

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.U. ROUTE 3887 (IL ROUTE 31)
SECTION R-VB-R

PROJECT: ACBHM-3387(006)
OVER ~~SOO LINE~~ RAILROAD (0.8 MI SOUTH OF I-90)
METRA
BRIDGE REHABILITATION
KANE COUNTY
C-91-109-07

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE COUNTY	03	1
ILLINOIS			CONTRACT NO. 60C06	

D-91-109-07

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION

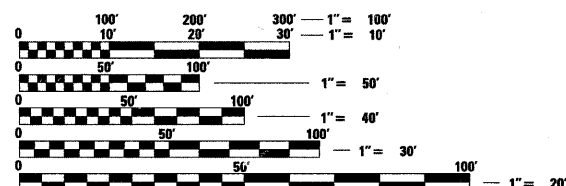
3850 (21) MINOR ARTERIAL 7.21(FD-20)

TRAFFIC DATA

ADT (2021): 38,475
DESIGN SPEED: 40 MPH
POSTED SPEED: 35 MPH

PROJECT LOCATED IN CITY OF ELGIN

NOTE: WHEREVER IN THESE PLANS REFERENCE IS MADE TO SOO RAILROAD IT SHALL MEAN METRA (METROPOLITAN RAILROAD).

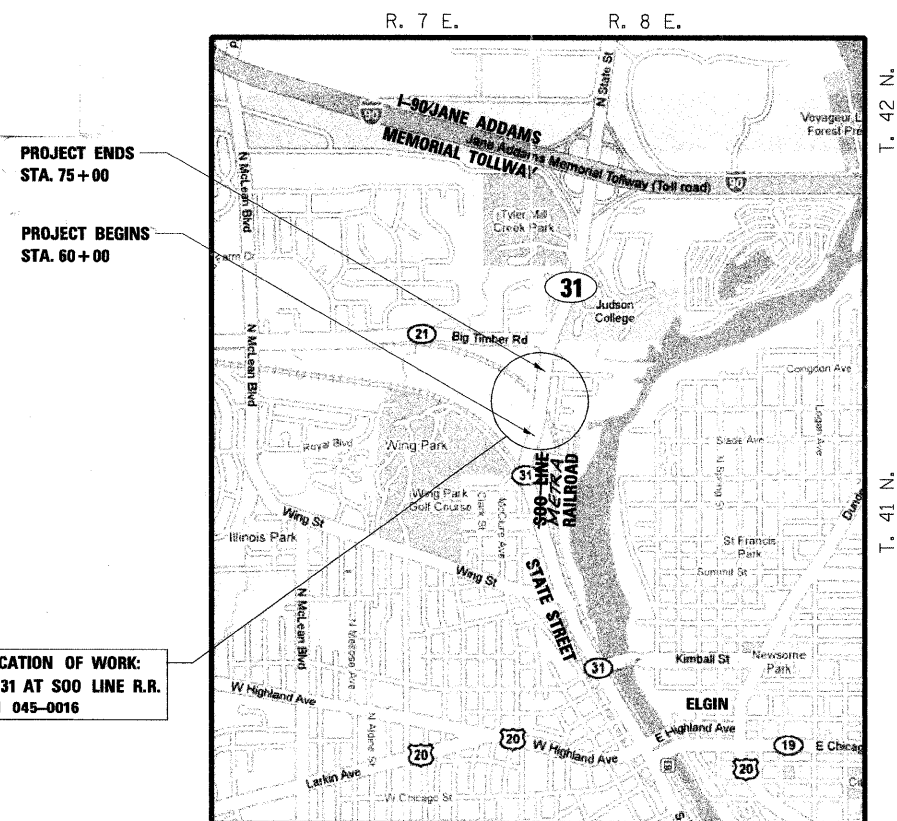


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

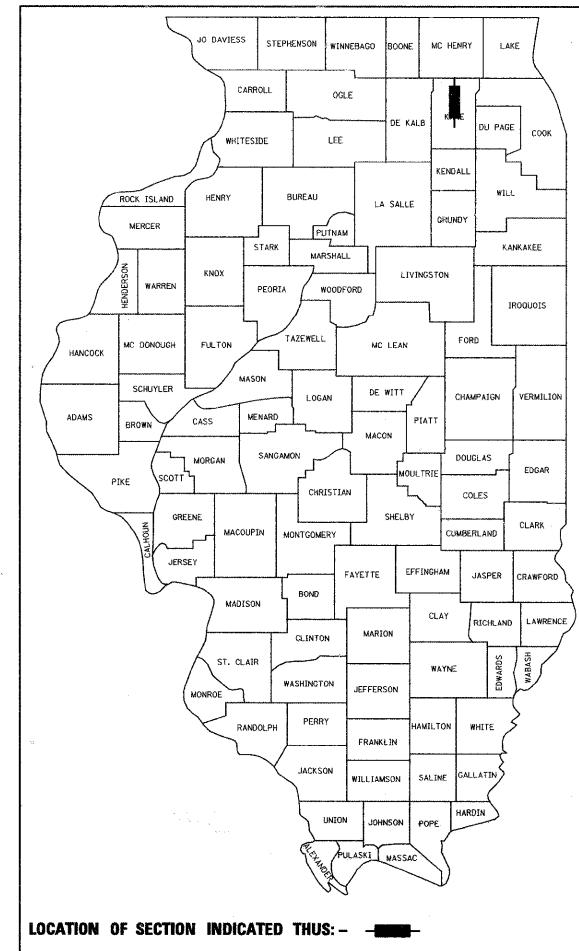
PROJECT ENGINEER: SUNG BYUN (847) 705-4288
PROJECT MANAGER: KIM HARVEY (847) 705-4055

CONTRACT NO. 60C06



LOCATION MAP

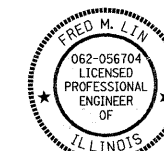
GROSS LENGTH = 383 FT. = 0.17 MILE
NET LENGTH = 637 FT. = 0.12 MILE



LOCATION OF SECTION INDICATED THUS: -



SIGNED: *J. M. Daim*
DATE: 6/23/2011
EXPIRES: NOVEMBER 30, 2011
DRAWING NOS: 1-8, 10-12, 14-17, 69-83



SIGNED: *Fred M. Lin*
DATE: 6/23/2011
EXPIRES: NOVEMBER 30, 2011
DRAWING NOS: 9, 13-15 & 18-34

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED June 20, 2011
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
August 19, 2011
Scott E. Stitt, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
August 19, 2011
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

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001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
601001-04	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306-03	CORRUGATED PC CONCRETE MEDIANS
630001-09	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631033-04	TRAFFIC BARRIER TERMINAL, TYPE 6B
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
664001-02	CHAIN LINK FENCE
668001-01	U.S.G.S. AND NATIONAL GEODETIC SURVEY BENCHMARKS RESETTING METHOD
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701606-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
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720011-01	METAL POST FOR SIGNS, MAKERS & DELINEATORS
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701601-07	
701701-07	

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731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
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880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

HIGHWAY STANDARDS

GENERAL NOTES

- TEN FT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- WHERE ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
- THE HMA MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.1 GAL/SY.
- THE UNIT WEIGHT USED FOR ALL HMA SURFACE MIXTURES IS 112 LB/SQ YD-IN.
- THE CONTRACTOR SHALL NOT SET UP A YARD OF FIELD OFFICE ON I.D.O.T. PROPERTY WITHOUT WRITTEN PERMISSION FROM I.D.O.T.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ABUTTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
- CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- SAW CUTTING IS INCIDENTAL TO THE PROPOSED ITEM OF WORK SPECIFIED, UNLESS OTHERWISE SHOWN IN PLAN.

- THE DIMENSIONS AND LOCATIONS OF NICOR GAS UTILITY FACILITIES AS SHOWN ON THESE PLANS ARE AN ESTIMATE FOR DESIGN PURPOSES ONLY, AND ARE NOT INTENDED FOR USE AS FIELD LOCATIONS FOR CONSTRUCTION. CALL JULIE 48 HOURS PRIOR TO CONSTRUCTION FOR CONFIRMATION OF CURRENT FACILITY LOCATIONS, 800-892-0123.
- USE THE LATEST IDOT HIGHWAY STANDARDS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISION AT (847) 705-4470, A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL CONTACT THE AREA FIELD ENGINEER, DON CHIARUGI AT 847-705-4413, 2 WEEKS PRIOR TO PLACEMENT OF PAVEMENT MARKINGS.
- THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

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PLOT SCALE = #SCALE#		DATE - 07/01/2011	REVISED -
PLOT DATE = 6/30/2011			

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, GENERAL NOTES		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: NA	SHEET NO. 1 OF 1 SHEETS	3887	R-VB-R	KANE	83	2
STA. NA	TO STA. NA	CONTRACT NO. 60C06				
ILLINOIS FED. AID PROJECT						

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SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				80% FED. / 20% STATE		
				0005	0014 SN 045-0016	0021
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	40	40	.	.
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	6	6		
20200100	EARTH EXCAVATION	CU YD	951	551	400	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	50		50	
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	268	268		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	58	58		
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	66	66		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	66	66		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	66	66		
25100630	EROSION CONTROL BLANKET	SQ YD	2,948	2,948		
28000400	PERIMETER EROSION BARRIER	FOOT	1,788	1,788		
28000500	INLET AND PIPE PROTECTION	EACH	6	6		
28100107	STONE RIPRAP, CLASS A4	SQ YD	75		75	
28200200	FILTER FABRIC	SQ YD	134		134	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	421	421		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	205	205		
40600895	CONSTRUCTING TEST STRIP	EACH	1	1		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	294	294		
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	214.6	214.6		
40701956	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"	SQ YD	2,299	2,299		
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	360	360		
42001300	PROTECTIVE COAT	SQ YD	444	444		
44000100	PAVEMENT REMOVAL	SQ YD	1,743	1,743		
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	3,312	3,312		
44000300	CURB REMOVAL	FOOT	430	430		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,295	1,295		
44003100	MEDIAN REMOVAL	SQ FT	4,633	4,633		
50102400	CONCRETE REMOVAL	CU YD	38		38	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1	

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				80% FED. / 20% STATE		
				0005	0014 SN 045-0016	0021
50157300	PROTECTIVE SHIELD	SQ YD	758		758	
50200100	STRUCTURE EXCAVATION	CU YD	439		439	
50300225	CONCRETE STRUCTURES	CU YD	140.3		140.3	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	770.1		770.1	
50300260	BRIDGE DECK GROOVING	SQ YD	1,615		1,615	
50300300	PROTECTIVE COAT	SQ YD	2,280		2,280	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	17,570		17,570	
50500505	STUD SHEAR CONNECTORS	EACH	6,504		6,504	
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1		1	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	170,480		170,480	
50800515	BAR SPLICERS	EACH	1,624		1,624	
50901125	STEEL RAILING (TEMPORARY)	FOOT	306		306	
50901730	BRIDGE FENCE RAILING	FOOT	611		611	
51500100	NAME PLATES	EACH	1		1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	196		196	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		24	
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12		12	
52100505	ANCHOR BOLTS, 5/8"	EACH	96		96	
52100510	ANCHOR BOLTS, 3/4"	EACH	24		24	
52100520	ANCHOR BOLTS, 1"	EACH	24		24	
58700300	CONCRETE SEALER	SQ FT	791		791	
59000200	EPOXY CRACK INJECTION	FOOT	10		10	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	191		191	
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	3	3		
60107600	PIPE UNDERDRAINS 4"	FOOT	140	140		
60237420	INLETS, TYPE A, TYPE 20 FRAME AND GRATE	EACH	4	4		
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	1	1		
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	5	5		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	10	10		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	958	958		

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• SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NA	SHEET NO. 1 OF 3 SHEETS	STA. NA	TO STA. NA	F.A. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 3
							CONTRACT NO. 60C06	
							ILLINOIS FED. AID PROJECT	

Rev.

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URBAN 80% FED. / 20% STATE

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				005	0014 SN 045-0016	0021
60608521	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24	FOOT	226	226		
60621600	CONCRETE MEDIAN, TYPE SM	SQ FT	1,055	1,055		
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	475			475
* 63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	3			3
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	3			3
63200310	GUARDRAIL REMOVAL	FOOT	410	410		
66400205	CHAIN LINK FENCE, 5'	FOOT	30	30		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12		
67100100	MOBILIZATION	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DAY	30	30		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	6,000	6,000		
70300220	TEMPORARY PAVEMENT MARKING, LINE 4"	FOOT	1,000	1,000		
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	11,365	11,365		
70300540	PAVEMENT MARKING TAPE, TYPE III 6"	FOOT	539	539		
70300560	PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	83	83		
70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	72	72		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	6,619	6,619		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	975	975		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	838	838		
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110	110		
* 78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	6,291	6,291		
* 78000600	THERMOPLASTIC PAVEMENT MARKING-LINE 12"	FOOT	807	807		
* 78000650	THERMOPLASTIC PAVEMENT MARKING-LINE 24"	FOOT	119	119		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	763	763		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	276	276		
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	16	16		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10		
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	10	10		
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	184	184		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	2,685	2,685		

* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NA	SHEET NO. 2 OF 3 SHEETS	STA. NA	TO STA. NA	F.A. RFE 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 4
							CONTRACT NO. 60C06	
							[ILLINOIS] FED. AID PROJECT	

URBAN 80% FED. / 20% STATE

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				005	0014 SN 045-0016	0021
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	246	246		
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	140	140		
* 81200120	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	240	240		
* 81304600	JUNCTION BOX EMBEDDED IN STRUCTURE 18"X12"X6"	EACH	2	2		
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	140	140		
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
* 86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	1	1		
* 85400100	TRANSCIVER FIBER OPTIC	EACH	2	2		
* 87100020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1,750	1,750		
* 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,750	1,750		
* 87900200	DRILL EXISTING HANDHOLE	EACH	3	3		
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2	2		
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	3		
* 88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	3		
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1	1		
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	3	3		
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	66	66		
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
* 89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1	1		
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,750	1,750		
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1		
X0325598	DRAINAGE SCUPPERS, DS-12M10	EACH	8			8
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	350			350
X4403800	MEDIAN SURFACE REMOVAL	SQ FT	1,055	1,055		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	2,748	2,748		
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	29,160			29,160
Z0003802	REMOVAL OF EXISTING BEARINGS	EACH	48			48
Z0004552	APPROACH SLAB REMOVAL	SQ YD	560	560		
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	110	110		

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CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				005	0014 SN 045-0016	0021
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1		1	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	600		600	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	1	1		
Z0018700	DRAINAGE STRUCTURE TO BE REMOVED	EACH	3	3		
Z0018800	DRAINAGE SYSTEM	L SUM	1		1	
Z0024478	FLEXIBLE DELINEATORS	EACH	120	120		
Z0026407	TEMPORARY SHEET PILING	SQ FT	733		733	
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4		
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	4	4		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	256	256		
Z0032300	JACKING EXISTING SUPERSTRUCTURE	L SUM	1		1	
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	382		382	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
Z0053700	RESETTING SURVEY MONUMENTS	EACH	1	1		
Z0062456	TEMPORARY PAVEMENT	SQ YD	37	37		
Z0065704	BITUMINOUS COATED AGGREGATE SLOPEWALL 6"	SQ YD	1,172		1,172	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1		
Z0076600	TRAINEES	HOUR	—	—	—	
—	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	230	230		
Z5100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2,200	2,200		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	2,395	2,395		
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1		
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1		
* 87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3	3		
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1	1		
* 87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1	1		
* 88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1	1		
* 78000400	THERMOPLASTIC PAVEMENT MARKING-LINE 6"	FOOT	1,090	1,090		
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS	EACH	48	48		

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* SPECIALTY ITEMS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: NA	SHEET NO. 3 OF 3 SHEETS	STA. NA	TO STA. NA

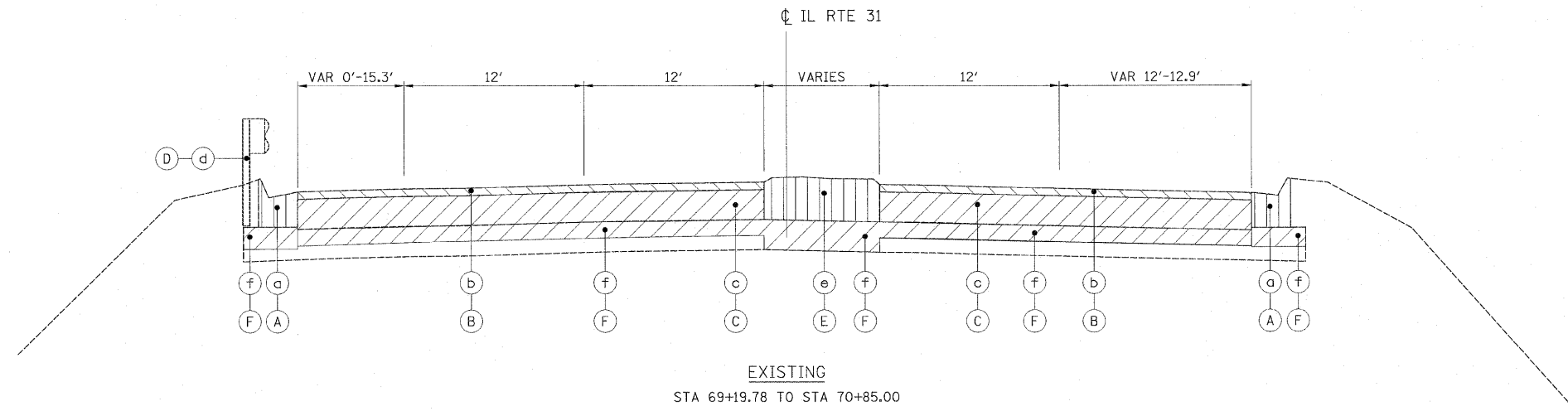
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	5
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

Rev.

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WESTBOUND

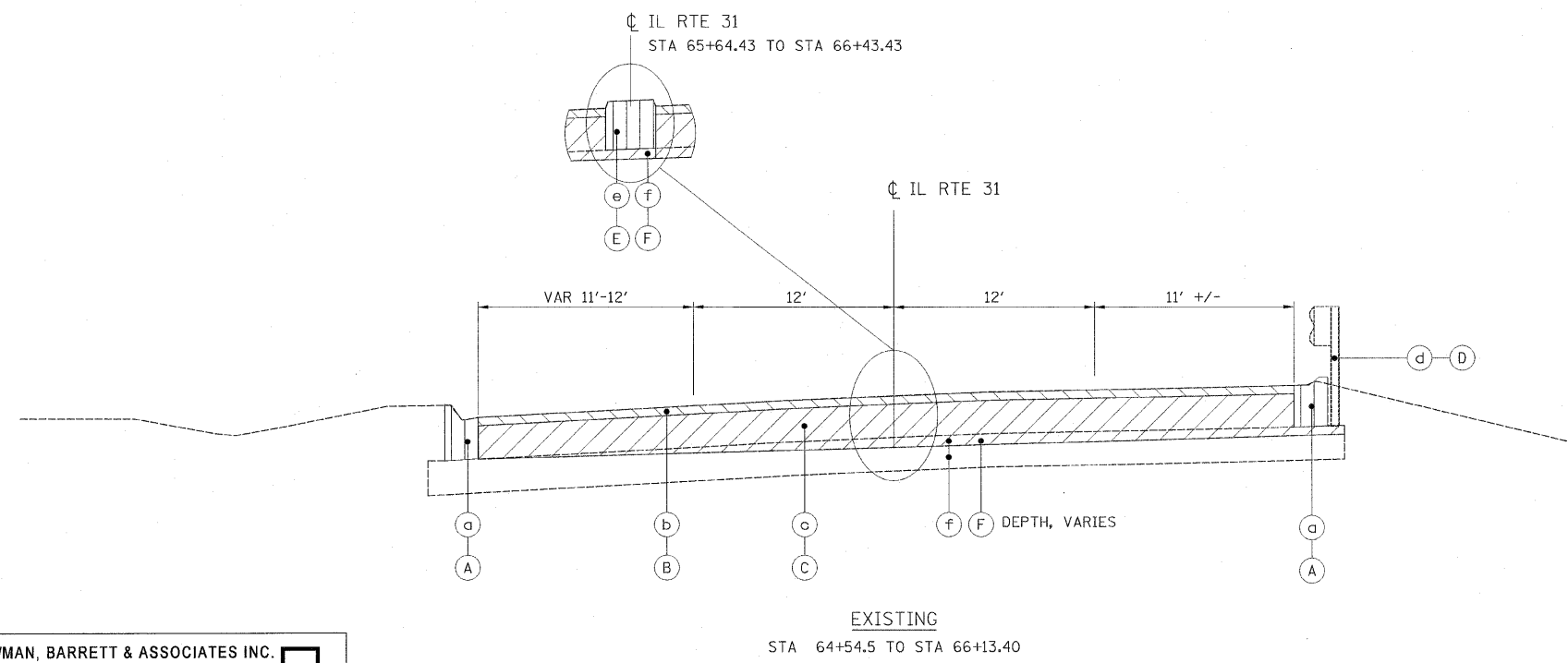
EASTBOUND



- EXISTING LEGEND**
- (a) COMBINATION CURB AND GUTTER
 - (b) BITUMINOUS SURFACE AND BINDER COURSE, 3" - 4.5"
 - (c) PCC PAVEMENT, 9.25" - 11.25"
 - (d) GUARDRAIL
 - (e) MEDIAN
 - (f) AGGREGATE SUBGRADE, 8" - 12"

- REMOVAL LEGEND**
- (A) COMBINATION CURB AND GUTTER REMOVAL
 - (B) HOT-MIX ASPHALT SURFACE REMOVAL, 3"
 - (C) PAVEMENT REMOVAL
 - (D) GUARDRAIL REMOVAL
 - (E) MEDIAN REMOVAL
 - (F) EARTH EXCAVATION

FOR BRIDGE SECTION, SEE STRUCTURAL DRAWINGS



HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS
PAVEMENT RESURFACING POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" (IL-9.5mm) LEVELING BINDER (MACHINE METHOD), N70, THICKNESS VARIES 3/4" MIN. -2 1/4"	4% @ 90 Gyr 4% @ 70 Gyr
HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4" POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" (IL-9.5mm) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 11 3/4" (IN 4 LIFTS)	4% @ 90 Gyr 4% @ 90 Gyr
RESURFACING AND BUTT JOINT POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" (IL-9.5mm)	4% @ 90 Gyr
TEMPORARY PAVEMENT HOT-MIX ASPHALT BINDER COURSE, (IL-19mm), N50, 8 1/2", (3 Lif+ts)	4% @ 50 Gyr
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", (IL-9.5mm), N50, 1 1/2"	4% @ 50 Gyr
INCIDENTAL HMA SURFACING HOT-MIX ASPHALT BINDER COURSE, (IL-19mm), N70, 10", (3 Lif+ts)	4% @ 70 Gyr

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA, THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP", SEE DISTRICT ONE SPECIAL PROVISIONS.

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/ SY/IN.
TEMPORARY PAVEMENT NOTE: IF CONTRACTOR CHOOSES TO USE CONCRETE THE THICKNESS WILL BE 10"

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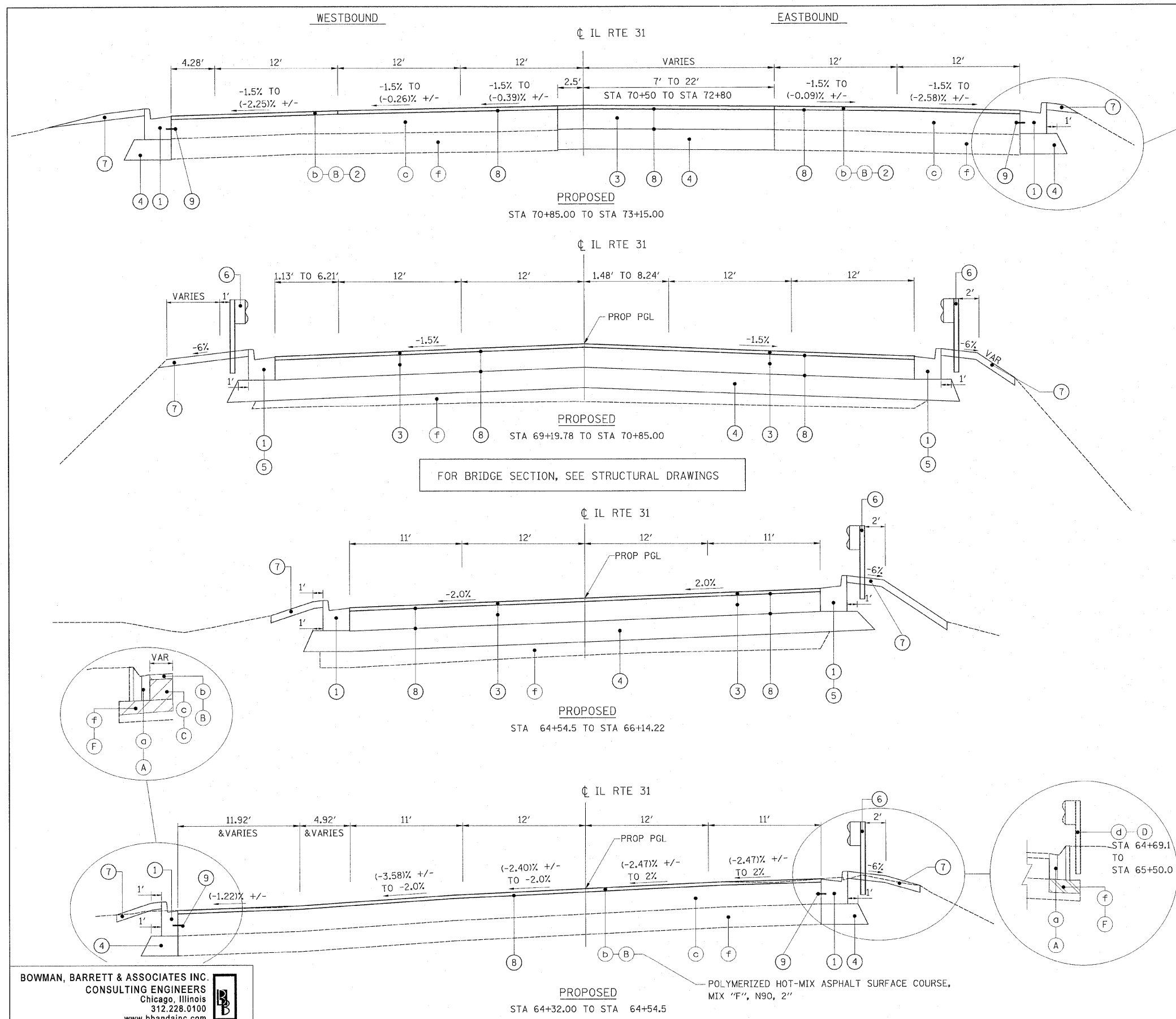
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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SCALE: NTS SHEET NO. 1 OF 2 SHEETS STA. NA TO STA. NA

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	6
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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EXISTING LEGEND

- (a) COMBINATION CURB AND GUTTER
- (b) BITUMINOUS SURFACE AND BINDER COURSE, 3" - 4.5"
- (c) PCC PAVEMENT, 9.25" - 11.25"
- (d) GUARDRAIL
- (e) MEDIAN
- (f) AGGREGATE SUBGRADE, 8" - 12"

REMOVAL LEGEND

- (A) COMBINATION CURB AND GUTTER REMOVAL
- (B) HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- (C) PAVEMENT REMOVAL
- (D) GUARDRAIL REMOVAL
- (E) MEDIAN REMOVAL
- (F) EARTH EXCAVATION

PROPOSED LEGEND

- (1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
 - (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
 - (3) LEVELING BINDER (MACHINE METHOD), N70, THICKNESS VARIES 3/4" MIN-2 1/4"
 - (4) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"
 - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
 - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 11 3/4"
 - (5) AGGREGATE SUBGRADE 12"
 - (6) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24
 - (7) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
 - (8) TOPSOIL FURNISH AND PLACE, 4"
 - (9) BITUMINOUS MATERIALS (PRIME COAT)
- LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 6 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE COMB. CONC. CURB AND GUTTER TYPE)

NOTES

1. SEE "CIVIL DETAILS" SHEETS FOR PAVEMENT SLOPE TRANSITIONS.

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CHECKED - RS	REVISED -
DATE - 07/01/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NTS	SHEET NO. 2 OF 2 SHEETS	STA. NA TO STA. NA
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	7
CONTRACT NO. 60C06				ILLINOIS FED. AID PROJECT

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SCHEDULE OF QUANTITIES

HOT-MIX ASPHALT SURFACE REMOVAL, 3" (44000161)					
STA	WIDTH	TO	STA	WIDTH	AREA SY
64+54.50	49.5		65+95.48	79.5	763
69+38.66	84.19		73+15.00	146	2,550
TOTAL					3,312

COMBINATION CURB AND GUTTER REMOVAL (44000500)						
STA	OFFSET		TO	STA	OFFSET	LENGTH FT
64+32.00	23	RT		66+12.73	25.62	RT 183
64+33.48	40.22	LT		66+77.53	29.27	LT 249
68+54.17	27.5	RT		73+07.50	77.40	RT 470
69+23.41	29.5	LT		73+15.00	41.73	LT 393
TOTAL						1,295

GUARDRAIL REMOVAL (63200310)						
STA	OFFSET		TO	STA	OFFSET	LENGTH FT
64+68.70	28	RT		66+25.65	28.00	RT 160
69+08.20	27.86	LT		71+49.50	41.50	LT 250
TOTAL						410

PAVEMENT REMOVAL (44000100)					
STA		WIDTH	STA		AREA SY
64+54.50		49.5	65+95.48		762.58
69+38.66		53.3	70+85.00		908
70+85.00	LT	3.4	72+38.00	LT	35
MOT					
64+32.00			65+92.00		100
74+90.00			77+05.00		37
TOTAL					1,843

MEDIAN REMOVAL (44003100)				
STA	WIDTH	STA	WIDTH	AREA SQ FT
65+64.43	3	65+95.48	3	93
69+38.66	3	72+80.00	24.5	4539
TOTAL				4633

HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT (40600982)				
STA	WIDTH	STA	WIDTH	AREA SQ YD
64+32.00	65	64+54.50	49.5	132
73+15.00	146	73+25.00	146	162
TOTAL				294

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HOT-MIX ASPHALT PAVEMENT (FULL DEPTH) 13 3/4" (40701956)						
STA		WIDTH	TO	STA		SY
64+54.50	LT, RT	46		66+14.58	LT, RT	813
69+19.00	LT, RT	75.3		70+85.00	LT, RT	1044
70+85.00	CENTER	11.95		72+80.00	CENTER	406
72+57.33	RT			73+12.52	RT	36
TOTAL						2299

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (63000001)				
STA		TO	STA	LENGTH
65+00.45	RT		65+44.50	RT 50.0
69+17.87	RT		71+57.30	RT 250.0
69+92.24	LT		71+59.57	LT 175.0
TOTAL				475

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (40603595)					
STA		WIDTH	TO	STA	TON
64+32.00		65		64+54.50	14.2
73+15.00		146		73+25.00	18.2
70+85.00		65.3		73+15.00	182.2
TOTAL					214.6

AGGREGATE SUBGRADE 12" (Z0001050)					
STA		WIDTH	STA	WIDTH	AREA (SY)
64+54.50		46	66+14.00	73.73	813
69+19.00		75.3	70+85.00	65.3	1044
70+85.00	RT	11.95	72+80.00	RT	406
72+57.33	RT	VAR	73+12.52	RT	35
64+32.00	LT	2.6	64+37.37	LT	3
64+32.00	RT	3.6	65+34.68	RT	41
64+37.37	LT	3.6	66+41.58	LT	83
70+13.25	RT	3.6	73+12.52	RT	134
70+02.35	LT	3.6	73+15.00	LT	125
65+34.50	RT	2.5	65+86.36	RT	14
68+90.77	RT	2.5	70+03.25	RT	34
69+48.79	LT	2.5	70+02.35	LT	14
TOTAL					2748

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (60603800)			
STA		STA	LENGTH FOOT
64+32.00	LT	64+37.37	LT 10
TOTAL			10

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (60605000)				
STA		STA		LENGTH FOOT
64+32.00	RT	65+34.68	RT	103
64+37.37	LT	66+41.58	LT	207
70+13.25	RT	73+12.52	RT	335
70+02.35	LT	73+15.00	LT	313
TOTAL				958

COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24 (60608521)				
STA		STA		LENGTH FOOT
65+34.50	RT	65+86.36	RT	52
68+90.77	RT	70+03.25	RT	124
69+48.79	LT	70+02.35	LT	51
TOTAL				226

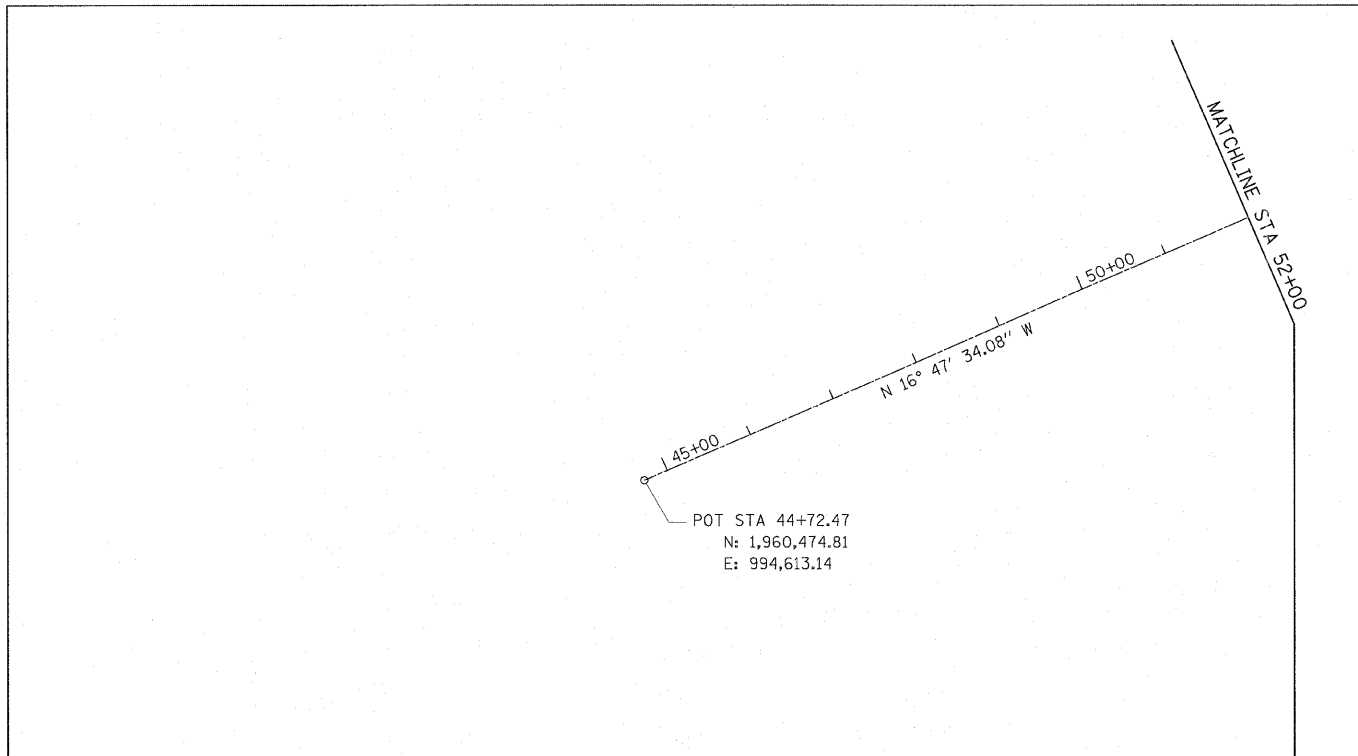
BITUMINOUS MATERIALS (PRIME COAT) (40600100)						
STA	WIDTH	TO	STA	WIDTH	AREA SY	GALLON
64+32.00	62.8		64+54.50	46	126	13
70+85.00	65.3		73+25.00	146.23	1789	179
SEE ITEM 40701956					2299	230
TOTAL						421

STA	EARTH EXCAVATION CY	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CY	EMBANKMENT CY	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) CY	TOPSOIL EXCAVATION AND PLACEMENT CY	PROPOSED TOPSOIL CY	TOPSOIL FURNISH AND PLACE, 4" (21101615) SY
64+32.00		0.0	0.46	-0.46	0	0	
64+50.00	4.60	3.9	4.00	-0.09	3.92	3.49	
65+00.00	35.5	30.2	20.97	9.20	19.54	17.01	
65+50.00	53.3	45.3	19.35	25.94	14.44	14.77	
66+00.00	36.6	31.1	18.52	12.57	6.57	6.44	
66+13.81	4.3	3.7	5.49	-1.82	1.56	1.66	
69+19.70							
69+19.78	0.0		0.07	-0.07	0.03	0.03	
69+50.00	0.6	0.5	55.61	-55.07	25.71	24.20	
70+00.00	10.3	8.8	88.43	-79.65	45.57	45.60	
70+50.00	41.4	35.2	73.10	-37.88	39.12	41.67	
71+00.00	61.0	51.8	42.71	9.11	35.88	39.58	
71+50.00	63.1	53.6	18.69	34.91	26.62	29.72	
72+00.00	72.8	61.9	23.29	38.57	18.10	20.88	
72+50.00	85.6	72.7	19.95	52.77	16.39	18.47	
73+00.00	73.3	62.3	6.81	55.49	11.81	9.12	
73+15.00	8.9	7.6	1.10	6.48	2.55	1.58	
TOTAL		951	469	399	70	268	274.2
BALANCE TOPSOIL TO PAY =						6.4	= 57.6

STATION	OFFSET		60300310	Z0018700
64+44.94	26.29	LT	1	
65+10.22	21.54	LT	1	
70+83.40	36.33	LT		1
70+87.41	33.89	RT		1
72+67.76	41.93	LT	1	
72+82.42	47.30	RT		1
73+08.83	83.19	RT	1	
73+13.37	85.62	RT	1	
TOTAL			5	3

INLETS, TYPE A, TYPE 20 FRAME AND GRATE (60237420)				
STR. NO.	STATION	OFFSET	RIM ELEV	INV ELEV
S100	64+54.94	23.96	LT 799.96	FIELD VERIFY
S101	70+83.60	32.18	LT 793.59	FIELD VERIFY
S102	70+87.49	35.20	RT 793.42	FIELD VERIFY
S103	72+80.58	50.65	RT 786.15	FIELD VERIFY

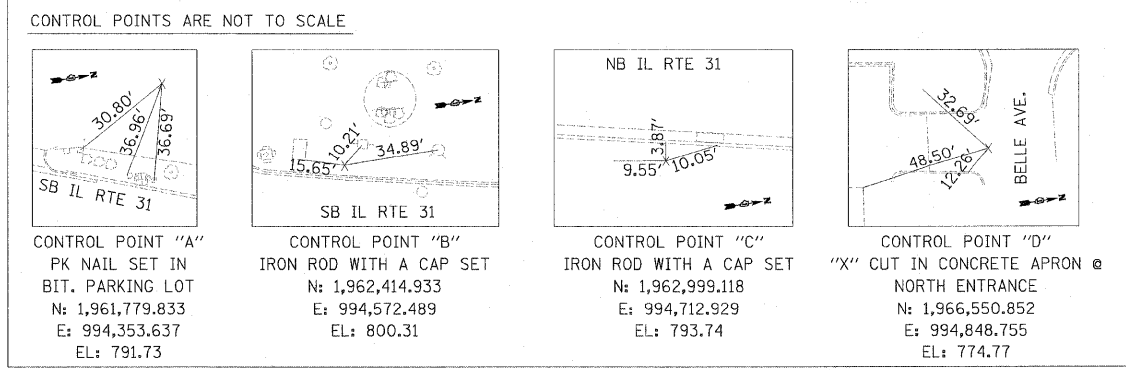
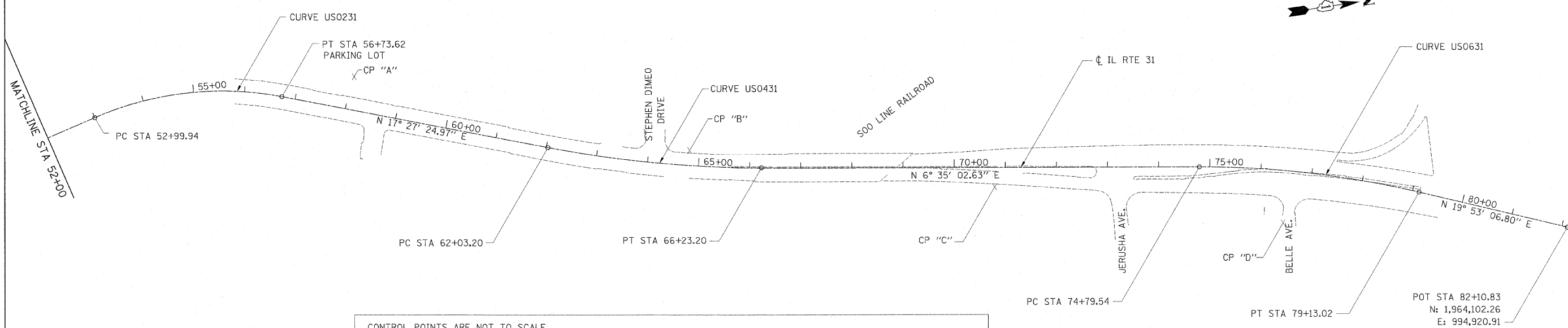
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CURVE US0231
 PI STA. = 54+92.55
 N: 1,961,451.40
 E: 994,318.42
 $\Delta = 34^\circ 14' 59''$ (RT)
 D = 9° 09' 56"
 R = 625.12'
 T = 192.61'
 L = 373.68'
 E = 29.00'
 e = EXISTING
 P.C. STA. = 52+99.94
 N: 1,961,267.00
 E: 994,374.07
 P.T. STA. = 56+73.62
 N: 1,961,635.14
 E: 994,376.20

CURVE US0431
 PI STA. = 64+13.83
 N: 1,962,341.25
 E: 994,598.26
 $\Delta = 10^\circ 52' 22''$ (LT)
 D = 2° 35' 20"
 R = 2,213.24'
 T = 210.63'
 L = 420.00'
 E = 10.00'
 e = EXISTING
 P.C. STA. = 62+03.20
 N: 1,962,140.32
 E: 994,535.07
 P.T. STA. = 66+23.20
 N: 1,962,550.49
 E: 994,622.41

CURVE US0631
 PI STA. = 76+97.26
 N: 1,963,617.47
 E: 994,745.56
 $\Delta = 13^\circ 18' 04''$ (RT)
 D = 3° 04' 06"
 R = 1,867.25'
 T = 217.72'
 L = 433.48'
 E = 12.65'
 e = EXISTING
 P.C. STA. = 74+79.54
 N: 1,963,401.19
 E: 994,720.60
 P.T. STA. = 79+13.02
 N: 1,963,822.21
 E: 994,819.62



BENCHMARK
 ELEVATION 797.38
 DESCRIPTION: U.S.G.S. DISK SET VERTICALLY IN EAST FACE OF BRICK FACE SOUTHEAST CORNER OF THE OLD PORTION OF HIGHLAND AVE. CHURCH OF THE BRETHERN, 0.8 FT. NORTH OF THE CORNER, AND 81 FT. SOUTHWEST OF THE SOUTHWEST CORNER OF THE NEW PORTION OF THE CHURCH AND ABOUT 3 FT. ABOVE GROUND LEVEL. (U.S.G.S. W131)

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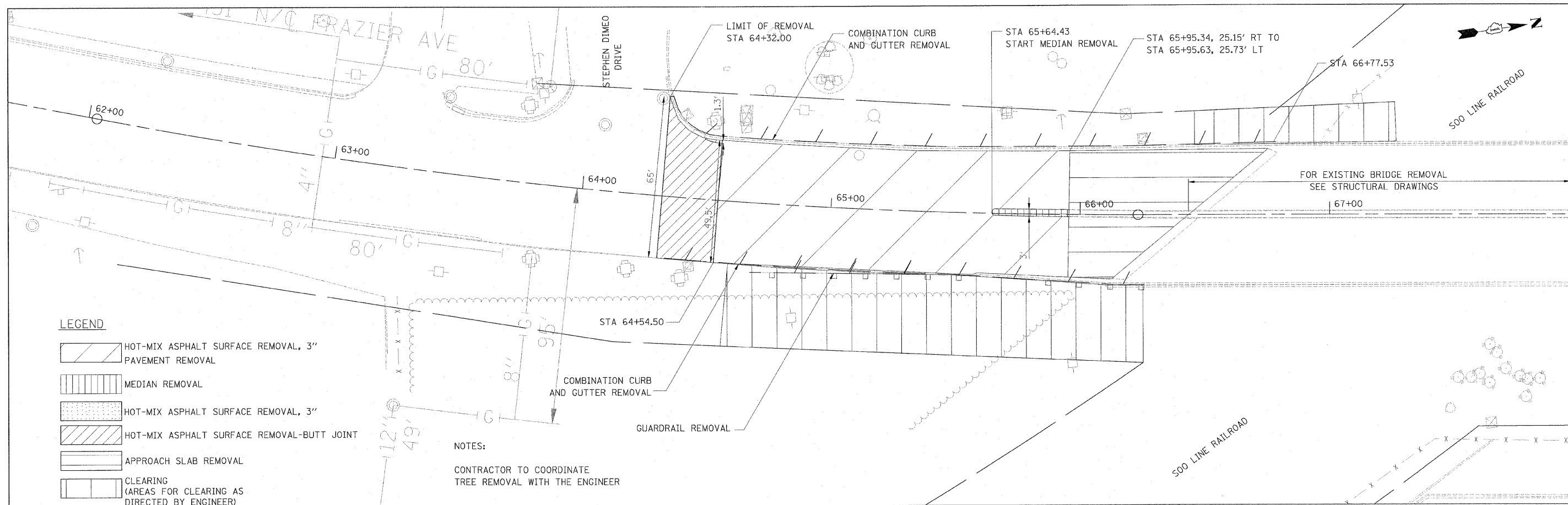
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ALIGNMENT, TIES AND BENCHMARKS

SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA. 44+72.47 TO STA. 82+10.83
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	10
CONTRACT NO. 60C06				
ILLINOIS FED. AID PROJECT				

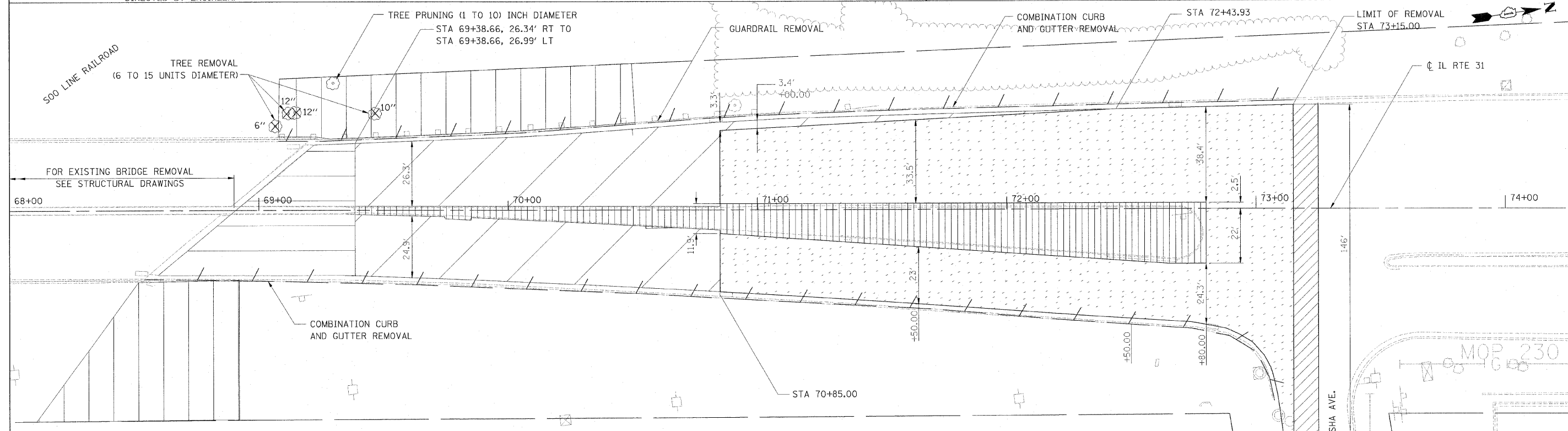
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LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL, 3" PAVEMENT REMOVAL
- MEDIAN REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT
- APPROACH SLAB REMOVAL
- CLEARING (AREAS FOR CLEARING AS DIRECTED BY ENGINEER)

NOTES:
CONTRACTOR TO COORDINATE TREE REMOVAL WITH THE ENGINEER



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PLOT DATE = 7/8/2011		DATE - 07/01/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



REMOVAL PLAN
SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. 61+00 TO STA. 75+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	11
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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PROFILE	SUBMITTED	DATE
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	BY	
	NO. OF WAY CHECKED	
	NO. OF FILE NAME	

LEGEND

- ① TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)
- ② STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
- ③ TRAFFIC BARRIER TERMINAL, TYPE 6B

④ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" IL 9.5
 ⑤ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" IL 9.5
 ⑥ POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 1 1/4"

* ⑤ HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"
 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2" IL 9.5
 POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 1 1/4"

- ⑥ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑦ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24
- ⑧ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

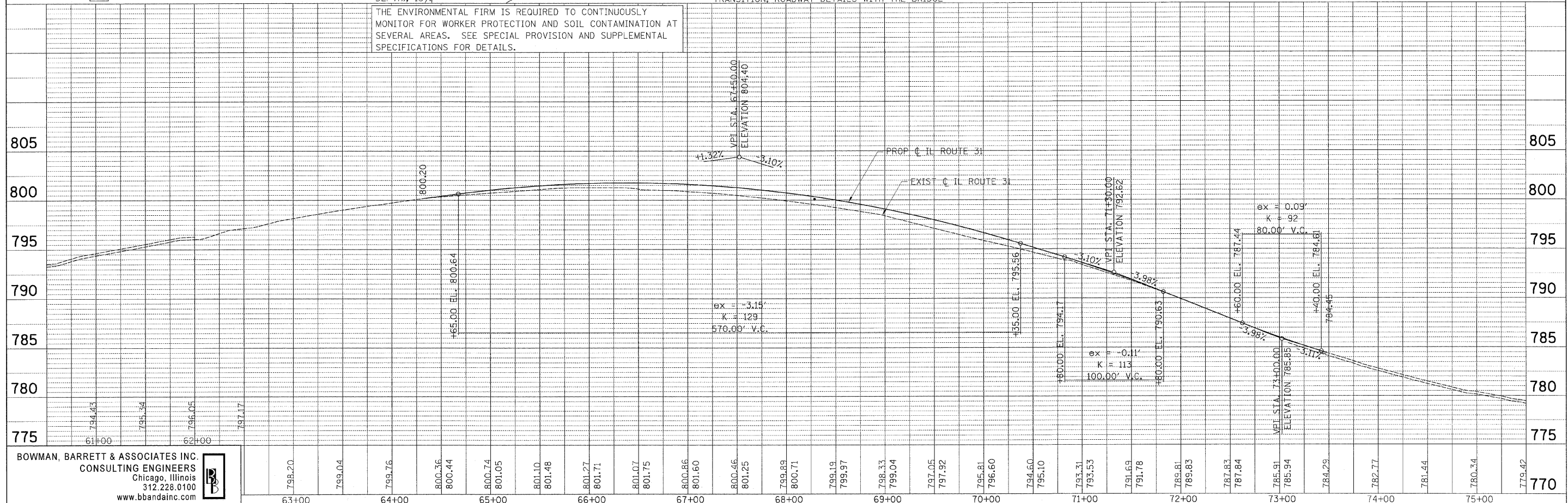
- [R] REMOVE EXISTING DRAINAGE STRUCTURE
- [ADJ] FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
- [S1] PROPOSED DRAINAGE STRUCTURE

* TREATMENT OF FULL DEPTH PAVEMENT AT APPROACH END SHALL BE ACCORDING TO HIGHWAY STANDARD 420401, HOWEVER, THE COST SHALL BE INCLUDED WITH HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 13 3/4"

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

NOTES

- FOR GUARDRAIL END SECTIONS, SEE CORRESPONDING HIGHWAY STANDARDS
- FOR STEEL PLATE BEAM GUARD RAIL, SEE HIGHWAY STANDARD 630001
- FOR COMB CONC CURB AND GUTTER, SEE HIGHWAY STANDARD 606001
- FOR DRAINAGE STRUCTURE INFORMATION, SEE SHEET 8
- SEE CIVIL DETAILS FOR PAVEMENT SLOPE TRANSITIONS; BRIDGE SIDEWALK TRANSITION TO CURB AND GUTTER; PAVEMENT SLOPE TRANSITION; ROADWAY DETAILS WITH THE BRIDGE



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 PLOT DATE = 7/8/2011

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 DATE - 07/01/2011

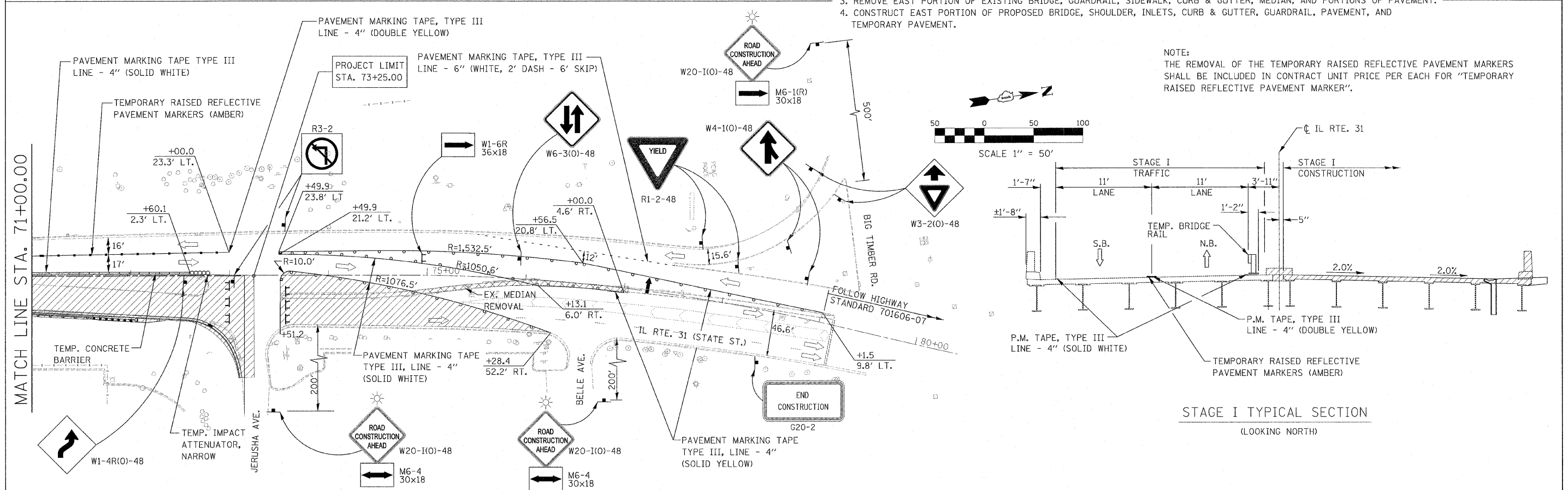
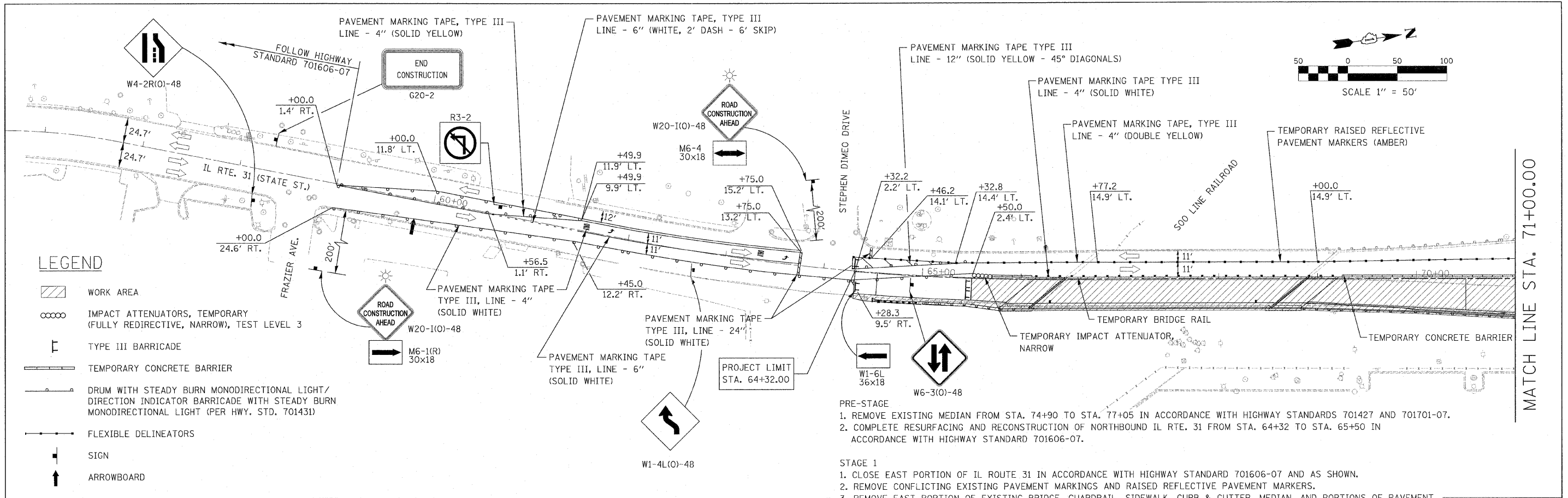
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

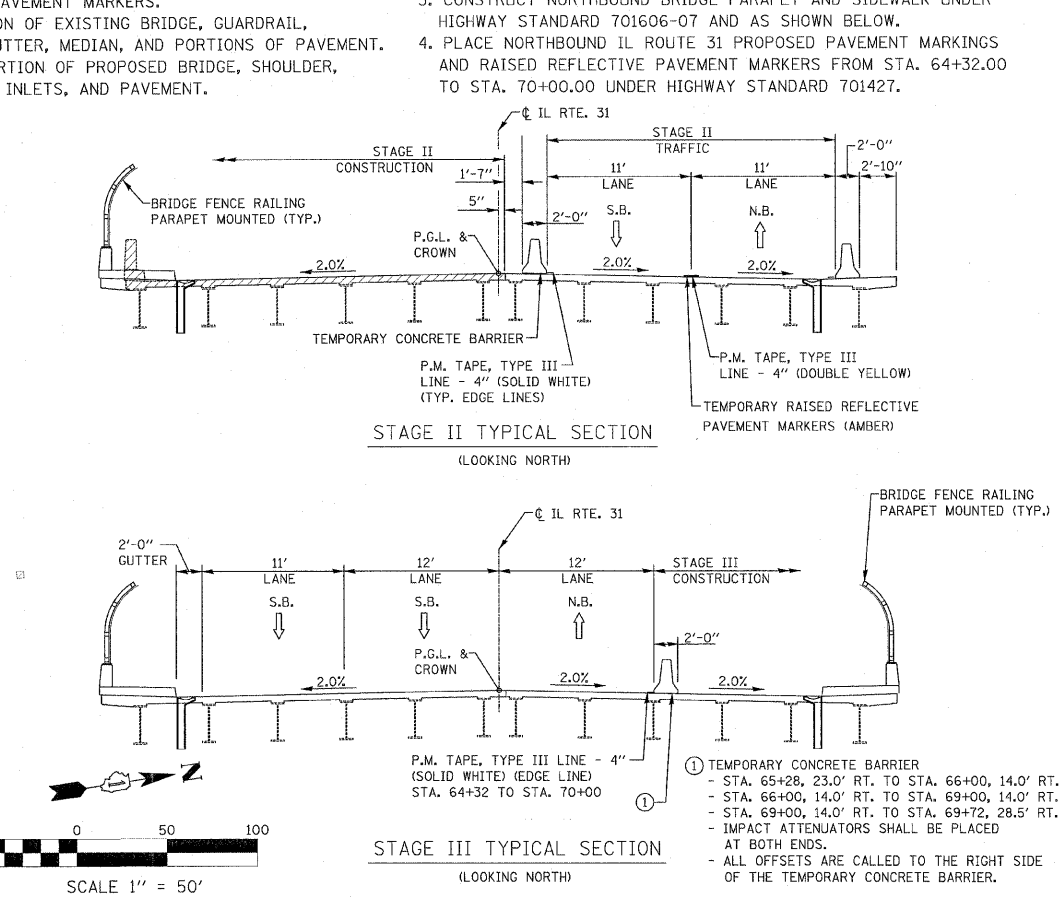
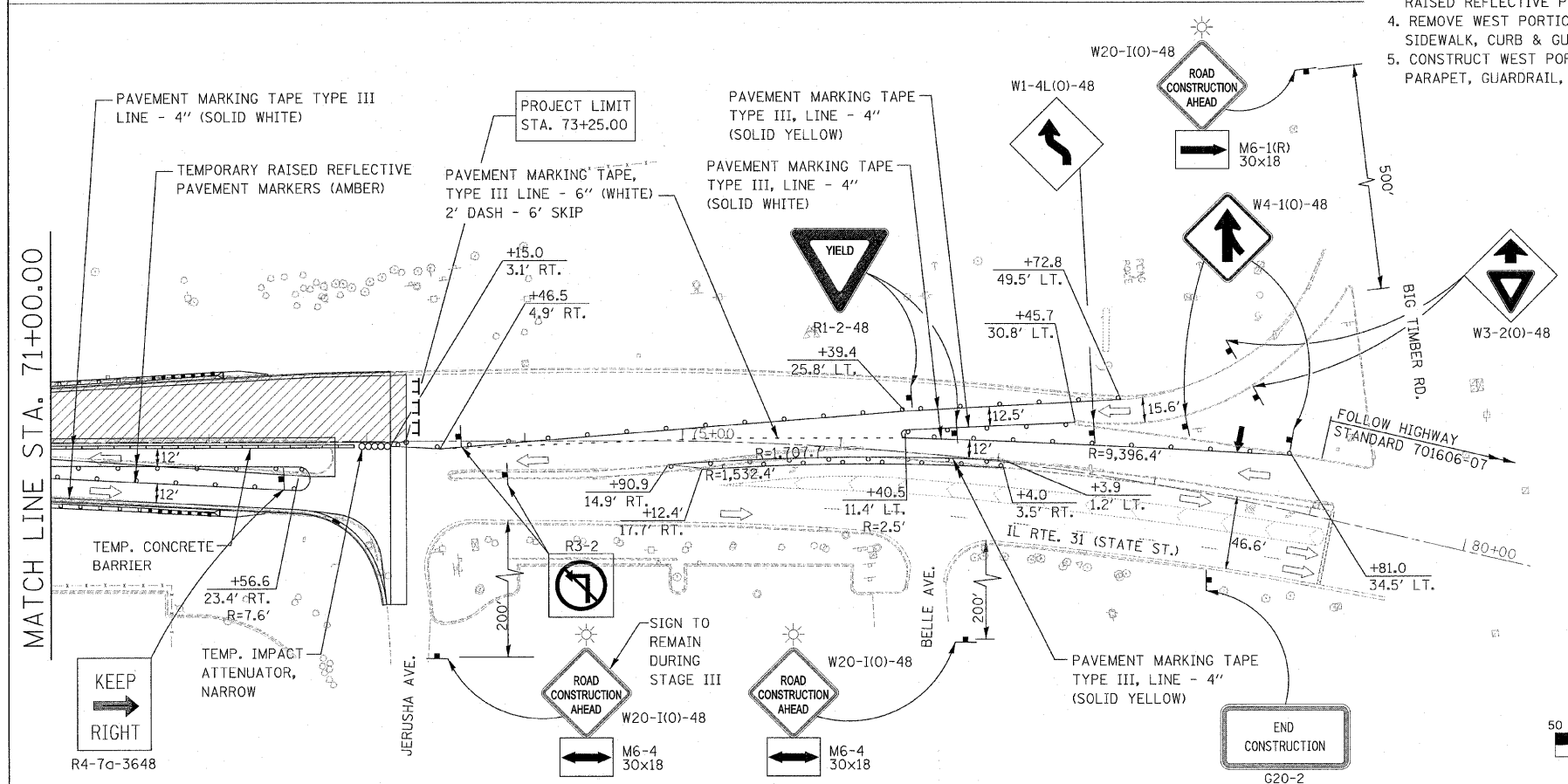
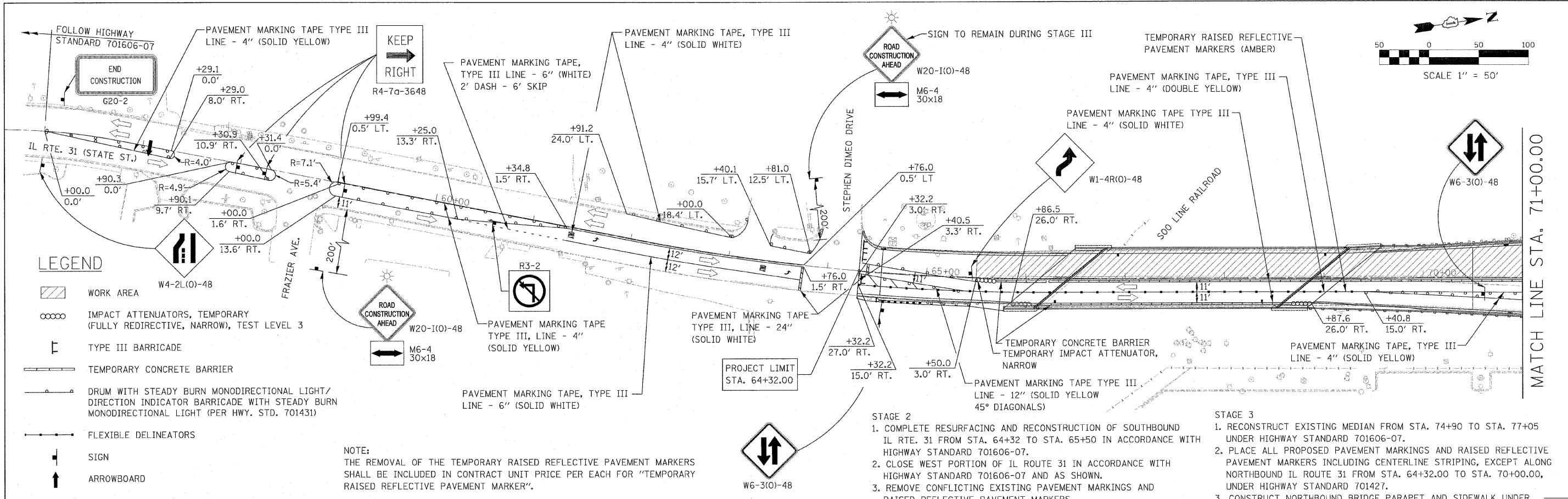
PLAN AND PROFILE

SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. 61+00 TO STA. 75+00

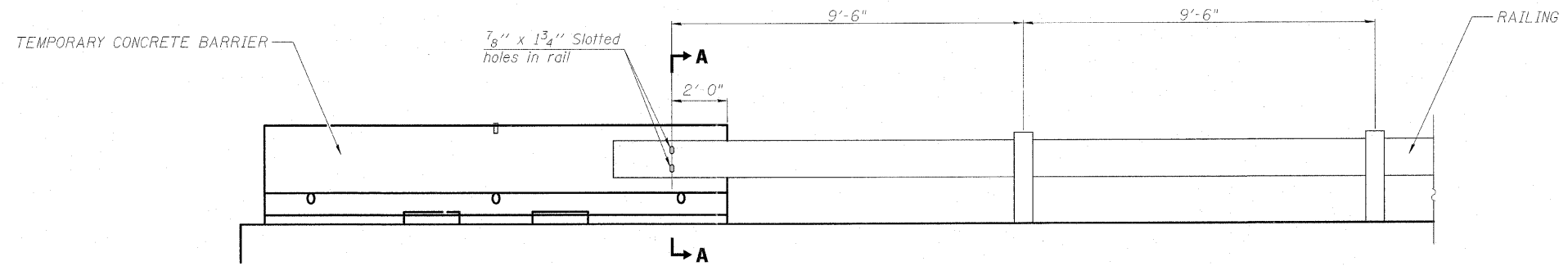
F.A. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 12
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	



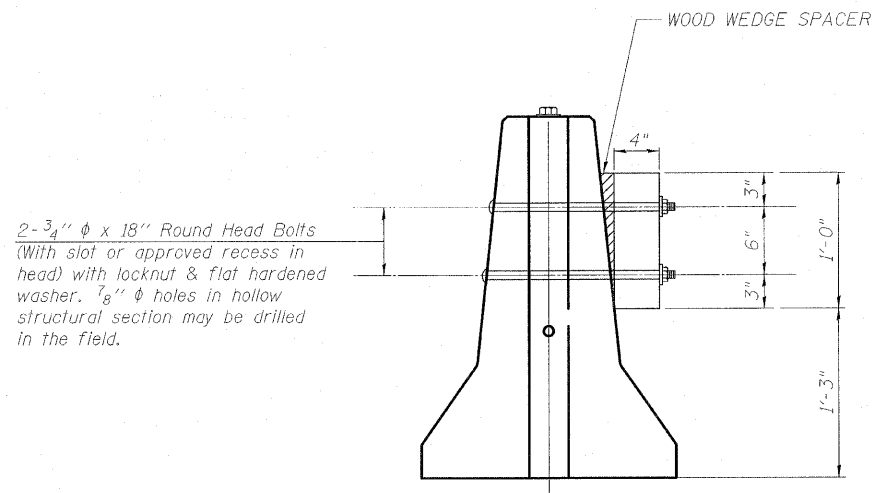
FILE NAME =	USER NAME = Plotted by flm	DESIGNED - SGL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC PLANS - STAGE 1 IL ROUTE 31 (STATE STREET) OVER SOO LINE RAILROAD	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
...\\D160C06-shr-staging\dgn	PLOT SCALE = 50,0000 / IN.	DRAWN - SGL	REVISED -			3887	R-VB-R	KANE	83	13	
PLOT DATE = 8/10/2011	CHECKED - FML	REVISOR -	REVISED -			CONTRACT NO. 60C06					
	DATE - 07/01/2011	REVISOR -	REVISED -			SCALE: 1" = 50'		SHEET NO. 1 OF 2 SHEETS		STA. TO STA.	



- STAGE 2**
1. COMPLETE RESURFACING AND RECONSTRUCTION OF SOUTHBOUND IL RTE. 31 FROM STA. 64+32 TO STA. 65+50 IN ACCORDANCE WITH HIGHWAY STANDARD 701606-07.
 2. CLOSE WEST PORTION OF IL ROUTE 31 IN ACCORDANCE WITH HIGHWAY STANDARD 701606-07 AND AS SHOWN.
 3. REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS.
 4. REMOVE WEST PORTION OF EXISTING BRIDGE, GUARDRAIL, SIDEWALK, CURB & GUTTER, MEDIAN, AND PORTIONS OF PAVEMENT.
 5. CONSTRUCT WEST PORTION OF PROPOSED BRIDGE, SHOULDER, PARAPET, GUARDRAIL, INLETS, AND PAVEMENT.
- STAGE 3**
1. RECONSTRUCT EXISTING MEDIAN FROM STA. 74+90 TO STA. 77+05 UNDER HIGHWAY STANDARD 701606-07.
 2. PLACE ALL PROPOSED PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS INCLUDING CENTERLINE STRIPING, EXCEPT ALONG NORTHBOUND IL ROUTE 31 FROM STA. 64+32.00 TO STA. 70+00.00, UNDER HIGHWAY STANDARD 701427.
 3. CONSTRUCT NORTHBOUND BRIDGE PARAPET AND SIDEWALK UNDER HIGHWAY STANDARD 701606-07 AND AS SHOWN BELOW.
 4. PLACE NORTHBOUND IL ROUTE 31 PROPOSED PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS FROM STA. 64+32.00 TO STA. 70+00.00 UNDER HIGHWAY STANDARD 701427.



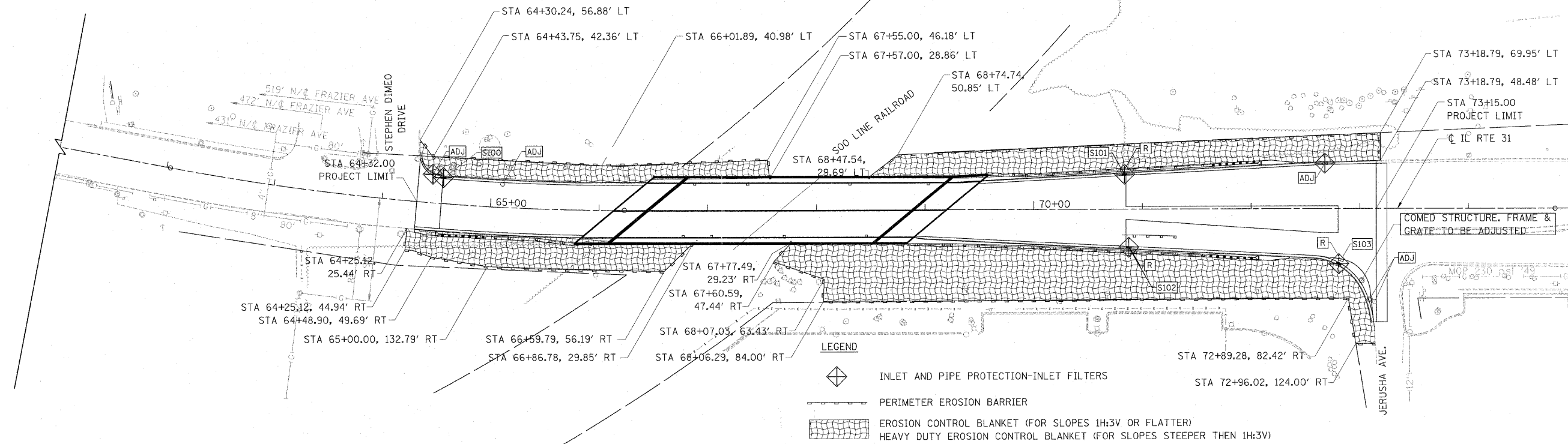
TEMPORARY RAIL AND BARRIER CONNECTION



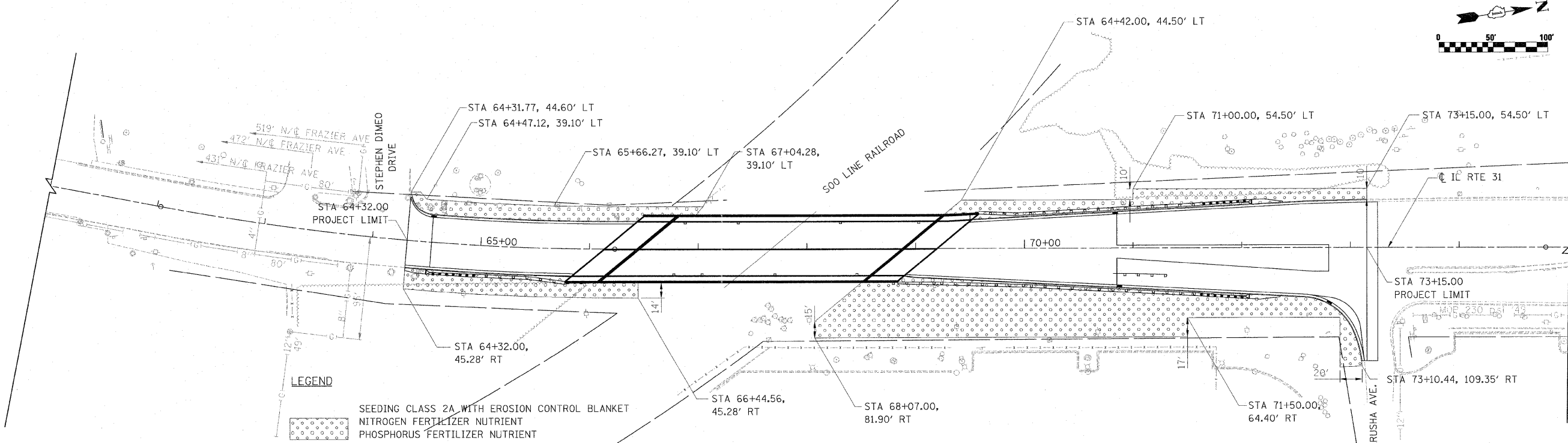
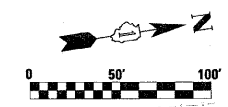
SECTION A-A

Note: All labor, materials, and equipment required to provide the Temporary Steel Railing connection to Temporary Concrete Barrier as shown on this sheet shall be included in the cost for Temporary Concrete Barrier and Relocated Temporary Concrete Barrier.

FILE NAME =	USER NAME = #USER#	DESIGNED - RWK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY STEEL RAILING AND BARRIER TRANSITION DETAIL IL ROUTE 31 (STATE STREET) OVER SOO LINE RAILROAD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILEL#	PLOT SCALE = #SCALE#	DRAWN - RWK	REVISED -			3887	R-VB-R	KANE	83	15	
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		DATE - 07/01/2011	REVISED -			SCALE: N.T.S.	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.



EROSION AND SEDIMENT CONTROL PLAN



LANDSCAPING PLAN

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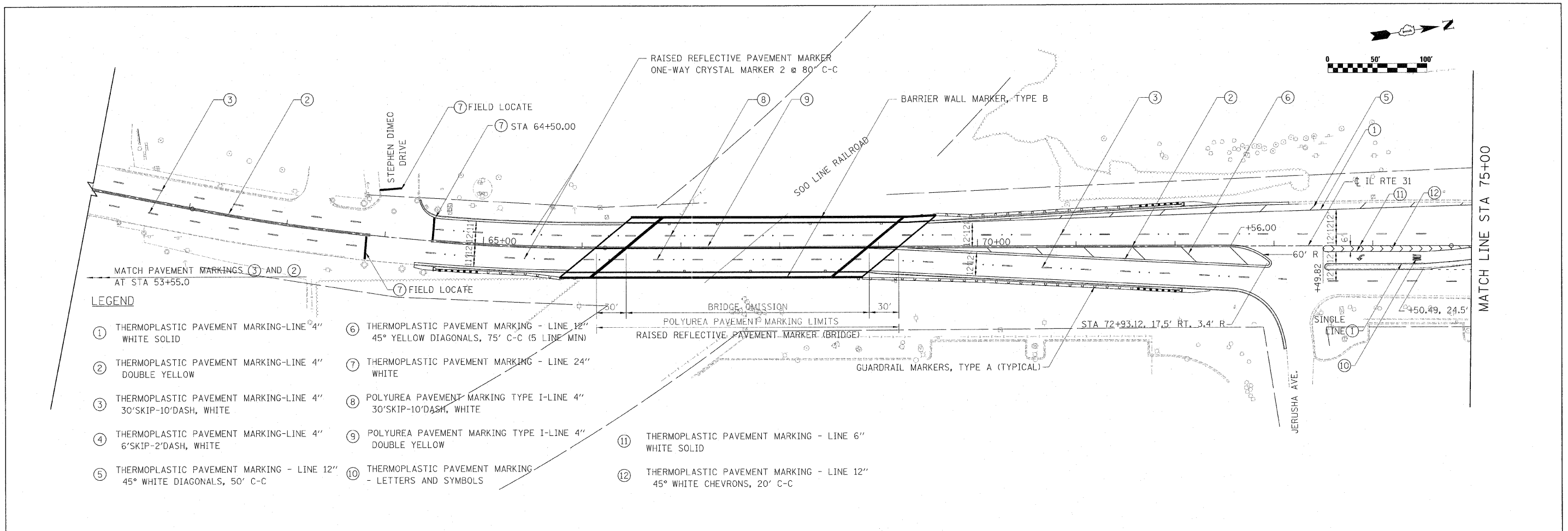
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		DATE - 07/01/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL AND LANDSCAPING PLAN
 SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. 61+00 TO STA. 75+00

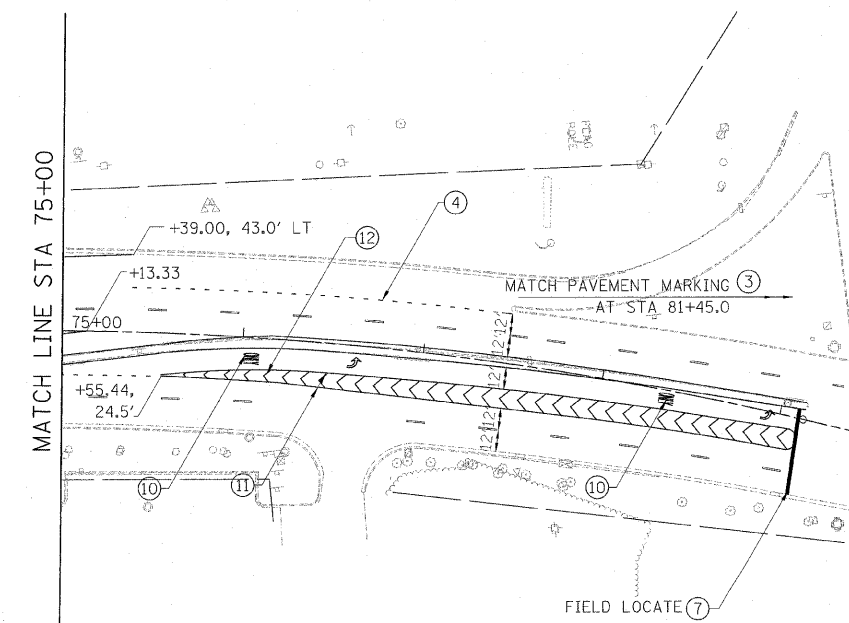
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	16
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE SOLID
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" DOUBLE YELLOW
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 4" 30'SKIP-10'DASH, WHITE
- ④ THERMOPLASTIC PAVEMENT MARKING - LINE 4" 6'SKIP-2'DASH, WHITE
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 12" 45° WHITE DIAGONALS, 50' C-C
- ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" 45° YELLOW DIAGONALS, 75' C-C (5 LINE MIN)
- ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 24" WHITE
- ⑧ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" 30'SKIP-10'DASH, WHITE
- ⑨ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" DOUBLE YELLOW
- ⑩ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
- ⑪ THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE SOLID
- ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 12" 45° WHITE CHEVRONS, 20' C-C



NOTES

- A. FOR RAISED REFLECTIVE PAVEMENT MARKINGS SEE CIVIL DETAILS "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)"
- B. FOR PAVEMENT MARKINGS, SEE CIVIL DETAILS "DISTRICT ONE TYPICAL PAVEMENT MARKINGS"
- C. SEE HIGHWAY STANDARD LIST FOR GUARDRAIL MARKERS

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FILE NAME = D:\60006-SHT-pmk.dgn	USER NAME = default	DESIGNED -	REVISED -
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PLOT DATE = 8/11/2011		CHECKED - RS	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLANS			
SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA. 61+00 TO STA. 75+00	

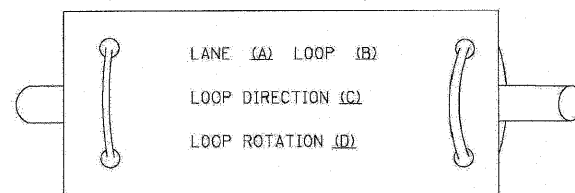
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	17
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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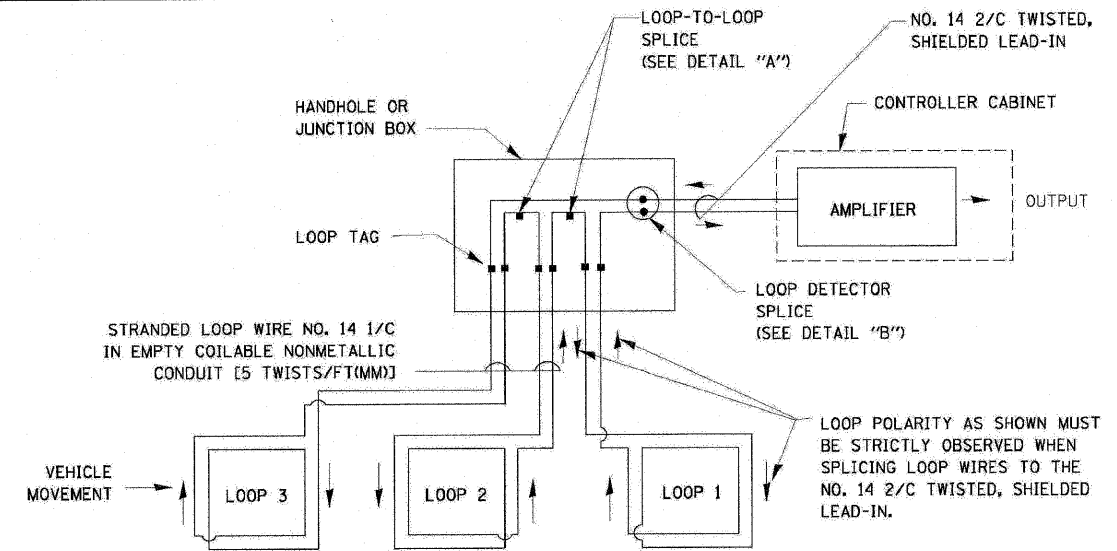
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

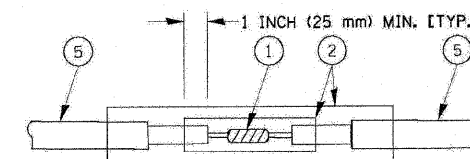


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

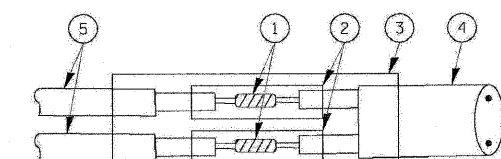


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

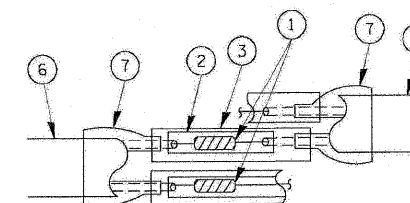


DETAIL "A"
LOOP-TO-LOOP SPLICE

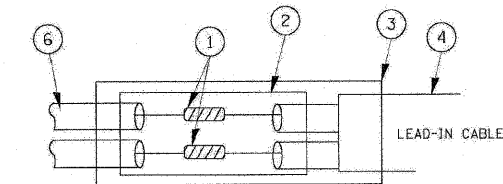


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

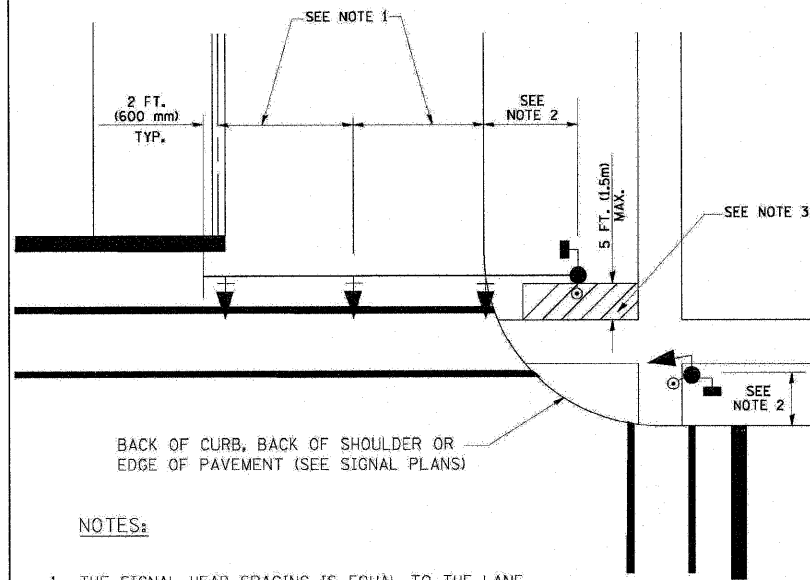
DISTRICT 1 - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S. SHEET NO. 1 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	18
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60C06	

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

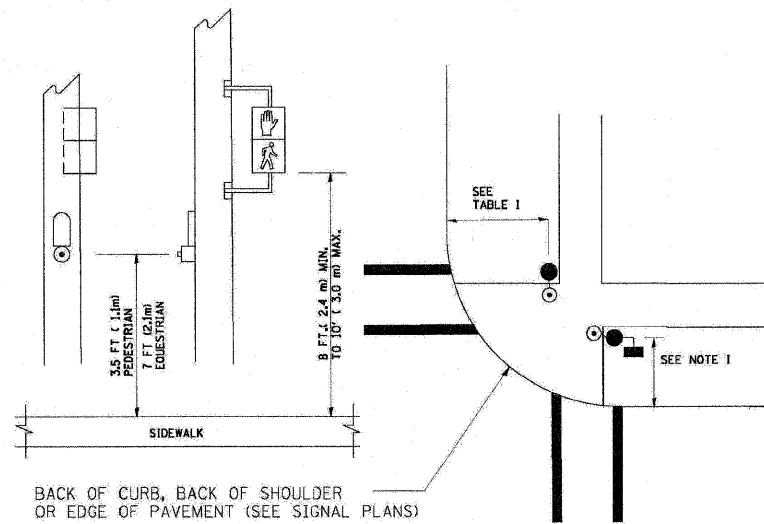
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

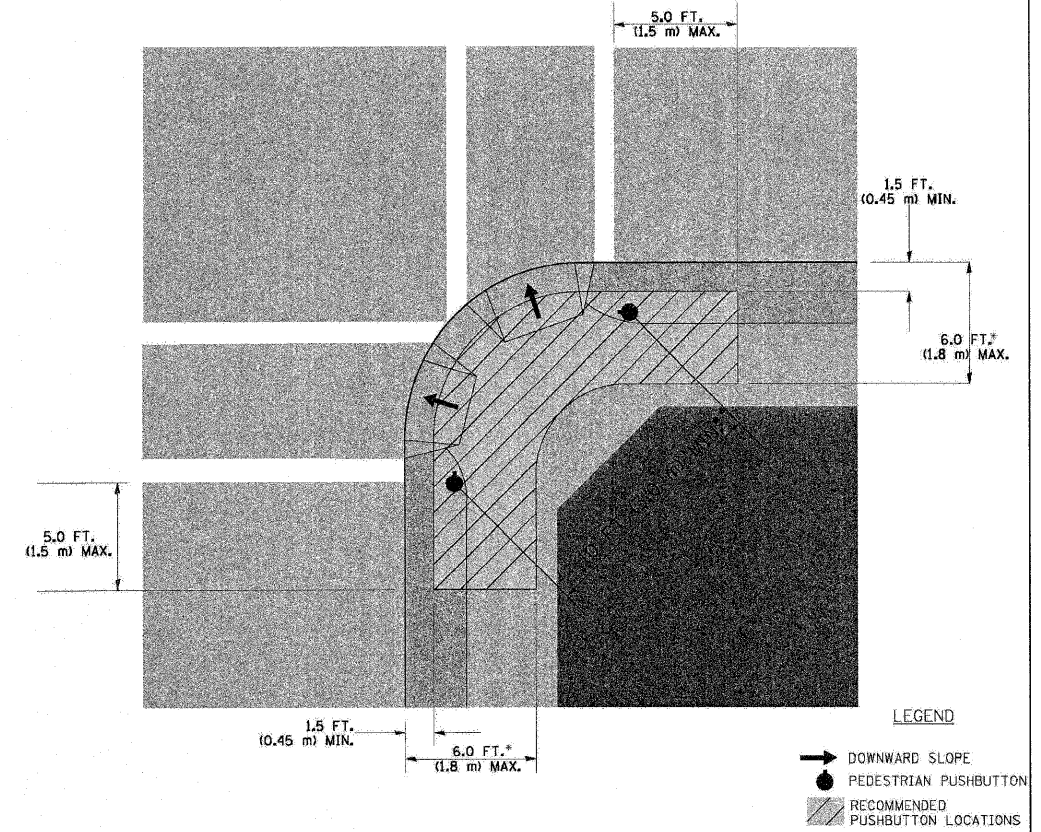
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

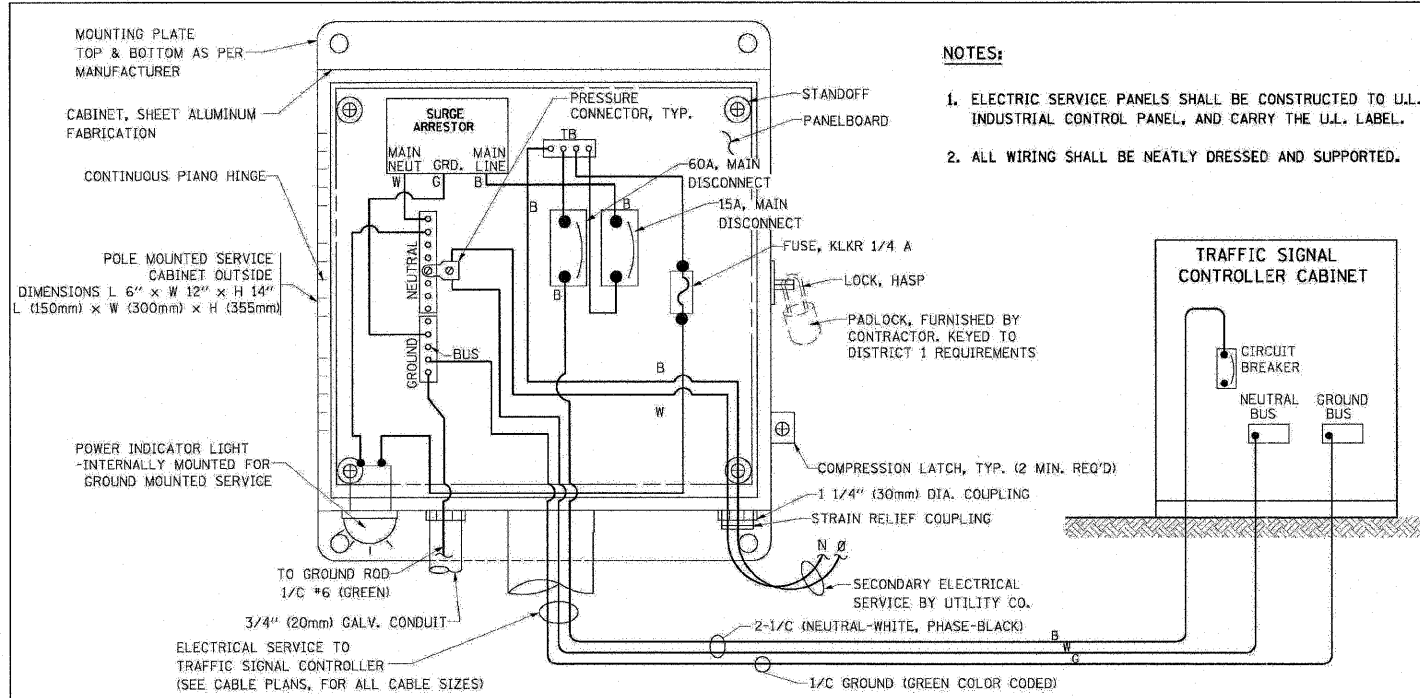
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

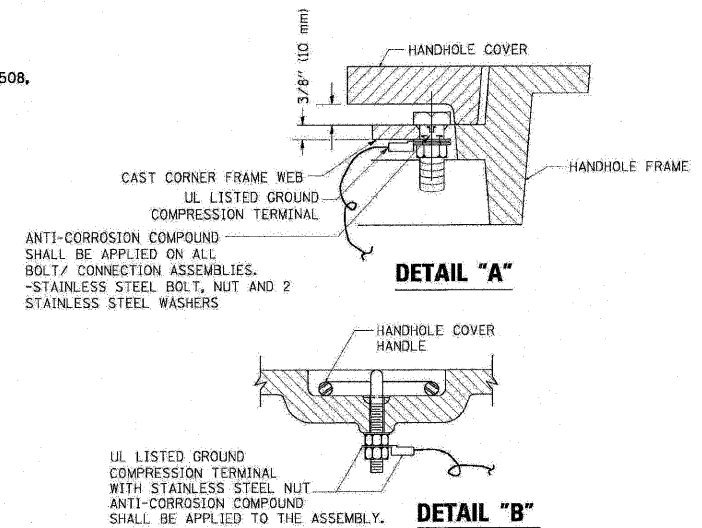
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

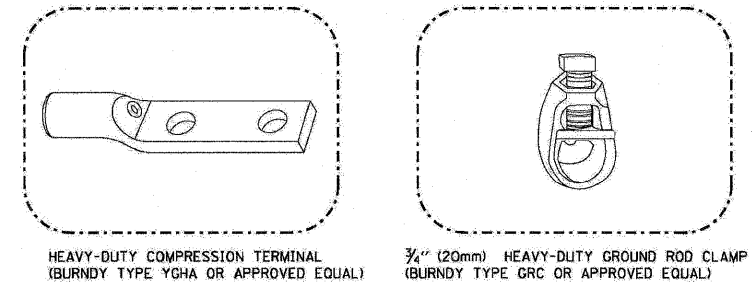
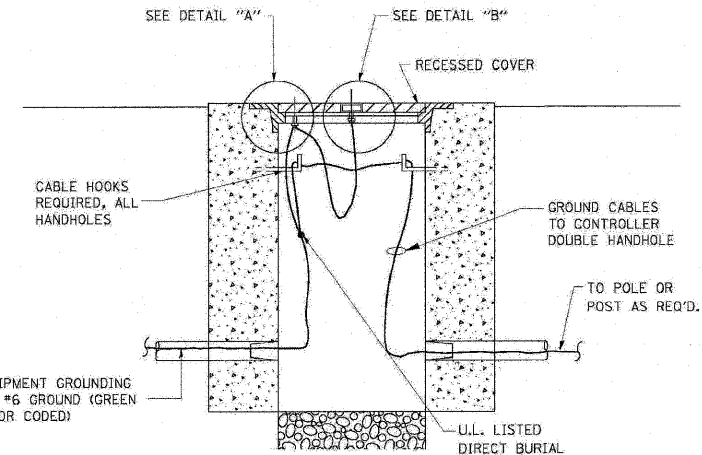


- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

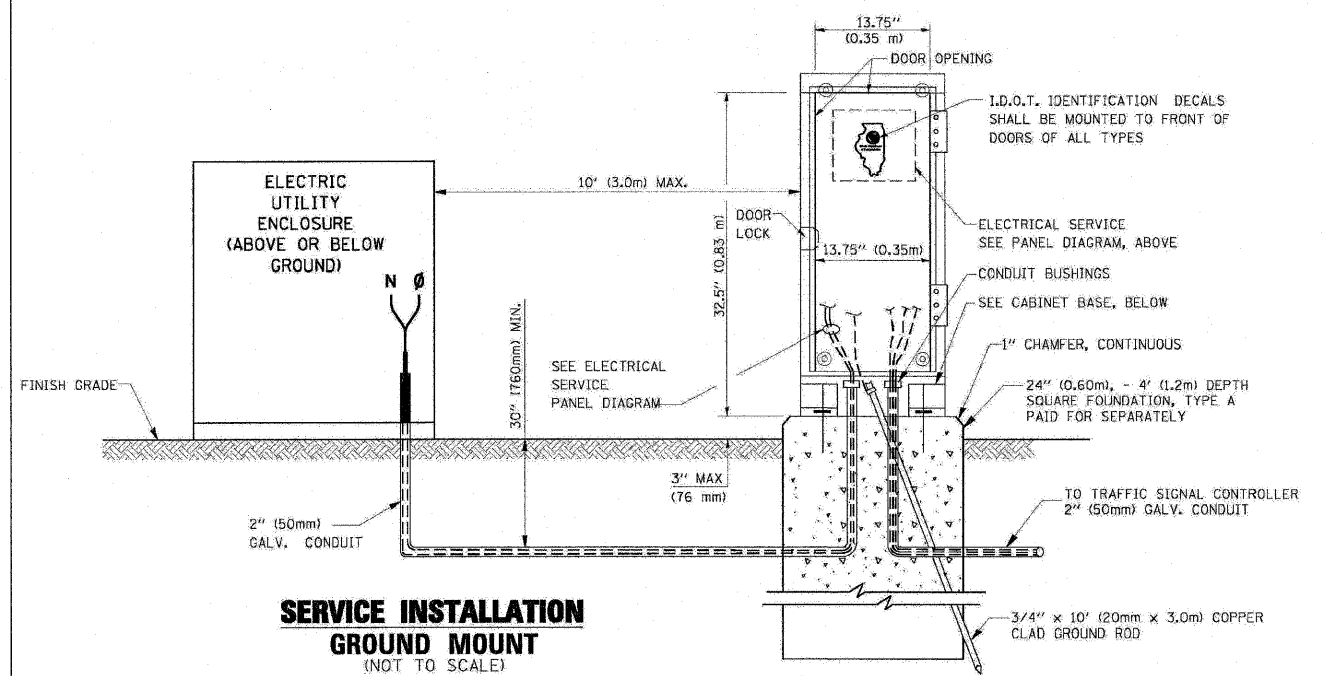


- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)

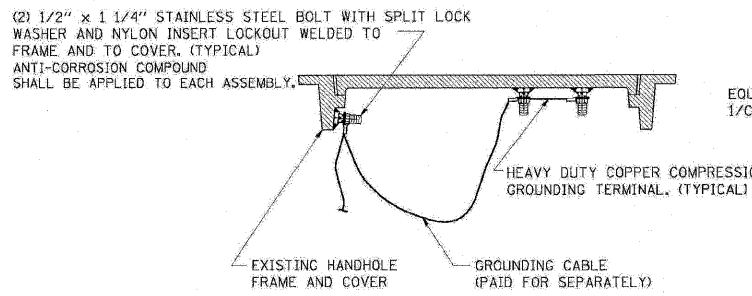


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

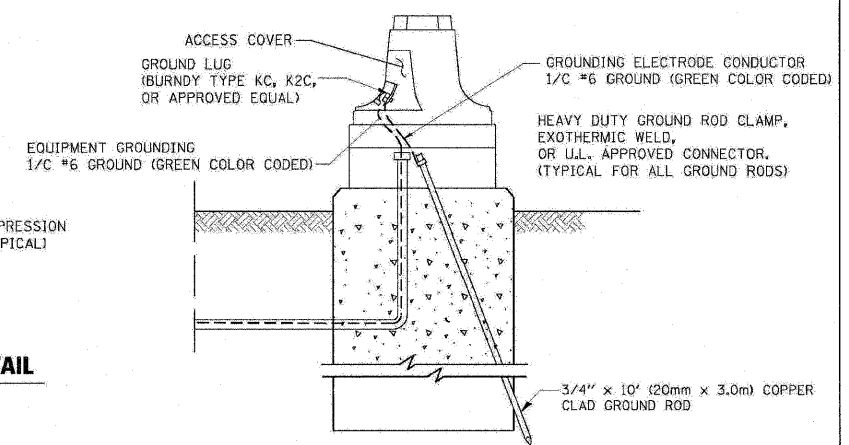


SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

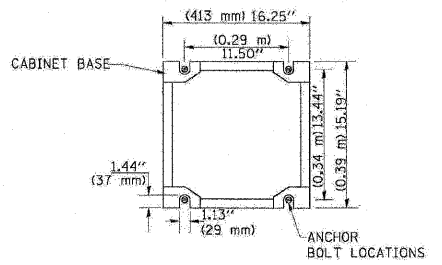


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



MAST ARM POLE / POST - GROUNDING DETAIL (NOT TO SCALE)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)



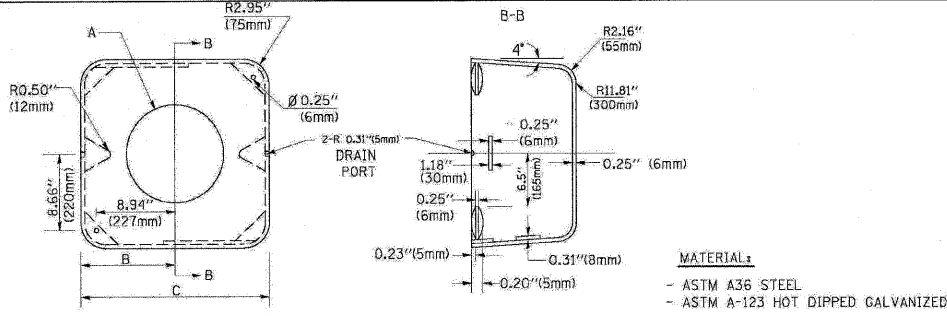
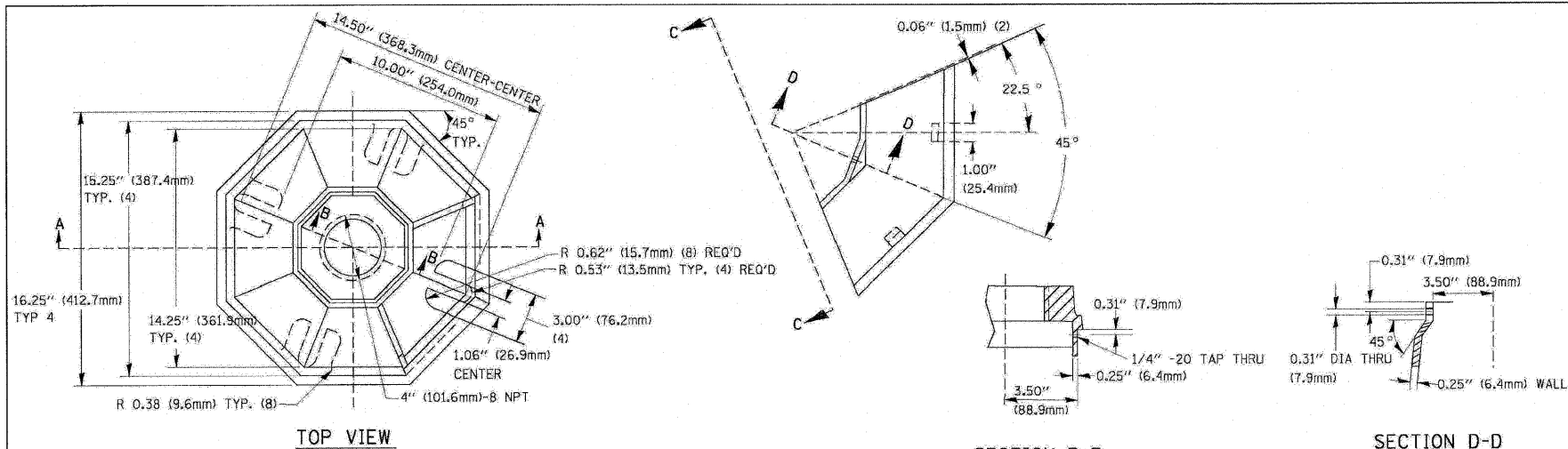
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#FILE#		DRAWN - XXX	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - XXX	REVISED -
	PLOT DATE = #DATE#	DATE - 07/01/2011	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: N.T.S. SHEET NO. 3 OF 9 SHEETS STA. TO STA.

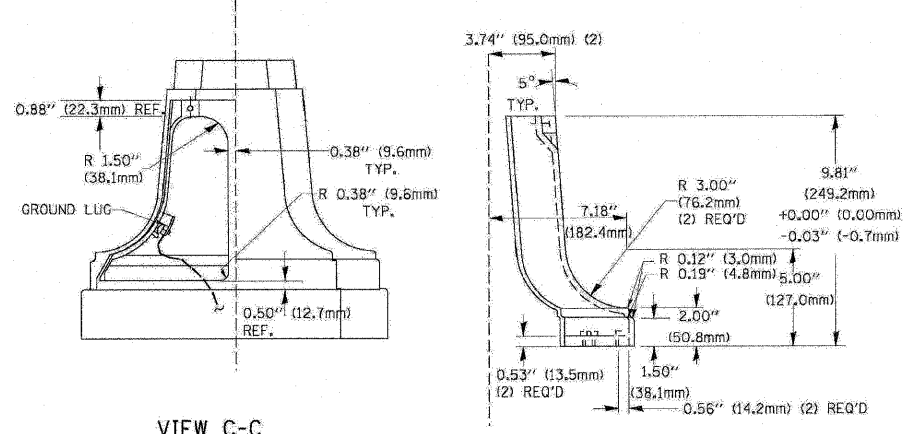
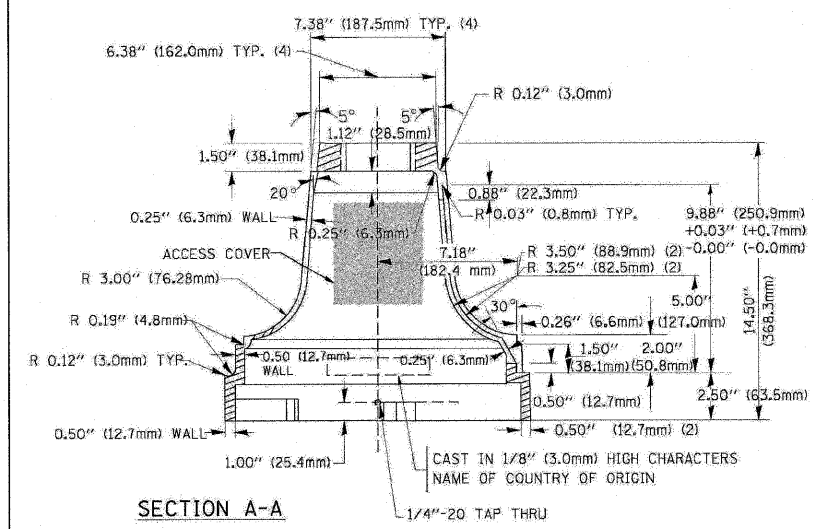
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	20
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60C06	



A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

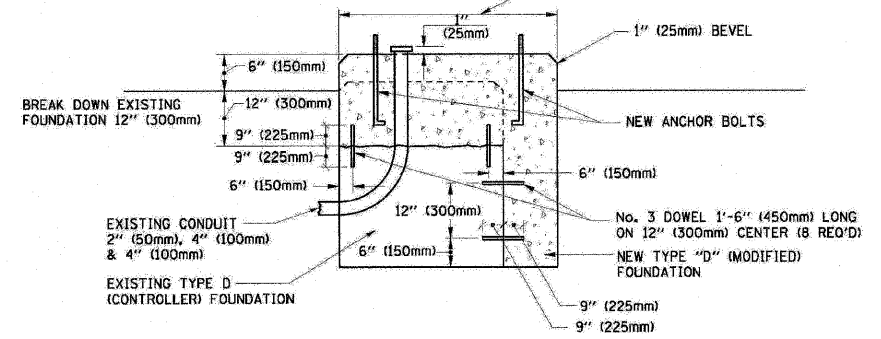
SHROUD

- NOTES:
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

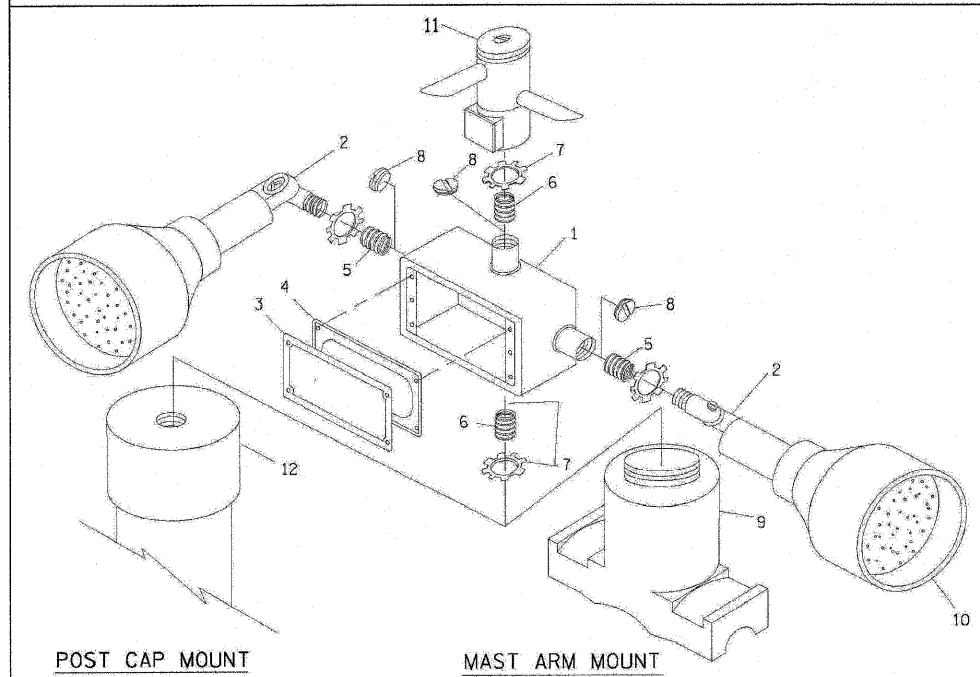


TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.

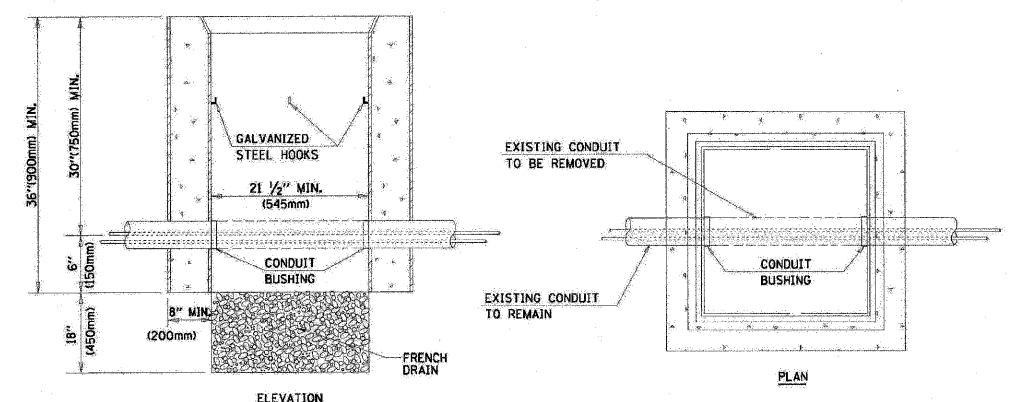


MODIFY EXISTING TYPE "D" FOUNDATION



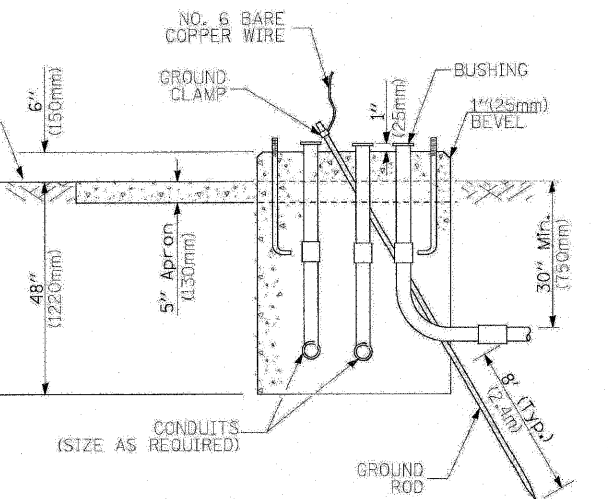
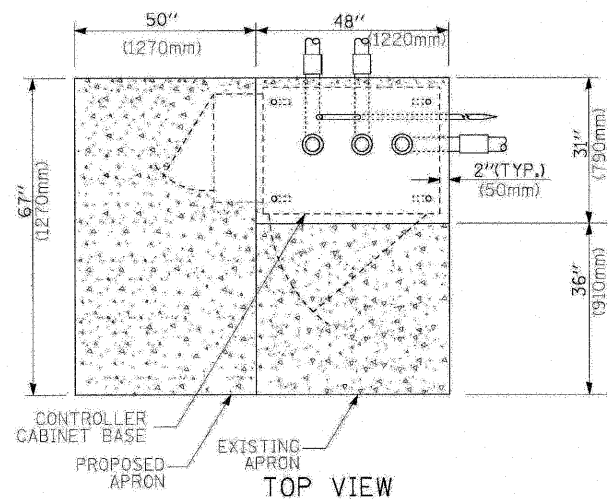
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0.00344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

- NOTES:
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

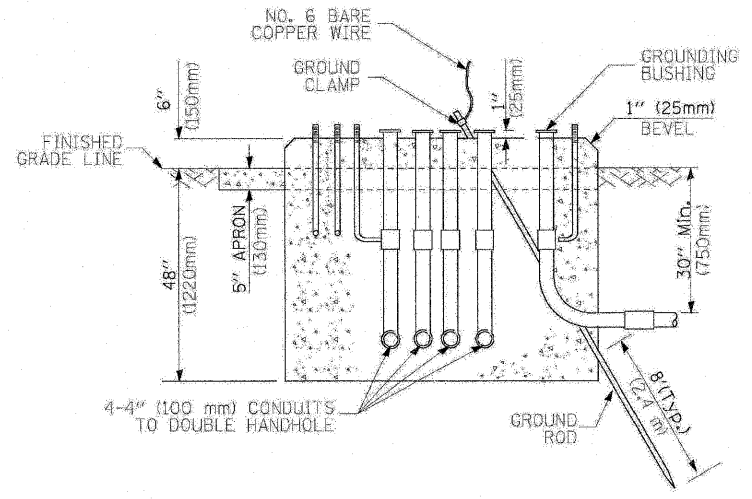
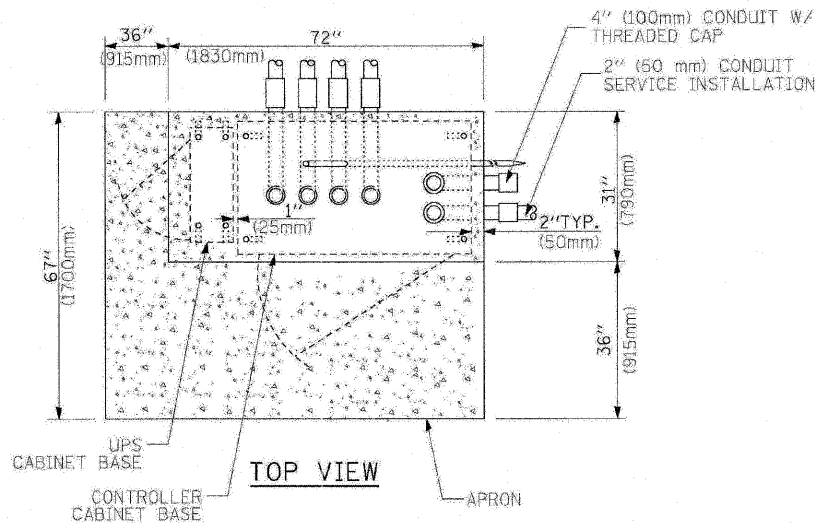


- NOTES:
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

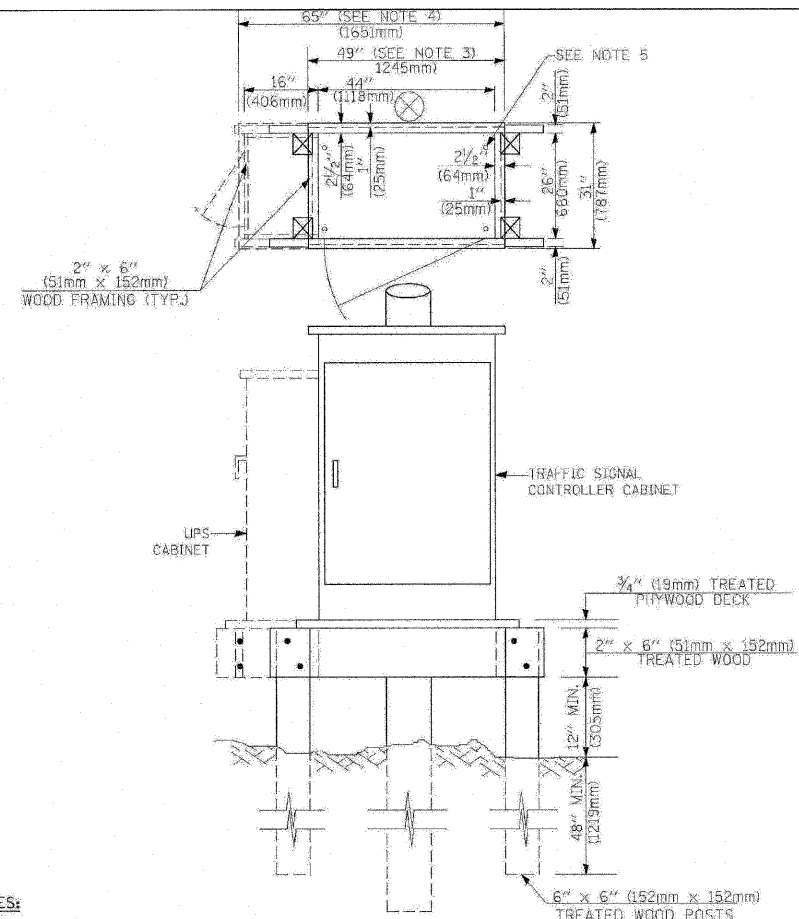
HANDHOLE TO INTERCEPT EXISTING CONDUIT



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



- NOTES:**
1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 4. For mast arm assemblies with dual arms refer to state standard 878001.

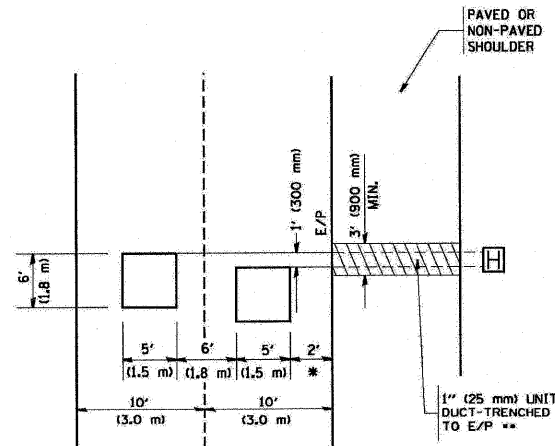
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED																	
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE																				
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE																				
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA																				
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED																				
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F																				
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F																				
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F																				
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)																				
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE																				
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED																				
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED																				
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED																				
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED																				
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED																				
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR																				
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR																				
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR																				
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																				
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				EXISTING PREFORMED INTERSECTION LOOP DETECTOR																				
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																				
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																				
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PREFORMED SAMPLING (SYSTEM) DETECTOR																				
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%;">EXISTING</th> <th style="width: 25%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td>RAILROAD CONTROL CABINET</td> <td></td> <td></td> </tr> <tr> <td>RAILROAD CANTILEVER MAST ARM</td> <td></td> <td></td> </tr> <tr> <td>FLASHING SIGNAL</td> <td></td> <td></td> </tr> <tr> <td>CROSSING GATE</td> <td></td> <td></td> </tr> <tr> <td>CROSSBUCK</td> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED	RAILROAD CONTROL CABINET			RAILROAD CANTILEVER MAST ARM			FLASHING SIGNAL			CROSSING GATE			CROSSBUCK		
	EXISTING	PROPOSED																										
RAILROAD CONTROL CABINET																												
RAILROAD CANTILEVER MAST ARM																												
FLASHING SIGNAL																												
CROSSING GATE																												
CROSSBUCK																												
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT																								
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER																								
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																								
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																								
MICROWAVE VEHICLE SENSOR																												
VIDEO DETECTION CAMERA																												
VIDEO DETECTION ZONE																												
PAN, TILT, ZOOM CAMERA																												
WIRELESS DETECTOR SENSOR																												
WIRELESS ACCESS POINT																												

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

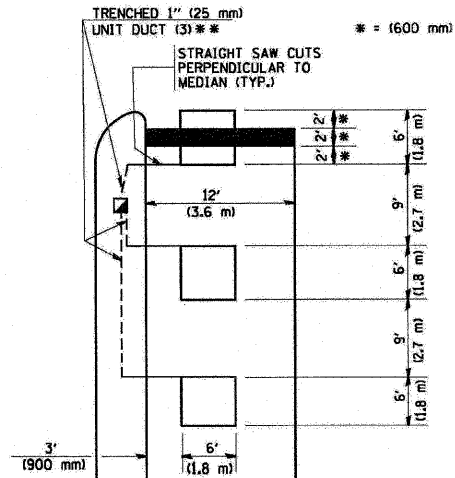


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

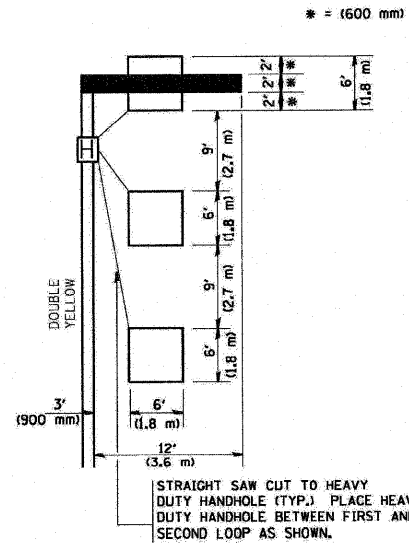
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

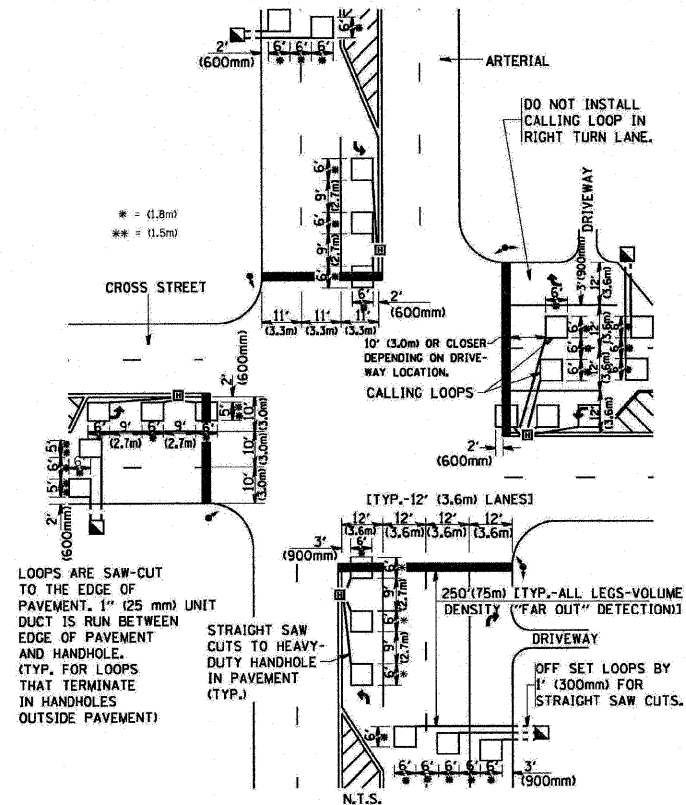
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**



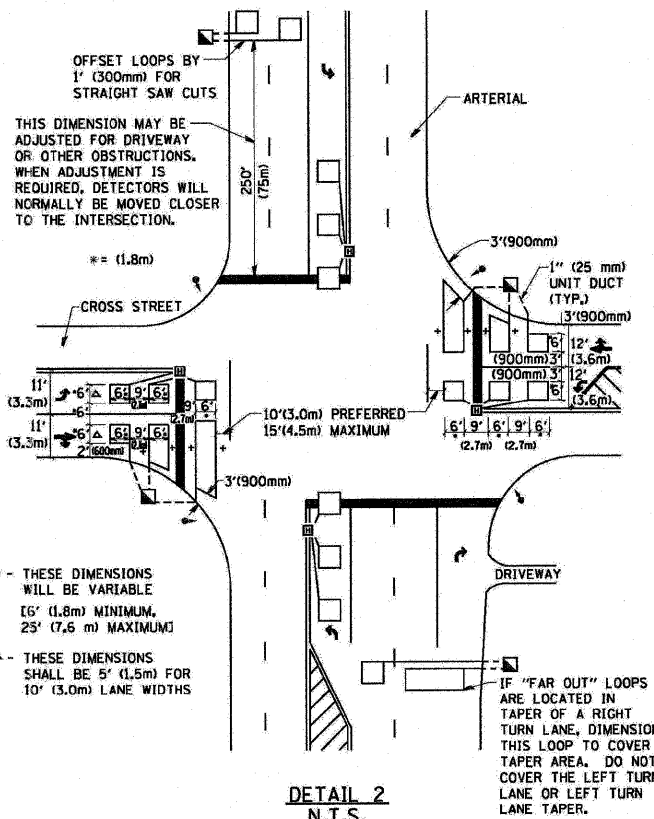
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



DETAIL 1
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =
#FILE#

USER NAME = #USER#
PLOT SCALE = #SCALE#
PLOT DATE = #DATE#

DESIGNED - XXX
DRAWN - XXX
CHECKED - XXX
DATE - 07/01/2011

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAIL
FOR ROADWAY RESURFACING**

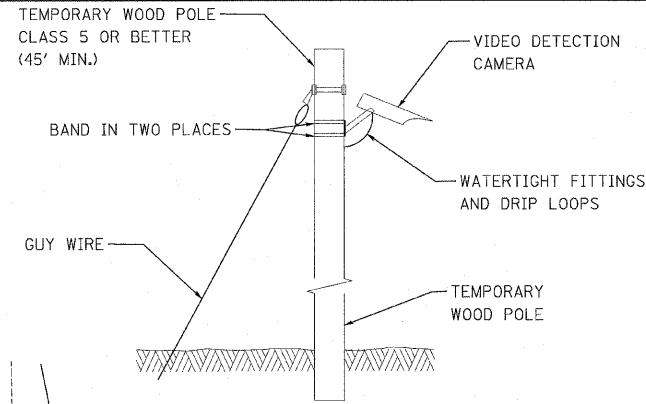
SCALE: N.T.S. SHEET NO. 7 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	24
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60C06	

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

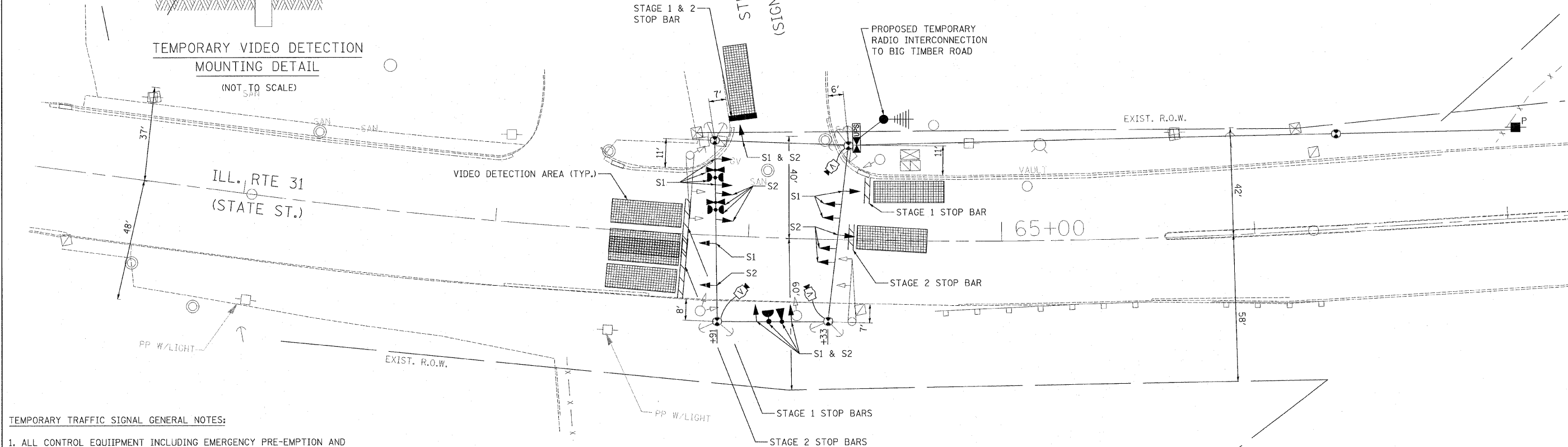
	PREEMPTION SEQUENCE																										PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	CLEAR TO NORMAL SEQUENCE			
	1	5	5	8	8	11	11	14	18	18	22	22	26	26	2	3																
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	1CC	1DD	1EE	1FF		
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2 OR 3	1C	2	1E	1F	3	1H	2	1K	1L	3	2	1P	1Q	3	2 OR 3	1T	1U	2	1W	3	1Y	1Z	2	1BB	3	1DD	1EE	2	3		
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																																
MAIN STREET END MAST ARM AND FAR LEFT SIGNALS E/B	R ←Y	R	R	R	R	R	G ←G	G ←Y	G ←G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
MAIN STREET FAR RIGHT SIGNAL E/B	R	R	R	R	R	R	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
MAIN STREET END MAST ARM AND FAR LEFT SIGNALS W/B	R ←Y	G ←G	G ←Y	G ←G	Y	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
MAIN STREET FAR RIGHT SIGNAL W/B	R	G	G	G	Y	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
CROSS STREET END MAST ARM AND FAR LEFT SIGNALS S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
CROSS STREET FAR RIGHT SIGNAL S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
CROSS STREET END MAST ARM AND FAR LEFT SIGNALS N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
CROSS STREET FAR RIGHT SIGNAL N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON NORTHSIDE OF MAIN STREET	H	FH	H	FH	H	H	H	H	H	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING CROSS STREET ON SOUTHSIDE OF MAIN STREET	H	H	H	H	H	H	FH	H	FH	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON EASTSIDE OF CROSS STREET	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	H
PEDESTRIAN SIGNALS CROSSING MAIN STREET ON WESTSIDE OF CROSS STREET	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	H

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE 2 OR 3 IS TERMINATED.



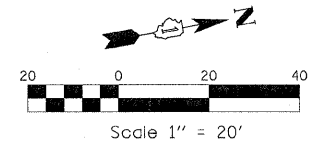
TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)



CONSTRUCTION NOTES:

1. THE SIGNAL HEAD PLACEMENT FOR ALL APPROACHES OF THE INTERSECTION IS FOR CONSTRUCTION STAGE 1 AND CONSTRUCTION STAGE 2, AND ARE LABELED AS "S1" AND "S2" TO THE TEMPORARY SIGNAL HEAD.
2. RELOCATION OF THE VIDEO DETECTION ZONES FOR EACH CONSTRUCTION STAGE IS INCLUDED IN THE COST FOR THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
3. CONTRACTOR SHALL VERIFY WITH COMED FOR TYPE OF SERVICE INSTALLATION.



TEMPORARY TRAFFIC SIGNAL GENERAL NOTES:

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300 MM) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE DISABLED AND TRAFFIC SIGNAL HEADS SHALL BE BAGGED DURING THE TIME WHEN TEMPORARY TRAFFIC SIGNAL INSTALLATION IS IN OPERATION. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE SAME AND SHALL BE INCIDENTAL TO PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

IF EXISTING MAST ARMS AND RELATED SIGNAL HEADS CONFLICT WITH PROPOSED TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE ARMS MAY NEED TO BE REMOVED DURING CONSTRUCTION AFTER TEMPORARY TRAFFIC SIGNAL IS OPERATIONAL AND REINSTALLED BEFORE THE TEMPORARY TRAFFIC SIGNAL IS REMOVED. THE IDOT AREA TRAFFIC SIGNAL MAINTENANCE ENGINEER WILL NEED TO APPROVE OF THIS IN THE FIELD. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

RESTORATION OF WORK AREA:

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENTS, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = ...phase two\01680C06-shit-TS.dgn	USER NAME = Plected by flin	DESIGNED - FML	REVISED -
		DRAWN - FML	REVISED -
	PLOT SCALE = 20.00' / IN.	CHECKED - KC	REVISED -
	PLOT DATE = 8/18/2011	DATE - 07/22/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION
IL RT 31 (STATE ST) & STEPHEN DIMEO DRIVE

SCALE: 1" = 20' SHEET NO. OF SHEETS STA. 67+00 TO STA. 82+10

F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 27
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C06	

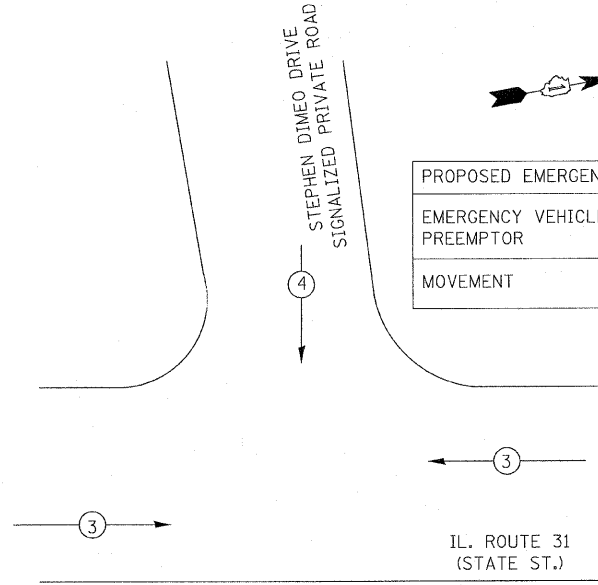
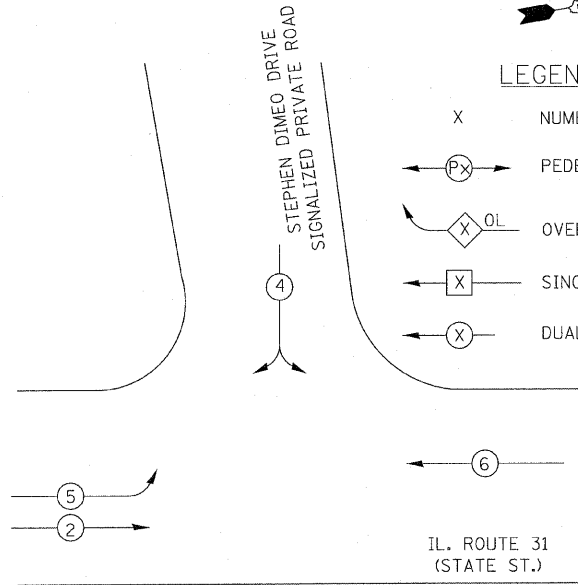
CONTROLLER SEQUENCE

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

LEGEND

- X NUMBER REFERS TO ASSOCIATED PHASE
- (Px) PEDESTRIAN MOVEMENT
- (X) OL OVERLAP
- (X) SINGLE ENTRY PHASE
- (X) DUAL ENTRY PHASE

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓



TEMPORARY PHASE DESIGNATION DIAGRAM

STAGES 1 & 2
NOT TO SCALE

STAGES 1 & 2
NOT TO SCALE

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE DISABLED AND TRAFFIC SIGNAL HEADS SHALL BE BAGGED DURING THE TIME WHEN TEMPORARY TRAFFIC SIGNAL INSTALLATION IS IN OPERATION. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE SAME AND SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA:

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENTS, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TEMPORARY CABLE PLAN

STAGES 1 & 2
NOT TO SCALE

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	9		17	0.50	76.5
SIGNAL (YELLOW)	9		25	0.25	56.3
SIGNAL (GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 421.4

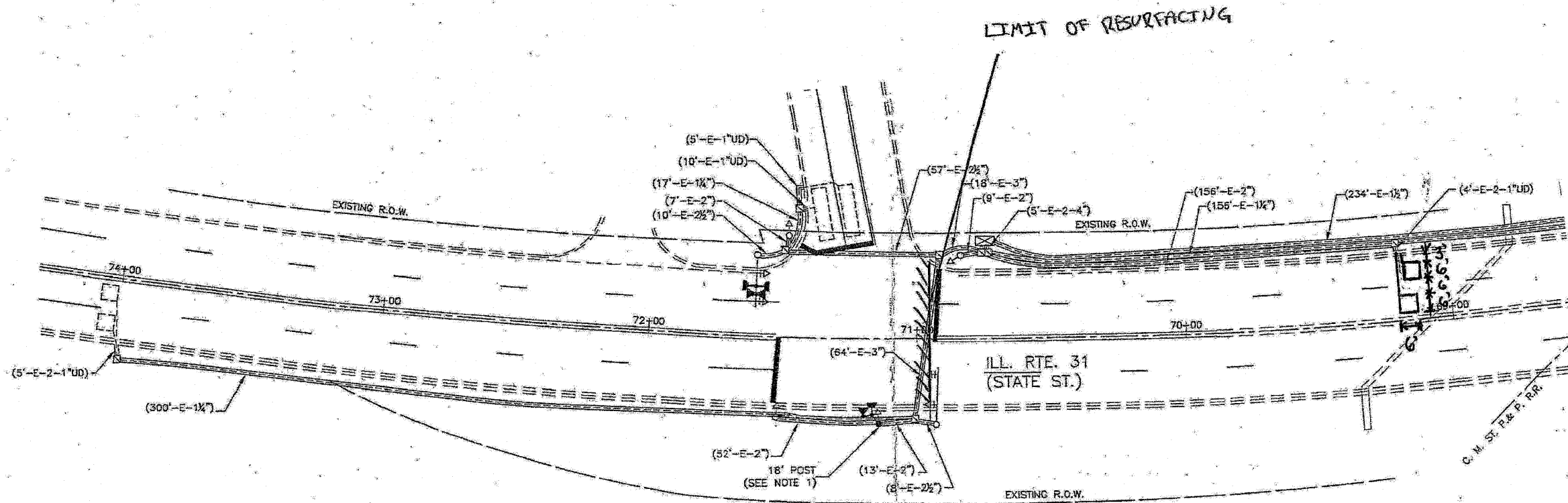
CITY OF ELGIN
150 DEXTER COURT, ELGIN, IL 60120

ENERGY SUPPLY: CONTACT: KATHY NYSTROM
PHONE: 847-608-2331
COMPANY: COMED

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		



THE DETECTOR LOOPS SHALL NOT BE INSTALLED ON THE APPROACH SLAB. IF REQUIRED, THE DETECTOR LOOPS CAN BE INSTALLED IN A STAGGERED CONFIGURATION.

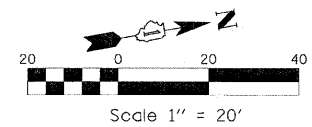
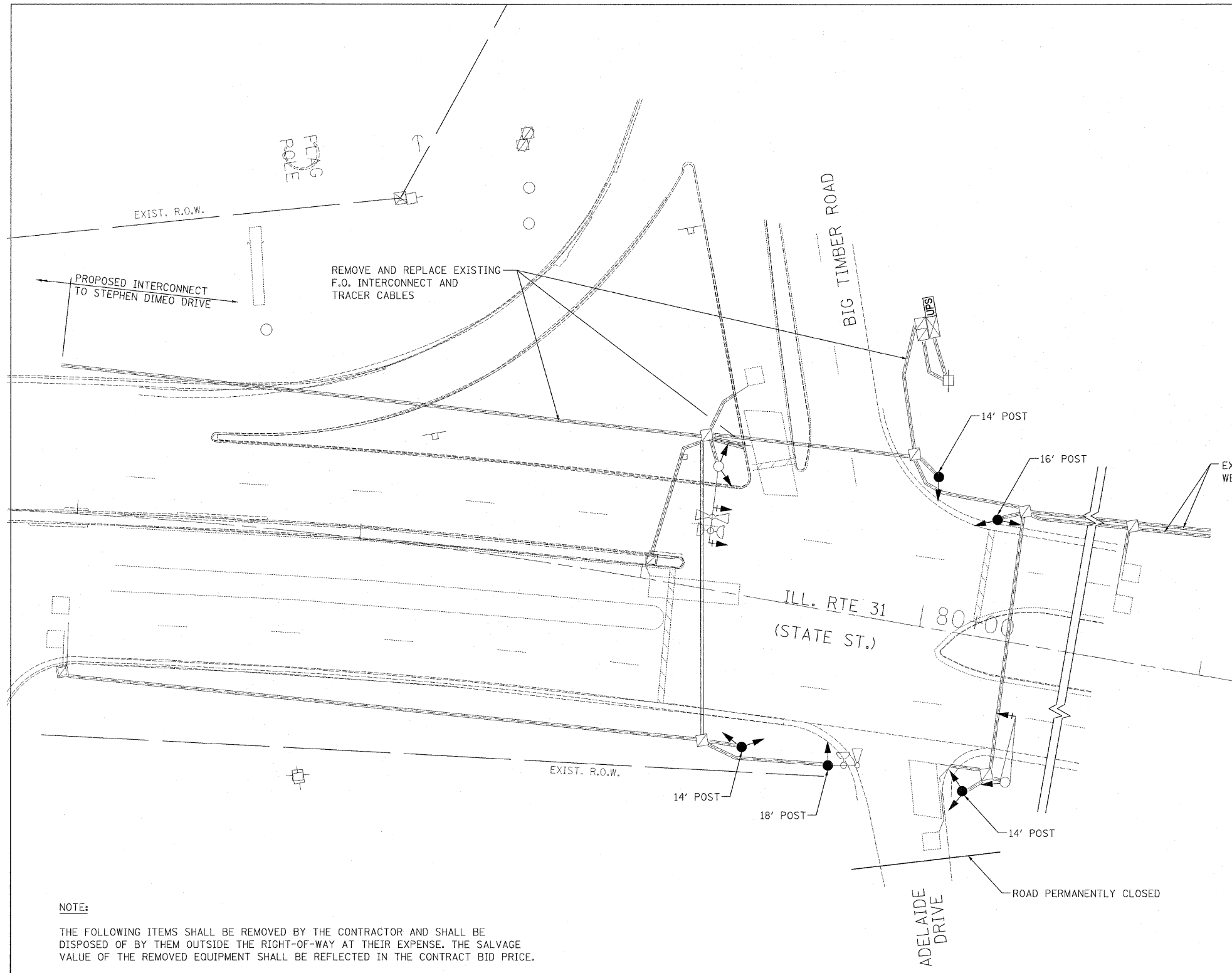
THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600600	66	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = #USER#	DESIGNED - FML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL RT 31 (STATE ST) & STEPHEN DIMEO DRIVE	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 29	
#FILE#	PLOT SCALE = #SCALE#	DRAWN - FML	REVISED -			SCALE: N.T.S.	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 60C06			
	PLOT DATE = #DATE#	CHECKED - KC	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
		DATE - 07/01/2011	REVISED -								



THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA:

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENTS, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:

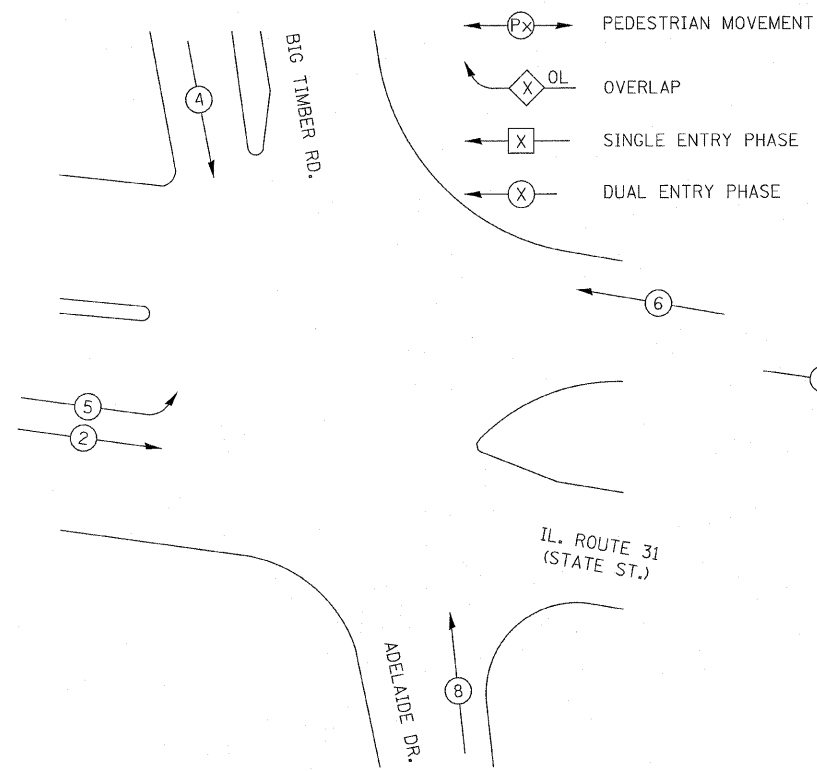
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

ITEM	UNIT	QUANTITY
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	10
SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
TRAFFIC SIGNAL POST, 14 FT.	EACH	3
TRAFFIC SIGNAL POST, 16 FT.	EACH	1
TRAFFIC SIGNAL POST, 18 FT.	EACH	1

NOTE:

1. REMOVE ALL EXISTING SIGNAL HEADS AND BACKPLATES AND INSTALL LED SIGNAL HEADS AND BACKPLATES.
2. REMOVE AND REPLACE EXISTING LOAD SWITCHES.
3. EXISTING CONCRETE FOUNDATIONS FOR TRAFFIC SIGNAL POSTS SHALL BE REUSED UNDER PROPOSED CONDITIONS. IF THE CONCRETE FOUNDATIONS CANNOT BE REUSED, NEW CONCRETE FOUNDATIONS SHALL BE PROVIDED. THE COST OF THIS WORK SHALL BE PAID IN ACCORDANCE WITH ART. 109.04.

CONTROLLER SEQUENCE



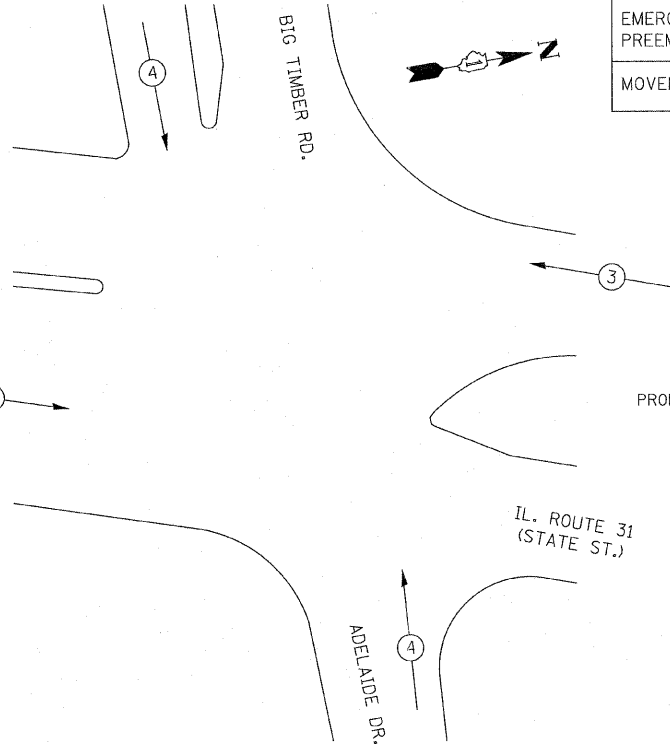
PHASE DESIGNATION DIAGRAM

NOT TO SCALE

LEGEND

- X NUMBER REFERS TO ASSOCIATED PHASE
- ⊗ PEDESTRIAN MOVEMENT
- ⊗ OL OVERLAP
- ⊗ SINGLE ENTRY PHASE
- ⊗ DUAL ENTRY PHASE

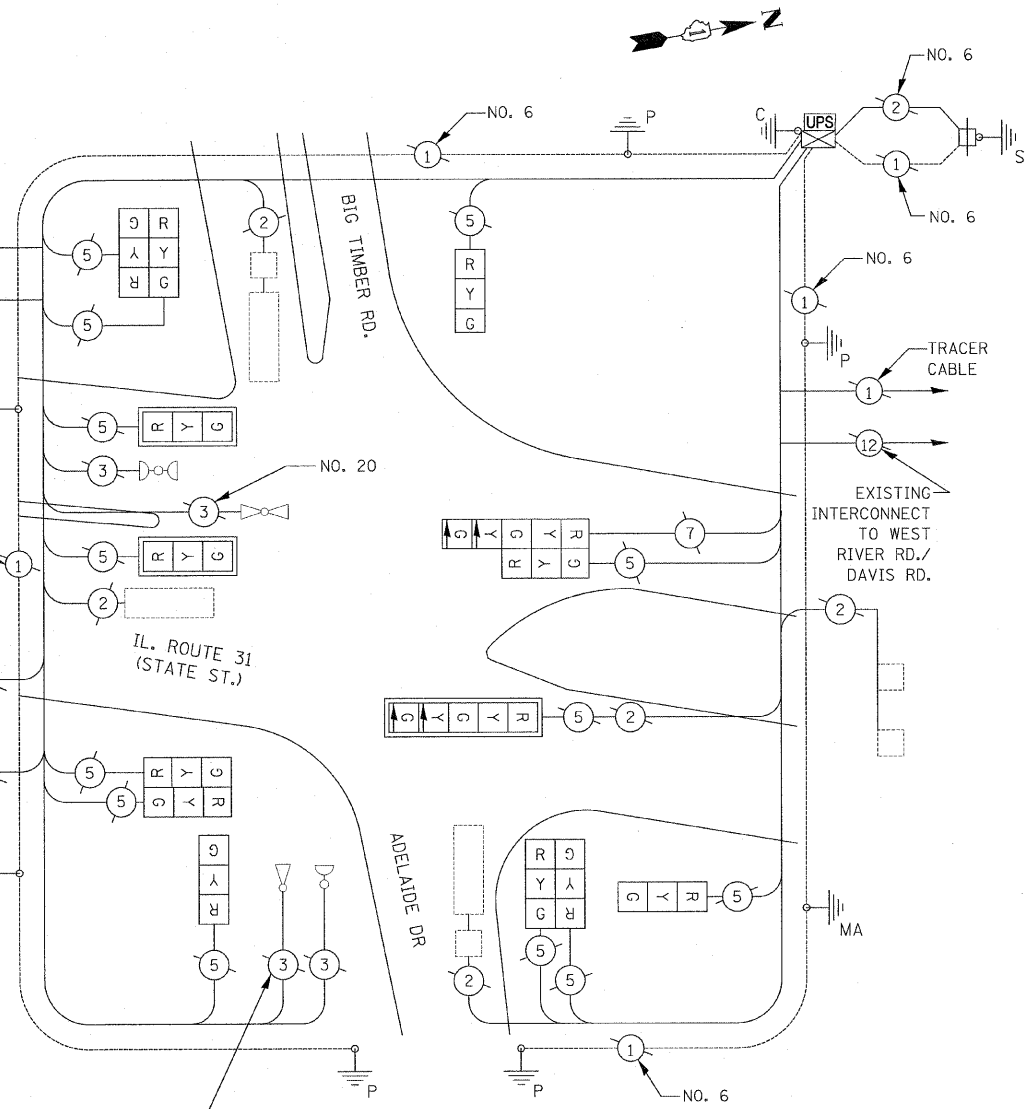
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

PROPOSED TRACER CABLE
PROPOSED INTERCONNECT TO STEPHEN DIMEO DR.

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS



CABLE PLAN

NOT TO SCALE

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

SCHEDULE OF QUANTITIES

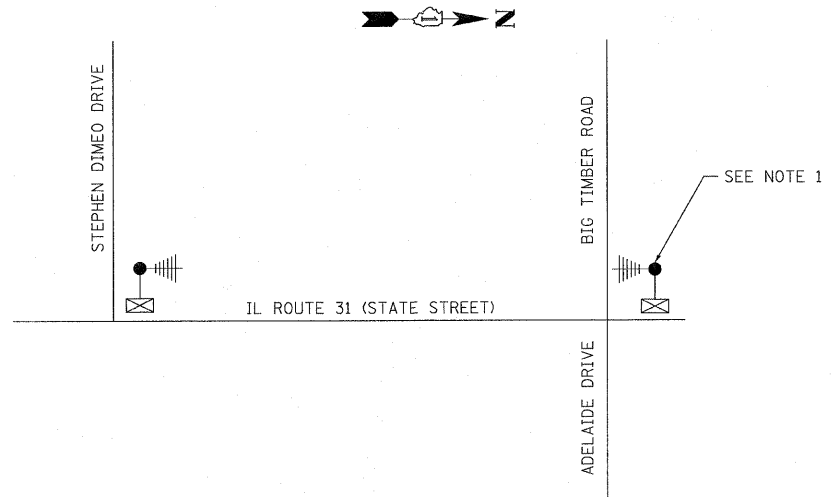
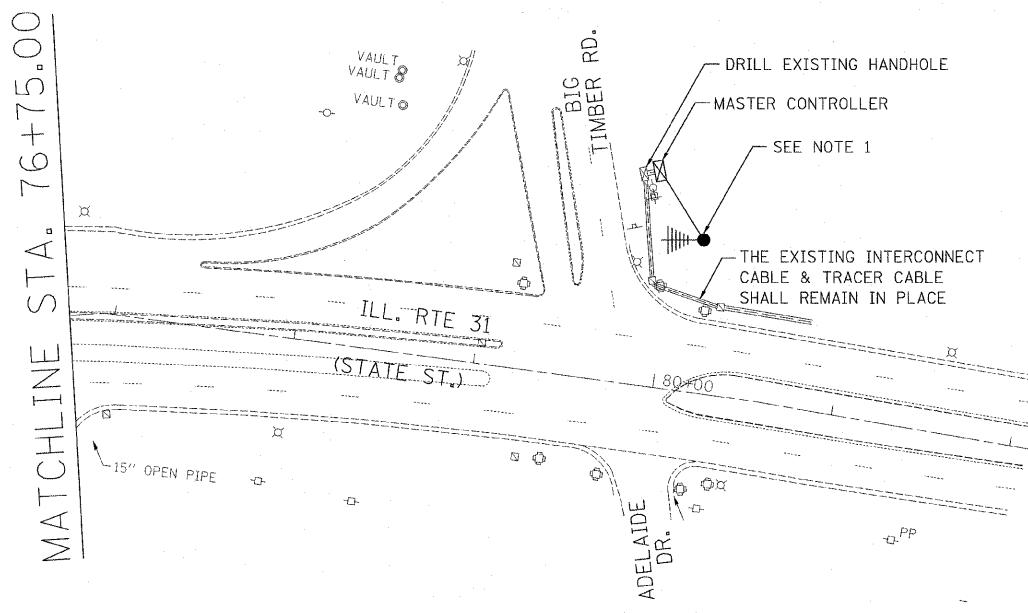
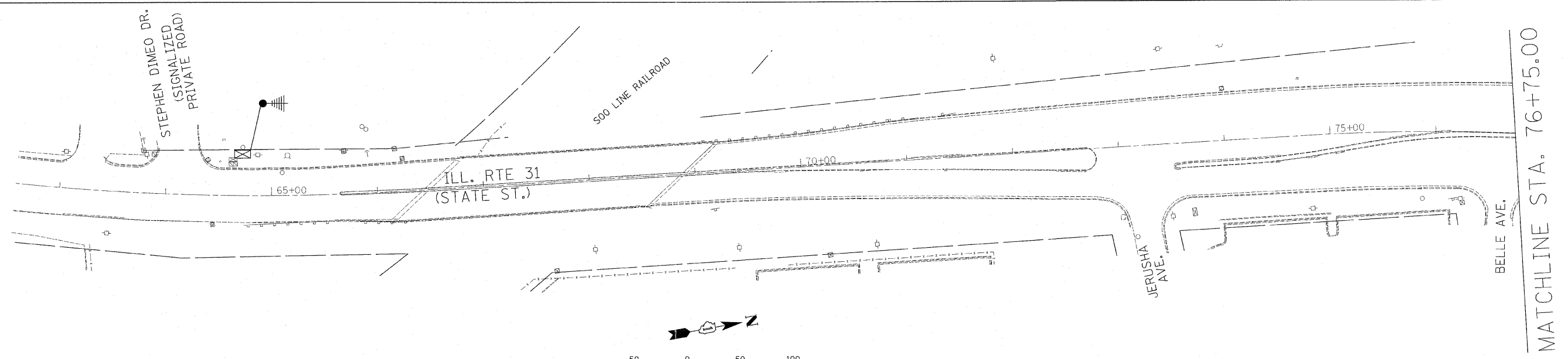
ITEM	UNIT	QUANTITY
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119
SIGNAL (YELLOW)	14		25	0.25	87.5
SIGNAL (GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED. SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	363.8

CITY OF ELGIN
150 DEXTER COURT, ELGIN, IL 60120

ENERGY SUPPLY: CONTACT: KATHY NYSTROM
PHONE: 847-608-2331
COMPANY: COMED



RADIO INTERCONNECTION SCHEMATIC

NOTE:

1. THE TEMPORARY INTERCONNECT WORK SHALL BE PERFORMED AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FOR "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
2. OTHER METHODS MAY BE USED WITH PRIOR APPROVAL FROM DISTRICT 1, ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

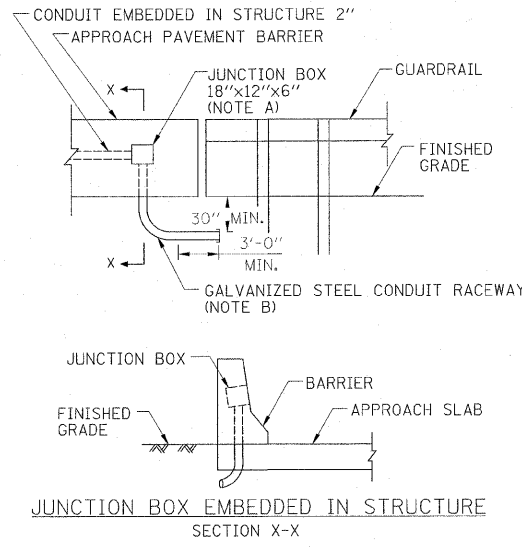
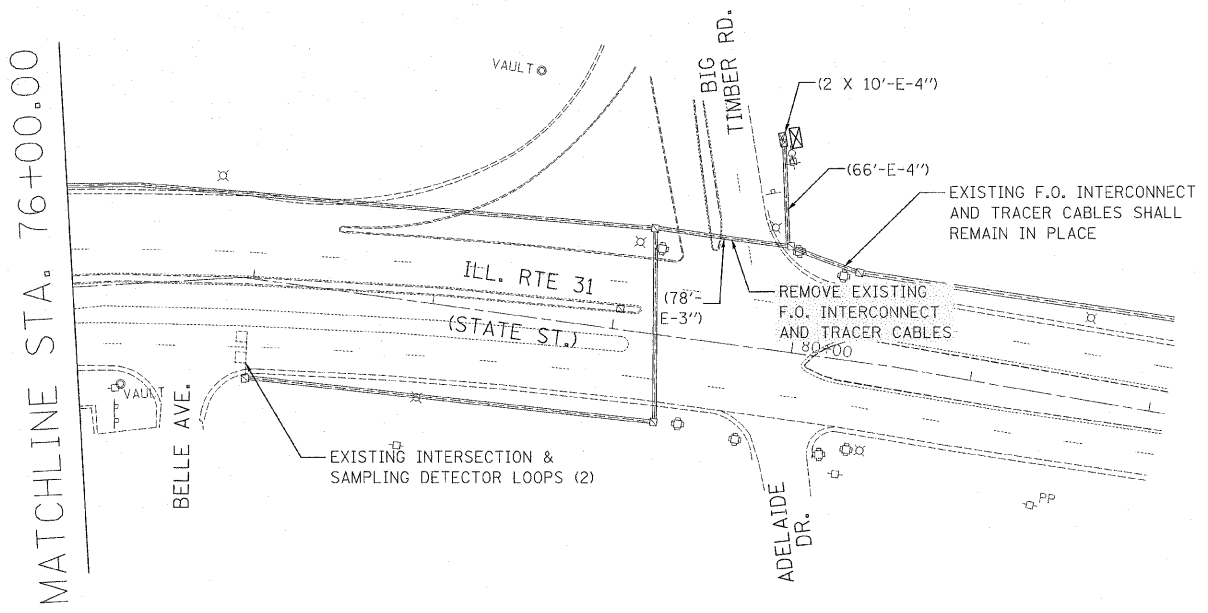
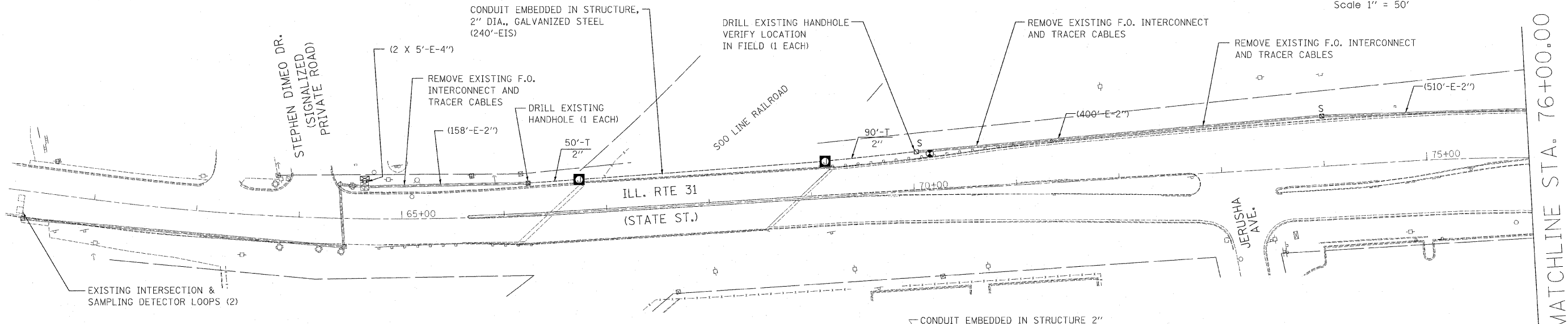
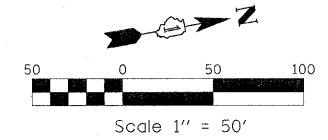
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA:

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENTS, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = ...Phase Two\DJ160C06-shr-TS.dgn	USER NAME = Plotted by flin	DESIGNED - FML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INTERCONNECTION IL RT 31 (STATE ST) FROM STEPHEN DIMEO DRIVE TO BIG TIMBER RD./ADELAIDE DR.			F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 32
	PLOT SCALE = 60.00' / IN.	CHECKED - KC	REVISED -		SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA. 67+00	TO STA. 82+10	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
PLOT DATE = 7/22/2011	DATE - 07/22/2011	REVISED -	REVISED -		CONTRACT NO. 60C06							

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

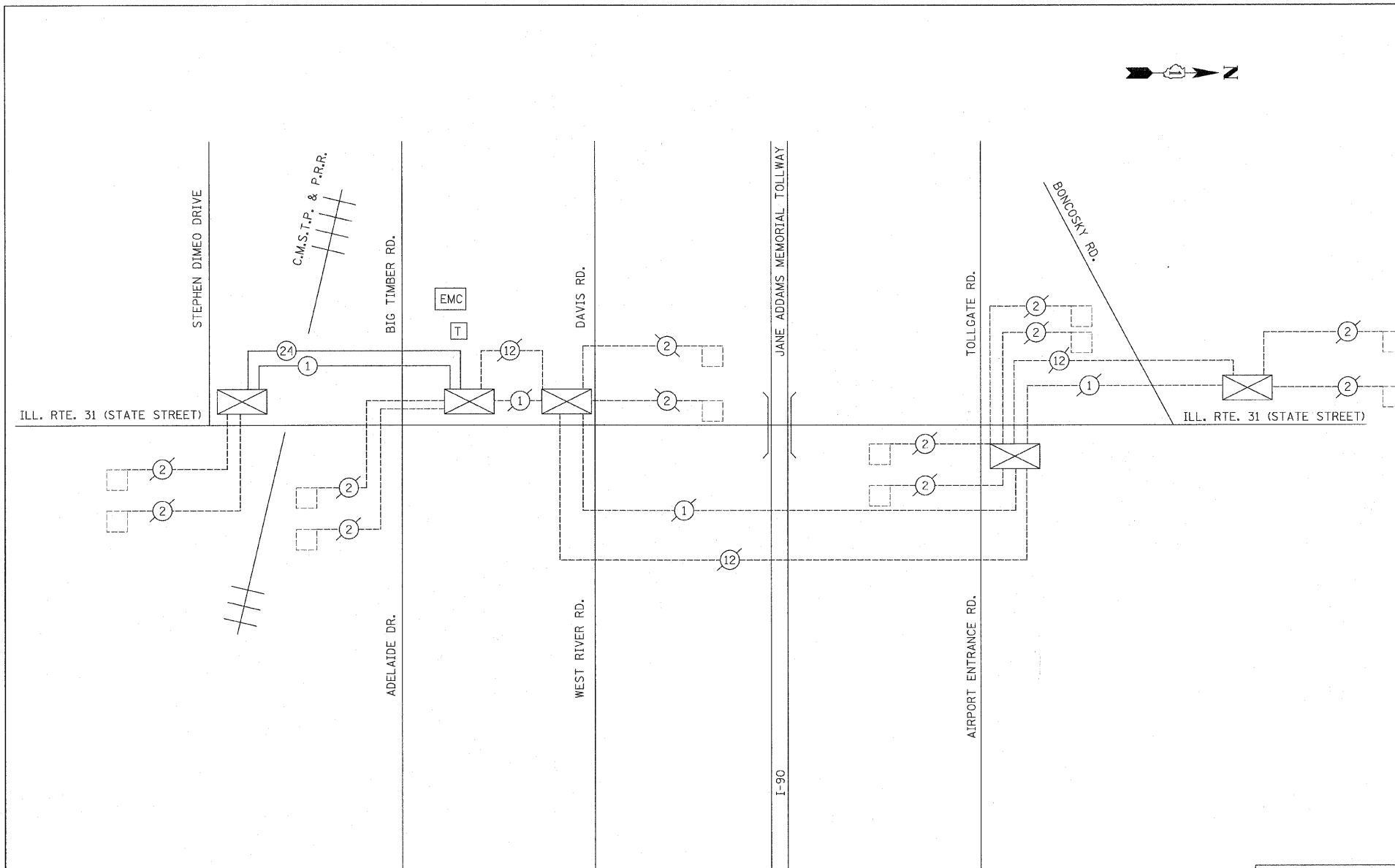


- A. COORDINATE PLACEMENT OF JUNCTION BOX WITH GUARDRAIL BARRIER TERMINAL ATTACHMENT.
B. COORDINATE CONDUIT PLACEMENT TO TERMINATE OUTSIDE OF PAVEMENT AND AVOID GUARDRAIL.

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

- NOTE:
1. REMOVE EXISTING FIBER OPTIC CABLE AND TRACER CABLE BETWEEN STEPHEN DIMEO DRIVE AND BIG TIMBER ROAD. INSTALL NEW FIBER OPTIC CABLE AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
 2. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.
 3. THE EXISTING LEAD-IN CABLE SHALL BE REUSED FOR THE NEW DETECTOR LOOPS.
 4. PROPOSED CONDUIT EXPANSION FITTINGS ARE REQUIRED AT ALL LOCATIONS WHERE CONDUIT EXTENDS BETWEEN TWO CONCRETE SECTIONS THAT ARE CAPABLE OF MOVEMENT. THE EXPANSION FITTINGS SHALL COMPLY WITH STD. SPEC. ARTICLE 1088.020. COST INCLUDED WITH CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL.
 5. JUNCTION BOX SHALL BE EMBEDDED IN PARAPET - UPPER PORTION WITH COVER FACING IL 31 AND MUST BE ACCESSIBLE (TYP.) COORDINATE W/APPROACH PVMT. SEE DETAIL THIS SHEET.

FILE NAME =	USER NAME = #USER#	DESIGNED - FML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED INTERCONNECT IL RT 31 (STATE ST) FROM STEPHEN DIMEO DRIVE TO BIG TIMBER RD./ADELAIDE DR.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - FML	REVISED -			3887	R-VB-R	KANE	83	33	
PLOT SCALE = #SCALE#		CHECKED - KC	REVISED -			SCALE: 1" = 50'		SHEET NO. OF SHEETS		STA. 67+00 TO STA. 82+10	
PLOT DATE = #DATE#		DATE - 07/01/2011	REVISED -			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 60C06	



THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	140
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	240
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1750
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	140
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1750
DRILL EXISTING HANDHOLE	EACH	3
JUNCTION BOX EMBEDDED IN STRUCTURE 18" X 12" X 6"	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1750

FILE NAME = ...Phase Two\0160C06-sht-TS.dgn	USER NAME = Plotted by flin	DESIGNED - FML	REVISED -
		DRAWN - FML	REVISED -
	PLOT SCALE = 20.00 / IN.	CHECKED - KC	REVISED -
	PLOT DATE = 7/22/2011	DATE - 07/22/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC
IL RT 31
FROM STEPHEN DIMEO DRIVE TO BONCOSKY RD.**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 34
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C06	

Bench Mark: U.S.G.S. Disk on top of Southwest wingwall, elevation 801.26.

Existing Structure: S.N. 045-0016 carrying IL Route 31 over Soo Line Railroad was originally built in 1952 as SBI Route 22, Section R-VB. The bridge is a 3-span continuous structure with 12 lines of non-composite rolled steel beams. The existing structure is 58'-4" out to out and measures 246'-0" back to back abutment, and is supported by spill thru pile bent abutments and multi column piers. The structure was rehabilitated in 1984 and included waterproofing the deck and installing a bituminous wearing surface, new 1'-8" wide bridge parapets, the transverse expansion joints were rebuilt and the longitudinal open joint was closed. The transverse joints now consist of a 2 1/2" neoprene joint at south abutment, and a poured joint at the north abutment. The structure has a 50°24'00" forward left skew. The existing deck is to be removed and replaced and substructure repaired. One lane of traffic in each direction is to be maintained utilizing stage construction. No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

1. Remove and replace deck and approach pavements.
2. Remove and replace abutment backwalls and substructure repairs.
3. Remove and replace bearings at abutments and piers. Jack and raise existing superstructure by providing steel extensions at abutments and Pier 2, and concrete extensions at Pier 1.
4. Remove and replace all end diaphragms.
5. Provide stud shear connectors.
6. Remove blast plates.
7. Clean and paint existing structural steel within 10 ft of each beam end, the exterior surface and bottom flange of fascia beam, and interior surfaces where paint failure occurred.
8. Regrade and construct bituminous coated aggregate slopewalls.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

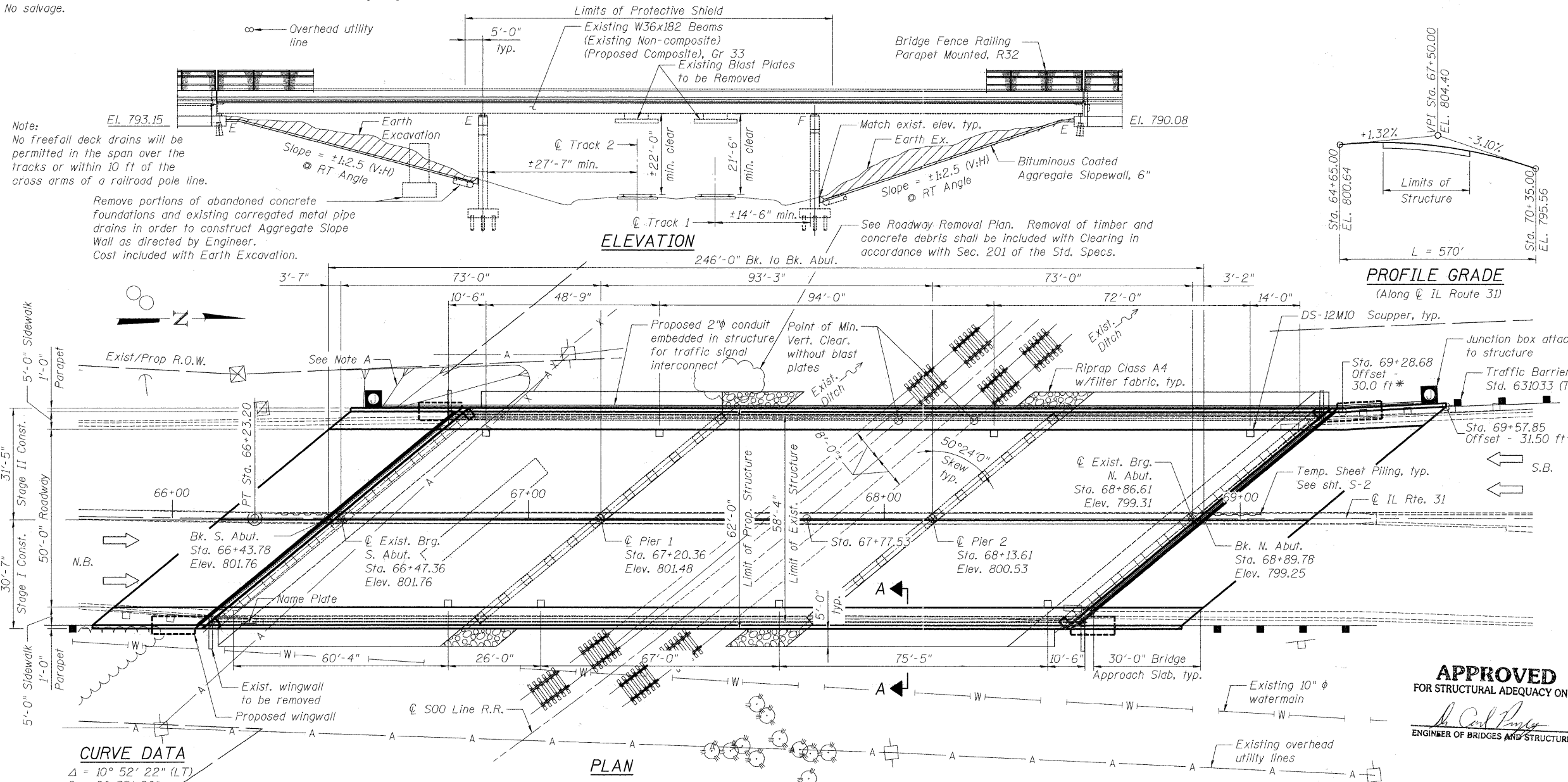
DESIGN STRESSES

FIELD UNITS (New Construction)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

FIELD UNITS (Existing Construction)
 $f'_c = 800$ psi (w/earth pressure)
 $f_y = 33,000$ psi (structural steel)
 $f_y = 40,000$ psi (reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.04g
 Site Coefficient (S) = 1.0



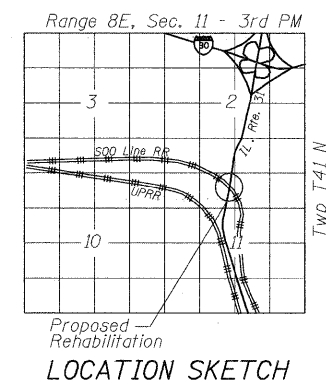
PROFILE GRADE
(Along IL Route 31)

PLAN

SECTION A-A

SECTION THRU ABUTMENT SLOPE WALL

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
[Signature]
ENGINEER OF BRIDGES AND STRUCTURES



CURVE DATA

$\Delta = 10^\circ 52' 22''$ (LT)
 $D = 2^\circ 35' 20''$
 $T = 210.63'$
 $L = 420.00'$
 $E = 10.00'$
 $R = 2,213.24'$
 S.E. = Existing, 2% max.
 P.C. = Sta. 62+03.20
 P.T. = Sta. 66+23.20
 P.I. = Sta. 64+13.83



SIGNED: *[Signature]*
 DATE: JUNE 27, 2011
 EXPIRES: November 30, 2012

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - BLU

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job No. 910

SHEET NO. S-1	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 35
S-34 SHEETS					
CONTRACT NO. 60C06					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

GENERAL PLAN & ELEVATION
 IL ROUTE 31 OVER SOO LINE R.R.
 F.A.U. RTE. 3887 SEC. R-VB-R
 KANE COUNTY
 STATION 67+77.53
 STRUCTURE NO. 045-0016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4-in. ϕ , holes 7/8-in. ϕ , unless otherwise noted.

No field welding is permitted except as specified in the contract documents.

The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

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

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

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

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

The Environmental Firm is required to continuously monitor for worker protection and soil contamination at several areas. See Special Provision and Supplemental Specifications for details.

STATION 67+77.53
RE-BUILT 20__ BY
STATE OF ILLINOIS
LOADING HS-20
STRUCTURE NO. 045-0016

NAME PLATE
See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

DESIGNED - DF
CHECKED - BLU
DRAWN - LAM
CHECKED - DF

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 10 ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Power Tool cleaning - Commercial Grade.

Interior beam surfaces where paint failure has occurred as directed by the Engineer shall be cleaned per Power Tool Cleaning - Commercial Grade. It is estimated that these areas equal 2,500 sq. ft. in addition to other areas noted above.

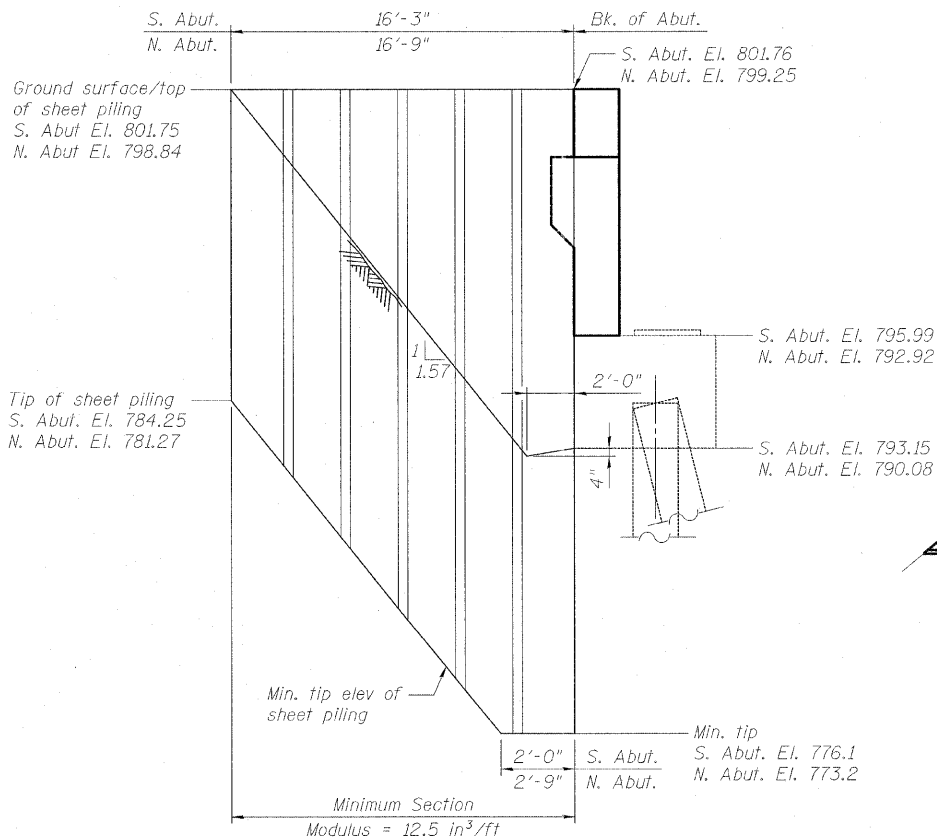
The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 and per Power Tool Cleaned - Commercial Grade shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No 7.5G 4/8.

All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

Current Ratings on File for Existing Structure

Inventory: HS 25.0
Operating: HS 38.9
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.



TEMPORARY SHEET PILING

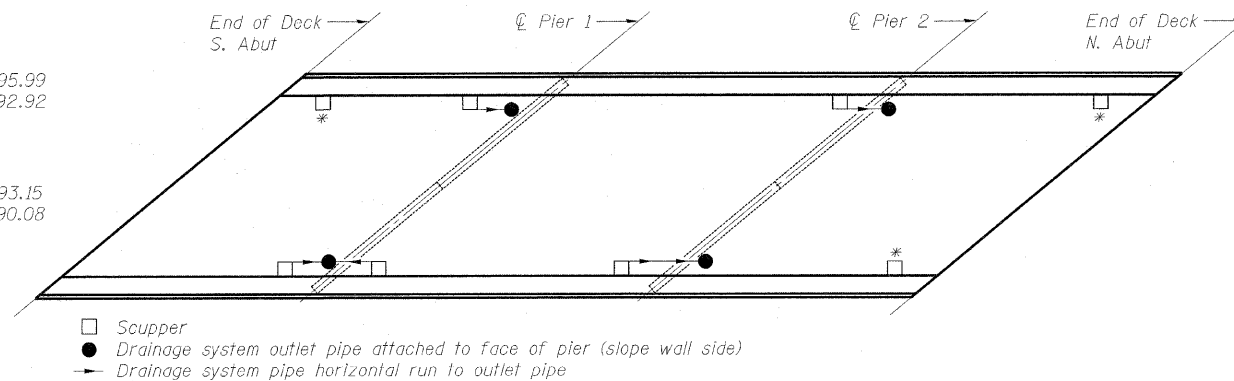
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

INDEX OF SHEETS

S-1	General Plan & Elevation
S-2	General Notes and Total Bill of Material
S-3	Construction Staging
S-4	Steel Railing (Temporary)
S-5	Temporary Concrete Barrier For Stage Construction
S-6	Top of Slab Elevations Layout
S-7	Top of Slab Elevations I
S-8	Top of Slab Elevations II
S-9	Top of Slab Elevations III
S-10	Top of South Approach Slab Elevations
S-11	Top of North Approach Slab Elevations
S-12	Superstructure Plan
S-13	Superstructure Details I
S-14	Superstructure Details II
S-15	Preformed Joint Strip Seal
S-16	Drainage Scupper, DS-12M10
S-17	Bridge Approach Slab Details I
S-18	Bridge Approach Sidewalk & Parapet Details
S-19	Bridge Approach Slab Details II
S-20	Bridge Fence Railing Parapet Mounted
S-21	Framing Plan & Beam Details
S-22	Beam Details
S-23	Abutment Bearing Details
S-24	Pier Bearing Details
S-25	Abutment Removal Details
S-26	Abutment Repair Details
S-27	North Abutment
S-28	North Abutment Wingwall Details
S-29	South Abutment
S-30	South Abutment Wingwall Details
S-31	Abutment Details I
S-32	Abutment Details II
S-33	Pier Repairs & Pier 1 Cap Modification
S-34	Bar Splicer Assembly and Mechanical Splicer Details

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq Yd	-	75	75
Filter Fabric	Sq Yd	-	134	134
Concrete Removal	Cu Yd	-	38	38
Removal of Existing Concrete Deck	Each	1	-	1
Protective Shield	Sq Yd	758	-	758
Structure Excavation	Cu Yd	-	439	439
Concrete Structures	Cu Yd	-	140.3	140.3
Concrete Superstructure	Cu Yd	770.1	-	770.1
Bridge Deck Grooving	Sq Yd	1,615	-	1,615
Protective Coat	Sq Yd	2,280	-	2,280
Furnishing and Erecting Structural Steel	Pound	17,570	-	17,570
Stud Shear Connectors	Each	6,504	-	6,504
Cleaning and Painting Structural Steel Location No. 1	L Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	156,420	14,060	170,480
Bar Splicers	Each	1,592	32	1,624
Steel Railing (Temporary)	Foot	306	-	306
Bridge Fence Railing	Foot	611	-	611
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	196	-	196
Elastomeric Bearing Assembly, Type 1	Each	24	-	24
Elastomeric Bearing Assembly, Type 2	Each	12	-	12
Anchor Bolts, 5/8"	Each	96	-	96
Anchor Bolts, 3/4"	Each	24	-	24
Anchor Bolts, 1"	Each	24	-	24
Concrete Sealer	Sq Ft	-	791	791
Epoxy Crack Injection	Foot	-	10	10
Geocomposite Wall Drain	Sq Yd	-	191	191
Drainage Scuppers, DS-12M10	Each	8	-	8
Porous Granular Embankment, Special	Cu Yd	-	350	350
Structural Steel Removal	Pound	29,160	-	29,160
Removal of Existing Bearings	Each	48	-	48
Containment and Disposal of Lead Paint Cleaning Residue No. 1	L Sum	1	-	1
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq Ft	-	600	600
Drainage System	L Sum	-	1	1
Temporary Sheet Piling	Sq Ft	-	733	733
Jacking Existing Superstructure	L Sum	1	-	1
Pipe Underdrains for Structures, 4"	Foot	-	382	382
Bituminous Coated Aggregate Slopewall, 6"	Sq Yd	-	1,172	1,172



DRAINAGE SYSTEM PLAN

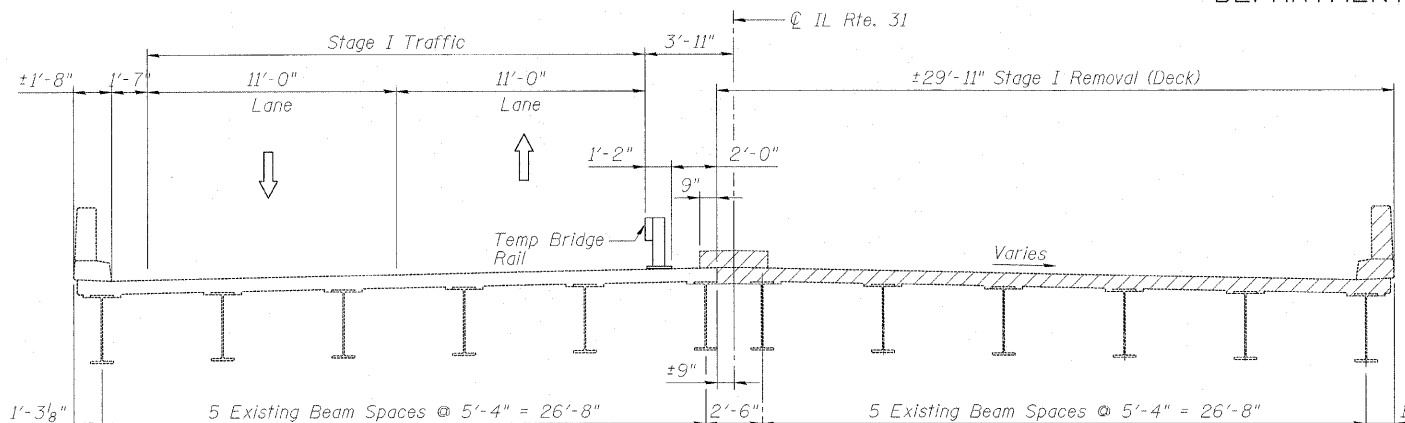
See sheet S-14 for Drainage System Details.
See sheet S-1 for scupper spacing.
* Scuppers are to free fall on slope wall and are not included as part of the Drainage System.

GENERAL NOTES AND
TOTAL BILL OF MATERIAL
STRUCTURE NO. 045-0016

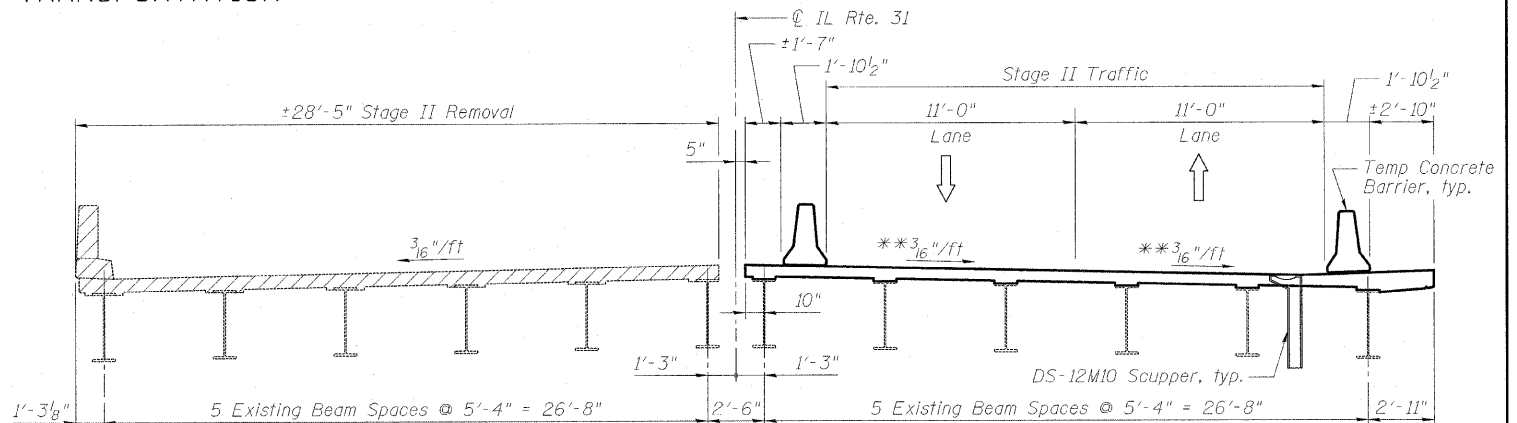
SHEET NO. S-2 S-34 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3887	R-VB-R	KANE	83	36
CONTRACT NO. 60C06					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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Chicago, Illinois
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Job No. 910

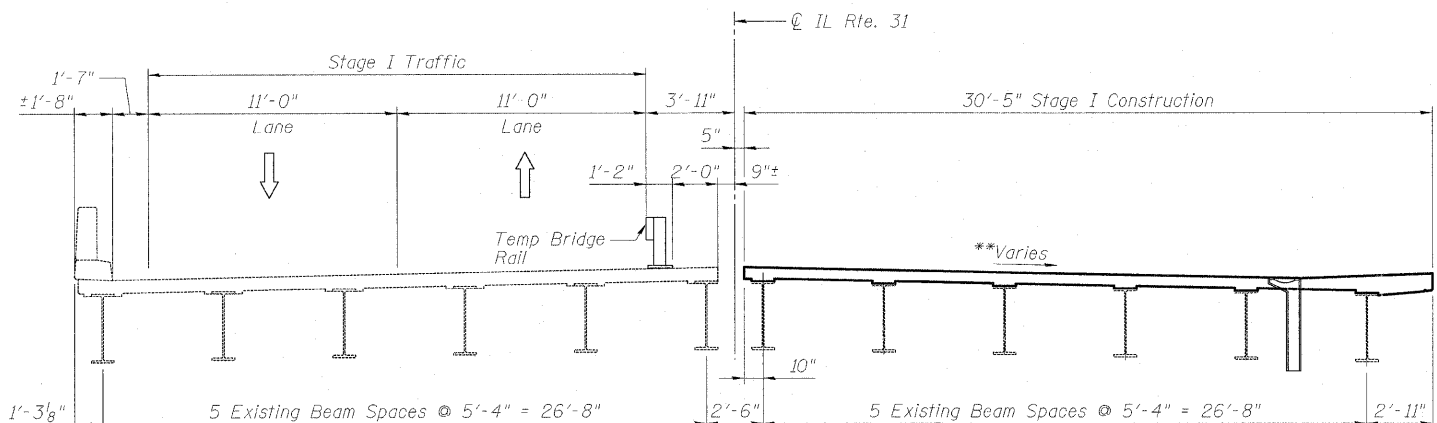
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



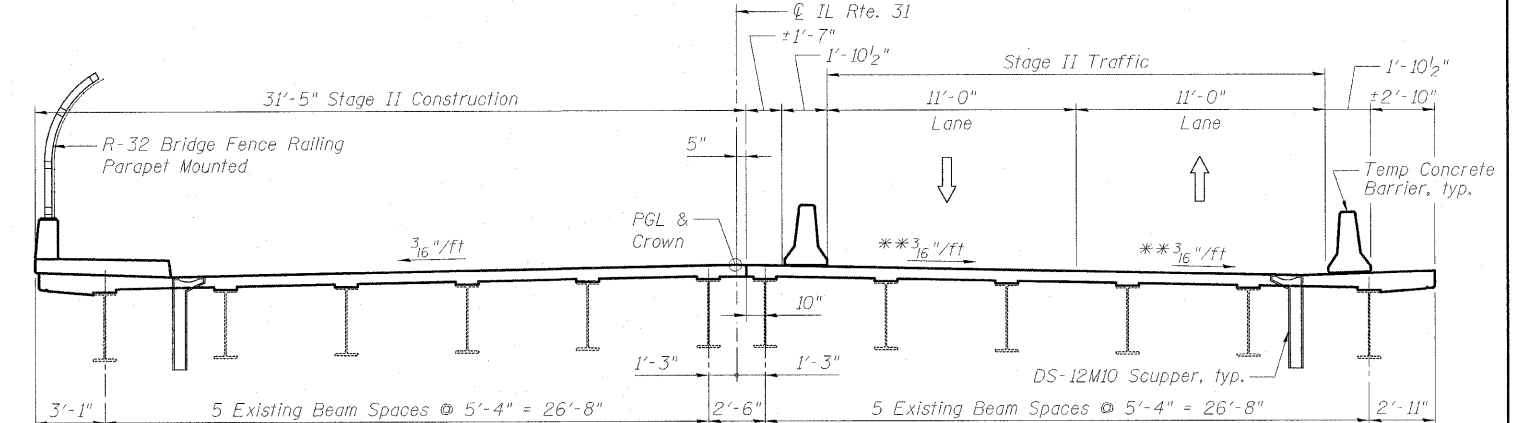
STAGE I REMOVAL



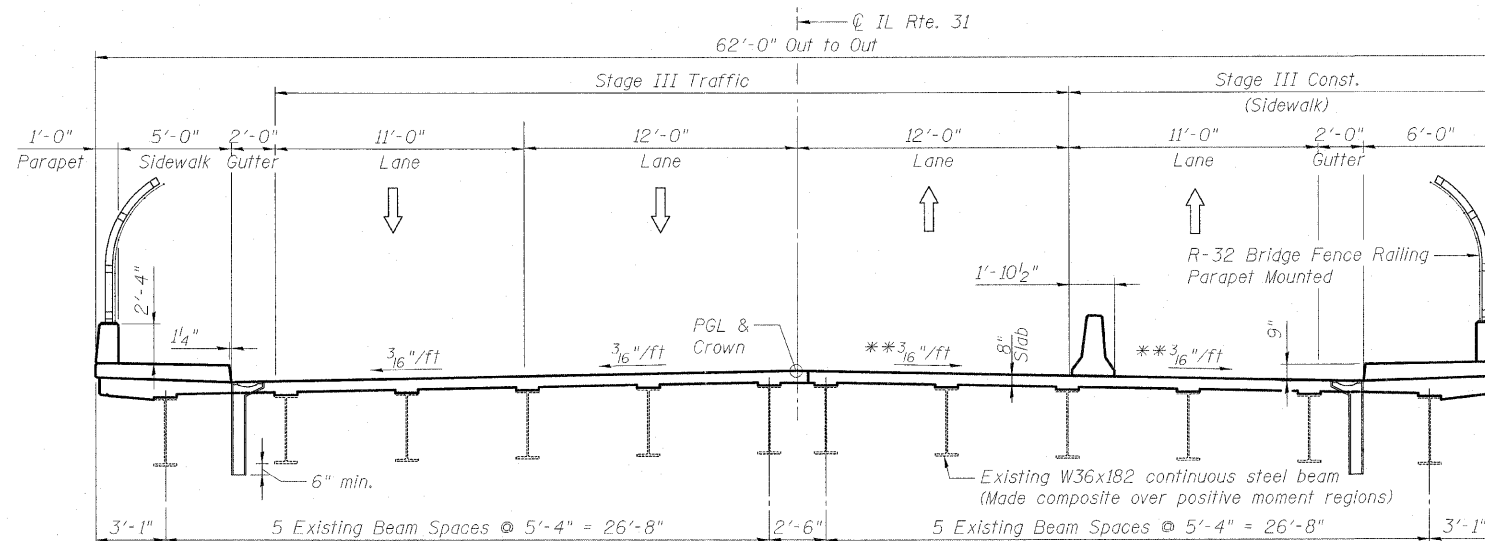
STAGE II REMOVAL



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



STAGE III CONSTRUCTION - FINAL

** Slope varies due to superelevation tangent run out.
Superelevation transition occurs from Sta. 65+70 to Sta. 66+73.5 and cross-slope transitions from full S.E. (2.0%) to normal crown.

NOTES

1. Cross section views are looking north.
2. See Roadway Plans for quantity of Temporary Concrete Barrier.

LEGEND

Removal of Existing Concrete Deck

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - BLU

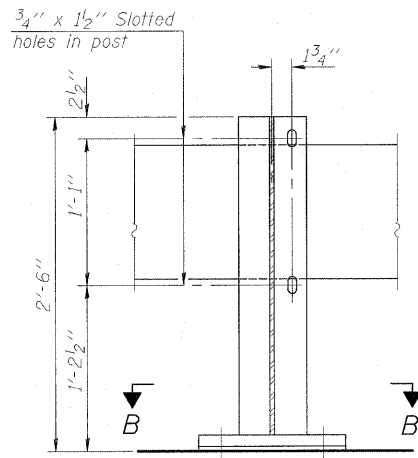
BOWMAN, BARRETT & ASSOCIATES INC.
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SHEET NO. S-3 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 37
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

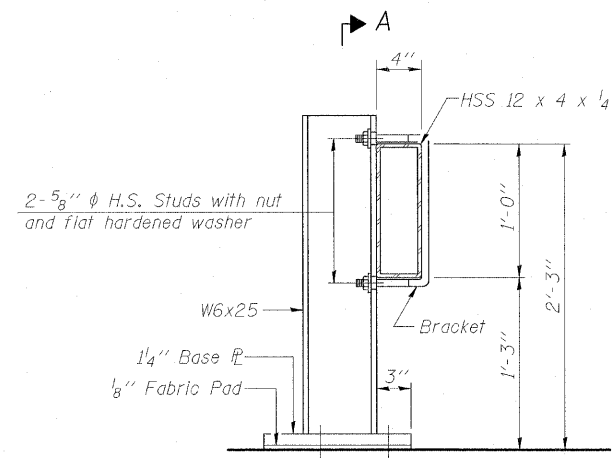
CONSTRUCTION STAGING
STRUCTURE NO. 045-0016

6/27/2009 08:28:05 AM S:\910\95-CAD\01\3401-Struct\A\95006-0016-001-58.dwg

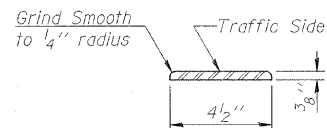
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



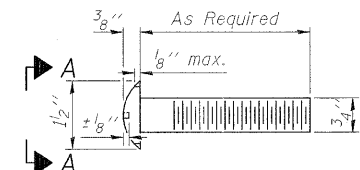
SECTION A-A



SECTION AT RAIL POST

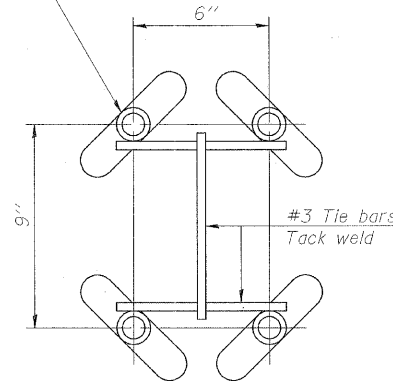


DETAIL A

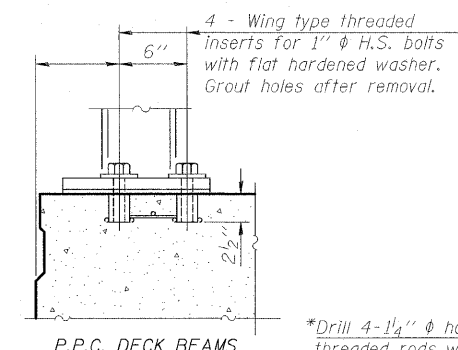


VIEW A-A
ROUND HEAD BOLT

1" φ Flared thin slab ferrule insert. Electroplated according to ASTM B 633 Service Condition 4.

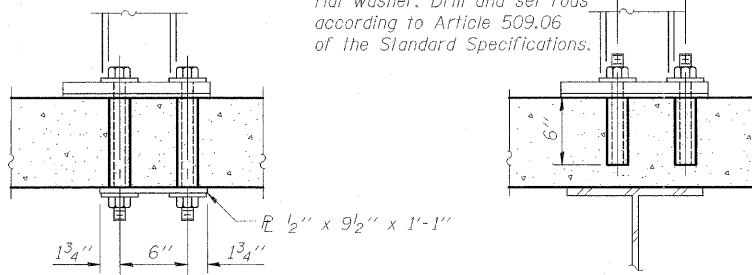


INSERT DETAIL

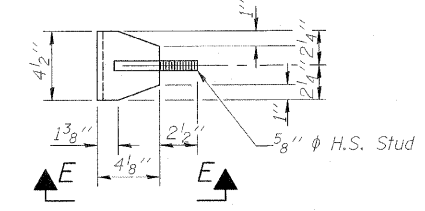


P.P.C. DECK BEAMS

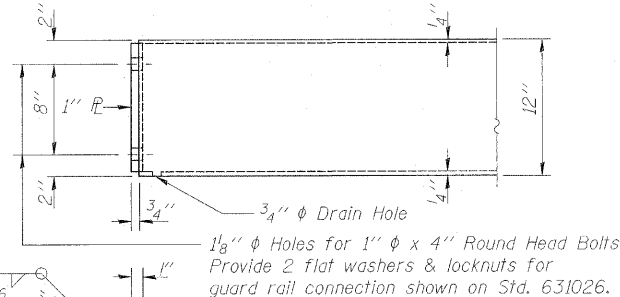
*Drill 4-1 1/2" φ holes for 1" φ threaded rods with hex nut and flat washer. Drill and set rods according to Article 509.06 of the Standard Specifications.



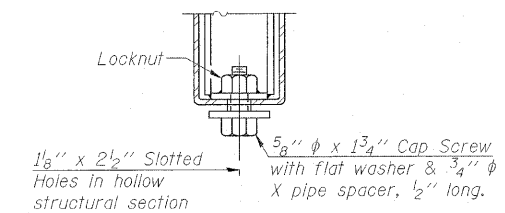
NEW & EXISTING DECKS
ANCHORAGE DETAILS



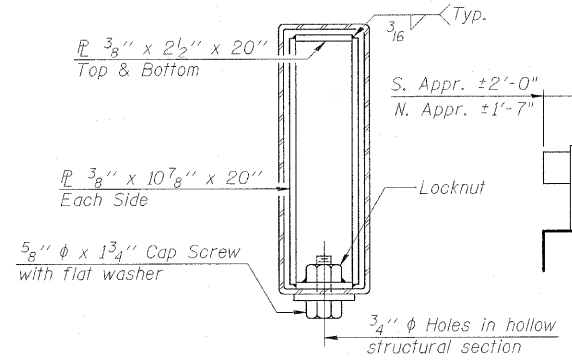
VIEW C-C



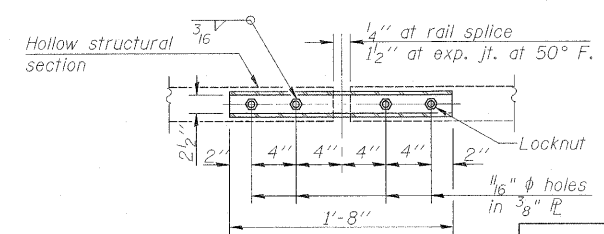
END OF RAIL DETAILS



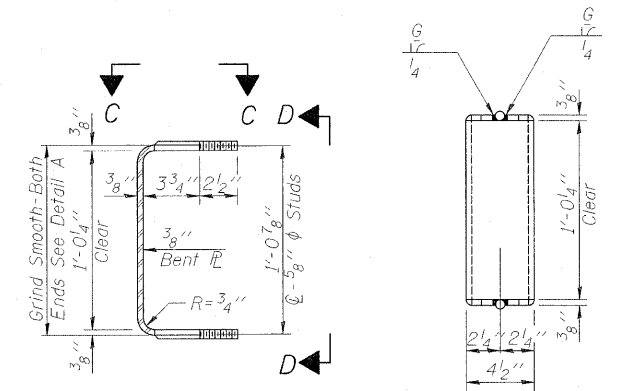
RAIL SPLICE CONNECTION
AT EXPANSION JT.



SECTION AT RAIL SPLICE

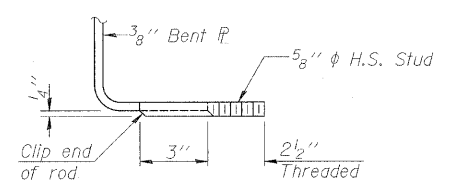


PLAN-BOTT. SPLICE PL
TYPICAL



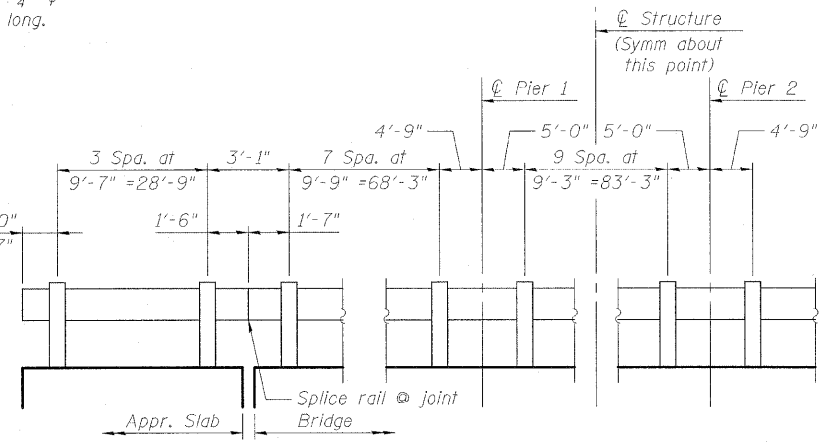
SECTION THRU BRACKET

VIEW D-D



VIEW E-E

Notes:
The contact surfaces between post flange, rail and inside face of bracket for Alternate I shall be free of all lubricants.
The nut for 5/8" φ high strength studs used in Alternate I to connect bracket to post shall be tightened to a snug fit and given an additional one half turn.



TEMPORARY BRIDGE RAIL POST SPACING

BILL OF MATERIAL

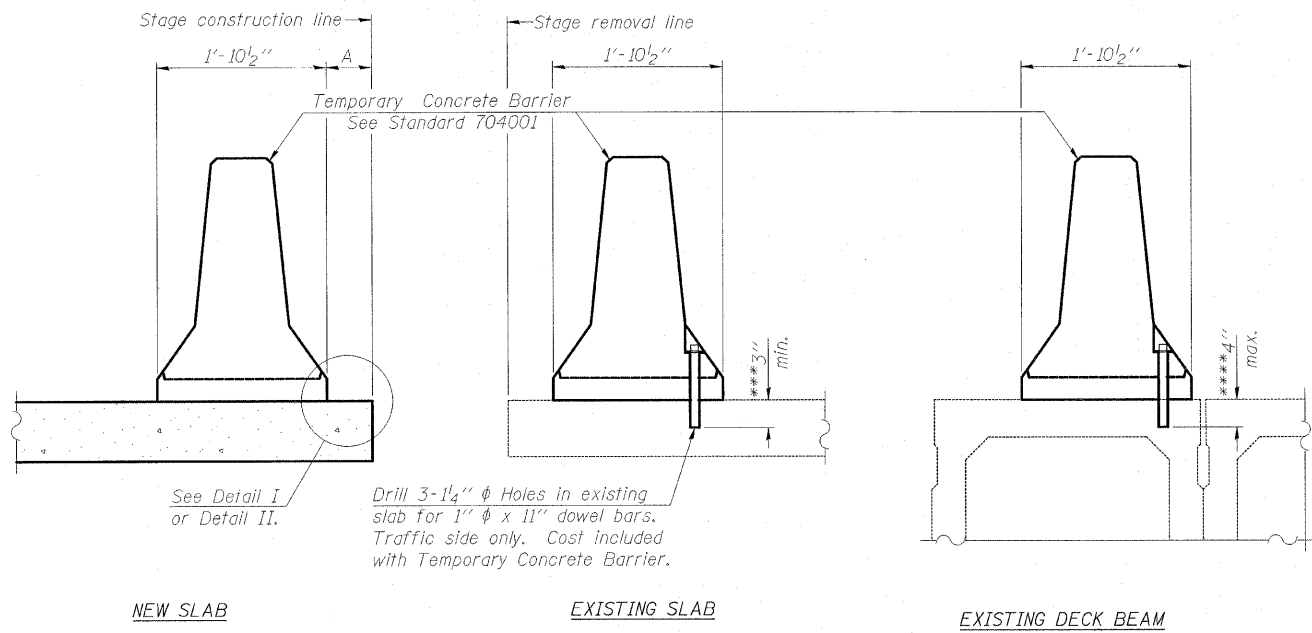
Item	Unit	Quantity
Steel Railing (Temporary)	Foot	306

STEEL RAILING (TEMPORARY)
STRUCTURE NO. 045-0016

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-4	R-VB-R	KANE	83	38
CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

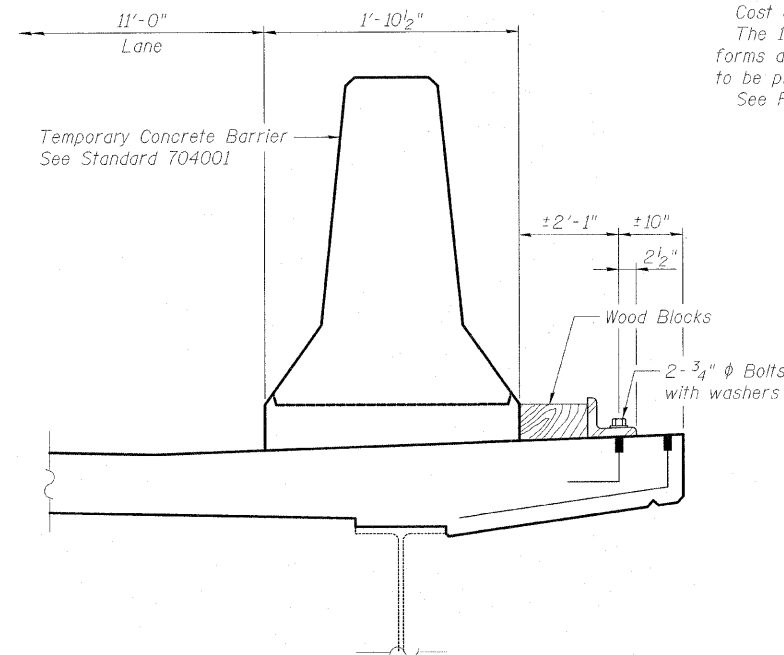


SECTIONS THRU SLAB OR DECK BEAM

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

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

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



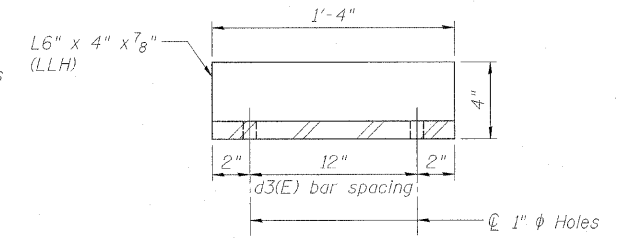
EDGE OF DECK ANCHOR DETAIL

NOTES

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

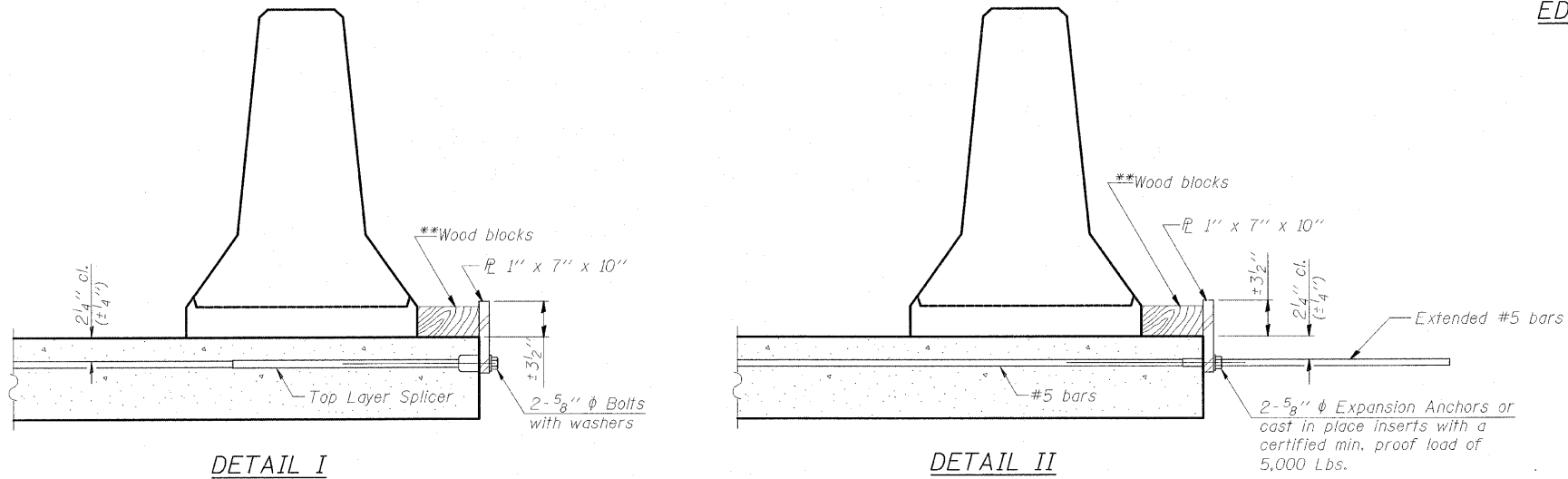
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{R} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

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



STEEL RETAINER ANGLE

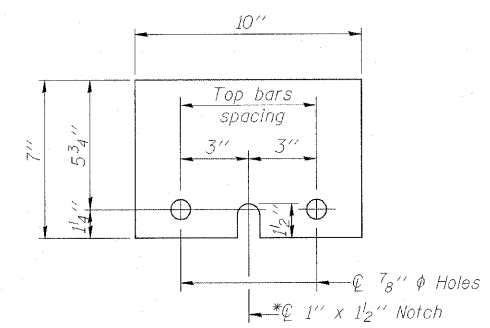
Required only at edge of deck



DETAIL I

DETAIL II

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



STEEL RETAINER \bar{R} 1" x 7" x 10"

* Required only with Detail II

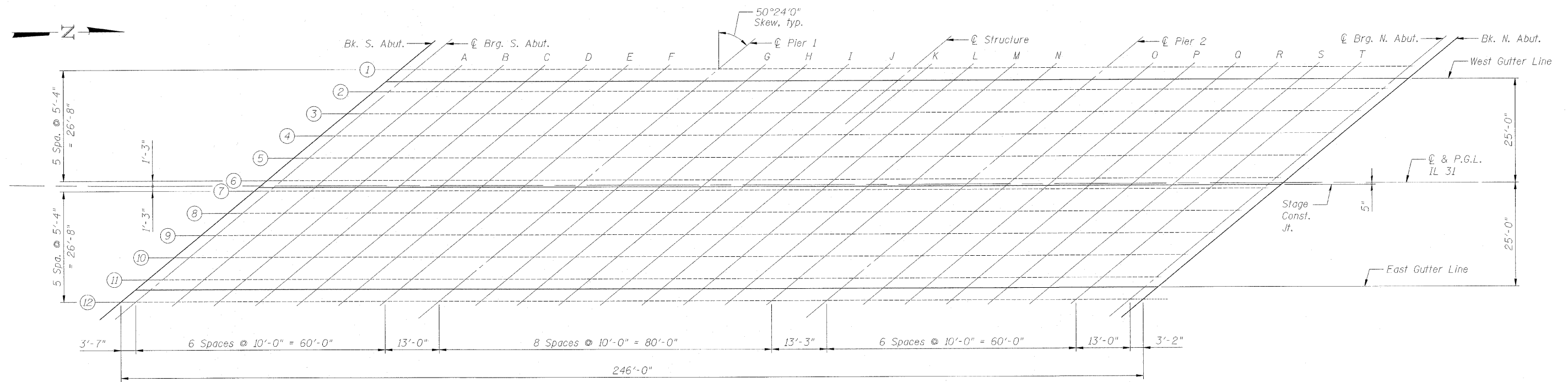
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 045-0016

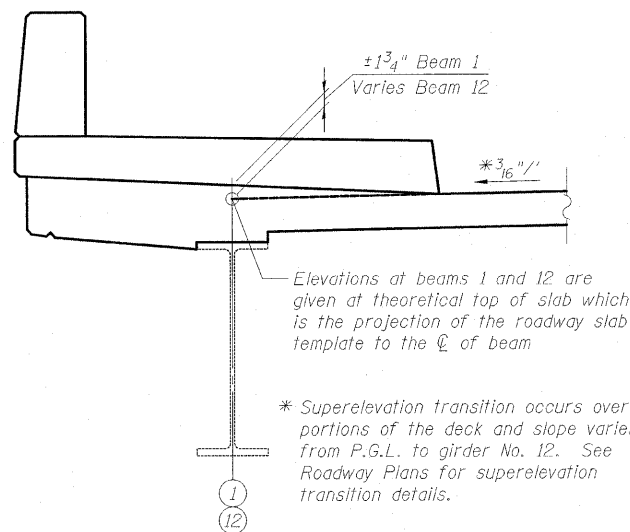
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312.228.0100
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Job. No. 910

SHEET NO. S-5 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 39
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

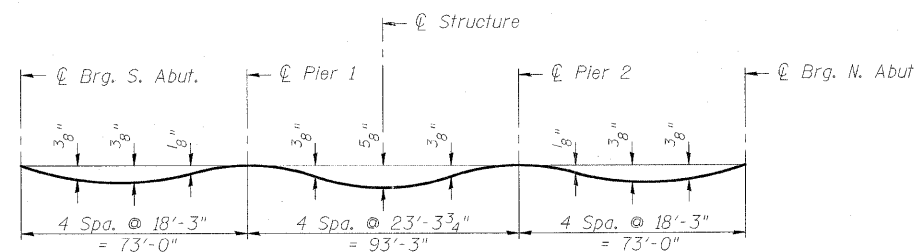
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



PROJECTION UNDER SIDEWALK DETAIL

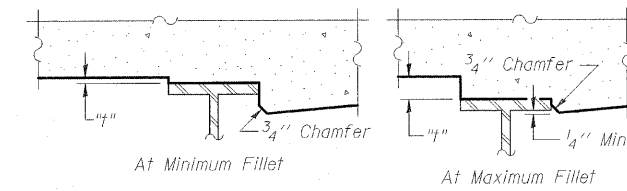


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-7 thru S-9 of S-34.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets S-7 thru S-9 of S-34, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

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Job No. 910



SHEET NO. S-6 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 40
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

TOP OF SLAB ELEVATIONS LAYOUT
STRUCTURE NO. 045-0016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

☉ Beam 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+77.53	-27.92	801.26	801.26
CL Brg South Abut	66+81.11	-27.92	801.24	801.24
A	66+91.11	-27.92	801.21	801.23
B	67+01.11	-27.92	801.16	801.20
C	67+11.11	-27.92	801.10	801.16
D	67+21.11	-27.92	801.04	801.09
E	67+31.11	-27.92	800.97	801.00
F	67+41.11	-27.92	800.89	800.90
CL Pier 1	67+54.11	-27.92	800.78	800.78
G	67+64.11	-27.92	800.68	800.69
H	67+74.11	-27.92	800.58	800.61
I	67+84.11	-27.92	800.47	800.52
J	67+94.11	-27.92	800.35	800.41
K	68+04.11	-27.92	800.22	800.29
L	68+14.11	-27.92	800.08	800.14
M	68+24.11	-27.92	799.94	799.98
N	68+34.11	-27.92	799.79	799.81
CL Pier 2	68+47.36	-27.92	799.58	799.58
O	68+57.36	-27.92	799.41	799.42
P	68+67.36	-27.92	799.23	799.26
Q	68+77.36	-27.92	799.05	799.09
R	68+87.36	-27.92	798.86	798.91
S	68+97.36	-27.92	798.66	798.71
T	69+07.36	-27.92	798.45	798.49
CL Brg North Abut	69+20.36	-27.92	798.17	798.17
Bk of North Abut	69+23.53	-27.92	798.10	798.10

West Gutter Line

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+74.00	-25.00	801.31	801.31
CL Brg South Abut	66+77.58	-25.00	801.30	801.30
A	66+87.58	-25.00	801.27	801.29
B	66+97.58	-25.00	801.22	801.25
C	67+07.58	-25.00	801.17	801.21
D	67+17.58	-25.00	801.11	801.14
E	67+27.58	-25.00	801.04	801.06
F	67+37.58	-25.00	800.97	800.97
CL Pier 1	67+50.58	-25.00	800.86	800.86
G	67+60.58	-25.00	800.76	800.77
H	67+70.58	-25.00	800.66	800.68
I	67+80.58	-25.00	800.55	800.59
J	67+90.58	-25.00	800.43	800.48
K	68+00.58	-25.00	800.31	800.36
L	68+10.58	-25.00	800.18	800.22
M	68+20.58	-25.00	800.04	800.07
N	68+30.58	-25.00	799.89	799.90
CL Pier 2	68+43.83	-25.00	799.68	799.68
O	68+53.83	-25.00	799.52	799.52
P	68+63.83	-25.00	799.34	799.36
Q	68+73.83	-25.00	799.16	799.19
R	68+83.83	-25.00	798.97	799.01
S	68+93.83	-25.00	798.78	798.81
T	69+03.83	-25.00	798.57	798.60
CL Brg North Abut	69+16.83	-25.00	798.29	798.29
Bk of North Abut	69+20.00	-25.00	798.22	798.22

☉ Beam 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+71.08	-22.58	801.36	801.36
CL Brg South Abut	66+74.66	-22.58	801.35	801.35
A	66+84.66	-22.58	801.31	801.33
B	66+94.66	-22.58	801.27	801.31
C	67+04.66	-22.58	801.22	801.26
D	67+14.66	-22.58	801.16	801.20
E	67+24.66	-22.58	801.10	801.12
F	67+34.66	-22.58	801.03	801.03
CL Pier 1	67+47.66	-22.58	800.92	800.92
G	67+57.66	-22.58	800.83	800.84
H	67+67.66	-22.58	800.73	800.75
I	67+77.66	-22.58	800.62	800.66
J	67+87.66	-22.58	800.51	800.56
K	67+97.66	-22.58	800.39	800.44
L	68+07.66	-22.58	800.26	800.30
M	68+17.66	-22.58	800.12	800.15
N	68+27.66	-22.58	799.97	799.99
CL Pier 2	68+40.91	-22.58	799.77	799.77
O	68+50.91	-22.58	799.60	799.61
P	68+60.91	-22.58	799.43	799.45
Q	68+70.91	-22.58	799.25	799.28
R	68+80.91	-22.58	799.07	799.10
S	68+90.91	-22.58	798.87	798.91
T	69+00.91	-22.58	798.67	798.69
CL Brg North Abut	69+13.91	-22.58	798.40	798.40
Bk of North Abut	69+17.08	-22.58	798.33	798.33

☉ Beam 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+64.63	-17.25	801.46	801.46
CL Brg South Abut	66+68.21	-17.25	801.45	801.45
A	66+78.21	-17.25	801.42	801.44
B	66+88.21	-17.25	801.38	801.42
C	66+98.21	-17.25	801.34	801.38
D	67+08.21	-17.25	801.29	801.32
E	67+18.21	-17.25	801.23	801.25
F	67+28.21	-17.25	801.16	801.17
CL Pier 1	67+41.21	-17.25	801.06	801.06
G	67+51.21	-17.25	800.97	800.98
H	67+61.21	-17.25	800.88	800.90
I	67+71.21	-17.25	800.77	800.81
J	67+81.21	-17.25	800.67	800.71
K	67+91.21	-17.25	800.55	800.60
L	68+01.21	-17.25	800.42	800.47
M	68+11.21	-17.25	800.29	800.32
N	68+21.21	-17.25	800.15	800.16
CL Pier 2	68+34.46	-17.25	799.95	799.95
O	68+44.46	-17.25	799.79	799.80
P	68+54.46	-17.25	799.63	799.64
Q	68+64.46	-17.25	799.45	799.48
R	68+74.46	-17.25	799.27	799.31
S	68+84.46	-17.25	799.08	799.12
T	68+94.46	-17.25	798.88	798.91
CL Brg North Abut	69+07.46	-17.25	798.62	798.62
Bk of North Abut	69+10.63	-17.25	798.55	798.55

☉ Beam 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+58.18	-11.92	801.56	801.56
CL Brg South Abut	66+61.76	-11.92	801.55	801.55
A	66+71.76	-11.92	801.52	801.54
B	66+81.76	-11.92	801.49	801.53
C	66+91.76	-11.92	801.45	801.49
D	67+01.76	-11.92	801.40	801.44
E	67+11.76	-11.92	801.35	801.37
F	67+21.76	-11.92	801.29	801.29
CL Pier 1	67+34.76	-11.92	801.19	801.19
G	67+44.76	-11.92	801.11	801.12
H	67+54.76	-11.92	801.02	801.04
I	67+64.76	-11.92	800.92	800.96
J	67+74.76	-11.92	800.82	800.87
K	67+84.76	-11.92	800.71	800.76
L	67+94.76	-11.92	800.59	800.63
M	68+04.76	-11.92	800.46	800.49
N	68+14.76	-11.92	800.32	800.34
CL Pier 2	68+28.01	-11.92	800.13	800.13
O	68+38.01	-11.92	799.98	799.98
P	68+48.01	-11.92	799.82	799.84
Q	68+58.01	-11.92	799.65	799.68
R	68+68.01	-11.92	799.47	799.51
S	68+78.01	-11.92	799.29	799.32
T	68+88.01	-11.92	799.10	799.12
CL Brg North Abut	69+01.01	-11.92	798.83	798.83
Bk of North Abut	69+04.18	-11.92	798.77	798.77

☉ Beam 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+51.74	-6.58	801.65	801.65
CL Brg South Abut	66+55.32	-6.58	801.64	801.64
A	66+65.32	-6.58	801.62	801.64
B	66+75.32	-6.58	801.60	801.63
C	66+85.32	-6.58	801.56	801.60
D	66+95.32	-6.58	801.52	801.55
E	67+05.32	-6.58	801.47	801.49
F	67+15.32	-6.58	801.41	801.42
CL Pier 1	67+28.32	-6.58	801.32	801.32
G	67+38.32	-6.58	801.25	801.25
H	67+48.32	-6.58	801.16	801.19
I	67+58.32	-6.58	801.07	801.11
J	67+68.32	-6.58	800.97	801.02
K	67+78.32	-6.58	800.86	800.91
L	67+88.32	-6.58	800.75	800.79
M	67+98.32	-6.58	800.63	800.65
N	68+08.32	-6.58	800.50	800.51
CL Pier 2	68+21.57	-6.58	800.31	800.31
O	68+31.57	-6.58	800.16	800.17
P	68+41.57	-6.58	800.01	800.02
Q	68+51.57	-6.58	799.84	799.87
R	68+61.57	-6.58	799.67	799.71
S	68+71.57	-6.58	799.49	799.53
T	68+81.57	-6.58	799.30	799.33
CL Brg North Abut	68+94.57	-6.58	799.05	799.05
Bk of North Abut	68+97.74	-6.58	798.98	798.98

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

**TOP OF SLAB ELEVATIONS I
STRUCTURE NO. 045-0016**

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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Job. No. 910



SHEET NO. S-7	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 41
S-34 SHEETS	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ⓞ Beam 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+45.29	-1.25	801.74	801.74
CL Brg South Abut	66+48.87	-1.25	801.74	801.74
A	66+58.87	-1.25	801.72	801.74
B	66+68.87	-1.25	801.70	801.73
C	66+78.87	-1.25	801.67	801.70
D	66+88.87	-1.25	801.63	801.66
E	66+98.87	-1.25	801.59	801.60
F	67+08.87	-1.25	801.53	801.54
CL Pier 1	67+21.87	-1.25	801.45	801.45
G	67+31.87	-1.25	801.38	801.39
H	67+41.87	-1.25	801.30	801.32
I	67+51.87	-1.25	801.21	801.25
J	67+61.87	-1.25	801.12	801.16
K	67+71.87	-1.25	801.02	801.06
L	67+81.87	-1.25	800.91	800.94
M	67+91.87	-1.25	800.79	800.81
N	68+01.87	-1.25	800.66	800.67
CL Pier 2	68+15.12	-1.25	800.49	800.49
O	68+25.12	-1.25	800.34	800.35
P	68+35.12	-1.25	800.19	800.20
Q	68+45.12	-1.25	800.03	800.06
R	68+55.12	-1.25	799.87	799.90
S	68+65.12	-1.25	799.69	799.72
T	68+75.12	-1.25	799.51	799.53
CL Brg North Abut	68+88.12	-1.25	799.26	799.26
Bk of North Abut	68+91.29	-1.25	799.20	799.20

Ⓞ IL 31 & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+43.78	0.00	801.76	801.76
CL Brg South Abut	66+47.36	0.00	801.76	801.76
A	66+57.36	0.00	801.74	801.76
B	66+67.36	0.00	801.72	801.75
C	66+77.36	0.00	801.69	801.72
D	66+87.36	0.00	801.66	801.68
E	66+97.36	0.00	801.61	801.63
F	67+07.36	0.00	801.56	801.57
CL Pier 1	67+20.36	0.00	801.48	801.48
G	67+30.36	0.00	801.41	801.42
H	67+40.36	0.00	801.33	801.35
I	67+50.36	0.00	801.25	801.28
J	67+60.36	0.00	801.15	801.19
K	67+70.36	0.00	801.05	801.09
L	67+80.36	0.00	800.94	800.98
M	67+90.36	0.00	800.83	800.85
N	68+00.36	0.00	800.70	800.71
CL Pier 2	68+13.61	0.00	800.53	800.53
O	68+23.61	0.00	800.38	800.39
P	68+33.61	0.00	800.23	800.25
Q	68+43.61	0.00	800.08	800.10
R	68+53.61	0.00	799.91	799.94
S	68+63.61	0.00	799.74	799.77
T	68+73.61	0.00	799.56	799.58
CL Brg North Abut	68+86.61	0.00	799.31	799.31
Bk of North Abut	68+89.78	0.00	799.25	799.25

Stage Construction Line

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+43.27	0.42	801.76	801.76
CL Brg South Abut	66+46.85	0.42	801.76	801.76
A	66+56.85	0.42	801.74	801.76
B	66+66.85	0.42	801.72	801.75
C	66+76.85	0.42	801.69	801.72
D	66+86.85	0.42	801.65	801.68
E	66+96.85	0.42	801.61	801.62
F	67+06.85	0.42	801.56	801.56
CL Pier 1	67+19.85	0.42	801.48	801.48
G	67+29.85	0.42	801.41	801.41
H	67+39.85	0.42	801.33	801.35
I	67+49.85	0.42	801.25	801.28
J	67+59.85	0.42	801.15	801.19
K	67+69.85	0.42	801.05	801.09
L	67+79.85	0.42	800.94	800.98
M	67+89.85	0.42	800.83	800.85
N	67+99.85	0.42	800.70	800.71
CL Pier 2	68+13.10	0.42	800.53	800.53
O	68+23.10	0.42	800.39	800.39
P	68+33.10	0.42	800.24	800.25
Q	68+43.10	0.42	800.08	800.10
R	68+53.10	0.42	799.91	799.94
S	68+63.10	0.42	799.74	799.77
T	68+73.10	0.42	799.56	799.58
CL Brg North Abut	68+86.10	0.42	799.31	799.31
Bk of North Abut	68+89.27	0.42	799.25	799.25

Ⓞ Beam 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+42.27	1.25	801.76	801.76
CL Brg South Abut	66+45.85	1.25	801.76	801.76
A	66+55.85	1.25	801.74	801.75
B	66+65.85	1.25	801.71	801.74
C	66+75.85	1.25	801.68	801.71
D	66+85.85	1.25	801.64	801.67
E	66+95.85	1.25	801.60	801.62
F	67+05.85	1.25	801.55	801.56
CL Pier 1	67+18.85	1.25	801.47	801.47
G	67+28.85	1.25	801.40	801.41
H	67+38.85	1.25	801.33	801.34
I	67+48.85	1.25	801.24	801.27
J	67+58.85	1.25	801.15	801.19
K	67+68.85	1.25	801.05	801.09
L	67+78.85	1.25	800.94	800.98
M	67+88.85	1.25	800.83	800.85
N	67+98.85	1.25	800.70	800.71
CL Pier 2	68+12.10	1.25	800.53	800.53
O	68+22.10	1.25	800.39	800.39
P	68+32.10	1.25	800.24	800.25
Q	68+42.10	1.25	800.08	800.11
R	68+52.10	1.25	799.92	799.95
S	68+62.10	1.25	799.74	799.77
T	68+72.10	1.25	799.56	799.58
CL Brg North Abut	68+85.10	1.25	799.32	799.32
Bk of North Abut	68+88.27	1.25	799.26	799.26

Ⓞ Beam 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+35.82	6.58	801.77	801.77
CL Brg South Abut	66+39.40	6.58	801.76	801.76
A	66+49.40	6.58	801.73	801.75
B	66+59.40	6.58	801.69	801.72
C	66+69.40	6.58	801.64	801.68
D	66+79.40	6.58	801.58	801.62
E	66+89.40	6.58	801.55	801.57
F	66+99.40	6.58	801.50	801.51
CL Pier 1	67+12.40	6.58	801.43	801.43
G	67+22.40	6.58	801.36	801.37
H	67+32.40	6.58	801.29	801.32
I	67+42.40	6.58	801.21	801.25
J	67+52.40	6.58	801.13	801.17
K	67+62.40	6.58	801.03	801.08
L	67+72.40	6.58	800.93	800.97
M	67+82.40	6.58	800.82	800.85
N	67+92.40	6.58	800.70	800.71
CL Pier 2	68+05.65	6.58	800.53	800.53
O	68+15.65	6.58	800.40	800.40
P	68+25.65	6.58	800.25	800.27
Q	68+35.65	6.58	800.10	800.13
R	68+45.65	6.58	799.94	799.98
S	68+55.65	6.58	799.77	799.81
T	68+65.65	6.58	799.60	799.62
CL Brg North Abut	68+78.65	6.58	799.36	799.36
Bk of North Abut	68+81.82	6.58	799.30	799.30

Ⓞ Beam 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+29.38	11.92	801.80	801.80
CL Brg South Abut	66+32.96	11.92	801.79	801.79
A	66+42.96	11.92	801.75	801.77
B	66+52.96	11.92	801.69	801.72
C	66+62.96	11.92	801.63	801.66
D	66+72.96	11.92	801.55	801.58
E	66+82.96	11.92	801.49	801.51
F	66+92.96	11.92	801.45	801.45
CL Pier 1	67+05.96	11.92	801.38	801.38
G	67+15.96	11.92	801.32	801.33
H	67+25.96	11.92	801.26	801.28
I	67+35.96	11.92	801.18	801.22
J	67+45.96	11.92	801.10	801.15
K	67+55.96	11.92	801.01	801.06
L	67+65.96	11.92	800.91	800.95
M	67+75.96	11.92	800.81	800.84
N	67+85.96	11.92	800.69	800.71
CL Pier 2	67+99.21	11.92	800.53	800.53
O	68+09.21	11.92	800.40	800.41
P	68+19.21	11.92	800.26	800.28
Q	68+29.21	11.92	800.12	800.15
R	68+39.21	11.92	799.96	800.00
S	68+49.21	11.92	799.80	799.83
T	68+59.21	11.92	799.63	799.65
CL Brg North Abut	68+72.21	11.92	799.40	799.40
Bk of North Abut	68+75.38	11.92	799.34	799.34

TOP OF SLAB ELEVATIONS II
STRUCTURE NO. 045-0016

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
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Job No. 910

SHEET NO. S-8
S-34 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	42

CONTRACT NO. 60C06
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

☉ Beam 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+22.93	17.25	801.84	801.84
CL Brg South Abut	66+26.51	17.25	801.83	801.83
A	66+36.51	17.25	801.78	801.80
B	66+46.51	17.25	801.72	801.75
C	66+56.51	17.25	801.63	801.67
D	66+66.51	17.25	801.54	801.58
E	66+76.51	17.25	801.45	801.47
F	66+86.51	17.25	801.39	801.40
CL Pier 1	66+99.51	17.25	801.33	801.33
G	67+09.51	17.25	801.28	801.29
H	67+19.51	17.25	801.22	801.24
I	67+29.51	17.25	801.15	801.19
J	67+39.51	17.25	801.07	801.12
K	67+49.51	17.25	800.99	801.04
L	67+59.51	17.25	800.89	800.94
M	67+69.51	17.25	800.79	800.82
N	67+79.51	17.25	800.68	800.70
CL Pier 2	67+92.76	17.25	800.53	800.53
O	68+02.76	17.25	800.40	800.41
P	68+12.76	17.25	800.27	800.29
Q	68+22.76	17.25	800.13	800.16
R	68+32.76	17.25	799.98	800.02
S	68+42.76	17.25	799.82	799.86
T	68+52.76	17.25	799.66	799.68
CL Brg North Abut	68+65.76	17.25	799.43	799.43
Bk of North Abut	68+68.93	17.25	799.37	799.37

☉ Beam 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+16.48	22.58	801.90	801.90
CL Brg South Abut	66+20.06	22.58	801.88	801.88
A	66+30.06	22.58	801.83	801.85
B	66+40.06	22.58	801.76	801.80
C	66+50.06	22.58	801.67	801.71
D	66+60.06	22.58	801.56	801.59
E	66+70.06	22.58	801.45	801.47
F	66+80.06	22.58	801.33	801.34
CL Pier 1	66+93.06	22.58	801.28	801.28
G	67+03.06	22.58	801.23	801.24
H	67+13.06	22.58	801.17	801.20
I	67+23.06	22.58	801.11	801.15
J	67+33.06	22.58	801.04	801.09
K	67+43.06	22.58	800.96	801.01
L	67+53.06	22.58	800.87	800.91
M	67+63.06	22.58	800.78	800.80
N	67+73.06	22.58	800.67	800.68
CL Pier 2	67+86.31	22.58	800.52	800.52
O	67+96.31	22.58	800.40	800.41
P	68+06.31	22.58	800.27	800.29
Q	68+16.31	22.58	800.14	800.17
R	68+26.31	22.58	799.99	800.03
S	68+36.31	22.58	799.84	799.88
T	68+46.31	22.58	799.68	799.70
CL Brg North Abut	68+59.31	22.58	799.46	799.46
Bk of North Abut	68+62.48	22.58	799.41	799.41

East Gutter Line

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+13.56	25.00	801.94	801.94
CL Brg South Abut	66+17.14	25.00	801.92	801.92
A	66+27.14	25.00	801.85	801.87
B	66+37.14	25.00	801.79	801.82
C	66+47.14	25.00	801.69	801.73
D	66+57.14	25.00	801.58	801.61
E	66+67.14	25.00	801.46	801.48
F	66+77.14	25.00	801.33	801.34
CL Pier 1	66+90.14	25.00	801.26	801.26
G	67+00.14	25.00	801.21	801.22
H	67+10.14	25.00	801.15	801.18
I	67+20.14	25.00	801.09	801.13
J	67+30.14	25.00	801.02	801.07
K	67+40.14	25.00	800.94	800.99
L	67+50.14	25.00	800.86	800.90
M	67+60.14	25.00	800.77	800.79
N	67+70.14	25.00	800.67	800.68
CL Pier 2	67+83.39	25.00	800.52	800.52
O	67+93.39	25.00	800.40	800.41
P	68+03.39	25.00	800.27	800.29
Q	68+13.39	25.00	800.14	800.17
R	68+23.39	25.00	800.00	800.03
S	68+33.39	25.00	799.85	799.88
T	68+43.39	25.00	799.69	799.71
CL Brg North Abut	68+56.39	25.00	799.47	799.47
Bk of North Abut	68+59.56	25.00	799.42	799.42

☉ Beam 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk of South Abut	66+10.03	27.92	801.98	801.98
CL Brg South Abut	66+13.61	27.92	801.96	801.96
A	66+23.61	27.92	801.89	801.92
B	66+33.61	27.92	801.82	801.86
C	66+43.61	27.92	801.72	801.78
D	66+53.61	27.92	801.60	801.65
E	66+63.61	27.92	801.47	801.50
F	66+73.61	27.92	801.34	801.35
CL Pier 1	66+86.61	27.92	801.22	801.22
G	66+96.61	27.92	801.18	801.19
H	67+06.61	27.92	801.13	801.16
I	67+16.61	27.92	801.07	801.12
J	67+26.61	27.92	801.00	801.07
K	67+36.61	27.92	800.93	801.00
L	67+46.61	27.92	800.84	800.90
M	67+56.61	27.92	800.75	800.79
N	67+66.61	27.92	800.66	800.67
CL Pier 2	67+79.86	27.92	800.51	800.51
O	67+89.86	27.92	800.40	800.40
P	67+99.86	27.92	800.27	800.30
Q	68+09.86	27.92	800.14	800.18
R	68+19.86	27.92	800.00	800.05
S	68+29.86	27.92	799.86	799.91
T	68+39.86	27.92	799.70	799.73
CL Brg North Abut	68+52.86	27.92	799.49	799.49
Bk of North Abut	68+56.03	27.92	799.43	799.43

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

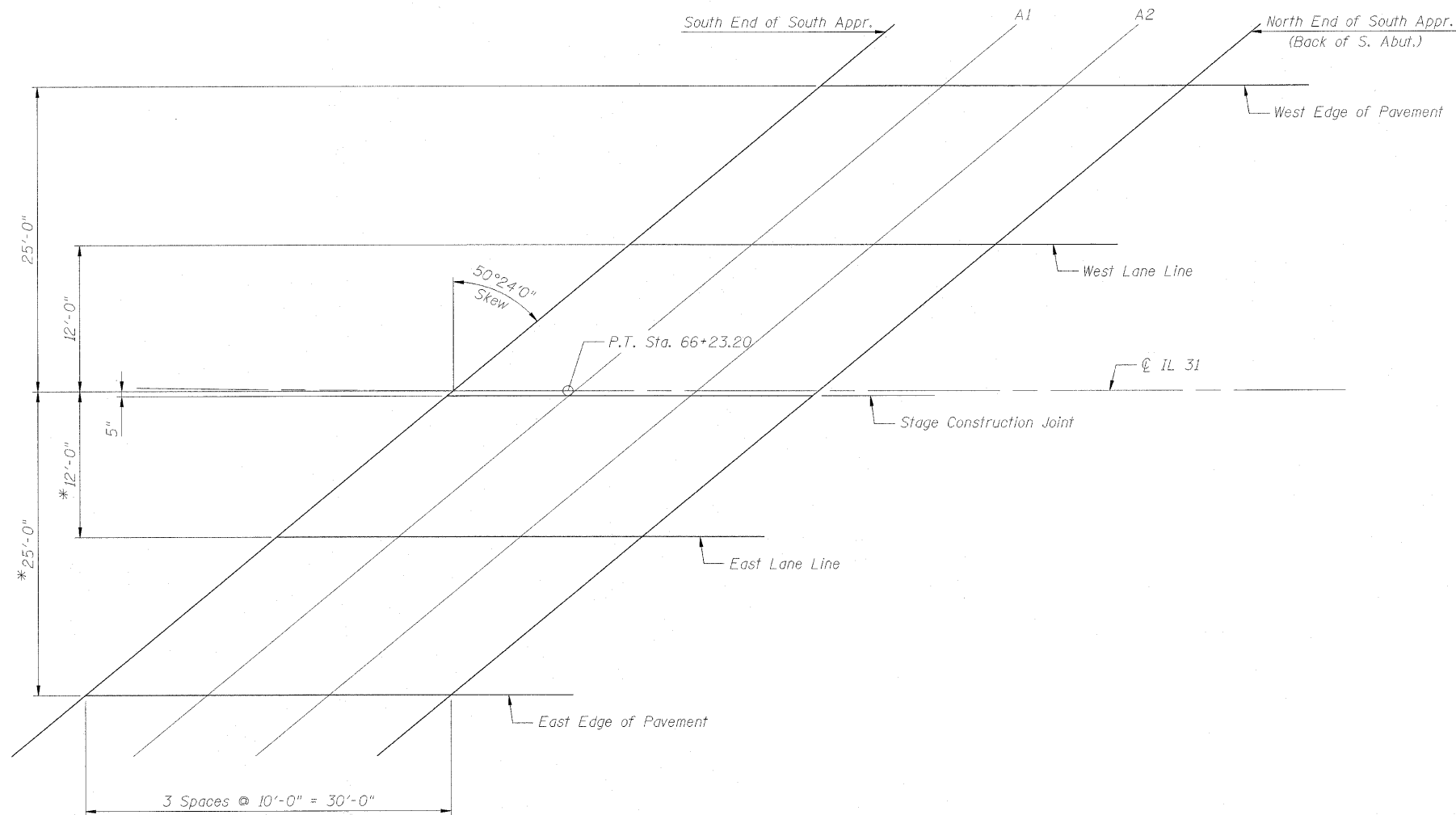
TOP OF SLAB ELEVATIONS III
STRUCTURE NO. 045-0016

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job. No. 910



SHEET NO. S-9 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 43
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



*Dimensions shown are taken from local tangent to CL IL 31 .
Offsets provided in tables are taken from CL IL 31 .

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of South Appr.	66+44.00	-25.00	801.37
A1	66+54.00	-25.00	801.36
A2	66+64.00	-25.00	801.34
N. End of South Appr.	66+74.00	-25.00	801.31

WEST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of South Appr.	66+28.29	-12.00	801.57
A1	66+38.29	-12.00	801.57
A2	66+48.29	-12.00	801.57
N. End of South Appr.	66+58.29	-12.00	801.56

CL IL 31 \& PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End of South Appr.	66+13.80	0.00	801.74
A1	66+23.78	0.00	801.76
A2	66+33.78	0.00	801.76
N. End of South Appr.	66+43.78	0.00	801.76

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of South Appr.	66+13.27	0.44	801.75
A1	66+23.27	0.42	801.76
A2	66+33.27	0.42	801.76
N. End of South Appr.	66+43.27	0.42	801.76

EAST LANE LINE

Location	Station	*Offset	Theoretical Grade Elevations
S. End of South Appr.	65+99.40	12.13	801.85
A1	66+09.35	12.04	801.84
A2	66+19.29	12.00	801.83
N. End of South Appr.	66+29.27	12.00	801.80

EAST EDGE OF PAVEMENT

Location	Station	*Offset	Theoretical Grade Elevations
S. End of South Appr.	65+84.00	25.36	802.07
A1	65+93.89	25.20	802.03
A2	66+03.78	25.09	801.99
N. End of South Appr.	66+13.66	25.02	801.94

TOP OF SOUTH APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 045-0016

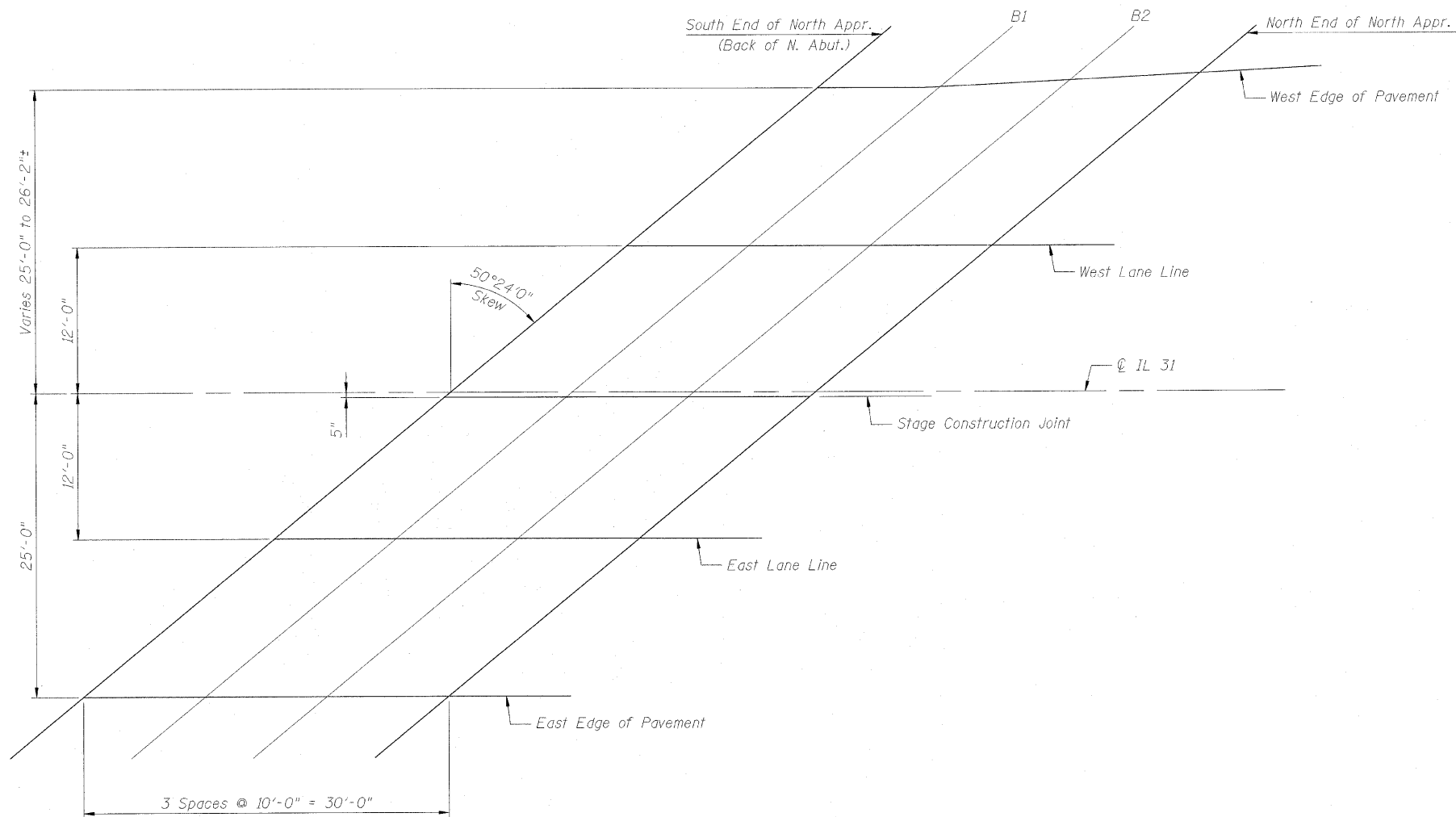
DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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Job No. 910

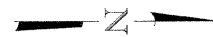


SHEET NO. S-10	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 44
S-34 SHEETS	CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	69+20.00	-25.00	798.22
B1	69+30.08	-25.07	798.00
B2	69+40.75	-25.61	797.74
N. End of North Appr.	69+51.40	-26.16	797.47

WEST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	69+04.29	-12.00	798.77
B1	69+14.29	-12.00	798.55
B2	69+24.29	-12.00	798.33
N. End of North Appr.	69+34.29	-12.00	798.10

CL IL 31 & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	68+89.78	0.00	799.25
B1	68+99.78	0.00	799.05
B2	69+09.78	0.00	798.84
N. End of North Appr.	69+19.78	0.00	798.62

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	68+89.28	0.42	799.25
B1	68+99.28	0.42	799.05
B2	69+09.28	0.42	798.84
N. End of North Appr.	69+19.28	0.42	798.62

EAST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	68+75.27	12.00	799.34
B1	68+85.27	12.00	799.15
B2	68+95.27	12.00	798.95
N. End of North Appr.	69+05.27	12.00	798.74

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of North Appr.	68+59.56	25.00	799.42
B1	68+69.56	25.00	799.24
B2	68+79.56	25.00	799.05
N. End of North Appr.	68+89.56	25.00	798.86

TOP OF NORTH APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 045-0016

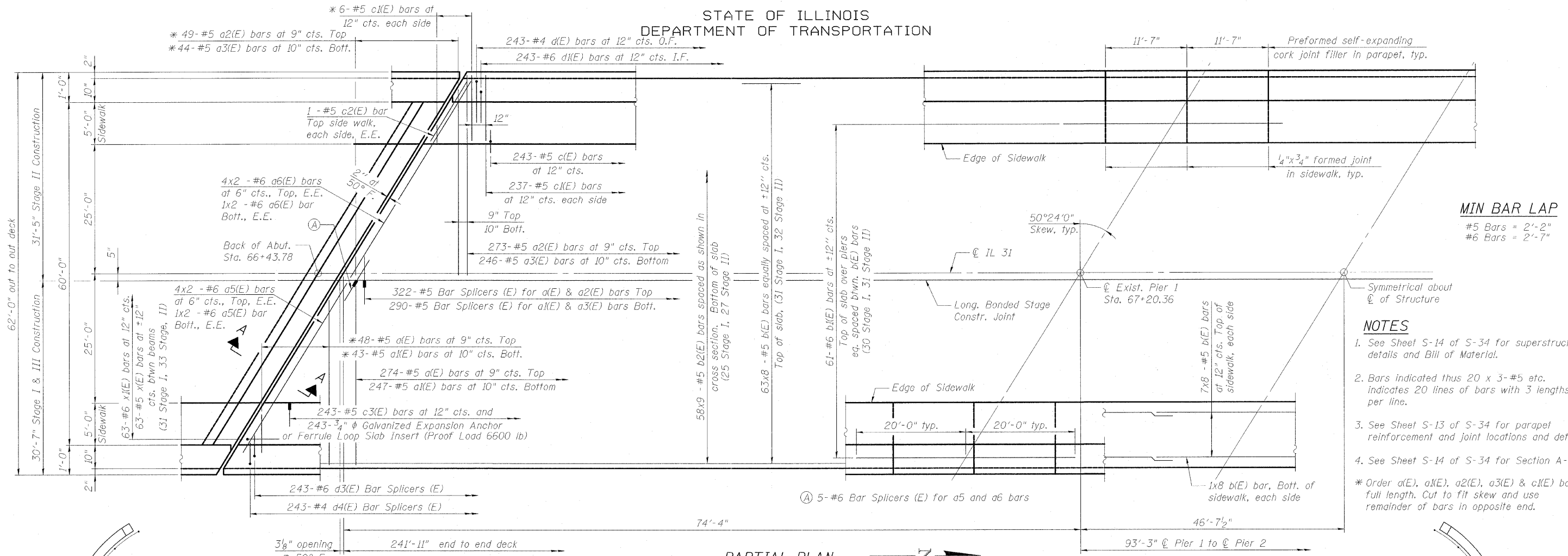
DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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SHEET NO. S-11	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 45
S-34 SHEETS	CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

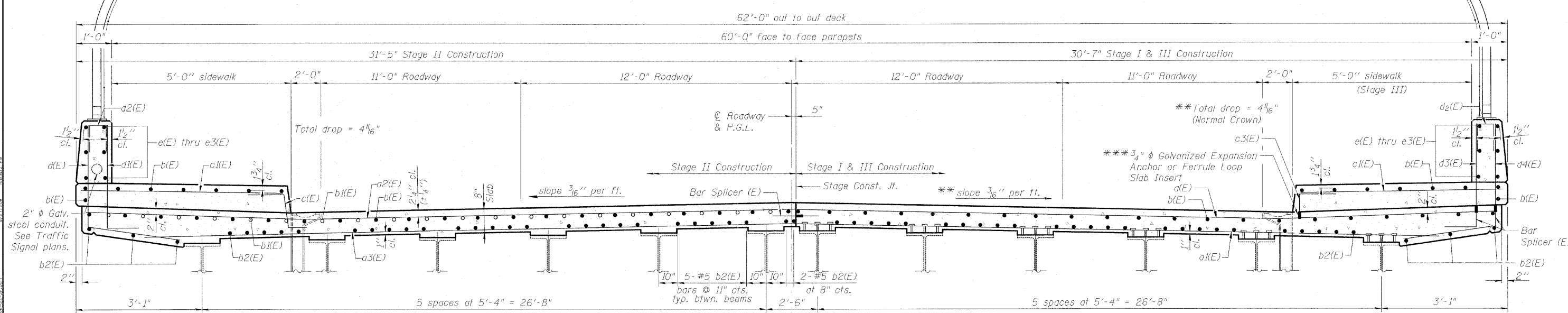
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



MIN BAR LAP
 #5 Bars = 2'-2"
 #6 Bars = 2'-7"

- NOTES**
1. See Sheet S-14 of S-34 for superstructure details and Bill of Material.
 2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 3. See Sheet S-13 of S-34 for parapet reinforcement and joint locations and details.
 4. See Sheet S-14 of S-34 for Section A-A.
- * Order a(E), a1(E), a2(E), a3(E) & c(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PARTIAL PLAN



CROSS SECTION
(Looking North)

SUPERSTRUCTURE PLAN
STRUCTURE NO. 045-0016

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

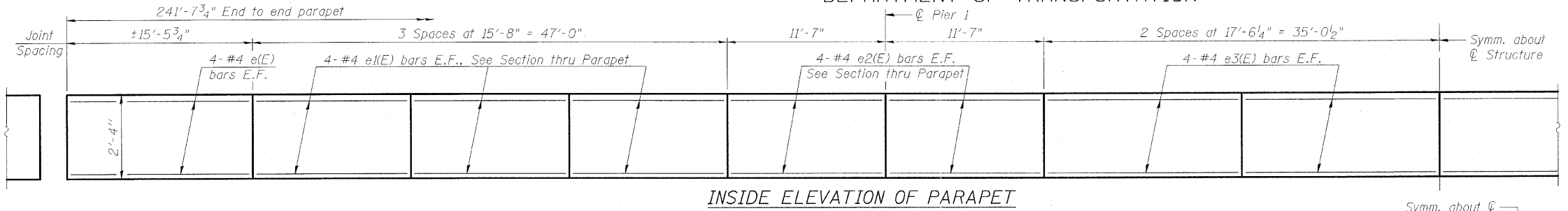
** Slope varies due to superelevation tangent run out. Superelevation transition occurs from Sta. 65+70 to Sta. 66+73.5 and cross-slope transitions from Full S.E. (2.0%) to normal crown.

*** Cost included with Reinforcement Bars, Epoxy Coated.

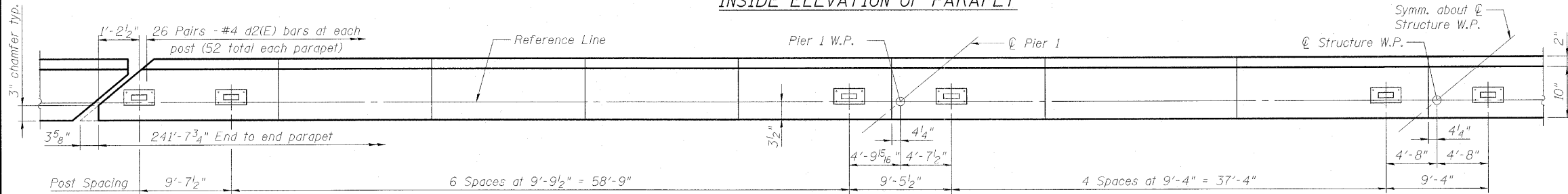
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SHEET NO. S-12	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3887	R-VB-R	KANE	83	46
S-34 SHEETS		CONTRACT NO. 60C06			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

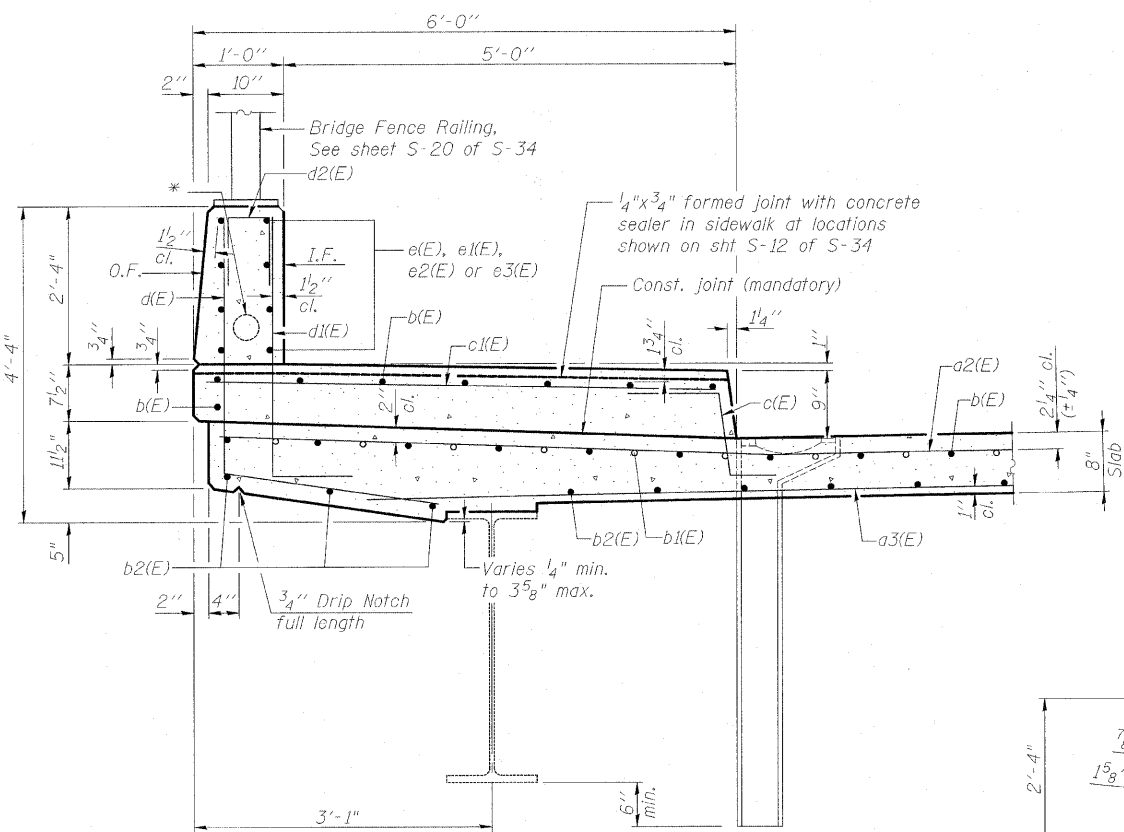
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



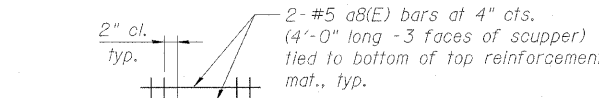
INSIDE ELEVATION OF PARAPET



PARAPET PLAN/FENCE POST SPACES

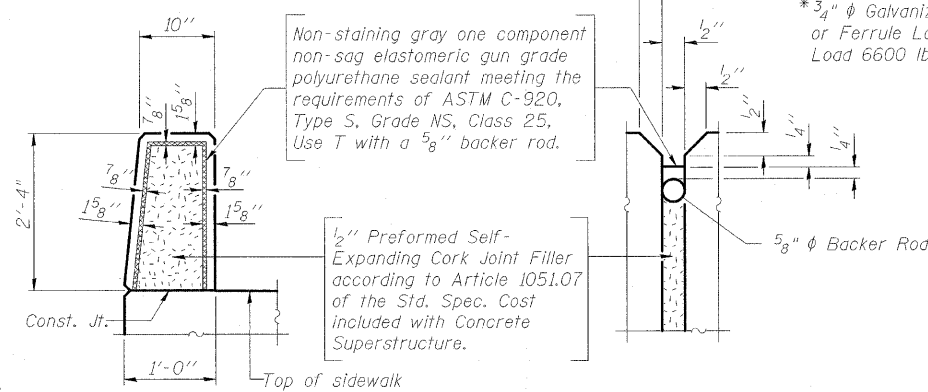


SECTION THRU WEST SIDEWALK

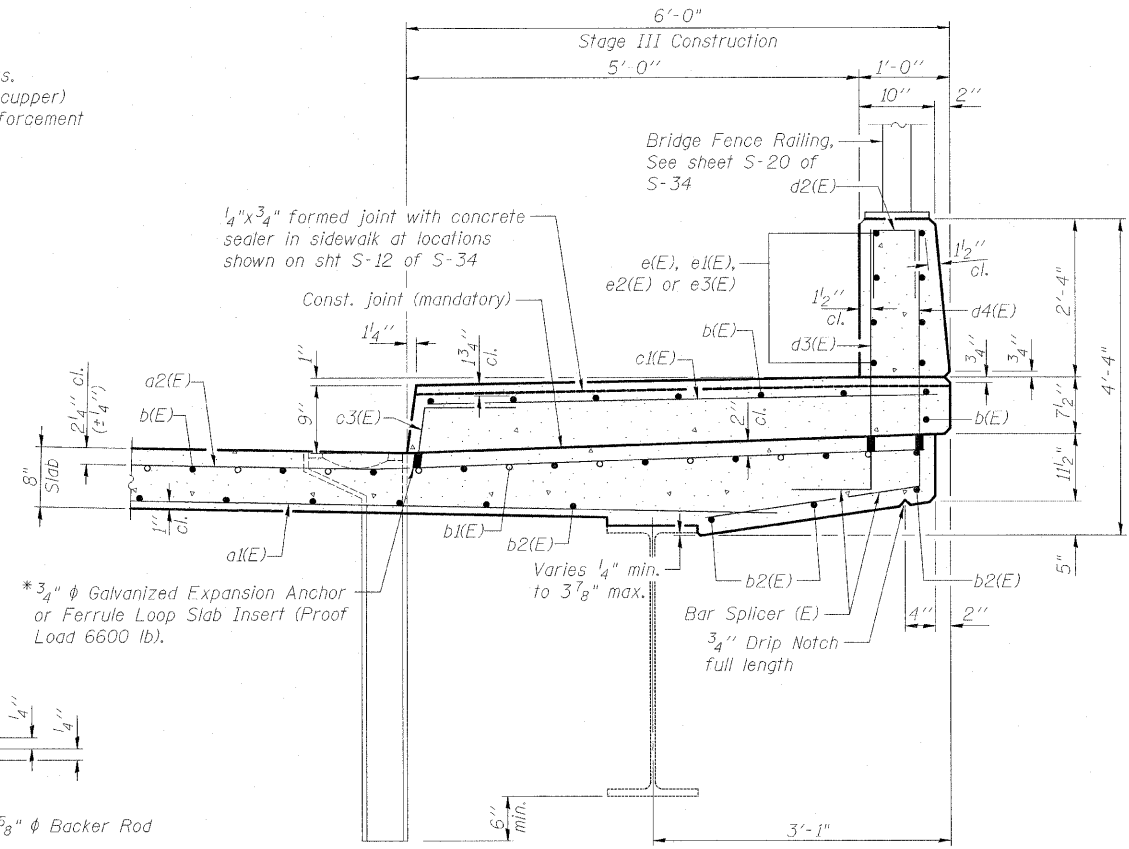


SCUPPER DETAIL

Space transverse bars to miss scupper and cut longitudinal bars as necessary at scupper to provide 2" cl.



PARAPET JOINT DETAILS



SECTION THRU EAST SIDEWALK

SUPERSTRUCTURE DETAILS I
STRUCTURE NO. 045-0016

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

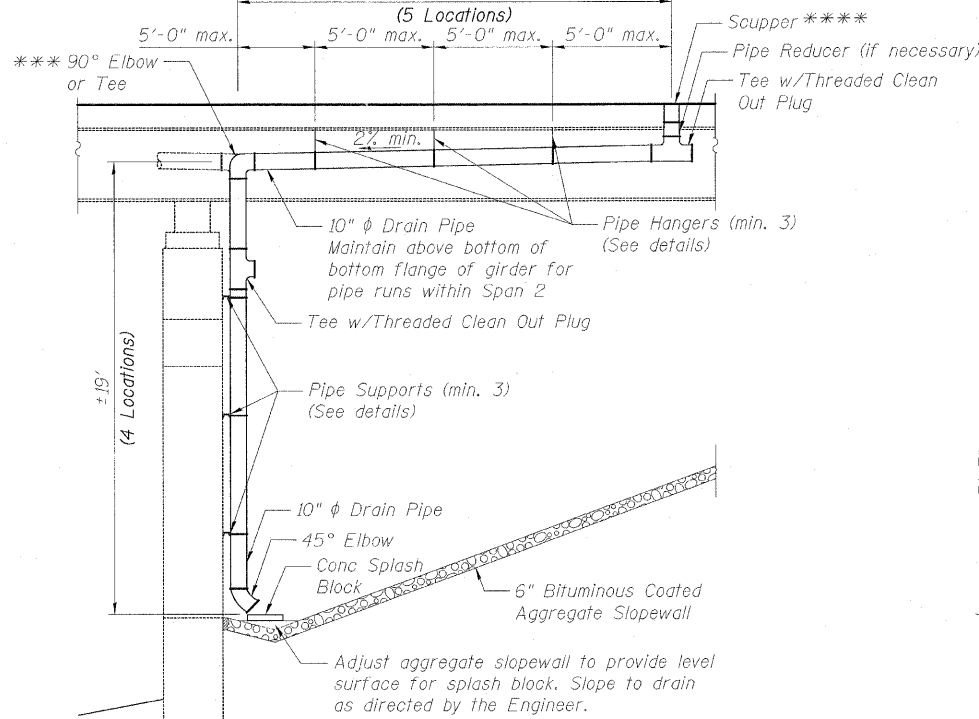
* 2" φ Galvanized steel conduit embedded in parapet with expansion couplings at joint locations. Provide 1/2" clear of all reinforcement bars. See Traffic Signal Interconnect Plans for details.

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SHEET NO. S-13 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 47
	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C06	

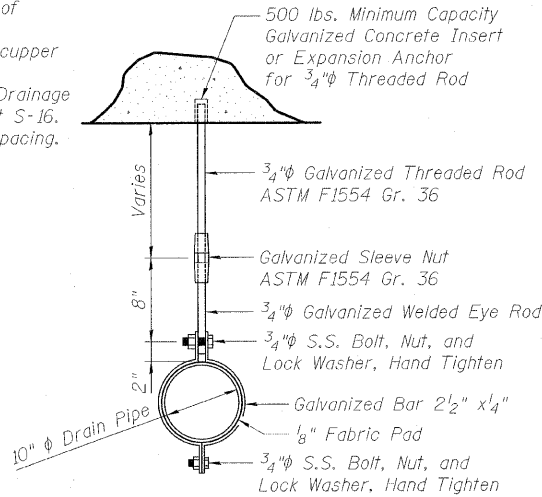
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Varies ±9'-6" to ±11'-0"

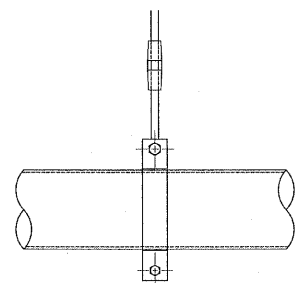


DRAINAGE SYSTEM TYPICAL ELEVATION

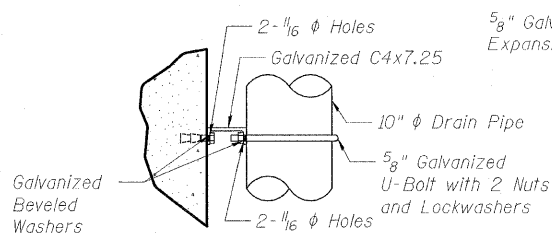
See sheet S-2 for locations of Drainage System.
*** Use tee when connecting 2 scupper outlets to downspout.
**** Scupper will be paid for as Drainage Scupper DS-12M10, see sheet S-16. See sheet S-1 for scupper spacing.



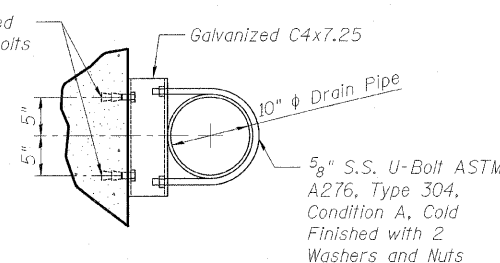
PIPE HANGER SECTION



PIPE HANGER ELEVATION



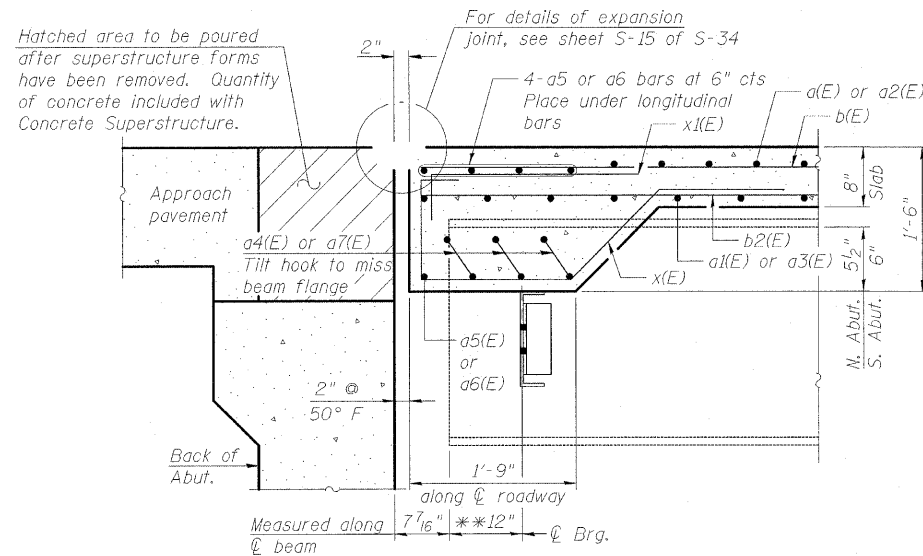
PIPE SUPPORT ELEVATION



PIPE SUPPORT PLAN

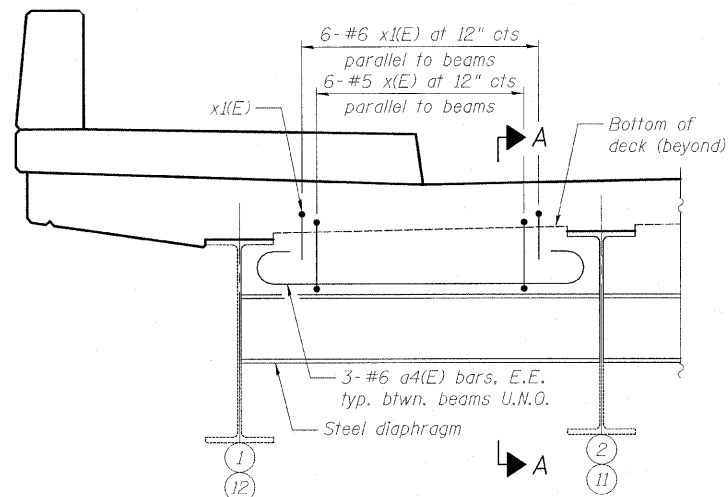
DRAINAGE SYSTEM

For 3 scuppers located near abutments, see sheet S-16 for Downspout Details



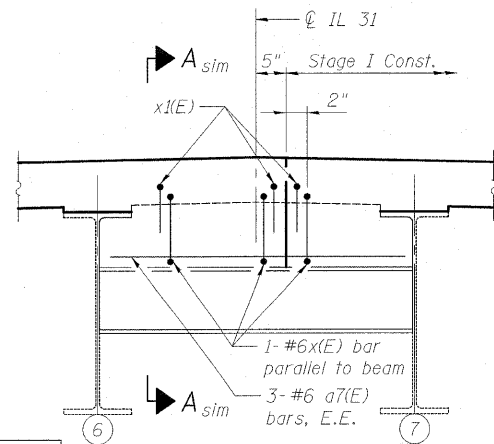
SECTION A-A

(Dimensions at right Ls to back of abutment unless noted otherwise)
** Exist beam flange is chamfered, max dimension shown



DECK END DIAPHRAGM

(Typical between beams U.N.O.)



DECK DIAPHRAGM AT STAGE CONSTRUCTION

(Looking North)
(Dimensions at Rt Ls to Rldy)

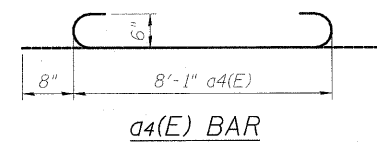
DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

SUPERSTRUCTURE
BILL OF MATERIAL

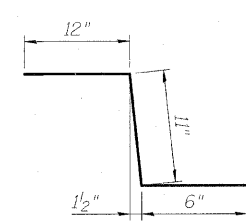
Bar	No.	Size	Length	Shape	
a(E)	322	#5	30'-1"	—	
a1(E)	290	#5	29'-4"	—	
a2(E)	322	#5	30'-11"	—	
a3(E)	290	#5	30'-2"	—	
a4(E)	60	#6	9'-5"	—	
a5(E)	20	#6	25'-1"	—	
a6(E)	20	#6	25'-7"	—	
a7(E)	6	#6	3'-2"	—	
a8(E)	48	#5	4'-0"	—	
b(E)	632	#5	32'-2"	—	
b1(E)	122	#6	40'-0"	—	
b2(E)	522	#5	28'-10"	—	
c(E)	243	#5	2'-5"	—	
c1(E)	486	#5	5'-7"	—	
c2(E)	4	#5	8'-5"	—	
c3(E)	243	#5	1'-9"	—	
d(E)	243	#4	5'-9"	—	
d1(E)	243	#6	4'-6"	—	
d2(E)	104	#4	2'-0"	—	
d3(E)	243	#6	2'-10"	—	
d4(E)	243	#4	2'-10"	—	
e(E)	32	#4	15'-2"	—	
e1(E)	96	#4	15'-4"	—	
e2(E)	64	#4	11'-3"	—	
e3(E)	64	#4	17'-2"	—	
x(E)	126	#5	6'-8"	—	
x1(E)	126	#6	4'-1"	—	
Reinforcement Bars, Epoxy Coated				Pound	96,130
Concrete Superstructure				Cu. Yd.	567.4
Drainage System				L. Sum	1
Bridge Deck Grooving				Sq. Yd.	1,291
Protective Coat				Sq. Yd.	1,824

Bars indicated thus 1 x 4 - #8 etc. indicates 1 line of bars with 4 lengths per line.

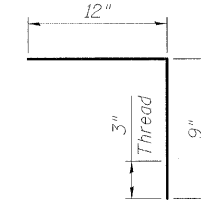
* Bars d3(E), and d4(E) are to be furnished by bar splicer supplier and cost included in the contract unit price for Bar Splicers. See sheet S-34 of S-34 for bar splicer assembly details.



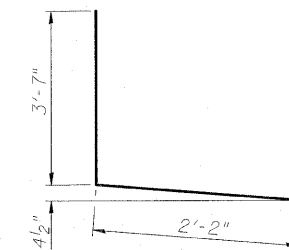
a4(E) BAR



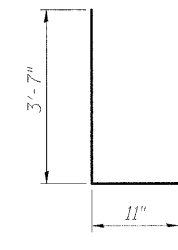
BAR c(E)



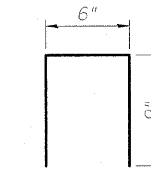
BAR c3(E)



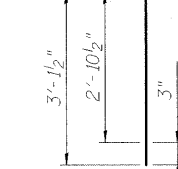
BAR d(E)



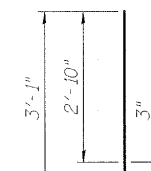
BAR d1(E)



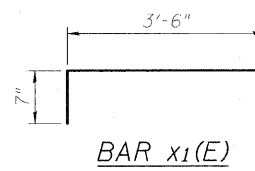
BAR d2(E)



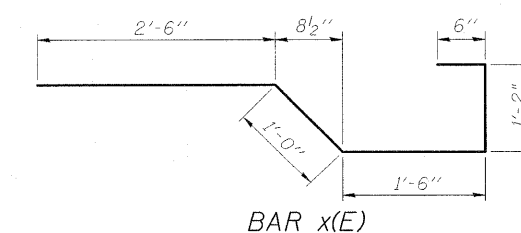
*BAR d3(E)



*BAR d4(E)



BAR x1(E)



BAR x(E)

SUPERSTRUCTURE DETAILS II
STRUCTURE NO. 045-0016

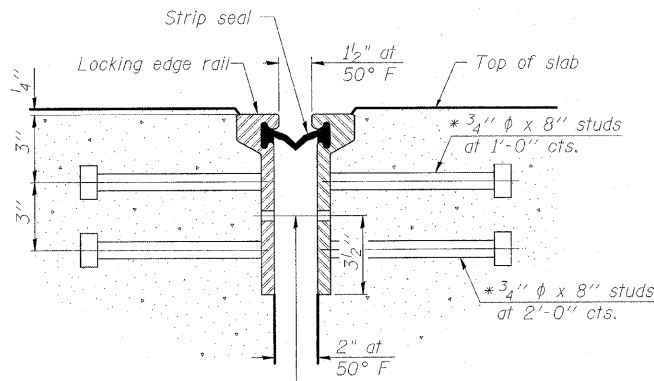
SHEET NO. S-14 S-34 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3887	R-VB-R	KANE	83	48
CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

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Job No. 910



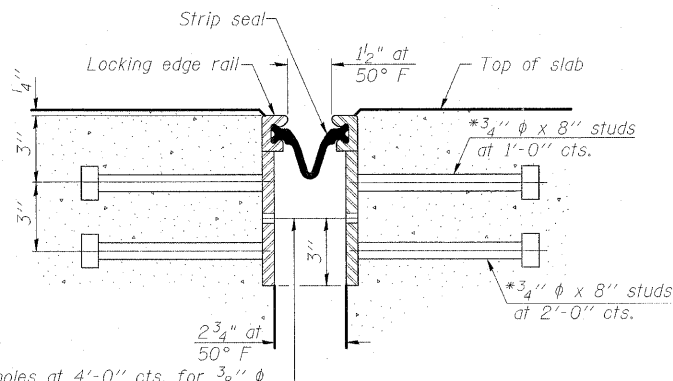
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
ROLLED RAIL JOINT



7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
WELDED RAIL JOINT

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

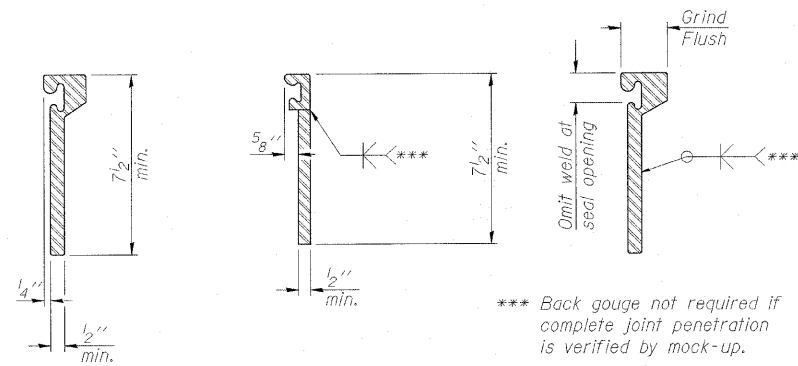
The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Cost of all sliding plates, shear stud connectors, and all connections shall be included with "Preformed Joint Strip Seal".

Exposed surfaces of top sliding plates shall be textured to meet all ADA requirements.



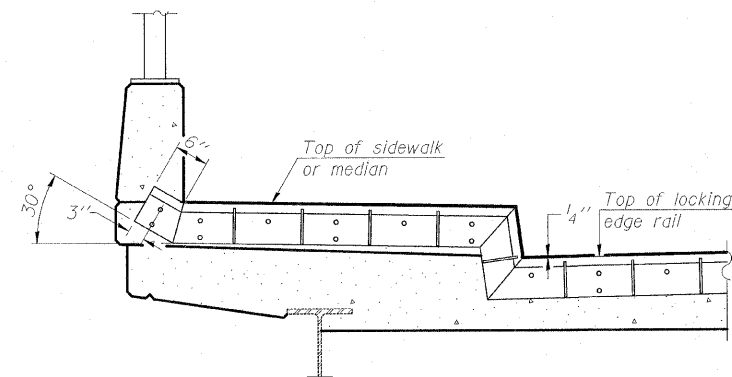
ROLLED
EXTRUDED RAIL

WELDED RAIL

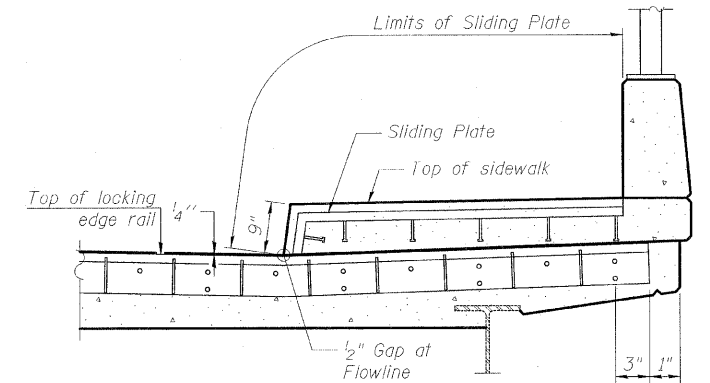
LOCKING EDGE
RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

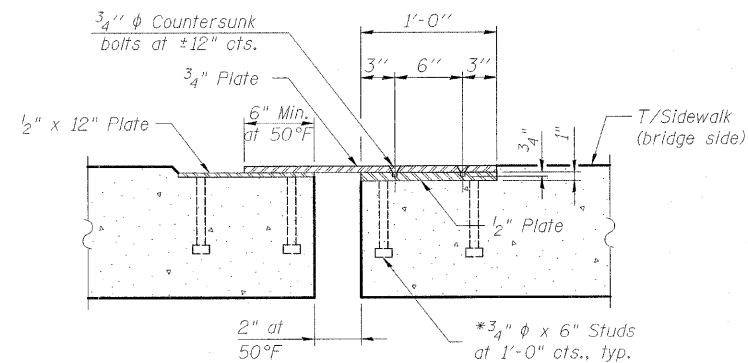


AT WEST SIDEWALK
(Looking North)



AT EAST SIDEWALK
(Looking North)

TYPICAL END TREATMENTS



SECTION THRU SLIDING PLATE
(Dimensions at right L to C Abut)

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	196

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

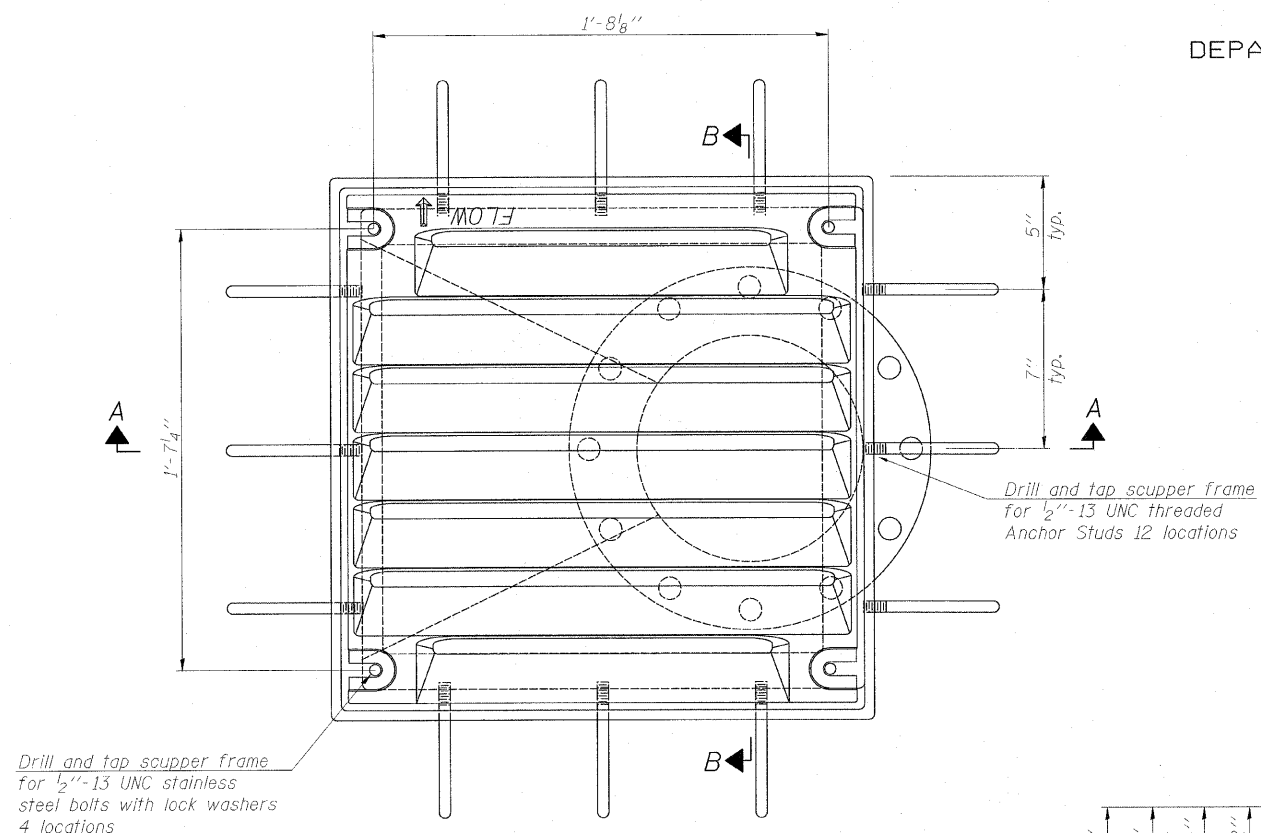
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Job No. 910



SHEET NO. S-15	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 49
S-34 SHEETS	CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

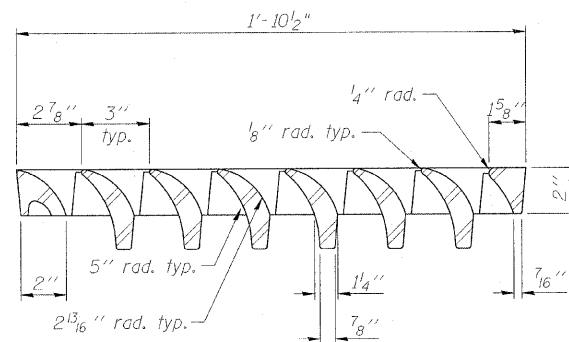
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 045-0016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

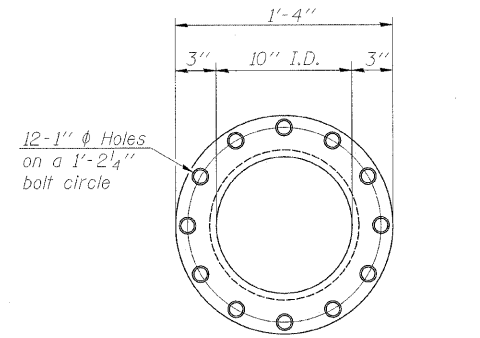


PLAN

Drill and tap scupper frame for 1/2"-13 UNC stainless steel bolts with lock washers 4 locations



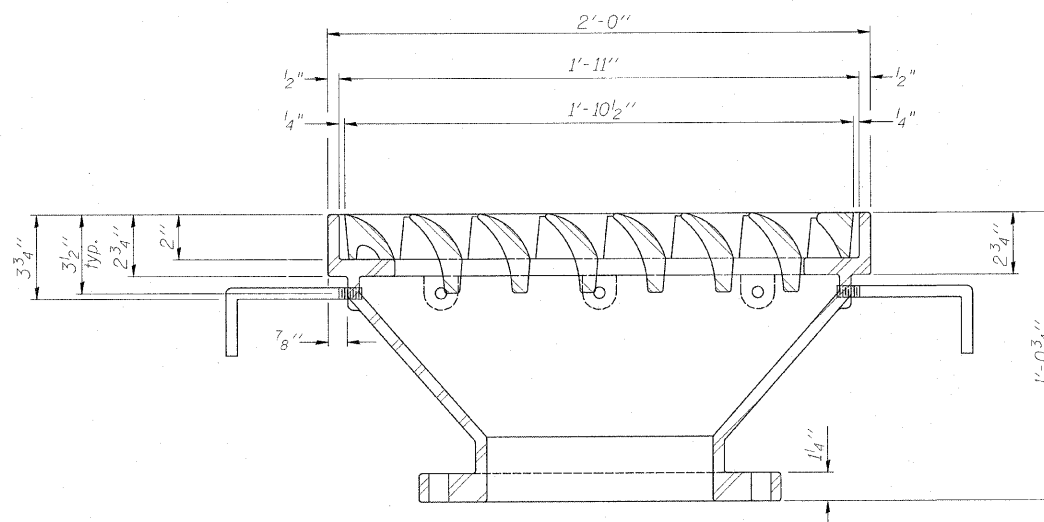
VANE GRATE DETAIL



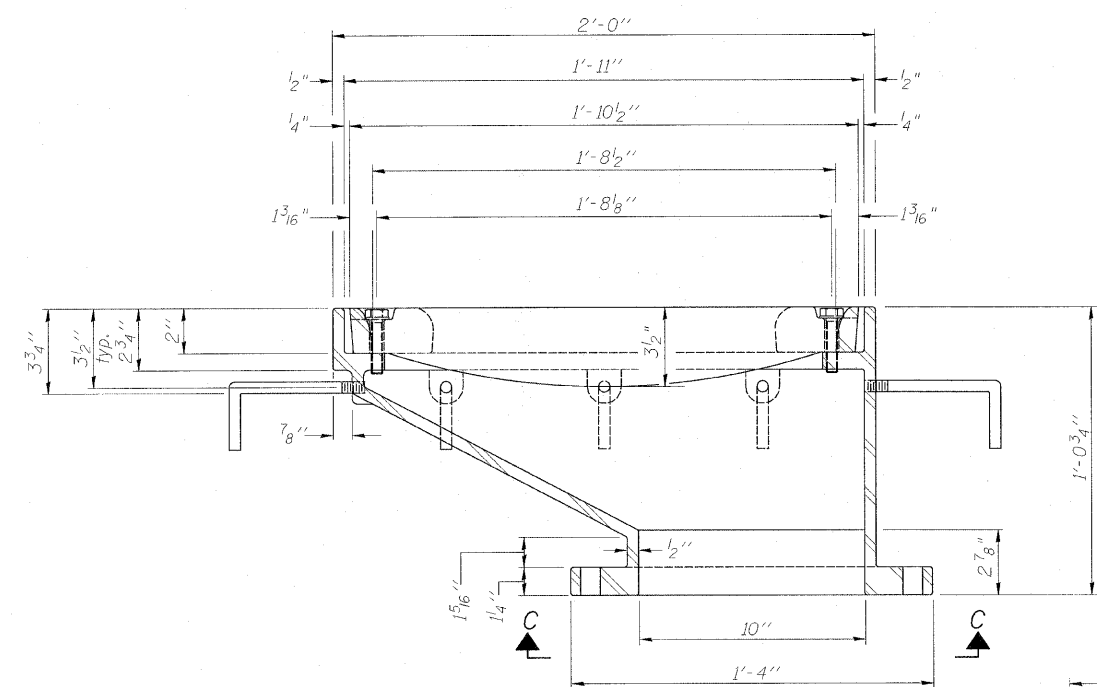
DOWNSPOUT

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
All castings shall conform to the requirements of AASHTO M 306.
Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

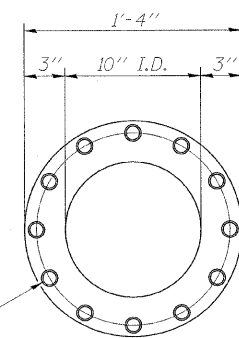


SECTION B-B



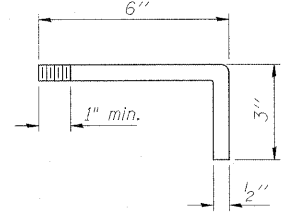
SECTION A-A

Drill and tap 12 holes for 7/8"-9 UNC bolts on 1'-2 1/4" bolt circle



GRATE BOLT HOLE DETAIL

VIEW C-C



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-12M10	Each	8

DRAINAGE SCUPPER, DS-12M10
STRUCTURE NO. 045-0016

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

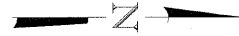
DS-12M10 11-1-09

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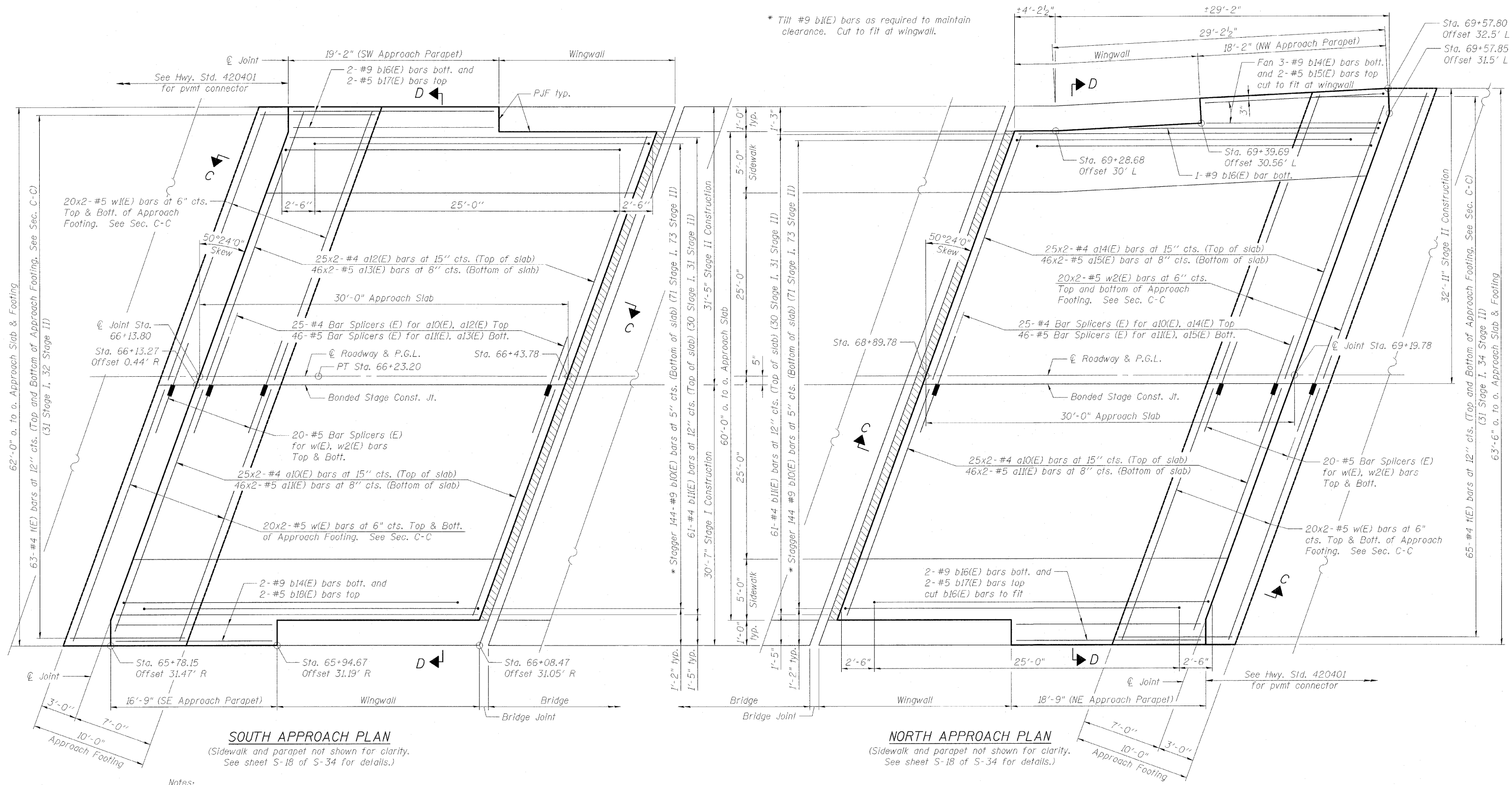
SHEET NO. S-16
S-34 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	50
CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* Tilt #9 b1(E) bars as required to maintain clearance. Cut to fit at wingwall.



SOUTH APPROACH PLAN
(Sidewalk and parapet not shown for clarity. See sheet S-18 of S-34 for details.)

NORTH APPROACH PLAN
(Sidewalk and parapet not shown for clarity. See sheet S-18 of S-34 for details.)

Notes:
See sheet S-19 of S-34 for Sections C-C & D-D and reinforcement details.
See sheet S-18 of S-34 for Parapet and Sidewalk reinforcement bars.
a1(E), a1(E), a2(E), a3(E), a10(E), a11(E), a12(E), a13(E), w(E) and w1(E) bar spacings measured parallel to \varnothing Rdwy.

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

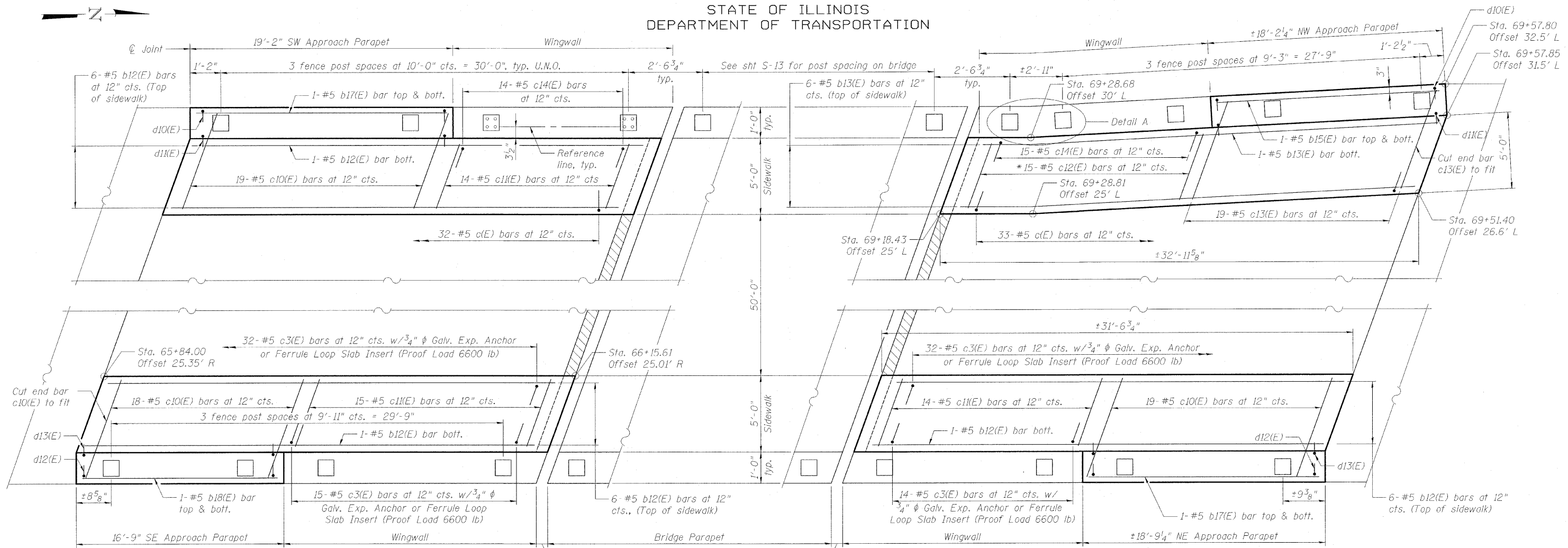
BRIDGE APPROACH SLAB DETAILS I
STRUCTURE NO. 045-0016

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SHEET NO. S-17 S-34 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3887	R-VB-R	KANE	83	51
CONTRACT NO. 60C06					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

6/27/2009 5:03:42 PM S:\IN\06\045\045-0016\045-0016-01-APPB.rvt

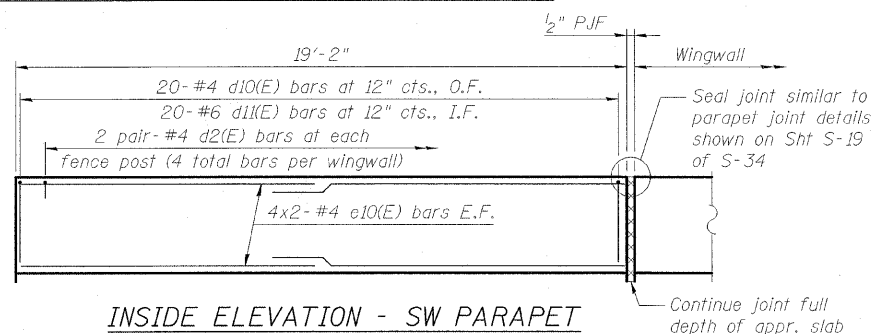
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



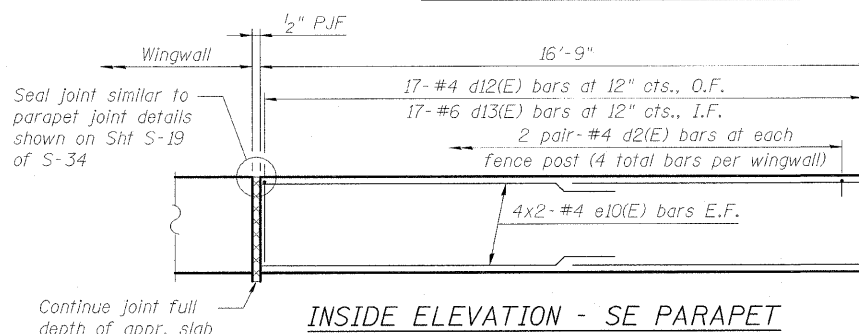
SOUTH APPROACH SIDEWALK PLAN

NORTH APPROACH SIDEWALK PLAN

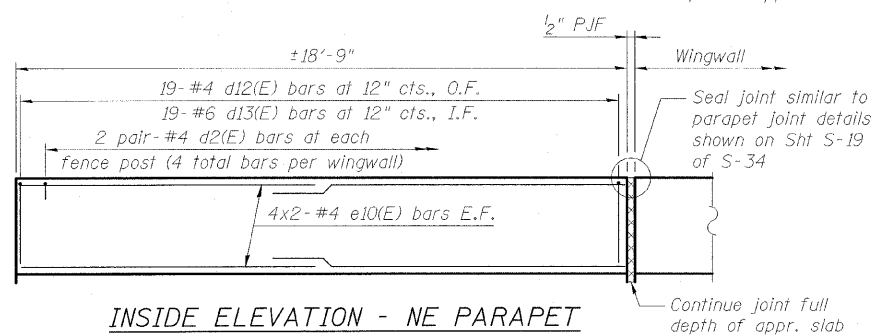
* Cut to fit at wingwall



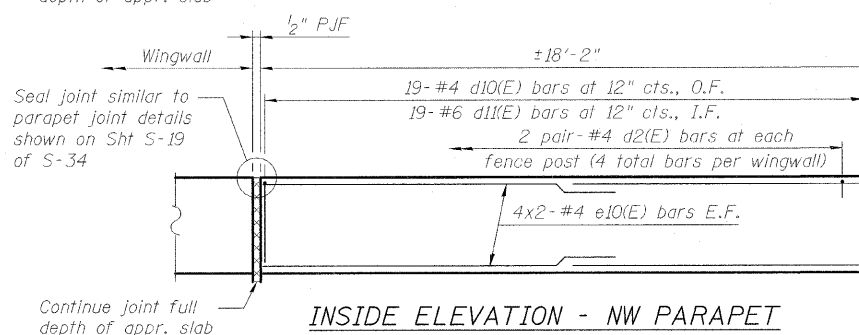
INSIDE ELEVATION - SW PARAPET



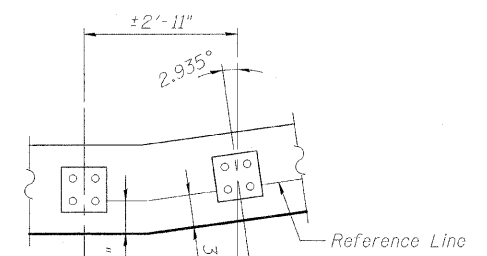
INSIDE ELEVATION - SE PARAPET



INSIDE ELEVATION - NE PARAPET



INSIDE ELEVATION - NW PARAPET



DETAIL A

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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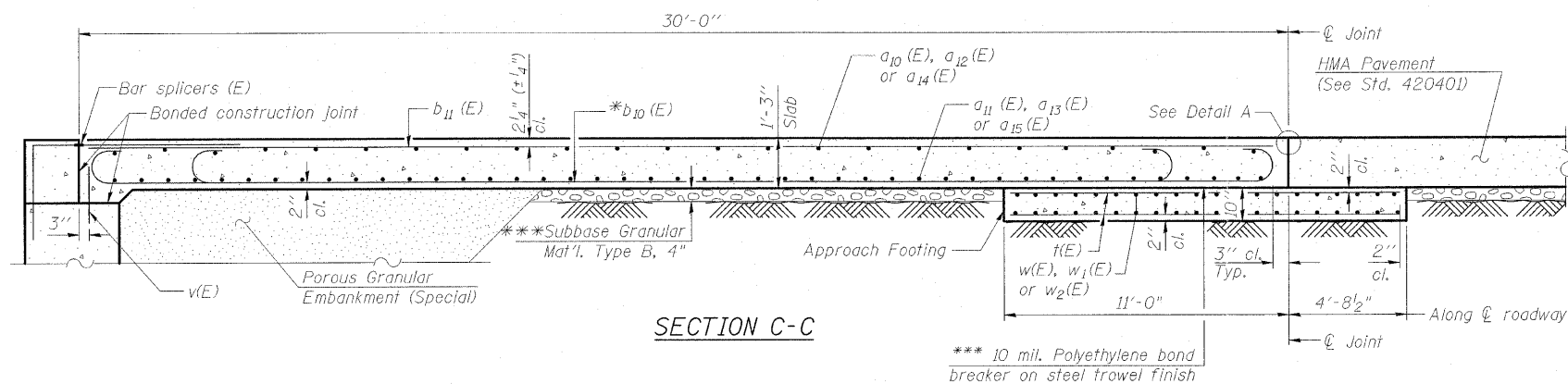
SHEET NO. S-18 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 52
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

BRIDGE APPROACH
SIDEWALK & PARAPET DETAILS
STRUCTURE NO. 045-0016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:

Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet S-27 and S-29 of S-34.
The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
For bar splicer details, see sheet S-34 of S-34.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment, Special and drainage treatment details, see sheet S-31 of S-34.
Cost of PJF included with Concrete Structures.
See sheet S-14 of S-34 for c(E), c3(E) and d2(E) bar details.



SECTION C-C

* Tilt #9 b1(E) bars as required to maintain clearance.

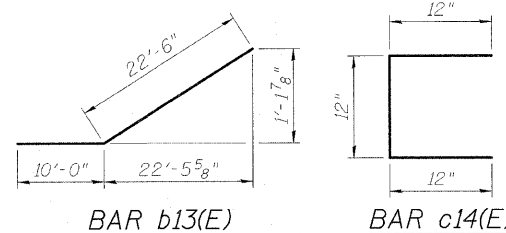
** Slope varies due to superelevation tangent run out. Superelevation transition occurs from Sta. 65+70 to Sta. 66+73.5 and cross-slope transitions from full S.E. (2.0%) to normal crown.

*** Cost included with Concrete Superstructure.

**** Cost included with Reinforcement Bars, Epoxy Coated.

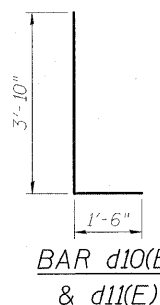
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	100	#4	24'-9"	
a11(E)	184	#5	25'-0"	
a12(E)	50	#4	25'-5"	
a13(E)	92	#5	25'-8"	
a14(E)	50	#4	26'-7"	
a15(E)	92	#5	26'-10"	
b10(E)	288	#9	29'-9"	
b11(E)	122	#4	29'-8"	
b12(E)	21	#5	31'-2"	
b13(E)	7	#5	32'-6"	
b14(E)	5	#9	17'-5"	
b15(E)	4	#5	17'-5"	
b16(E)	5	#9	19'-11"	
b17(E)	8	#5	18'-10"	
b18(E)	4	#5	16'-5"	
c(E)	65	#5	2'-5"	
c3(E)	93	#5	1'-9"	
c10(E)	56	#5	8'-10"	
c11(E)	43	#5	7'-3"	
c12(E)	15	#5	7'-10"	
c13(E)	19	#5	9'-5"	
c14(E)	29	#5	3'-0"	
d2(E)	16	#4	2'-0"	
d10(E)	39	#4	5'-4"	
d11(E)	39	#6	5'-4"	
d12(E)	36	#4	3'-1"	
d13(E)	36	#6	3'-1"	
e10(E)	64	#4	10'-3"	
t(E)	256	#4	15'-4"	
w(E)	160	#5	25'-0"	
w1(E)	80	#5	25'-8"	
w2(E)	80	#5	26'-10"	
Concrete Superstructure	Cu. Yd.		202.7	
Concrete Structures	Cu. Yd.		60.9	
Reinforcement Bars, Epoxy Coated	Pound		60,290	
Bridge Deck Grooving	Sq. Yd.		324	
Protective Coat	Sq. Yd.		456	

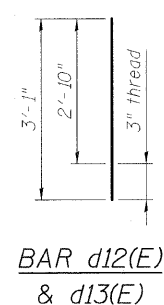


BAR b13(E)

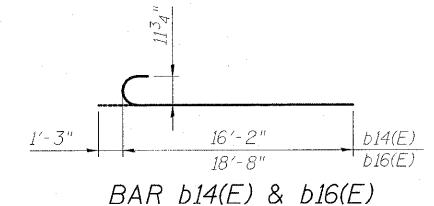
BAR c14(E)



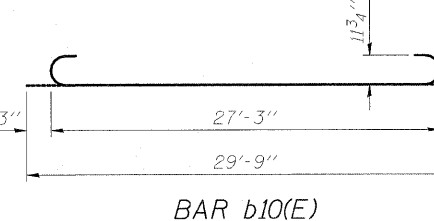
BAR d10(E) & d11(E)



BAR d12(E) & d13(E)



BAR b14(E) & b16(E)



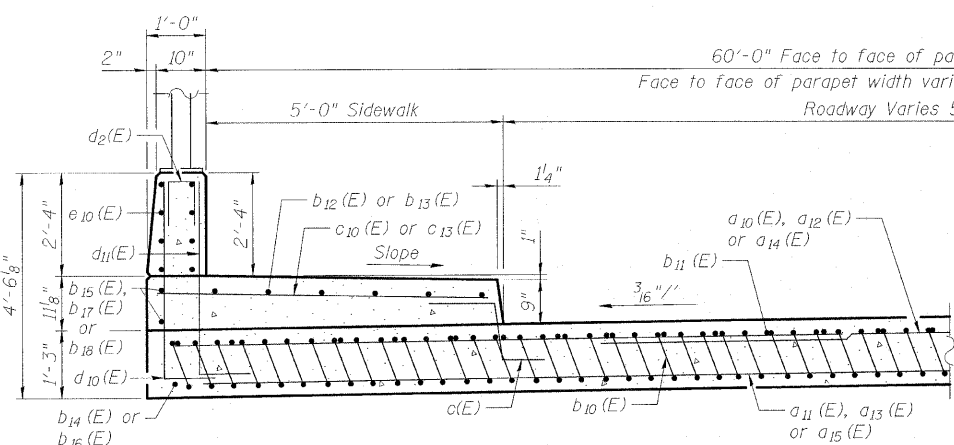
BAR b10(E)

① Bars d12(E) and d13(E) are to be furnished by bar splicer supplier and cost included in the contract unit price for Bar Splicers. See sheet S-34 of S-34 for bar splicer assembly details.

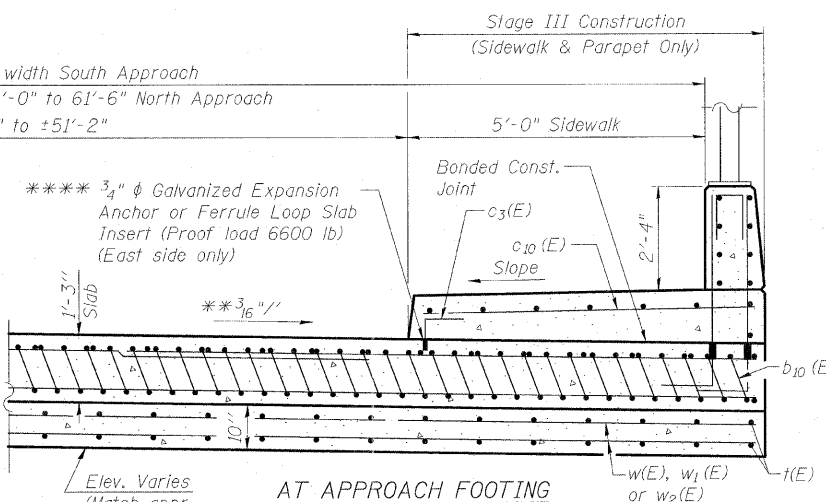
MIN. BAR LAP

#4 bars = 1'-8"
#5 bars = 2'-2"

BRIDGE APPROACH SLAB DETAILS II
STRUCTURE NO. 045-0016



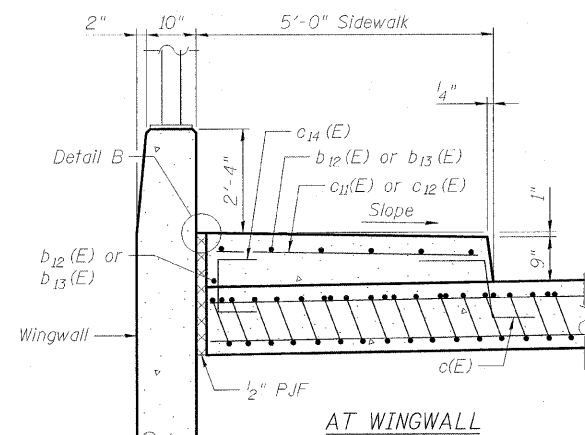
AT END OF WINGWALL



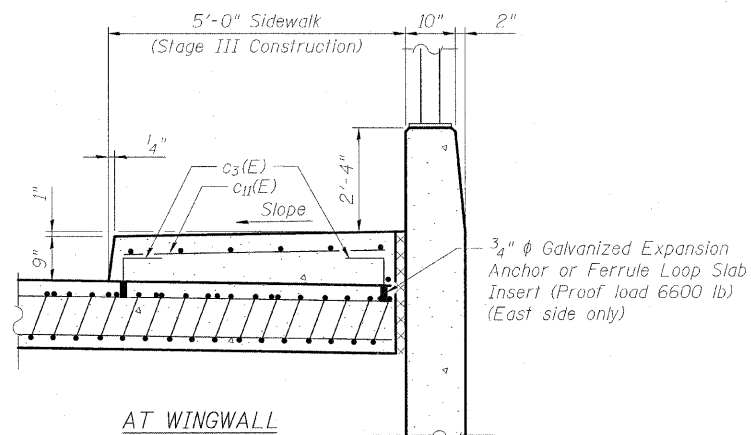
AT APPROACH FOOTING

SECTION D-D

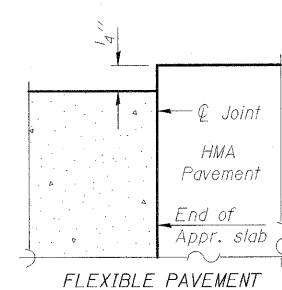
(See Plan for dimensions not shown)



AT WINGWALL (West Side)

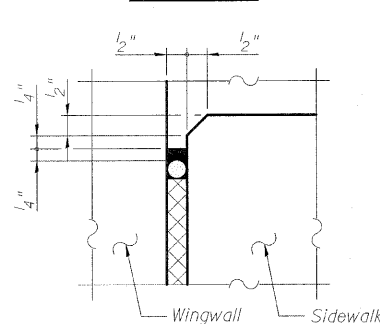


AT WINGWALL (East Side)



FLEXIBLE PAVEMENT

DETAIL A



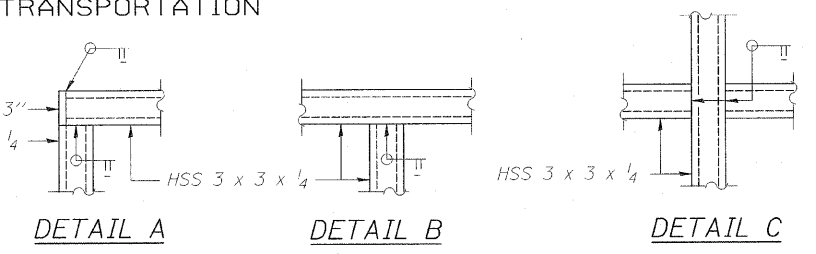
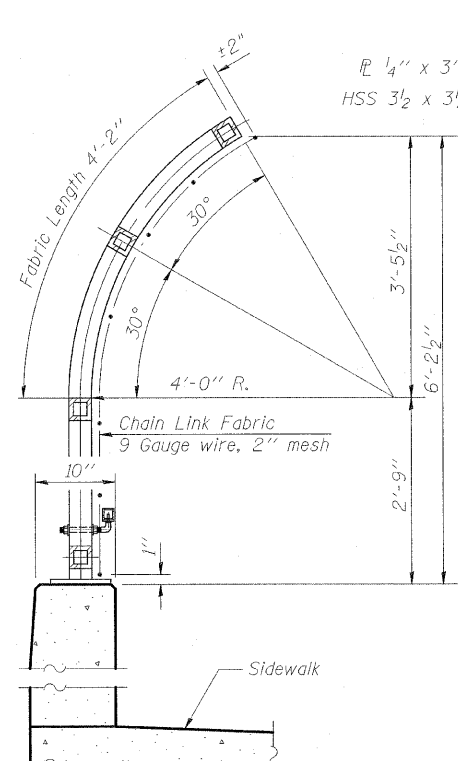
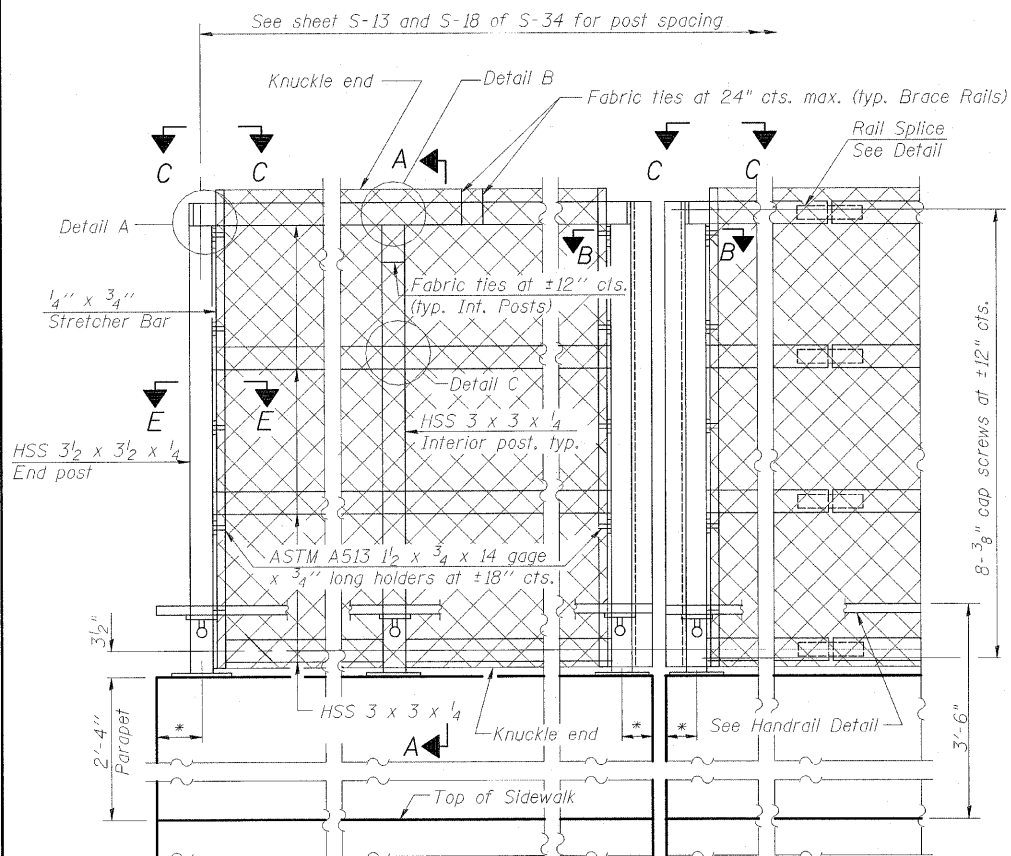
DETAIL B

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

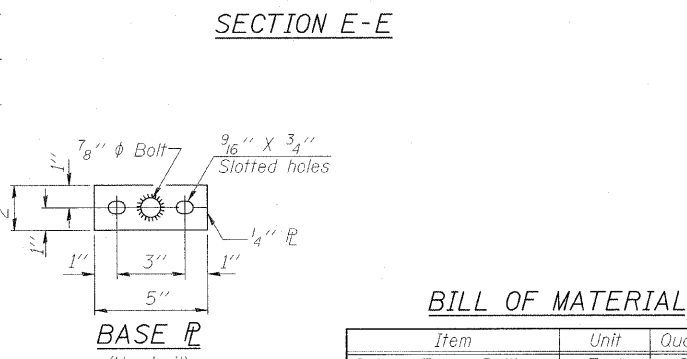
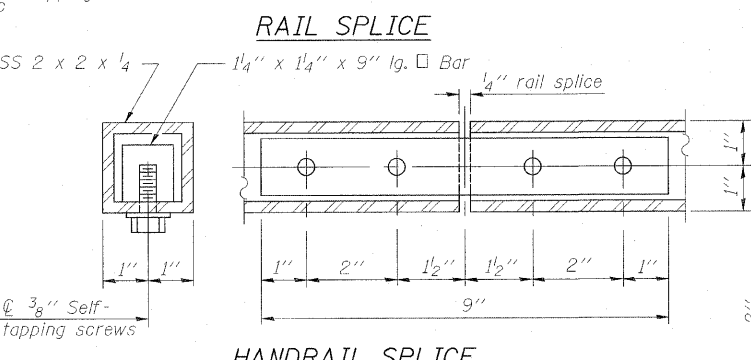
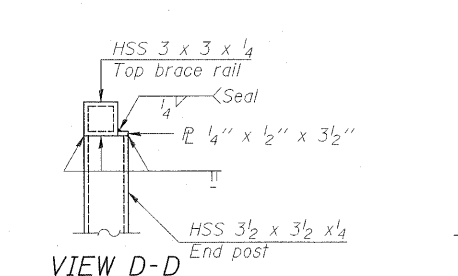
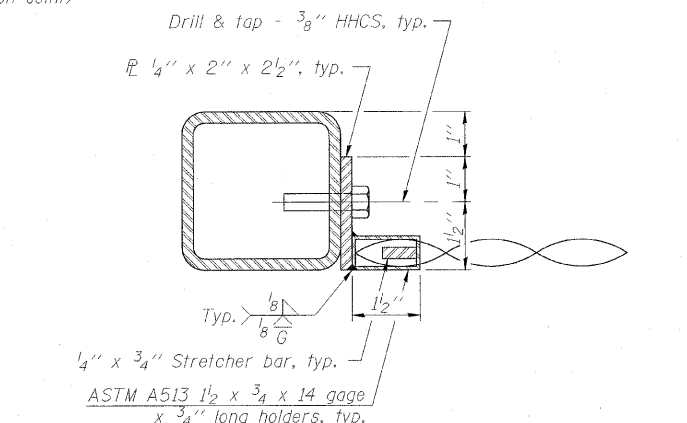
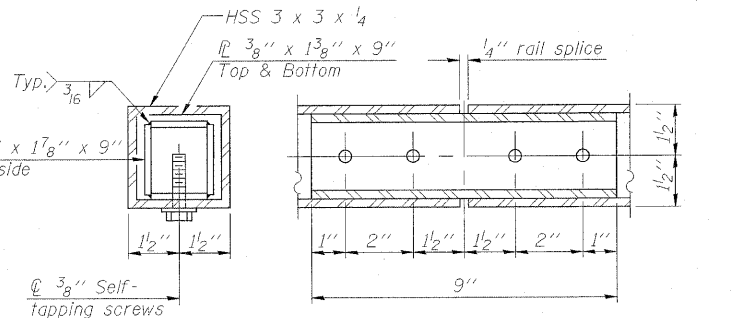
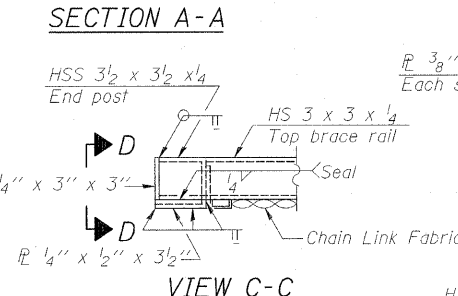
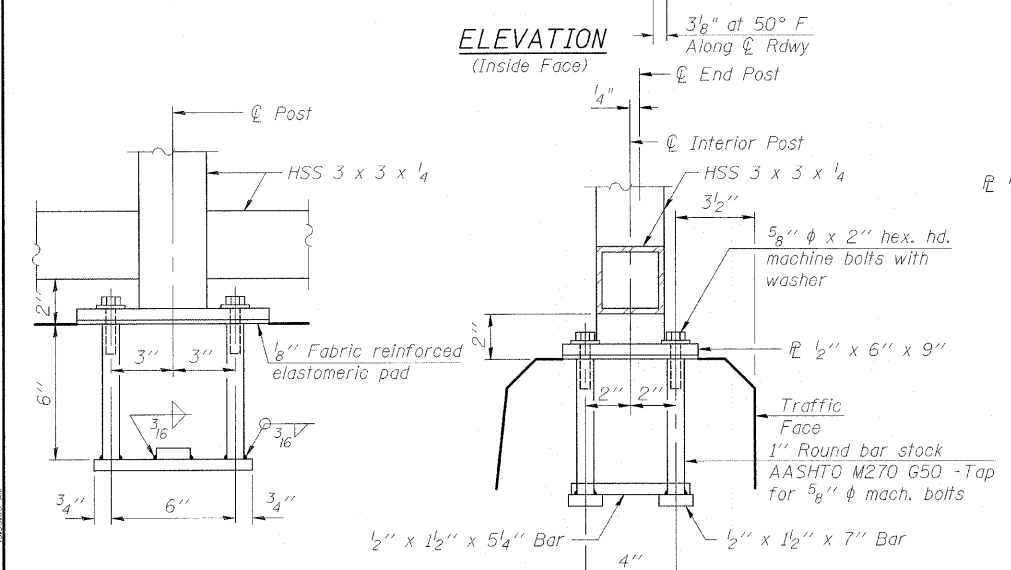
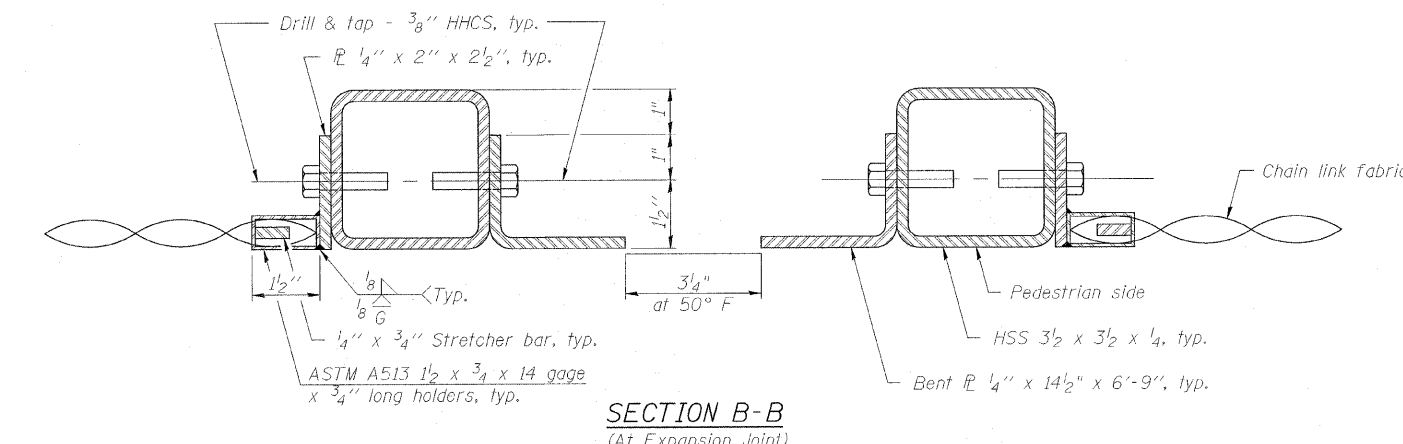
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SHEET NO. S-19 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 53
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

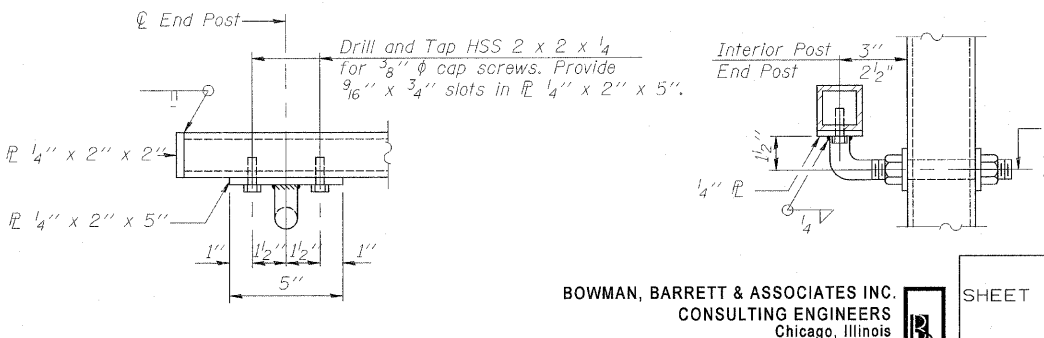
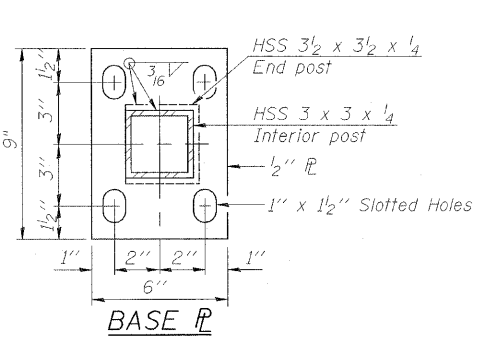
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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



ANCHOR BOLT DETAILS
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	611

**BRIDGE FENCE RAILING
PARAPET MOUNTED
STRUCTURE NO. 045-0016**

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - DF

R-32

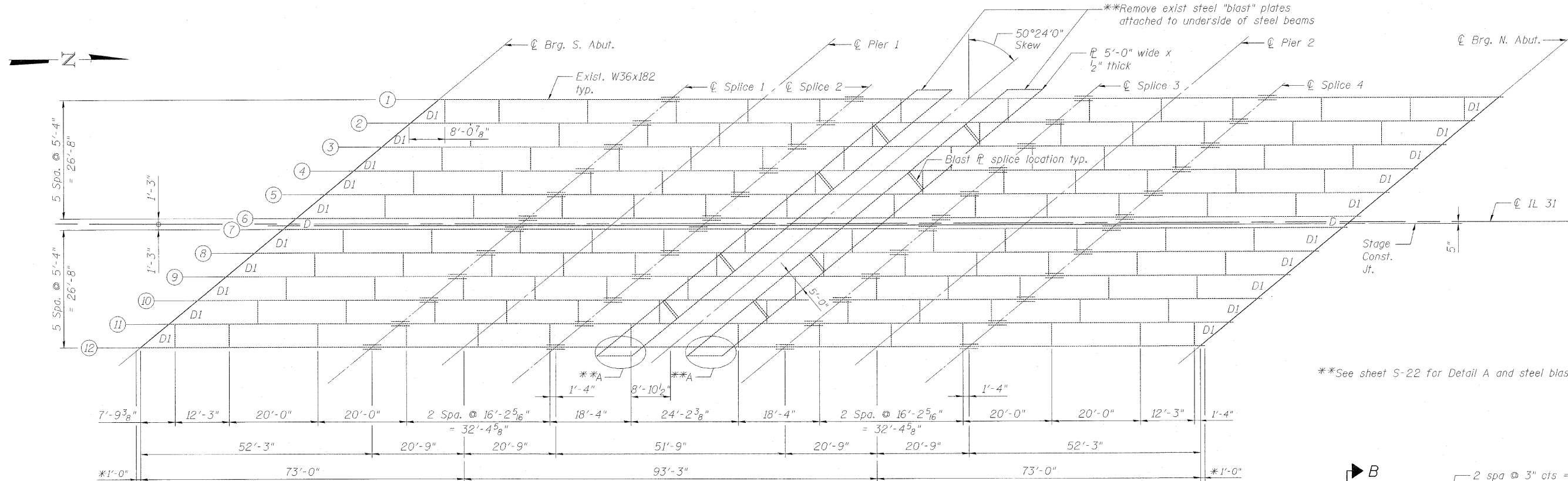
11-1-09

*Variable - See sheets S-13 and S-18
(10'-0" Maximum Post Spacing)

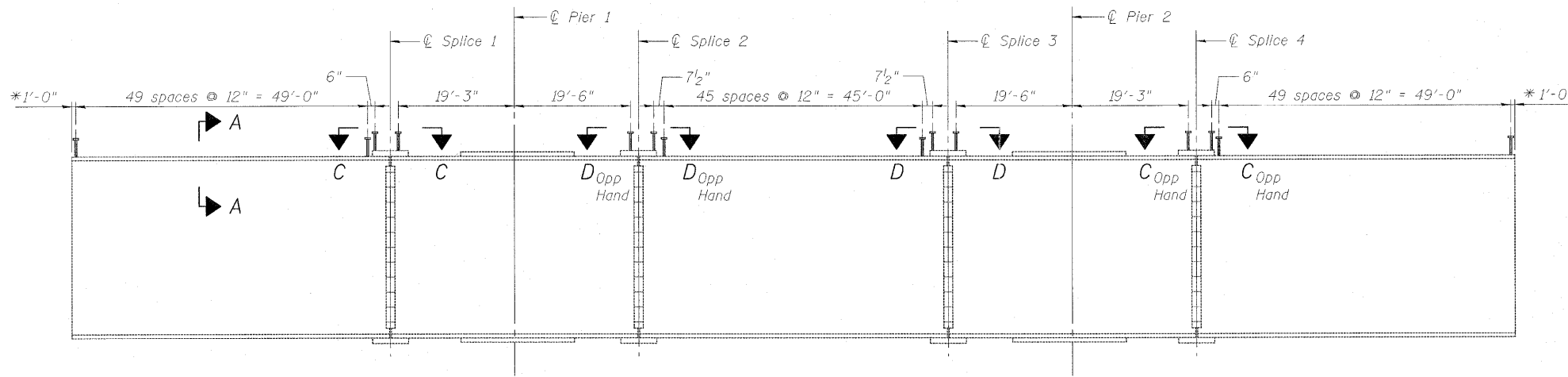
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Job. No. 910

SHEET NO. S-20	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 54
S-34 SHEETS	CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

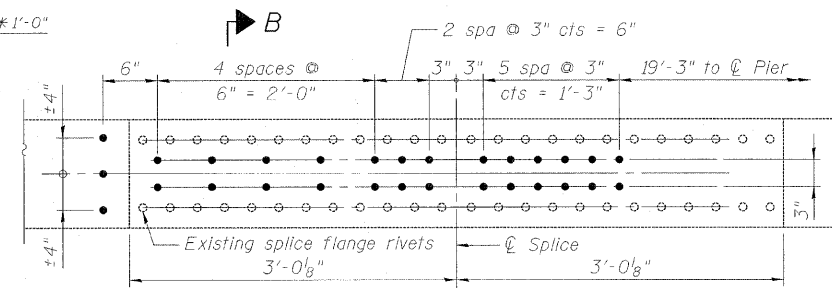
STATE OF ILLINOIS
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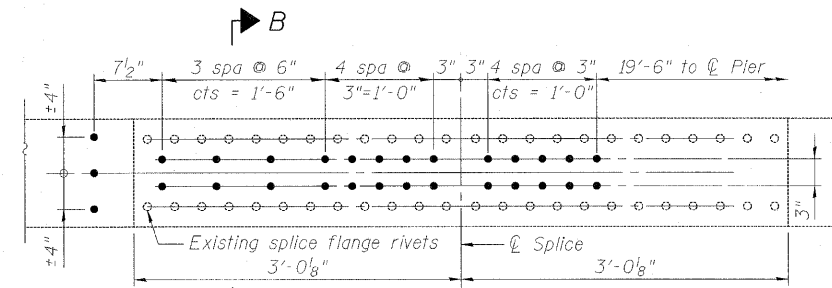
PLAN



EXISTING BEAM ELEVATION



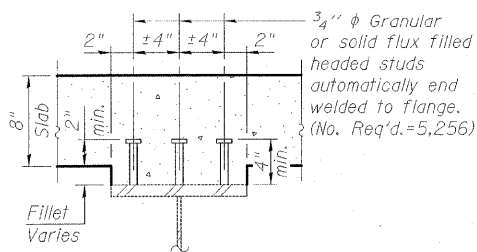
SECTION C-C
Splice 1 shown, Splice 4 opposite hand



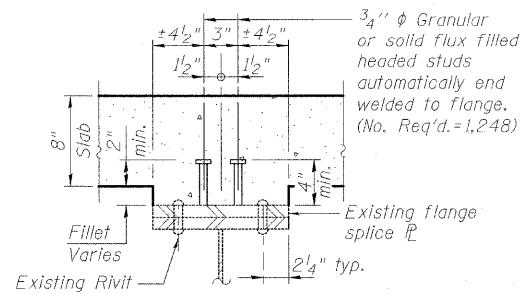
SECTION D-D
Splice 3 shown, Splice 2 opposite hand

* Existing beam end is notched.
Dimension shown is maximum.

All beams have three studs/row except over the splices where there are 2 studs/row (see splice detail this sheet).



SECTION A-A



SECTION B-B
(At splice only)

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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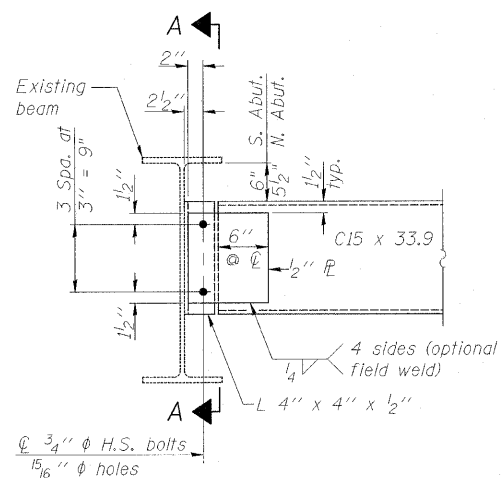


SHEET NO. S-21 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 55
	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C06	

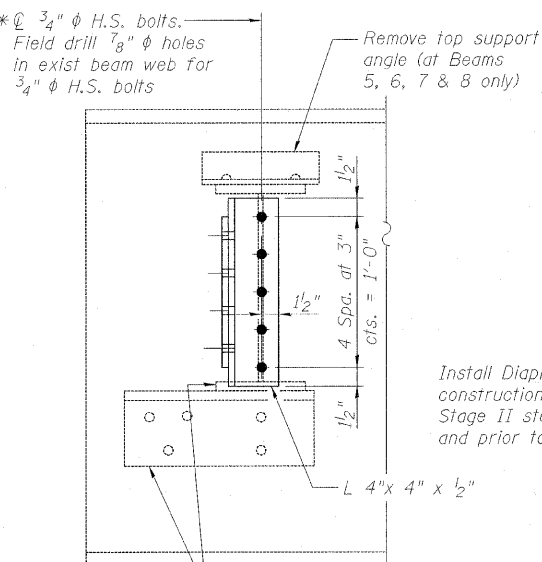
FRAMING PLAN & BEAM DETAILS
STRUCTURE NO. 045-0016

**See sheet S-22 for Detail A and steel blast plate removal details.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

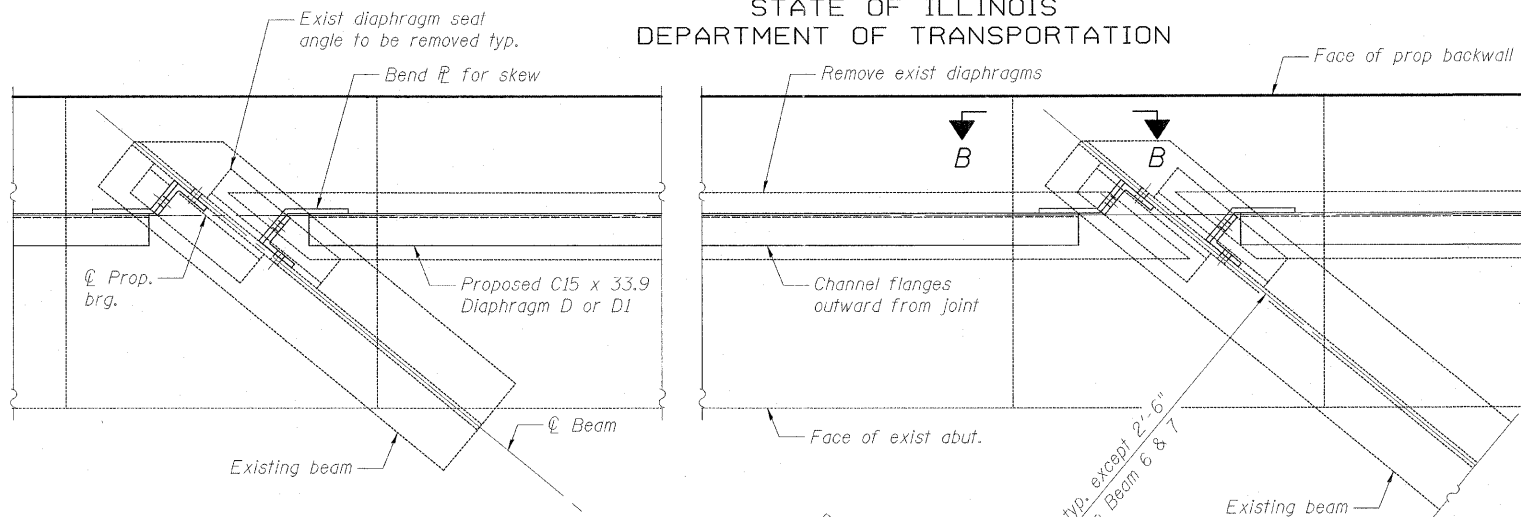


VIEW B-B
END DIAPHRAGM - D1
(20 Required)

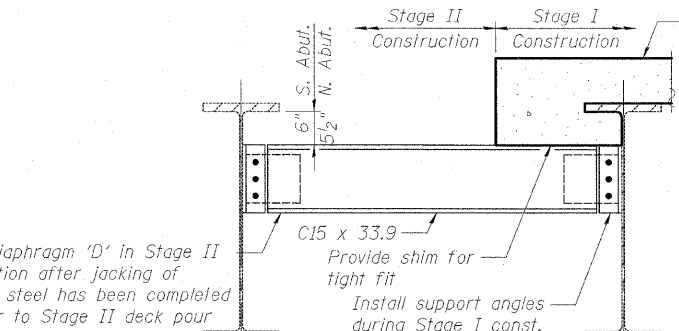


SECTION A-A

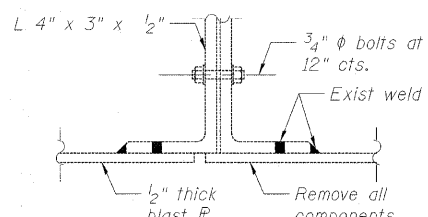
* Cost included with Furnishing and Erecting Structural Steel.



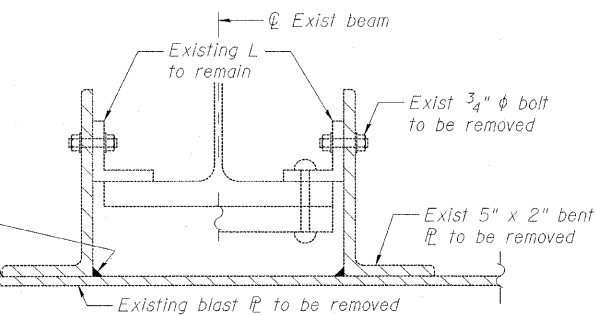
END DIAPHRAGM PLAN VIEW



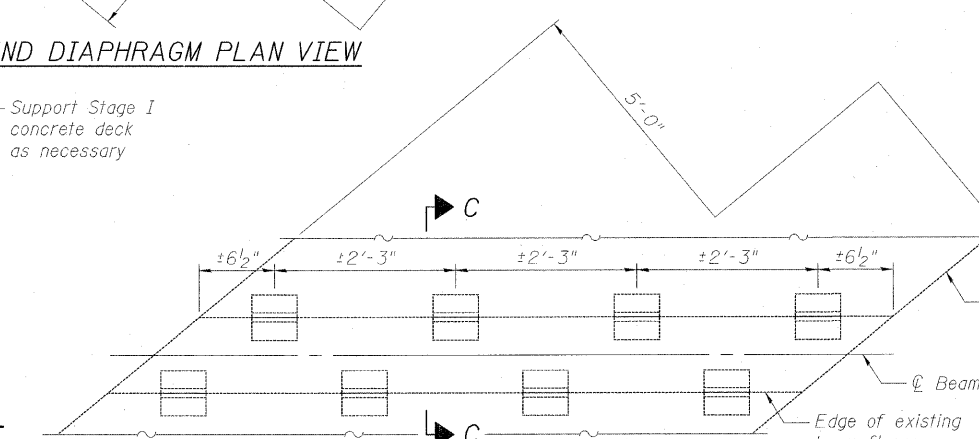
END DIAPHRAGM D
(2 Required)
Connection details similar to Diaphragm D1



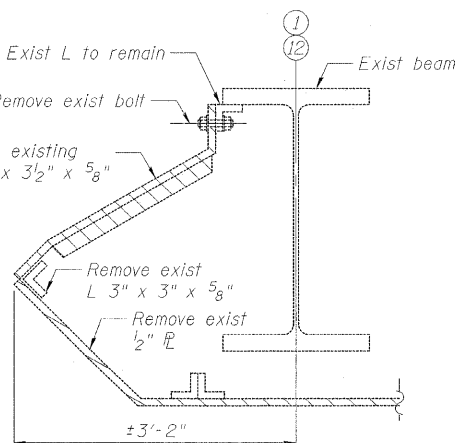
BLAST PLATE SPLICE DETAIL
(See framing plan for locations)



SECTION C-C
BLAST PLATE HANGER DETAIL



EXISTING BLAST PLATE HANGER SPACING
(Typical at each beam)



DETAIL A

	EXISTING EXTERIOR GIRDER MOMENT TABLE		
	0.4 Sp. 1 OR 0.6 Sp. 3	Pier 1 OR Pier 2	0.5 Sp. 2
I_s	(in ⁴) 11,300	***17,952	11,300
$I_c(n)$	(in ⁴) 26,090	-	26,090
$I_c(3n)$	(in ⁴) 18,838	-	18,838
S_s	(in ³) 623	944	623
$S_c(n)$	(in ³) 868	-	868
$S_c(3n)$	(in ³) 776	-	776
Z	(in ³) -	***1,068	-
ρ	(k/')	1.514	1.033
$M \rho$	(k)	1,065.2	349.2
$s \rho$	(k/')	-	0.415
$M_s \rho$	(k)	-	168.0
M_L	(k)	342.3	472.4
M_{IM}	(k)	81.9	108.7
$P_3 [M_L + i]$	(k)	707	969
M_a	(k)	2,304	1,931
M_u	(k)	2,937	3,060
$f_s \rho$ non-comp	(ksi)	13.55	6.75
$f_s \rho$ (comp)	(ksi)	-	2.6
$f_s P_3 [M_L + M_I]$	(ksi)	9.0	13.3
f_s (Overload)	(ksi)	22.6	22.8
f_s (Total)	(ksi)	-	-
VR	(k)	-	37.1

	EXISTING EXTERIOR GIRDER REACTION TABLE	
	N. Abut. OR S. Abut.	Pier 1 OR Pier 2
$R \rho$	(k) 38.8	136.6
R_L	(k) 34.6	43.9
R_I	(k) 8.7	10.5
R_{Total}	(k) 82.1	191.0

- * Compact section
- ** Braced non-compact and partially braced section
- *** Includes Cover Plate
- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).
- Z: Plastic Section Modulus of the steel section in non-composite areas (in³).
- ρ : Un-factored non-composite dead load (kips/ft.).
- $M \rho$: Un-factored moment due to non-composite dead load (kip-ft.).
- $s \rho$: Un-factored long-term composite (superimposed) dead load (kips/ft.).
- $M_s \rho$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
- M_L : Un-factored live load moment (kip-ft.).
- M_I : Un-factored moment due to impact (kip-ft.).
- M_a : Factored design moment (kip-ft.).
- $1.3 [M \rho + M_s \rho + \frac{2}{3} (M_L + M_I)]$
- M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- f_s (Overload): Sum of stresses as computed from the moments below (ksi).
- $M \rho + M_s \rho + \frac{2}{3} (M_L + M_I)$
- f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
- $1.3 [M \rho + M_s \rho + \frac{2}{3} (M_L + M_I)]$
- VR: Maximum $\frac{1}{2}$ + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

BILL OF MATERIAL

Item	Unit	Quantity
Furnish & Erect Structural Steel	Pound	6,900
Structural Steel Removal	Pound	29,160
Jacking Existing Superstructure	L. Sum	1

Notes:
Prior to ordering any material, the Contractor shall verify dimensions of the diaphragms.

Removal of blast plate attachment components will not be measured for payment, but shall be included in the cost of Structural Steel Removal.

See S-24 of S-34 for superstructure jacking requirements.

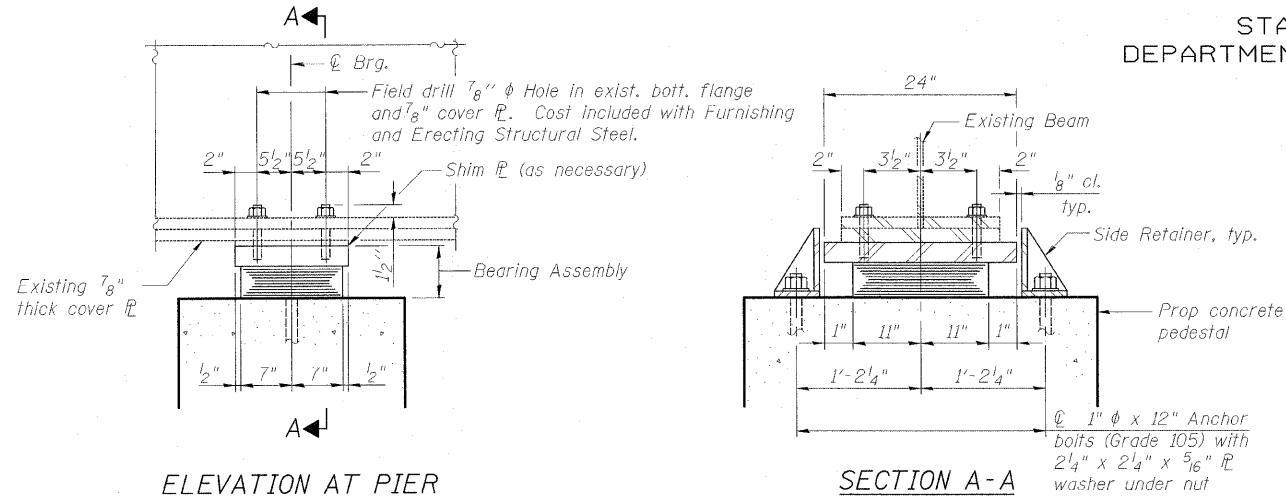
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Job No. 910

SHEET NO. S-22	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 56
S-34 SHEETS	CONTRACT NO. 60C06			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

BEAM DETAILS
STRUCTURE NO. 045-0016

DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

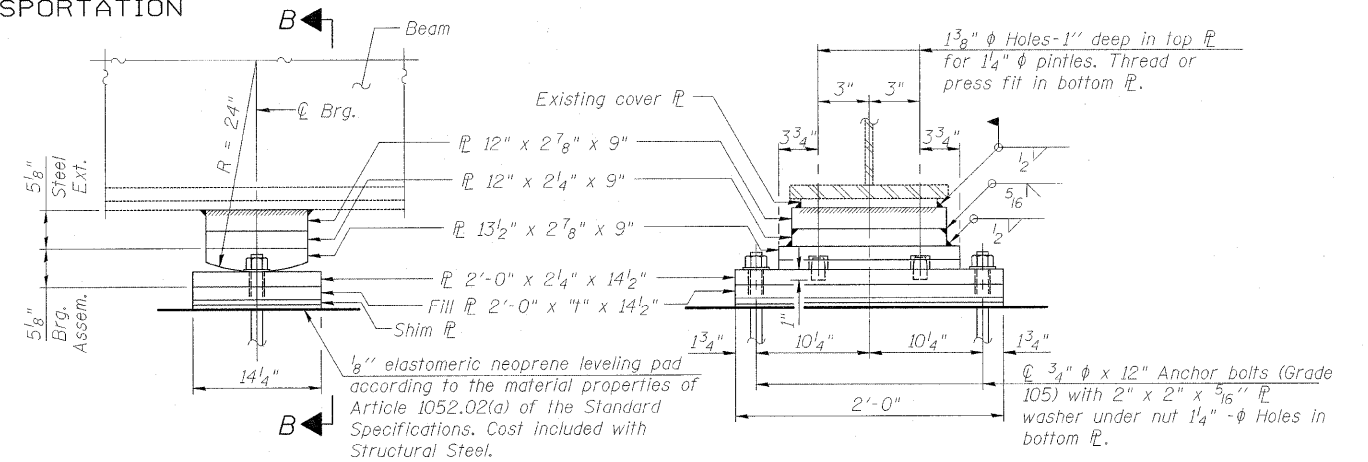
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT PIER

SECTION A-A

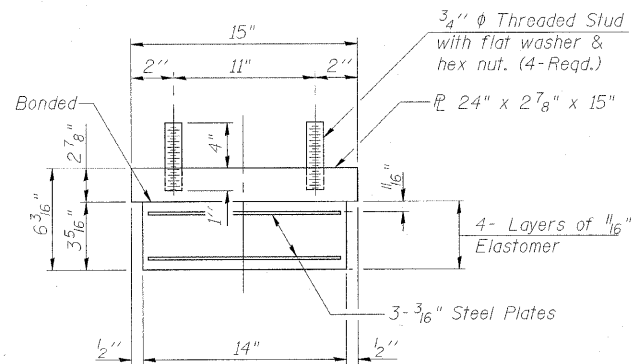
TYPE I ELASTOMERIC EXP. BRG. AT PIER 1



ELEVATION AT PIER

SECTION B-B

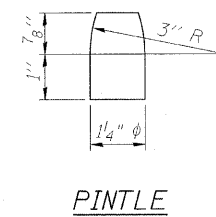
FIXED BEARING AT PIER 2



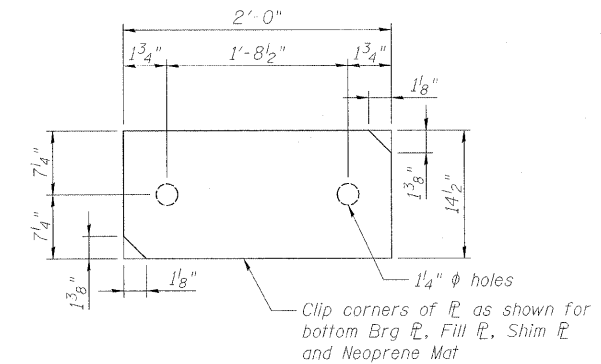
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor may be used in lieu of ASTM 1554 Grade 36 (Fy = 36 ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
The cost for fabricating and installing the fixed bearing assembly, steel extensions, fill and shim shall be included in the cost of Furnishing and Erecting Structural Steel.



PINTLE



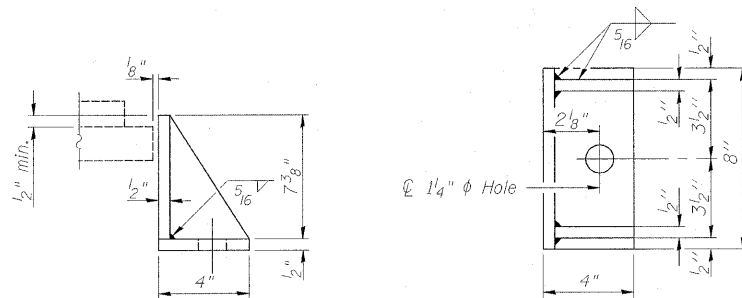
BOTTOM PLATE PLAN

FILL PLATE THICKNESS "4"

	BM 1	BM 2	BM 3	BM 4	BM 5	BM 6	BM 7	BM 8	BM 9	BM 10	BM 11	BM 12
Pier 2	3/8"	1/2"	1/4"	3/4"	1/2"	3/8"	-	-	-	-	1/4"	1/2"

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts, 1"	Each	24
Anchor Bolts, 3/4"	Each	24
Furnishing and Erecting Structural Steel	Pound	6,250
Removal of Existing Bearings	Each	24



SIDE RETAINER

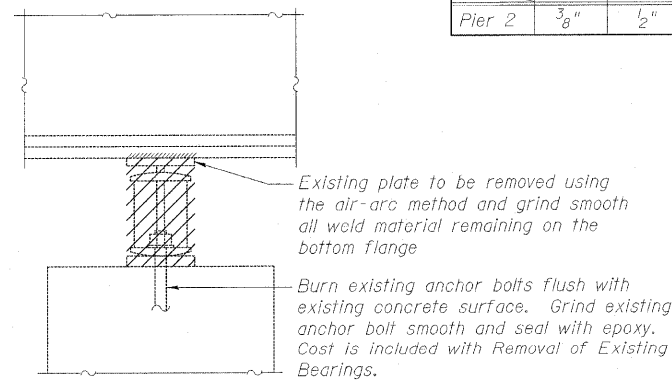
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

SUPERSTRUCTURE JACKING PROCEDURE

- Jacking of existing superstructure shall be done after deck is removed and diaphragm between Beams 6 & 7 have been removed.
- The Contractor shall submit for approval by the Engineer, plans for jacking existing beams, removing and installing bearings prior to commencing any related work. The maximum dead load reaction per beam (weight of steel only) and minimum jack capacities are as follows:

	Dead Load (one bearing)	Min. Jack Capacity
Abutments	6.5 kips	10 kips
Piers	22.5 kips	34 kips

- Prior to ordering any material, the Contractor shall verify steel extensions, fill and shim thickness required at each bearing.
- There shall be at least one jack per bearing and the jack shall be placed close to the bearing. The jacking operation shall follow procedures outlined in the special provision "Jacking Existing Superstructure." The beams shall be blocked in position until after the completion of the installation of new bearings.
- The new bearings and steel extensions shall be in place and the jacks shall be lowered before the new concrete is poured.



BEARING REMOVAL

(Pier 1 shown, Pier 2 similar)

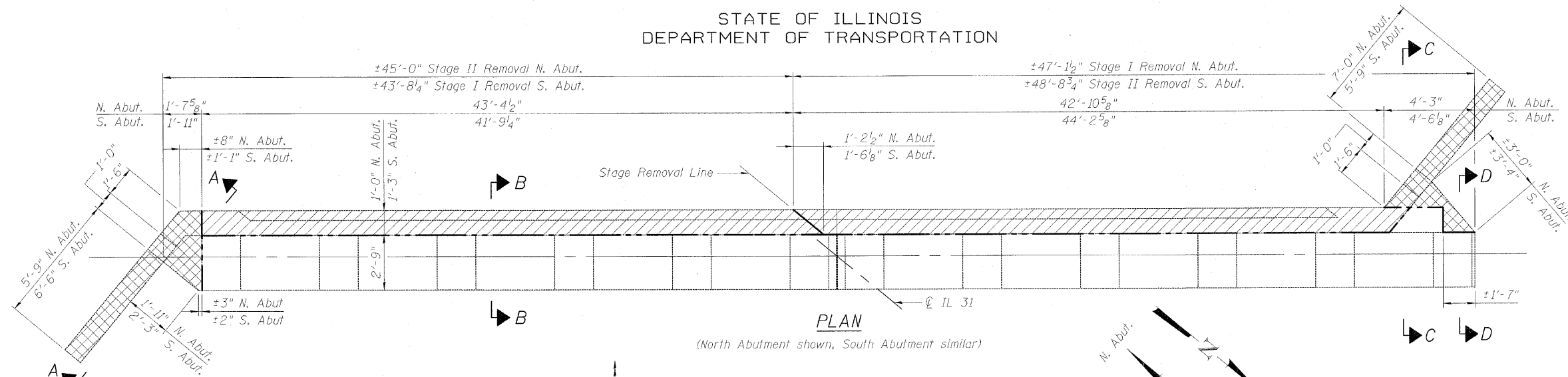
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CHECKED - TL
DRAWN - LAM
CHECKED - DF

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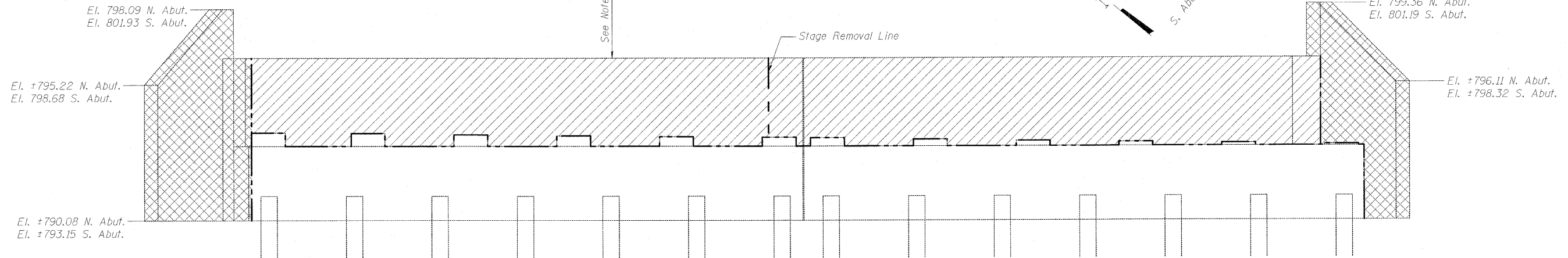
SHEET NO. S-24	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 58
S-34 SHEETS	CONTRACT NO. 60C06		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

PIER BEARING DETAILS
STRUCTURE NO. 045-0016

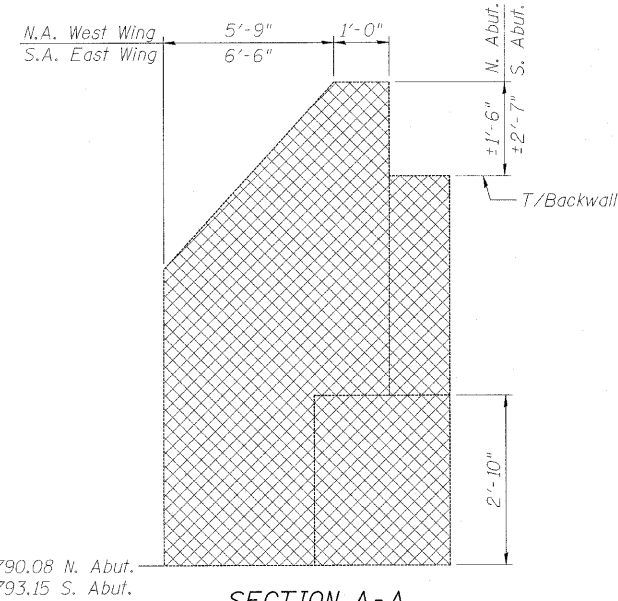
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



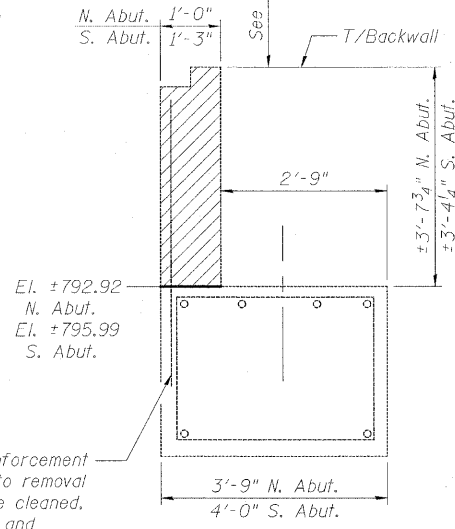
PLAN
(North Abutment shown, South Abutment similar)



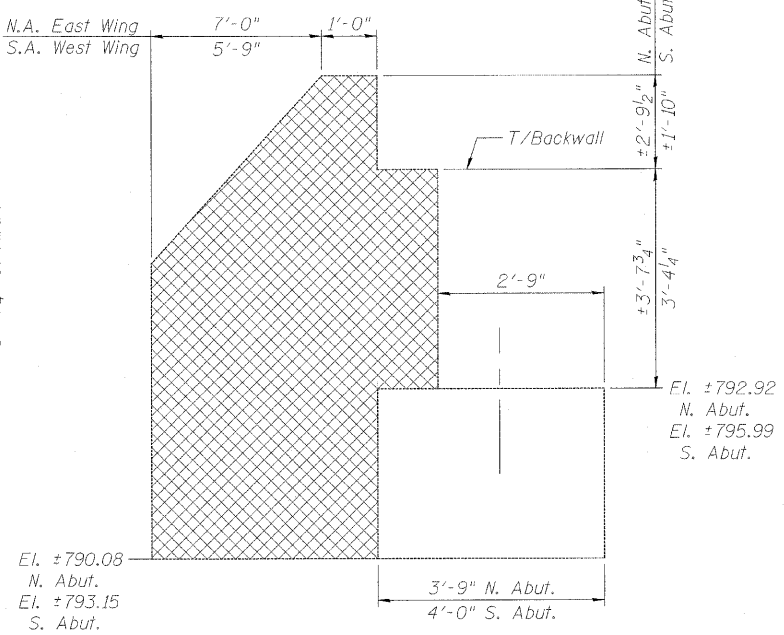
ELEVATION
(North Abutment shown, South Abutment similar)



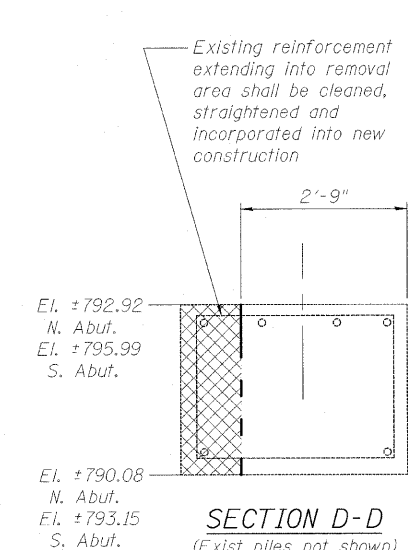
SECTION A-A
(Exist piles not shown)



SECTION B-B
(Exist piles not shown)



SECTION C-C
(Exist piles not shown)



SECTION D-D
(Exist piles not shown)

LEGEND

- Concrete Removal - backwall
- Concrete Removal - full depth

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	36.7

Note A:
Concrete Removal above this point shall be included in the cost of Removal of Existing Concrete Deck.

ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 045-0016

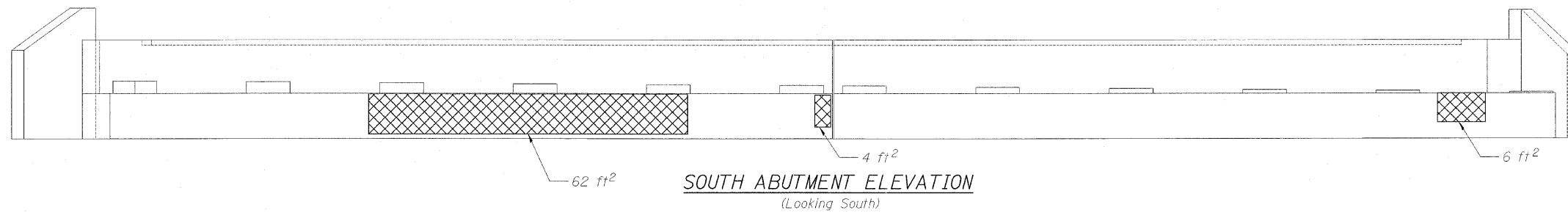
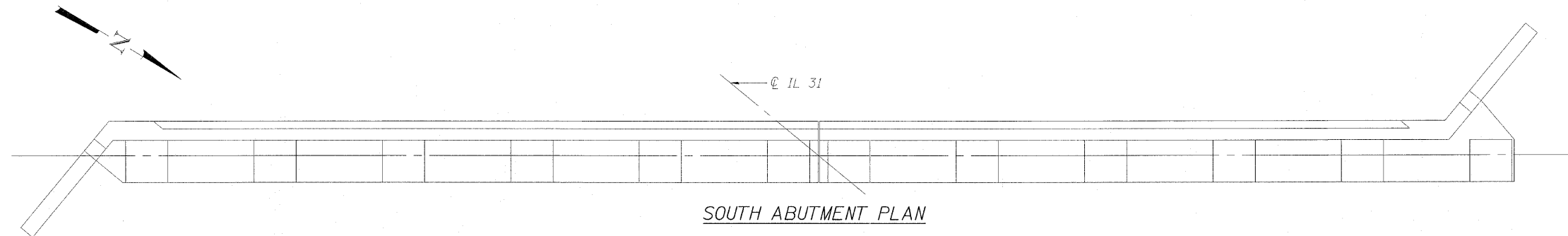
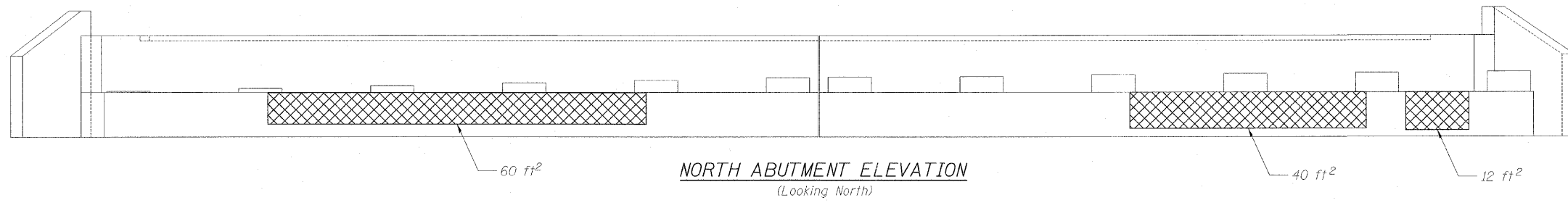
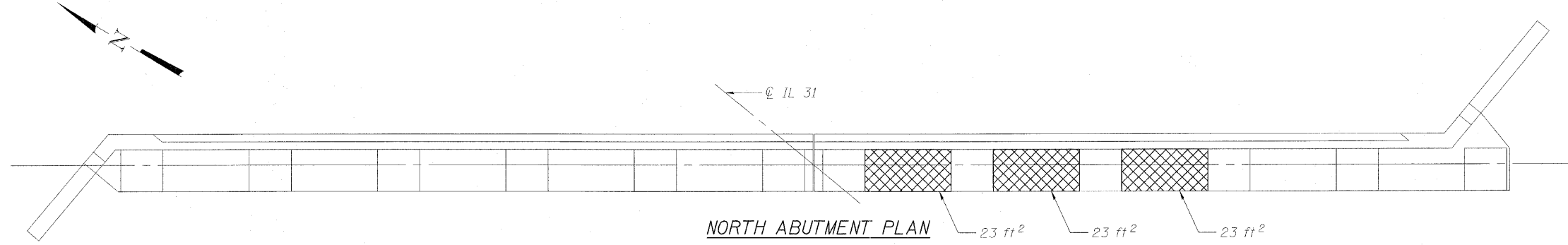
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

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SHEET NO. S-25	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 59
S-34 SHEETS	FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		
			CONTRACT NO. 60C06		

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DEPARTMENT OF TRANSPORTATION



LEGEND

Structural Repair of Concrete
(Depth equal to or less than 5")

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Ft.	253

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

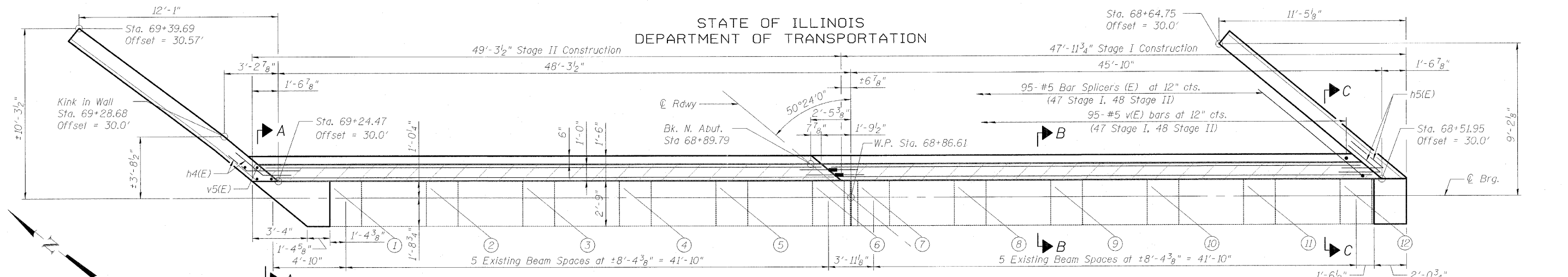
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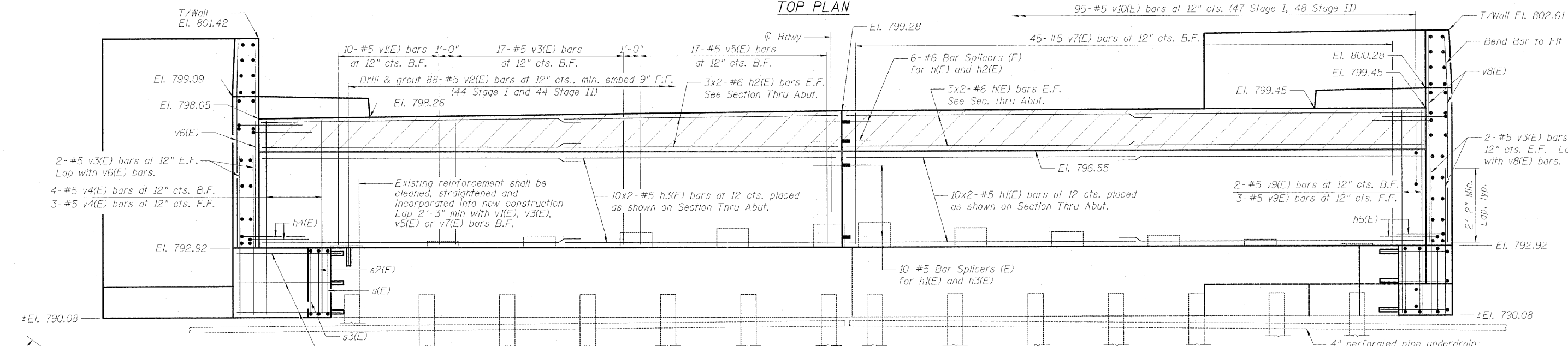
SHEET NO. S-26 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 60
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

ABUTMENT REPAIR DETAILS
STRUCTURE NO. 045-0016

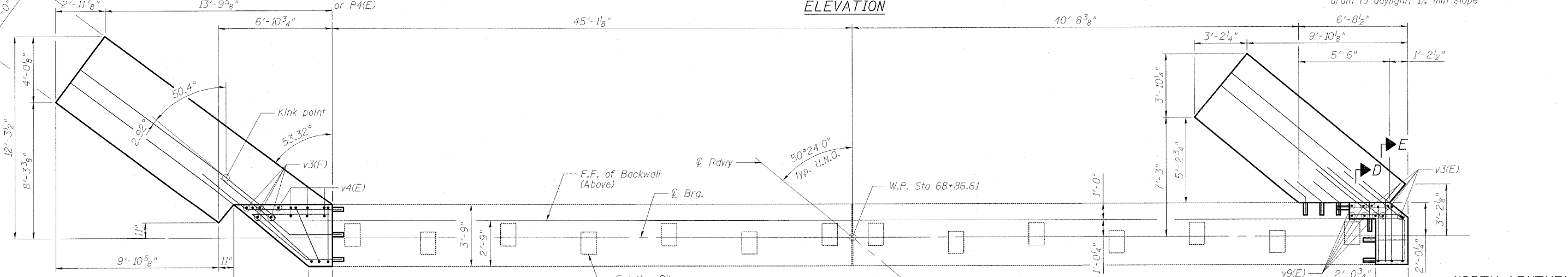
STATE OF ILLINOIS
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TOP PLAN



ELEVATION



ABUTMENT CAP PLAN

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

NOTES

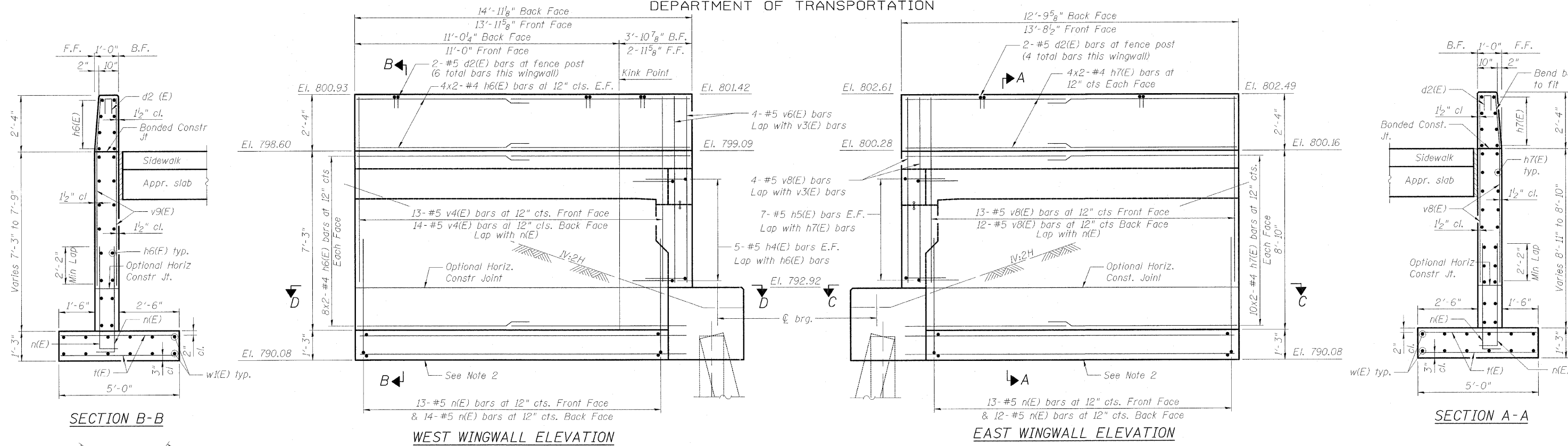
- See sheet S-18 of S-34 for fence post location on wingwalls.
- See sheet S-31 of S-34 for Section A-A, B-B, C-C, D-D, and E-E.
- See sheet S-28 of S-34 for Abutment Pile Cap and Wingwall reinforcement.
- E.F. = Each Face, B.F. = Back Face, F.F. = Front Face, U.N.O. = Unless Noted Otherwise
- Sidewalk over hatch block portion to be poured with approach pavement sidewalk. Concrete quantity & reinforcement bars are included with Approach Pavement. See drawings S-17 thru S-19 of S-34.

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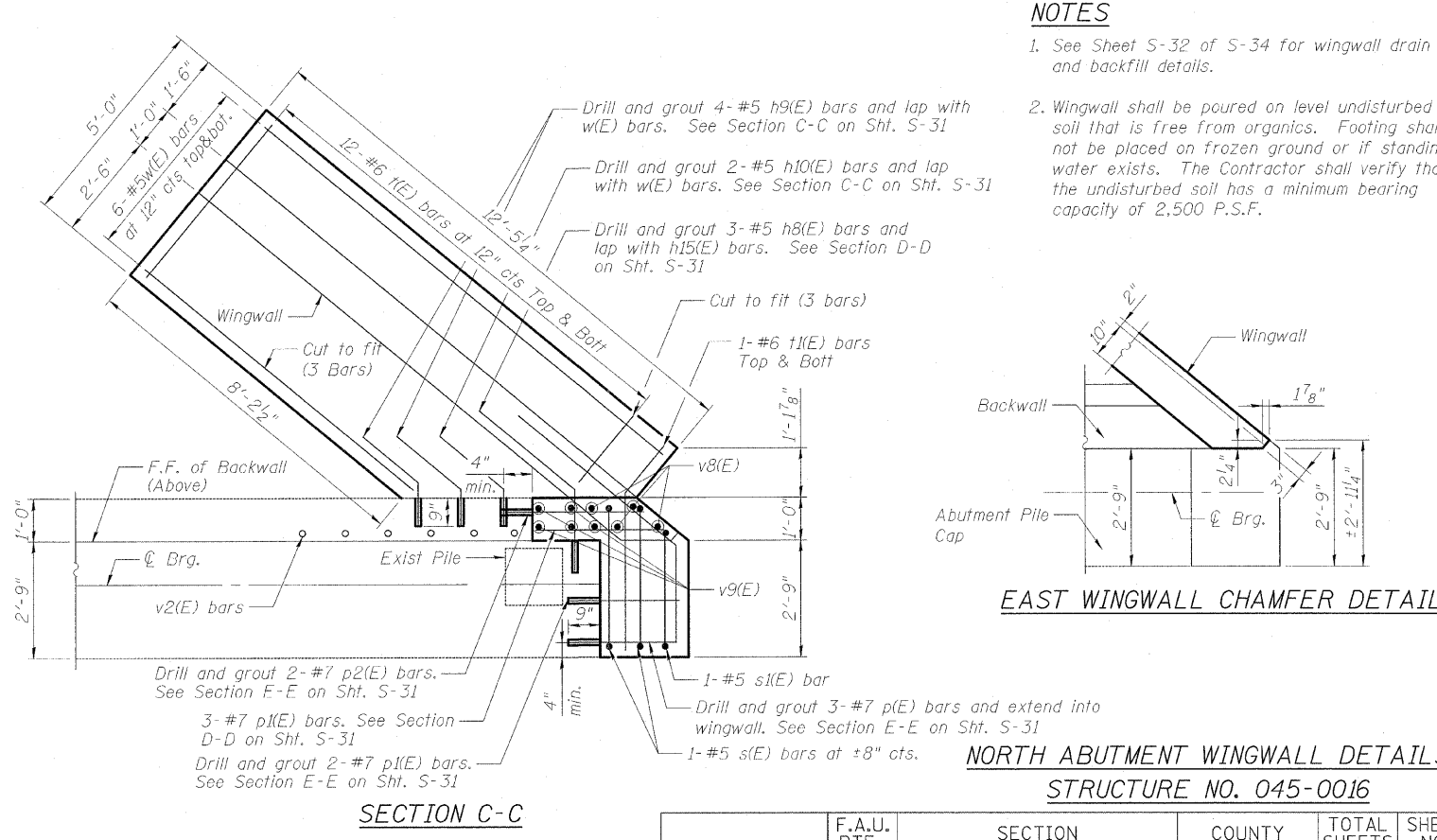
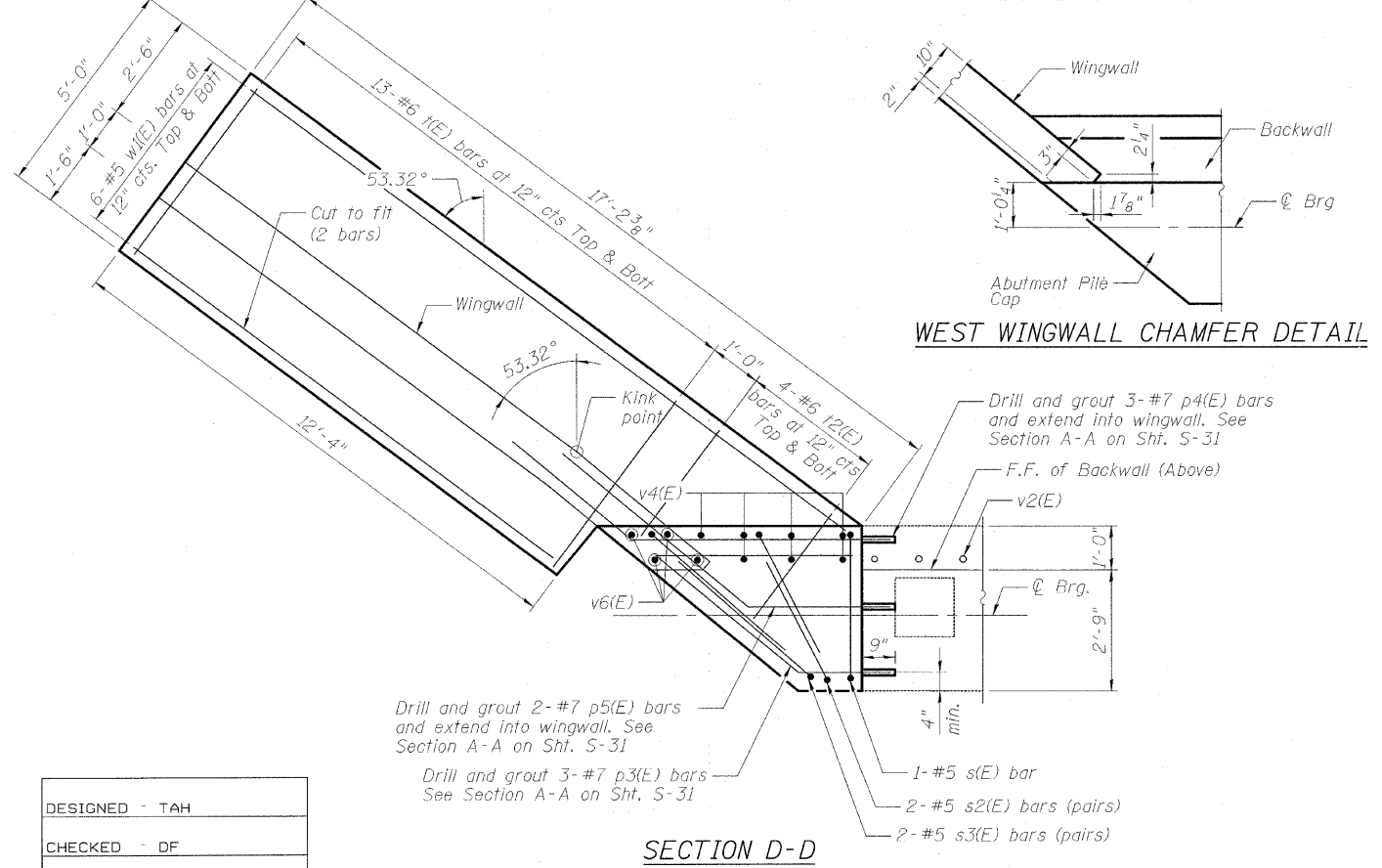
SHEET NO. S-27 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 61
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

NORTH ABUTMENT
E STRUCTURE NO. 045-0016

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



- NOTES**
- See Sheet S-32 of S-34 for wingwall drain and backfill details.
 - Wingwall shall be poured on level undisturbed soil that is free from organics. Footing shall not be placed on frozen ground or if standing water exists. The Contractor shall verify that the undisturbed soil has a minimum bearing capacity of 2,500 P.S.F.

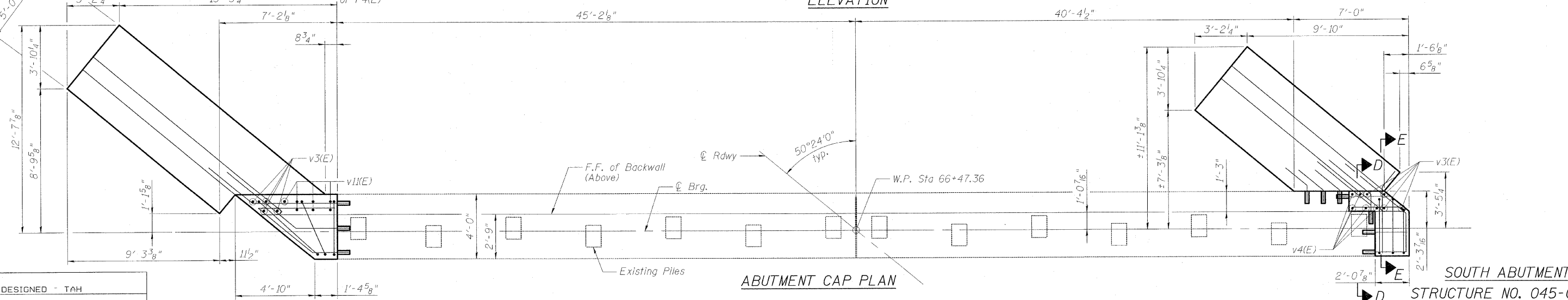
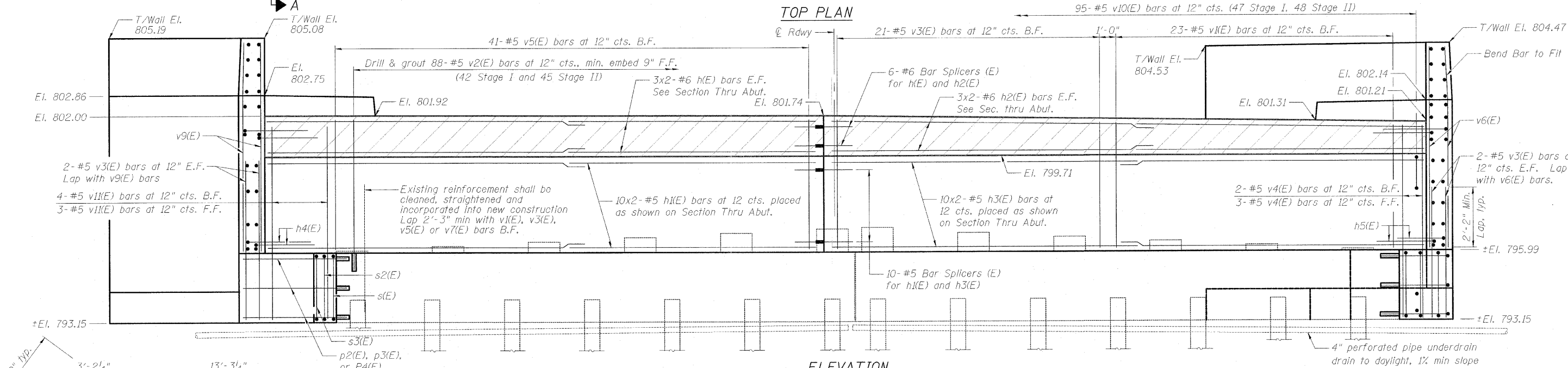
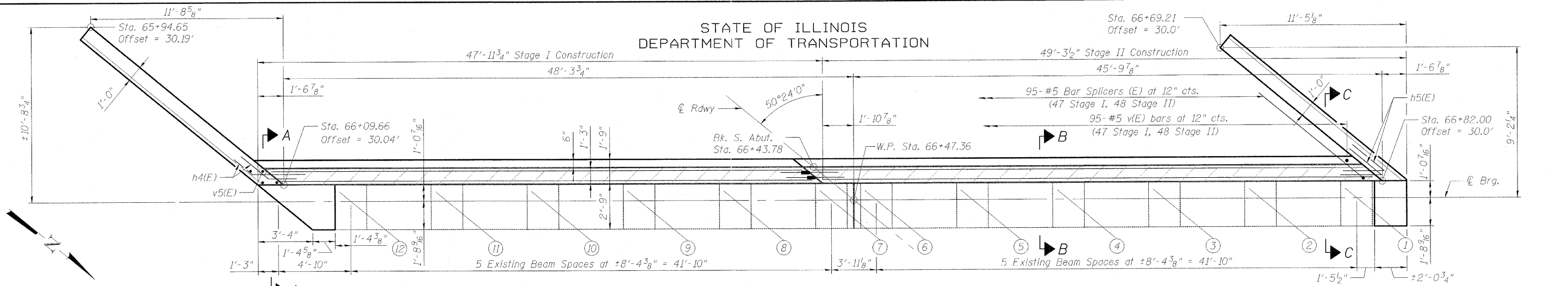


DESIGNED	- TAH
CHECKED	- DF
DRAWN	- LAM
CHECKED	- TAH

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SHEET NO. S-28	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 62
S-34 SHEETS			CONTRACT NO. 60C06		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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**SOUTH ABUTMENT
STRUCTURE NO. 045-0016**

DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

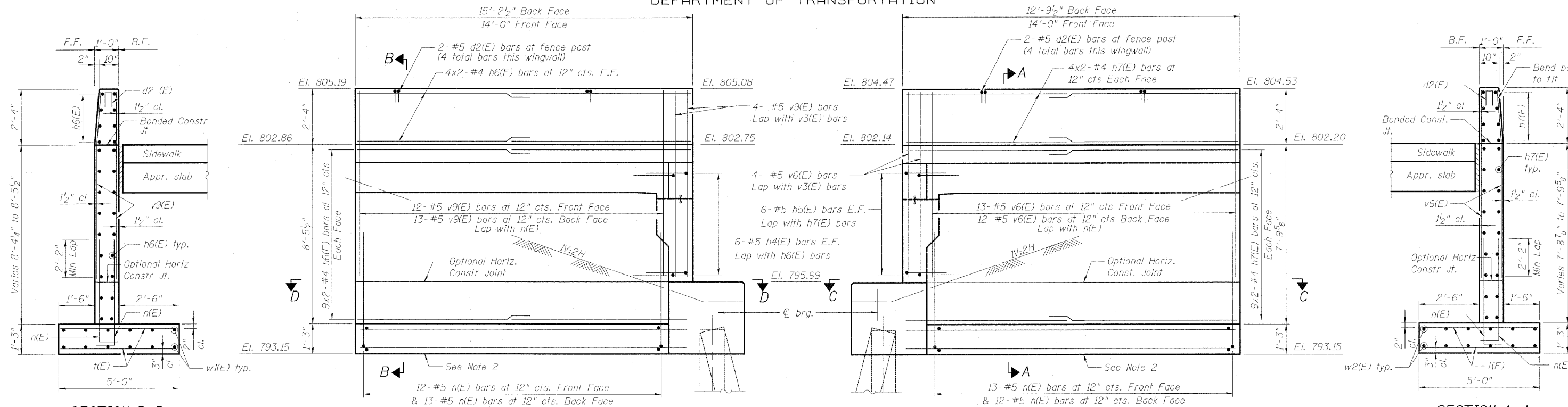
NOTES

- See sheet S-18 of S-34 for fence post location on wingwalls.
- See sheet S-31 of S-34 for Section A-A, B-B, C-C, D-D, and E-E.
- See sheet S-30 of S-34 for Abutment Pile Cap and Wingwall reinforcement.
- E.F. = Each Face, B.F. = Back Face, F.F. = Front Face
- Sidewalk over hatch block portion to be poured with approach pavement sidewalk. Concrete quantity & reinforcement bars are included with Approach Pavement. See drawings S-17 thru S-19 of S-34.

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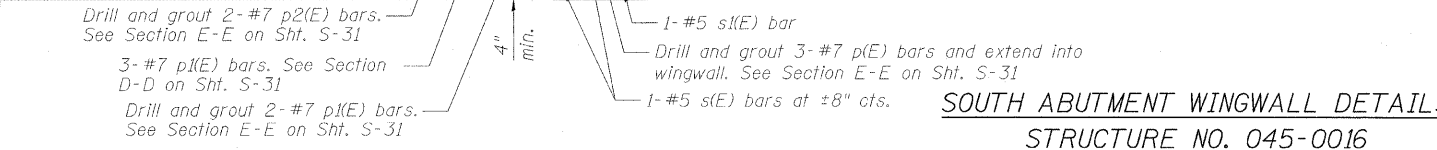
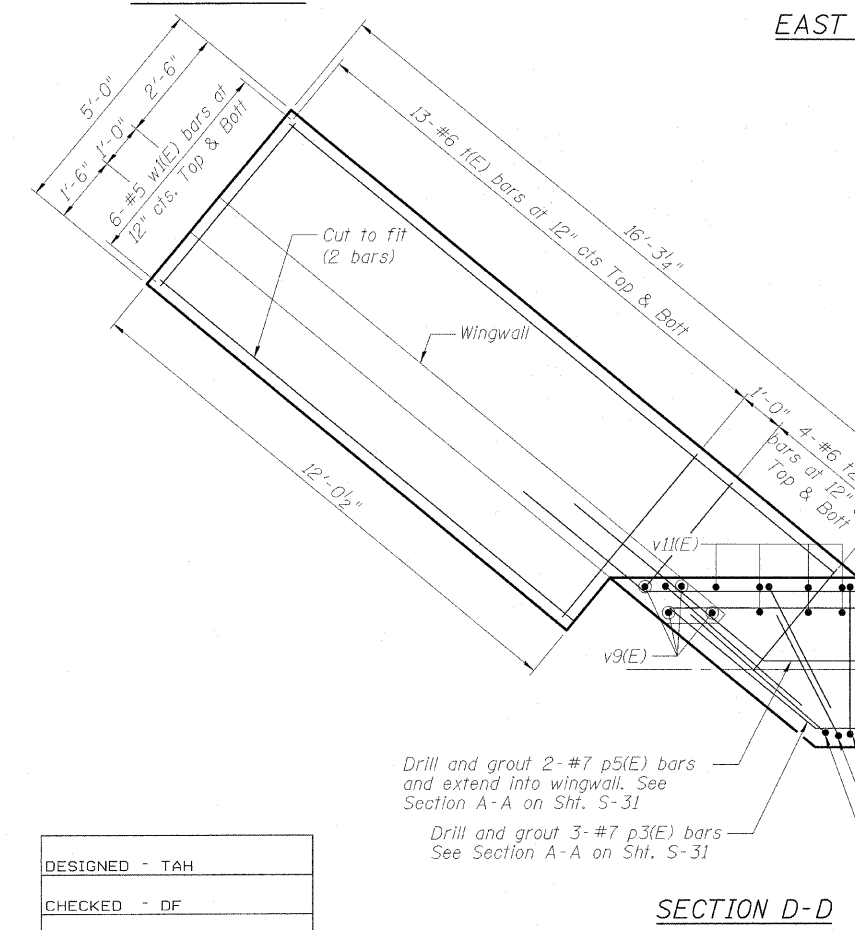
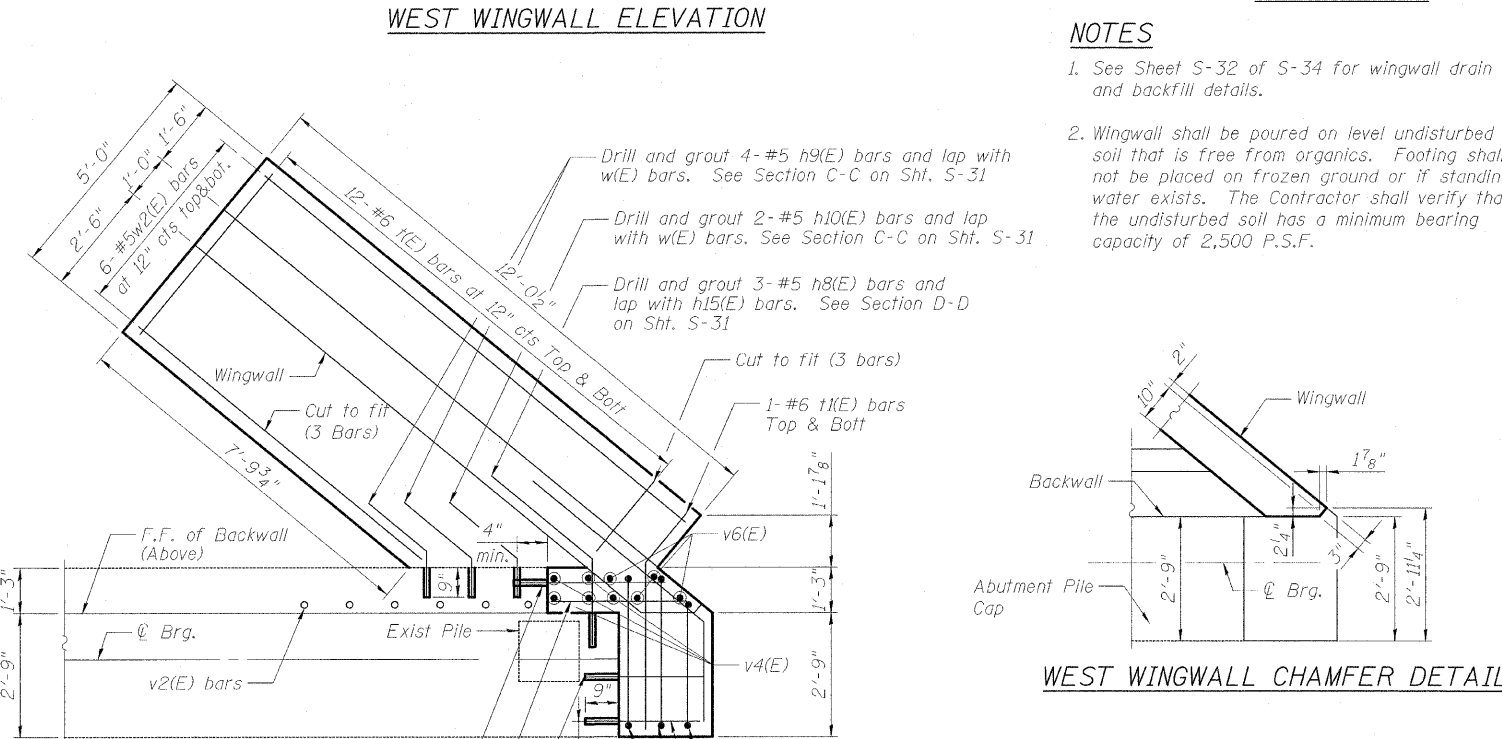
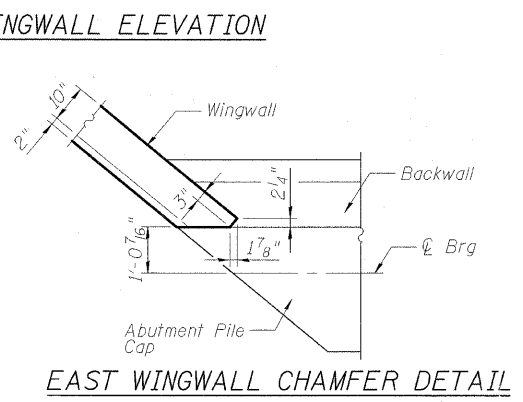
SHEET NO. S-29 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 63
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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NOTES

1. See Sheet S-32 of S-34 for wingwall drain and backfill details.
2. Wingwall shall be poured on level undisturbed soil that is free from organics. Footing shall not be placed on frozen ground or if standing water exists. The Contractor shall verify that the undisturbed soil has a minimum bearing capacity of 2,500 P.S.F.



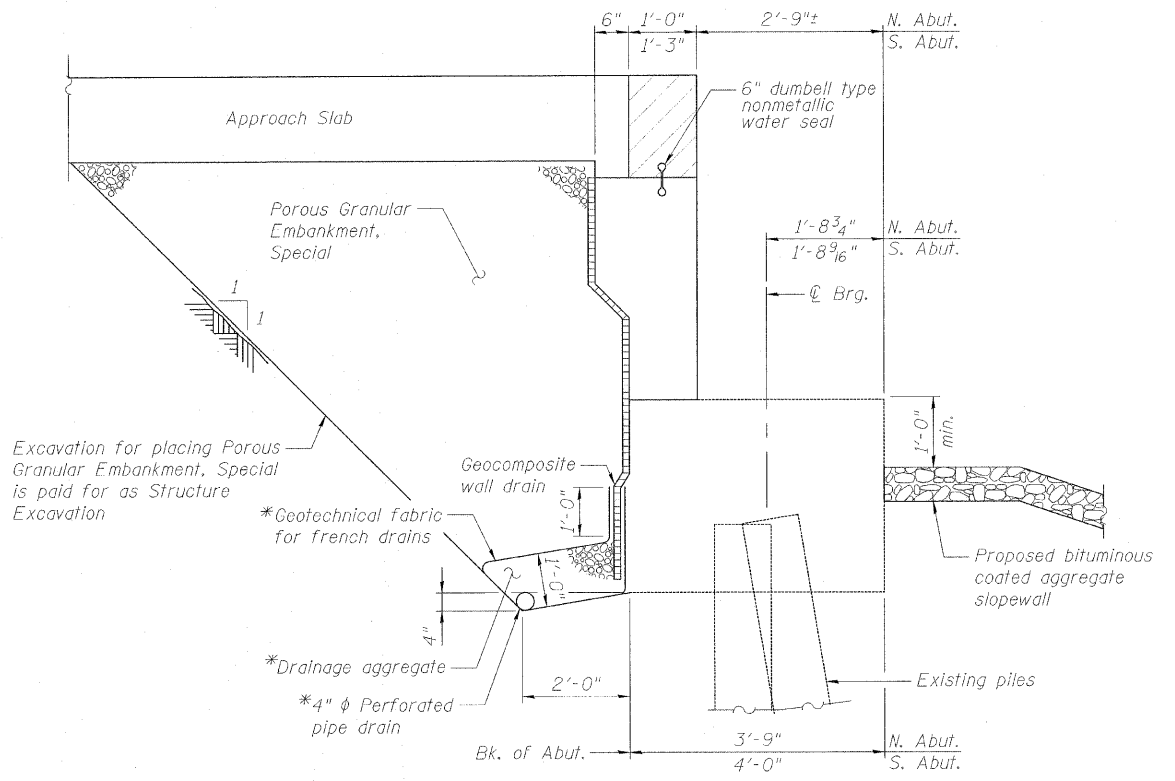
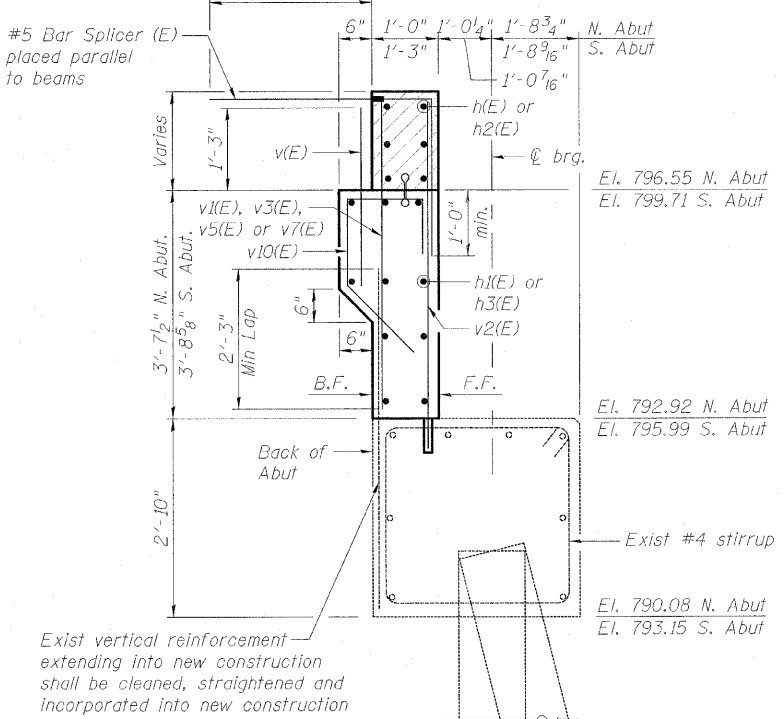
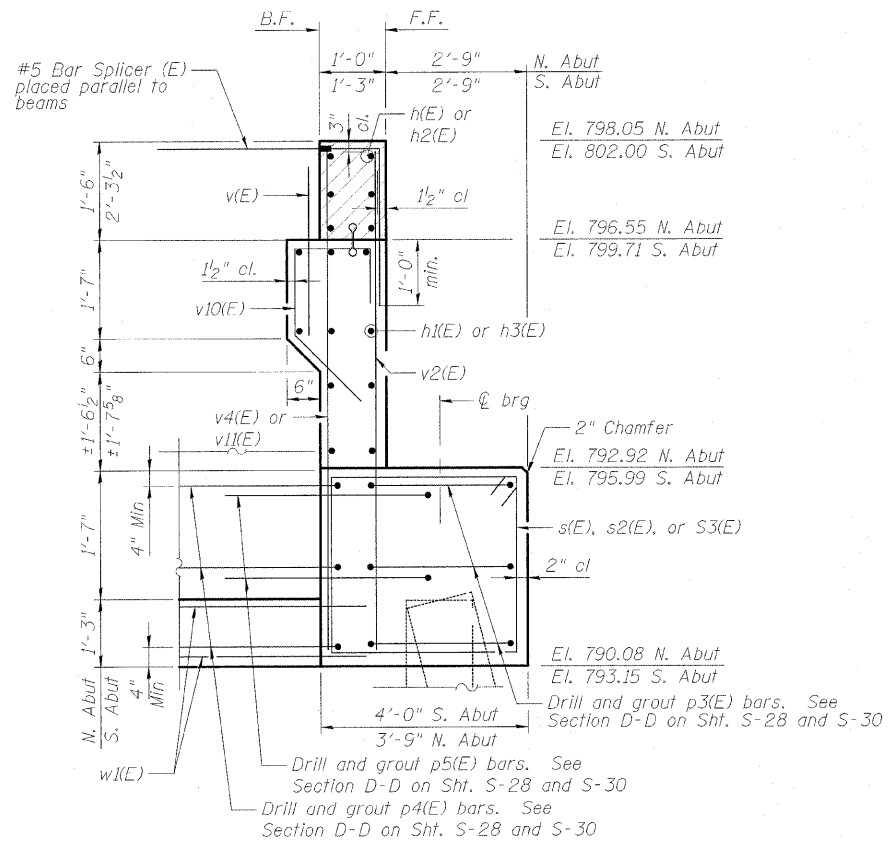
**SOUTH ABUTMENT WINGWALL DETAILS
STRUCTURE NO. 045-0016**

DESIGNED	- TAH
CHECKED	- DF
DRAWN	- LAM
CHECKED	- TAH

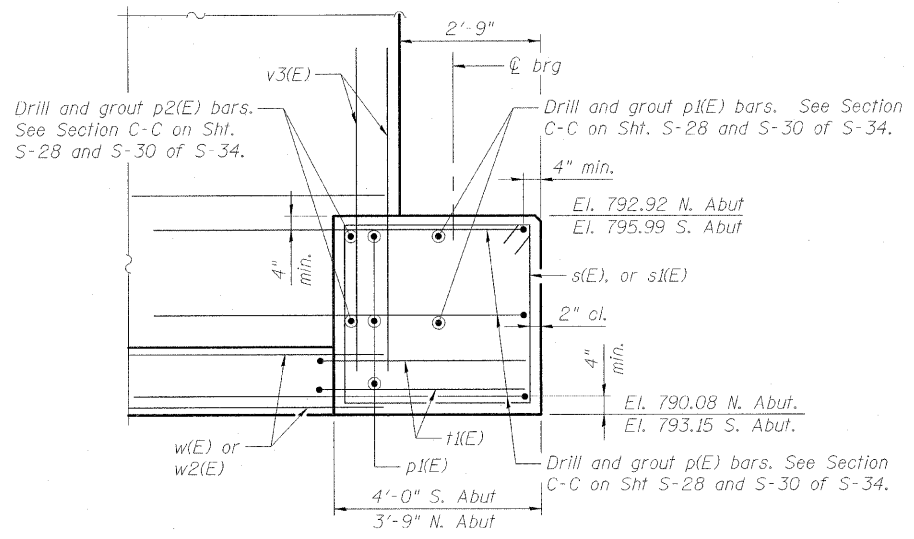
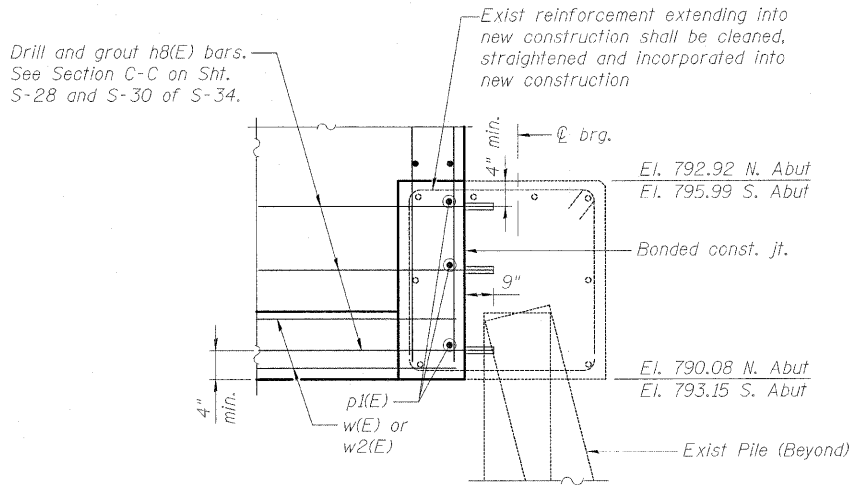
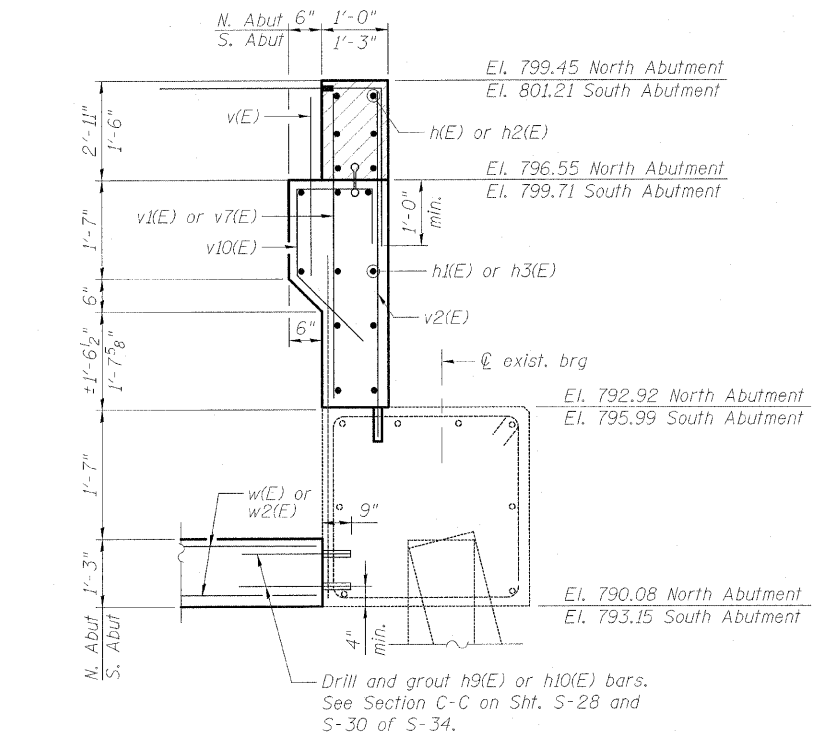
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SHEET NO. S-34	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 64
S-34 SHEETS			CONTRACT NO. 60C06		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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SECTION THRU ABUTMENT
Dimensions are shown at right angles to the abutment
* Cost included with Pipe Underdrains for Structures 4"



ABUTMENT DETAILS I
STRUCTURE NO. 045-0016

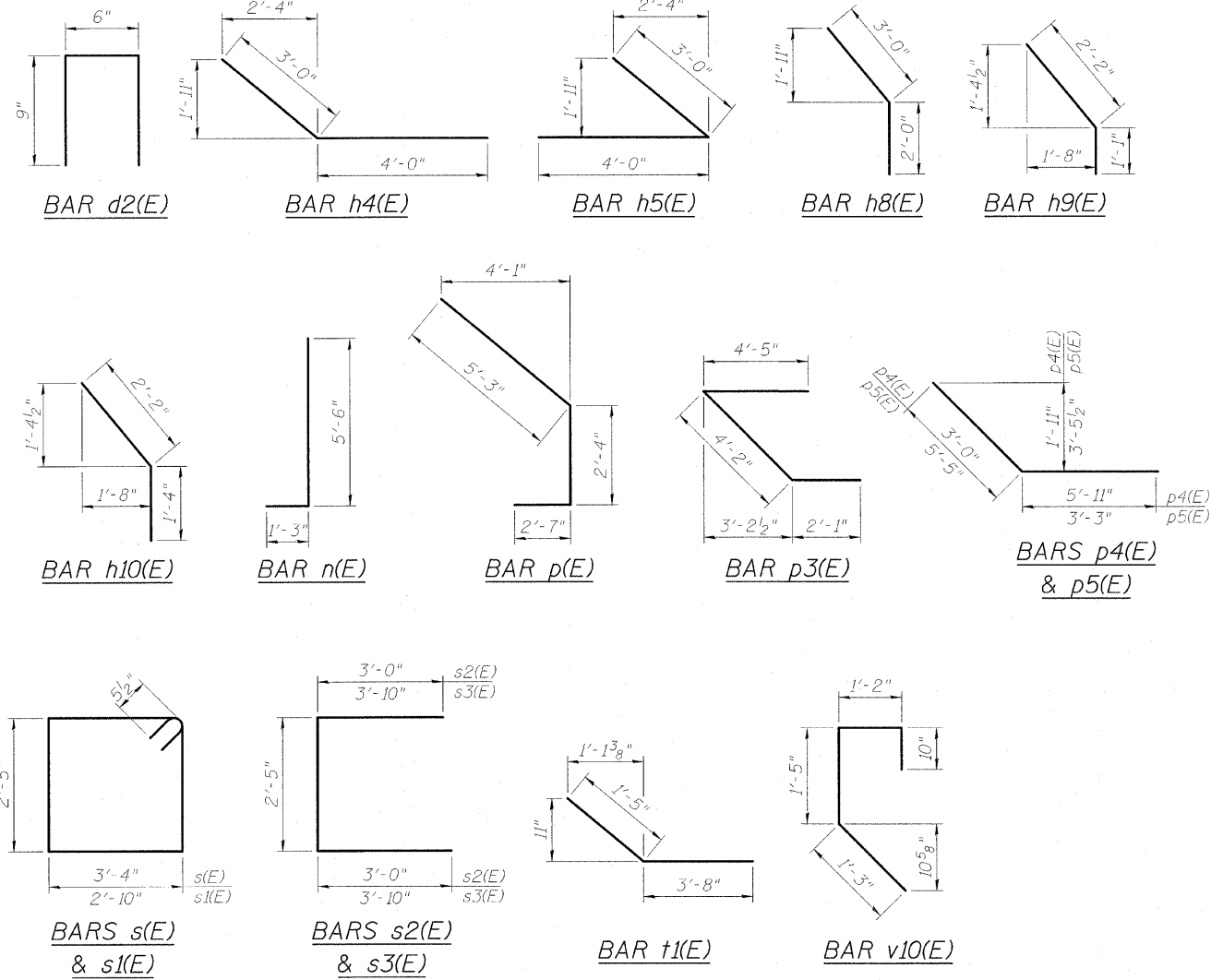
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

NOTES
Any existing reinforcement damaged during removal of backwall shall be replaced with the equivalent size of drilled and epoxy grouted bars. Cost shall be included with Reinforcement Bars, Epoxy Coated.
Concrete Sealer shall be applied to the front face of the backwall and to the top and front face of the new abutment pile cap.

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SHEET NO. S-31 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 65
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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MIN BAR LAP

- #4 bars = 1'-8"
- #5 bars = 2'-2"
- #6 bars = 2'-7"

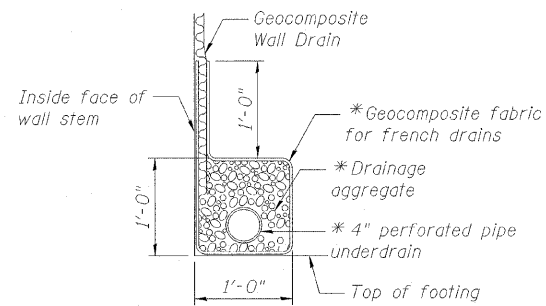
NORTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d2(E)	10	#4	2'-0"	□
n(E)	12	#6	24'-6"	—
h1(E)	20	#5	24'-6"	—
h2(E)	12	#6	25'-0"	—
h3(E)	20	#5	25'-0"	—
h4(E)	10	#5	7'-0"	↘
h5(E)	14	#5	7'-0"	↘
h6(E)	48	#4	8'-4"	—
h7(E)	56	#4	7'-8"	—
h8(E)	3	#5	5'-0"	↘
h9(E)	4	#5	3'-3"	↘
h10(E)	2	#5	3'-6"	↘
n(E)	52	#5	6'-9"	┘
p(E)	3	#7	10'-2"	↘
p1(E)	5	#7	2'-8"	—
p2(E)	2	#7	3'-3"	—
p3(E)	3	#7	10'-8"	↘
p4(E)	3	#7	8'-11"	↘
p5(E)	2	#7	8'-8"	↘
s(E)	3	#5	12'-5"	□
s1(E)	1	#5	11'-5"	□
s2(E)	2	#5	8'-5"	□
s3(E)	2	#5	10'-1"	□
t(E)	50	#6	4'-8"	—
t1(E)	2	#6	5'-1"	↘
t2(E)	8	#6	3'-2"	—
v(E)	95	#5	2'-7"	—
v1(E)	10	#5	4'-10"	—
v2(E)	88	#5	5'-8"	—
v3(E)	25	#5	5'-2"	—
v4(E)	34	#5	7'-7"	—
v5(E)	17	#5	5'-5"	—
v6(E)	4	#5	8'-2"	—
v7(E)	45	#5	5'-11"	—
v8(E)	29	#5	9'-4"	—
v9(E)	5	#5	8'-10"	—
v10(E)	95	#5	4'-8"	┘
w(E)	12	#5	12'-1"	—
w1(E)	12	#5	17'-0"	—
Porous Granular Embankment, Special	Cu. Yd.	180.1		
Structure Excavation	Cu. Yd.	231		
Concrete Structures	Cu. Yd.	34.8		
Reinforcement Bars, Epoxy Coated	Pound	6620		
Concrete Sealer	Sq. Ft.	392		
Geocomposite Wall Drain	Sq. Yd.	95		
Pipe Underdrains for Structures, 4"	Foot	189.5		

SOUTH ABUTMENT
BILL OF MATERIAL

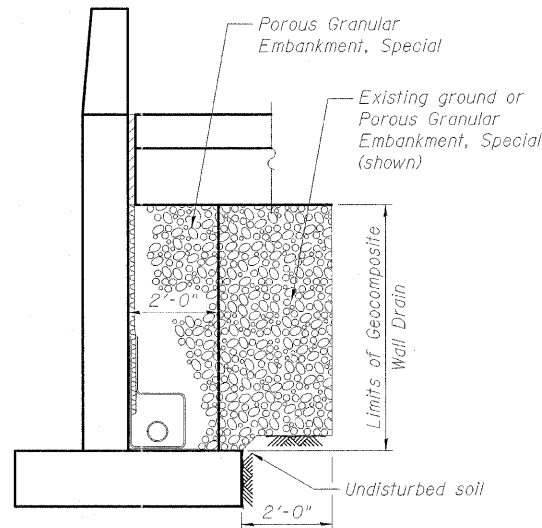
Bar	No.	Size	Length	Shape
d2(E)	8	#4	2'-0"	□
n(E)	12	#6	24'-6"	—
h1(E)	20	#5	24'-6"	—
h2(E)	12	#6	25'-0"	—
h3(E)	20	#5	25'-0"	—
h4(E)	12	#5	7'-0"	↘
h5(E)	12	#5	7'-0"	↘
h6(E)	52	#4	8'-4"	—
h7(E)	52	#4	7'-8"	—
h8(E)	3	#5	5'-0"	↘
h9(E)	4	#5	3'-3"	↘
h10(E)	2	#5	3'-6"	↘
n(E)	50	#5	6'-9"	┘
p(E)	3	#7	10'-2"	↘
p1(E)	5	#7	2'-8"	—
p2(E)	2	#7	3'-3"	—
p3(E)	3	#7	10'-8"	↘
p4(E)	3	#7	8'-11"	↘
p5(E)	2	#7	8'-8"	↘
s(E)	3	#5	12'-5"	□
s1(E)	1	#5	11'-5"	□
s2(E)	2	#5	8'-5"	□
s3(E)	2	#5	10'-1"	□
t(E)	50	#6	4'-8"	—
t1(E)	2	#6	5'-1"	↘
t2(E)	8	#6	3'-2"	—
v(E)	95	#5	2'-7"	—
v1(E)	23	#5	4'-10"	—
v2(E)	88	#5	5'-8"	—
v3(E)	29	#5	5'-2"	—
v4(E)	5	#5	7'-7"	—
v5(E)	41	#5	5'-5"	—
v6(E)	29	#5	8'-2"	—
v9(E)	29	#5	8'-10"	—
v10(E)	95	#5	4'-8"	┘
w1(E)	12	#5	17'-0"	—
w2(E)	12	#5	11'-8"	—
Porous Granular Embankment, Special	Cu. Yd.	169.4		
Structure Excavation	Cu. Yd.	208		
Concrete Structures	Cu. Yd.	38.5		
Reinforcement Bars, Epoxy Coated	Pound	6530		
Concrete Sealer	Sq. Ft.	399		
Geocomposite Wall Drain	Sq. Yd.	96		
Pipe Underdrains for Structures, 4"	Foot	192.5		

For details of Bar Splicers, see sheet S-34 of S-34.



PIPE UNDERDRAIN DETAIL

*Cost included with Pipe Underdrains for Structures 4"



SECTION THRU WINGWALL

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SHEET NO. S-32 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 66
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

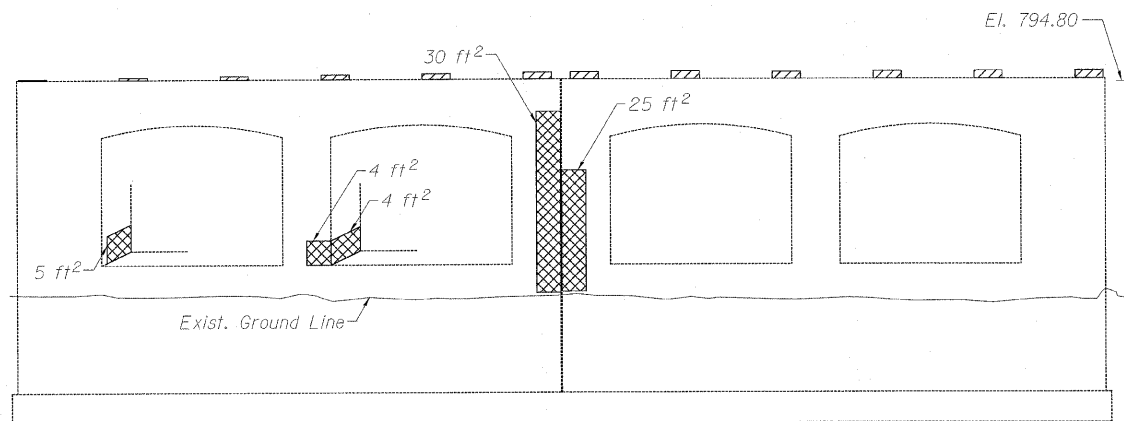
ABUTMENT DETAILS II
STRUCTURE NO. 045-0016

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CHECKED - DF
DRAWN - LAM
CHECKED - TAH

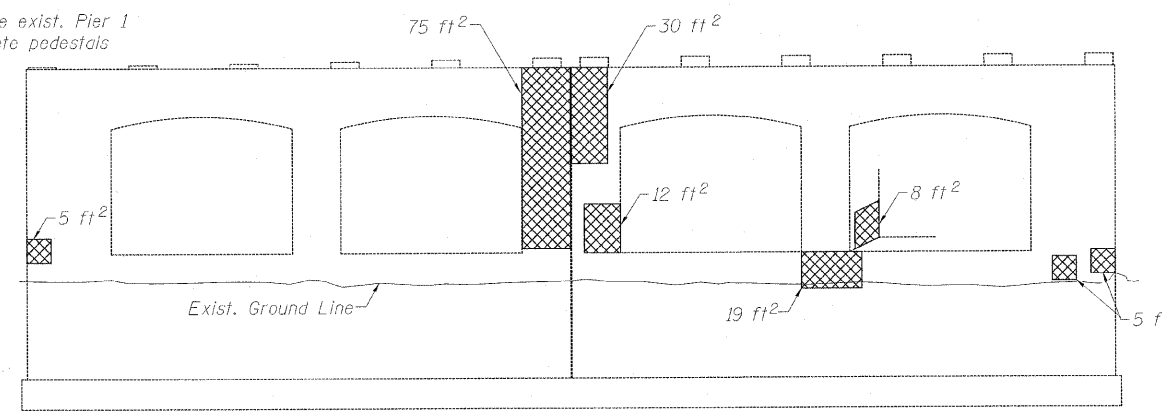
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

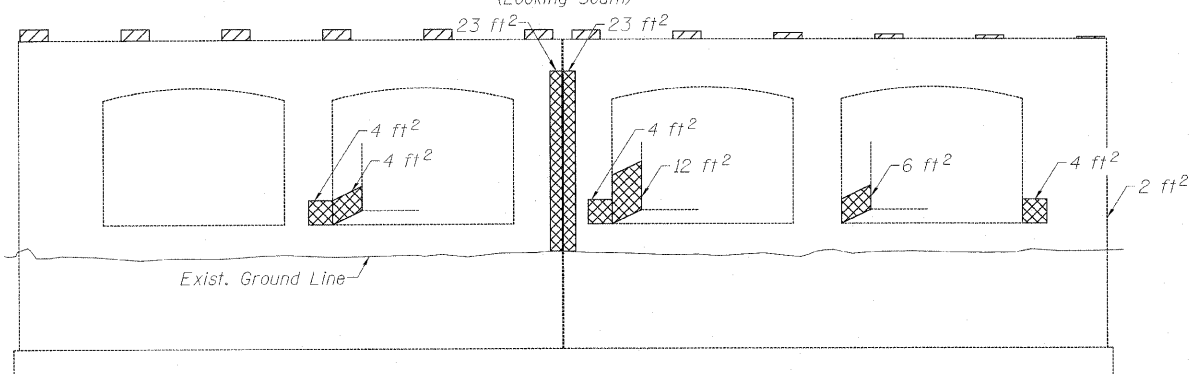
Bar	No.	Size	Length	Shape
d30(E)	48	#5	4'-4"	□
s30(E)	30	#5	10'-5"	□
s31(E)	6	#5	9'-11"	□
v30(E)	10	#5	2'-0"	—
v31(E)	10	#5	2'-1"	—
v32(E)	10	#5	2'-3"	—
v33(E)	10	#5	2'-4"	—
v34(E)	10	#5	2'-5"	—
v35(E)	10	#5	2'-6"	—
v36(E)	60	#5	2'-7"	—
Concrete Removal		Cu. Yd.	1.2	
Concrete Structures		Cu. Yd.	6.1	
Reinforcement Bars, Epoxy Coated		Pound	910	
Structural Repair of Concrete (Depth equal to or less than 5 Inches)		Sq. Ft.	347	
Epoxy Crack Injection		Foot	10	



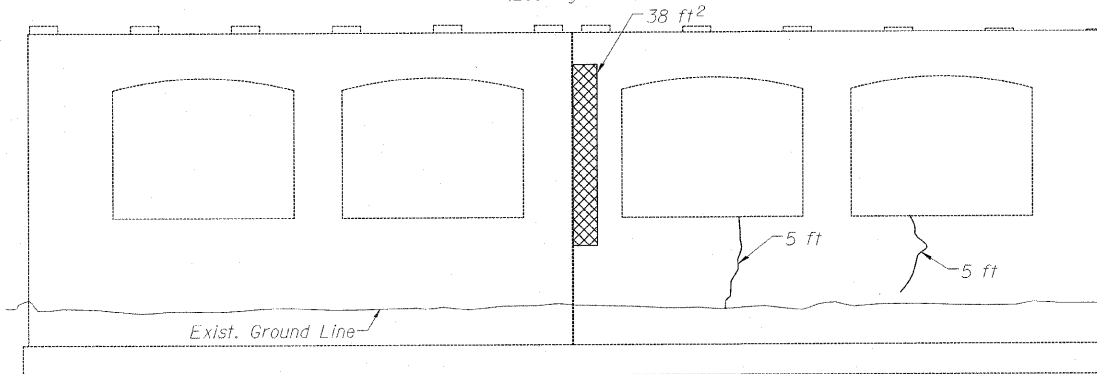
NORTH FACE PIER 1
(Looking South)



NORTH FACE PIER 2
(Looking South)



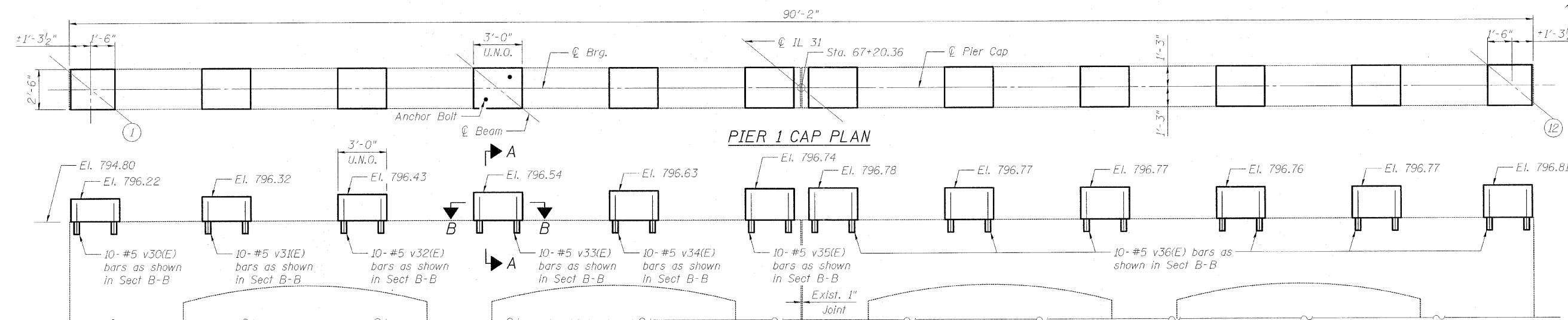
SOUTH FACE PIER 1
(Looking North)



SOUTH FACE PIER 2
(Looking North)

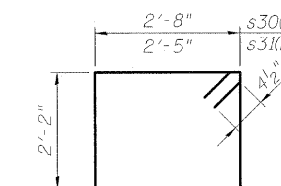
LEGEND

- Concrete Removal
- Structural Repair of Concrete (Depth equal to or less than 5 Inches)
- Epoxy Crack Injection

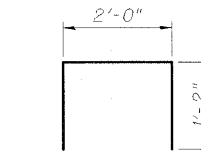


PIER 1 CAP PLAN

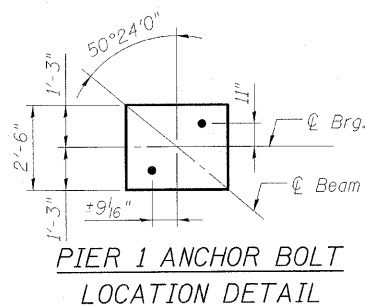
PIER 1 CAP ELEVATION
(Looking North)



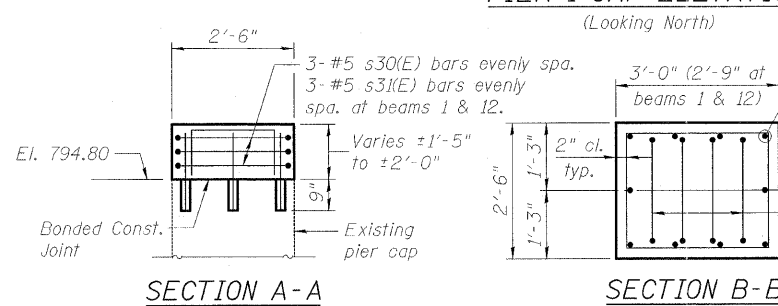
BARS s30(E)
& s31(E)



BAR d30(E)



PIER 1 ANCHOR BOLT
LOCATION DETAIL



SECTION A-A

SECTION B-B

Note:
Space reinforcement to miss anchor bolts.

Drill and epoxy grout #5 bars, evenly spaced. See elevation view for bar callouts.

4- #5 d30(E) bars at 12" cts. each pedestal. Space to miss anchor bolts

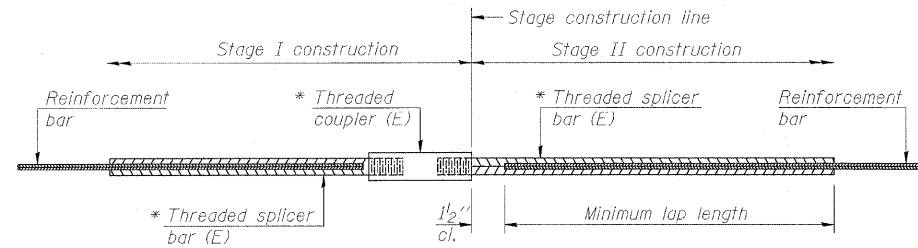
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SHEET NO. S-33 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 67
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

PIER REPAIRS &
PIER 1 CAP MODIFICATION
STRUCTURE NO. 045-0016

DESIGNED - DF
CHECKED - TL
DRAWN - LAM
CHECKED - DF

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

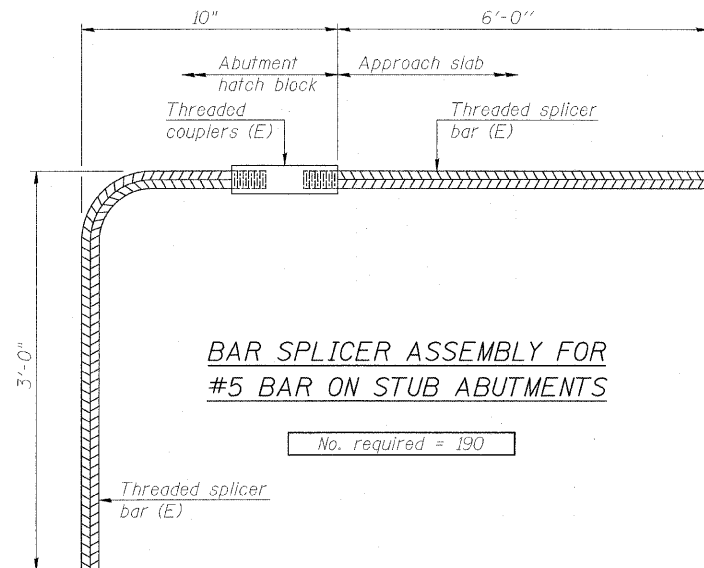
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

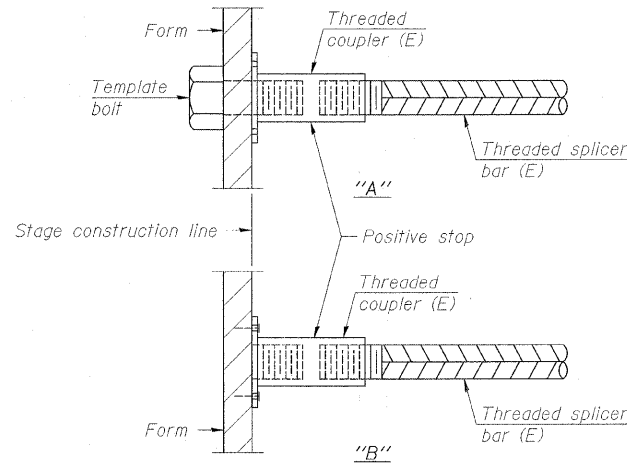
Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	# 5	612	Table 3
Deck	# 6	10	Table 3
Approach Slab	# 4	50	Table 3
Approach Slab	# 5	172	Table 3
S. Abutment	# 5	10	Table 3
S. Abutment	# 6	6	Table 3
N. Abutment	# 5	10	Table 3
N. Abutment	# 6	6	Table 3

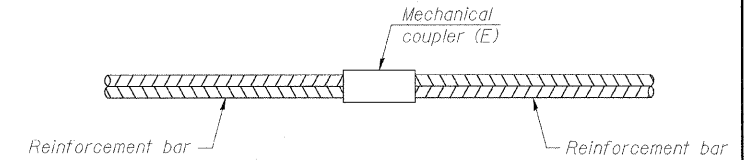


BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS



INSTALLATION AND SETTING METHODS

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

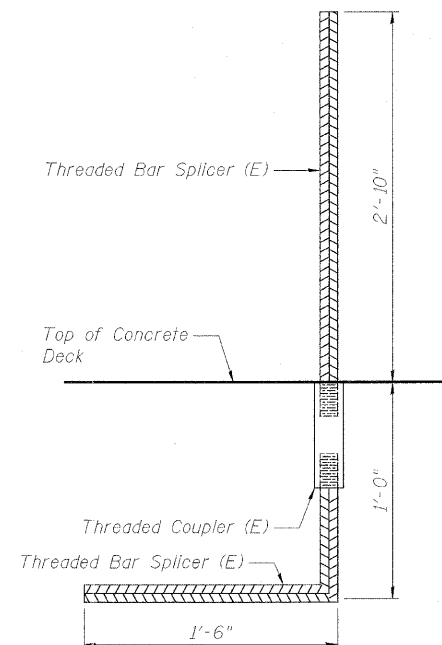


STANDARD MECHANICAL SPLICER

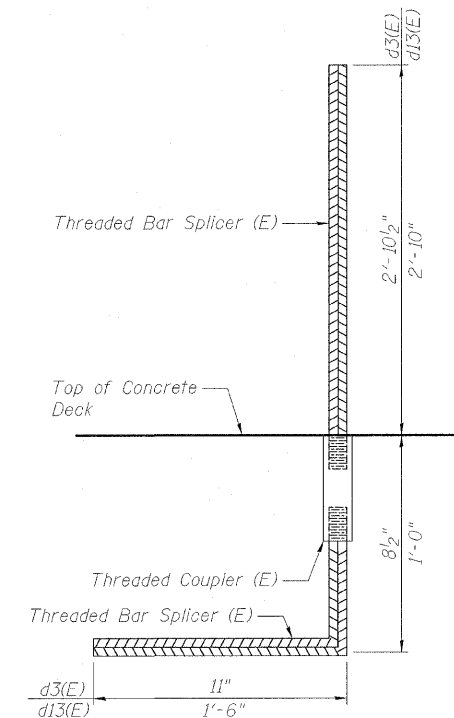
Location	Bar size	No. assemblies required
Deck	#5	---
Appr. Slab	#4	---
Appr. Slab	#5	---

NOTES

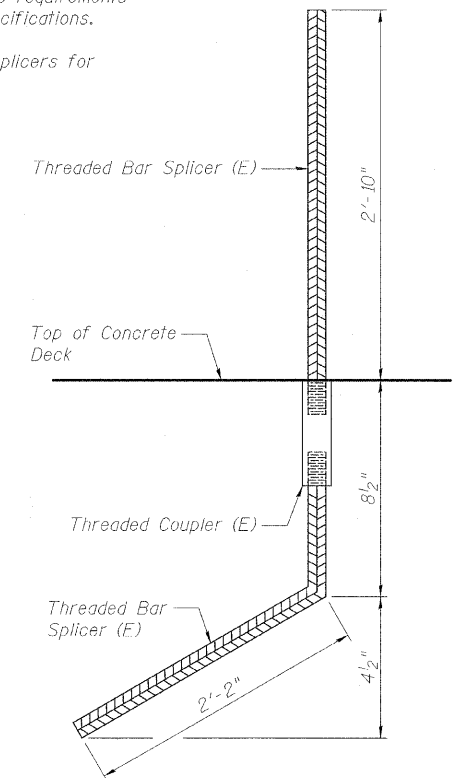
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.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



d12(E) #4 BAR SPLICER



d3(E) & d13(E) #6 BAR SPLICER



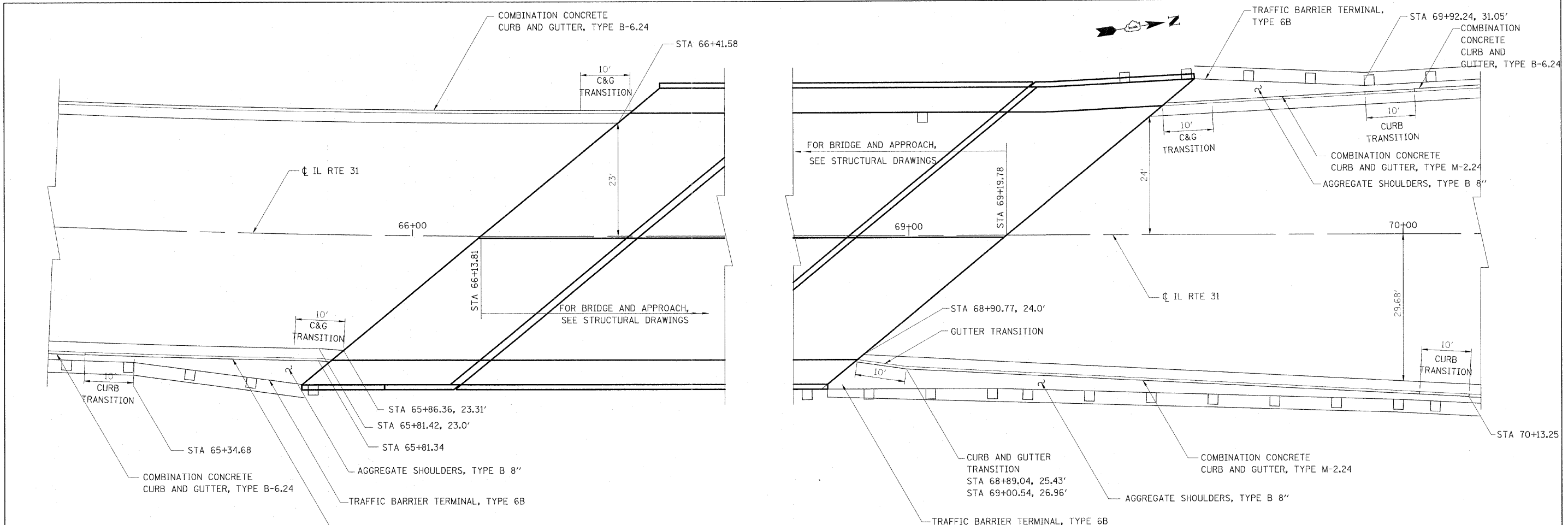
d4(E) #4 BAR SPLICER

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-0016

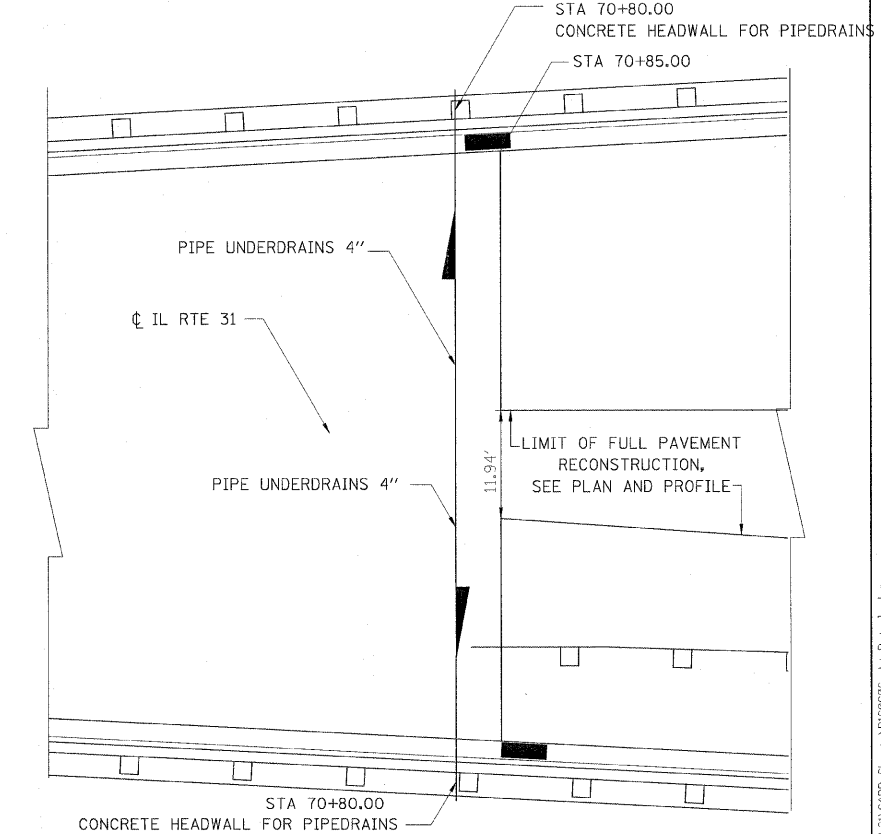
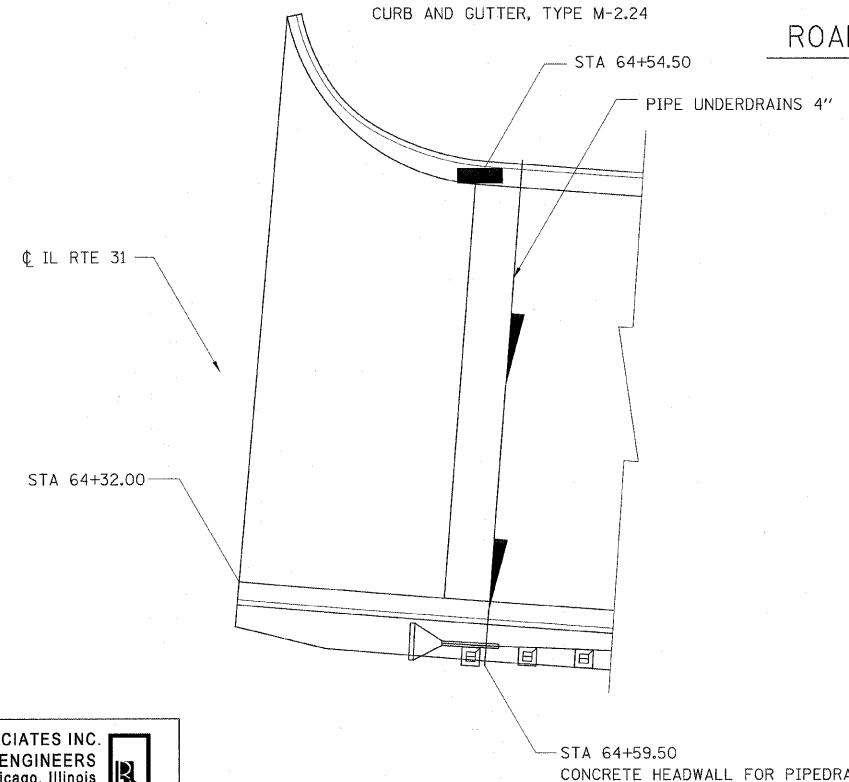
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CHECKED - DF
DRAWN - LAM
CHECKED - DF

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SHEET NO. S-34 S-34 SHEETS	F.A.U. RTE. 3887	SECTION R-VB-R	COUNTY KANE	TOTAL SHEETS 83	SHEET NO. 68
	CONTRACT NO. 60C06				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



ROADWAY DETAILS WITH BRIDGE CORNERS



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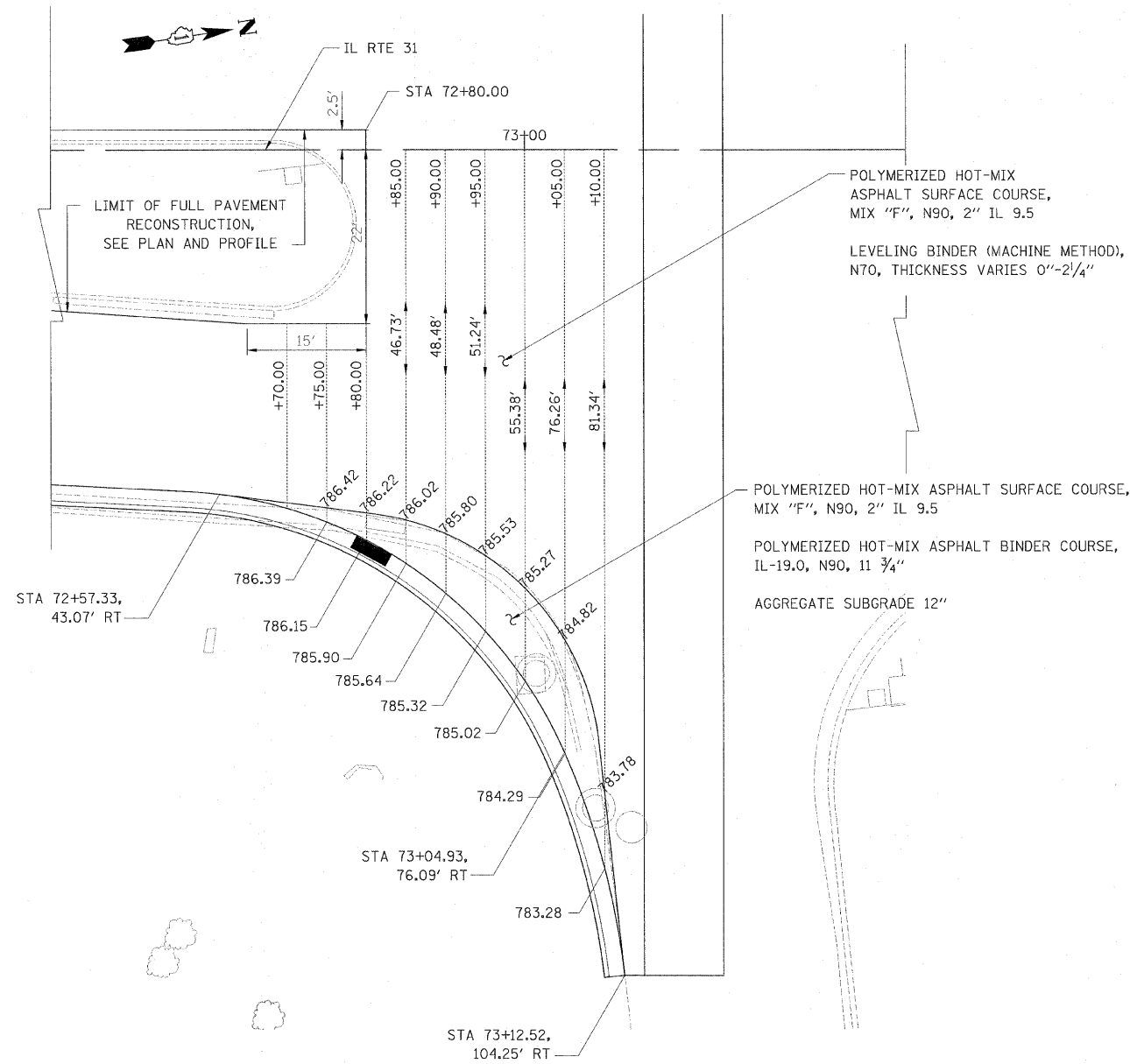
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		DATE - 07/01/2011	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CIVIL DETAILS
 SCALE: NTS
 SHEET NO. 1 OF 2 SHEETS
 STA. NA TO STA. NA

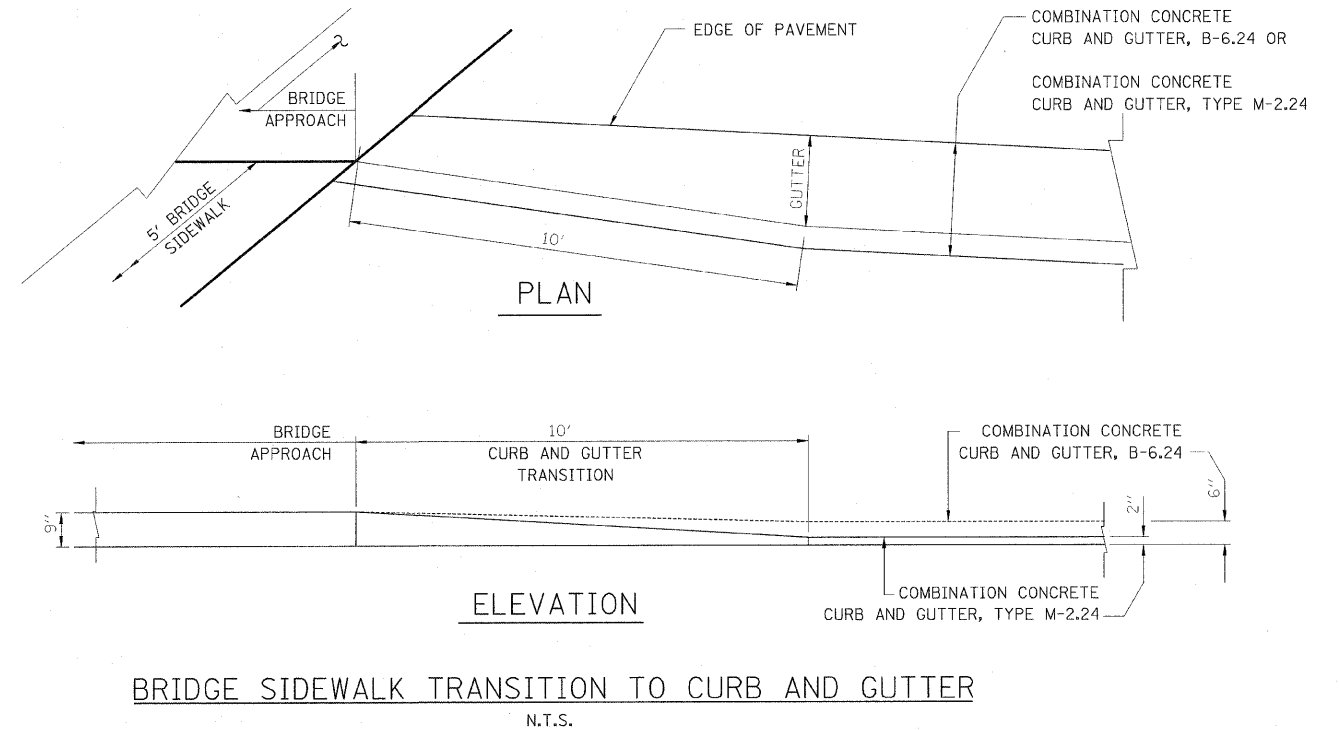
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	69
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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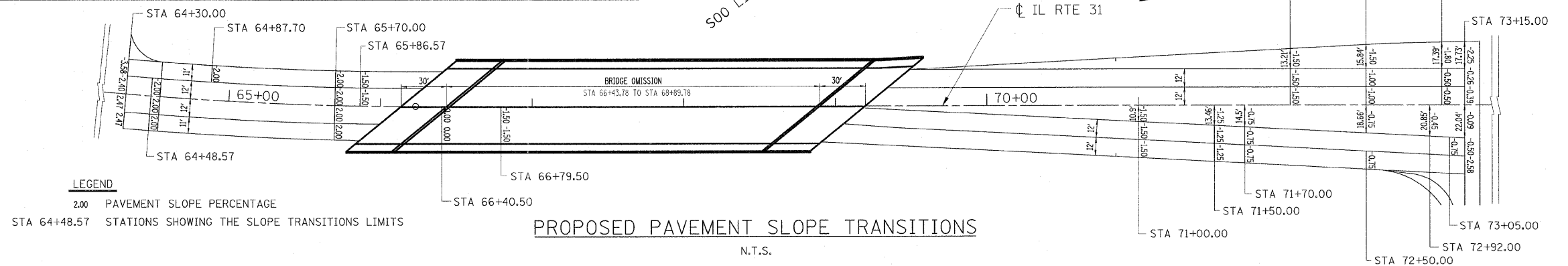
PROPOSED ELEVATION DETAILS
FOR IL RTE 31 AND JERUSHA AVE WIDENING

N.T.S.



BRIDGE SIDEWALK TRANSITION TO CURB AND GUTTER

N.T.S.



LEGEND

- 2.00 PAVEMENT SLOPE PERCENTAGE
- STA 64+48.57 STATIONS SHOWING THE SLOPE TRANSITIONS LIMITS

PROPOSED PAVEMENT SLOPE TRANSITIONS

N.T.S.

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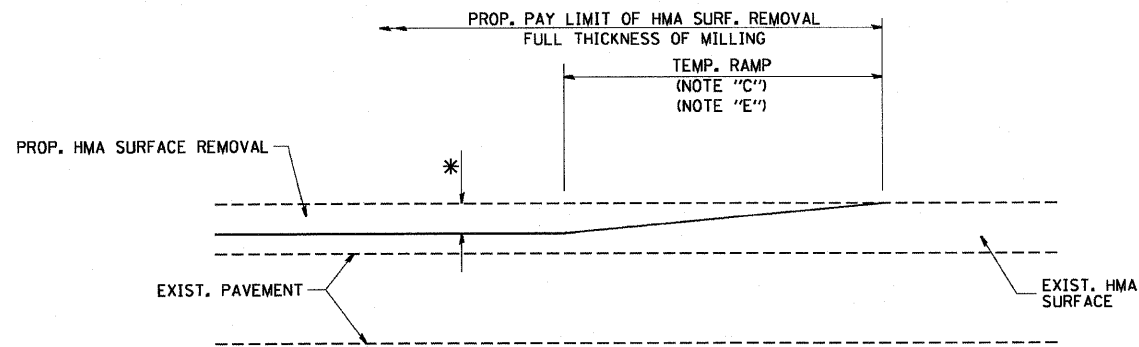
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL DETAILS

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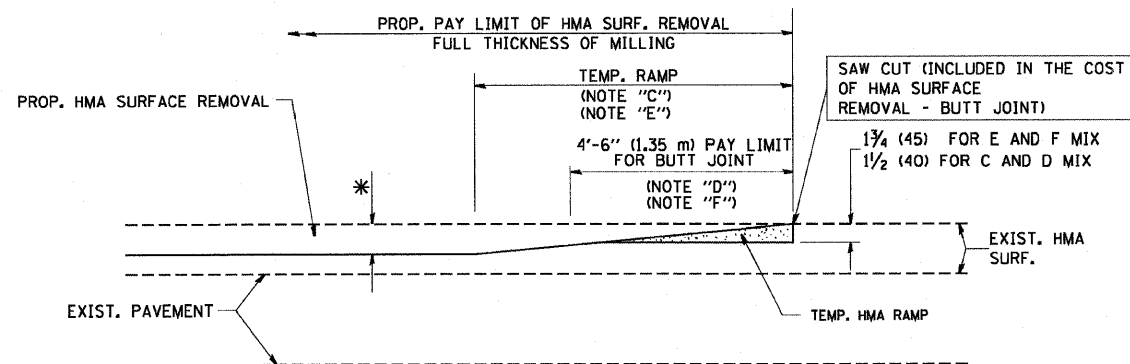
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CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

s:\100\2011\60060\1131\CADD Sheets\60060-sht-Details.dgn



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

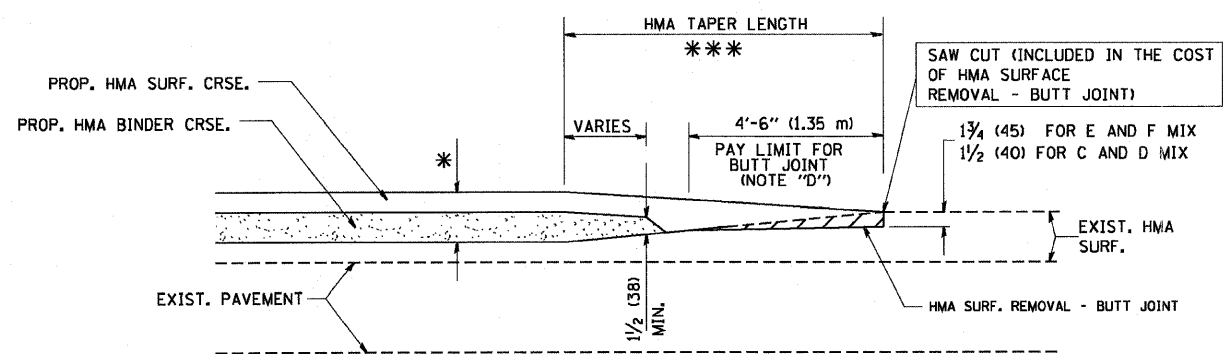
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

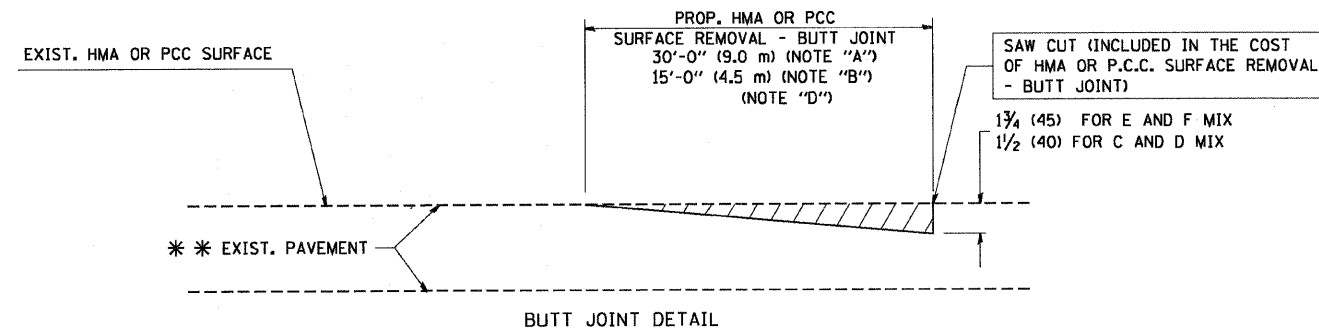
OPTION 2

TYPICAL TEMPORARY RAMP

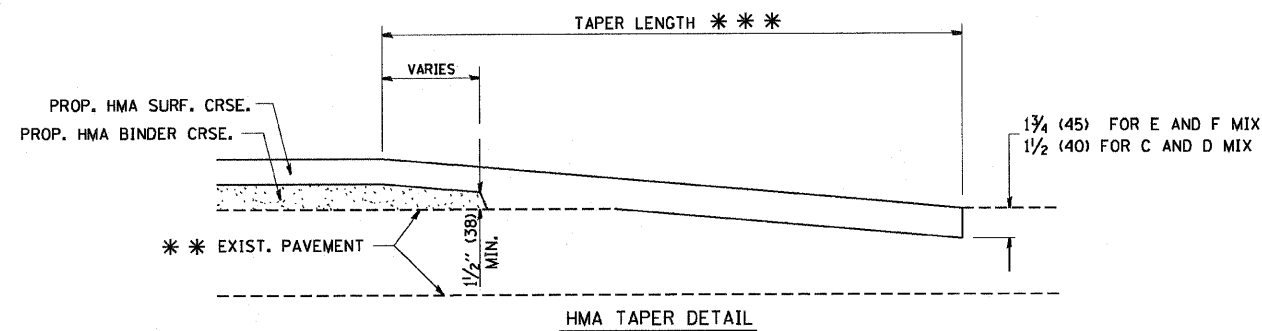


BUTT JOINT AND
HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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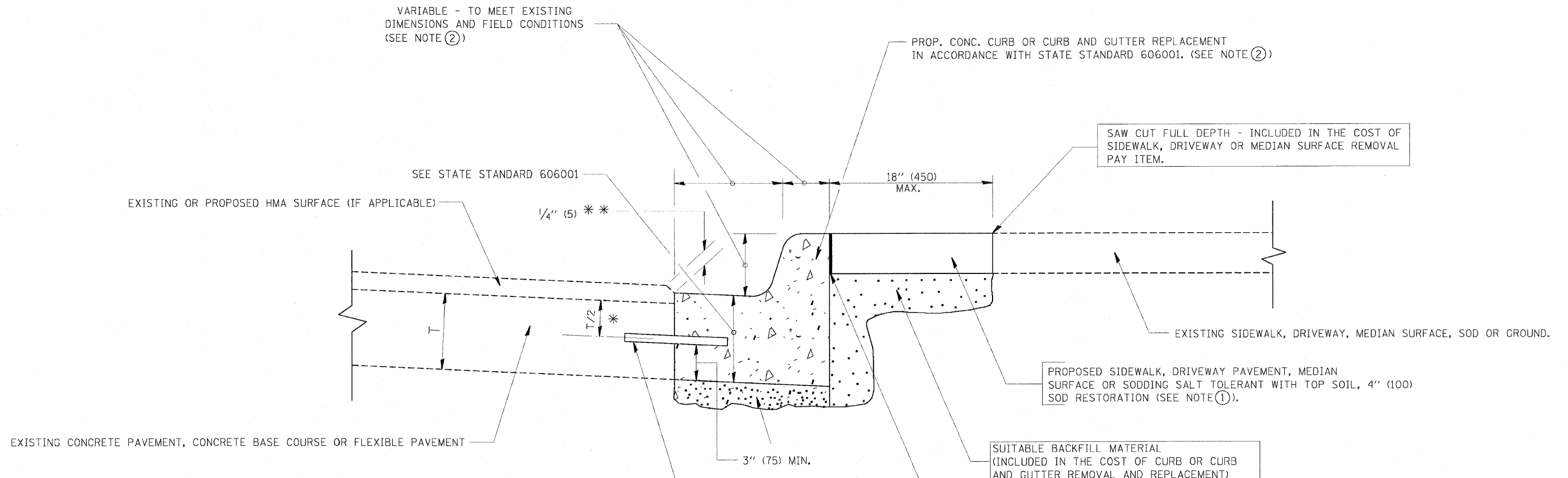
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DRAWN -
CHECKED -
DATE - 06-13-90

REVISED - R. SHAH 10-25-94
REVISED - A. ABBAS 03-21-97
REVISED - M. GOMEZ 04-06-01
REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 3887	SECTION R-VB-R	COUNTY COOK	TOTAL SHEETS 83	SHEET NO. 71
BD400-05 BD32			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



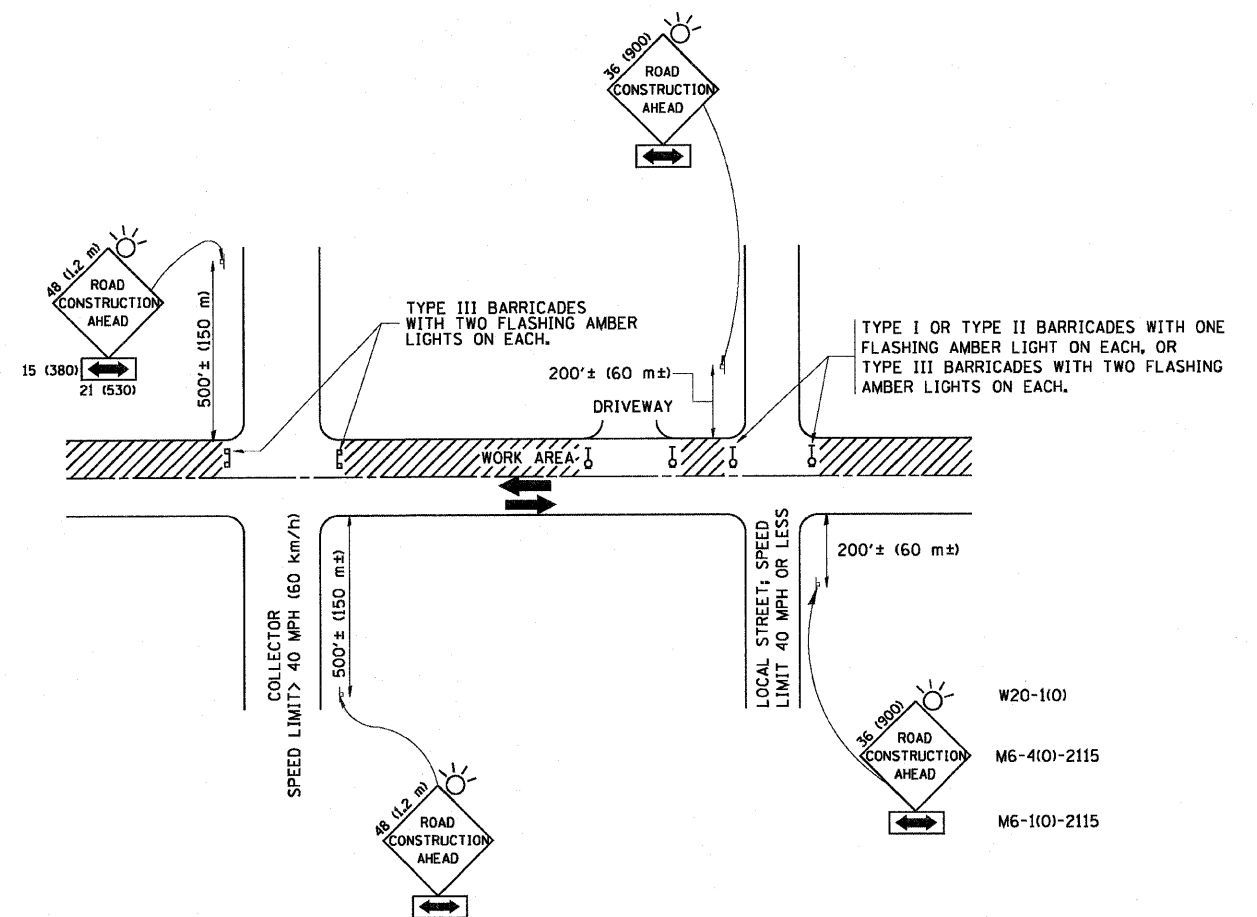
* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
 ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
 SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.
- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
- ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drsvk05gn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			F.A. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
drsvk05gn.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		3887	R-VB-R	COOK	83	72			
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO.				
PLOT DATE = 12/15/2009		DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

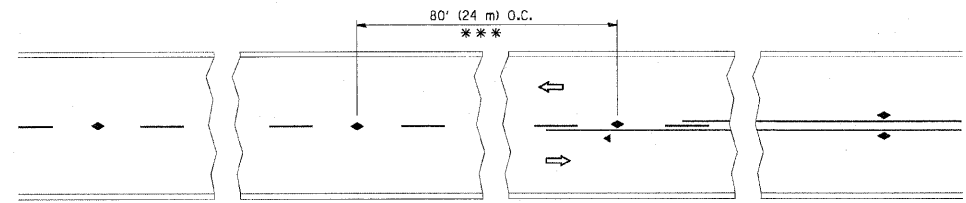
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	PLOT SCALE = 68.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

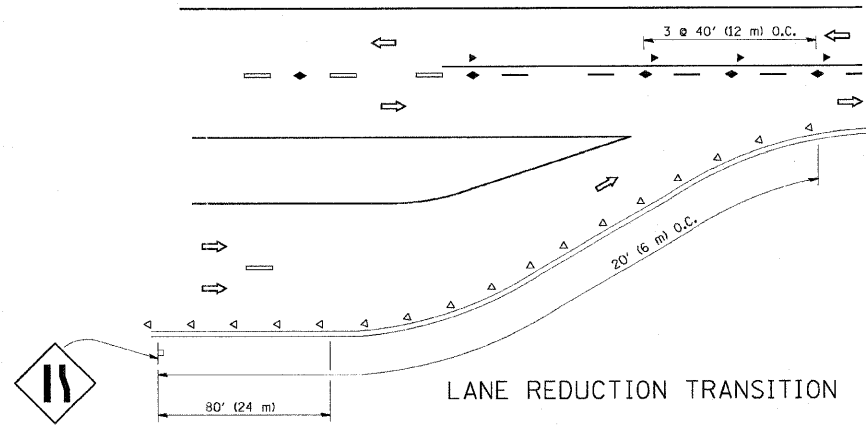
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	COOK	83	73
TC-10			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

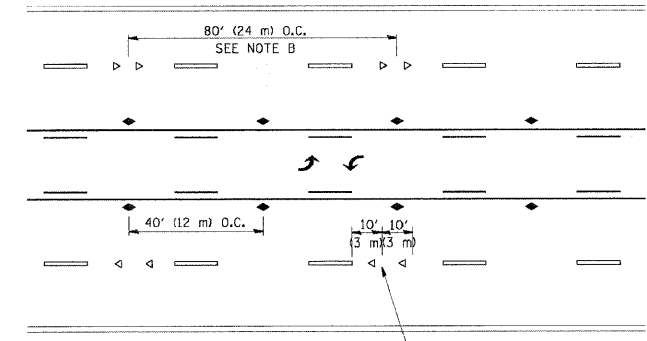


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

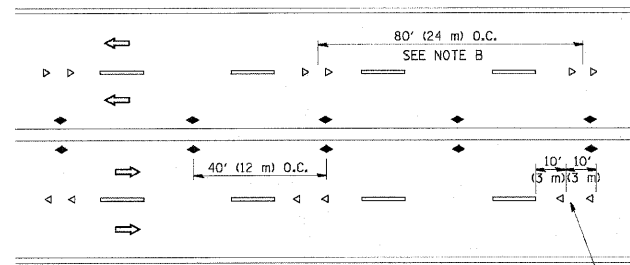
TWO-LANE/TWO-WAY



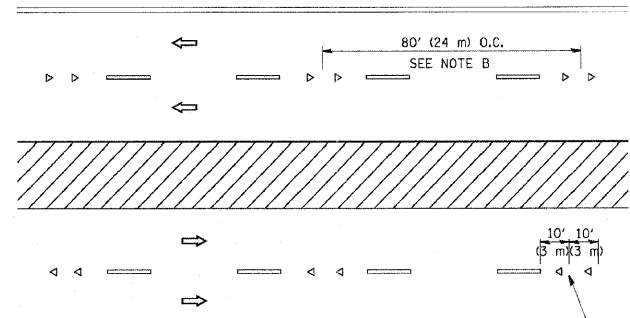
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

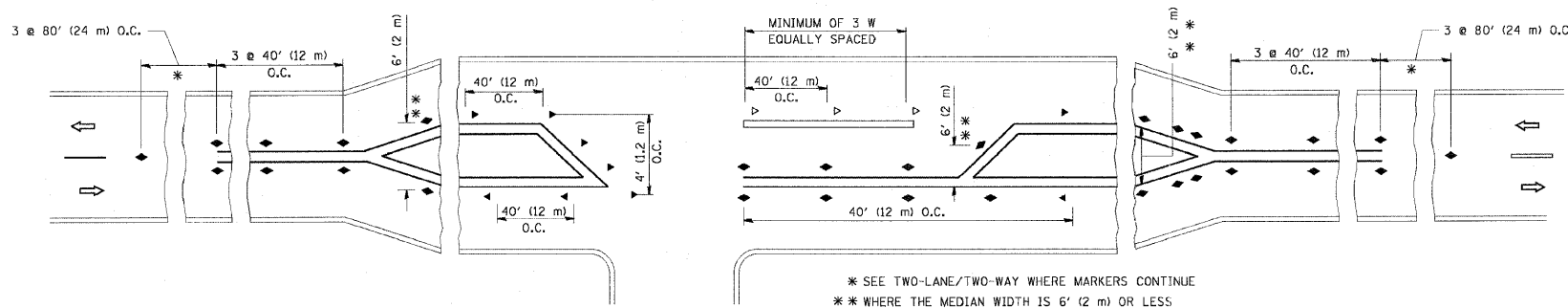
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

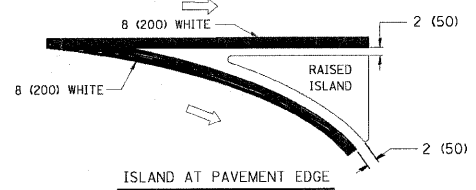
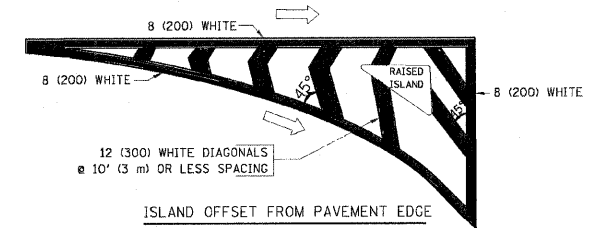
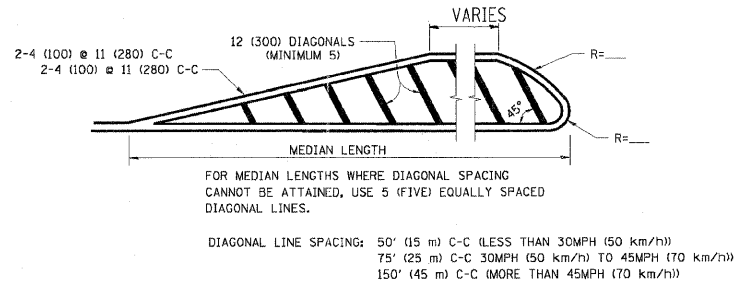
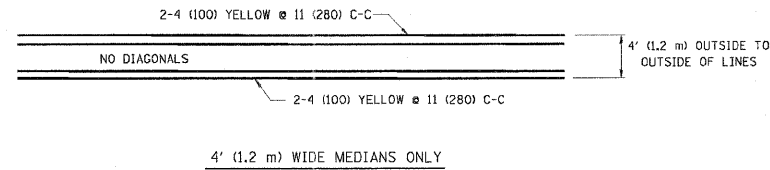
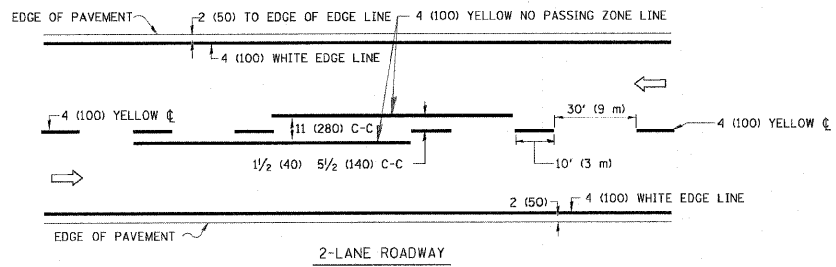
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

All dimensions are in inches (millimeters) unless otherwise shown.

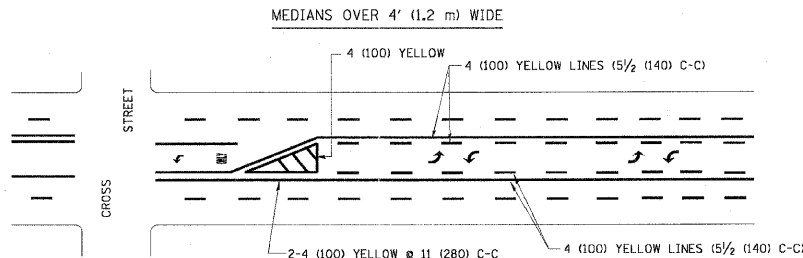
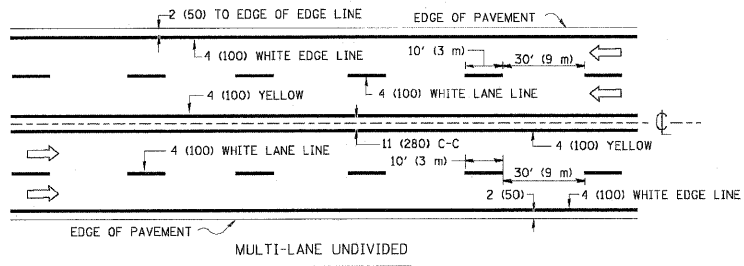
FILE NAME =	USER NAME = drivekosgn	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
...	...	DRAWN -	REVISED - T. RAMMACHER 03-12-99
...	...	CHECKED -	REVISED - T. RAMMACHER 01-06-00
...	...	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

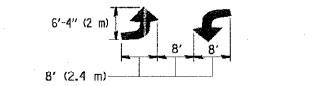
TYPICAL APPLICATIONS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLow RESISTANT)		3887	R-VB-R	COOK	83	74
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		CONTRACT NO.
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



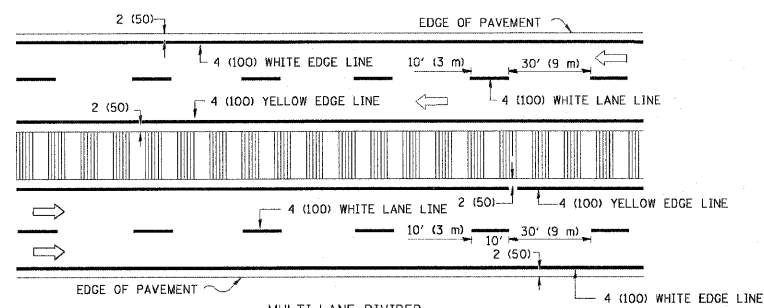
TYPICAL ISLAND MARKING



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

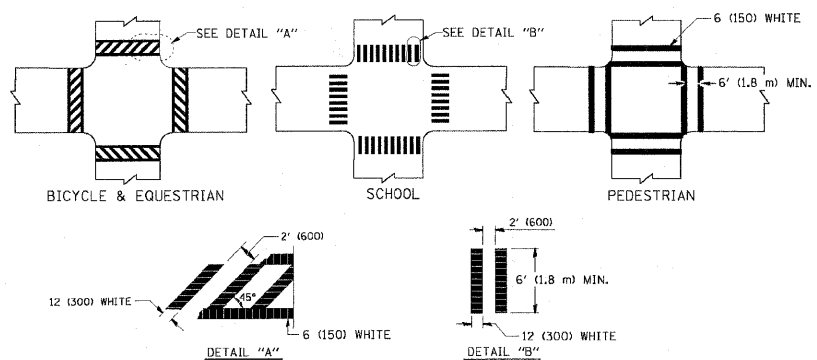


TYPICAL PAINTED MEDIAN MARKING

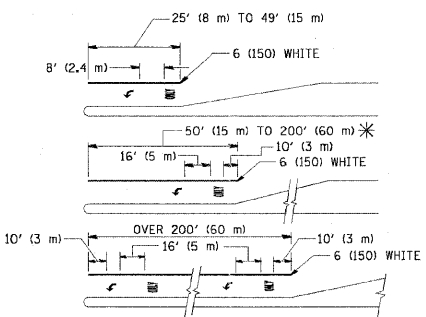


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

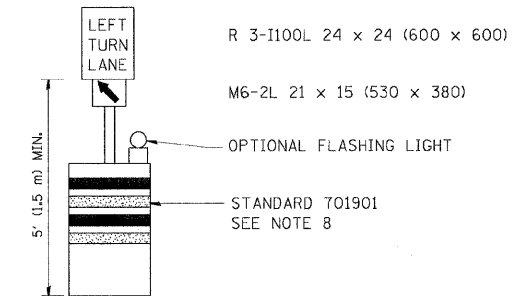
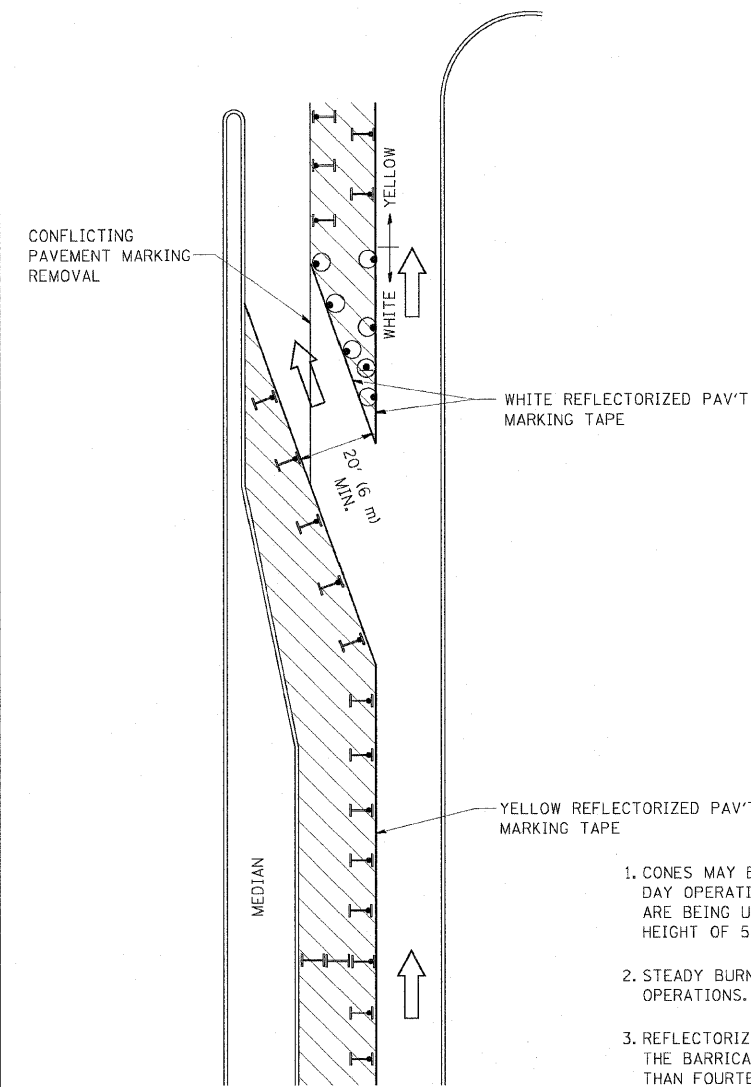
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drvskosgn	DESIGNED = EVERS	REVISED - T. RAMMACHER 10-27-94
ca:\pw_work\pwsdot\drvskosgn\j8189315\co	3.dgn	DRAWN =	REVISED - C. JUCIUS 09-09-09
PLOT SCALE = 1/8" = 1' IN.		CHECKED =	REVISED =
PLOT DATE = 9/9/2009		DATE = 03-19-90	REVISED =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A. RTE. 3887	SECTION R-VB-R	COUNTY COOK	TOTAL SHEETS 83	SHEET NO. 75
TYPICAL PAVEMENT MARKINGS		TC-13		CONTRACT NO.		
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT	



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

LEGEND

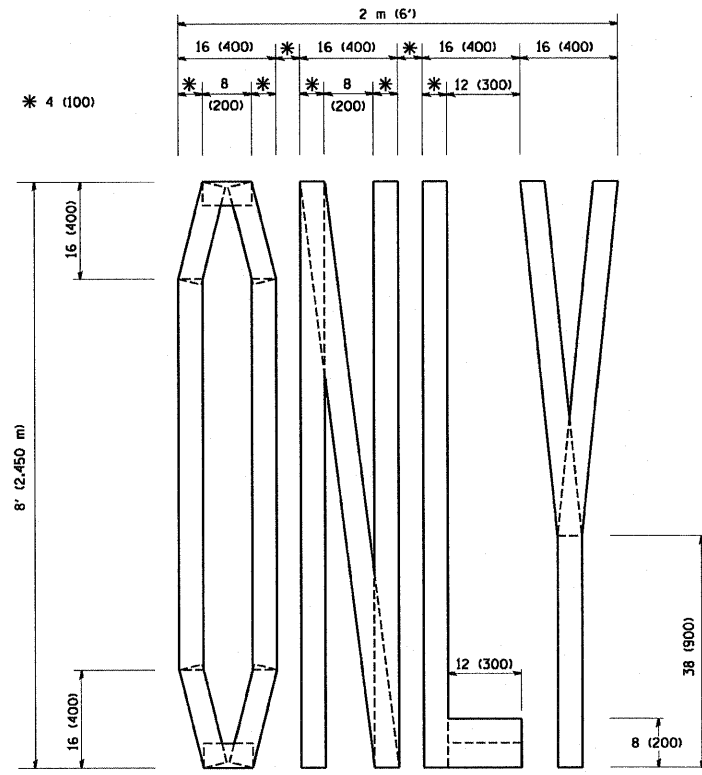
- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drvakoagn	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
cr\pwr\work\FW100T\DRIVAKOAGN\01R0315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 49.9999 1/4 IN.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 9/14/2009	REVISED - T. RAMMACHER 01-06-00	REVISED -

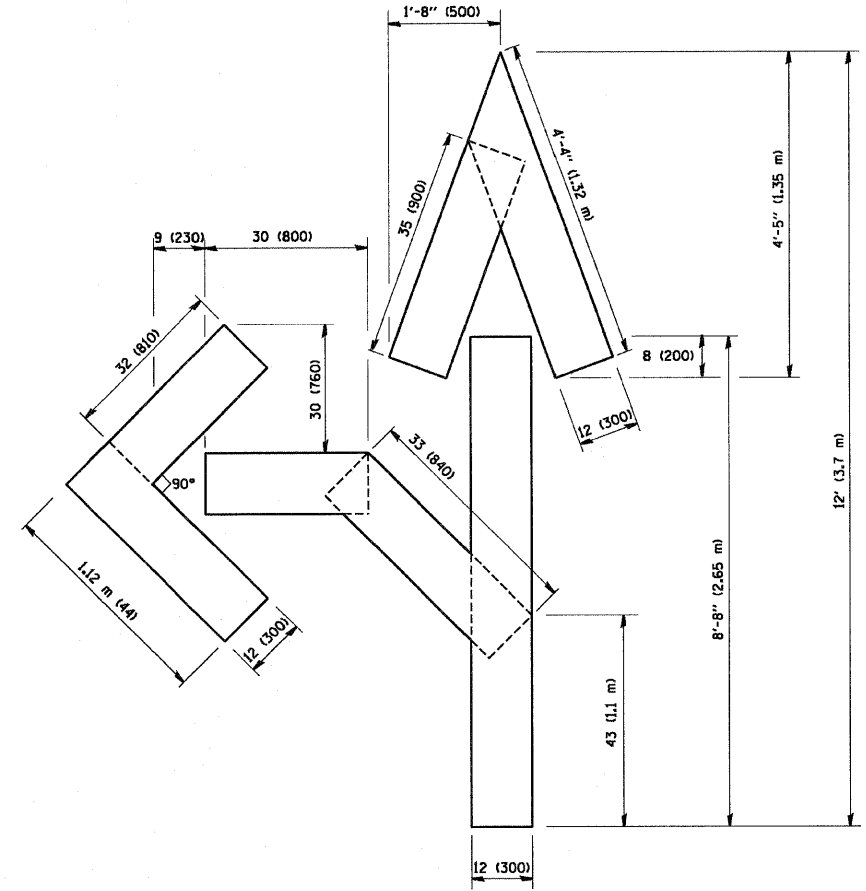
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

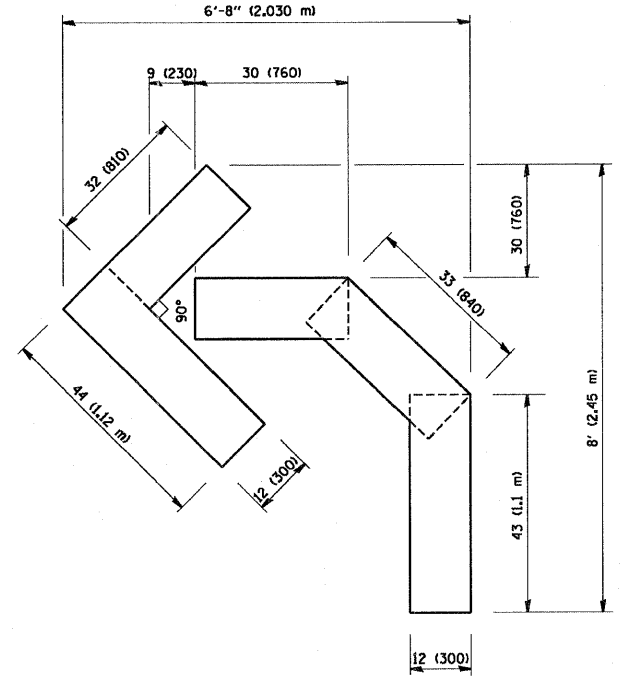
F.A. RATE. 3887	SECTION R-VB-R	COUNTY COOK	TOTAL SHEETS 83	SHEET NO. 76
TC-14		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



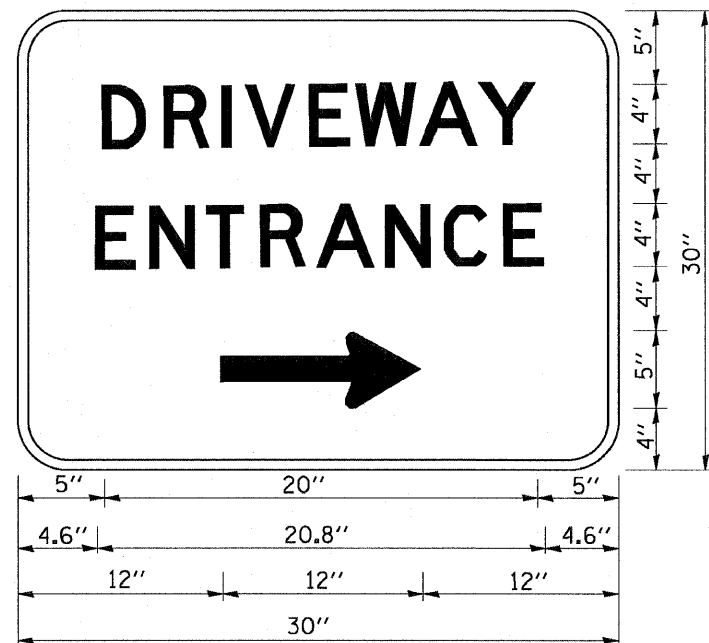
QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\diststd\22x34\1616.dgn	USER NAME = geglinoht	DESIGNED -	REVISED - T. RAMMACHER 06-05-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000" / IN.	CHECKED -	REVISED - T. RAMMACHER 11-04-97					3887	R-VB-R	COOK	83	77
PLOT DATE = 1/4/2000	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00	REVISED - T. RAMMACHER 03-02-98		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-16 CONTRACT NO.			
								FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

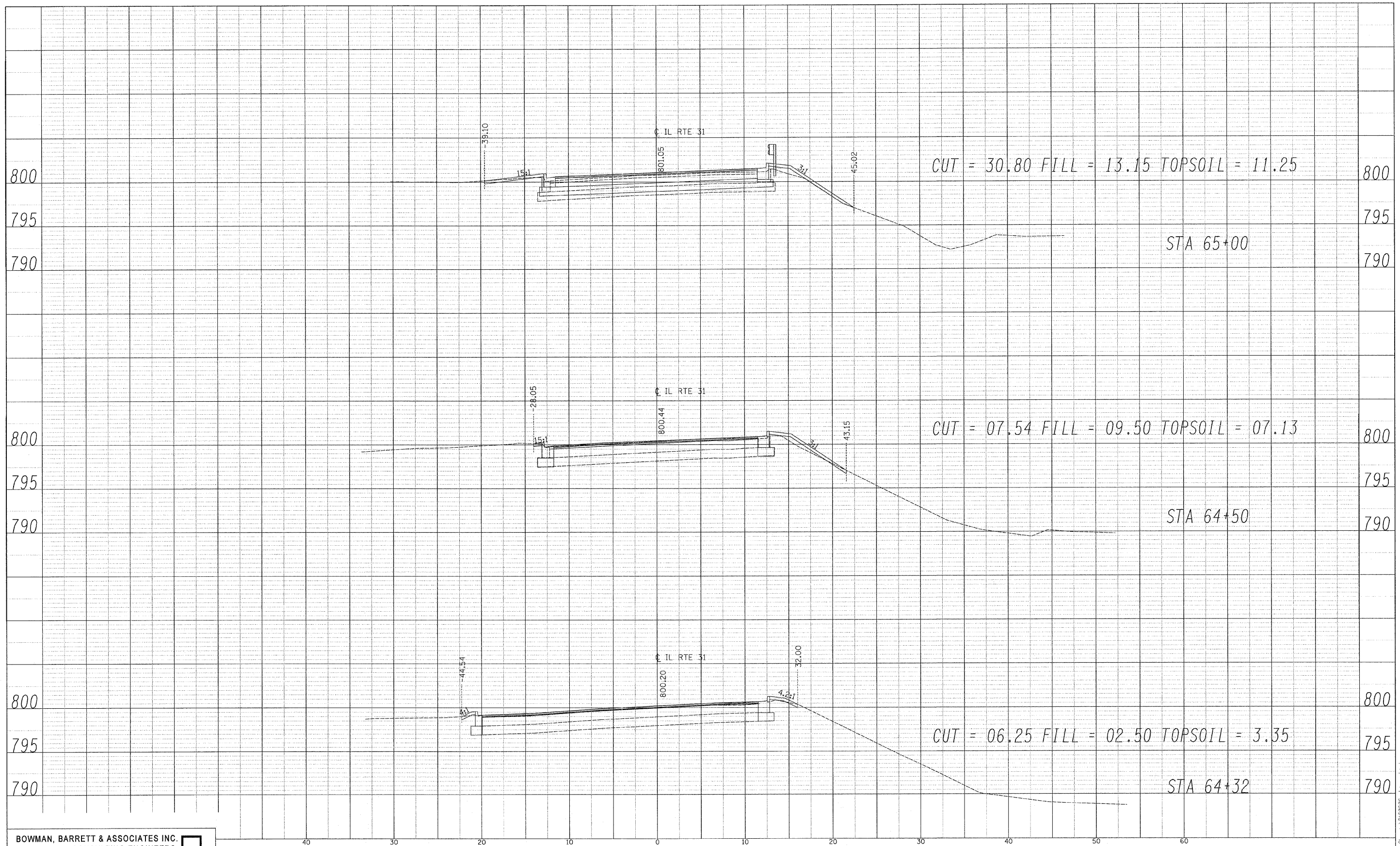
NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = W:\disto\td\22x34\to26.dgn	USER NAME = goglienobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY ENTRANCE SIGNING			F.A. RTE. 3887	SECTION R-VB-R	COUNTY COOK	TOTAL SHEETS 83	SHEET NO. 79
	PLOT SCALE = 50.000 / IN.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE -	REVISED -									

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

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



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 Chicago, Illinois
 312.228.0100
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FILE NAME = D:\68C06-shr-xssht.dgn

USER NAME = default
 PLOT SCALE = *SCALE*
 PLOT DATE = 6/30/2011

DESIGNED -
 DRAWN -
 CHECKED -
 DATE - 07/01/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 31 CROSS SECTIONS

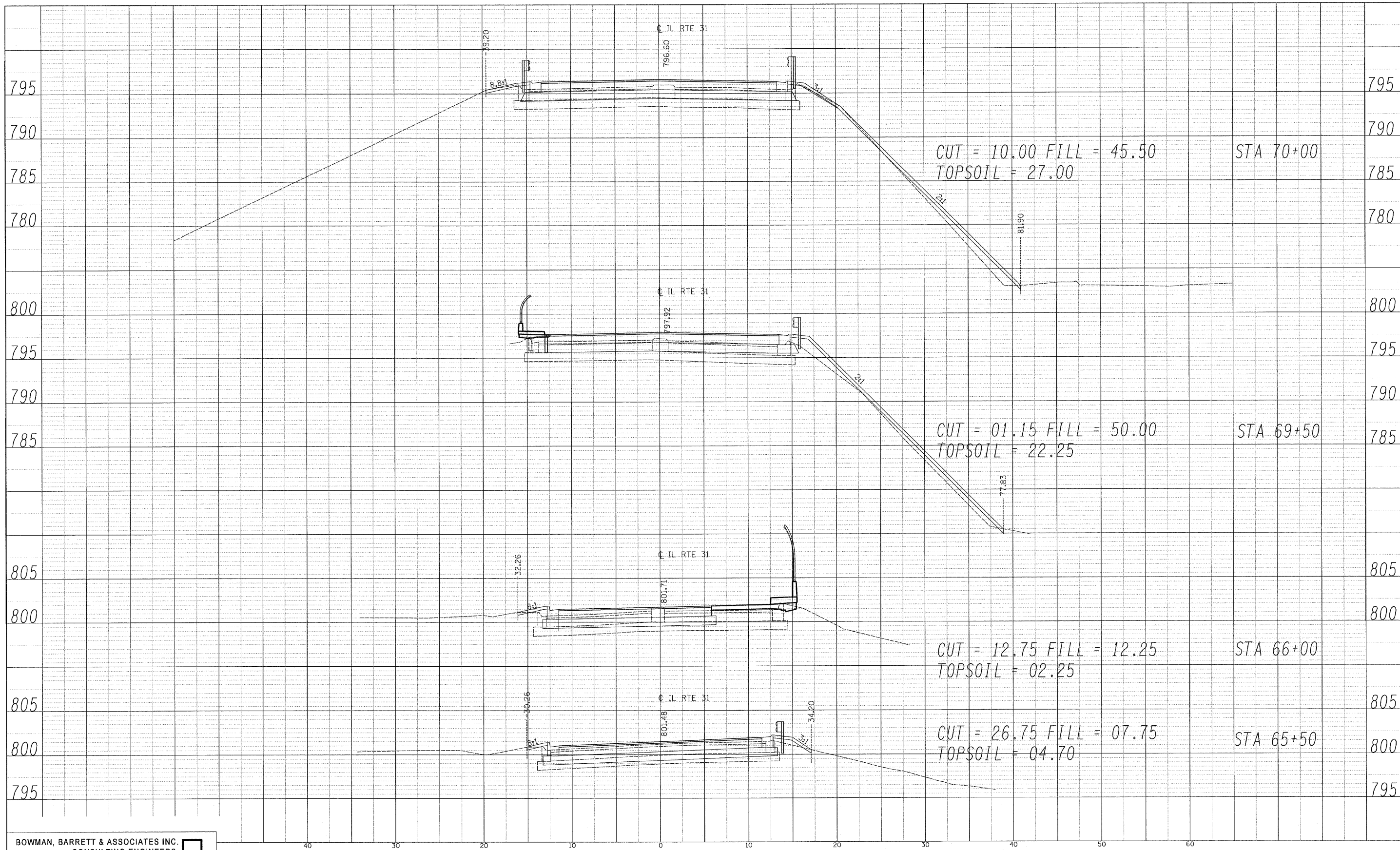
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	80
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	BY	
	NOTED	
	STRUCTURE	NOTATION
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	BY	
	NOTED	
	STRUCTURE	NOTATION
	NO.	



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FILE NAME =	USER NAME = default
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PLOT DATE = 6/30/2011	DRAWN -	REVISIONS
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	DATE = 07/01/2011	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 31 CROSS SECTIONS

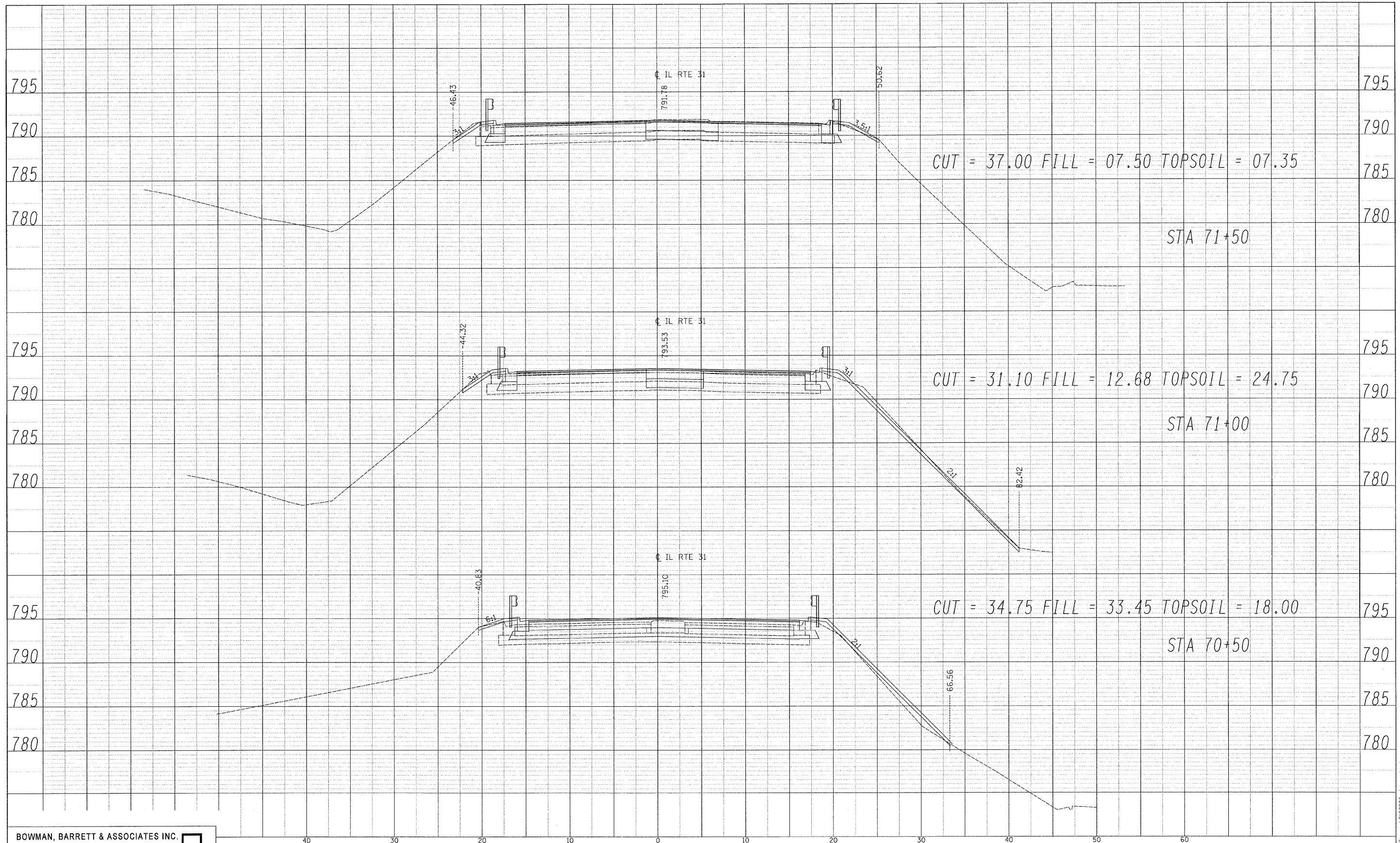
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VERT 1"=5'
SHEET NO. 02 OF 06 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	81
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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DATE	
BY	
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	GRADES CHECKED
	RT. OF WAY CHECKED
	STRUCTURE NOTATIONS CHECKED
NO.	CADD FILE NAME

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	RT. OF WAY CHECKED
	STRUCTURE NOTATIONS CHECKED
NO.	CADD FILE NAME



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USER NAME	= default
DESIGNED	-
DRAWN	-
CHECKED	-
DATE	- 07/01/2011
REVISIONS	
REVISED	-
REVISED	-
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

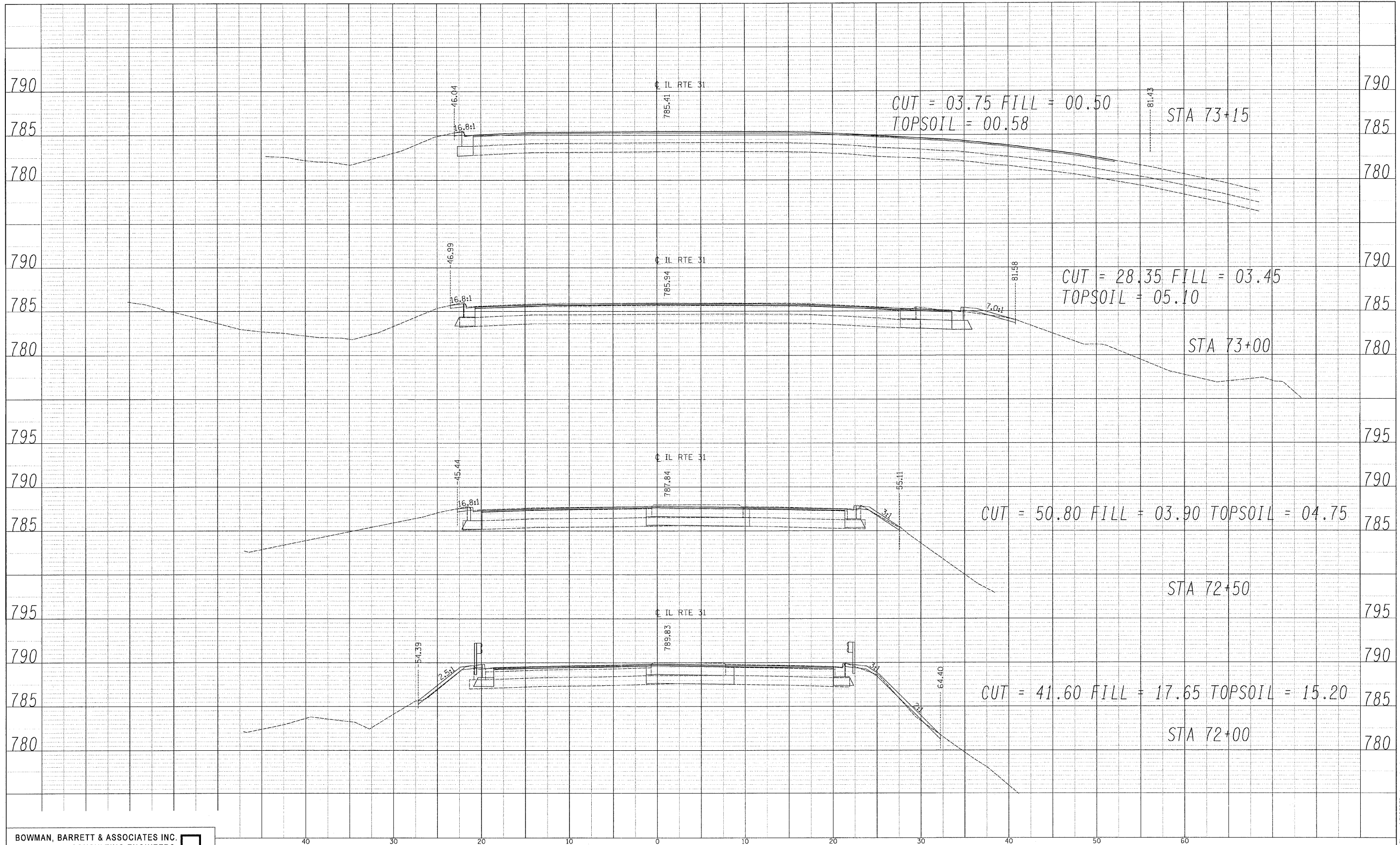
ILLINOIS ROUTE 31 CROSS SECTIONS
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VERT 1"=5'
SHEET NO. 05 OF 06 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	82
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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BY	
PLAN	
SUBMITTED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION/US MK'G	
NOTE BOOK NO.	
CADD FILE NAME	

DATE	
BY	
PROFILE	
SUBMITTED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION/US MK'G	
NOTE BOOK NO.	
CADD FILE NAME	



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FILE NAME =
D:\160C06-aht-xasht.dgn

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PLOT SCALE = #SCALE#
PLOT DATE = 6/30/2011

DESIGNED -
DRAWN -
CHECKED -
DATE - 07/01/2011

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 31 CROSS SECTIONS

SCALE: HOR 1"=10'
VERT 1"=5'
SHEET NO. 06 OF 06 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	R-VB-R	KANE	83	83
CONTRACT NO. 60C06			ILLINOIS FED. AID PROJECT	

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