGINEER \_\_\_\_\_  
 AS BUILT CHANGES WERE MADE  
 ON THE FOLLOWING SHEETS \_\_\_\_\_

JULIE 1-800-892-0123  
 PROJECT ENGINEER: LYLE SCHAUB  
 SQUAD LEADER: BOB LITTLE  
 TOWNSHIP: CHEBANSE & ASHKUM

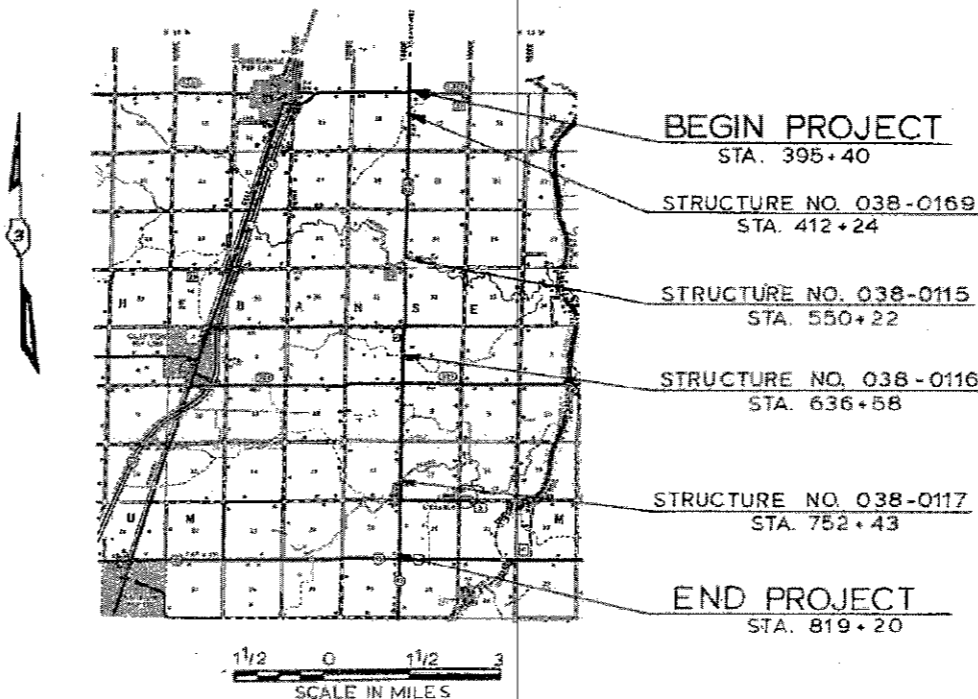
CONTRACT NO. 86024

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAY PLANS FOR PROPOSED FEDERAL AID HIGHWAY

## F.A. ROUTE 840 (U.S. 45/52) SECTION 138 RS-2

### IROQUOIS COUNTY

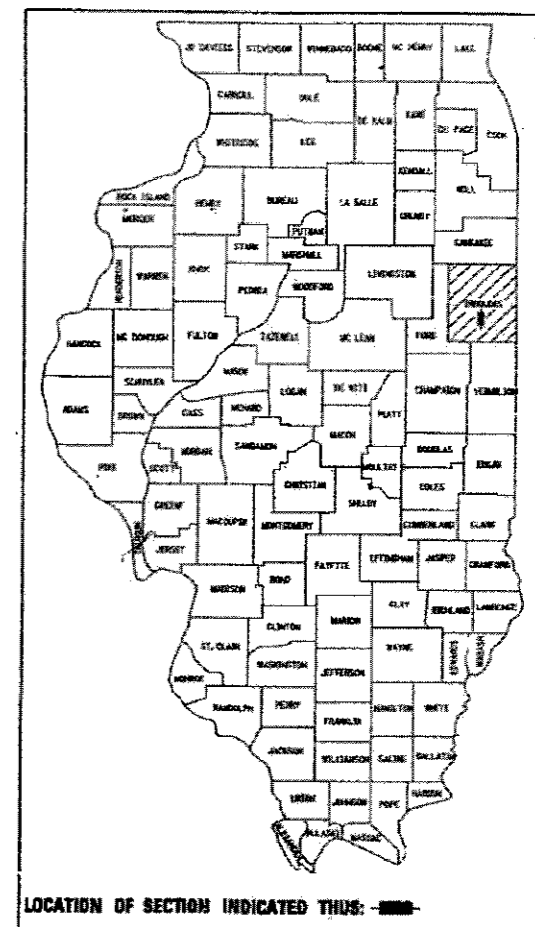
C-93-011-89



GROSS AND NET LENGTH OF PROJECT = 42,380.0 FEET = 8.026 MILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	138 RS-2	IROQUOIS	46	34

P-93-027-87



DESIGN DESIGNATION

1988 ADT 2500  
 PC 89.3%, SU 2.7%, MU 8.0%

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED OCT 31 1988  
R.H. Blasingame DISTRICT ENGINEER  
 EXAMINED DEC 16 1988  
Henry P. Gould ENGINEER OF PLANS AND CONTRACTS  
 PASSED DEC 16 1988  
D.J. Williams ENGINEER OF DESIGN  
 APPROVED DEC 16 1988  
John Thompson DIRECTOR, DIVISION OF HIGHWAYS



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:55:21 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

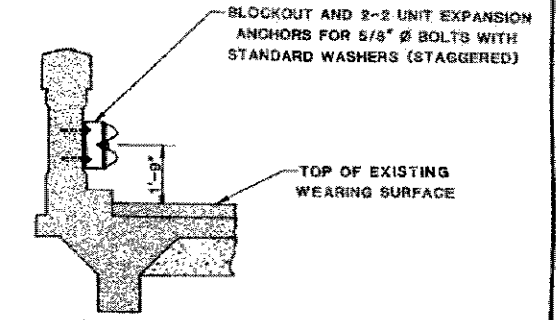
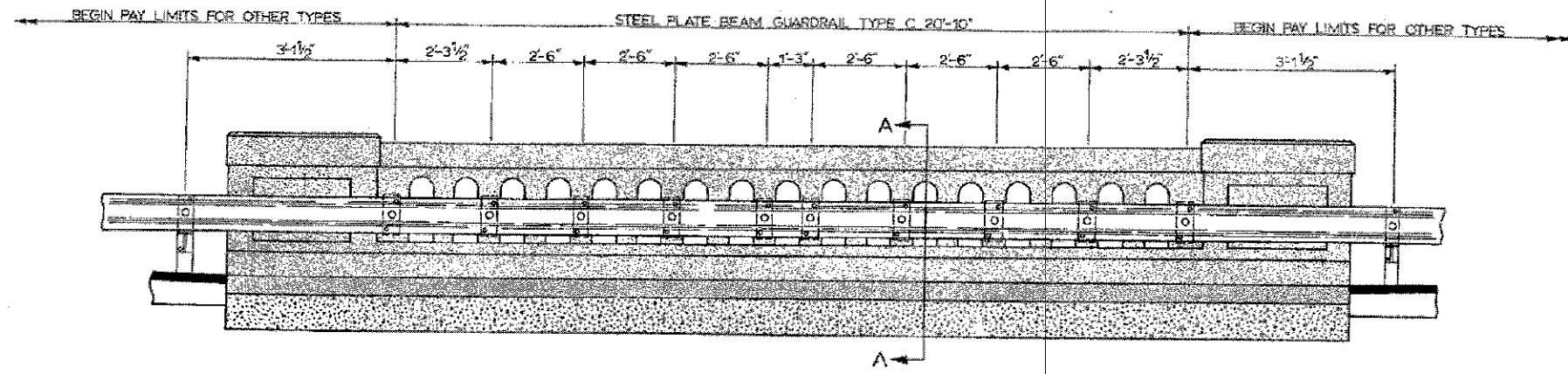
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - FOR INFORMATION ONLY  
 STRUCTURE NO. 038-2029

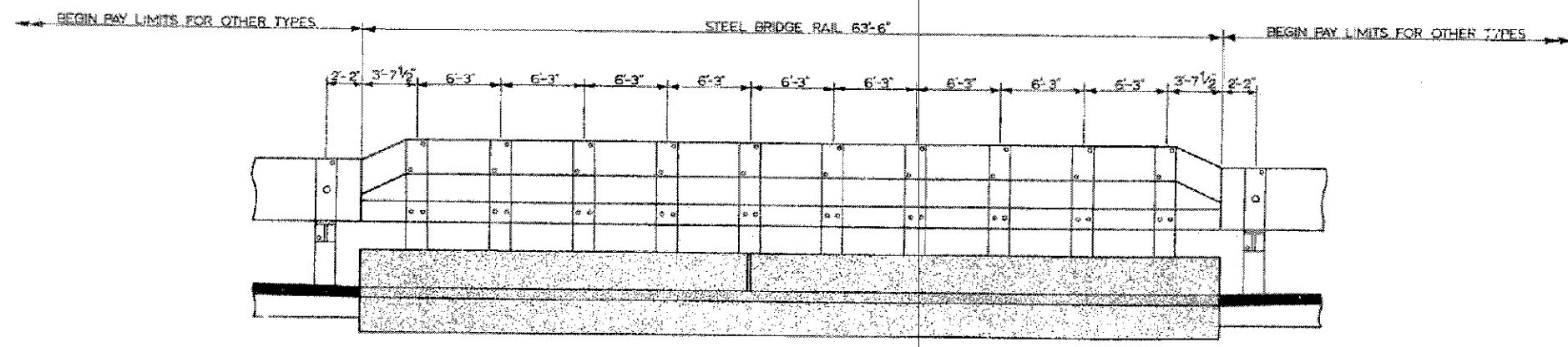
SHEET NO. 13 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	138 BR-11BR	IROQUOIS	46	34
				CONTRACT NO. 66E24
ILLINOIS FED. AID PROJECT				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 840	138 RS-2	IROQUOIS	46	36
F.H.A. REG. D. ILLINOIS PROJECT				



**GUARDRAIL ATTACHED TO EXISTING BRIDGE RAIL**  
 STRUCTURE NO. 038-0116  
 STATION 636+58



**STEEL BRIDGE RAIL ATTACHED TO EXISTING CURB**  
 STRUCTURE NO. 038-0117  
 STATION 752+43

**GUARDRAIL DETAILS**

**LIN ENGINEERING, LTD.**  
 Consulting Engineers  
 Springfield, Illinois

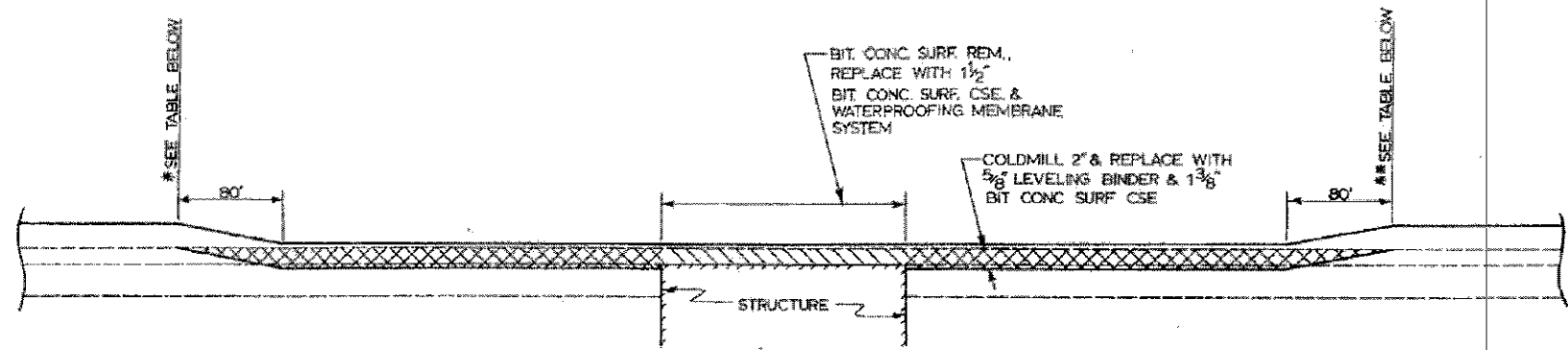
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FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:55:27 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EXISTING PLANS - FOR INFORMATION ONLY**  
**STRUCTURE NO. 038-2029**  
 SHEET NO. 14 OF 15 SHEETS

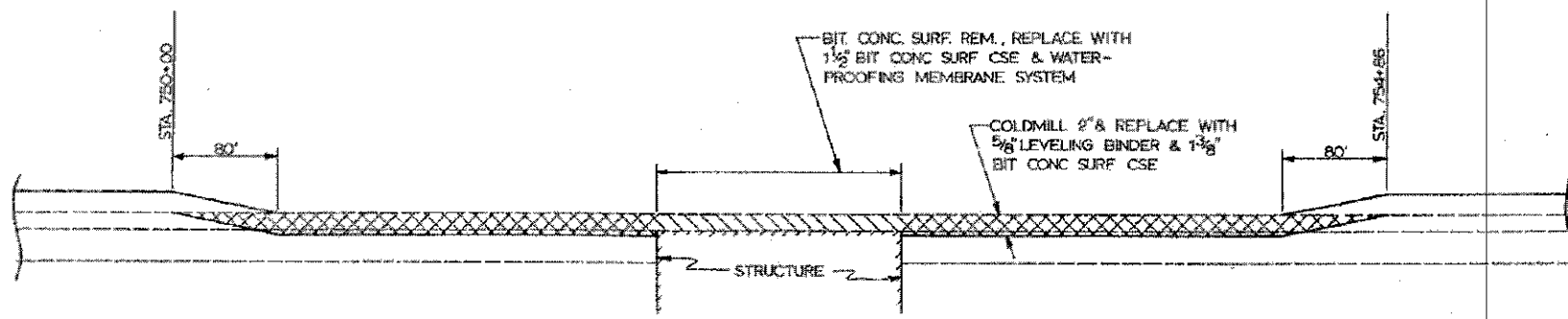
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	138 BR-1BR	IROQUOIS	46	35
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
F.A.P. 840	138 RS-2	IROQUOIS	46	37
F.H.W.A. REG. A 1 ILLINOIS PROJECT				



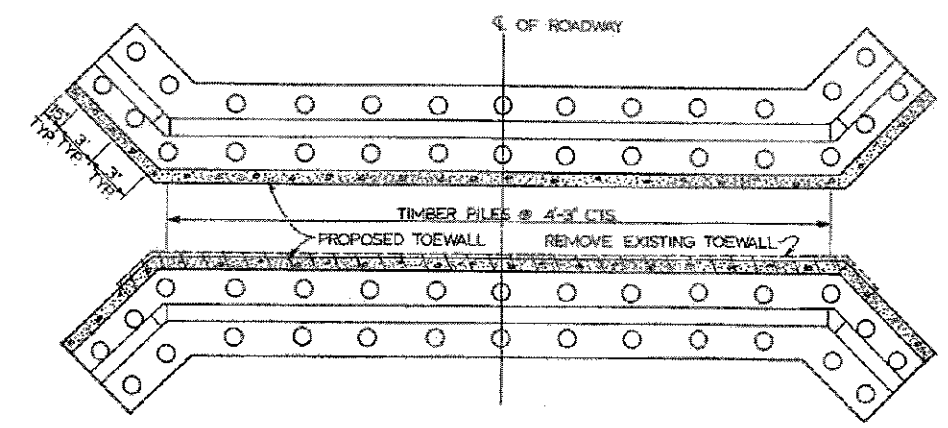
**COLDMILLING DETAIL**

STRUCTURE NO. 038-0169 - \*STA. 408+80 TO \*\*STA. 414+50  
 STRUCTURE NO. 038-0115 - \*STA. 548+00 TO \*\*STA. 552+00  
 STRUCTURE NO. 038-0116 - \*STA. 634+00 TO \*\*STA. 638+20

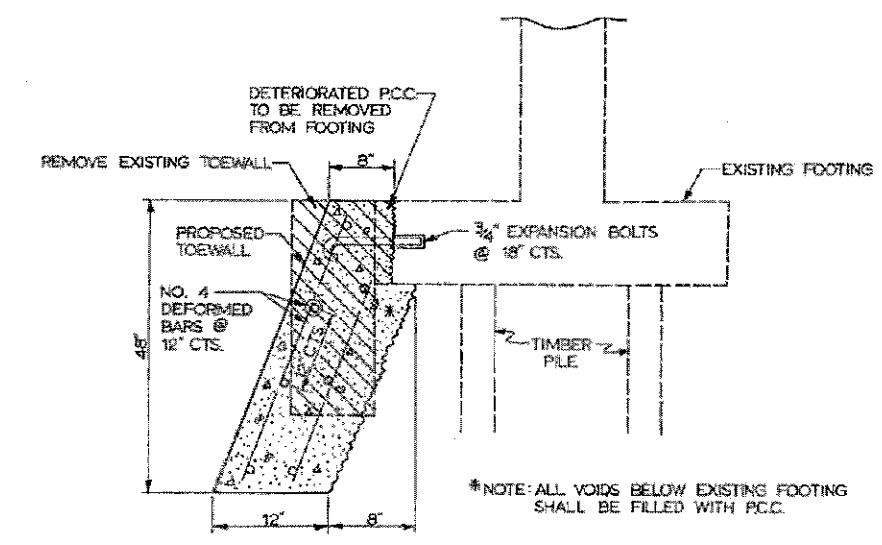


**COLDMILLING DETAIL**

STRUCTURE NO. 038-0117



**PILE LAYOUT**



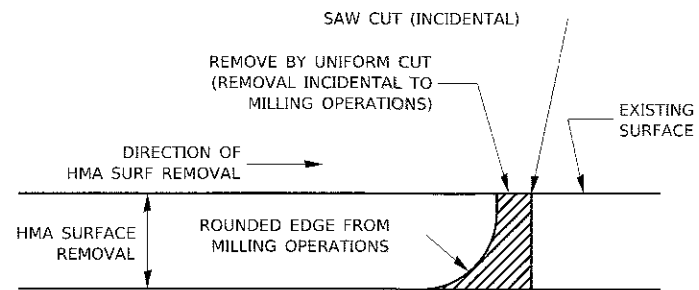
**TOEWALL DETAIL @ STRUCTURE #038-0116**

STA. 636+58

TOEWALL QUANTITIES*				
BAR	SIZE	NUMBER	LENGTH	SHAPE
h	#5	14	23'-0"	
h <sub>1</sub>	#5	14	9'-0"	
y	#5	116	3'-0"	
3/4" EXPANSION BOLTS		EACH		42
CLASS X CONCRETE		CU YD		8.0
REINFORCEMENT BARS		LBS		532
CONCRETE REMOVAL		CU YDS		6.2

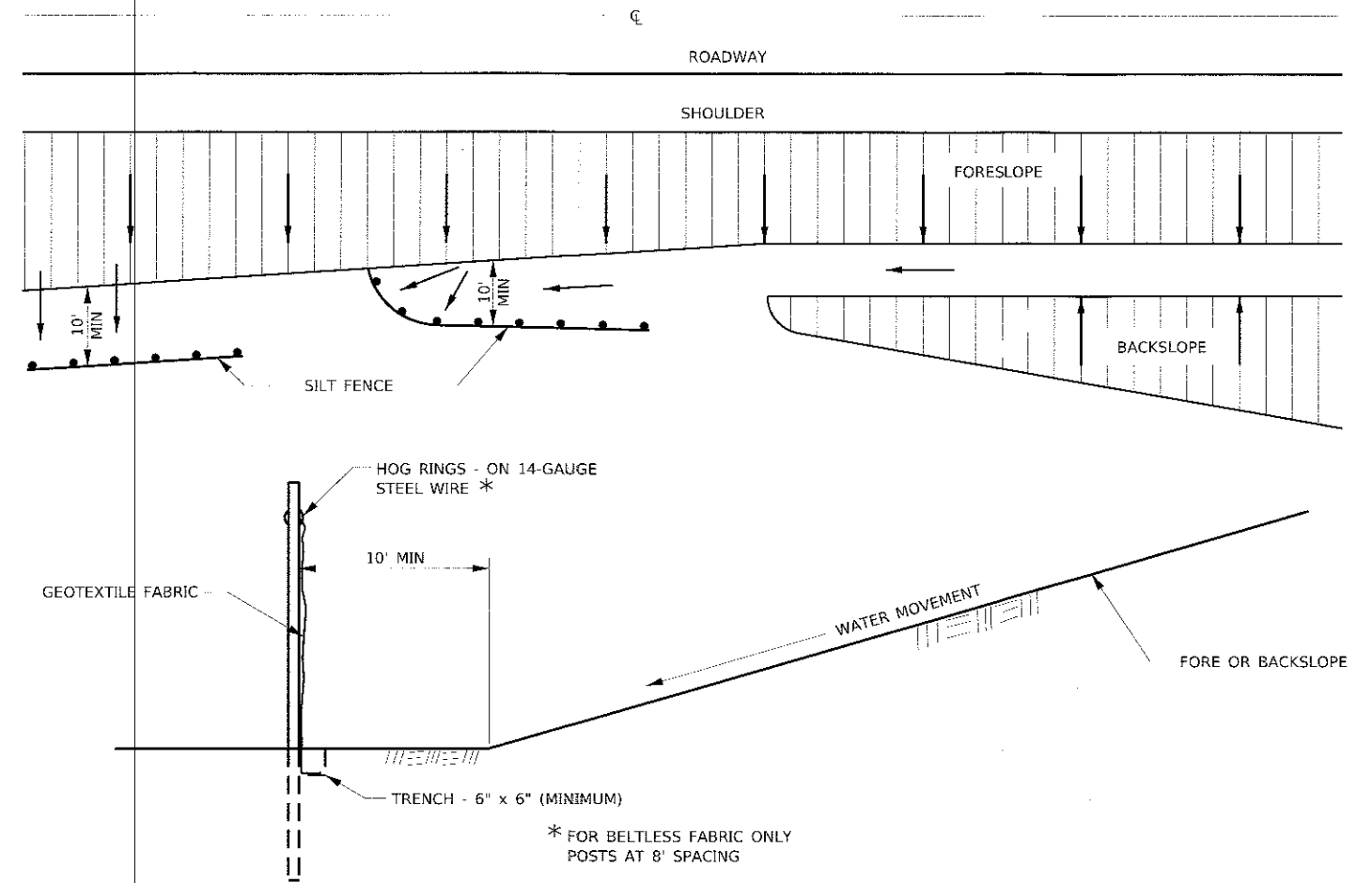
\*QUANTITIES ARE FOR ONE WALL ONLY.

**COLDMILLING & TOEWALL DETAILS**



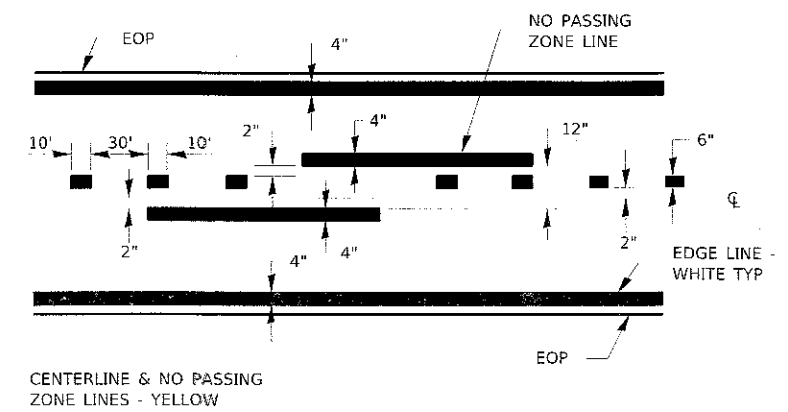
NOTE:  
 WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE,  
 THEN A SAW CUT SHALL BE USED TO MANUFACTURE  
 A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL.  
 THE ENGINEER SHALL BE THE SOLE JUDGE  
 CONCERNING THE USE OF THIS DETAIL

**HMA DETAIL AT BUTT JOINTS**

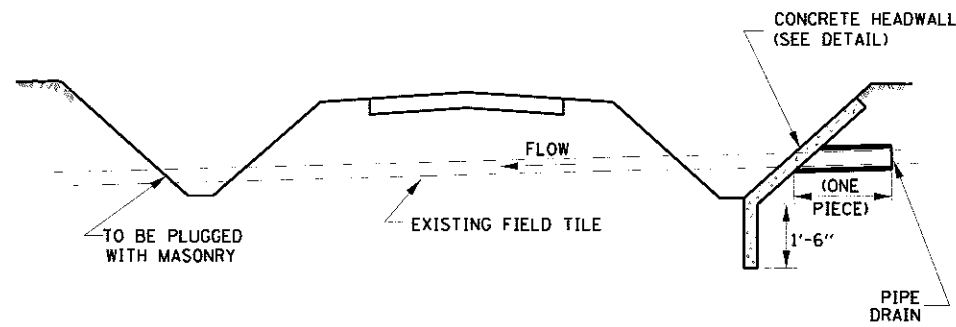
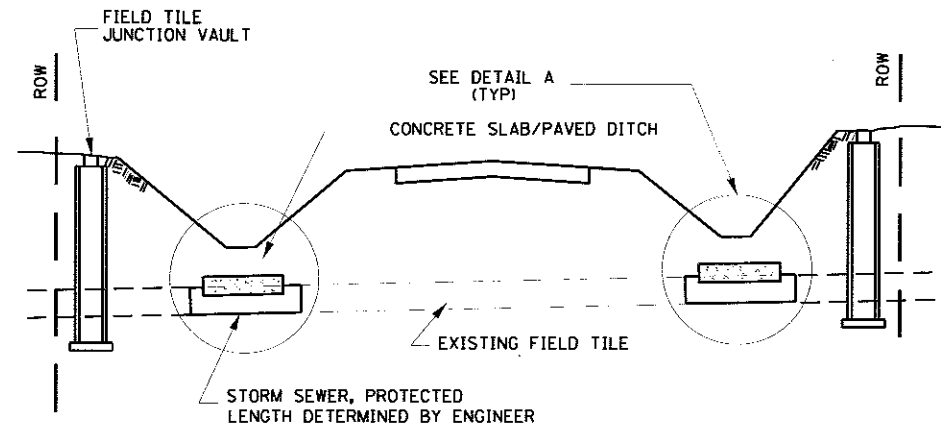


**DETAILS OF SILT FENCE**

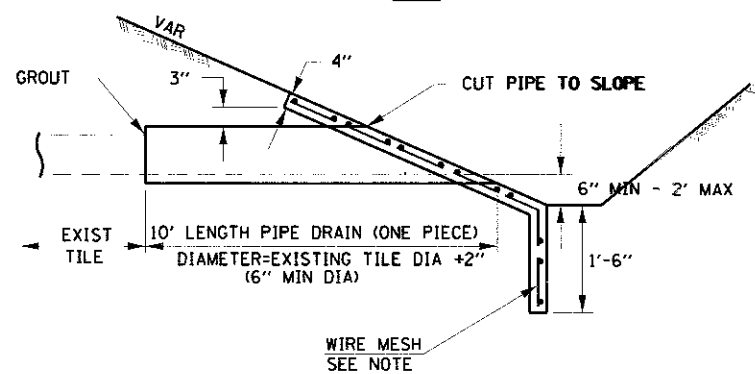
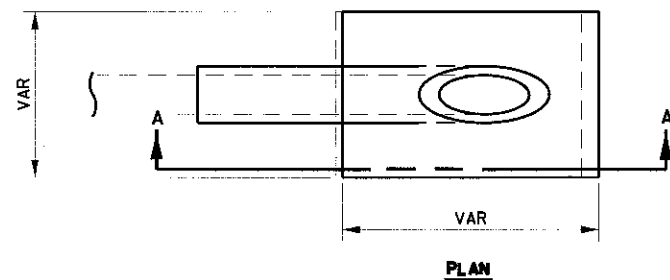
**EROSION CONTROL DETAILS FOR SILT FENCE**



**PAVEMENT MARKING**

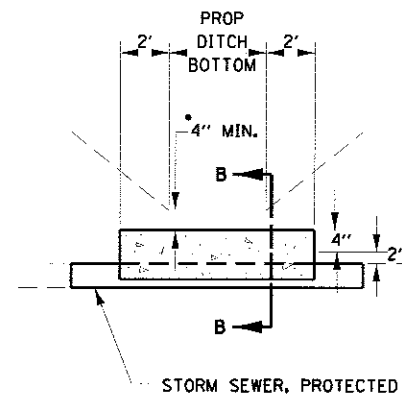


**FIELD TILE REPLACEMENT**



**SECTION A-A**

**CLASS SI CONCRETE HEADWALLS**



**DETAIL A**  
NO SCALE

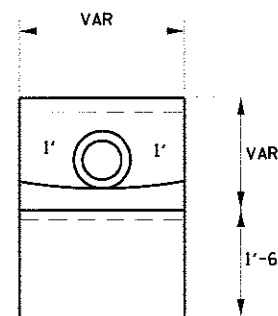
\* IF A 4" COVER CAN NOT BE PROVIDED A PAVED DITCH SHALL BE CONSTRUCTED AS SHOWN IN DETAIL C.

**NOTES**

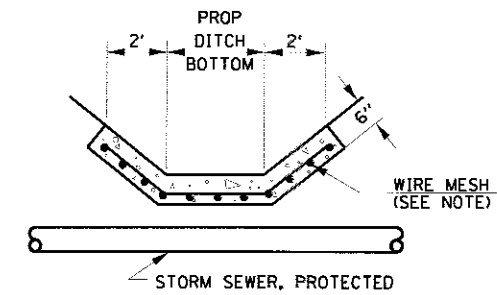
1. WIDTH OF CONCRETE SLAB SHALL BE THE SAME AS THE TRENCH WIDTH IN ACCORDANCE WITH SECTION 550 OF THE STD. SPECIFICATIONS, OR 3' MIN.
2. CONCRETE FOR SLAB, HEADWALL AND PAVED DITCH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "MISCELLANEOUS CONCRETE."
3. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT

**NOTES**

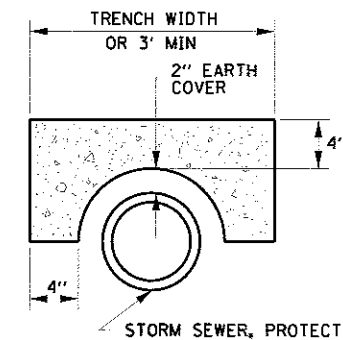
1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT



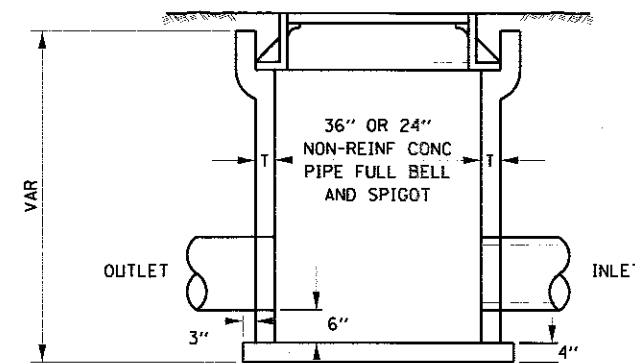
**END VIEW**



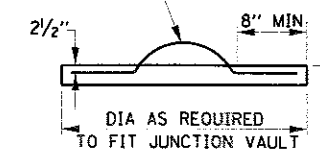
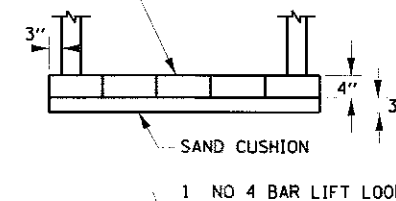
**DETAIL C**  
NO SCALE



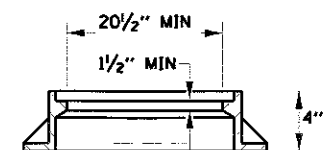
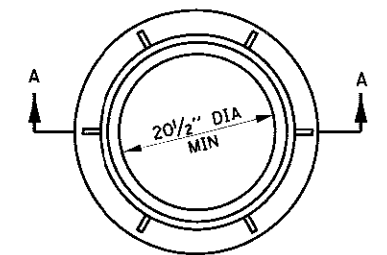
**SECTION B-B**



CLASS SI CONCRETE OR PRECAST REINFORCED CONCRETE SLABS NOT LESS THAN 12" WIDE



**FIELD TILE JUNCTION VAULT**



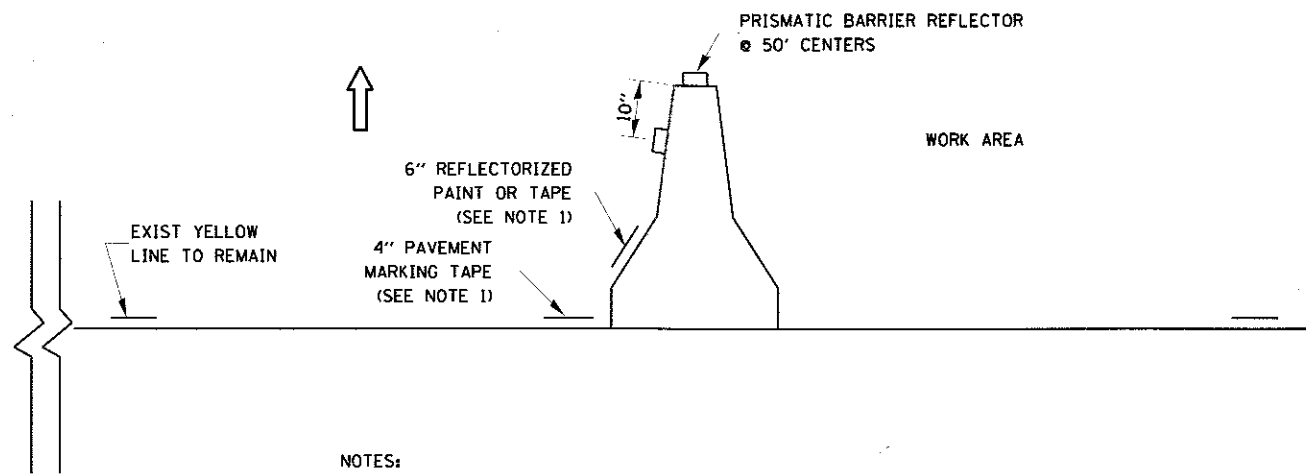
**SECTION A-A**

ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RISERS	4"
CONCRETE MASONRY UNIT	1 1/2"
MONOLITHIC CONCRETE	6"
BUILDING BRICK, GRADE SW FROM CLAY OR SHALE	8"
CONCRETE BUILDING BRICK, GRADE A	6"

**NOTES**

1. THE CONTRACT UNIT PRICE FOR FIELD TILE JUNCTION VAULT SHALL INCLUDE THE COST OF FURNISHING AND PLACING THE FRAME AND GRATE OR PRECAST CONCRETE LID AND WHEN REQUIRED, THE SAND CUSHION.
2. ALL FIELD TILE JUNCTION VAULTS SHALL BE 2'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.

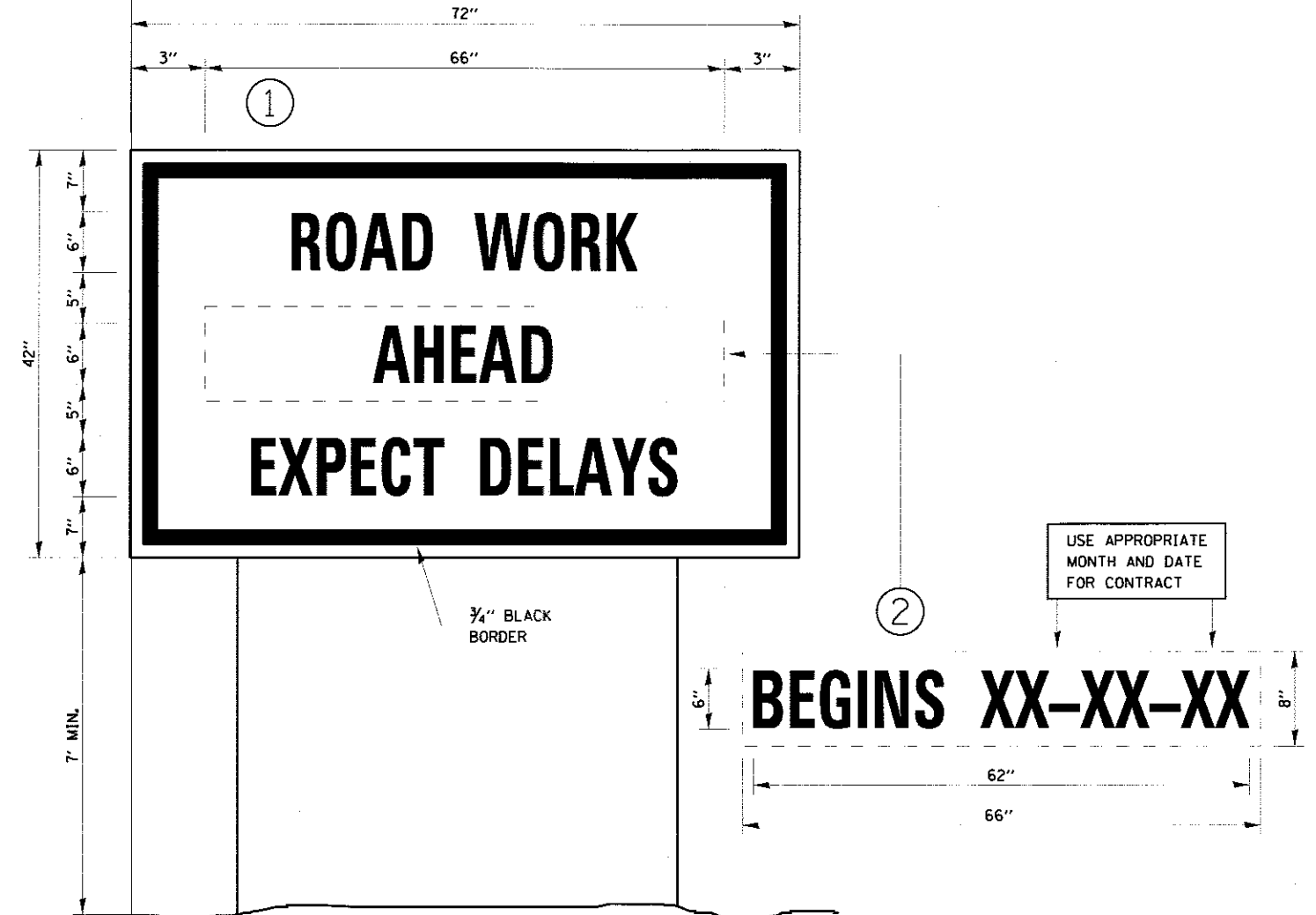
RDWY.



NOTES:

1. THE CONTRACTOR HAS THE OPTION OF USING EITHER THE LINE ON THE TEMPORARY CONCRETE BARRIER OR ON THE PAVEMENT.
2. THE COLOR OF THE REFLECTORS AND PAVEMENT/BARRIER MARKING LINE WILL VARY WITH STAGING AND SHALL MATCH THE EXISTING LINE IN THE WORK AREA.
3. THE COST OF THE REFLECTORS AND THE PAVEMENT/BARRIER MARKING LINE IS INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.

**TRAFFIC CONTROL DETAIL  
FOR TEMPORARY CONCRETE BARRIER**



**TEMPORARY INFORMATION SIGNING**

NOTES:

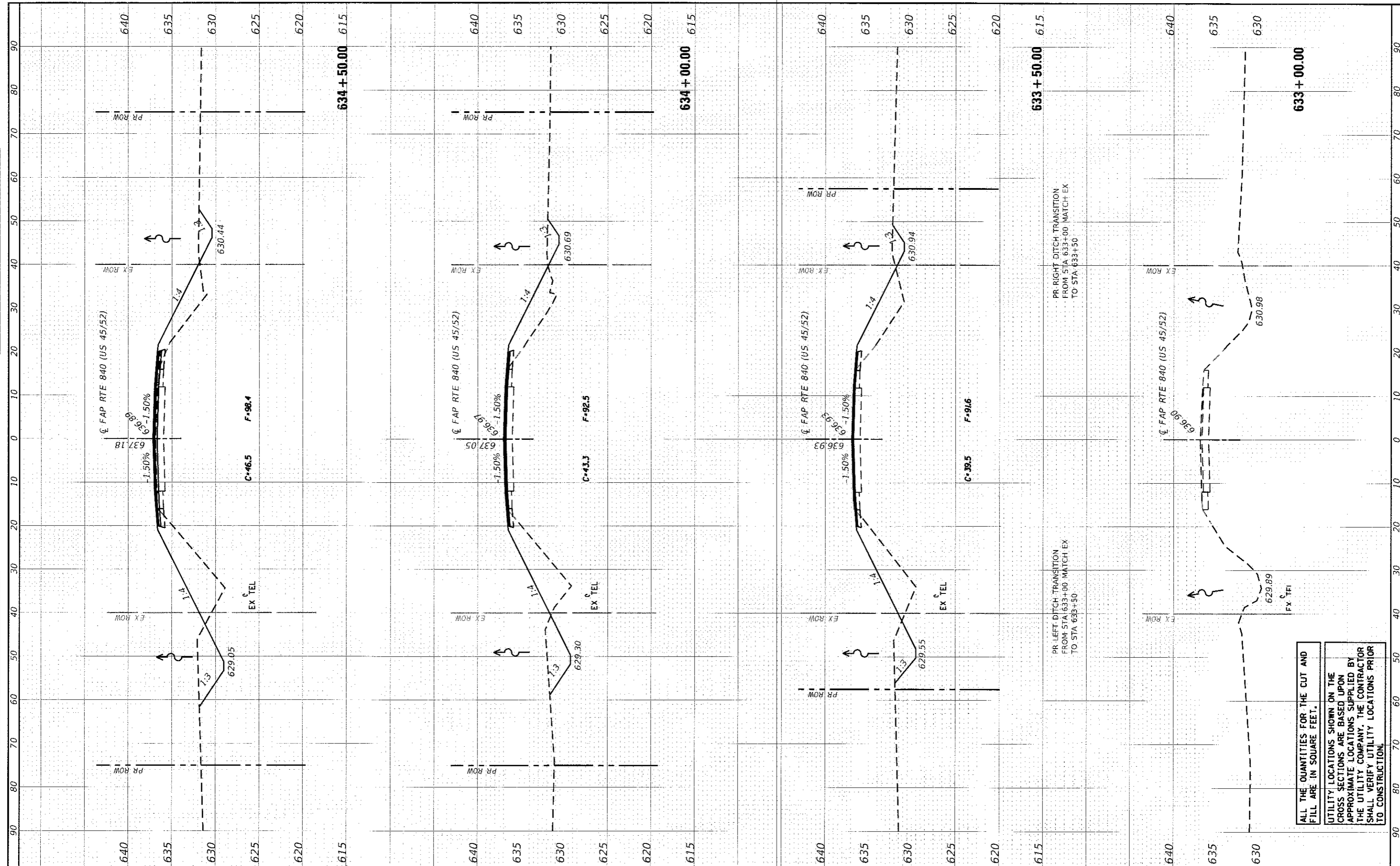
1. USE 6" D BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND.
2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
4. REMOVE PANEL ② ON THAT DATE.
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 PANEL ② WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.





FINAL	DATE
SURVEY	
NOTE BOOK	
AREAS CHECKED	

DESIGNED	DATE
DRAWN	
CHECKED	
DATE	



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

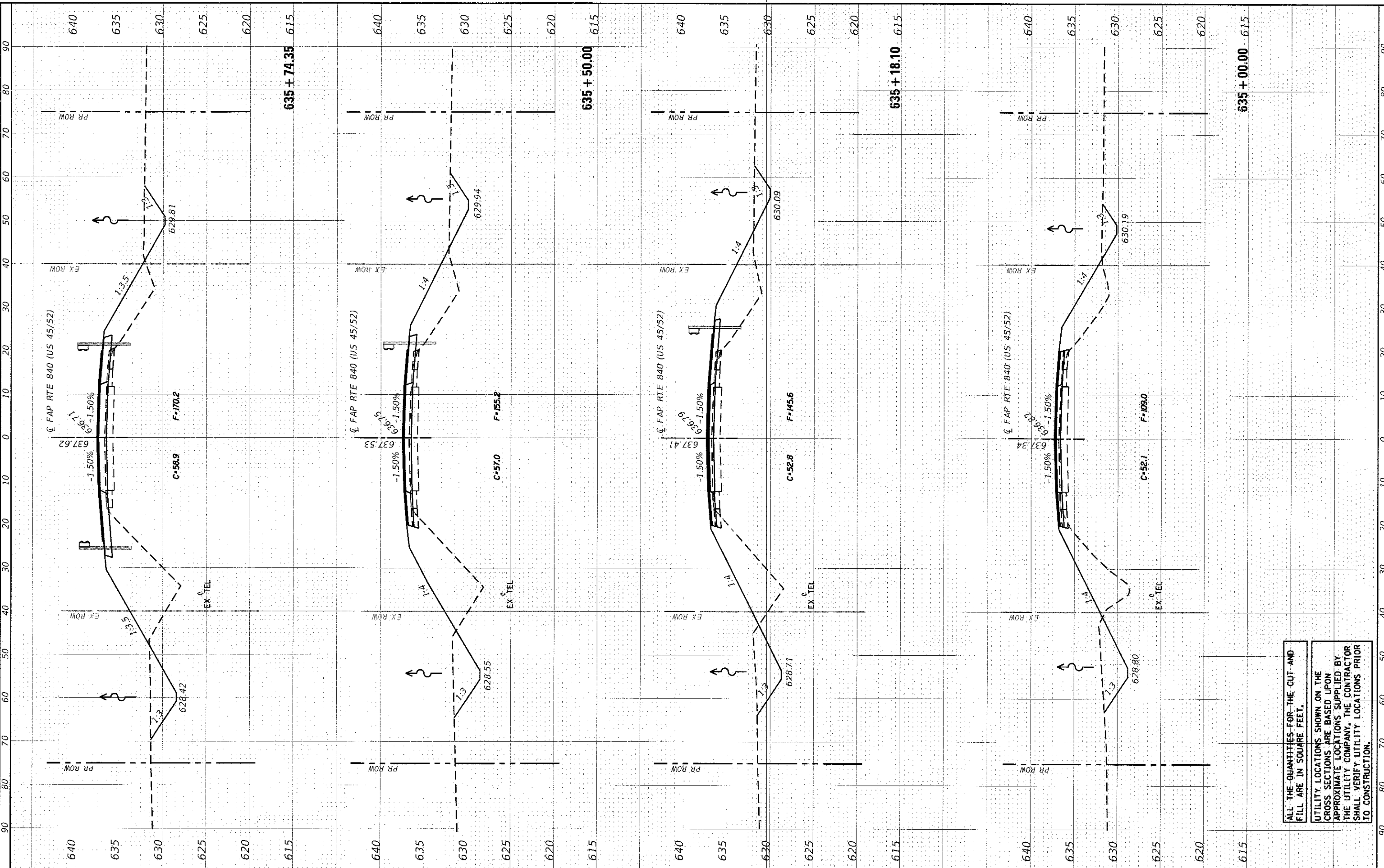
UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 863-8435 / info@f-w.com

USER NAME = dmayr  
 DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERB  
 DATE - 01/12/18  
 PLOT SCALE = 20,000' / 1" = 1/8" = 1/16" = 1/32" = 1/64" = 1/128" = 1/256" = 1/512" = 1/1024" = 1/2048" = 1/4096" = 1/8192" = 1/16384" = 1/32768" = 1/65536" = 1/131072" = 1/262144" = 1/524288" = 1/1048576" = 1/2097152" = 1/4194304" = 1/8388608" = 1/16777216" = 1/33554432" = 1/67108864" = 1/134217728" = 1/268435456" = 1/536870912" = 1/1073741824" = 1/2147483648" = 1/4294967296" = 1/8589934592" = 1/17179869184" = 1/34359738368" = 1/68719476736" = 1/137438953472" = 1/274877906944" = 1/549755813888" = 1/1099511627776" = 1/2199023255552" = 1/4398046511104" = 1/8796093022208" = 1/17592186044416" = 1/35184372088832" = 1/70368744177664" = 1/140737488355328" = 1/281474976710656" = 1/562949953421312" = 1/1125899906842624" = 1/2251799813685248" = 1/4503599627370496" = 1/9007199254740992" = 1/18014398509481984" = 1/36028797018963968" = 1/72057594037927936" = 1/144115188075855872" = 1/288230376151711744" = 1/576460752303423488" = 1/1152921504606846976" = 1/2305843009213693952" = 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 CHECKED: [ ]  
 DESIGNED: [ ]  
 DRAWN: [ ]  
 USER: [ ]

DATE: 3/18  
 NO. 1  
 CHECKED: [ ]  
 DESIGNED: [ ]  
 DRAWN: [ ]  
 USER: [ ]



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.  
 UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-8435 / info@f-w.com

USER NAME = dmayer  
 PLOT SCALE = 20,000' / in.  
 PLOT DATE = 11/22/2018

DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/ERB  
 DATE - 01/12/18

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

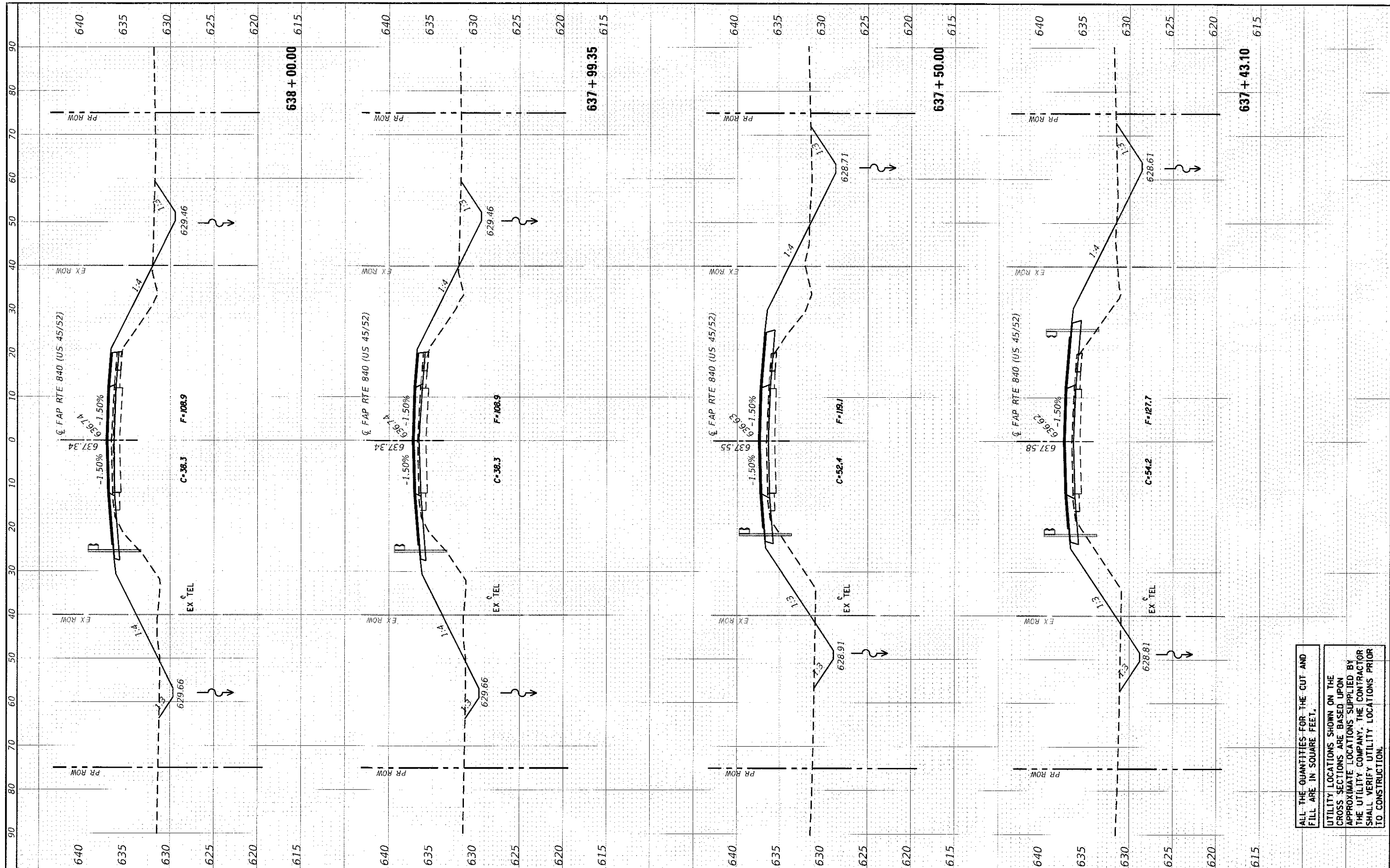
**FAP ROUTE 840 (US 45/52)  
 CROSS SECTIONS**  
 SCALE: 1"=10'  
 SHEET 3 OF 7 SHEETS  
 STA. 635+00.00 TO STA. 635+76.38

FAP RTE: 840	SECTION: (138 BR-1)BR	COUNTY: IROQUOIS	TOTAL SHEETS: 46	SHEET NO: 42
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



FORM	DATE
SURVEY	BY
PLOTTED	
NO. 7E BOOK	
AREA	
AREAS CHECKED	

DATE	
BY	
NO.	
AREAS CHECKED	



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

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**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-8435 / info@f-w.com

USER NAME	= dmsyar
DESIGNED	- JJO
DRAWN	- JJO
CHECKED	- PSA/ERB
DATE	- 01/12/18
REVISIONS	
REVISION	-
REVISION	-
REVISION	-

DESIGNED	- JJO
DRAWN	- JJO
CHECKED	- PSA/ERB
DATE	- 01/12/18
REVISIONS	
REVISION	-
REVISION	-
REVISION	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

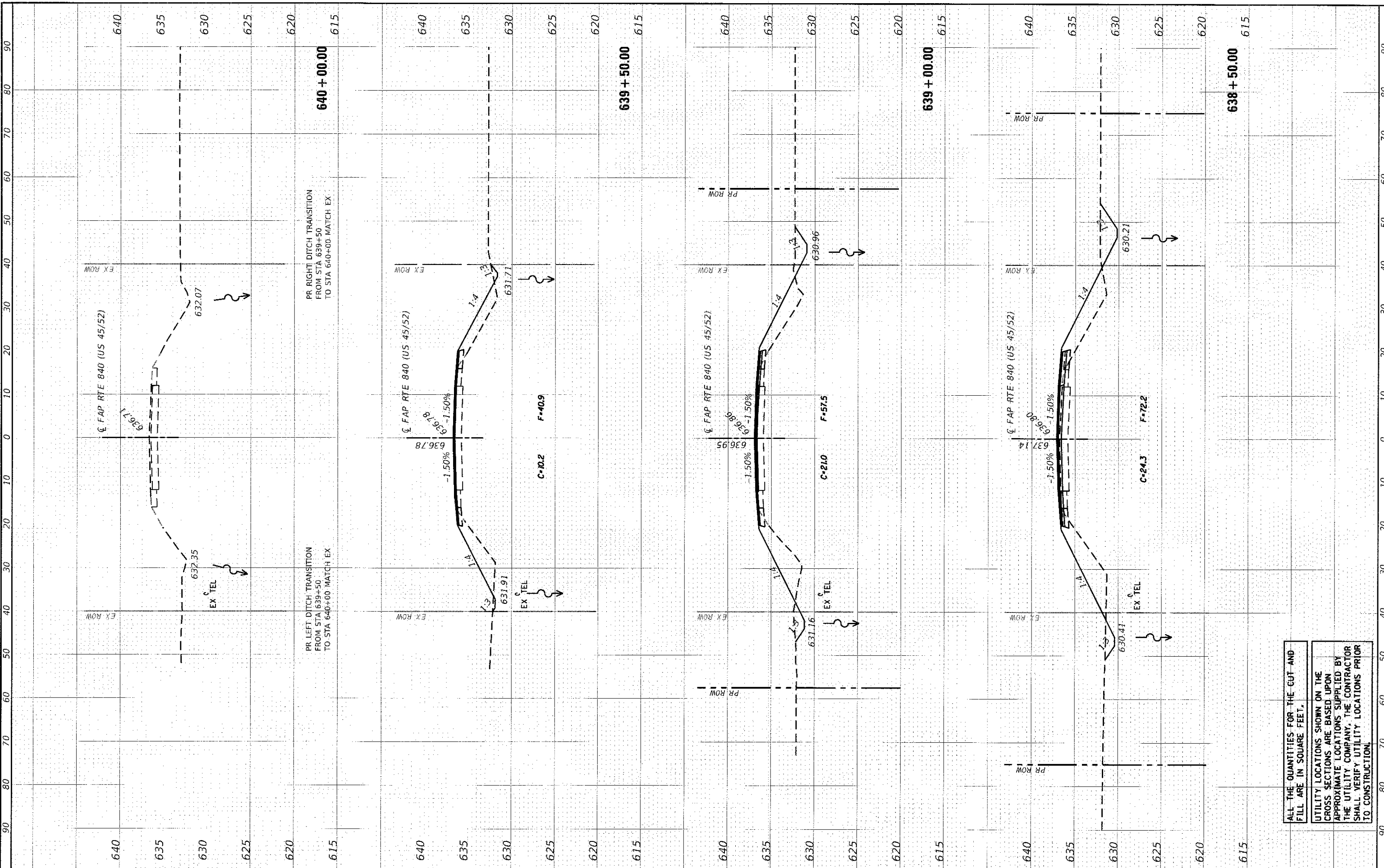
**FAP ROUTE 840 (US 45/52)  
CROSS SECTIONS**

SCALE: 1"=10'  
SHEET 5 OF 7 SHEETS STA. 637+43.10 TO STA. 638+00.00

F.A.P. RTE.	840	SECTION	(138 BR-1)BR	COUNTY	IROQUOIS	TOTAL SHEETS	46	SHEET NO.	44
						CONTRACT NO.	66E24		
						ILLINOIS	FED. AID PROJECT		

FINAL DATE: 01/12/18  
 CONFORMS TO: 11/12/18  
 SURVEY: 11/12/18  
 NOTE BOOK: 11/12/18  
 AREA: 11/12/18  
 NO. OF SHEETS: 7

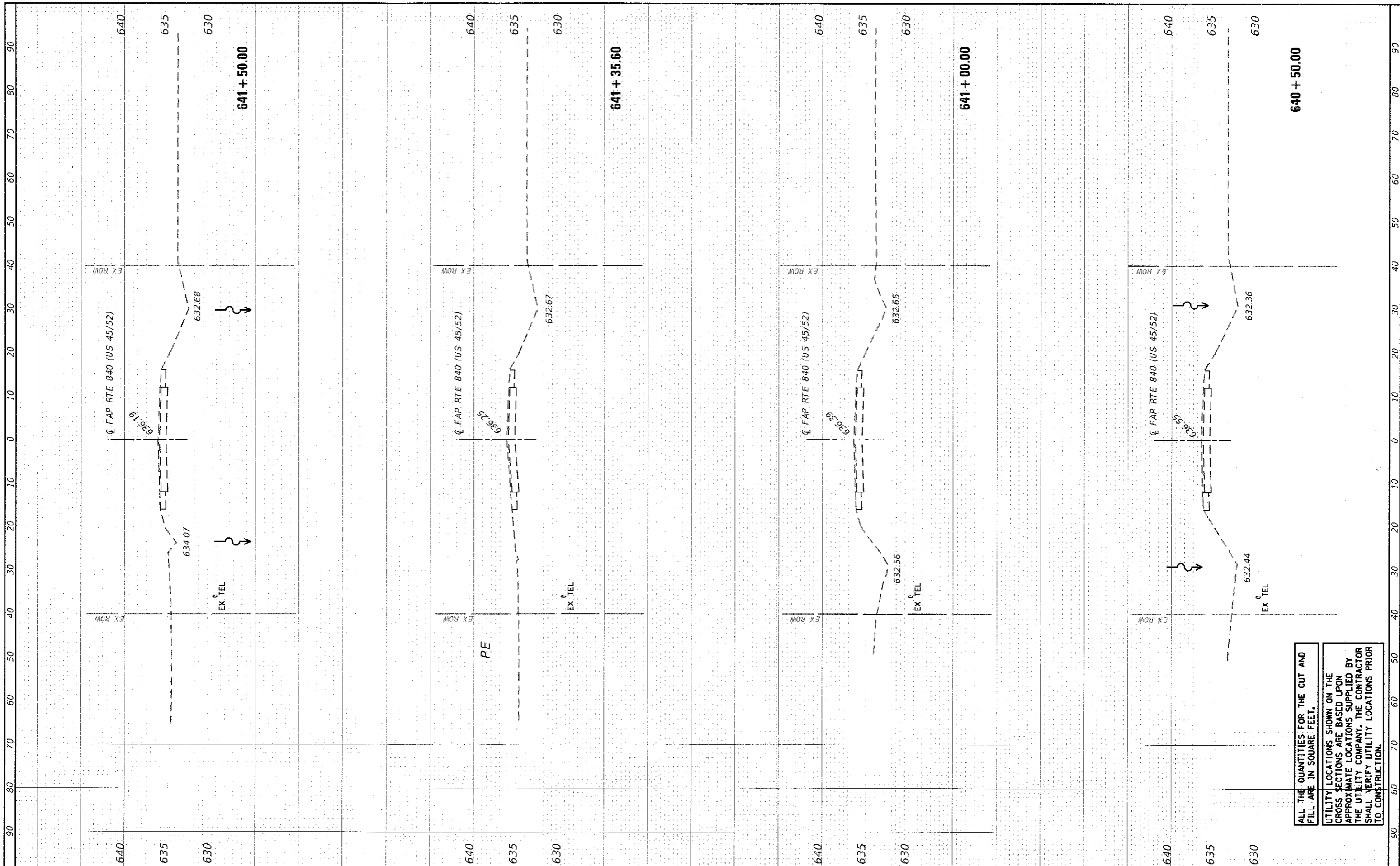
PROJECT: STATEWAY SURVEY  
 SHEET: 6  
 DATE: 01/12/18  
 DRAWN: JJO  
 CHECKED: PSA/ERB  
 DATE: 01/12/18



ALL THE QUANTITIES FOR THE GUT AND FILL ARE IN SQUARE FEET.  
 UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

TITLE SHEET  
 SURVEYED  
 PLOTTED  
 NOTE BOOK TOP DATE  
 NO. AREAS CHECKED

SURVEYED  
 PLOTTED  
 NOTE BOOK TOP DATE  
 NO. AREAS CHECKED



**ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.**  
**UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.**

**Farnsworth GROUP**  
 2709 McGRAW DRIVE  
 BLOOMINGTON, ILLINOIS 61704  
 (309) 663-8435 / info@faw.com

USER NAME = dmeyer  
 DESIGNED - JJO  
 DRAWN - JJO  
 CHECKED - PSA/VERB  
 DATE - 01/12/18  
 PLOT SCALE = 20.0000' / 1" = 1/12/2018

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)**  
**CROSS SECTIONS**  
 SCALE: 1"=10'  
 SHEET 7 OF 7 SHEETS STA. 638+50.00 TO STA. 640+00.00

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 46
CONTRACT NO. 66E24			ILLINOIS FED. AID PROJECT	