11-9-12 LETTING ITEM 081

41-42

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	1
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS	FEDERAL AID PROJECT		

MAJOR BRIDGE PROGRAM

DETAIL PLANS FOR

FAS 779 (CH 21 – N. POKEY ROAD)

OVER TRIBUTARY TO SHOAL CREEK

SECTION 07-00085-00-BR

BOND COUNTY

PROJECT NO. BRS-0779(104)

JOB NO. C-98-304-09

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
631032-07	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥45 MPH.
701901-02	TRAFFIC CONTROL DEVICES

0 100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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.

DESIGN CLASSIFICATION

MAJOR COLLECTOR (NON-URBAN) ADT = 750-2,000
CURRENT ADT = 1,350 (2010)
DESIGN ADT = 1,800 (2032)
DESIGN SPEED = 50 MPH

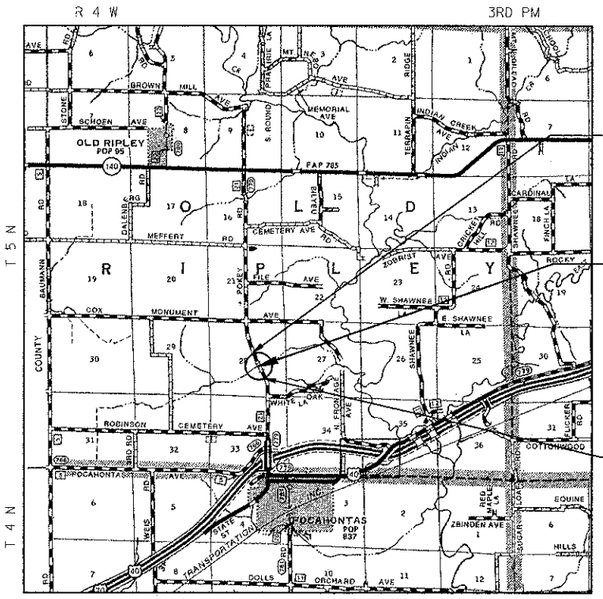
UTILITIES:

CALL J.U.L.I.E. BEFORE YOU DIG
1-800-892-0123 OR 811

TELEPHONE:
FRONTIER COMMUNICATIONS
ALTAMONT, IL. 62411
(618) 483-6205

ELECTRIC:
SOUTHWESTERN ELECTRIC COOP
HIGHLAND, IL. 62249
(618) 664-1025

WATER:
BOND/MADISON WATER CO.
208 ACADEMY STREET
POCAHONTAS, IL. 62275
(618) 659-0900



LOCATION MAP

NET LENGTH OF PROJECT = 2,950 FEET = 0.559 MILES

PROJECT LOCATION
EXISTING S.N. 003-3023
PROPOSED STRUCTURE NO. 003-3053 STATION 27+00
THREE SIMPLE SPANS (40' EACH), PRECAST PRESTRESSED CONCRETE DECK BEAMS (21") ON SPILL THRU PILE BENT ABUTMENTS AND PILE BENT PIERS MEASURING 120'-0" B-B OF THE ABUTMENTS WITH A 36'-0" CLEAR ROADWAY WIDTH.

N

SCALE IN MILES
0 1 2

LOCATION OF SECTION INDICATED THUS: ■

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED Sept 6 20 12
COUNTY ENGINEER

PASSED 9-13 20 12
DISTRICT 8 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED UPON LIMITED REVIEW 9-13 20 12
OMER OSMAN, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION 5 ENGINEER

HMG ENGINEERS SURVEYORS

LARRY D. GOWLER JR.
REGISTERED PROFESSIONAL
ENGINEER IN ILLINOIS, NO. 52900
DATE: 9/7/12

LARRY D. GOWLER JR. 062-052920 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

EXPIRES: NOVEMBER 30, 2013

HMG NO. 5790

CONTRACT NO. 97508

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GENERAL NOTES

1. ALL ELEVATIONS REFER TO USGS MEAN SEA LEVEL DATUM.

2. THIS PROJECT IS TO CONSIST OF TWO PHASES SEPARATED BY ONE WINTER SEASON.

   THE CONSTRUCTION IS GENERALLY DESCRIBED AS:

   a. PHASE 1 SHALL CONSIST OF CONSTRUCTION OF THE ROADWAY SECTION UP TO AND INCLUDING THE AGGREGATE BASE COURSE. AN A-2 BITUMINOUS SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF THE AGGREGATE BASE COURSE. EARTHWORK AND SEEDING SHOULD BE COMPLETED DURING PHASE 1 CONSTRUCTION.

   b. PHASE 2 SHALL CONSIST OF APPLICATION OF THE BITUMINOUS MATERIALS (PRIME COAT) TO THE A-2 BITUMINOUS SURFACE AND THE CONSTRUCTION OF THE HOT-MIX ASPHALT BINDER COURSE AND THE HOT-MIX ASPHALT SURFACE COURSE; THE AGGREGATE SHOULDERS SHALL BE BROUGHT TO FINAL GRADE AFTER CONSTRUCTION OF THE HOT-MIX ASPHALT BINDER AND SURFACE COURSE; AND GUARDRAILS SHALL BE INSTALLED.

   c. PHASE 2 CONSTRUCTION SHALL COMMENCE AFTER THE ROADWAY HAS EXPERIENCED ONE WINTER SEASON AND SHOULD BE COMPLETED BY EARLY SUMMER 2014. HOT-MIX ASPHALT WORK SHALL NOT BEGIN BEFORE MAY 15TH WITHOUT APPROVAL OF THE ENGINEER.

3. THE CONTRACTOR SHALL EXERCISE CARE IN PERFORMING REMOVALS SO AS NOT TO DISRUPT ADJOINING FEATURES THAT ARE TO REMAIN IN PLACE. ANY DAMAGE CAUSED TO ADJOINING FEATURES AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

4. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL AND PROTECTION.

5. ADDITIONAL BITUMINOUS REQUIREMENTS:
   a. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.
   b. A PRESET GRADE CONTROL STRINGLINE SHALL BE USED FOR THE FULL PROJECT.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING POSITIVE DRAINAGE IN THE DISTURBED AREAS, TO THE SATISFACTION OF THE ENGINEER. ANY GRADING SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

7. ALL AREAS THAT ARE DISTURBED BEYOND THE SEEDING LIMITS SHALL BE GRADED AND SEEDING RE-ESTABLISHED BY THE CONTRACTOR AT HIS/HER EXPENSE, IN THE SAME MANNER AS FINAL GRADING WORK PER THE SPECIFICATIONS, TO THE SATISFACTION OF THE ENGINEER.

8. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY HAVE BEEN CAUSED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL EXISTING UNDERGROUND UTILITIES. THE APPROXIMATE LOCATIONS OF THE KNOWN UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN.

9. THE ELECTRIC AND TELEPHONE LINES WILL BE RELOCATED BY RESPECTIVE UTILITIES AFTER COMPLETION OF TREE REMOVAL.

10. IF ASH TREES ARE REMOVED ON THE PROJECT, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH MEASURES SPECIFIED BY THE ILLINOIS DEPARTMENT OF AGRICULTURE (IDOA) TO PREVENT THE SPREAD OF THE EMERALD ASH BORER. THE IDOA INFORMATION FOR ASH TREE REMOVAL CAN BE FOUND ON THE IDOA WEBSITE AT WWW.AGR.STATE.IL.US/EAB.

11. ALL SAW CUTTING OF THE EXISTING SURFACES SHALL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF WORK INVOLVED. THE DEPTH OF THE SAW CUT SHALL BE SUFFICIENT TO ALLOW A CLEAN, STRAIGHT EDGE TO BE VISIBLE WHERE THE PROPOSED IMPROVEMENTS MEET THE EXISTING FEATURES.

12. GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE FILLS OR CUTS ARE ADJACENT TO THESE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE, IN THE ORIGINAL STATE, AS MUCH AREA AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

13. REMOVAL OF EXISTING AGGREGATE AND OIL & CHIP SURFACE WILL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

14. ALL ENTRANCES WITHIN THE PROJECT LIMITS SHALL REMAIN ACCESSIBLE, AS DIRECTED BY THE ENGINEER, THROUGHOUT THE TIME OF CONSTRUCTION.

15. THE CONTRACTOR SHALL GIVE AT LEAST TWO WEEKS NOTICE BEFORE BEGINNING CONSTRUCTION FOR PHASE 1 AND PHASE 2 SO THE ENGINEER MAY GIVE ADEQUATE NOTICE TO ALL EMERGENCY, SCHOOL AND POSTAL SERVICES.

16. REMOVAL OF EXISTING ROW MARKERS WITHIN THE PROJECT LIMITS, FENCES AND DITCH CHECKS OR OTHER OBSTRUCTIONS NOT PAID FOR ELSEWHERE, SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

17. REMOVAL OF EXISTING GUARDRAIL SHALL BE CONSIDERED IN THE CONTRACT UNIT PRICE OF REMOVAL OF EXISTING STRUCTURES, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

18. THE FOLLOWING ITEMS SHALL HAVE THE LISTED RESTRICTIONS, ALSO SEE SPECS.

ITEM	RESTRICTION
AGGREGATE BASE COURSE, TYPE B	SHALL MEET REQUIREMENTS OF ARTICLE 351.05(a) EXCEPT THE BEARING RATIO AND THE DENSITY TESTING SHALL NOT BE REQUIRED. THE MOISTURE CONTENT SHALL BE PUGGED AT 6% - 8%. AGGREGATE SHALL BE PROOF ROLLED TO THE SATISFACTION OF THE ENGINEER.
AGGREGATE SURFACE COURSE, TYPE B	SHALL MEET REQUIREMENTS OF ARTICLE 402.05(a) EXCEPT THE BEARING RATIO AND THE DENSITY TESTING SHALL NOT BE REQUIRED. THE MOISTURE CONTENT SHALL BE PUGGED AT 6% - 8%. AGGREGATE SHALL BE PROOF ROLLED TO THE SATISFACTION OF THE ENGINEER.
PIPE CULVERTS, CLASS A	ONLY REINFORCED CONCRETE PIPE SHALL BE ALLOWED.
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	THE 3.125' OF GUARDRAIL PROVIDED BEYOND THE TYPICAL 50' PAY LENGTH TO MEET THE NEXT TYPICAL SPLICE LOCATION, USING STANDARD RAIL LENGTHS, SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

19. TO AVOID THE POTENTIAL FOR DESTROYING INDIANA BATS, THERE SHALL BE NO TREE CLEARING FROM APRIL 1 THROUGH SEPTEMBER 30.

APPLICATION RATES

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

NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE	BITUMINOUS CONCRETE	112 LBS/SY/IN
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE	BITUMINOUS MATERIALS (PRIME COAT)	
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE	BITUMINOUS/OIL & CHIP SURFACE	0.08 GAL/SY
MULCH METHOD 2	2 TONS/ACRE	AGGREGATE SURFACE	0.375 GAL/SY
GRANULAR MATERIAL	2.05 TONS/CY	AGGREGATE (PRIME COAT)	
RIPRAP	1.6 TONS/CY	BITUMINOUS/OIL & CHIP SURFACE	3 LBS/SY
TEMPORARY DITCH CHECKS	10 FT/DITCH CHECK	AGGREGATE SURFACE	5 LBS/SY
		A-2 BITUMINOUS SURFACE TREATMENT	
		2 COATS OF HFE - 150: 1ST AT	0.40 GAL/SY
		2ND AT	0.35 GAL/SY
		COVER COAT AGGREGATE	20 LBS/SY
		SEAL COAT AGGREAGATE	20 LBS/SY

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		DRAWN K.H.L.	REVISED
	PLOT SCALE = 20.0000 ' / IN.	CHECKED L.D.G.	REVISED
	PLOT DATE = 9/10/2012	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	2
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM

HMG NO. 5790

SUMMARY OF QUANTITIES

SPEC. PROV.	SPECIALTY ITEM	CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
		20100500	TREE REMOVAL, ACRES	ACRE	1.2
*		20200100	EARTH EXCAVATION	CU YD	7,660
*		20300100	CHANNEL EXCAVATION	CU YD	1,193
*		20400800	FURNISHED EXCAVATION	CU YD	12,980
*		20800150	TRENCH BACKFILL	CU YD	96
	#	25000210	SEEDING, CLASS 2A	ACRE	6.1
	#	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	549
	#	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	549
	#	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	549
	#	25100115	MULCH, METHOD 2	ACRE	6.1
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	610
*		28000305	TEMPORARY DITCH CHECKS	FOOT	90
*		28000315	AGGREGATE DITCH CHECKS	TON	24
		28000400	PERIMETER EROSION BARRIER	FOOT	320
*		28100807	STONE DUMPED RIPRAP, CLASS A4	TON	36
*		28100809	STONE DUMPED RIPRAP, CLASS A5	TON	627
*		35101400	AGGREGATE BASE COURSE, TYPE B	TON	5,056
*		40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	550
		40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	6,132
		40300500	COVER COAT AGGREGATE	TON	82
		40300600	SEAL COAT AGGREGATE	TON	82
		40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,420
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,414
		40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	2,239
		40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	875
		48100100	AGGREGATE SHOULDERS, TYPE A	TON	920
		50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
		50105220	PIPE CULVERT REMOVAL	FOOT	280
		50200100	STRUCTURE EXCAVATION	CU YD	114
		50300225	CONCRETE STRUCTURES	CU YD	69.0
		50300280	CONCRETE ENCASEMENT	CU YD	71.4
		50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	4,266
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8,840
	#	50901050	STEEL RAILING, TYPE SM	FOOT	240
		51201600	FURNISHING STEEL PILES HP12X53	FOOT	828
		51202305	DRIVING PILES	FOOT	372

SPEC. PROV.	SPECIALTY ITEM	CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
		51203600	TEST PILE STEEL HP12X53	EACH	1
		51500100	NAME PLATES	EACH	1
		542A0223	PIPE CULVERTS, CLASS A, TYPE 1 18"	FOOT	40
		542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	32
		542A0235	PIPE CULVERTS, CLASS A, TYPE 1 30"	FOOT	40
		542A1081	PIPE CULVERTS, CLASS A, TYPE 2 36"	FOOT	320
		54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2
		54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2
		54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2
		54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	6
		58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	475
		58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	950
		59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	28.0
	#	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
*	#	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
		67100100	MOBILIZATION	L SUM	1
	#	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
*		Z0013798	CONSTRUCTION LAYOUT	L SUM	1
*	#	Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
*		Z0065000	SETTING PILES IN ROCK	EACH	12
	#	B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	25
*		X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

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PLOT DATE = 9/28/2012

DESIGNED - K.M.M.
DRAWN - K.H.L.
CHECKED - L.D.G.
DATE -

REVISED -
REVISED -
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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	3
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM

CULVERT SCHEDULE

LOCATION							PIPE CULVERT REMOVAL	PIPE CULVERTS, CLASS A, TYPE 1 18"	PIPE CULVERTS, CLASS A, TYPE 1 24"	PIPE CULVERTS, CLASS A, TYPE 1 30"	PIPE CULVERTS, CLASS A, TYPE 2 36"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	TRENCH BACKFILL
							FOOT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH	CU YD
ENTRANCE	INV EL					INV EL										
18+84	LT	STA 18+68.55	31.85'	540.01	TO STA 19+08.55 31.96'	538.09	24			40				2		
24+80	LT	STA 24+51.35	38.21'	511.81	TO STA 25+44.22 66.06'	503.92					88				2	
26+18	LT	STA 25+31.57	19.88'		TO STA 25+73.70 17.99'		43									
25+49	RT	STA 25+20.62	36.71'		TO STA 25+76.82 43.02'		57									
28+63	LT	STA 28+43.95	11.46'		TO STA 28+76.06 10.20'		32									
29+20	LT	STA 27+98.42	77.79'	493.87	TO STA 29+49.44 60.48'	507.05					152				2	
36+09	LT	STA 36+07.40	37.14'		TO STA 36+10.73 51.87'		15									
36+17	LT	STA 35+93.06	31.76'	544.21	TO STA 36+33.06 30.18'	545.89	37	40				2				
AR 42+42	CTR	STA 42+42.00	42.7'	L 540.90	TO STA 42+42.00	53.5' RT 536.50					80				2	60.0
AR 42+79	CTR	STA 42+77.14	26.38'		TO STA 42+79.80	25.53'	52									36.0
43+61	LT	STA 43+44.27	34.87'	542.06	TO STA 43+76.27	32.63' 542.34	20		32				2			
						TOTAL	280	40	32	40	320	2	2	2	6	96
						USE	280	40	32	40	320	2	2	2	6	96

ENTRANCE SCHEDULE

LOCATION			AGG SURFACE COURSE, TYPE B
STA.		TYPE	TON
18+84	LT	FE	39
24+80	LT	FE	182
29+20	LT	FE	171
36+17	LT	PE	98
37+87	RT	FE	26
43+61	LT	FE	34

HMA MIXTURE REQUIREMENTS

ROUTE	FAS 779 (CH 21)
SECTION	07-00085-00-BR
COUNTY	BOND
CONTRACT	97508

DESCRIPTION: POKEY RD. OVER TRIB. TO SHOAL CREEK

20 YR. ESAL'S: 0.25

MIXTURE USE	SURFACE	BINDER
AC/PG	PG 64-22	PG 64-22
RAP % (MAX)	0%	10%
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGG	MIXTURE C	N/A

EARTHWORK SCHEDULE

(SEE SPECIAL PROVISIONS)

LOCATION							A CHANNEL EXCAVATION	B EARTH EXCAVATION	C EXCAVATION ADJUSTED FOR SHRINKAGE/LOSS	D REQUIRED FILL	E = C - D BALANCE: WASTE (+) OR SHORTAGE (-)
							CU YD	CU YD	CU YD	CU YD	CU YD
STA	16+50.00		TO	STA	23+00.00			1,672.0	1,254.0	996.0	258.0
STA	23+00.00		TO	STA	26+40.00	(NORTH ABUTMENT)		1,027.0	770.3	5,788.0	-5,017.8
STA	26+40.00	(NORTH ABUTMENT)	TO	STA	27+60.00	(SOUTH ABUTMENT)	1,193.0		894.8	932.0	-37.3
STA	27+60.00	(SOUTH ABUTMENT)	TO	STA	32+00.00			809.0	606.8	9,939.0	-9,332.3
STA	32+00.00		TO	STA	34+50.00			899.0	674.3	409.0	265.3
STA	34+50.00		TO	STA	40+50.00			1,806.0	1,354.5	467.0	887.5
STA	40+50.00		TO	STA	46+00.00			1,447.0	1,085.3	869.0	216.3
						TOTAL	1,193.0	7,660.0	5,554.5	19,400.0	-12,976.5
						USE	1,193	7,660	5,555	19,400	12,980

NOTES:
QUANTITIES ESTIMATED FROM CROSS-SECTION END AREAS.
SCHEDULE ASSUMES A 25% SHRINKAGE/LOSS FACTOR.
COLUMN "A" - CUT MATERIAL FROM THE CHANNEL (CHANNEL EXCAVATION)
COLUMN "B" - CUT MATERIAL OUTSIDE THE CHANNEL (EARTH EXCAVATION)
COLUMN "C" - CUT MATERIAL ADJUSTED FOR SHRINKAGE/LOSS AND SUITABLE FOR EMBANKMENT (NOT A PAY ITEM)
COLUMN "D" - REQUIRED FILL MATERIAL (NOT A PAY ITEM)
COLUMN "E" - BALANCE OF CUT MATERIAL AND FILL MATERIAL (FURNISHED EXCAVATION)

TREE REMOVAL SCHEDULE

LOCATION							TREE REMOVAL, ACRES
							ACRE
STA	21+78.00	LT	TO	STA	25+63.00	LT	0.30
STA	26+42.00	LT	TO	STA	27+74.00	LT	0.16
STA	28+59.00	LT	TO	STA	31+63.00	LT	0.44
STA	37+12.00	LT	TO	STA	42+19.00	LT	0.23
STA	44+50.00	LT	TO	STA	46+00.00	LT	0.05
						TOTAL	1.18
						USE	1.2

THERE SHALL BE NO TREE CLEARING FROM APRIL 1 THROUGH SEPTEMBER 30.

EXTRA BARS FOR TEST SAMPLES

BAR	NO.	SIZE	LENGTH	SHAPE
h_1(E)	1	#7	14'-5"	
h_3(E)	1	#4	17'-5"	
u(E)	1	#6	10'-4"	
v(E)	1	#5	6'-4"	

THESE BARS SHALL BE IDENTICAL TO AND DELIVERED WITH THE BARS OF THE SAME MARK LISTED IN THE STRUCTURE SHEETS. ONE BAR OF EACH OF THESE MARKS WILL BE SELECTED BY THE ENGINEER TO BE USED AS A TEST SAMPLE.

THIS CHART ASSUMES THAT ALL BARS OF THE SAME SIZE ON THE JOB WILL HAVE THE SAME HEAT NUMBER. IF BARS OF THE SAME SIZE ON THE JOB HAVE DIFFERENT HEAT NUMBERS, THEN THE CONTRACTOR SHALL SUPPLY ADDITIONAL BARS FROM OTHER HEAT NUMBERS FOR SAMPLING BY THE ENGINEER AT NO ADDITIONAL COST.

PAVING SCHEDULE

LOCATION						AGGREGATE BASE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	HMA SURFACE REMOVAL - BUTT JOINT	HMA BINDER COURSE, IL-19.0, N70	HMA SURFACE COURSE, MIX "C", N70	AGGREGATE SHOULDERS, TYPE A
						TON	GALLON	SQ YD	TON	TON	TON
STA	16+50.00	TO	STA	23+00.00		800	307	347	485	159	234
STA	23+00.00	TO	STA	25+03.00		396	96		151	50	73
STA	25+03.00	TO	STA	26+40.00		319	106	360	167	55	
BRIDGE OMISSION											
STA	27+60.00	TO	STA	28+97.00		319	106	360	167	55	
STA	28+97.00	TO	STA	32+00.00		591	143		226	74	109
STA	32+00.00	TO	STA	34+50.00		564	118		186	61	90
STA	34+50.00	TO	STA	40+50.00		1171	284		447	146	216
STA	40+50.00	TO	STA	46+00.00		896	260	347	410	134	198
					TOTAL	5,056	1,420	1,414	2,239	734	920
					USE	5,056	1,420	1,414	2,239	734	920

PHASE 2 WORK ITEMS

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	Phase 1	Phase 2
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	550	50	500
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,420		1,420
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,414		1,414
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	2,239		2,239
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	875	141	734
48100100	AGGREGATE SHOULDERS, TYPE A	TON	920		920
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4		4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4		4
67100100	MOBILIZATION	L SUM	1	0.9	0.1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.9	0.1
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.9	0.1

PAY ITEMS NOT INCLUDED IN THE ABOVE TABLE SHALL BE COMPLETED IN PHASE 1.

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CHECKED - L.D.G.
DATE -
REVISED -
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REVISED -
REVISED -

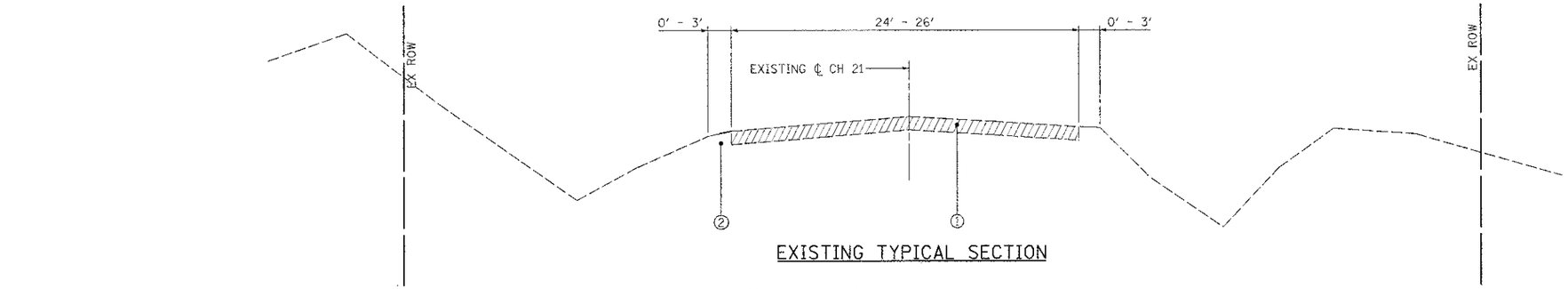
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

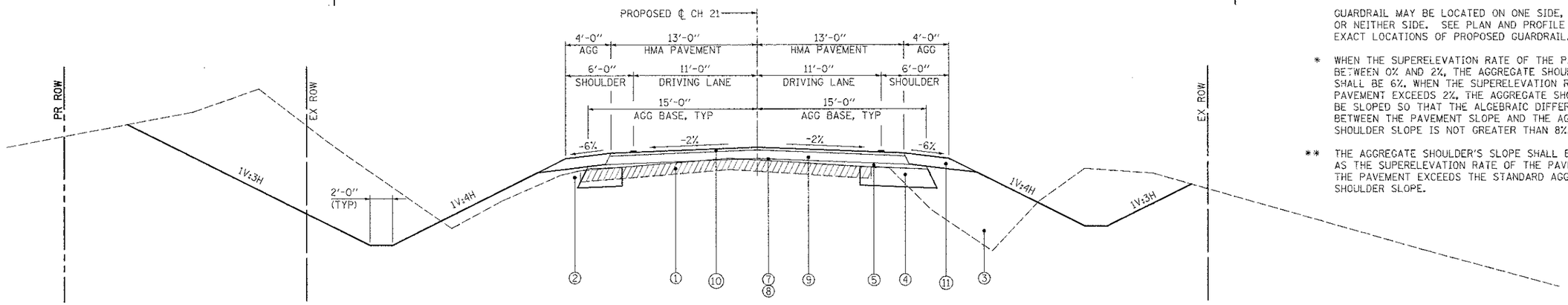
SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	4
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790



EXISTING TYPICAL SECTION



PROPOSED OVERLAY WITH WIDENING
TYPICAL TANGENT SECTION

STA 16+50 TO STA 18+07
STA 32+00 TO STA 34+25
STA 44+70 TO STA 46+00

NOTES:

TYPICAL SECTIONS CONTROL BASE & SUBBASE CONSTRUCTION OVER CROSS SECTIONS.

SEE GENERAL NOTE 2 FOR CONSTRUCTION SEQUENCING.

SEE GENERAL NOTES AND SPECIFICATIONS FOR AGGREGATE TYPE B REQUIREMENTS.

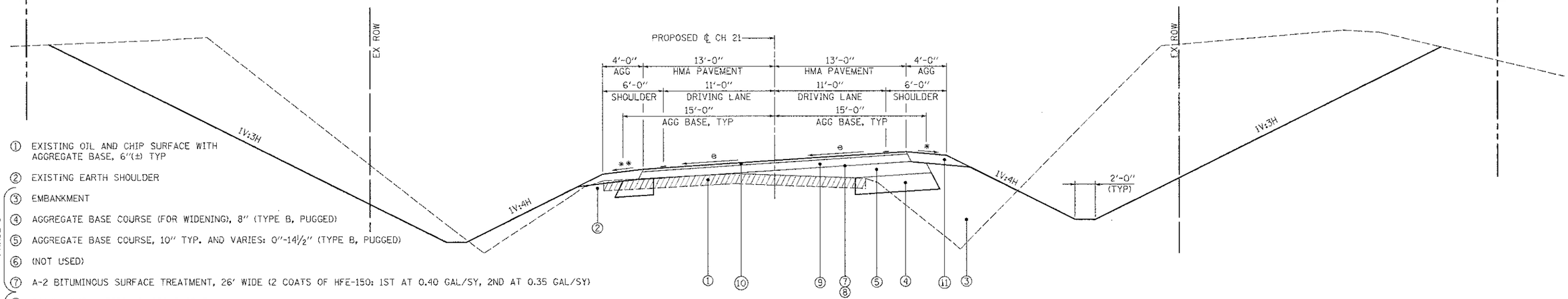
A PRESET GRADE CONTROL STRINGLINE SHALL BE USED FOR THE FULL PROJECT. SEE GENERAL NOTES.

WIDENING DUE TO PROPOSED REALIGNMENT MAY BE ON ONE OR BOTH SIDES. SEE PLAN AND PROFILE SHEETS AND CROSS SECTIONS.

GUARDRAIL MAY BE LOCATED ON ONE SIDE, BOTH SIDES OR NEITHER SIDE. SEE PLAN AND PROFILE SHEETS FOR EXACT LOCATIONS OF PROPOSED GUARDRAIL.

* WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 2%, THE AGGREGATE SHOULDER SLOPE SHALL BE 6%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 2%, THE AGGREGATE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND THE AGGREGATE SHOULDER SLOPE IS NOT GREATER THAN 8%.

** THE AGGREGATE SHOULDER'S SLOPE SHALL BE THE SAME AS THE SUPERELEVATION RATE OF THE PAVEMENT AFTER THE PAVEMENT EXCEEDS THE STANDARD AGGREGATE SHOULDER SLOPE.



PHASE 1
① EXISTING OIL AND CHIP SURFACE WITH AGGREGATE BASE, 6"(±) TYP
② EXISTING EARTH SHOULDER
③ EMBANKMENT
④ AGGREGATE BASE COURSE (FOR WIDENING), 8" (TYPE B, PUGGED)
⑤ AGGREGATE BASE COURSE, 10" TYP. AND VARIES: 0"-14½" (TYPE B, PUGGED)
⑥ (NOT USED)
⑦ A-2 BITUMINOUS SURFACE TREATMENT, 26' WIDE (2 COATS OF HFE-150: 1ST AT 0.40 GAL/SY, 2ND AT 0.35 GAL/SY)

PHASE 2
⑧ BITUMINOUS MATERIALS (PRIME COAT)
⑨ HOT-MIX ASPHALT BINDER COURSE, 4½"
⑩ HOT-MIX ASPHALT SURFACE COURSE, 1½"
⑪ AGGREGATE SHOULDERS, 6"
⑫ HOT-MIX ASPHALT SHOULDER AT GUARDRAIL WIDENING (1½" HMA SURFACE CSE. OVER 4½" HMA BINDER CSE.)
⑬ GUARDRAIL

PROPOSED OVERLAY WITH WIDENING
TYPICAL SUPERELEVATED SECTION

STA 18+07 TO STA 23+00
STA 34+25 TO STA 34+50
STA 40+50 TO STA 44+70

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	PLOT DATE = 9/7/2012	DATE	REVISED -

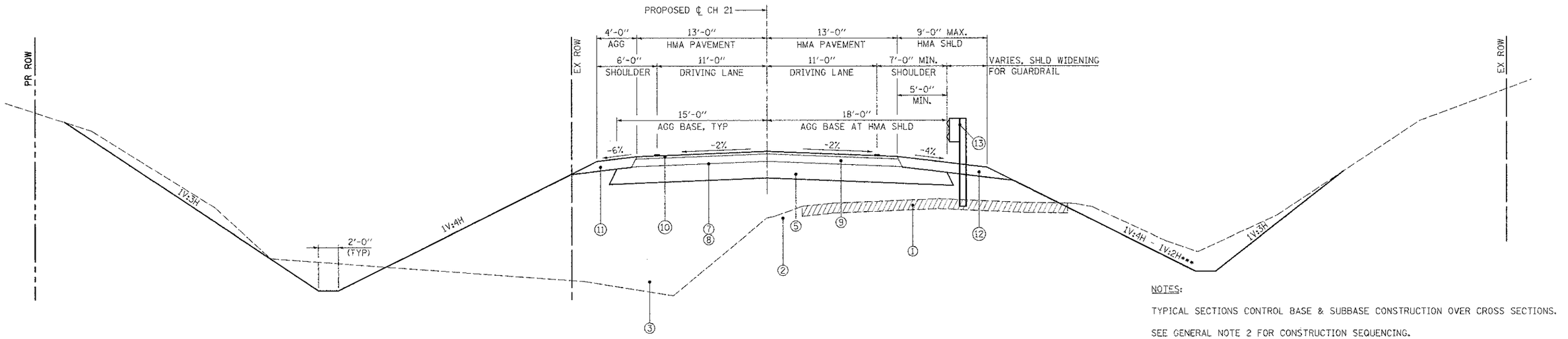
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL ROADWAY SECTIONS

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

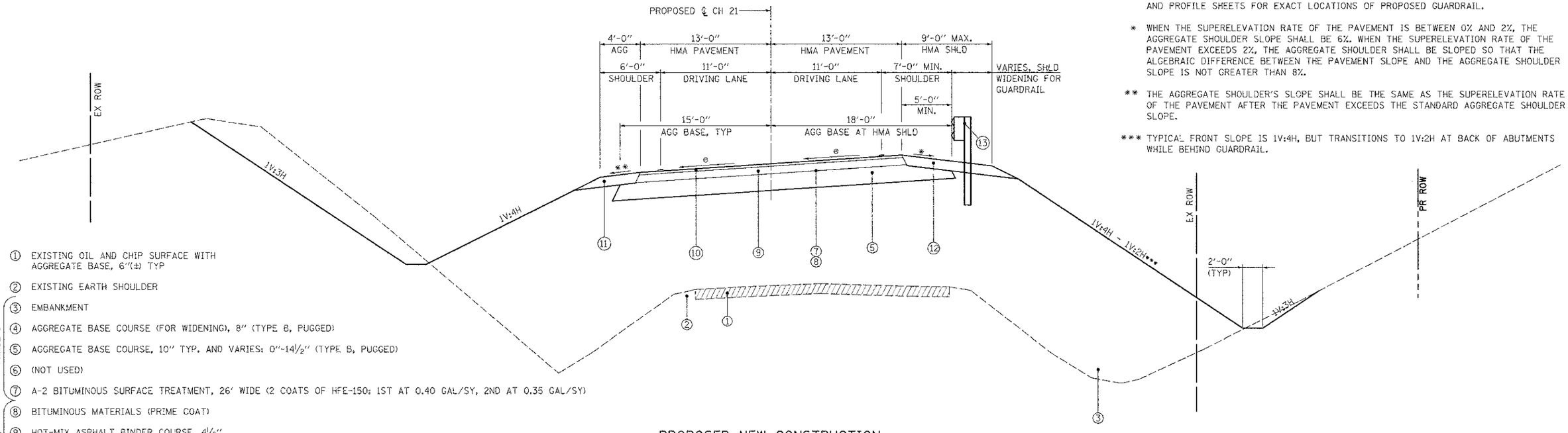
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	5
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790



PROPOSED NEW CONSTRUCTION
TYPICAL TANGENT SECTION

STA 26+23 TO STA 26+40
STA 27+60 TO STA 32+00



PHASE 1

① EXISTING OIL AND CHIP SURFACE WITH AGGREGATE BASE, 6"(±) TYP

② EXISTING EARTH SHOULDER

③ EMBANKMENT

④ AGGREGATE BASE COURSE (FOR WIDENING), 8" (TYPE B, PUGGED)

⑤ AGGREGATE BASE COURSE, 10" TYP. AND VARIES: 0"-14½" (TYPE B, PUGGED)

⑥ (NOT USED)

⑦ A-2 BITUMINOUS SURFACE TREATMENT, 26' WIDE (2 COATS OF HFE-150; 1ST AT 0.40 GAL/SY, 2ND AT 0.35 GAL/SY)

PHASE 2

⑧ BITUMINOUS MATERIALS (PRIME COAT)

⑨ HOT-MIX ASPHALT BINDER COURSE, 4½"

⑩ HOT-MIX ASPHALT SURFACE COURSE, 1½"

⑪ AGGREGATE SHOULDERS, 6"

⑫ HOT-MIX ASPHALT SHOULDER AT GUARDRAIL WIDENING (1½" HMA SURFACE CSE. OVER 4½" HMA BINDER CSE.)

⑬ GUARDRAIL

PROPOSED NEW CONSTRUCTION
TYPICAL SUPERELEVATED SECTION

STA 23+00 TO STA 26+23
STA 34+50 TO STA 40+50

NOTES:

TYPICAL SECTIONS CONTROL BASE & SUBBASE CONSTRUCTION OVER CROSS SECTIONS.

SEE GENERAL NOTE 2 FOR CONSTRUCTION SEQUENCING.

SEE GENERAL NOTES AND SPECIFICATIONS FOR AGGREGATE TYPE B REQUIREMENTS.

A PRESET GRADE CONTROL STRINGLINE SHALL BE USED FOR THE FULL PROJECT. SEE GENERAL NOTES.

WIDENING DUE TO PROPOSED REALIGNMENT MAY BE ON ONE OR BOTH SIDES. SEE PLAN AND PROFILE SHEETS AND CROSS SECTIONS.

GUARDRAIL MAY BE LOCATED ON ONE SIDE, BOTH SIDES OR NEITHER SIDE. SEE PLAN AND PROFILE SHEETS FOR EXACT LOCATIONS OF PROPOSED GUARDRAIL.

* WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 2%, THE AGGREGATE SHOULDER SLOPE SHALL BE 6%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 2%, THE AGGREGATE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN THE PAVEMENT SLOPE AND THE AGGREGATE SHOULDER SLOPE IS NOT GREATER THAN 8%.

** THE AGGREGATE SHOULDER'S SLOPE SHALL BE THE SAME AS THE SUPERELEVATION RATE OF THE PAVEMENT AFTER THE PAVEMENT EXCEEDS THE STANDARD AGGREGATE SHOULDER SLOPE.

*** TYPICAL FRONT SLOPE IS 1V:4H, BUT TRANSITIONS TO 1V:2H AT BACK OF ABUTMENTS WHILE BEHIND GUARDRAIL.

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	PLOT DATE = 9/7/2012	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL ROADWAY SECTIONS

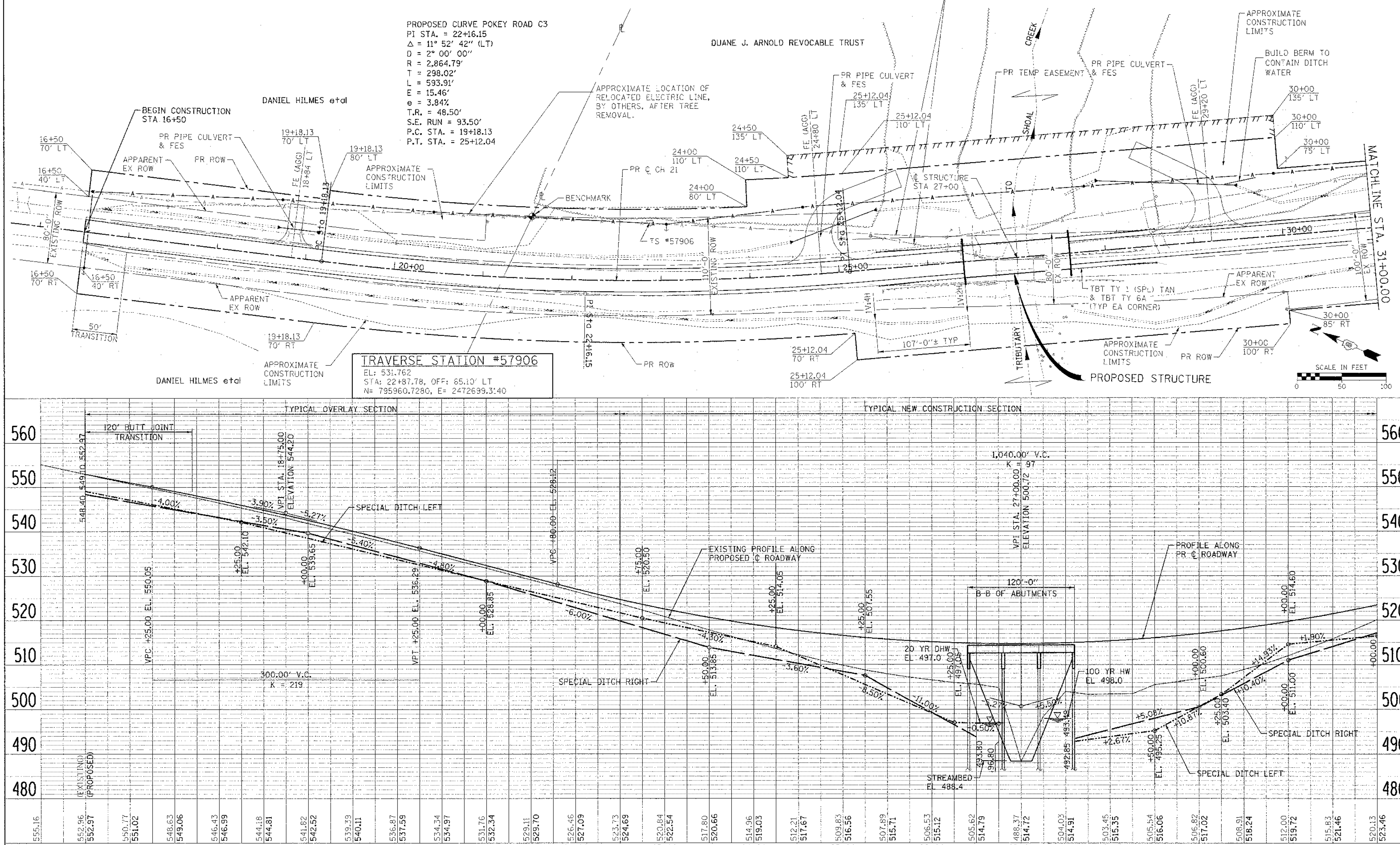
SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	6
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM

BENCHMARK: STEEL PIN WITH CAP (FOUND)
STA 21+52.58, 69.8' LT
EL 537.61



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE PROPOSED ROADWAY

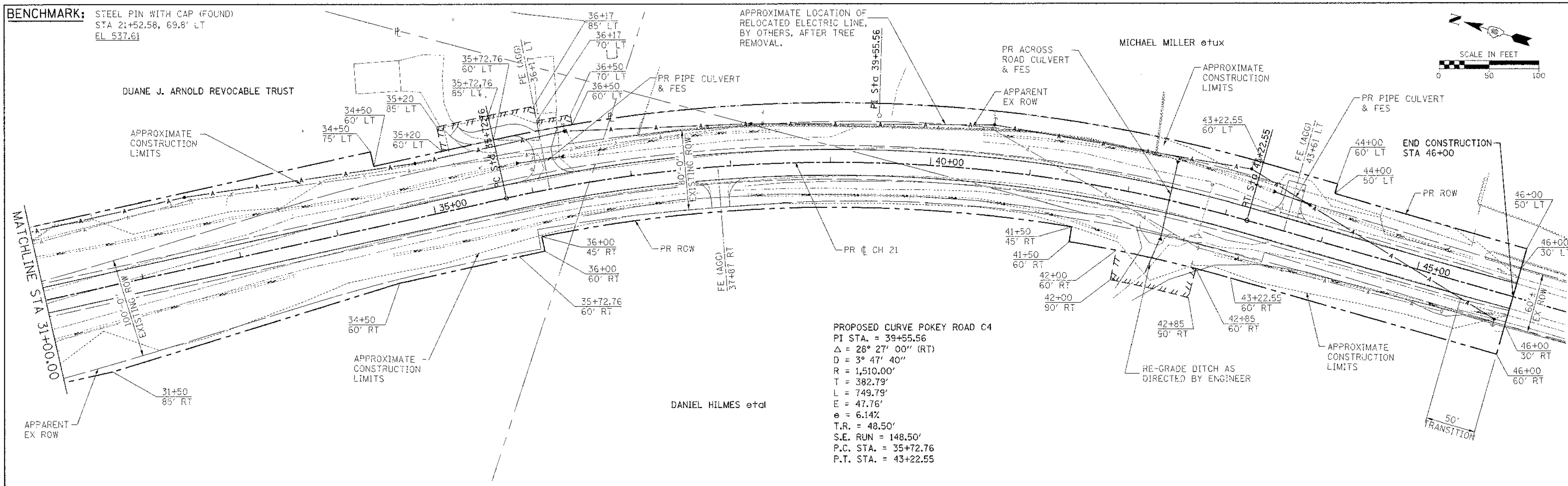
SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. 16+00 TO STA. 31+00

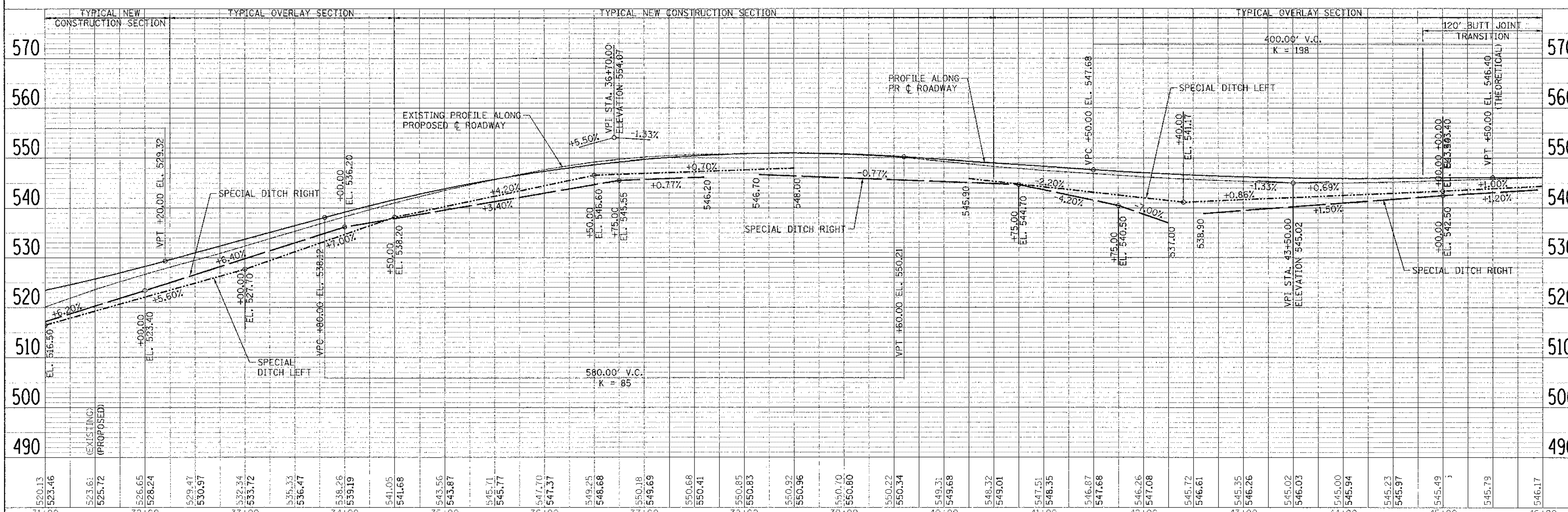
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-C0085-00-BR	BOND	41	7
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

HMG NO. 5790

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., BY, DATE





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DRAWN - K.O.J.
CHECKED - L.D.G.
DATE

REVISED -
REVISED -
REVISED
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

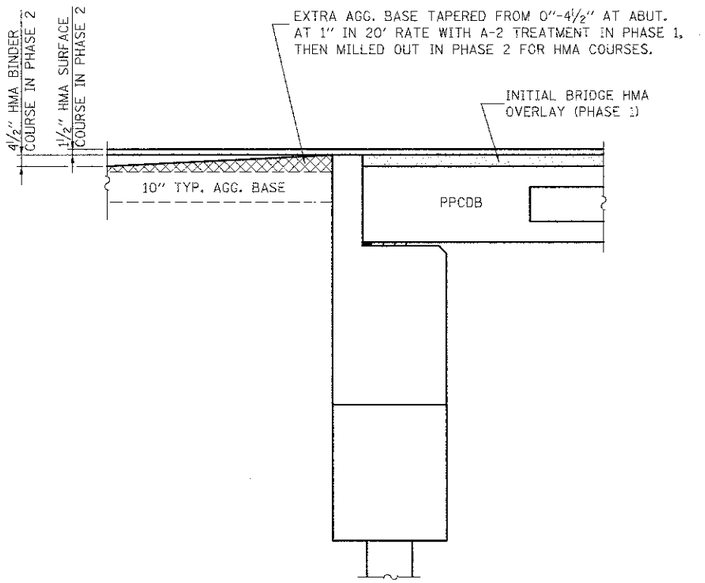
PLAN & PROFILE PROPOSED ROADWAY

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	8

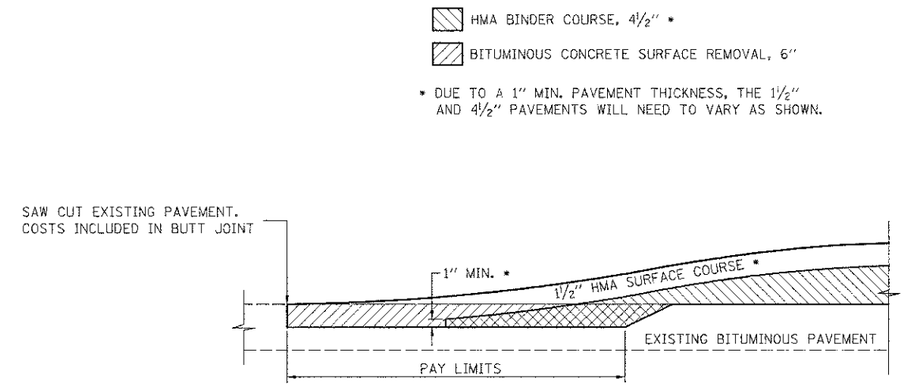
SN 003-3053 | CONTRACT NO. 97508
ILLINOIS FED. AID PROJECT

HMG NO. 5790



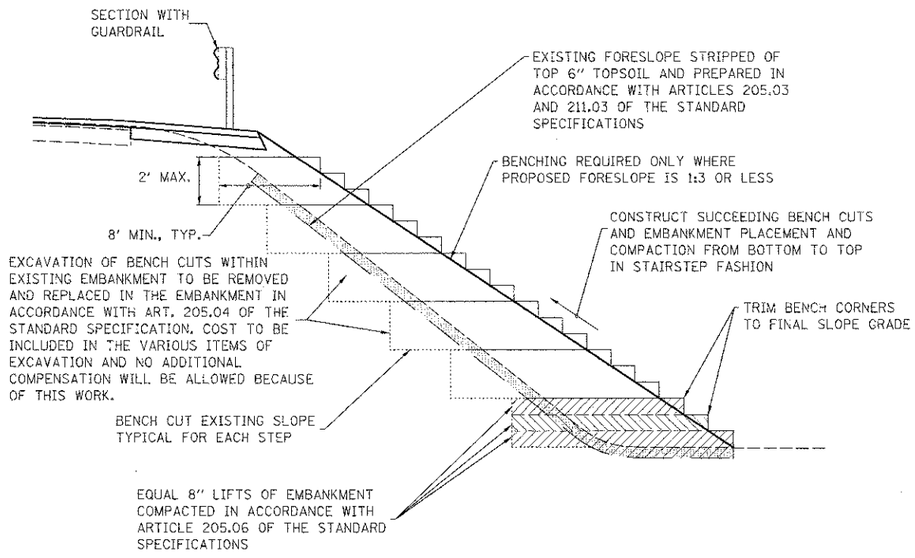
PROPOSED BUTT JOINT-BACK OF ABUTMENT DETAIL

NOT TO SCALE



PROPOSED BUTT JOINT TRANSITION DETAIL

NOT TO SCALE



TYPICAL BENCHING DETAIL FOR EMBANKMENTS

HORIZONTAL CONTROL TABLE (ALIGNMENT)

		STATION	NORTHING	EASTING
PROPOSED CURVE POKEY ROAD C3	PC	19+18.13	796278.225	2472507.514
	PI	22+16.15	795993.767	2472596.405
	PT	25+12.04	795733.697	242741.943
		STATION	NORTHING	EASTING
PROPOSED CURVE POKEY ROAD C4	PC	35+72.76	794808.055	2473259.942
	PI	39+55.56	794474.012	2473446.876
	PT	43+22.55	794091.257	2473452.099

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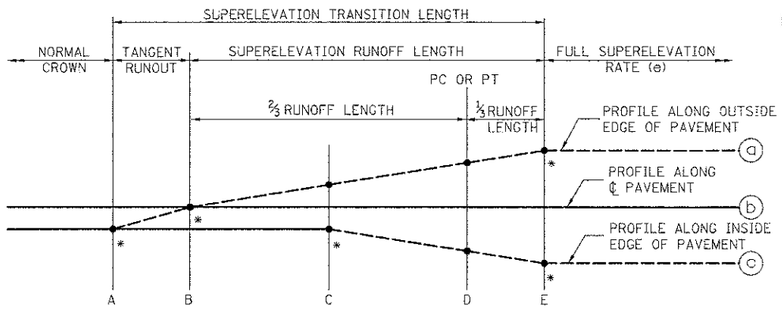
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	9
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

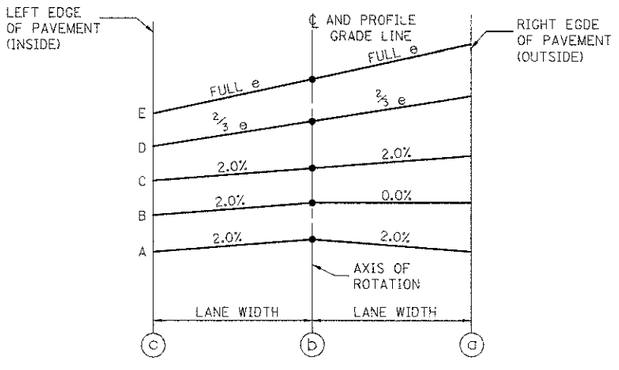
HMG NO. 5790



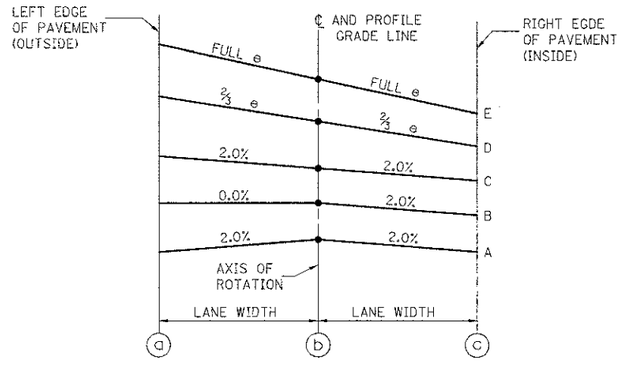
* ROUND ALL BREAKPOINTS IN FIELD

POINTS	CURVE 3		CURVE 4	
E	19+49	24+81	36+22	42+74
D	19+18.13	25+12.04	35+72.76	43+22.53
C	19+04	25+26	35+22	43+74
B	18+56	25+74	34+73	44+23
A	18+07	26+23	34+25	44+71

SUPERELEVATION DETAILS



SUPERELEVATION DETAILS
LEFT CURVE



SUPERELEVATION DETAILS
RIGHT CURVE

NOTE:
A PRESET GRADE CONTROL STRINGLINE SHALL BE USED FOR THE FULL PROJECT. SEE GENERAL NOTES.

PROPOSED CURVE 3

STA	LT EOS	LT EOP	PCE	RT EOP	RT EOS
18+00.	546.49	546.73	546.99	546.73	546.49
18+25.	545.42	545.66	545.92	545.76	545.52
18+50.	544.32	544.56	544.82	544.79	544.55
18+75.	543.19	543.43	543.69	543.79	543.55
19+00.	542.02	542.26	542.52	542.76	542.52
19+25.	540.73	540.97	541.34	541.71	541.47
19+50.	539.38	539.62	540.12	540.62	540.38
19+75.	538.13	538.37	538.87	539.37	539.13
20+00.	536.86	537.10	537.60	538.10	537.86
20+25.	535.56	535.80	536.29	536.79	536.55
20+50.	534.24	534.48	534.98	535.48	535.24
20+75.	532.92	533.16	533.66	534.16	533.92
21+00.	531.60	531.84	532.34	532.84	532.60
21+25.	530.29	530.53	531.02	531.52	531.28
21+50.	528.97	529.21	529.71	530.21	529.97
21+75.	527.65	527.89	528.39	528.89	528.65
22+00.	526.35	526.59	527.09	527.59	527.35
22+25.	525.12	525.36	525.86	526.36	526.12
22+50.	523.95	524.19	524.69	525.19	524.95
22+75.	522.85	523.09	523.59	524.09	523.85
23+00.	521.81	522.05	522.55	523.05	522.81
23+25.	520.83	521.07	521.57	522.07	521.83
23+50.	519.92	520.16	520.66	521.16	520.92
23+75.	519.08	519.32	519.82	520.32	520.08
24+00.	518.30	518.54	519.04	519.54	519.30
24+25.	517.58	517.82	518.32	518.82	518.58
24+50.	516.93	517.17	517.67	518.17	517.93
24+75.	516.35	516.59	517.08	517.58	517.34
# 25+00.	515.99	516.17	516.56	516.96	516.79
# 25+25.	515.54	515.84	516.11	516.37	516.06
# 25+50.	515.09	515.45	515.71	515.84	515.48
# 25+75.	514.77	515.13	515.39	515.38	515.02
# 26+00.	514.50	514.86	515.12	514.99	514.63
# 26+25.	514.31	514.67	514.93	514.67	514.31

\# Indicates Sections within Guardrail Widening and/or Transitions.

PROPOSED CURVE 4

STA	LT EOS	LT EOP	PCE	RT EOP	RT EOS
34+25.	539.98	540.22	540.48	540.22	539.98
34+50.	541.32	541.56	541.68	541.42	541.18
34+75.	542.58	542.82	542.81	542.55	542.31
35+00.	543.77	544.01	543.87	543.61	543.37
35+25.	544.89	545.13	544.86	544.58	544.34
35+50.	545.94	546.18	545.77	545.36	545.12
35+75.	546.92	547.15	546.61	546.06	545.82
36+00.	547.86	548.05	547.37	546.69	546.45
36+25.	548.70	548.86	548.06	547.26	547.02
36+50.	549.32	549.48	548.68	547.88	547.63
36+75.	549.86	550.02	549.22	548.42	548.18
37+00.	550.33	550.49	549.69	548.89	548.65
37+25.	550.73	550.88	550.09	549.29	549.04
37+50.	551.05	551.21	550.41	549.61	549.36
37+75.	551.30	551.46	550.66	549.86	549.61
38+00.	551.48	551.63	550.83	550.03	549.79
38+25.	551.58	551.73	550.93	550.14	549.89
38+50.	551.61	551.76	550.96	550.16	549.92
38+75.	551.56	551.71	550.92	550.12	549.87
39+00.	551.44	551.60	550.80	550.00	549.75
39+25.	551.25	551.40	550.60	549.81	549.56
39+50.	550.98	551.14	550.34	549.54	549.29
39+75.	550.65	550.81	550.01	549.21	548.97
40+00.	550.32	550.48	549.68	548.88	548.63
40+25.	549.99	550.14	549.35	548.55	548.30
40+50.	549.66	549.81	549.01	548.21	547.97
40+75.	549.32	549.48	548.68	547.88	547.64
41+00.	548.99	549.15	548.35	547.55	547.30
41+25.	548.66	548.81	548.01	547.22	546.97
41+50.	548.33	548.48	547.68	546.88	546.64
41+75.	548.01	548.16	547.36	546.57	546.32
42+00.	547.72	547.88	547.08	546.28	546.04
42+25.	547.47	547.62	546.83	546.03	545.78
42+50.	547.25	547.40	546.60	545.80	545.56
42+75.	547.05	547.20	546.41	545.62	545.37
43+00.	546.71	546.91	546.25	545.59	545.35
43+25.	546.41	546.65	546.12	545.60	545.36
43+50.	546.18	546.42	546.03	545.64	545.40
43+75.	545.98	546.22	545.96	545.70	545.46
44+00.	545.81	546.05	545.93	545.67	545.43
44+25.	545.67	545.91	545.93	545.67	545.43
44+50.	545.57	545.81	545.96	545.70	545.46
44+75.	545.52	545.76	546.02	545.76	545.52

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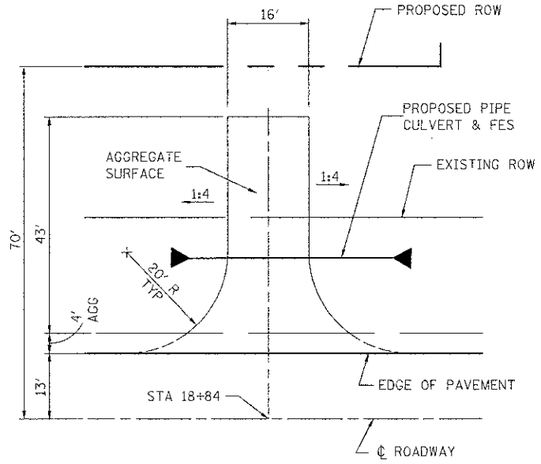
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

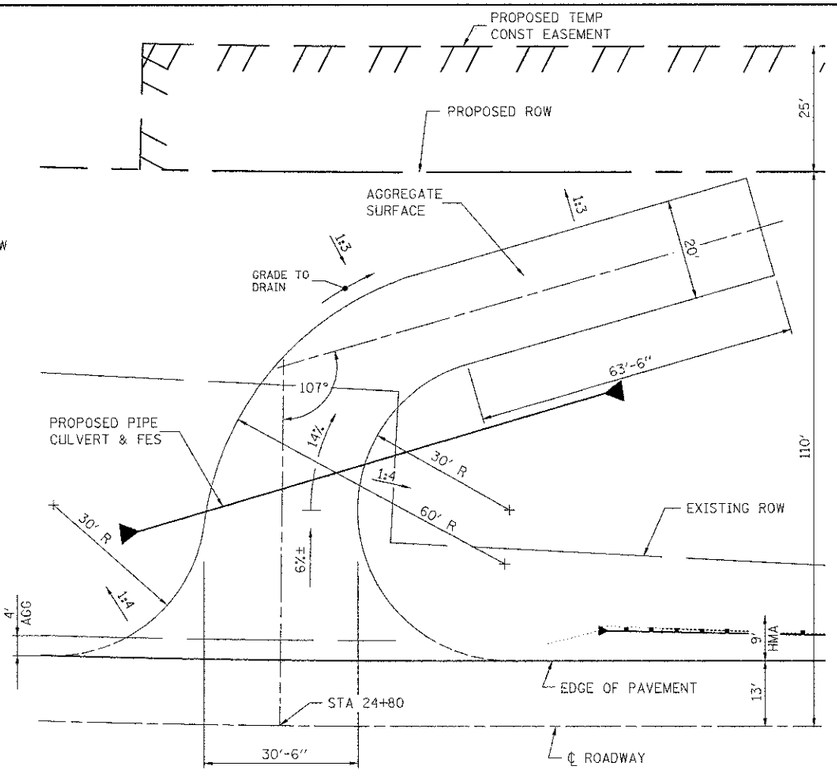
SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	10
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

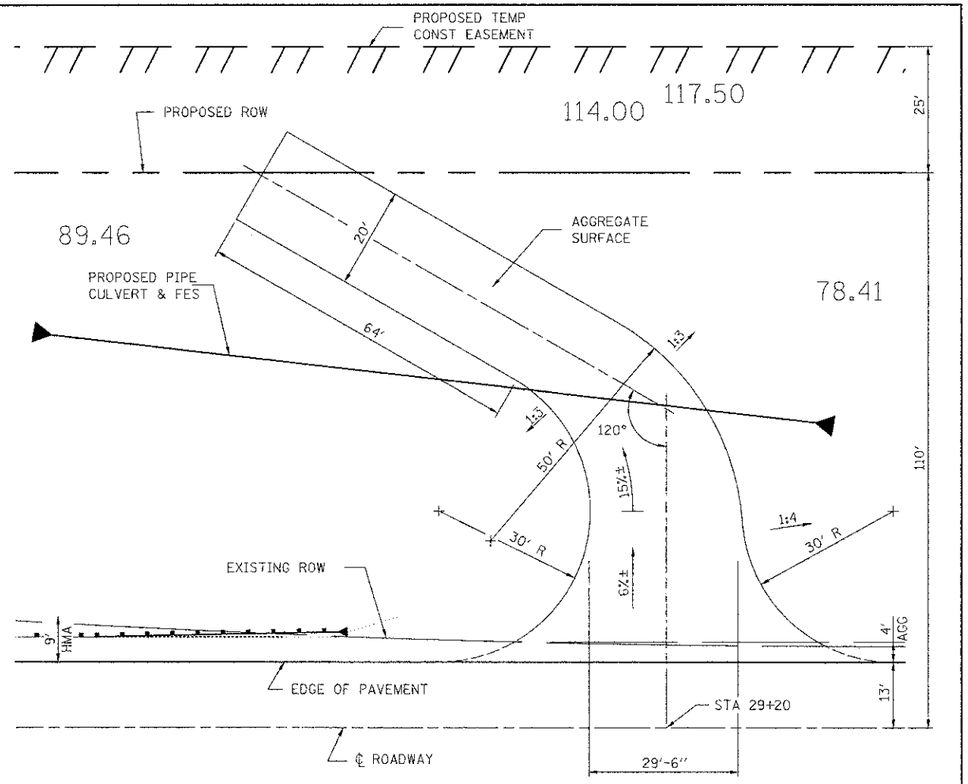
HMG NO. 5790



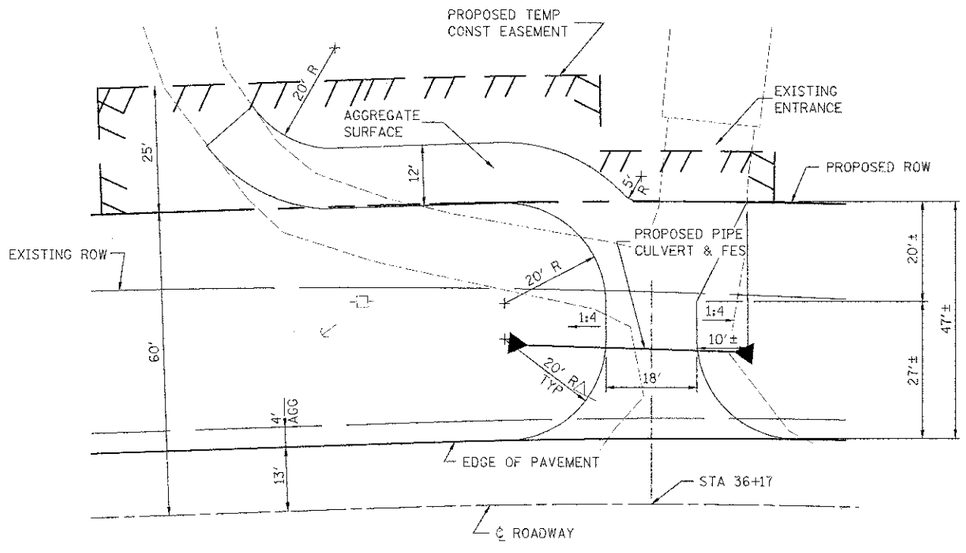
FE LT
STA 18+84



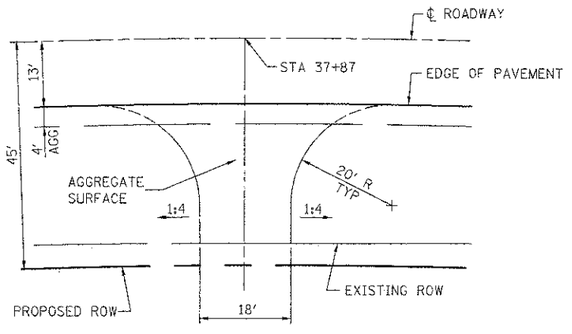
FE LT
STA 24+80



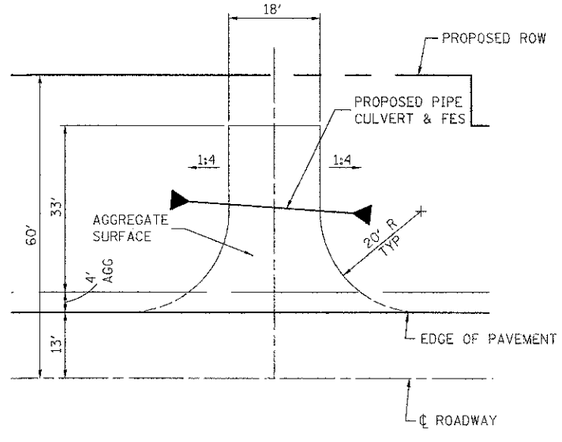
FE LT
STA 29+20



PE LT
STA 36+17



FE RT
STA 37+87



FE LT
STA 43+61

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	PLOT SCALE = 10.0000 ' / IN.	CHECKED - L.D.G.	REVISED - K.M.M.				SN 003-3053	CONTRACT NO. 97508		
	PLOT DATE = 7/10/2012	DATE -	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.			ILLINOIS FEDERAL AID PROJECT		

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HMG NO. 5790

EXISTING CURVE POKEY ROAD C3
PI STA. = 21+39.40
Δ = 8° 50' 00" (LT)
D = 2° 00' 00"
R = 2,864.79'
T = 221.27'
L = 441.67'
E = 8.53'
e = EXISTING
T.R. = EXISTING
S.E. RUN = EXISTING
P.C. STA. = 19+18.13
P.T. STA. = 23+59.80

DANIEL HILMES etal

DUANE J. ARNOLD REVOCABLE TRUST

EXISTING CURVE POKEY ROAD C4
PI STA. = 30+04.07
Δ = 7° 46' 00" (LT)
D = 2° 00' 00"
R = 2,864.79'
T = 194.46'
L = 388.33'
E = 6.59'
e = EXISTING
T.R. = EXISTING
S.E. RUN = EXISTING
P.C. STA. = 28+09.61
P.T. STA. = 31+97.94

REMOVAL AREA FOR WIDENING, TYP.

REMOVE EXISTING 24"Ø PIPE CULVERT

BENCHMARK

℄ EX ROW (CH 21)

EXISTING ROW

80'-0" EXISTING ROW

120+00

110'-0" EXISTING ROW

125+00

REMOVE EXISTING 30"Ø PIPE CULVERT

TO SHOAL CREEK

REMOVE EXISTING FENCE AS REQUIRED AND AS DIRECTED BY THE ENGINEER. ALL COSTS SHALL BE INCLUDED IN EARTH EXCAVATION. SEE GENERAL NOTES.

MATCHLINE STA 31+00.00

130+00

80'-0" EXISTING ROW

100'-0" EXISTING ROW

REMOVE EXISTING 24"Ø PIPE CULVERT

REMOVE EXISTING ROW MARKERS WITHIN PROJECT LIMITS. ALL COSTS SHALL BE INCLUDED IN COST OF EARTH EXCAVATION. SEE GENERAL NOTES.

EXISTING STRUCTURE

TRIBUTARY

REMOVE EXISTING GUARDRAIL. ALL COSTS SHALL BE INCLUDED IN COST OF STRUCURES. SEE GENERAL PLAN AND ELEVATION AND GENERAL NOTES.

N

SCALE IN FEET
0 50 100

560 550 540 530 520 510 500 490 480

EXISTING PROFILE ALONG ℄

20 YR DHW EL 497.0

100 YR HW EL 498.0

555.16 (EXISTING) 552.96 550.77 548.63 546.43 544.18 541.82 539.39 536.87 534.34 531.76 529.11 526.46 523.73 520.84 517.80 514.97 512.25 509.91 508.03 506.77 506.03 488.21 506.12 506.74 507.75 509.65 512.24 515.12 518.08 520.98

16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00

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	PLOT DATE = 9/10/2012	DATE	REVISED

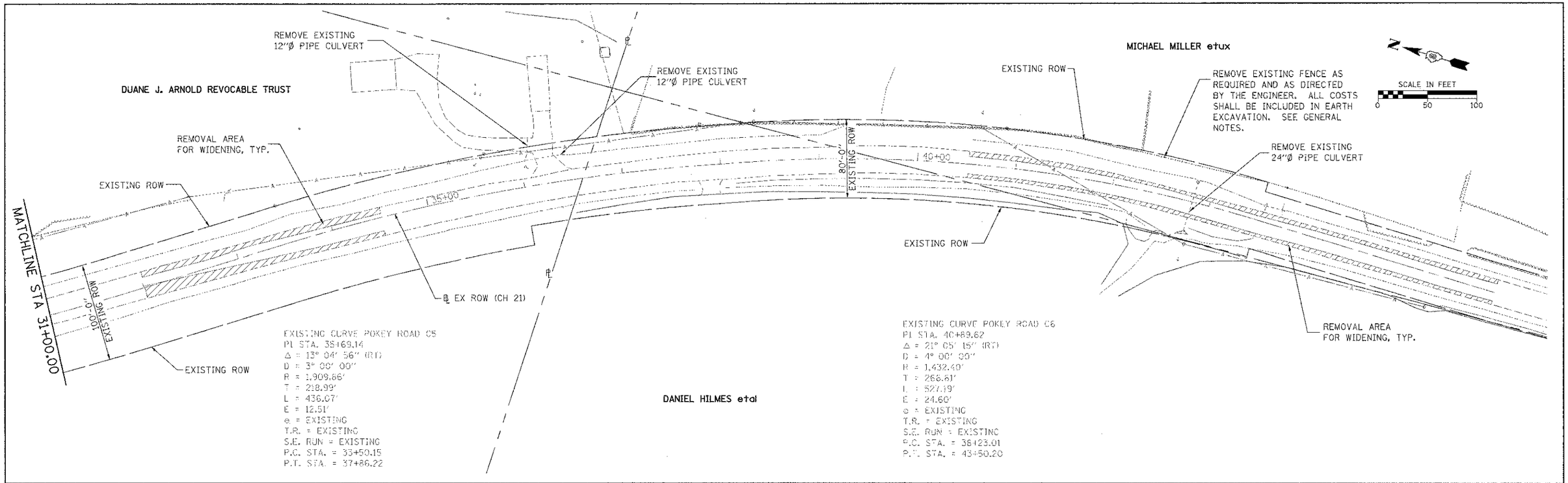
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE EXISTING ROADWAY & REMOVALS

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. 16+00 TO STA. 31+00

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	12
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

HMG NO. 5790



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	PLOT DATE = 9/16/2022	CHECKED - L.D.G.	REVISED -		
		DATE	REVISED -		

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	13
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

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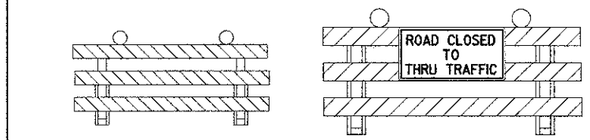
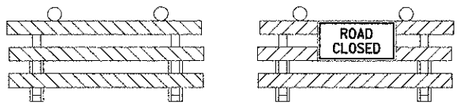


LOCATION Ⓑ



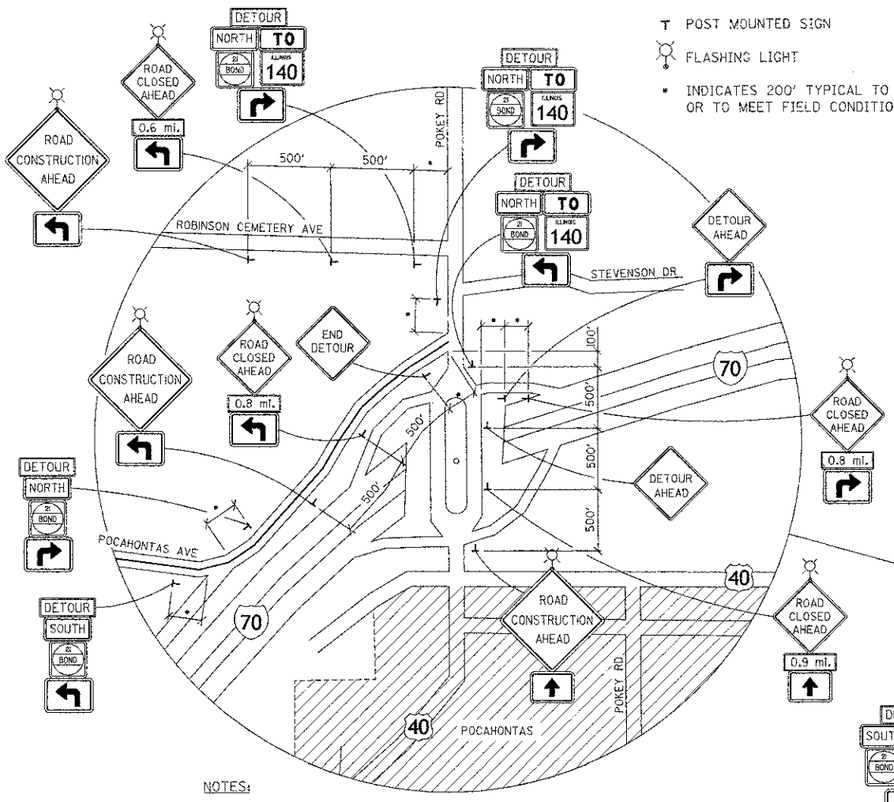
LOCATION Ⓐ

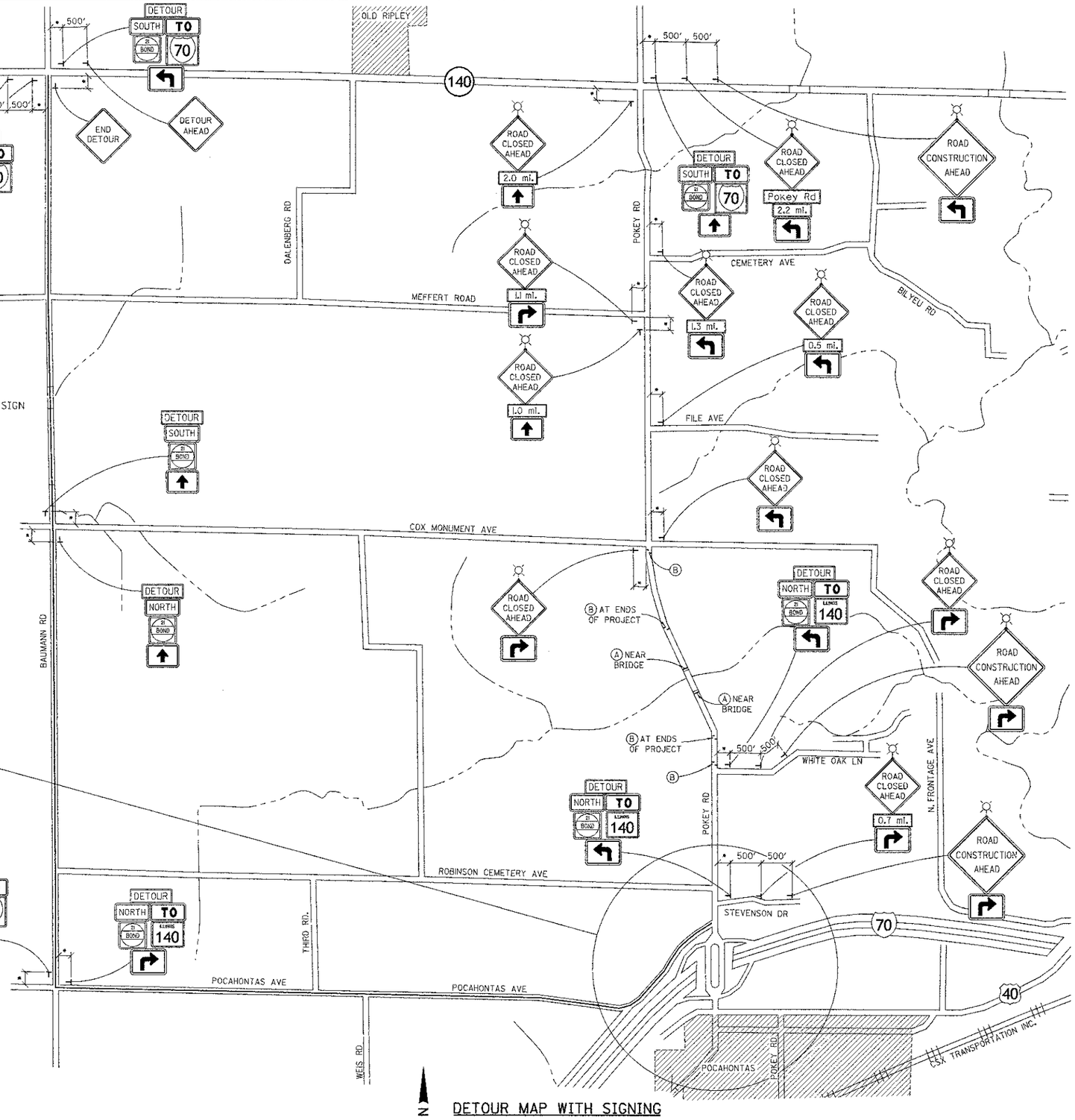
LEGEND

T POST MOUNTED SIGN

FLASHING LIGHT

* INDICATES 200' TYPICAL TO FIRST SIGN OR TO MEET FIELD CONDITIONS.





N

DETOUR MAP WITH SIGNING

NOTES:

1. ENGINEER MAY MODIFY SIGN PLACEMENT TO MEET FIELD CONDITIONS.
2. ALL ADVANCED WARNING SIGNS SHALL BE 48" x 48" AND HAVE A BLACK LEGEND ON A FLUORESCENT ORANGE REFLECTORIZED BACKGROUND.
3. ALL ADVANCED WARNING SIGNS SHALL INCLUDE LOW INTENSITY FLASHING LIGHTS.
4. DETOUR SIGNING ASSEMBLY SHALL MAINTAIN THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN NO LESS THAN 5 FEET ABOVE THE EDGE OF PAVEMENT.
5. ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE FOR STABILIZATION.
6. AT LOCATIONS WHERE TYPE III BARRICADES ARE STAGGERED THE "ROAD CLOSED TO THRU TRAFFIC" SIGN SHALL BE PLACED ON THE FRONT BARRICADE.
7. ALL ITEMS OF WORK INVOLVED WITH THE ROAD CLOSURE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
8. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER 72 HOURS PRIOR TO CLOSURE.

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	PLOT DATE = 9/7/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR MAP

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	14
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

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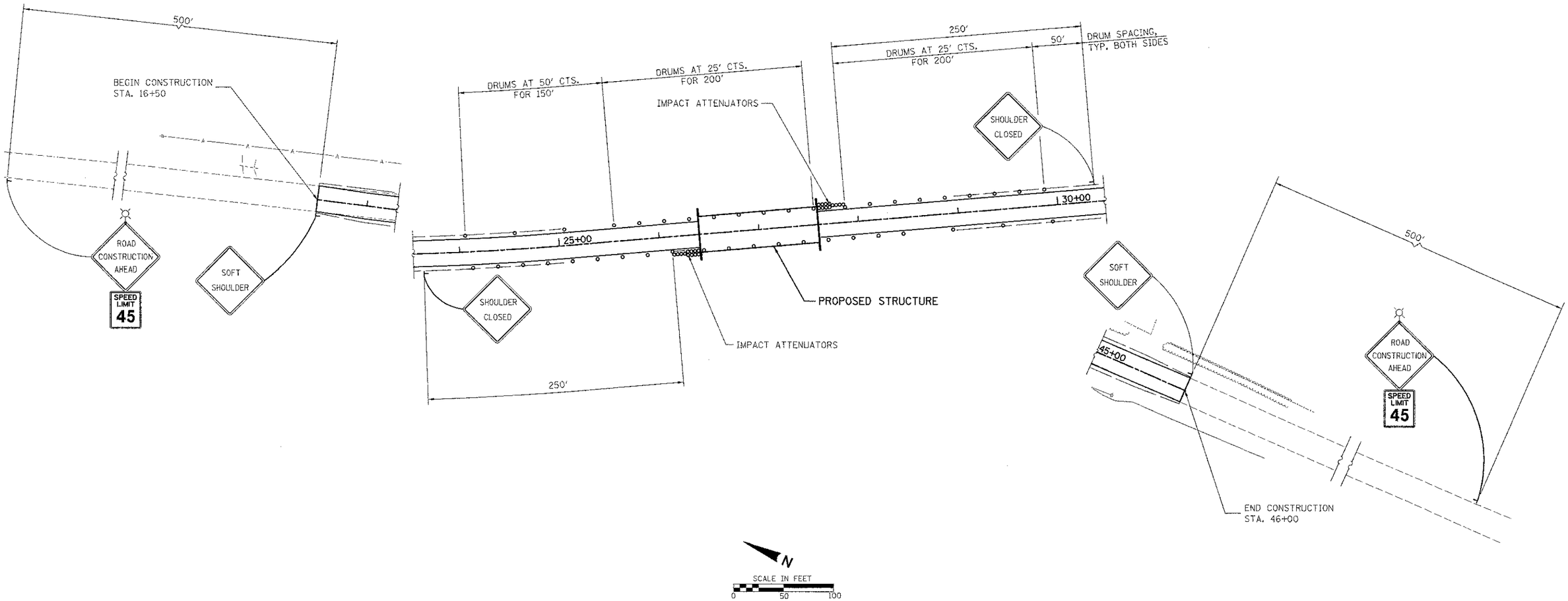

NOTE:

FOR PHASE 2 PAVING OPERATIONS THE CONTRACTOR SHALL HAVE THE OPTION OF RE-ESTABLISHING THE DETOUR WITH FULL SIGNAGE, AS SHOWN ON THE DETOUR MAP, FOR A MAXIMUM OF 15 CALENDAR DAYS OR USING STANDARDS 701006 AND 701306 FOR THE DURATION, INCLUDING "LOW SHOULDER" SIGNS, TYPE I OR II BARRICADES OR VERTICAL PANELS PER STANDARD SPECS AND AS DIRECTED BY THE ENGINEER.

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	PLOT DATE = 9/6/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN -- POST PHASE 1

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

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	15
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

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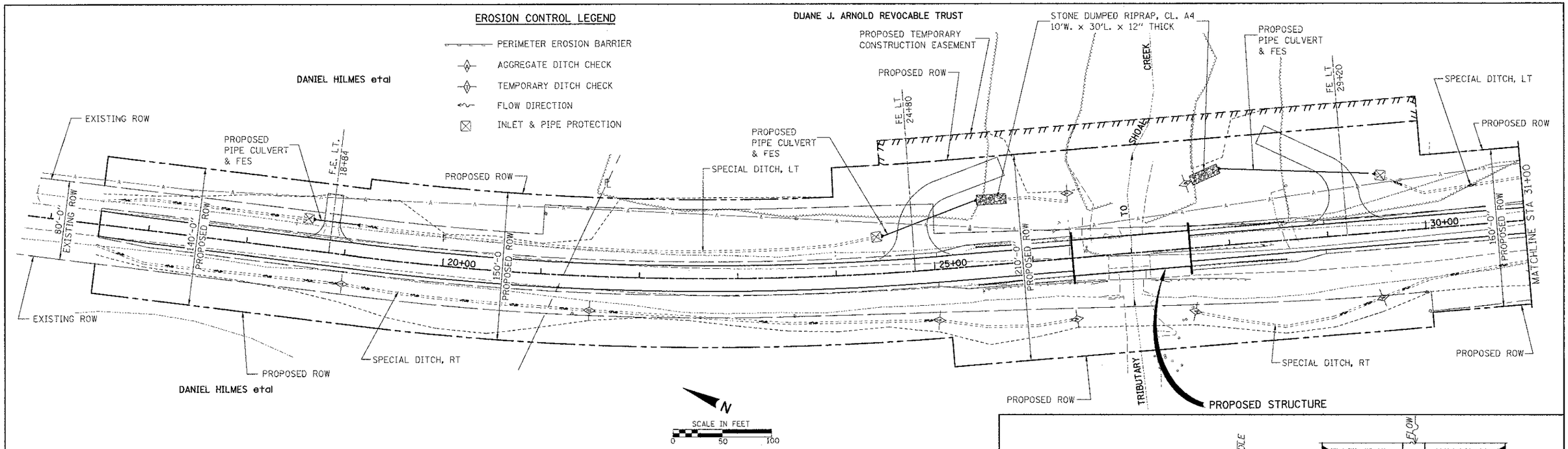
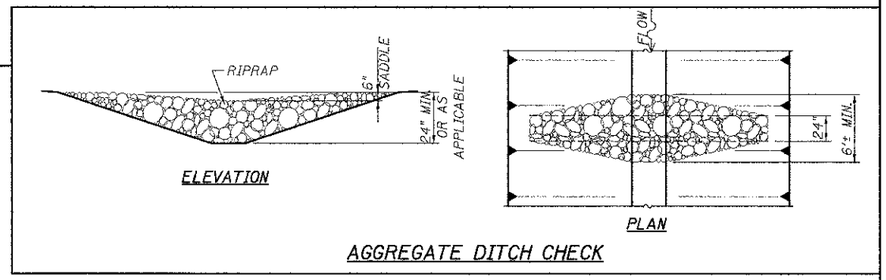
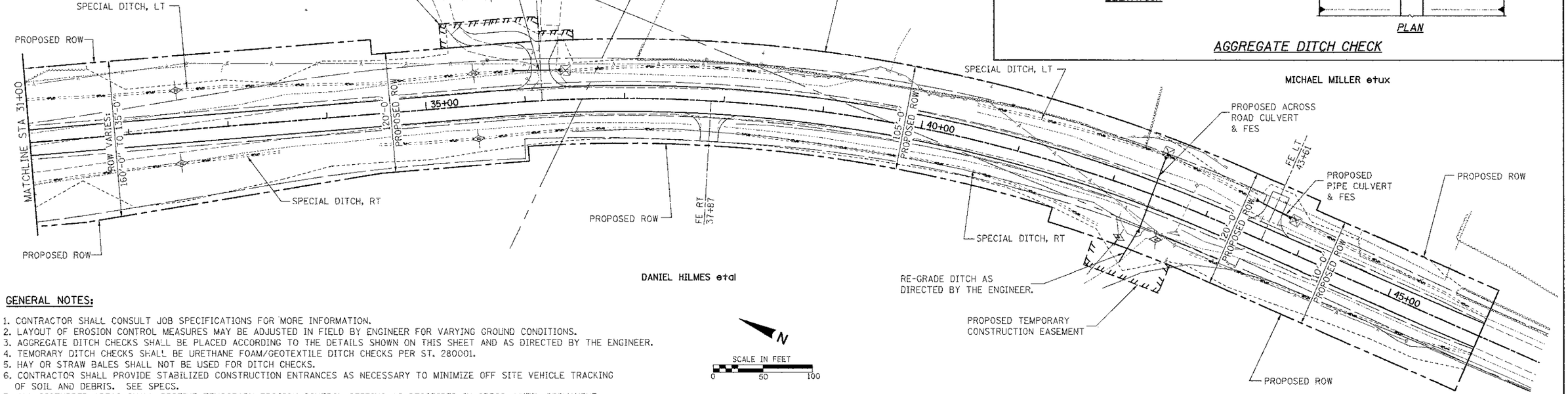
EROSION CONTROL LEGEND

- PERIMETER EROSION BARRIER
- AGGREGATE DITCH CHECK
- TEMPORARY DITCH CHECK
- FLOW DIRECTION
- INLET & PIPE PROTECTION





AGGREGATE DITCH CHECK



GENERAL NOTES:

1. CONTRACTOR SHALL CONSULT JOB SPECIFICATIONS FOR MORE INFORMATION.
2. LAYOUT OF EROSION CONTROL MEASURES MAY BE ADJUSTED IN FIELD BY ENGINEER FOR VARYING GROUND CONDITIONS.
3. AGGREGATE DITCH CHECKS SHALL BE PLACED ACCORDING TO THE DETAILS SHOWN ON THIS SHEET AND AS DIRECTED BY THE ENGINEER.
4. TEMORARY DITCH CHECKS SHALL BE URETHANE FOAM/GEOTEXTILE DITCH CHECKS PER ST. 280001.
5. HAY OR STRAW BALES SHALL NOT BE USED FOR DITCH CHECKS.
6. CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCES AS NECESSARY TO MINIMIZE OFF SITE VEHICLE TRACKING OF SOIL AND DEBRIS. SEE SPECS.
7. ALL DISTURBED AREAS SHALL RECEIVE TEMPORARY EROSION CONTROL SEEDING AS DESCRIBED IN SPECS. UNTIL PERMANENT STABILIZATION CAN BE PERFORMED.
8. THE COUNTY WILL ASSUME RESPONSIBILITY FOR MAINTAINING EROSION CONTROL MEASURES THROUGH FINAL STABILIZATION AFTER IDOT ACCEPTANCE OF WORK BY CONTRACTOR.
9. CONTRACTOR SHALL PROVIDE APPROPRIATE INLET AND PIPE PROTECTION AS NEEDED, OR AS DIRECTED BY THE ENGINEER. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE COSTS OF THE RESPECTIVE PIPE CULVERTS.

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	PLOT DATE = 9/7/2012	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

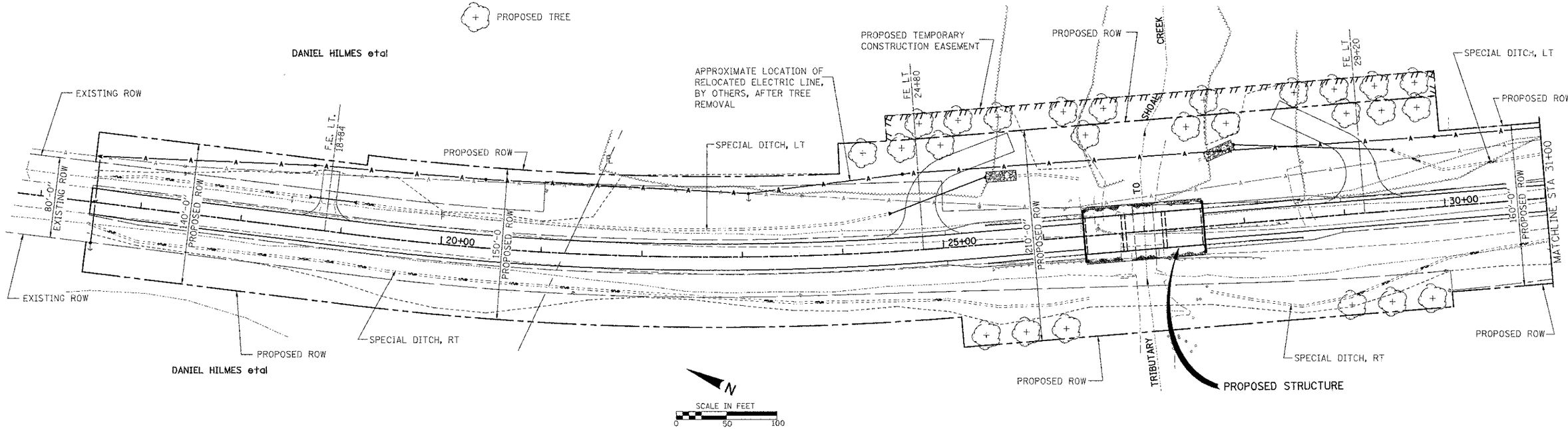
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	16
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM

TREE PLANTING LEGEND

PROPOSED TREE



GENERAL NOTES:

1. LAYOUT OF TREES MAY BE ADJUSTED IN FIELD BY ENGINEER FOR VARYING GROUND CONDITIONS.

TREE PLANTING SCHEDULE

LOCATION				TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED
				EACH
STA	24+25.00	99.00'	LT	1
STA	24+65.00	102.00'	LT	1
STA	24+85.00	125.00'	LT	1
STA	25+05.00	102.00'	LT	1
STA	25+25.00	125.00'	LT	1
STA	25+35.00	90.00'	RT	1
STA	25+65.00	125.00'	LT	1
STA	25+75.00	90.00'	RT	1
STA	26+15.00	90.00'	RT	1
STA	26+30.00	125.00'	LT	1
STA	26+50.00	100.00'	LT	1
STA	26+70.00	125.00'	LT	1
STA	27+50.00	100.00'	LT	1
STA	27+70.00	125.00'	LT	1
STA	27+90.00	100.00'	LT	1
STA	28+60.00	125.00'	LT	1
STA	29+00.00	125.00'	LT	1
STA	29+00.00	90.00'	RT	1
STA	29+10.00	100.00'	LT	1
STA	29+40.00	125.00'	LT	1
STA	29+40.00	90.00'	RT	1

LOCATION				TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED
				EACH
STA	29+45.00	100.00'	LT	1
STA	29+80.00	100.00'	LT	1
STA	29+80.00	125.00'	LT	1
STA	29+80.00	90.00'	RT	1
		TOTAL		25
		USE		25

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	PLOT DATE = 9/28/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TREE PLANTING PLAN

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	16A
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

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BENCHMARK: Steel Pin with Cap (found)
Sta. 21+51.32, 69.8' Lt.
El. 537.61

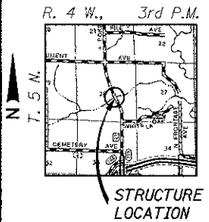
EXISTING STRUCTURE S.N. 003-3023

The existing structure, constructed in 1956, consists of a single span cast-in-place concrete deck supported by steel beams on timber pile bent abutments. The structure has an overall length of 42'-6" back-to-back of abutments and a width of 26'-0" out to out of the deck. Approximately 375' of approach guardrail shall be removed as part of Removal of Existing Structures.

The Contractor shall remove and dispose of the existing structure in accordance with Section 501 of the Standard Specifications.

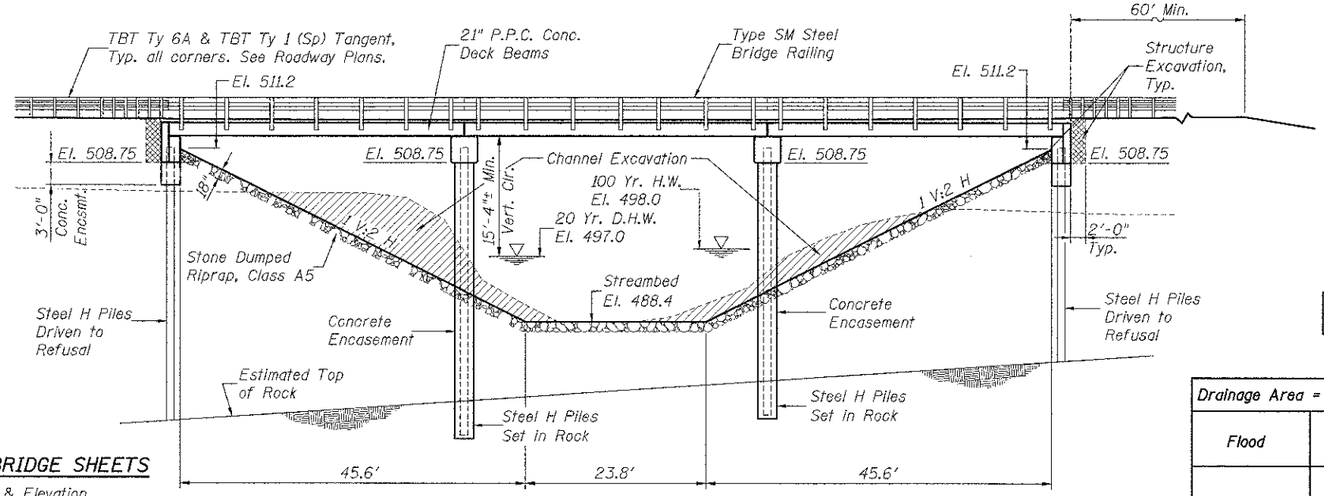
The existing roadway will be closed to traffic during the construction period.

SALVAGE: No salvage



LOCATION SKETCH

INDEX OF BRIDGE SHEETS



ELEVATION

Note:
Channel excavation shall be transitioned from the edge of the proposed deck to match the existing channel at the R.O.W. line.

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

PRECAST PRESTRESSED UNITS
f'c = 6,000 p.s.i.
f'ci = 5,000 p.s.i.
f's = 270,000 p.s.i. (½"ϕ Strands)
f'si = 201,960 p.s.i. (½"ϕ Strands)

FIELD UNITS
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinf.)
fy = 50,000 p.s.i. (M270 Grade 50)

LOADING HL-93
Allow 50 p.s.f. for future wearing surface

SEISMIC DATA
Seismic Performance Zone (SPZ): 2
Design Spectral Acceleration at 1.0 sec (S_{D1}) = 0.235 g
Design Spectral Acceleration at 0.2 sec (S_{Ds}) = 0.526 g
Soil Site Class = D

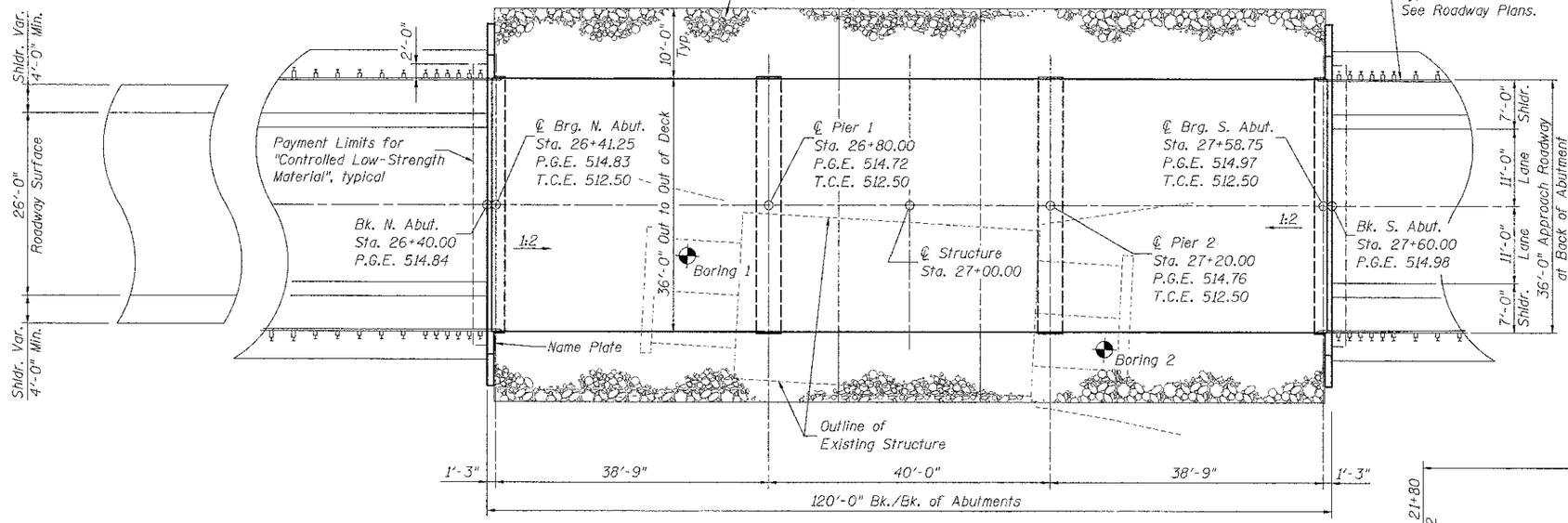
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (Feet)	N. Abut.	Pier 1	Pier 2	S. Abut.
	505.75	484.4	484.4	505.75

WATERWAY INFORMATION

Drainage Area = 4.13 Sq. Mi. Low Grade Elev. = 505.69 ℄ Sta. 26+98

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1,440	265	277	496.4	0.7	0.7	497.1	497.1
Design	20	1,830	286	310	497.0	0.4	0.6	497.4	497.6
Base	100	2,800	322	380	498.0	0.5	0.3	498.5	498.3
Max. Calc.	500	3,860	345	438	498.9	1.0	0.7	499.9	499.6



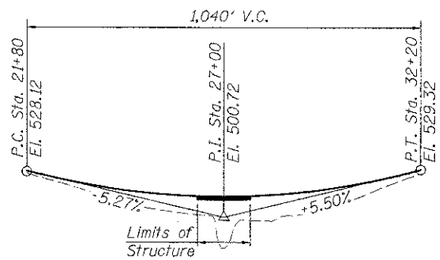
T.C.E. = Top of Cap Elevation

PLAN

Note:
The Existing Structure has Deadman Anchors behind the abutments. These Deadmen shall be removed and disposed of as part of Removal of Existing Structures.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Channel Excavation	Cu. Yd.	———	———	1,193
Stone Dumped Riprap, Class A5	Ton	———	———	627
Hot-Mix Asphalt Surface Course, Mix "C", N70	Ton	141	———	141
Removal of Existing Structures	Each	———	———	1
Structure Excavation	Cu. Yd.	———	114	114
Concrete Structures	Cu. Yd.	———	69.0	69.0
Concrete Encasement	Cu. Yd.	———	71.4	71.4
Prec. Pres. Conc. Dk. Bms. (21" Depth)	Sq. Ft.	4,266	———	4,266
Reinforcement Bars, Epoxy Coated	Pound	———	8,840	8,840
Steel Railing, Type SM	Foot	240	———	240
Furnishing Steel Piles HP 12x53	Foot	———	828	828
Driving Piles	Foot	———	372	372
Test Pile Steel HP 12x53	Each	———	1	1
Name Plates	Each	———	———	1
Waterproofing Membrane System	Sq. Yd.	475	———	475
Portland Cement Mortar Fairing Course	Foot	950	———	950
Controlled Low-Strength Material	Cu. Yd.	———	———	28.0
Setting Piles in Rock	Each	———	12	12



PROFILE GRADE

Along ℄ C.H. 21 (N. Pokey Rd.)

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

Bradley G. Hummert Date: 9/6/12

Bradley G. Hummert
Licensed Structural Engineer
In Illinois No. 081-005428 Expires: November 30, 2012

BRADLEY G. HUMMERT 081-005428 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS CARLYLE, IL

GENERAL PLAN & ELEVATION
C.H. 21/F.A.S. 779 (N. POKEY RD.)
OVER TRIBUTARY TO SHOAL CREEK
SECTION 07-00085-00-BR
BOND COUNTY
STATION 27+00.00
STRUCTURE NO. 003-3053

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	PLOT SCALE = 10.0000 ' / IN.	CHECKED - L.D.G.	REVISED -
	PLOT DATE = 9/6/2012	DATE -	REVISED -

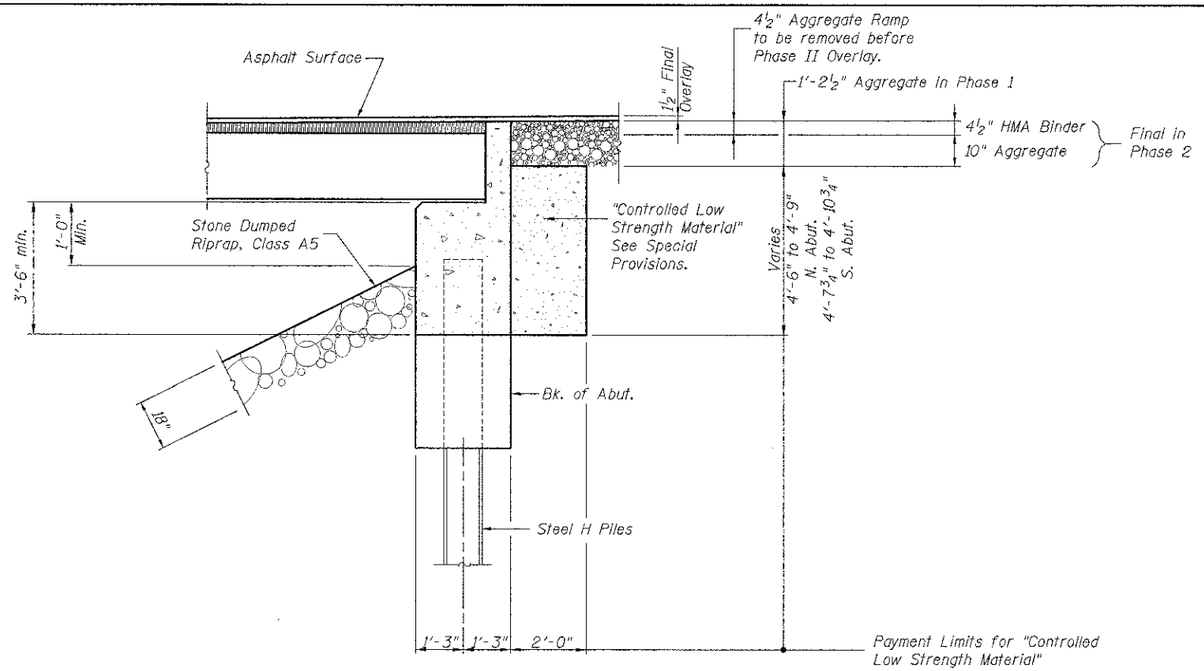
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION

SCALE: | SHEET NO. 1 OF 10 SHEETS | STA. | TO STA.

FAS RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	17
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

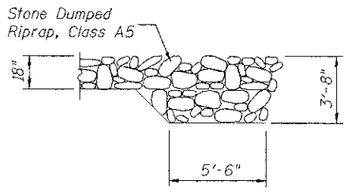
HMG NO. 5790



SECTION THRU ABUTMENT

GENERAL NOTES

1. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production location at substructures specified or approved by the Engineer before ordering remaining piles.
2. Hot-mix asphalt surface course overlay for the bridge deck shall be constructed in accordance with applicable portions of Section 582 of the Standard Specifications.
3. Waterproofing membrane system for the bridge shall be in accordance with material and construction requirements of the applicable portions of Section 581 of the Standard Specifications.
4. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. Deck beams shall be cleaned to the satisfaction of the Engineer before placing the waterproofing membrane system.
7. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.



STONE RIPRAP FLANK DETAIL

Tributary to Shoal Creek
Built 201 by
Bond County
Section 07-00085-00-BR
F.A.S. 779 Station 27+00
S.N. 003-3053 Loading HL93
PROJ. NO. BRS-0779(104)

NAME PLATE

See Std. 515001.
Locate Name Plate as shown in Plan View.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

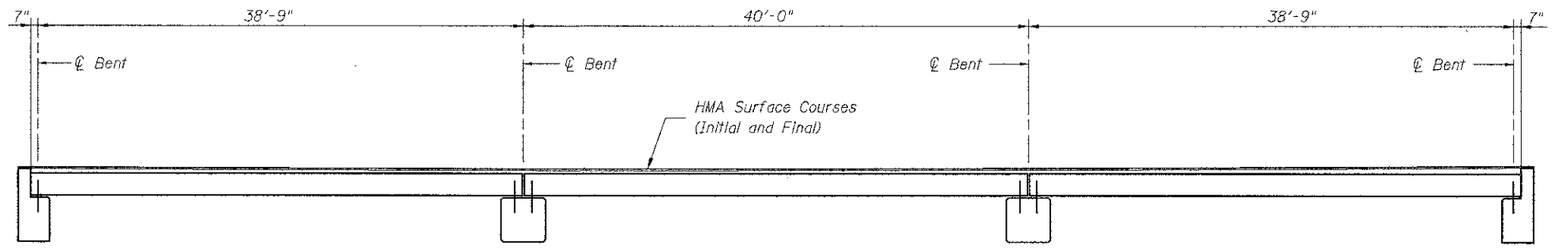
GENERAL DATA

SCALE: | SHEET NO. 2 OF 10 SHEETS | STA. | TO STA.

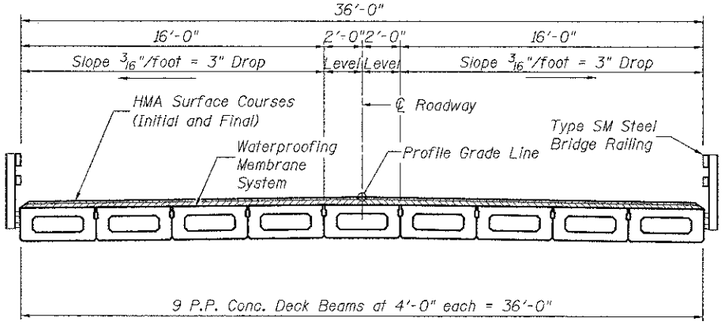
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	18
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

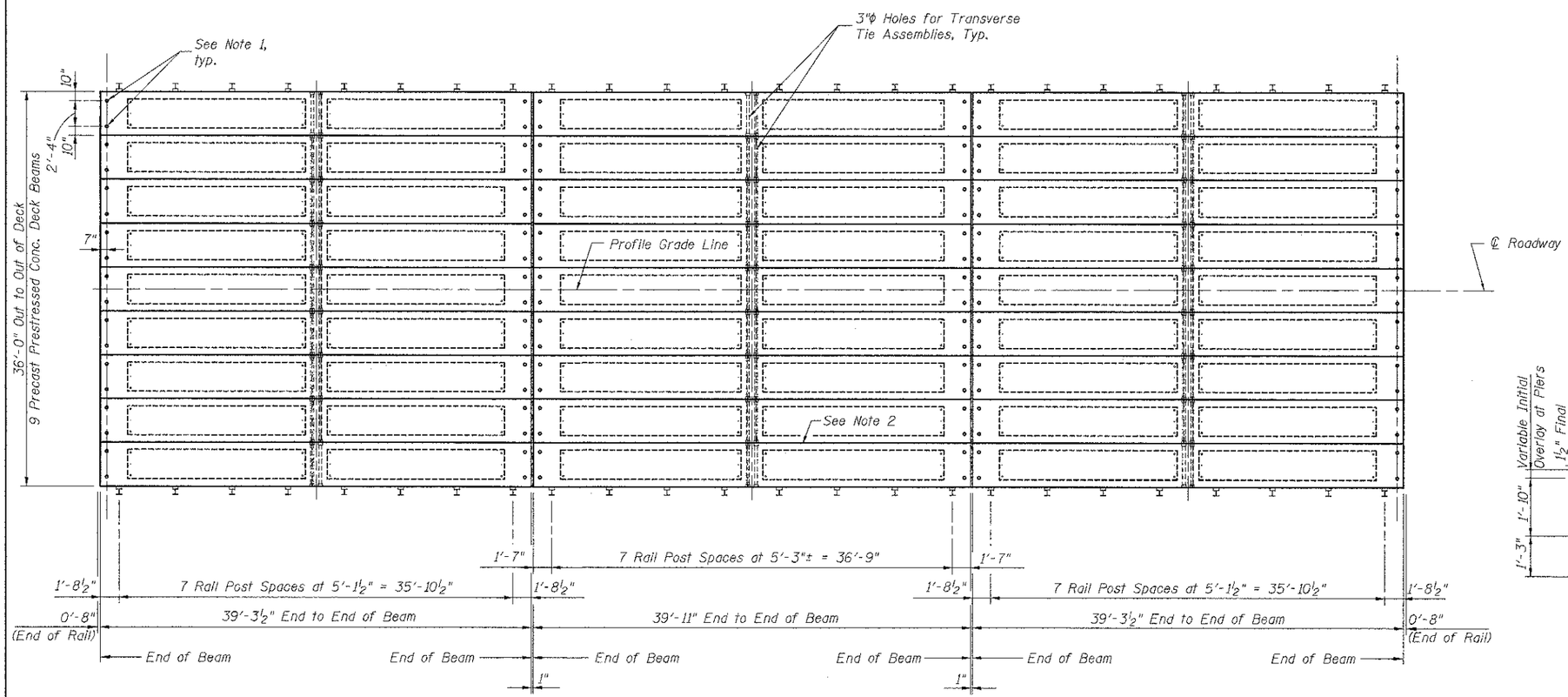
HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM



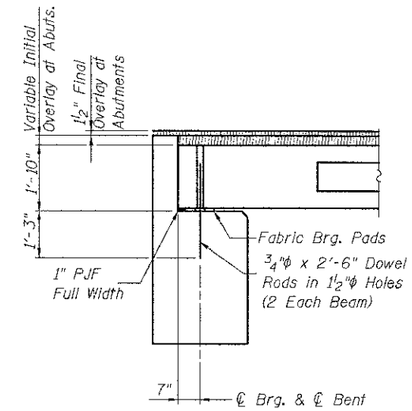
ELEVATION



CROSS SECTION

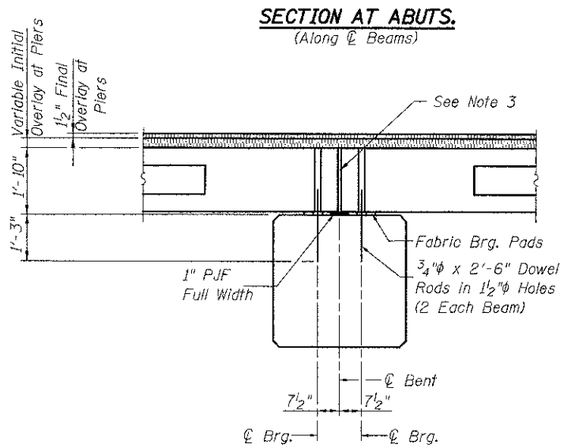


PLAN



SECTION AT ABUTS.

(Along ℄ Beams)

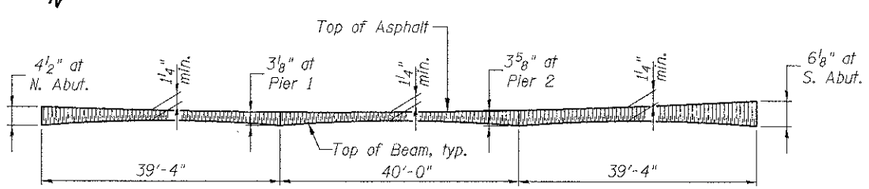


SECTION AT PIERS

(Along ℄ Beams)

NOTES

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
2. Longitudinal keys shall be grouted.
3. 1" joint shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



PROFILE OF INITIAL OVERLAY

(1½" Final Overlay)

BILL OF MATERIAL

Item	Unit	Quantity
Portland Cement Mortar Fairing Course	Foot	950
Waterproofing Membrane System	Sq. Yd.	475
Hot-Mix Asphalt Surf. Cse., Mix "C", N70	Ton	141

B.I.B.

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	PLOT DATE = 9/7/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE

SCALE: | SHEET NO. 3 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	19
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

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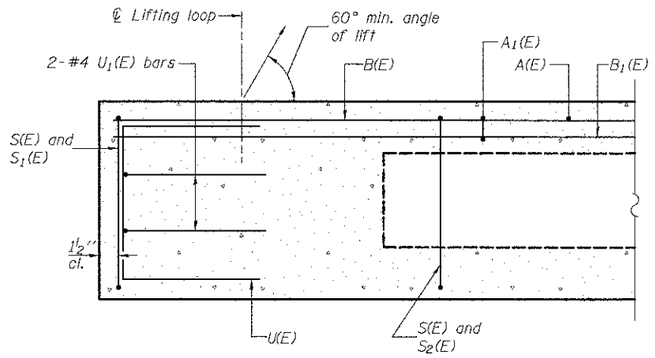
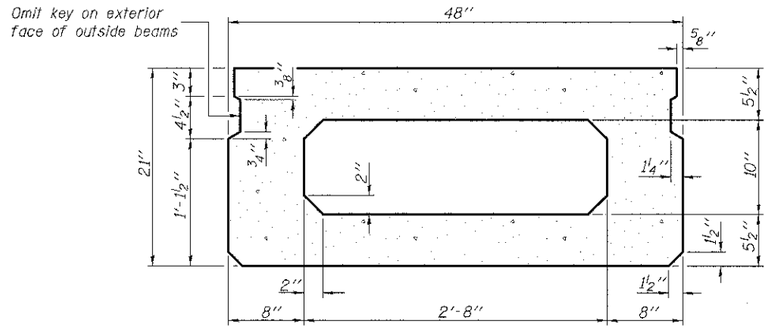
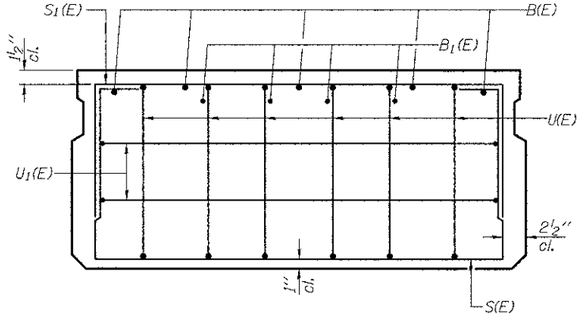


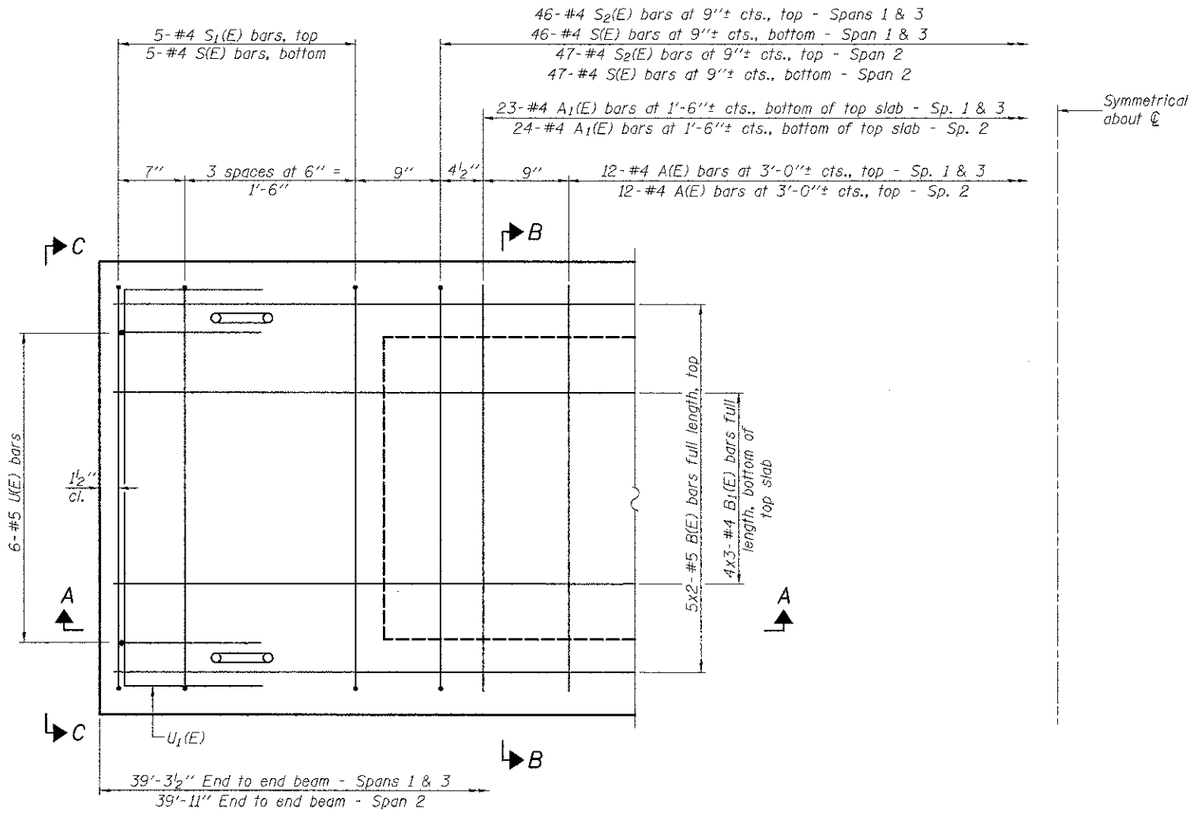
SECTION A-A



SECTION B-B
(Showing dimensions)



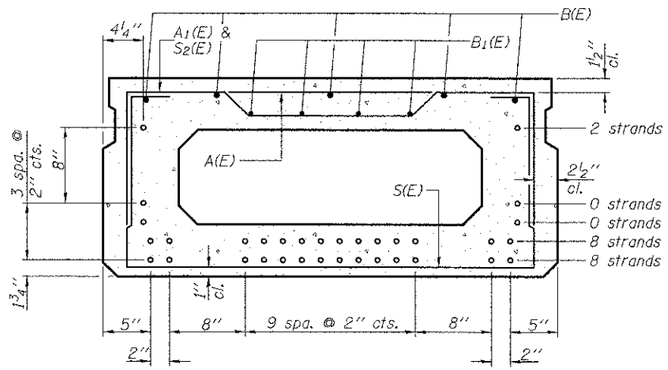
VIEW C-C



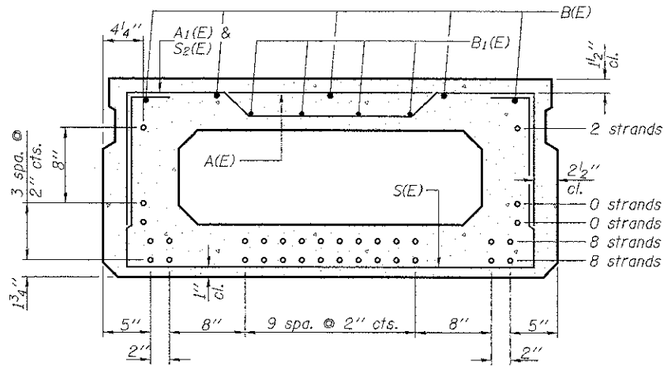
PLAN VIEW

Note: Spacing of S(E) and S_2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"



SECTION B-B - SPANS 1 & 3
(Showing reinforcement and permissible strand locations)
18 - ½"ϕ Strands
(8 Strands 1¾" up, 8 Strands 3¾" up, 2 Strands 15¾" up)



SECTION B-B - SPAN 2
(Showing reinforcement and permissible strand locations)
18 - ½"ϕ Strands
(8 Strands 1¾" up, 8 Strands 3¾" up, 2 Strands 15¾" up)

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

BAR LIST - SPANS 1 & 3
ONE BEAM ONLY
(For Information Only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	3'-7"	
A1(E)	23	#4	3'-10"	
B(E)	10	#5	20'-10"	
B1(E)	12	#4	14'-5"	
S(E)	56	#4	7'-5"	
S1(E)	10	#4	5'-11"	
S2(E)	46	#4	6'-2"	
U(E)	12	#5	4'-0"	
U1(E)	4	#4	6'-0"	

Note:
See sheet 5 of 10 for additional details and Bill of Material.

BAR LIST - SPAN 2
ONE BEAM ONLY
(For Information Only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	3'-7"	
A1(E)	24	#4	3'-10"	
B(E)	10	#5	21'-1"	
B1(E)	12	#4	14'-7"	
S(E)	57	#4	7'-5"	
S1(E)	10	#4	5'-11"	
S2(E)	47	#4	6'-2"	
U(E)	12	#5	4'-0"	
U1(E)	4	#4	6'-0"	

Note:
See sheet 5 of 10 for additional details and Bill of Material.

PD-2148-0 7-1-10

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	PLOT DATE = 9/7/2012	DATE -	REVISED -

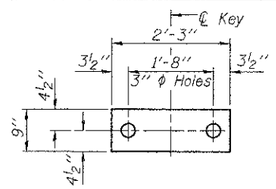
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 48" PPC DECK BEAM

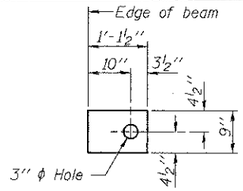
SCALE: | SHEET NO. 4 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	20
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790



FABRIC BEARING PAD
(Interior)



FABRIC BEARING PAD
(Exterior)

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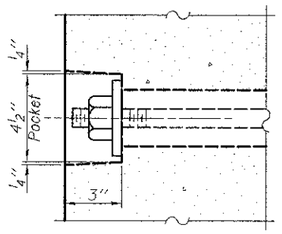
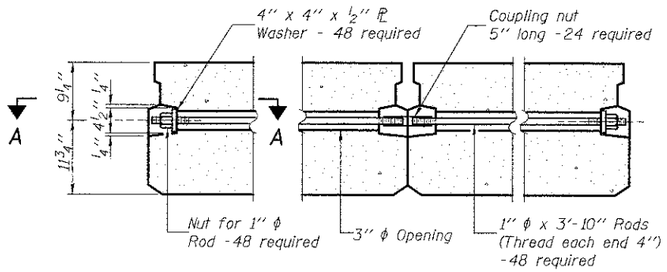
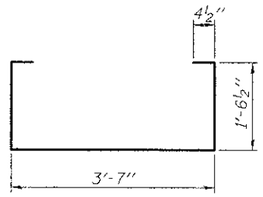


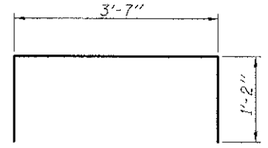
SECTION A-A



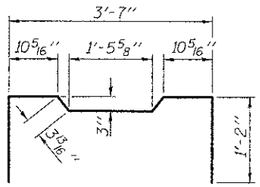
TYPICAL TRANSVERSE TIE ASSEMBLY



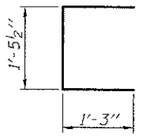
BAR S(E)



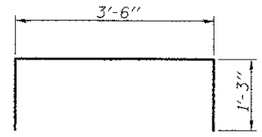
BAR S1(E)



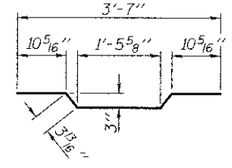
BAR S2(E)



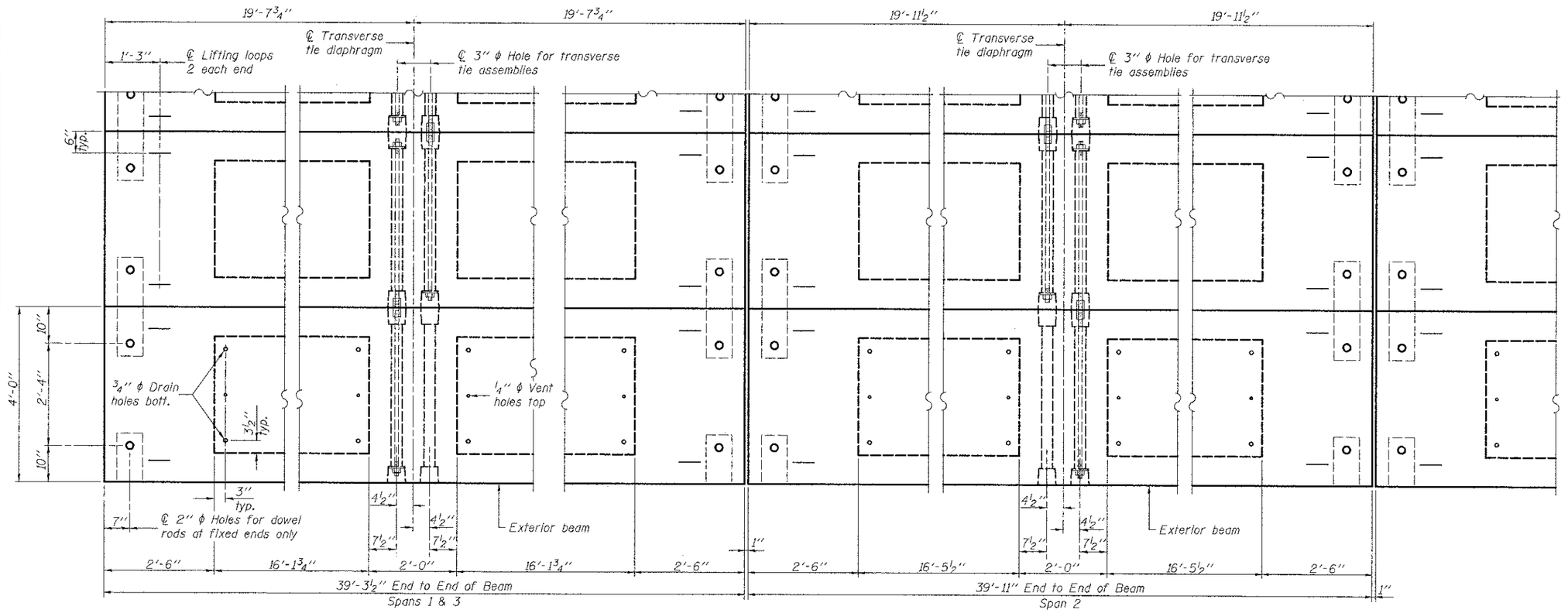
BAR U(E)



BAR U1(E)



BAR A1(E)



PLAN VIEW

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

NOTES

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

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

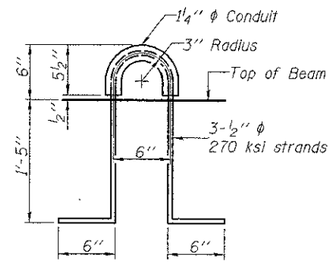
Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	4,266

PD-2148-0D 7-1-10

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	PLOT DATE = 9/7/2012	DATE -	REVISED -

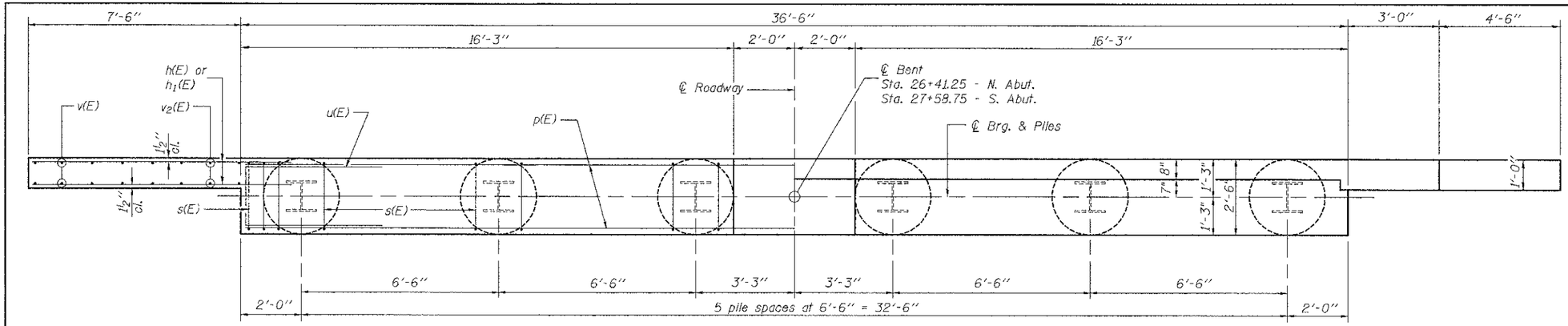
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 48" PPC DECK BEAM DETAILS

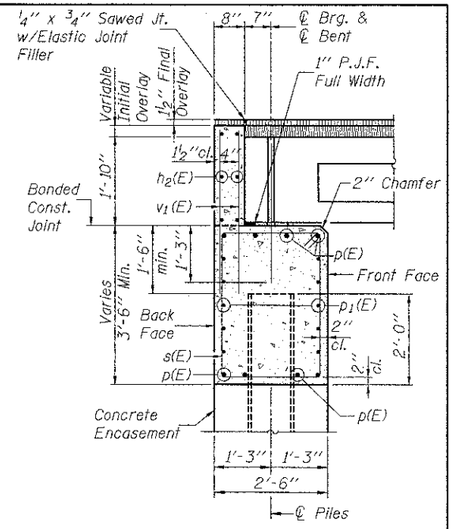
SCALE: | SHEET NO. 5 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	21
	SN 003-3053	CONTRACT NO. 97508		
	(ILLINOIS) FEDERAL AID PROJECT			

HMG NO. 5790

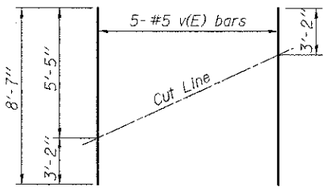


PLAN



SECTION THRU ABUTMENT

(at Right Angles)



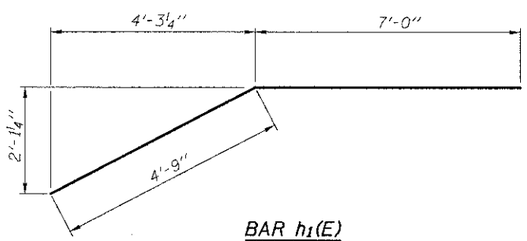
FIELD CUTTING DIAGRAM

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

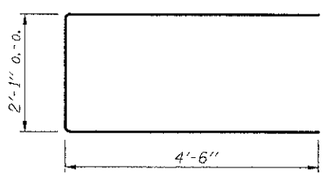
ELEVATION

PILE DATA

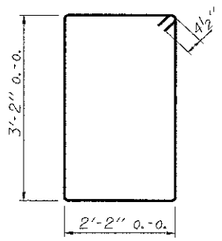
	N. ABUT.	S. ABUT.
Type:	Steel HP 12x53	Steel HP 12x53
Nominal Required Bearing:	419 k	419 k
Factored Resistance Available:	230 k	230 k
Est. Length:	36 ft.±	32 ft.±
No. Production Piles:	5	6
No. Test Piles:	1	0



BAR h1(E)



BAR u(E)



BAR s(E)

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	28	#7	11'-4"	straight
h1(E)	12	#7	11'-9"	bent
h2(E)	6	#4	36'-6"	straight
p(E)	8	#7	36'-2"	straight
p1(E)	10	#4	36'-2"	straight
s(E)	36	#4	11'-5"	stirrup
u(E)	14	#6	11'-1"	U-bar
v(E)	10	#5	8'-7"	straight
v1(E)	74	#4	3'-9"	straight
v2(E)	12	#5	5'-5"	straight
Concrete Structures		Cu. Yd.	17.3	
Reinforcement Bars, Epoxy Coated		Pound	2,770	
Concrete Encasement		Cu. Yd.	3.3	
Furnishing Steel Piles HP 12x53 - North Abut.		Foot	180	
Furnishing Steel Piles HP 12x53 - South Abut.		Foot	192	
Driving Steel Piles - North Abutment		Foot	180	
Driving Steel Piles - South Abutment		Foot	192	
Test Pile Steel HP 12x53-North Abut.		Each	1	

Notes:

For Details of Piles and Concrete Encasement, see sheet 9 of 10.

The backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place-beams.

Space reinforcement in pile cap to miss dowel rods.

FILE NAME = \\E\5790\C_22_Bridge_abut_5790_05.dgn	USER NAME = JUSERDESCR_	DESIGNED - B.I.B.	REVISED -
		DRAWN - K.H.L.	REVISED -
	PLOT SCALE = 2.0000 ' / IN.	CHECKED - L.D.G.	REVISED -
	PLOT DATE = 9/7/2012	DATE -	REVISED -

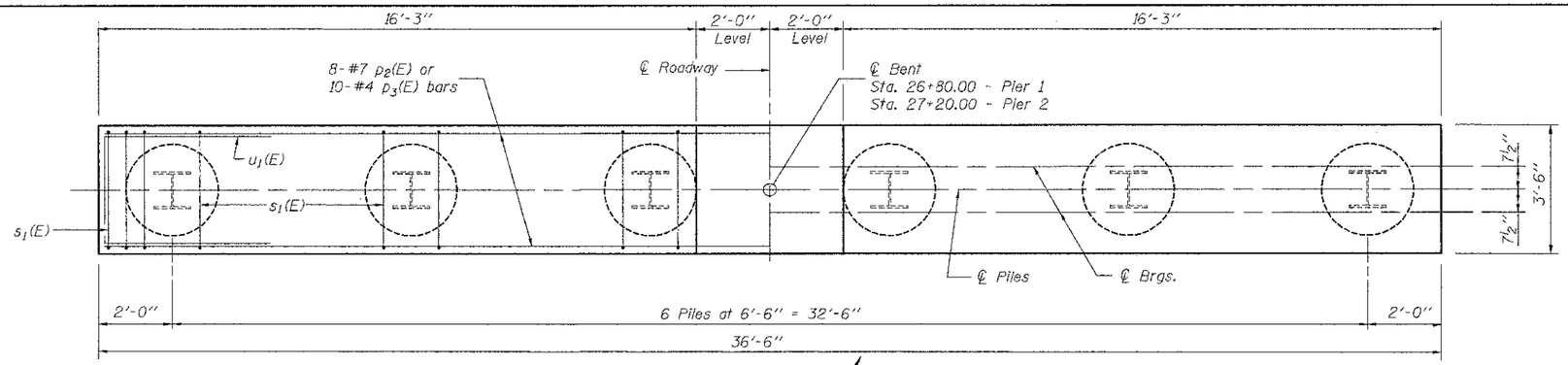
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE BENT ABUTMENT

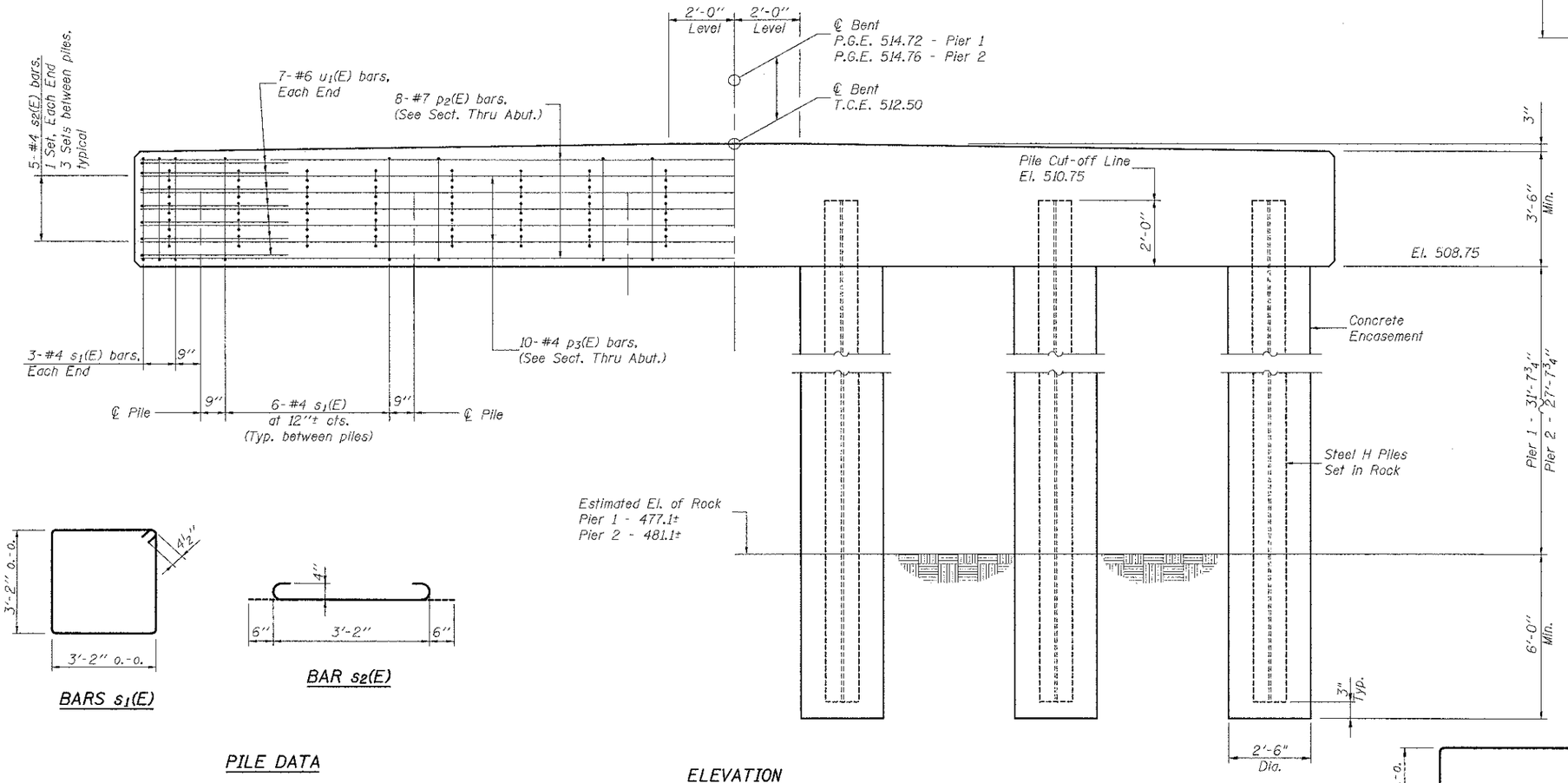
SCALE: | SHEET NO. 6 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	22
SN 003-3053		CONTRACT NO. 97508		
ILLINOIS FEDERAL AID PROJECT				

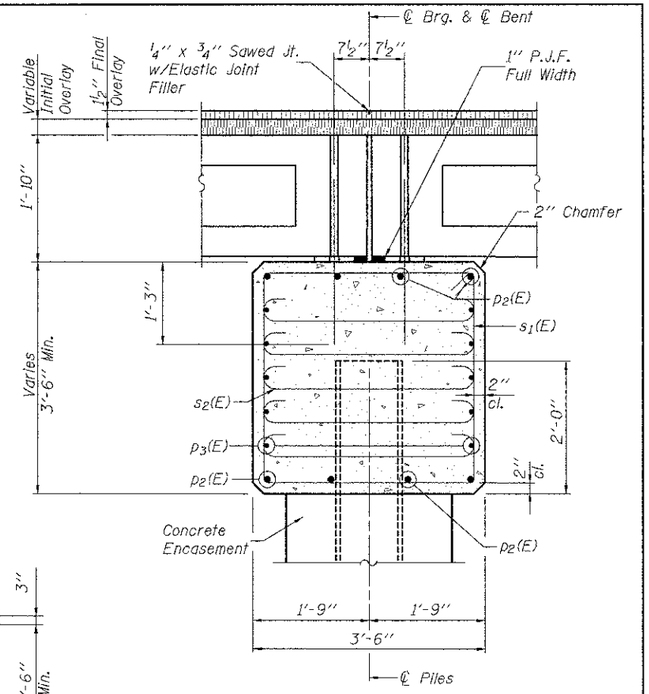
HMG NO. 5790



PLAN



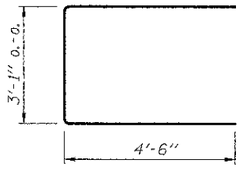
ELEVATION



SECTION THRU PIER
(at Right Angles)

BARS $s_1(E)$

BAR $s_2(E)$



BAR $u_1(E)$

PILE DATA

	PIER 1	PIER 2
Type:	Steel HP 12x53	Steel HP 12x53
Nominal Required Bearing:	Set in Rock	Set in Rock
Factored Resistance Available:	426 k	426 k
Est. Length:	40 ft.	36 ft.
No. Production Piles:	6	6
No. Test Piles:	0	0

BILL OF MATERIAL
ONE PIER

Bar	No.	Size	Length	Shape
$p_2(E)$	8	#7	36'-2"	——
$p_3(E)$	10	#4	36'-2"	——
$s_1(E)$	36	#4	13'-5"	
$s_2(E)$	85	#4	4'-2"	
$u_1(E)$	14	#6	12'-1"	
Concrete Structures			Cu. Yd.	17.2
Concrete Encasement - Pier 1			Cu. Yd.	34.6
Concrete Encasement - Pier 2			Cu. Yd.	30.2
Reinforcement Bars, Epoxy Coated			Pound	1,650
Furnishing Steel Piles HP 12x53 - Pier 1			Foot	240
Furnishing Steel Piles HP 12x53 - Pier 2			Foot	216
Setting Piles in Rock			Each	6

Notes:

For Details of Piles and Concrete Encasement, see sheet 9 of 10.

Space reinforcement in pile cap to miss dowel rods.

If a portion of the drilled shaft, web walls or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

FILE NAME = D:\5790\C_23_6-bridge_pier_5790_07.dgn	USER NAME = USERDESCR_	DESIGNED - B.I.B.	REVISED -
		DRAWN - K.H.L.	REVISED -
	PLOT SCALE = 2.0000 ' / IN.	CHECKED - L.D.G.	REVISED -
	PLOT DATE = 9/7/2012	DATE	REVISED -

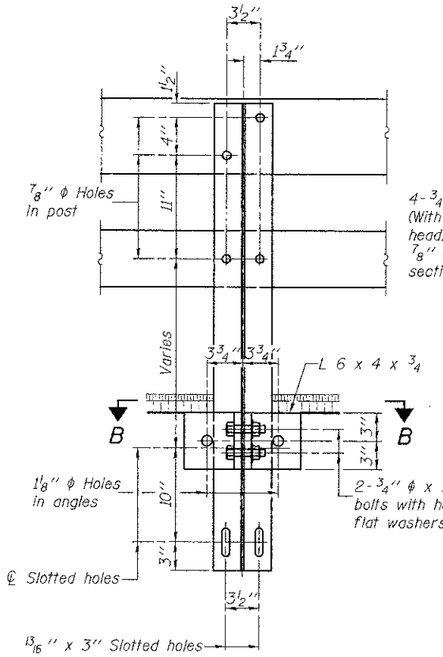
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS

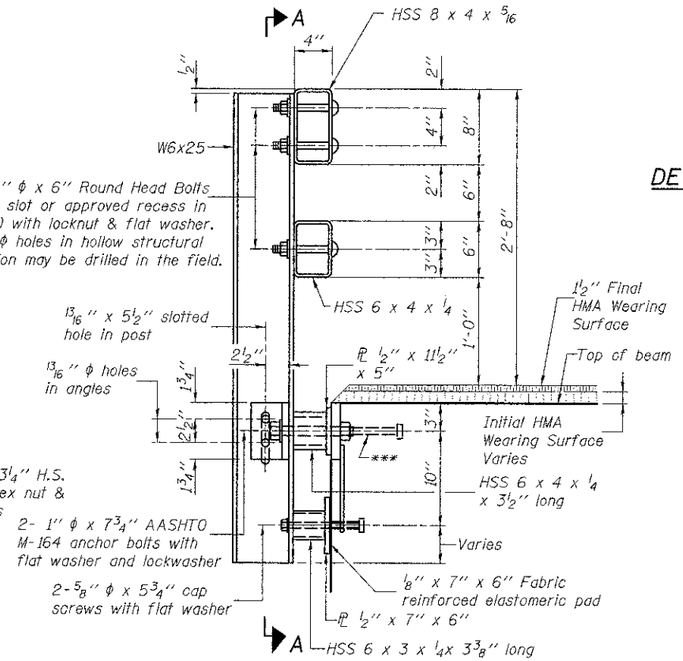
SCALE: | SHEET NO. 7 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	23
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

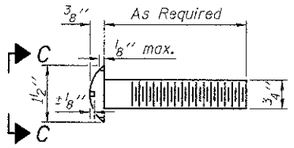
HMG NO. 5790



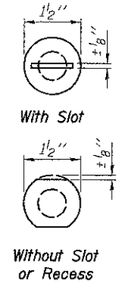
SECTION A-A



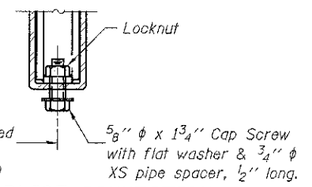
SECTION AT RAIL POST



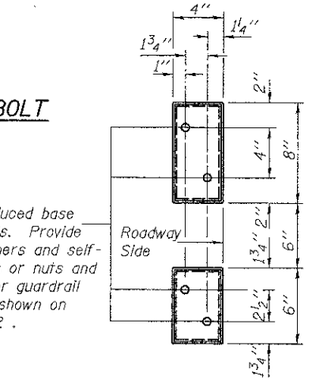
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



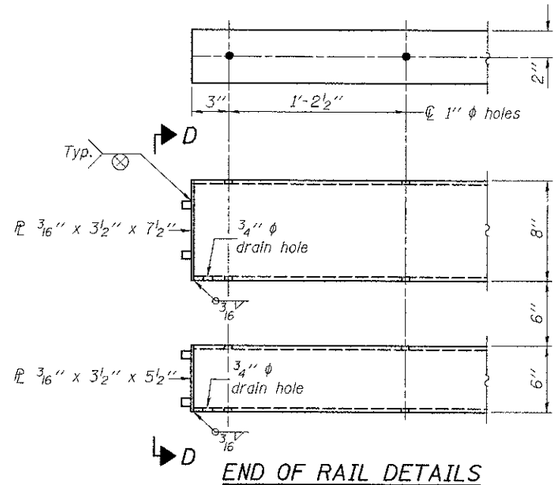
VIEW C-C



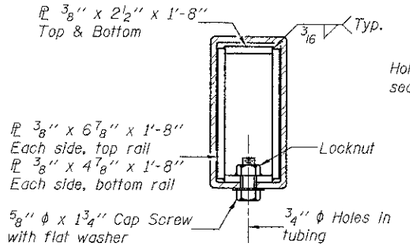
RAIL SPLICE CONNECTION AT EXPANSION JT.



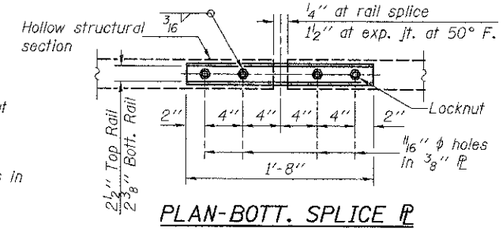
VIEW D-D



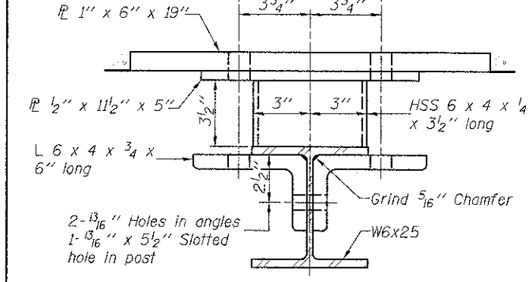
END OF RAIL DETAILS



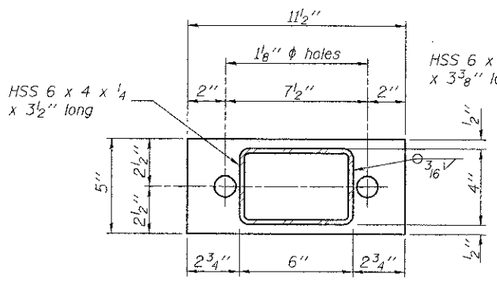
SECTION AT RAIL SPLICE



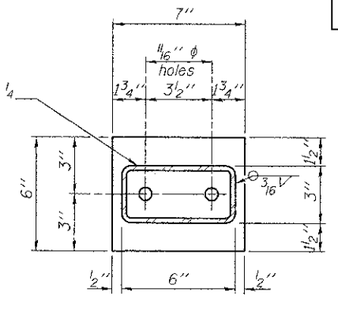
PLAN-BOTT. SPLICE PL TYPICAL



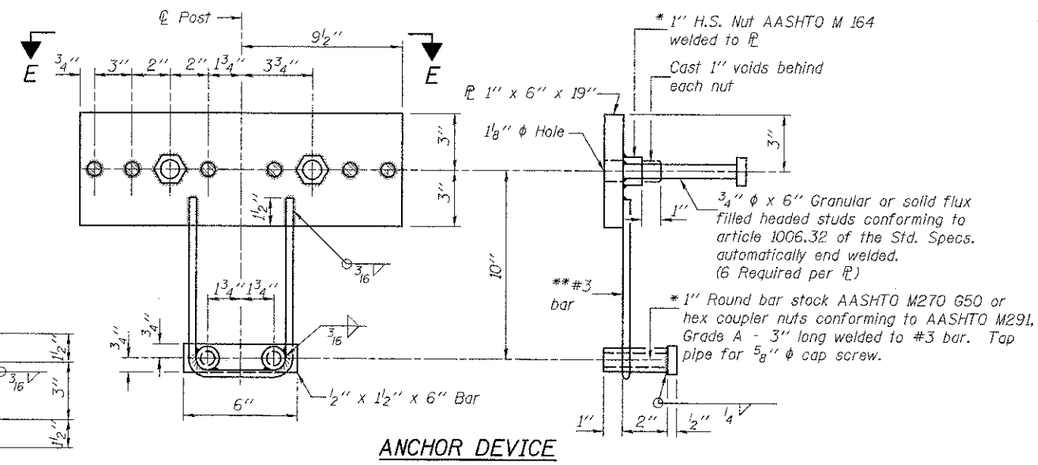
SECTION B-B



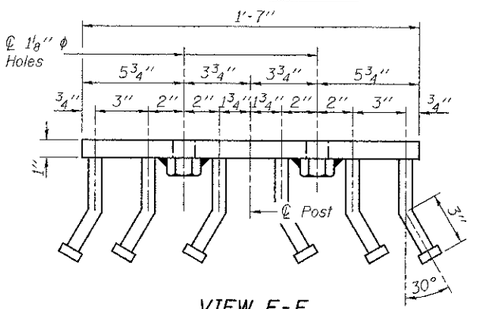
PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"



ANCHOR DEVICE



VIEW E-E

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.

All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.

*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

(6'-3" Maximum Post Spacing) (4 5/8" minimum to 7 5/8" maximum HMA thickness)

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

** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	240

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		DRAWN - K.H.L.	REVISED -
	PLOT SCALE = 2.0000 ' / IN.	CHECKED - L.D.G.	REVISED -
	PLOT DATE = 9/7/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

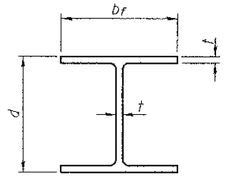
STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT WEARING SURFACE

SCALE: | SHEET NO. 8 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	24
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

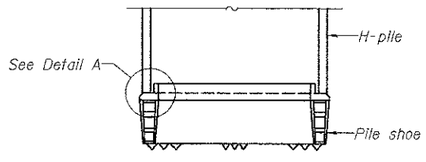
HMG NO. 5790

HMG ENGINEERS, INC. LAKE RD., P.O. BOX 70 CARLYLE, IL 62231 (618) 594-3711 WWW.HMGENGINEERS.COM

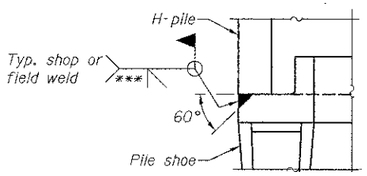


STEEL PILE TABLE

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

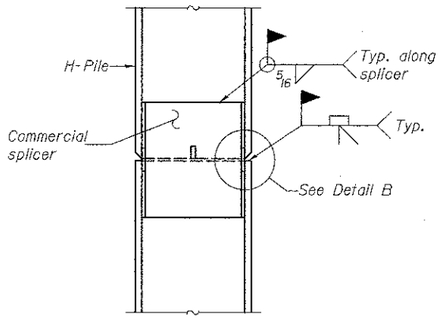


ELEVATION

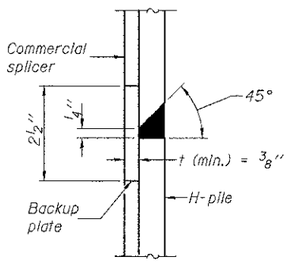


DETAIL A

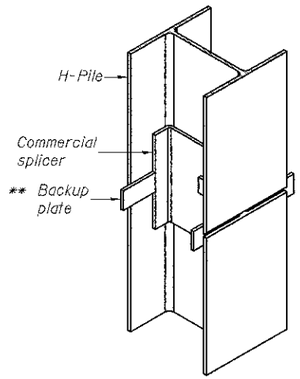
H-PILE SHOE ATTACHMENT



ELEVATION

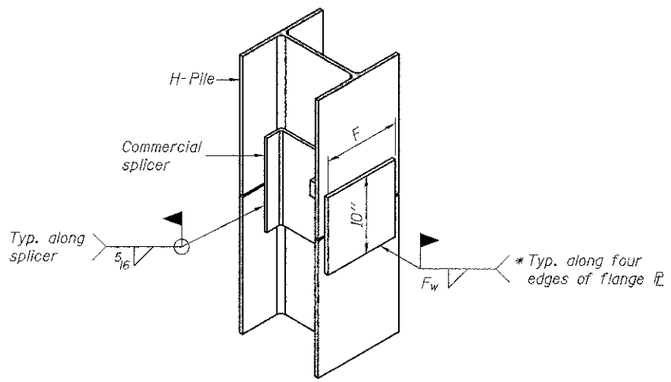


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



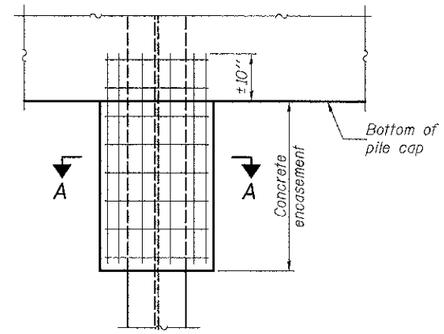
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

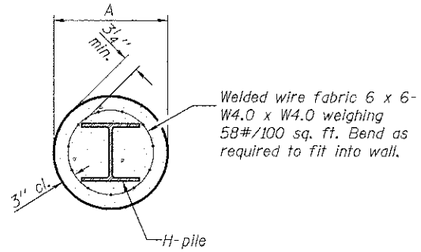
* Interrupt welds 1/4" from end of web and/or each flange.

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

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



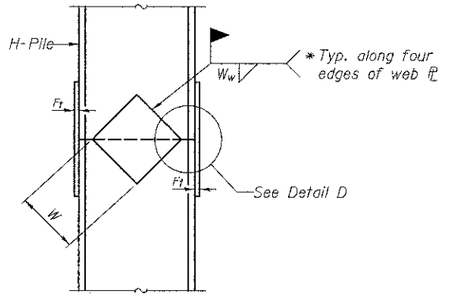
ELEVATION



Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT



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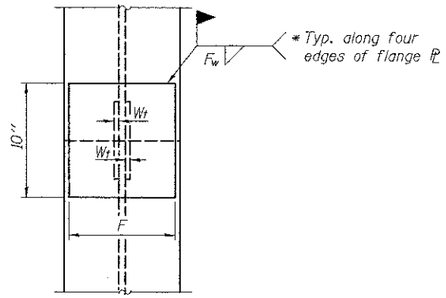
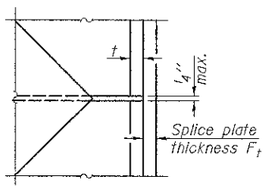


END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

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

FILE NAME = M:\5790\C_25_Bridge pile_5790_09.dgn	USER NAME = USERDESCR.	DESIGNED - B.I.B.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HP PILE DETAILS	FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - K.H.L.	REVISED -			779	07-00085-00-BR	BOND	41	25
	PLOT SCALE = 3.2000 ' / IN.	CHECKED - L.D.G.	REVISED -				SN 003-3053	CONTRACT NO. 97508		
	PLOT DATE = 9/7/2012	DATE	REVISED -		SCALE:	SHEET NO. 9 OF 10 SHEETS	STA.	TO STA.	ILLINOIS FEDERAL AID PROJECT	

HOLCOMB FOUNDATION ENGINEERING INC.
P.O. Box 88 618-529-5262
Carbondale, Il. 62903 618-457-8991 fax
Page 1 of 1

Bridge Foundation Boring Log

Project: H-08220
Section: 07-00085-00-BR
Route: North Pokey Road
County: Bond

Bridge Over Tributary to Shoal Creek
Station
Bored by: D. Russell
Checked By: T. Holcomb
Date: 2-17-09

Boring No: 1
Station:
Offset:

Surface Water Elev.
Ground Water Elev. During Drilling 489.6
Upon Completion plugged

Description	Elevation	N	Qu tsf	% w
Ground Surface 505.6	0			
3" A-3/ 6" C. Stone 504.8				
Gray Silty CLAY and Crushed Stone mixture (A-6)		17	1.05	7
502.6				
Gray Silty CLAY (A-6)	-5	7	3.15	19
		4	1.08	25
496.6				
Brown Mottled Gray Silty CLAY (A-6)	-10	3	0.98	25
494.1				
Gray SAND (A-2-4) w/ clay		4	---	11
491.6				
Gray Mottled Brown Sandy CLAY (A-6)	-15	3	0.88	20
489.1				
Gray SAND (A-2-4) with gravel		2	---	25
486.6				
Gray Mottled Brown CLAY (A-6)	-20	4	1.48	29
484.1				
Gray Weathered SHALE		20	3.55	17

Description	Elevation	N	Qu tsf	% w
SHALE (continued)				
	-25	35	---	9
478.6				
Dense Gray SHALE		100/4"	6.25	11
477.1				
Dense Gray LIMESTONE	-30	100/4"	---	4
		100/1"	---	3
474.1				
End of Boring @ -31.5'				
	-35			
	-40			

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"

Qu=Unconfined Compressive Strength in tons/sq.ft. w=Water Content-percentage of oven dry weight-%

B = Bulge Failure
S = Shear Failure
E = Estimated Value
P = Penetrometer

HOLCOMB FOUNDATION ENGINEERING INC.
P.O. Box 88 618-529-5262
Carbondale, Il. 62903 618-457-8991 fax
Page 1 of 1

Bridge Foundation Boring Log

Project: H-08220
Section: 07-00085-00-BR
Route: North Pokey Road
County: Bond

Bridge Over Tributary to Shoal Creek
Station
Bored by: D. Russell
Checked By: T. Holcomb
Date: 2-17-09

Boring No: 2
Station:
Offset:

Surface Water Elev.
Ground Water Elev. During Drilling 488.6
Upon Completion plugged

Description	Elevation	N	Qu tsf	% w
Ground Surface 504.6	0			
3" A-3/ 6" C. Stone 503.8				
Brown Mottled Gray Silty CLAY (A-6) with crushed stone		13	---	5
501.6				
Brown Mottled Gray Silty CLAY (A-6) w/ sand	-5	4	0.68	22
498.6				
Gray Mottled Brown Sandy CLAY (A-6)		10	1.25	17
	-10	3	0.75	17
493.1				
Gray Clayey SAND (A-2-4)		3	0.68	16
	-15	4	0.38	18
488.1				
Gray SAND (A-2-4)		4	---	22
485.6				
Gray Mottled Brown SAND (A-2-4) w/ gravel and clay	-20	4	---	16
483.1				
Gray to Brown Weathered SHALE		12	---	18

Description	Elevation	N	Qu tsf	% w
Weathered SHALE (continued)				
481.1				
Gray Dense LIMESTONE	-25	100/2"	---	11
		100/2"	---	9
		100/4"	---	3
475.6				
End of Boring @ -29.0'	-30			
	-35			
	-40			

N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"

Qu=Unconfined Compressive Strength in tons/sq.ft. w=Water Content-percentage of oven dry weight-%

B = Bulge Failure
S = Shear Failure
E = Estimated Value
P = Penetrometer

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	PLOT DATE = 9/7/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: | SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	26
	SN 003-3053	CONTRACT NO. 97508		
	ILLINOIS FEDERAL AID PROJECT			

HMG NO. 5790

BEGIN CONSTRUCTION
STA. 16+50

16+50
17+00
17+50
18+00
18+50

EX ROW
PR ROW
℄ PROPOSED ROADWAY

541.40
543.15
544.90
546.65
540.90
543.10
545.10
547.10

C = 86.3
F = 32.8
C = 71.2
F = 28.0
C = 47.1
F = 28.6
C = 31.5
F = 27.0
C = 27.4
F = 0.0

PCE 546.81
PCE 546.59
PCE 549.06
PCE 551.02
PCE 552.97

1:3
1:4
1:2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 1 OF 15 SHEETS | STA. 16+50.00 TO STA. 18+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	27

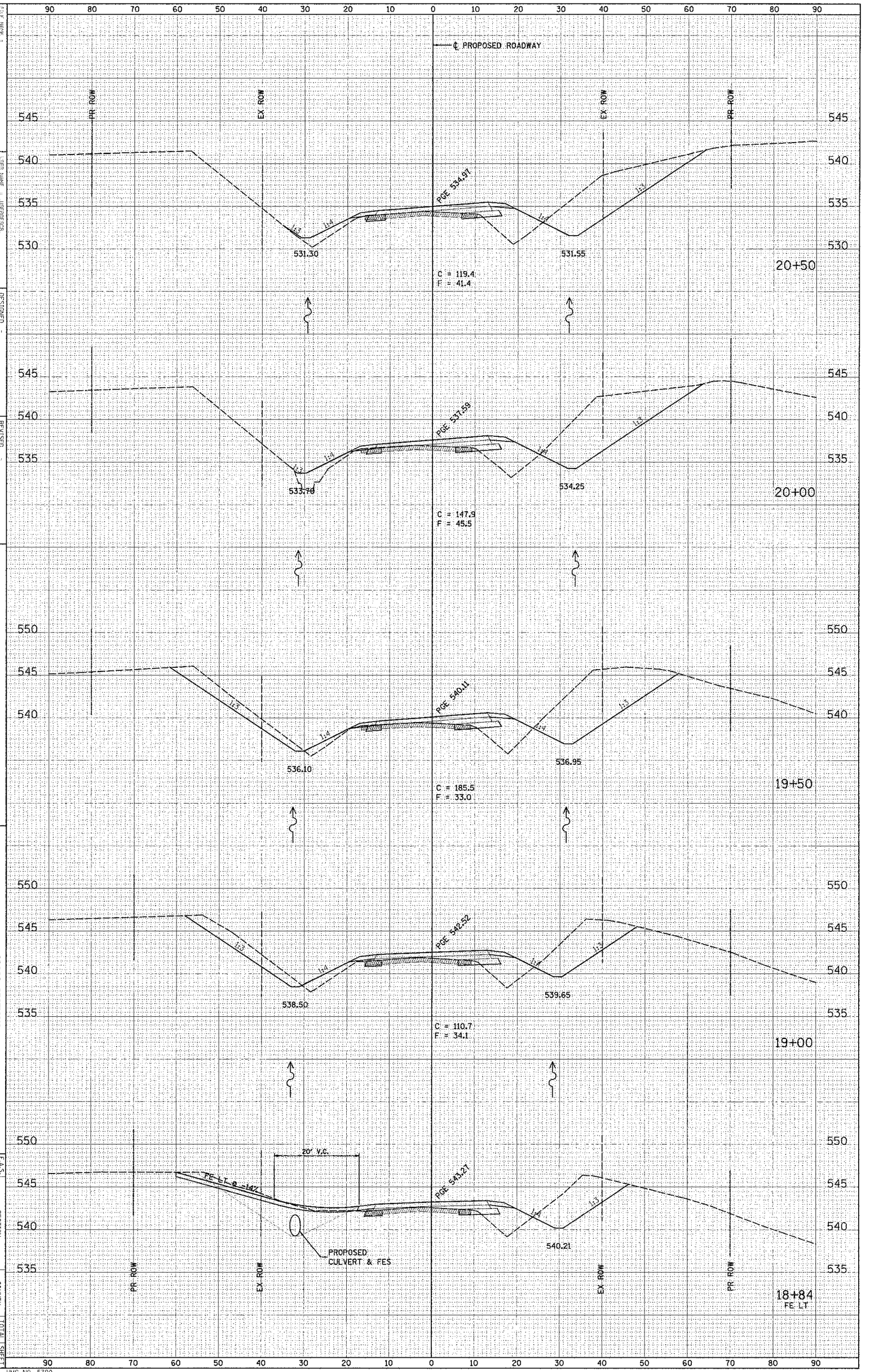
CONTRACT NO. 97508
ILLINOIS FED. AID PROJECT

HMG NO. 5790

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

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

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



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE:

SHEET NO. 2 OF 15 SHEETS | STA. 18+84.00 TO STA. 20+50.00

F.A.S. RTE. 779 | SECTION 07-00085-00-BR | COUNTY | TOTAL SHEETS 41 | SHEET NO. 26

ILLINOIS FED. AID PROJECT | BOND | CONTRACT NO. 97508

HMG NO. 5790

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USER NAME = USERDESGN

PLOT SCALE = 10.0000 ' / IN.

PLOT DATE = 9/26/2012

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

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

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

℄ PROPOSED ROADWAY

EX ROW

PR ROW

21+00

PGE 528.34

C = 52.7
F = 45.9

528.85

528.90

21+50

PGE 529.10

C = 18.0
F = 58.2

525.85

526.50

22+00

PGE 527.09

C = 8.9
F = 50.8

522.85

524.10

22+50

PGE 524.69

C = 7.8
F = 61.8

519.85

521.70

1:4

1:3

535 530 525 520 515 540

0 10 20 30 40 50 60 70 80 90

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	PLOT SCALE = 10.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/28/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 3 OF 15 SHEETS | STA. 21+00.00 TO STA. 22+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	29
		CONTRACT NO. 97508		
		ILLINOIS FED. AID PROJECT		

HMG NO. 5790

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

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

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	PLOT DATE = 9/28/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 4 OF 15 SHEETS | STA. 23+00.00 TO STA. 24+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	30
		CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

HMG NO. 5790

FIELD SURVEY NOTE BOOK	NO.
SURVEYED	BY:
PLOTTED	DATE
TYPED	
AREAS	
AREAS CHECKED	

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

℄ PROPOSED ROADWAY

EX ROW

1:2.75

1:2.5

499.30

C = 40.7
F = 861.2

PDE 516.12

499.18

26+00

1:3.63

1:3

504.80

C = 106.2
F = 705.1

PDE 516.71

503.43

25+50

1:4

1:3

508.45

C = 273.1
F = 513.5

PDE 516.56

25+00

1:4

1:3

509.17

PDE 516.97

PR ROW

24+80
FE LT

FE LT @ 6.0% (±)

FE LT @ 14.0% (±)

PROPOSED CULVERT & FES

FILE NAME =	USER NAME = USERDESCR	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/28/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 5 OF 15 SHEETS | STA. 24+80.00 TO STA. 26+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	31
		CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

AMG NO. 5790

FINAL SURVEY NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	PLANIMETER		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	PLANIMETER		
	AREAS		
	AREAS CHECKED		

℄ PROPOSED ROADWAY

EX ROW

PGE 516.06

113.69

C = 18.0
F = 1460.5

498.06

28+50

PGE 515.35

112.75

C = 54.3
F = 1126.3

495.52

28+00

PGE 514.91

C = 91.6
F = 950.3

27+60
BK S ABUT

BRIDGE OMISSION
STA. 26+40 TO
STA. 27+60

PGE 514.84

C = 65.0
F = 622.3

26+40
BK N ABUT

EX ROW

493.92

HMG NO. 5790

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	PLOT DATE = 9/26/2012	DATE -	REVISED -		SCALE: SHEET NO. 6 OF 15 SHEETS STA. 26+40.00 TO STA. 28+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	32
		CONTRACT NO. 97508		
		ILLINOIS FED. AID PROJECT		

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

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

℄ PROPOSED ROADWAY

EX ROW

PR ROW

30+00

511.00

29+50

505.80

29+20

FE LT

502.68

29+00

500.60

PROPOSED CULVERT @ FES.

FE LT @ 6%

FE LT @ 15%

PVC 519.72

C = 64.6
F = 313.8

PVC 518.24

C = 91.4
F = 483.7

PVC 517.48

C = 91.4
F = 483.7

PVC 517.02

C = 29.9
F = 1130.2

514.60

507.13

1:4

1:3

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 7 OF 15 SHEETS | STA. 29+00.00 TO STA. 30+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	33
		CONTRACT NO. 97508		
		ILLINOIS FED. AID PROJECT		

HMG NO. 5790

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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 8 OF 15 SHEETS | STA. 30+50.00 TO STA. 32+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	34
		CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	PLOT SEC		
	AREAS		
NOS.	AREAS CHECKED		

℄ PROPOSED ROADWAY

EX ROW

PR ROW

34+00

C = 110.0
F = 33.3

PGE 539.19

556.20

33+50

C = 67.3
F = 39.5

PGE 536.47

533.00

534.70

531.20

33+00

C = 99.7
F = 45.0

PGE 533.72

529.80

527.70

32+50

C = 112.8
F = 54.5

PGE 530.97

526.60

524.90

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
	PLOT SEC		
NOTE BOOK	AREAS		
NOS.	AREAS CHECKED		

HMG NO. 5790

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

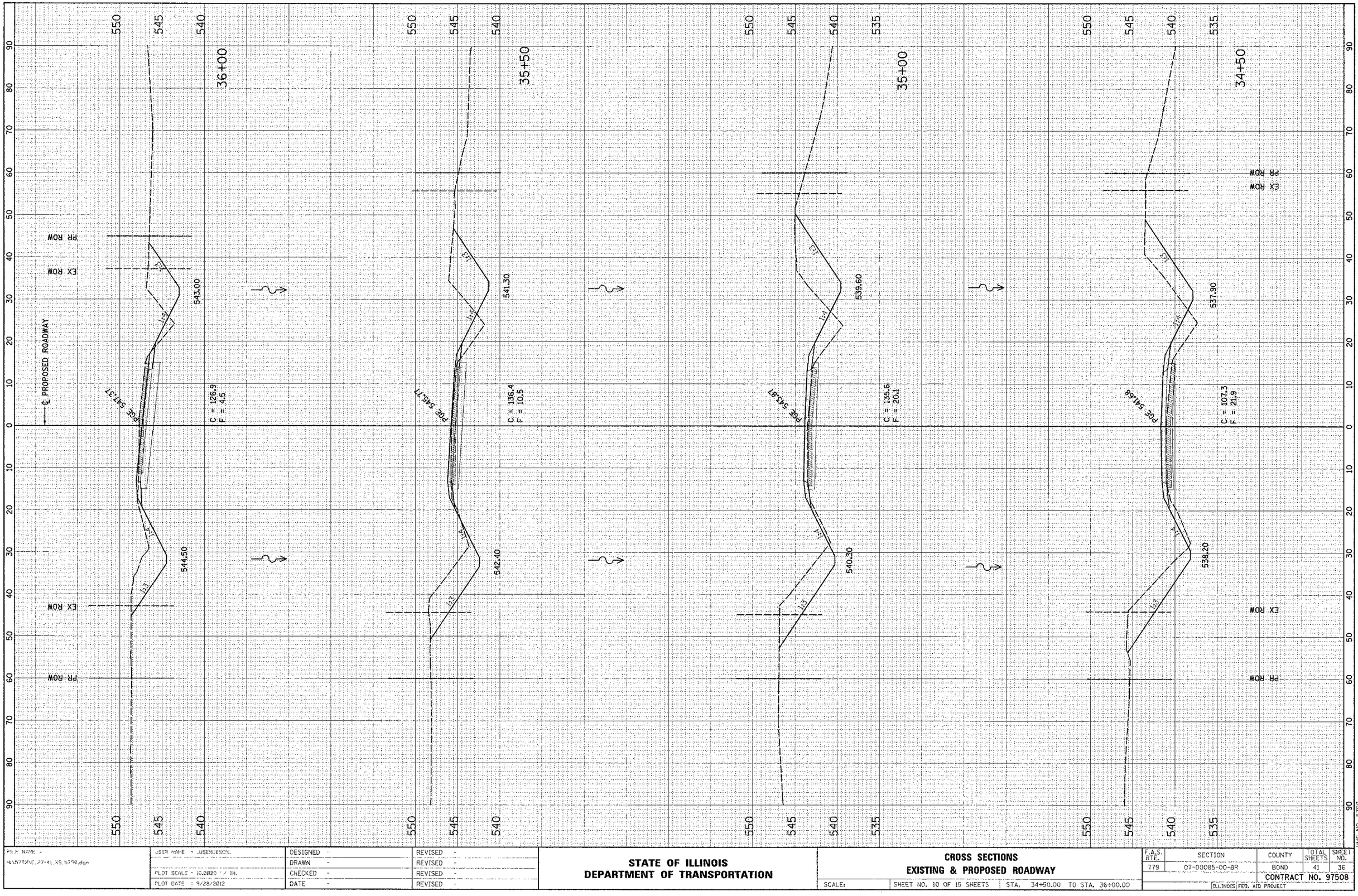
CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 9 OF 15 SHEETS | STA. 32+50.00 TO STA. 34+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	35
		CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	CHECKED	
	TEMP. AR.	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	CHECKED	
	TEMP. AR.	
	AREAS	
	AREAS CHECKED	



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 10 OF 15 SHEETS | STA. 34+50.00 TO STA. 36+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	36

CONTRACT NO. 97508

ILLINOIS FED. AID PROJECT

HMG NO. 5750

FINAL SURVEY NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	DRAWN		
	CHECKED		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY NOTE BOOK	SURVEYED	DATE
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	DRAWN	
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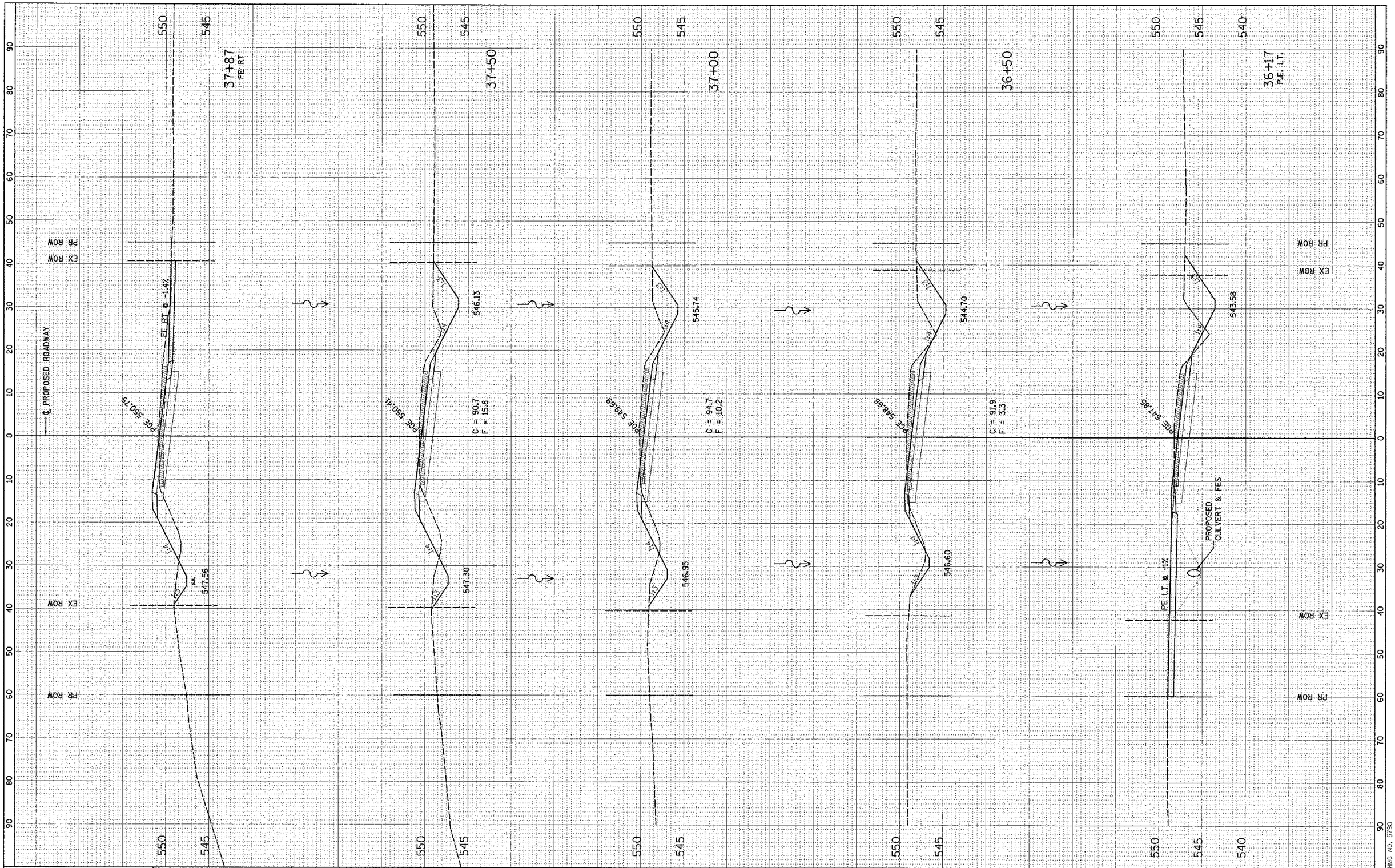

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 11 OF 15 SHEETS | STA. 36+17.00 TO STA. 37+87.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	37
		CONTRACT NO. 97508		
	ILLINOIS FED. AID PROJECT			

HMG NO. 5790

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

℄ PROPOSED ROADWAY

EX ROW

PR ROW

545.28

C = 38.3
F = 27.2

POE 550.68

545.66

C = 44.8
F = 54.8

POE 550.34

546.05

C = 51.0
F = 31.4

POE 550.80

546.43

C = 54.9
F = 22.1

POE 550.96

547.65

C = 44.8
F = 23.9

POE 550.83

548.00

1:4

1:4

1:4

1:4

1:4

1:4

40+00

39+50

39+00

38+50

38+00

550

545

540

0

10

20

30

40

50

60

70

80

90

HMG NO. 5790

FILE NAME =	USER NAME = USERDESGN	DESIGNED -	REVISED -
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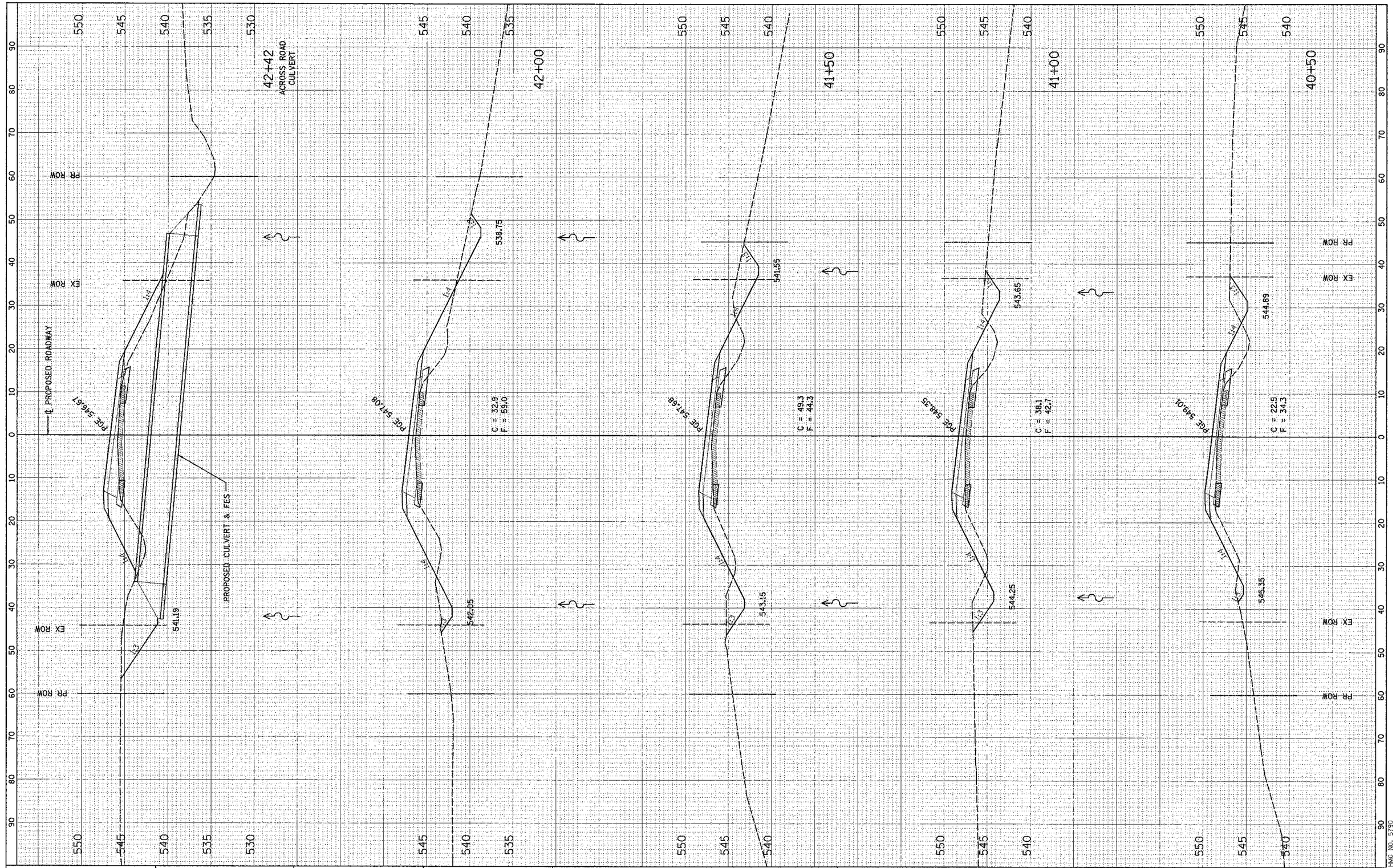
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 12 OF 15 SHEETS | STA. 38+00.00 TO STA. 40+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	38
		CONTRACT NO. 97508		
		ILLINOIS FED. AID PROJECT		



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

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

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PLOT DATE = 9/28/2012

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

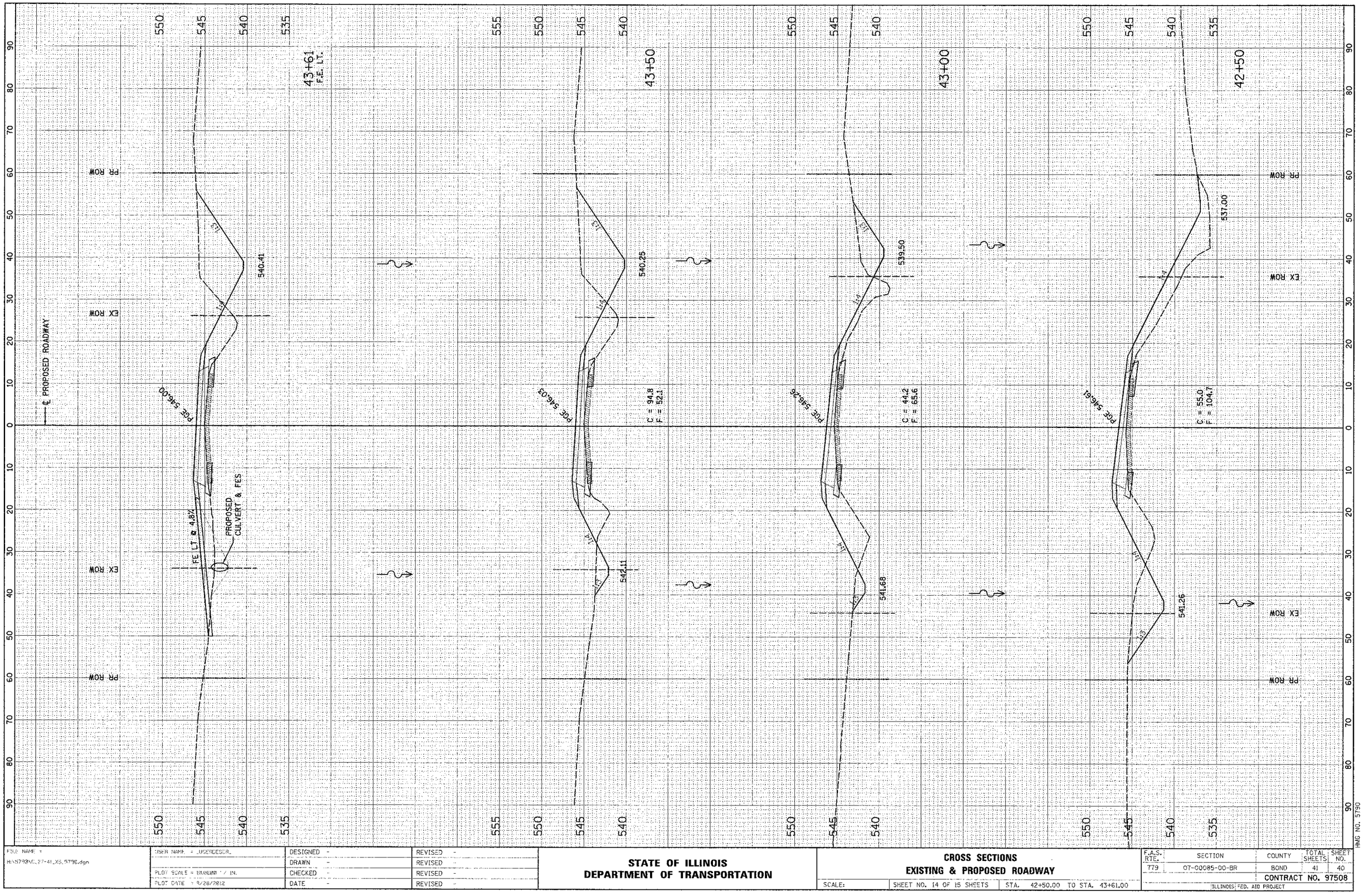
CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: SHEET NO. 13 OF 15 SHEETS STA. 40+50.00 TO STA. 42+42.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	39

CONTRACT NO. 97508
ILLINOIS FED. AID PROJECT

HWG NO. 5790



FINAL / SURVEYED / PLOTTED / NOTE SHOW / AREAS / AREAS CHECKED — BY — DATE

ORIGINAL / SURVEY / PLOTTED / NOTE SHOW / AREAS / AREAS CHECKED — By — DATE

HMG NO. 5790

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	PLOT DATE = 9/28/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 14 OF 15 SHEETS | STA. 42+50.00 TO STA. 43+61.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	40
		CONTRACT NO. 97508		
ILLINOIS FED. AID PROJECT				

END CONSTRUCTION
STA. 46+00

℄ PROPOSED ROADWAY

EX ROW

PR ROW

PDE 546.12

C = 27.3
F = 0.0

543.10

543.90

PDE 546.11

C = 122.4
F = 10.2

542.50

543.40

PDE 546.08

C = 110.9
F = 15.0

541.75

542.97

PDE 545.97

C = 104.6
F = 21.8

541.00

542.54

PDE 545.94

C = 103.9
F = 36.6

46+00

45+50

45+00

44+50

44+00

550

545

540

0 10 20 30 40 50 60 70 80 90

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

FILE NAME =	USER NAME = JUSERJESCR	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/20/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EXISTING & PROPOSED ROADWAY

SCALE: | SHEET NO. 15 OF 15 SHEETS | STA. 44+00.00 TO STA. 46+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
779	07-00085-00-BR	BOND	41	41
		CONTRACT NO. 97508		
		ILLINOIS FED. AID PROJECT		

HMG NO. 5790