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FOR HIGHWAY STANDARDS SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS
F.A.I. ROUTE 57 (I-57)
SECTION (38-4)RS-2, (38-4)BR,BR1,BR3

IROQUOIS COUNTY

C - 93 - 047 - 08

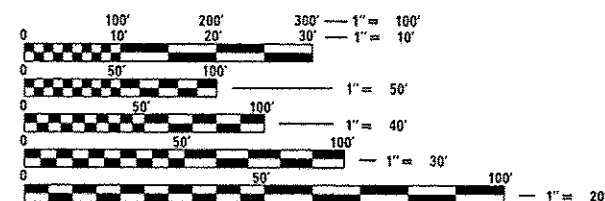
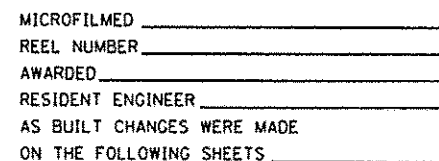
HMA SURFACE REMOVAL WITH 5 1/2" RESURFACING 3 TWIN STRUCTURE REPLACEMENTS



INTERSTATE (RURAL)

2013 ADT = 15400

P.V. = 74.1% S.U. = 4.7% M.U. = 21.2%



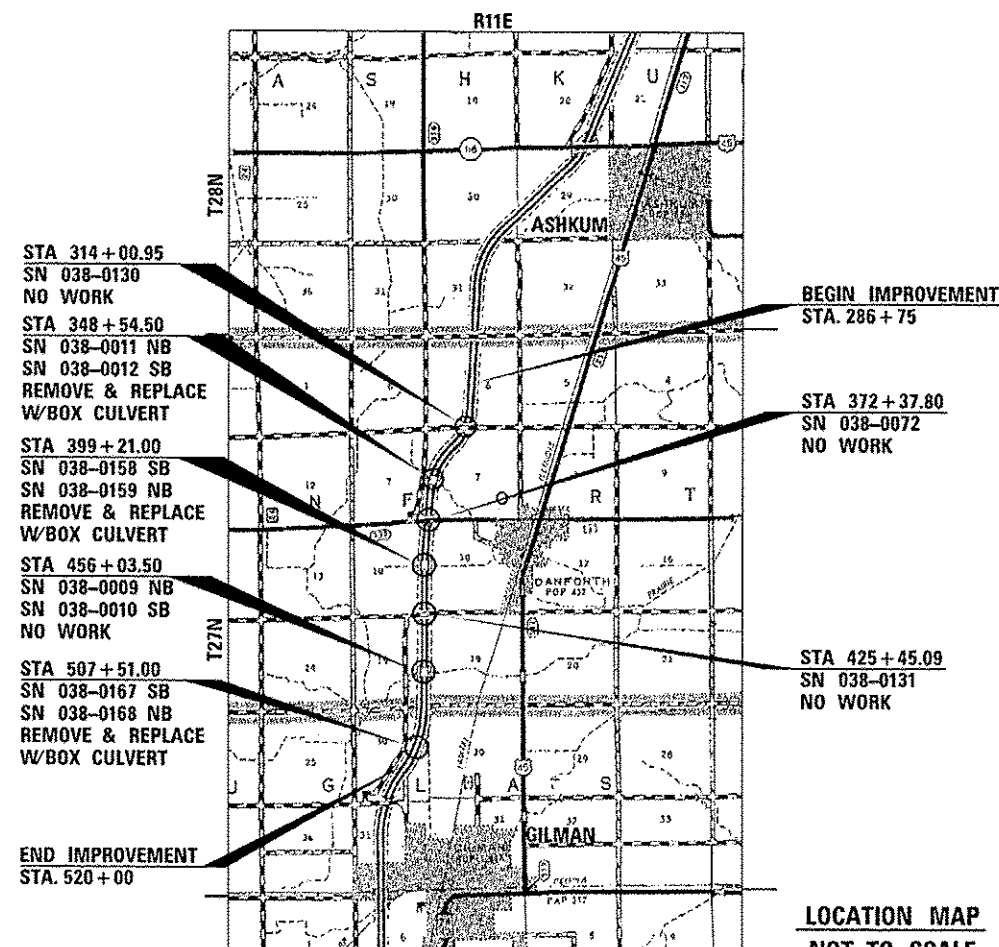
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: CRAIG REED, P.E.
UNIT CHIEF: BRAD DUNCAN, P.E.

CONTRACT NO. 66757



LOCATION MAP
NOT TO SCALE

GROSS & NET LENGTH = 23325 FT. = 4.42 MI.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 6 20 14
Paul Coete P.E.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 27 20 14
John D. Baranzelli, P.E. / JR
acting ENGINEER OF DESIGN AND ENVIRONMENT

June 27 20 14
Omer Osman, P.E. / JR
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

LIST OF ILLINOIS DOT 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
420001-07	PAVEMENT JOINTS
420701-02	PAVEMENT FABRIC
442001-04	CLASS A PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
542516-03	INLET BOX TYPE 24 (600) D
542531-04	INLET BOX TYPE 24 (600) G
542546-01	FLUSH INLET BOX FOR MEDIAN
601001-04	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAINS
602301-04	INLET, TYPE A
604036-02	GRATE, TYPE B
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-09	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-12	TRAFFIC BARRIER TERMINAL, TYPE 6
631032-08	TRAFFIC BARRIER TERMINAL, TYPE 6A
631033-05	TRAFFIC BARRIER TERMINAL, TYPE 6B
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
642001-02	SHOULDER RUMBLE STRIPS, 16 INCH
643001-02	SAND MODULE IMPACT ATTENUATORS
665001-02	WOVEN WIRE FENCE
701101-04	OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701400-07	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-08	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-09	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701406-08	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701426-06	LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701428	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701901-03	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
780001-04	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

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.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

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

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

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

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MILLIMETERS) IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

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 SHALL 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 CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

COMMITMENTS

A COMMITMENT WAS MADE TO LEAVE ALL EXCAVATED MATERIAL ON OR WITHIN THE PROJECT LIMITS FOR CONTRACT NO. 66757.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: Don B. Boyd
DISTRICT STUDIES & PLANS ENGINEER

DATE: 6-6-14

EXAMINED BY: [Signature]
DISTRICT CONSTRUCTION ENGINEER

Wayne L. Phillips
DISTRICT MATERIALS ENGINEER

[Signature]
DISTRICT OPERATIONS ENGINEER

FILE NAME :	USER NAME = duncenbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\p\work\p\stdot\duncenbd\des38388\ep0005-shr-cover.dgn		DRAWN -	REVISED -			57	138-41RS-2, 138-41BR,BR1,BR3	IRROQUOIS	190	2
		PLOT SCALE : 100.0000' / in.	CHECKED -							
		PLOT DATE : 6/2/2014	DATE -							
						CONTRACT NO. 66757				
					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

				CONSTRUCTION CODE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE ROADWAY	100% STATE BOX CULVERT	100% STATE BOX CULVERT	100% STATE PIPE CULVERT
				0004	0011	0011	0011
				RURAL	PR SN 038-2021	PR SN 038-2020	PR SN 038-2019
20200100	EARTH EXCAVATION	CU YD	2420	2420			
20400800	FURNISHED EXCAVATION	CU YD	10604	10604			
20700220	POROUS GRANULAR EMBANKMENT	CU YD	3189		1093	1016	1080
20800150	TRENCH BACKFILL	CU YD	10	10			
△ 25000200	SEEDING, CLASS 2	ACRE	14.4	14.4			
△ 25000300	SEEDING, CLASS 3	ACRE	0.71	0.71			
△ 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1359	1359			
△ 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1359	1359			
△ 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1359	1359			
△ 25100115	MULCH, METHOD 2	ACRE	14.4	14.4			
△ 25100630	EROSION CONTROL BLANKET	SQ YD	3534	3534			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	3022	3022			
28000305	TEMPORARY DITCH CHECKS	FOOT	216	216			
28000500	INLET AND PIPE PROTECTION	EACH	2	2			
△ SPECIALTY ITEMS							
				SUMMARY OF QUANTITIES			
				</			

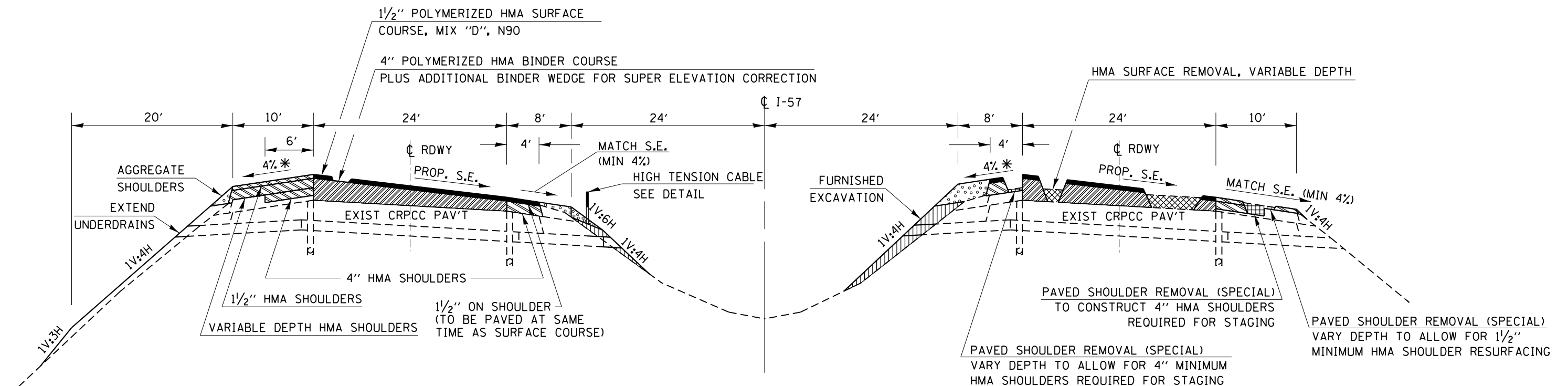
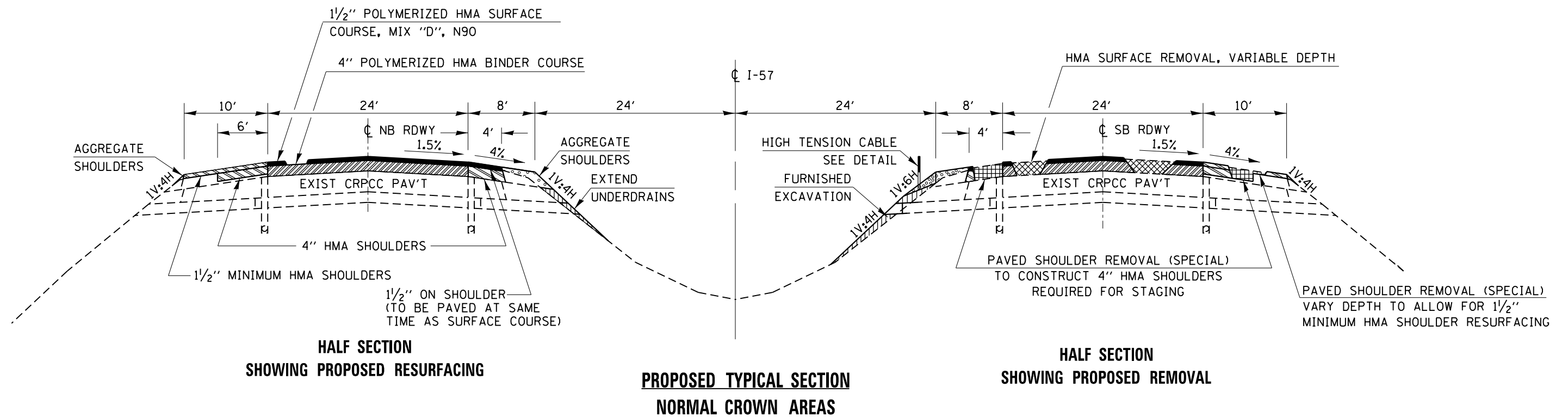
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				100% STATE ROADWAY	100% STATE BOX CULVERT	100% STATE BOX CULVERT	100% STATE PIPE CULVERT
				0004	0011	0011	0011
				RURAL	PR SN 038-2021	PR SN 038-2020	PR SN 038-2019
44200529	CLASS A PATCHES, TYPE II, 8 INCH	SQ YD	104	104			
44200533	CLASS A PATCHES, TYPE III, 8 INCH	SQ YD	40	40			
44200535	CLASS A PATCHES, TYPE IV, 8 INCH	SQ YD	2042	2042			
44213000	PATCHING REINFORCEMENT	SQ YD	4464	4464			
44213200	SAW CUTS	FOOT	8346	8346			
44213204	TIE BARS 3/4"	EACH	808	808			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	7310	7310			
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	1686	1686			
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	859	859			
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	525	525			
48203100	HOT-MIX ASPHALT SHOULDERS	TON	23669	23669			
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1		
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1	
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1				1

FILE NAME : c:\p-work\pwork\duncanbd\dm30308\ap05005-rlt-500.dgn	USER NAME : duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE : 100.0000' / 1" = 100.0000'	DRAWN -	REVISED -						57	*	ILLINOIS	190	5
	PLOT DATE : 6/2/2014	CHECKED -	REVISED -						*(38-4)RS-2, (38-4)BR, BR1, BR3				CONTRACT NO. 66757
		DATE -	REVISED -						ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET NO. 3 OF 9 SHEETS	STA.	TO STA.					

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				100% STATE ROADWAY	100% STATE BOX CULVERT	100% STATE BOX CULVERT	100% STATE PIPE CULVERT
				0004	0011	0011	0011
				RURAL	PR SN 038-2021	PR SN 038-2020	PR SN 038-2019
54246405	INLET BOX, STANDARD 542531	EACH	1	1			
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	6	6			
60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	150	150			
60236200	INLETS, TYPE A, TYPE B GRATE	EACH	1	1			
60600605	CONCRETE CURB, TYPE B	FOOT	150	150			
60801024	FLAP GATE 24"	EACH	6	6			
60801036	FLAP GATE 36"	EACH	2	2			
△ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	3222.075	3222.075			
△ 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	6	6			
△ 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	6	6			
△ 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4			
△ 63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	1	1			
△ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	16	16			
△ 63200310	GUARDRAIL REMOVAL	FOOT	7145	7145			

△ SPECIALTY ITEMS

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				SUMMARY OF QUANTITIES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\vidos\duncanbd\dms30300\ep0005-ent-500.dgn		DRAWN -	REVISED -									57	*	ROQUOIS	190	7
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED -									*(38-4)RS-2, (38-4)BR,BR1,BR3				CONTRACT NO. 66757
PLOT DATE = 6/2/2014		DATE -	REVISED -									ILLINOIS FED. AID PROJECT				
								SCALE:	SHEET NO. 5 OF 9 SHEETS	STA.	TO STA.					



* WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 4%, THE SHOULDER SHALL BE SLOPED AT 4%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 4%, THE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 8%.

SEE STAGING TYPICALS FOR ADDITIONAL PAVING DETAILS.

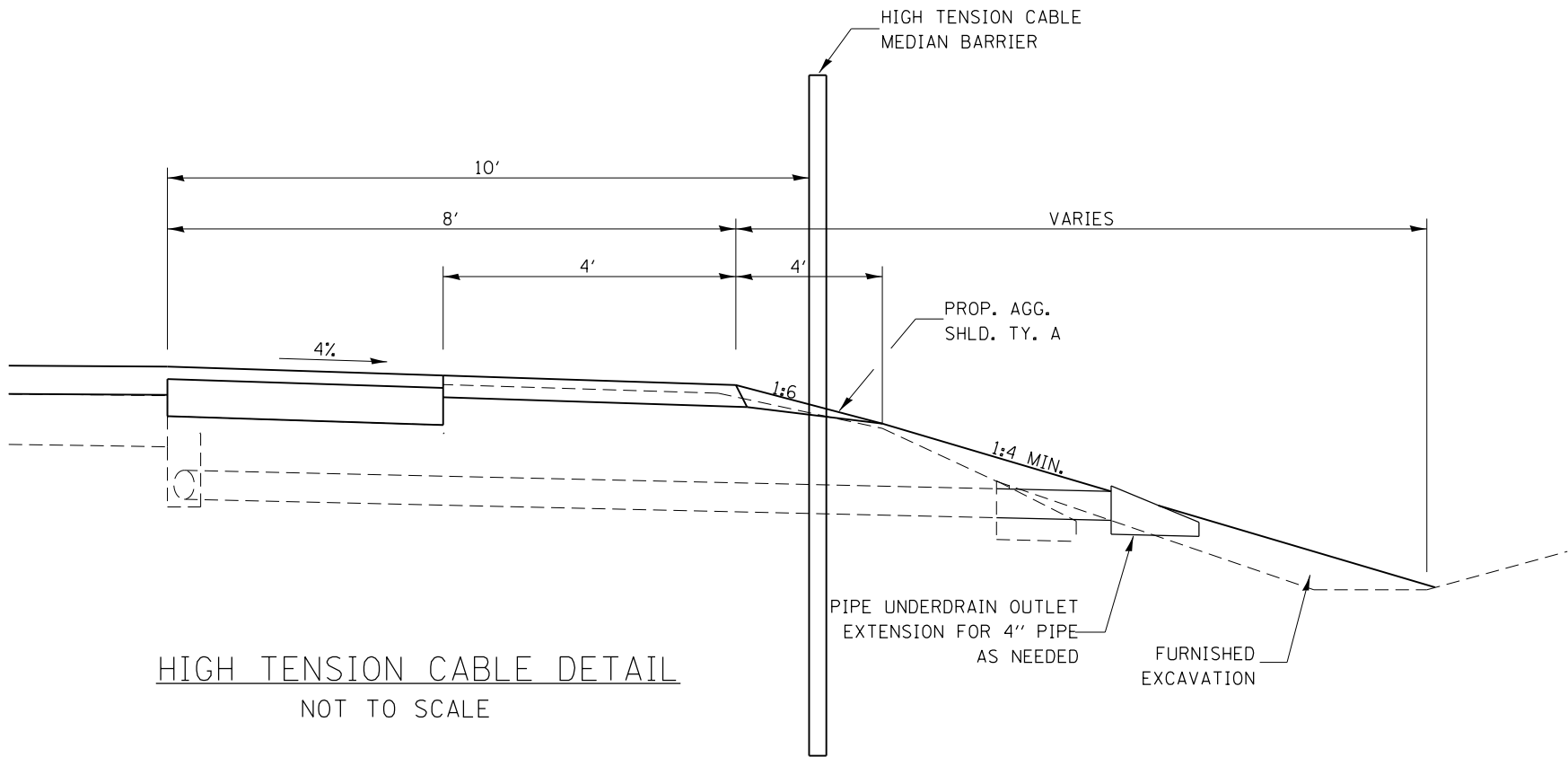
16' MINIMUM VERTICAL CLEARANCES SHALL BE MAINTAINED UNDER OVERHEAD STRUCTURES.
SEE TAPER DETAILS.

**PROPOSED TYPICAL SECTION
SUPERELEVATION AREAS**
SEE SCHEDULES AND PLAN SHEETS FOR LOCATIONS

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TYPICAL SECTIONS				F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\dot\duncanbd\dms30308\ep05005-sh-typical.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	IRROQUITS	190	12
PLOT SCALE = 10.0000' / in.		CHECKED -	REVISED -								* (38-4)RS-2, (38-4)BR,BR1,BR3	CONTRACT NO. 66757	
PLOT DATE = 6/2/2014		DATE -	REVISED -								FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

MIXTURES TABLE

	POLY HMA SURFACE	POLY HMA BINDER	HMA SHOULDERS 4" FOR STAGING	HMA SHLDS 8" & 10"	TEMPORARY PAVEMENT	HMA SHLDS 6" FOR GUARDRAIL STABILIZATION	HMA SHOULDERS 1 1/2" FOR FINAL LIFT
PG GRADE	SBS-PG70-22	SBS-PG70-22	PG64-22	PG64-22	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0% @ N90	4.0% @ N90	4.0% @ N70	4.0% @ N70	4.0% @ N70	2.0% @ N30	4.0% @ N70
MIXTURE COMPOSITION	IL 9.5	IL 19.0 FG	IL 19.0	IL 19.0	IL 19.0	IL 19.0L	IL 9.5
FRICTION AGGREGATE	MIXTURE D						MIXTURE C
DENSITY TEST METHOD	PFP	PFP	CORES/ CORRELATION	CORES/ CORRELATION	CORES/ CORRELATION	SATISFACTION OF ENGINEER	CORRELATION

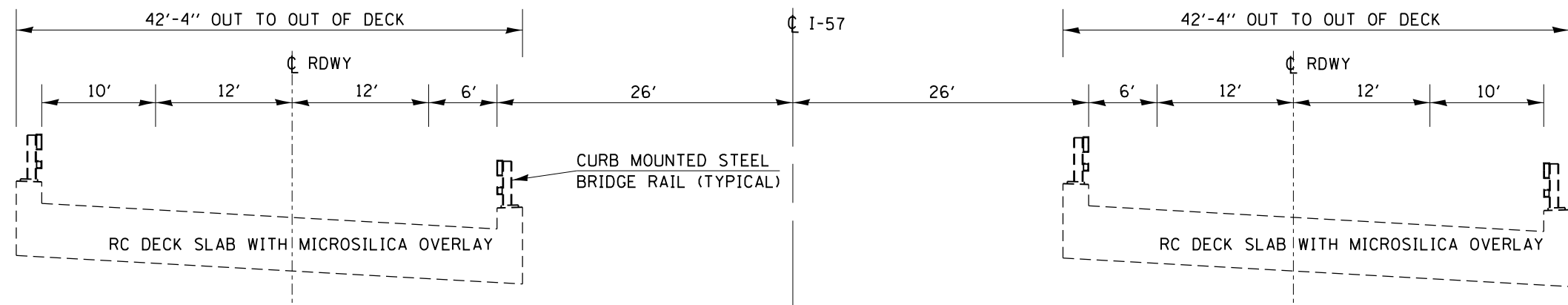


HIGH TENSION CABLE DETAIL
NOT TO SCALE

NOTES

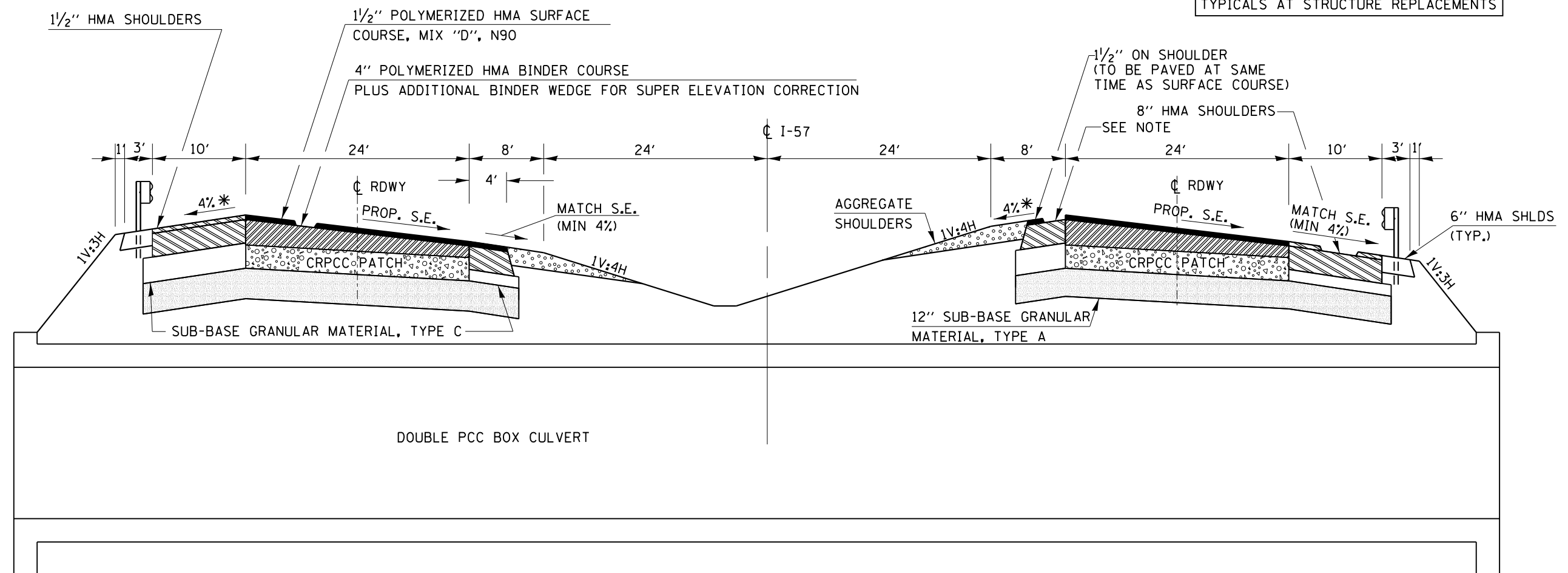
- SEVERAL LOCATIONS MAY REQUIRE ADDITIONAL FILL TO PROVIDE A MINIMUM 1:4 FORESLOPE. THIS MATERIAL WILL BE PAID FOR AS "FURNISHED EXCAVATION".
- EXISTING PIPE UNDERDRAIN STRUCTURES MAY NEED TO BE ADJUSTED TO MATCH THE PROPOSED SLOPE, AND WILL BE PAID AS "PIPE UNDERDRAIN OUTLET EXTENSION FOR 4" PIPE".

FILE NAME = c:\p\work\p\midot\duncanbd\dms30308\ep05005-sht-typical.dgn	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RAMP EXISTING AND PROPOSED TYPICAL SECTIONS					F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -							57	*	IROOOUIS	190	13	
	PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -							* (38-4)RS-2, (38-4)BR,BR1,BR3					
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 66757				
											FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION

NOTE:
10" HMA SHOULDER. SEE STAGING
TYPICALS AT STRUCTURE REPLACEMENTS



PROPOSED TYPICAL SECTION

* WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 4%, THE SHOULDER SHALL BE SLOPED AT 4%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 4%, THE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 8%.

SEE STRUCTURE PLANS, STANDARD 482001, AND STAGING TYPICALS FOR ADDITIONAL PAVING DETAILS.

STR NO 038-0011 & 038-0012
STR NO 038-0158 & 038-0159
STR NO 038-0167 & 038-0168

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE TYPICAL SECTIONS				F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\duncanbd\dms30308\sep05005-shit-typical.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	57	190	14
	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -								* (38-4)RS-2, (38-4)BR,BR1,BR3	CONTRACT NO. 66757	
	PLOT DATE = 6/2/2014	DATE -	REVISED -								FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

HMA RESURFACING QUANTITIES													
LOCATION STA. TO STA.	HMA SURFACE REMOVAL		PAVED SHLD REMOVAL (SPECIAL) SQ YD	BITUMINOUS MATERIALS PRIME COAT POUND	MIXTURE FOR CRACKS JOINTS & FLANGEWAYS TON	LEVELING BINDER HAND METHOD N90 TON	POLYMERIZED HMA BINDER COURSE IL-19.0, N90 TON	POLYMERIZED HMA SURFACE COURSE MIX D, N90 TON	HMA SHLDS TON	AGGREGATE SHOULDERS TYPE B		TEMP RAMP SQ YD	COMMENTS
	BUTT JOINT	VAR DEPTH								INSIDE	OUTSIDE		
NORTHBOUND LANES													
MAINLINE													
286+25 - 286+75	211			95	0.04	0.07		13	5	2.0	1.0	13.3	TAPER
286+75 - 293+91.82		1912	769	1792	0.57	0.96	800	187	68	74.0	7.4	13.3	
293+91.82 - 322+33.11		7577	231	7103	2.27	3.79	3171	651	1062	172.5	106.3	26.6	CURVE #8 - SUPER CORRECTION
322+33.11 - 325+74.64		911	0	854	0.27	0.46	418	89	52	35.2	4.2		
325+74.64 - 352+38.82		7104	2667	6660	2.13	3.55	3310	696	628	505.3	27.0		CURVE #9 - SUPER CORRECTION
352+38.82 - 389+86.63		9994	1874	9369	3.00	5.00	2675	979	475	522.1	43.8		
389+86.63 - 402+34.26		3327	1237	3119	1.00	1.66	867	326	135	152.2	9.6		CURVE #10 - SUPER CORRECTION
402+34.26 - 485+20.21		21797	4111	20435	6.54	10.90	5982	2040	1031	961.1	90.3	26.6	
STR OMISSION INCLUDED													
485+20.21 - 516+63.83		8383	0	7859	2.51	4.19	3980	822	1798	261.2	123.0		CURVE #11 - SUPER CORRECTION
516+63.83 - 520+00		897	0	841	0.27	0.45	375	88	90	68.3	10.7	22.2	
520+00 - 521+60	253			304	0.13	0.21		77	27	6	2	13.3	TAPER
NORTHBOUND SUBTOTALS	464	61902	10889	58432	19	31	21578	5968	5371	2760	425	115	
SOUTHBOUND LANES													
MAINLINE													
285+15 - 286+75	253		667	304	0.13	0.21		77	27	6.0	2.0	13.3	TAPER
286+75 - 293+91.82		1912	333	1792	0.57	0.96	786	187	251	141.9	18.9	22.2	
293+91.82 - 322+33.11		7577	1889	7103	2.27	3.79	3414	676	869	631.0	31.4	26.6	CURVE #8 - SUPER CORRECTION
322+33.11 - 325+74.64		911	0	854	0.27	0.46	467	89	161	78.7	12.9		
325+74.64 - 352+38.82		7104	0	6660	2.13	3.55	3518	696	1672	330.2	86.7		CURVE #9 - SUPER CORRECTION
352+38.82 - 389+86.63		9994	667	9370	3.00	5.00	2653	979	590	646.2	49.7		
389+86.63 - 402+34.26		3327	111	3119	1.00	1.66	941	326	178	154.7	14.5		CURVE #10 - SUPER CORRECTION
402+34.26 - 485+20.21		21797	5740	20435	6.54	10.90	5509	2011	1074	934.4	96.7	53.2	
STR OMISSION INCLUDED													
485+20.21 - 516+63.83		8383	1889	7859	2.51	4.19	4013	822	835	731.7	36.9		CURVE #11 - SUPER CORRECTION
516+63.83 - 520+00		897	0	841	0.27	0.45	386	88	113	97.0	14.9	13.3	
520+00 - 521+60	253			304	0.13	0.21		63	25	6	2	13.3	TAPER
MAINTENANCE CROSSOVER 384+69		291		131				33					
SOUTHBOUND SUBTOTALS	506	62193	11296	58772	19	31	21687	6047	5795	3758	367	142	
RESURFACING TOTALS	970	124095	22185	117204	38	62	43265	12015	11166	6518	792	257	

EARTHWORK					
LOCATION	EARTH EXCAVATION	SUITABLE EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE(+) OR SHORTAGE(-)
STA. TO STA.	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD
NORTHBOUND					
286+75 - 295+29	11	0	0	34	-34
295+29 - 320+96	852	682	511	1334	-823
320+96 - 327+12	4	0	0	43	-43
327+12 - 351+02	64	51	38	1208	-1170
351+02 - 390+87	21	0	0	468	-468
390+87 - 401+34	278	222	167	181	-14
401+34 - 486+57	63	50	38	1144	-1106
486+57 - 515+27	104	83	62	849	-787
515+27 - 520+00	0	0	0	37	-37
SOUTHBOUND					
286+75 - 295+29	0	0	0	136	-136
295+29 - 320+96	303	242	182	1585	-1403
320+96 - 327+12	0	0	0	127	-127
327+12 - 351+02	385	308	231	1507	-1276
351+02 - 390+87	11	0	0	753	-753
390+87 - 401+34	42	0	0	172	-172
401+34 - 486+57	247	198	148	1146	-998
486+57 - 515+27	35	0	0	1165	-1165
515+27 - 520+00	0	0	0	93	-93
TOTAL	2420	1837	1378	11982	-10604

ACCESS CONTROL FENCING				
APPROXIMATE LOCATION	SIDE	WOVEN WIRE FENCE REMOVAL	WOVEN WIRE FENCE 4'	COMMENTS
		FOOT	FOOT	
STA. 303+40 - STA. 304+60	RT	120	120	FENCE REPAIR
STA. 345+80 - STA. 346+05	LT	25	25	FENCE REPAIR
STA. 348+54.50	LT	72	38	FENCE REPLACEMENT AT BOX CULVERT
STA. 348+54.50	RT	79	42	FENCE REPLACEMENT AT BOX CULVERT
STA. 366+30 - STA. 366+80	RT	50	50	FENCE REPAIR
STA. 370+40 - STA. 370+65	RT	25	25	FENCE REPAIR
STA. 372+35 - STA. 372+85	LT	50	50	FENCE REPAIR
STA. 389+30 - STA. 389+50	LT	20	20	FENCE REPAIR
STA. 399+21	LT	101	66	FENCE REPLACEMENT AT BOX CULVERT
STA. 399+21	RT	83	51	FENCE REPLACEMENT AT BOX CULVERT
STA. 410+90 - STA. 411+10	RT	20	20	FENCE REPAIR
STA. 423+90 - STA. 424+15	RT	25	25	FENCE REPAIR
STA. 424+60 - STA. 425+00	LT	40	40	FENCE REPAIR
STA. 425+80 - STA. 426+20	LT	40	40	FENCE REPAIR
STA. 453+00 - STA. 453+80	LT	80	80	FENCE REPAIR
STA. 454+70 - STA. 455+20	RT	50	50	FENCE REPAIR
STA. 455+45 - STA. 455+85	LT	78	78	FENCE REPAIR
STA. 456+50 - STA. 456+70	LT	60	60	FENCE REPAIR
STA. 457+10 - STA. 457+40	RT	30	30	FENCE REPAIR
STA. 479+90 - STA. 481+10	LT	120	120	FENCE REPAIR
STA. 501+00 - STA. 501+25	RT	25	25	FENCE REPAIR
STA. 507+51	LT	78	53	FENCE REPLACEMENT AT BOX CULVERT
STA. 507+51	RT	100	72	FENCE REPLACEMENT AT BOX CULVERT
TOTALS		1371	1180	

FILE NAME = c:\pwwork\pwwidot\duncanbd\dms30308\ep05005-sh1-schedule.dgn	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					57	*	IROQUOIS	190	15
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -					*(38-4)RS-2, (38-4)BR,BR1,BR3				
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:	SHEET NO. 1 OF 5 SHEETS	STA.	TO STA.	CONTRACT NO. 66757			
										ILLINOIS FED. AID PROJECT		

CLASS A PATCHING																			
STATION	NORTHBOUND DRIVING LANE									NORTHBOUND PASSING LANE									REMARKS
	LENGTH	WIDTH	TY II	TY III	TY IV	10" SPEC TY IV	PATCH REINF.	SAW CUTS	TIE BARS	LENGTH	WIDTH	TY II	TY III	TY IV	10" SPEC TY IV	PATCH REINF.	SAW CUTS	TIE BARS	
	FOOT	FOOT	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	EACH	FOOT	FOOT	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	EACH	
311+75 - 316+00	425	12				567	567	900.00	212	425	12				567	567	900.00		UNDER SN 038-0130
348+10 - 349+50	140	12			187		187	330.00	70	140	12			187		187	330.00		NEW BOX CULVERT SN 038-2021
351+17	6	12	8.0				8.0	62.00											
374+93	12	12		16.0			16.0	74.00											
393+40	6	12	8.0				8.0	62.00											
397+50	6	12	8.0				8.0	62.00											PATCH OVER NEW CULVERT
398+65 - 399+70	105	12			140		140.0	260.00	52	105	12			140		140	260.00		NEW BOX CULVERT SN 038-2020
506+50 - 507+90	140	12			187		187	330.00	70	140	12			187		187	330.00		NEW BOX CULVERT SN 038-2019
TOTALS			24.0	16.0	514	567	1120	2080.0	404.0			0.0	0.0	514	567	1080	1820.0	0.0	

CLASS A PATCHING																			
STATION	SOUTHBOUND DRIVING LANE									SOUTHBOUND PASSING LANE									REMARKS
	LENGTH	WIDTH	TY II	TY III	TY IV	10" SPEC TY IV	PATCH REINF.	SAW CUTS	TIE BARS	LENGTH	WIDTH	TY II	TY III	TY IV	10" SPEC TY IV	PATCH REINF.	SAW CUTS	TIE BARS	
	FOOT	FOOT	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	EACH	FOOT	FOOT	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	FOOT	EACH	
286+85										6	12	8.0				8.0	62.00		
312+50 - 315+50	300	12				400	400	650.00	150	300	12				400	400	650.00		UNDER SN 038-0130
347+60 - 349+00	140	12			187		187	330.00	70	140	12			187		187	330.00		NEW BOX CULVERT SN 038-2021
373+87	6	12	8.0				8.0	62.00											
374+93	18	12		24.0			24.0	86.00											
390+77	6	12	8.0				8.0	62.00											
396+65	6	12	8.0				8.0	62.00											
397+10	6	12	8.0				8.0	62.00											
398+75 - 399+80	105	12			140		140.0	260.00	52	105	12			140		140	260.00		NEW BOX CULVERT SN 038-2020
401+33	6	12	8.0				8.0	62.00											
424+85 - 426+15	130	12				173	173	310.00	65	130	12				173	173	310.00		UNDER SN 038-0131
433+00	6	12	8.0				8.0	62.00											
434+06	6	12	8.0				8.0	62.00											
507+15 - 508+50	135	12			180		180	320.00	67	135	12			180		180	320.00		NEW BOX CULVERT SN 038-2019
512+20										6	12	8.0				8.0	62.00		
517+50	6	12	8.0				8.0	62.00											
TOTALS			64.0	24.0	507	573	1168	2452.0	404.0			16.0	0.0	507	573	1096	1994.0	0.0	

DRAINAGE SCHEDULE																		
LOCATION	SIDE	CLEANING EXISTING INLETS	INLETS TO BE ADJUSTED (SPECIAL)	PIPE CULVERT REMOVAL	REMOVE INLET BOX	INLETS TY A TY 8 GR	INLET BOX STANDARD 542516	INLET BOX STANDARD 542531	PIPE CULV CLASS A TY 1, 24"	PIPE CULV CLASS D TY 1, 15"	PIPE CULV CLASS D TY 1, 24"	PIPE CULV CLASS D TY 1, 36"	END SECTIONS 24"	END SECTIONS 36"	TRENCH BACKFILL	FLAP GATE 24"	FLAP GATE 36"	STONE RIPRAP CL A3
		EACH	EACH	FOOT	EACH	EACH	EACH	EACH	FOOT	FOOT	FOOT	FOOT	EACH	EACH	CU YD	EACH	EACH	SQ YD
STA. 287+00	SB	1																
STA. 307+92	MEDIAN			4						4								
STA. 314+70	MEDIAN			12						12								
STA. 347+75	SB			38							36		1			1		
STA. 348+24	SB			30							31		1			1		
STA. 348+87	NB			32							30		1			1		
STA. 349+37	NB			34						32			1			1		
STA. 397+50	NB						1		80.5						10			
	MEDIAN			190	1			1										
STA. 398+83	NB			39								38		1				
STA. 398+99	SB			47								44		1				
STA. 458+90	NB																	19
STA. 480+00	MEDIAN		1															
STA. 506+58	NB			40		1					35					1		
STA. 507+06	NB			30								30		1			1	
STA. 507+97	SB			34							34		1			1		
STA. 508+50	SB			32								36		1			1	
STA. 510+00	MEDIAN		1															
TOTALS		1	2	562	1	1	1	1	80.5	16	198	148	5	4	10	6	2	19

FILE NAME = c:\pwwork\p1\dot\duncanbd\dms30308\ep03005-sh1-schedule.dgn	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULES					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	57							•	IROQUOI	190	16	
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		*(38-4)RS-2, (38-4)BR,BR1,BR3					CONTRACT NO. 66757				
	PLOT DATE = 6/2/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT									
				SCALE:	SHEET NO. 2 OF 5 SHEETS		STA.	TO STA.						

STAGING							
LOCATION	LANE	TEMPORARY CONCRETE BARRIER	REL TEMP CONCRETE BARRIER	IMPACT ATT TEMP (NON-RED) TEST LEVEL 3	IMPACT ATT REL (NON-RED) TEST LEVEL 3	PAVEMENT REMOVAL (NOTE 1)	TEMPORARY PAVEMENT 10"
		FOOT	FOOT	EACH	EACH	SQ YD	SQ YD
SN 038-2021							
STAGE 1							
347+75 - 351+50	NB	375		1			
348+10 - 349+50	NB					296	
345+60 - 349+35	SB	375		1			
347+60 - 349+00	SB					296	
STAGE 2							
347+75 - 351+50	NB		375		1		
346+00 - 353+25	NB					779	546
345+60 - 349+35	SB		375		1		
343+90 - 351+00	SB					769	536
SN 038-2020							
STAGE 1							
398+32.5 - 401+70	NB	337.5		1			
398+65 - 399+70	NB					222	
396+75 - 400+12.5	SB	337.5		1			
398+75 - 399+80	SB					222	
STAGE 2							
398+32.5 - 401+70	NB		337.5		1		
396+50 - 403+45	NB					685	510
396+75 - 400+12.5	SB		337.5		1		
395+00 - 401+75	SB					672	497
SN 038-2016							
STAGE 1							
506+15 -509+90	NB	375		1			
506+50 - 507+90	NB					296	
505+15 - 508+77.5	SB	362.5		1			
507+15 - 508+50	SB					285	
STAGE 2							
506+15 -509+90	NB		375		1		
504+50 - 511+70	NB					776	542
505+15 - 508+77.5	SB		362.5		1		
503+40 - 510+50	SB					758	533
TOTAL		2162.5	2162.5	6	6	6056	3164

NOTE 1: PAVEMENT REMOVAL INCLUDES THE HMA SHOULDER AND THE REMOVAL OF THE TEMPORARY PAVEMENT

PAVEMENT REPLACEMENT				
LOCATION	LANE	HMA SHLD 8"	SUBBASE GRAN MAT TY A 12"	SUBBASE GRAN MAT TYPE C
		SQ YD	SQ YD	TON
SN 038-2021				
348+10 - 349+50	NB	156	607	89.5
347+60 - 349+00	SB	156	607	112.7
SN 038-2020				
398+65 - 399+70	NB	117	455	42.4
398+75 - 399+80	SB	117	455	56.8
SN 038-2016				
506+50 - 507+90	NB	156	607	130.7
507+15 - 508+50	SB	150	585	83.9
397+50 @ PATCH	NB	7	16	2.4
TOTAL		859	3332	518

SEE STAGING SCHEDULE FOR PAVEMENT REMOVAL
SEE PATCHING SCHEDULE FOR CLASS A PATCH

SHOULDER RUMBLE STRIPS		
LOCATION	INSIDE SHOULDER	OUTSIDE SHOULDER
	FOOT	FOOT
NORTHBOUND		
STA. 284+75 - STA. 286+75		200
STA. 285+75 - STA. 286+75	100	
STA. 286+75 - STA. 455+53	16878	16878
STA. 456+65 - STA. 520+00	6335	6335
STA. 520+00 - STA. 529+00		900
STA. 520+00 - STA. 521+60	675	
NB SUBTOTAL	48301	
SOUTHBOUND		
STA. 277+75 - STA. 286+75		900
STA. 280+00 - STA. 286+75	675	
STA. 286+75 - STA. 455+42	16867	16867
STA. 456+54 - STA. 520+00	6346	6346
STA. 520+00 - STA. 522+00		200
STA. 520+00 - STA. 521+60	160	
SB SUBTOTAL	48361	
TOTALS	96662	

PIPE UNDERDRAIN OUTLET EXTENSION FOR 4" PIPE					
STATION	LOCATION	QUANTITY	STATION	LOCATION	QUANTITY
		EACH			EACH
287+97	MEDIAN	1	341+00	SOUTHBOUND	1
296+66	NORTHBOUND	1	341+00	MEDIAN(SB)	1
297+95	MEDIAN	1	342+35	SOUTHBOUND	1
298+63	NORTHBOUND	1	344+34	SOUTHBOUND	1
299+94	NORTHBOUND	1	346+34	SOUTHBOUND	1
300+60	NORTHBOUND	1	346+50	MEDIAN(SB)	1
302+56	NORTHBOUND	1	346+50	SOUTHBOUND	1
303+00	MEDIAN	1	346+51	MEDIAN(NB)	1
304+54	NORTHBOUND	1	349+52	SOUTHBOUND	1
306+52	NORTHBOUND	1	350+16	NORTHBOUND	1
309+35	NORTHBOUND	1	351+11	NORTHBOUND	1
310+39	NORTHBOUND	1	352+63	NORTHBOUND	1
310+96	MEDIAN	1	360+00	MEDIAN(NB)	1
311+89	NORTHBOUND	1	360+00	MEDIAN(SB)	1
311+97	SOUTHBOUND	1	374+93	MEDIAN	1
312+00	MEDIAN	1	375+00	NORTHBOUND	1
315+27	NORTHBOUND	1	381+37	MEDIAN	1
316+51	NORTHBOUND	1	387+00	MEDIAN(SB)	1
318+18	NORTHBOUND	1	392+96	MEDIAN(SB)	1
320+15	NORTHBOUND	1	395+75	NORTHBOUND	1
321+00	MEDIAN	1	396+48	SOUTHBOUND	1
321+13	NORTHBOUND	1	397+76	NORTHBOUND	1
327+61	SOUTHBOUND	1	405+00	MEDIAN(SB)	1
328+61	SOUTHBOUND	1	417+00	MEDIAN(NB)	1
330+57	SOUTHBOUND	1	427+33	NORTHBOUND	1
332+54	SOUTHBOUND	1	479+08	MEDIAN(SB)	1
334+49	SOUTHBOUND	1	479+08	MEDIAN(NB)	1
334+86	NORTHBOUND	1	483+90	MEDIAN(SB)	1
335+00	MEDIAN	1	489+82	MEDIAN(SB)	1
335+00	SOUTHBOUND	1	489+82	NORTHBOUND	1
336+46	SOUTHBOUND	1	495+94	MEDIAN(SB)	1
338+40	SOUTHBOUND	1	495+97	NORTHBOUND	1
340+38	SOUTHBOUND	1	508+21	NORTHBOUND	1
340+96	MEDIAN(NB)	1	514+00	NORTHBOUND	1
				TOTAL	68

TEMPORARY EROSION CONTROL SYSTEMS			
STATION	LOCATION	TEMPORARY DITCH CHECKS	INLET AND PIPE PROTECTION
		FOOT	EACH
298+00	NORTHBOUND	9	
300+00	NORTHBOUND	9	
302+00	NORTHBOUND	9	
304+00	NORTHBOUND	9	
306+00	NORTHBOUND	9	
307+90	NORTHBOUND	9	
310+00	NORTHBOUND	9	
312+00	NORTHBOUND	9	
328+00	SOUTHBOUND	9	
330+00	SOUTHBOUND	9	
334+00	SOUTHBOUND	9	
336+00	SOUTHBOUND	9	
338+00	SOUTHBOUND	9	
340+00	SOUTHBOUND	9	
342+00	SOUTHBOUND	9	
344+50	SOUTHBOUND	9	
347+00	SOUTHBOUND	9	
396+00	NORTHBOUND	9	
398+25	NORTHBOUND	9	
474+00	MEDIAN	9	
476+00	MEDIAN	9	
478+00	MEDIAN	9	
480+00	MEDIAN		1
480+50	MEDIAN	9	
510+00	MEDIAN		1
512+00	MEDIAN	9	
TOTALS		216	2

TEMPORARY EROSION CONTROL SEEDING QUANTITY (NOT SHOWN) BASED ON FINAL SEEDING

FILE NAME = c:\pwwork\p\midot\duncanbd\dms30308\epc3005-shlt-schedule.dgn	USER NAME = duncanbd		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULES		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN -	REVISED -				57	*	IROQUOIS	190	17
	PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -				*(38-4)RS-2, (38-4)BR,BR1,BR3				CONTRACT NO. 66757
	PLOT DATE = 6/2/2014		DATE -	REVISED -				SCALE:	SHEET NO. 3 OF 5 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

PAVEMENT MARKING							
LOCATION STA. TO STA.	THERMOPLASTIC		PREFORMED PLASTIC TYPE B - 6"	GROOVE FOR RECESSED PAVEMENT MARKING		RAISED REFL	
	4"			18"	PAVT MARK		
	WHITE	YELLOW	WHITE	WHITE	5"	7"	CRYSTAL
	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH
NORTHBOUND							
286+25 - 286+75							
EDGELINE	50	50			100		
CENTERLINE				20		20	2
286+75 - 520+00							
EDGELINE	23325	23325			46650		
CENTERLINE				5830		5830	584
520+00 - 521+60							
EDGELINE	160	160			320		
CENTERLINE				40		40	4
ADDITIONAL QUANT. DUE TO PAVT MARK REM	890	565			1455		
NB SUBTOTAL	48525		0	5890	48525	5890	590
SOUTHBOUND							
285+15 - 286+75							
EDGELINE	160	160			320		
CENTERLINE				40		40	4
286+75 - 520+00							
EDGELINE	23325	23325			46650		
CENTERLINE				5830		5830	584
AERIAL SPEED CHECK			36				
520+00 - 521+60							
EDGELINE	160	160			320		
CENTERLINE				40		40	4
ADDITIONAL QUANT. DUE TO PAVT MARK REM	780	515			1295		
SB SUBTOTAL	48585		36	5910	48585	5910	592
TOTALS	97110		36	11800	97110	11800	1182

TEMPORARY PAVEMENT MARKING				
LOCATION STA. TO STA.	TEMPORARY			SHORT TERM PAVT MARK
	4''		6''	
	WHITE FOOT	YELLOW FOOT	WHITE FOOT	FOOT
STAGE 1				
NORTHBOUND				
BEGINNING TAPER	400	150		
TANGENT	23875	23875		
ENDING TAPER	360			
ADDITIONAL QUANTITIES AT STRUCTURE REPLACEMENTS	2100	2100		
SOUTHBOUND				
BEGINNING TAPER	400	1500		
TANGENT	23875	23875		
ENDING TAPER	360			
ADDITIONAL QUANTITIES AT STRUCTURE REPLACEMENTS	2100	2100		
STAGE 2				
NORTHBOUND				
BEGINNING TAPER	175	1167		
TANGENT	23875	23875		
ENDING TAPER	120			
ADDITIONAL QUANTITIES AT STRUCTURE REPLACEMENTS	2100	2100		
SOUTHBOUND				
BEGINNING TAPER	175	1167		
TANGENT	23875	23875		
ENDING TAPER	120			
ADDITIONAL QUANTITIES AT STRUCTURE REPLACEMENTS	2100	2100		
BEFORE FINAL LIFT				
CENTERLINE				
NORTHBOUND			5890	941
SOUTHBOUND			5910	946
EDGELINES				
NORTHBOUND	23535	23535		
SOUTHBOUND	23645	23645		
TOTALS	308254		11800	1887

PAVED SHOULDER ITEMS FOR STAGING				
LOCATION	PAVED SHLD REMOVAL (SPECIAL)	BIT MAT PRIME COAT	HMA SHOULDERS	COMMENTS
	SQ YD	POUND	TON	
NORTHBOUND				
OUTSIDE SHOULDER				
STA. 282+65 - STA. 286+75	273	123	61	STAGE 1 TAPER
STA. 286+75 - STA. 347+00	4017	1808	900	
STA. 347+00 - STA. 352+25	583	262	131	AT SN 038-0011 REPLACEMENT
STA. 352+25 - STA. 397+50	3017	1358	676	
STA. 397+50 - STA. 402+45	550	248	123	AT SN 038-0159 REPLACEMENT
STA. 402+45 - STA. 455+53	3539	1593	793	
STA. 455+53 - STA. 456+65	STRUCTURE OMISSION			
STA. 456+65 - STA. 505+50	3257	1466	730	
STA. 505+50 - STA. 510+70	578	260	129	AT SN 038-0168 REPLACEMENT
STA. 510+70 - STA. 520+00	620	279	139	
STA. 520+00 - STA. 529+00	600	270	134	STAGE 1 TAPER
INSIDE SHOULDER				
STA. 285+05 - STA. 286+75	76	34	10	STAGE 2 TAPER
STA. 286+75 - STA. 293+91.82	319	144	71	
STA. 293+91.82 - STA. 322+33.11	1263	568	283	
STA. 322+33.11 - STA. 325+74.64	152	68	34	
STA. 325+74.64 - STA. 352+38.82	117	53	349	
STA. 352+38.82 - STA. 389+86.63	1666	750	336	
STA. 389+86.63 - STA. 402+34.26	554	249	109	
STA. 402+34.26 - STA. 485+20.21	3633	1635	780	
STRUCTURE OMISSION INCLUDED				
STA. 485+20.21 - STA. 516+63.83	1397	629	307	
STA. 516+63.83 - STA. 520+00	149	67	19	
STA. 520+00 - STA. 526+75	300	135	67	STAGE 2 TAPER
NB SUBTOTAL	26660	11997	6181	
SOUTHBOUND				
OUTSIDE SHOULDER				
STA. 277+75 - STA. 286+75	600	270	134	STAGE 1 TAPER
STA. 286+75 - STA. 344+90	3877	1745	868	
STA. 344+90 - STA. 350+00	567	255	127	AT SN 038-0012 REPLACEMENT
STA. 350+00 - STA. 396+00	3067	1380	687	
STA. 396+00 - STA. 400+50	500	225	112	AT SN 038-0158 REPLACEMENT
STA. 400+50 - STA. 455+42	3661	1647	820	
STA. 455+42 - STA. 456+54	STRUCTURE OMISSION			
STA. 456+54 - STA. 504+40	3191	1436	715	
STA. 504+40 - STA. 509+50	567	255	127	AT SN 038-0169 REPLACEMENT
STA. 509+50 - STA. 520+00	700	315	157	
STA. 520+00 - STA. 524+10	273	123	61	STAGE 1 TAPER
INSIDE SHOULDER				
STA. 280+00 - STA. 286+75	300	135	67	STAGE 2 TAPER
STA. 286+75 - STA. 293+91.82	319	144	21	
STA. 293+91.82 - STA. 322+33.11	92	41	518	
STA. 322+33.11 - STA. 325+74.64	152	68	6	
STA. 325+74.64 - STA. 352+38.82	1184	533	240	
STA. 352+38.82 - STA. 389+86.63	1666	750	295	
STA. 389+86.63 - STA. 402+34.26	554	249	119	
STA. 402+34.26 - STA. 485+20.21	3633	1635	765	
STRUCTURE OMISSION INCLUDED				
STA. 485+20.21 - STA. 516+63.83	117	53	452	
STA. 516+63.83 - STA. 520+00	149	67	13	
STA. 520+00 - STA. 521+70	76	34	17	STAGE 2 TAPER
SB SUBTOTAL	25245	11360	6322	
TOTALS	51905	23357	12503	

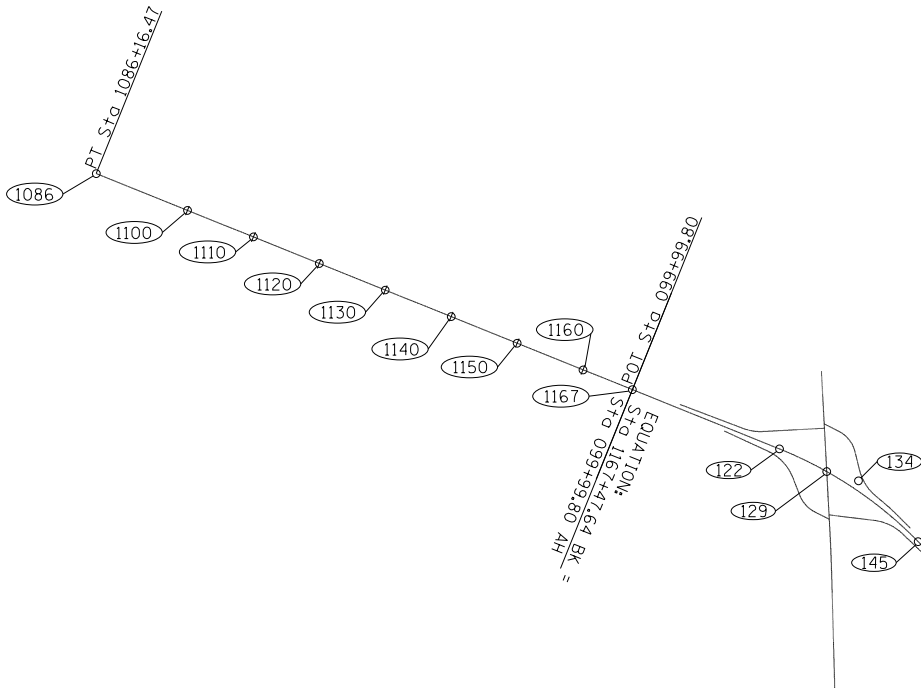
OUTSIDE SHOULDER QUANTITIES = INITIAL 4" SHOULDER UPGRADE FOR STAGING
INSIDE SHOULDER QUANTITIES = MIN 4" NEEDED FOR STAGING
HMA QUANTITIES ARE IN ADDITION TO WHAT IS SHOW ON HMA RESURFACING SCHEDULE

FILE NAME = c:\pwwork\pwwidot\duncanbd\dms30308\ep05005-shd-schedule.dgn	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -					57	•	IROQUOIS	190	18	
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -					*(38-4)RS-2, (38-4)BR,BR1,BR3					
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:			SHEET NO. 4 OF 5 SHEETS		STA. TO STA.			
										ILLINOIS FED. AID PROJECT			
										CONTRACT NO. 66757			

GUARDRAIL SCHEDULE														
LOCATION	LANE	SIDE	GUARD RAIL REMOVAL FOOT	CURB REMOVAL FOOT	TRAF BAR TERM					SPBGR TYPE A 6' POSTS FOOT	CONC CURB TYPE B FOOT	HMA SHLDS 6'' FOR SPBGR STABILIZATION SQ YD	TERM MARK DIRECT APPLIED EACH	GUARDRAIL MARKER EACH
					TYPE 2 EACH	TYPE 6 EACH	TYPE 6A EACH	TYPE 6B EACH	TYPE 1 SPEC (TANG) EACH					
SN 038-0130														
STA. 313+65.5 - STA. 315+90	NB	DRIVE	288	30		1			1	128.125	15	83.4	1	3
STA. 311+37.9 - STA. 314+38.8 SN 038-0011(exist.)	SB	DRIVE	288	30		1			1	200	15	121.6	1	3
STA. 348+87.5 - STA. 352+18.7	NB	DRIVE	290	30	1				1	278.125		123.4	1	4
STA. 348+81 - STA. 352+77 SN 038-0012(exist.)	NB	MED	394	30										
STA. 345+37 - STA. 348+22.5	SB	DRIVE	302	30	1				1	228.125		110.2	1	3
STA. 344+39 - STA. 348+05.5	SB	MED	394	30										
SN 038-0072														
STA. 372+32.1 - STA. 374+80.9	NB	DRIVE	291	30		1			1	153.125	15	90	1	3
STA. 369+94.9 - STA. 372+43.6	SB	DRIVE	290	30		1			1	153.125	15	89.9	1	3
SN 038-0158(exist.)														
STA. 396+47.5 - STA. 399+37.5	SB	DRIVE	303	30	1				1	228.125		110.3	1	3
STA. 395+20 - STA. 399+12	SB	MED	394	30										
SN 038-0159(exist.)														
STA. 398+98.5 - STA. 402+13.9	NB	DRIVE	315	30	1				1	253.125		118.1	1	4
STA. 399+29 - STA. 402+23.5	NB	MED	394	30										
SN 038-0131														
STA. 425+41.1 - STA. 427+89.8	NB	DRIVE	292	30		1			1	153.125	15	89.9	1	3
STA. 423+00.2 - STA. 425+48.9	SB	DRIVE	291	30		1			1	153.125	15	90	1	3
SE QUAD OVERHEAD			44					1						
SN 038-0009														
STA. 456+67.75 - STA. 459+28.9	NB	DRIVE	264	30			1		1	165.625	15	94.9	1	3
STA. 456+62.75 - STA. 460+11.4	NB	MED	294	30			1		1	253.125	15	124.2	1	4
SN 038-0010														
STA. 452+90.5 - STA. 455+39	SB	DRIVE	240	30			1		1	153.125	15	91.6	1	3
STA. 451+95.5 - STA. 455+44.25	SB	MED	394	30			1		1	253.125	15	124.1	1	4
SN 038-0168(exist.)														
STA. 506+87.5 - STA. 509+46.3	NB	DRIVE	327	30	1				1	203.125		103.1	1	3
STA. 507+43 - STA. 510+80	NB	MED	339	30										
SN 038-0167(exist.)														
STA. 504+90.1 - STA. 508+19.1	SB	DRIVE	323	30	1				1	265.825		121.3	1	4
STA. 503+60 - STA. 507+58	SB	MED	394	30										
TOTALS			7145	660	6	6	4	1	16	3222.075	150	1686	16	53

HIGH TENSION CABLE MEDIAN BARRIER (HTCMB)						
LOCATION	HTCMB	HTCMB TERMINAL	HTCMB TERMINAL (SPECIAL)	HTCMB DEMO	REMOVE HTCMB	REMOVE HTCMB TERMINAL
STATION TO STATION SIDE	FOOT	EACH	EACH	EACH	FOOT	EACH
297+35 TO 342+60 SB					4425	2
342+10 TO 345+10 NB					200	2
EXISTING STRUCTURE 038-0012						
348+62 TO 384+18 SB					3456	2
297+35 TO 384+15 SB	8580	2				
MAINTENANCE CROSSOVER						
385+16 TO 393+47 SB					731	2
393+02 TO 396+03 NB					201	2
EXISTING STRUCTURE 038-0158						
399+46 TO 415+30 SB					1484	2
385+20 TO 415+30 SB	2910	2				
481+25 TO 501+87 SB					1962	2
501+39 TO 504+39 NB					200	2
EXISTING STRUCTURE 038-0167						
507+90 TO 523+00 SB			1		1460	1
481+25 TO 523+50 SB	4125	2				
513+03 TO 523+00 NB			1		947	1
TOTALS	15615	6	2	1	15066	18

SEEDING							
LOCATION	SEEDING CLASS 2	SEEDING CLASS 3	MULCH METHOD 2	EROSION CONTROL BLANKET	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
STA TO STA	ACRE	ACRE	ACRE	SQ YD	POUND	POUND	POUND
286+00 - 295+00	0.279		0.279		25	25	25
295+00 - 321+00	2.862		2.862		258	258	258
321+00 - 327+00	0.203		0.203		18	18	18
327+00 - 351+00	2.901		2.901		261	261	261
351+00 - 391+00	1.915		1.915		172	172	172
391+00 - 401+50	0.756		0.756		68	68	68
401+50 - 486+50	3.178		3.178		286	286	286
486+50 - 515+00	2.108		2.108		190	190	190
515+00 - 521+00	0.193		0.193		17	17	17
345+50 - 346+00 SB		0.022		109	2	2	2
347+80 - 348+25 SB		0.023		110	2	2	2
348+83 - 352+10 NB		0.093		448	8	8	8
396+40 - 399+00 SB		0.095		460	9	9	9
398+87 - 402+20 NB		0.081		391	7	7	7
422+90 - 425+20 SB		0.041		200	4	4	4
425+80 - 428+10 NB		0.050		242	5	5	5
452+80 - 455+40 SB		0.058		282	5	5	5
456+80 - 459+40 NB		0.014		68	1	1	1
456+80 - 460+15 MED		0.026		127	2	2	2
504+85 - 508+38 SB		0.066		319	6	6	6
506+63 - 509+60 NB		0.141		683	13	13	13
307+92 MEDIAN				23			
314+70 MEDIAN				28			
397+42 MEDIAN				29			
397+50 NB				15			
460+00 NB							
TOTAL	14.40	0.71	14.40	3534	1359	1359	1359

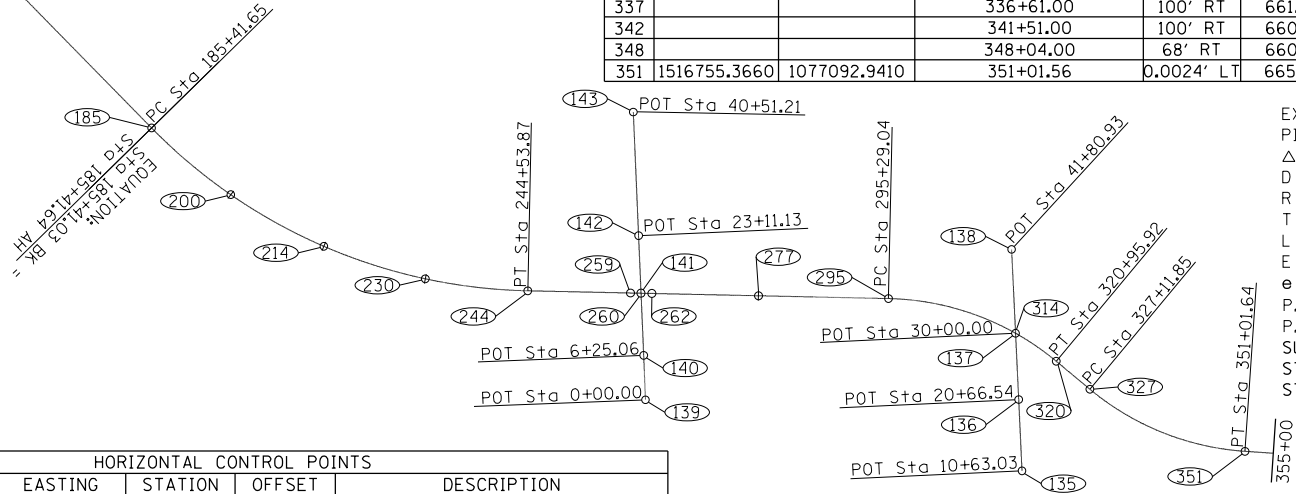


EXIST. CURVE 1571R0-5
PI STA. = 216+54.70
 Δ = 44° 20' 26" (LT)
D = 0° 45' 00"
R = 7,639.63'
T = 3,113.05'
L = 5,912.22'
E = 609.92'
e = 0.0263
P.C. STA. = 185+41.65
P.T. STA. = 244+53.87
SUPER TRANSITIONS
STA. 184+43.86 TO STA. 185+67.86
STA. 244+27.66 TO STA. 245+51.66

HORIZONTAL CONTROL POINTS - I-57					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
1086	1546461.6540	1089636.6590	1086+16.39	0.0271' RT	PT-PERMANENT SURVEY MARKER
1100	1545178.0430	1089119.5720	1100+00.24	0.0959' LT	POT-PERMANENT SURVEY MARKER
1110	1544250.6430	1088745.8910	1110+00.10	0.1019' LT	POT-PERMANENT SURVEY MARKER
1120	1543323.3440	1088372.2480	1119+99.84	0.1055' LT	POT-PERMANENT SURVEY MARKER
1130	1542395.7290	1087998.4840	1129+99.93	0.1149' LT	POT-PERMANENT SURVEY MARKER
1140	1541468.5560	1087624.8190	1039+99.56	0.0510' LT	POT-PERMANENT SURVEY MARKER
1150	1540540.3490	1087250.8900	1150+00.26	0.1287' LT	POT-PERMANENT SURVEY MARKER
1160	1539612.6670	1086877.1120	1160+00.41	0.1501' LT	POT-PERMANENT SURVEY MARKER
1167	1538919.6340	1086597.9300	1167+47.56	0.2146' LT	POT-PERMANENT SURVEY MARKER
122	1536850.0730	1085763.9040	122+31.02	0.1080' LT	PC-PERMANENT SURVEY MARKER
129	1536185.8592	1085445.0974	129+68.28	0.0169' LT	BRIDGE DECK
134	153738.6450	1085315.9210	134+12.31	123.94' LT	PI
145	1534899.6986	1084460.0878	145+93.74		PT
185	1532136.6790	1081641.1480	185+40.98	0.0424' RT	PC-PERMANENT SURVEY MARKER
200	1531022.9970	1080703.1810	199+99.84	0.0256' RT	POC-PERMANENT SURVEY MARKER
214	1529714.9300	1079977.7300	214+98.02	0.1445' LT	POC-PERMANENT SURVEY MARKER
230	1528286.4900	1079519.8390	230+00.49	0.0241' RT	POC-PERMANENT SURVEY MARKER
244	1526845.1050	1079351.0080	244+53.92	0.0267' LT	PT-PERMANENT SURVEY MARKER
259	1525399.3570	1079319.7990	259+00.00	0.0688' RT	POT
260	1525251.7930	1079316.6460	260+47.60	0.0462' RT	BRIDGE DECK
262	1525099.4560	1079313.3230	261+99.97	0.0908' RT	POT
277	1523600.0640	1079281.0920	276+99.71	0.0539' RT	POT
295	1521771.2330	1079241.7950	295+28.97	0.0067' LT	PC-PERMANENT SURVEY MARKER
314	1519983.1860	1078750.0880	314+02.85	2.9874' RT	BRIDGE DECK
320	1519411.7820	1078360.0360	320+95.93	0.3076' RT	PT-PERMANENT SURVEY MARKER
327	1518938.1800	1077966.5760	327+11.65	0.1116' RT	PC-PERMANENT SURVEY MARKER
351	1516755.3660	1077092.9410	351+01.56	0.0024' LT	PT-PERMANENT SURVEY MARKER

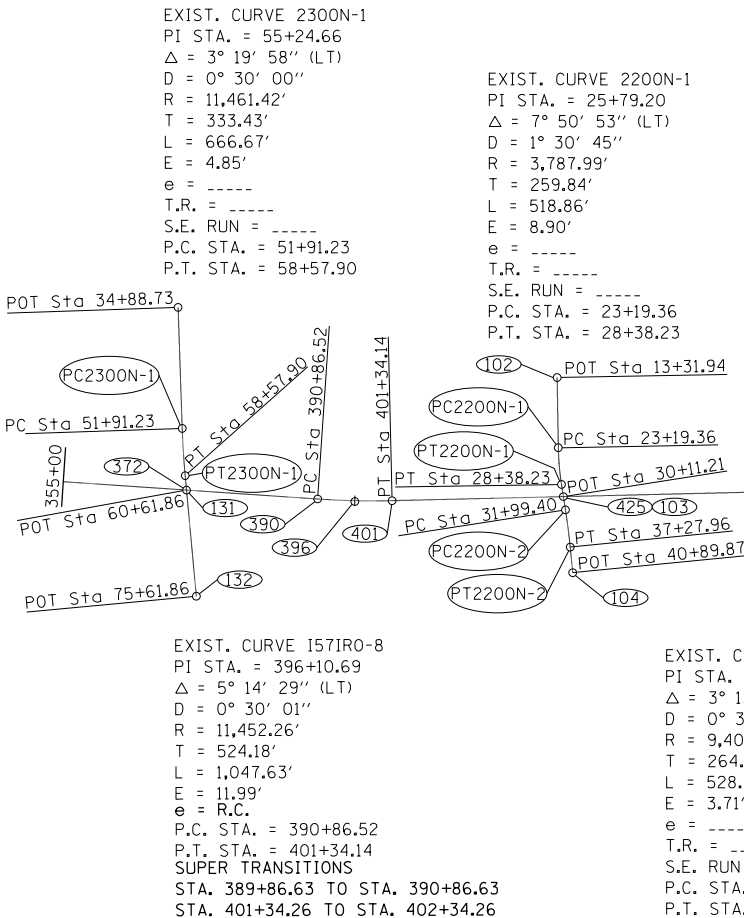
HORIZONTAL CONTROL POINTS					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2500N					
139	1525189.8304	1077817.9746	0+00.00		POT
140	1525214.3831	1078442.5522	6+25.06		POT
141	1525251.7920	1079316.6921	15+00.00		POT
142	1525286.4726	1080127.0804	23+11.13		POT
143	1525360.4670	1081865.5900	40+51.21		POT
2400N					
135	1519893.0620	1076818.7460	10+63.03		POT
136	1519939.2727	1077821.1894	20+66.54		POT
137	1519983.3524	1078753.6080	30+00.00		POT
138	1520039.1180	1079933.2190	41+80.93		POT

BENCHMARKS						
NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
1167	1538919.6340	1086597.9300	1167+47.56	0.2146' LT	671.60	SURV MARK-BRASS PLUG
105			105+00.00	83' RT	674.13	80d SPIKE IN GUARDRAIL POST
109			108+35.00	82' RT	673.09	80d SPIKE IN GUARDRAIL POST
112			112+08.00	83' RT	669.92	CHIS "[I]" TOP CENTER HEADWALL
118			117+72.00	72' RT	669.36	CHIS "X" NE BOLT LIGHT FDN
122	1536850.0730	1085763.9040	122+31.02	0.1080' LT	666.35	SURV MARK-BRASS PLUG
127			127+43.00	12' LT	667.20	CHIS "[I]" TOP CENTER HEADWALL
132			132+00.00	2.0' LT	667.14	CHIS "[I]" TOP CENTER HEADWALL
134	1535738.6450	1085315.9210	134+12.31	123.94' LT	666.45	SURV MARK-BRASS PLUG
140			140+00.00	107' RT	667.36	CHIS "[I]" TOP CENTER HEADWALL
146	1534992.5060	1084332.6570	146+20.00	161' RT	668.05	ASHKUM YARD-BRASS PLUG
151			151+00.00	100' RT	672.40	TOP ROW MARKER
157			156+73.00	100' RT	670.42	80d SPIKE IN FENCE POST
161			161+00.00	100' RT	670.00	TOP ROW MARKER
166			166+97.89		663.43	SURV MARK-BRASS PLUG
176			176+00.00	100' RT	670.69	TOP ROW MARKER
180			180+00.00	83.5' RT	672.61	CHIS "[I]" TOP NW COR HEADWALL
185	1532136.6790	1081641.1480	185+40.98	0.0424' RT	670.59	SURV MARK-BRASS PLUG
191			191+00.00	105' RT	668.74	TOP ROW MARKER
200	1531022.9970	1080703.1810	199+99.84	0.0256' RT	667.47	SURV MARK-BRASS PLUG
204			204+69.76	93.5' RT	663.61	CHIS "[I]" TOP NW COR HEADWALL
209			209+40.00	100' RT	670.47	80d SPIKE IN FENCE POST
214	1529714.9300	1079997.7300	214+98.02	0.1445' LT	665.99	SURV MARK-BRASS PLUG
220			220+23.00	100' RT	667.13	TOP ROW MARKER
230	1528286.4900	1079519.8390	230+00.49	0.0241' RT	665.51	SURV MARK-BRASS PLUG
234			234+59.00	105' RT	666.50	80d SPIKE IN FENCE POST
240			240+00.00	100' RT	666.36	TOP ROW MARKER
244	1526845.1050	1079351.0080	244+53.92	0.0267' LT	668.84	SURV MARK-BRASS PLUG
250			248+92.00	100' RT	670.47	80d SPIKE IN FENCE POST
254			253+91.00	100' RT	668.38	80d SPIKE IN FENCE POST
259	1525399.3570	1079319.7990	259+00.00	0.0688' RT	665.95	SURV MARK-BRASS PLUG
262	1525099.4560	1079313.3230	261+99.97	0.0908' RT	664.98	SURV MARK-BRASS PLUG
271			271+00.00	100' RT	663.99	TOP ROW MARKER
277	1523600.0640	1079281.0920	276+99.71	0.0539' RT	663.22	SURV MARK-BRASS PLUG
284			283+79.45	100' RT	669.31	TOP ROW MARKER
288			287+64.00	100' RT	664.26	80d SPIKE IN FENCE POST
295	1521771.2330	1079241.7950	295+28.97	0.0067' LT	661.05	SURV MARK-BRASS PLUG
300			299+81.00	100' RT	659.27	80d SPIKE IN FENCE POST
306			305+82.00	109' RT	659.21	80d SPIKE IN FENCE POST
315			315+30.00	83.5' RT	658.33	CHIS "[I]" TOP NW COR HEADWALL
320	1519411.7820	1078360.0360	320+95.93	0.3076' RT	657.58	SURV MARK-BRASS PLUG
327	1518938.1800	1077966.5760	327+11.65	0.1116' RT	661.08	SURV MARK-BRASS PLUG
332			331+67.00	100' RT	663.88	80d SPIKE IN FENCE POST
337			336+61.00	100' RT	661.07	80d SPIKE IN FENCE POST
342			341+51.00	100' RT	660.81	80d SPIKE IN FENCE POST
348			348+04.00	68' RT	660.17	CHIS "[I]" TOP NW COR WINGWALL
351	1516755.3660	1077092.9410	351+01.56	0.0024' LT	665.22	SURV MARK-BRASS PLUG



EXIST. CURVE 1571R0-6
PI STA. = 308+63.07
 Δ = 38° 30' 16" (RT)
D = 1° 30' 00"
R = 3,819.58'
T = 1,334.03'
L = 2,566.88'
E = 226.26'
e = 0.0458
P.C. STA. = 295+29.04
P.T. STA. = 320+95.92
SUPER TRANSITIONS
STA. 293+91.82 TO STA. 295+74.82
STA. 320+50.11 TO STA. 322+33.11

EXIST. CURVE 1571R0-7
PI STA. = 339+47.31
 Δ = 35° 50' 52" (LT)
D = 1° 30' 00"
R = 3,819.60'
T = 1,235.46'
L = 2,389.78'
E = 194.84'
e = 0.0458
P.C. STA. = 327+11.85
P.T. STA. = 351+01.64
SUPER TRANSITIONS
STA. 325+74.64 TO STA. 327+57.64
STA. 350+55.82 TO STA. 352+38.82



EXIST. CURVE 157IRO-10
PI STA. = 537+87.12
Δ = 43° 04' 11" (LT)
D = 1° 29' 59"
R = 3,820.36'
T = 1,507.56'
L = 2,871.79'
E = 286.69'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 522+79.56
P.T. STA. = 551+51.35

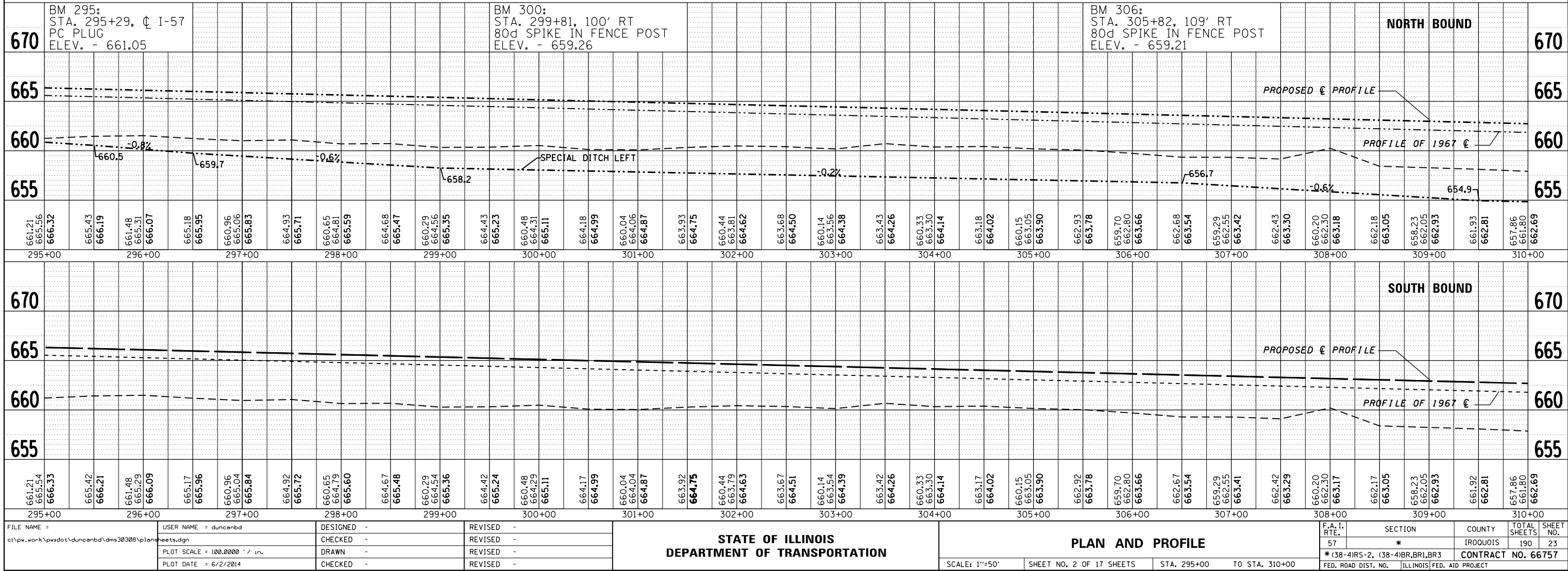
EXIST. CURVE 157IRO-9
PI STA. = 501+63.48
Δ = 43° 02' 08" (RT)
D = 1° 30' 00"
R = 3,820.00'
T = 1,506.10'
L = 2,869.24'
E = 286.18'
e = 0.0458
P.C. STA. = 486+57.38
P.T. STA. = 515+26.62
SUPER TRANSITIONS
STA. 485+20.21 TO STA. 487+03.21
STA. 514+80.83 TO STA. 516+63.83

BENCHMARKS						
NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
356			356+00.00	115' RT	656.80	80d SPIKE IN FENCE POST
361			361+29.00	115' RT	661.23	TOP ROW MARKER
366			366+07.00	93.5' RT	663.76	80d SPIKE IN FENCE POST
370			370+00.00	114.5' RT	659.80	CHIS "IJ" TOP NW COR HEADWALL
374			374+09.00	74' RT	659.82	CHIS "IJ" TOP UNDERDRAIN HDWL
379			379+00.00	87' RT	656.27	CHIS "IJ" TOP NW COR HEADWALL
384			383+71.00	110' LT	659.70	80d SPIKE IN FENCE POST
390	1512779.7360	1076822.7710	390+86.36	0.1361' LT	653.27	SURV MARK-BRASS PLUG
396	1512256.6930	1076787.0750	396+10.26	11.98' RT	654.32	SURV MARK-BRASS PLUG
401	1511732.5890	1076799.3890	401+34.14	0.0441' RT	650.10	SURV MARK-BRASS PLUG
406			406+12.00	100' RT	649.24	80d SPIKE IN FENCE POST
411			410+94.00	100' RT	648.49	80d SPIKE IN FENCE POST
416			415+58.00	100' RT	647.40	80d SPIKE IN FENCE POST
421			420+40.00	100' RT	647.81	80d SPIKE IN FENCE POST
427			427+00.00	94' RT	646.07	CHIS "IJ" TOP NW COR HEADWALL
432			431+83.00	100' RT	649.01	80d SPIKE IN FENCE POST
437			437+00.00	100' RT	649.07	80d SPIKE IN FENCE POST
441			441+00.00	94' RT	644.28	CHIS "IJ" TOP NW COR HEADWALL
446			446+10.00	121' RT	648.20	80d SPIKE IN FENCE POST
451			451+21.00	120' RT	646.66	80d SPIKE IN FENCE POST
456			455+48.00	68' RT	648.47	CHIS "IJ" TOP NW COR WINGWALL
459			459+00.00	90' RT	642.64	CHIS "IJ" TOP NW COR HEADWALL
464			463+96.00	115' RT	646.12	80d SPIKE IN FENCE POST
469			468+45.00	115' RT	647.82	80d SPIKE IN FENCE POST
474			473+49.00	115' RT	649.39	80d SPIKE IN FENCE POST
480			480+00.00	87' RT	645.17	CHIS "IJ" TOP NW COR HEADWALL
486	1503211.9660	1077001.1390	486+57.67	0.6510' LT	646.67	SURV MARK-BRASS PLUG
490			490+13.00	115' RT	647.48	80d SPIKE IN FENCE POST
495			495+00.00	86' RT	646.88	CHIS "IJ" TOP NW COR HEADWALL
507			507+51.00	27' RT	653.66	CHIS "IJ" TOP SE COR WINGWALL
510			510+00.00	91' RT	646.96	CHIS "IJ" TOP NW COR HEADWALL
515	1500581.5510	1076034.7870	515+26.56	0.4302' LT	648.41	SURV MARK-BRASS PLUG

HORIZONTAL CONTROL POINTS					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2300N					
130	1514742.5790	1079517.900	34+88.73		POT
PC2300N-1	1514684.8132	1077816.3849	51+91.23		POT
PT2300N-1	1514642.8338	1077151.1348	58+57.90		POT
131	1514624.0749	1076948.0369	60+61.86		POT
132	1514486.1160	1075454.3946	75+61.86		POT
2200N					
102	1509410.9280	1078531.0410	13+31.94		POT
PC2200N-1	1509393.6337	1077543.7667	23+19.36		PC
PT2200N-1	1509349.0993	1077027.2240	28+38.23		PT
103	1509322.4813	1076856.3028	30+11.21		POT
PC2200N-2	1509293.5229	1076670.3534	31+99.40		PC
PT2200N-2	1509226.9043	1076146.0794	37+27.96		PT
104	1509191.3890	1075785.9136	40+89.87		POT

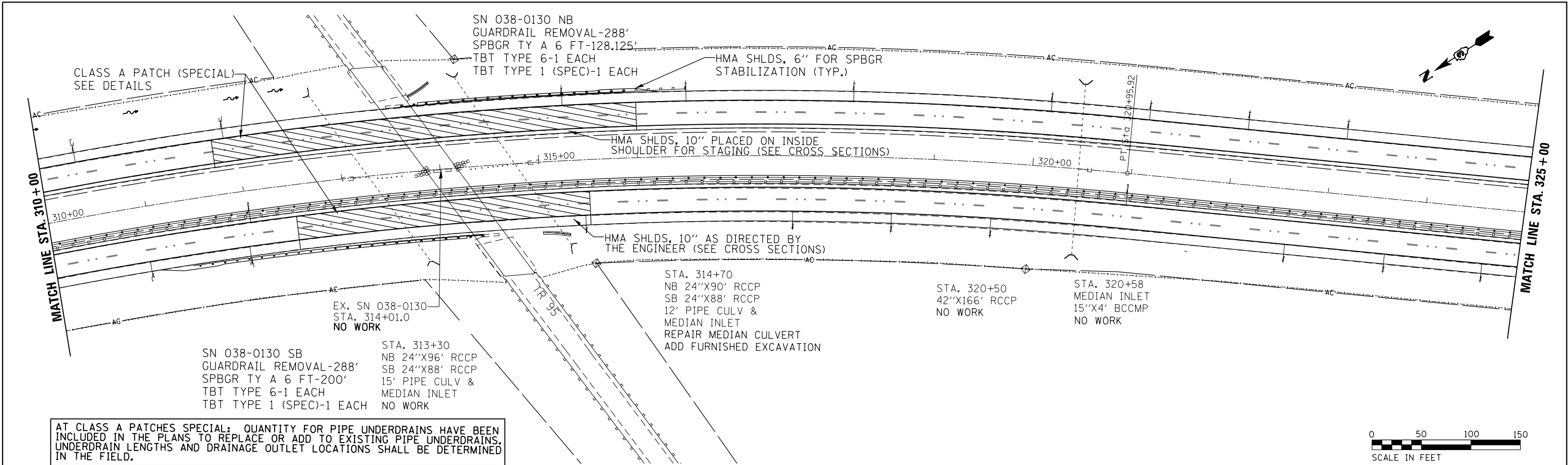
HORIZONTAL CONTROL POINTS - I-57					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
372	1514624.0740	1076948.0370	372+37.78	0.0054' LT	BRIDGE DECK
390	1512779.7360	1076822.7710	390+86.36	0.1361' LT	PC-PERMANENT SURVEY MARKER
396	1512256.6930	1076787.0750	396+10.26	11.984' RT	PI
401	1511732.5890	1076799.3890	401+34.14	0.0441' RT	PT-PERMANENT SURVEY MARKER
425	1509322.4730	1076856.3930	425+44.93	0.0899' LT	BRIDGE DECK
486	1503211.9960	1077001.1390	486+57.67	0.6510' LT	PC-PERMANENT SURVEY MARKER
515	1500581.5510	1076034.7870	515+26.56	0.4302' LT	PT-PERMANENT SURVEY MARKER
522	1500019.0190	1075534.2040	522+79.57	0.6751' LT	PC-PERMANENT SURVEY MARKER
537	1498794.7150	1074800.4300	537+15.52	0.1623' LT	POC-PERMANENT SURVEY MARKER
541	1498365.7800	1074673.1210	541+63.34	2.1867' LT	BRIDGE DECK
551	1497386.5490	1074567.6140	551+51.27	0.0012' LT	PT-PERMANENT SURVEY MARKER
580	1494538.5800	1074636.5080	580+00.07	0.0070' RT	POT-PERMANENT SURVEY MARKER
618	1490740.1760	1074728.3960	617+99.58	0.0156' RT	POT-PERMANENT SURVEY MARKER
669	1485629.2630	1074852.0630	669+11.99	0.0006' LT	PC-PERMANENT SURVEY MARKER

PROFILE					
	SURVEYED		BY		DATE
	PLOTTED				
NOTE BOOK	GRADES CHECKED				
	B.M. NOTED				
NO. _____	STRUCTURE NOTATION	CHKD			

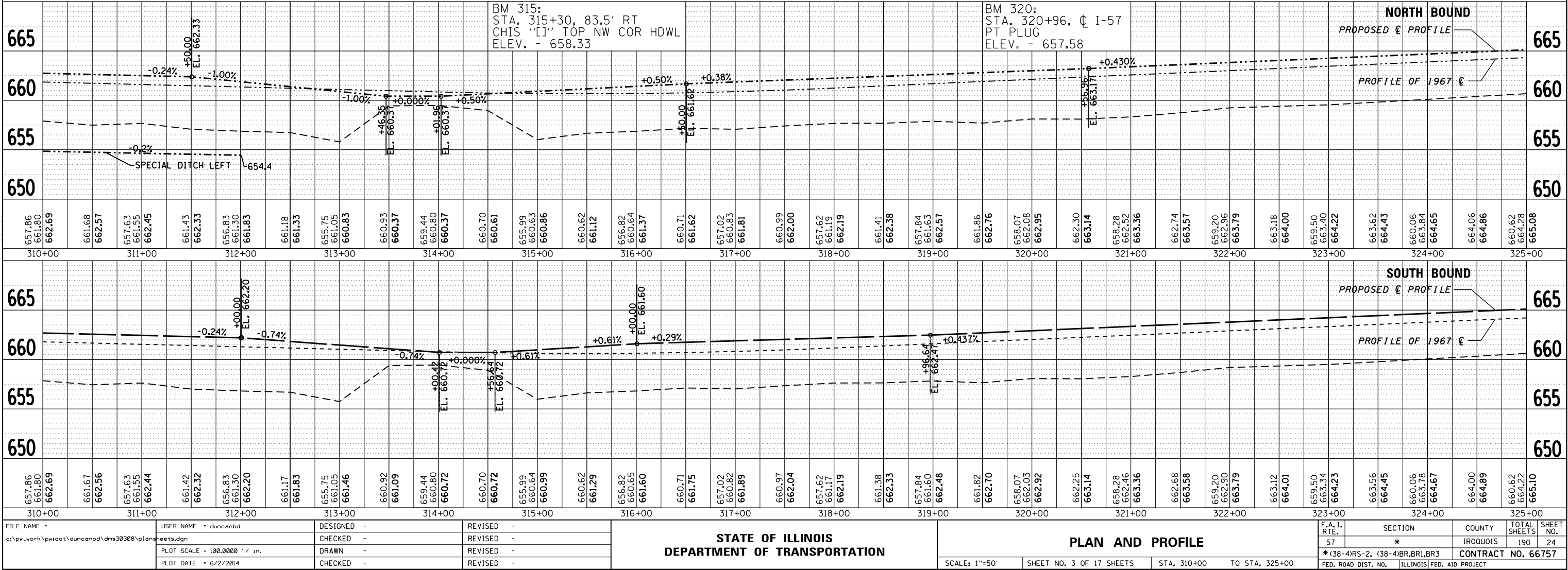


PLAN	SURVEYED	PLOTTED	CHECKED	DATE
NOTE BOOK	NO.	FILE NAME	DATE	BY

PROFILE	SURVEYED	PLOTTED	CHECKED	DATE
NOTE BOOK	NO.	FILE NAME	DATE	BY



AT CLASS A PATCHES SPECIAL: QUANTITY FOR PIPE UNDERDRAINS HAVE BEEN INCLUDED IN THE PLANS TO REPLACE OR ADD TO EXISTING PIPE UNDERDRAINS. UNDERDRAIN LENGTHS AND DRAINAGE OUTLET LOCATIONS SHALL BE DETERMINED IN THE FIELD.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE

SCALE: 1"=50' SHEET NO. 3 OF 17 SHEETS STA. 310+00 TO STA. 325+00

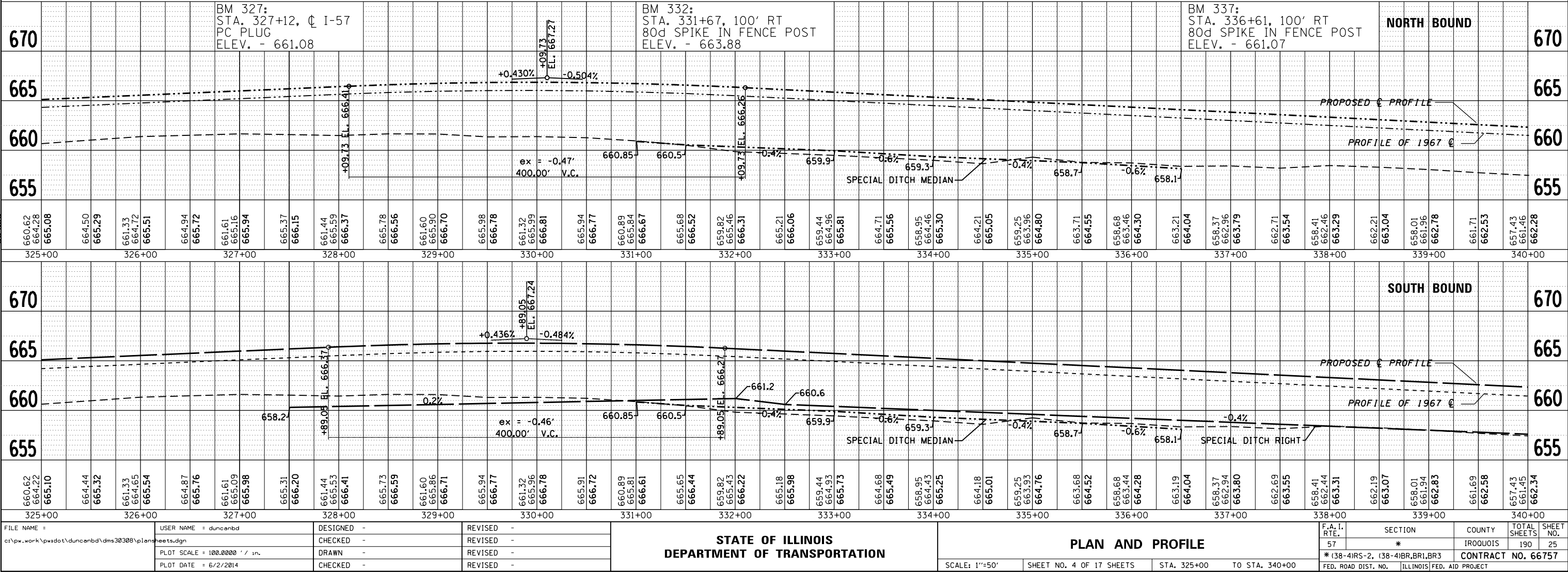
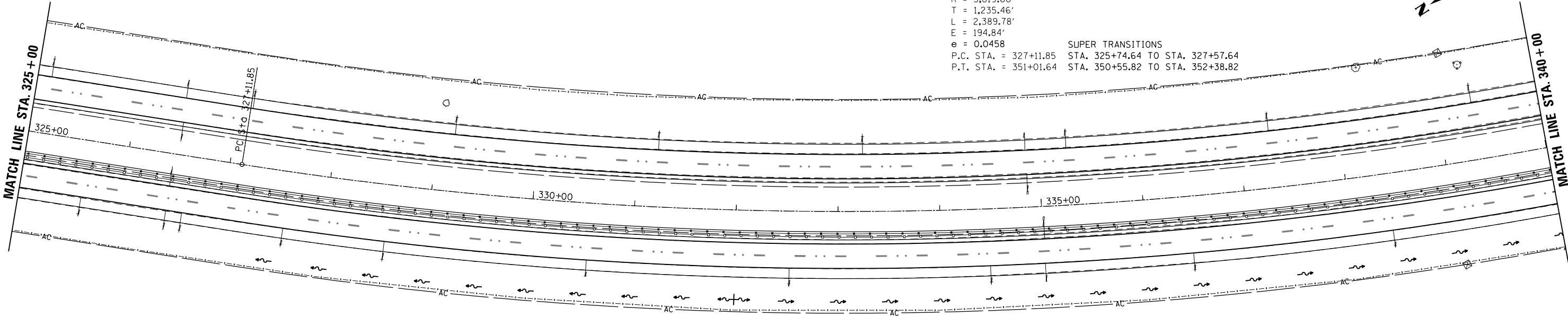
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	IROQUOIS	190	24
*(38-4)RS-2, (38-4)BR,BR1,BR3		CONTRACT NO. 66757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	ALIGNED	CHECKED	
	NO.		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	GRADES CHECKED		
	NO.		
	STRUCTURE NOTATIONS CHKD		

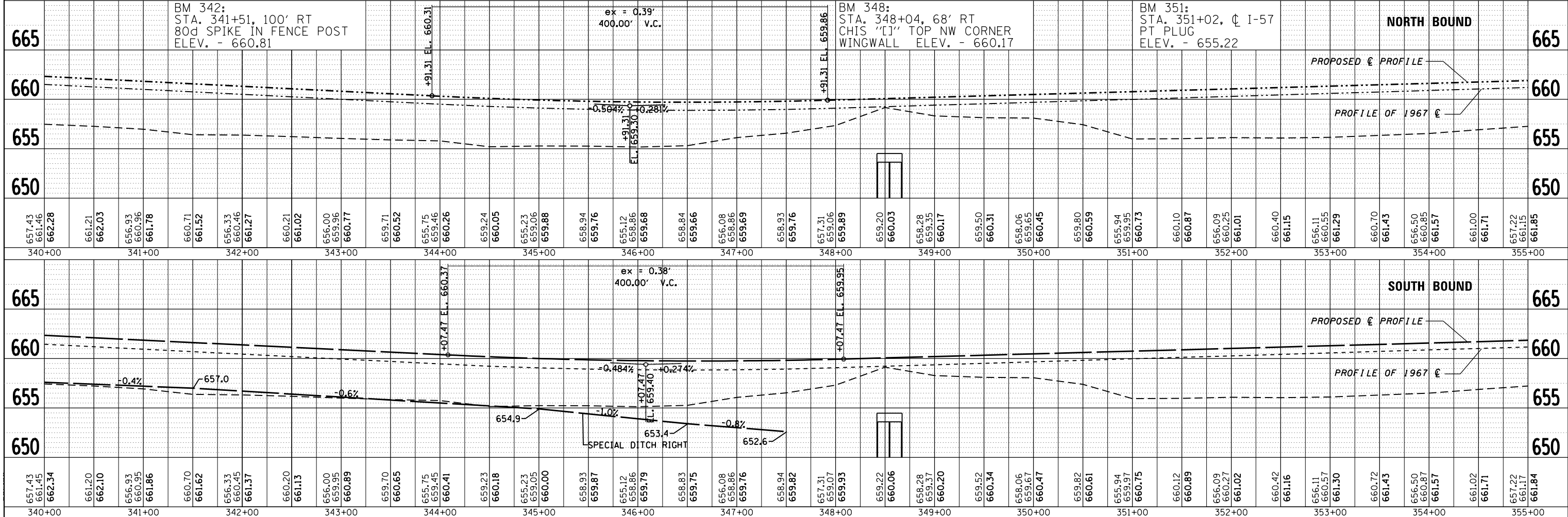
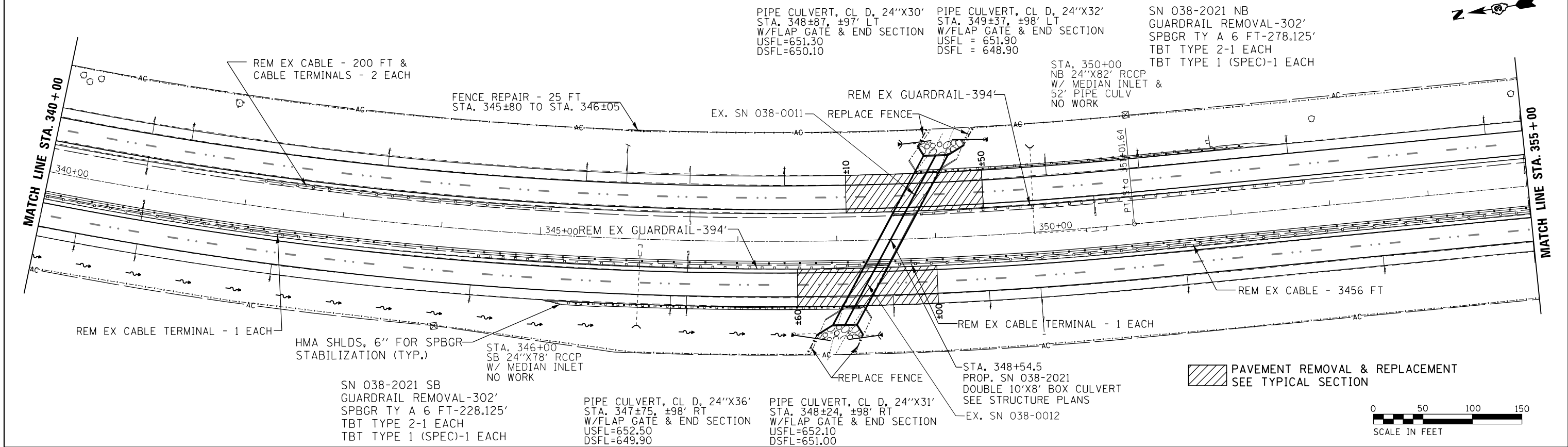
EXIST. CURVE 1571R0-7
PI STA. = 339+47.31
 $\Delta = 35^\circ 50' 52''$ (LT)
D = 1° 30' 00"
R = 3,819.60'
T = 1,235.46'
L = 2,389.78'
E = 194.84'
e = 0.0458
P.C. STA. = 327+11.85
P.T. STA. = 351+01.64

SUPER TRANSITIONS
STA. 325+74.64 TO STA. 327+57.64
STA. 350+55.82 TO STA. 352+38.82



PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	ALIGNED		
	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		



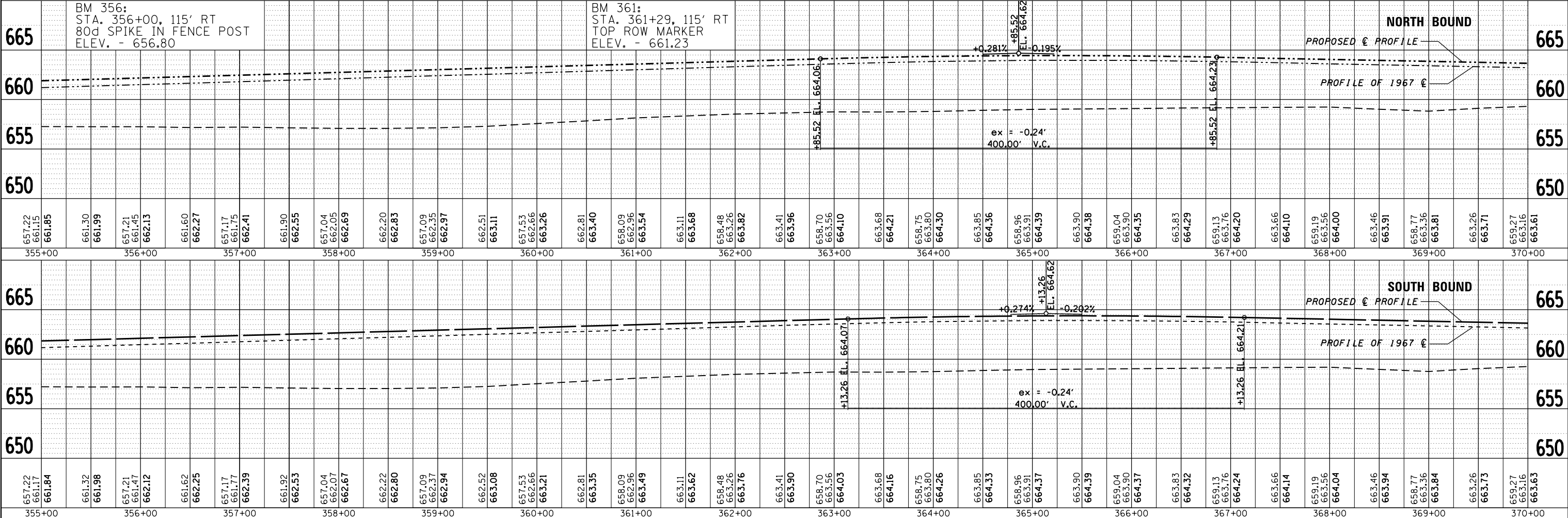
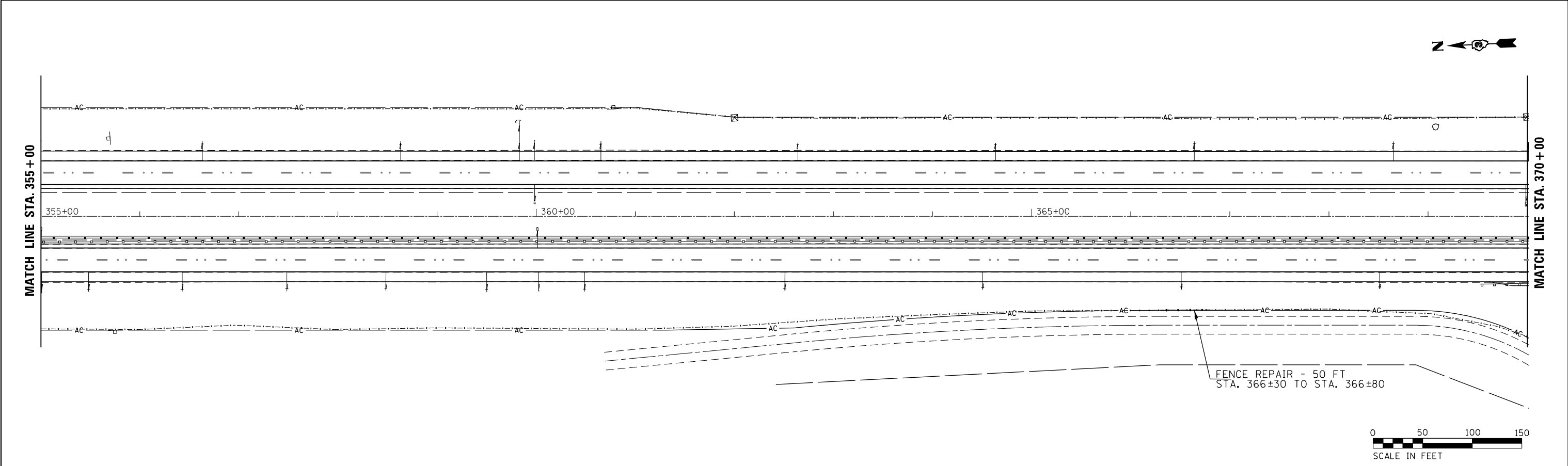
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PLOT SCALE = 100.0000' / in.		DRAWN -	REVISED -
PLOT DATE = 6/2/2014		CHECKED -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PLAN AND PROFILE	
SCALE: 1"=50'	SHEET NO. 5 OF 17 SHEETS	STA. 340+00	TO STA. 355+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	IROQUOIS	190	26
*(38-4)RS-2, (38-4)BR,BR1,BR3		CONTRACT NO. 66757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

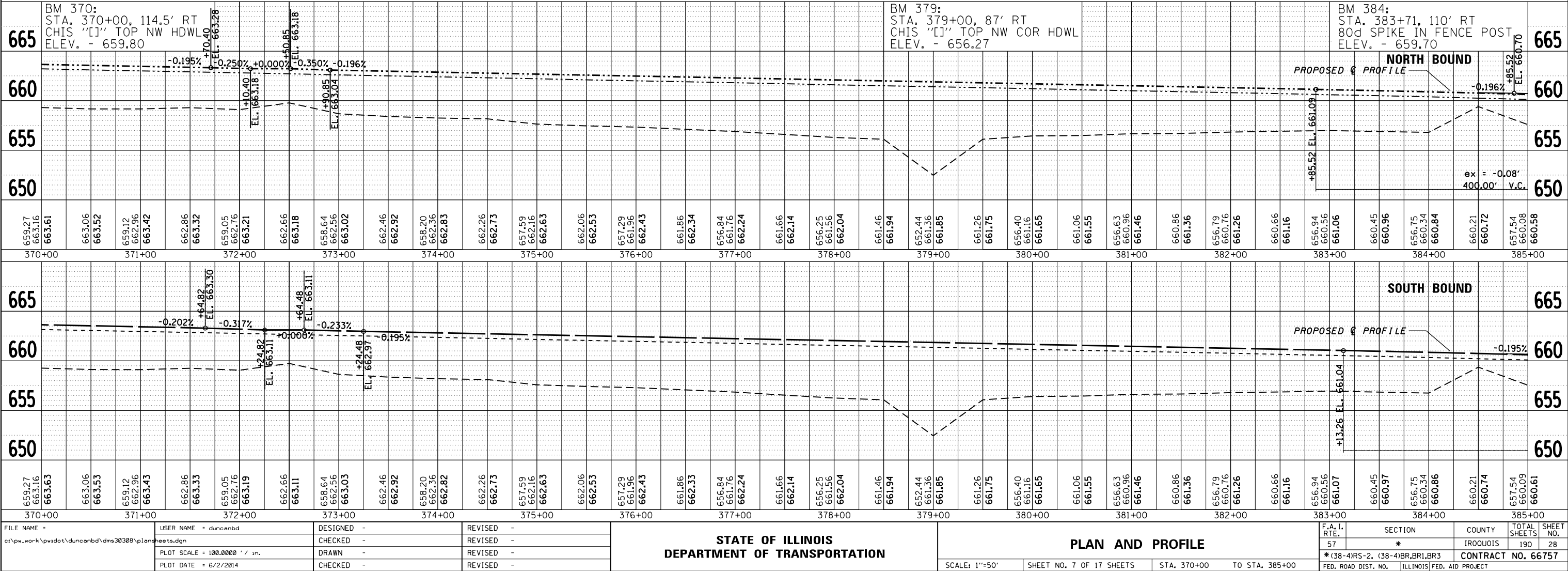
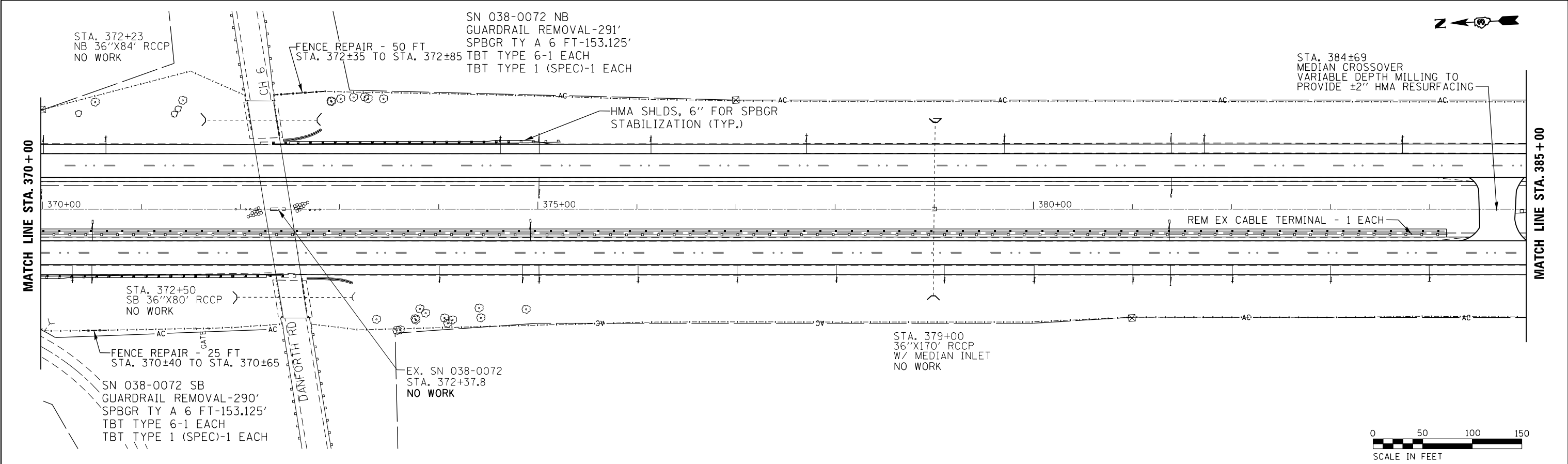
PLAN	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK NO.	ALLOWED		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		



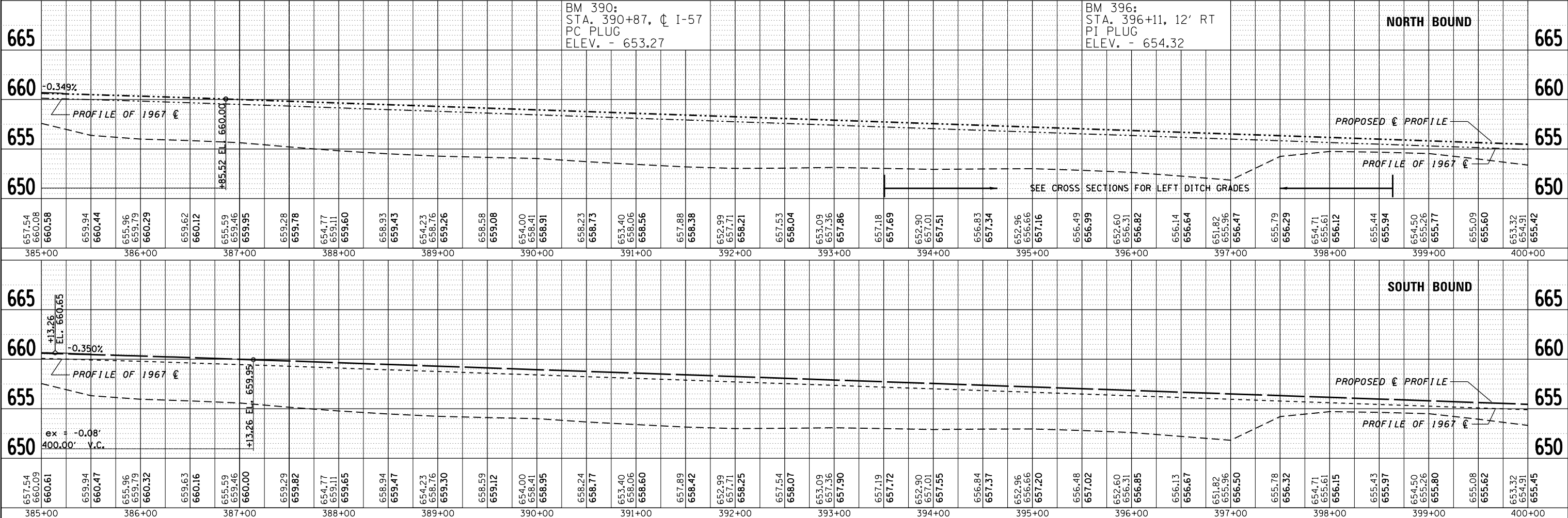
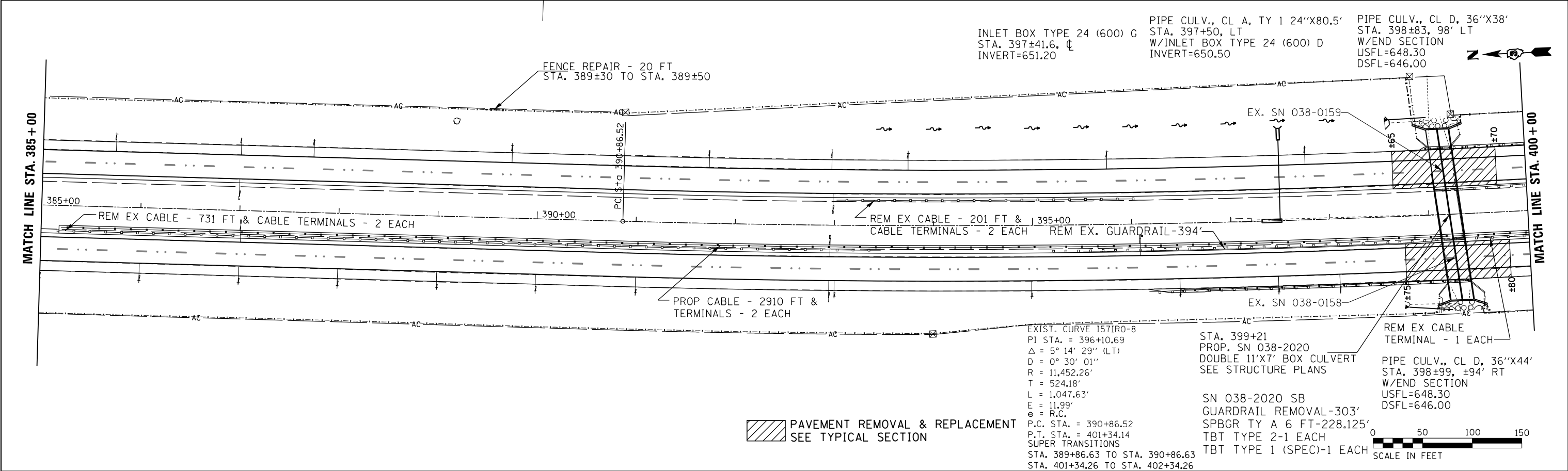
PLAN	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	CHECKED		
	FILE NAME		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO.		



PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	CHECKED	FILE NAME
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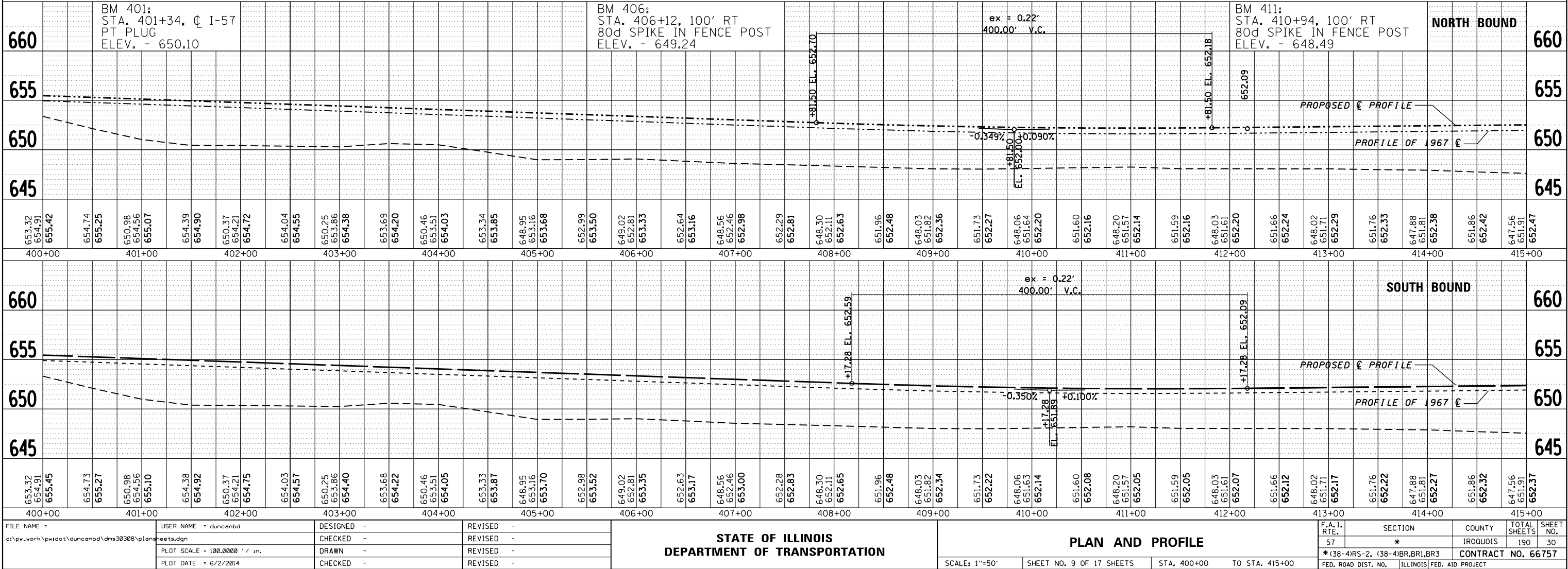
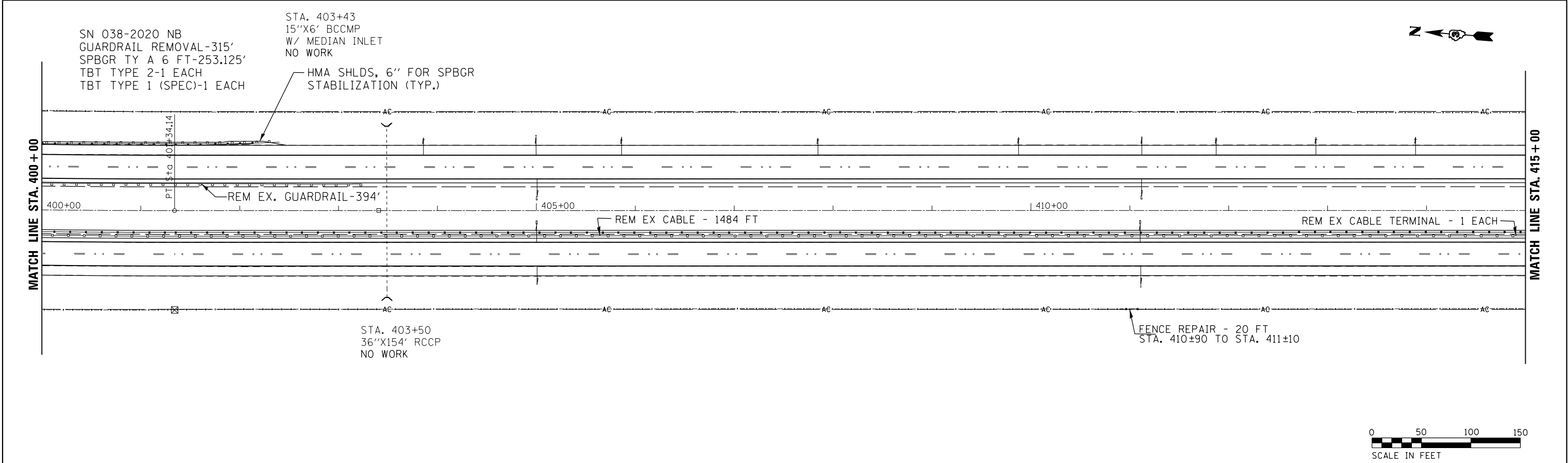
PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED	CHECKED	FILE NAME
NO.			



FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\pwork\pwork\duncanbd\dms30308\plansheets.dgn		CHECKED -	REVISED -						57	*	IROQUOIS	190	29		
PLOT SCALE = 100.0000' / in.		DRAWN -	REVISED -						*(38-4)RS-2, (38-4)BR,BR1,BR3					CONTRACT NO. 66757	
PLOT DATE = 6/2/2014		CHECKED -	REVISED -						SCALE: 1"=50'		SHEET NO. 8 OF 17 SHEETS		STA. 385+00 TO STA. 400+00		FED. ROAD DIST. NO.

PLAN	SURVEYED _____		BY _____	DATE _____
	PLOTTED _____			
NOTE BOOK	ALIGNMENT CHECKED _____		_____	_____
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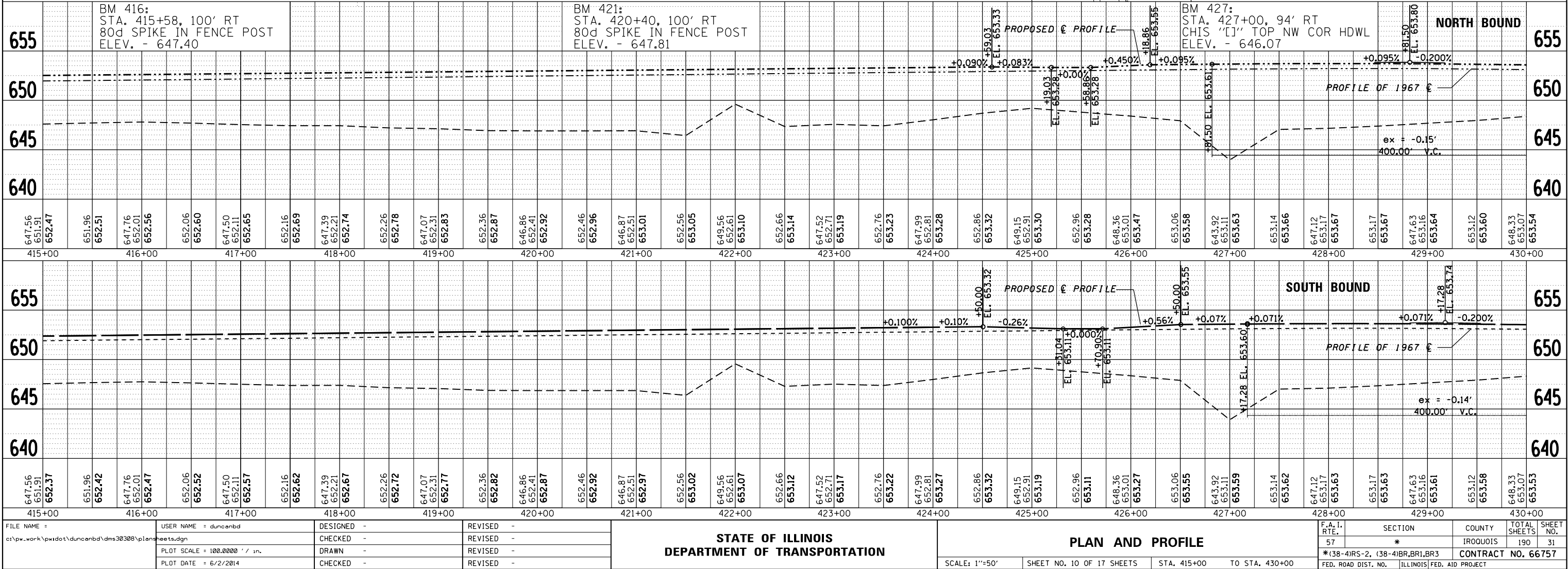
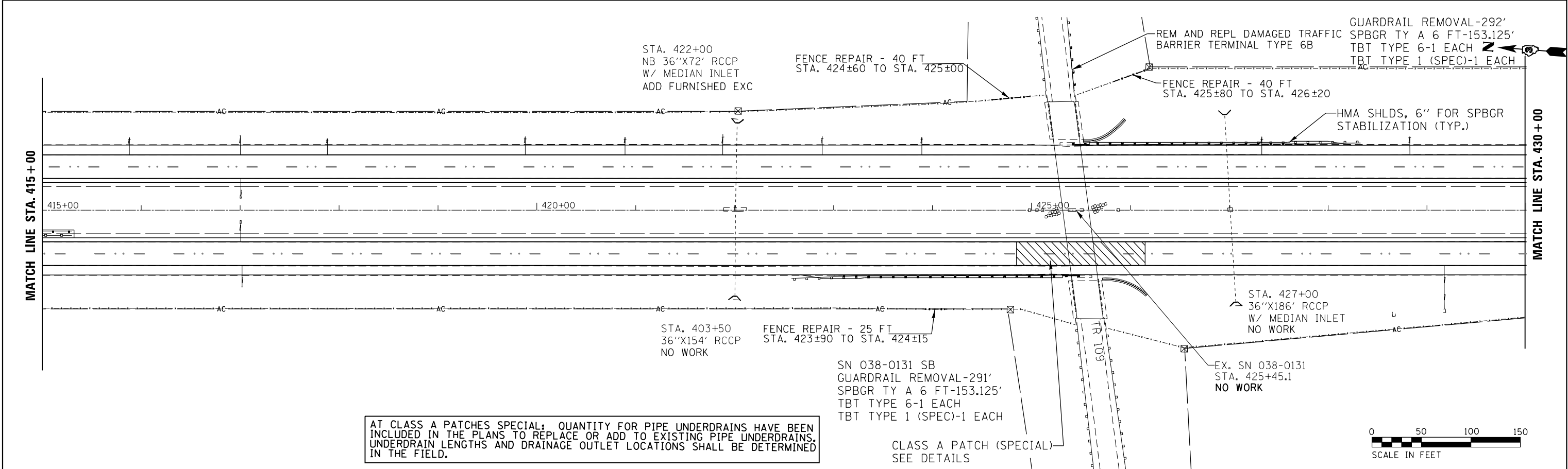
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FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw\work\pwidot\duncanbd\dms30308\plansheets.dgn	CHECKED -	REVISED -	57							*	IROQUOIS	190	30		
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -	*(38-4)RS-2, (38-4)BR,BR1,BR3							CONTRACT NO. 66757					
PLOT DATE = 6/2/2014	CHECKED -	REVISED -	FED. ROAD DIST. NO.							ILLINOIS FED. AID PROJECT					
					SCALE: 1"=50'	SHEET NO. 9 OF 17 SHEETS	STA. 400+00	TO STA. 415+00							

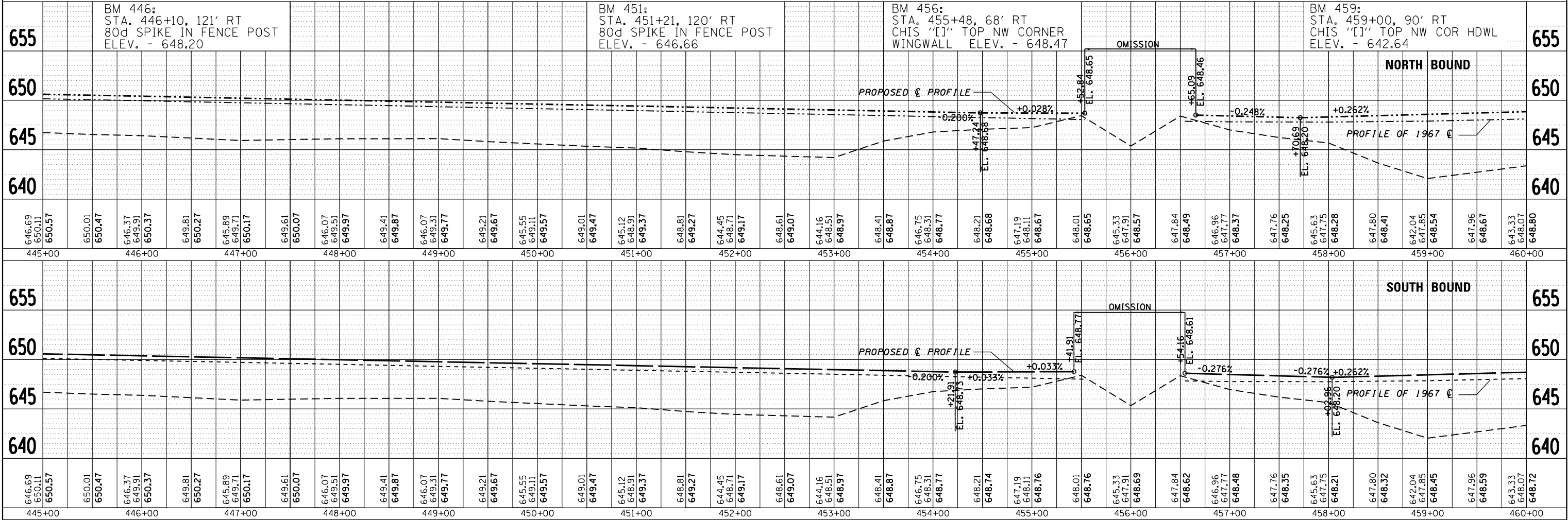
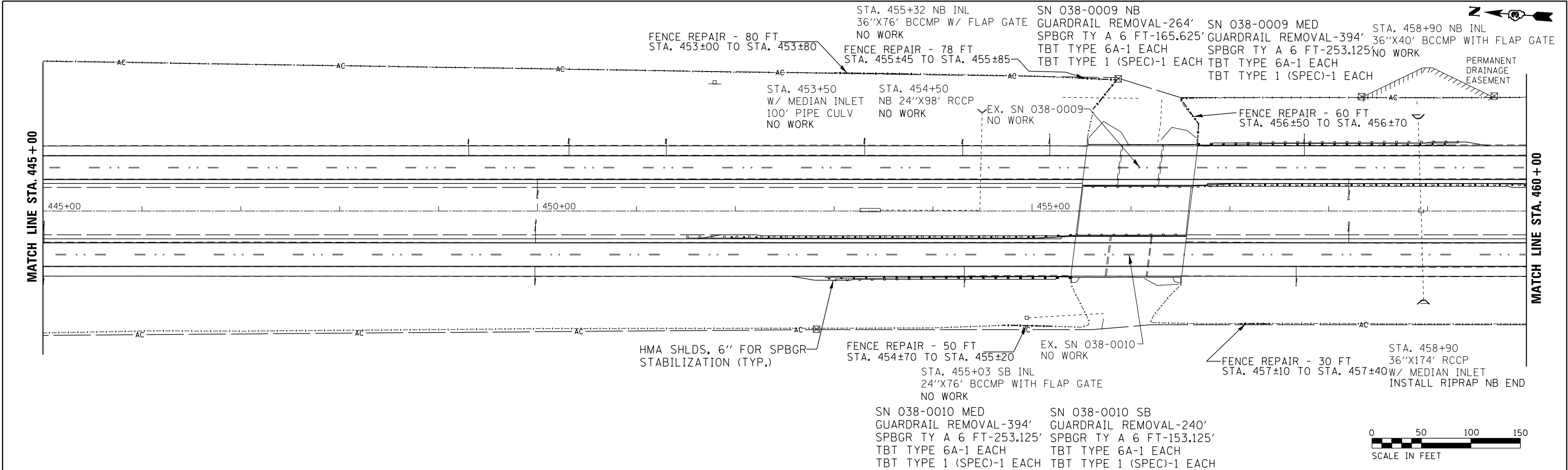
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NO. _____	ALIGNMENT CHECKED _____			
	RT. OF WAY CHECKED _____			
	CADD FILE NAME _____			

PROFILE	SURVEYED _____	BY _____	DATE _____
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NOTE BOOK	GRADES CHECKED _____		
	B.M. NOTED _____		
NO. _____	STRUCTURE NOTAT'NS CHK'D _____		



PLAN	BY		DATE
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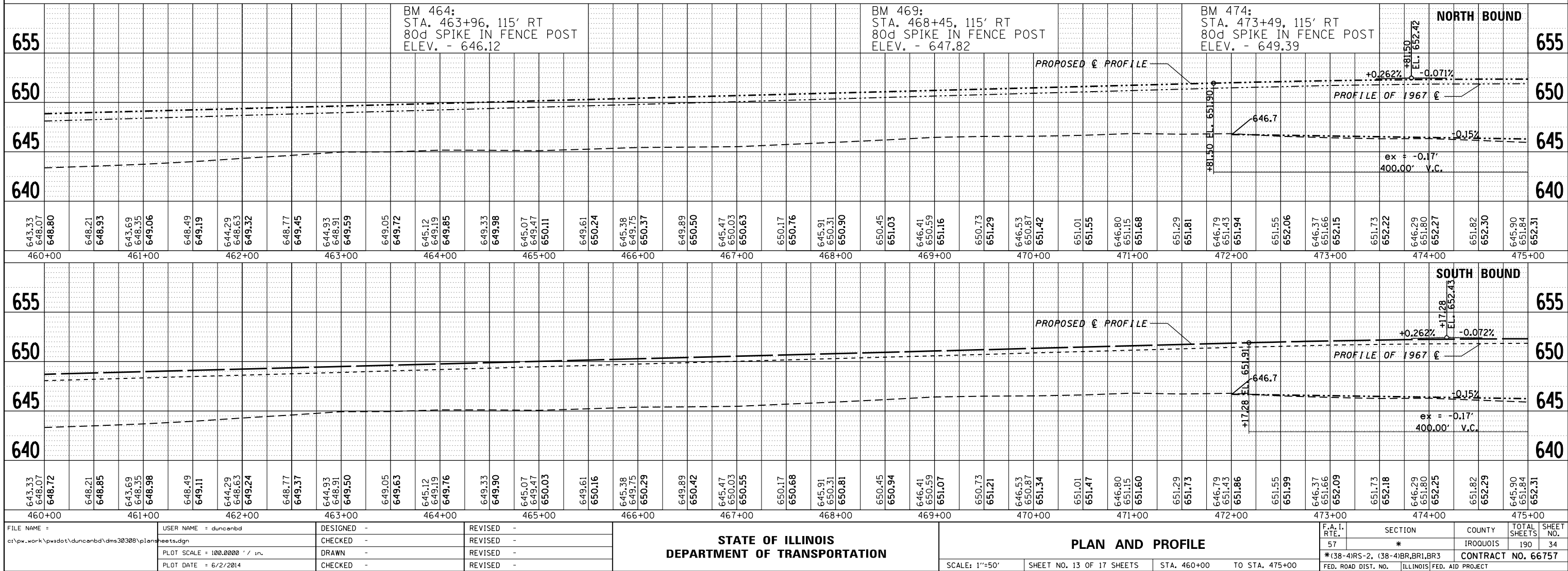
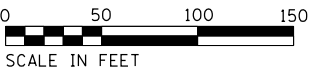
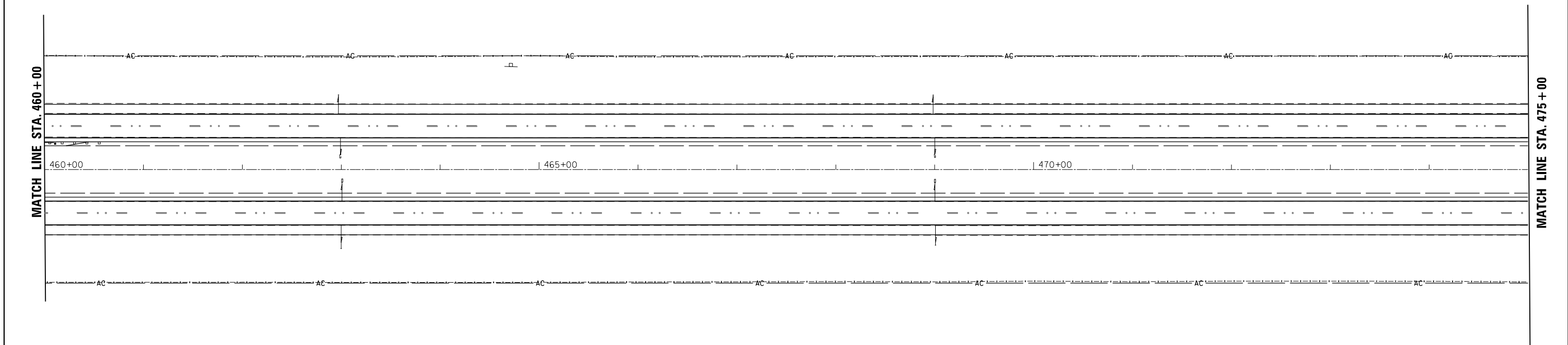
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	PLOTTED _____			
	GRADES CHECKED _____			
	B.M. NOTED _____			
NOTE BOOK	STRUCTURE NOTAT'NS CHK'D _____			
NO. _____				



FILE NAME =		USER NAME = duncanbd		DESIGNED -		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				PLAN AND PROFILE						F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw-work\pwidot\duncanbd\dms30308\plansheets.dgn				CHECKED -		REVISED -												57	*		IROQUOIS		190
PLOT SCALE = 100.0000 ' / in.				DRAWN -		REVISED -						* (38-4)RS-2, (38-4)BR,BR1,BR3								CONTRACT NO. 66757			
PLOT DATE = 6/2/2014				CHECKED -		REVISED -						SCALE: 1"=50'		SHEET NO. 12 OF 17 SHEETS		STA. 445+00 TO STA. 460+00		FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

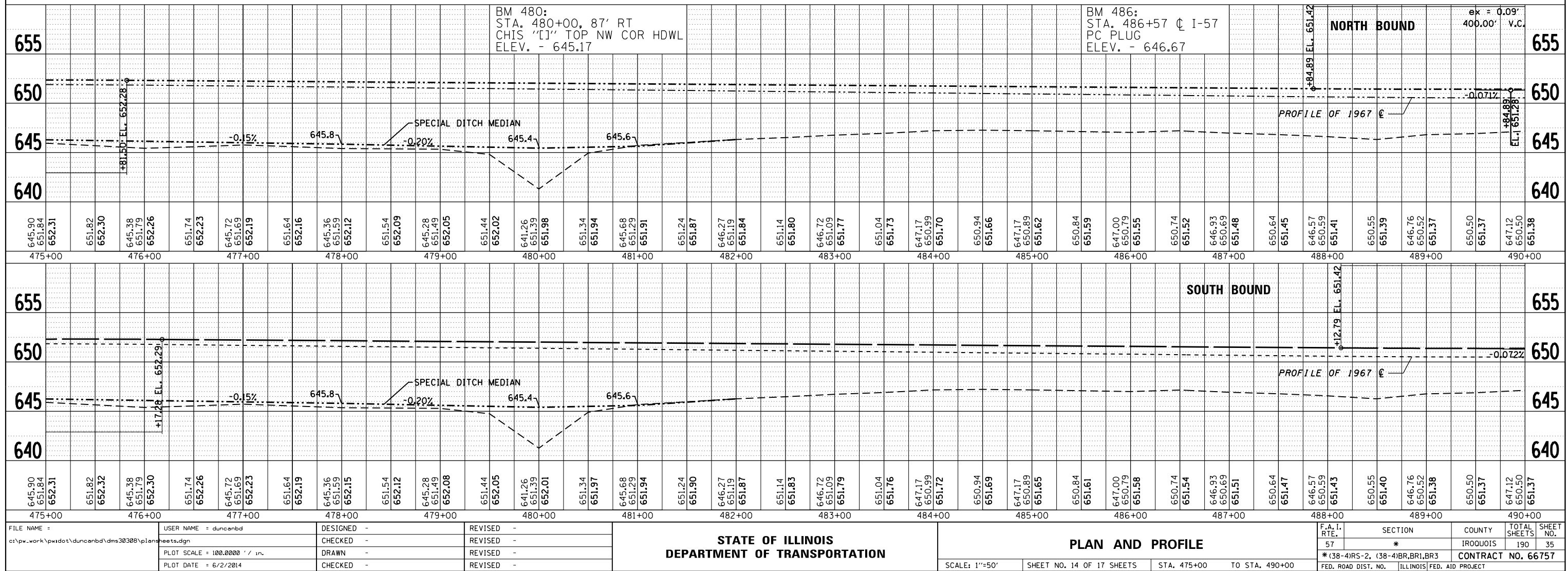
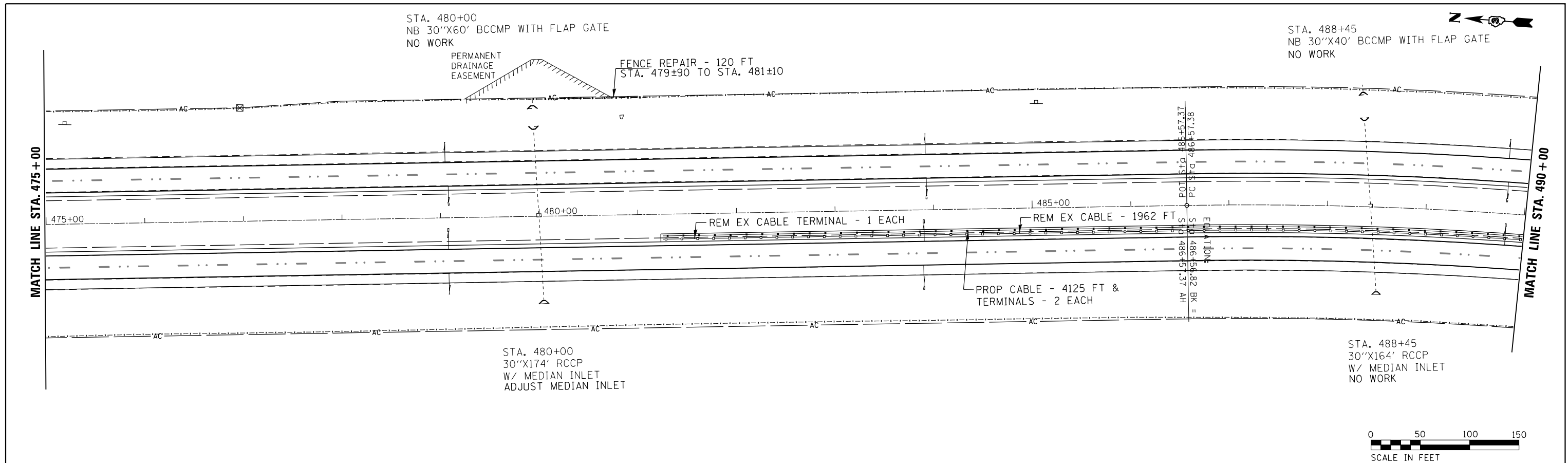
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NOTE BOOK	PLOTTED _____		
NO. _____	ALIGNMENT CHECKED _____		
	RT. OF WAY CHECKED _____		
	CADD FILE NAME _____		

PROFILE			
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	PLOTTED		
NOTE BOOK	GRADES CHECKED		
	B.M. NOTED		
NO. _____	STRUCTURE NOT'NS CHKD		

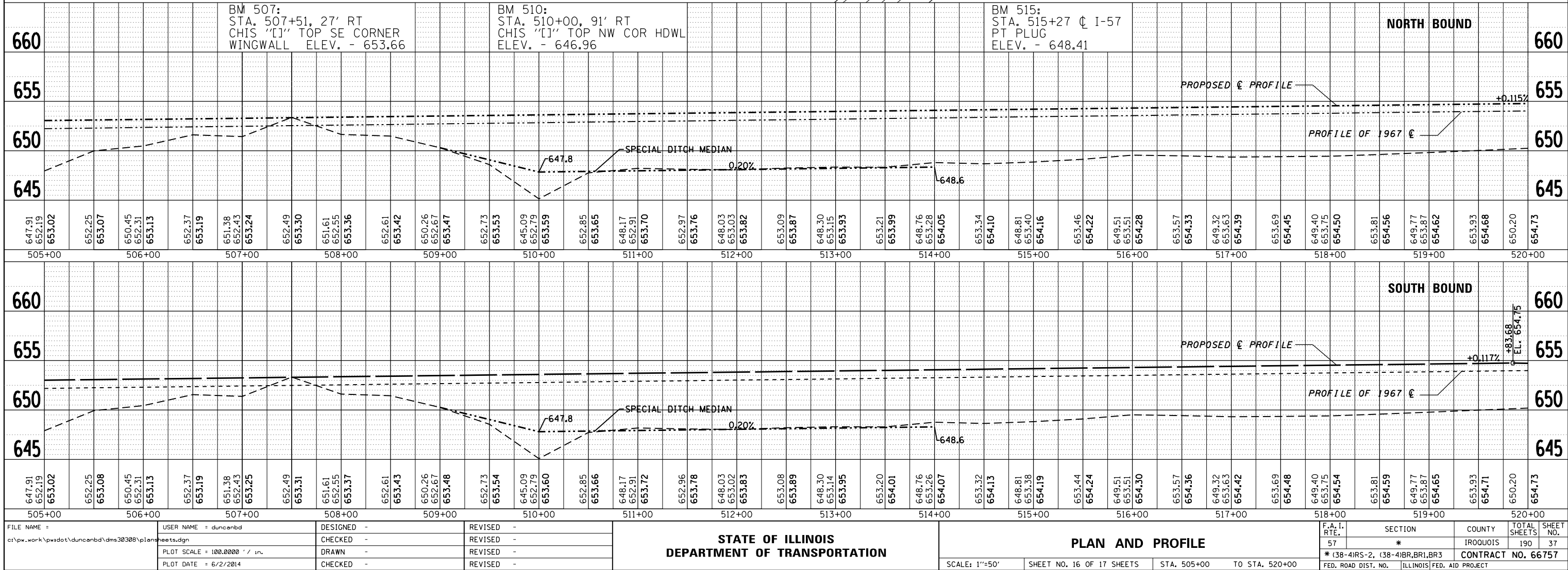


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NOTE BOOK NO. _____	PLOTTED _____			
	ALIGNMENT CHECKED _____			
	RT. OF WAY CHECKED _____			
	CADD FILE NAME _____			

PROFILE					
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	PLOTTED				
NOTE BOOK	GRADES CHECKED				
	B.M. NOTED				
NO. _____	STRUCTURE NOT'NS	CHKD			

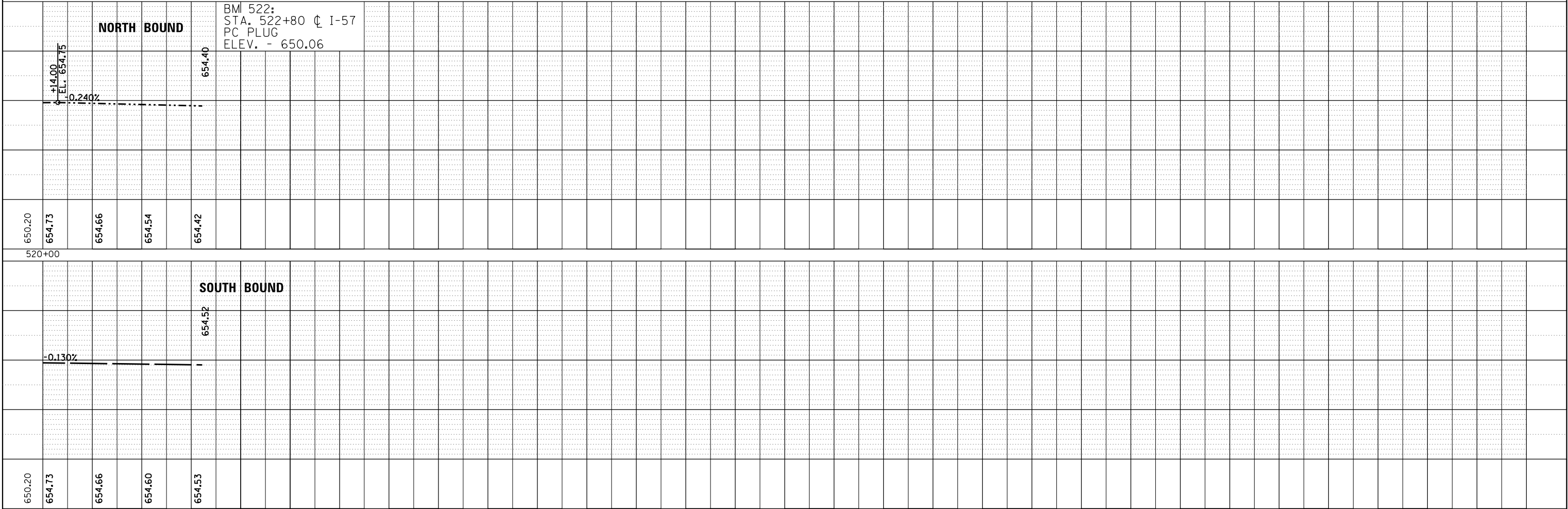
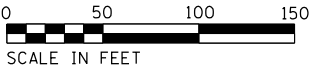


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NOTE BOOK _____		GRADES CHECKED _____					
NO. _____		B.M. NOTED _____					
		STRUCTURE NOTATIONS CHECKED _____					

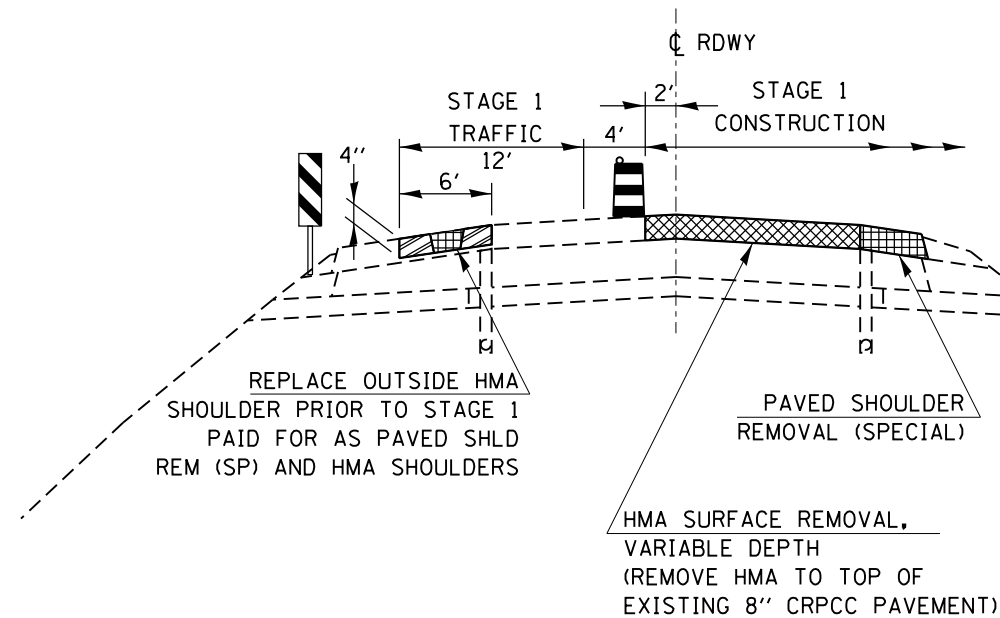


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	PLOTTED		
NOTE BOOK NO.	CHECKED		
	FILE NAME		

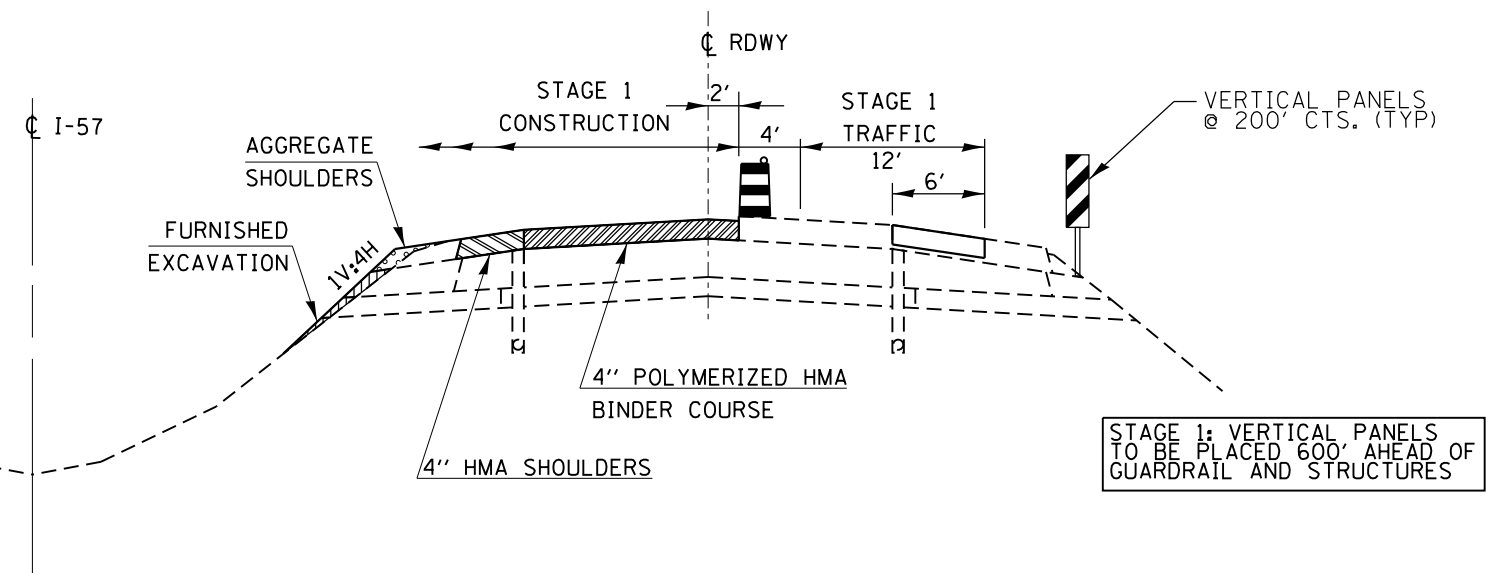
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	PLOTTED		
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		



FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE	SCALE: 1"=50'	SHEET NO. 17 OF 17 SHEETS	STA. 520+00 TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\pwork\pwork\duncanbd\dms30308\plansheets.dgn		CHECKED -	REVISED -						57	*	IROQUOIS	190	38		
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	PLOT DATE = 6/2/2014	CHECKED -	REVISED -						CONTRACT NO. 66757						
										FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT	



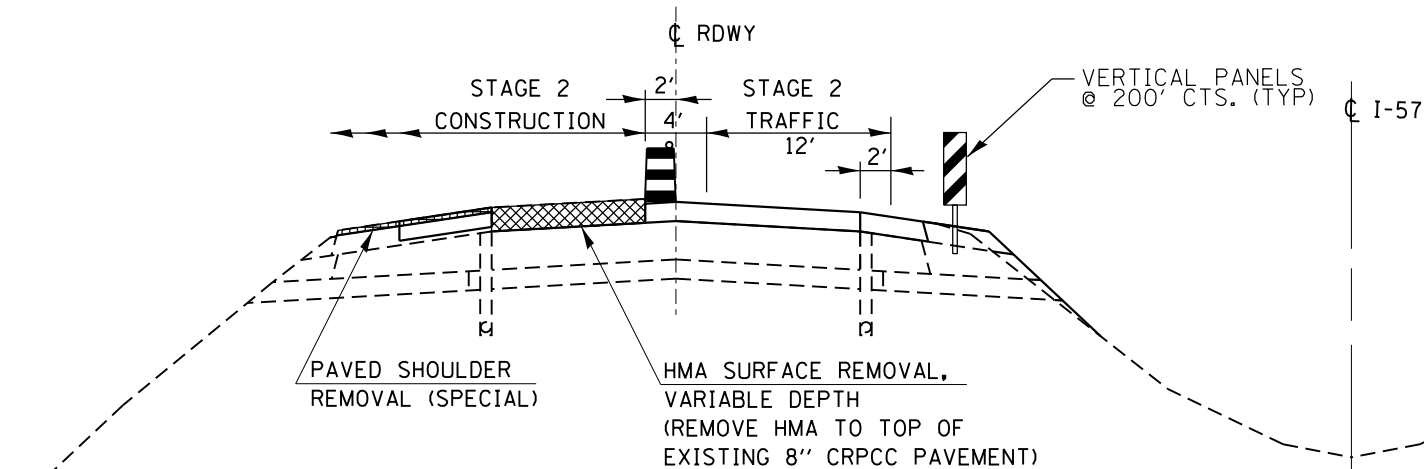
SHOWING REMOVAL



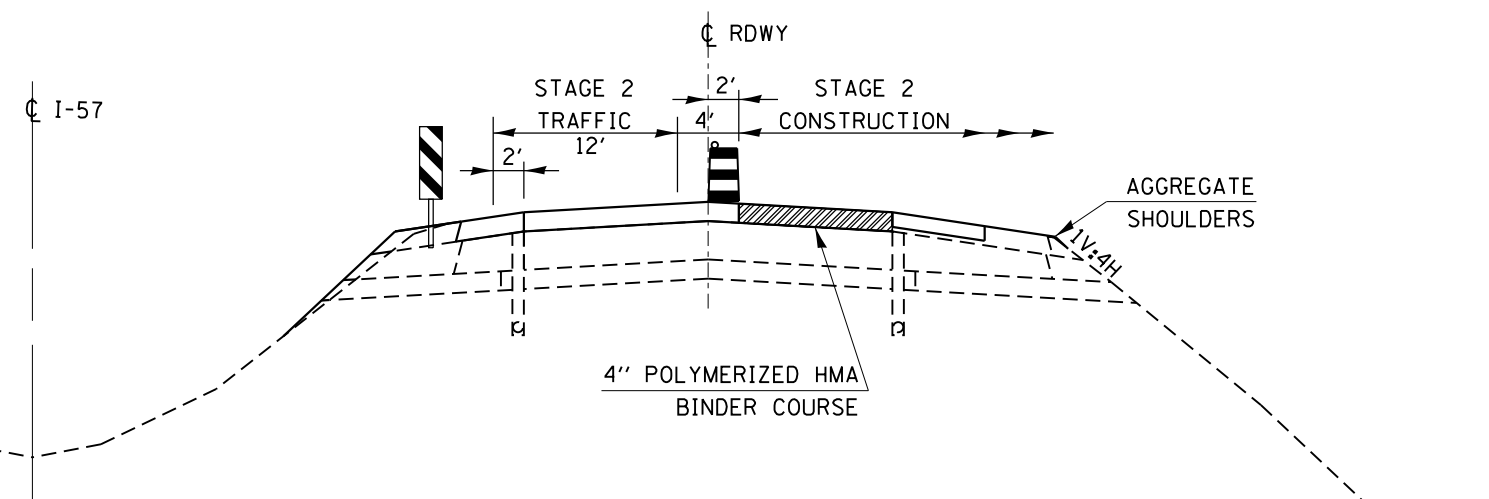
SHOWING PROPOSED

STAGE I TYPICAL

FOR BOTH STAGES:
DRUMS/BARRELS @ 100' SPACING
PER DROP-OFF POLICY UNLESS
DIRECTED BY THE ENGINEER



SHOWING REMOVAL



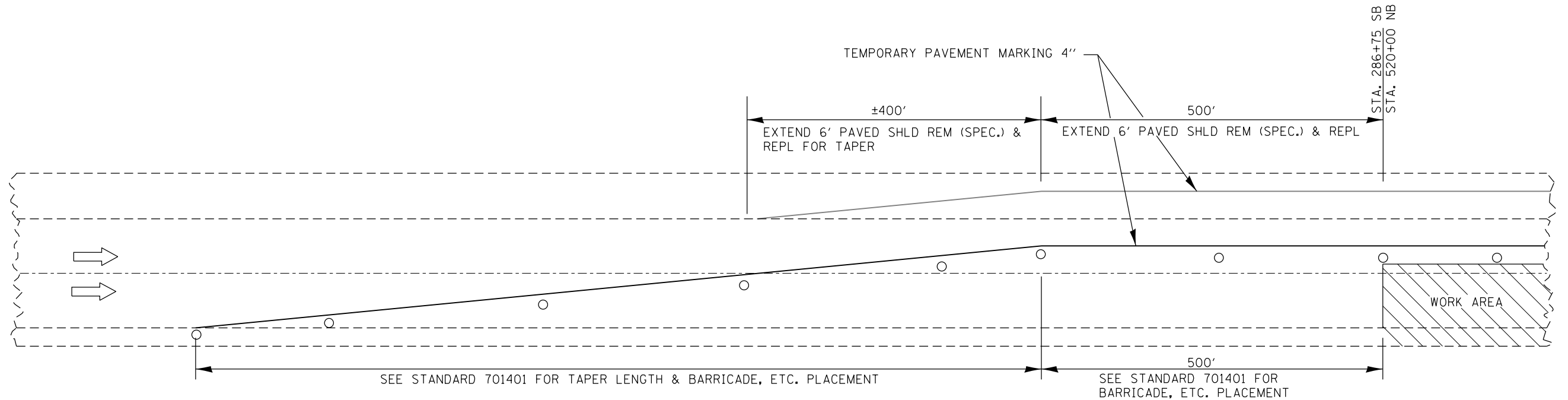
SHOWING PROPOSED

STAGE II TYPICAL

STAGE 2: VERTICAL PANELS
TO BE PLACED LENGTH OF
LANE CLOSURE

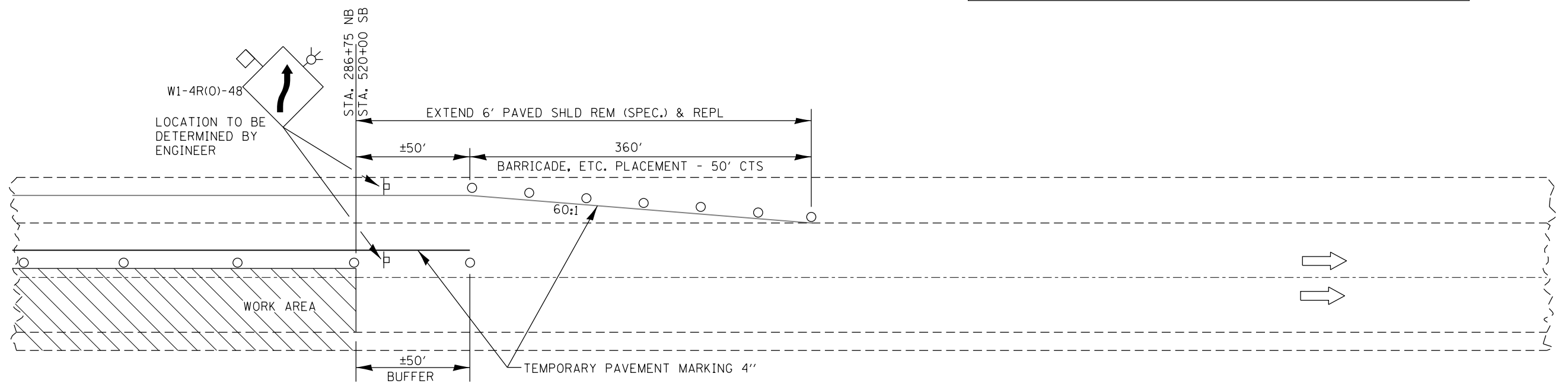
NOTE:
PLACE FINAL 1 1/2" LIFT OF HMA SURFACE, HMA SHOULDERS, AND
AGGREGATE SHOULDERS AFTER COMPLETION OF STAGE II

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED ROADWAY STAGING TYPICAL				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\p\pidot\duncanbd\dms30308\ep05005-shit-staging.dgn		DRAWN -	REVISED -						57	*	IROQUOIS	190	39
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -						*(38-4)RS-2, (38-4)BR,BR1,BR3				
PLOT DATE = 6/2/2014		DATE -	REVISED -						ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		
									CONTRACT NO. 66757				



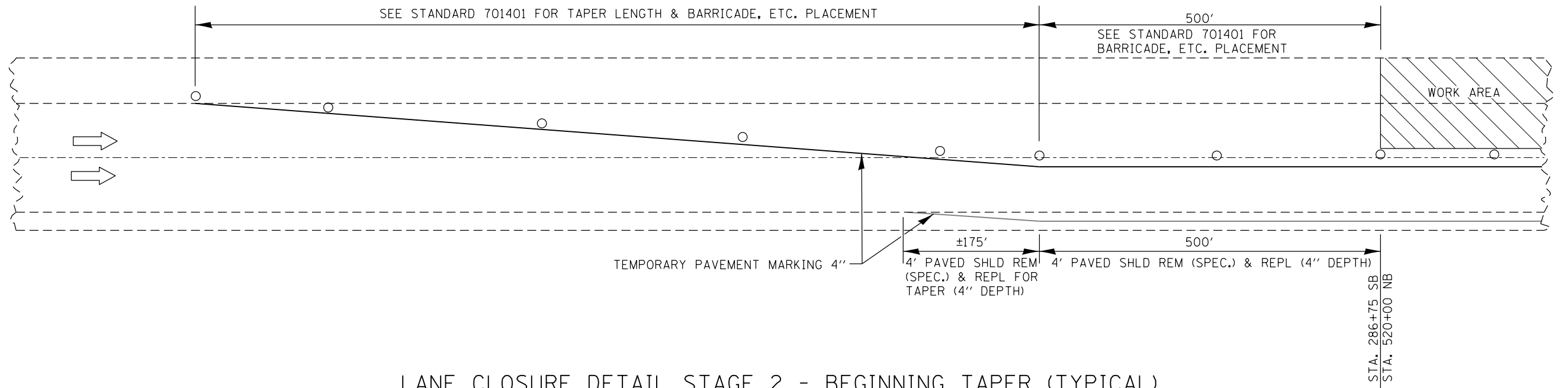
LANE CLOSURE DETAIL STAGE 1 - BEGINNING TAPER (TYPICAL)
NORTHBOUND & SOUTHBOUND

TRAFFIC CONTROL DEVICES SHOWN TO BE INCLUDED IN COST OF TC & P 701401 (SPECIAL)



LANE CLOSURE DETAIL STAGE 1 - ENDING TAPER (TYPICAL)
NORTHBOUND & SOUTHBOUND

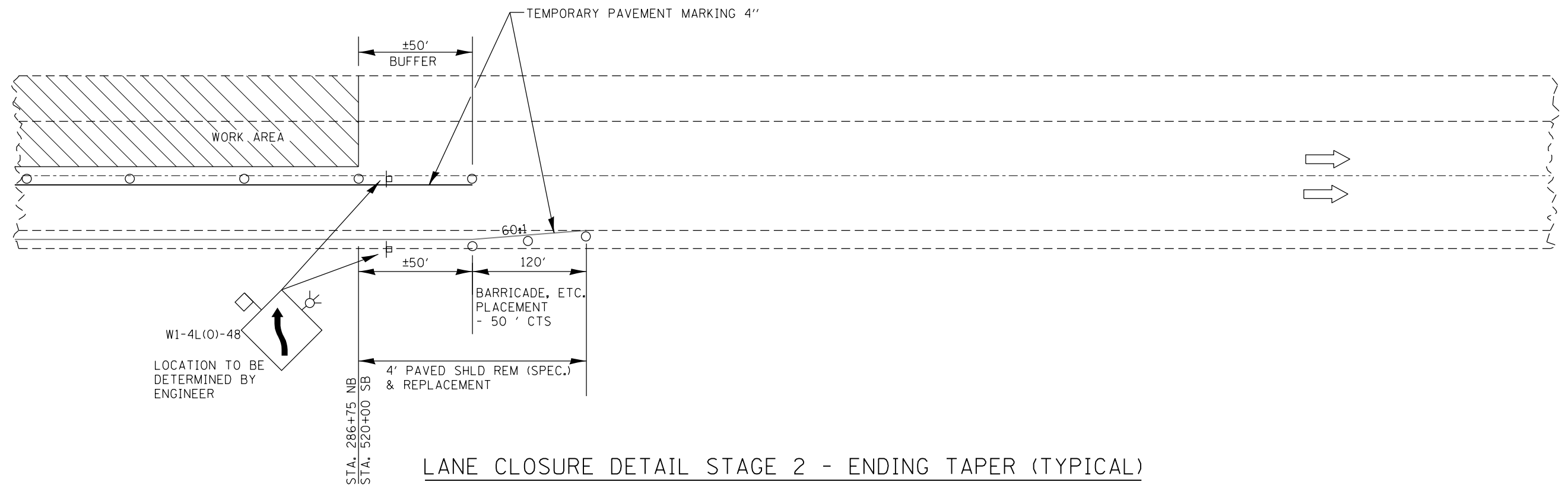
FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL STAGING				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\duncanbd\dms30308\ep05005-shit-staging.dgn		DRAWN -	REVISED -		57	*	IROQUOIS	190	40				
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PLOT DATE = 6/2/2014		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								
					SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			



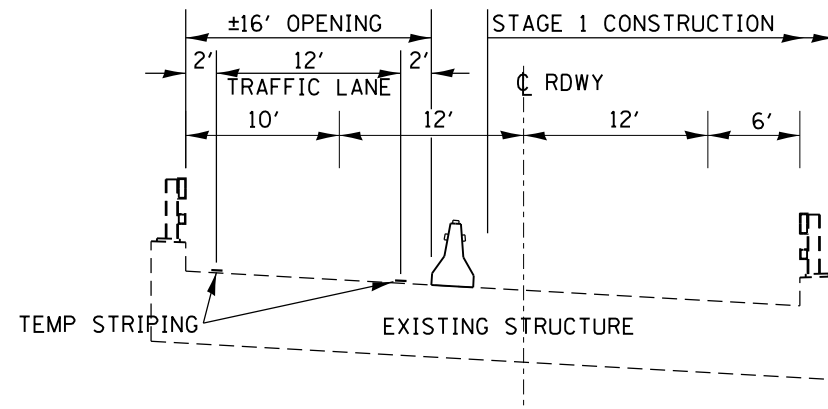
LANE CLOSURE DETAIL STAGE 2 - BEGINNING TAPER (TYPICAL)

NORTHBOUND & SOUTHBOUND

TRAFFIC CONTROL DEVICES SHOWN TO BE INCLUDED IN COST OF TC & P 701401 (SPECIAL)

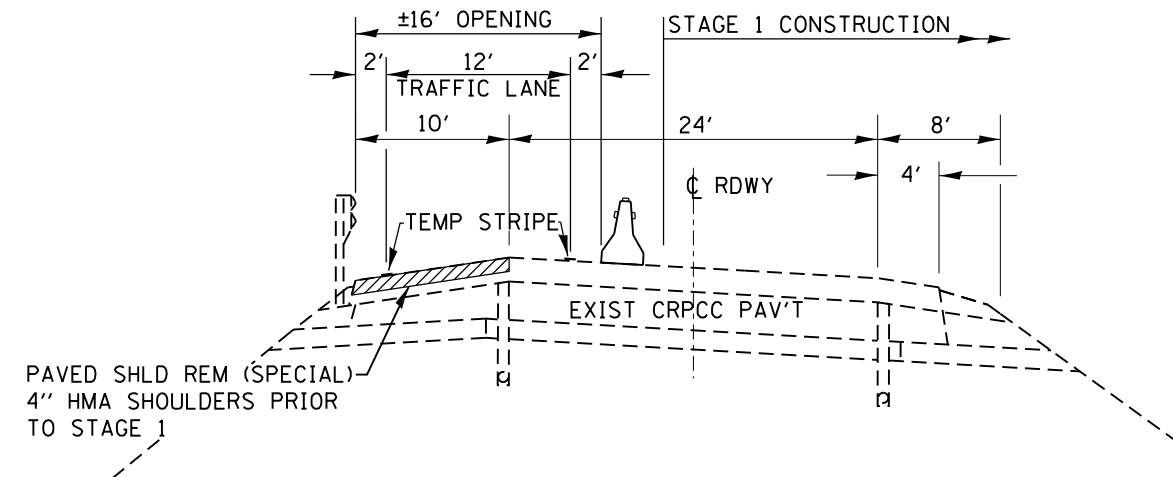


FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL STAGING				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw\work\p\dot\duncanbd\dms30308\ep05005-shit-staging.dgn		DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT		
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -											
	PLOT DATE = 6/2/2014	DATE -	REVISED -											
								57	*	IROQUOIS	190	41		
								*(38-4)RS-2, (38-4)BR,BR1,BR3						
								CONTRACT NO. 66757						



**HALF SECTION
SHOWING STAGE 1 AT STRUCTURE**

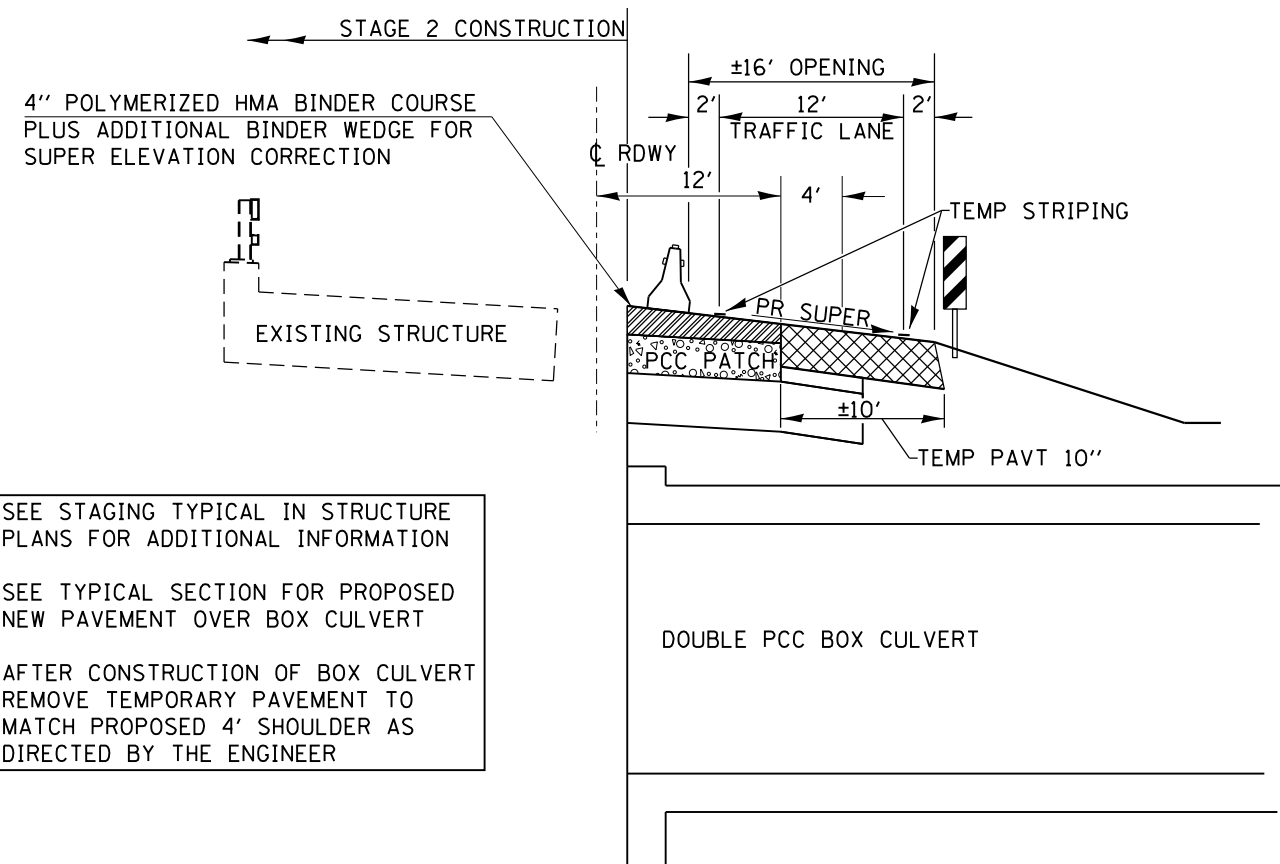
SEE STAGING TYPICAL IN STRUCTURE
PLANS FOR ADDITIONAL INFORMATION



**HALF SECTION
SHOWING STAGE 1 AT ROADWAY**

NOTE:

STAGING TYPICALS ASSUME ROADWAY
WORK/CLOSURES BEING PERFORMED AT
SAME TIME AS STRUCTURE WORK

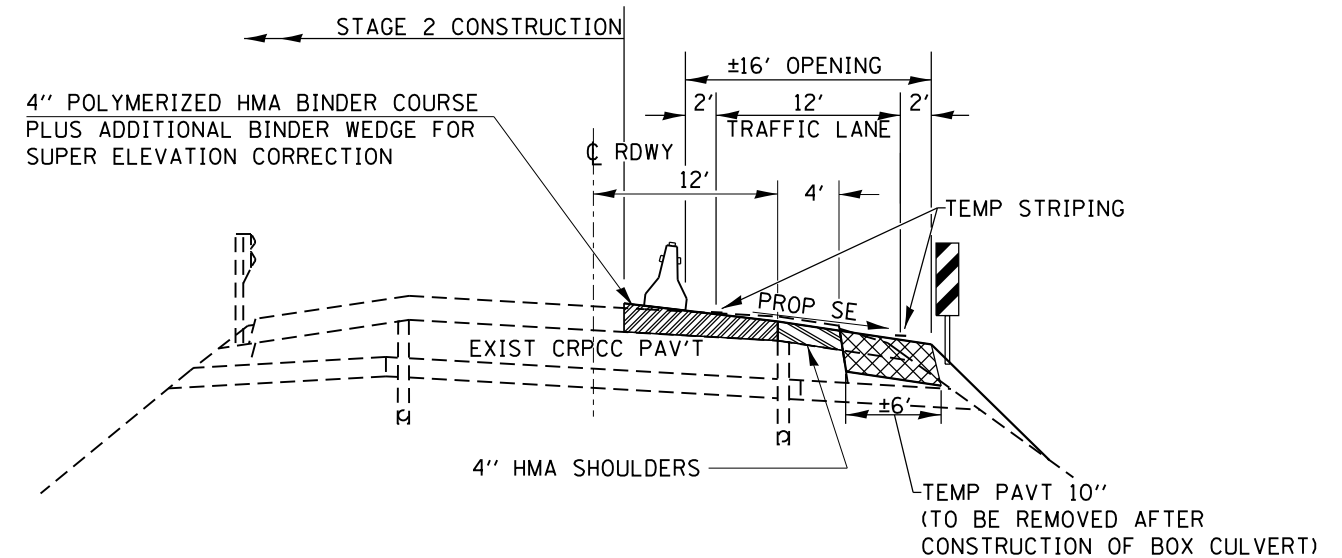


**HALF SECTION
SHOWING STAGE 2 AT STRUCTURE**

SEE STAGING TYPICAL IN STRUCTURE
PLANS FOR ADDITIONAL INFORMATION

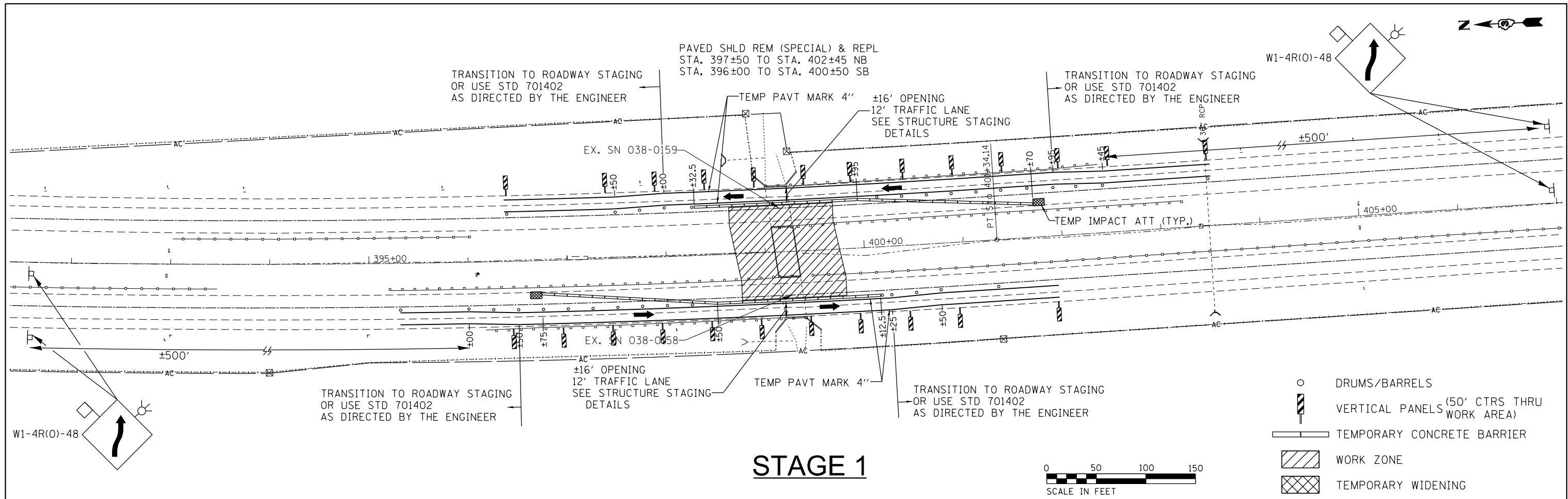
SEE TYPICAL SECTION FOR PROPOSED
NEW PAVEMENT OVER BOX CULVERT

AFTER CONSTRUCTION OF BOX CULVERT
REMOVE TEMPORARY PAVEMENT TO
MATCH PROPOSED 4' SHOULDER AS
DIRECTED BY THE ENGINEER

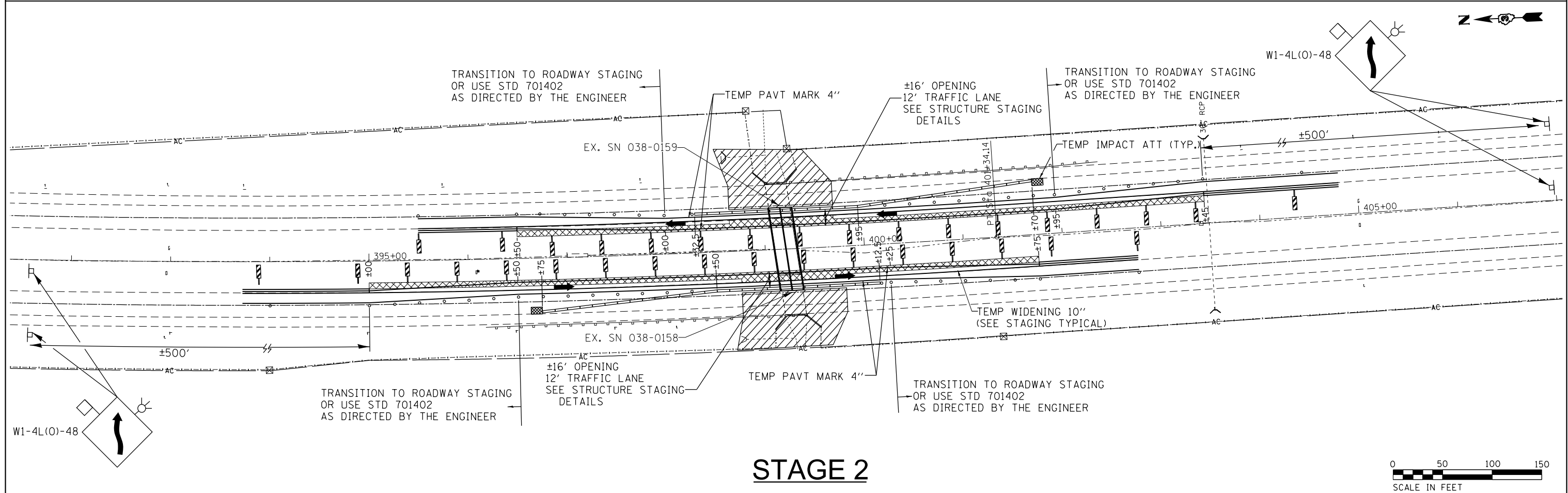


**HALF SECTION
SHOWING STAGE 2 AT ROADWAY**

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING TYPICALS AT STRUCTURE REPLACEMENTS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\duncanbd\dms30308\ep05005-shit-staging.dgn		DRAWN -	REVISED -						57	*	IROQUOIS	190	42
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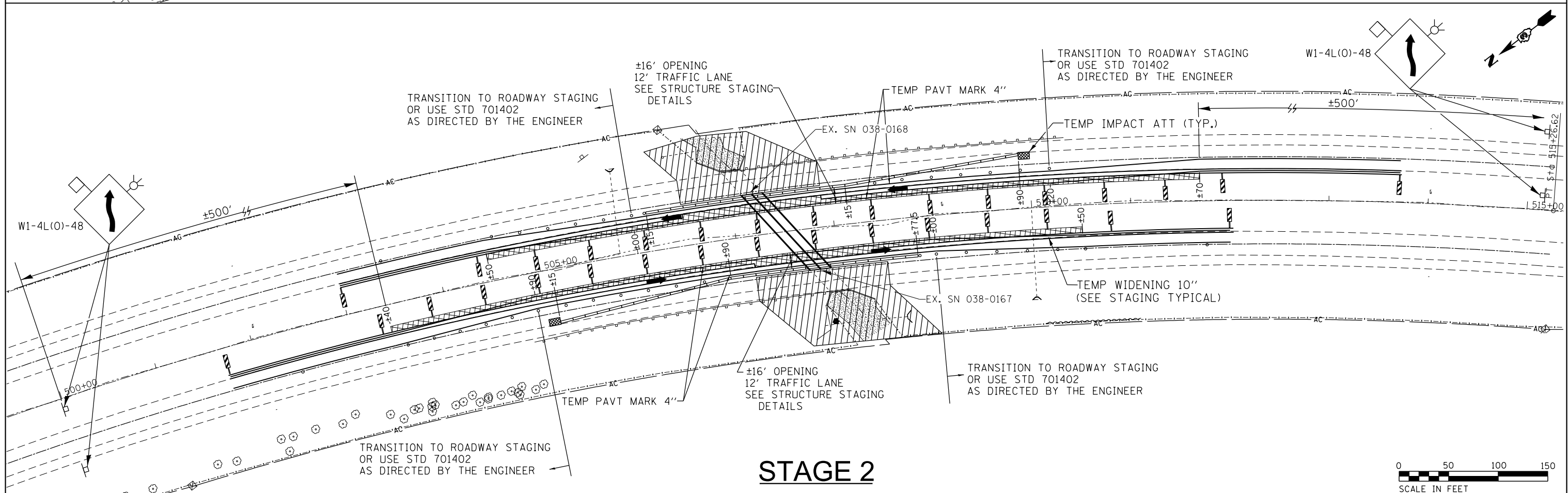
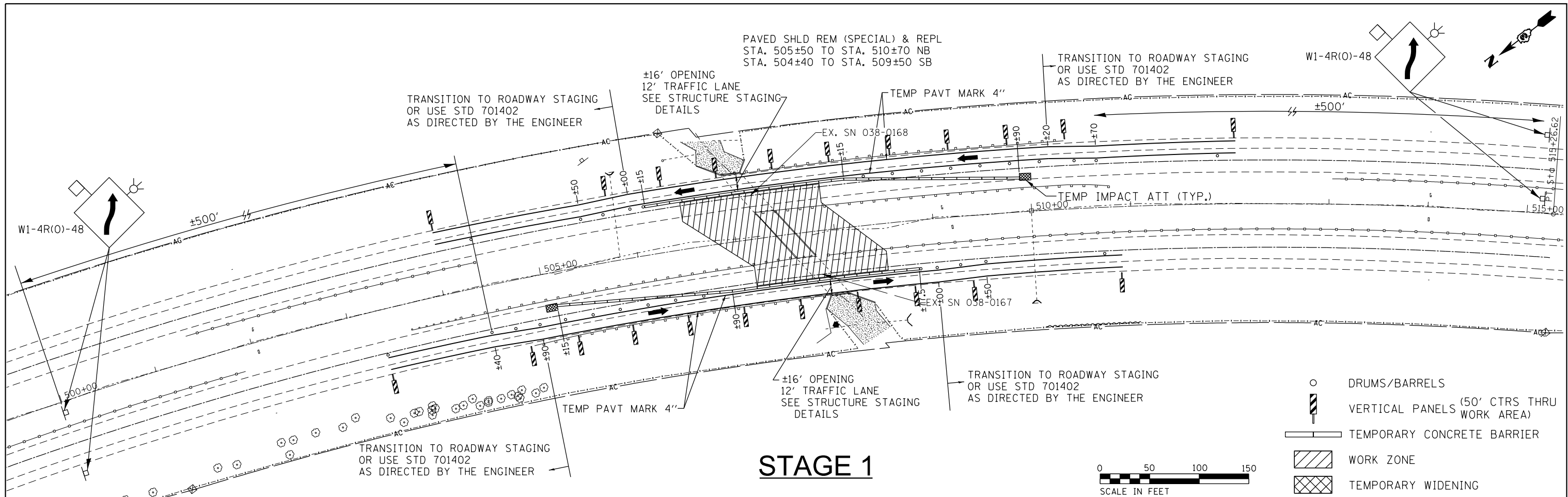


STAGE 1



STAGE 2

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				PROPOSED STAGING PLAN SN 038-2020				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Plot Scale = 100,0000' / in.		CHECKED -	REVISED -									* (38-4)RS-2, (38-4)BR,BR1,BR3				CONTRACT NO. 66757
Default	Plot Date = 6/2/2014	DATE -	REVISED -									ILLINOIS FED. AID PROJECT				
				SCALE: 1"=50'				SHEET	OF	SHEETS	STA.	TO STA.				



FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED STAGING PLAN SN 038-2019	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\p\idot\duncanbd\dms30308\ep05005-sh1-staging.dgn		DRAWN -	REVISED -			57	*	IROQUOIS	190	45
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	PLOT DATE = 6/2/2014	DATE -	REVISED -			CONTRACT NO. 66757				
SCALE: 1"=50'								ILLINOIS FED. AID PROJECT		

Bench Mark:
Chisel "X" on top of northwest wingwall of southbound I-57 bridge, Structure Number 038-0012. Elevation 660.17

Existing Structures:
SN 038-0011, Northbound I-57 Bridge
SN 038-0012, Southbound I-57 Bridge

The structures were built in 1967 as single span Reinforced Concrete Slab Bridges supported by Closed Concrete Abutments. Vertical cantilever retaining walls with spread footings connect the two structures on either side of the channel in the median area of the highway. The superstructures were resurfaced in 2000 with a microsilica concrete overlay. The bridges measure 23'-4" back to back of abutments and 42'-4" out to out of deck. The Structures are to be replaced with a Double Box Culvert.

Salvage:

No Salvage

Staging:

One lane of traffic shall be maintained in each direction utilizing stage construction.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

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.

Removal of the existing reinforced concrete slabs creates an unstable condition for the abutment walls directly supporting the superstructures. Bracing of the abutment walls or excavation behind the abutments may be required to ensure the stability of the abutment walls during structure removal and construction activities.

A precast concrete culvert alternate will not be allowed.

HORIZONTAL CURVE DATA

P.I. Sta 339+47.29
 $\Delta = 35^{\circ}-50'-48.23''$
 $D = 01^{\circ}-30'-00''$
 $T = 1,235.46$
 $L = 2,389.78'$
 $R = 3,819.72$
 $E = 194.83$
P.C. Sta. 327+11.84
P.T. Sta. 351+01.62
S.E. = 4.58%

APPROVED

For Structural Adequacy

Carl P. Meyer
Engineer of Bridges & Structures

TOTAL BILL OF MATERIAL

Stone Riprap, Class A4	Sq. Yd.	124
Filter Fabric	Sq. Yd.	124
*** Removal of Existing Structures No. 1	Each	1
Furnishing and Erecting Structural Steel	Pound	4,600
Reinforcement Bars	Pound	82,270
Reinforcement Bars, Epoxy Coated	Pound	700
Bar Splicers	Each	230
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	462.3
*** Temporary Soil Retention System	Sq. Ft.	4,029

***See Special Provisions

WATERWAY INFORMATION

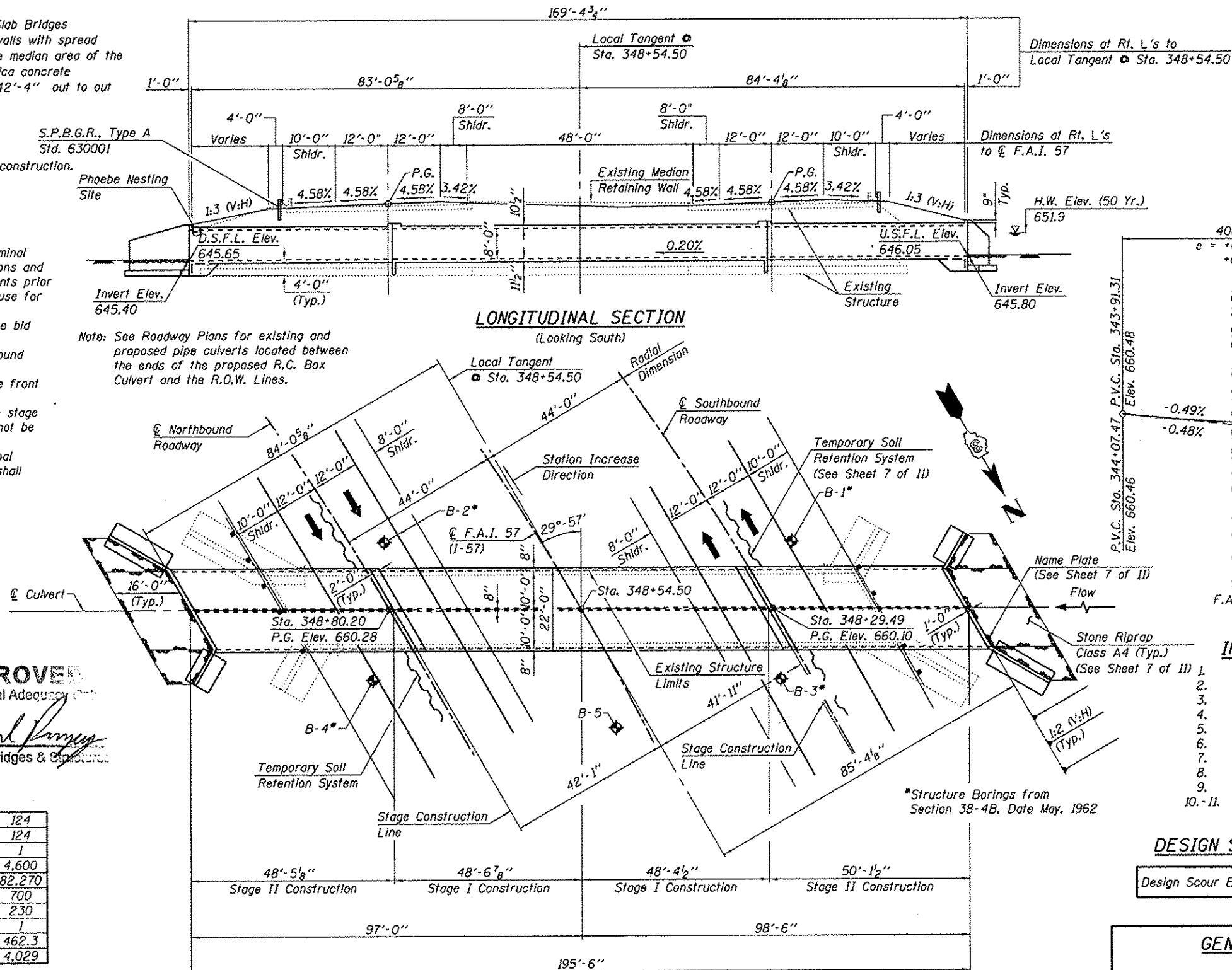
Drainage Area = 0.59 Sq. Mi. Exist. Low Grade Elev. 659.30 @ Sta. 346+50
Prop. Low Grade Elev. 659.85 @ Sta. 346+50

Flood	Freq.	Q	Opening (Sq.Ft.)		Natural	Head (Ft.)		Headwater El.	
	(Yr.)	(c.f.s.)	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
-	10	93	84	108	651.2	0.1	0.0	651.3	651.2
Design	50	136	97	122	651.9	0.2	0.0	652.1	651.9
Base	100	153	102	126	652.1	0.2	0.0	652.3	652.1
Overtopping									
Max. Calc.	500	193	111	136	652.6	0.2	0.0	652.8	652.6

10-Year Velocity through Exist. Structure = 1.1 f.p.s.

10-Year Velocity through Prop. Structure = 0.9 f.p.s.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



DESIGN STRESSES PLAN

FIELD UNITS

$f'_c = 3,500$ psi

$f_y = 60,000$ psi

Allowable Bearing Pressure under footings = 6,840 lbs./Sq. Ft.

LOADING HS 20-44 & ALTERNATE

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

DESIGN SPECIFICATIONS

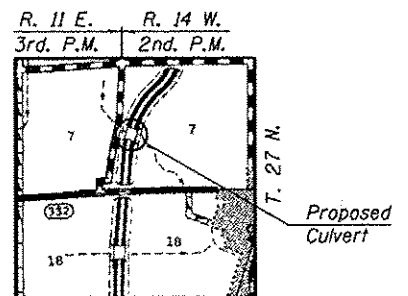
2002 AASHTO Specifications

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	46

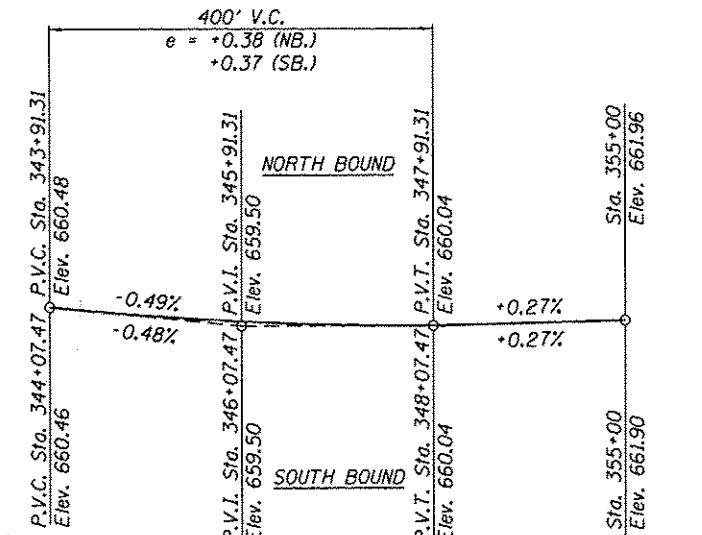
FED. ROAD DIST. NO. ILLINOIS

CONTRACT NO. 66757

Sheet 1 of 11



LOCATION PLAN



PROFILE GRADE

F.A.I. 57 (P.G.L. @ Rdwy.)

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Edge Beam Details
4. Stage I Culvert Construction
5. Stage II Culvert Construction - Southbound Lanes
6. Stage II Culvert Construction - Northbound Lanes
7. Culvert Details
8. Bar Splicer Assembly Details
9. Temporary Concrete Barrier
- 10.-11. Soil Boring Logs

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	641.80	641.40

GENERAL PLAN & ELEVATION
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-3.4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021



John A. Morris 12-14-12
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/14)

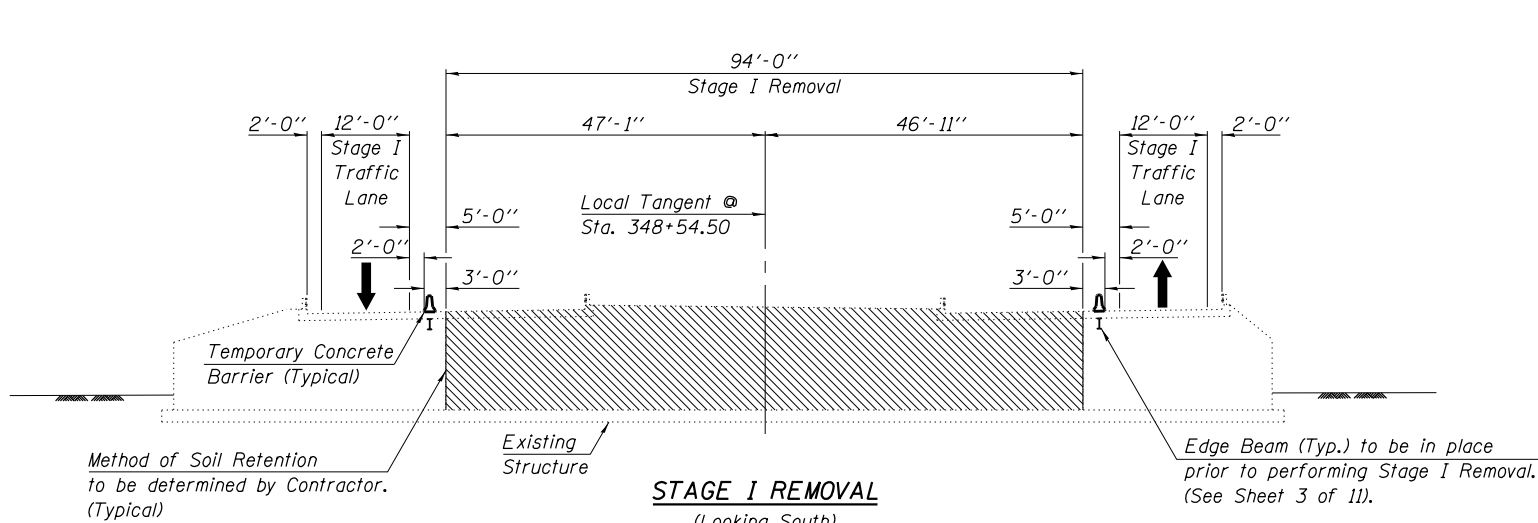
4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8800
www.fehr-graham.com

FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
11/1/08

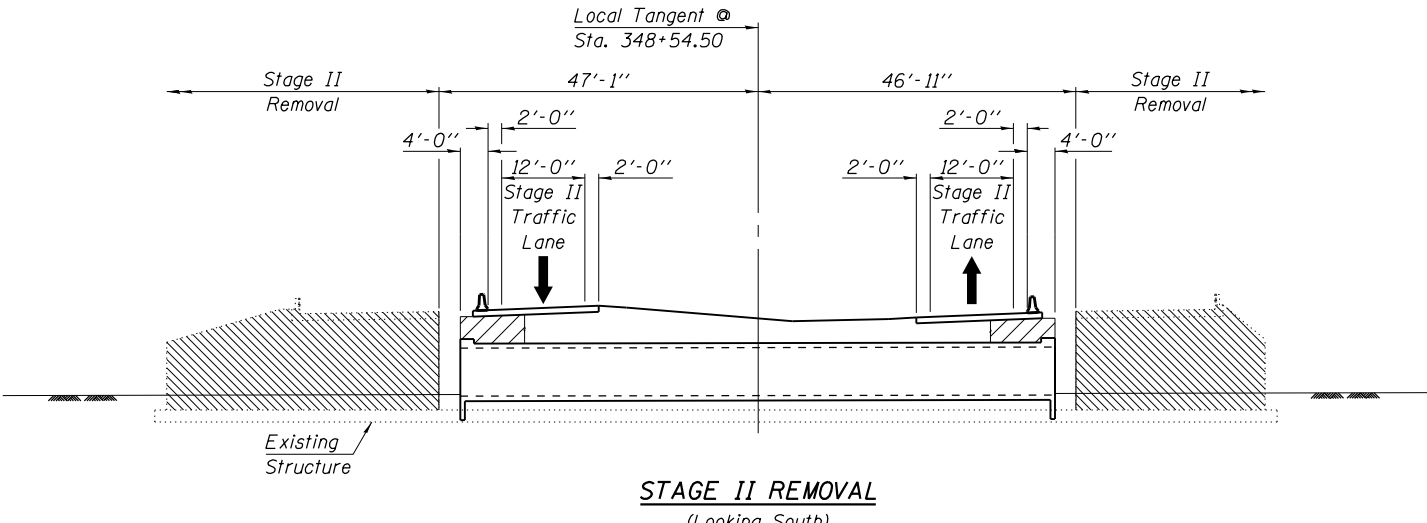
JOB NO.: 468101
FILE: 468101_GPE.DGN
DATE: 11/1/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

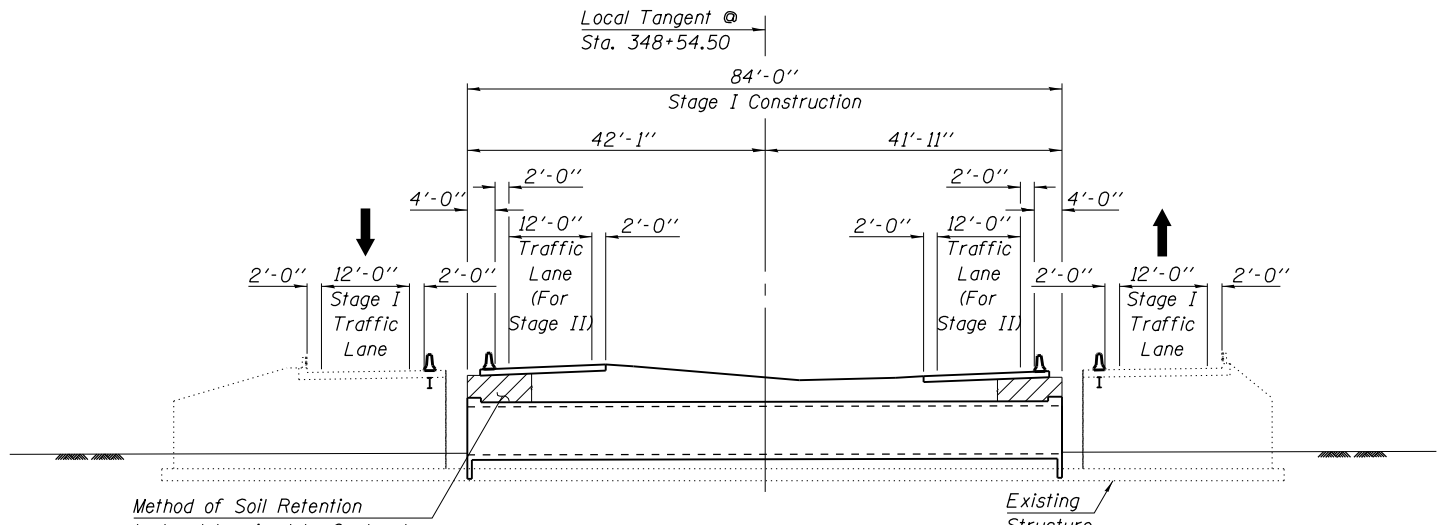
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	47
FED. ROAD DIST. NO.		ILLINOIS		
**(38-4)RS-2, (38-4)BR		CONTRACT NO. 66757		
Sheet 2 of 11				



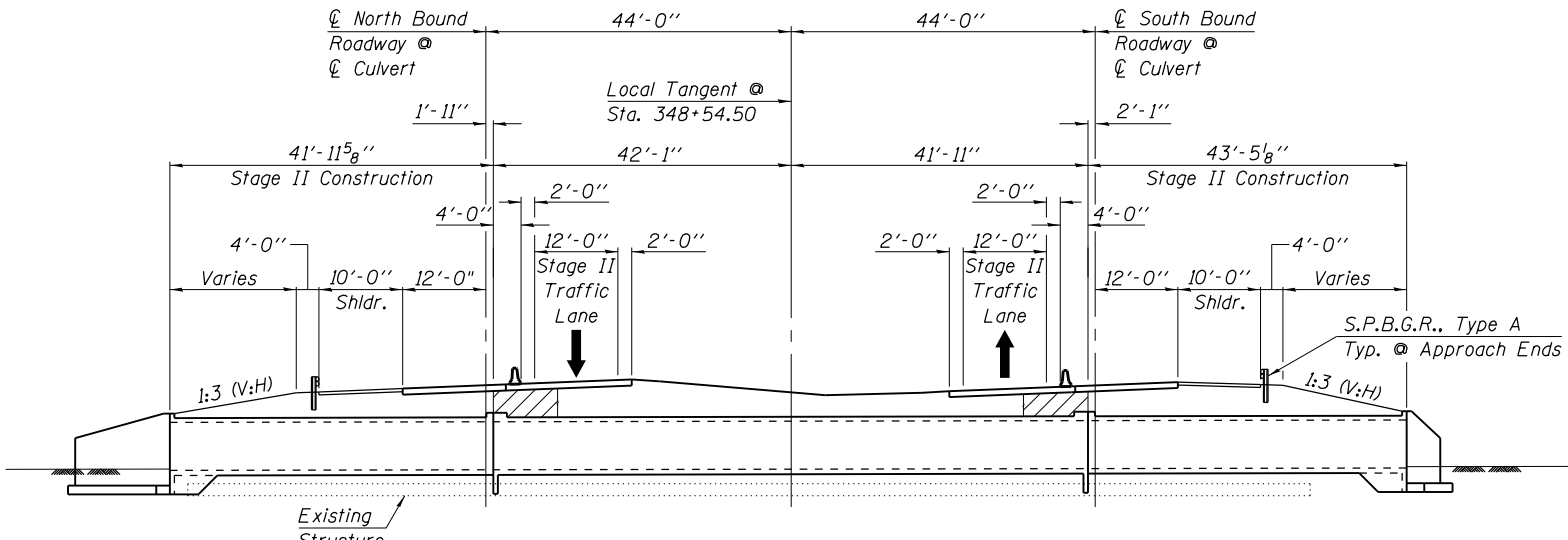
STAGE I REMOVAL
(Looking South)
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 348+54.50



STAGE II REMOVAL
(Looking South)
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 348+54.50



STAGE I CONSTRUCTION
(Looking South)
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 348+54.50



STAGE II CONSTRUCTION
(Looking South)
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 348+54.50

Note: Portions of existing footings interfering with new construction to be removed as required to accommodate the proposed culvert and wingwalls. Cost included in Removal of Existing Structures.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

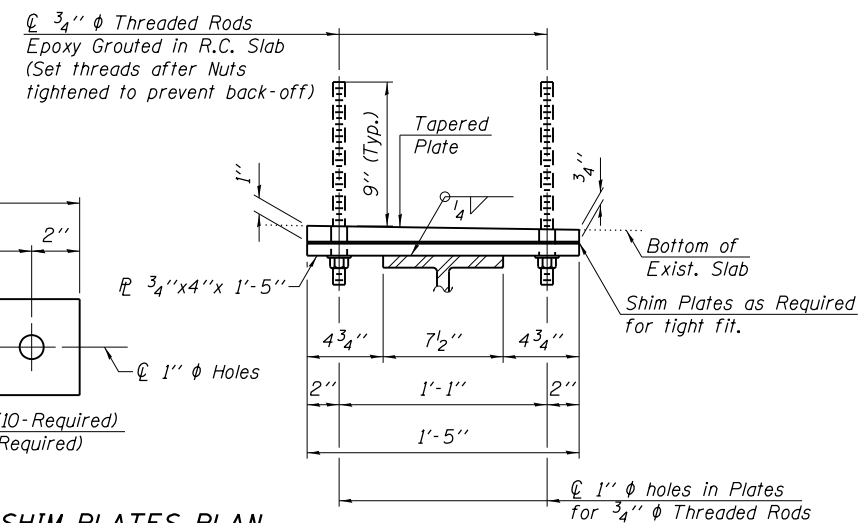
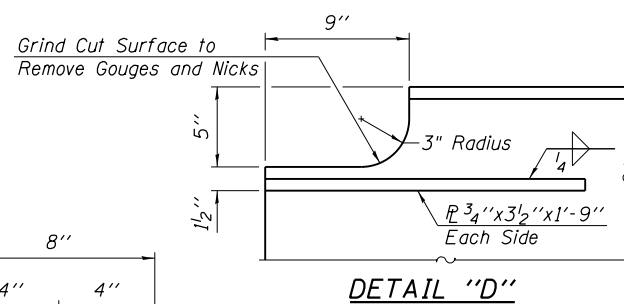
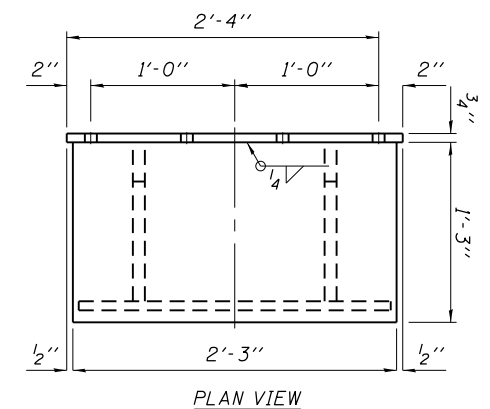
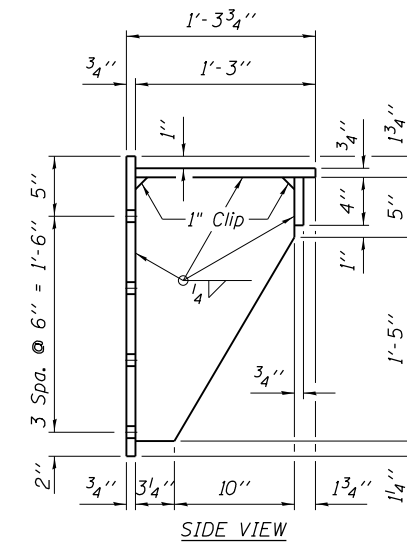
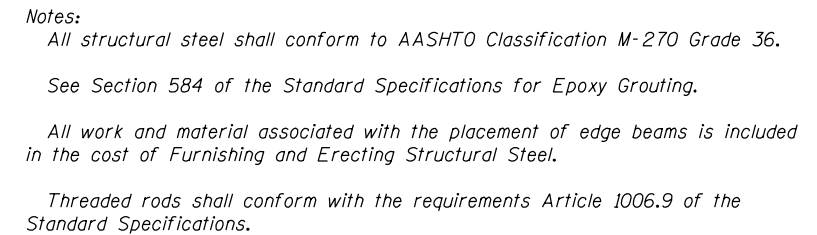
STAGE CONSTRUCTION DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCKFORD, IL SPRINGFIELD, IL	JOB NO.: 468101 FILE: STAGING.DGN DATE: 11/11/08
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IRROUOIS	190	48
FED. ROAD DIST. NO.	ILLINOIS			

**** (38-4)RS-2, (38-4)BR** *CONTRACT NO. 66757*

Sheet 3 of 11 Sheets



SECTION B-B

EDGE BEAM DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

DESIGNED	-	J.A.M.
CHECKED	-	S.F.M. & A.R.K.
DRAWN	-	S.A.P.
CHECKED	-	A.R.K. & J.A.M.

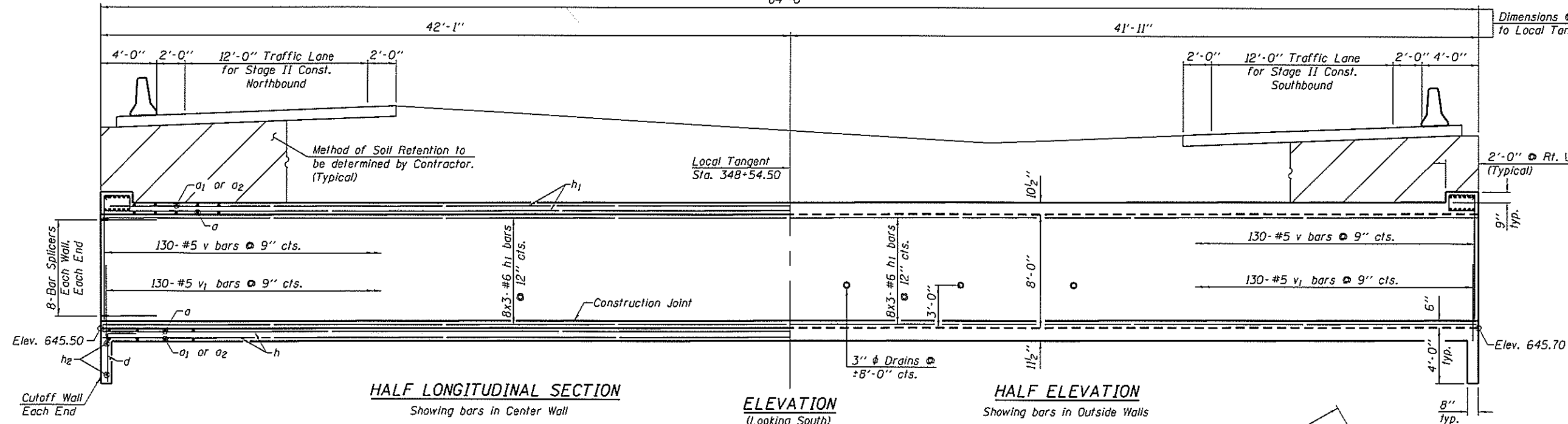
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FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.: 468101
FILE: SUP-BM.DGN
DATE: 11/11/08

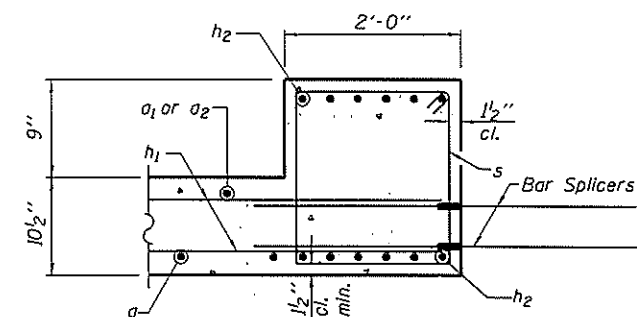
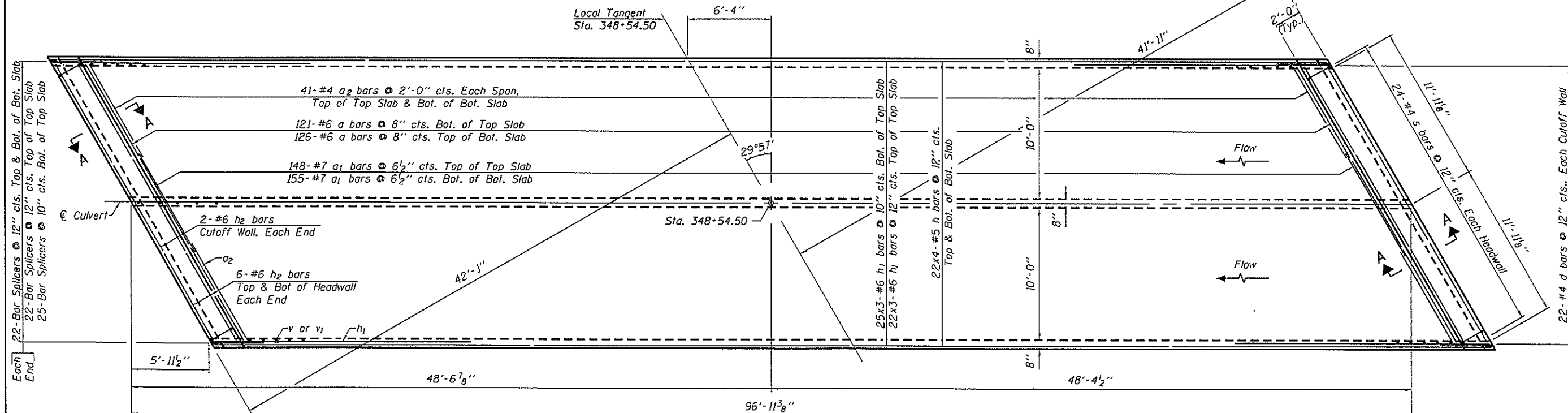
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
84'-0"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	49
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 66757	
** (38-4)RS-2, (38-4)BR				



BILL OF MATERIAL-STAGE I

Bar	No.	Size	Length	Shape
a	247	#6	26'-5"	
a1	303	#7	12'-0"	
a2	164	#4	7'-6"	
d	44	#4	5'-6"	
h	176	#5	25'-6"	
h1	213	#6	34'-0"	
h2	28	#6	25'-0"	
s	48	#4	7'-0"	
v	390	#5	8'-0"	
v1	390	#5	3'-0"	
Concrete Box Culverts			Cu. Yd.	208.9
Reinforcement Bars			Pound	39,520



SECTION A-A

Note: Bars indicated thus, 25x3-#6 etc. indicates 25 lines of bars with 3 lengths per line.

MINIMUM BAR LAP - BARREL

#4	1'-4"
#5	1'-8"
#6	2'-0"

Note: All bar spacings shown are at right angles to bars.

Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.
See Sheet 8 of 11 for Bar Splicer Details.

STAGE I CULVERT CONSTRUCTION
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

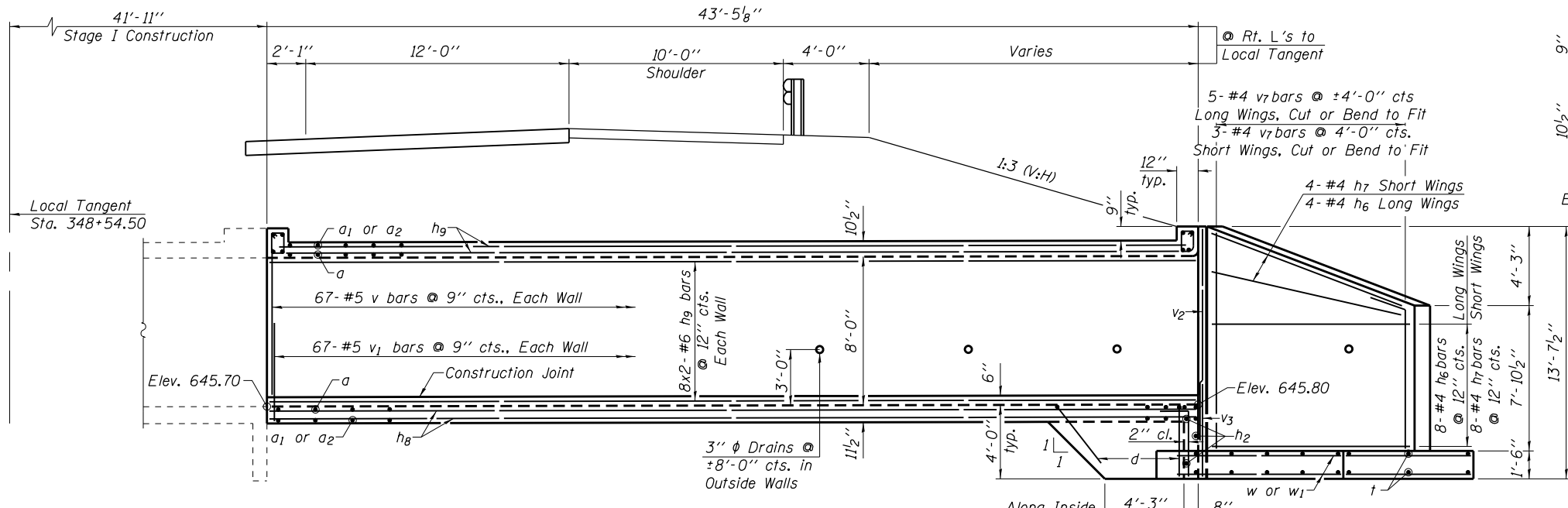
4440 ASH DRIVE SPRINGFIELD, IL 62711 (317) 793-0600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS PERRYVILLE, MISSOURI DATE: 11/11/08	JOB NO.: 458101 FILE: CULV-DT151.DGN DATE: 11/11/08
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	50

FED. ROAD DIST. NO. ILLINOIS CONTRACT NO. 66757

Sheet 5 of 11 Sheets



MINIMUM BAR LAP - BARREL

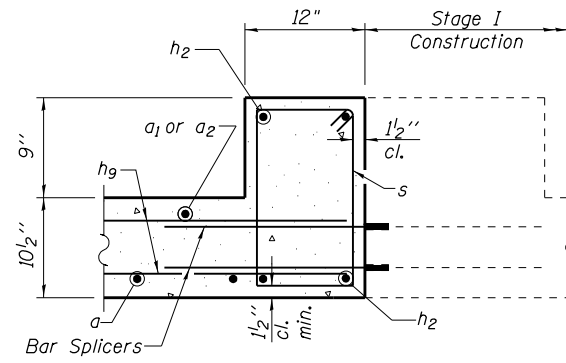
#4	1'-4"
#5	1'-8"
#6	2'-0"

Note: All bar spacings shown are at right angles to bars.

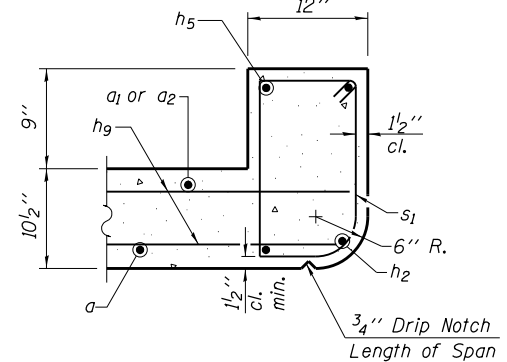
ELEVATION
(Looking South)

WING WALL REINFORCEMENT
FRONT FACE

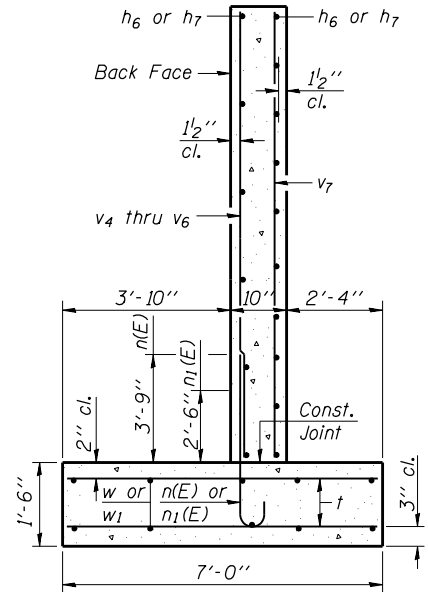
(See Sheet 6 of 11 for Reinf.
in Back Face & Footing)



SECTION B-B



SECTION C-C



SECTION A-A

BILL OF MATERIAL - STAGE II (SOUTHBOUND)

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	128	#6	26'-5"	C	s1	24	#4	4'-9"	C
a1	157	#7	12'-0"	C	s2	24	#4	5'-0"	C
a2	88	#4	7'-6"	C	t	80	#4	6'-9"	C
d	35	#4	5'-6"	C	v	201	#5	8'-0"	C
h2	9	#6	25'-0"	C	v1	201	#5	3'-0"	C
h5	2	#6	24'-8"	C	v2	4	#5	8'-9"	C
h6	18	#4	17'-2"	C	v3	4	#5	6'-3"	C
h7	18	#4	9'-8"	C	v4	9	#5	7'-6"	C
h8	88	#5	25'-9"	C	v5	10	#5	9'-3"	C
h9	142	#6	26'-3"	C	v6	9	#5	10'-6"	C
n(E)	28	#6	5'-7"	C	v7	8	#4	11'-9"	C
n1(E)	26	#5	4'-3"	C	w	10	#5	17'-2"	C
					w1	10	#5	9'-8"	C

Concrete Box Culverts	Cu. Yd.	128.5
Reinforcement Bars, Epoxy Coated	Pound	350
Reinforcement Bars	Pound	21,690
Name Plates	Each	1
Stone Riprap, Class A4	Sq. Yd.	62
Filter Fabric	Sq. Yd.	62

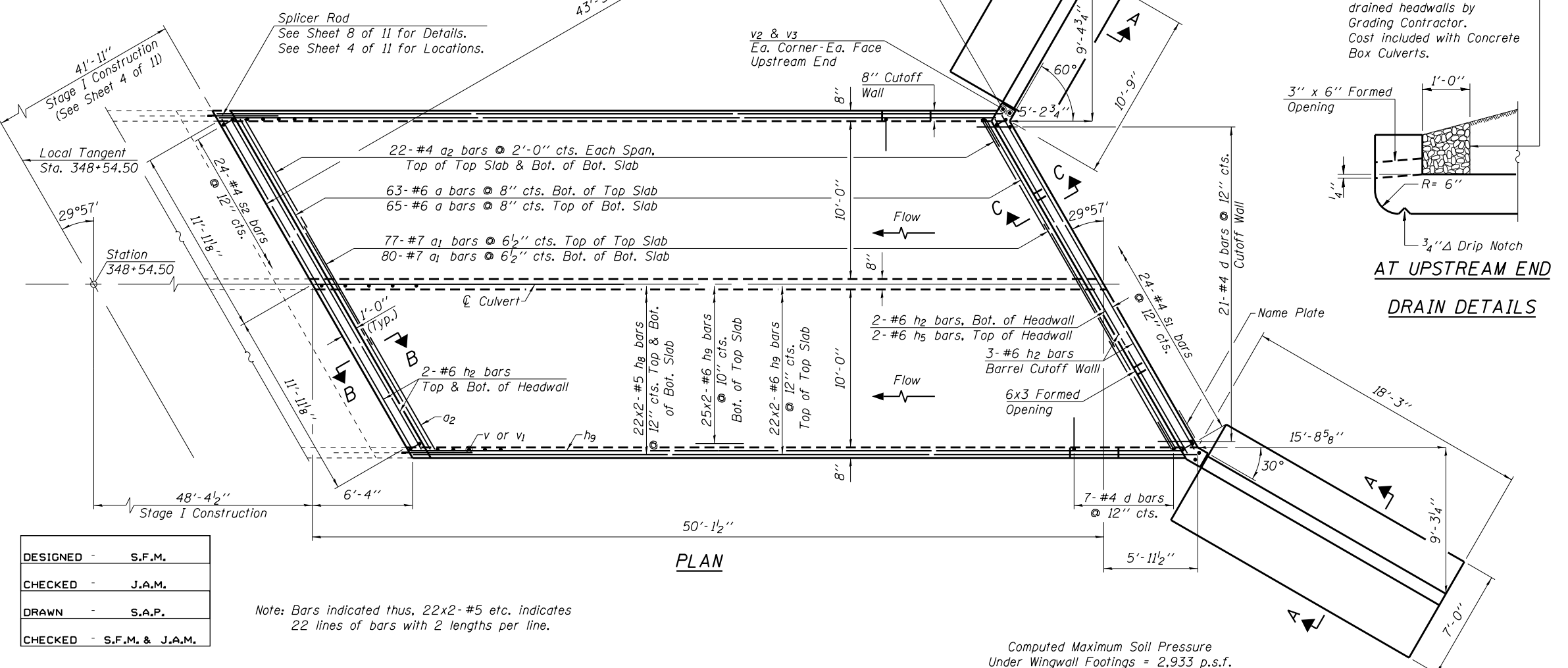
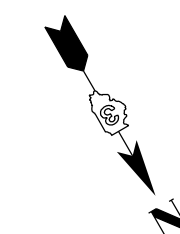
Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.

STAGE II CULVERT CONSTRUCTION
SOUTHBOUND LANES
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

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ENGINEERING AND SCIENCE CONSULTANTS
FREEDOM, E. ROCKFORD, E. ROCKFORD, E. MONROE, WI SPRINGFIELD, IL

JOB NO.: 468101
FILE: CULV-DT15(2).DGN
DATE: 11/11/08



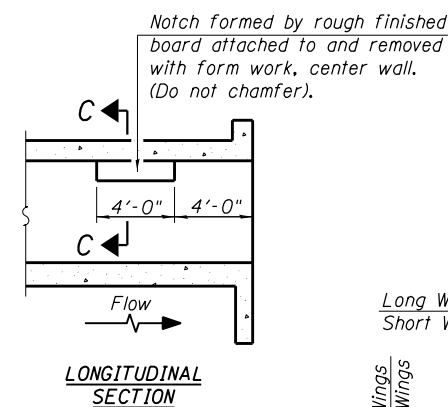
PLAN

Note: Bars indicated thus, 22x2-#5 etc. indicates
22 lines of bars with 2 lengths per line.

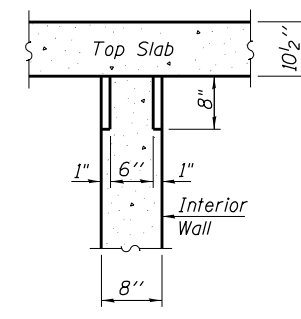
DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

Computed Maximum Soil Pressure
Under Wingwall Footings = 2,933 p.s.f.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



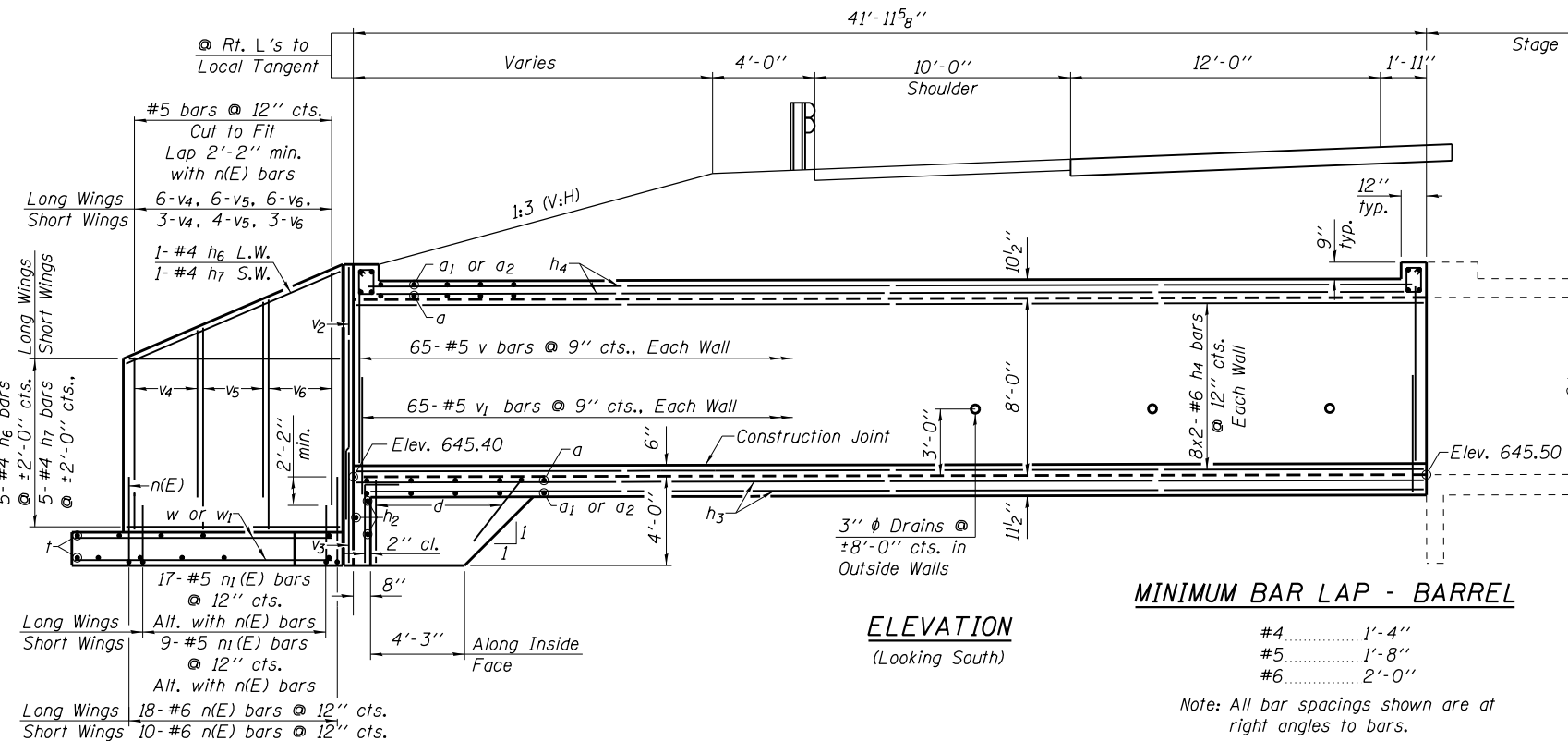
LONGITUDINAL
SECTION



SECTION C-C

PHOEBE NESTING

SITE DETAILS
(Downstream End Only)

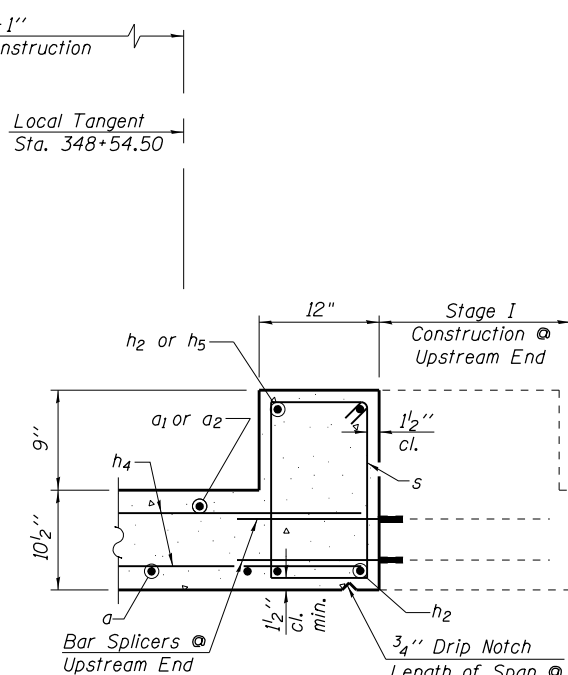


ELEVATION
(Looking South)

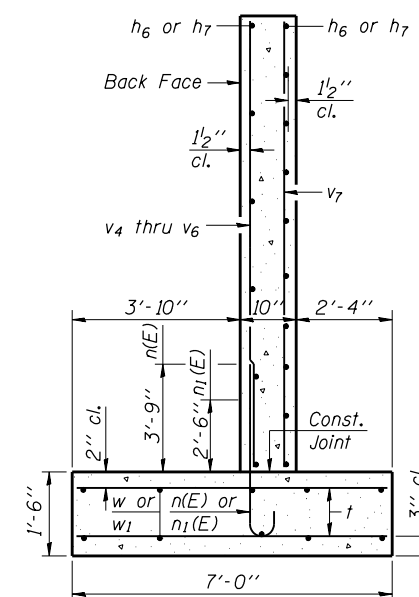
MINIMUM BAR LAP - BARREL

#4.....1'-4"
#5.....1'-8"
#6.....2'-0"

Note: All bar spacings shown are at right angles to bars.



SECTION B-B

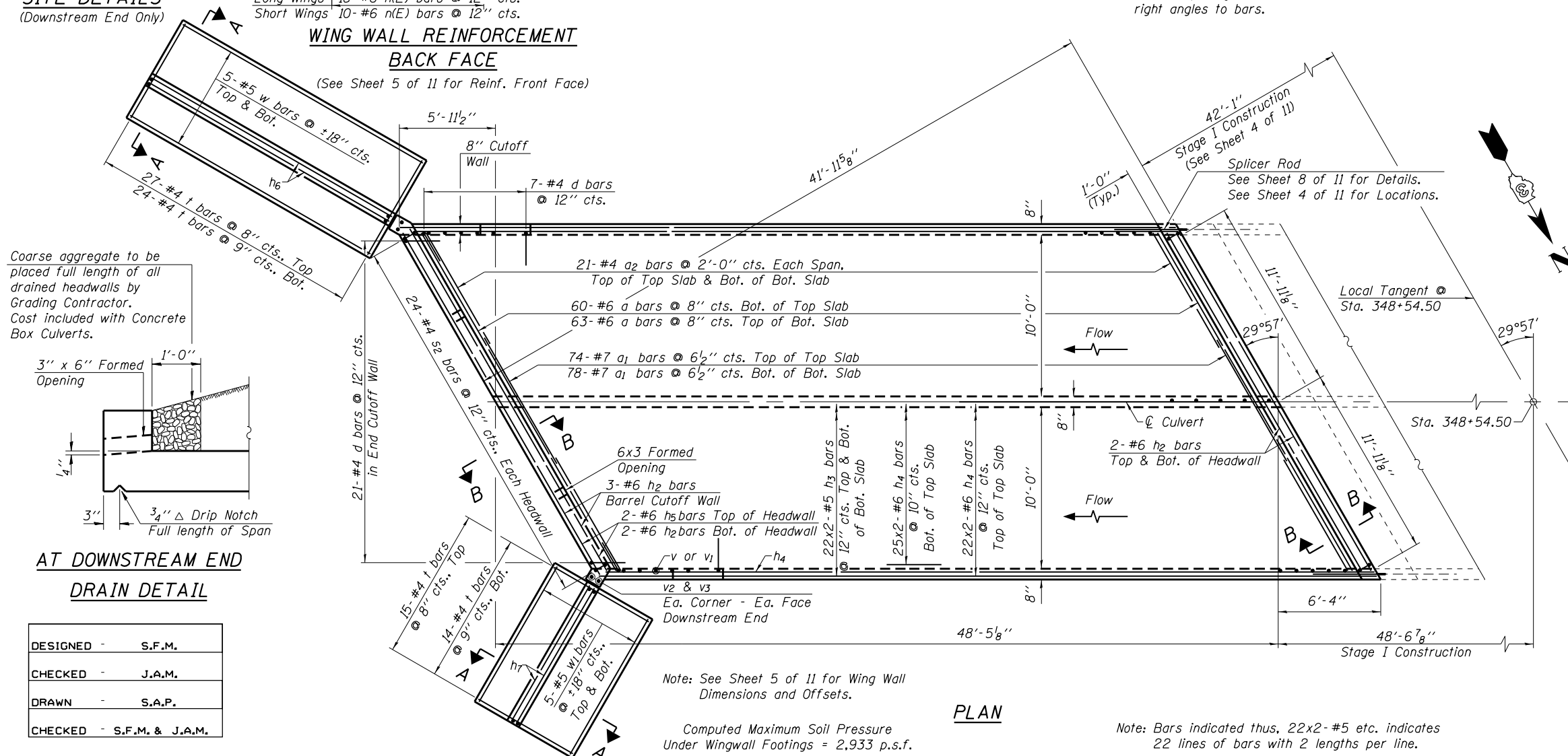


SECTION A-A

WING WALL REINFORCEMENT

BACK FACE

(See Sheet 5 of 11 for Reinf. Front Face)



PLAN

Note: See Sheet 5 of 11 for Wing Wall Dimensions and Offsets.

Computed Maximum Soil Pressure
Under Wingwall Footings = 2,933 p.s.f.

Note: Bars indicated thus, 22x2-#5 etc. indicates 22 lines of bars with 2 lengths per line.

BILL OF MATERIAL - STAGE II (NORTHBOUND)

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	123	#6	26'-5"		s_2	48	#4	5'-0"	
a_1	152	#7	12'-0"						
a_2	84	#4	7'-6"		t	80	#4	6'-9"	
d	35	#4	5'-6"		v	195	#5	8'-0"	
					v_1	195	#5	3'-0"	
h_2	9	#6	25'-0"		v_2	4	#5	8'-9"	
h_3	88	#5	25'-0"		v_3	4	#5	6'-3"	
h_4	142	#6	25'-6"		v_4	9	#5	7'-6"	
h_5	2	#6	24'-8"		v_5	10	#5	9'-3"	
h_6	18	#4	17'-2"		v_6	9	#5	10'-6"	
h_7	18	#4	9'-8"		v_7	8	#4	11'-9"	
$n(E)$	28	#6	5'-7"		w	10	#5	17'-2"	
$n_1(E)$	26	#5	4'-3"		w_1	10	#5	9'-8"	

Concrete Box Culverts	Cu. Yd.	124.9
Reinforcement Bars, Epoxy Coated	Pound	350
Reinforcement Bars	Pound	21,061
Stone Riprap, Class A4	Sq. Yd.	62
Filter Fabric	Sq. Yd.	62

Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.

STAGE II CULVERT CONSTRUCTION

NORTHBOUND LANES

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-4)RS-2, (38-4)BR

IROQUOIS COUNTY

STATION 348+54.50

S.N. 038-2021

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	52
FED. ROAD DIST. NO.	ILLINOIS			

** (38-4)RS-2, (38-4)BR CONTRACT NO. 66757

The plan view shows a rectangular box culvert with two lanes, each 8'-0" wide, separated by a 3'-0" wall. The total width of the culvert is 25'-4 3/4". The culvert is 37'-0" long. The surrounding area is a trapezoidal excavation with 1:2 (V:H) slopes. The top of the culvert headwall is at elevations 655.33 SB and 655.13 NB. The bottom of the cutoff wall is at elevations 641.70 SB and 641.50 NB. The bottom of the culvert slab is at elevations 644.74 SB and 644.54 NB. The exposed surface area is 37'-0" wide at the top and 25'-4 3/4" wide at the bottom. The excavation line is shown on the left and right sides. The soil retention system is indicated on the right side.

Top of Culvert Headwall
 Elev. 655.33 SB.
 Elev. 655.13 NB.

Proposed Reinforced Concrete Box Culvert

Excavation Line

Soil Retention System Exposed Surface Area

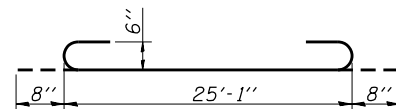
Bottom of Cutoff Wall
 Elev. 641.70 SB.
 Elev. 641.50 NB.

Bottom of Culvert Slab
 Elev. 644.74 SB.
 Elev. 644.54 NB.

Dimensions:
 Top width: 37'-0"
 Bottom width: 25'-4 3/4"
 Culvert width: 25'-4 3/4"
 Culvert length: 37'-0"
 Lane width: 8'-0"
 Wall width: 3'-0"
 Slope: 1:2 (V:H) @ Rt. L's to Channel

Plan view of bridge abutments and retaining walls. The diagram shows two abutments with a central opening. The left abutment has a width of 42'-6" and a height of 41'-3". The right abutment has a width of 42'-6" and a height of 41'-3". The central opening has a width of 41'-3" and a height of 41'-3". The abutments are labeled "Existing Abuts." and "Existing Reinforced Concrete Slab Bridge". The retaining walls are labeled "Retaining Wall Footing" and "Soil Retention System Exposed Surface Area". The slope is labeled "1:2 (V:H) @ Rt. L's to Channel". The maximum soil excavation line is indicated. The elevation of the top of the abutment is 659.90 (Typical). The elevation of the bottom of the footing is 641.21 S. Abut. and 641.14 N. Abut. The width of the footing is 10'-1 3/8". The height of the footing is 2'-0" (Typ.).

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.



A diagram showing a rectangular area. The horizontal dimension is labeled $1'-9''$ and the vertical dimension is labeled $3'-9''$.

Figure 1 shows a schematic diagram of a rectangular channel with a U-shaped bottom. The channel has a total width of 4'-11" and a total height of 3'-8". The bottom is U-shaped with a flat base of 6" and a height of 5". The channel is divided into two sections: a left section with a width of 7" and a height of 8", and a right section with a width of 7" and a height of 7". The channel is labeled with $n(E)$ and $n_1(E)$ at the top and bottom.

Technical drawing of a mechanical part. The drawing includes the following dimensions and specifications:

- Overall height: 4'-11"
- Height of the upper section: 3'-8"
- Radius of the upper section: $\frac{6''}{5}$
- Material specification: $\frac{n(E)}{n_1(E)}$
- Bottom flange thickness: 8"
- Bottom flange width: 7"
- Bottom flange material: BARS $n(E)$
- Top flange thickness: 1'-4 1/2"
- Top flange width: 1'-9"
- Top flange material: s and s_2
- Top flange angle: 45°

[illegible]

Diagram illustrating the cross-section of a stone riprap structure. The structure consists of a top layer of Stone Riprap (Class A4) 16" thick, a middle layer of Bedding 6" thick, and a bottom layer of Filter Fabric. The structure is 3'-0" wide at the top and 4'-0" wide at the bottom. The total height is 2'-8".

STATION 348+54.50
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. ROUTE 57
SEC. (38-4)RS-2, (38-4)BR
LOADING HS20
STR. NO. 038-2021

See Std. 515001

CULVERT DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_l$
② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_l$
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES

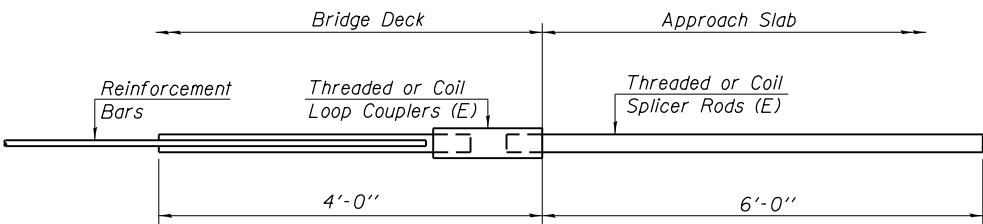
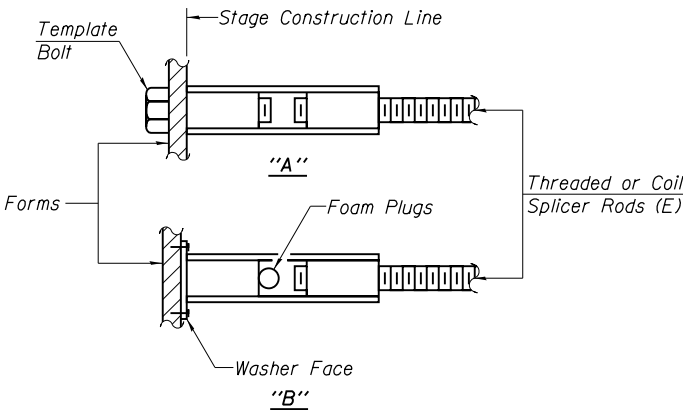
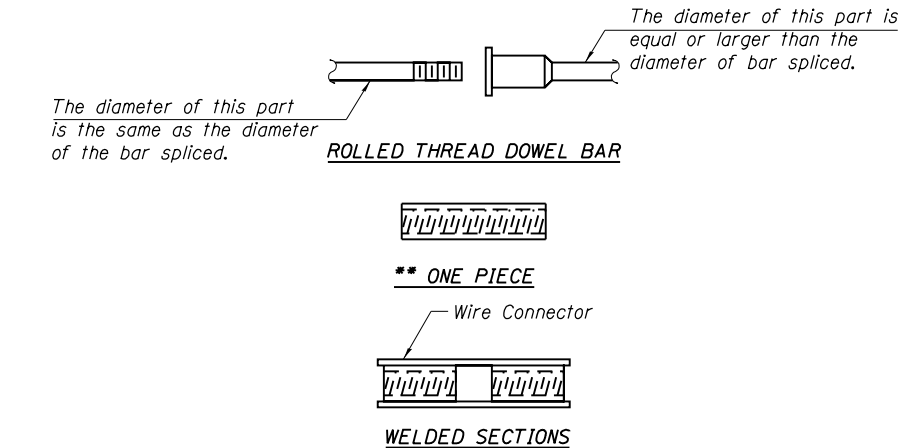
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

BAR SPLICER ASSEMBLY ALTERNATIVES

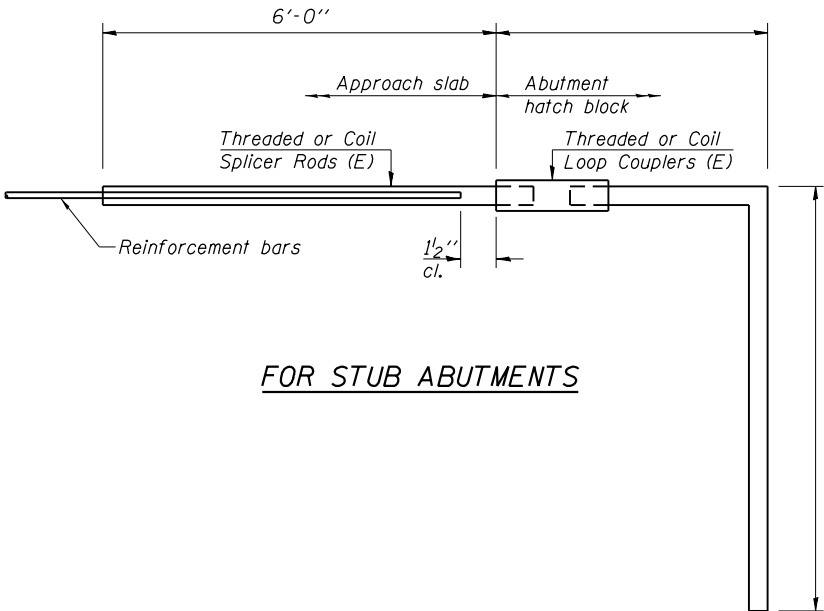
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

INSTALLATION AND SETTING METHODS

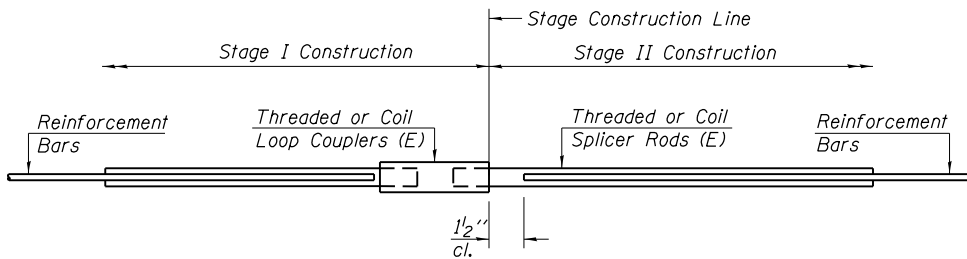
"A" :Set bar splicer assembly by means of a template bolt.
"B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#5	88	Bot. Slab
#6	94	Top Slab
#6	48	Walls

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

BSD-1

5-16-08

BAR SPLICER ASSEMBLY DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

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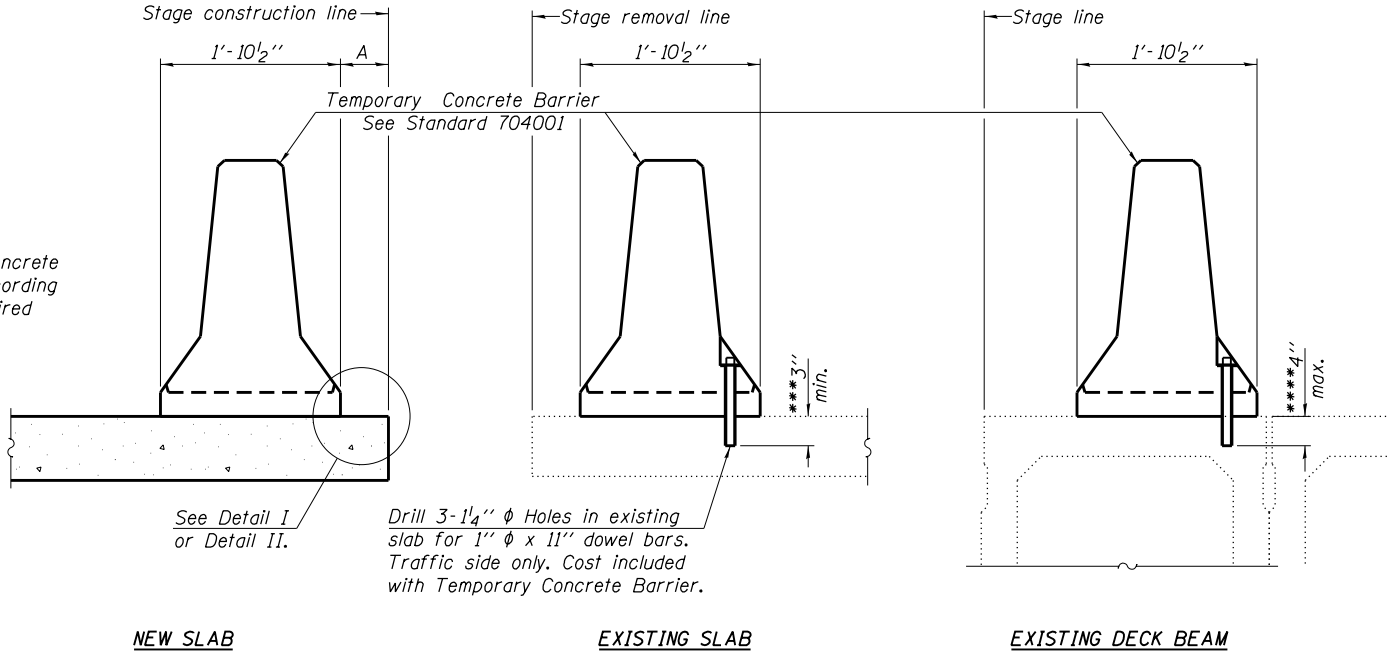
FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.: 468101
FILE: SPLICER.DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	54
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 66757	
Sheet 9 of 11 Sheets				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

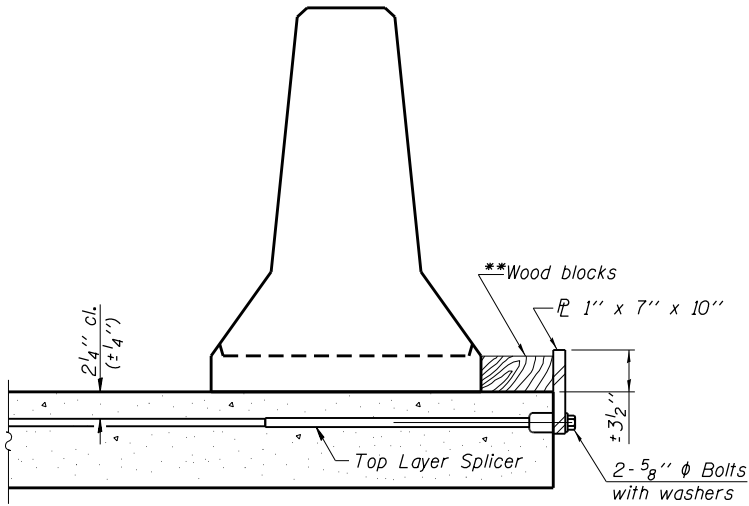


SECTIONS THRU SLAB OR DECK BEAM

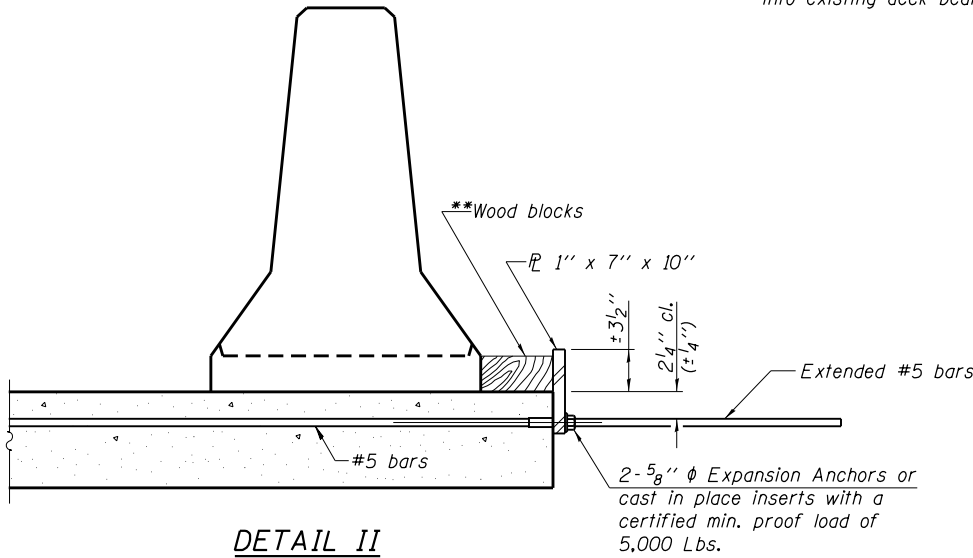
- NOTES**
- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate $\bar{C}$ of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate $\bar{C}$ of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

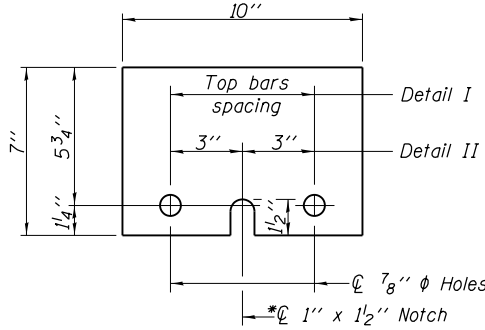
***If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER $\bar{L}$ 1" x 7" x 10"

*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

R-27

5-16-08

TEMPORARY CONCRETE BARRIER I-57 OVER DANFORTH TOWNSHIP DRAINAGE DITCH F.A.I. ROUTE 57 SECTION (38-4)RS-2, (38-4)BR IROQUOIS COUNTY STATION 348+54.50 S.N. 038-2021	
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, E. ROCKFORD, E. ROCKFELL, E. MONROE, W. SPRINGFIELD, IL
JOB NO.: 468101 FILE: BARRIER.DGN DATE: 11/11/08	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	55
FED. ROAD DIST. NO.	ILLINOIS			

**** (38-4) RS-2, (38-4) BR** CONTRACT NO. 66757

Sheet 10 of 11 Sheets

**Illinois Department
of Transportation**
Division of Highways
District #1, Ottawa

SOIL BORING LOG

Page 2 of 2

Date 5/1/82

ROUTE FAI 57 (157) DESCRIPTION FAI Rt 57 over Prairie Creek LOGGED BY H.W.B.

SECTION (38-3,4)RS-2, (38-4)BR LOCATION NW 1/4, SW 1/4 SEC. 7, TWP. 27N, RNG. 14W, 2nd PM

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 038-0012

Station 348+54.5

BORING NO. B-1: S Abut S.E.L

Station 348+75

Offset 88.00 ft Rt of Cl. on Skew

Ground Surface Elev. 655.61 ft

Medium, fine, Sand and Silty Clay
layers

Medium, gray, fine to coarse,
angular, Sand

D E P T H S	B L O W S	U C S	M O I S T
(ft)	(#/ft)	(tsf)	(%)

13	2.1	24.0	
----	-----	------	--

14	--	--	
----	----	----	--

612.11

Stiff, gray, Clay Till

11	1.9	27.0	
----	-----	------	--

8	1.0	29.0	
---	-----	------	--

13	1.8	25.0	
----	-----	------	--

605.61

Very stiff, gray, Clay Till

16	2.7	25.0	
----	-----	------	--

17	2.9	25.0	
----	-----	------	--

16	3.1	25.0	
----	-----	------	--

Surface Water Elev. 648.73 ft

Stream Bed Elev. ft

Groundwater Elev.: ft

First Encounter ft

Upon Completion None ft

After 24 hrs. 611.6 ft

Very stiff, gray, Clay Till

(continued)

End of Boring

D E P T H S	B L O W S	U C S	M O I S T
(ft)	(#/ft)	(tsf)	(%)

17	2.7	23.0	
----	-----	------	--

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T298)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District #3, Ottawa

SOIL BORING LOG

Page 2 of 2

Date 5/2/62

ROUTE FA157 (57) DESCRIPTION FA1 Rt 57 over Prairie Creek LOGGED BY H.W.B.

SECTION (38-3,4RS-2, 138-41BR) LOCATION NW 1/4, SW 1/4, SEC. 7, TWP. 27N, RNG. 14W, 2nd PM

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 038-0011
Station 348+54.5

BORING NO. B-2: S Abut N.B.L.
Station 348+75
Offset 42.00 ft. L of CL on Skew
Ground Surface Elev. 656.47 ft

	D E P T H	B L O W S	U C S	M O I S T U R E
(ft)	(ft)	(blf)	(%)	

Surface Water Elev. 648.73 ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After 24 Hrs. None ft

Very stiff, gray, Clay Till (continued)	615.47	16	3.1	24.0
Stiff, gray, Clay Till		B		
		14	1.8	25.0
		B		
Very stiff, gray, Clay Till	612.97			
		17	3.3	23.0
		B		
Stiff, gray, Clay Till	610.47			
		14	1.9	24.0
		B		
Very stiff, gray, Clay Till	607.97			
		16	2.3	24.0
		B		
End of Boring	605.97			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (ft value) is the sum of the last two blow values in each sampling zone (AASHTO T205)

BBS, from 137 (Rev. 8-89)

BORING #2

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.

SOIL BORING LOGS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR
IROQUOIS COUNTY
STATION 348+54.50
S.N. 038-2021

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	 FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREETPORT, E. ROCKFORD, E. ROCHELLE, E. MONROE, W. SPRINGFIELD, IL	JOB NO.: 468101 FILE: BORINGS(1).DGN DATE: 11/11/08
--	--	---

Bench Mark:
Chisel "□" on top of southeast wingwall of northbound I-57 bridge, Structure Number
038-0159. Elevation 655.74

Existing Structures:

SN 038-0158, Southbound I-57 Bridge

SN 038-0159, Northbound I-57 Bridge

The structures were built in 1967 as single span Reinforced Concrete Slab Bridges supported by Closed Concrete Abutments. Vertical cantilever retaining walls with spread footings connect the two structures on either side of the channel in the median area of the highway. The superstructures were resurfaced in 2000 with a microsilica concrete overlay. The bridges measure 21'-11 1/2" back to back of abutments and 42'-4" out to out of deck. The structures will be replaced with a Double Box Culvert.

Salvage:

No Salvage

Staging:

One lane of traffic shall be maintained in each direction utilizing stage construction.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

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.

Removal of the existing reinforced concrete slabs creates an unstable condition for the abutment walls directly supporting the superstructures. Bracing of the abutment walls or excavation behind the abutments may be required to ensure the stability of the abutment walls during structure removal and construction activities.

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wings.

A precast concrete culvert alternate will not be allowed.

BILL OF MATERIAL

Stone Riprap, Class A4	Sq. Yd.	100
Filter Fabric	Sq. Yd.	100
*** Removal of Existing Structures No. 2	Each	1
Furnishing and Erecting Structural Steel	Pound	4,520
Reinforcement Bars	Pound	79,630
Bar Splicers	Each	242
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	434.1
*** Temporary Soil Retention System	Sq. Ft.	3,114

***See Special Provisions

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	638.40	638.10

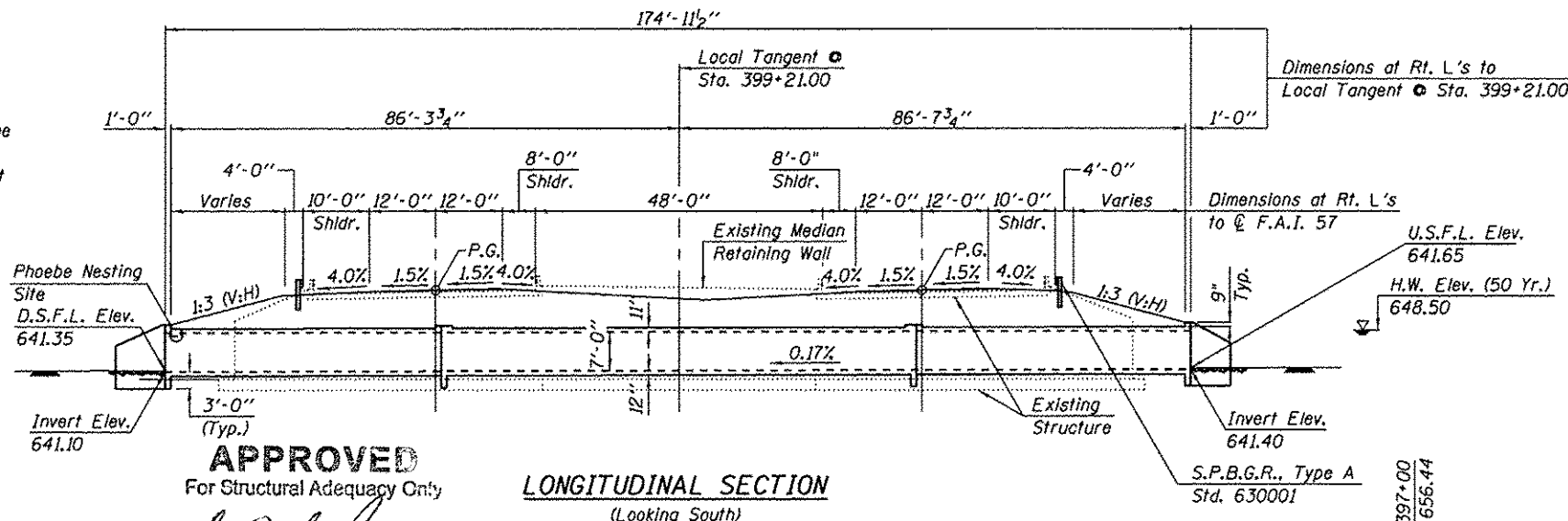
WATERWAY INFORMATION

Drainage Area = 0.30 Sq. Mi.			Exist. Low Grade Elev. 654.00 ● Sta. 403+40						
			Prop. Low Grade Elev. 654.32 ● Sta. 403+40						
Flood	Freq.	Q	Opening (Sq.Ft.)		Natural	Head (Ft.)		Headwater El.	
	(Yr.)	(c.f.s.)	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
-	10	150	120	128	647.2	0.0	0.0	647.2	647.2
Design	50	250	146	154	648.5	0.0	0.0	648.5	648.5
Base	100	295	156	154	649.0	0.0	0.0	649.0	649.0
Overtopping									
Max. Calc.	500	405	170	154	649.7	0.1	0.0	649.8	649.7

10-Year Velocity through Exist. Structure = 1.3 f.p.s.

10-Year Velocity through Prop. Structure = 1.2 f.p.s.

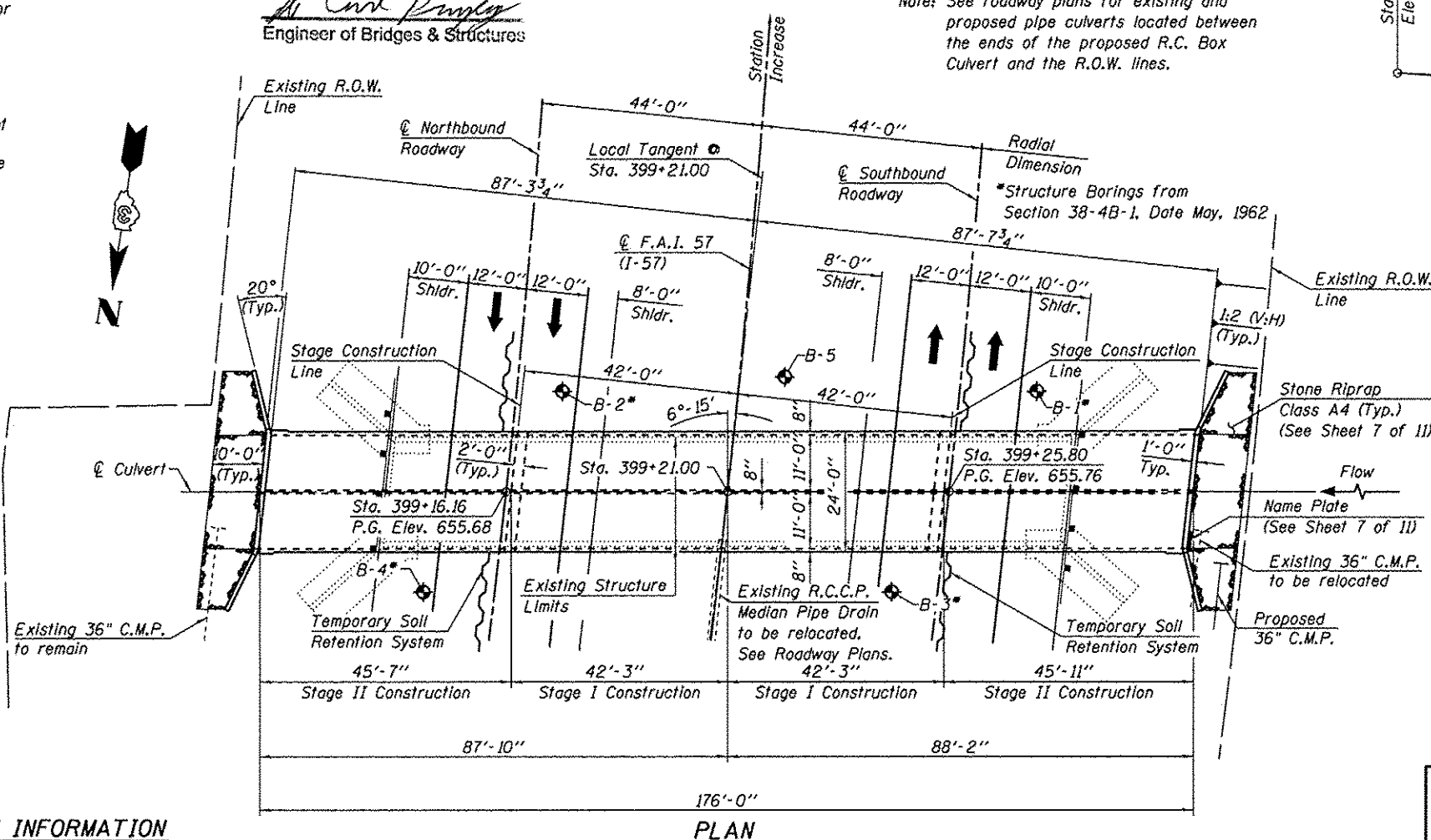
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



APPROVED
For Structural Adequacy Only
John A. Morris
Engineer of Bridges & Structures

LONGITUDINAL SECTION (Looking South)

Note: See roadway plans for existing and proposed pipe culverts located between the ends of the proposed R.C. Box Culvert and the R.O.W. lines.



PLAN

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi

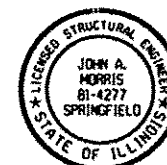
f_y = 60,000 psi

LOADING HS 20-44 & ALTERNATE

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

DESIGN SPECIFICATIONS

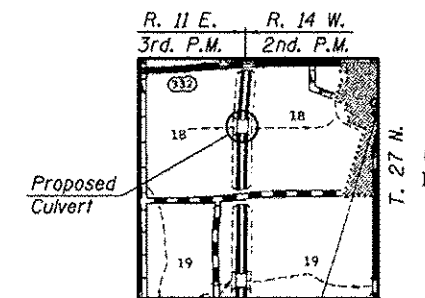
2002 AASHTO Specifications



John A. Morris 12-14-12
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/14)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	57
FED. ROAD DIST. NO. ILLINOIS				
** (38-3.4)RS-2, (38-4)BR1 Contract No. 66757				

Sheet 1 of 11 Sheets



LOCATION PLAN

NORTH BOUND

SOUTH BOUND

PROFILE GRADE

F.A.I. 57 (P.G.L. @ Rdwy.)

HORIZONTAL CURVE DATA

P.I. Sta 396+10.81
Δ = 05°-14'-17.35"
D = 00°-30'-00"
T = 524.18
L = 1,047.63
R = 11,459.16
E = 11.98'
P.C. Sta. 309+86.63
P.T. Sta. 401+34.26
Remove Crown

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Edge Beam Details
4. Stage I Culvert Construction
5. Stage II Culvert Construction - Southbound Lanes
6. Stage II Culvert Construction - Northbound Lanes
7. Culvert Details
8. Bar Splicer Assembly Details
9. Temporary Concrete Barrier
- 10-11. Soil Boring Logs

GENERAL PLAN & ELEVATION

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-3.4)RS-2, (38-4)BR1

IROQUOIS COUNTY

STATION 399+21.00

S.N. 038-2020

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
www.fehr-graham.com

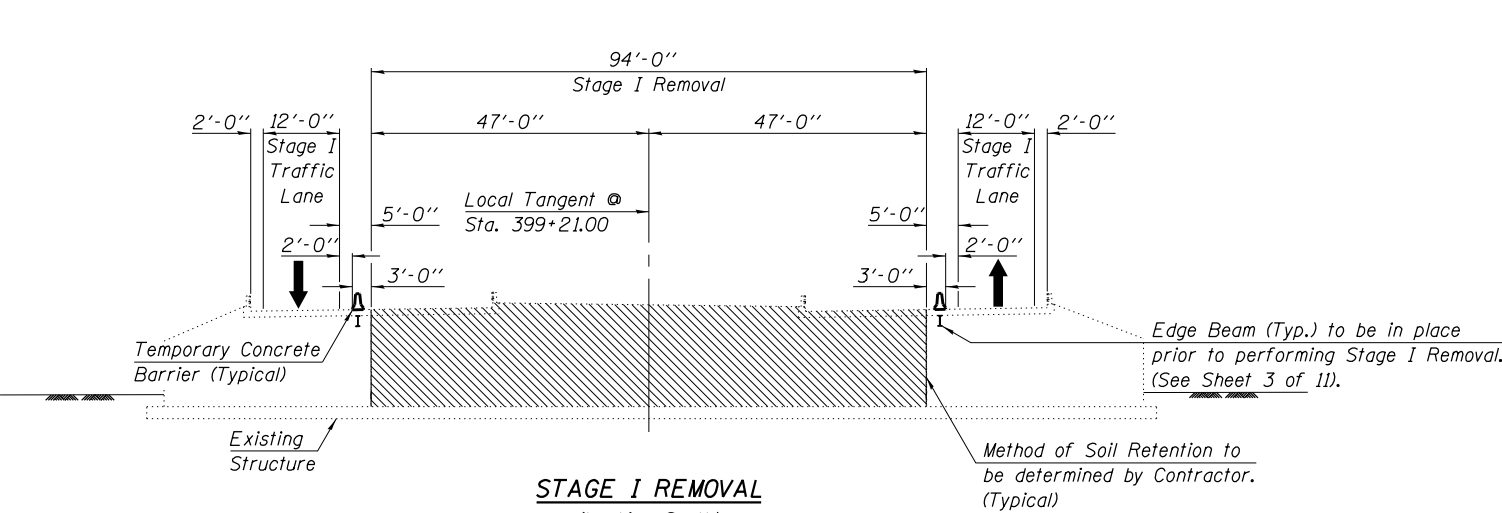
FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
PROFESSIONAL ENGINEER
JOHN A. MORRIS
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	••	IROQUOIS	190	58
FED. ROAD DIST. NO.	ILLINOIS			

••(38-4)RS-2, (38-4)BR1 Contract No. 66757

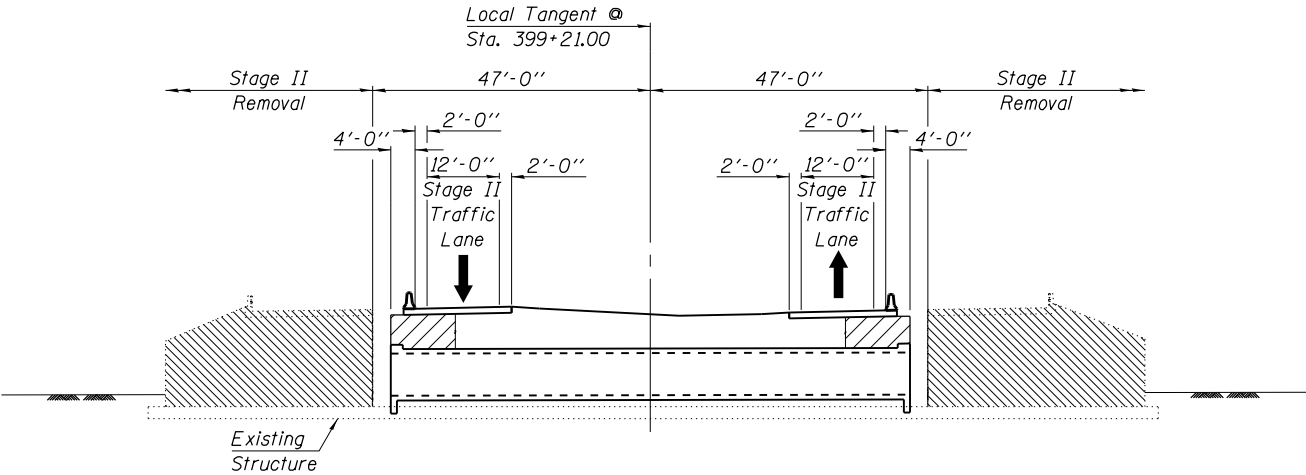
Sheet 2 of 11 Sheets



STAGE I REMOVAL

(Looking South)

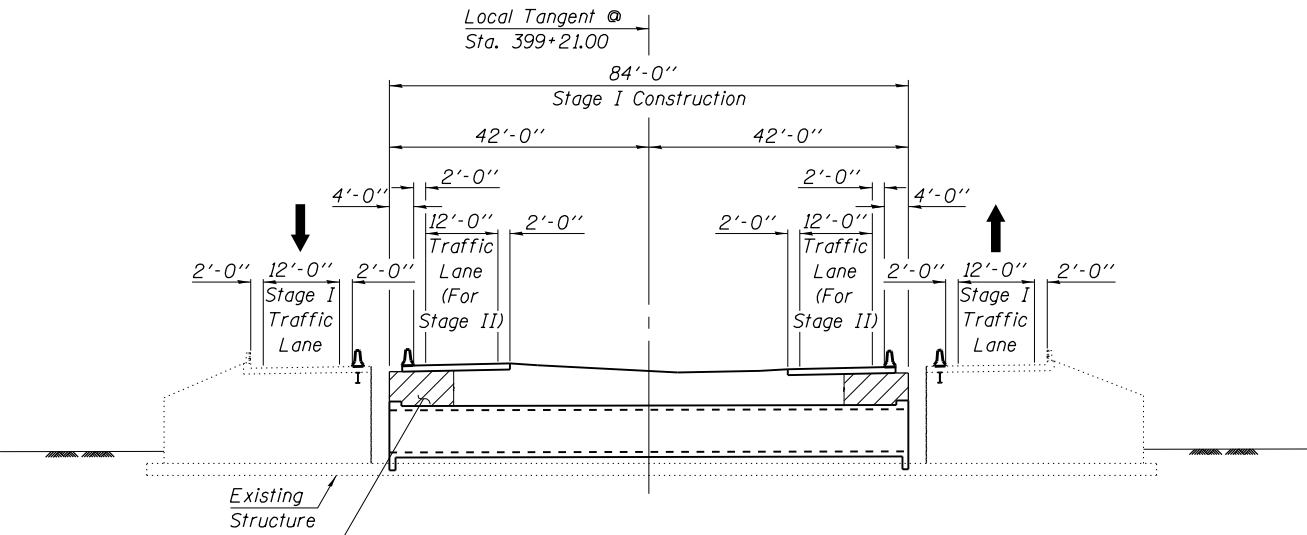
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 399+21.00



STAGE II REMOVAL

(Looking South)

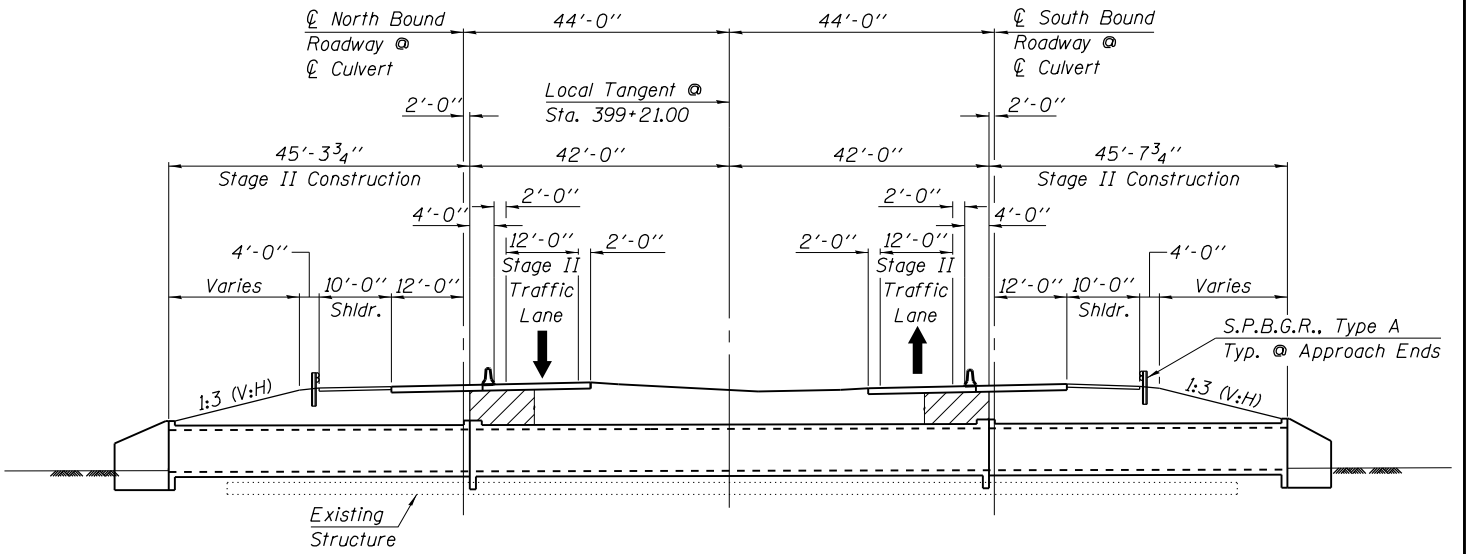
All dimensions measured at Rt. L's to
Local Tangent @ Sta. 399+21.00



STAGE I CONSTRUCTION

(Looking South)

All dimensions measured at Rt. L's to
Local Tangent @ Sta. 399+21.00



STAGE II CONSTRUCTION

(Looking South)

All dimensions measured at Rt. L's to
Local Tangent @ Sta. 399+21.00

Note: Portions of existing footings interfering with new construction to be removed as required to accommodate the proposed culvert and wingwalls. Cost included in Removal of Existing Structures.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

STAGE CONSTRUCTION DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR1
IROQUOIS COUNTY
STATION 399+21.00
S.N. 038-2020

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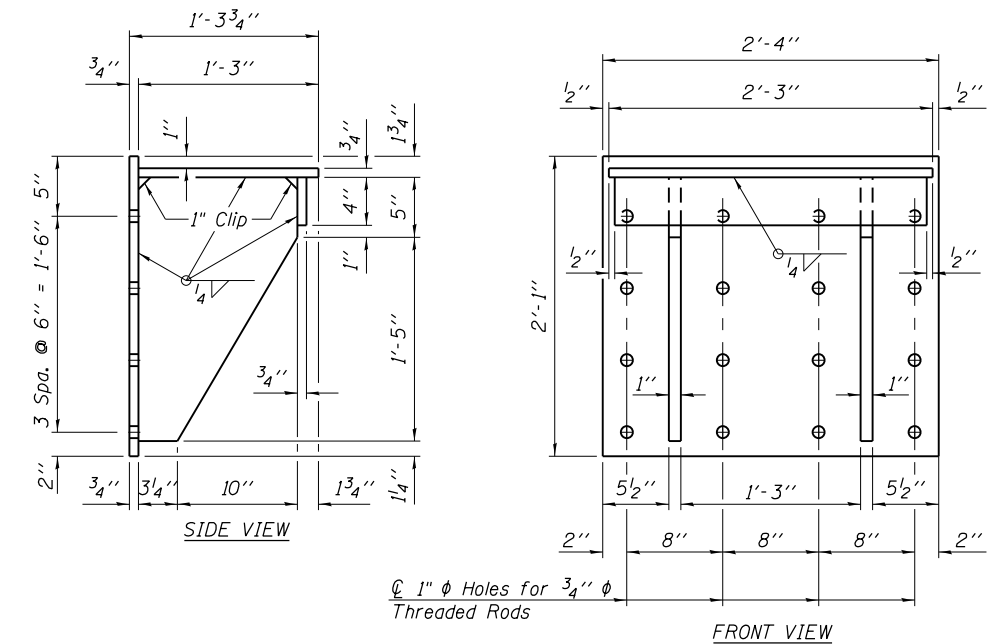
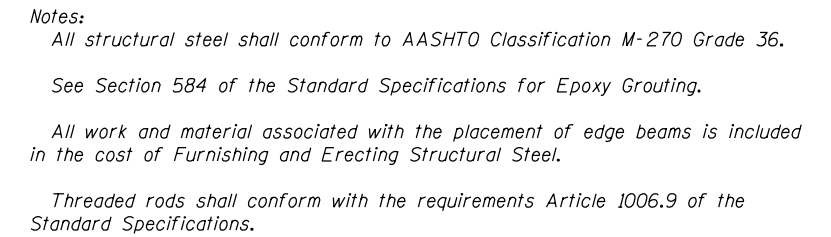
FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCKFELL, IL MONROE, WI SPRINGFIELD, IL

JOB NO.: 46810J
FILE: STAGING.DGN
DATE: 11/11/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	59
FED. ROAD DIST. NO.	ILLINOIS			

** (38-4)RS-2, (38-4)BR1 Contract No. 66757

Contract No. 66757



EDGE BEAM DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BRI
IROQUOIS COUNTY
STATION 399+21.00
S.N. 038-2020

DESIGNED	-	J.A.M.
CHECKED	-	S.F.M. & A.R.K.
DRAWN	-	S.A.P.
CHECKED	-	A.R.K. & J.A.M.

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SPRINGFIELD, IL. 62711
(217) 793-8600
www.fehr-graham.com**

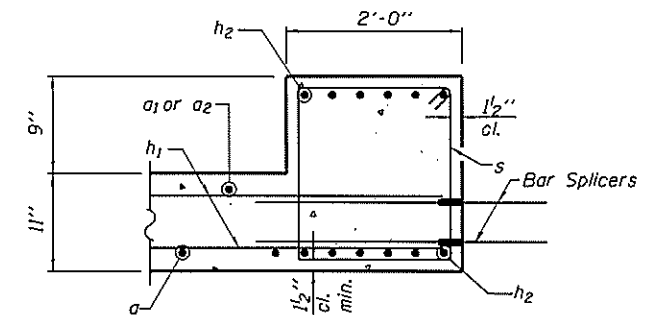
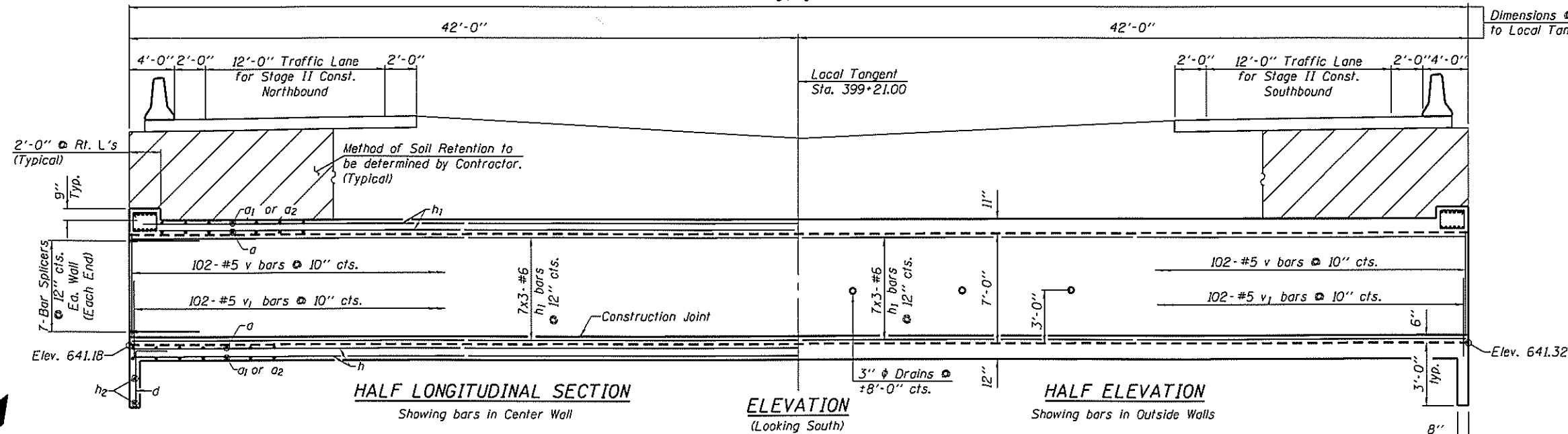
FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.: 46810J
FILE: SUP-BM.DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
84'-0"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	60
FED. ROAD DIST. NO.		ILLINOIS		
**(38-4)RS-2, (38-4)BR1			Contract No. 66757	

Sheet 4 of 11 Sheets

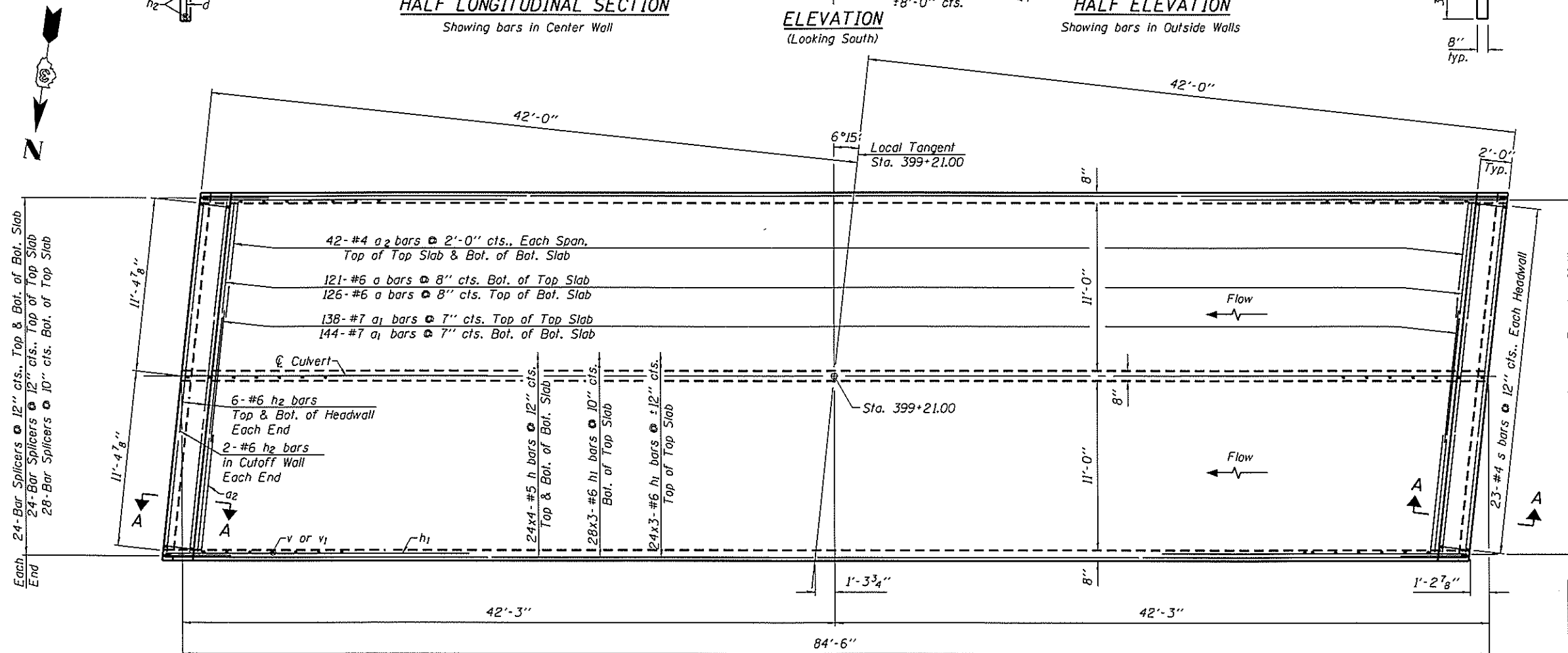


SECTION A-A

BILL OF MATERIAL - STAGE I

Bar	No.	Size	Length	Shape
a	247	#6	25'-1"	
a1	282	#7	11'-6"	
a2	168	#4	7'-9"	
d	46	#4	5'-6"	
h	192	#5	22'-6"	
h1	219	#6	29'-6"	
h2	28	#6	23'-9"	
s	46	#4	7'-1"	
v	306	#5	7'-6"	
v1	306	#5	3'-0"	
Reinforcement Bars			Pound	35,750
Concrete Box Culverts			Cu. Yd.	192.8

Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.
See Sheet 8 of 11 for Bar Splicer Details.



PLAN

MINIMUM BAR LAP - BARREL

#4	1'-4"
#5	1'-8"
#6	2'-0"

Note: All bar spacings shown are at right angles to bars.

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

Note: Bars indicated thus, 24x4-#5 etc. indicates 24 lines of bars with 4 lengths per line.

STAGE I CULVERT CONSTRUCTION
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR1
IROQUOIS COUNTY
STATION 399+21.00
S.N. 038-2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MINIMUM BAR LAP - BARREL

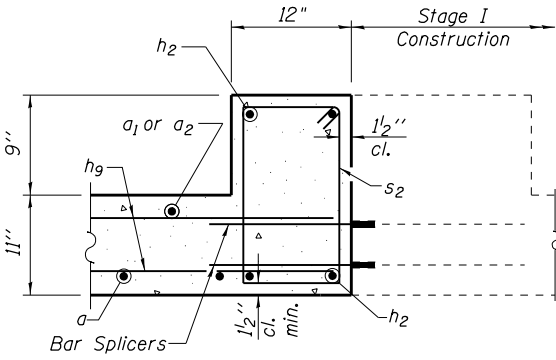
#4 1'-4"
#5 1'-8"
#6 2'-0"

Note: All bar spacings shown are at right angles to bars.

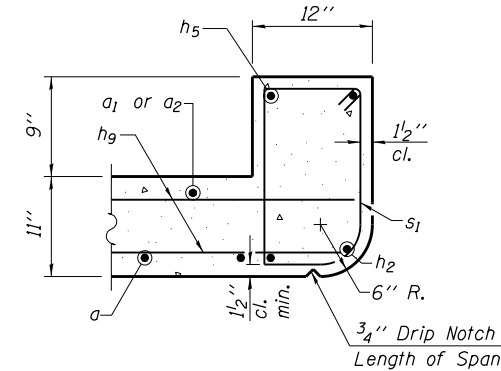
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	..	IROQUOIS	190	61

** (38-4)RS-2, (38-4)BR1 Contract No. 66757

Sheet 5 of 11 Sheets

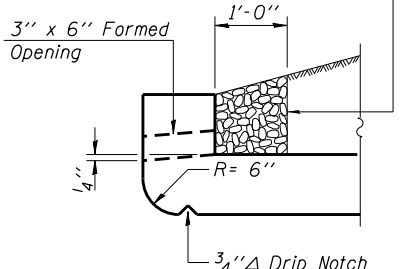


SECTION B-B



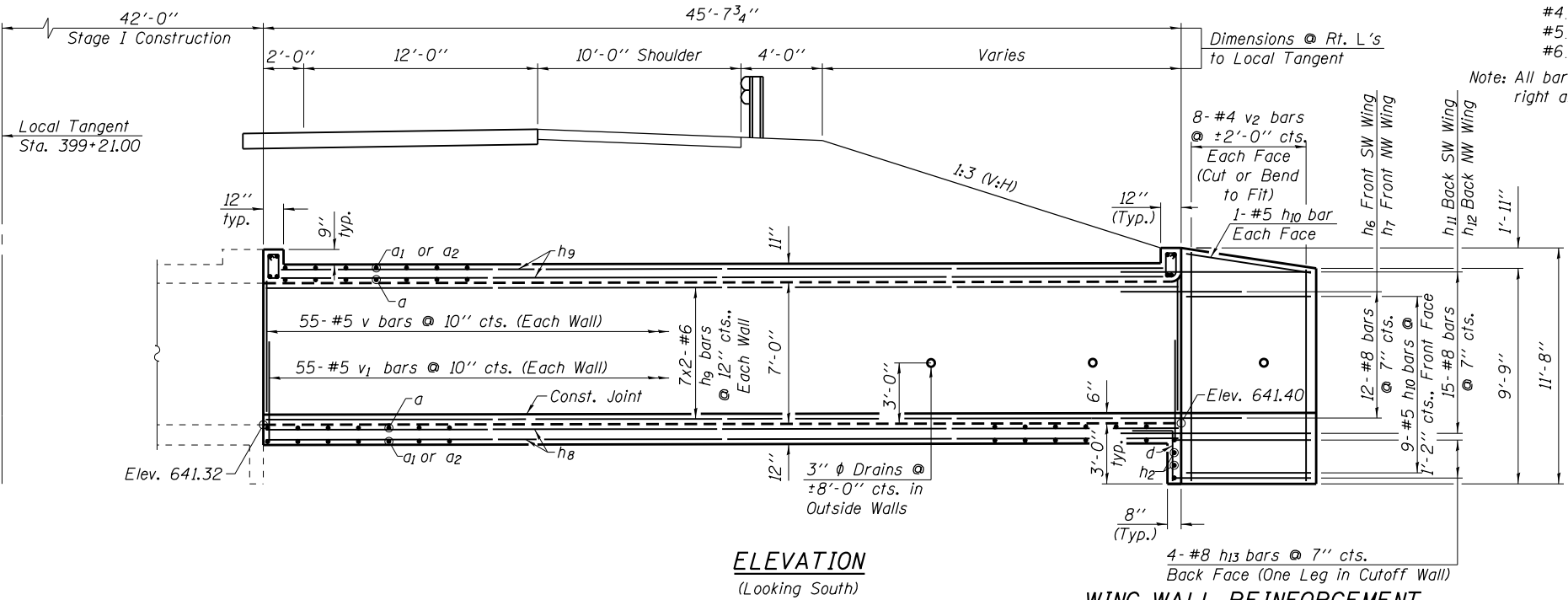
SECTION C-C

Coarse aggregate to be placed full length of all drained headwalls by Grading Contractor. Cost included with Concrete Box Culverts.



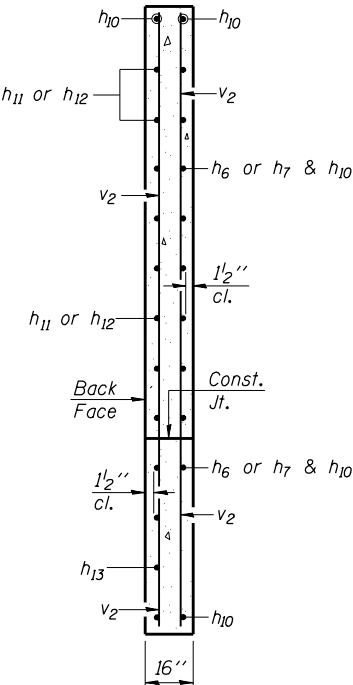
AT UPSTREAM END

DRAIN DETAILS



ELEVATION
(Looking South)

WING WALL REINFORCEMENT



SECTION A-A

BILL OF MATERIAL - STAGE II (SOUTHBOUND)

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	135	#6	25'-1"		s1	23	#4	4'-11"	
a1	154	#7	11'-6"		s2	23	#4	5'-1"	
a2	92	#4	7'-9"		v	165	#5	7'-6"	
d	23	#4	5'-6"		v1	165	#5	3'-0"	
					v2	32	#4	11'-4"	
h2	8	#6	23'-9"						
h5	2	#6	23'-0"						
h6	12	#8	9'-0"						
h7	12	#8	9'-0"						
h8	96	#5	23'-9"						
h9	146	#6	24'-0"						
h10	22	#5	13'-9"						
h11	15	#8	17'-2"						
h12	15	#8	16'-11"						
h13	8	#8	14'-11"						
Stone Riprap, Class A4								Sq. Yd.	50
Filter Fabric								Sq. Yd.	50
Reinforcement Bars								Pound	22,040
Name Plate								Each	1
Concrete Box Culverts								Cu. Yd.	121.0

Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.

STAGE II CULVERT CONSTRUCTION

SOUTHBOUND LANES

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-4)RS-2, (38-4)BR1

IROQUOIS COUNTY

STATION 399+21.00

S.N. 038-2020

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

Note: Bars indicated thus, 24x2-#5 etc. indicates 24 lines of bars with 2 lengths per line.

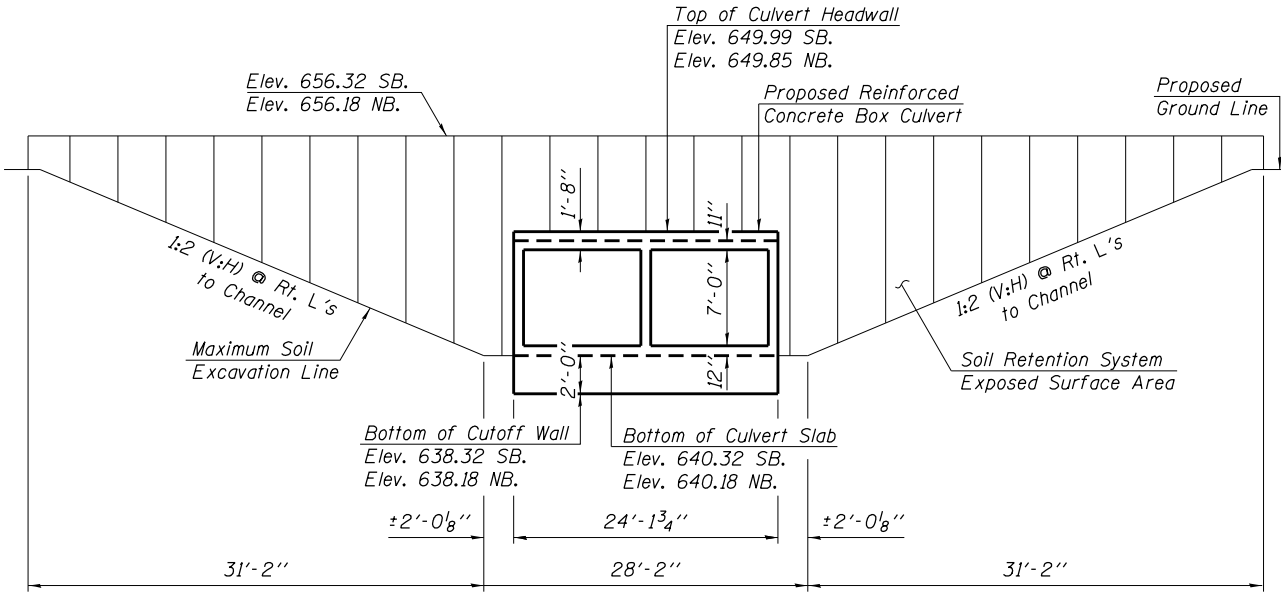
4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
www.fehr-graham.com

FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, E. ROCKFORD, E. ROCKFORD, E. MONROE, WI SPRINGFIELD, IL

JOB NO.: 46810J
FILE: CULV-DTLS(2).DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

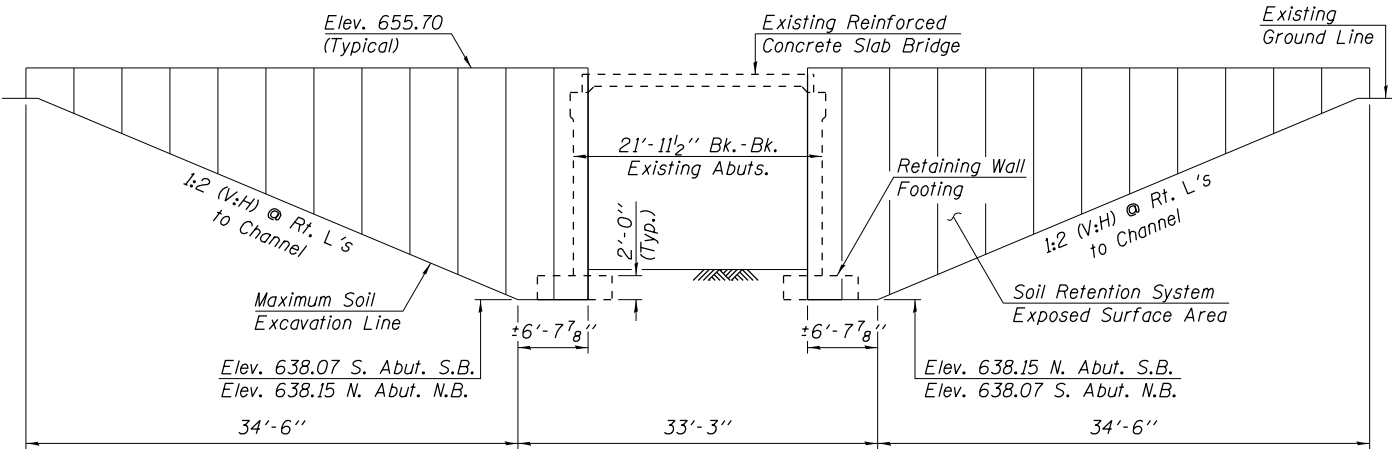
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IR000015	190	63
FED. ROAD DIST. NO.		ILLINOIS	Contract No. 66757	
**(38-4)RS-2, (38-4)BR1				
Sheet 7 of 11 Sheets				



STAGE II - TEMPORARY SOIL RETENTION SYSTEM

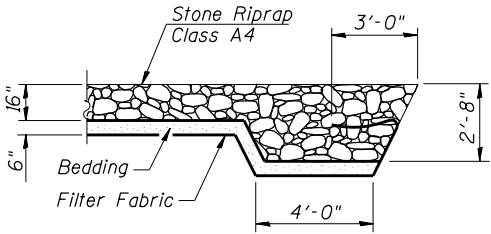
(Looking East @ Southbound Lane)
(Looking West @ Northbound Lane)

Note: All horizontal dimensions shown for limits of Temporary Soil Retention System are measured parallel to the Local Tangent at Sta. 399+21.00

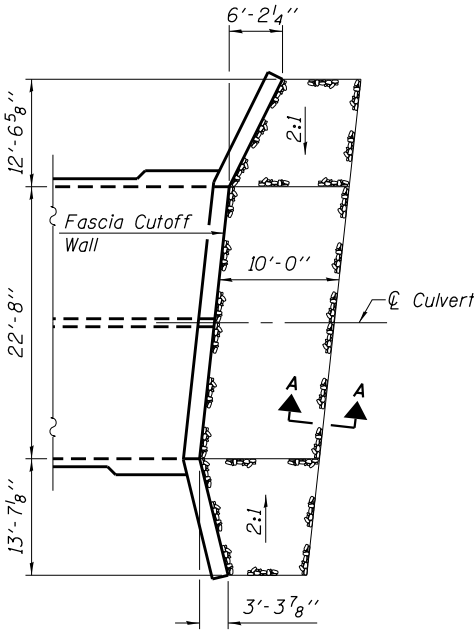


STAGE I - TEMPORARY SOIL RETENTION SYSTEM

(Looking West @ Southbound Lane)
(Looking East @ Northbound Lane)



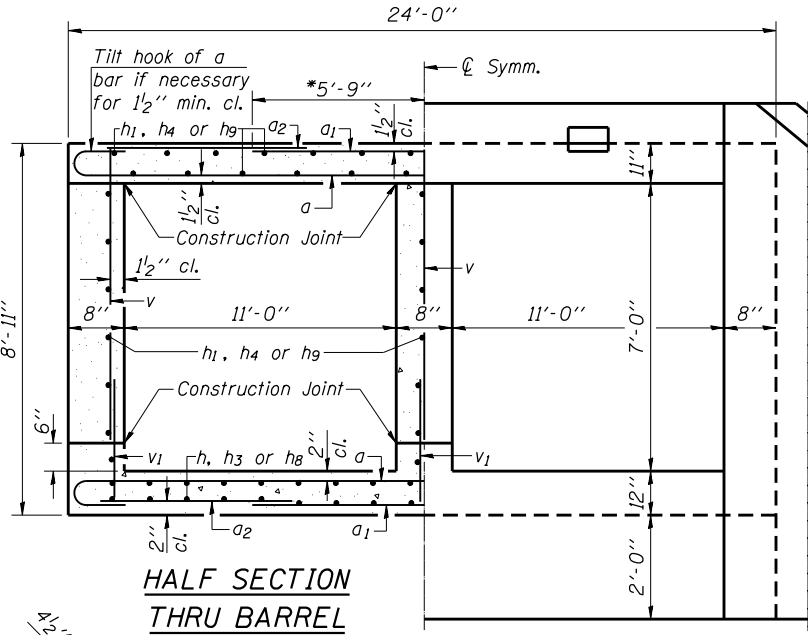
SECTION A-A



STONE RIPRAP, CLASS A4 DETAIL

(Typical @ Each End of Culvert)

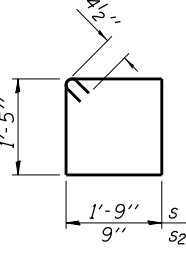
*Along Skew
(Parallel to Local Tangent)



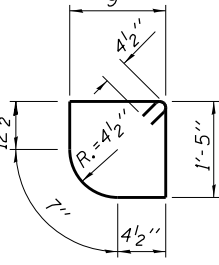
HALF SECTION THRU BARREL

HALF END ELEVATION

CROSS SECTION



BARS s & s2



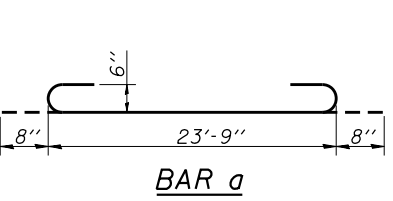
BAR s1

STATION 399+21.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. ROUTE 57
SEC. (38-4)RS-2, (38-4)BR1
LOADING HS20 & ALT.
STR. NO. 038-2020

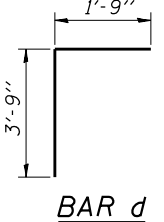
LETTERING FOR NAME PLATE

See Std. 515001

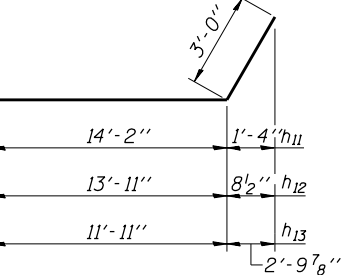
DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.



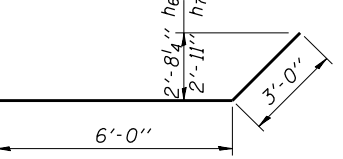
BAR a



BAR d



BARS h11, h12 & h13



BARS h6 & h7

CULVERT DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR1
IROQUOIS COUNTY
STATION 399+21.00
S.N. 038-2020

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHESTER, IL MONROE, IL SPRINGFIELD, IL	JOB NO.: 46810J FILE: CULV-DTSL(4).DGN DATE: 11/11/08
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	64
FED. ROAD DIST. NO.	ILLINOIS			
**(38-4)RS-2, (38-4)BR1			Contract No. 66757	

Sheet 8 of 11 Sheets

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity
(Tension in kips) = $1.25 \times f_y \times A_l$
- ② Minimum *Pull-out Strength
(Tension in kips) = $0.66 \times f_y \times A_l$

Where f_y = Yield strength of lapped reinforcement bars in ksi.

A_l = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

BAR SPLICER ASSEMBLIES

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

The diameter of this part is equal or larger than the diameter of bar spliced.

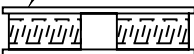
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

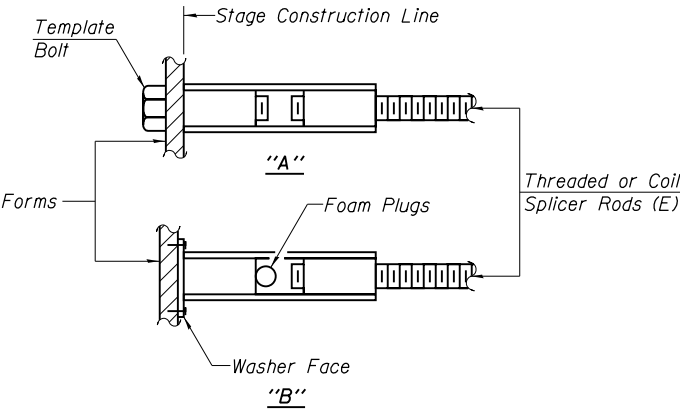
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

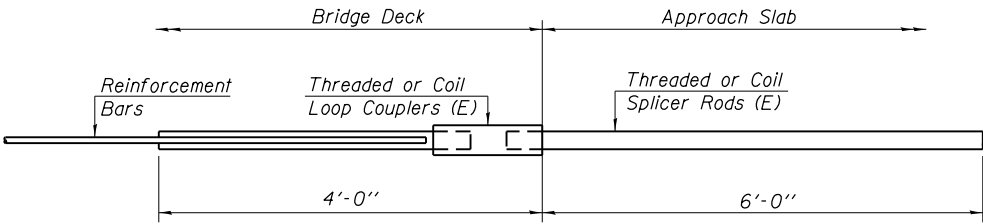


INSTALLATION AND SETTING METHODS

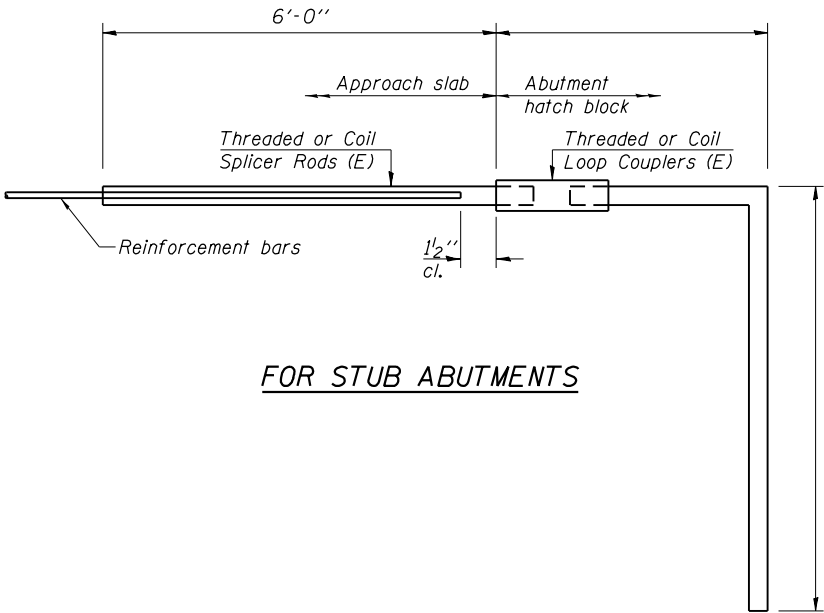
"A" :Set bar splicer assembly by means of a template bolt.

"B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

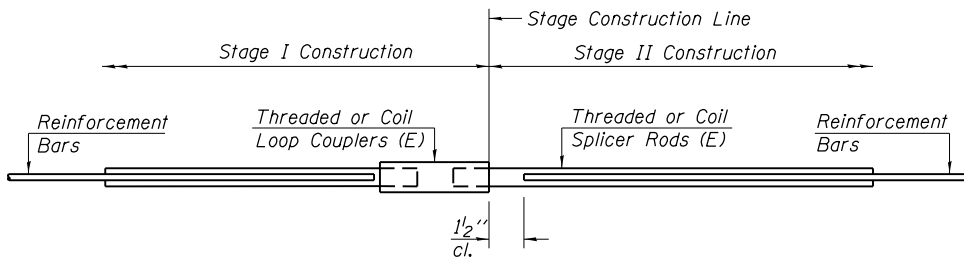
(E) : Indicates epoxy coating.



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#5	96	Bottom Slab
#6	104	Top Slab
#6	42	Walls

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

BAR SPLICER ASSEMBLY DETAILS

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-4)RS-2, (38-4)BR1

IROQUOIS COUNTY

STATION 399+21.00

S.N. 038-2020

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

BSD-1

5-16-08

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SPRINGFIELD, IL 62711
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ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

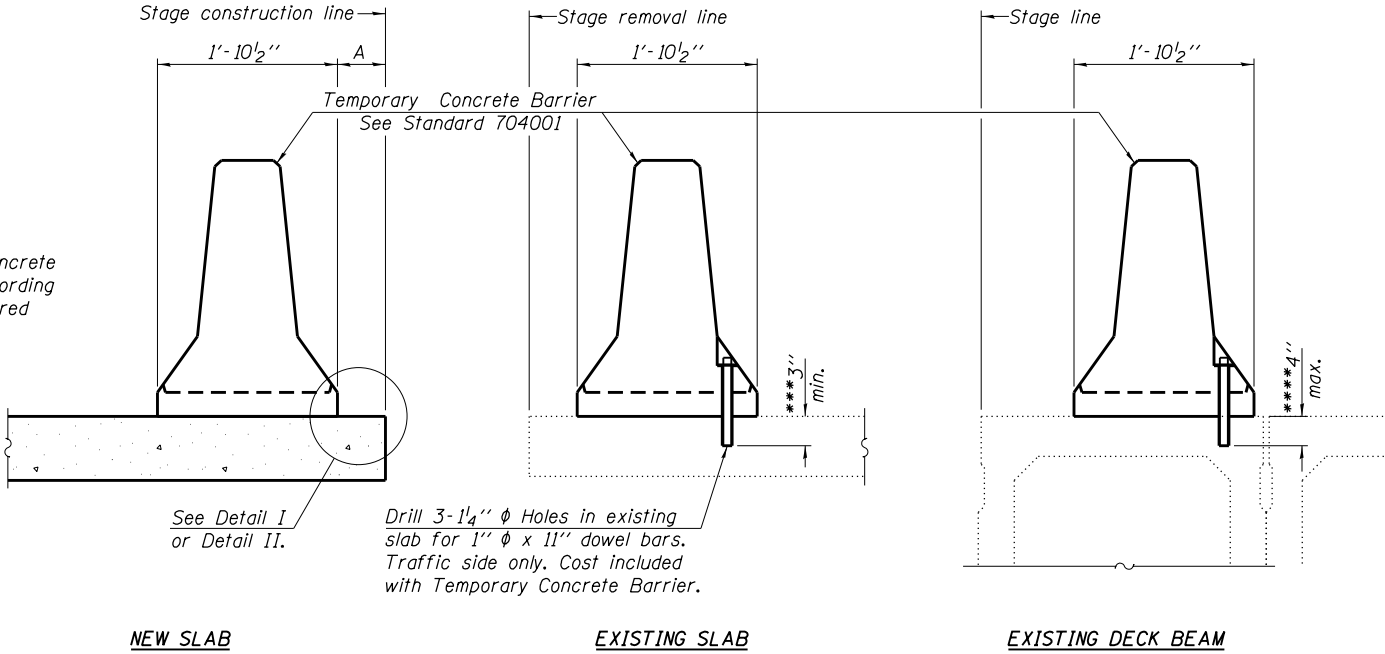
JOB NO.: 46810J
FILE: SPLICER.DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	65
FED. ROAD DIST. NO.		ILLINOIS		
**(38-4)RS-2, (38-4)BR1			Contract No. 66757	

Sheet 9 of 11 Sheets

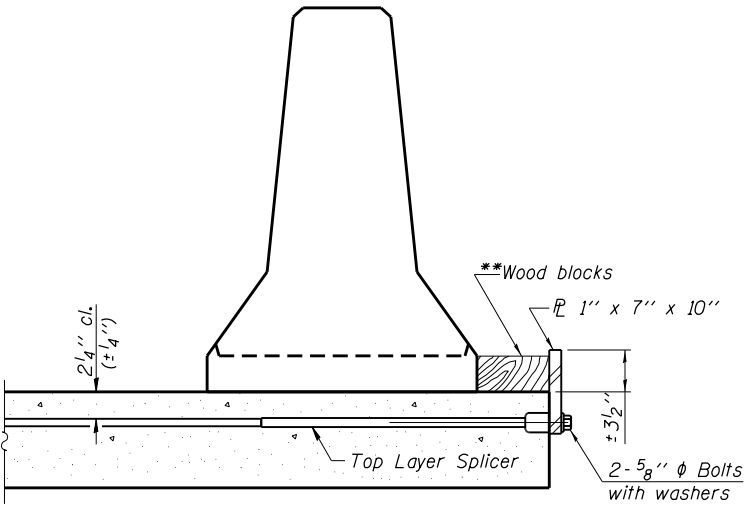
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



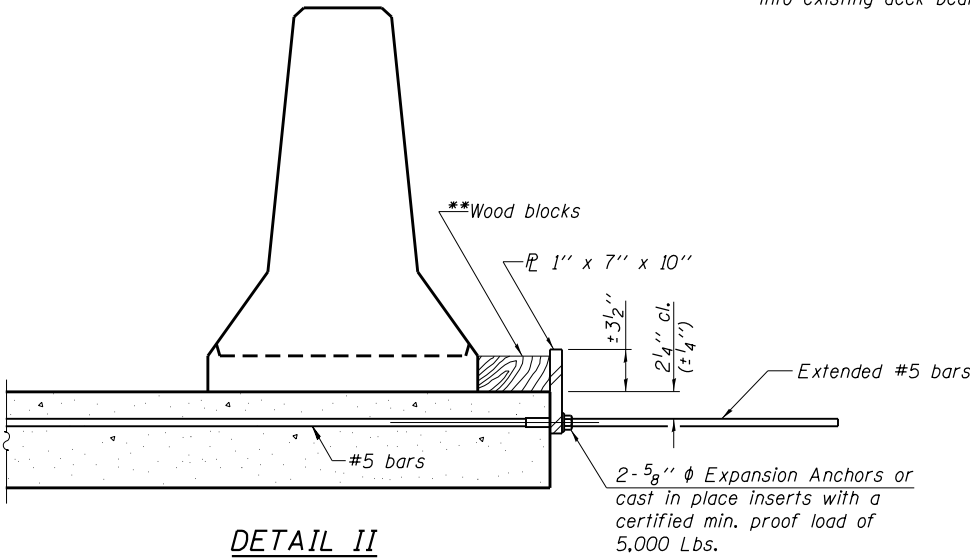
SECTIONS THRU SLAB OR DECK BEAM

- NOTES**
- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate $\bar{C}$ of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate $\bar{C}$ of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

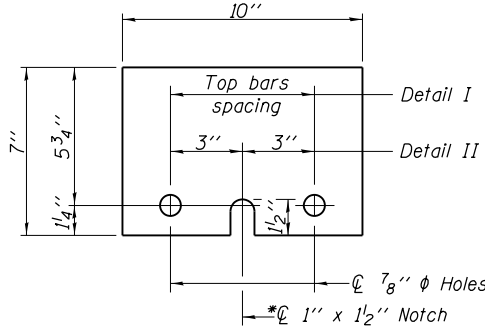
- ***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- ****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER $\bar{L}$ 1" x 7" x 10"

*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

R-27

5-16-08

TEMPORARY CONCRETE BARRIER	
I-57 OVER	
DANFORTH TOWNSHIP DRAINAGE DITCH	
F.A.I. ROUTE 57	
SECTION (38-4)RS-2, (38-4)BR1	
IROQUOIS COUNTY	
STATION 399+21.00	
S.N. 038-2020	
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, E. ROCKFORD, E. ROCKFELL, E. MONROE, W. SPRINGFIELD, IL
JOB NO.: 46810J FILE: BARRIER.DGN DATE: 11/11/08	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IRROQUOIS	190	66
FED. ROAD DIST. NO.	ILLINOIS			

**** (38-4)RS-2, (38-4)BR1** *Contract No. 66757*

Sheet 10 of 11 Sheets



Illinois Department of Transportation

Division of Highway IDOT

District #3, Chicago

SOIL BORING LOG

Page 2 of 2

Date 5/7/62

ROUTE

FAI 57 (I-57)

DESCRIPTION

FAI Rt.57 over Danforth #3 Drainage Ditch

LOGGED BY

HWB

SECTION

(38-3,4)RS-2, (38-4)BR1

LOCATION

NE 1/4, SE 1/4, SEC. 18, TWP. 27N, RNG. 11E, 3rd PM

COUNTY

Ingham

DRILLING METHOD

Hollow Stem Auger

HAMMER TYPE

Manual Hammer

STRUCT. NO.

038-D156

Station

399+18.5

BORING NO.

B-1 S Abut S B.L.

Station

322+37.5

Offset

56.00 ft RL of CL on Skew

Ground Surface Elev.

649.62 ft

D

B

U

M

E

L

C

O

P

O

S

I

T

W

S

S

H

S

Q

T

(ft)

(ft)

(in)

(%)

13

2.9

21.0

B

16

2.7

20.0

B

16

2.3

17.0

B

18

3.5

20.0

B

10

1.8

29.0

B

15

2.2

26.0

S

18

3.1

24.0

B

20

2.7

25.0

B

Very Stiff Gray CLAY (Till)

(continued)

692.12

691.12

598.62

Gray SILTY LOAM

Stiff Gray CLAY (Till)

Very Stiff Gray CLAY (Till)

D

B

U

M

E

L

C

O

P

O

S

I

T

W

S

S

H

S

Q

T

(ft)

(ft)

(in)

(%)

27

3.1

19.0

B

27

4.1

15.0

B

28

4.3

15.0

B

28

4.9

14.0

B

31

5.6

15.0

B

579.12

End of Boring

Surface Water Elev.

643.82

ft

Stream Bed Elev.

ft

Groundwater Elev.:

First Encounter

None

ft

Upon Completion

After 24 Hrs.

844.6

ft

Very Stiff Gray CLAY (Till)

(continued)

Hard Gray CLAY (Till)

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D2938)

BBS, from 137 (Rev. 9-99)

[illegible]

BORING #2

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.

SOIL BORING LOGS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BRI
IROQUOIS COUNTY
STATION 399+21.00
S.N. 038-2020

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	 FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEMONT, E. ROCKFORD, E. ROCHELLE, E. MONROE, W. SPRINGFIELD, IL	JOB NO.: 46810J FILE: BORINGS(I).DGN DATE: 11/11/08
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Bench Mark:
Chisel "X" on top of wall at southeast corner of southbound I-57 bridge. Structure Number
038-0167. Elevation 653.68

Existing Structures:

SN 038-0167, Southbound I-57 Bridge

SN 038-0168, Northbound I-57 Bridge

The structures were built in 1967 as single span Reinforced Concrete Slab Bridges supported by Closed Concrete Abutments. Vertical cantilever retaining walls with spread footings connect the two structures on either side of the channel in the median area of the highway. The superstructures were resurfaced in 2000 with a microsilica concrete overlay. The bridges measure 20'-9" back to back of abutments and 42'-4" out to out of deck. The structures are to be replaced with a Double Box Culvert.

Salvage:

No Salvage

Staging:

One lane of traffic shall be maintained in each direction utilizing stage construction.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706

Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

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.

Removal of the existing reinforced concrete slabs creates an unstable condition for the abutment walls directly supporting the superstructures. Bracing of the abutment walls or excavation behind the abutments may be required to ensure the stability of the abutment walls during structure removal and construction activities.

A precast concrete culvert alternate will not be allowed.

TOTAL BILL OF MATERIAL

Stone Riprap, Class A4	Sq. Yd.	108
Filter Fabric	Sq. Yd.	108
*** Removal of Existing Structures No. 3	Each	1
Furnishing and Erecting Structural Steel	Pound	4,260
Reinforcement Bars	Pound	70,770
Reinforcement Bars, Epoxy Coated	Pound	720
Bar Splicers	Each	194
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	392.7
*** Temporary Soil Retention System	Sq. Ft.	3,669

***See Special Provisions

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	635.30	634.80

WATERWAY INFORMATION

Drainage Area = 0.11 Sq. Mi.		Exist. Low Grade Elev. 652.20 @ Sta. 503+00		Prop. Low Grade Elev. 652.79 @ Sta. 503+00					
Flood	Freq.	0	Opening (Sq.Ft.)	Natural	Head (Ft.)	Headwater El.			
	(Yr.)	(c.f.s.)	Exist.	Prop.	H.W.E.	Exist.	Prop.		
-	10	137	95	126	647.2	0.1	0.0	647.3	647.2
Design	50	241	122	128	649.0	0.1	0.1	649.1	649.1
Base	100	289	132	128	649.7	0.2	0.2	649.9	649.9
Overtopping									
Max. Calc.	500	412	150	128	650.9	0.2	0.3	651.1	651.2

10-Year Velocity through Exist. Structure = 1.4 f.p.s.

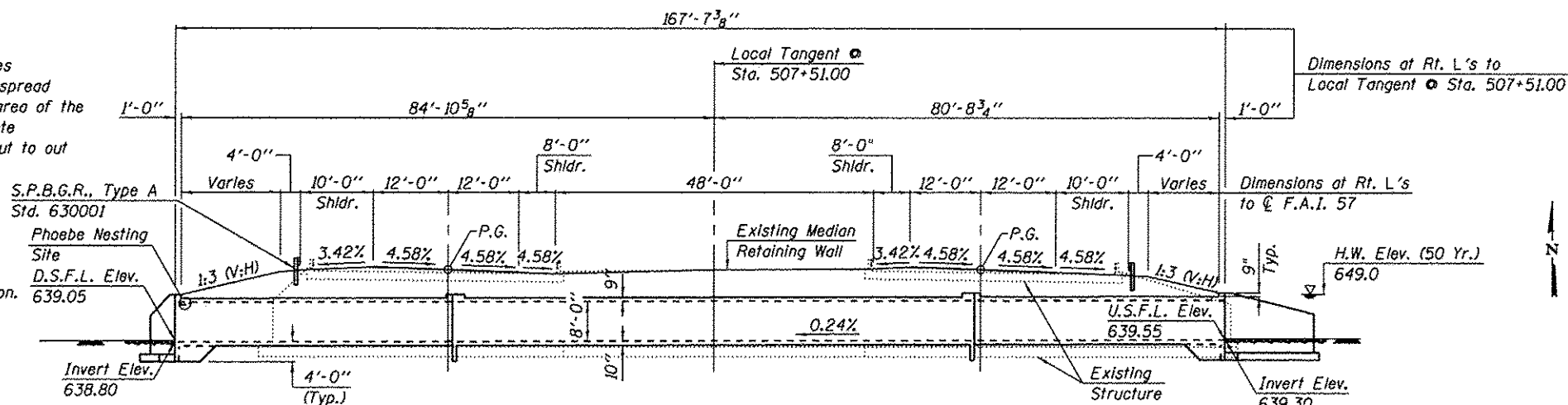
10-Year Velocity through Prop. Structure = 1.1 f.p.s.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	68

FED. ROAD DIST. NO. ILLINOIS
** (38-3.4)RS-2, (38-4)BR3 CONTRACT NO. 66757

Sheet 1 of 11 Sheets



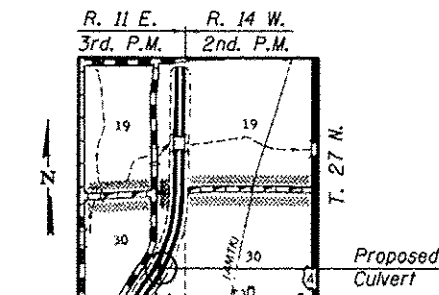
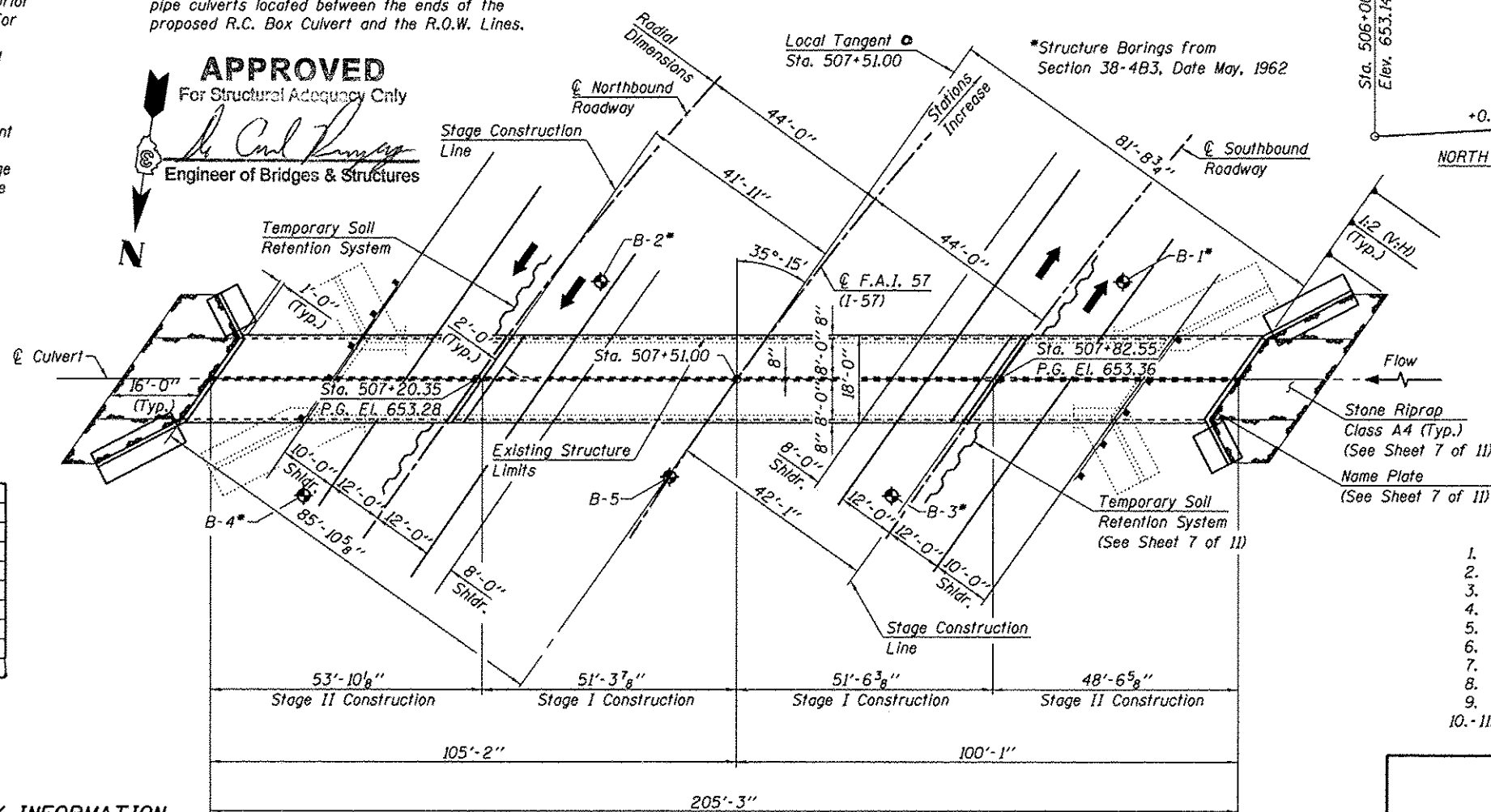
LONGITUDINAL SECTION (Looking South)

Note: See roadway plans for existing and proposed pipe culverts located between the ends of the proposed R.C. Box Culvert and the R.O.W. Lines.

APPROVED

For Structural Adequacy Only

Engineer of Bridges & Structures



LOCATION PLAN

PROFILE GRADE

F.A.I. 57 (P.G.L. @ Rdwy.)

HORIZONTAL CURVE DATA

P.I. Sta 501+63.51
 $\Delta = 43^\circ 02' 17.77''$
 $D = 01^\circ 30' 00''$
 $T = 1,506.10$
 $L = 2,869.22$
 $R = 3,819.72$
 $E = 286.20$
P.C. Sta. 486+57.41
P.T. Sta. 515+26.63
S.E. = 4.58%

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Edge Beam Details
4. Stage I Culvert Construction
5. Stage II Culvert Construction - Southbound Lanes
6. Stage II Culvert Construction - Northbound Lanes
7. Culvert Details
8. Bar Splicer Assembly Details
9. Temporary Concrete Barrier
10. Soil Boring Logs

GENERAL PLAN & ELEVATION

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-3.4)RS-2, (38-4)BR3

IROQUOIS COUNTY

STATION 507+51.00

S.N. 038-2019

DESIGN STRESSES PLAN

FIELD UNITS

$f'_c = 3,500$ psi

$f_y = 60,000$ psi

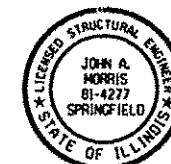
Allowable Bearing Pressure under footings = 6,800 lbs./Sq. Ft.

LOADING HS 20-44 & ALTERNATE

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

DESIGN SPECIFICATIONS

2002 AASHTO Specifications



John A. Morris 12-14-12
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/14)

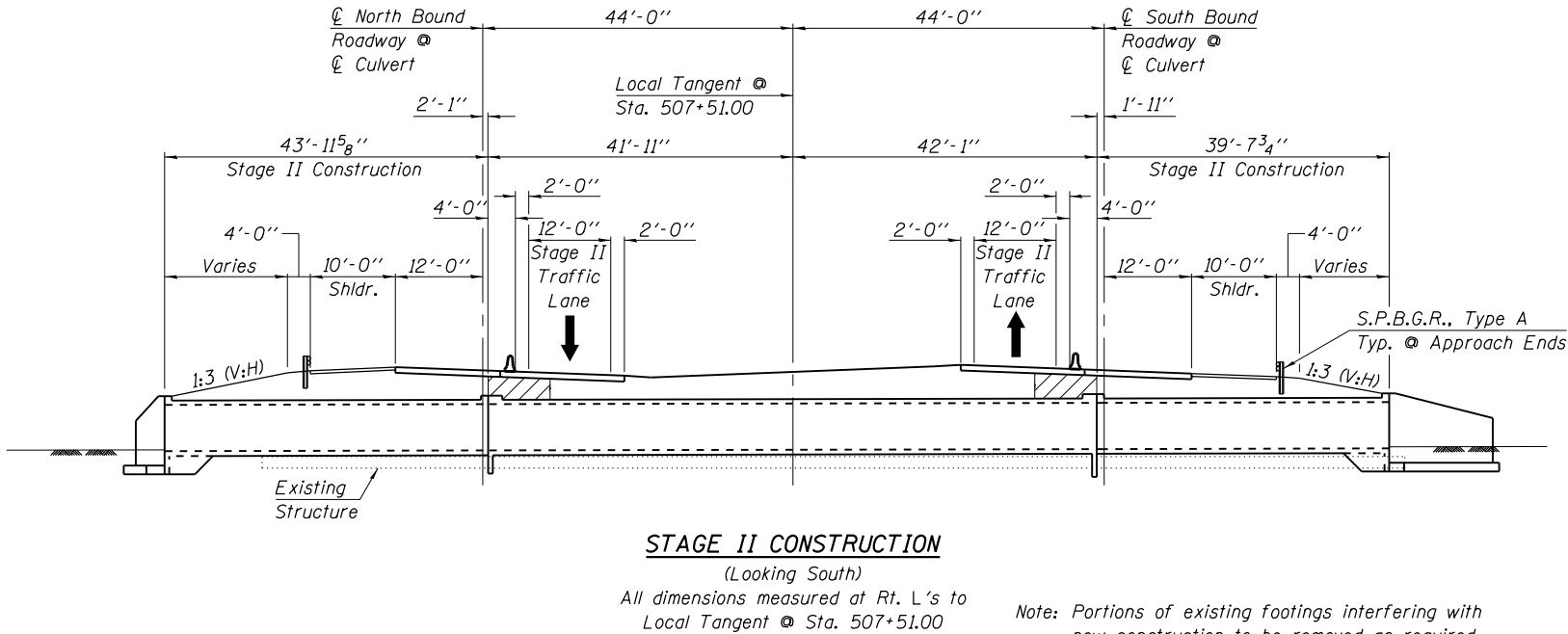
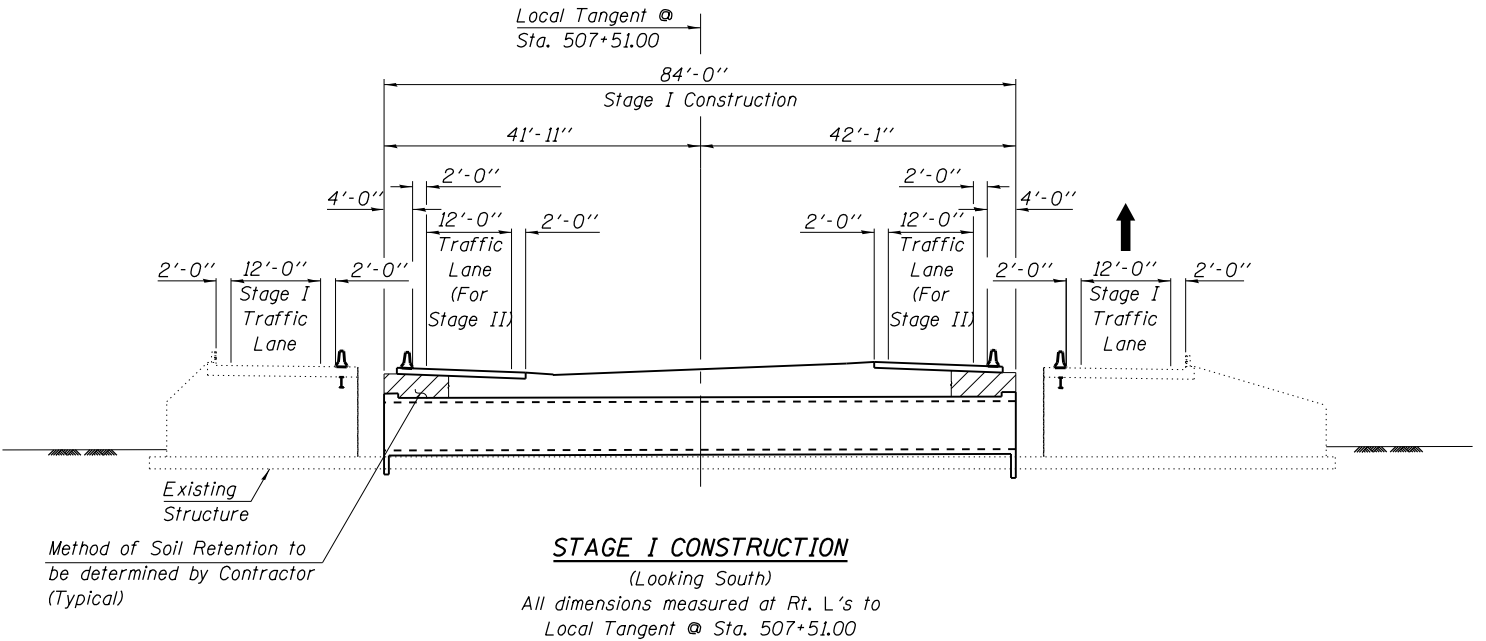
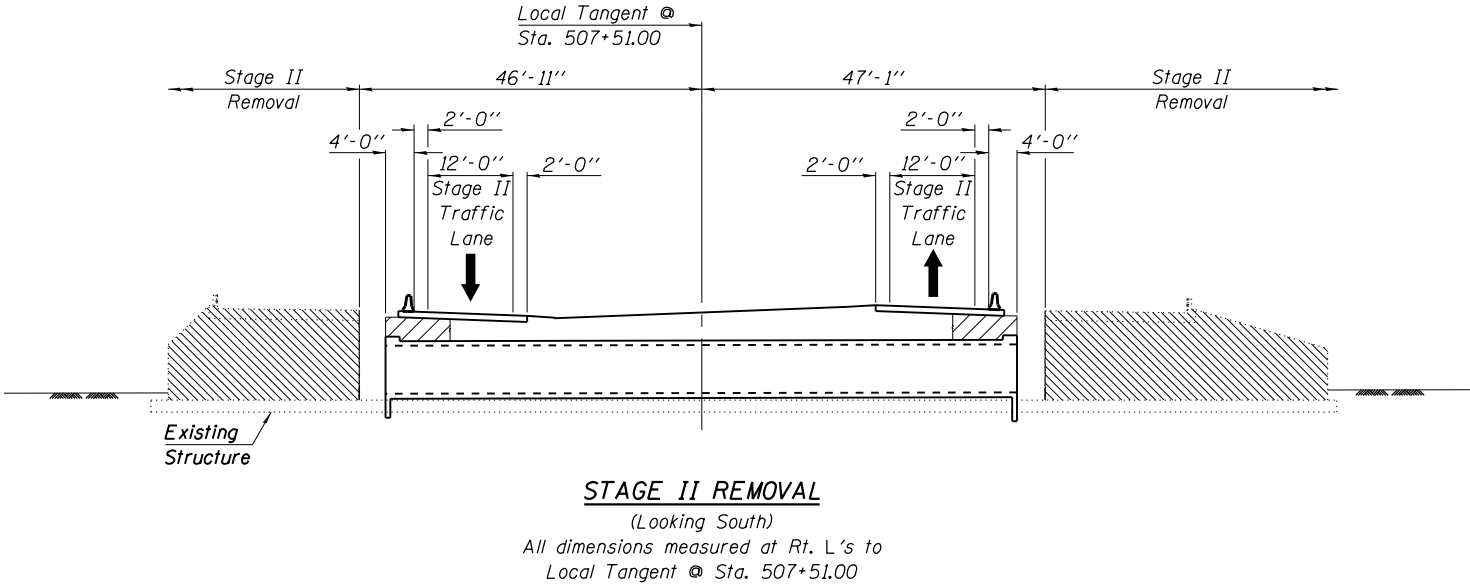
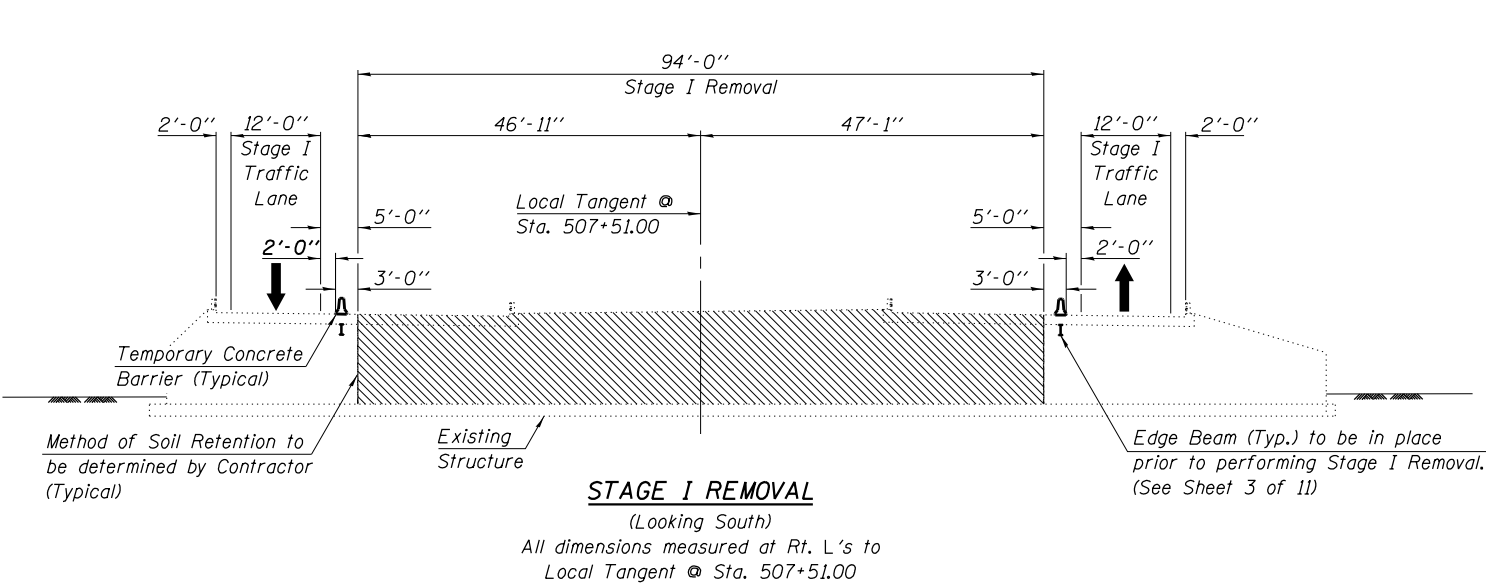
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SPRINGFIELD, IL 62711
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ENGINEERING AND SCIENCE CONSULTANTS
JOB NO. 46810K
FILE: 46810K-TSL.DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	69
FED. ROAD DIST. NO.		ILLINOIS		
**(38-4)RS-2, (38-4)BR3			CONTRACT NO. 66757	

Sheet 2 of 11 Sheets



Note: Portions of existing footings interfering with new construction to be removed as required to accommodate the proposed culvert and wingwalls. Cost included in Removal of Existing Structures.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

STAGE CONSTRUCTION DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCKFORD, IL MONROE, WI SPRINGFIELD, IL	JOB NO.: 46810K FILE: STAGING.DGN DATE: 11/11/08
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	70
FED. ROAD DIST. NO.	ILLINOIS			

** (38-4)RS-2, (38-4)BR3 CONTRACT NO. 66757

Threaded rods shall conform with the requirements Article 1006.9 of the Standard Specifications.

See Detail "D"

Exist. R.C. Slab and Overlay

Top Flange Bracket Plates with Shim Plates (Typ.)

Bottom of Slab

$P 3_4'' \times 7_2'' \times 8''$ Bearing Plate with Shim Plates as Required (Each End)

W18x60 (2-Required)

Top of Support Assembly

Face of Existing Abutment (Typ.)

9" (Typ.)

$3_4'' \phi$ Threaded Rods Epoxy Grouted in Abutment (Typical)

SECTION A-A

Orthographic projection of a rectangular plate with a grid of holes. The front view shows a plate with overall dimensions 2'-4" by 1'-5". It features a 4x4 grid of 16 holes, each 1" in diameter. The holes are spaced 8" apart. The plate has a 1/4" thick top flange and 1/2" thick side flanges. The top flange has a 1/4" hole. The side flanges have 1/2" holes. The bottom flange has a 1/4" hole. The front view is labeled "FRONT VIEW".

Grind Cut Surface to Remove Gouges and Nicks

9"

5"

3" Radius

1 1/2"

8"

1/4"

P 3 1/4" x 3 1/2" x 1'-9" Each Side

DETAIL "D"

Technical drawing of a tapered shim. The drawing shows a rectangular part with two circular holes. Dimensions are as follows:

- Overall length: 1'-5"
- Distance from left edge to first hole: 2"
- Distance between holes: 1'-1"
- Distance from second hole to right edge: 2"
- Overall width: 4"
- Distance from top edge to hole centerline: 2"
- Distance from bottom edge to hole centerline: 2"

Material specifications and requirements:

- Tapered Shim: $\frac{3}{4}$ " x 4" x 1'-5" (10-Required)
- Shim: $\frac{1}{8}$ " x 4" x 1'-5" (20-Required)

Other features: Two holes with a diameter of 1" ϕ are indicated.

ϕ Threaded Rods
 Grouted in R.C. Slab
 reads after Nuts
 ed to prevent back-off)

9" (Typ.)
 Tapered Plate
 1"
 3/4" x 4" x 1'-5"
 4 3/4"
 7 1/2"
 4 3/4"
 2"
 1'-1"
 2"
 1'-5"
 Bottom of Exist. Slab
 Shim Plates as Required for tight fit.
 1" ϕ Holes
 1" ϕ holes in Plates for 3/4" ϕ Threaded Rods

EDGE BEAM DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

Technical drawing of a rectangular plate with the following dimensions and specifications:

- Overall width: 8"
- Overall height: 7 1/2"
- Distance between hole centers: 5 1/2"
- Distance from top edge to hole center: 1"
- Distance from bottom edge to hole center: 1"
- Hole diameter: $\varnothing 13/16$ "
- Label: "Holes"
- Note: "1" (4 Required)" with an arrow pointing to the bottom edge.

Bearing $\mathbb{P}$ $\frac{3}{4}'' \times 7\frac{1}{2}'' \times 8''$ (4-Required)
Shim $\mathbb{P}$ $\frac{1}{8}'' \times 7\frac{1}{2}'' \times 8''$ (8-Required)

TOP FLANGE BRACKET TAPERED & SHIM PLATES PLAN

SECTION B-B

DESIGNED	-	J.A.M.
CHECKED	-	S.F.M. & A.R.K.
DRAWN	-	S.A.P.
CHECKED	-	A.R.K.. & J.A.M.

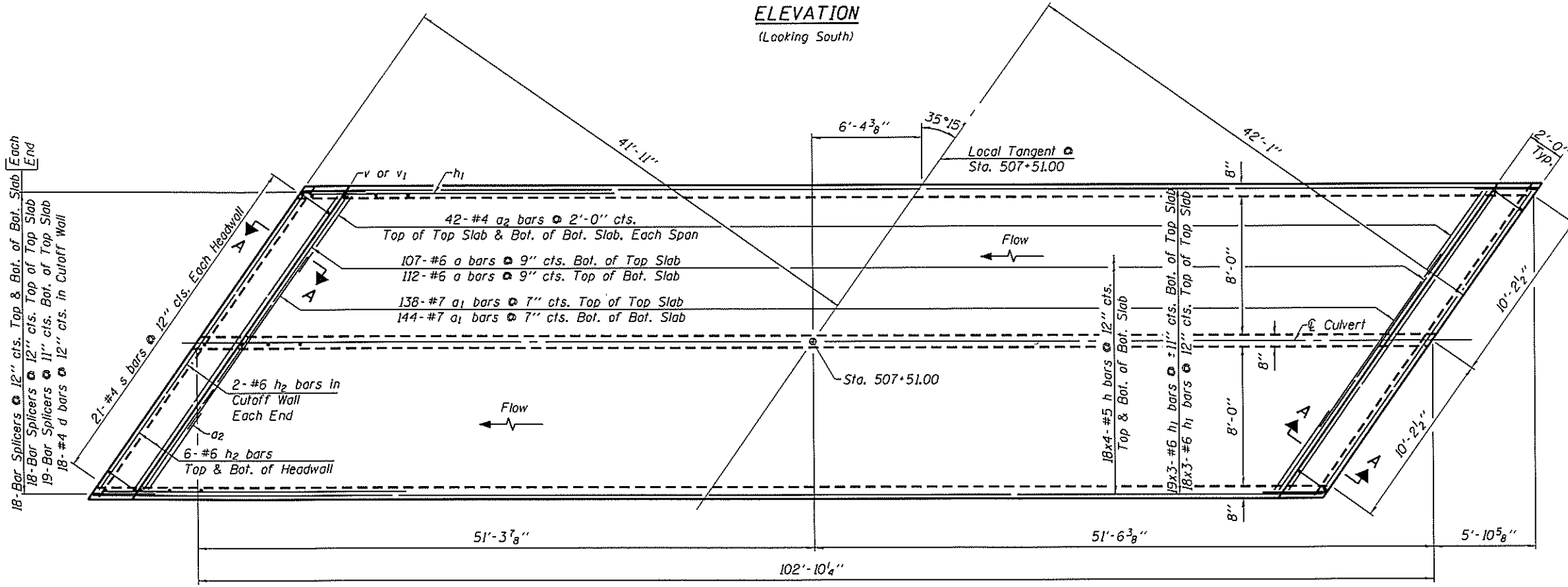
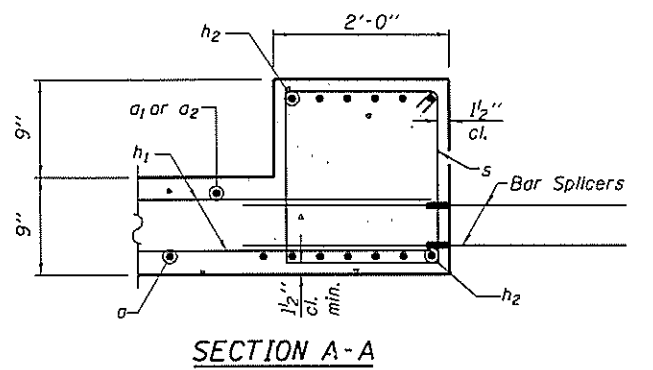
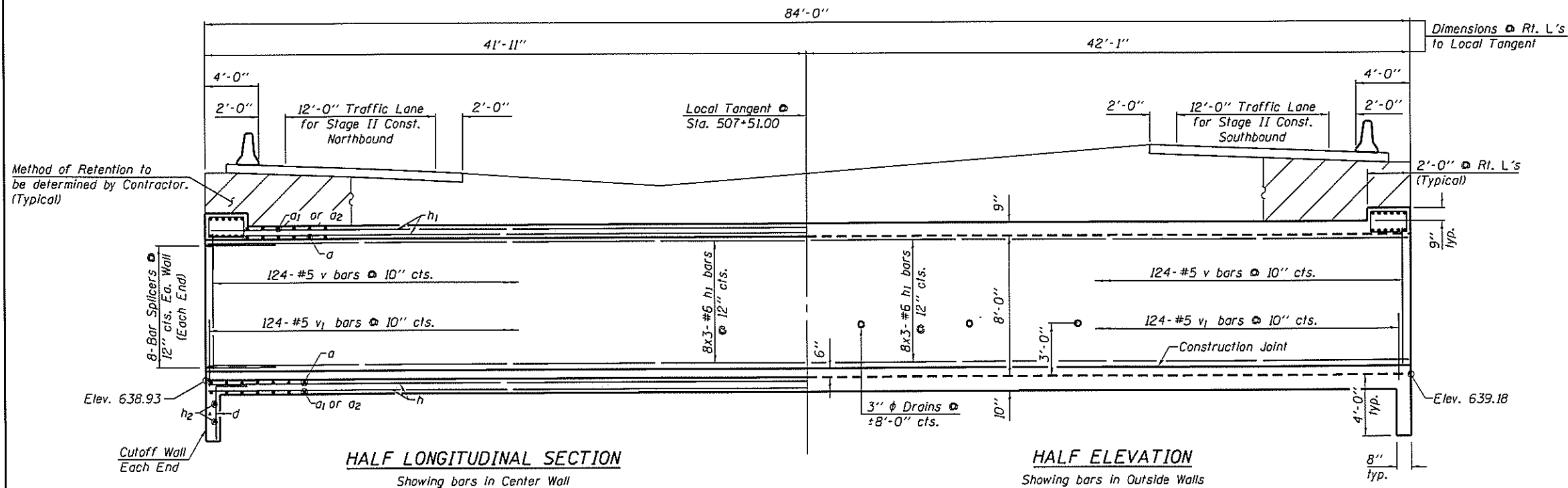
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FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

DB NO.:	46810K
FILE:	SUP-BM.DGN
DATE:	11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	71
FED. ROAD DIST. NO.	ILLINOIS			
**138-4)RS-2, 138-4)BR3			CONTRACT NO. 66757	
Sheet 4 of 11 Sheets				



BILL OF MATERIAL - STAGE I

Bar	No.	Size	Length	Shape
a	219	#6	23'-0"	
a1	282	#7	11'-0"	
a2	168	#4	7'-0"	
d	36	#4	5'-6"	
h	144	#5	27'-0"	
h1	183	#6	35'-9"	
h2	28	#6	21'-9"	
s	42	#4	6'-9"	
v	372	#5	8'-0"	
v1	372	#5	3'-0"	
Concrete Box Culverts			Cu. Yd.	175.4
Reinforcement Bars			Pound	34,080

Note: See Sheet 7 of 11 for additional Culvert Details and Bar Bends.
See Sheet 8 of 11 for Bar Splicer Details.

STAGE I CULVERT CONSTRUCTION
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

Note: Bars indicated thus, 18x4-#5 etc. indicates
18 lines of bars with 4 lengths per line.

MINIMUM BAR LAP - BARREL

#4	1'-4"
#5	1'-8"
#6	2'-0"

Note: All bar spacings shown are at
right angles to bars.

Sheet 5 of 11 Sheets

#4.....1'-4''
#5.....1'-8''
#6.....2'-0''

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	104	#6	23'-0"		s_1	21	#4	4'-6"	
a_1	133	#7	11'-0"		s_2	21	#4	4'-9"	
a_2	76	#4	7'-0"						
					t	83	#4	6'-9"	
d	32	#4	5'-6"						
					v	177	#5	8'-0"	
h_2	9	#6	21'-9"		v_1	177	#5	3'-0"	
h_5	2	#6	21'-0"		v_2	4	#5	8'-6"	
h_6	18	#4	18'-8"		v_3	4	#5	6'-3"	
h_7	18	#4	9'-5"		v_4	9	#5	7'-6"	
h_8	72	#5	25'-0"		v_5	11	#5	8'-9"	
h_9	122	#6	25'-3"		v_6	9	#5	10'-3"	
					v_7	8	#4	11'-6"	
$n(E)$	29	#6	5'-7"						
$n_1(E)$	27	#5	4'-3"		w	10	#5	18'-8"	
					w_1	10	#5	9'-5"	

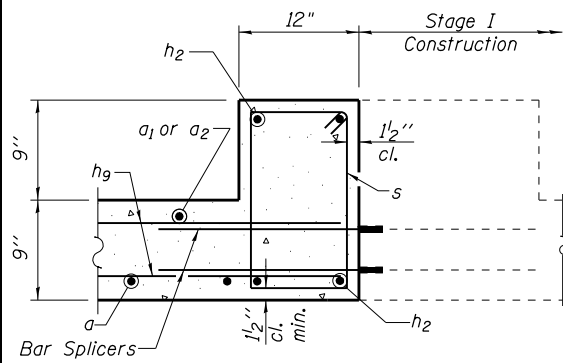
Concrete Box Culverts	Cu. Yd.	104.3
Reinforcement Bars, Epoxy Coated	Pound	360
Reinforcement Bars	Pound	17,470
Name Plate	Each	1
Stone Riprap, Class A4	Sq. Yd.	54
Filter Fabric	Sq. Yd.	54

STAGE II CULVERT CONSTRUCTION
SOUTHBOUND LANES
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

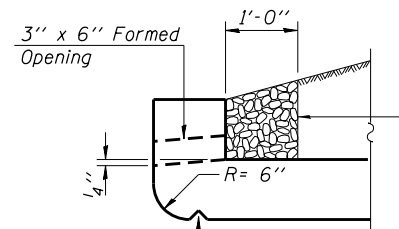
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JOB NO.: 46810K
FILE: CULV-DTLS(2).DGN
DATE: 11/11/08

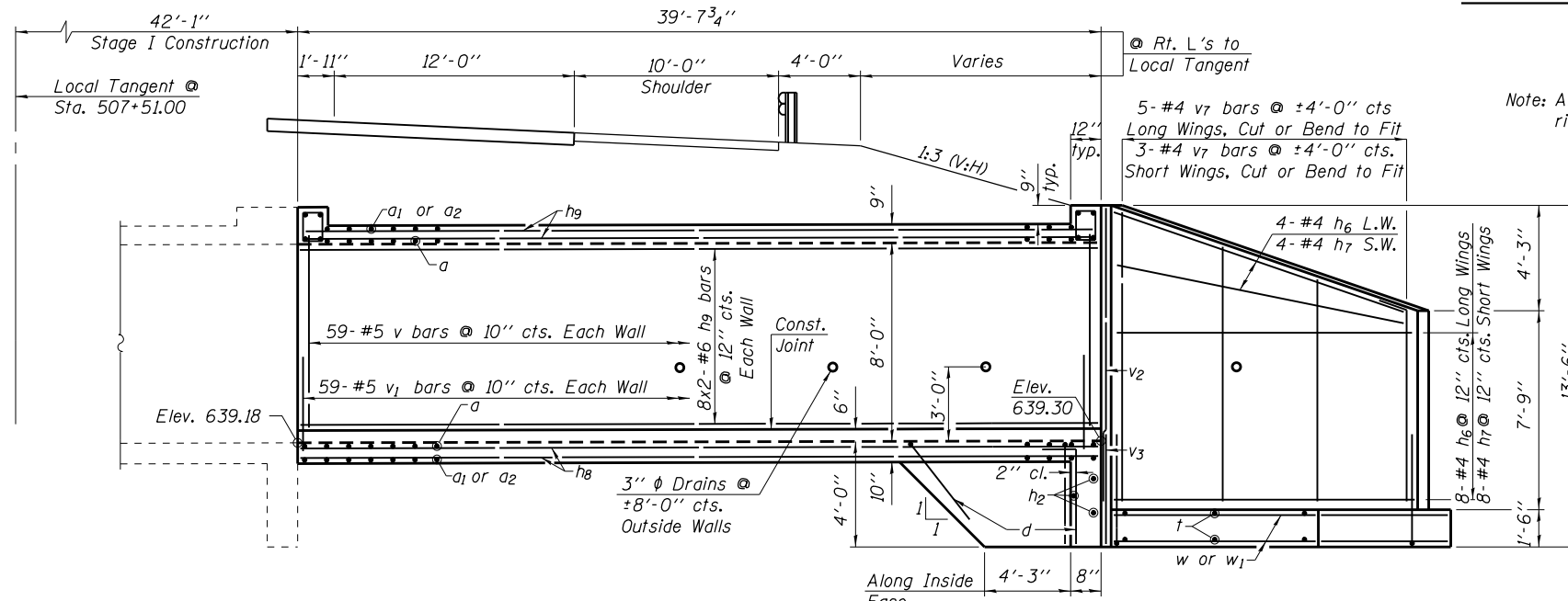
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*Coarse aggregate to be placed full length of all drained headwalls by Grading Contractor.
Cost included with Concrete Box Culverts.*



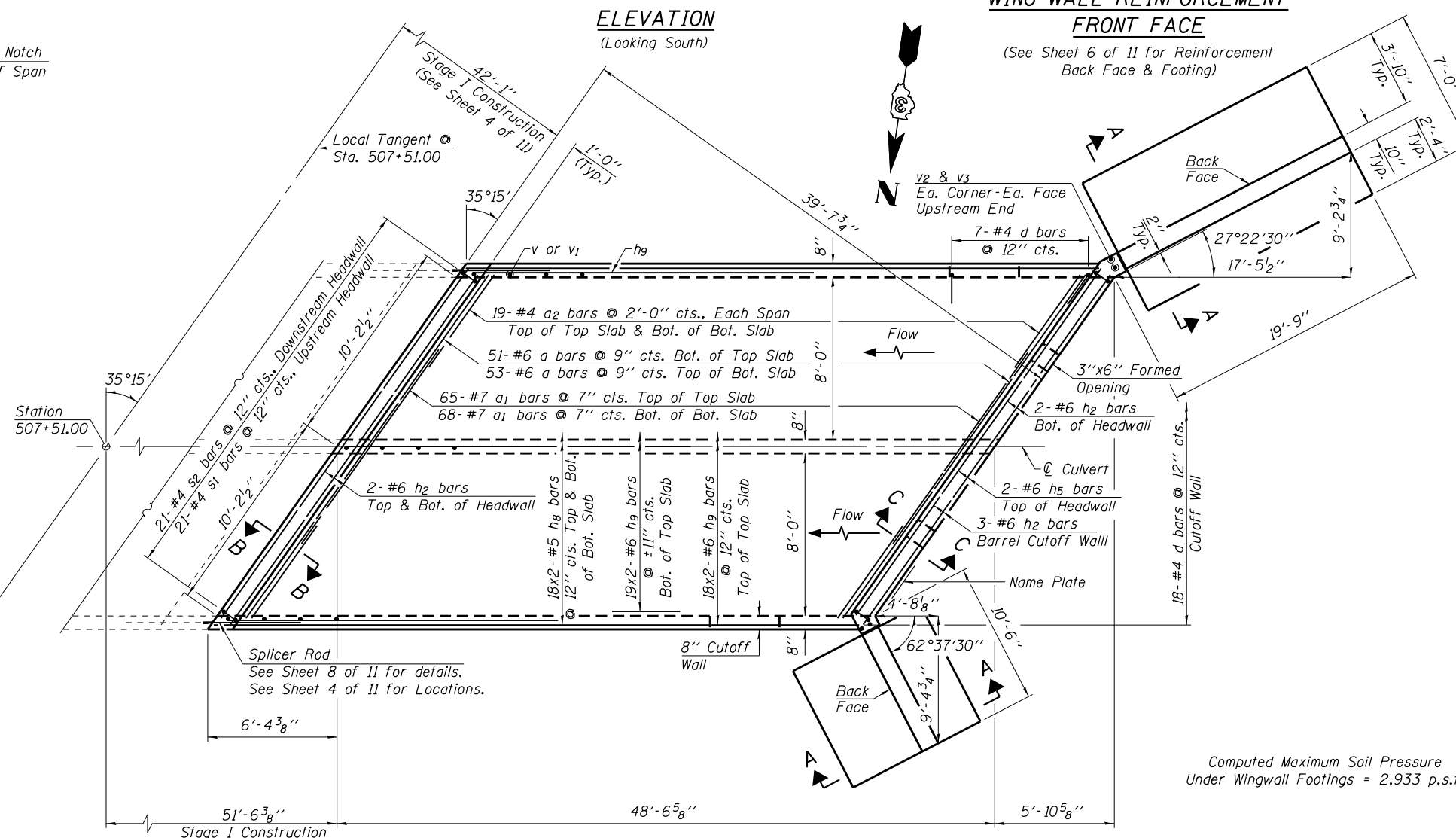
DRAIN DETAILS

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.



(See Sheet 6 of 11 for Reinforcement
Back Face & Footing)

(Looking South)

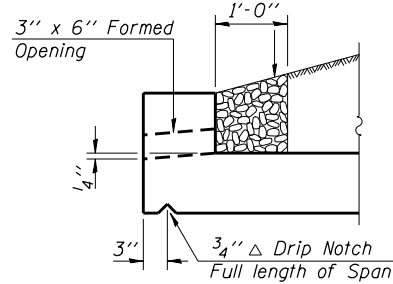


PLAN

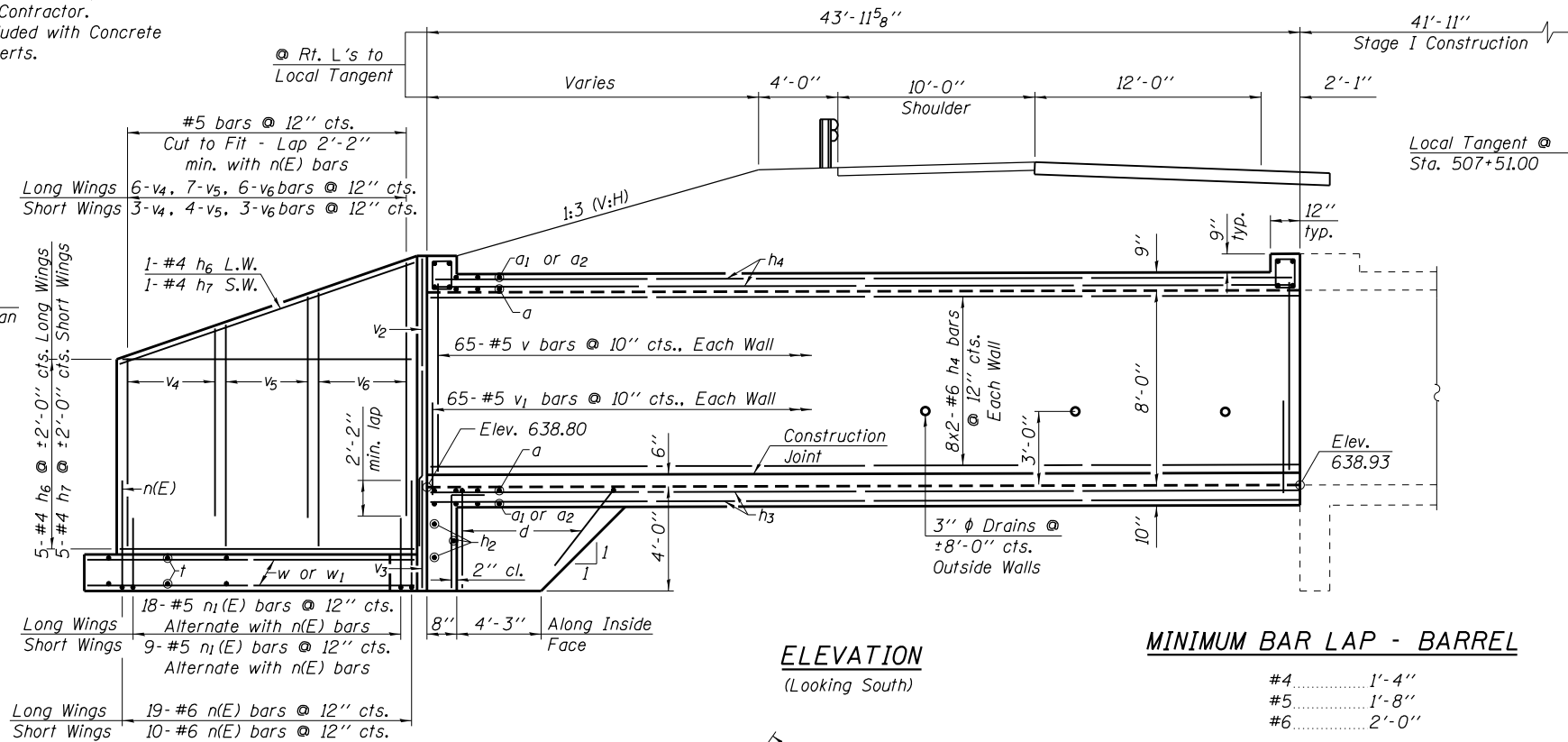
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	••	IROQUOIS	190	73
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 66757	
Sheet 6 of 11 Sheets				

Coarse aggregate to be placed full length of all drained headwalls by Grading Contractor. Cost included with Concrete Box Culverts.



AT DOWNSTREAM END
DRAIN DETAIL

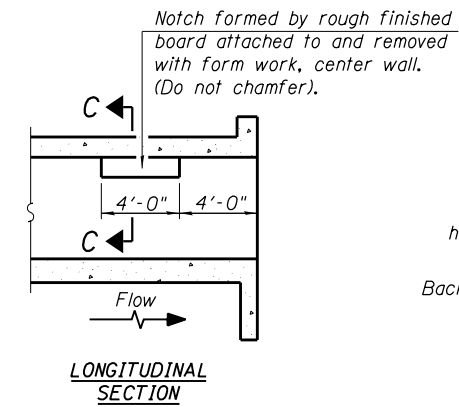


ELEVATION
(Looking South)

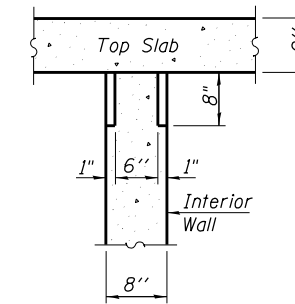
MINIMUM BAR LAP - BARREL

#4	1'-4"
#5	1'-8"
#6	2'-0"

Note: All bar spacings shown are at right angles to bars.

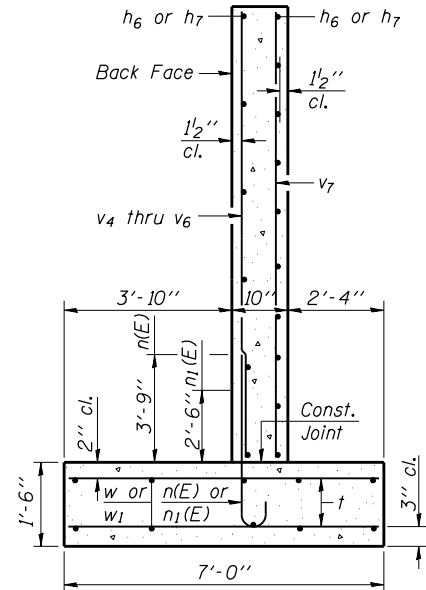


LONGITUDINAL
SECTION



SECTION C-C

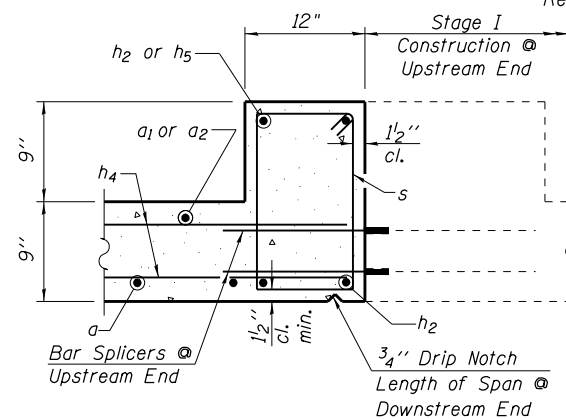
PHOEBE NESTING
SITE DETAILS
(Downstream End Only)



SECTION A-A

WING WALL REINFORCEMENT
BACK FACE

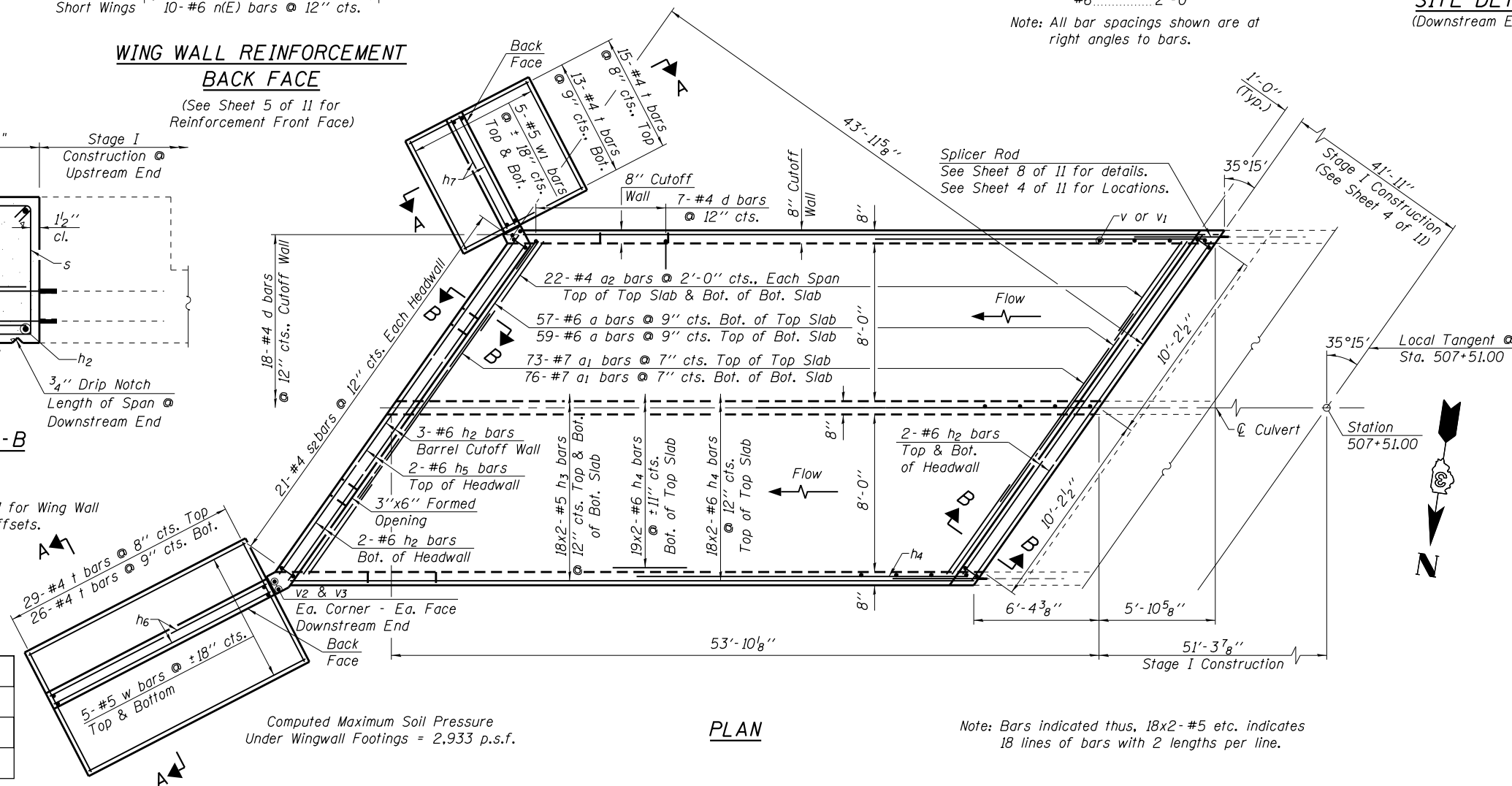
(See Sheet 5 of 11 for Reinforcement Front Face)



SECTION B-B

Note: See Sheet 5 of 11 for Wing Wall Dimensions and Offsets.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.



PLAN

Note: Bars indicated thus, 18x2-#5 etc. indicates 18 lines of bars with 2 lengths per line.

BILL OF MATERIAL - STAGE II (NORTHBOUND)

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a	116	#6	23'-0"	C	s2	42	#4	4'-9"	□
a1	149	#7	11'-0"	—					
a2	88	#4	7'-0"	—	t	83	#4	6'-9"	—
d	32	#4	5'-6"	—	v	195	#5	8'-0"	—
h2	9	#6	21'-9"	—	v1	195	#5	3'-0"	—
h3	72	#5	27'-9"	—	v2	4	#5	8'-6"	—
h4	122	#6	28'-0"	—	v3	4	#5	6'-3"	—
h5	2	#6	21'-0"	—	v4	9	#5	7'-6"	—
h6	18	#4	18'-8"	—	v5	11	#5	8'-9"	—
h7	18	#4	9'-5"	—	v6	9	#5	10'-3"	—
n(E)	29	#6	5'-7"	—	v7	8	#4	11'-6"	—
n1(E)	27	#5	4'-3"	—	w	10	#5	18'-8"	—
					w1	10	#5	9'-5"	—
Concrete Box Culverts									Cu. Yd. 113.0
Reinforcement Bars, Epoxy Coated									Pound 360
Reinforcement Bars									Pound 19,220
Stone Riprap, Class A4									Sq. Yd. 54
Filter Fabric									Sq. Yd. 54

Note: See Sheet 7 of 11 for additional Culvert Details & Bar Bends.

STAGE II CULVERT CONSTRUCTION
NORTHBOUND LANES
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

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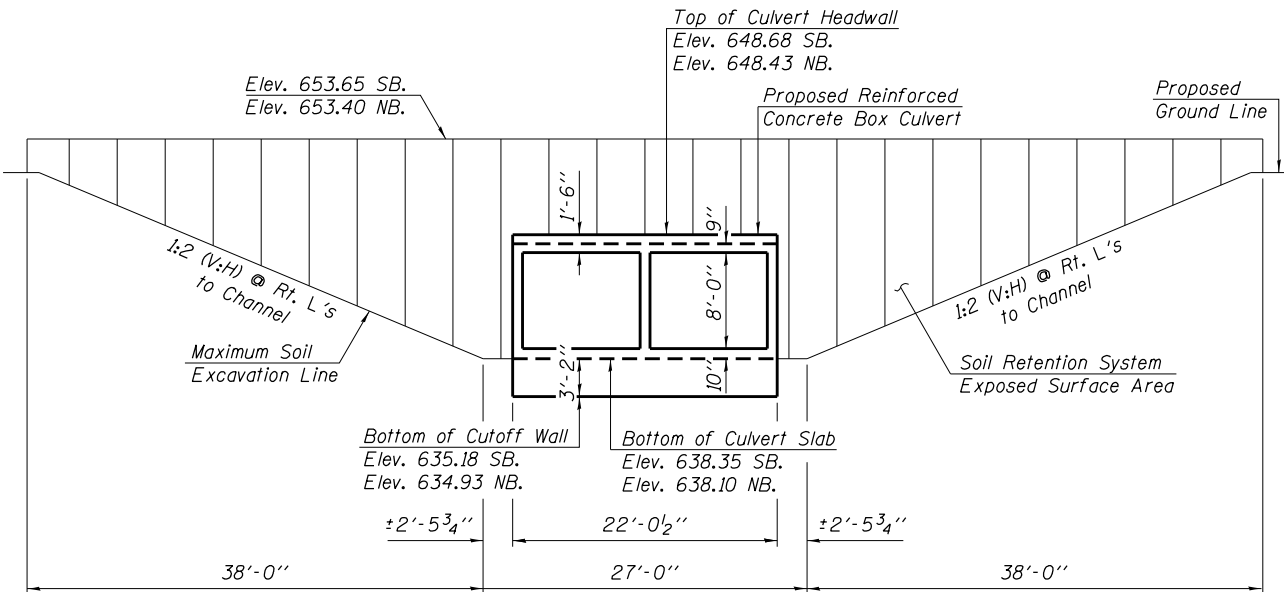
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FREEDPORT, IL ROCKFORD, IL ROCKFORD, IL SPRINGFIELD, IL

JOB NO.: 46810K
FILE: CULV-DTLS(3).DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	••	IROQUOIS	190	74
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66757		

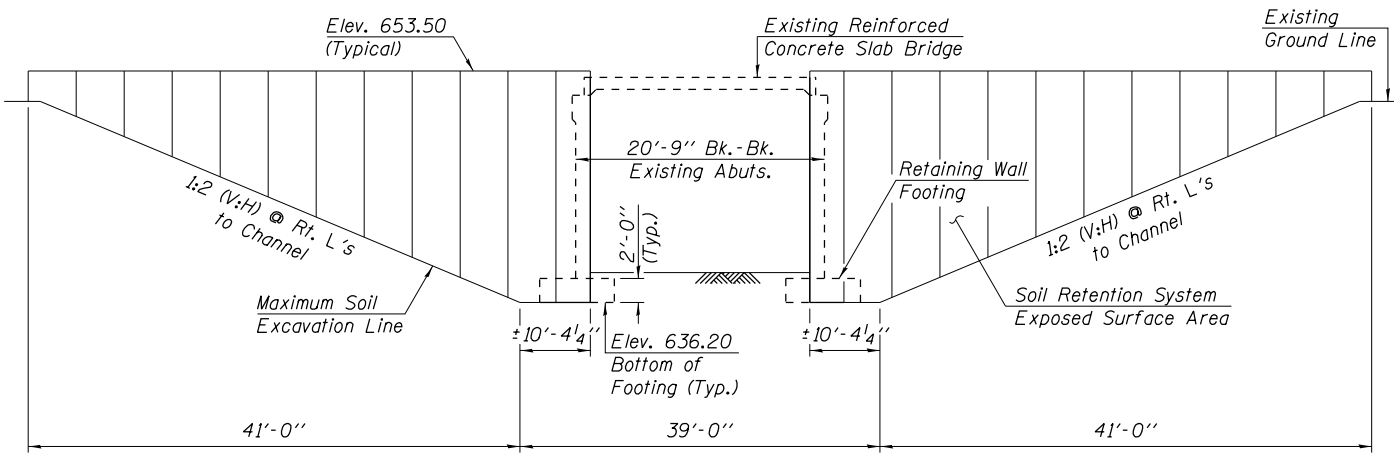
Sheet 7 of 11 Sheets



STAGE II - TEMPORARY SOIL RETENTION SYSTEM

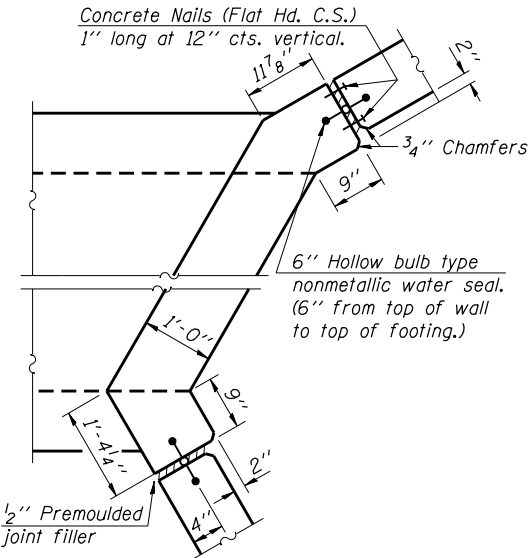
(Looking East @ Southbound Lane)
(Looking West @ Northbound Lane)

Note: All horizontal dimensions shown for limits of Temporary Soil Retention System are measured parallel to the Local Tangent at Sta. 507+51.00

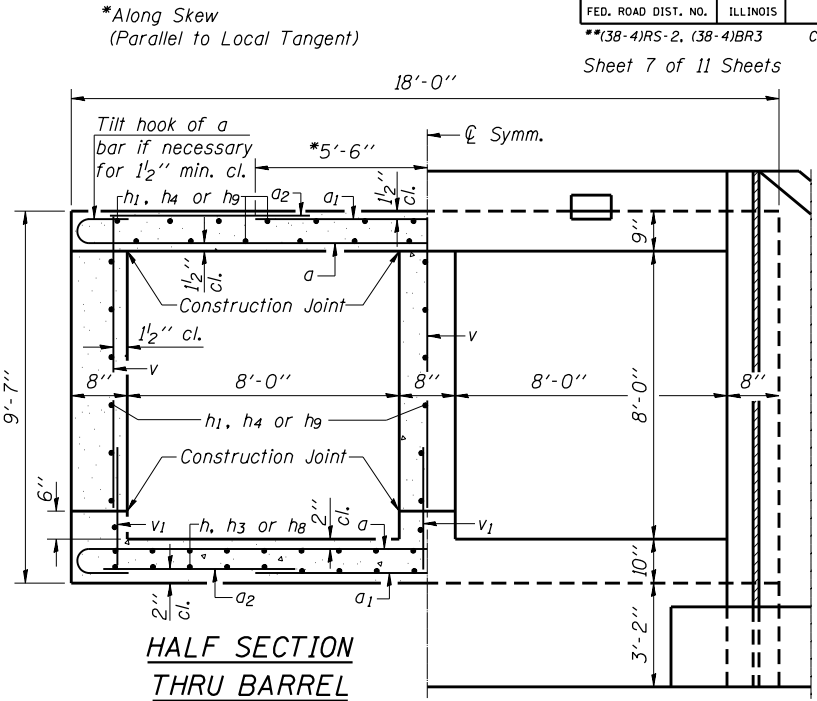


STAGE I - TEMPORARY SOIL RETENTION SYSTEM

(Looking West @ Southbound Lane)
(Looking East @ Northbound Lane)



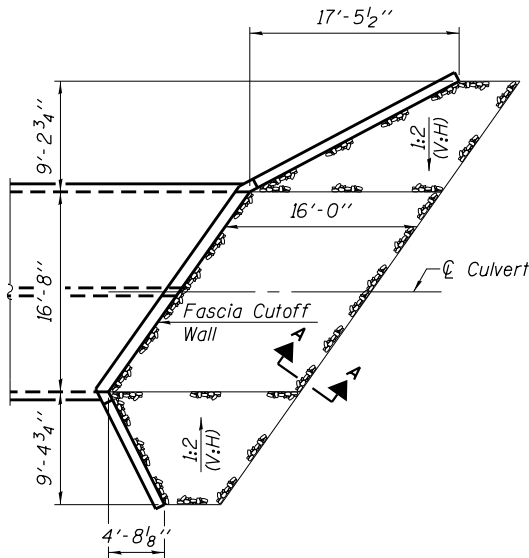
CORNER DETAIL



**HALF SECTION
THRU BARREL**

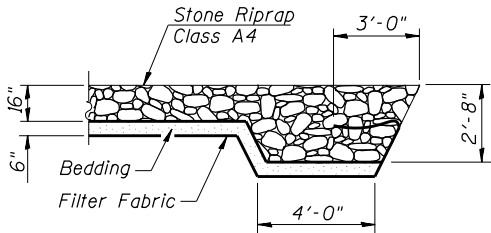
HALF END ELEVATION

CROSS SECTION THRU BARREL



STONE RIPRAP, CLASS A4 DETAIL

(Typical @ Each End of Culvert)



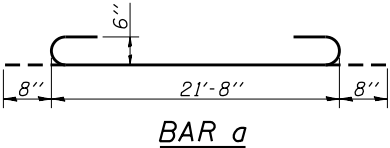
SECTION A-A

STATION 507+51
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. ROUTE 57
SEC. (38-4)RS-2, (38-4)BR3
LOADING HS20
STR. NO. 038-2019

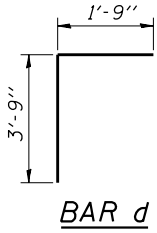
LETTERING FOR NAME PLATE

See Std. 515001

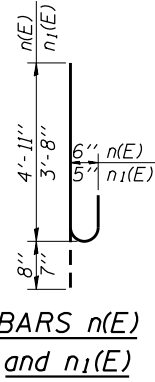
DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.



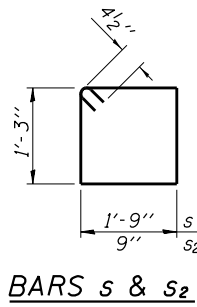
BAR a



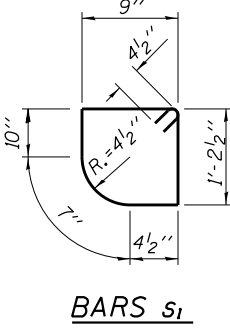
BAR d



**BARS n(E)
and n1(E)**



BARS s & s2



BAR s1

CULVERT DETAILS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

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JOB NO.: 46810K
FILE: CULV-DTLS(4).DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	75
FED. ROAD DIST. NO.	ILLINOIS			
**(38-4)RS-2, (38-4)BR3			CONTRACT NO. 66757	

Sheet 8 of 11 Sheets

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_l$
② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_l$
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES

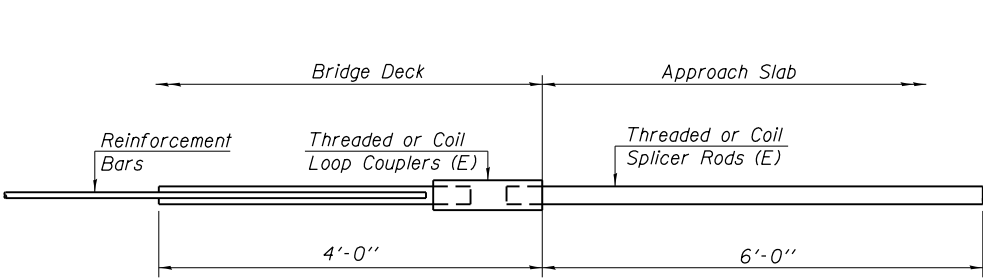
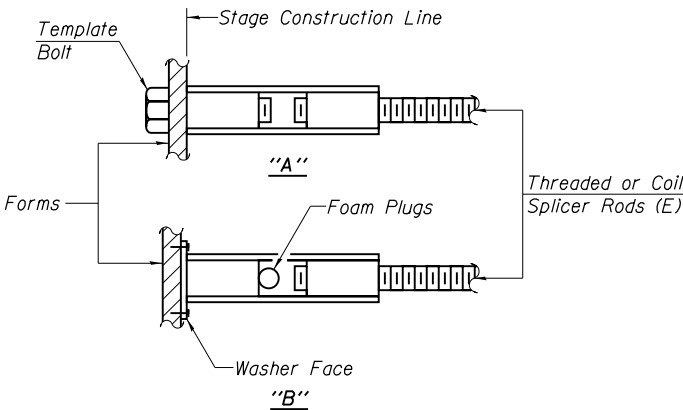
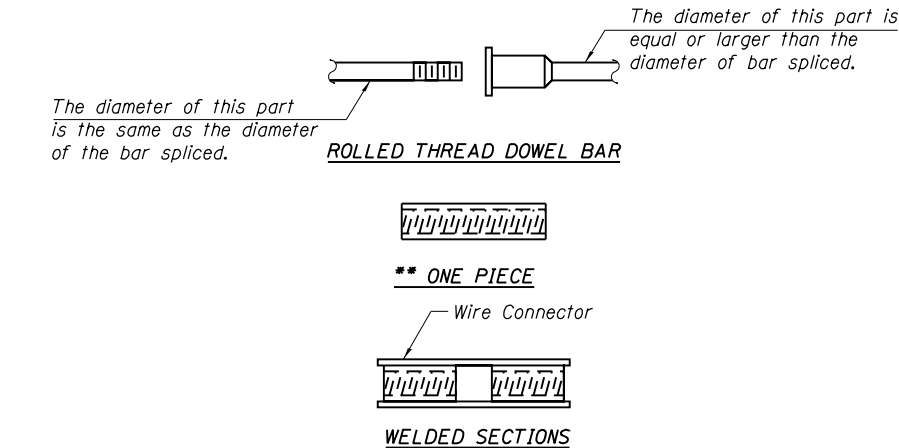
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

BAR SPLICER ASSEMBLY ALTERNATIVES

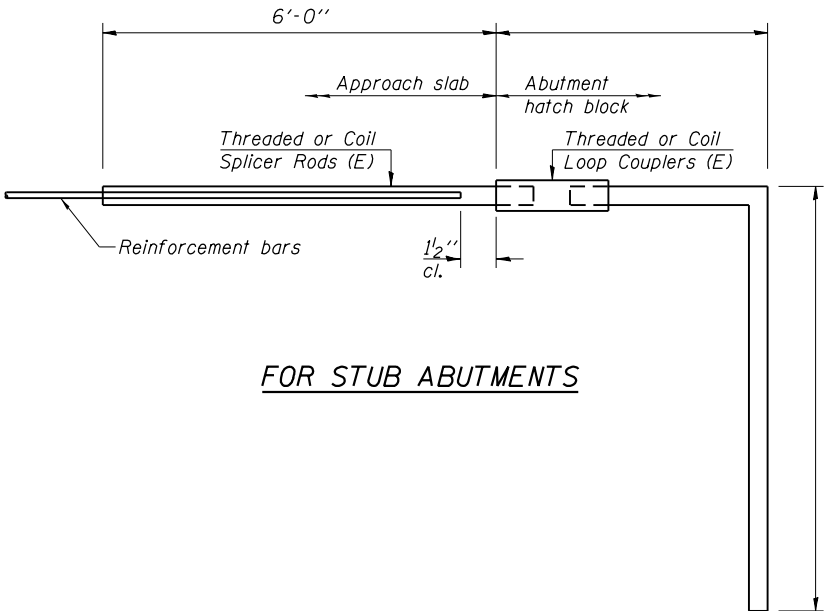
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

INSTALLATION AND SETTING METHODS

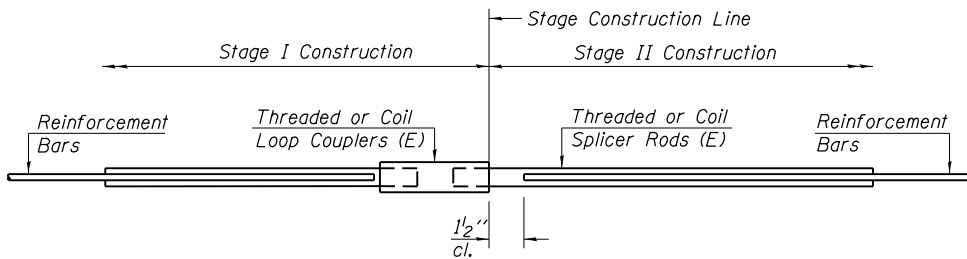
"A" :Set bar splicer assembly by means of a template bolt.
"B" :Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#6	74	Top Slab
#6	48	Walls
#5	72	Bot. Slab

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =

BAR SPLICER ASSEMBLY DETAILS

I-57 OVER

DANFORTH TOWNSHIP DRAINAGE DITCH

F.A.I. ROUTE 57

SECTION (38-4)RS-2, (38-4)BR3

IROQUOIS COUNTY

STATION 507+51.00

S.N. 038-2019

DESIGNED -	S.F.M.
CHECKED -	J.A.M.
DRAWN -	S.A.P.
CHECKED -	S.F.M. & J.A.M.

BSD-1

5-16-08

4440 ASH GROVE
SPRINGFIELD, IL, 62711
(217) 793-8600
www.fehr-graham.com



FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, E. ROCKFORD, E. ROCKFELLE, E. MONROE, W. SPRINGFIELD, IL

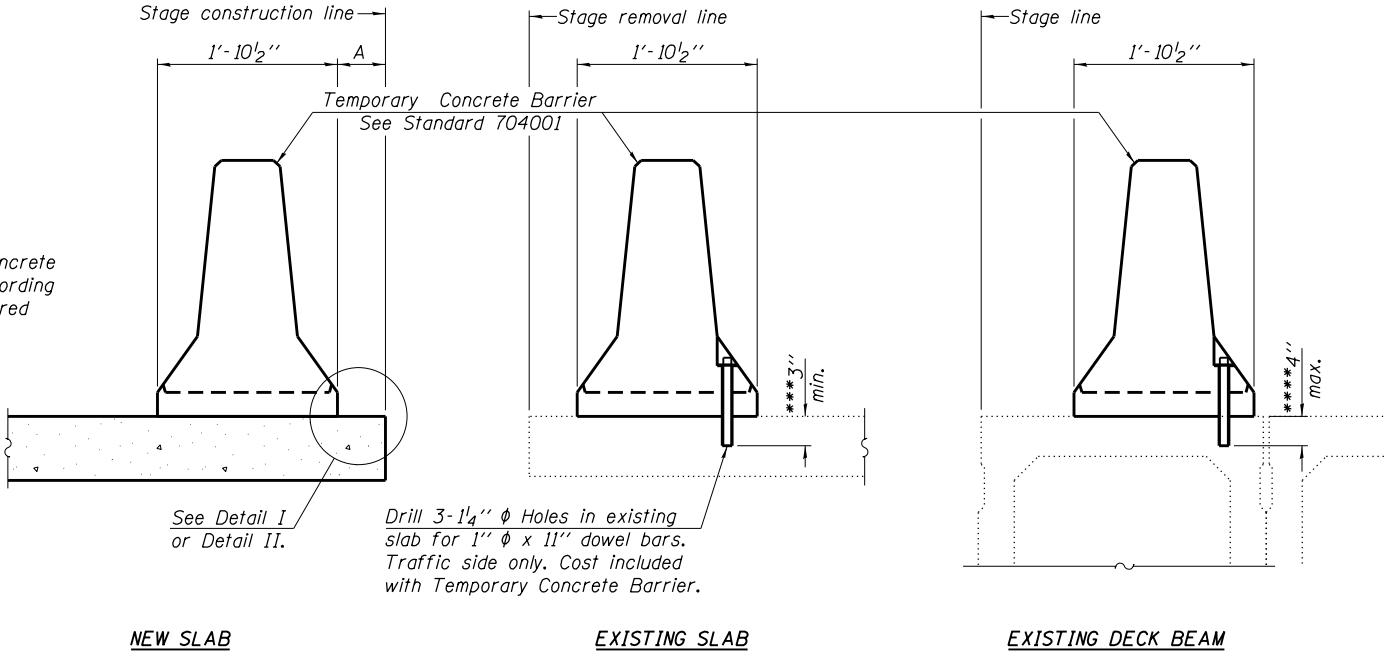
JOB NO.: 46810K
FILE: SPLICER.DGN
DATE: 11/11/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IROQUOIS	190	76
FED. ROAD DIST. NO.		ILLINOIS		
**(38-4)RS-2, (38-4)BR3			CONTRACT NO. 66757	

Sheet 9 of 11 Sheets

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

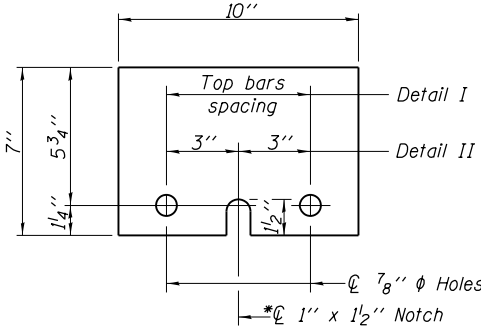
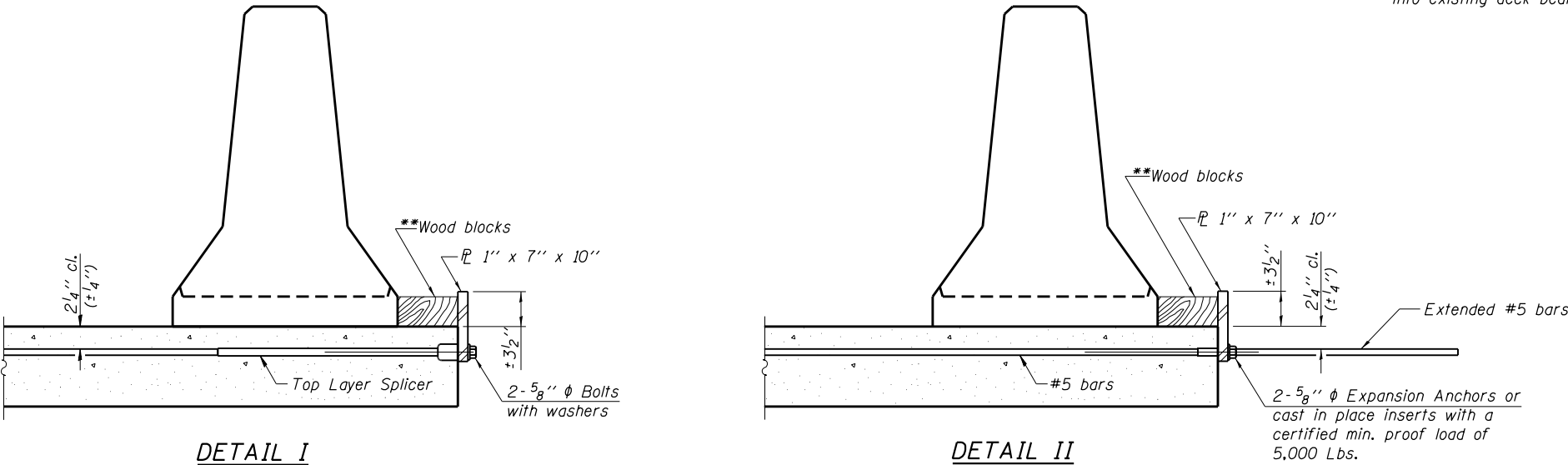
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate $\bar{C}$ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel $\bar{L}$ to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate $\bar{C}$ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete.
If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

***If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



STEEL RETAINER $\bar{L}$ 1" x 7" x 10"

*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	S.F.M.
CHECKED	J.A.M.
DRAWN	S.A.P.
CHECKED	S.F.M. & J.A.M.

R-27

5-16-08

TEMPORARY CONCRETE BARRIER
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

4440 ASH GROVE
SPRINGFIELD, IL, 62711
(217) 793-8600
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FREEPORT, IL, ROCKFORD, IL, ROCKFORD, IL, SPRINGFIELD, IL

JOB NO.: 46810K
FILE: BARRIER.DGN
DATE: 11/11/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	**	IRROQUOIS	190	77
FED. ROAD DIST. NO.	ILLINOIS			
**(38-4)RS-2, (38-4)BR3		CONTRACT NO. 66757		
Sheet 10 of 11 Sheets				

**Illinois Department
of Transportation**
Division of Highways
District #3, Ottawa

SOIL BORING LOG

Page 2 of 2

Date 5/16/62

ROUTE FAI 57 (57) DESCRIPTION I-57 over stream LOGGED BY H.W.B.

SECTION 39-4B 3 LOCATION NE 1/4, SE 1/4, SEC. 30, TWP. 27N, R11E, 3rd PM

COUNTY Inyoquips DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 038-0168

Station 507+51

BORING NO. B-2 S Abut N.B.L.

Station 507+69

Offset 45.00 ft of CL on Skew

Ground Surface Elev. 645.02 ft

D E P T H S	B L C I W S	U L C S I S Q u	M O S T
(ft)	(in)	(tsf)	(%)

Surface Water Elev. 641.12 ft

Stream Bed Elev. ft

Groundwater Elev. ft

First Encounter None ft

Upon Completion After 24 Hrs. 599.0 ft

Very stiff, gray, Clay Till
(continued)

8	2.3	25.0
	B	
10	2.3	19.0
	B	
11	2.7	23.0
	B	
11	1.9	26.0
	B	
14	2.5	23.0
	B	
18	3.1	23.0
	B	
15	3.1	23.0
	B	

End of Boring

593.52

BORING #2

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.

SOIL BORING LOGS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

**4440 ASH GROVE
SPRINGFIELD, IL, 62711
(217) 793-8600
www.fehr-graham.com**

FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

JOB NO.:	46810K
FILE:	BORINGS(1).DGN
DATE:	11/11/08



SOIL BORING LOG

Page 1 of 2

Date 5/17/62

ROUTE	FAI 57 (157)	DESCRIPTION	I-57 over stream	LOGGED BY	H.W.B.
SECTION	38-4B 3	LOCATION	NE 1/4, SE 1/4, SEC. 30, TWP. 27N, RNG. 11E, 3 rd PM		
COUNTY	Iroquois	DRILLING METHOD	Hollow Stem Auger	HAMMER TYPE	

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BORING #3



SOIL BORING LOG

Page 2 of 2

Date 5/17/62

ROUTE	FAI 57 (I57)	DESCRIPTION	I-57 over stream	LOGGED BY	H.W.B.
SECTION	38-4B 3	LOCATION	NE 1/4, SE 1/4, SEC. 30, TWP. 27N, RNG. 11E, 3 rd PM		
COUNTY	Iroquois	DRILLING METHOD	Hollow Stem Auger	HAMMER TYPE	

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

Page 1 of 1

Date 6/29/07

ROUTE	FAI 57 (I57)	DESCRIPTION	I-57 over stream	LOGGED BY	Larry Myers
SECTION	38-4B 3	LOCATION	NE 1/4, SE 1/4, SEC. 30, TWP. 27N, RNG. 11E, 3 rd PM		
COUNTY	Iroquois	DRILLING METHOD	Hollow Stem Auger	HAMMER TYPE	CME Automatic

STRUCT. NO. 038-2019		DEPTH H S	BLOW S	UCS Qu	MOIST T	Surface Water Elev. 641.12 ft		DEPTH H S	BLOW S	UCS Qu	MOIST T
Station 507-51						Stream Bed Elev. ft					
BORING NO. B-5 Confirmation Boring						Groundwater Elev.:					
Station 507+26						First Encounter dry ft					
Offset 0.00ft. At CL						Upon Completion dry ft					
Ground Surface Elev. 651.60 ft						After Hrs. ft					
Augered, black gray, Silty Clay Loam- fill						Very stiff, gray, Silty Clay to Clay Till (continued)		5 2.7 23.4			
649.60						630.10		6 B			
Very stiff to stiff, black gray brown, Silty Clay to Silty Clay Loam- fill						Stiff, gray, Silty Clay to Clay		3 1.3 24.7			
3								3 B			
4 3.3 21.1								4 B			
7 P											
1								1 1.6 25.8			
2 2.0 23.2								3 B			
3 P											
645.10								1 1.5 26.1			
Hard, brown gray, Silty Clay to Silty Clay Loam Till								3 B			
3											
5 7 21.4								4 B			
7 S											
3								1 1.4 25.2			
4 4.3 22.1								3 B			
6 S											
4											
9 7.0 25.7								1 1.6 24.3			
12 S								4 B			
637.60											
Hard, gray, Silty Clay Till						End of Boring		615.60			
7											
9 7.0 18.1											
12 S											
5											
7 5.0 19.9											
10 S											
832.60											
Very stiff, gray, Silty Clay to Clay Till											
2											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)

DESIGNED	-	S.F.M.
CHECKED	-	J.A.M.
DRAWN	-	S.A.P.
CHECKED	-	S.F.M. & J.A.M.

BORING #5



SOIL BORING LOG

Page 1 of 2

Date 5/18/62

ROUTE FAI 57 (I57) DESCRIPTION I-57 over stream LOGGED BY H.W.B.
SECTION 38-4B 3 LOCATION NE 1/4, SE 1/4, SEC. 30, TWP. 27N, RNG. 11E, 3rd PM
COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

Page 2 of 2

Date 5/18/62

ROUTE FAI 57 (157) DESCRIPTION 1-57 over stream LOGGED BY H.W.B.
SECTION 38-4B 3 LOCATION NE 1/4, SE 1/4, SEC. 30, TWP. 27N, RNG. 11E, 3rd PM
COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 030-0168		Surface Water Elev. 641.12 ft		
Station 507+51		Stream Bed Elev. _____ ft		
BORING NO. B-4 N Abut N B L		Groundwater Elev.:		
Station 507+18		First Encounter _____ ft		
Offset 70.00 ft L of CL on Skew		Upon Completion None ft		
Ground Surface Elev. 650.96 ft		After _____ Hrs. _____ ft		
Stiff, gray, Clay Till, occasional Sand and Silt pockets (continued)	(ft)	(/ft)	(tsf)	(%)
	9	1.8	25.0	
		B		
	8	1.6	24.0	
		S		
	8	1.8	24.0	
		S		
	12	1.8	24.0	
		S		
Very stiff, gray, Clay Till	11	2.5	25.0	
		B		
End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T205)

BORING #4

SOIL BORING LOGS
I-57 OVER
DANFORTH TOWNSHIP DRAINAGE DITCH
F.A.I. ROUTE 57
SECTION (38-4)RS-2, (38-4)BR3
IROQUOIS COUNTY
STATION 507+51.00
S.N. 038-2019

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ENGINEERING AND SCIENCE CONSULTANTS
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

OBJ NO.:	46810K
FILE:	BORINGS(2).DGN
DATE:	11/11/08

GENERAL NOTES

Class X concrete shall be used throughout except in hand rails

Handrail concrete shall be used in hand rails

The concrete floor slab shall be finished in accordance with Article 5/19 of the Standard Specifications

The handrail concrete in the rail posts and railings shall be poured in separate operations

The following surfaces of the Bridge shall be waterproofed: entire back face of abutments, back faces of retaining walls and wing walls from top of footing to one foot below top of walls

Waterproofing shall be done in accordance with Article 5/21 of the Standard Specifications

STATION 348+54.5
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57 SEC. 38-4B
F.A. PROJ. I-57-6(83)
LOADING HS 20 & ALT.

NAME PLATE LETTERING

See Standard 2113-1

CURVE DATA

PI Sta 339+47.27
 $\Delta = 35^{\circ}50'48.23''$
 $D = 01^{\circ}30'00''$
 $T = 1235.46$
 $L = 2389.78$
 $R = 3819.72$
 $E = 194.83$
 $SE = 0017$ (Remove Crown)
 SE Attained $326+40.87$ to $327+82.75$
 $350+30.65$ to $351+72.53$

DEC. 10 1962

DESIGNED	Wei Heisong
CHECKED	Richard Pao W. Heisong
DRAWN	J.L. Armstrong
CHECKED	R.P.

EXAMINED *W. Baumann*
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED *E. Herberich*
ENGINEER OF DESIGN

APPROVED *V. E. Hoff*
CHIEF HIGHWAY ENGINEER

PLAN

WATERWAY INFORMATION

Drainage Area ----- 620 Acres
Character ----- Cultivated
Required Opening - (50 Yr Fl) - 125 Sq Ft
Proposed Opening ----- 125 Sq Ft
Ordinary Water Elev 660.9
Low Water Elev 648.9

DESIGN STRESSES

$f_c = 1400 \text{ psi. Super}$
 $f_c = 1000 \text{ psi. Sub}$
 $f_s = 20,000 \text{ psi. Reinf.}$
 $v = 75 \text{ psi. Ftgs}$
 $n = 10$
 $\text{Safe Soil Bearing Capacity} = 40 \text{ K.S.F.}$
LOADING H20-S16-44 & ALT.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Channel Excavation	Cu.Yds			160
Class A Excavation for Structures	Cu.Yds		470	470
Class B Excavation for Structures	Cu.Yds		1220	1220
Class X Concrete	Cu.Yds	90.2	4559	546.1
Handrail Concrete	Cu.Yds	3.0		3.0
Reinforcement Bars	Lbs	25,130	49,490	74,620
Name Plates	Each	2		2
Protective Coat	Sq.Yds	227		227

PROJ. I-57-6(83)278
GENERAL PLAN & ELEVATION
DANFORTH #3 DRAINAGE DITCH
F.A.I. RT. 57 SEC. 38-4B
IROQUOIS COUNTY
STA. 348+54.5

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -
ct\pw\work\pw\dot\duncanbd\dms30308\ep05005-sht-F10.DGN		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 6/2/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FOR INFORMATION ONLY
EXISTING SN 038-0011/0012

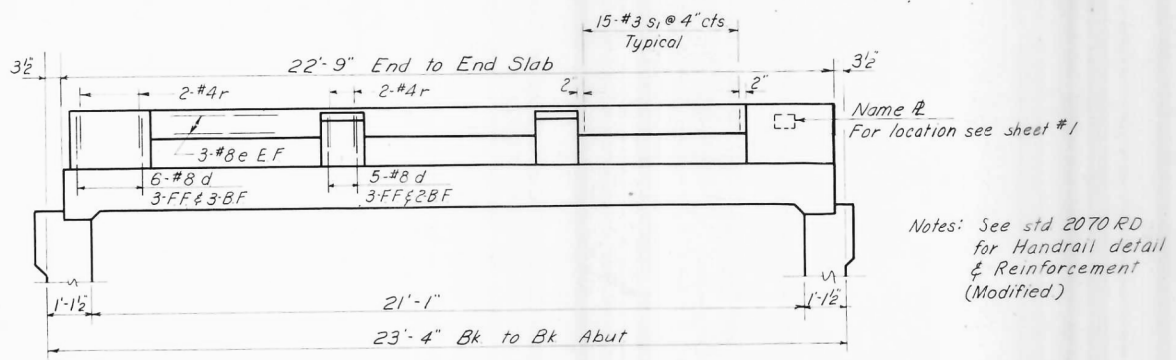
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	•	IROQUOIS	190	79
•(38-4)RS-2, (38-4)BR,BR1,BR3		CONTRACT NO. 66757		

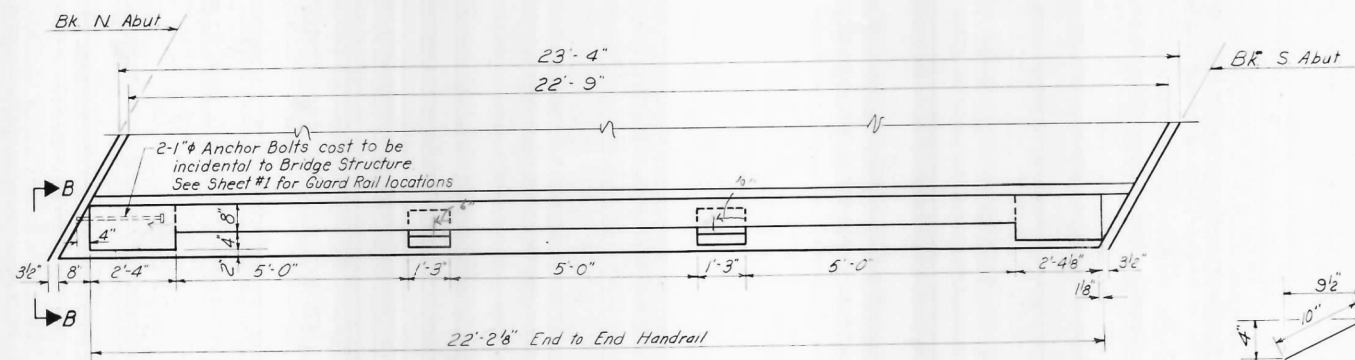
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	SHEETS	NO.	SHEET NO.
157	*	IROQUOIS	82	24	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

* 38-4, 4B, 4B-1, 4B-2, 4B-3.

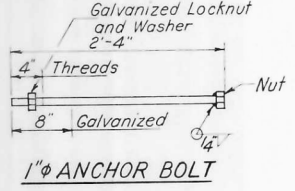


ELEVATION

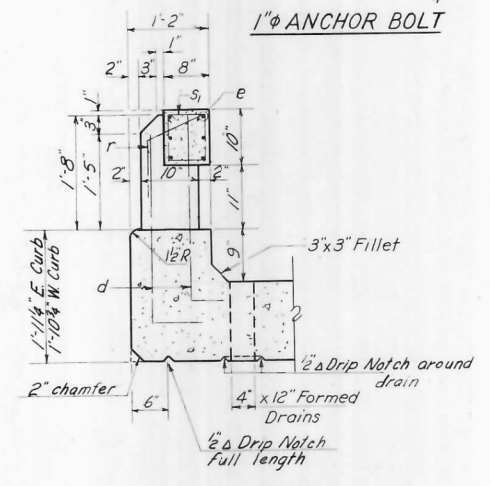


PLAN

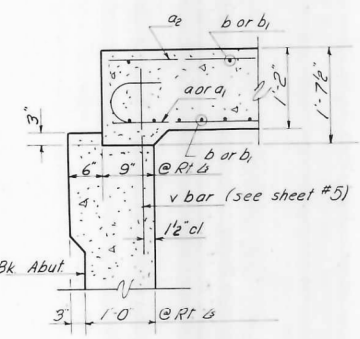
(Showing West Handrail, East Handrail Similar By Rotation Thru 180°)



VIEW B-B



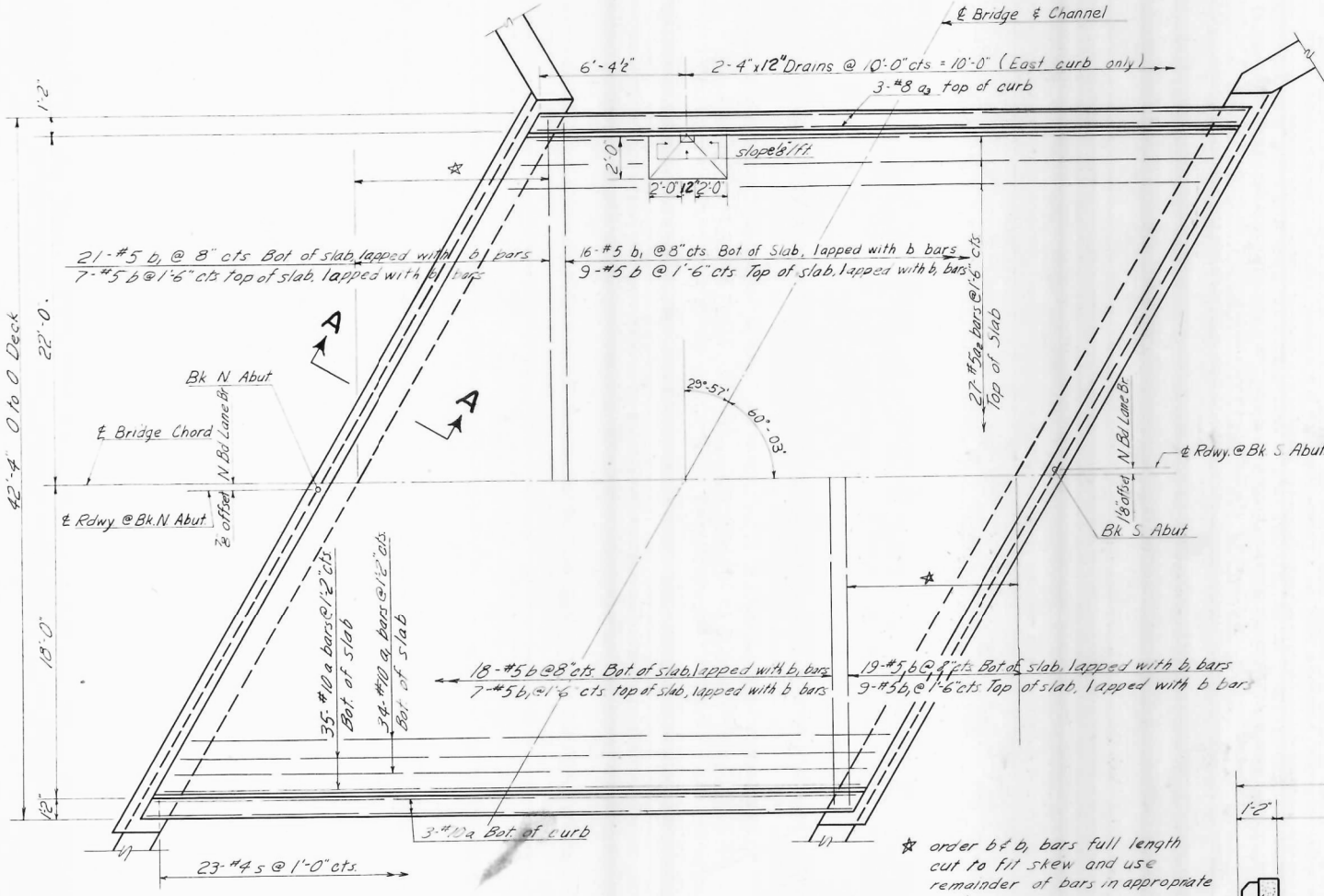
CURB DETAIL



SEC. A-A

BILL OF MATERIAL

Bar	No	Size	Length	Shape
a	82	#10	25'-4"	U
a ₁	68	#10	22'-6"	U
a ₂	54	#5	22'-6"	U
a ₃	12	#8	22'-6"	U
b	106	#5	19'-9"	U
b ₁	106	#5	23'-9"	U
d	88	#8	3'-6"	U
e	24	#8	21'-9"	U
r	32	#4	2'-3"	U
s	92	#4	5'-9"	U
s ₁	180	#3	2'-11"	U
Class x Concrete Cu yds 90.2				
Reinforcement Bars Lbs 25,130				
Handrail Concrete Cu yds 3.0				
Name Plates Each 2				



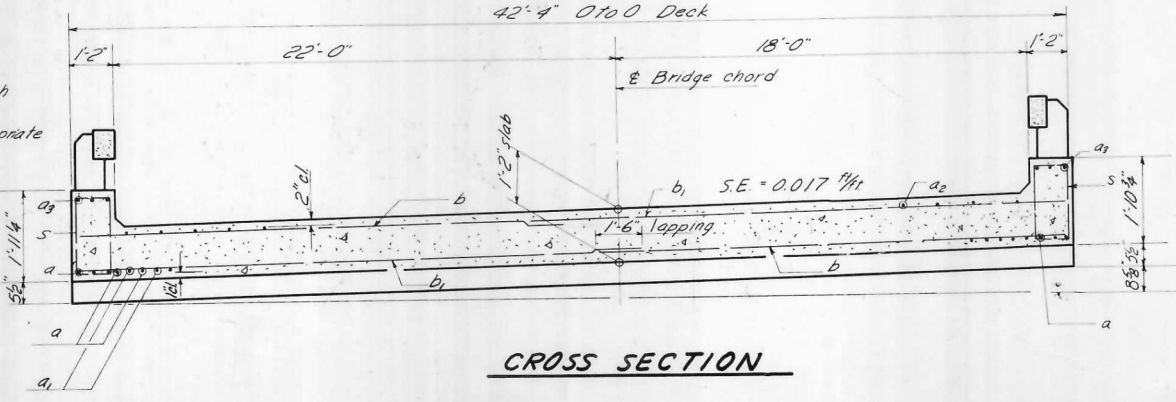
PLAN

(Showing N. Bound Lane Bridge. S. Bound lane Br similar by rotation thru 180°) See sheet 1 of 6 for offset of S. Bd Lane of Bridge

Dec. 10 19 62

DESIGNED	Wei Heng
CHECKED	Richard P.
DRAWN	T. Fuller
CHECKED	R. P.

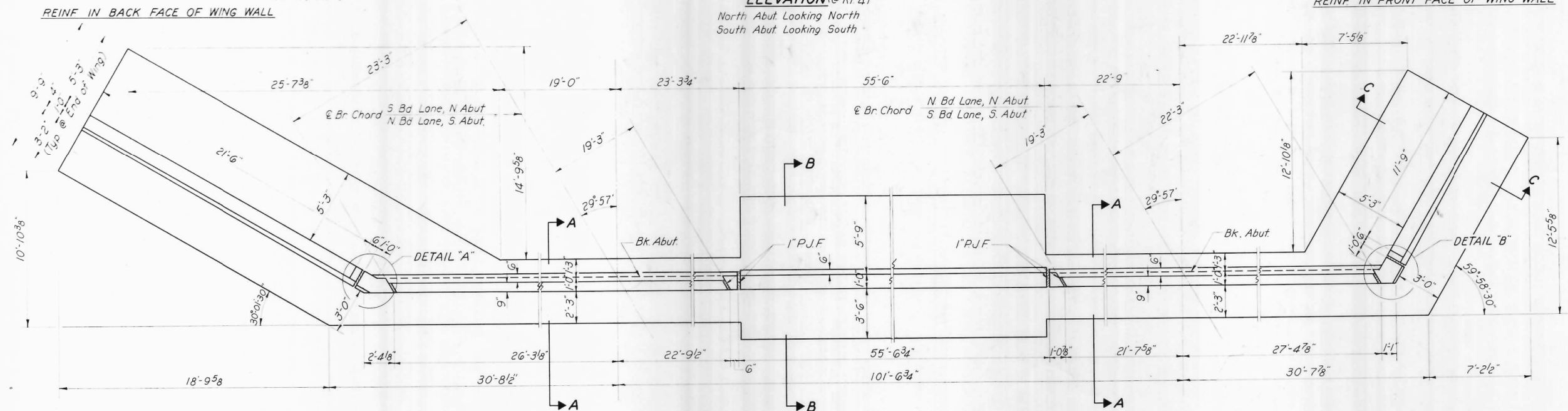
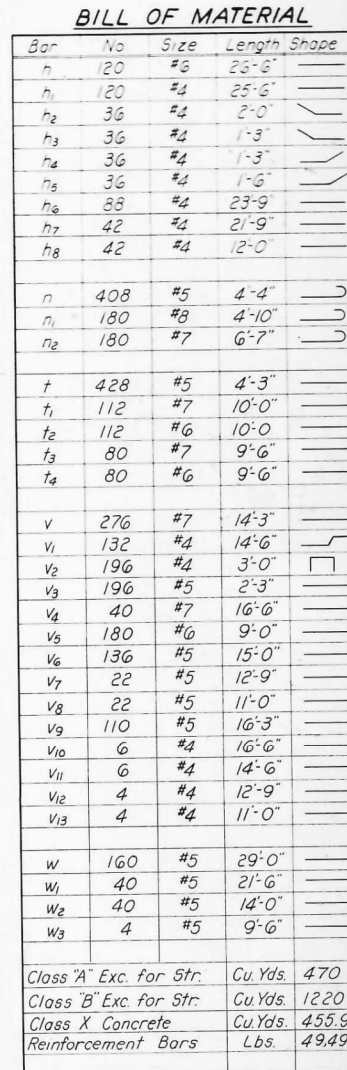
EXAMINED	W. Baumann
PASSED	E. H. H.
APPROVED	V. E. Hoff



CROSS SECTION

SUPERSTRUCTURE
N.E.S. BD LANE BRIDGES
F.A.I. RT. 57 SEC. 38-4B
IROQUOIS COUNTY
STA. 348+54.5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 6 SHEETS
S.B. 1 F.A. 157	*	IROQUOIS	82	25	
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		



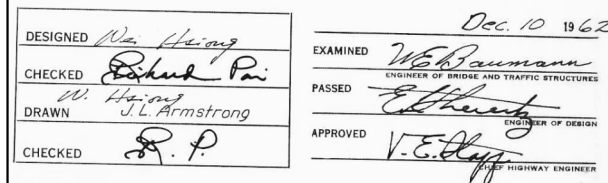
NOTE:
For all Details & Sections
See Sheet 6 of 6

DESIGNED	<i>W. J. Haines</i>	EXAMINED	<i>W. C. Baumann</i>
CHECKED	<i>Richard P. Haines</i>	PASSED	<i>E. L. Haines</i>
DRAWN	<i>J. L. Armstrong</i>	APPROVED	<i>V. E. Haines</i>
CHECKED	<i>R. P. Haines</i>		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. 1 A 157	*	IROQUOIS	62	26
FED. ROAD DIST. NO. 1	ILLINOIS		FED. AID PROJECT	

SHEET NO. 6
6 SHEETS

* 38-4, 4B, 4B-1, 4B-2, 4B-3



FILE NAME =	USER NAME = duncenbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION FOR INFORMATION ONLY EXISTING SN 038-00110012				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw_work\p\idot\duncenbd\dms30388\ep5005-sh\F10.DGN		DRAWN -	REVISED -					57	*	IRROQUOIS	190	82
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -					(38-4)RS-2, (38-4)BR,BR1,BR3 CONTRACT NO. 66757 ILLINOIS FED. AID PROJECT				
PLOT DATE = 6/2/2014		DATE -	REVISED -									
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			

Q.M. : #14 R.R. Spike in Fence Post of N. Bank
of ditch 180' L. Sta. 398+96. Elev. 653.122
No Existing Structure..

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. /
57	*	IROQUOIS	82	27	4 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT: I-57-G(83)278.					
* 38-4, 48, 48-1, 48-2, 48-3					

GENERAL NOTES

Class II Concrete shall be used throughout, except in handrail.
Handrail Concrete shall be used in concrete rail posts and railing.
The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.
The concrete rail posts and railing shall be poured in separate operations.
For backfill behind abutments held off the top by Superstructure see Article 50.10 of the Standard Specifications.
The following surfaces of the bridge shall be waterproofed: the back face of the abutments, retaining walls and wingwalls from the top of the footings to one foot below top of wingwalls.
Waterproofing shall be done in accordance with Article 51.61 of the Standard Specifications.
Non metallic water seal used in the wing joints shall extend from the top of the footing to within 6" of the top of the wing.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Channel Excavation	Cu. Yd.		720	720
Class A Excavation for Structures	Cu. Yd.		430	430
Class B Excavation for Structures	Cu. Yd.		790	790
Class II Concrete	Cu. Yd.	82.2	383.4	465.6
Name Plates	Each	2		2
Protective Coat	Sq. Yd.			235
Handrail Concrete	Cu. Yd.	3.4		3.4
Reinforcement Bars	Lb.	24,780	37,580	62,360

STATION 399+21
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57-SEC. 38-4B-1
F.A. PROJECT I-57-G(83)
LOADING H520 & ALT.
NAME PLATE
See Std. E113-1

CURVE DATA

P.I. Sta. 396+10.78
Δ = 05°-14'-17.35"
D = 00°-30'
T = 521.15
L = 1047.63
R = 11459.16
E = 11.09'
S.E. = 0.01 (Remove Gravel)
S.E. Affected: 390+36.60 To 391+36.60
400+84.23 To 401+84.23

WATERWAY INFORMATION

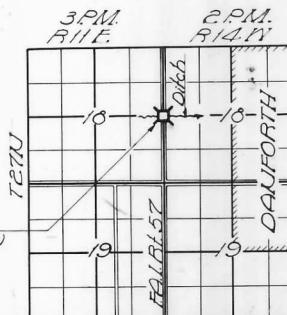
Drainage Area 420 Acres
Character Cultivated
Required Opening (50 Yr. Fl.) 114 Sq. Ft.
Present Opening ~ 39 Sq. Ft.
Proposed Opening 114.39 Sq. Ft.
Ordinary Water Elev. 644.4
Low Water Elev. 643.4

DESIGN STRESSES

$R_c = 1400$ p.s.i. Super
 $R_c = 1000$ p.s.i. Sub.
 $R_s = 20,000$ p.s.i. Reinfr.
 $v = 75$ p.s.i. Flg.
 $n = 10$
LOADING H520-44 & ALT.

Max. Flg. Pressure = 1.5 T/S.F.

LOCATION SKETCH



PROJ. I-57-G(83)278
GENERAL PLAN & ELEVATION
DANFORTH #3 DRAINAGE DITCH
F.A.I. RT. 57-SEC. 38-4B-1
IROQUOIS COUNTY
STATION 399+21

DESIGNED	D. Spore
CHECKED	C. L. H. (Baker)
DRAWN	del. jacob
CHECKED	C. L. H.

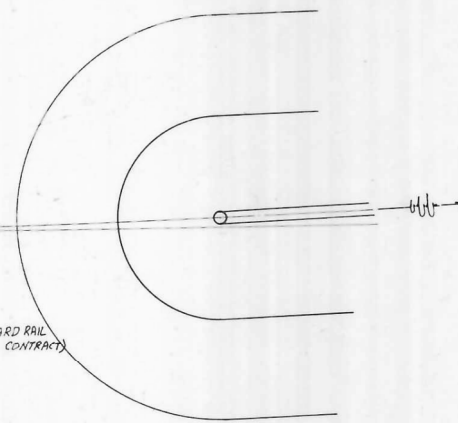
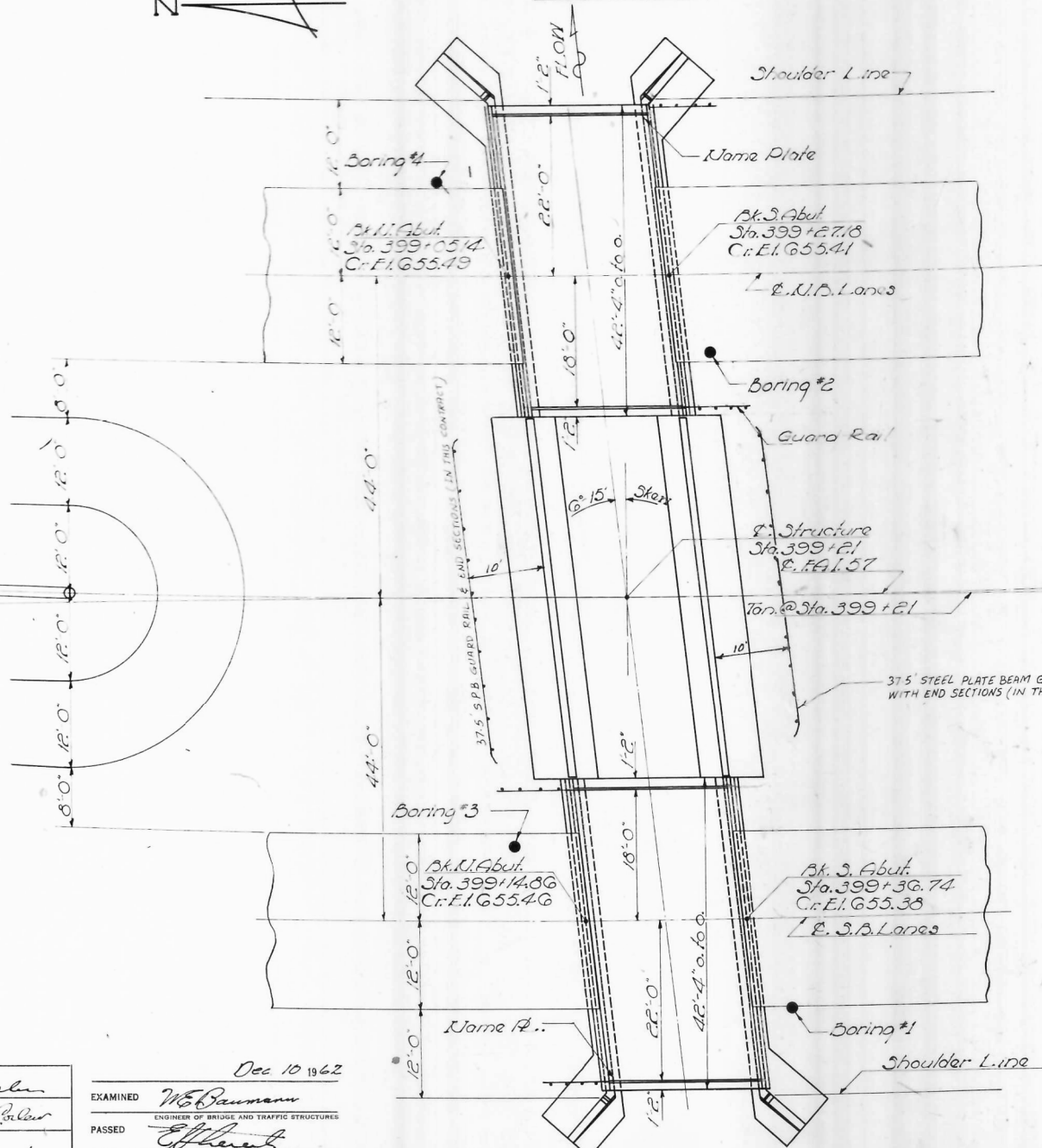
EXAMINED	W. Baumann
PASSED	E. H. (Baker)
APPROVED	V. E. H. (Baker)

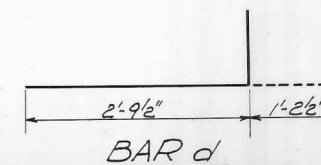
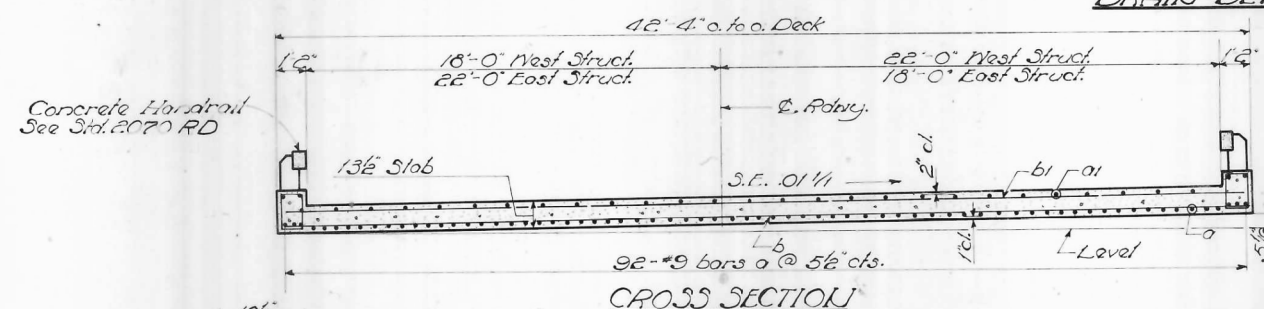
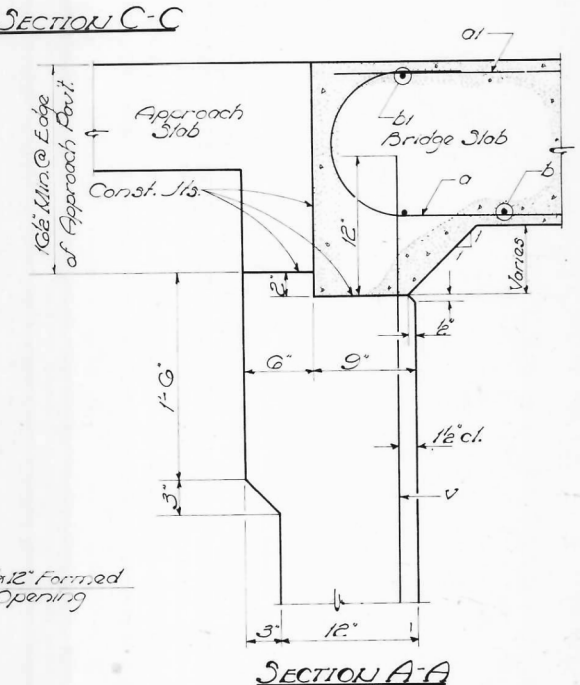
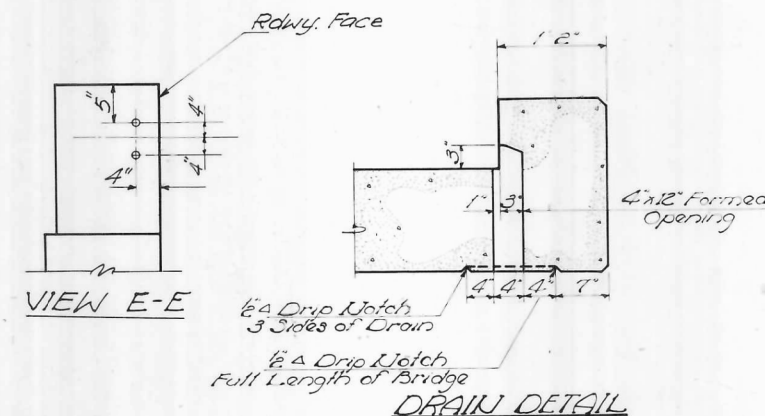
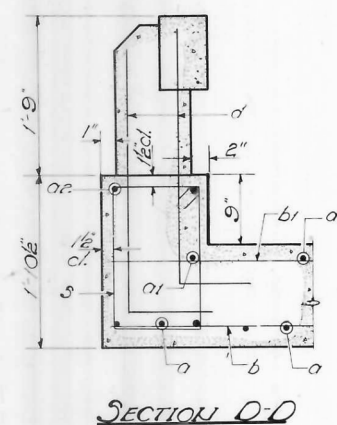
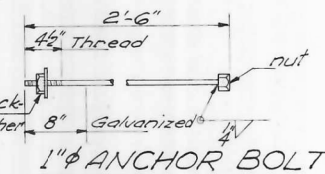
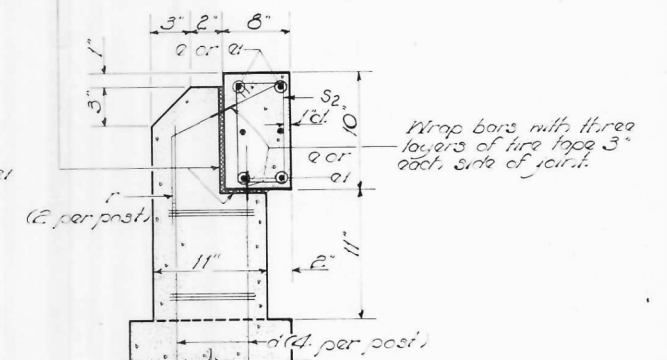
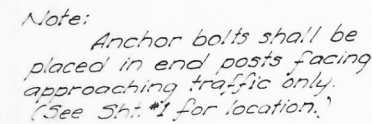
Dec 10 1962

PLAN



ELEVATION





SUPERSTRUCTURE
F.A.I. RT. 57 ~ SEC. 38-4B-1
IROQUOIS COUNTY
STA. 399+21

Dec. 10 1962

EXAMINED *W.B. Baumann*
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

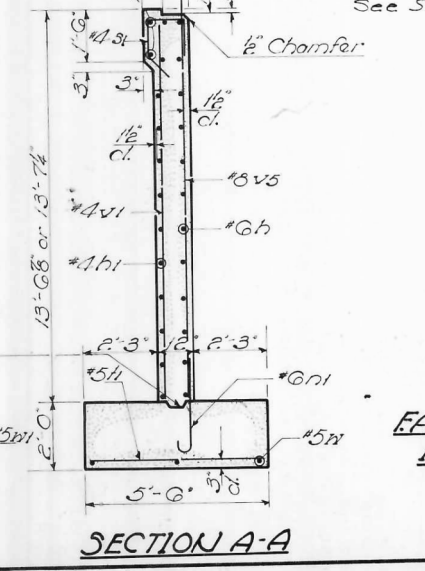
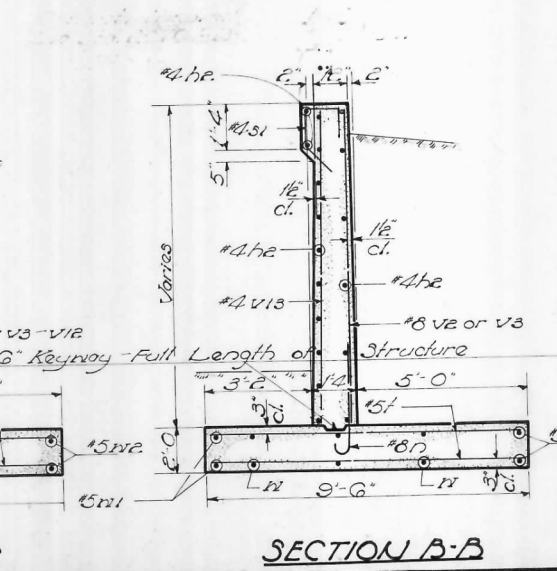
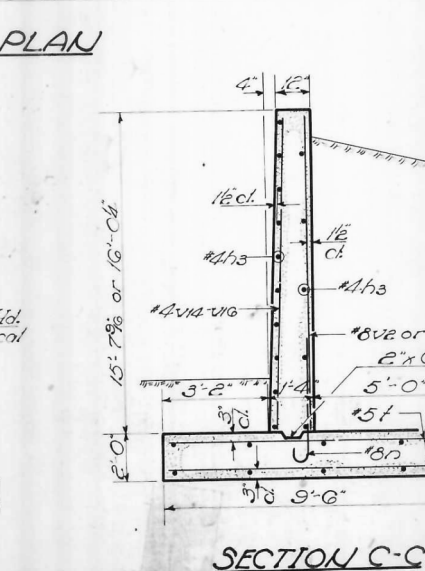
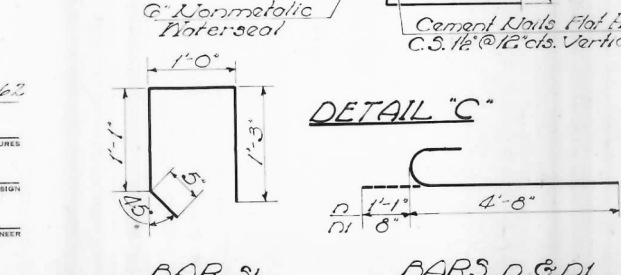
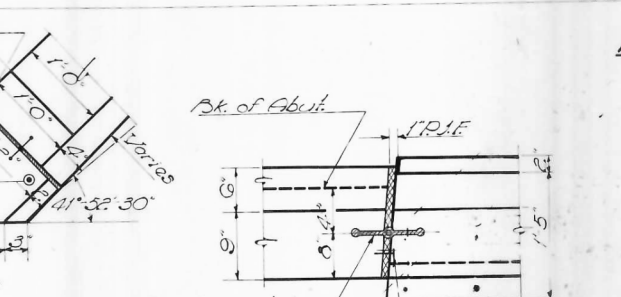
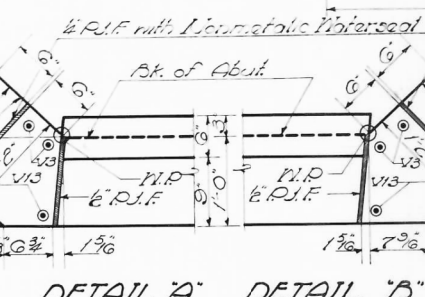
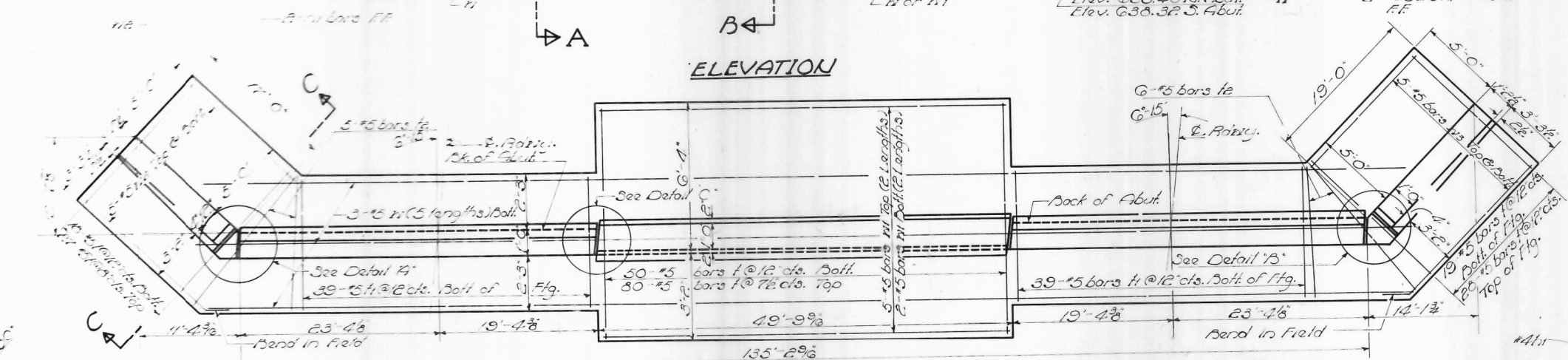
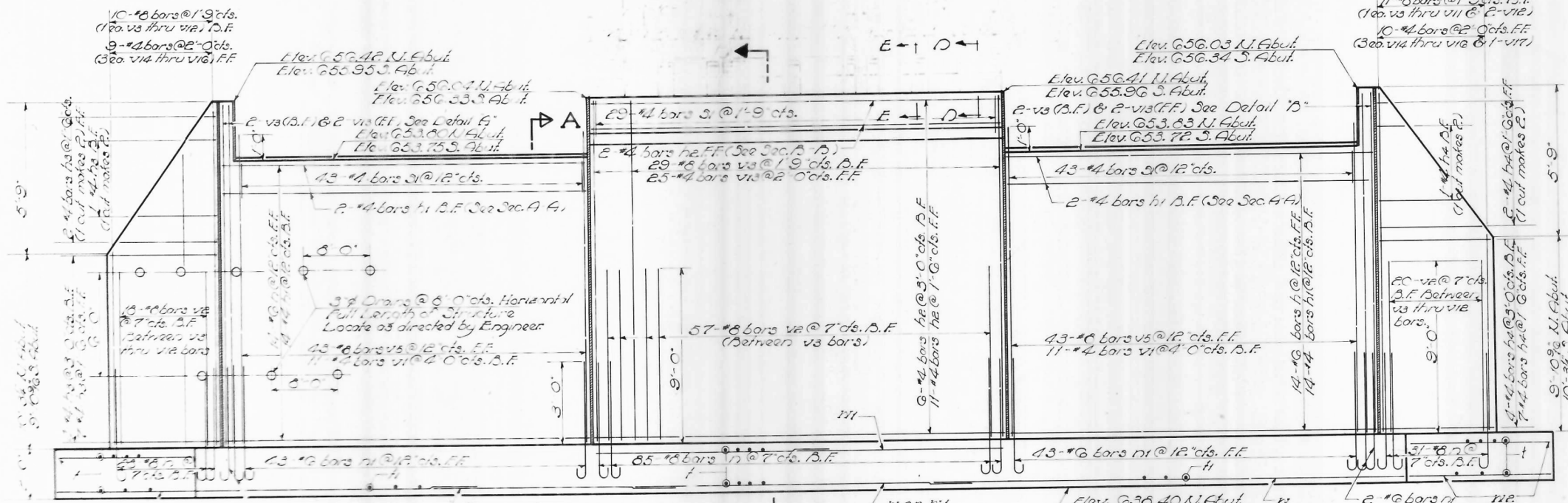
PASSED *E. H. H. H.*
ENGINEER OF DESIGN

APPROVED *V.E. Bluff*
DEPUTY HIGHWAY ENGINEER

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

Note: For Sections D-D & E-E See Sections
B-B & C-C respectively on Sheet E.

STATE OF ILLINOIS	PROJECT NO.	SECTION	SHEET NO.
IRROQUOIS	82	29	4
4 SHEETS			



BILL OF MATERIAL				
Bar	No.	Size	Length	Notes
h	50	#8	13'-0"	
h1	64	#8	13'-0"	
h2	38	#8	13'-0"	
h3	28	#8	13'-0"	
h4	28	#8	13'-0"	
n	290	#8	5'-9"	
n1	160	#8	5'-4"	
31	230	#8	3'-9"	
f	444	#5	9'-0"	
h	156	#5	5'-0"	
h2	28	#5	6'-0"	
v1	44	#8	13'-0"	
v2	194	#8	8'-0"	
v3	70	#8	14'-9"	
v4	4	#8	14'-3"	
v5	176	#8	13'-6"	
v6	4	#8	12'-9"	
v7	4	#8	12'-3"	
v8	4	#8	11'-9"	
v9	4	#8	11'-0"	
v10	4	#8	10'-3"	
v11	4	#8	9'-9"	
v12	6	#8	9'-3"	
v13	58	#8	14'-9"	
v14	12	#8	13'-9"	
v15	12	#8	11'-3"	
v16	12	#8	9'-3"	
v17	2	#8	9'-0"	
w	30	#5	29'-0"	
w1	28	#5	25'-0"	
w2	20	#5	16'-6"	
w3	20	#5	21'-3"	
Class X Concrete			Cu. Yd.	383.4
Reinforcement Bars			L.B.	37,580

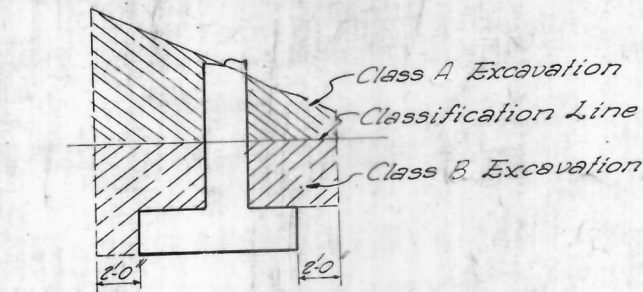
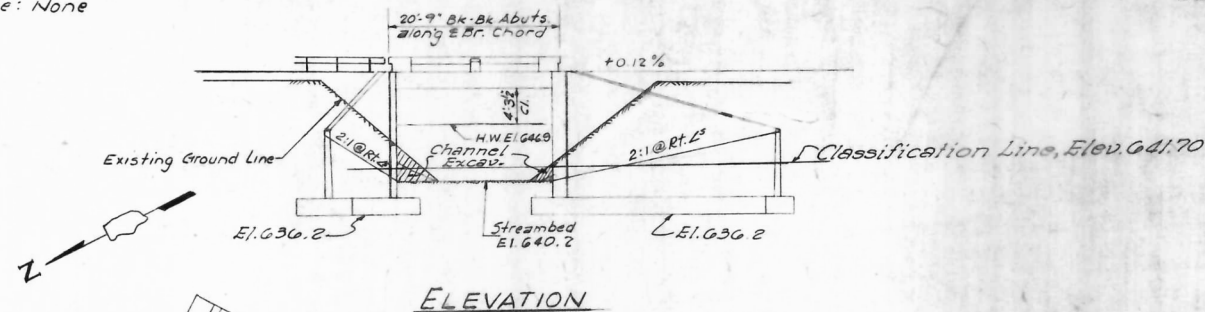
Note: For detail of Bar 15, d #5
See Sht. #2

ABUTMENTS
F.A.I. RT. 57-SEC. 38-4B-1
IROQUOIS COUNTY
STA. 399+21

B.M.: "588 Railroad Spike in base of Telephone Pole Sta. 39+42.2 R. 58 23 Rt. El. 654.93
Existing Structure: None

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
57	38-4B	IROQUOIS	82	38	5 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT: I-57-6(83)278					
*38-4, 4B, 4B-1, 4B-2, 4B-3					



CLASS A & B EXCAVATION

STATION 507+51
BUILT 196 BY
STATE OF ILLINOIS
F.A.I.R.T. 57-SEC. 38-4B-3
F.A. PROJ. I-57-6(83)
LOADING H520 & ALT.

NAME PLATE
See Std. 2113-1

CURVE DATA
P.I. Sta. 501 + 68.48
Δ = 43°-02'-17.77"
D = 1°-30'-00"
T = 1506.10
L = 2867.22
R = 3819.72
E = 286.20
S.E. = 0.017 (Remove Crown)
S.E. attained 485 + 86.44 to 487 + 28.32
514 + 55.66 to 515 + 97.54

GENERAL NOTES

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

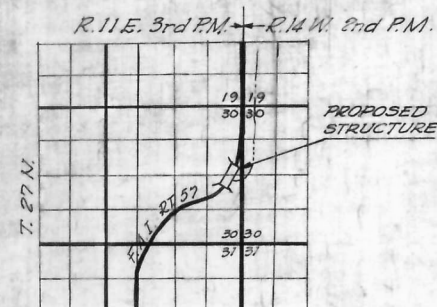
The handrail concrete in the rail posts and railing shall be poured in separate operations.

For backfill behind abutments held at the top, see Article 50.10 of the Standard Specifications.

The backs of the abutments, retaining walls and wing walls above the tops of the footings, shall be waterproofed in accordance with Article 51.21 of the Standard Specifications.

WATERWAY INFORMATION

Drainage Area	450 Acres
Character	Cultivated
Required Opening	(50 Yr. Fl.) 100 Sq. Ft.
Present Opening	- Sq. Ft.
Proposed Opening	100 Sq. Ft.
Ordinary Water Elev.	642.2
Low Water Elev.	640.7



LOCATION PLAN

DESIGN STRESSES

$f_c = 1400$ psi. Super.
 $f_c = 1000$ psi. Sub.
 $f_s = 20,000$ psi. Rein F.
 $f_r = 75$ psi. Ftg.
 $n = 10$
Max. footing pressure = $2.850 \frac{W}{b}$
LOADING H520-44 & Alt

TOTAL BILL OF MATERIAL

Items	Unit	Super	Sub	Total
Channel Excavation	Cyd.	-	150	150
Class A Excavation	Cyd.	-	340	340
Class B Excavation	Cyd.	-	950	950
Handrail Concrete	Cyd.	2.9	-	2.9
Class X Concrete	Cyd.	15.0	431.0	506.0
Reinforcement Bars	Lbs.	20,630	34,320	54,950
Name Plates	Each	2	-	2
Protective Coat	Sq. Yd.	210	-	210

DANFORTH #3 DRAINAGE DITCH

PROJECT I-57-6(83)278
F.A.I. ROUTE 57
SECTION 38-4B-3
IROQUOIS COUNTY
STATION 507 + 51

DESIGNED	Nabi R. Zakroddin	EXAMINED	W. Baumann
CHECKED	James J. Hanning	PASSED	E. S. Shuford
DRAWN	James J. Hanning	APPROVED	James J. Hanning
CHECKED	James J. Hanning		

FILE NAME :	USER NAME : duncanbd	DESIGNED :	REVISED :
et:\pw\work\p10dot\duncanbd\dm3308\ep3005-shr-F10.DGN		DRAWN :	REVISED :
		CHECKED :	REVISED :
		DATE :	REVISED :

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY
EXISTING SN 038-0167/0168

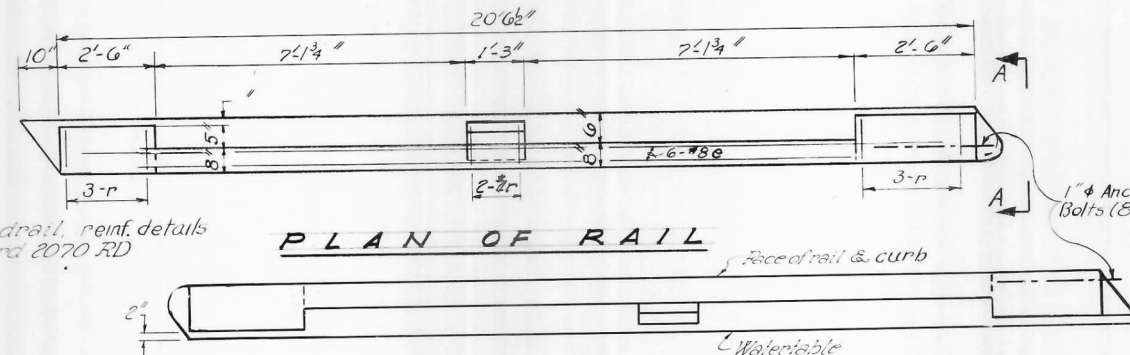
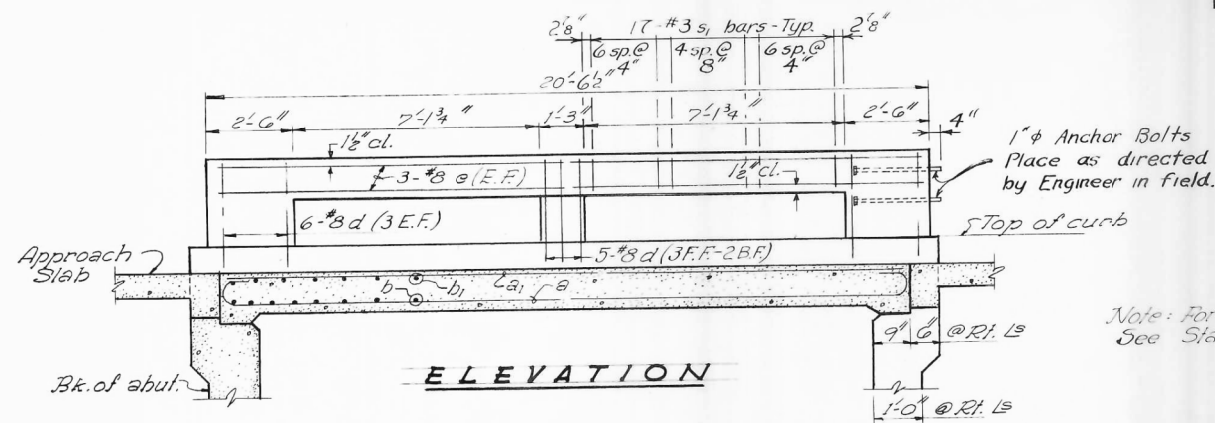
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57		IROQUOIS	190	86
*(38-4)RS-2, (38-4)BR,BR1,BR3 CONTRACT NO. 66757				
ILLINOIS FED. AID PROJECT				

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

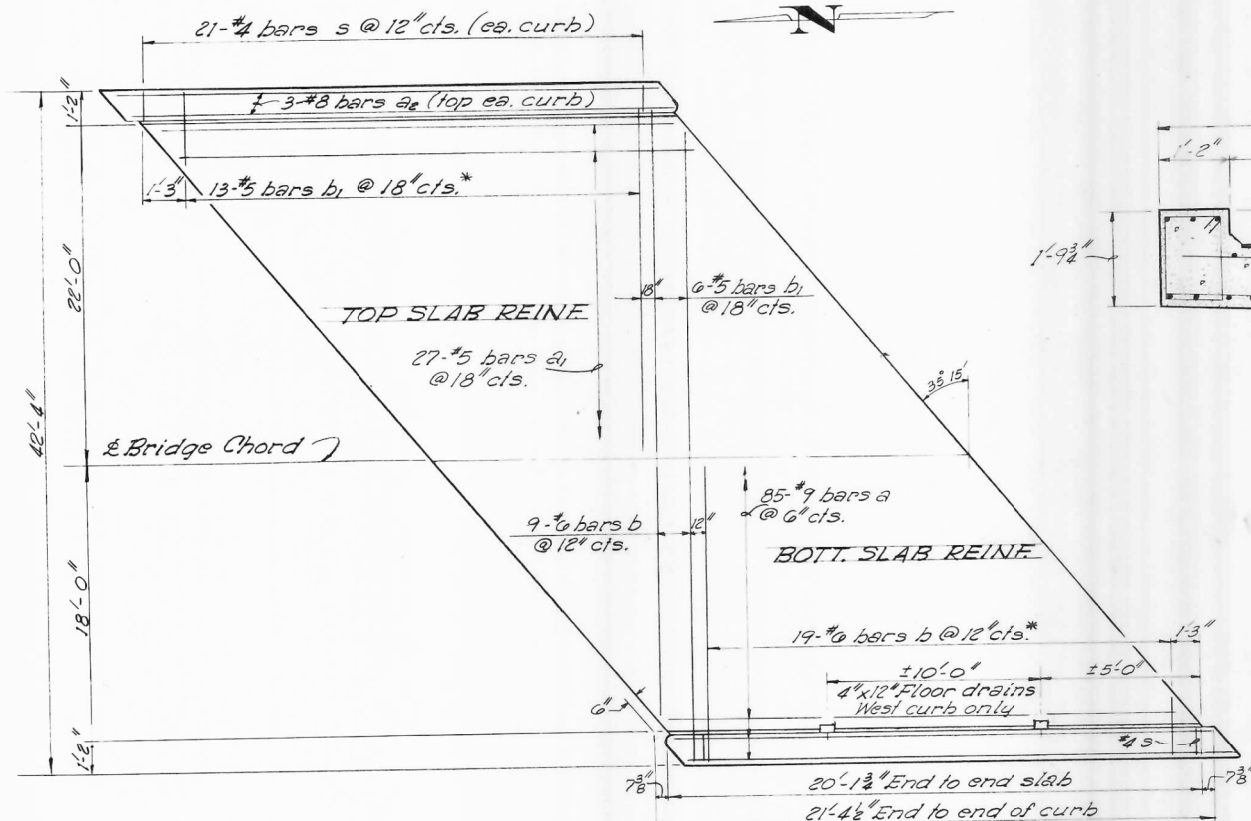
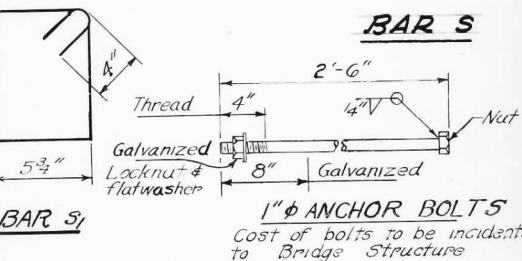
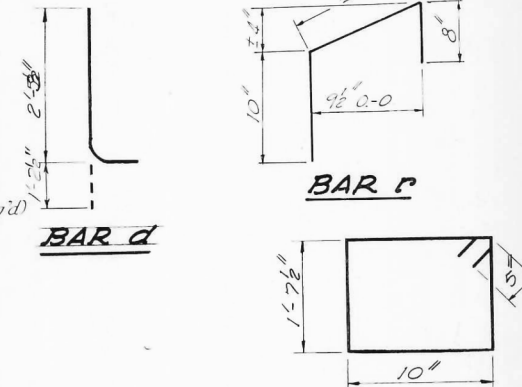
SHEET NO. 57 * IROQUOIS 32 39 5 SHEETS

* 38-4, 4B, 4B-1, 4B-2, 4B-3



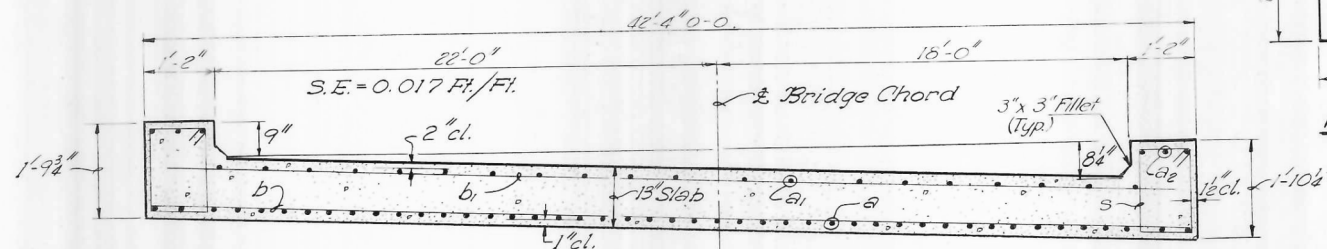
PLAN OF RAIL - NORTHBOUND LANES
Southbound similar by rotation thru 180°

Note: For handrail, reinf. details
See Standard 2070 RD

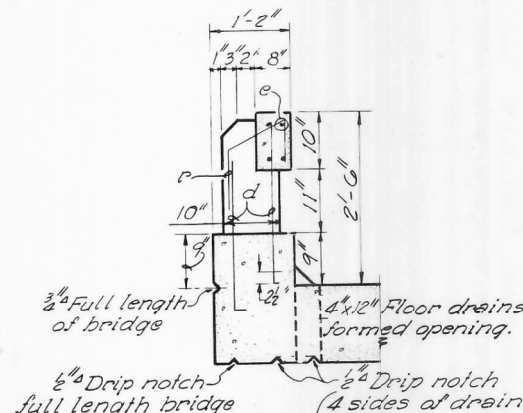


Note: Plan of east structure shown.
West structure similar by rotation
of 180° except as noted.

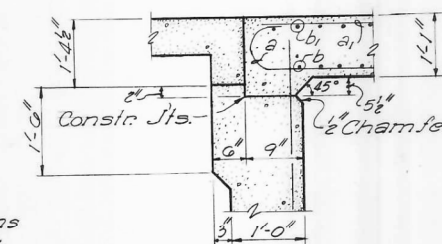
* Order b and b1 bars full length.
Cut to fit, skew and use remainder
in opposite end.



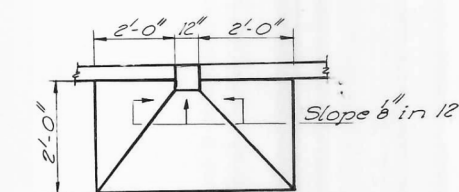
CROSS SECTION



CURB DETAIL



SEC. @ ABUT.



4" x 12" DRAIN DETAIL

BAR LIST - TWO SLABS

Bar	No.	Size	Length	Shape
a	170	#9	22'-4"	
a1	54	#5	19'-10"	
a2	12	#8	21'-0"	
b	56	#6	28'-0"	
b1	38	#5	28'-0"	
d	68	#8	3'-6"	
e	24	#8	20'-0"	
f	32	#4	2'-4"	
s	84	#4	5'-9"	
s1	136	#3	2'-11"	

BILL OF MATERIAL - SUPER.

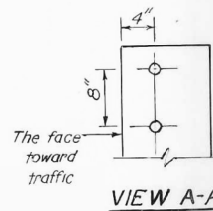
Handrail Concrete	Cu. Yds.	2.9
Class X Concrete	Cu. Yds.	75.0
Reinforcement Bars	Lbs.	20,630
Name Plates	Each	2

SUPERSTRUCTURE

F.A.I. ROUTE 57
SEC. 38-4B-3
IROQUOIS COUNTY
STATION 507 + 51

DESIGNED: *Neel R. Jakrodin*
CHECKED: *James J. Warrington*
DRAWN: *James J. Warrington*
CHECKED: *James J. Warrington*

EXAMINED: *James J. Warrington*
PASSED: *James J. Warrington*
APPROVED: *James J. Warrington*



VIEW A-A

DEAD LOAD DEFLECTION DIAGRAM

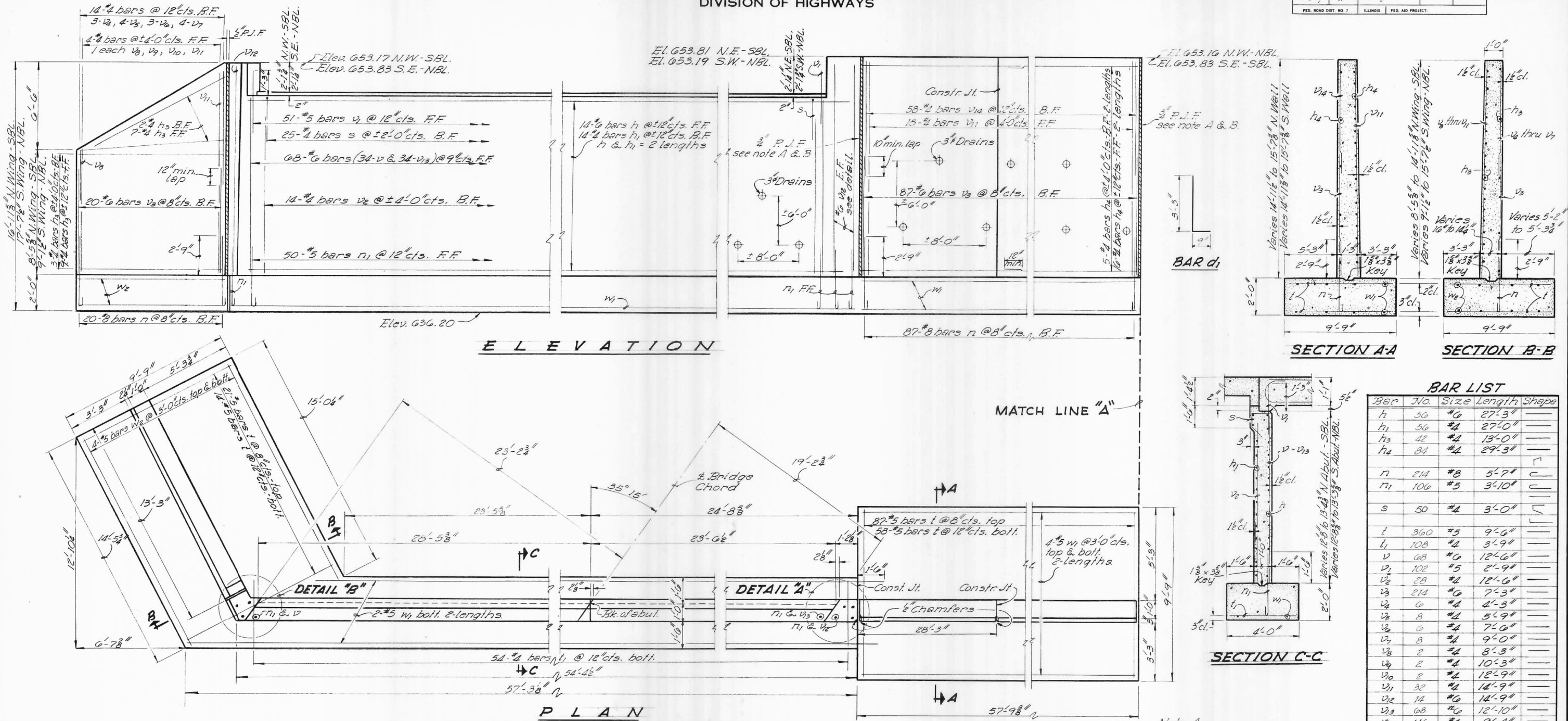
In addition to D Defl., contractor
shall allow shrinkage and settlement
of forms.

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

* 38-4, 4B, 4B-1, 4B-2, 4B-3

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	* 38-4	IROQUOIS	22	40
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

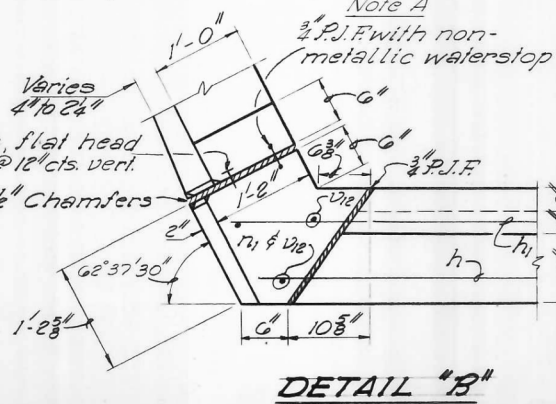
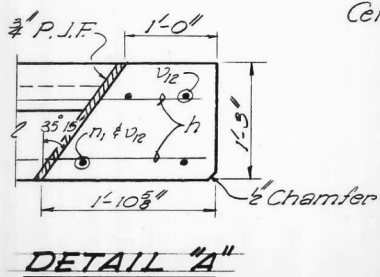
SHEET NO. 3
5 SHEETS



Note: North abutment of south bound lane shown. South abutment of north bound lane similar by rotation of 180°

Note: Contractor shall pour front face of all footings against undisturbed earth as directed by the engineer.

DESIGNED	Nabi R. Jakrodin	EXAMINED	T. E. C. 27 1962
CHECKED	James J. Warrung	PASSED	E. J. Shultz
DRAWN	J. J. Miller	APPROVED	J. E. C. 27 1962
CHECKED	James J. Warrung		



BILL OF MATERIAL-SUBST.		
Class X Concrete	Cu. Yds.	431.0
Reinforcement Bars	Lbs.	34,320

SUBSTRUCTURE
F.A.I. ROUTE 57
SEC. 38-4B-3
IROQUOIS COUNTY
STATION 507 + 51

FILE NAME :	USER NAME : duncanb	DESIGNED -	REVISED -	STATE OF ILLINOIS	FOR INFORMATION ONLY	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p1dot\duncanb\dms30308\ep0005-sh-f10.DGN		DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	EXISTING SN 038-0167/0168	57		IROQUOIS	190	88
		CHECKED -	REVISED -			*(38-4)RS-2, (38-4)BR,BR1,BR3				
		DATE -	REVISED -			CONTRACT NO. 66757				
						ILLINOIS FED. AID PROJECT				

[illegible]

SECTION B-B

[illegible]

4 #5 bars w @ 3'-0" cts. (2-length's) top & both s'ing.

PLAN

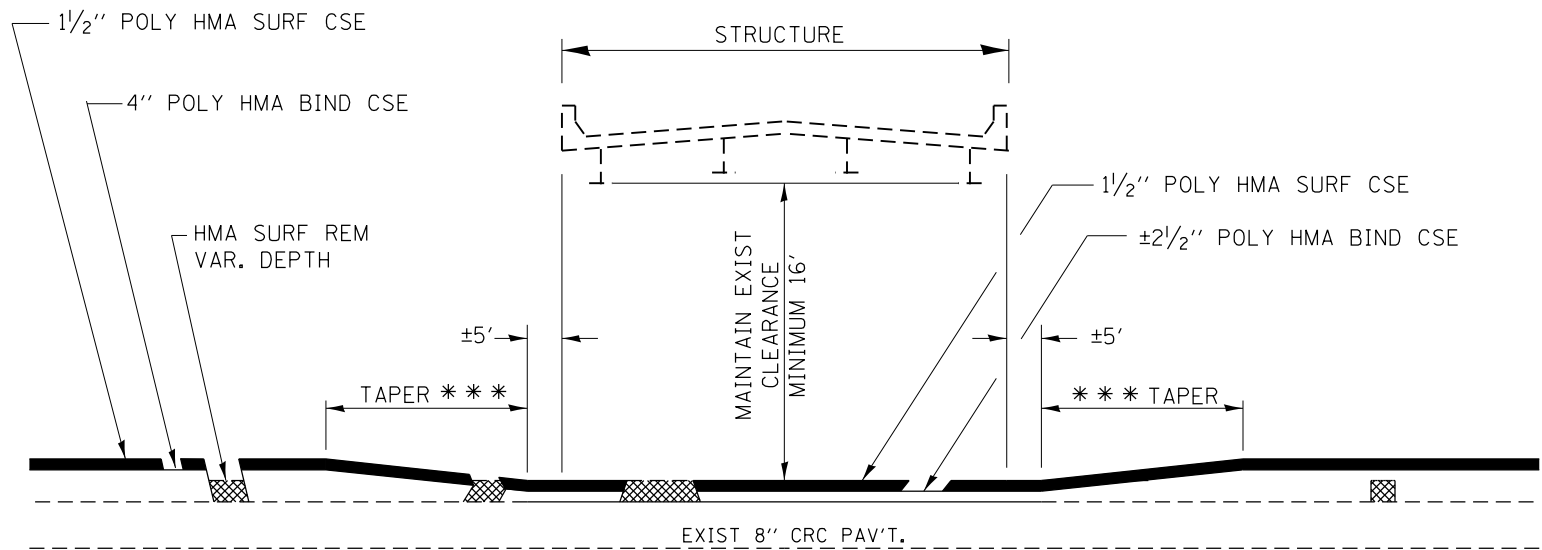
Note: North abutment of north bound lane shown.
South abutment of south bound lane similar by
rotation of 180 degrees.

DESIGNED	Wabi R. Jakobson	EXAMINED	J. E. C. 20	1943
CHECKED	James I. Knauring		ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	
DRAWN	A. Chellomay	PASSED	E. L. Smith	ENGINEER OF DESIGN
	NRF	APPROVED	J. E. C.	CHIEF HIGHWAY ENGINEER

BAR S

BAR LIST				
Bar	No.	Size	Length	Shape
h_1	22	#6	27'-3"	—
h_2	50	#4	27'-0"	—
h_2	22	#4	22'-11"	—
h_3	20	#4	2'-3"	—/
n	7	#8	5'-7"	C
n_1	110	#5	3'-10"	C
s	20	#4	3'-0"	C
t	100	#5	9'-6"	—
t_1	100	#4	3'-9"	—
v	16	#6	12'-6"	—
v_1	2	#5	2'-9"	—
v_2	22	#4	12'-0"	—
v_3	7	#6	7'-0"	—
v_2	16	#4	4'-3"	—
v_3	12	#4	5'-9"	—
v_2	12	#4	7'-6"	—
v_1	14	#4	9'-0"	—
v_2	4	#4	8'-3"	—
v_2	4	#4	10'-3"	—
v_{10}	4	#4	12'-9"	—
v_{11}	2	#4	14'-9"	—
v_{12}	18	#6	14'-9"	—
v_{13}	68	#6	12'-10"	—
w	32	#5	16'-6"	—
w_1	8	#5	29'-9"	—

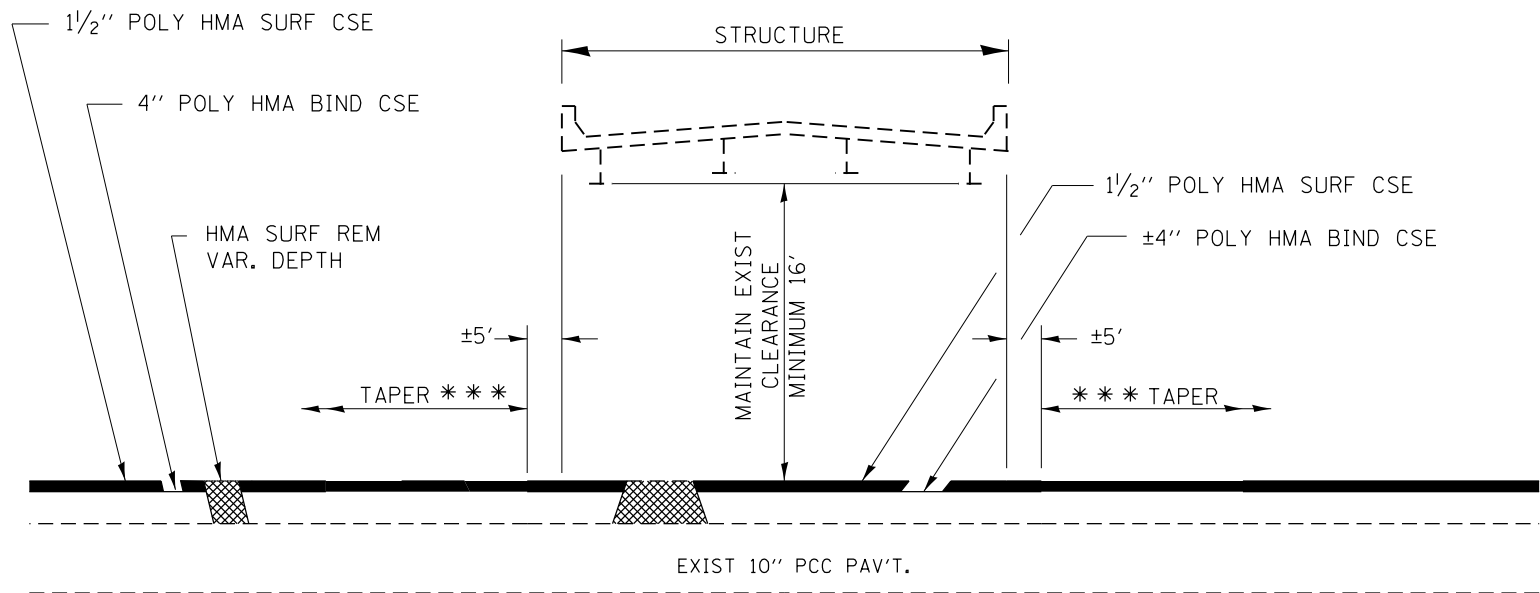
F.A.I. ROUTE 57
SEC. 38-4B-3
IROQUOIS COUNTY
STATION 507 + 51



*** SEE PROFILE FOR PROPOSED TAPER

TAPER DETAIL UNDER STRUCTURES

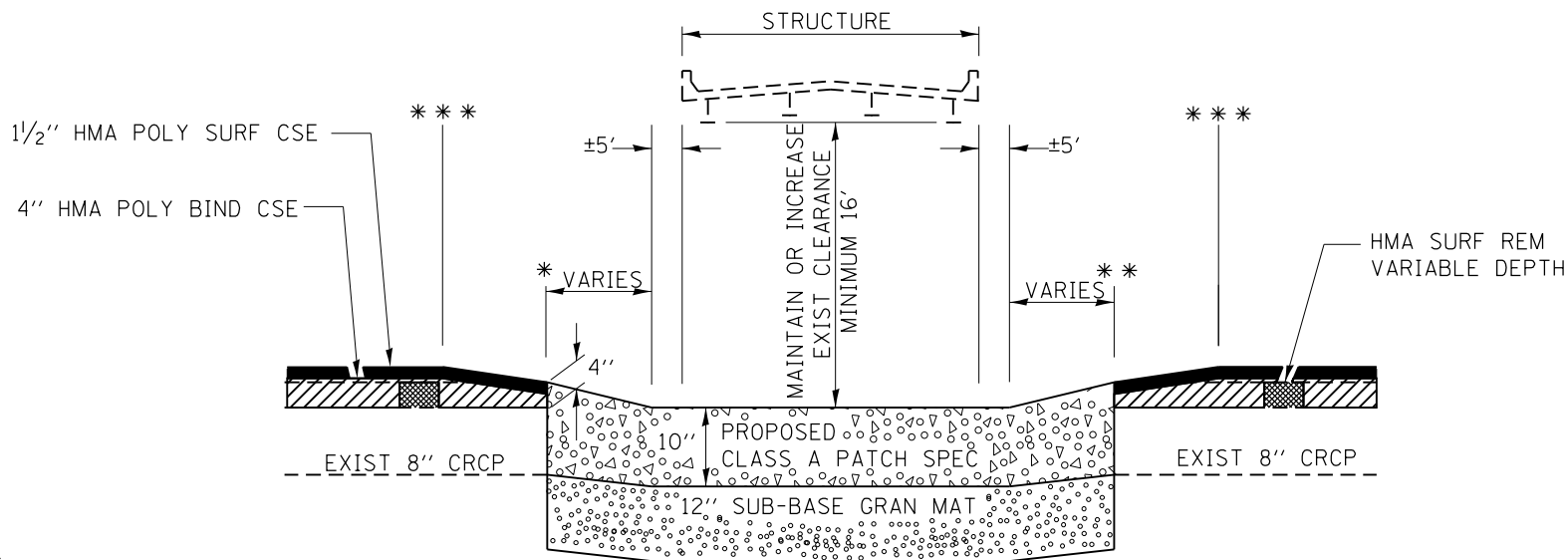
S.N. 038-0131 NORTHBOUND



*** SEE PROFILE FOR PROPOSED TAPERS

TAPER DETAIL UNDER STRUCTURES

S.N. 038-0072 NORTHBOUND & SOUTHBOUND



PATCHING DETAIL UNDER STRUCTURES

* STA 311±75 NB S.N. 038-0130 ** STA 316±00 NB
* STA 312±50 SB S.N. 038-0130 ** STA 315±50 SB
* STA 424±85 SB S.N. 038-0131 ** STA 426±15 SB

*** SEE PROPOSED PROFILE

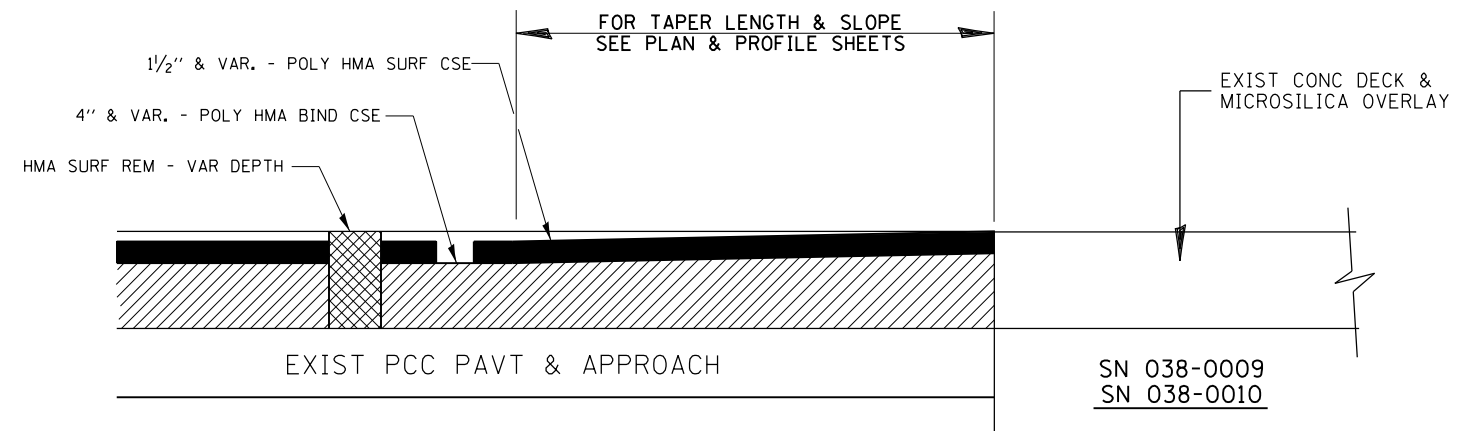
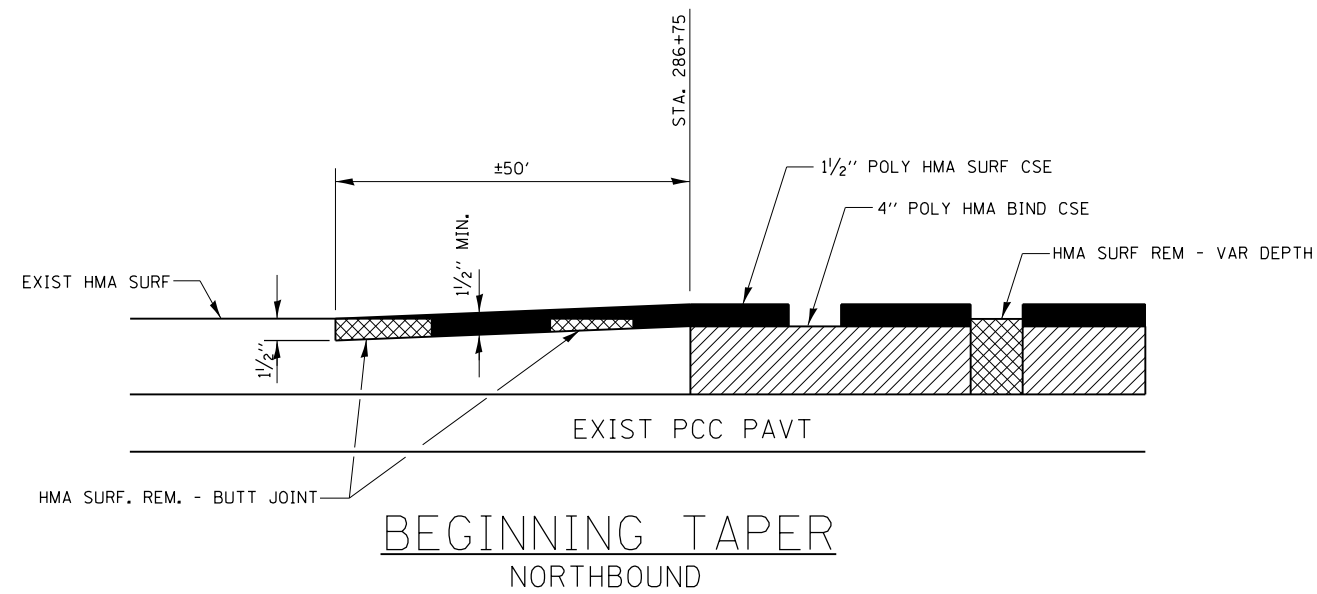
PIPE UNDERDRAIN TO BE INSTALLED
AS DIRECTED BY THE ENGINEER.

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 6/2/2014	DATE -	REVISED -

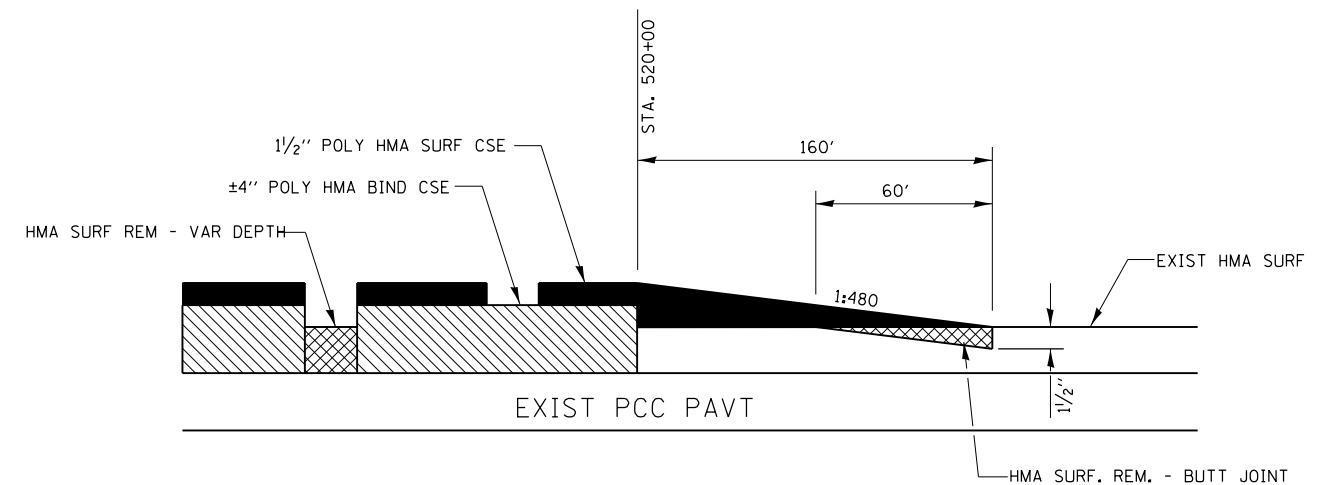
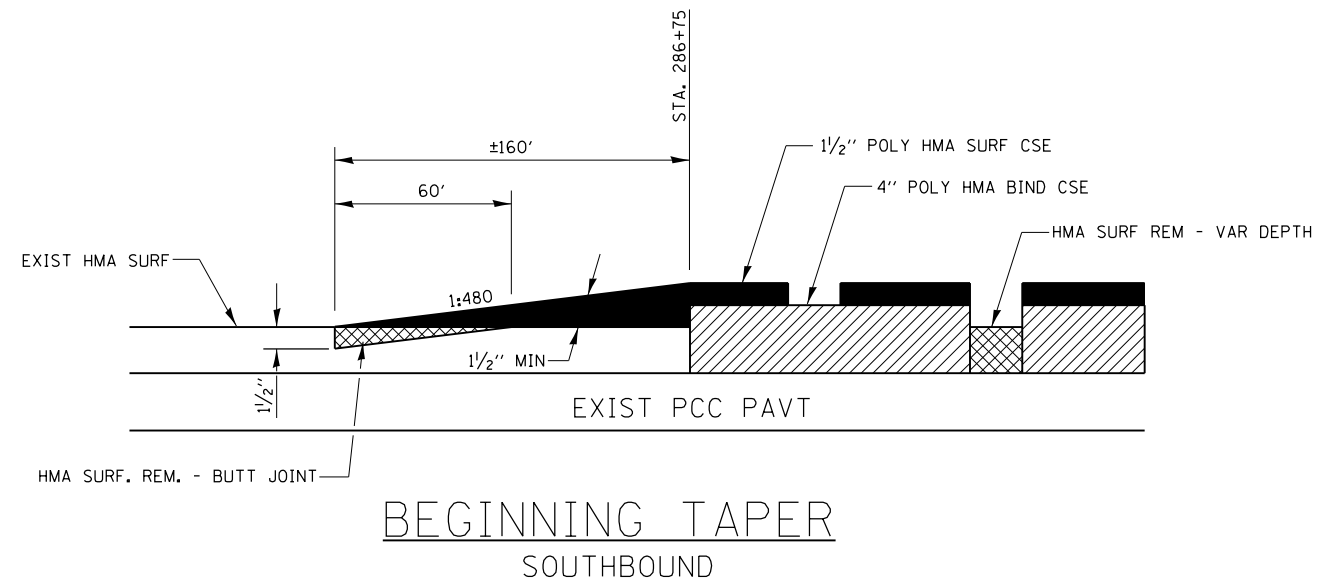
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS				
SCALE:	SHEET NO.	OF	SHEETS	STA. TO STA.

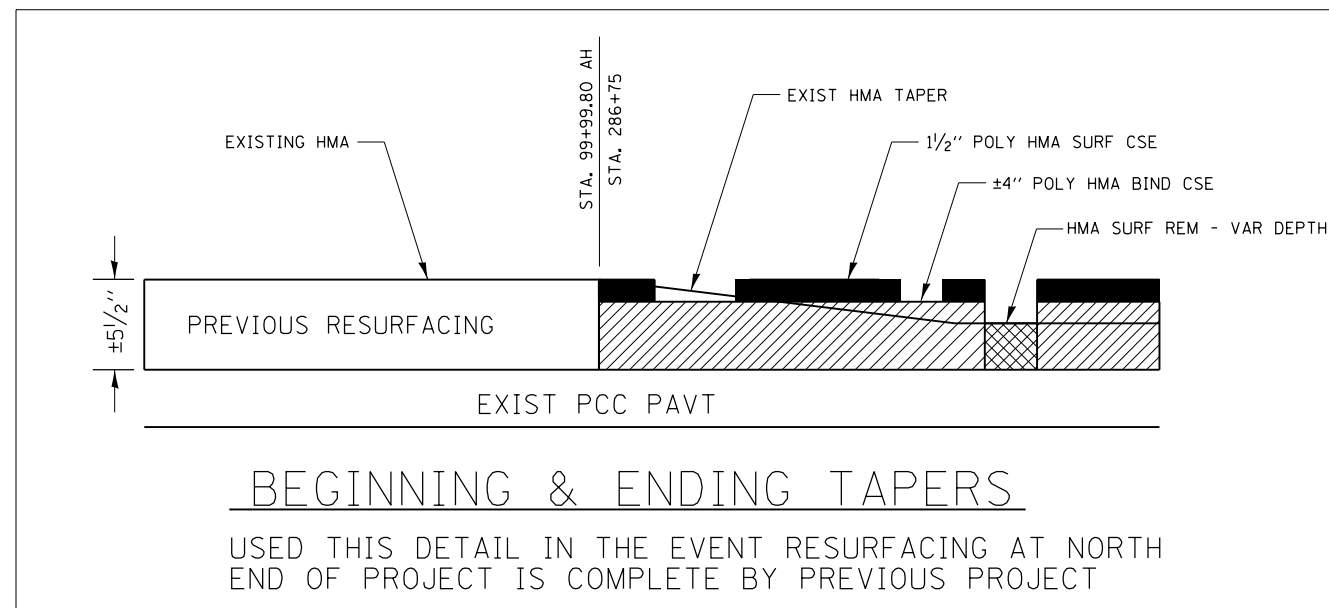
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	IRROQUOIS	190	90
* (38-4)RS-2, (38-4)BR,BR1,BR3		CONTRACT NO. 66757		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TAPERS @ SN 038-0009/0010



ENDING TAPER



FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -
et:\pwork\pwork\pwork\duncanbd\dms30308\ep03005-shit-details.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 6/2/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	IRROQUOIS	190	91
* (38-4)RS-2, (38-4)BR,BR1,BR3		CONTRACT NO. 66757		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

NOTES

FOR DETAILS OF STEEL OR CAST GRATING NOT SHOWN SEE STANDARD 542546. EXISTING GRATING MAY BE REUSED IF IN GOOD CONDITION AND APPROVED BY THE ENGINEER.

ALL FRAMES SHALL BE GALVANIZED AND ANCHORED IN CONCRETE.

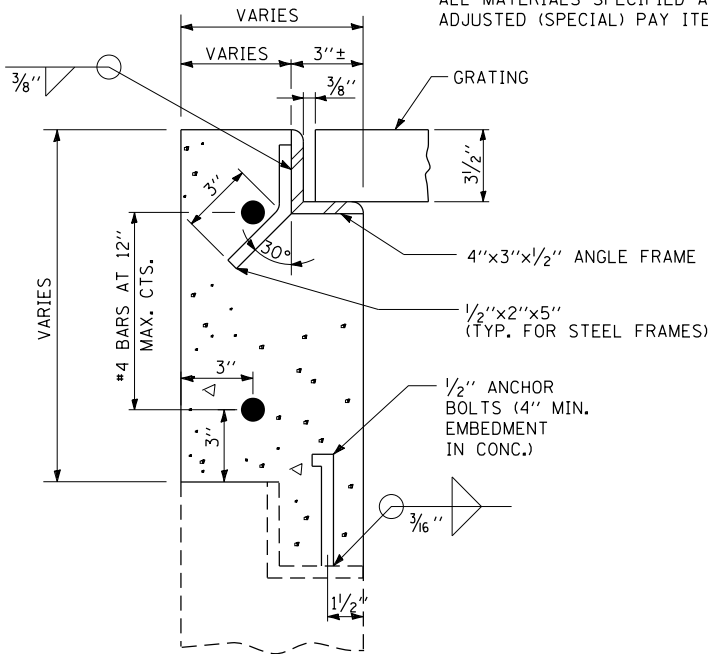
ALL ANCHOR BOLTS SHALL BE ACCORDING TO ARTICLE 1006.09.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DIMENSIONS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS.

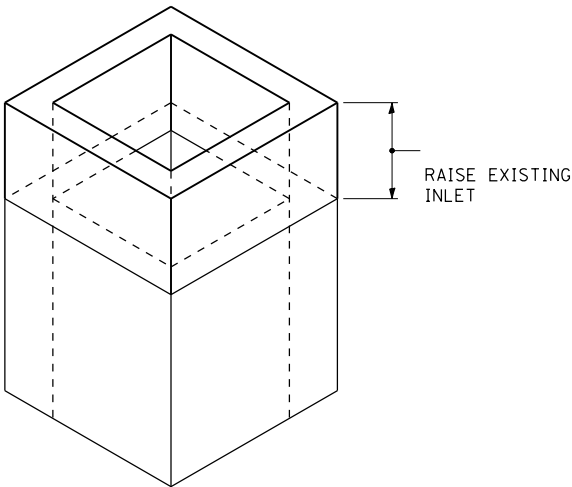
CLASS SI CONCRETE SHOULD BE USED THROUGHOUT.

SEE SPECIAL PROVISIONS FOR INLET BOXES TO BE ADJUSTED (SPECIAL)

ALL MATERIALS SPECIFIED ARE INCLUDED IN THE INLETS TO BE ADJUSTED (SPECIAL) PAY ITEM.

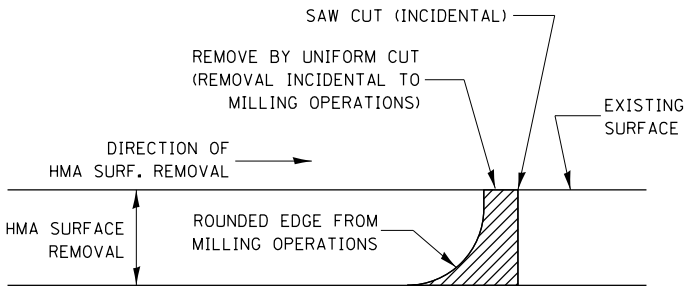


SECTION



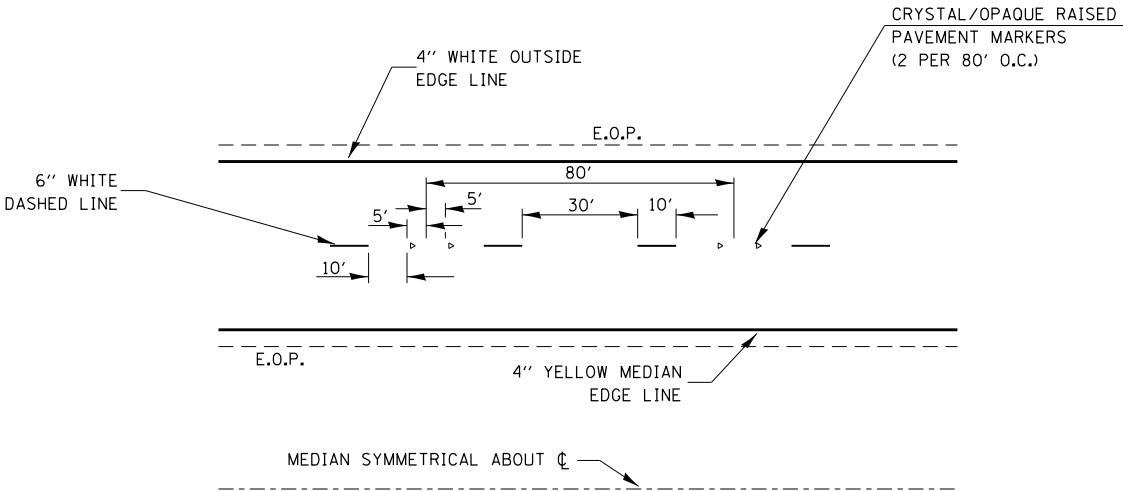
INLET BOX DETAIL

MEDIAN INLET BOX ADJUSTMENT DETAIL

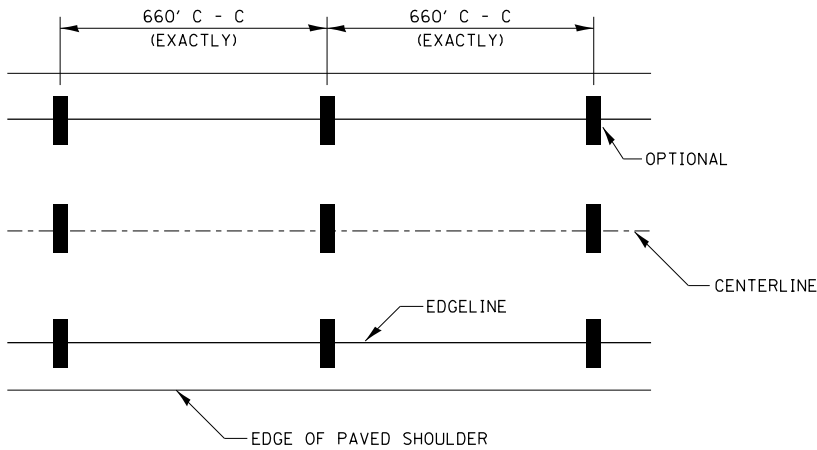


NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

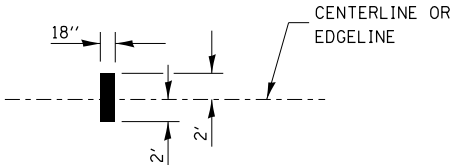
HMA DETAIL AT BUTT JOINTS



TYPICAL PAVEMENT MARKINGS

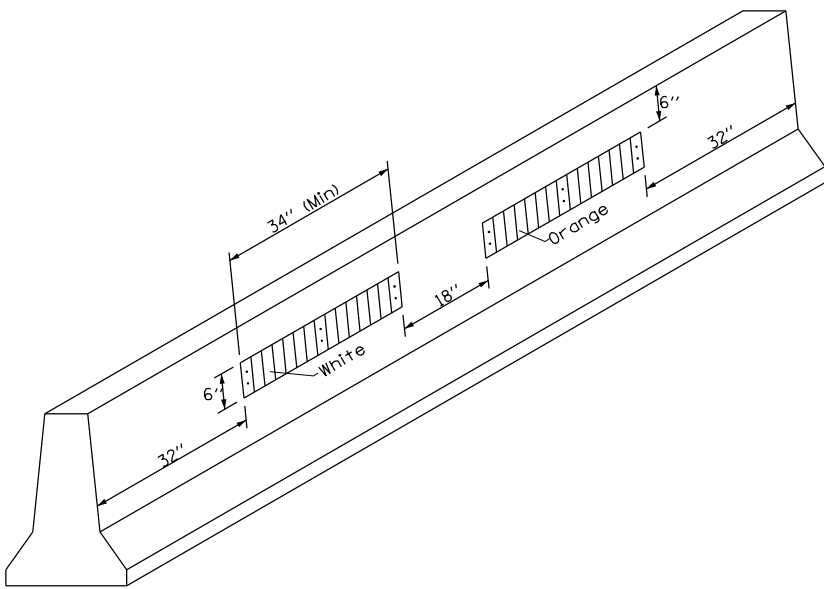


IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



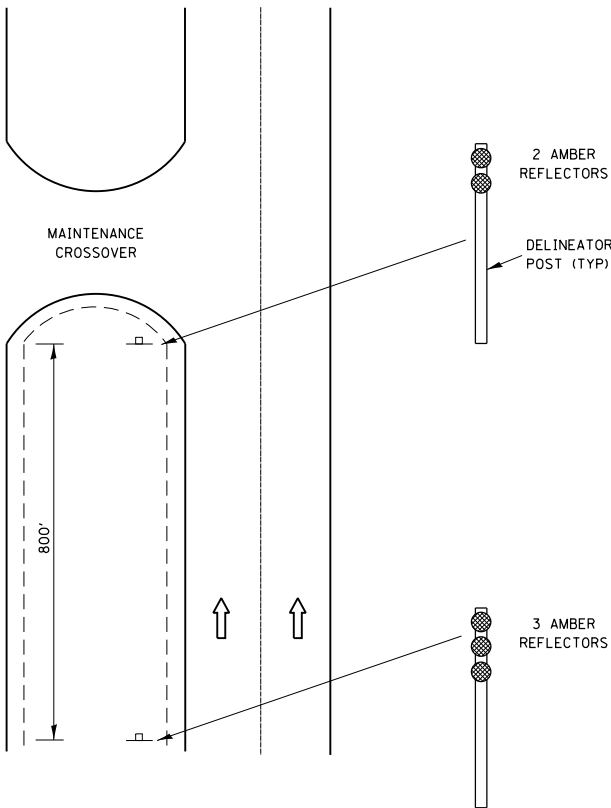
AERIAL SPEED CHECK ZONES

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS					F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\p\w\dot\duncanbd\dms30308\ep05005-shit-details.dgn		DRAWN -	REVISED -							57	*	IR000015	190	92
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		* (38-4)RS-2, (38-4)BR,BR1,BR3									
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 66757			
									FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

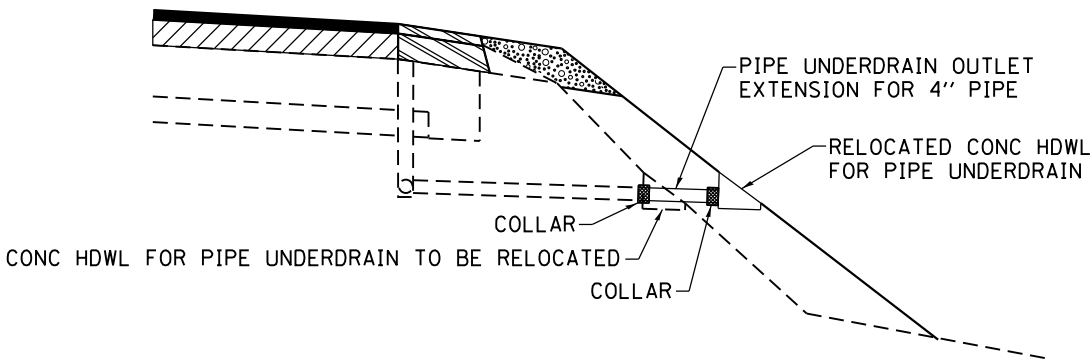


LINEAR DELINEATION PANEL

NOTE: THIS DETAIL DENOTES 1 FULL 12.5' SECTION OF TEMPORARY CONCRETE BARRIER.



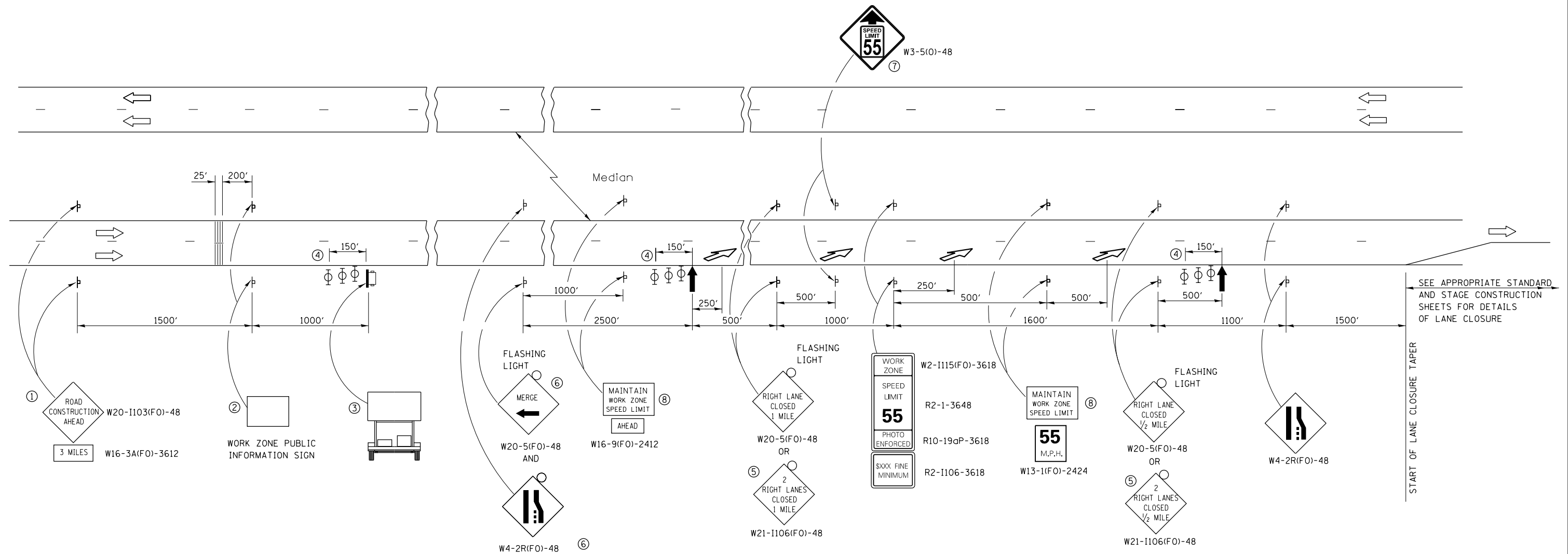
DELINEATION
FOR MAINTENANCE
CROSSOVER
(TYPICAL FOR BOTH DIRECTIONS)



PIPE UNDERDRAIN TO BE FIELD LOCATED BY THE
CONTRACTOR AND AS DIRECTED BY THE ENGINEER

PIPE UNDERDRAIN OUTLET EXTENSION SPECIAL

FILE NAME = c:\pwork\pwork\duncanbd\dms30308\ep05005-shit-details.dgn	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS					F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -							57	*	IR000U015	190	93	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -							* (38-4)RS-2, (38-4)BR,BR1,BR3					
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 66757				
											FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:
"RIGHT LANE CLOSED" / " x MILES AHEAD"
"LEFT LANE CLOSED" / " x MILES AHEAD"
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.
- ⑦ THIS SIGN SHALL ONLY BE USED IF THE EXISTING SPEED LIMIT IS GREATER THAN 65 MPH.

- ⑧ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS.
48"

36" MAINTAIN WORK ZONE SPEED LIMIT 8" 6" 6"

- ↑ ARROW BOARD
- PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT
- LANE DROP ARROW - SEE STANDARD 780001
- TEMPORARY THERMOPLASTIC RUMBLE STRIPS

GENERAL NOTE:

THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

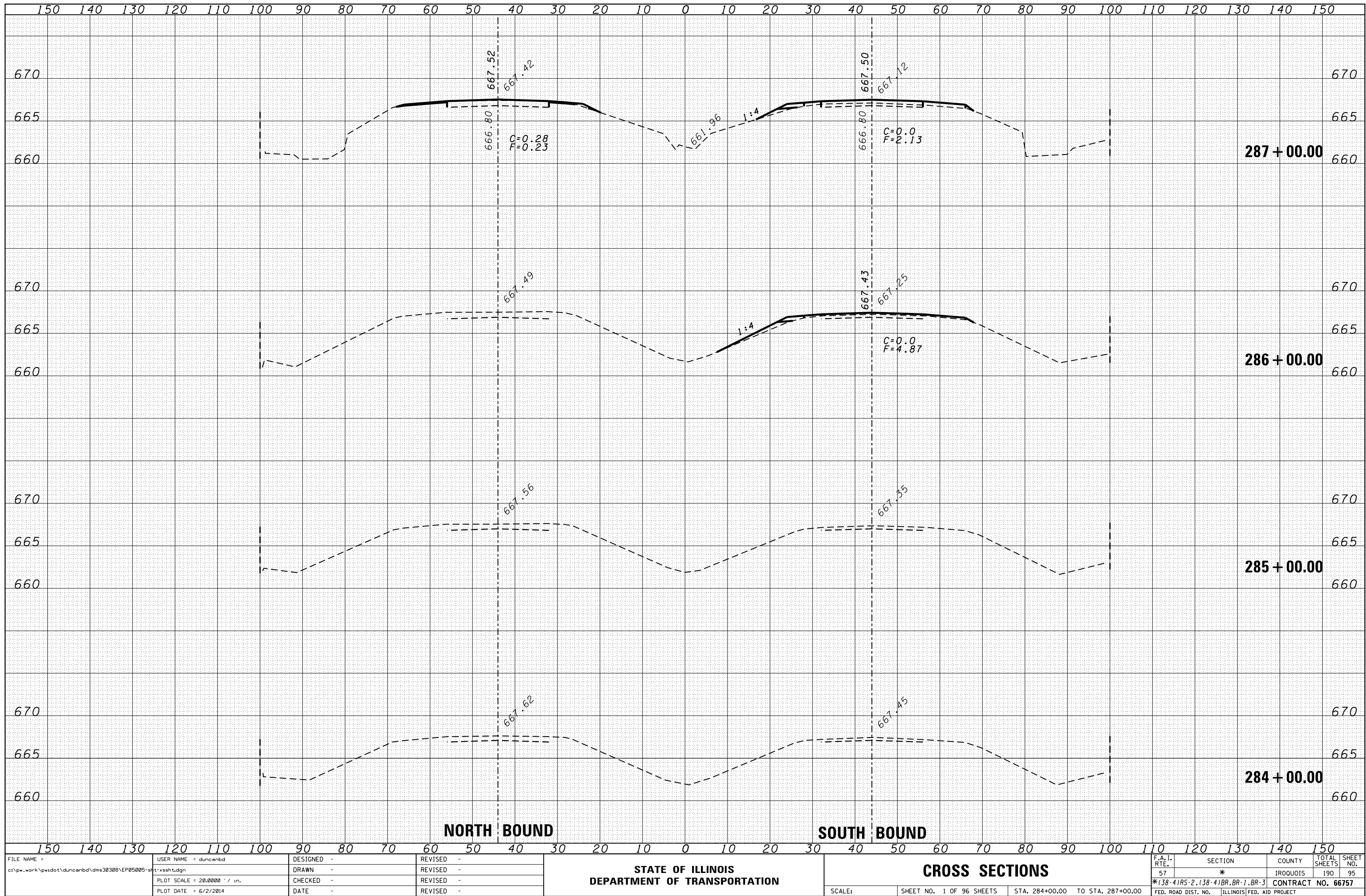
SEE SPECIAL PROVISIONS.

ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = duncanbd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STANDARD 701400 (SPECIAL)			F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\pwidot\duncanbd\dms30308\ep05005-shit-details.dgn		DRAWN -	REVISED -					57	*	IROQUOIS	190	94
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -					* (38-4)RS-2, (38-4)BR,BR1,BR3				CONTRACT NO. 66757
	PLOT DATE = 6/2/2014	DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

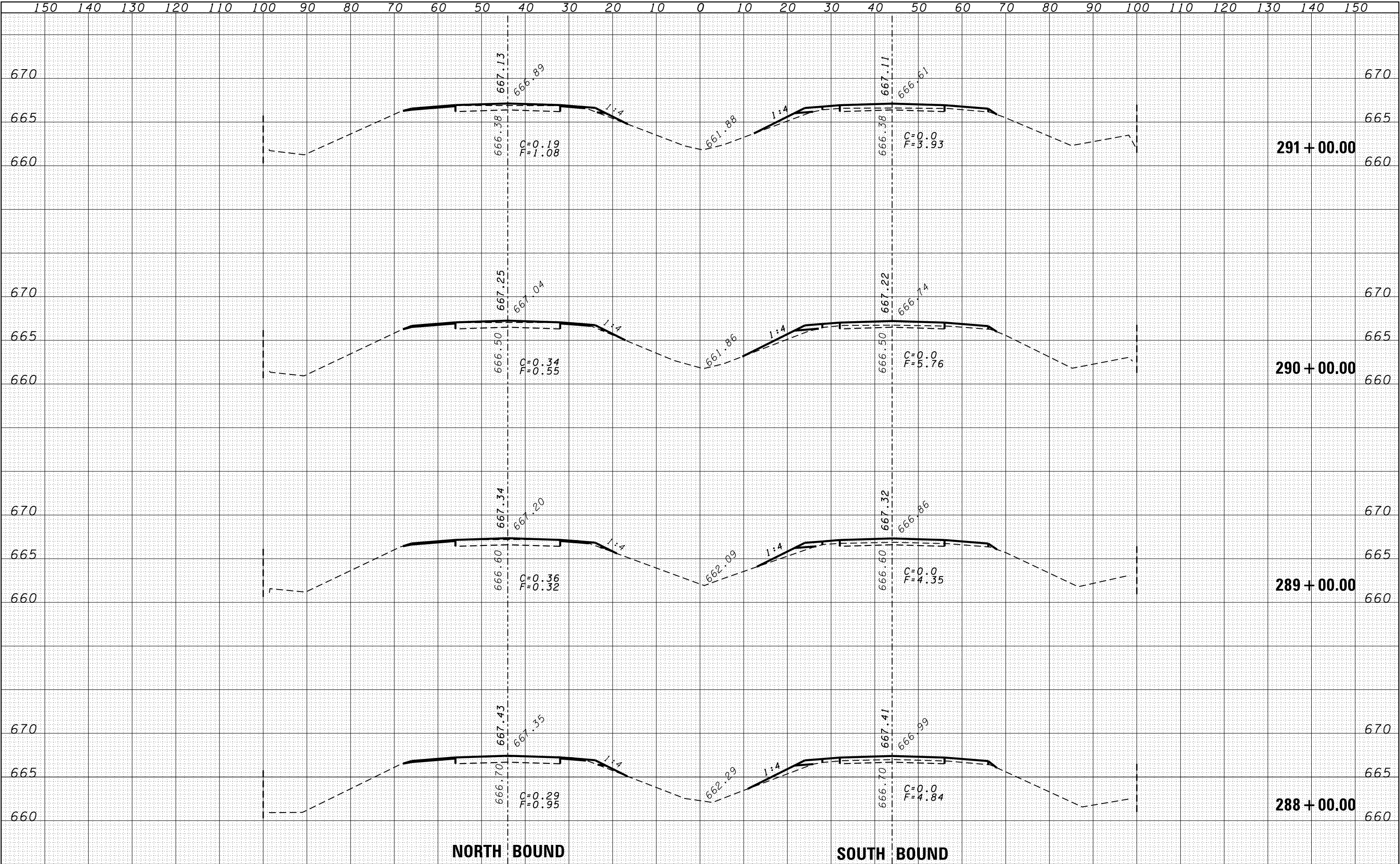
FINAL SURVEY		BY	DATE
NOTE BOOK			
	SURVEYED _____		
	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK			
	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO. _____	AREAS CHECKED		



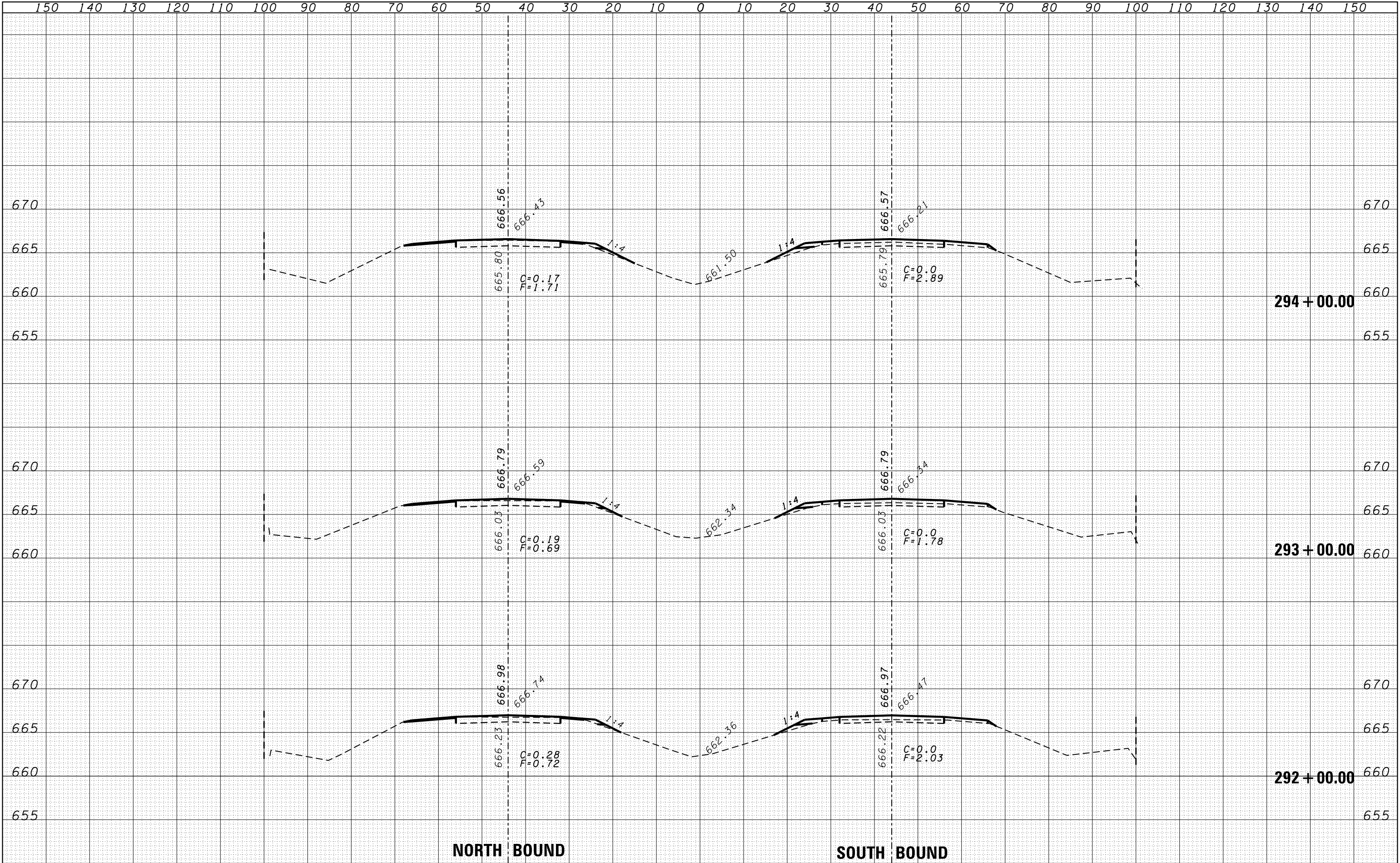
FINAL SURVEY	NO.	DATE	BY	SURVEYED	PLOTTED	TEMPLATE	NOTE BOOK	AREAS	CHECKED

ORIGINAL SURVEY	NO.	DATE	BY	SURVEYED	PLOTTED	TEMPLATE	NOTE BOOK	AREAS	CHECKED



FINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS	CHECKED	

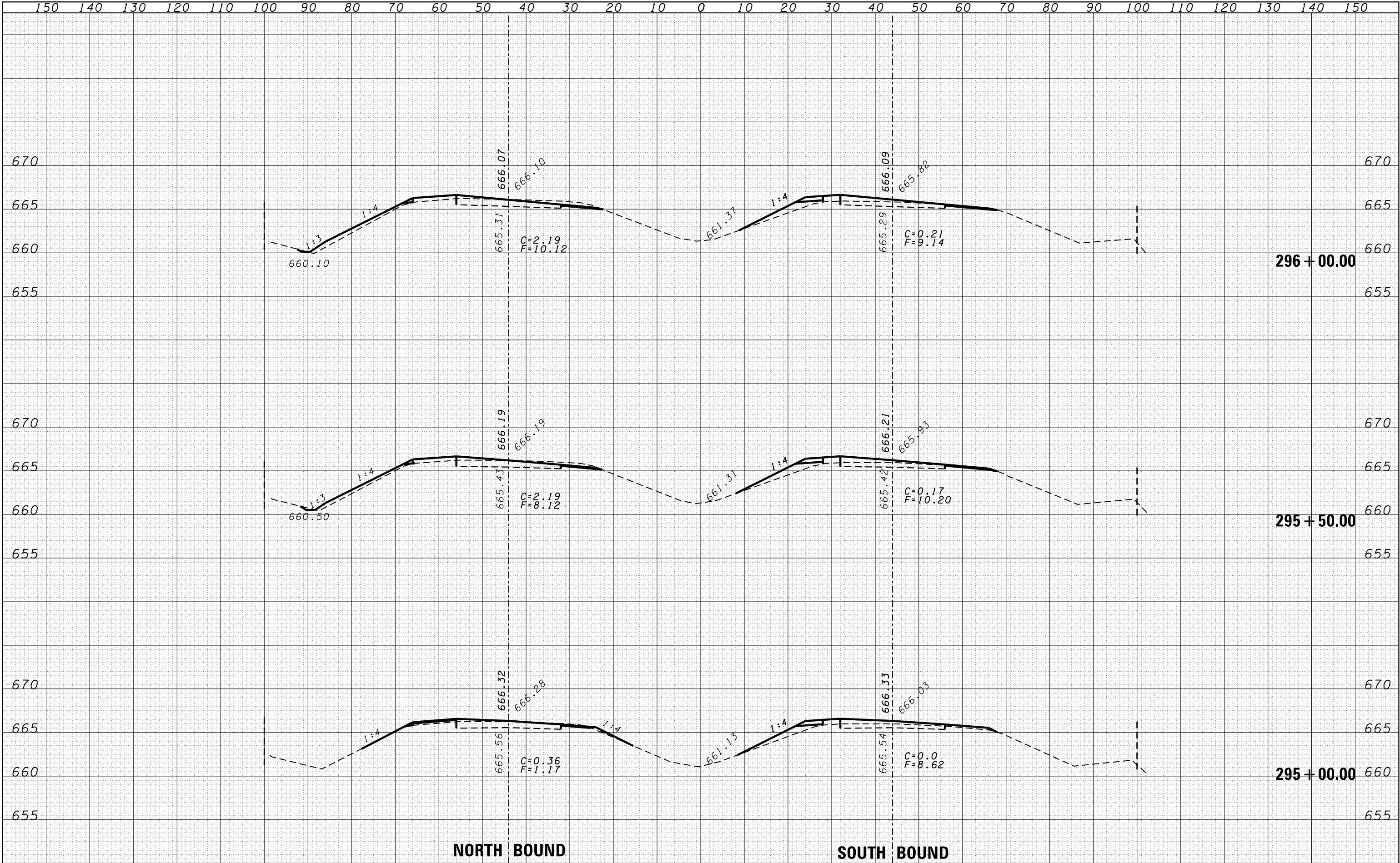
ORIGINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS	CHECKED	



150															140															130															120															110															100															90															80															70															60															50															40															30															20															10															0															10															20															30															40															50															60															70															80															90															100															110															120															130															140															150														
FILE NAME =		USER NAME = duncanbd		DESIGNED -		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION															CROSS SECTIONS										F.A.I. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.																																																																																																																																																																																																																																																																																																																																																																																																																																							
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								SCALE:		SHEET NO. 3 OF 96 SHEETS					STA. 292+00.00 TO STA. 294+00.00										FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT																																																																																																																																																																																																																																																																																																																																																																																																																																																					

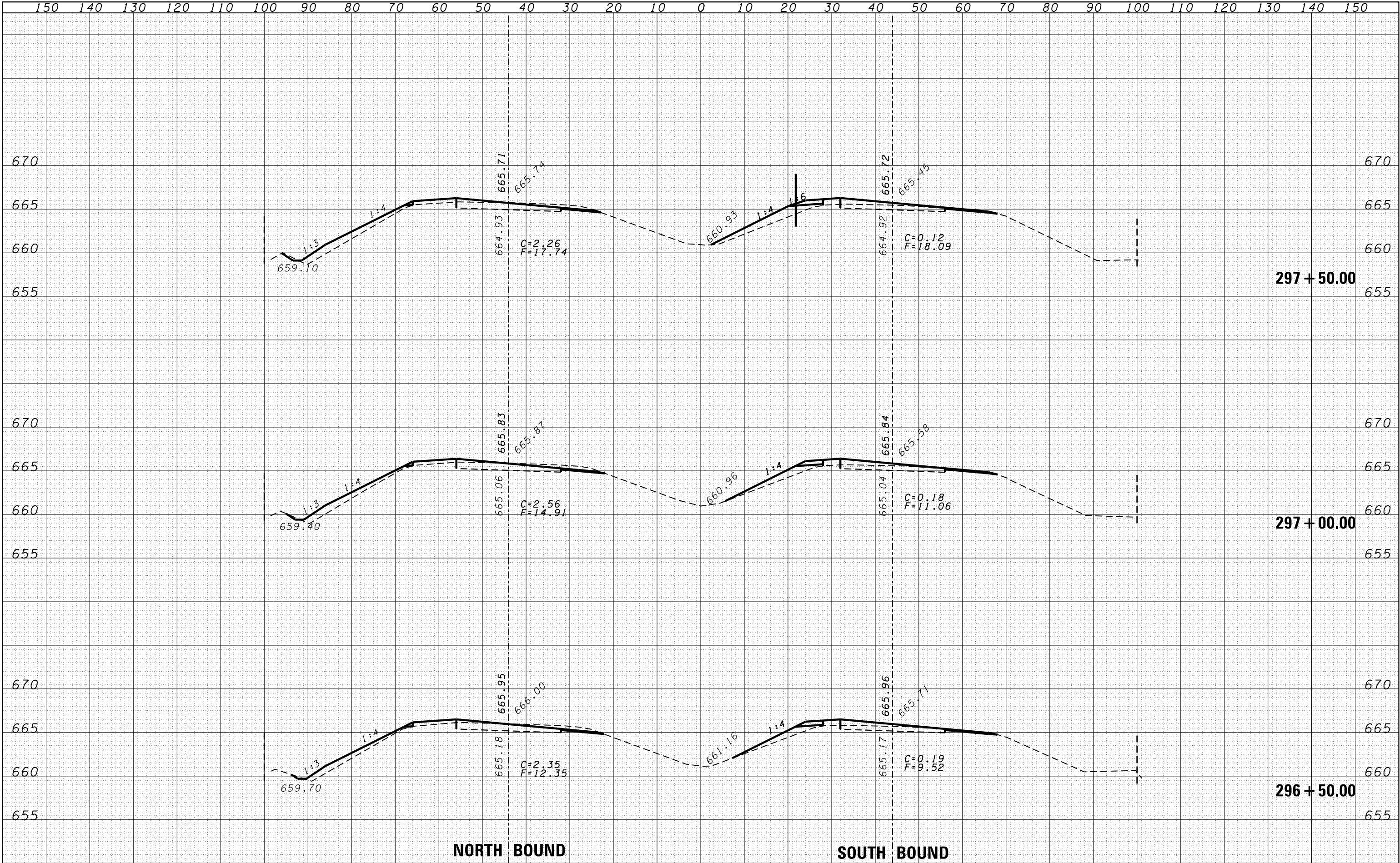
FINAL SURVEY	DATE
	BY
	SURVEYED
	PLOTTED
NOTE BOOK	NO.
AREAS	CHECKED

ORIGINAL SURVEY	DATE
	BY
	SURVEYED
	PLOTTED
NOTE BOOK	NO.
AREAS	CHECKED



DATE	BY	SURVEYED	PLOTTED	AREAS
		NO.	NO.	CHECKED
		NO.	NO.	CHECKED
		NO.	NO.	CHECKED

DATE	BY	SURVEYED	PLOTTED	AREAS
		NO.	NO.	CHECKED
		NO.	NO.	CHECKED
		NO.	NO.	CHECKED



DATE	BY	SURVEYED	PLOTTED	AREAS	CHECKED
		NO.	NO.	NO.	NO.

DATE	BY	SURVEYED	PLOTTED	AREAS	CHECKED
		NO.	NO.	NO.	NO.

