

★ 91+1=92

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60C05		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 0353 (US 30)
SECTION 0303.1B-1
PROJECT: *ESP-0353(014)*
COOK COUNTY
C-91-108-07

US ROUTE 30 (LINCOLN HIGHWAY)
OVER IL ROUTE 394
BRIDGE AND ROADWAY REHABILITATION

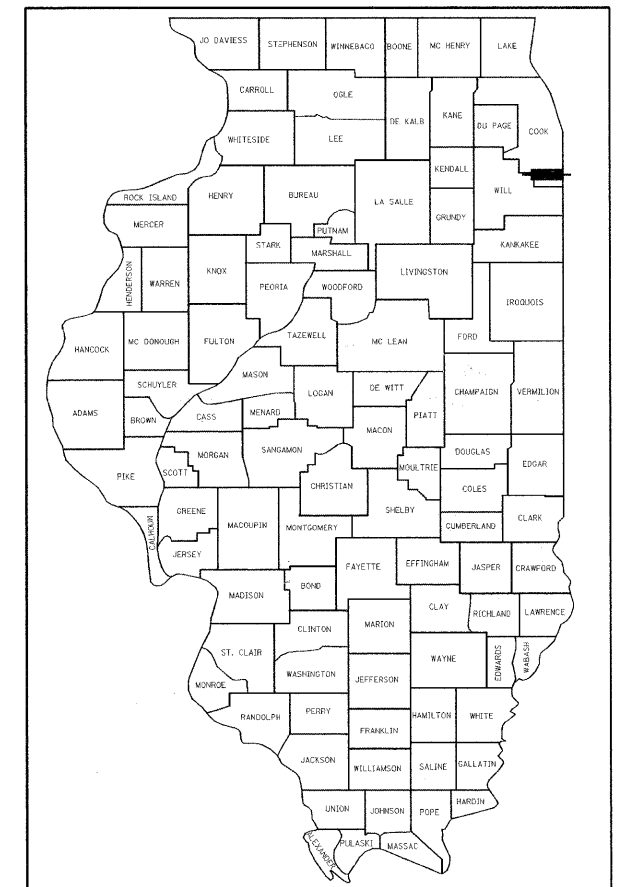
INDEX OF SHEETS
FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN NUMBER
D-91-108-07

DESIGN DESIGNATION
4340(30) ARTERIAL 9.15 (FD-20)

TRAFFIC DATA
ADT (2021): 17,200
DESIGN SPEED: 45 MPH
POSTED SPEED: 40 MPH

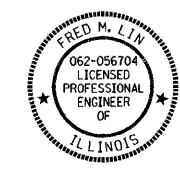
PROJECT LOCATED IN VILLAGE OF FORD HEIGHTS



LOCATION OF SECTION INDICATED THUS: —



SIGNED: *R.W. Stafforbo*
DATE: 4/27/09
EXPIRES: NOVEMBER 30, 2009
DRAWING NOS: 1-8, 10-12, 23-45 & 76-91



SIGNED: *Fred M. Lin*
DATE: 4/27/2009
EXPIRES: NOVEMBER 30, 2009
DRAWING NOS: 9, 13-22

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

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

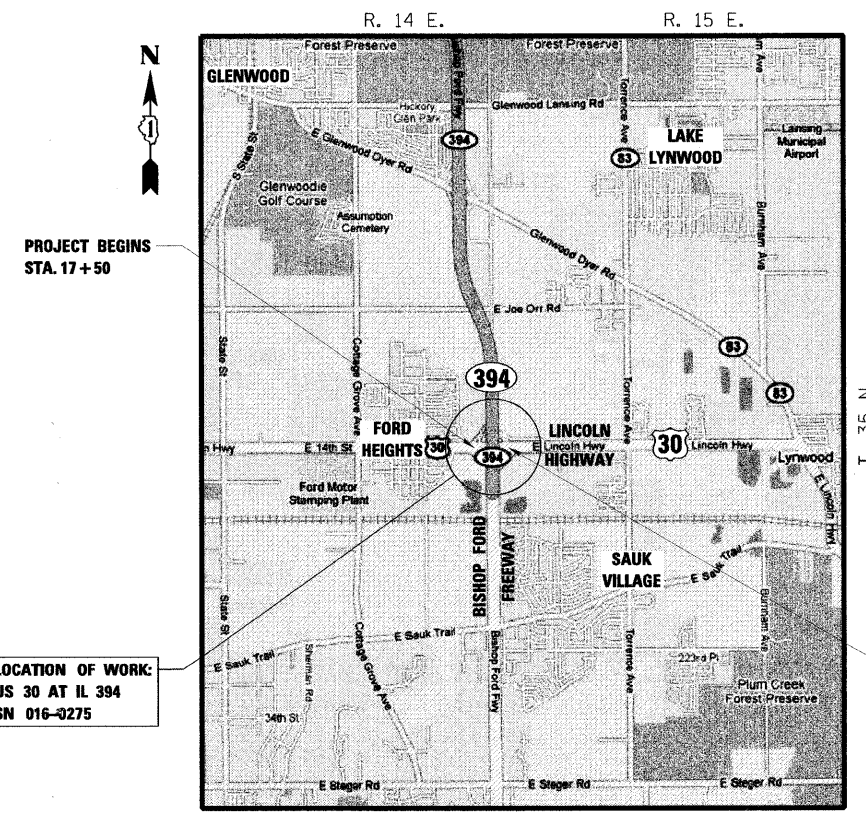
SUBMITTED APRIL 30, 2009

Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 26, 2009
Charles G. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

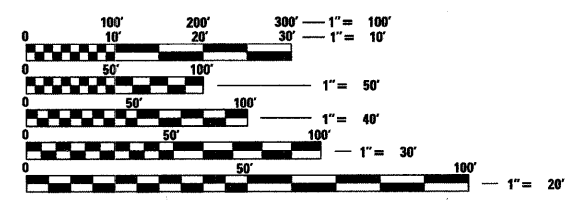
June 26, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS



LOCATION MAP

0 1/2 MILE 1 MILE 1" = 1/2 MILE
GROSS LENGTH OF PROJECT = 500 FT = 0.09 Miles
NET LENGTH OF PROJECT = 274 FT = 0.05 Miles



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: ERSKINE KLYCE
PROJECT MANAGER: RAJENDRA SHAH

CONTRACT NO. 60C05

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	INDEX OF SHEETS, GENERAL NOTES
3 TO 4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6 TO 9	SCHEDULE OF QUANTITIES
10	ALIGNMENT, TIES, AND BENCHMARKS
11	REMOVAL PLAN
12	PLAN AND PROFILE
13	MAINTENANCE OF TRAFFIC PRESTAGE
14	MAINTENANCE OF TRAFFIC-IL ROUTE 394
15 TO 18	MAINTENANCE OF TRAFFIC STAGE 1
19 TO 22	MAINTENANCE OF TRAFFIC STAGE 2
23	EROSION AND LANDSCAPING PLAN
24 TO 25	PAVEMENT MARKING AND SIGNING PLAN
26	SIGN PANEL DETAILS
27	SIGN PLACEMENT DETAILS
28	BRIDGE MOUNT SIGN STRUCTURES - GENERAL PLAN AND ELEVATION
29	BRIDGE MOUNT SIGN STRUCTURES - WALKWAY AND CONNECTION DETAILS
30	BRIDGE MOUNT SIGN STRUCTURES - CONNECTION DETAILS
31	BRIDGE MOUNT SIGN STRUCTURES - WALKWAY DETAILS
32 TO 33	BREAK-AWAY WIDE FLANGE STEEL
34	STAGE I EXISTING AND PROPOSED LIGHTING PLAN
35	STAGE II EXISTING AND PROPOSED LIGHTING PLAN
36	STAGE I EXISTING AND TEMPORARY UNDERPASS LIGHTING PLAN US 30 OVER IL RTE 394
37	STAGE II PROPOSED UNDERPASS LIGHTING PLAN US 30 OVER IL RTE. 394
38	UNDERPASS LIGHTING REMOVAL DETAILS
39 TO 45	LIGHTING DETAILS
46	GENERAL PLAN AND ELEVATION
47	GENERAL NOTES AND TOTAL BILL OF MATERIAL
48	CONSTRUCTION STAGING AND DETAILS
49	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
50	TOP OF SLAB ELEVATIONS LAYOUT
51 TO 52	TOP OF SLAB ELEVATIONS
53	TOP OF WEST APPROACH SLAB ELEVATIONS
54	TOP OF EAST APPROACH SLAB ELEVATIONS
55	SUPERSTRUCTURE PLAN
56 TO 57	SUPERSTRUCTURE DETAILS
58	PREFORMED JOINT STRIP SEAL
59 TO 60	BRIDGE APPROACH SLAB DETAILS
61	FRAMING PLAN AND BEAM ELEVATION
62	BEAM DETAILS
63	BEARING DETAILS
64	ABUTMENT REMOVAL DETAILS
65	WEST ABUTMENT PLAN AND ELEVATION
66	EAST ABUTMENT PLAN AND ELEVATION
67	ABUTMENT DETAILS
68	PIER REMOVAL DETAILS
69	PIER REPAIR DETAILS
70	PIER 1 CAP MODIFICATIONS
71	PIER 2 CAP MODIFICATIONS
72	PIER 3 CAP MODIFICATIONS
73	BAR SPLICER ASSEMBLY DETAILS
74	DRAINAGE SCUPPER DS-11
75	CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
75	CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER
76	BD600-06 (BD-24) CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
77	TC-08 FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
78	TC-09 TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE
79	TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
80	TC-11 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT
81 TO 82	TC-12 MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS
83	TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
83A	TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
84	TC-17 TRAFFIC CONTROL DETAILS FOR FREEWAY CLOSURES
85	TC-22 ARTERIAL ROAD INFORMATION SIGN
86	TC-26 DRIVEWAY ENTRANCE SIGNING
87 TO 91	CROSS SECTIONS

HIGHWAY STANDARDS

000001-05	STANDARDS SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
420401-07	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-02	OUTLETS FOR CONC. CURB AND GUTTER TYPE B-6.24 (B-15.60)
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306-03	CORRUGATED PC CONCRETE MEDIANS
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-05	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-05	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
642001-01	SHOULDER RUMBLE STRIPS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDG
701101-02	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT
701400-03	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-05	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-05	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-05	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS>- 45 MPH
701421-02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >- 45 MPH TO
701426-03	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS>- 45 MPH
701431-05	LANE CLOSURE, MULTILANE, UNDIV. WITH CROSSOVER, FOR SPEEDS>- 45 MPH TO 55 MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
BLR 17-4	TRAFFIC CONTROL DEVICES - DAY LABOR CONSTRUCTION

GENERAL NOTES

1. 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.
2. 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.
3. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
4. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
5. THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.1 GAL/SY.
6. THE UNIT WEIGHT USED FOR ALL HMA SURFACE MIXTURES IS 112 LB/50 YD-IN.
7. THE FERTILIZER NUTRIENTS QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 90 LB/ACRE.
8. 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.
9. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ABUTTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
10. 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.
11. SAW CUTTING IS INCIDENTAL TO THE PROPOSED ITEM OF WORK SPECIFIED, UNLESS OTHERWISE SHOWN IN PLAN.
12. TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT (708) 597-9800.

BOWMAN, BARRETT & ASSOCIATES INC
CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com



FILE NAME = D160C05-shr-gennote.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, GENERAL NOTES					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RA	REVISED -		0353	0303JB-1	COOK	91	2					
		CHECKED - RS	REVISED -		CONTRACT NO. 60C05									
		DATE - 5/6/2009	REVISED -		SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA. NA	TO STA. NA	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN 80% FEB. 2015 STATE					CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN 80% FEB. 2015 STATE				
			TOTAL QUANTITY	ROADWAY 1000	SIGNING Y002-1C	LIGHTING Y030-1E	BRIDGE X271-2A				TOTAL QUANTITY	ROADWAY 1000	SIGNING Y002-1C	LIGHTING Y030-1E	BRIDGE X271-2A
20101100	TREE TRUNK PROTECTION	EACH	6	6				52100530	ANCHOR BOLTS, 1 1/4"	EACH	20				20
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	21	21				52100540	ANCHOR BOLTS, 1 1/2"	EACH	40				40
20200100	EARTH EXCAVATION	CU YD	1,106	986				58700300	CONCRETE SEALER	SO FT	3,900				3,900
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	190					59100100	GEOCOMPOSITE WALL DRAIN	SO YD	110				110
20800150	TRENCH BACKFILL	CU YD	13	13				60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	4	4			
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	57	57				60107600	PIPE UNDERDRAINS 4"	FOOT	193	193			
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25				60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	221				221
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	13	13				60600605	CONCRETE CURB, TYPE B	FOOT	60	60			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	13	13				60619200	CONCRETE MEDIAN, TYPE SB-6.06	SO FT	6872	6872			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	13	13				* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	287.5	287.5			
25100630	EROSION CONTROL BLANKET	SO YD	685	685				* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2			
28000400	PERIMETER EROSION BARRIER	FOOT	1,105	1,105				* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2			
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	960	960				* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2			
40600895	CONSTRUCTING TEST STRIP	EACH	1	1				* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SO YD	266	266				63200310	GUARDRAIL REMOVAL	FOOT	218	218			
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	67	67				63801200	MODULAR GLARE SCREEN SYSTEM	FOOT	3,744	3,744			
40701996	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 15 3/4"	SO YD	1,291	1,291				64200105	SHOULDER RUMBLE STRIP	FOOT	2,236	2,236			
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	820	820				67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	14	14			
42001300	PROTECTIVE COAT	SO YD	2,125	2,125				67100100	MOBILIZATION	L SUM	1	1			
44000100	PAVEMENT REMOVAL	SO YD	2,928	2,928				70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1			
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SO YD	1,348	1,348				70100400	TRAFFIC CONTROL AND PROTECTION, STANDARD 701431	EACH	3	3			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	441	441				70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	26	26			
44000700	APPROACH SLAB REMOVAL	SO YD	467				467	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	16	16			
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1767	1767				70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,000	1,000			
44003100	MEDIAN REMOVAL	SO FT	6929	6929				70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	11,640	11,640			
44003900	MEDIAN SURFACE REMOVAL AND REPLACEMENT	SO FT	7490	7490				70300625	TEMPORARY PAINT PAVEMENT MARKING LINE 4"	FOOT	1,000	1,000			
44004250	PAVED SHOULDER REMOVAL	SO YD	60	60				70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	19,107	19,107			
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SO YD	222	222				70400100	TEMPORARY CONCRETE BARRIER	FOOT	3,744	3,744			
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	326	326				70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2,076	2,076			
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1				1	* 72000300	SIGN PANEL - TYPE 3	SO FT	559		559		
50102400	CONCRETE REMOVAL	CU YD	112				112	* 72400330	REMOVE SIGN PANEL - TYPE 3	SO FT	559		559		
50200100	STRUCTURE EXCAVATION	CU YD	190				190	* 72400730	RELOCATE SIGN PANEL - TYPE 3	SO FT	351		351		
50300225	CONCRETE STRUCTURES	CU YD	193.6				193.6	* 72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	2,322		2,322		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	696.0				696.0	* 73304000	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	50		50		
50300260	BRIDGE DECK GROOVING	SO YD	1,819				1,819	* 73400100	CONCRETE FOUNDATIONS	CU YD	6		6		
50300300	PROTECTIVE COAT	SO YD	2,337				2,337	* 73602000	REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	2		2		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1				1	* 73700100	REMOVE GROUND-MOUNTED SIGN SUPPORT	EACH	8		8		
50500505	STUD SHEAR CONNECTORS	EACH	8,700				8,700	* 73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	8		8		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	188,362		622		187,740	* 78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	23,268	23,268			
50800515	BAR SPLICERS	EACH	1,139				1,139	* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	988	988			
51100100	SLOPE WALL 4 INCH	SO YD	838				838	* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	250	250			
51205200	TEMPORARY SHEET PILING	SO FT	327				327	* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	2,782	2,782			
51500100	NAME PLATES	EACH	1				1	* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	827	827			
52000110	PREFORMED JOINT STRIP SEAL	FOOT	136				136	* 78005120	EPOXY PAVEMENT MARKING - LINE 5"	FOOT	6,397	6,397			
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	40				40	* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	400	400			
52100520	ANCHOR BOLTS, 1"	EACH	40				40	* 78005140	EPOXY PAVEMENT MARKING - LINE 8"	FOOT	800	800			

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

• SPECIALTY ITEMS

FILE NAME = 0168C05-shr-500.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = #SCALE#	CHECKED - RS	DRAWN - RA	REVISED -			0353	0303.1B-1	COOK	91	3	
PLOT DATE = 5/6/2009	DATE - 5/6/2009	REVISIONS	REVISED -			CONTRACT NO. 60C05					
		SCALE: NA	SHEET NO. 1 OF 2 SHEETS			STA. NA	TO STA. NA	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

st:\10\05\cadd\US30\CADD_Sheets\0168C05-shr-500.dgn

Rev

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN				
			100% FED TOTAL QUANTITY	ROADWAY 1000	SIGNING Y002-1C	LIGHTING Y030-1E	BRIDGE X271-2A
• 78005150	EPOXY PAVEMENT MARKING - LINE 12"	FOOT	225	225			
• 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	715	715			
• 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	328	328			
• 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	14	14			
• 78100300	REPLACEMENT REFLECTOR	EACH	110	110			
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10			
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	10	10			
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	1,764	1,764			
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2			
78300100	PAVEMENT MARKING REMOVAL	SQ FT	10,898	10,898			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	348	348			
• 81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	180			180	
• 81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	520			520	
• 81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	12			12	
• 81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	3			3	
• 81700110	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 10	FOOT	737			737	
• 81700315	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 3-1/C NO. 10	FOOT	737			737	
• 81700375	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 3/C NO. 4 AND 1/CNO. 6 GROUND	FOOT	815			815	
• 82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	2			2	
• 82107100	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	12			12	
• 83050710	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 6 FT. MAST ARM	EACH	2			2	
• 83057340	LIGHT POLE, WOOD, 60 FOOT, CLASS 3	EACH	5			5	
• 84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	14			14	
X0321781	MECHANICAL SPLICE	EACH	306				306
• X0322141	REMOVE TEMPORARY WOOD POLE	EACH	5			5	
• X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	116		116		
• X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	108		108		
• X0326492	REMOVAL OF EXISTING SIGN LIGHTING UNIT AND SALVAGE	EACH	4			4	
• X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	14			14	
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	4				4
• X0324387	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	2			2	
• 81200240	CONDUIT EMBEDDED IN STRUCTURE, 2 1/2" DIA., PVC	FOOT	520			520	
X0325201	SHOULDER RUMBLE STRIP REMOVAL	SQ YD	2,236	2,236			
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	105				105
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	18,519	18,519			
X0325876	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 8 INCH	FOOT	1,407	1,407			
X0326107	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 5 INCH	FOOT	5,533	5,533			
X0712400	TEMPORARY PAVEMENT	SQ YD	1,716	1,716			
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1			
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	32	32			
• X8130300	JUNCTION BOX, EMBEDDED IN STRUCTURE, PRECAST POLYMER, 11"X 18" X 13"	EACH	4			4	
• X0326493	AERIAL CABLE, 3-1/C NO. 4 WITH 1 NO. 8 GROUND WITH MESSENGER WIRE	FOOT	703			703	
• X0326493	REMOVAL OF EXISTING UNDERPASS LUMINAIRE AND SALVAGE	EACH	12			12	
• X8440160	TEMPORARY RELOCATION AND REINSTALLATION OF EXISTING UNDERPASS LUMINAIRES	L SUM	1			1	
• XX003453	REMOVAL OF EXISTING AERIAL CABLE ASSEMBLY, NO SALVAGE	FOOT	703			703	
XX003669	BITUMINOUS SIDEWALK REMOVAL	SQ YD	261	261			

CODE NUMBER	ITEM DESCRIPTION	UNIT	URBAN				
			100% FED TOTAL QUANTITY	ROADWAY 1000	SIGNING Y002-1C	LIGHTING Y030-1E	BRIDGE X271-2A
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	1,712	1,712			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	110				110
Z0024478	FLEXIBLE DELINEATORS	EACH	80	80			
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	10	10			
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	4	4			
Z0030390	IMPACT ATTENUATORS, REPLACEMENT (NON-REDIRECTIVE), TEST LEVEL 3	EACH	6	6			
Z0053700	RESETTING SURVEY MONUMENTS	EACH	2	2			
44001980	CONCRETE BARRIER REMOVAL	FOOT	60	60			
50157300	PROTECTIVE SHIELD	SQ YD	1086				1086
54215547	METAL END SECTIONS 12"	EACH	4	4			
60105000	PIPE DRAINS, CORRUGATED STEEL OR ALUMINUM ALLOY 12"	FOOT	40	40			
60403400	GRATES, TYPE A	EACH	4	4			
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	8	8			
Z0002005	ATTENUATOR BASE	SR YD	28.5	28.5			
Z0030150	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2			
Z076600	TRAINEES	HOUR	1000	1000			
X8420102	REMOVAL OF EXISTING UNDERPASS LUMINAIRE AND SALVAGE	EACH	12	12			
84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	12	12			

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

• SPECIALTY ITEMS
 © 2010

FILE NAME = D:\B\C05-ahf-500.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN - RA	REVISED -
		CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

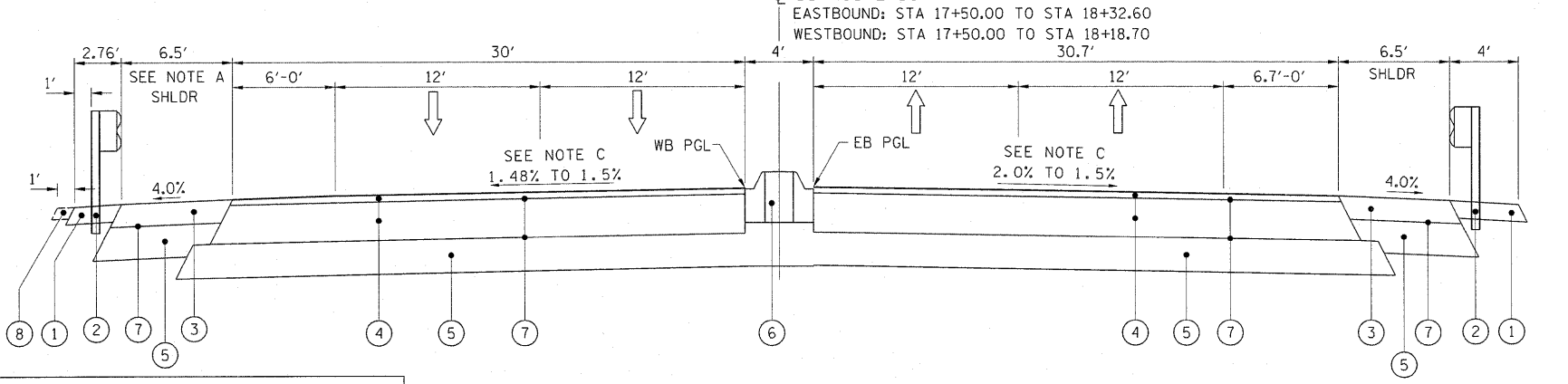
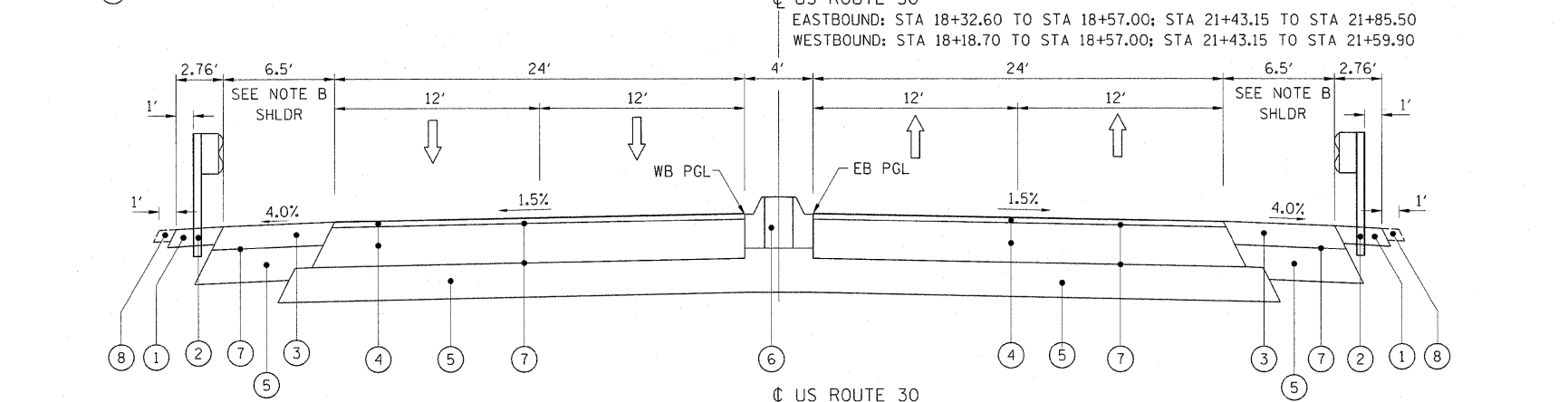
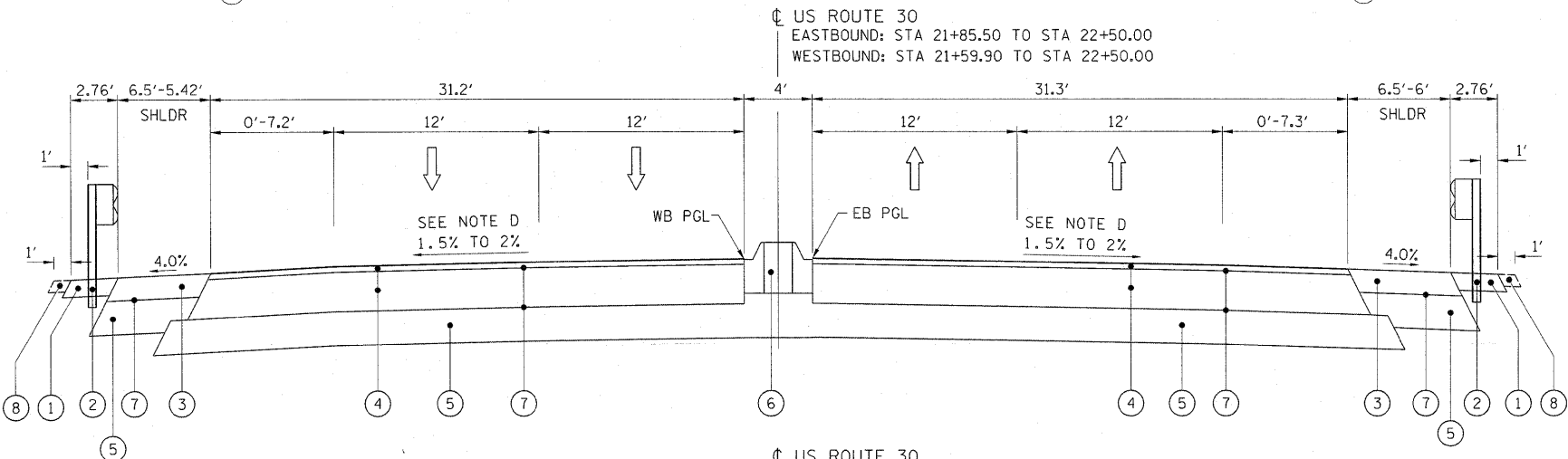
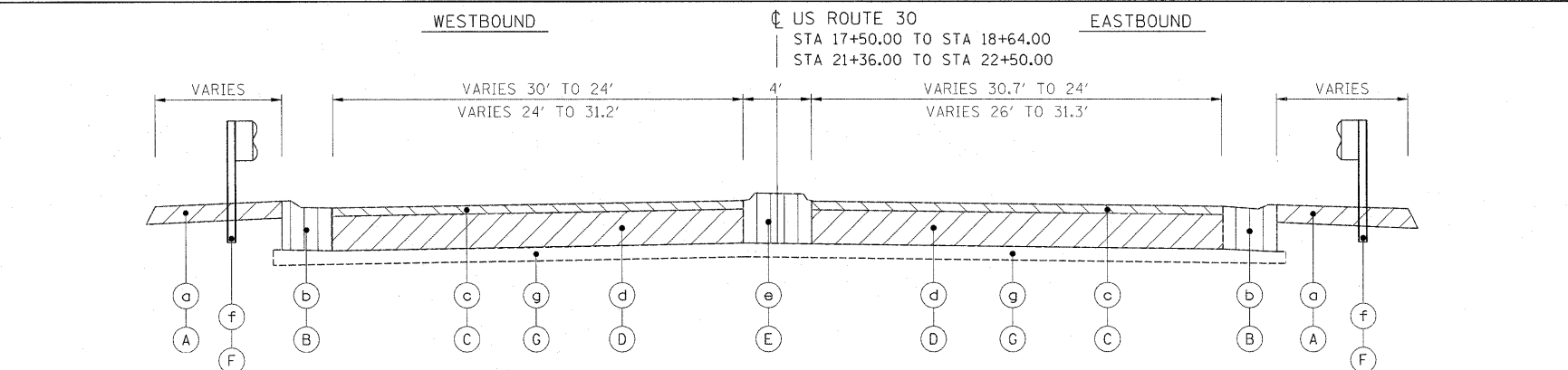
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	4
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60C05	

s:\110\100-2009\0530\0303\0303-1B-1-500.dgn



EXISTING LEGEND

- (a) HMA
- (b) COMBINATION CURB AND GUTTER
- (c) BITUMINOUS SURFACE AND BINDER COURSE 4 1/2" TYP AND VARIES
- (d) 10" PCC PAVEMENT WITH PAVEMENT FABRIC
- (e) MEDIAN
- (f) GUARDRAIL
- (g) 6" GRANULAR BASE

REMOVAL LEGEND

- (A) HOT MIX ASPHALT SIDEWALK REMOVAL
- (B) COMBINATION CURB AND GUTTER REMOVAL
- (C) HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- (D) PAVEMENT REMOVAL (PAVEMENT FABRIC REM, INCIDENTAL TO THIS ITEM)
- (E) MEDIAN REMOVAL
- (F) GUARDRAIL REMOVAL
- (G) EARTH EXCAVATION

PROPOSED LEGEND

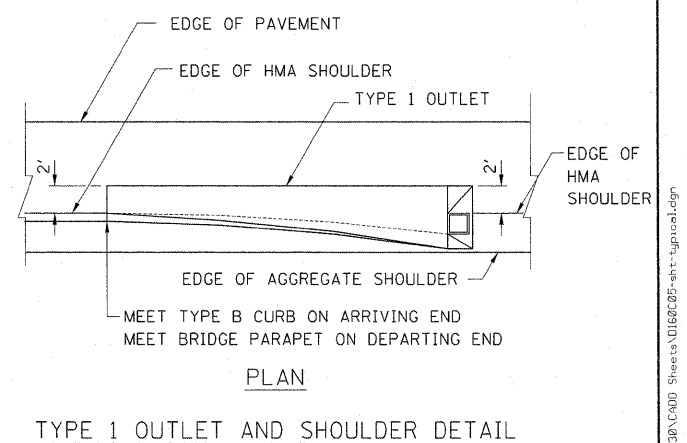
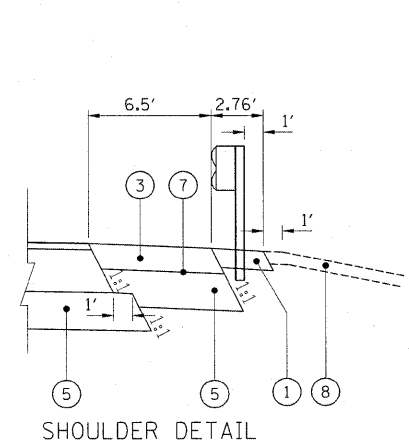
- (1) AGGREGATE SHOULDERS, TYPE B 6"
- (2) STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
- (3) HOT-MIX ASPHALT SHOULDER, 8"
- (4) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 15 3/4"
HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, IL 9.5, 2"
HOT-MIX ASPHALT BINDER COURSE IL-19.0, N70, 13 3/4"
- (5) AGGREGATE SUBGRADE 12"
- (6) CONCRETE MEDIAN, TYPE SB-6.06
- (7) BITUMINOUS MATERIALS (PRIME COAT)
- (8) TOP SOIL FURNISH AND PLACE, 4"
TOP SOIL EXCAVATION AND PLACEMENT

TYPICAL SECTION NOTES

- A. SHOULDER TRANSITION FROM EXISTING TO 2.27% TO 4% FROM STA 17+50 TO STA 17+80.
- B. SHOULDER TRANSITION FROM 4% TO 1.5% FROM STA 18+15 TO STA 18+57.
SHOULDER TRANSITION FROM 1.5% TO 4% FROM STA 21+43.15 TO STA 21+85.15.
- C. EB PAVEMENT TRANSITION FROM 2% TO 1.5% FROM STA 17+50 TO STA 17+80.
WB PAVEMENT TRANSITION FROM 1.48% TO 1.5% FROM STA 17+50 TO STA 17+55.
- D. EB PAVEMENT TRANSITION FROM 1.5% TO 2% FROM STA 22+20 TO STA 22+50.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
FULL DEPTH PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5 mm), 2"	PG 64-22	4% @ 70 Gyr
HOT-MIX ASPHALT BINDER COURSE IL-19.0, N70, 13 3/4" (IN 4 LIFTS)	PG 64-22*	4% @ 70 Gyr
BUTT JOINT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5 mm); 4.5"	PG 64-22	4% @ 70 Gyr
SHOULDER		
HOT-MIX ASPHALT SHOULDER, 8" (IN 3 LIFTS)	PG 64-22*	2% @ 30 Gyr
TEMPORARY PAVEMENT- SURFACE MIX D, N50 (IL 9.5mm), 1 1/2"	PG 64-22	4% @ 50 Gyr
HOT-MIX ASPHALT BINDER COURSE, (BINDER IL-19mm), N50, 8 1/2" (IN 3 LIFTS)	PG 64-22*	4% @ 50 Gyr
INCIDENTAL HMA SURFACING		
HOT-MIX ASPHALT BINDER, IL-19 N70, 10" (IN 4 LIFTS)	PG 64-22*	4% @ 70 Gyr
RUMBLE STRIP RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"	PG 64-22*	4% @ 70 Gyr

* RAP % NOTE: WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/ SY/IN.



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

FILE NAME = 0160C05-shr-typical.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009
		DRAWN - RA	REVISED -
		CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	5
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C05	

s:\10\05_CADD\US30\CHDD Sheets\0160C05-shr-typical.dgn

BITUMINOUS SIDEWALK REMOVAL (XX003669)									
STA	OFFSET		WIDTH	TO	STA	OFFSET		WIDTH	AREA SY
17+57.25	43.30	RT	0.1		18+49.27	37.00	RT	8.3	
18+49.27	37.00	RT	8.3		18+65.57	33.90	RT	5.4	91
17+80.03	36.00	LT	0.1		18+10.00	36.00	LT	6.20	
18+10.00	36.00	LT	6.20		18+65.53	33.00	LT	4.4	50
21+35.05	33.00	RT	4.5		21+87.15	33.70	RT	5.00	
21+87.15	33.70	RT	5.00		22+17.96	33.90	RT	0.10	42
21+34.64	33.00	LT	4.5		21+48.48	35.70	LT	7.50	
21+48.48	35.70	LT	7.50		22+18.44	40.88	LT	7.50	
22+18.44	40.88	LT	7.50		22+36.22	43.70	LT	2.60	78
TOTAL									261

COMBINATION CURB AND GUTTER REMOVAL (44000500)							
STA	OFFSET		TO	STA	OFFSET		LENGTH FT
17+54.15	43	RT		18+64.13	26.00	RT	116
17+65.79	45.3	LT		18+65.66	33.00	LT	104
21+35.06	28.4	RT		22+36.25	46.90	RT	107
21+34.57	27.9	LT		22+44.32	46.09	LT	114
TOTAL							441

GUARDRAIL REMOVAL (63200310)							
STA	OFFSET		TO	STA	OFFSET		LENGTH FT
17+61.82	39.12	RT		18+72.85	33.03	RT	112
21+27.33	33.3	LT		22+32.04	40.00	LT	106
TOTAL							218

PAVEMENT REMOVAL (44000100)						
STA		WIDTH	STA		WIDTH	AREA SY
17+50.00	RT	30.7	18+32.60	RT	24	
18+32.60	RT	24	18+64.07	RT	24	335
17+50.00	LT	30	18+18.70	LT	24	
18+18.70	LT	24	18+64.06	LT	24	327
21+35.95	RT	26	22+00.00	RT	26	
22+00.00	RT	26	22+50.00	RT	31.3	344
21+35.95	LT	24	21+56.69	LT	24	
21+56.69	LT	24	22+50.00	LT	31.2	342
ITEMS USED DURING MOT SEE ITEM 40800050 AND SEE ITEM X0712400						1580
TOTAL						2928

HOT-MIX ASPHALT SURFACE REMOVAL, 3" (44000161)						
STA		WIDTH	STA		WIDTH	AREA SY
17+50.00	RT	30.7	18+32.60	RT	24	
18+32.60	RT	24	18+64.07	RT	24	335
17+50.00	LT	30	18+18.70	LT	24	
18+18.70	LT	24	18+64.06	LT	24	327
21+35.95	RT	26	22+00.00	RT	26	
22+00.00	RT	26	22+50.00	RT	31.3	344
21+35.95	LT	24	21+56.69	LT	24	
21+56.69	LT	24	22+50.00	LT	31.2	342
TOTAL						1348

PAVED SHOULDER REMOVAL (44004250)						
STA		WIDTH	STA		WIDTH	AREA SY
17+50.00	RT	6.6	17+61.63	RT	6.6	7
17+50.00	LT	6.5	17+73.00	LT	6.5	
17+73.00	LT	6.5	18+00.00	LT	0.1	30
22+27.60	RT	6.5	22+50.00	RT	6.1	16
22+37.00	LT	5.2	22+50.00	LT	5.4	7
TOTAL						60

AGGREGATE SHOULDERS, TYPE B 6" (48101500)									
STA	OFFSET		WIDTH	TO	STA	OFFSET		WIDTH	AREA SY
17+10.74	42.24	RT	0		17+39.96	44.53	RT	4.55	
17+39.96	44.53	RT	4.55		17+92.29	40	RT	4	
17+92.29	40	RT	2.76		18+33.06	35.26	RT	2.76	
18+33.06	35.26	RT	2.76		18+65.29	36.62	RT	2.76	57
17+39.00	43.64	LT	2.76		18+65.08	35.26	LT	2.76	39
21+32.48	36.7	RT	2.76		22+49.33	43.3	RT	2.76	36
21+35.15	36.4	LT	2.76		21+59.66	35.95	LT	2.76	
21+59.66	35.95	LT	2.76		22+45.40	42.33	LT	2.76	
22+45.40	42.33	LT	2.76		2249.9342.4	44.1	LT	2.76	
2249.9342.4	44.1	LT	2.76		22+49.93	42.4	LT	2.76	
22+49.93	42.4	LT	2.76		22+57.28	45.1	LT	4	
22+57.28	45.1	LT	4		22+99.65	46.45	LT	4	57
22+99.65	46.45	LT	4		23+28.43	45.782	LT	0	13
17+10.74		LT & RT	1:1		18+65.29		LT & RT	1:1	9
21+35.15		LT & RT	1:1		23+28.48		LT & RT	1:1	11
TOTAL									222

HOT MIX ASPHALT PAVEMENT (FULL DEPTH), 15 3/4" (40701996)						
STA		WIDTH	TO	STA		AREA SY
17+50.00	RT	30.7		18+32.67	RT	24
18+32.67	RT	24		18+57.24	RT	24
17+50.00	LT	30		18+18.70	LT	24
18+18.70	LT	24		18+57.16	LT	24
21+43.00	RT	24		21+85.45	RT	24
21+85.45	RT	24		22+50.00	RT	31.3
21+43.13	LT	24		21+59.93	LT	24
21+59.93	LT	24		22+50.00	LT	31.2
17+50.00	LT & RT	1:1		18+57.17	LT & RT	1:1
21+43.07	LT & RT	1:1		22+50.00	LT & RT	1:1
TOTAL						1291

HOT MIX ASPHALT SHOULDER, 8" (48203029)						
STA		WIDTH	TO	STA		AREA SY
17+50.00	RT	6.5		17+55.00	RT	6.5
17+55.00	RT	6.5		18+32.67	RT	6.5
18+32.67	RT	6.5		18+57.25	RT	6.5
17+50.00	LT	6.5		18+57.10	LT	6.5
21+43.04	RT	6.5		22+50.00	RT	6.5
21+43.05	LT	6.5		22+30.00	LT	6.5
22+30.00	LT	6.5		22+50.00	LT	5.4
17+50.00	LT & RT	1:1		18+57.17	LT & RT	1:1
21+43.07	LT & RT	1:1		22+50.00	LT & RT	1:1
TOTAL						326

AGGREGATE SUBGRADE 12" (Z0001050)						
STA		WIDTH	STA		WIDTH	AREA SY
17+50.00	RT	2	18+57.24	RT	2	24
17+50.00	LT	2	18+57.24	LT	2	24
21+42.98	RT	2	22+50.00	RT	2	24
21+43.15	LT	2	22+50.00	LT	2	24
SEE ITEM 40701996						1291
SEE ITEM 48203029						326
TOTAL						1712

HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT (40600982)				
STA	WIDTH	STA	WIDTH	AREA SQ YD
17+30.00	79.6	17+50.00	77.2	140
22+50.00	79.6	22+70.00	77.2	125
TOTAL				266

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (40603340)							
STA	WIDTH	STA	WIDTH	AREA SQ YD	RATE	THICKNESS Inches	TON
17+30.00	79.6	17+50.00	77.2	140.4	112	4.5	35
22+50.00	79.6	22+70.00	77.2	125.2	112	4.5	32
TOTAL							67

STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS (63000001)					
STA		TO	STA		LENGTH FOOT
17+99.46	RT		18+21.60	RT	22
17+50.95	LT		18+50.69	LT	101
21+46.86	RT		22+36.30	RT	91
21+78.28	LT		22+50.00	LT	72
TOTAL					285
SAY					287.5

MEDIAN REMOVAL (44003100)					
STA		WIDTH	STA		AREA SQ FT
10+25.00		4	17+50.00		2900
17+50.00		4	18+64.00		456
21+35.95		4	22+50.00		456
22+50.00		4.2	25+00.00		1050
25+00.00		4.2	27+85.00		2067
TOTAL					6929

CONCRETE MEDIAN, TYPE SB-6.06 (60619200)						
STA		WIDTH	STA		WIDTH	AREA SQ FT
10+25.00	CENTER	4	17+50.00	CENTER	4	2900
17+50.00	CENTER	4	18+57.07	CENTER	4	428
21+43.15	CENTER	4	22+50.00	CENTER	4	427
22+50.00	CENTER	4.2	25+00.00	CENTER	4.2	1050
25+00.00	CENTER	4.2	27+85.00	CENTER	10.3	2067
TOTAL						6872

BOWMAN, BARRETT & ASSOCIATES INC
CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com



FILE NAME = D:\B0005-shr-schedule.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009
		DRAWN - RA	REVISED -
		CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NA	SHEET NO. 1 OF 4 SHEETS	STA. NA TO STA. NA	F.A. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 6
						CONTRACT NO. 60C05	
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

s:\10\06_CADD\US30\CADD_Sheets\018005-shr-schedule.dgn

PERIMETER EROSION BARRIER (28000400)							
STA	OFFSET		TO	STA	OFFSET		FOOT
17+07.43	42.5	RT		17+09.33	68.1	RT	26
17+09.33	68.1	RT		18+33.06	62.3	RT	124
18+33.06	62.3	RT		19+36.52	62.2	RT	103
19+36.52	62.2	RT		19+35.14	62.3	LT	65
19+35.14	62.3	LT		18+18.70	62.3	LT	117
18+18.70	62.3	LT		17+39.54	66	LT	80
17+39.54	66	LT		17+34.87	41.6	LT	25
20+64.77	62.2	RT		22+49.72	65	RT	186
22+49.72	65	RT		22+54.61	40.6	RT	26
20+64.77	62.2	RT		20+63.58	62.3	LT	65
20+63.58	62.3	LT		22+18.85	62.3	LT	155
22+18.85	62.3	LT		23+27.46	70.6	LT	109
23+27.46	70.6	LT		23+34.02	46.9	LT	25
293+10±	I-394	RT					56
297+80±	I-394	LT					56
TOTAL							1216

SEEDING, CLASS 2A (25000210)										SQ YD 25100630 EROSION CONTROL BLANKET AREA SQ YD	POUND 25000400 NITROGEN FERTILIZER NUTRIENT ACRE * 90 RATE	POUND 25000500 PHOSPHORUS FERTILIZER NUTRIENT ACRE * 90 RATE	POUND 25000600 POTASSIUM FERTILIZER NUTRIENT ACRE * 90 RATE
STA	OFFSET		TO	STA	OFFSET		AREA SQ FT	ACRE SQ FT/43560					
17+10.80	50.7	RT		17+50.00	50.6	RT							
17+50.00	50.6	RT		18+00.00	42	RT							
18+00.00	42	RT		18+50.00	39.4	RT							
18+50.00	39.4	RT		19+39.40	39.1	RT	1190	0.03	132.2	2.5	2.5	2.5	
20+61.70	42.9	RT		21+43.07	42.9	RT							
21+43.07	42.9	RT		22+00.00	37.9	RT							
22+00.00	37.9	RT		22+50.00	47	RT	1152	0.03	128.0	2.4	2.4	2.4	
17+39.38	48.3	LT		18+00.00	38.9	LT							
18+00.00	38.9	LT		18+50.00	41.8	LT							
18+50.00	41.8	LT		18+57.17	46.8	LT							
18+57.17	46.8	LT		19+39.40	46.8	LT	1642	0.04	182.4	3.4	3.4	3.4	
20+60.70	41.6	LT		21+43.07	41.6	LT							
21+43.07	41.6	LT		21+50.00	37.1	LT							
21+50.00	37.1	LT		22+00.00	41.7	LT							
22+00.00	41.7	LT		22+50.00	48.4	LT							
22+50.00	48.4	LT		22+97.99	52	LT	1452	0.03	161.3	3.0	3.0	3.0	
293+10±	I-394	RT					362	0.01	40.3	0.7	0.7	0.7	
297+80±	I-394	LT					362	0.01	40.3	0.7	0.7	0.7	
TOTAL							6161	0.25	685	13	13	13	

STATION	OFFSET	SIGN PANEL-TYPE 3 (72000300) SQ FT	STRUCTURAL STEEL SIGN SUPPORT-BREAKAWAY (72700100) POUND	CONCRETE FOUNDATIONS (73400100) CU YD	REINFORCEMENT BARS, EPOXY COATED (50800205) POUND	RELOCATE SIGN PANEL-TYPE 3 (72400730) SQ FT
16+00.00	43.4'LT ±	104	540 [2 POSTS W6X15]	1.4	156	0
24+00.00	43.4'RT ±	104	555 [2 POSTS W6X15]	1.4	156	0
IB016S394L005.0		156	0	0	0	0
IB016S394R005.0		195	0	0	0	0
MOT PLANS						
296+20.00	IL 394, LT		590.4	1.5	155	156
294+20.00	IL 394, RT		636.5	1.5	155	195
TOTAL		559	2322	6	622	351

EARTHWORK SCHEDULE (20200100)				
STA	25% SHRINKAGE FACTOR		EMBANKMENT CY	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) CY
	EARTH EXCAVATION CY	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CY		
PRE-STAGE				
16+05 to 16+53	12	9.00	0	9.00
23+53 to 24+50	22	16.50	0	16.50
12+20 TO 16+51	91	68.25	0	68.25
23+60 TO 23+81	3	2.25	0	2.25
SLOPE WALL	120	90	0	90.00
17+39.00	-	-	-	-
17+50.00	-	-	-	-
17+10.75	-	-	-	-
17+50.00	-	-	-	-
17+50.00	-	-	-	-
18+00.00	157.39	118.04	0	118.04
18+50.00	145.72	109.29	0	109.29
18+57.17	24.38	18.28	0	18.28
18+87.17	59.32	44.49	0	44.49
21+13.07				
21+43.07	58.24	43.68	0	43.68
21+50.00	25.45	19.09	0	19.09
22+00.00	180.43	135.32	0	135.32
22+50.00	207.54	155.65	0	155.65
23+00.00	0	0.00	0	0.00
23+28.46	0	0.00	0	0.00
293+10± I-394 RT	2.15	1.61	0	1.61
297+80± I-394 RT	2.15	1.61	0	1.61
TOTAL		1111	833	833

PROTECTIVE COAT (42001300)						
STA		SURFACE	STA		SURFACE	SY
17+50.00	CENTER	4.5	18+57.07	CENTER	4.5	53.5
21+43.15	CENTER	4.5	22+50.00	CENTER	4.5	53.4
CURB AND GUTTER						
16+05.00	LT		16+53.00	LT		5.3
23+53.00	LT		24+50.00	LT		27.0
12+20.00	RT		16+51.00	RT		49.0
23+60.00	RT		23+81.00	RT		1.8
MEDIAN						
09+70.00			17+55.00	CENTER		499.0
22+50.00			29+90.00	CENTER		1436.0
TOTAL						2125

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D:\B0C05-shr-schedule.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009
		DRAWN - RA	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - RS	REVISED -
	PLOT DATE = 5/22/2009	DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

SCALE: NA SHEET NO. 2 OF 4 SHEETS STA. NA TO STA. NA

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	7
CONTRACT NO. 60C05				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

s:\10\05-CADD\US30\CADD Sheets\1166205-shr-schedule.dgn

BITUMINOUS MATERIALS (PRIME COAT) (40600100)		
	AREA SY	GALLON
16+05	16+53	5.5
23+53	24+50	16.1
12+20	16+51	70.9
23+60	23+81	1.2
9+70	17+50	52.3
22+50	36+70	94.7
INCIDENTAL HMA		38.2
IL 394 SHLDR		348.1
SEE ITEM (48203029) 326		32.6
SEE ITEM (40701996) 1291		129.1
SEE ITEM (Z0001050) 1712		171.2
TOTAL		960

THERMOPLASTIC PAVEMENT MARKING-LINE 4" (78000200)						
STA	OFFSET	TO	STA	OFFSET	TYPE	FOOT
17+50.00	RT		18+57.00	RT	10D-30S	27
17+50.00	LT		18+57.00	LT	10D-30S	27
17+50.00	LT		18+57.00	LT	SOLID	107
17+50.00	RT		18+57.00	RT	SOLID	107
21+43.00	RT		22+50.00	RT	SOLID	107
21+43.00	LT		22+50.00	LT	SOLID	107
21+43.00	RT		22+50.00	RT	10D-30S	27
21+43.00	LT		22+50.00	LT	10D-30S	27
17+50.00	MEDIAN		18+57.00	MEDIAN	SOLID	214
21+43.00	MEDIAN		22+50.00	MEDIAN	SOLID	214
04+40.00			17+50.00			
22+50.00			36+70.00		WHITE	6236
04+40.00			17+50.00			
22+50.00			36+70.00		YELLOW	9253
292+42.00	RT		296+98.00	RT	2D-6S	114
295+88.00	LT		298+15.00	LT	2D-6S	57
282+57.00	RT		291+77.00	RT		920
298+12.00	RT		302+32.00	RT		420
282+57.00	LT, RT		302+32.00	LT, RT		3950
282+57.00	LT		293+00.00	LT		1043
299+20.00	LT		302+32.00	LT		312
TOTAL						23268

THERMOPLASTIC PAVEMENT MARKING-LINE 5" (78000300)						
STA	OFFSET	TO	STA	OFFSET	TYPE	FOOT
282+57.00	RT		302+32.00	RT	10D-30S	494
282+57.00	LT		302+32.00	LT	10D-30S	494
TOTAL						988

THERMOPLASTIC PAVEMENT MARKING - LINE 6"		
LOCATION	IL 394	LENGTH (FOOT)
NB IL 394	- 292+57 TO 302+32	125.0
SB IL 394	- 285+84 TO 298+45	125.0
TOTAL		250

THERMOPLASTIC PAVEMENT MARKING-LINE 8" (78000500)	
LOCATION STATION TO STATION	LENGTH (FOOT)
US 30	709
291+77.00 RT TO 298+12.00	1001
293+00.00 LT TO 299+20.00	1072
TOTAL	2782

THERMOPLASTIC PAVEMENT MARKING-LINE 12" (78000600)	
LOCATION STATION TO STATION	LENGTH (FOOT)
NW LOOP RAMP GORE	125
SE LOOP RAMP GORE	97
NE RAMP GORE	396
291+77.00 RT GORE	35.5
296+98.00 RT GORE	64
295+88.00 LT GORE	62
298+15.00 LT	47
TOTAL	827

RAISED REFLECTIVE PAVEMENT MARKER (78100100)	
LOCATION STATION TO STATION	QUANTITY (EACH)
(TWO-WAY AMBER)	
9+70 TO 17+55 (MED)	40
22+50 TO 36+70 (MED)	72
(ONE-WAY CRYSTAL)	
4+39 TO 17+55 (RT)	66
22+50 TO 29+90 (RT)	38
12+00 TO 17+55 (LT)	28
22+50 TO 34+50 (LT)	60
17+50 to 22+50 EXCLUDING BRIDGE	24
TOTAL	328

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D:\B0005-sht-schedule.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RA	REVISED -					0353	0303.1B-1	COOK	91	8
		CHECKED - RS	REVISED -					CONTRACT NO. 60C05				
		DATE - 5/6/2009	REVISED -					SCALE: NA	SHEET NO. 3 OF 4 SHEETS	STA. NA TO STA. NA	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

D:\B0005-sht-schedule.dgn

INCIDENTAL HOT-MIX
ASPHALT SURFACING

LOCATION	QUANTITY (TON)
*JOBSITE	820
TOTAL	820

COMBINATION CONCRETE CURB AND
GUTTER REMOVAL AND REPLACEMENT

LOCATION	STATION	OFFSET	QUANTITY (FOOT)
	16+05 TO 16+53	LT	18.8
	23+53 TO 24+50	LT	96.9
	15+04 TO 16+51	RT	147.0
	23+60 TO 23+81	RT	6.3
	27+85 TO 35+34	LT/RT	1498.0
	TOTAL		1767.0

MEDIAN SURFACE REMOVAL
AND REPLACEMENT

LOCATION	STATION	QUANTITY (SQ FT)
	US ROUTE 30	
	27+85 TO 35+34	7490
	TOTAL	7490

MODULAR GLARE SCREEN SYSTEM

LOCATION	QUANTITY (FOOT)
PRESTAGE - 17+40 TO 23+50	312
STAGE I - 4+40 TO 31+00	2076
STAGE II - 9+78 TO 36+70	372
IL 394 - 285+84 TO 302+32	984
TOTAL	3744

SHOULDER RUMBLE STRIP

LOCATION	QUANTITY (SQ YD)
NB IL 394 - 292+57 TO 302+32	975
SB IL 394 - 285+84 TO 298+45	1261
TOTAL	2236

TRAFFIC CONTROL AND PROTECTION,
STANDARD 701421

LOCATION	QUANTITY (L SUM)
STATION	1
JOBSITE	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION,
STANDARD 701431

LOCATION	QUANTITY (EACH)
JOBSITE	3
TOTAL	3

TRAFFIC CONTROL SURVEILLANCE

LOCATION	QUANTITY (CAL DAY)
*JOBSITE	26
TOTAL	26

CHANGEABLE MESSAGE SIGN

LOCATION	QUANTITY (CAL MO)
*JOBSITE	16
TOTAL	16

SHORT TERM PAVEMENT MARKING

LOCATION	QUANTITY (FOOT)
*JOBSITE	1000
TOTAL	1000

TEMPORARY PAVEMENT MARKING - LINE 6"

LOCATION	QUANTITY (FOOT)
PRESTAGE - 17+40 TO 23+50	624
STAGE I - 4+40 TO 31+00	4152
STAGE II - 9+78 TO 36+70	4896
IL 394 - 285+84 TO 302+32	1968
TOTAL	11640

TEMPORARY PAINT PAVEMENT MARKING, LINE 4"

LOCATION	QUANTITY (FOOT)
*JOBSITE	1000
TOTAL	1000

WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	QUANTITY (SQ FT)
PRESTAGE - 17+40 TO 23+50	661
STAGE I - 4+40 TO 31+00	7635
STAGE II - 9+78 TO 36+70	9139
IL 394 - 285+84 TO 302+32	1672
TOTAL	19107

TEMPORARY CONCRETE BARRIER

LOCATION	QUANTITY (FOOT)
PRESTAGE - 17+40 TO 23+50	312
STAGE I - 4+40 TO 31+00	2076
STAGE II - 9+78 TO 36+70	372
IL 394 - 285+84 TO 302+32	984
TOTAL	3744

RELOCATE TEMPORARY CONCRETE BARRIER

LOCATION	QUANTITY (FOOT)
STAGE II	2076
TOTAL	2076

REPLACEMENT REFLECTOR

LOCATION	QUANTITY (EACH)
IL 394 - 285+84 TO 302+32	110
TOTAL	110

BARRIER WALL MARKERS, TYPE C

LOCATION	QUANTITY (EACH)
JOBSITE	1764
TOTAL	1764

PAVEMENT MARKING REMOVAL

LOCATION	LENGTH (FOOT)	QUANTITY (SQ FT)
STATION		
WHITE - (SKIP DASH, 4")		
04+39.22 TO 29+90.00 RT	2550.78	212.6
12+00.12 TO 36+70.00 LT	2470	823.3
WHITE - (SOLID, 4")		
09+70.00 TO 36+70.00 LT & RT	2700	1800.0
DOUBLE YELLOW - (SOLID 4")		
09+70.00 TO 36+70.00 MEDIAN	2700	1800.0
NW LOOP RAMP GORE		385.3
SE LOOP RAMP GORE		437.2
NE RAMP GORE		1389.1
IL 394 - 285+84 TO 302+32		4050.0
TOTAL		10897.5

RAISED REFLECTIVE
PAVEMENT MARKER REMOVAL

LOCATION	QUANTITY (EACH)
STATION TO STATION	
PRE-STAGE (TWO-WAY AMBER)	
9+70 TO 17+50 (MED)	52
22+50 TO 29+90 (MED)	44
STAGE I (ONE-WAY CRYSTAL)	
9+70 TO 29+90 (RT)	101
12+00 TO 34+50 (LT)	124
STAGE II (ONE-WAY CRYSTAL)	
4+39.22 TO 9+70 (RT)	27
TOTAL	348

TEMPORARY INFORMATION SIGNING

LOCATION	QUANTITY (SQ FT)
*JOBSITE	116
TOTAL	116

TEMPORARY INFORMATION SIGNING
FOR LANE CLOSURE

LOCATION	QUANTITY (SQ FT)
*JOBSITE	108
TOTAL	108

SHOULDER RUMBLE STRIP REMOVAL

LOCATION	QUANTITY (SQ YD)
NB IL 394 - 292+57 TO 302+32	975
SB IL 394 - 285+84 TO 298+45	1261
TOTAL	2236

WET REFLECTIVE TEMPORARY TAPE,
TYPE III, 4 INCH

LOCATION	QUANTITY (FOOT)
STATION	
PRESTAGE - 17+40 TO 23+50	1149
STAGE I - 4+40 TO 31+00	7364
STAGE II - 9+78 TO 36+70	10006
TOTAL	18519

WET REFLECTIVE TEMPORARY TAPE,
TYPE III, 8 INCH

LOCATION	QUANTITY (FOOT)
STATION	
STAGE II - 9+78 TO 36+70	780
IL 394 - 285+84 TO 302+32	627
TOTAL	1407

WET REFLECTIVE TEMPORARY TAPE,
TYPE III, 5 INCH

LOCATION	QUANTITY (FOOT)
STATION	
NB IL 394 - 292+57 TO 302+32	2414
SB IL 394 - 285+84 TO 298+45	3119
TOTAL	5533

TRAFFIC CONTROL AND PROTECTION,
(EXPRESSWAYS)

LOCATION	QUANTITY (L SUM)
STATION	1
JOBSITE	1
TOTAL	1

TRAFFIC CONTROL SURVEILLANCE
EXPRESSWAYS

LOCATION	QUANTITY (CAL DAY)
STATION	32
JOBSITE	32
TOTAL	32

TEMPORARY PAVEMENT

LOCATION	STATION	OFFSET	QUANTITY (SQ YD)
	STA. 16+05 TO STA. 16+53	LT	34.0
	STA. 23+53 TO STA. 24+50	LT	61.2
	STA. 15+04 TO STA. 16+51	RT	231.2
	STA. 23+60 TO STA. 23+81	RT	10.8
	STA. 10+25 TO STA. 17+50	LT/RT	403.0
	STA. 22+50 TO STA. 35+34	LT/RT	976.0
	TOTAL		1716.2

FLEXIBLE DELINEATORS

LOCATION	QUANTITY (EACH)
*JOBSITE	80
TOTAL	80

IMPACT ATTENUATORS,
TEMPORARY (FULLY REDIRECTIVE,
NARROW), TEST LEVEL 3

LOCATION	QUANTITY (EACH)
PRESTAGE	2
STAGE I	4
IL 394	4
TOTAL	10

IMPACT ATTENUATORS,
RELOCATE (FULLY REDIRECTIVE),
TEST LEVEL 3

LOCATION	QUANTITY (EACH)
STAGE II	4
TOTAL	4



LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Westmont, Illinois

*ESTIMATED QUANTITY

FILE NAME =
...D160C05-sht-schedule.dgn

USER NAME = Plotted by Administrator
PLOT SCALE = 50.00' / IN.
PLOT DATE = 5/22/2009

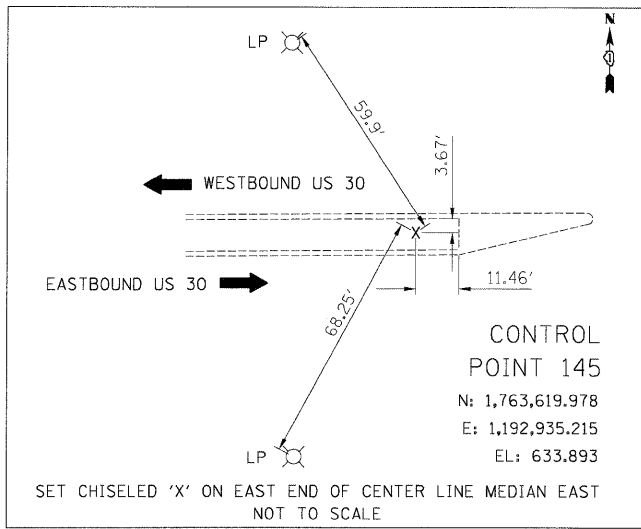
DESIGNED - SGL
DRAWN - SGL
CHECKED - FML
DATE - 03/04/2009

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
US ROUTE 30 OVER IL ROUTE 394
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

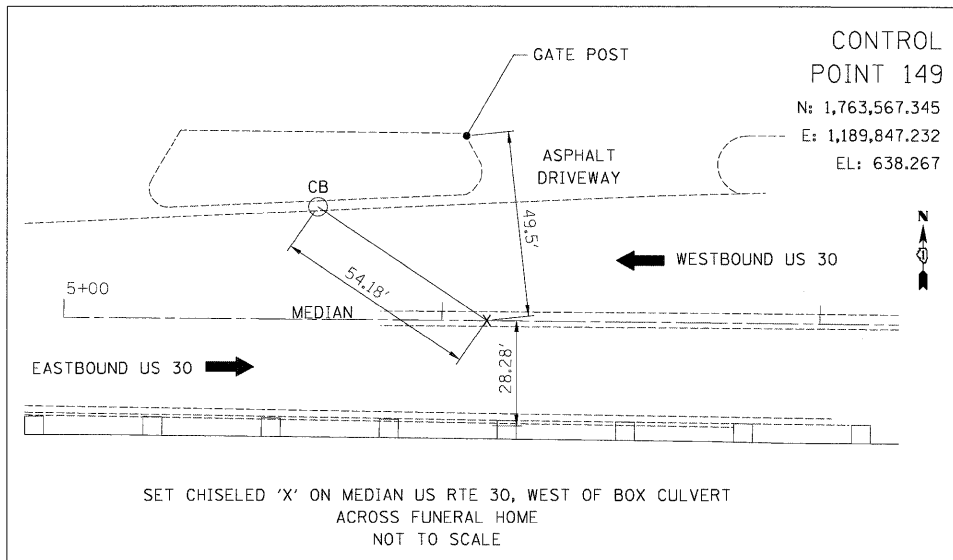
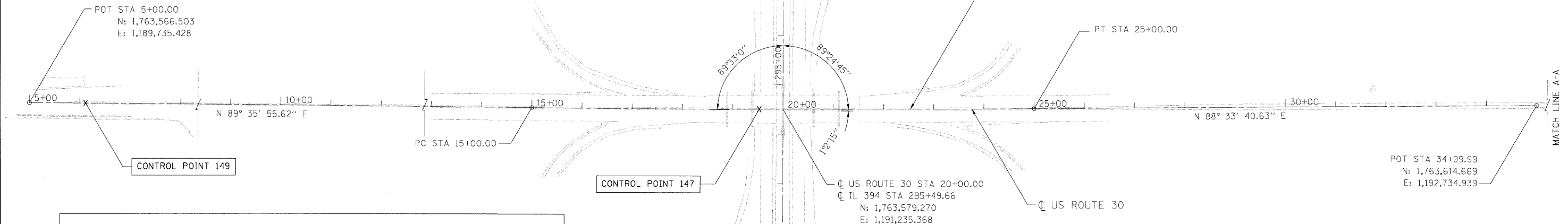
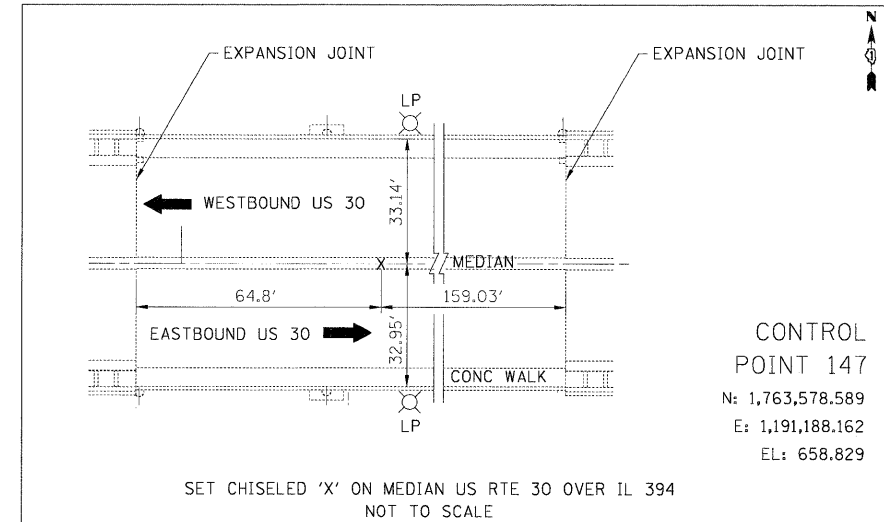
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	9
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



BENCHMARK 'A' ELEVATION 632.511'
 DESCRIPTION:
 SET '□' CUT ON SOUTHERLY SIDE OF CONCRETE BASE TO LIGHT POLE OPPOSITE RE-LAY STATION ON NORTHSIDE RTE 30 PRIOR TO ON RAMP NB RTE 394.

BENCHMARK 'B' ELEVATION 636.817'
 DESCRIPTION:
 SET '□' CUT ON SOUTHERLY FACE OF CONCRETE BASE TO LIGHT POLE ON RAMP NB IL RTE 394 NORTHSIDE OF US RTE 30.

BENCHMARK 'D' ELEVATION 636.433'
 DESCRIPTION:
 SET '□' ON NORTHWEST CORNER OF HEADWALL TO CULVERT UNDER WEST DRIVEWAY OF McCULLOUGH FUNERAL & CREMATION SERVICES NORTH SIDE OF US RTE 30.



CURVE DATA

EXIST. CURVE US302
 PI STA. = 20+00.01
 N: 1,763,577.007
 E: 1,191,235.404
 $\Delta = 1^\circ 02' 15''$ (LT)
 $D = 0^\circ 06' 14''$
 $R = 55,224.85'$
 $T = 500.01'$
 $L = 1,000.00'$
 $E = 2.26'$
 $e = NA$
 $T.R. = NA$
 $S.E. RUN = NA$
 P.C. STA. = 15+00.00
 N: 1,763,573.506
 E: 1,190,735.403
 P.T. STA. = 25+00.00
 N: 1,763,589.561
 E: 1,191,735.260

POT STA 305+00
 N: 1,762,629.029
 E: 1,191,249.487

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbdainc.com

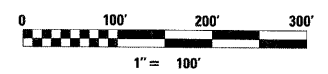
FILE NAME = D168C05-shr-ATB.dgn	USER NAME = default	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	CHECKED - RS	DRAWN - RA	REVISED -
PLOT DATE = 5/5/2009	DATE - 5/6/2009		REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

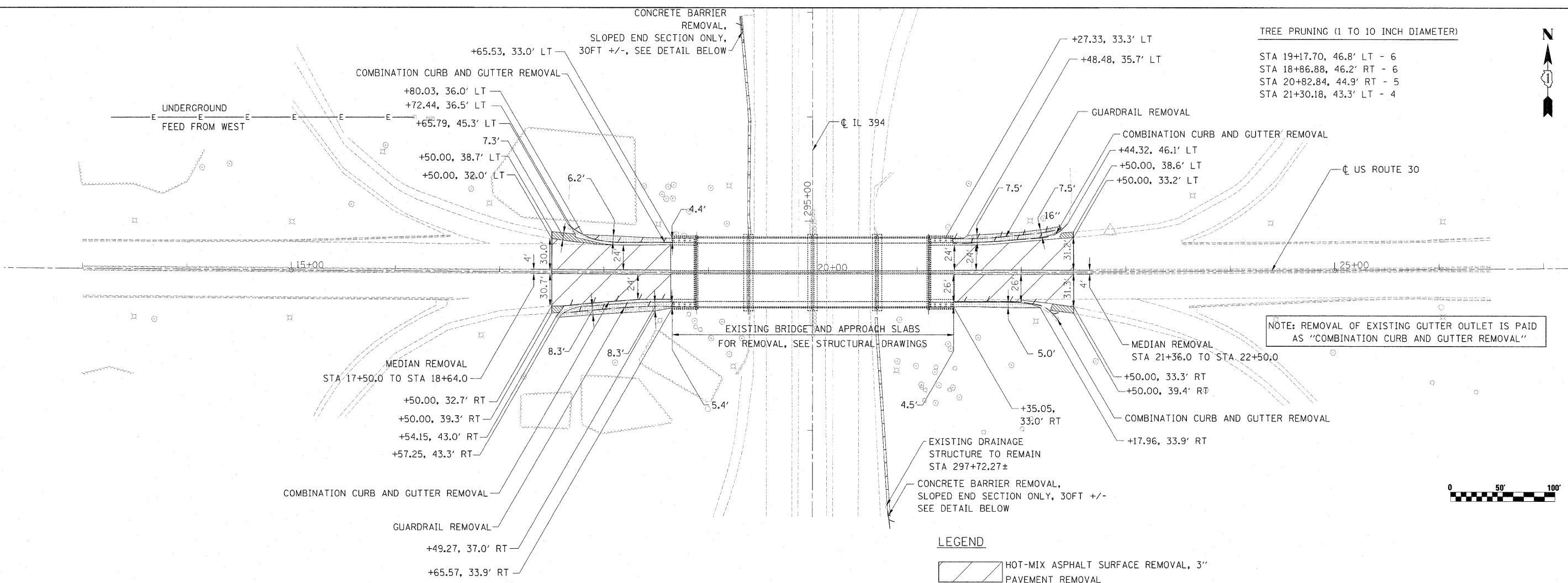
ALIGNMENT, TIES, AND BENCHMARKS

SCALE: 1"=100' SHEET NO. 1 OF 1 SHEETS STA. 5+00.00 TO STA. 34+99.99

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	10
FED. ROAD DIST. NO.			CONTRACT NO. 60C05	
ILLINOIS FED. AID PROJECT				



S:\19107-07-001\us30\CADD Sheets\0160005-shr-ATB.dgn

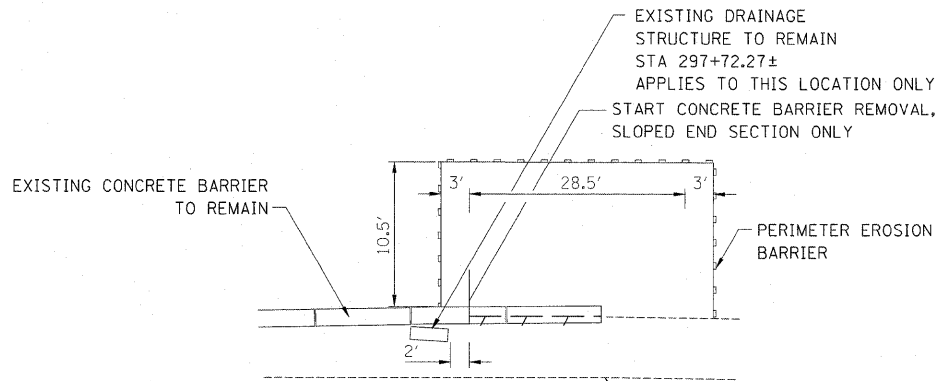


TREE PRUNING (1 TO 10 INCH DIAMETER)
 STA 19+17.70, 46.8' LT - 6
 STA 18+86.88, 46.2' RT - 6
 STA 20+82.84, 44.9' RT - 5
 STA 21+30.18, 43.3' LT - 4

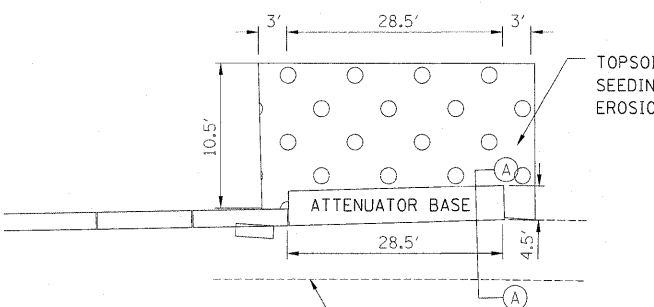
NOTE: REMOVAL OF EXISTING GUTTER OUTLET IS PAID AS "COMBINATION CURB AND GUTTER REMOVAL"

LEGEND

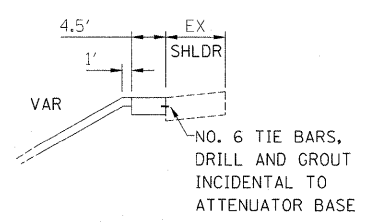
- HOT-MIX ASPHALT SURFACE REMOVAL, 3" PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- BITUMINOUS SIDEWALK REMOVAL



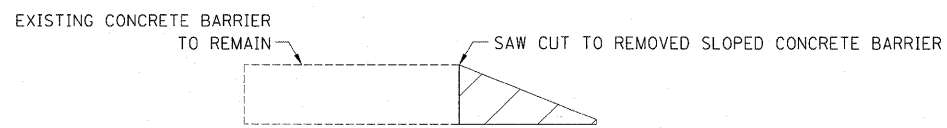
CONCRETE BARRIER REMOVAL PLAN
NOT TO SCALE



PROPOSED ATTENUATOR BASE ON I-394
NOT TO SCALE



SECTION A-A
NOT TO SCALE



CONCRETE BARRIER REMOVAL ELEVATION
NOT TO SCALE

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

FILE NAME = 0160C05-shr-rem.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009
		DRAWN - RA	REVISED -
		CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN

SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. 13+00.00 TO STA. 26+00.00

F.A. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60C05	

s:\10\03\CAUTION\US30\CA00 Sheets\0160C05-shr-rem.dgn

PLAN
 SURVEYED
 PLOTTED
 GRADES CHECKED
 STRUCTURE NOTATIONS OK'D
 BY
 DATE
 NOTE BOOK NO.
 FILE NAME

PROFILE
 SURVEYED
 PLOTTED
 GRADES CHECKED
 STRUCTURE NOTATIONS OK'D
 BY
 DATE
 NOTE BOOK NO.
 FILE NAME

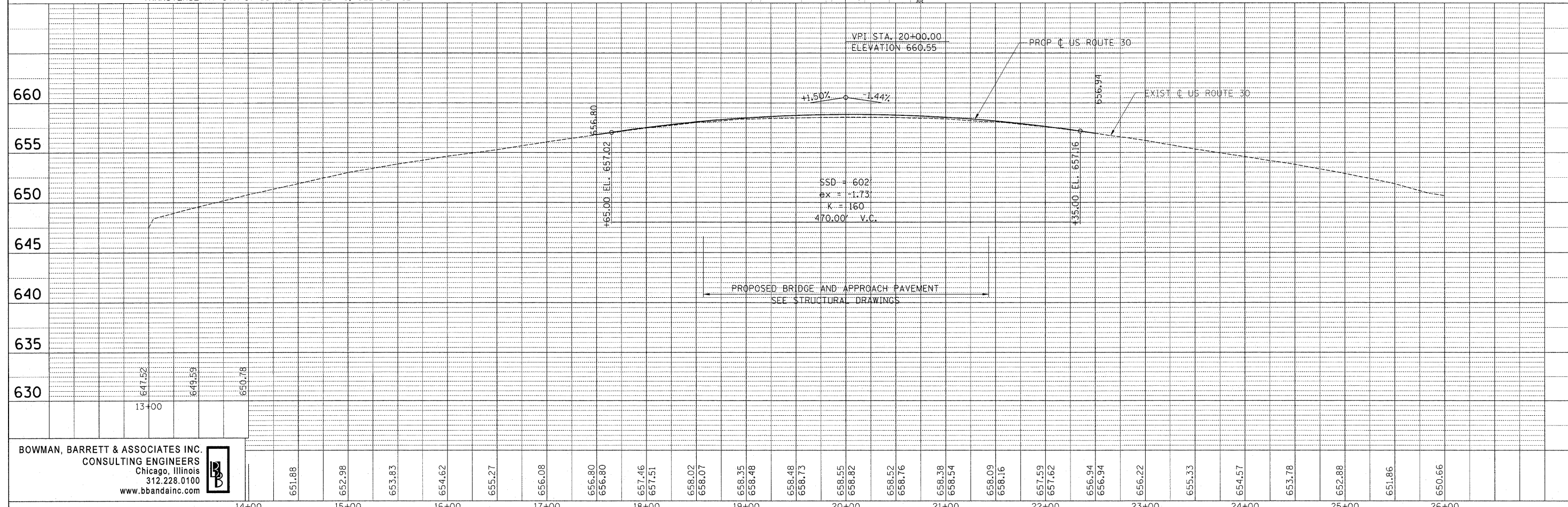
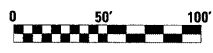
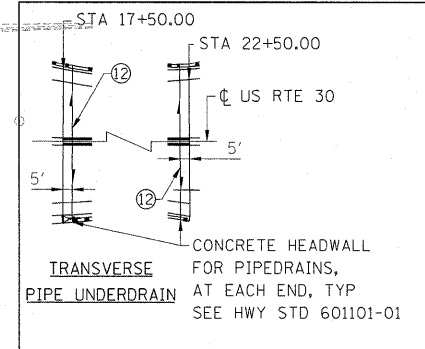
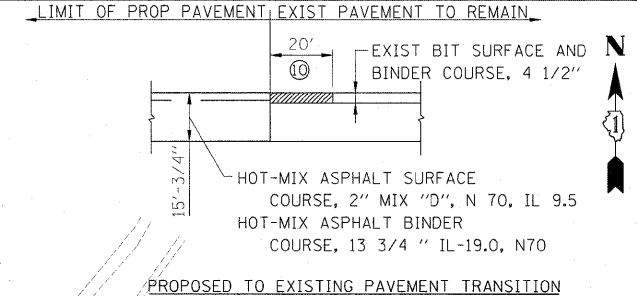
LEGEND

- ① HOT-MIX ASPHALT SHOULDERS, 8"
- ② BITUMINOUS MATERIALS (PRIME COAT) AGGREGATE SUBGRADE 12"
- ③ HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 15 3/4"
 -HOT-MIX ASPHALT SURFACE COURSE, 2" MIX "D", N 70, IL 9.5
 -HOT-MIX ASPHALT BINDER COURSE, 13 3/4" IL-19.0, N70
 BITUMINOUS MATERIALS (PRIME COAT)
 AGGREGATE SUBGRADE 12"
- ④ AGGREGATE SHOULDERS, TYPE B 6"
- ⑤ STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
- ⑥ TRAFFIC BARRIER TERMINAL, TYPE 2
- ⑦ TRAFFIC BARRIER TERMINAL, TYPE 5
- ⑧ TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)
- ⑨ TRAFFIC BARRIER TERMINAL, TYPE 6
- ⑩ CONCRETE CURB, TYPE B
- ⑪ CONCRETE MEDIAN, TYPE SB-6.06
- ⑫ HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT
- ⑬ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N 70, IL 9.5
- ⑭ APPROACH PAVEMENT
- ⑮ PIPE UNDERDRAINS 4"
- ⑯ TRANSVERSE AT STA 17+55 AND STA 22+45, SEE DETAIL
- ⑰ TYPE 1 OUTLET (NOTE: COORDINATE GUARD-RAIL POSTS WITH OUTLET)
- ⑱ PIPE DRAINS 12" METAL END SECTION 12"

IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3
 ATTENUATOR BASE, 4.5'W X 28.5'L
 SEE DETAIL, SHEET NO. 11

IMPACT ATTENUATORS, REPLACEMENT (NON-REDIRECTIVE), TEST LEVEL 3 (6 BARRELS)

IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3
 ATTENUATOR BASE, 4.5'W X 28.5'L
 SEE DETAIL, SHEET NO. 11



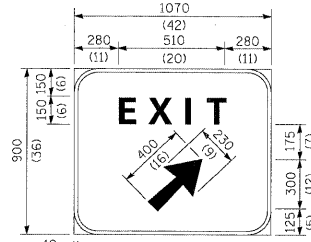
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

FILE NAME = D:\68095-sht-plnprf.dgn	USER NAME = default	DESIGNED -	REVISED - 05/22/2009	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - RA	REVISED -			0353	0303.1B-1	COOK	91	12	
		CHECKED - RS	REVISED -			CONTRACT NO. 60C05					
		DATE - 5/6/2009	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

D:\91095-CADD\US30\CA00_Sheets\0168095-sht-plnprf.dgn

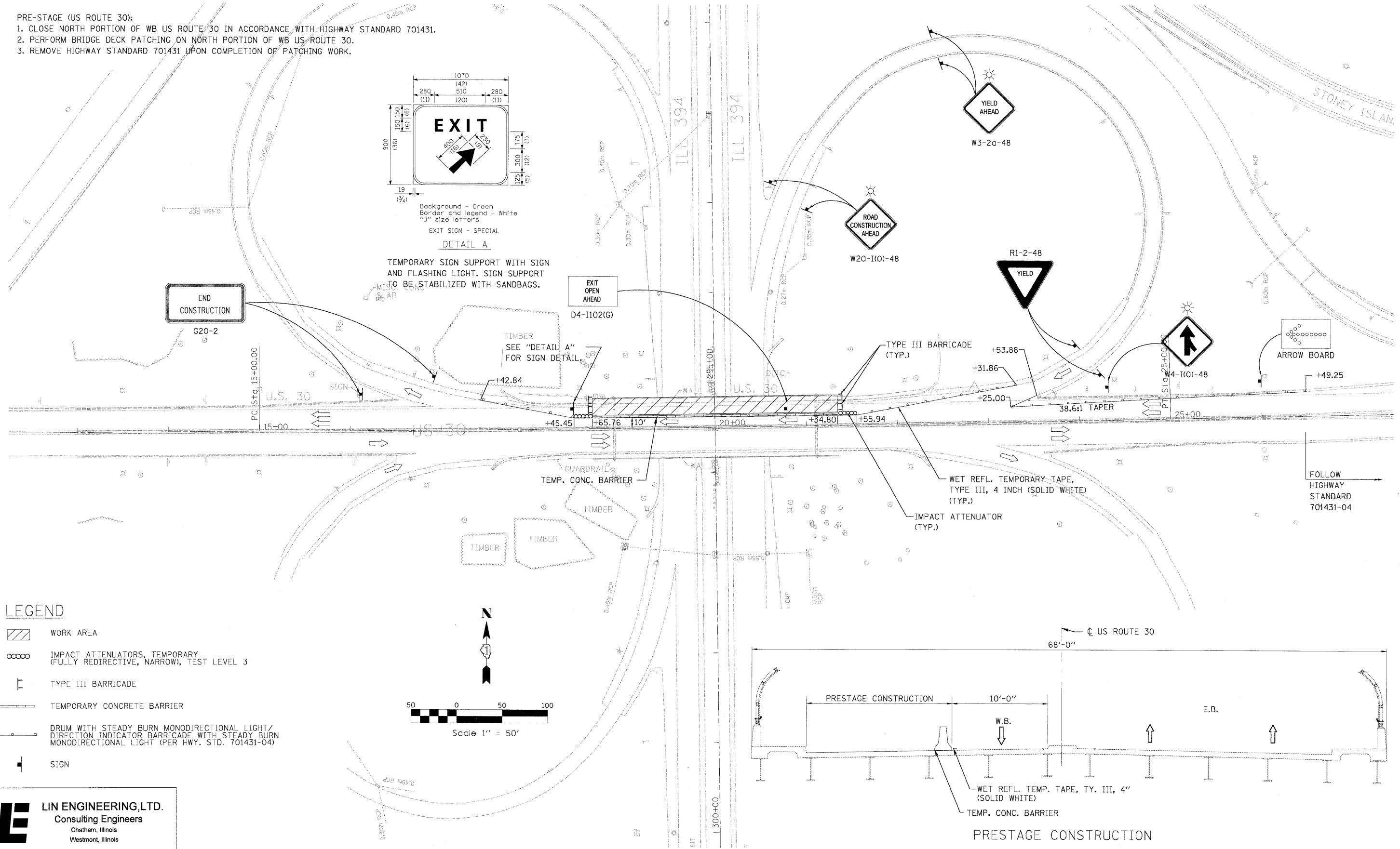
PRE-STAGE (US ROUTE 30):

1. CLOSE NORTH PORTION OF WB US ROUTE/30 IN ACCORDANCE WITH HIGHWAY STANDARD 701431.
2. PERFORM BRIDGE DECK PATCHING ON NORTH PORTION OF WB US ROUTE 30.
3. REMOVE HIGHWAY STANDARD 701431 UPON COMPLETION OF PATCHING WORK.



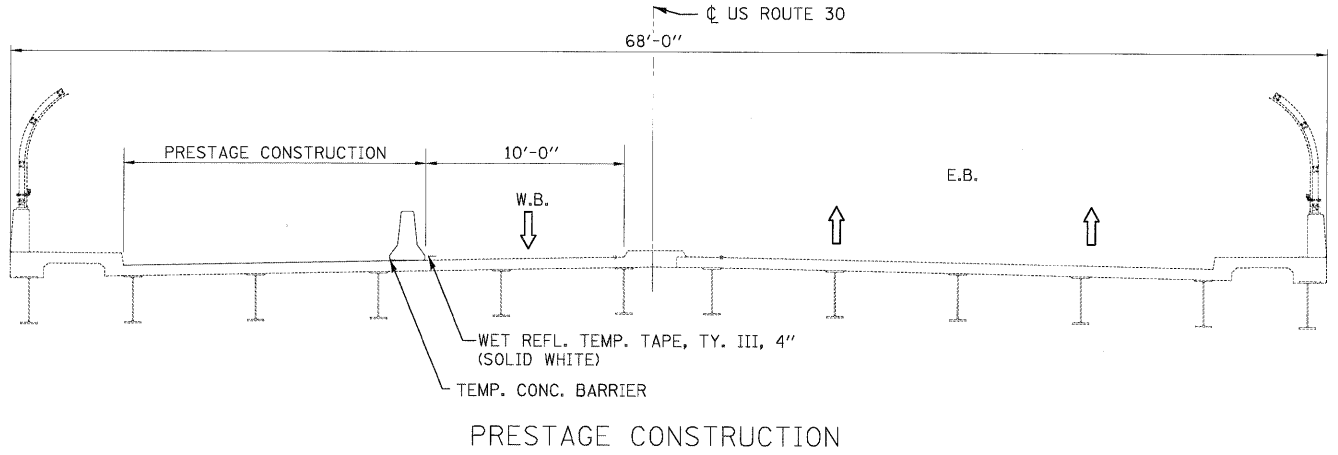
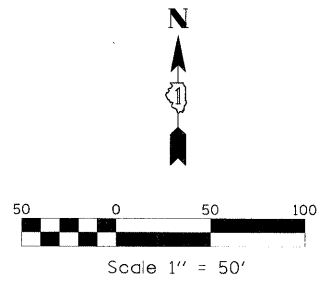
Background - Green
Border and legend - White
"D" size letters
EXIT SIGN - SPECIAL
DETAIL A

TEMPORARY SIGN SUPPORT WITH SIGN AND FLASHING LIGHT. SIGN SUPPORT TO BE STABILIZED WITH SANDBAGS.



LEGEND

- WORK AREA
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT / DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PER HWY. STD. 701431-04)
- SIGN



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

FILE NAME = ...\\D162005-SHT-Stage-Prestage1.dgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC PRESTAGE US ROUTE 30 OVER IL ROUTE 394	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.00' / IN.	CHECKED - FML	REVISED -	0353			0303.1B-1	COOK	91	13	
PLOT DATE = 5/5/2009	DATE - 05/01/2009	REVISED -	CONTRACT NO. 60C05							
			SCALE: 1" = 50'			SHEET NO. OF SHEETS	STA. 14+00.00 TO STA. 27+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

PRE-STAGE (IL ROUTE 394):

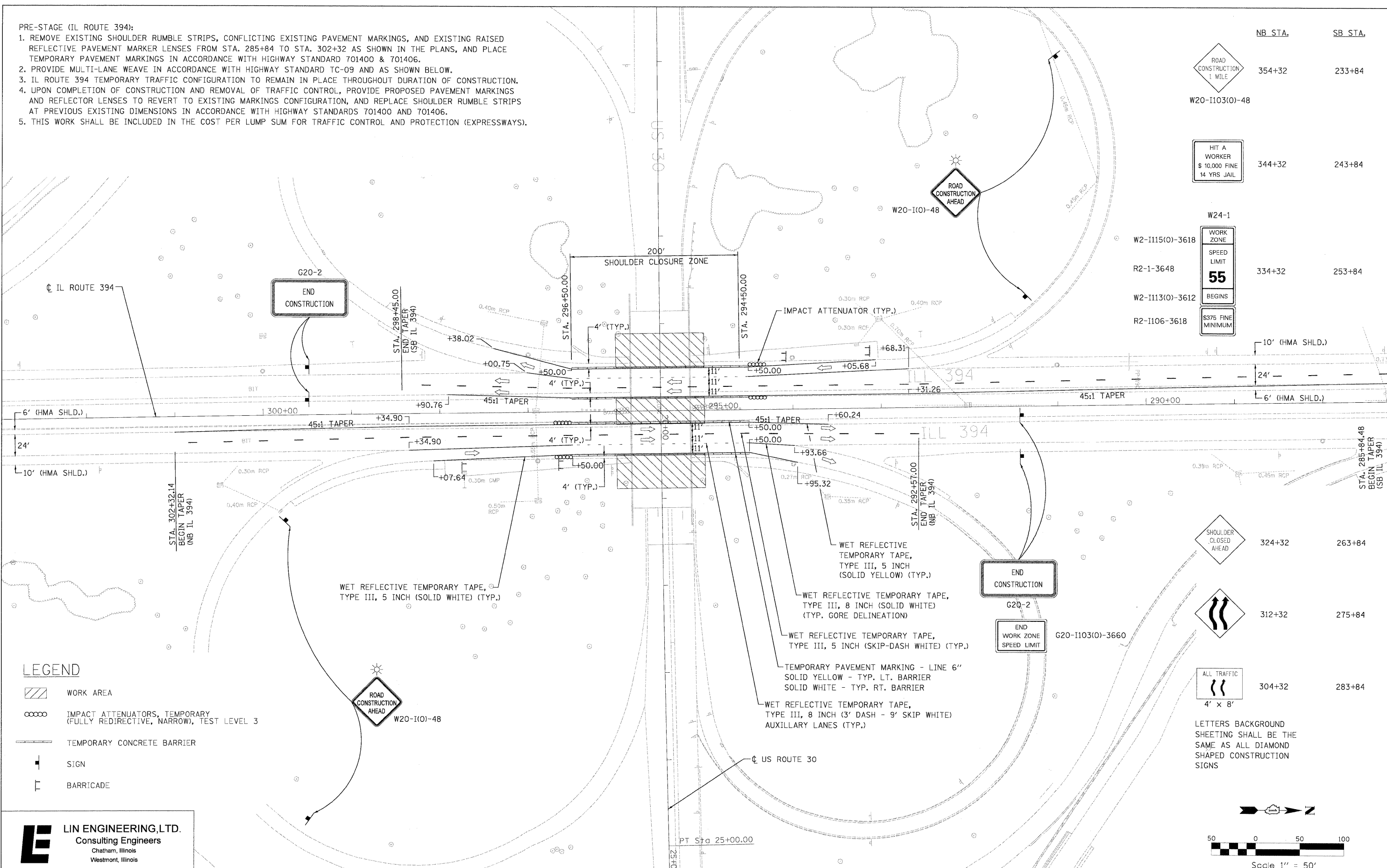
1. REMOVE EXISTING SHOULDER RUMBLE STRIPS, CONFLICTING EXISTING PAVEMENT MARKINGS, AND EXISTING RAISED REFLECTIVE PAVEMENT MARKER LENSES FROM STA. 285+84 TO STA. 302+32 AS SHOWN IN THE PLANS, AND PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH HIGHWAY STANDARD 701400 & 701406.
2. PROVIDE MULTI-LANE WEAVE IN ACCORDANCE WITH HIGHWAY STANDARD TC-09 AND AS SHOWN BELOW.
3. IL ROUTE 394 TEMPORARY TRAFFIC CONFIGURATION TO REMAIN IN PLACE THROUGHOUT DURATION OF CONSTRUCTION.
4. UPON COMPLETION OF CONSTRUCTION AND REMOVAL OF TRAFFIC CONTROL, PROVIDE PROPOSED PAVEMENT MARKINGS AND REFLECTOR LENSES TO REVERT TO EXISTING MARKINGS CONFIGURATION, AND REPLACE SHOULDER RUMBLE STRIPS AT PREVIOUS EXISTING DIMENSIONS IN ACCORDANCE WITH HIGHWAY STANDARDS 701400 AND 701406.
5. THIS WORK SHALL BE INCLUDED IN THE COST PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

NB STA. SB STA.

ROAD CONSTRUCTION 1 MILE
W20-I103(O)-48
354+32 233+84

HIT A WORKER
\$ 10,000 FINE
14 YRS JAIL
344+32 243+84

W24-1
WORK ZONE
SPEED LIMIT
55
BEGINS
S375 FINE MINIMUM
W2-I115(O)-3618
R2-1-3648
W2-I113(O)-3612
R2-I106-3618
334+32 253+84



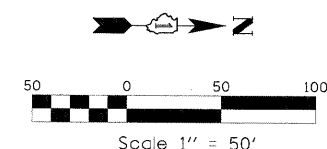
LEGEND

- WORK AREA
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- SIGN
- BARRICADE

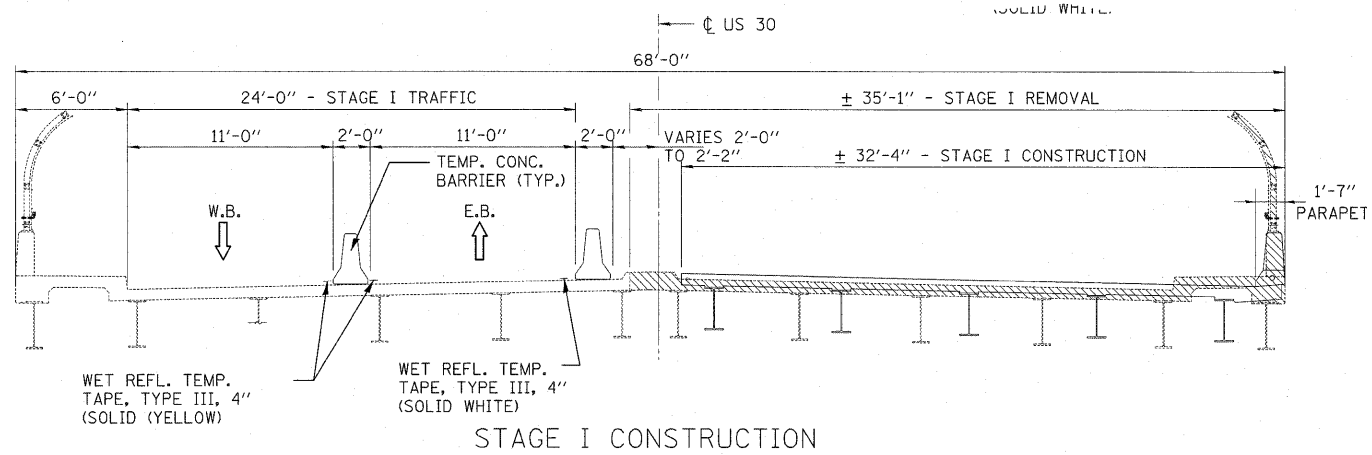
LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois
Westmont, Illinois

SHOULDER CLOSED AHEAD
324+32 263+84
ROAD CONSTRUCTION AHEAD
312+32 275+84
ALL TRAFFIC
4' x 8'
304+32 283+84

LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS

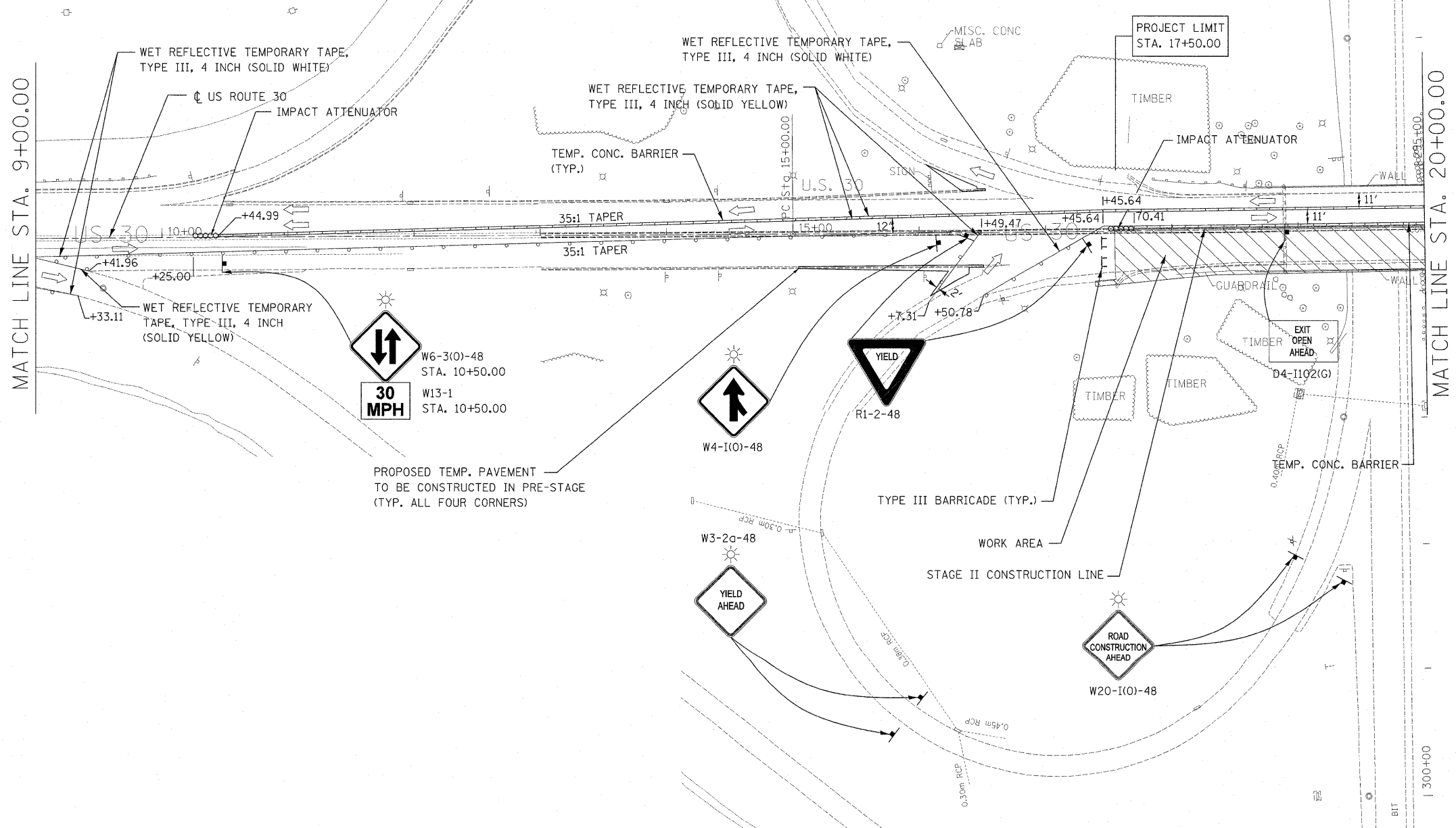
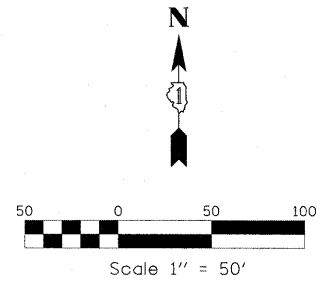


FILE NAME = ...NDIG005-SHT-Stage-Prestage2.dgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - IL ROUTE 394 US ROUTE 30 OVER IL ROUTE 394			F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 14
PLOT SCALE = 50.00' / IN.	CHECKED - FML	DRAWN - ST	REVISED -		SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60C05	
PLOT DATE = 5/5/2009	DATE - 05/2009	CHECKED - FML	REVISED -								FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
		DATE - 05/2009	REVISED -									



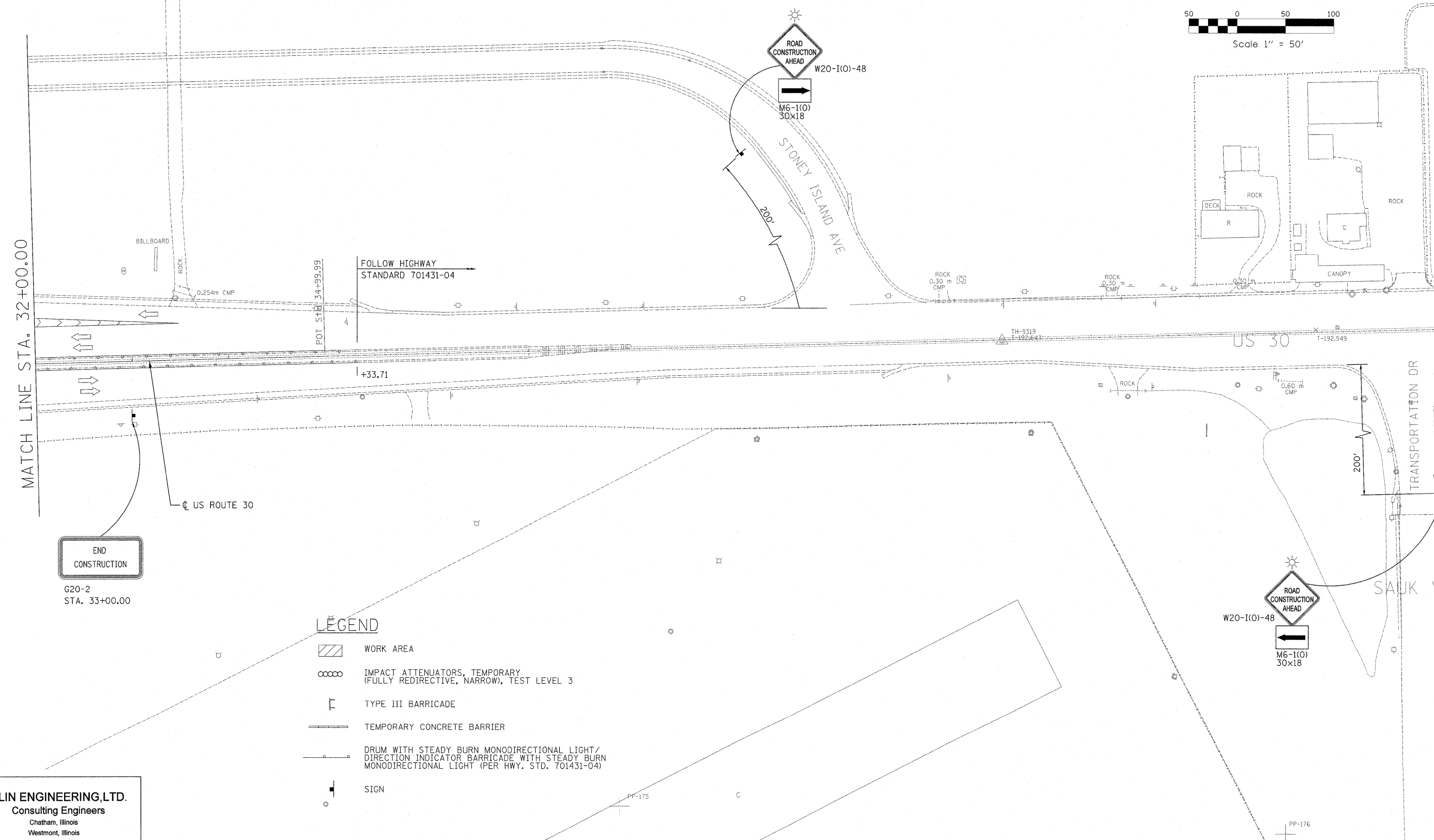
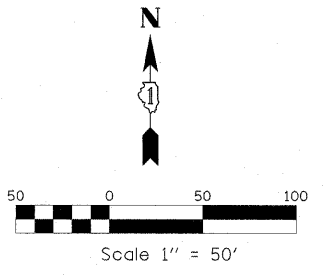
LEGEND

- WORK AREA
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT/DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PER HWY. STD. 701431-04)
- SIGN



LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Westmont, Illinois

FILE NAME = ...\\D162005-SHT-Stage-1-2.dgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC STAGE I US ROUTE 30 OVER IL ROUTE 394	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 16
PLOT SCALE = 50.00' / 1" IN.	CHECKED - FML	REVISIONS	CONTRACT NO. 60C05							
PLOT DATE = 5/22/2009	DATE - 05/2009	REVISIONS								
SCALE: 1" = 50' SHEET NO. OF SHEETS STA. 9+00.00 TO STA. 20+00.00 FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT										



- LEGEND**
- WORK AREA
 - IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
 - TYPE III BARRICADE
 - TEMPORARY CONCRETE BARRIER
 - DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT / DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PER HWY. STD. 701431-04)
 - SIGN

LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Westmont, Illinois

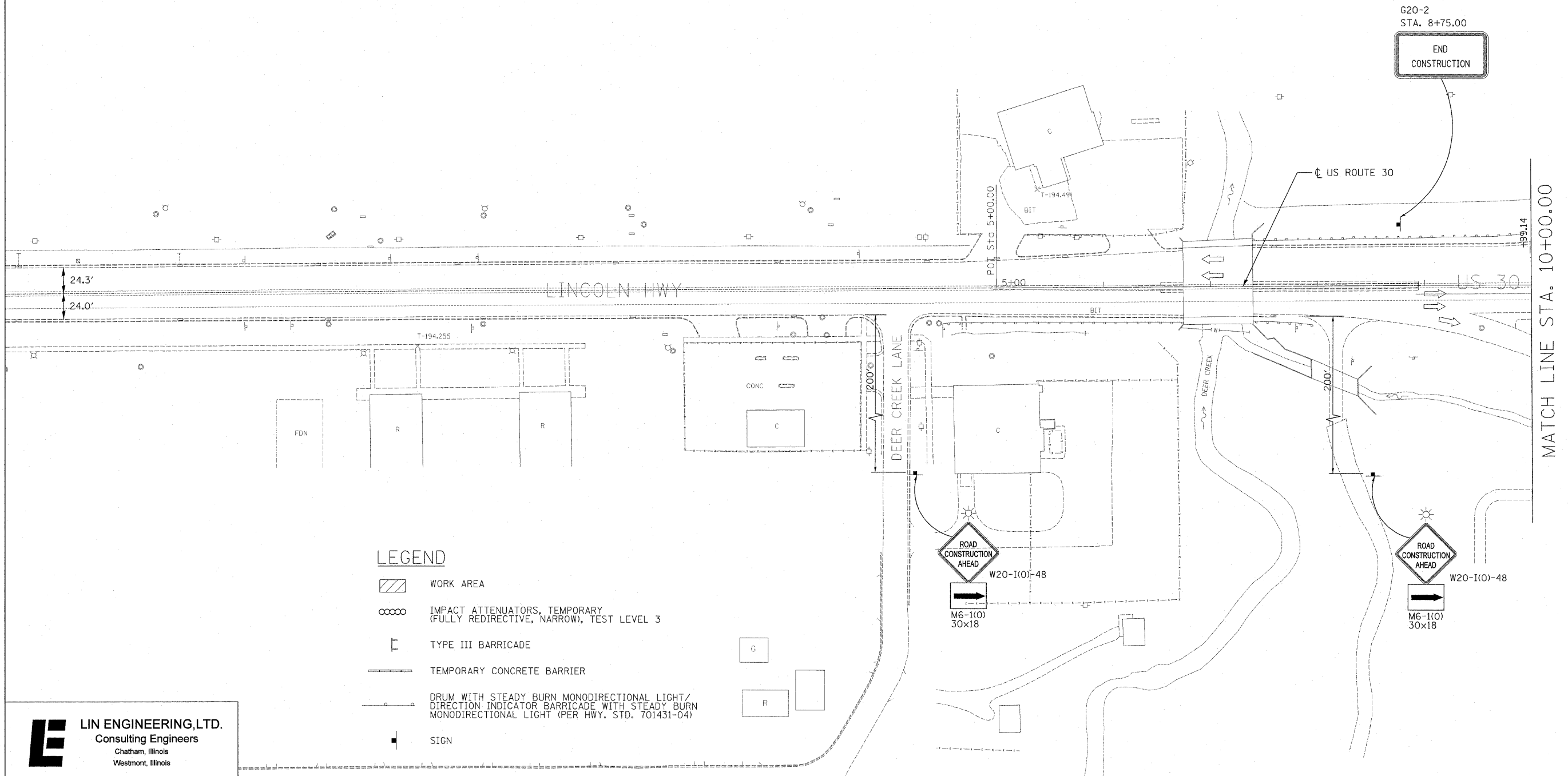
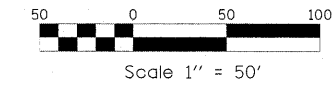
FILE NAME = ... \D160C05-SHT-Stage-1-4.dgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC STAGE I US ROUTE 30 OVER IL ROUTE 394	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 18	
	PLOT SCALE = 50.00' / IN.	DRAWN - ST	REVISED -			SCALE: 1" = 50'	SHEET NO. OF SHEETS	STA. 32+00.00 TO STA. 35+00.00	FED. ROAD DIST. NO. [ILLINOIS]	FED. AID PROJECT	CONTRACT NO. 60C05
	PLOT DATE = 5/22/2009	CHECKED - FML	REVISED -								
		DATE - 05/2009	REVISED -								

STAGE 2

1. CLOSE NORTH PORTION OF US ROUTE 30 IN ACCORDANCE WITH HIGHWAY STANDARD 701431.
2. REMOVE CONFLICTING EXISTING AND TEMPORARY PAVEMENT MARKINGS, AND RAISED REFLECTIVE PAVEMENT MARKERS.
3. REMOVE NORTH PORTION OF EXISTING BRIDGE, GUARDRAIL, SIDEWALK, CURB & GUTTER, MEDIAN, AND PORTIONS OF PAVEMENT.
4. CONSTRUCT NORTH PORTION OF PROPOSED BRIDGE, SHOULDER, PARAPET, GUARDRAIL, EROSION CONTROL, SIGNING, LIGHTING, AND PAVEMENT.
5. CONSTRUCT BRIDGE MEDIAN FROM STA. 17+50 TO STA. 22+50.
6. BRIDGE BEAM REMOVAL AND SETTING TO BE PERFORMED UNDER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

STAGE 3

1. CONSTRUCT PROPOSED MEDIAN, MEDIAN SURFACE, REMOVE TEMPORARY PAVEMENT, AND REPLACE COMBINATION CONCRETE CURB AND GUTTER FROM STA. 10+25 TO STA. 17+50, AND FROM STA. 22+50 TO STA. 35+34 IN ACCORDANCE WITH HIGHWAY STANDARD 701421.
2. PORTIONS OF THE TEMPORARY PAVEMENT PLACED DURING PRESTAGE SHALL BE REMOVED AND REPLACED WITH CURB & GUTTER:
 - STA. 16+05 LT. TO STA. 16+53 LT.
 - STA. 23+53 LT. TO STA. 24+50 LT.
 - STA. 15+04 RT. TO STA. 16+51 RT.
 - STA. 23+60 RT TO STA. 23+81 RT.
 THE REMAINDER OF THE TEMPORARY PAVEMENT SHALL REMAIN IN PLACE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH HIGHWAY STANDARD 701421.
3. PLACE FINAL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS UNDER HIGHWAY STANDARD 701426.

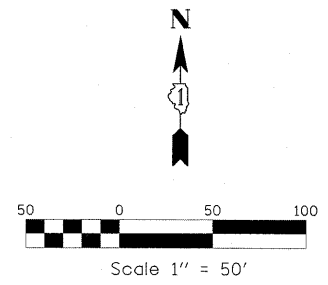
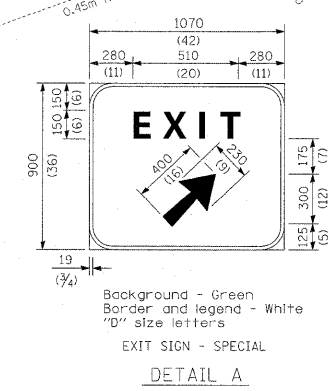
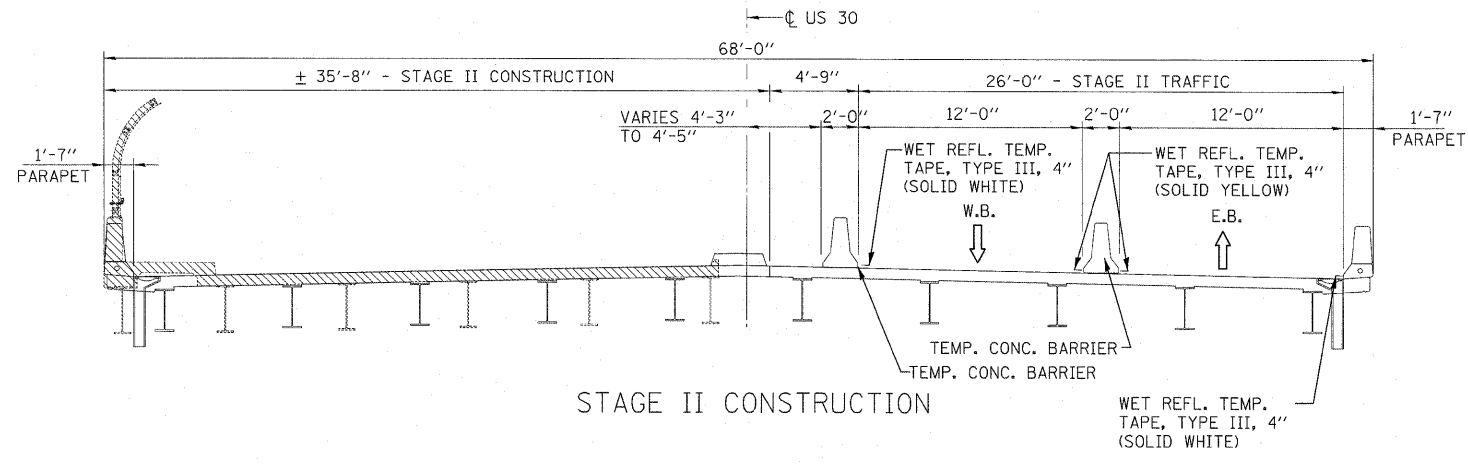


LEGEND

	WORK AREA
	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
	TYPE III BARRICADE
	TEMPORARY CONCRETE BARRIER
	DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT / DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PER HWY. STD. 701431-04)
	SIGN

LIN ENGINEERING, LTD.
 Consulting Engineers
 Chatham, Illinois
 Westmont, Illinois

FILE NAME = ...\\D:\60C05-SHT-Stage-2-Ldgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC STAGE II US ROUTE 30 OVER IL ROUTE 394	F.A.P. RTE. = 0353	SECTION = 0303.1B-1	COUNTY = COOK	TOTAL SHEETS = 91	SHEET NO. = 19		
PLOT SCALE = 50.00' / IN.	CHECKED - FML	DATE - 05/2009	REVISED -			SCALE: 1" = 50'	SHEET NO. OF SHEETS	STA. 5+00.00 TO STA. 10+00.00	CONTRACT NO. 60C05			
PLOT DATE = 5/22/2009	DATE - 05/2009	REVISED -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT						

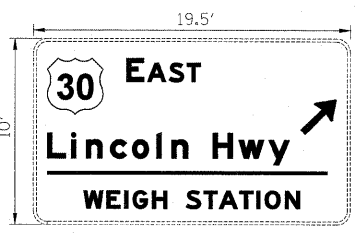
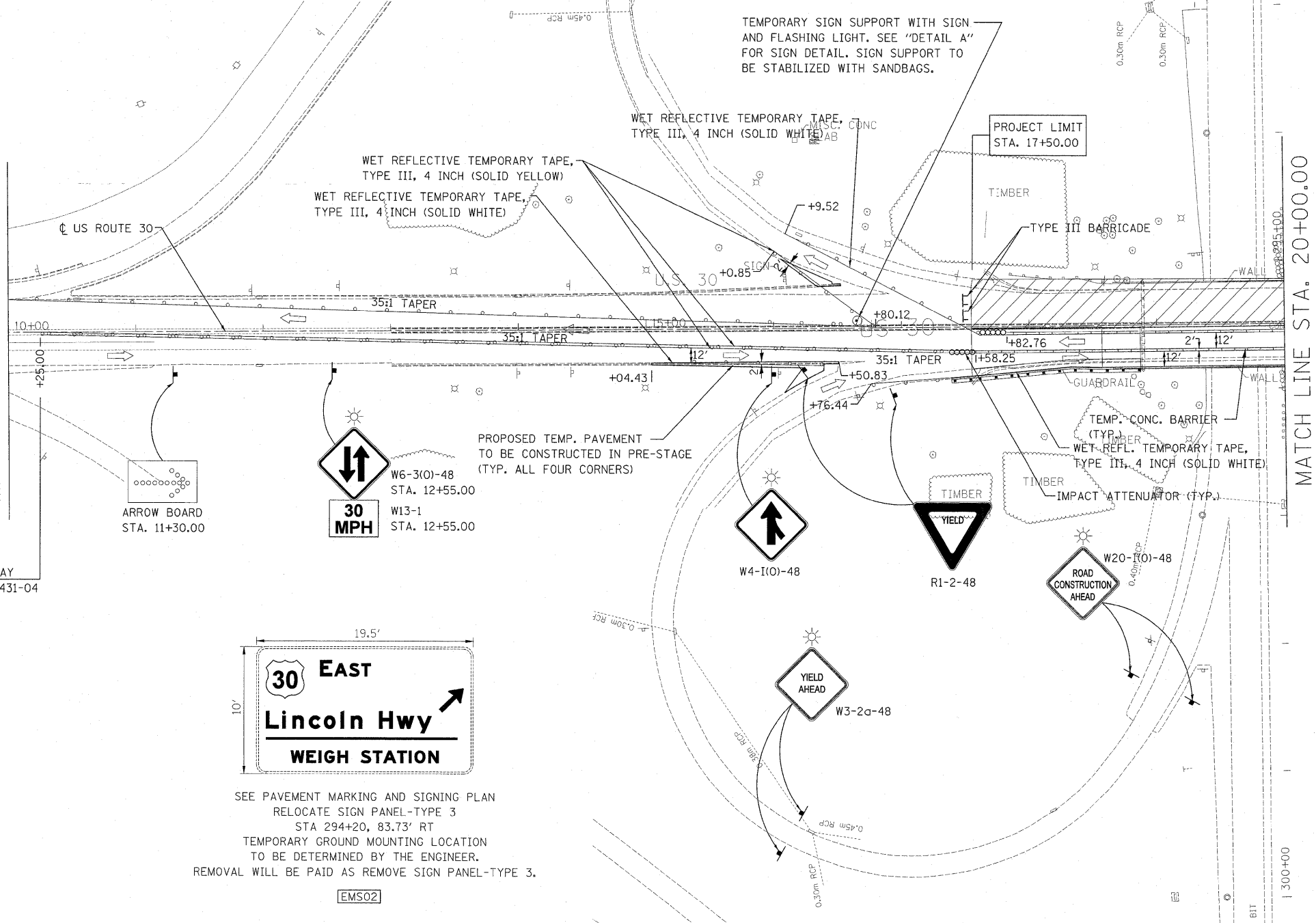


LEGEND

- WORK AREA
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT / DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PER HWY. STD. 701431-04)
- SIGN

MATCH LINE STA. 10+00.00

FOLLOW HIGHWAY STANDARD 701431-04

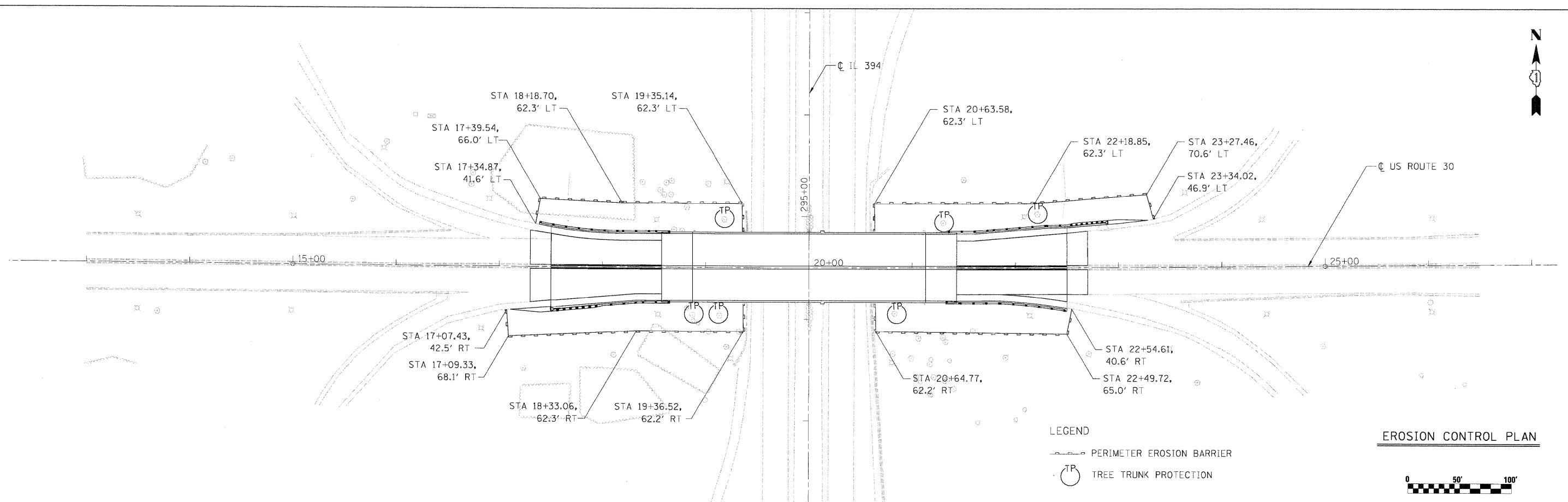


SEE PAVEMENT MARKING AND SIGNING PLAN
 RELOCATE SIGN PANEL-TYPE 3
 STA 294+20, 83.73' RT
 TEMPORARY GROUND MOUNTING LOCATION
 TO BE DETERMINED BY THE ENGINEER.
 REMOVAL WILL BE PAID AS REMOVE SIGN PANEL-TYPE 3.
 [EMS02]

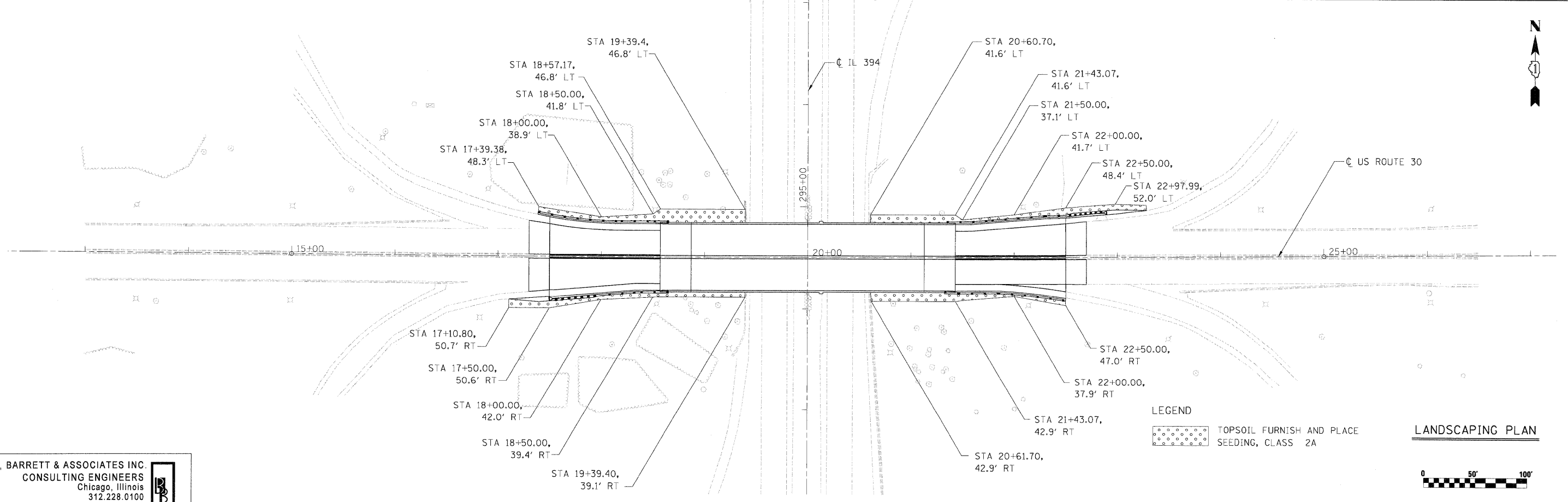
MATCH LINE STA. 20+00.00

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

FILE NAME = ...N0160C05-SHT-Stage-2-2.dgn	USER NAME = Plotted by Administrator	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC STAGE II US ROUTE 30 OVER IL ROUTE 394	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 20	
	PLOT SCALE = 50.00' / IN.	DRAWN - ST	REVISED -			SCALE: 1" = 50'	SHEET NO. OF SHEETS	STA. 10+00.00 TO STA. 20+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60C05
	PLOT DATE = 5/22/2009	CHECKED - FML	REVISED -								
		DATE - 05/2009	REVISED -								



EROSION CONTROL PLAN



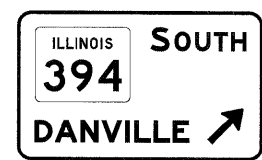
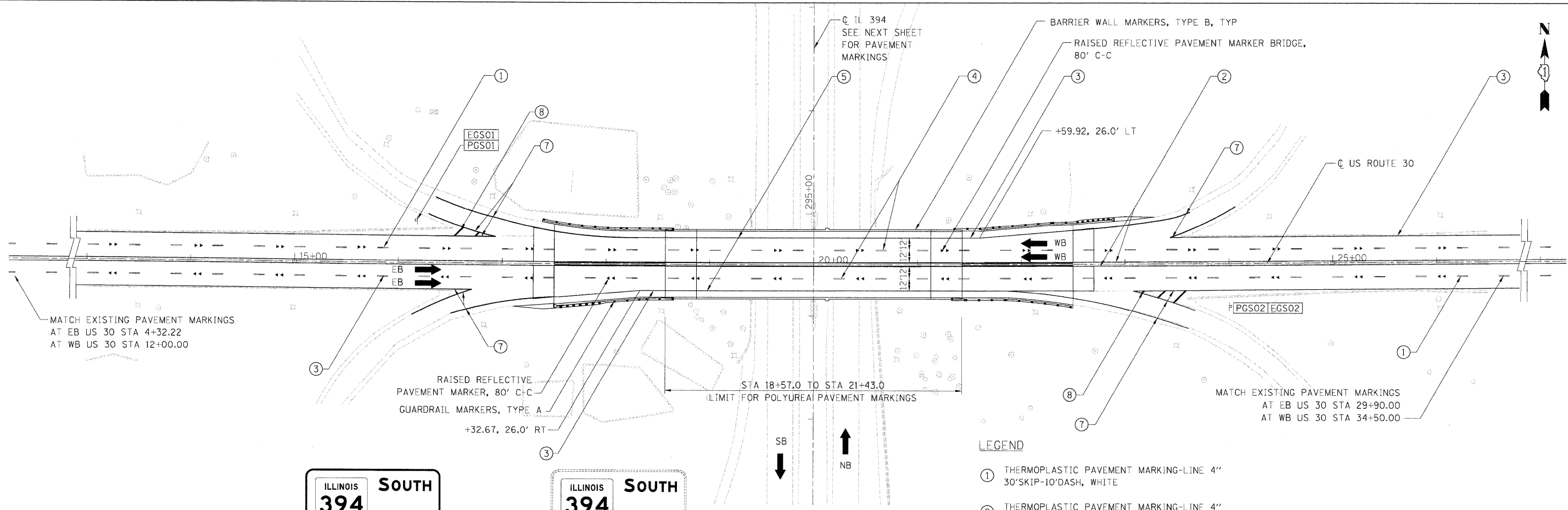
LANDSCAPING PLAN

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com



FILE NAME = D:\60C05-sht-eros.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION AND LANDSCAPING PLAN			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.					
		DRAWN - RA	REVISED -					0353	0303.1B-1	COOK	91	23					
		CHECKED - RS	REVISED -					SCALE: 1" = 50'			SHEET NO. 1 OF 1 SHEETS			STA. 13+00.00 TO STA. 26+00.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT
		DATE - 5/6/2009	REVISED -					CONTRACT NO. 60C05									

er:\9129\05_road\un38\CADD_Sheets\116\26-sht-er-05.dgn



PGS01
 STA 16+00±
 SIGN PANEL TYPE 3
 STRUCTURAL STEEL SIGN SUPPORT-BREAKAWAY
 CONCRETE FOUNDATIONS



EGS01
 REMOVE SIGN PANEL-TYPE 3
 REMOVE GROUND-MOUNTED SIGN SUPPORT
 REMOVE CONCRETE FOUNDATION-GROUND MOUNT



PGS02
 STA 24+00±
 SIGN PANEL TYPE 3
 STRUCTURAL STEEL SIGN SUPPORT-BREAKAWAY
 CONCRETE FOUNDATIONS

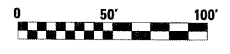


EGS02
 REMOVE SIGN PANEL-TYPE 3
 REMOVE GROUND-MOUNTED SIGN SUPPORT
 REMOVE CONCRETE FOUNDATION-GROUND MOUNT

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING-LINE 4" 30'SKIP-10'DASH, WHITE
- ② THERMOPLASTIC PAVEMENT MARKING-LINE 4" YELLOW WHITE
- ③ THERMOPLASTIC PAVEMENT MARKING-LINE 4" SOLID WHITE
- ④ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" 30'SKIP-10'DASH, WHITE
- ⑤ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" SOLID WHITE
- ⑥ THERMOPLASTIC PAVEMENT MARKING-LINE 5" 30'SKIP-10'DASH, WHITE
- ⑦ THERMOPLASTIC PAVEMENT MARKING-LINE 8" SOLID WHITE GORE LINE
- ⑧ THERMOPLASTIC PAVEMENT MARKING-LINE 12" SOLID 45° WHITE DIAGONAL LINES @ 20' C-C

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

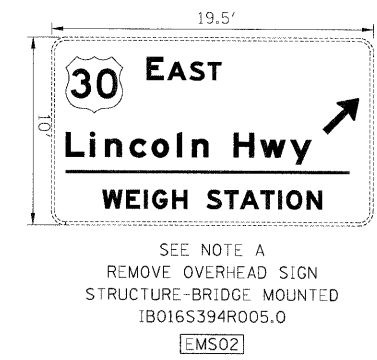
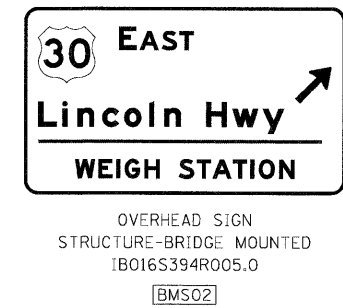
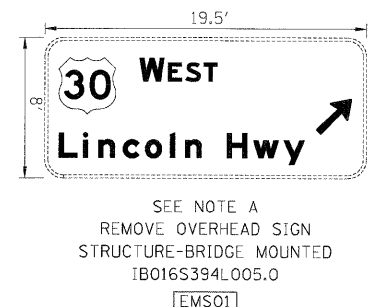
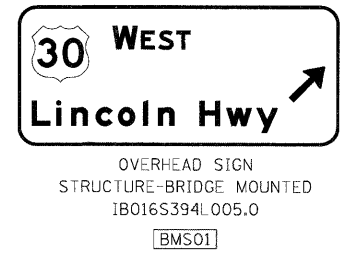
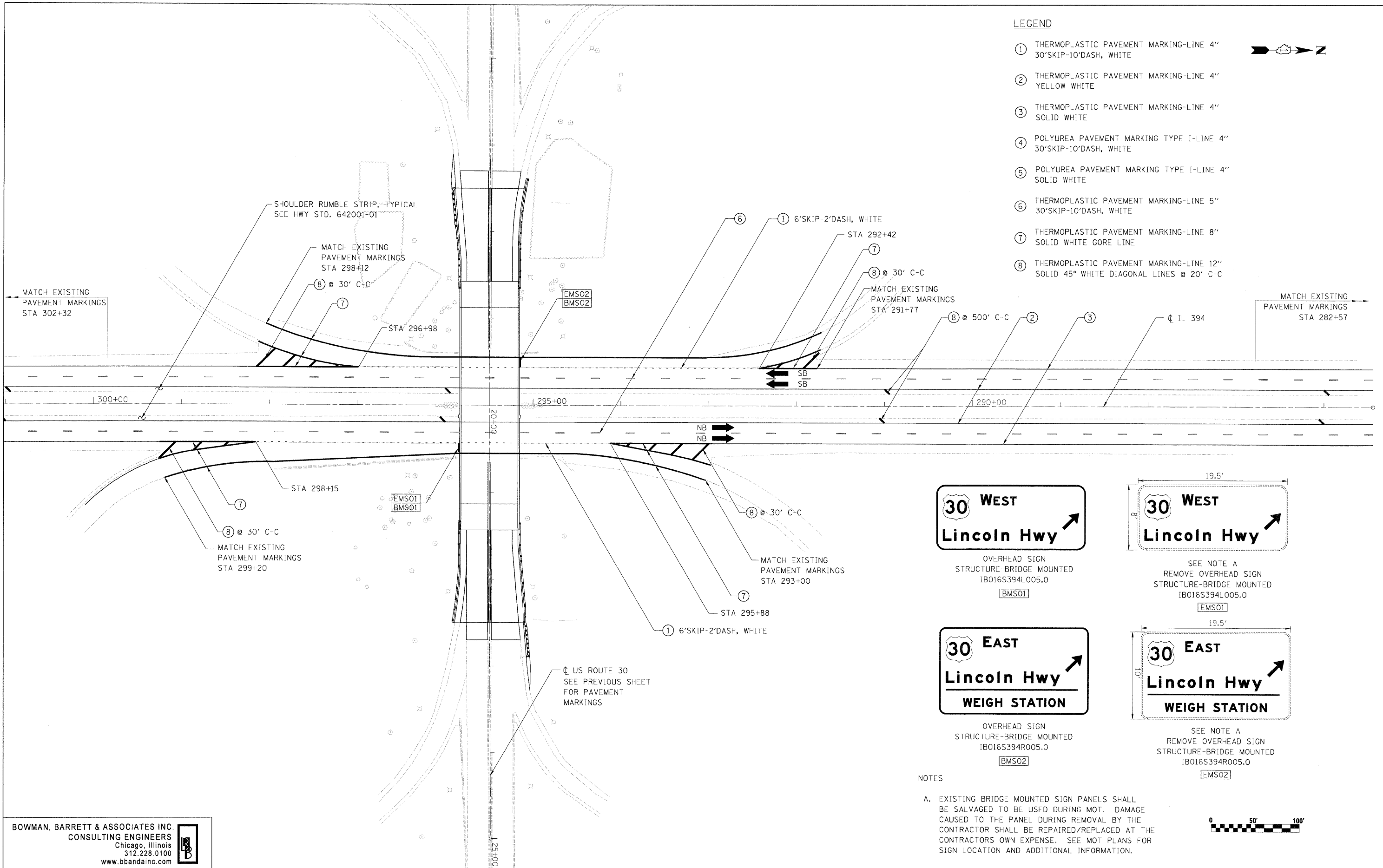
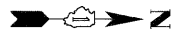


FILE NAME = D168025-sh1-pmk.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING AND SIGNING PLAN	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = \$SCALE*	DRAWN - RA	REVISED -	0353			0303.1B-1	COOK	91	24	
PLOT DATE = 5/5/2009	CHECKED - RS	REVISED -	CONTRACT NO. 60C05							
DATE = 5/6/2009	DATE = 5/6/2009	REVISED -	ILLINOIS FED. AID PROJECT							
SCALE: 1" = 50'					SHEET NO. 1 OF 2 SHEETS		STA. 13+00.00 TO STA. 26+00.00		FED. ROAD DIST. NO.	

m:\316\35_cadrs\us30\CR00_Sheets\168025-sh1-pmk.dgn

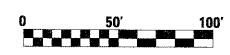
LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING-LINE 4" 30'SKIP-10'DASH, WHITE
- ② THERMOPLASTIC PAVEMENT MARKING-LINE 4" YELLOW WHITE
- ③ THERMOPLASTIC PAVEMENT MARKING-LINE 4" SOLID WHITE
- ④ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" 30'SKIP-10'DASH, WHITE
- ⑤ POLYUREA PAVEMENT MARKING TYPE I-LINE 4" SOLID WHITE
- ⑥ THERMOPLASTIC PAVEMENT MARKING-LINE 5" 30'SKIP-10'DASH, WHITE
- ⑦ THERMOPLASTIC PAVEMENT MARKING-LINE 8" SOLID WHITE GORE LINE
- ⑧ THERMOPLASTIC PAVEMENT MARKING-LINE 12" SOLID 45° WHITE DIAGONAL LINES @ 20' C-C



NOTES

- A. EXISTING BRIDGE MOUNTED SIGN PANELS SHALL BE SALVAGED TO BE USED DURING MOT. DAMAGE CAUSED TO THE PANEL DURING REMOVAL BY THE CONTRACTOR SHALL BE REPAIRED/REPLACED AT THE CONTRACTORS OWN EXPENSE. SEE MOT PLANS FOR SIGN LOCATION AND ADDITIONAL INFORMATION.



BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

FILE NAME = D160C05-ahh-pmk-2.dgn	USER NAME = default	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	CHECKED - RS	DRAWN - RA	REVISED -
PLOT DATE = 5/5/2009	DATE - 5/6/2009	CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

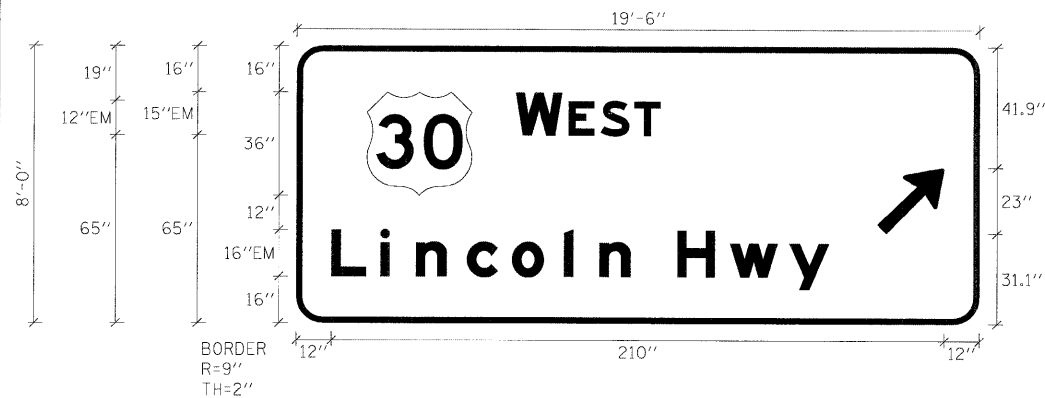
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1" = 50' SHEET NO. 2 OF 2 SHEETS STA. 298+45.00 TO STA. 282+57.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	25
CONTRACT NO. 60C05				

s:\118\05_cedit\us38\CADD_Sheets\1180205-ahh-pmk-2.dgn

SIGN DETAIL
1:40



Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	IB016S394L005.0
WIDTH x HGHT.	19'-6" x 8'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M1_4	0	24	44	36	36
ARMED	45	199	31.1	16	30

LETTER POSITIONS (X)											LENGTH	SERIESSIZE
W	E	S	T									EM 2000
75	93.1	104.2	115.7									49.5 15,12
L	i	n	c	o	l	n	H	w	y			EM 2000
12	28.8	40.9	58.4	73.9	91.7	103.9	114.5	130.5	148.6	168.9		170.5 1611.7

SIGN DETAIL
1:40



Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

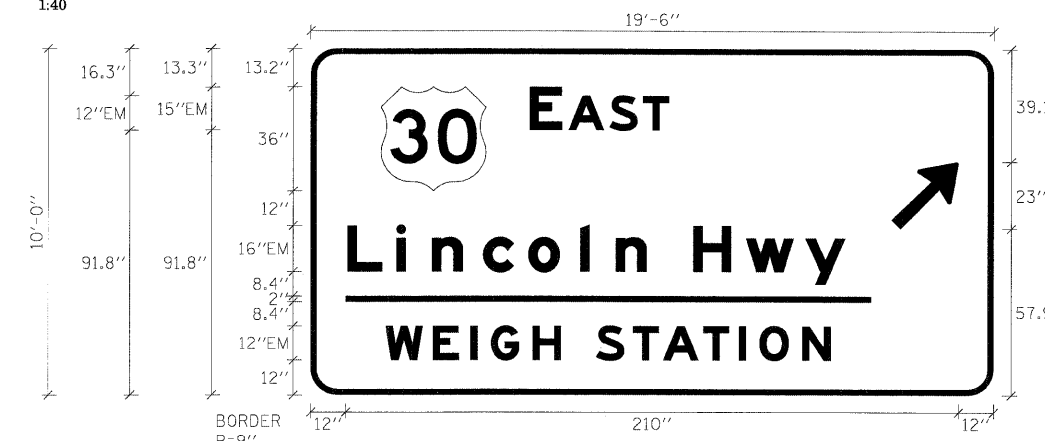
Letter locations are panel edge to lower left corner

SIGN NUMBER	PGS02
WIDTH x HGHT.	13'-0" x 8'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M160_3	0	11.5	37.5	60	48
ARMED	45	120.6	10.5	16	30

LETTER POSITIONS (X)											LENGTH	SERIESSIZE
N	O	R	T	H								EM 2000
84.5	99.8	112.8	123.8	134.8								60.1 15,12
C	H	I	C	A	G	O						EM 2000
11.5	27	43.3	49.9	63.9	81.1	96.3						97.4 15

SIGN DETAIL
1:40



Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

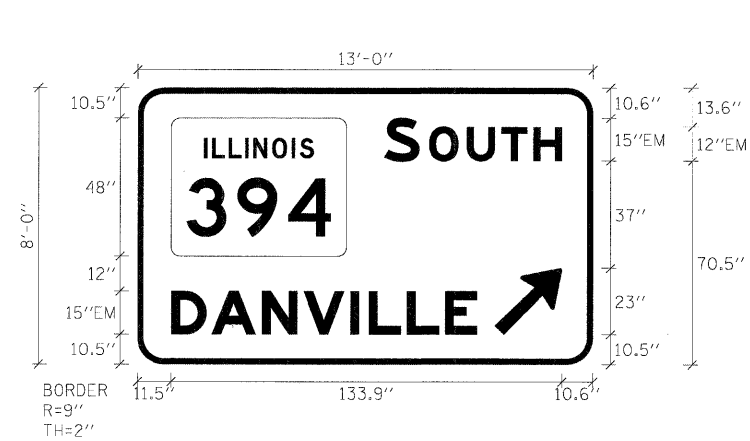
Letter locations are panel edge to lower left corner

SIGN NUMBER	IB016S394R005.0
WIDTH x HGHT.	19'-6" x 10'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M1_4	0	24	70.8	36	36
ARMED	45	199	57.9	16	30

LETTER POSITIONS (X)											LENGTH	SERIESSIZE
E	A	S	T									EM 2000
75	88.3	102.2	113.8									47.6 15,12
L	i	n	c	o	l	n	H	w	y			EM 2000
12.6	29.4	41.6	59.1	74.5	92.4	104.5	115.1	131.1	149.2	169.6		170.5 1611.7
W	E	I	G	H	S	T	A	T	I	O	N	EM 2000
25.7	41.8	54.7	61.8	76.1	85.8	97.8	110.4	120.8	134.5	146.8	153.8	168.5 12

SIGN DETAIL
1:40



Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	PGS01
WIDTH x HGHT.	13'-0" x 8'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M160_3	0	11.5	37.5	60.1	48.1
ARMED	45	122.4	10.5	16	30

LETTER POSITIONS (X)											LENGTH	SERIESSIZE
S	O	U	T	H								EM 2000
84.5	99.8	112.8	124.7	135.7								61 15,12
D	A	N	V	I	L	L	E					EM 2000
11.5	25.3	42.6	57	72.9	79.3	92.3	105.3					104.9 15

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D168C05-shr-signdet.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN - RA	REVISED -
PLOT SCALE = #SCALE#		CHECKED - RS	REVISED -
PLOT DATE = 5/5/2009		DATE - 5/6/2009	REVISED -

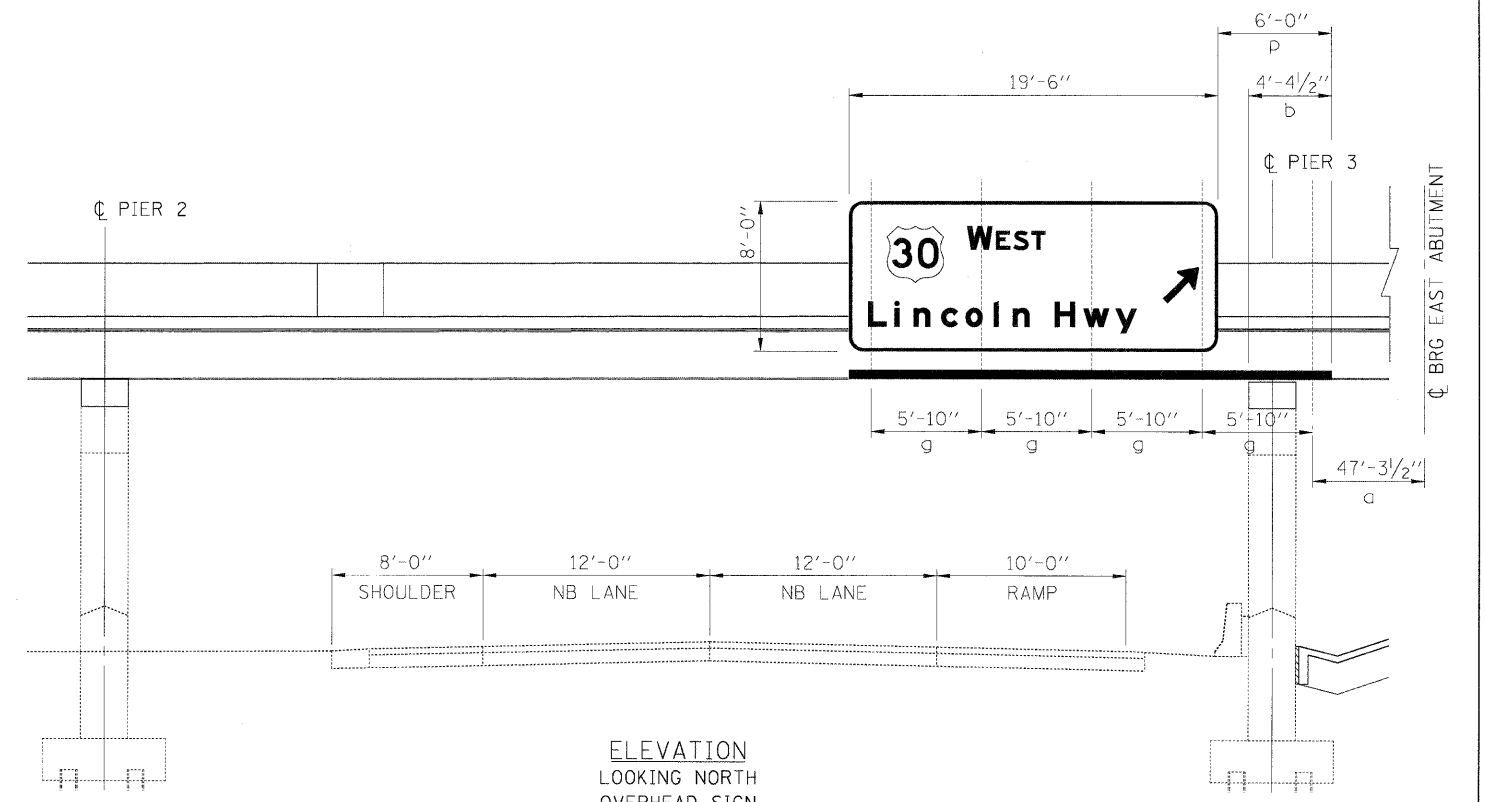
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

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

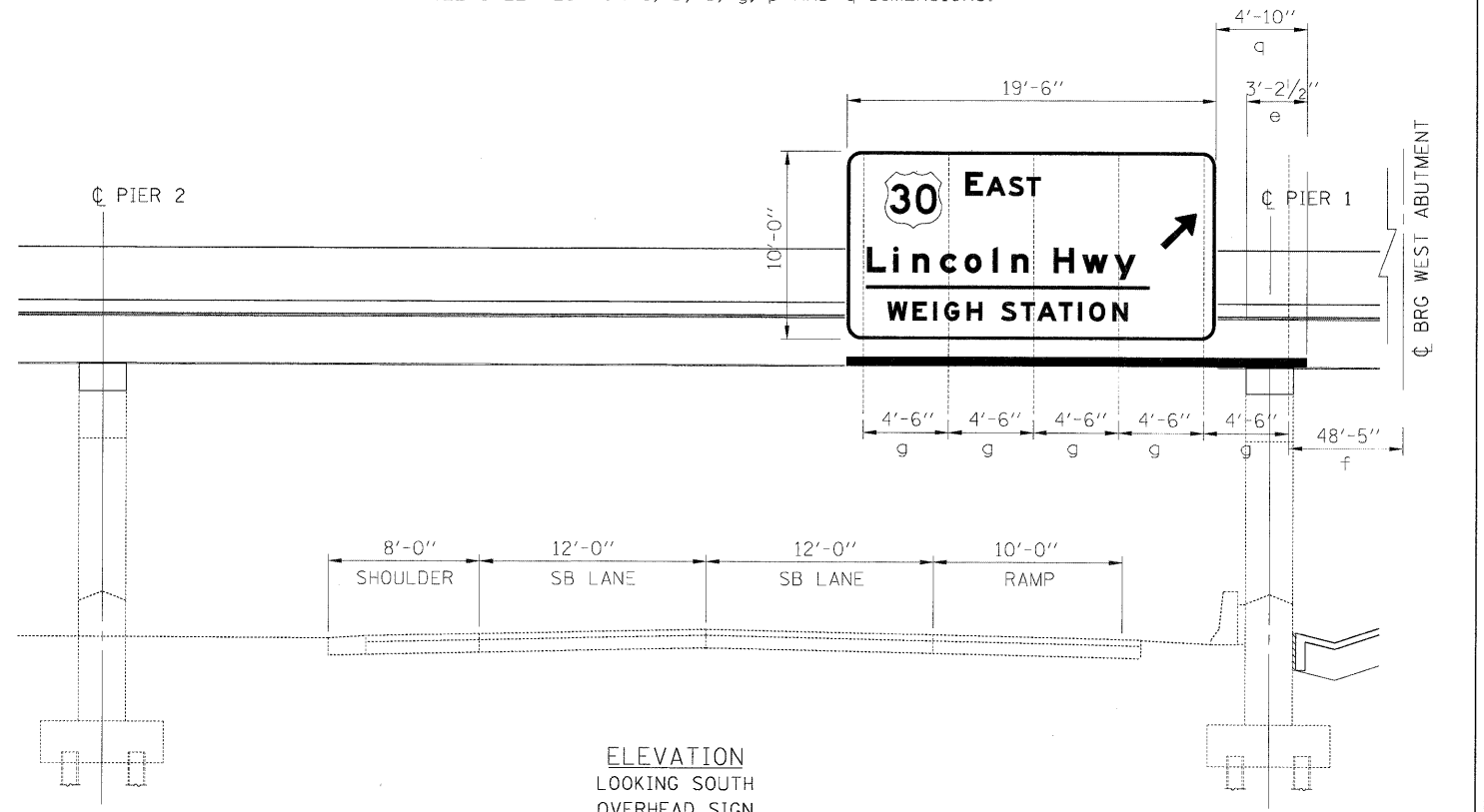
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	26
CONTRACT NO. 60C05				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

st:\p1\p15_06001\us38\cadd\Sheets\168C05-shr-signdet.dgn



ELEVATION
 LOOKING NORTH
 OVERHEAD SIGN
 STRUCTURE-BRIDGE MOUNTED
 IB016S394L005.0

SEE SHEET 28 FOR a, b, e, g, p AND q DIMENSIONS.



ELEVATION
 LOOKING SOUTH
 OVERHEAD SIGN
 STRUCTURE-BRIDGE MOUNTED
 IB016S394R005.0

SEE SHEET 28 FOR a, b, e, g, p AND q DIMENSIONS.

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com



FILE NAME = 0160C05-ah-t-signdet.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN - RA	REVISED -
		CHECKED - RS	REVISED -
		DATE - 5/6/2009	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SIGN PLACEMENT DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	27
CONTRACT NO. 60C05				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

s:\1916\05_0000\0530\CADD_Sheets\1616R005-ah-t-signdet.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") ②

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

MINIMUM CLEARANCE: 3" greater than bridge members at all locations. (All Obstructions)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.

All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 (M183, M223 Gr. 50).

HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: All threaded rod conforming to ASTM A307, 3/4" ϕ x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

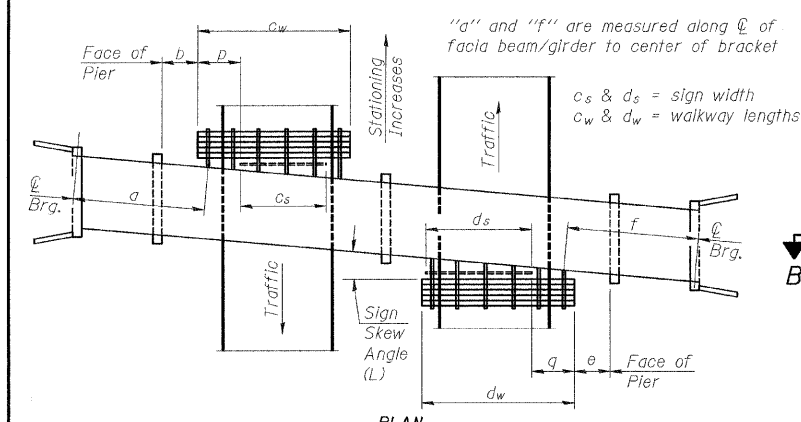
- ① Bracket spacing $g \leq 6'-0"$, max. Spacing shall be uniform if possible but may vary $\pm 6"$ to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
- ② Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
- ③ Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length (c_w , d_w) unless otherwise specified. For Safety Chain Details and Details D, F and G, see Base Sheet BM-4.
- ④ If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4.

NUMBER	REVISION	DATE

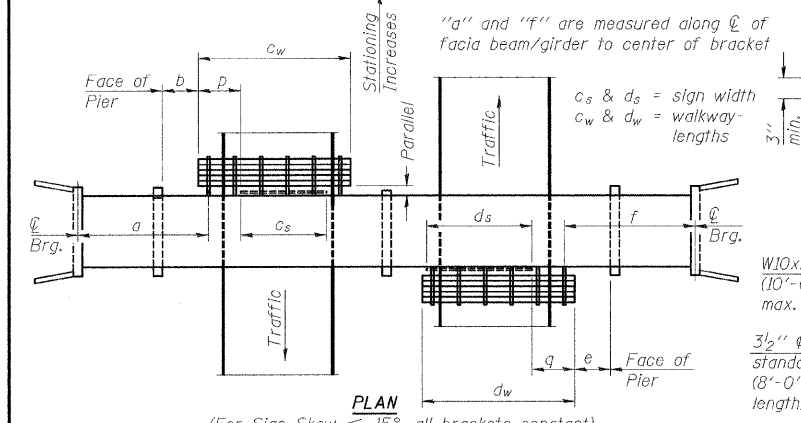
TOTAL BILL OF MATERIAL

③ OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	Foot	50.00
--	------	-------

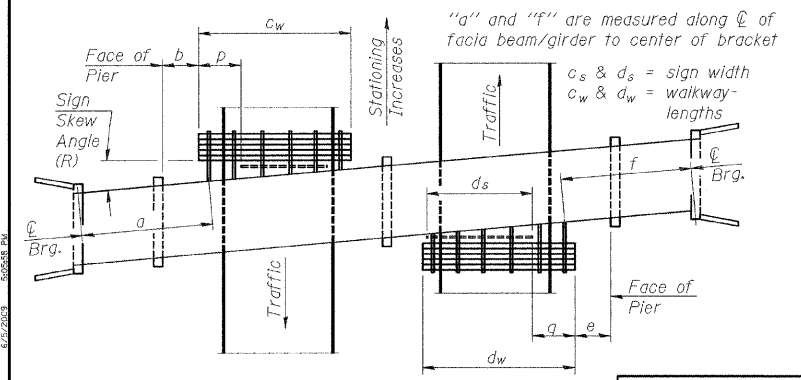
BRIDGE MOUNT SIGN STRUCTURES
GENERAL PLAN AND ELEVATION



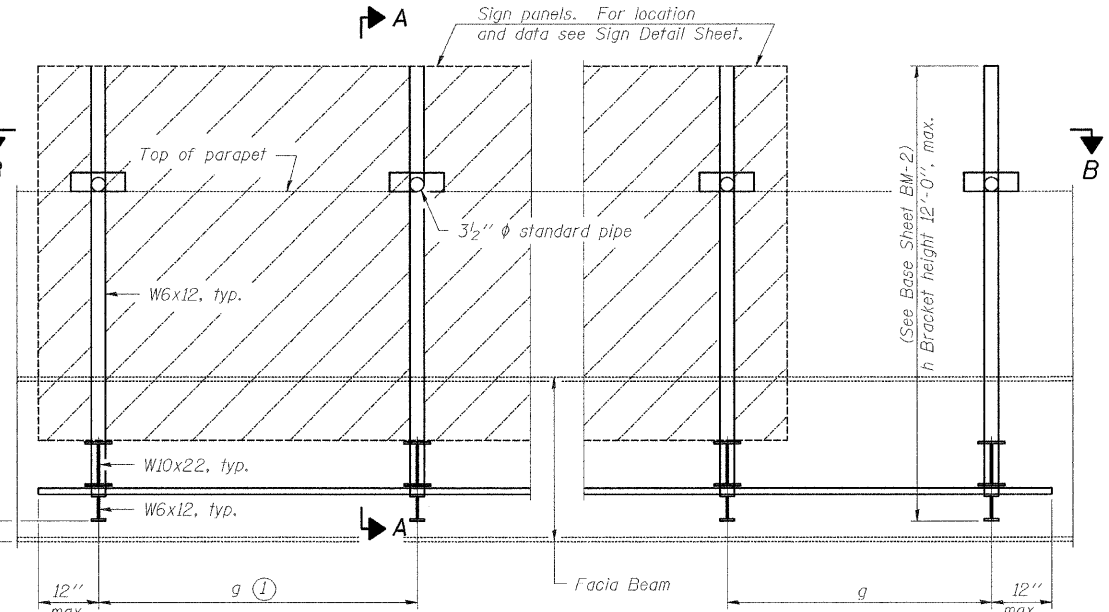
PLAN
(Left Sign Skew > 15°)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



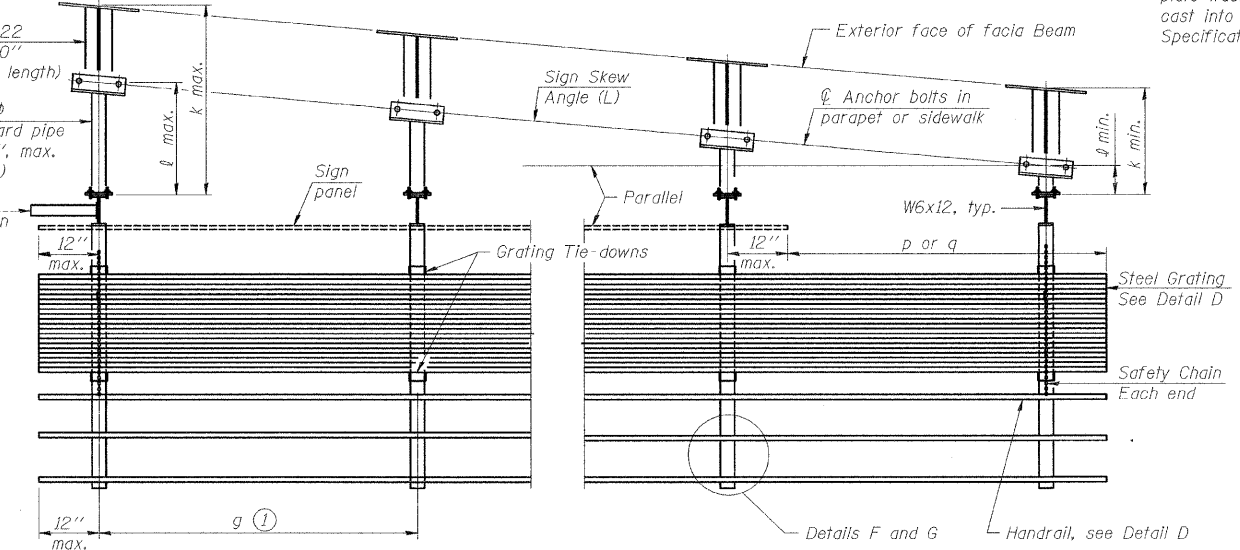
PLAN
(For Sign Skew $\leq 15^\circ$, all brackets constant)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



PLAN
(Right Sign Skew > 15°)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



TYPICAL FRONT ELEVATION
(With lights, safety chain and handrail omitted for clarity.)



SECTION B-B
(Shown: Left Sign Skew > 15°)

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a	b see note A	c _s	c _w	d _s	d _w	e see note A	f	g	No. of Brackets (Total)	p	q	Total Grating/Hndrl. Lengths (c _w + d _w)
* IB016S394R005.0	0	295+19.8	016-0275	US 30	-	-	-	-	19'-6"	24'-4"	(3'-2 1/2")	48'-5"	4'-6"	6	-	4'-10"	24'-4"
* IB016S394L005.0	0	295+80	016-0275	US 30	47'-3 1/2"	(4'-4 1/2")	19'-6"	25'-6"	-	-	-	-	5'-10"	5	6'-0"	-	25'-6"

Dimensions a, b, e, f & g may vary as approved by the Engineer, see ①.
When $c_w < c_s$ and/or $d_w < d_s$, use alternate brackets without walkway supports where applicable, see ③.

* Sign Structure IB016S394R005.0 is attached to Beam No. 1 and Sign Structure IB016S394L005.0 is attached to Beam No. 10 as designated on structural sheet S-16. In addition see "Beam Elevation" on sheet S-16 for details of bolt holes in beam.

DESIGNED - DF
CHECKED - BLU
DRAWN - LAM
CHECKED - BLU
BM-1

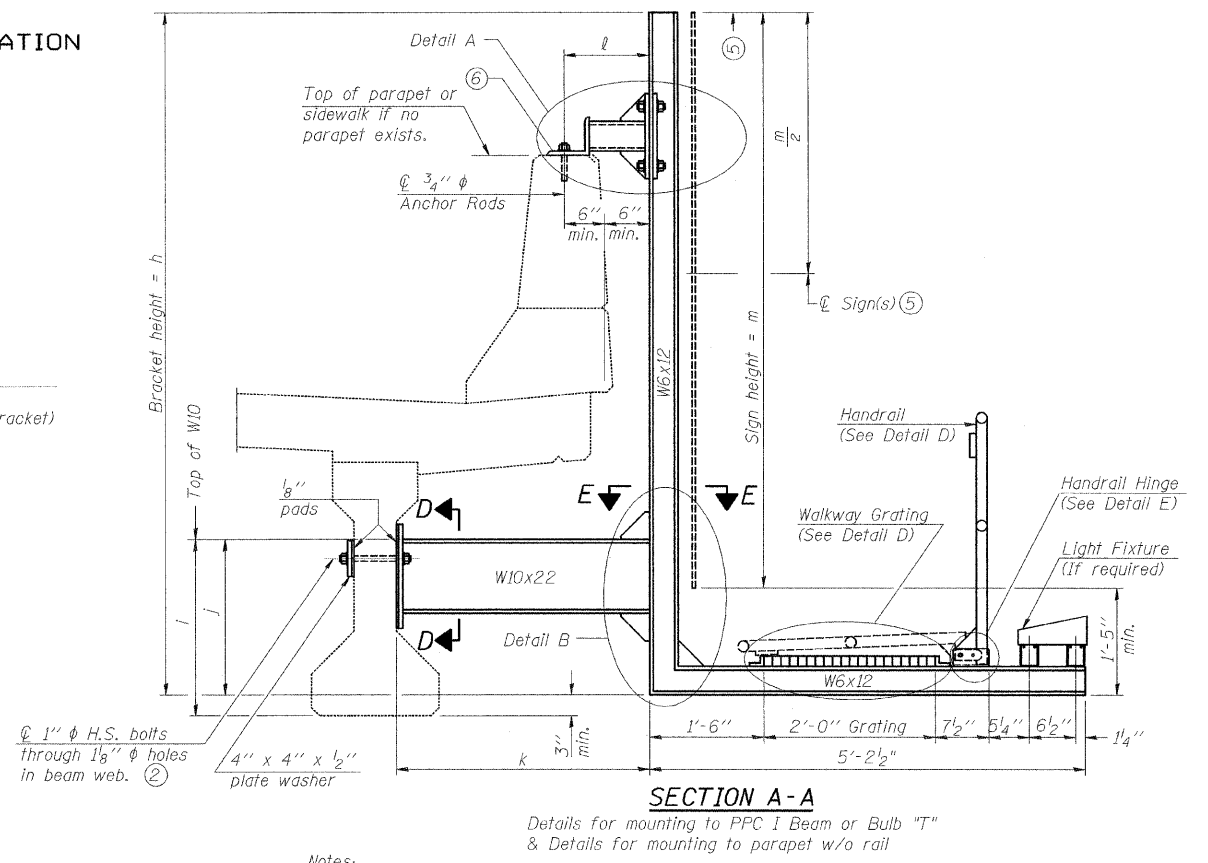
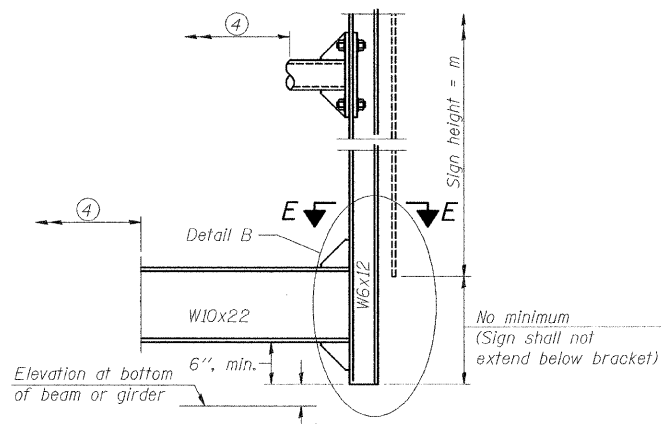
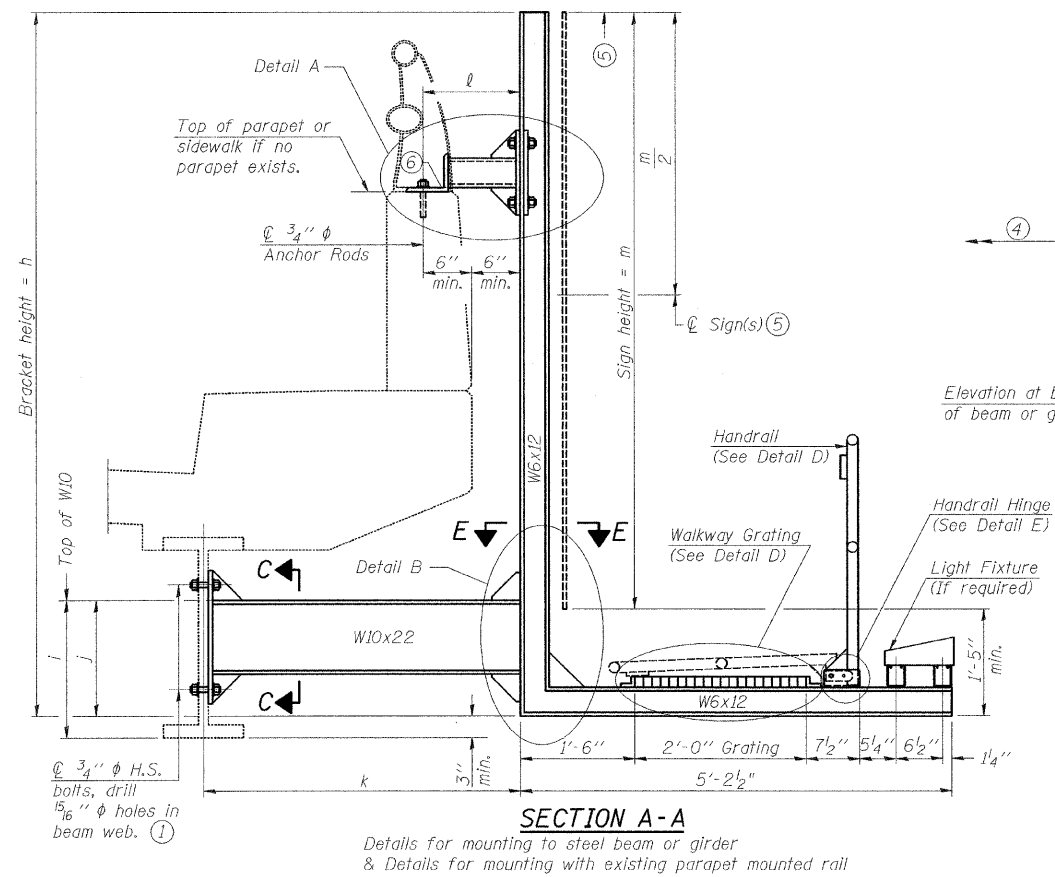
12-1-08

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

SHEET NO. 1
4 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	28
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Notes:
Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval. Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.
All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.
The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

- ⑤ Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)
- ⑥ For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

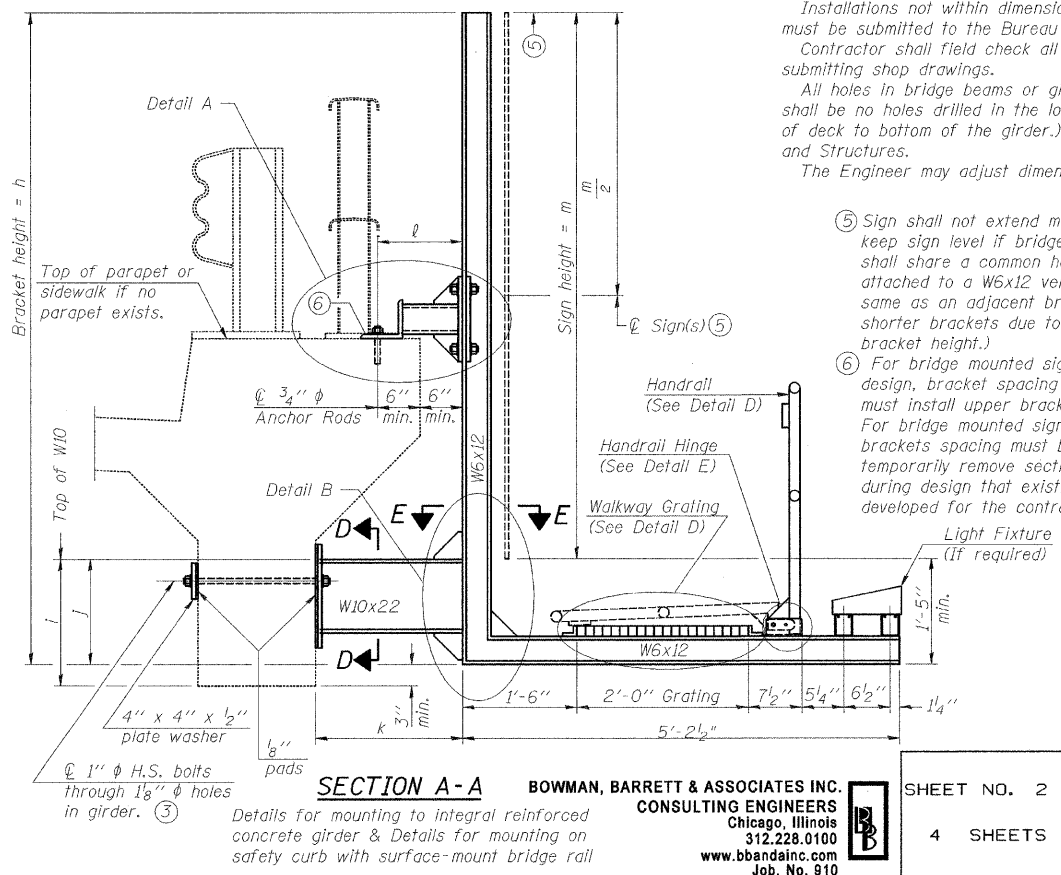
Structure Number	Station	h	i	j	k max. (10'-0" max.)	l max. (8'-0" max.)	m (15'-0" max.)
IB016S394R005.0	295+19.8	11'-5"	19 1/4"	16 1/4"	3'-9"	1'-1"	10'-0"
IB016S394L005.0	295+80	9'-5"	19 1/4"	16 1/4"	3'-9"	1'-1"	8'-0"

For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3.
For Details D & E, see Base Sheet BM-4.

- ① Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
- ② For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.
- ③ For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 1/4" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.

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

NUMBER	REVISION	DATE



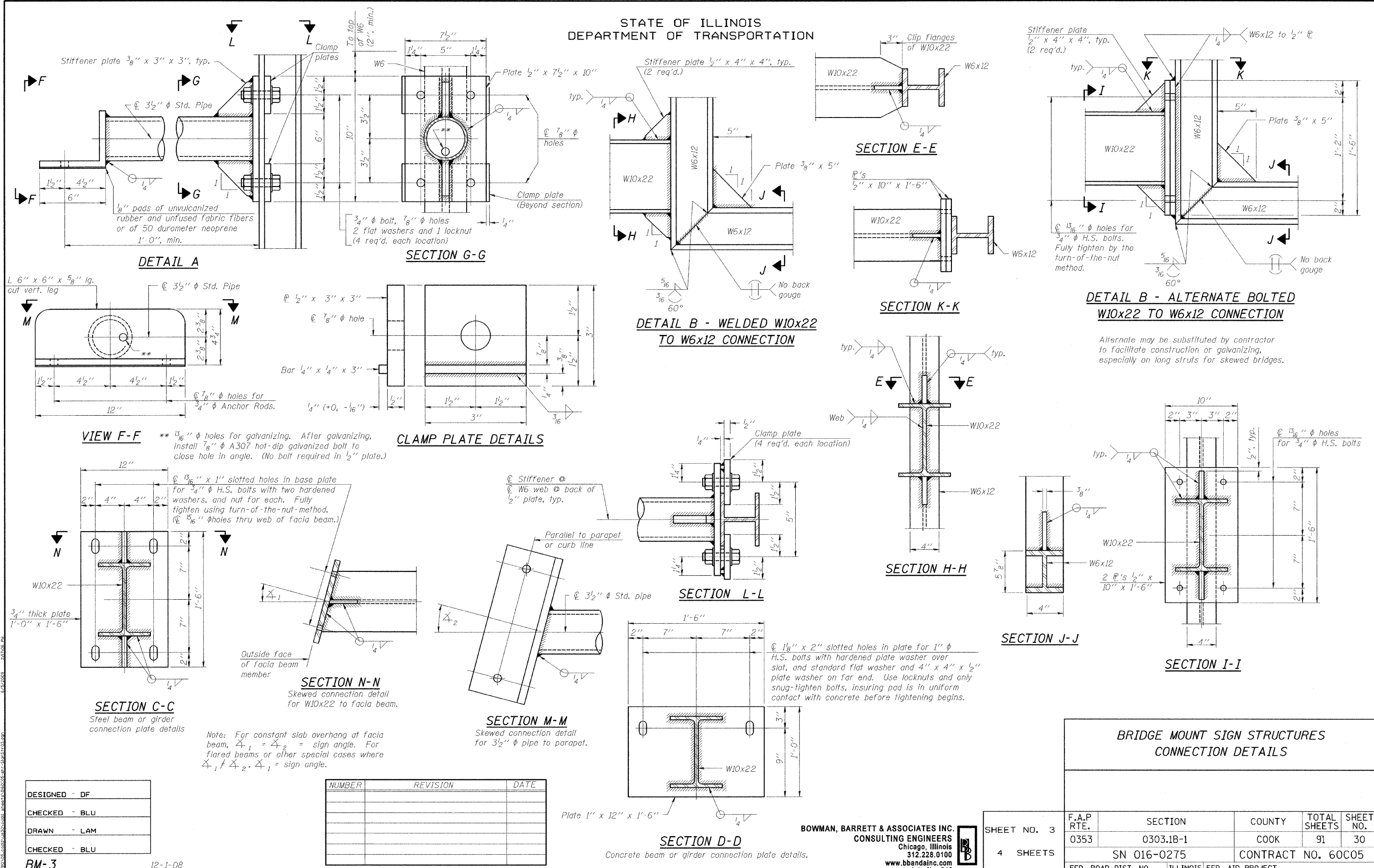
SECTION A-A
Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

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

BRIDGE MOUNT SIGN STRUCTURES WALKWAY AND CONNECTION DETAILS				
SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
4 SHEETS	0353	0303.1B-1	COOK	91
		SN 016-0275	CONTRACT NO. 60C05	
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

6/2/2008 10:35 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Alternate may be substituted by contractor to facilitate construction or galvanizing, especially on long struts for skewed bridges.

DESIGNED - DF
CHECKED - BLU
DRAWN - LAM
CHECKED - BLU
BM-3

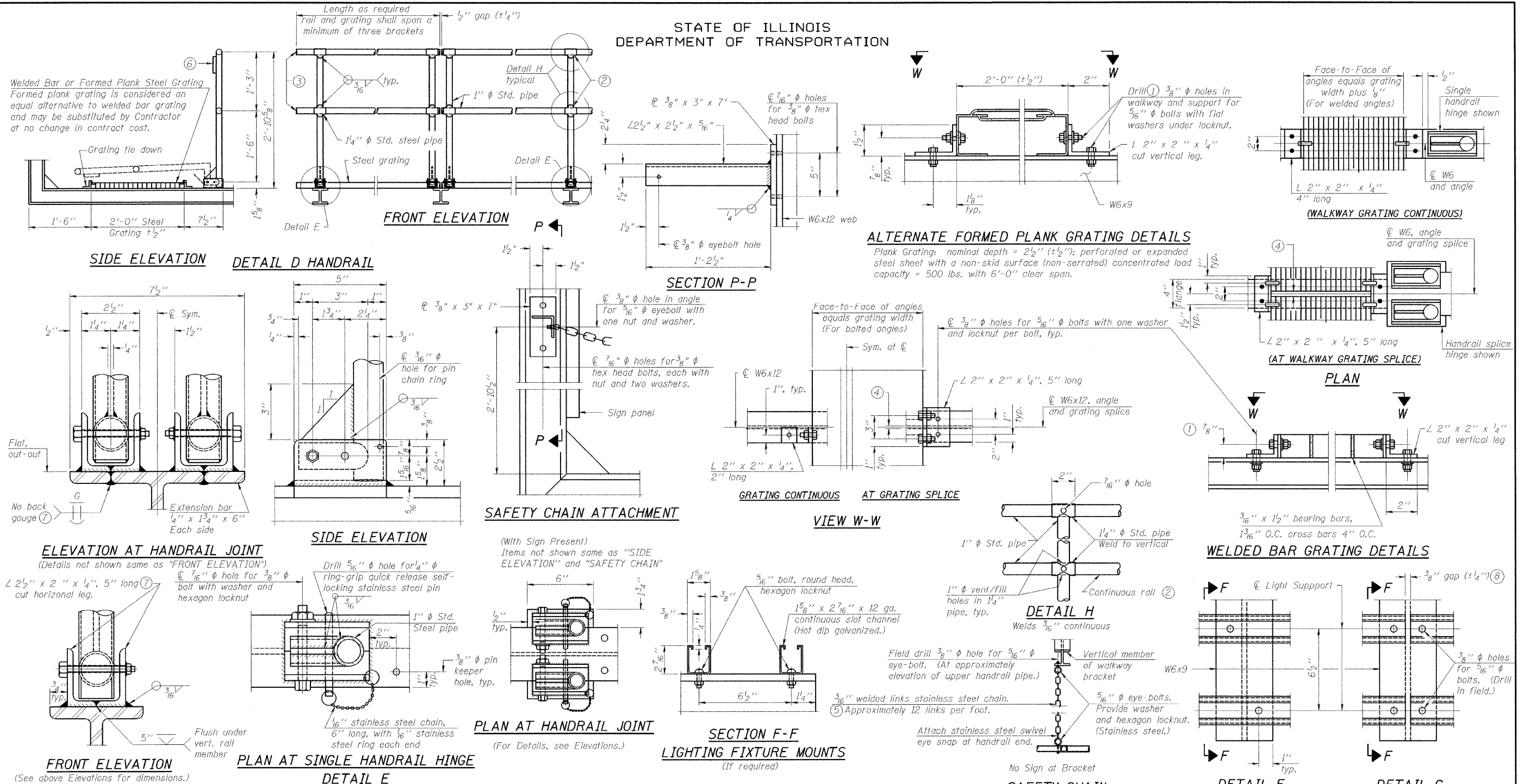
12-1-08

NUMBER	REVISION	DATE

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

SHEET NO. 3	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 30
4 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Welded Bar or Formed Plank Steel Grating
Formed plank grating is considered an equal alternative to welded bar grating and may be substituted by Contractor at no change in contract cost.

Grating tie down

Flat, out-out
No back gauge
Extension bar 1/4" x 1 3/4" x 6" Each side

ELEVATION AT HANDRAIL JOINT
(Details not shown same as "FRONT ELEVATION")

L 2 1/2" x 2" x 1/4", 5" long
7/16" hole for 3/8" bolt with washer and hexagon locknut

FRONT ELEVATION
(See above Elevations for dimensions.)

NUMBER	REVISION	DATE

DESIGNED - DF
CHECKED - BLU
DRAWN - LAM
CHECKED - BLU
BM-4

12-1-08

DETAIL D HANDRAIL

3/8" x 3" x 7"
7/16" hole for pin chain ring
3/8" hole for 3/8" hex head bolts, each with nut and two washers.

SIDE ELEVATION

1" Std. Steel pipe
3/8" pin keeper hole, typ.
1/16" stainless steel chain, 6" long, with 1/16" stainless steel ring each end

PLAN AT SINGLE HANDRAIL HINGE
DETAIL E

SAFETY CHAIN ATTACHMENT
(With Sign Present)
Items not shown same as "SIDE ELEVATION" and "SAFETY CHAIN"

6"
1 3/4"
3/8" x 3" x 7"
5/16" bolt, round head, hexagon locknut
1 5/8" x 2 7/16" x 12 ga. continuous slot channel (Hot dip galvanized.)

PLAN AT HANDRAIL JOINT
(For Details, see Elevations.)

NOTES

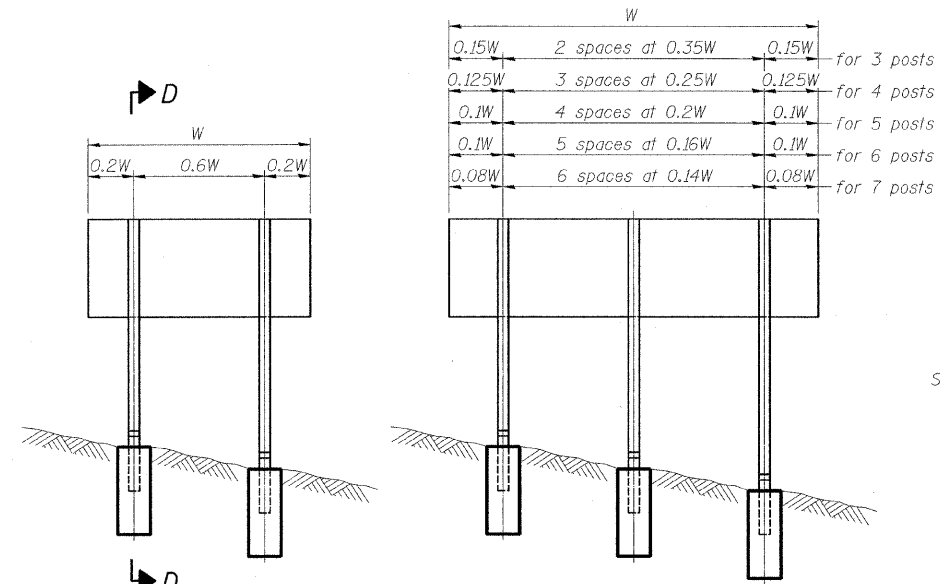
- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
- Horizontal rail member shall be continuous thru 1 1/4" pipe. Provide 7/16" hole in 1 1/4" pipe for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eye-bolts in 7/16" holes on top rail at ends only.)
- Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends.)
- 3/8" (± 1/4") gap between grating panels at splice.
- Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Extrusions may be used in lieu of details shown, with approval by Engineer.
- Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

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

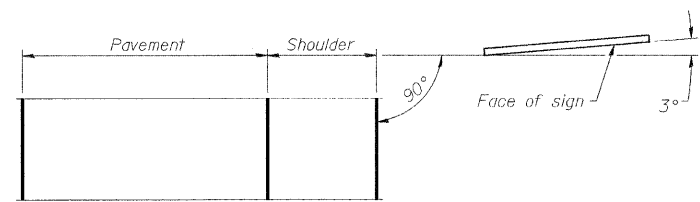
SHEET NO. 4
4 SHEETS

BRIDGE MOUNT SIGN STRUCTURES WALKWAY DETAILS				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	31
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

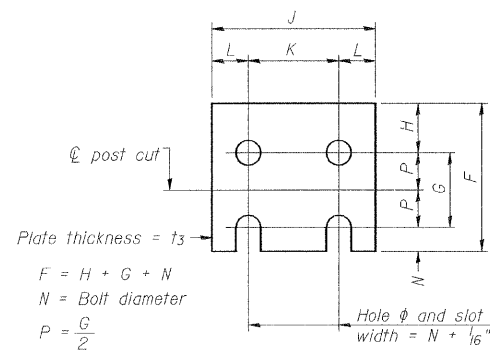
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION

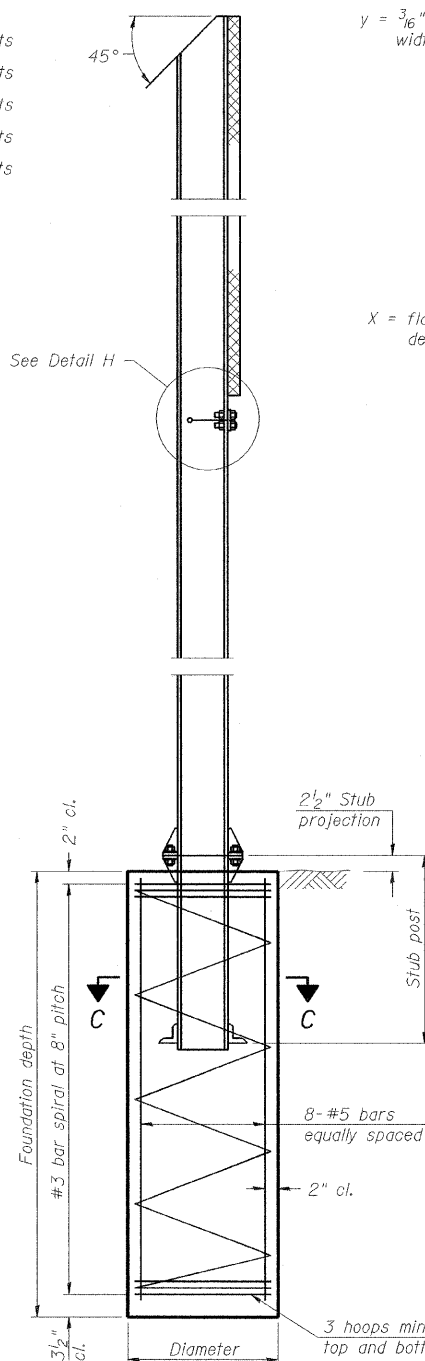


LOCATION SKETCH

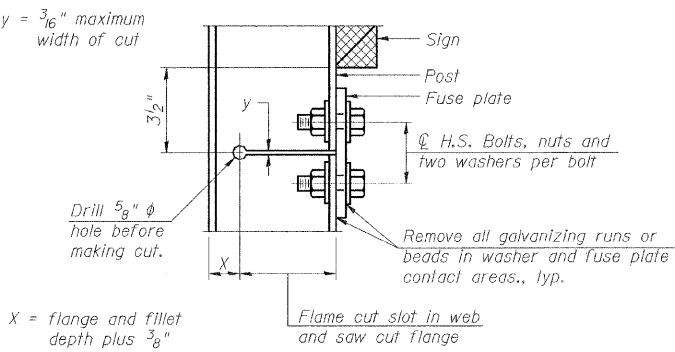


FUSE PLATE DETAIL
(Install with notches down.)

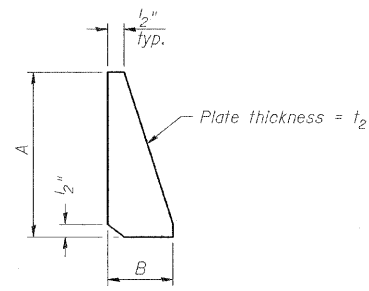
FUSE PLATE DATA			
N = Bolt Diameter	G	H	
2"	2"	1 1/8"	
5/8"	2 1/4"	1 1/4"	
3/4"	2 1/2"	1 3/8"	
7/8"	2 3/4"	1 1/2"	
1"	3"	1 5/8"	
1 1/8"	3 1/4"	1 3/4"	
1 1/4"	3 1/2"	1 7/8"	



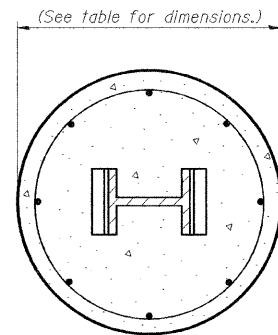
SECTION D-D



DETAIL H



STIFFENER PLATE DETAIL



SECTION C-C

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article T27.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

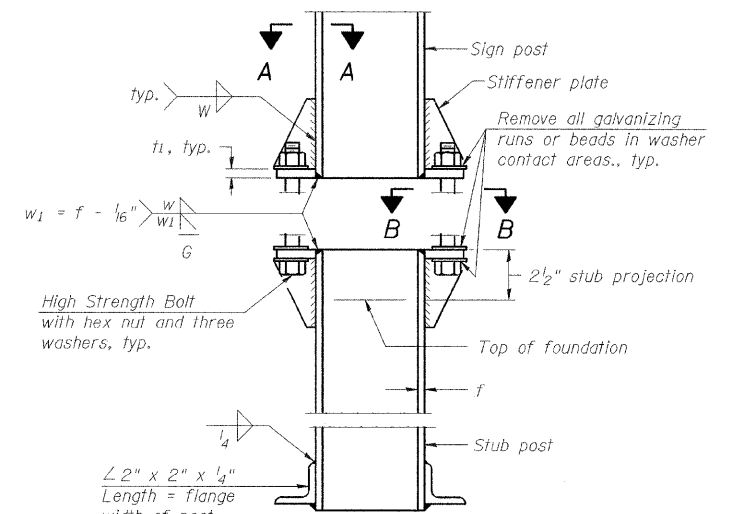
LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 20,000 p.s.i.
Reinforcing steel - 20,000 p.s.i.
Concrete - 1,400 p.s.i.
Footing soil pressure - 2,000 p.s.f.

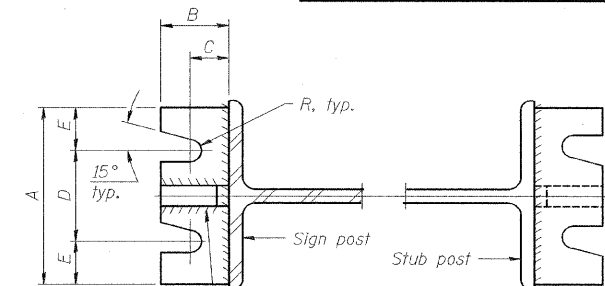
After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.

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

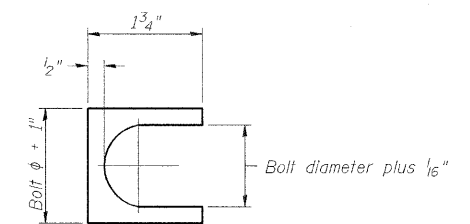


ELEVATION
SIGN POST & STUB POST



SECTION A-A

SECTION B-B



SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

BREAK-AWAY WIDE FLANGE
STEEL SIGN POST DETAILS

DESIGNED - RA
CHECKED - BLU
DRAWN - LAM
CHECKED - BLU

BAW-A-1

12-1-08

NUMBER	REVISION	DATE

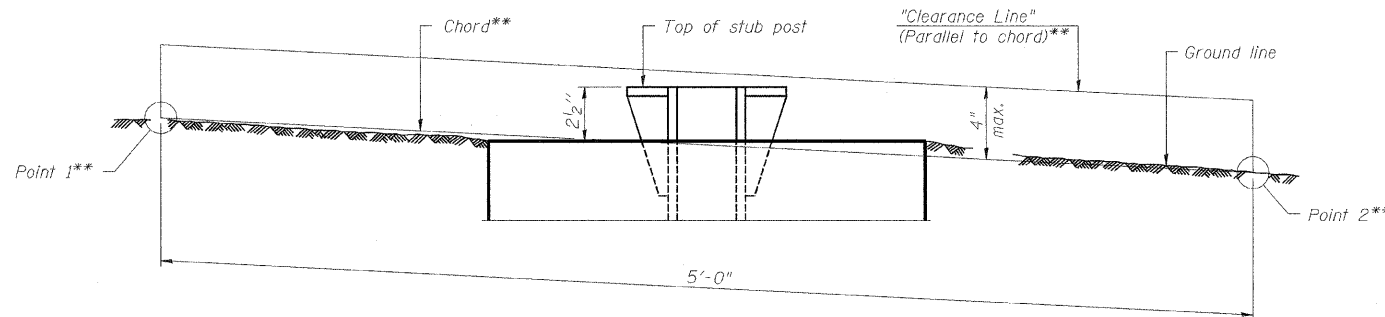
SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0353	0303.1B-1	COOK	91	32
2 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

POST	CONCRETE FOUNDATION TABLE								POST TO STUB POST CONNECTION DATA								FUSE PLATE DATA					
	Foundation			Reinforcement			Stub Post Length	Bolt Size	A	B	C	D	E	f ₁	f ₂	R	W	J	K	L	f ₃	
	Diameter	* Minimum Depth	Concrete cu. yds. ①	Vertical Bars Length	Bar Spirals Diameter Length	lbs. ②																
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	5/32"	1 1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	5/32"	1 1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	5/32"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	5/32"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	5/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	17/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE																				
	Sign Height																				
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	---	---	---	---	---	---	---	---	---	---	---	---
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	---	---	---	---	---	---	---	---	---	---	---	---
W10x22	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	---	---	---	---	---	---	---	
W10x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	---	---	---	---	---	---	
W12x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	---	---	---	---	---	---	
W14x30	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	---	---	---	
W14x38	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"
W16x45	---	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"



ELEVATION
GROUND LINE & STUB POST

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

DESIGNED - RA
CHECKED - BLU
DRAWN - LAM
CHECKED - BLU
BAW-A-2

NUMBER	REVISION	DATE

12-1-08

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

SHEET NO. 2
2 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	33
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

BREAK-AWAY WIDE FLANGE
STEEL SIGN POST TABLES

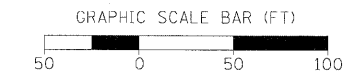
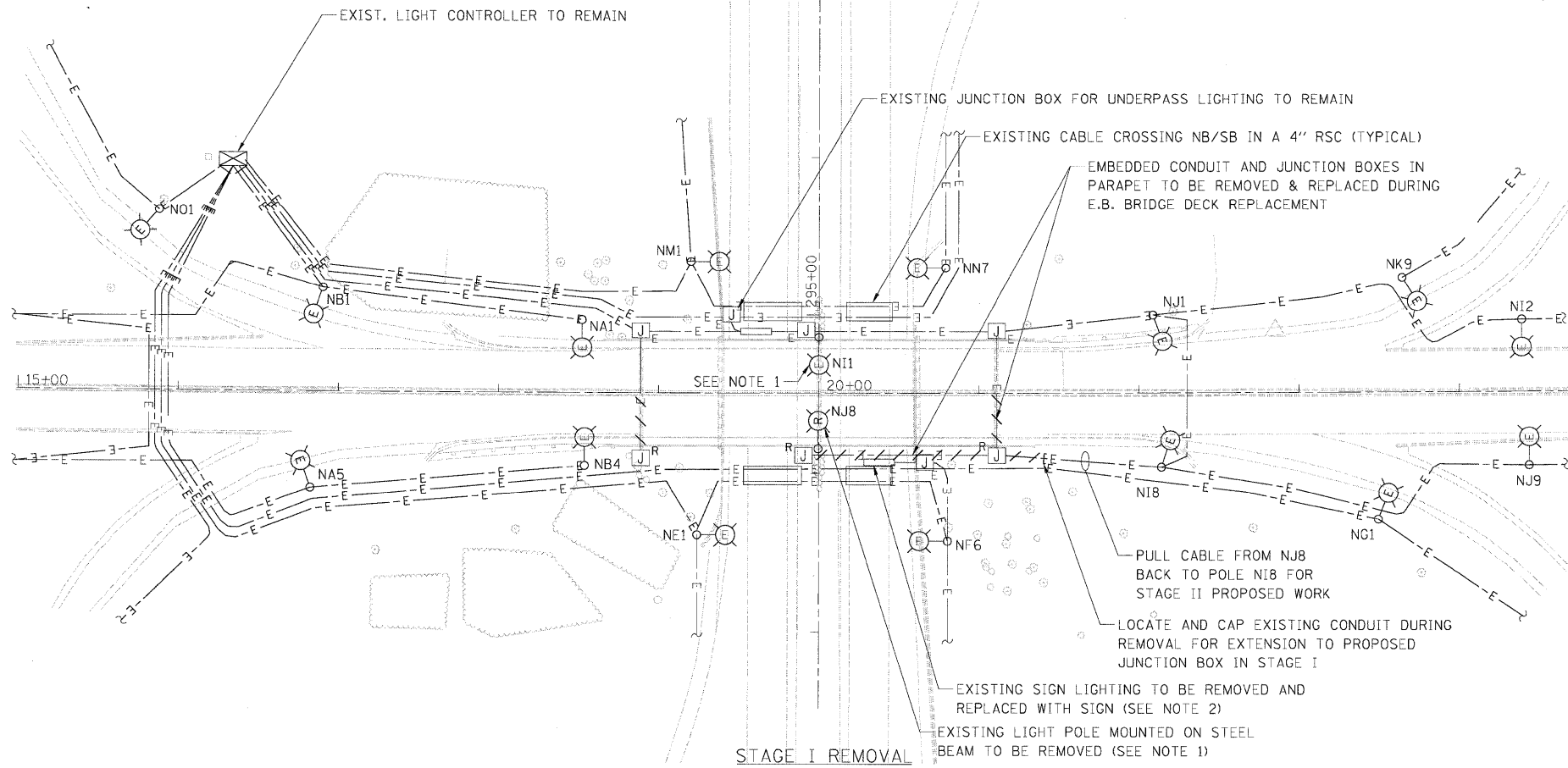
NOTES

- EXISTING BRIDGE LIGHTING UNIT NI1 TO BE MAINTAINED AND SERVE AS TEMPORARY LIGHTING DURING STAGE 1.
- SIGN LIGHTING FIXTURES TO BE SALVAGED TO IDOT, CONDUIT, JUNCTION BOXES AND WIRE TO BE REMOVED WITH SIGN STRUCTURE. WIRE TO BE REMOVED TO JUNCTION BOX ON PIER THAT REMAINS.

THE EXISTING UNDERPASS LUMINAIRES, SIGN LUMINAIRES AND LIGHT POLES THAT ARE REMOVED SHALL BE SALVAGED TO IDOT AND DELIVERED TO A DESIGNATION DETERMINED BY THE ENGINEER.

LEGEND

- E— EXISTING UNIDUCT/CONDUIT
- ⊙(R) EXISTING BRIDGE POLE TO BE REMOVED AND SALVAGED TO IDOT
- ⊙(E) EXISTING LUMINAIRE TO REMAIN
- ⊠ EXISTING LIGHTING CONTROLLER
- ⊠_E EXISTING JUNCTION BOX (E= EXISTING TO REMAIN; R= TO REMOVE)

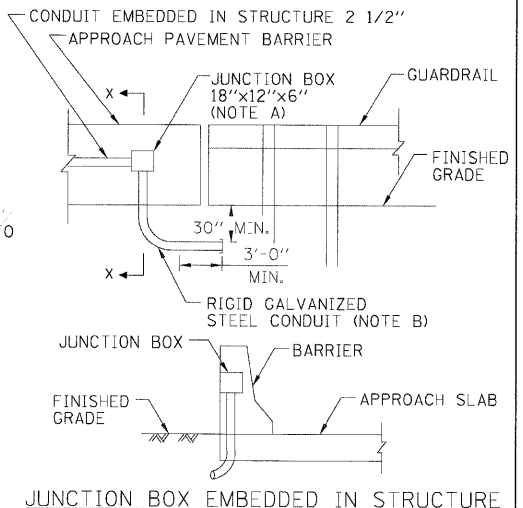
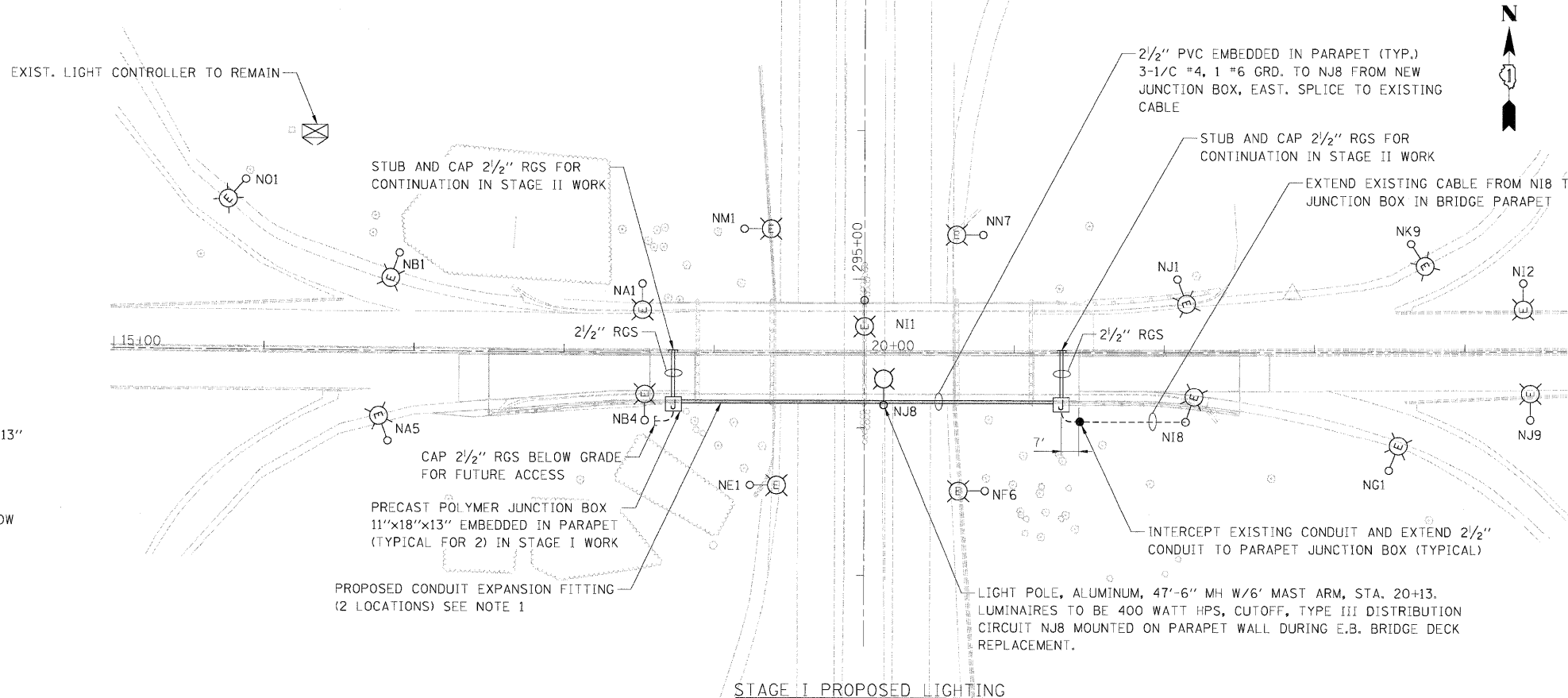


NOTES

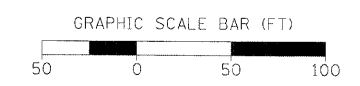
- PROPOSED CONDUIT EXPANSION FITTING ARE REQUIRED AT ALL LOCATIONS WHERE CONDUIT EXTENDS BETWEEN TWO CONCRETE SECTIONS THAT ARE CAPABLE OF MOVEMENT. THE EXPANSION FITTINGS SHALL COMPLY WITH STD. SPEC. ARTICLE 1088.020. COST INCLUDED WITH CONDUIT EMBEDDED IN STRUCTURE, 2 1/2" DIA. PVC (SCHEDULE 40).
- JUNCTION BOX SHALL BE EMBEDDED IN PARAPET - UPPER PORTION WITH COVER FACING US30 AND MUST BE ACCESSIBLE (TYP.) COORDINATE W/APPROACH PVMT. SEE DETAIL THIS SHEET.

LEGEND

- 2 1/2" PVC CONDUIT EMBEDDED IN PARAPET UNLESS NOTED OTHERWISE
- ⊠ PROPOSED JUNCTION BOX EMBEDDED IN STRUCTURE, PRECAST POLYMER 11"x18"x13"
- ⊙(E) EXISTING LUMINAIRE TO REMAIN
- ⊙(R) PROPOSED ALUM. POLE 47'-6" MH W/400W HPS LUMINAIRE AND 6' MAST ARM
- ⊠ EXISTING LIGHTING CONTROLLER



- A. COORDINATE PLACEMENT OF JUNCTION BOX WITH GUARDRAIL BARRIER TERMINAL ATTACHMENT.
- B. COORDINATE CONDUIT PLACEMENT TO TERMINATE OUTSIDE OF PAVEMENT AND AVOID GUARDRAIL.
- C. COST OF RIGID GALVANIZED STEEL RACEWAY SHALL BE INCLUDED WITH CONDUIT EMBEDDED IN STRUCTURE.



BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

FILE NAME = D168025-sht-lightstg1.dgn	USER NAME = default
PLOT SCALE = sSCALEs	PLOT DATE = 5/6/2009

DESIGNED - RR	REVISED -
DRAWN - LAM	REVISED -
CHECKED - DF	REVISED -
DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE I EXISTING AND PROPOSED LIGHTING PLAN

SCALE: 1" = 50' SHEET NO. 1 OF 12 SHEETS STA. 15+00.00 TO STA. 25+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	34
CONTRACT NO. 60C05				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

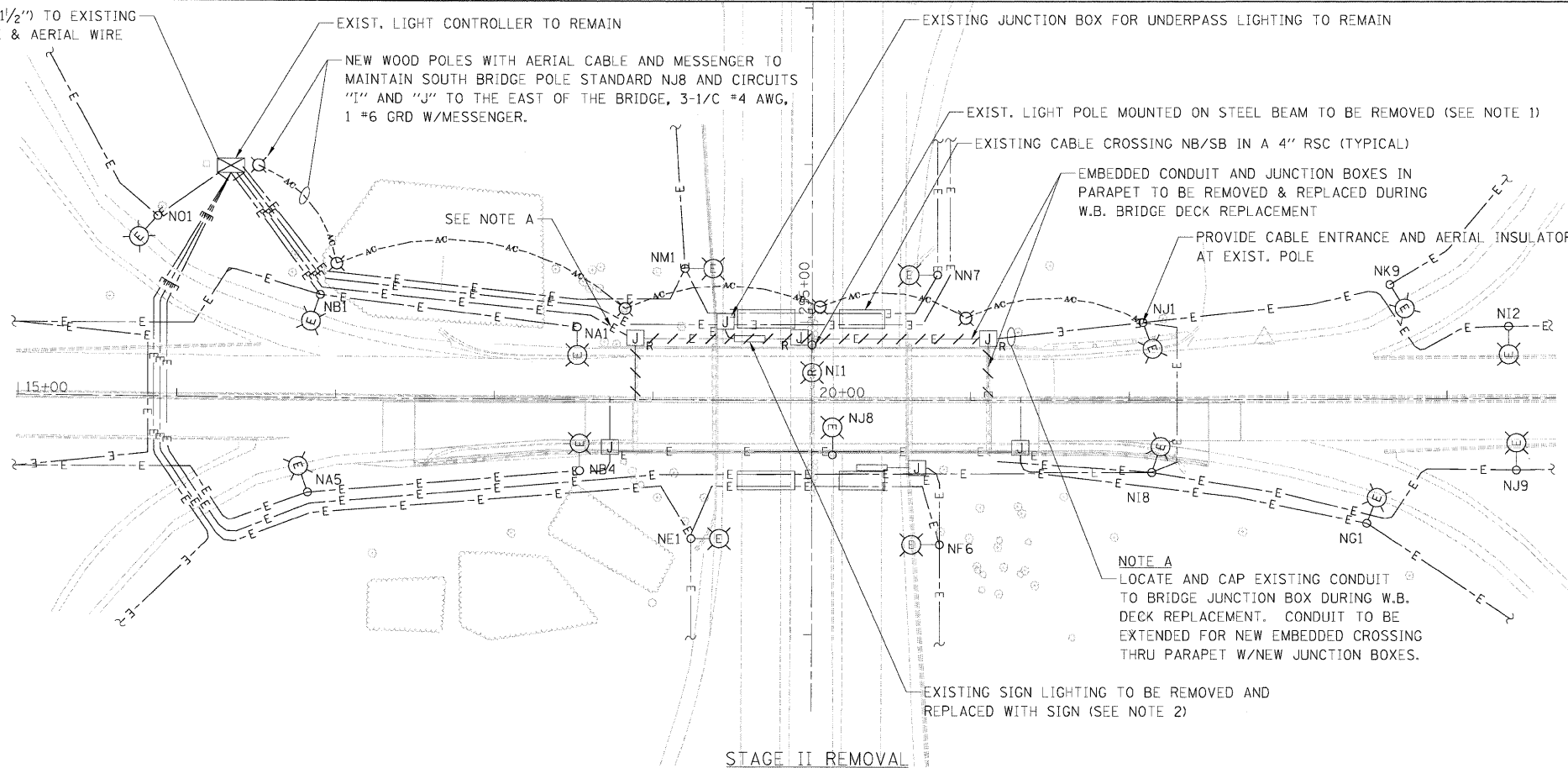
NOTES

1. MAINTAIN EXISTING SOUTH POLE STANDARD NJ8 AND CIRCUIT "I" AND "J" WITH TEMPORARY AERIAL CABLE AND TEMPORARY WOOD POLES DURING W.B. BRIDGE DECK REPLACEMENT (COORDINATE WITH PHASING FOR TEMP. LIGHTING).
2. SIGN LIGHTING FIXTURES, CONDUIT, JUNCTION BOXES AND WIRE TO BE REMOVED WITH SIGN STRUCTURE. WIRE TO BE REMOVED TO JUNCTION BOX ON PIER THAT REMAINS.

THE EXISTING UNDERPASS LUMINAIRES, SIGN LUMINAIRES AND LIGHT POLES THAT ARE REMOVED SHALL BE SALVAGED TO IDOT AND DELIVERED TO A DESIGNATION DETERMINED BY THE ENGINEER.

LEGEND

- E- EXISTING UNITDUCT/CONDUIT
- AC- NEW AERIAL CABLE W/MESSENGER
- ⊗ NEW TEMPORARY WOOD POLE
- ⊙(R) EXISTING BRIDGE POLE TO BE REMOVED AND SALVAGED TO IDOT
- ⊙(E) EXISTING LUMINAIRE TO REMAIN
- ⊠ EXISTING LIGHTING CONTROLLER
- ⊠(E) EXISTING JUNCTION BOX (E= EXISTING TO REMAIN; R= TO REMOVE)



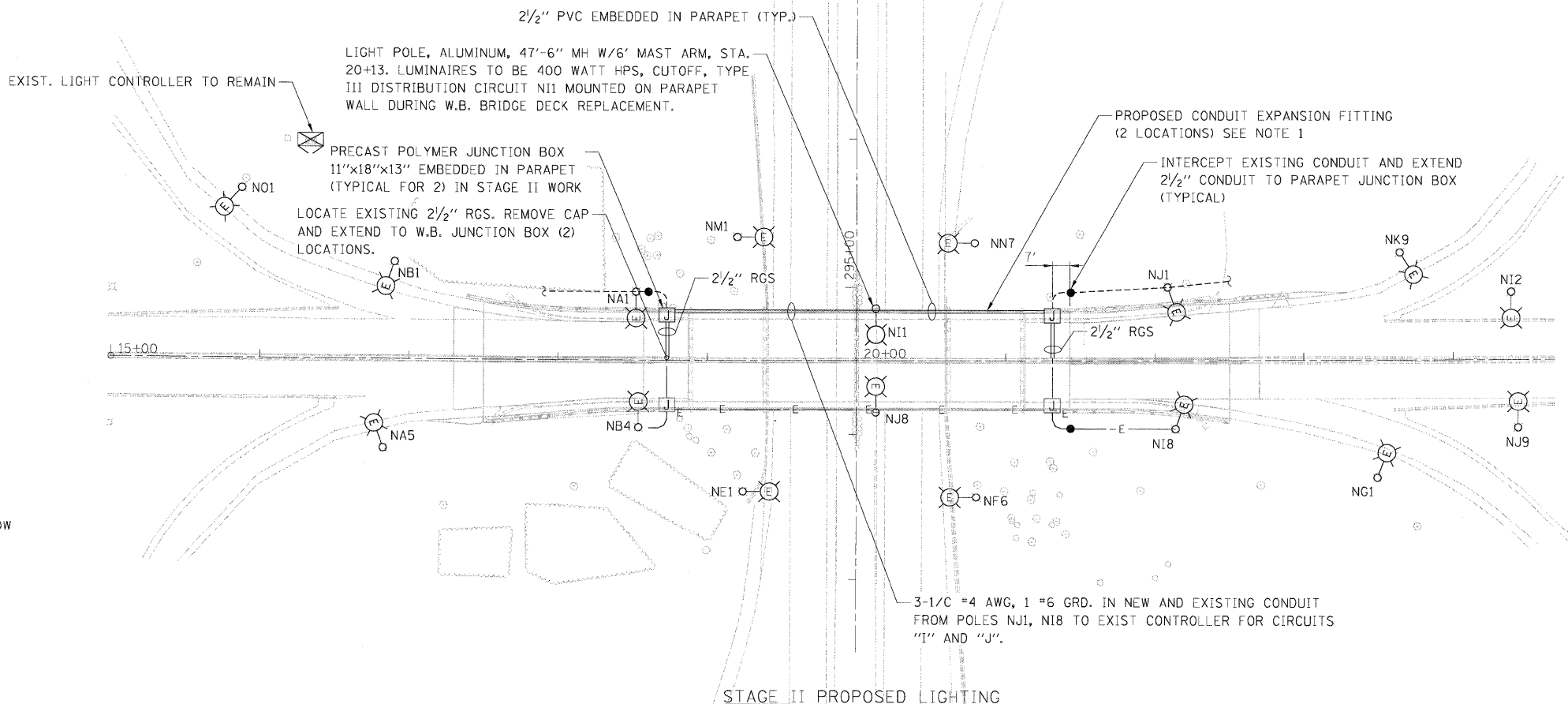
STAGE II REMOVAL

NOTES

1. PROPOSED CONDUIT EXPANSION FITTING 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 1/2" DIA. PVC (SCHEDULE 40).
2. JUNCTION BOX SHALL BE EMBEDDED IN PARAPET -UPPER PORTION WITH COVER FACING US30 AND MUST BE ACCESSIBLE(TYP.) COORDINATE W/APPROACH PVMT. SEE SHEET 34 FOR DETAIL.

LEGEND

- 2 1/2" PVC CONDUIT EMBEDDED IN PARAPET UNLESS NOTED OTHERWISE
- ⊠ PROPOSED JUNCTION BOX EMBEDDED IN STRUCTURE, PRECAST 11"x18"x13"
- ⊙(E) EXISTING LUMINAIRE TO REMAIN
- ⊙(R) PROPOSED ALUM. POLE 47'-6" MH W/400W HPS LUMINAIRE AND 6' MAST ARM
- ⊠ EXISTING LIGHTING CONTROLLER



STAGE II PROPOSED LIGHTING

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

FILE NAME = D168025-shr-lightstg2.dgn	USER NAME = default	DESIGNED - RR	REVISED -
		DRAWN - LAM	REVISED -
		CHECKED - DF	REVISED -
		DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

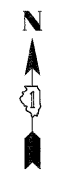
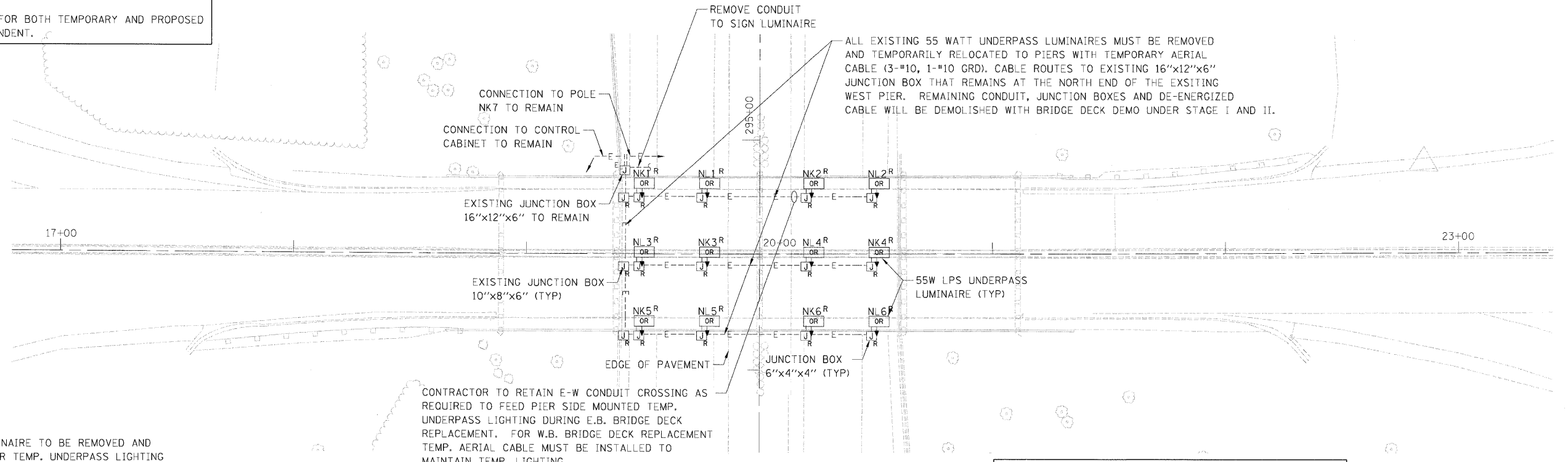
STAGE II EXISTING AND PROPOSED LIGHTING PLAN

SCALE: 1" = 50' SHEET NO. 2 OF 12 SHEETS STA. 15+00.00 TO STA. 25+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	35
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60C05	

s:\118\05-cadd\us30\cadd sheets\118025-shr-lightstg2.dgn

NOTE:
UNDERPASS LIGHTING FOR BOTH TEMPORARY AND PROPOSED
USE IS STAGE INDEPENDENT.

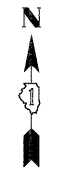
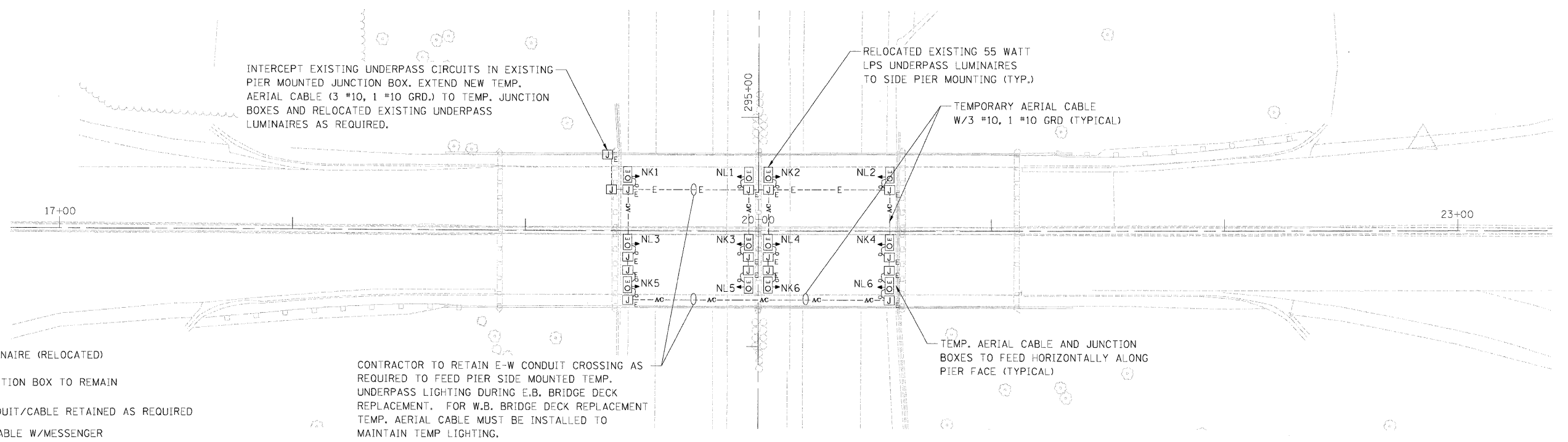
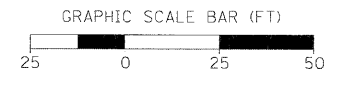


- LEGEND**
- OR EXISTING LUMINAIRE TO BE REMOVED AND RELOCATED FOR TEMP. UNDERPASS LIGHTING
 - JR EXISTING JUNCTION BOX TO BE REMOVED UNLESS NOTED OTHERWISE
 - E--- EXISTING CONDUIT/CABLE TO BE REMOVED

CONTRACTOR TO RETAIN E-W CONDUIT CROSSING AS REQUIRED TO FEED PIER SIDE MOUNTED TEMP. UNDERPASS LIGHTING DURING E.B. BRIDGE DECK REPLACEMENT. FOR W.B. BRIDGE DECK REPLACEMENT TEMP. AERIAL CABLE MUST BE INSTALLED TO MAINTAIN TEMP. LIGHTING.

UNDERPASS LIGHTING REMOVAL

THE EXISTING UNDERPASS LUMINAIRES, SIGN LUMINAIRES AND LIGHT POLES THAT ARE REMOVED SHALL BE SALVAGED TO IDOT AND DELIVERED TO A DESIGNATION DETERMINED BY THE ENGINEER.

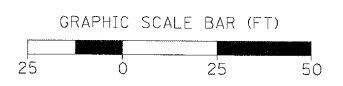


- LEGEND**
- OE EXISTING LUMINAIRE (RELOCATED)
 - JE EXISTING JUNCTION BOX TO REMAIN
 - E--- EXISTING CONDUIT/CABLE RETAINED AS REQUIRED
 - ac--- NEW AERIAL CABLE W/MESSENGER

CONTRACTOR TO RETAIN E-W CONDUIT CROSSING AS REQUIRED TO FEED PIER SIDE MOUNTED TEMP. UNDERPASS LIGHTING DURING E.B. BRIDGE DECK REPLACEMENT. FOR W.B. BRIDGE DECK REPLACEMENT TEMP. AERIAL CABLE MUST BE INSTALLED TO MAINTAIN TEMP LIGHTING.

TEMPORARY UNDERPASS LIGHTING

THE EXISTING UNDERPASS LUMINAIRES, SIGN LUMINAIRES AND LIGHT POLES THAT ARE REMOVED SHALL BE SALVAGED TO IDOT AND DELIVERED TO A DESIGNATION DETERMINED BY THE ENGINEER.



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

FILE NAME = D168C05-shr-und-stg1.dgn	USER NAME = default	DESIGNED - RR	REVISED -
		DRAWN - LAM	REVISED -
		CHECKED - DF	REVISED -
		DATE - 5/6/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE I EXISTING AND TEMPORARY UNDERPASS LIGHTING PLAN
US 30 OVER IL RTE. 394**

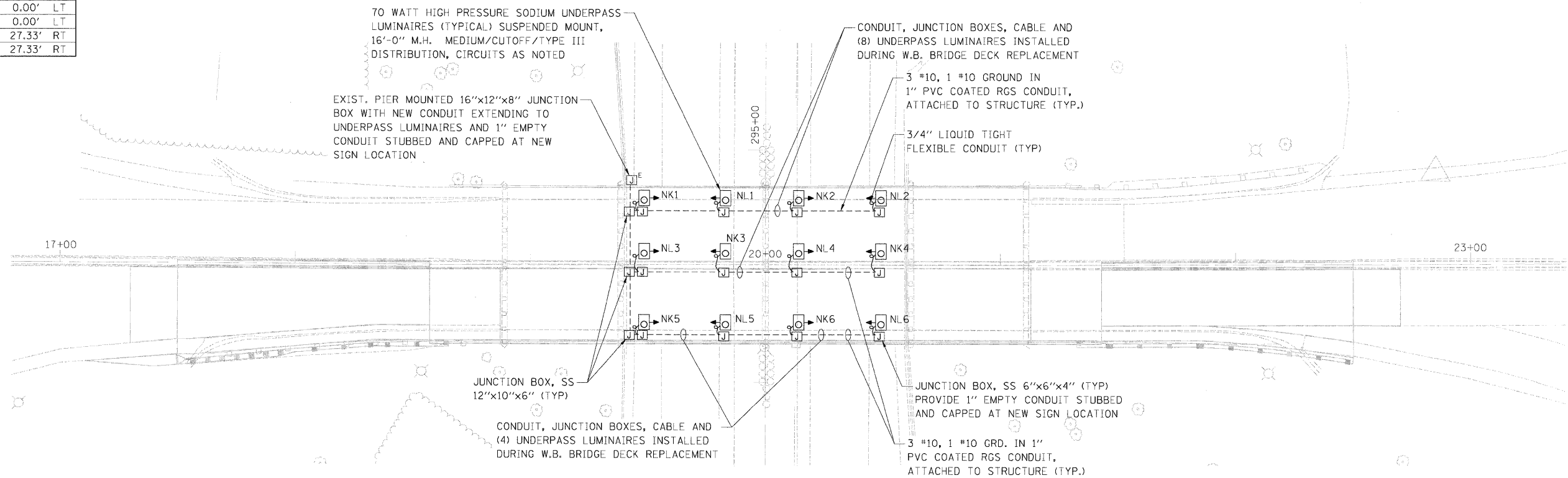
SCALE: 1" = 25' SHEET NO. 3 OF 12 SHEETS STA. 17+00.00 TO STA. 23+00.00

F.A. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 36
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60C05				

s:\110\05\cadd\110330\cadd sheets\110330-shr-und-stg1.dgn

NOTE:
UNDERPASS LIGHTING FOR BOTH TEMPORARY AND PROPOSED
USE IS STAGE INDEPENDENT.

UNDERPASS LUMINAIRE SCHEDULE			
FIXTURE #	STATION	OFFSET	
NK1	19+42.0	27.33'	LT
NK2	20+18.0	27.33'	LT
NK3	19+82.1	0.00'	LT
NK4	20+58.0	0.00'	LT
NK5	19+42.0	27.33'	RT
NK6	20+18.0	27.33'	RT
NL1	19+82.1	27.33'	LT
NL2	20+58.0	27.33'	LT
NL3	19+42.0	0.00'	LT
NL4	20+18.0	0.00'	LT
NL5	19+82.1	27.33'	RT
NL6	20+58.0	27.33'	RT



PROPOSED UNDERPASS LIGHTING

LEGEND

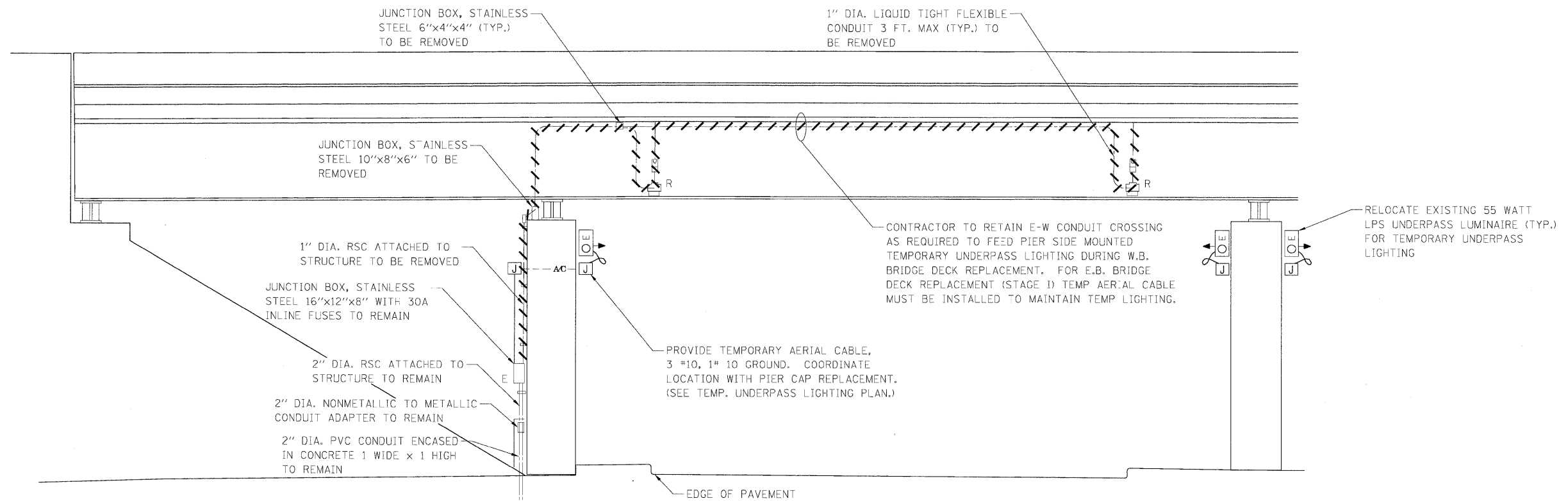
- PROPOSED LUMINAIRE, 70 WATT, HPS
- EXISTING JUNCTION BOX TO REMAIN
- PROPOSED JUNCTION BOX
- 1" PVC COATED RGS MOUNTED TO STRUCTURE
- 3/4" LIQUID TIGHT FLEXIBLE CONDUIT

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

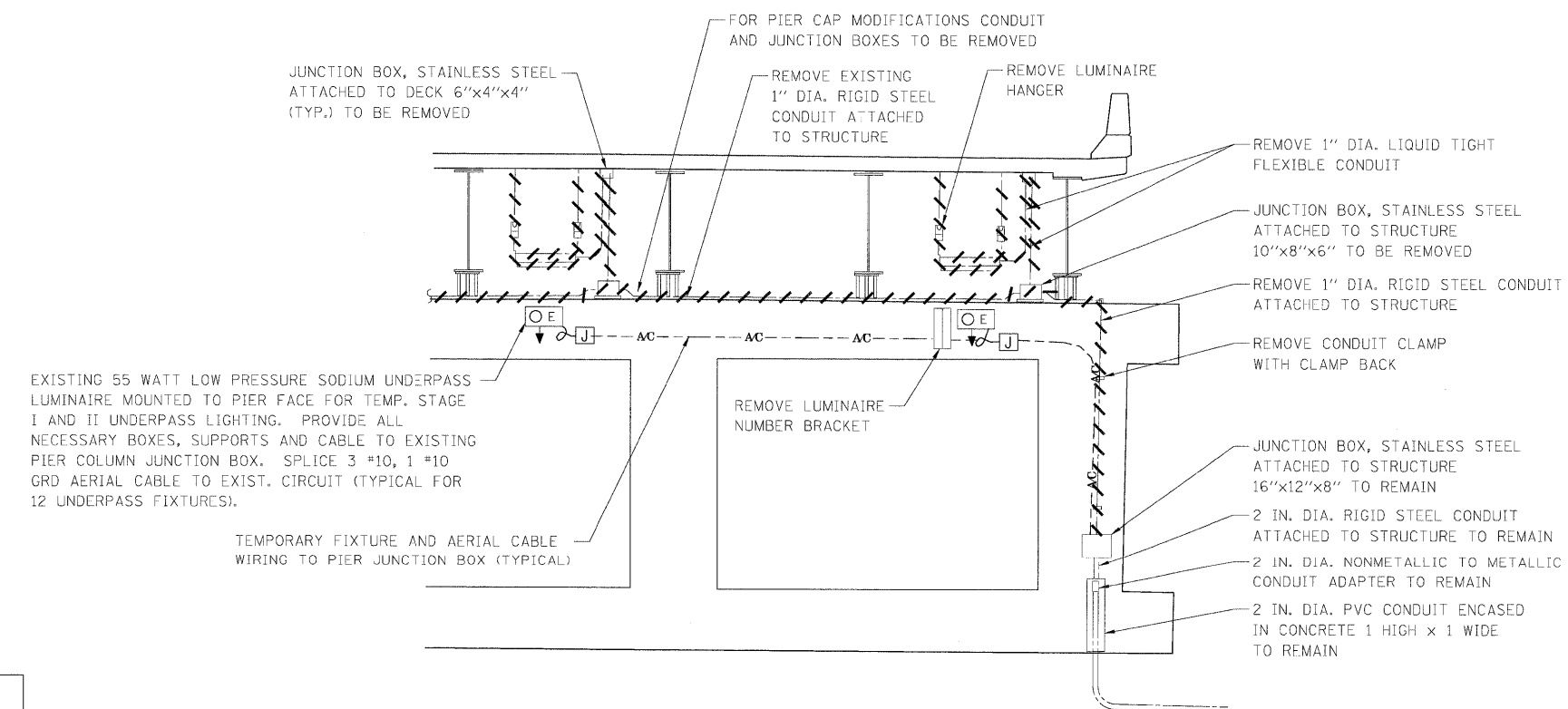


FILE NAME = D168C05-sht-undr+stg2.dgn	USER NAME = default	DESIGNED - RR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE II PROPOSED UNDERPASS LIGHTING PLAN US 30 OVER IL RTE. 394	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = \$SCALE\$	DRAWN - LAM	REVISED -			0353	0303.1B-1	COOK	91	37
	PLOT DATE = 5/6/2009	CHECKED - DF	REVISED -			CONTRACT NO. 60C05				
				DATE - 5/6/2009	REVISED -	SCALE: 1" = 25'		SHEET NO. 4 OF 12 SHEETS		STA. 17+00.00 TO STA. 23+00.00
						FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

st:\168\05\cadd\sheet\168C05-sht-undr+stg2.dgn



SECTION



ELEVATION

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D168C05-shr-ght-remdet.dgn	USER NAME = default	DESIGNED - RR	REVISED -
		DRAWN - LAM	REVISED -
		CHECKED - DF	REVISED -
		DATE - 5/6/2009	REVISED -

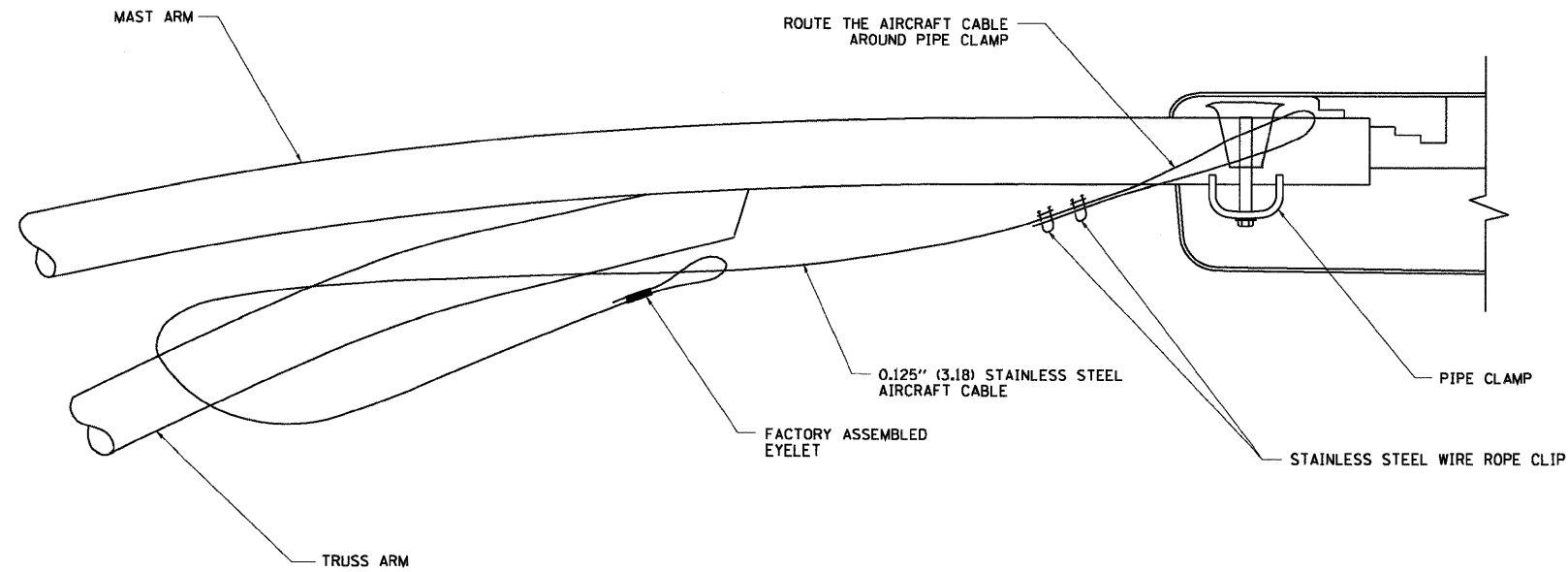
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**UNDERPASS LIGHTING
REMOVAL DETAILS**

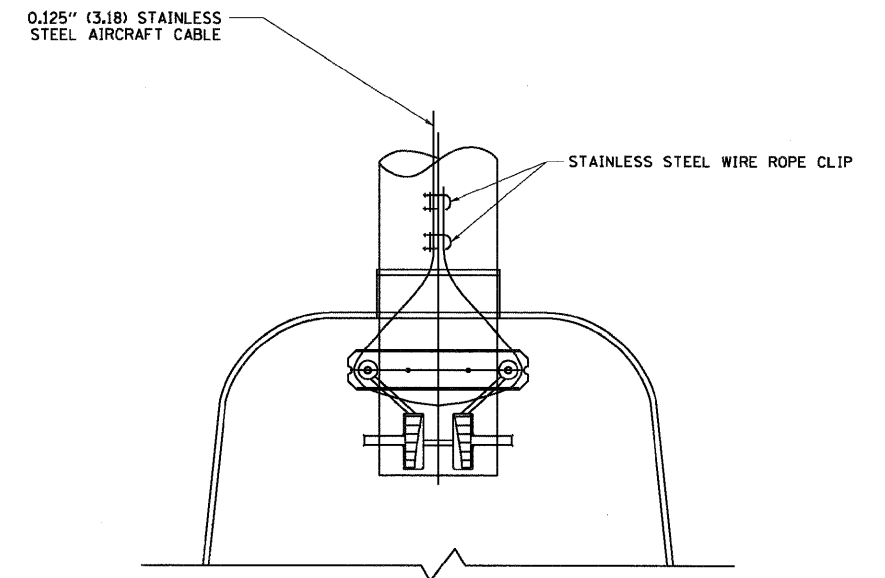
SCALE: NTS SHEET NO. 5 OF 12 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60C05	

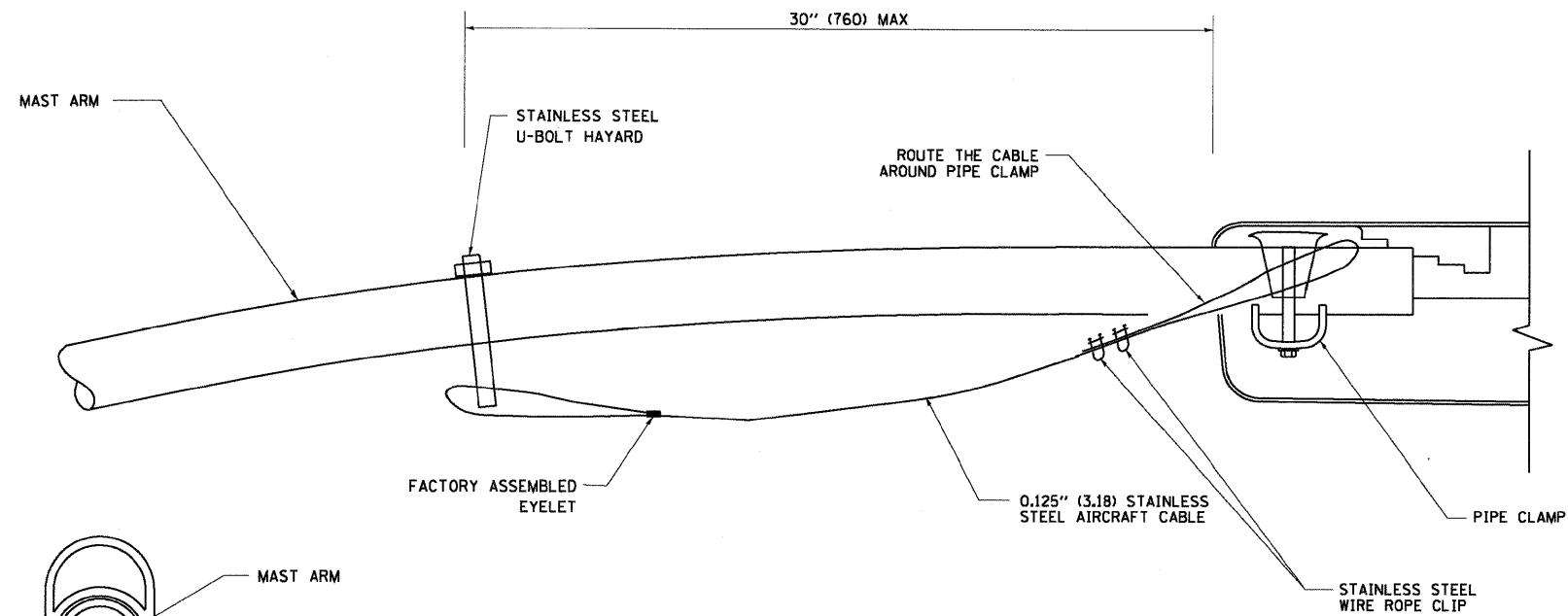
s:\118\05\cadd\us30\cadd sheets\D168C05-shr-ght-remdet.dgn



SIDE VIEW (TRUSS ARM)
N.T.S.



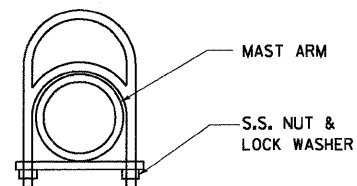
BOTTOM VIEW
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN



STAINLESS STEEL U-BOLT HAYARD

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: VERT.
HORIZ.
DATE: 1/17/2007

DRAWN BY
CHECKED BY

FILE NAME = D:\60005-ahh-lighting\td21.dgn	USER NAME = default	DESIGNED -	REVISED - 01/01/07
		DRAWN -	REVISED -
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -
	PLOT DATE = 5/6/2009	DATE -	REVISED -

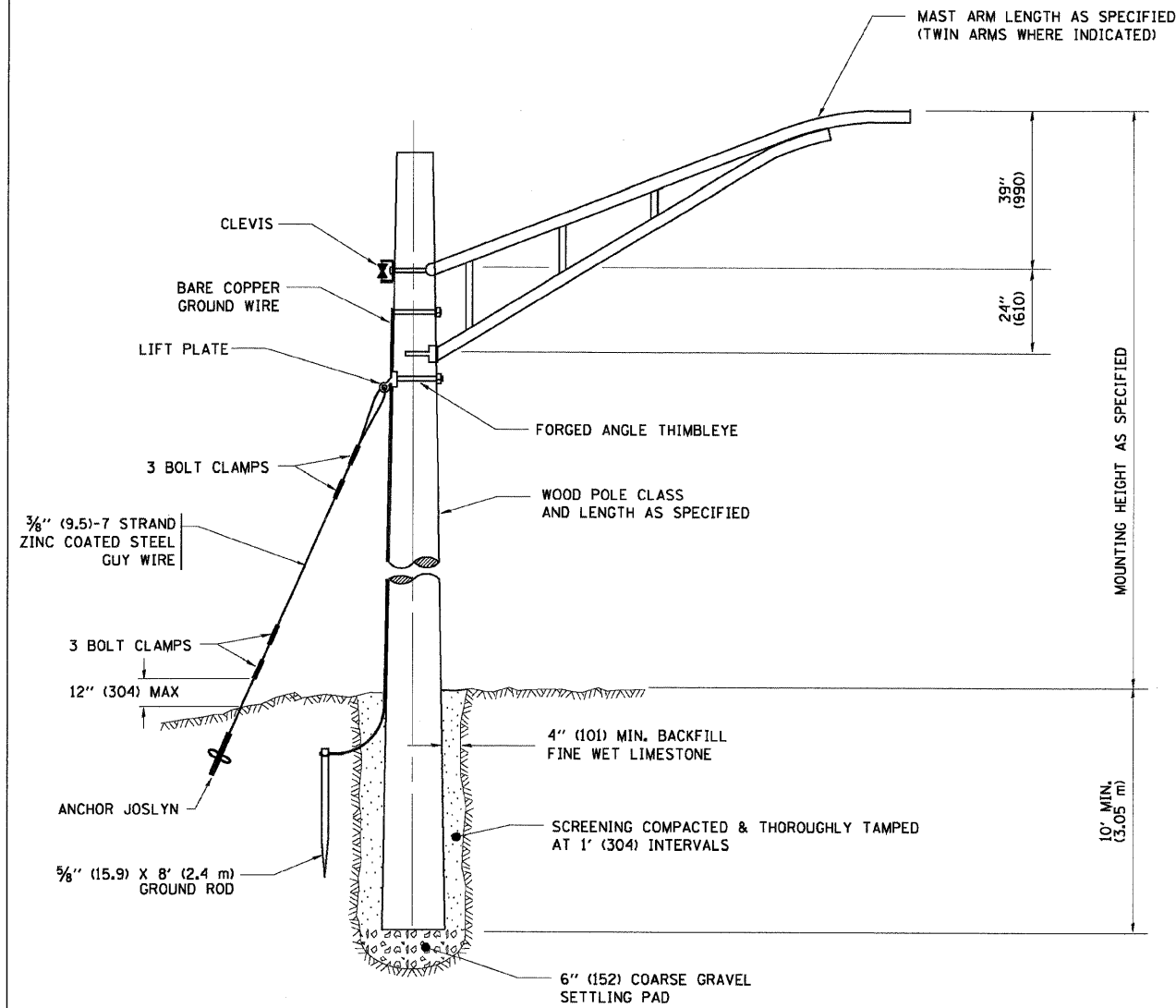
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LUMINAIRE SAFETY CABLE ASSEMBLY

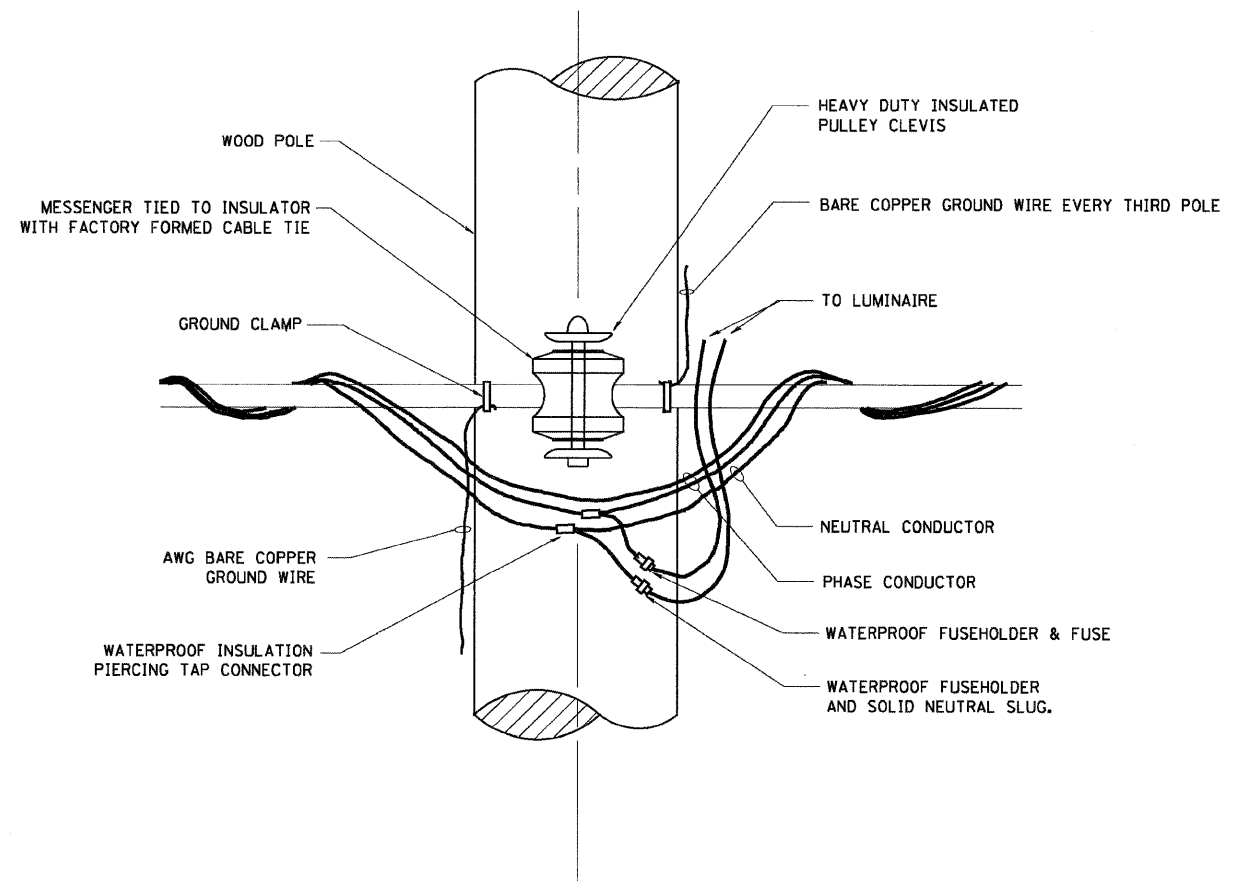
SCALE: NTS SHEET NO. 6 OF 12 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	39
BE-701		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

s:\718\05-cadd\as\30-cadd sheets\0160005-ahh-lighting\td21.dgn



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D168C05-sht-lightdet02.dgn	USER NAME = default	DESIGNED -	REVISED - 01/01/07
		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = 5/6/2009	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

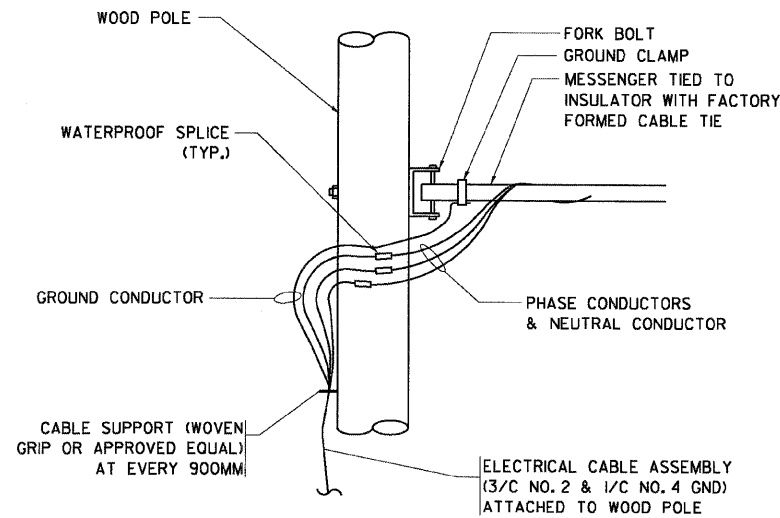
TEMPORARY LIGHT POLE DETAILS

SCALE: NTS SHEET NO. 7 OF 12 SHEETS STA. N/A TO STA. N/A

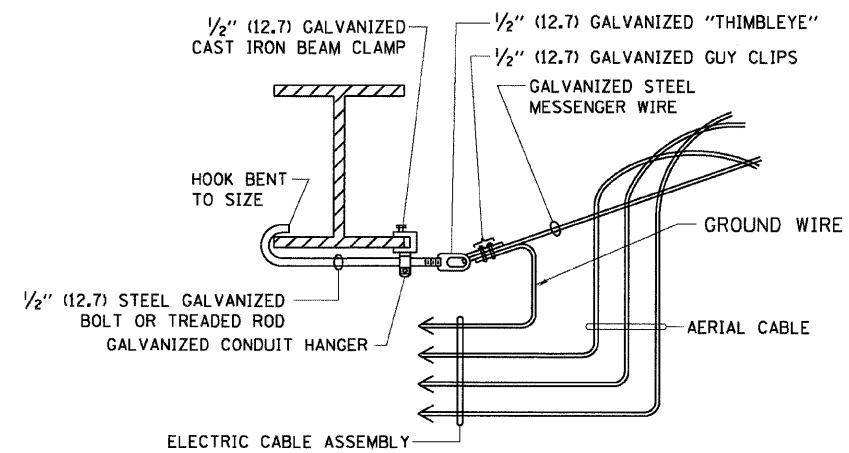
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION				
TEMPORARY LIGHT POLE DETAILS				
SCALE: VERT. HORIZ.		DRAWN BY		
DATE: 1/17/2007		CHECKED BY		
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	40
BE-800		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

s:\118\05-cadd\us30-cadd sheets\1186C05-sh-t-lightdet02.dgn



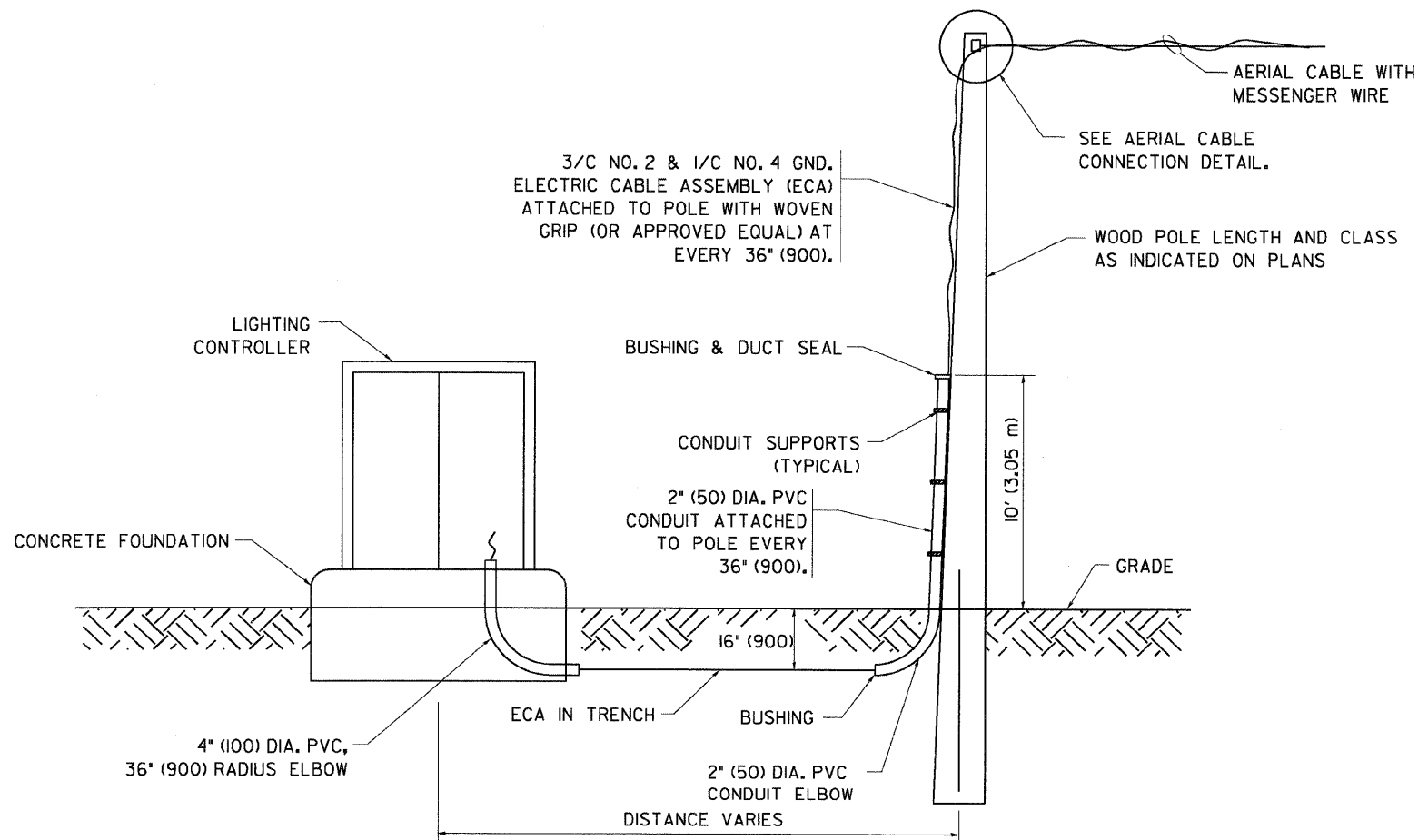
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



FILE NAME = D160C05-shr-lightdet23.dgn

USER NAME = default

DESIGNED -

DRAWN -

CHECKED -

DATE -

REVISED - 01/01/07

REVISED -

REVISED -

REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY AERIAL CABLE INSTALLATION

SCALE: NTS SHEET NO. 8 OF 12 SHEETS STA. N/A TO STA. N/A

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

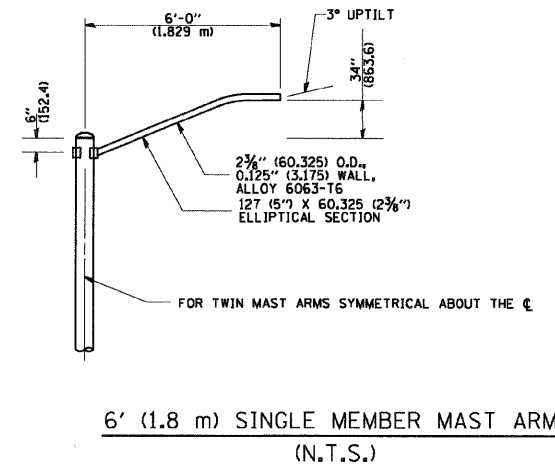
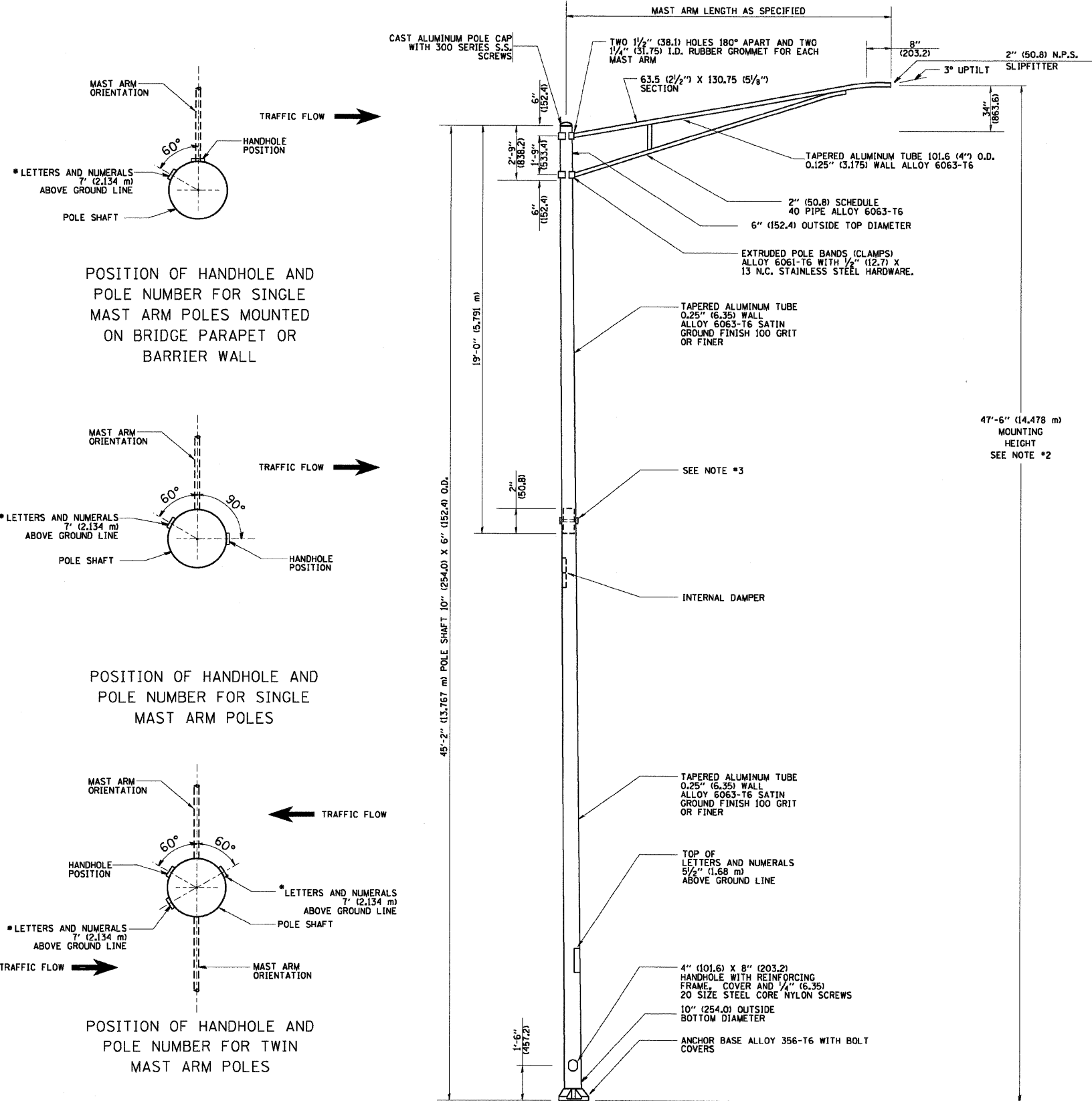
**TEMPORARY AERIAL
CABLE INSTALLATION**

SCALE: VERT.
HORIZ.
DATE: 1/17/2007

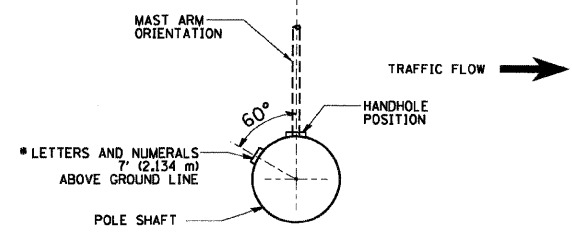
DRAWN BY
CHECKED BY

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	41
BE-801			CONTRACT NO. 60C05	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

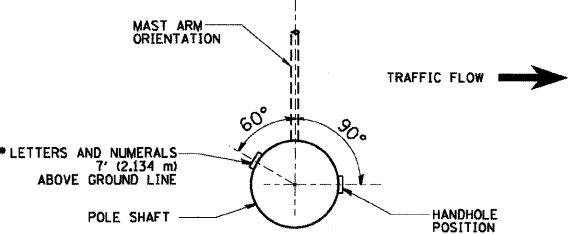
s:\918\05_cad\us30\add\sheet\160C05-shr-lightdet23.dgn



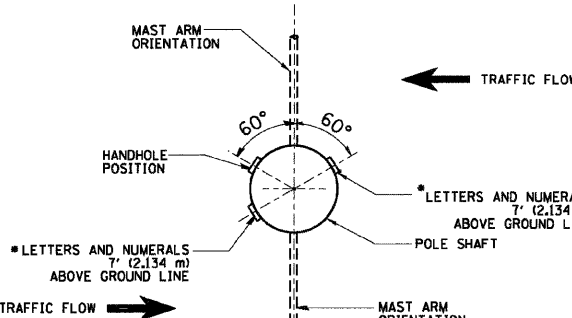
- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
 3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
 6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
 7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
 8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



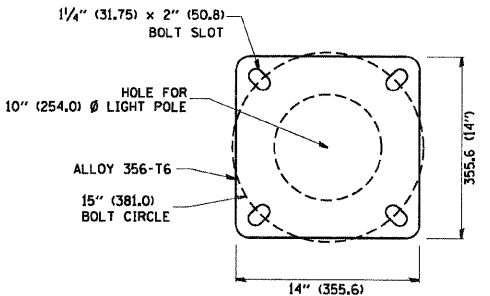
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



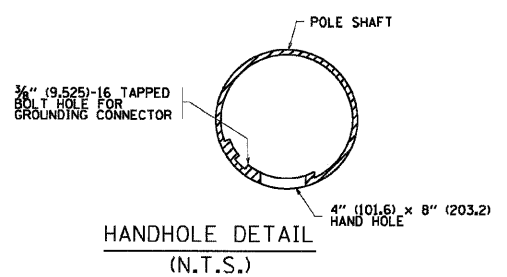
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



LIGHT POLE BASE PLATE DETAIL
15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL
(N.T.S.)

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

FILE NAME = D160C05-sht-1ghtdet124.dgn	USER NAME = default	DESIGNED -	REVISED - 09/02/03
PLOT SCALE = *SCALE*		DRAWN -	REVISED -
PLOT DATE = 5/6/2009		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALUMINUM LIGHT POLE
47'-6" (14.478 m) MOUNTING HEIGHT

SCALE: NTS SHEET NO. 9 OF 12 SHEETS STA. N/A TO STA. N/A

BE-400

REVISIONS	
NAME	DATE
R. TOMSONS	9-6-00
R. TOMSONS	8-12-03

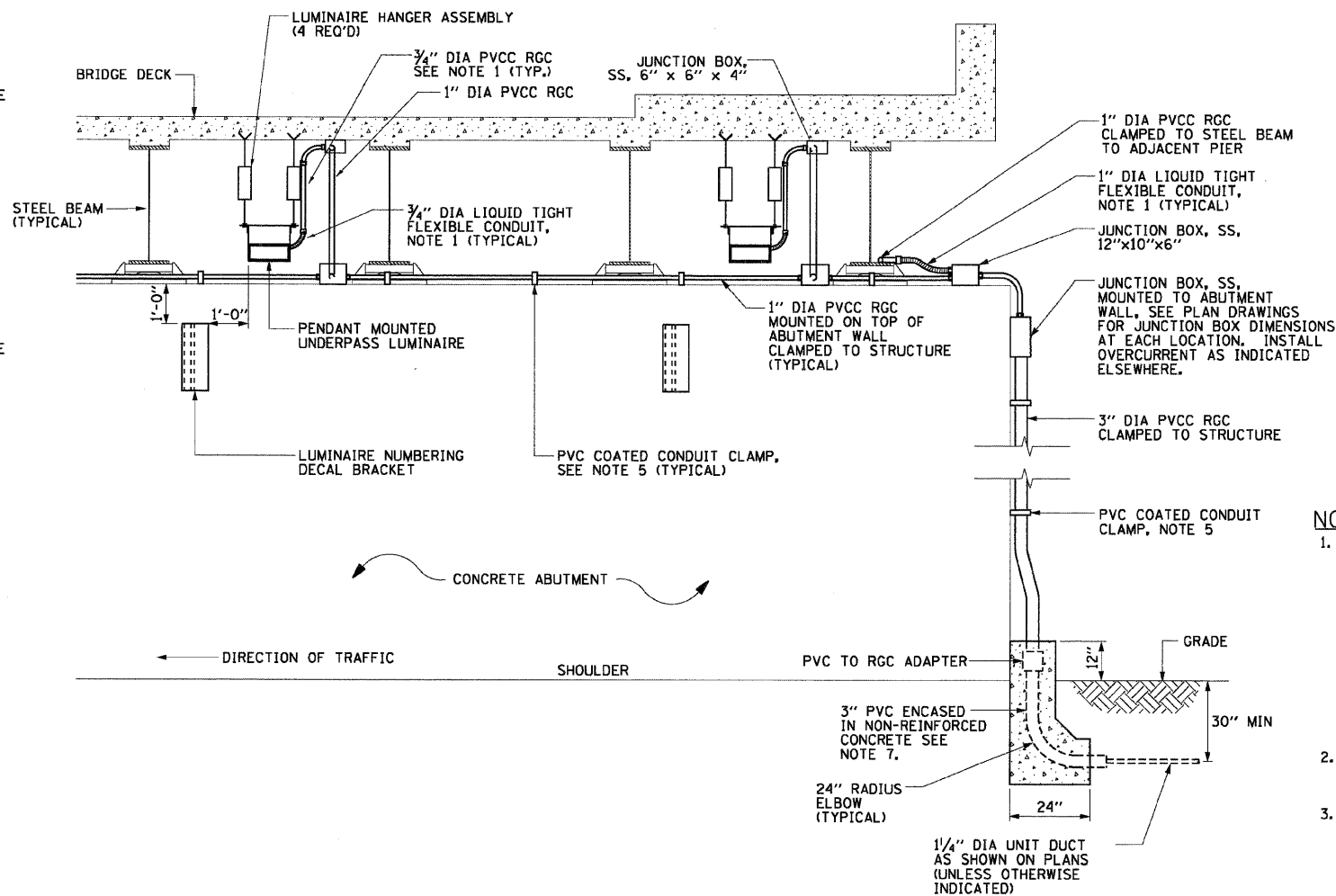
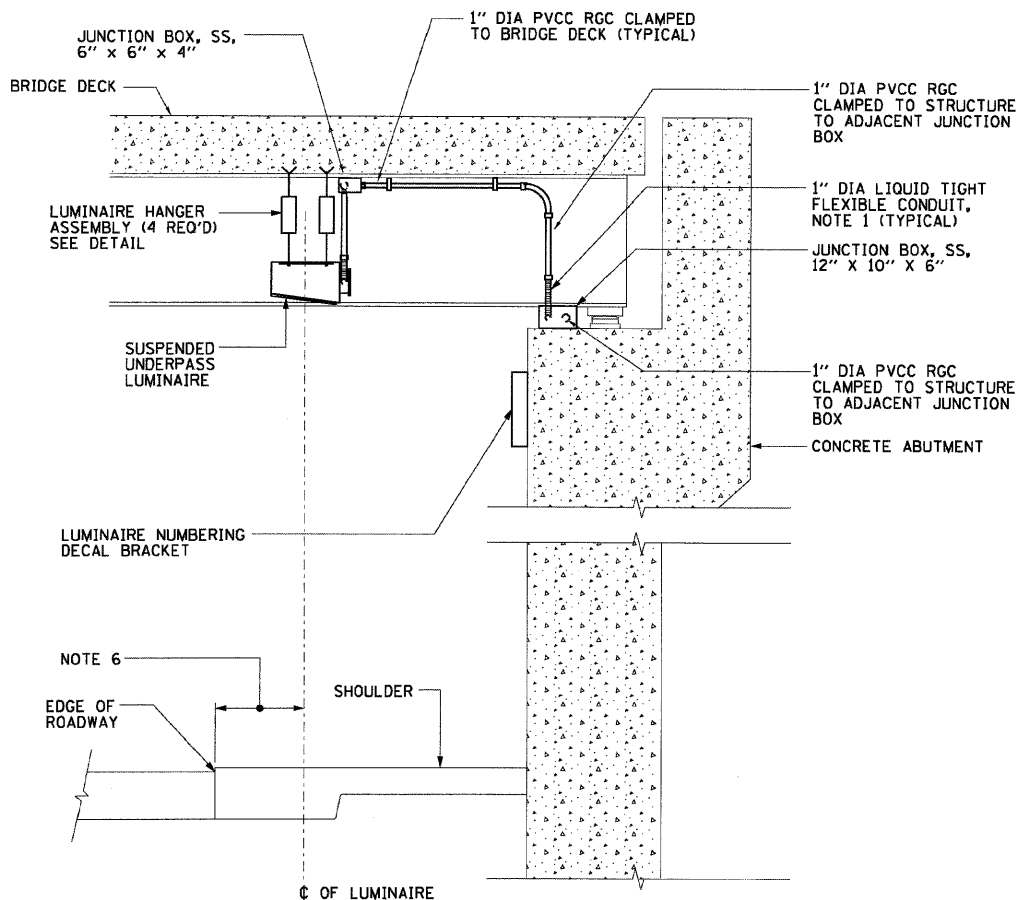
ILLINOIS DEPARTMENT OF TRANSPORTATION

ALUMINUM LIGHT POLE
47'-6" (14.478 m)
MOUNTING HEIGHT

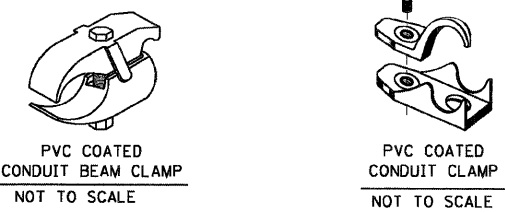
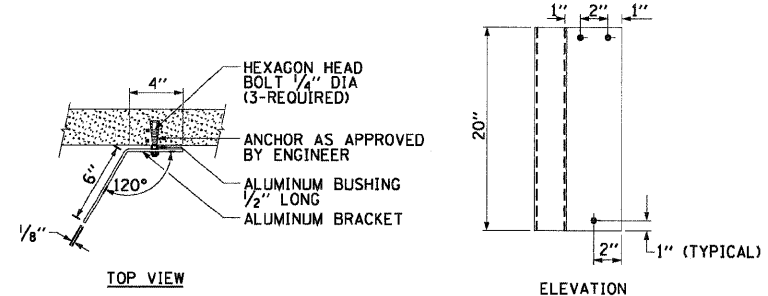
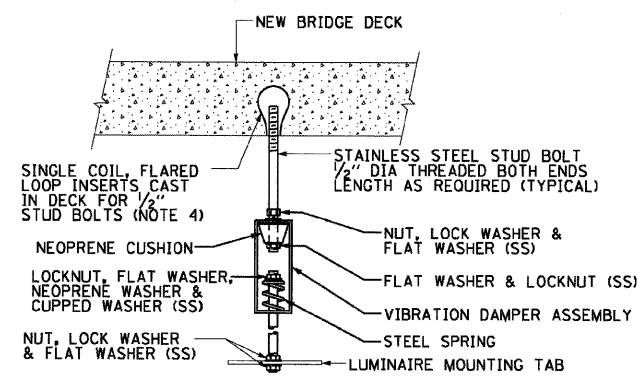
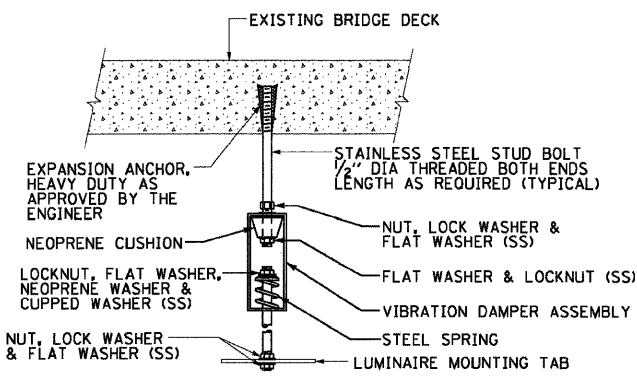
SCALE: NONE DRAWN BY

DATE: 1/10/2007 CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	42
BE-400			CONTRACT NO. 60C05	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



- NOTES:**
- LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN, PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT 3/4" DIA. CONDUIT AND 1/2" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
 - SEE UNDERPASS LIGHTING PLANS FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
 - THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN SUSPENDED MOUNTING AN UNDERPASS LUMINAIRE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING THE UNDERPASS LIGHTING SYSTEM AS SHOWN ON THE PLANS WITH THE BRIDGE DECK CONTRACTOR. SEE DETAIL.
 - THE UNDERPASS LUMINAIRE HANGER ASSEMBLY COMPLETE WITH HEAVY DUTY ANCHORS/INSERTS AND ALL APPLICABLE HARDWARE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE PAY ITEM.
 - SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
 - ALL UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGR. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS
 - THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
 - ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

EXISTING BRIDGE DECK INSTALLATION

NEW BRIDGE DECK INSTALLATION

TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUSPENDED MOUNT UNDERPASS
LUMINAIRE INSTALLATION DETAILS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

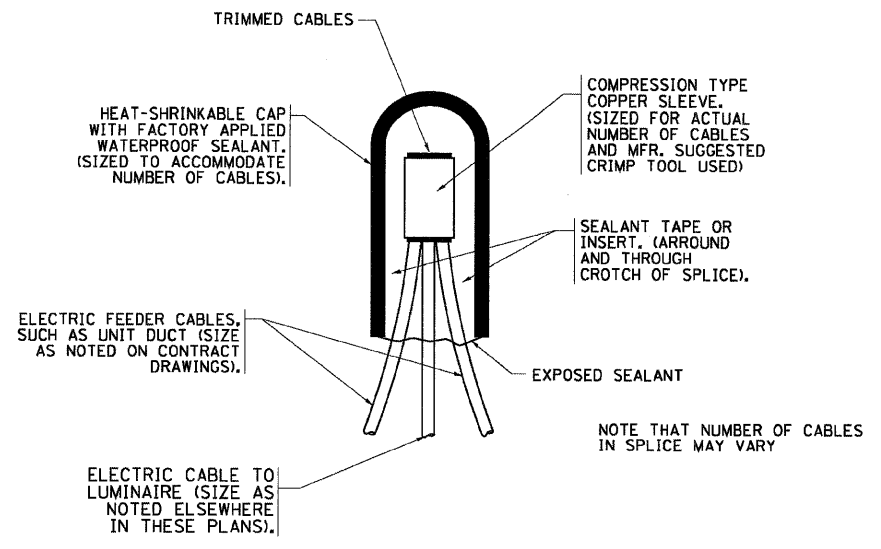
SUSPENDED MOUNT UNDERPASS
LUMINAIRE INSTALLATION DETAILS

SCALE: VERT. HORIZ. DATE: 1/17/2007 DRAWN BY CHECKED BY

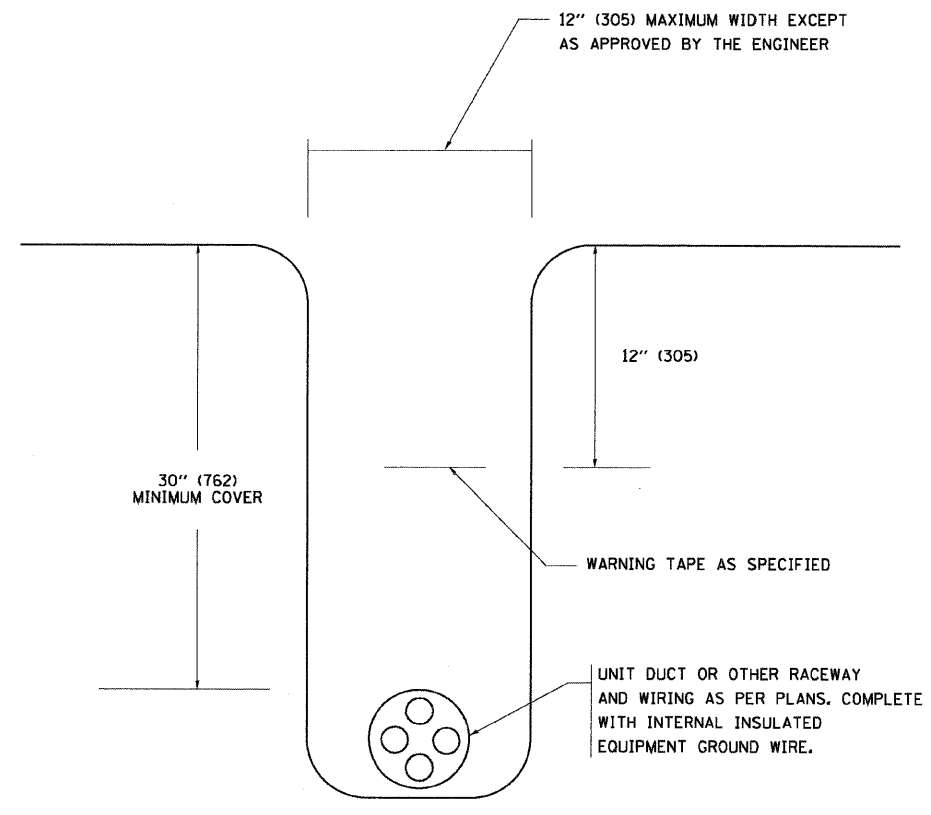
FILE NAME = 0160025-shr-1ghtdet196.dgn	USER NAME = default	DESIGNED -	REVISED - 01/01/07
PLOT SCALE = \$SCALE\$		DRAWN -	REVISED -
PLOT DATE = 5/6/2009		CHECKED -	REVISED -
		DATE -	REVISED -

SCALE: NTS SHEET NO. 10 OF 12 SHEETS STA. N/A TO STA. N/A

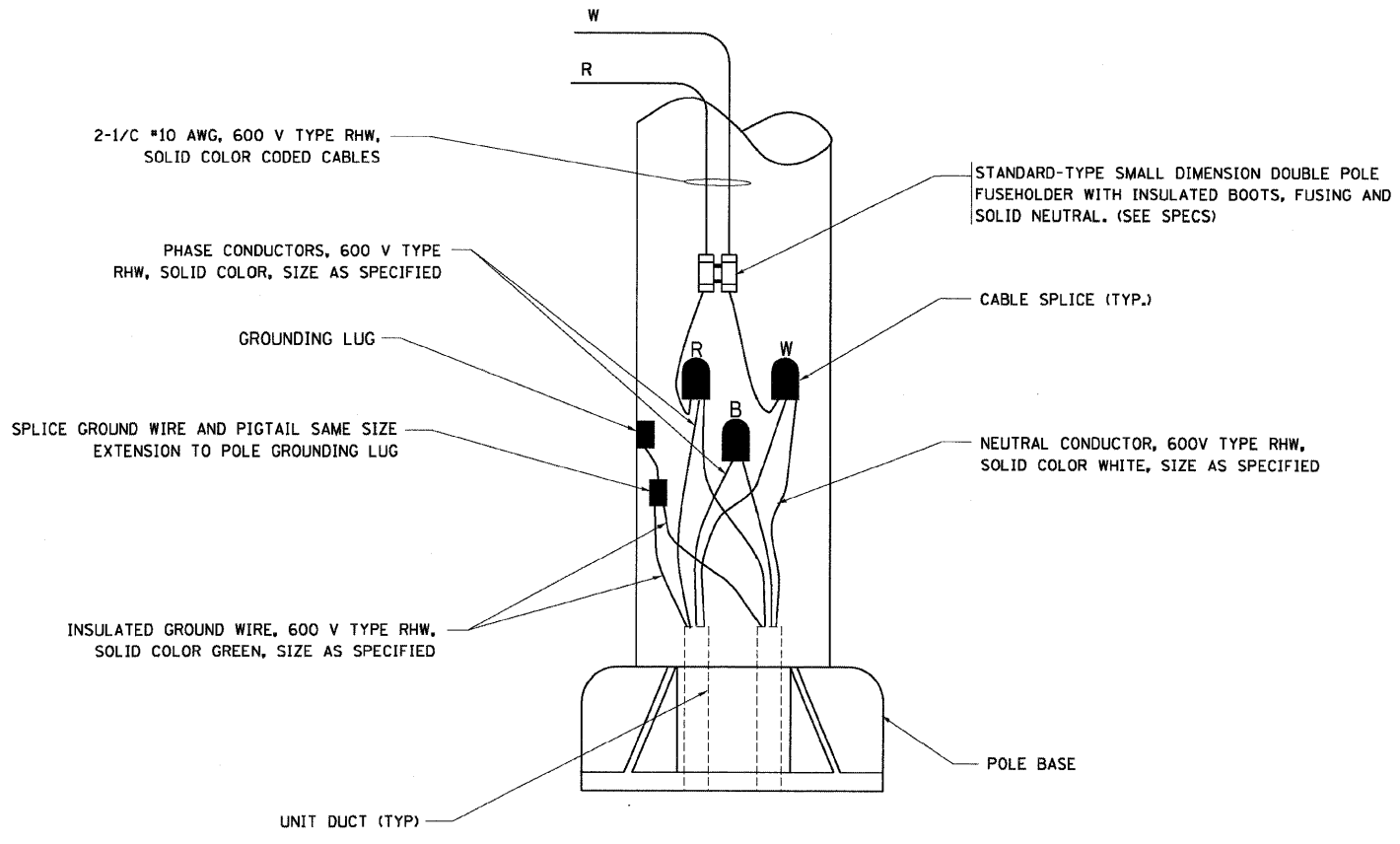
P.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	43
BE-900		CONTRACT NO. 60C05		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



TYPICAL SPLICE DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.



POLE WIRING DETAIL
N.T.S.

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION			
NAME	DATE				

MISC. ELECTRICAL DETAILS
SHEET A

SCALE: VERT. HORIZ. DATE: 1/18/2007 DRAWN BY CHECKED BY

FILE NAME = D:\60005-aht-lightdet07.dgn	USER NAME = ce\default	DESIGNED -	REVISED - 01/01/07
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

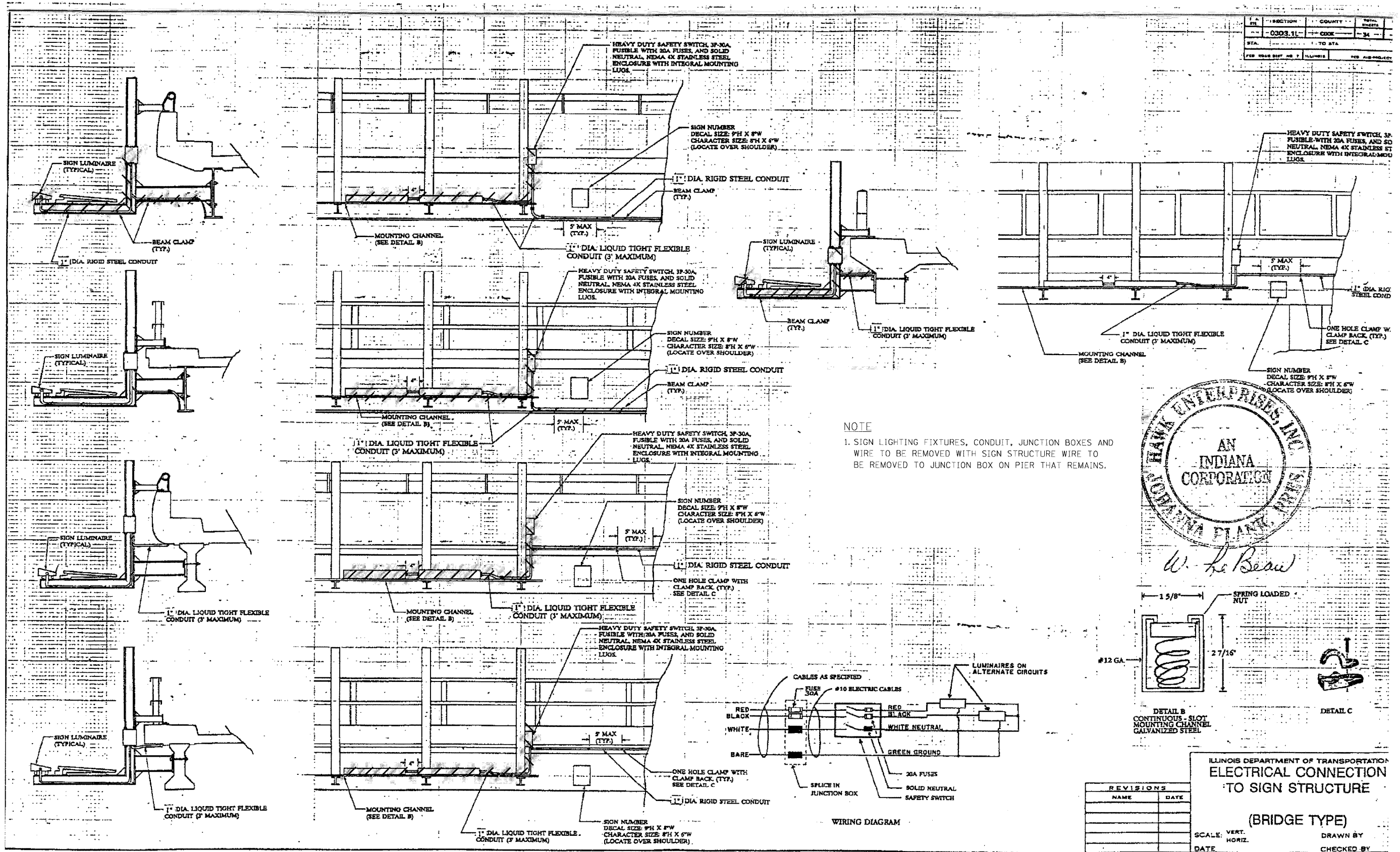
MISC. ELECTRICAL DETAILS
SHEET A

SCALE: NTS SHEET NO. 11 OF 12 SHEETS STA. N/A TO STA. N/A

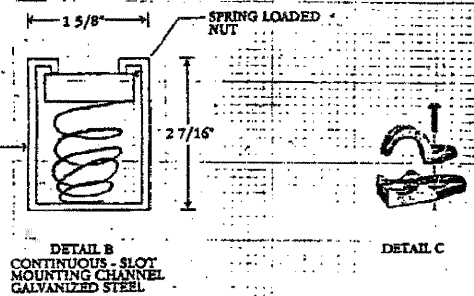
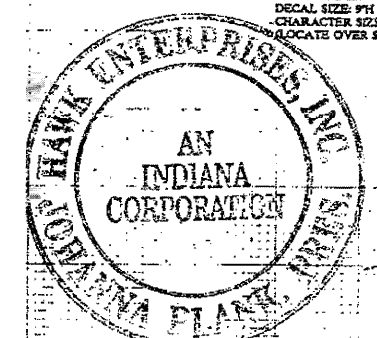
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	44
BE-702		CONTRACT NO. 60C05		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

s:\1105-05-cadd\us30\cadd\sheet\110505-11\lightdet07.dgn

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS
0353	0303.1B-1	COOK	91
STA.	TO STA.		SHEET NO.
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO.



NOTE
 1. SIGN LIGHTING FIXTURES, CONDUIT, JUNCTION BOXES AND WIRE TO BE REMOVED WITH SIGN STRUCTURE WIRE TO BE REMOVED TO JUNCTION BOX ON PIER THAT REMAINS.



REVISIONS	
NAME	DATE

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

FOR INFORMATION ONLY

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

FILE NAME = D:\62025-sh1-lightdet08.dgn	USER NAME = default	DESIGNED - RR	REVISED -
PLOT SCALE = #SCALE#	DRAWN - LAM	CHECKED - DF	REVISED -
PLOT DATE = 5/6/2009	DATE - 5/6/2009	REVISED -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL CONNECTION TO SIGN STRUCTURE
 SCALE: NTS SHEET NO. 12 OF 12 SHEETS STA. N/A TO STA. N/A

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	45
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60C05	

m:\9180_05_coad\va30\cadd\sheet\0160205-sh1-lightdet08.dgn

Bench Mark: 1) Cook County Highway Dept. brass disc at the southwest corner of the west abutment, elevation 657.90.
 2) Cook County Highway Dept. brass disc at the northeast corner of the east abutment, elevation 657.82.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

Existing Structure: The bridge carrying US Route 30 over IL Route 394 was originally built in 1954. The bridge is a four-span continuous structure with 12 lines of non-composite rolled steel beams. The existing structure is 68'-0" out to out and measures 226'-0" bk. to bk. abutments and is supported by spill thru pile bent abutments and multi column piers. The bridge rehabilitation in the year 1993 involved replacement of the steel bearings and approach slabs, installation of parapet walls, fence and construction of median. The superstructure was raised to gain a vertical clearance of 14'-8" and the expansion joints were replaced. The structure has a zero skew angles, however it intersects with IL Rte 394 at angle 0°-4'-8" (under). There are 12 surface mounted (HID) waterproof lights mounted under the bridge. There is also cobra style roadway light attached to each fascia beam at pier 2 and lights affixed to the two bridge mounted signs. The bridge has no historical significance. The existing superstructure is to be removed & replaced and the substructure modified. One lane of traffic in each direction is to be maintained using stage construction.

Salvage existing hardwood protective shielding as indicated on Sheet S-2.

SCOPE OF WORK

1. Remove and replace the bridge deck and superstructure.
2. Remove and replace abutment backwalls.
3. Remove and replace pier caps.
4. Remove and replace bearings.
5. Repair the substructures with structural concrete repairs.
6. Install concrete slope walls.
7. Remove and replace lights and signing.
8. Remove and replace guard rails on all four corners of the bridge.
9. Partial depth patching of W.B. deck during pre-stage.

LOADING HL-93

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

DESIGN SPECIFICATIONS

NEW CONSTRUCTION
 2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

EXISTING SUBSTRUCTURE
 1995 FHWA Seismic Retrofitting Manual for Highway Bridges

DESIGN STRESSES

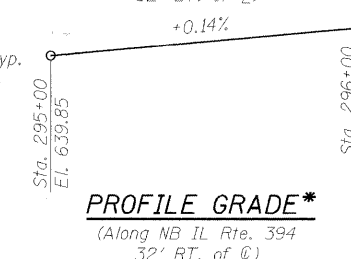
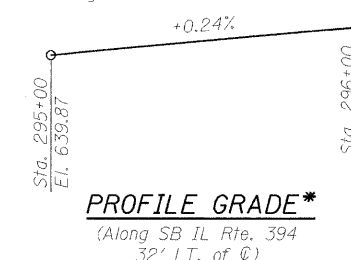
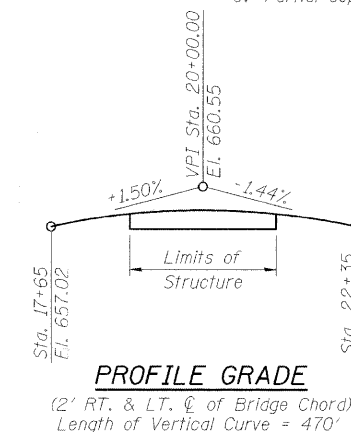
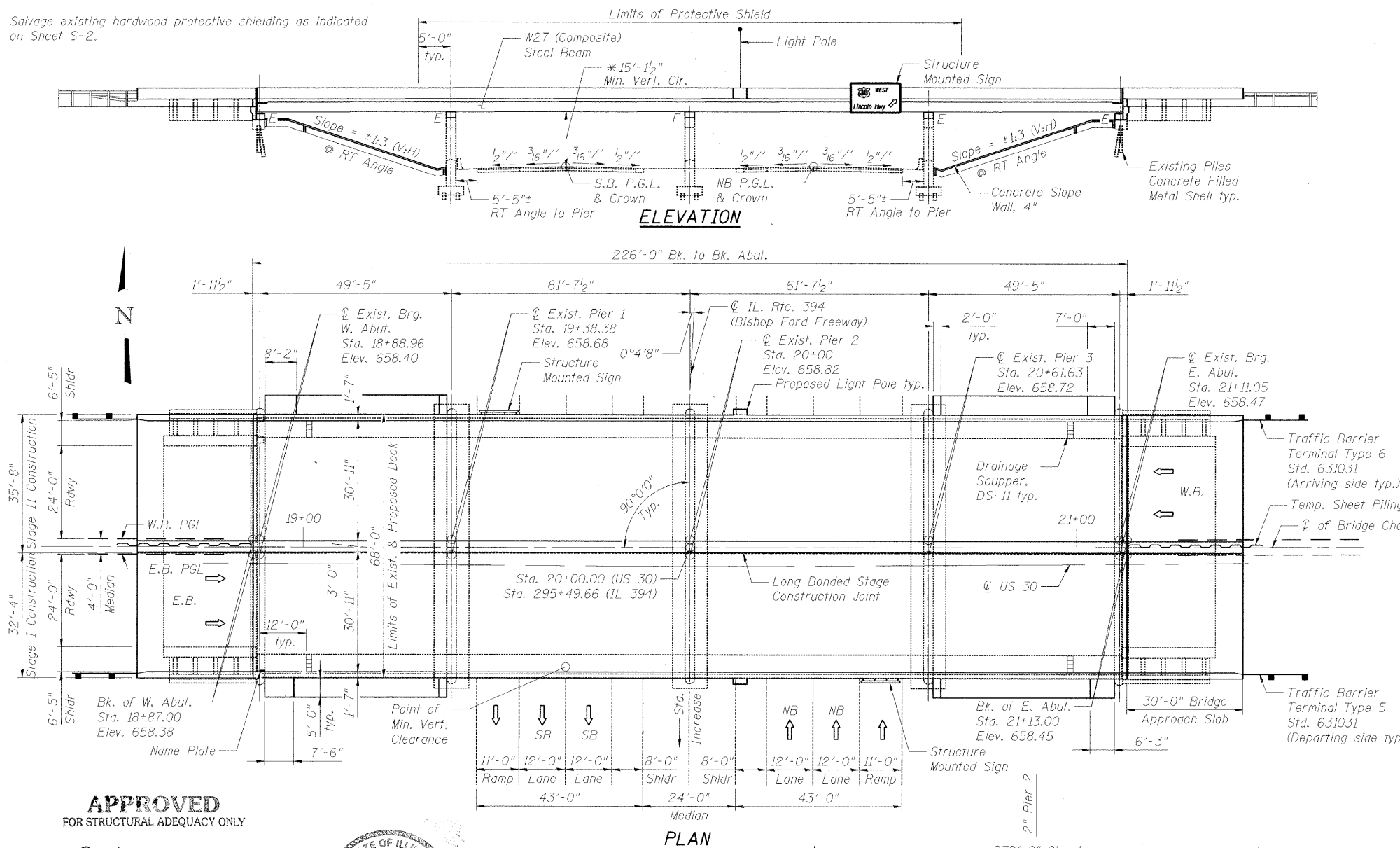
FIELD UNITS (NEW CONSTRUCTION)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (AASHTO M270 Grade 50)

FIELD UNITS (EXISTING CONSTRUCTION)
 $f_c = 800$ psi (w/o soil pressure)
 $f_c = 1,400$ psi (with soil pressure)
 $f_s = 20,000$ psi (Reinforcement)

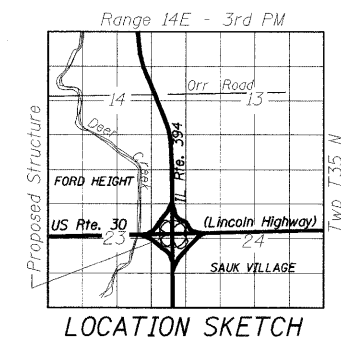
SEISMIC DATA

NEW CONSTRUCTION
 Seismic Performance Zone (SPZ)=1
 Design Spectral Acceleration at 1.0 sec (SD1)=0.093g
 Design Spectral Acceleration at 0.2 sec (SDS)=0.154g
 Soil Site Class = D

EXISTING CONSTRUCTION:
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = .04g
 Site Coefficient (S) = 1.2

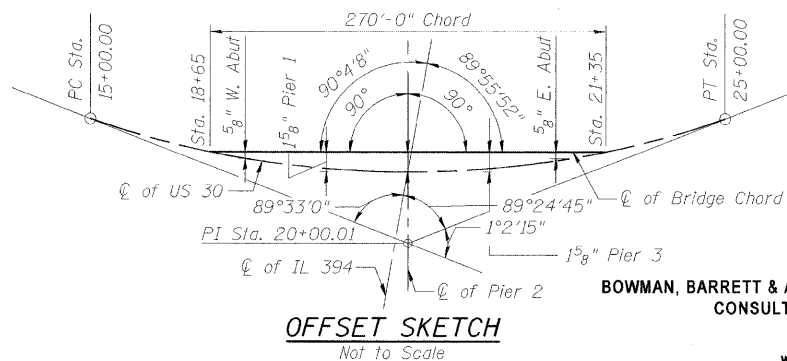


* The existing Profile Grade for IL Rte. 394 was obtained from survey data taken along P.G.L. between limits of the existing US 30 Structure after completion of resurfacing contract 62481.



CURVE DATA

$\Delta = 1^\circ 02' 15''$ LT
 $D = 0^\circ 06' 14''$
 $T = 500.01'$
 $L = 1,000.00'$
 $E = 2.26'$
 $R = 55,224.85'$
 $S.E. = 0.0$
 $P.C. = Sta. 15+00$
 $P.T. = Sta. 25+00$
 $P.I. = Sta. 20+00.01$



OFFSET SKETCH
 Not to Scale

GENERAL PLAN AND ELEVATION
 US ROUTE 30 (LINCOLN HWY) OVER
 IL ROUTE 394 (BISHOP FORD FWY)
 F.A.P. RT. 0353 SEC. 0303.1B-1
 COOK COUNTY
 STATION 20+00
 STRUCTURE NO. 016-0275

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES



SIGNED: *Brian L. Umbright*

DATE: MAY 20, 2009

EXPIRES: November 30, 2010

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

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

SHEET NO. S-1 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 46
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ -in. ϕ , holes $\frac{15}{16}$ -in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 274000 lb. Gr. 50
28400 lb. Gr. 36

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

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

Reinforcement bars designated (E) shall be epoxy coated.

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

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

Concrete Sealer shall be applied to new concrete surfaces of the abutments including the face of backwall, bearing seats and face of the pile cap, and to all new concrete surfaces of all piers.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. 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 Reddish Brown, Munsell No. 2.5 YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".

Slipforming of parapets is not allowed.

Protective shield may exist in some locations. The Contractor with the approval of the Engineer may re-use the existing protective shield. If protective shield is to be re-utilized, the Contractor shall evaluate the existing protective shield, and demonstrate through calculations sealed by an Illinois Licensed Structural Engineer that the existing system meets or exceeds the design requirements specified in Article 501.03 of the Standard Specifications. Supplementing and/or replacement of the existing shield may be required to satisfy the Standard Specifications. The cost of maintaining and adjusting the protective shield shall be included in the cost of Protective Shield.

The existing protective shield shall be salvaged when no longer required. The salvaged protective shield shall be delivered to IDOT District One Bridge Office, 1101 Biersterfield Road, Elk Grove Village, Illinois, 60007, telephone 847-956-1501; 24 hour notice before delivery is required. The cost of salvaging and delivering the existing protective shield shall be included in the cost of Protective Shield.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF STRUCTURAL SHEETS

SHEET NO.	TITLE
S-1	General Plan and Elevation
S-2	General Notes and Total Bill of Material
S-3	Construction Staging and Details
S-4	Temporary Concrete Barrier for Stage Construction
S-5	Top of Slab Elevations Layout
S-6	Top of Slab Elevations I
S-7	Top of Slab Elevations II
S-8	Top of West Approach Slab Elevations
S-9	Top of East Approach Slab Elevations
S-10	Superstructure Plan
S-11	Superstructure Details I
S-12	Superstructure Details II
S-13	Preformed Joint Strip Seal
S-14	Bridge Approach Slab Details I
S-15	Bridge Approach Slab Details II
S-16	Framing Plan and Beam Elevation
S-17	Beam Details
S-18	Bearing Details
S-19	Abutment Removal Details
S-20	West Abutment Plan and Elevation
S-21	East Abutment Plan and Elevation
S-22	Abutment Details
S-23	Pier Removal Details
S-24	Pier Repair Details
S-25	Pier 1 Cap Modifications
S-26	Pier 2 Cap Modifications
S-27	Pier 3 Cap Modifications
S-28	Bar Splicer Assembly Details
S-29	Drainage Scupper DS-11
S-30	Cantilever Forming Brackets for Superstructures with W27 Beams and Smaller

STATION 20+00
RE-BUILT 20__ BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 016-0275

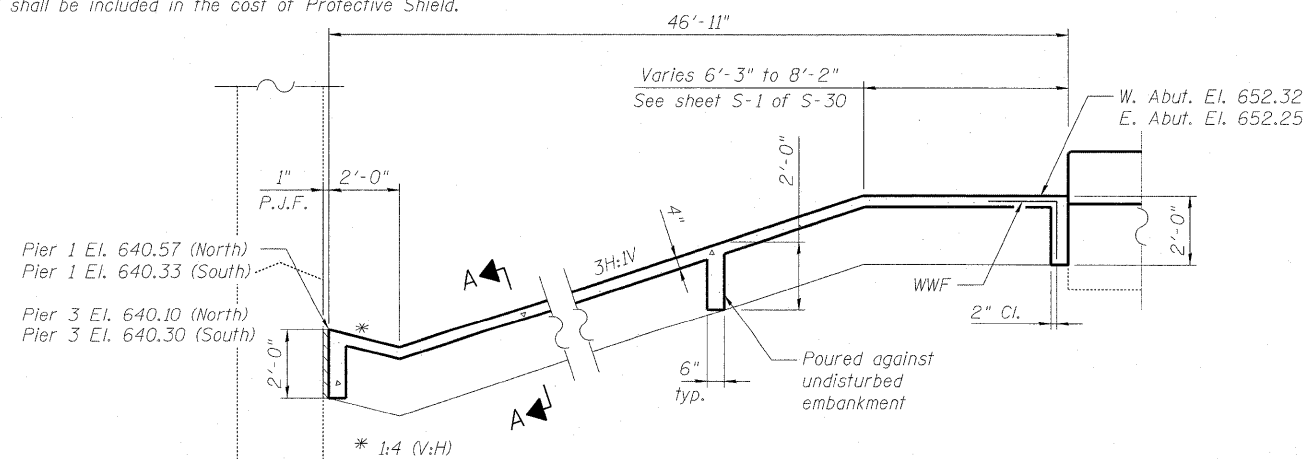
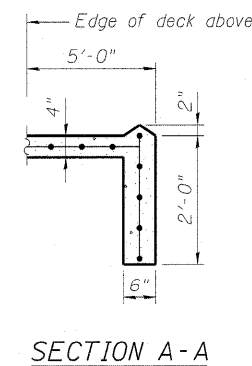
NAME PLATE

See Std. 515001

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

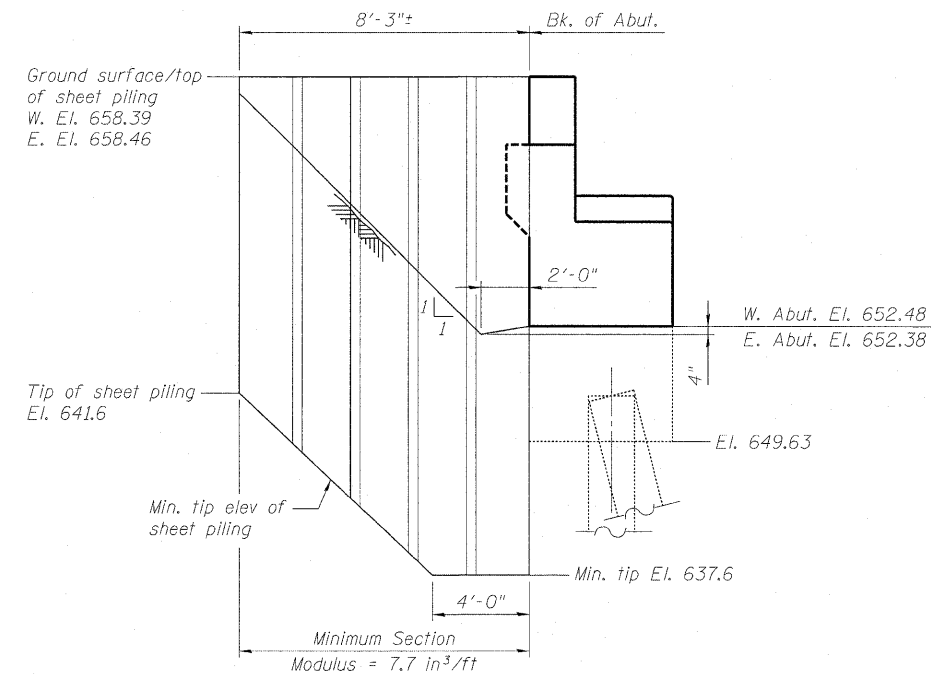
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	-	190	190
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu. Yd.	-	112	112
Protective Shield	Sq. Yd.	1086	-	1086
Structure Excavation	Cu. Yd.	-	190	190
Concrete Structures	Cu. Yd.	-	193.6	193.6
Concrete Superstructure	Cu. Yd.	696.0	-	696.0
Bridge Deck Grooving	Sq. Yd.	1819	-	1819
Protective Coat	Sq. Yd.	2337	-	2337
Furnishing and Erecting Structural Steel	L. Sum	-	1	1
Stud Shear Connectors	Each	8700	-	8700
Reinforcement Bars, Epoxy Coated	Pound	167590	20150	187740
Bar Splicers	Each	955	184	1139
Sloped 4 Inch	Sq. Yd.	-	838	838
Temporary Sheet Piling	Sq. Ft.	-	327	327
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	136	-	136
Elastomeric Bearing Assembly, Type I	Each	40	-	40
Anchor Bolts, 1"	Each	40	-	40
Anchor Bolts, 1 1/4"	Each	20	-	20
Anchor Bolts, 1/2"	Each	40	-	40
Concrete Sealer	Sq. Ft.	-	3900	3900
Geocomposite Wall Drain	Sq. Yd.	-	110	110
Pipe Underdrains for Structures, 4"	Foot	-	221	221
Mechanical Splice	Each	-	306	306
Drainage Scupper, DS-11	Each	4	-	4
Structural Repair of Concrete (Depth < 5")	Sq. Ft.	-	105	105
Deck Slab Repair (Partial)	Sq. Yd.	110	-	110



SECTION THRU ABUTMENT SLOPE WALL

Slope wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



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. Sheet piling design based on assumed soil properties. The contractor shall monitor the sheet piling for movement/poor performance and notify the Engineer.

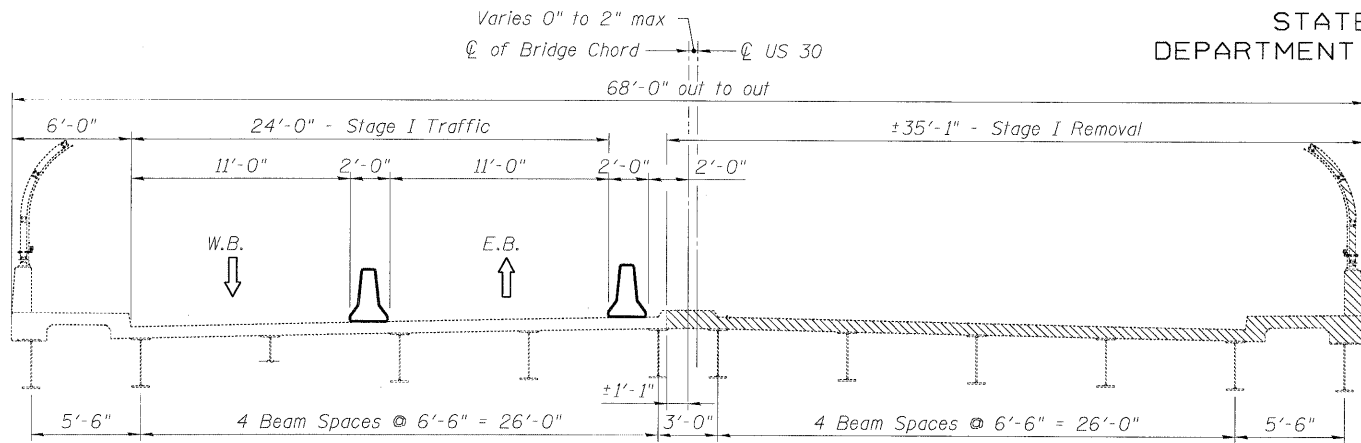
**GENERAL NOTES AND
TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-0275**

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

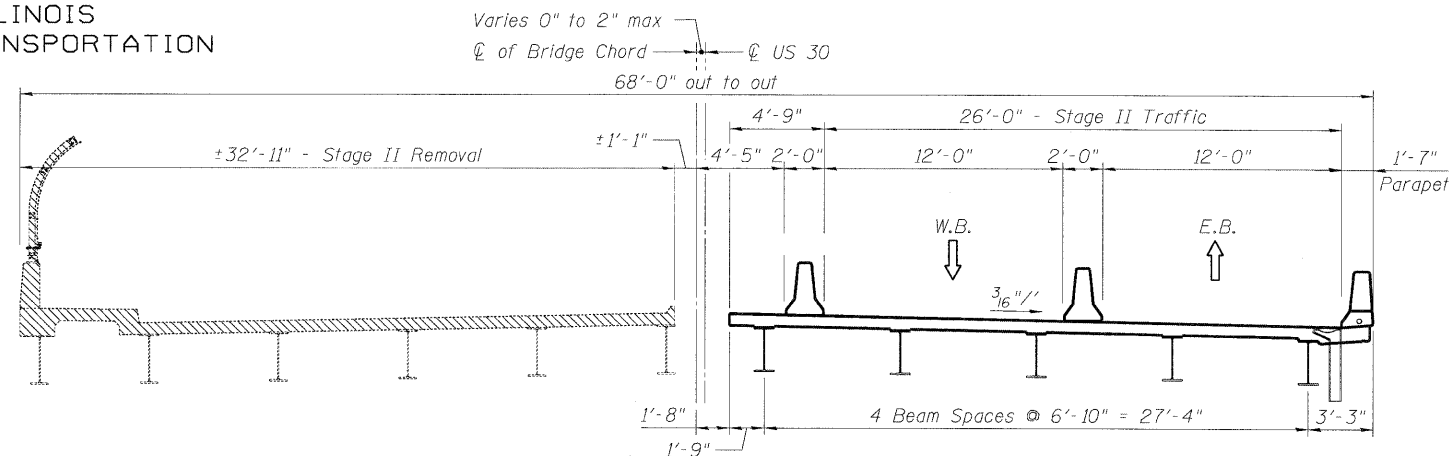
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job No. 910

SHEET NO. S-2	F.A.P RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 47
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

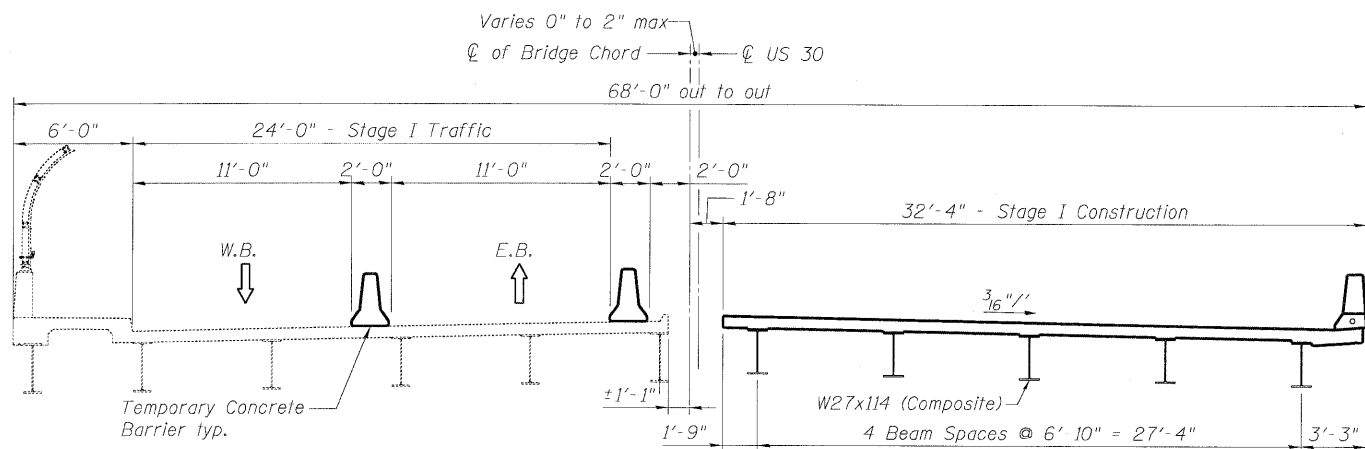
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



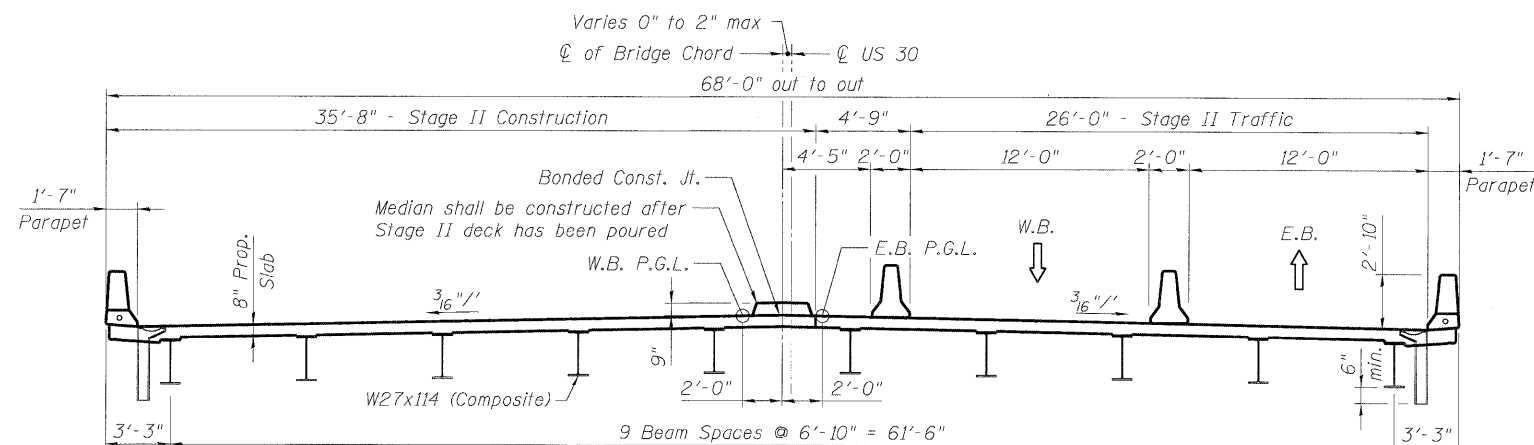
STAGE I REMOVAL



STAGE II REMOVAL

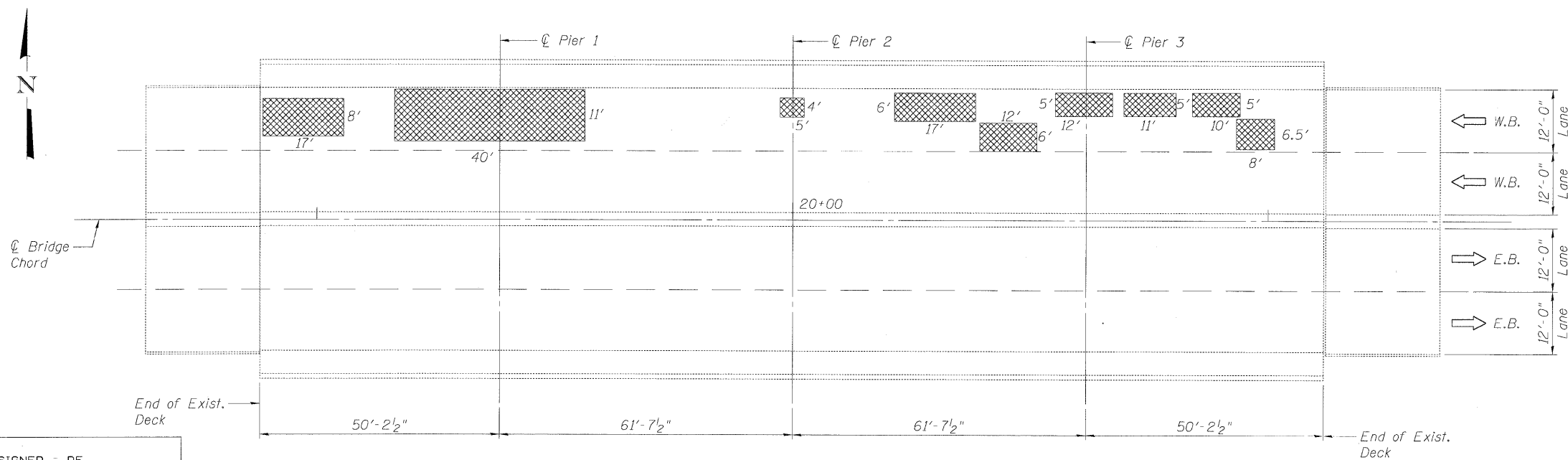


STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

For final dimensions see sheet S-10 of S-30.



PRESTAGE DECK SLAB REPAIR (PARTIAL DEPTH)

NOTES

1. Cross section views are looking east.
2. Removal of existing Bridge Mounted Fence shall be included in the cost of Removal of Existing Superstructures.
3. Longitudinal removal line shall follow existing beam flange.
4. See MOT plans for pre-stage traffic configuration during deck patching operations.

LEGEND

- Indicates Removal of Existing Superstructures
- Indicates Deck Slab Repair (Partial Depth)

CONSTRUCTION STAGING AND DETAILS
STRUCTURE NO. 016-0275

DESIGNED	DF
CHECKED	TAH
DRAWN	LAM
CHECKED	DF

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

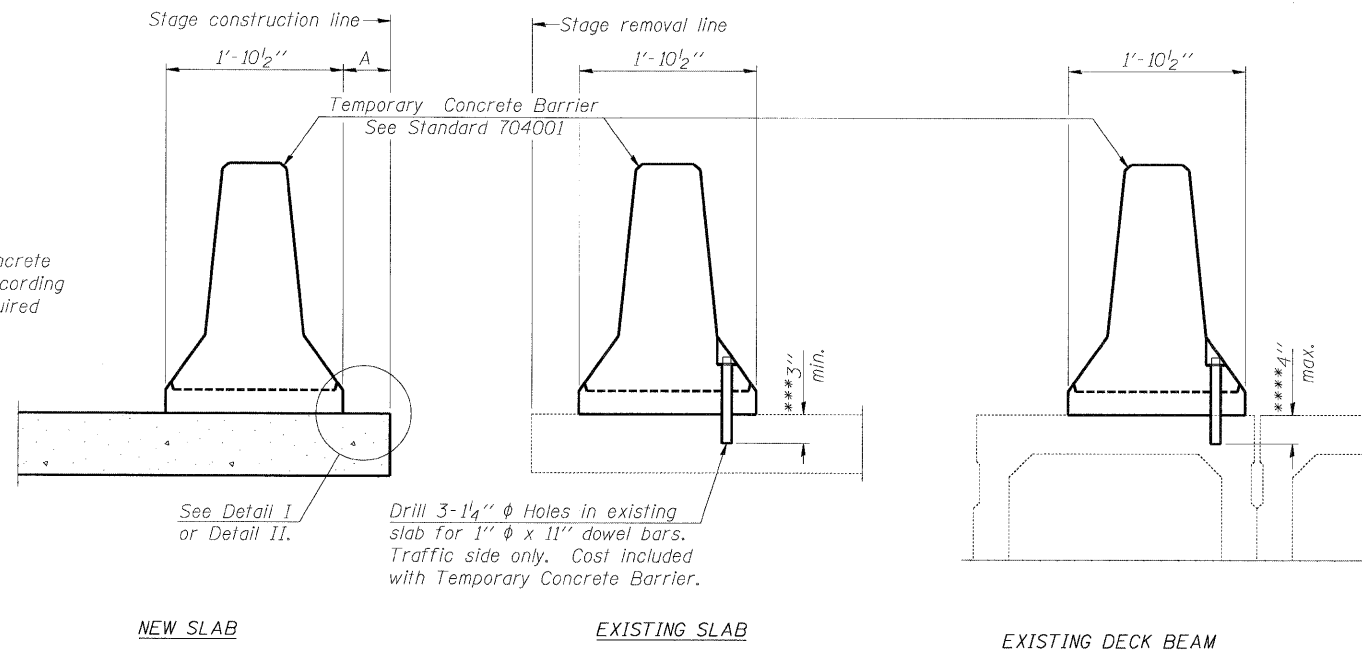


SHEET NO. S-3
S-30 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	48
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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".



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

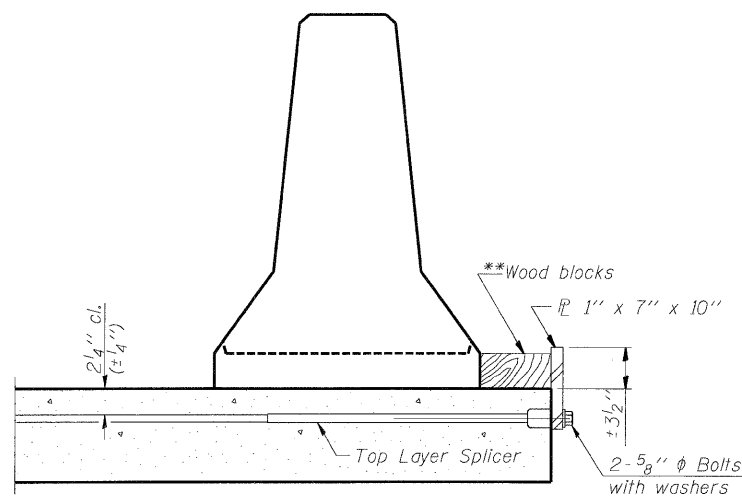
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

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

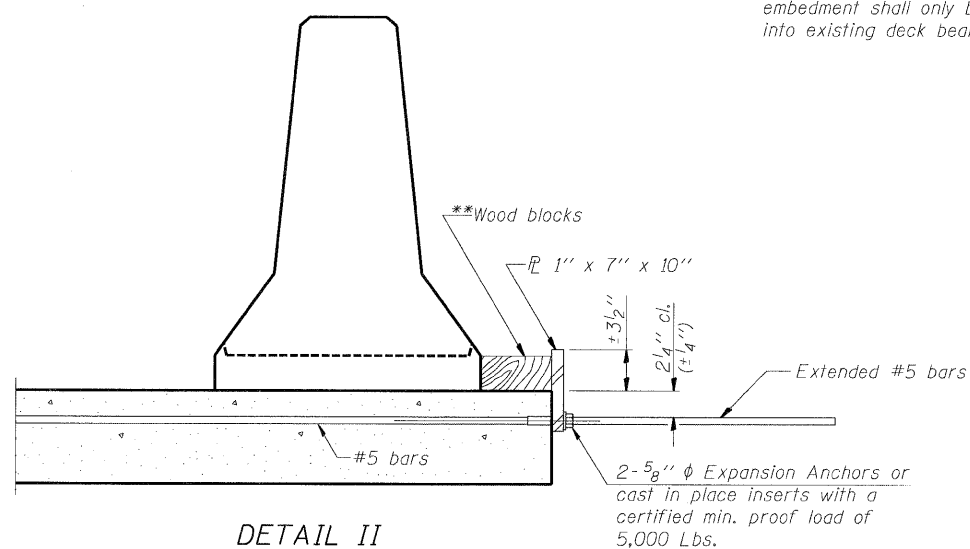
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

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

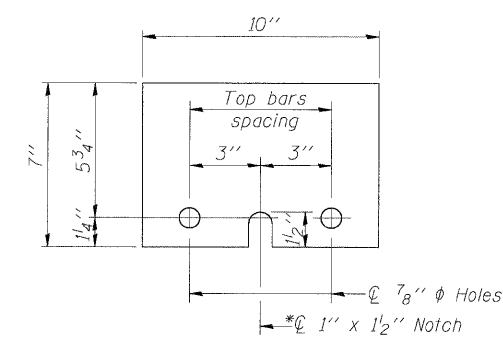


DETAIL I



DETAIL II

**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{L} 1" x 7" x 10"

* Required only with Detail II

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

R-27

10-1-08

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

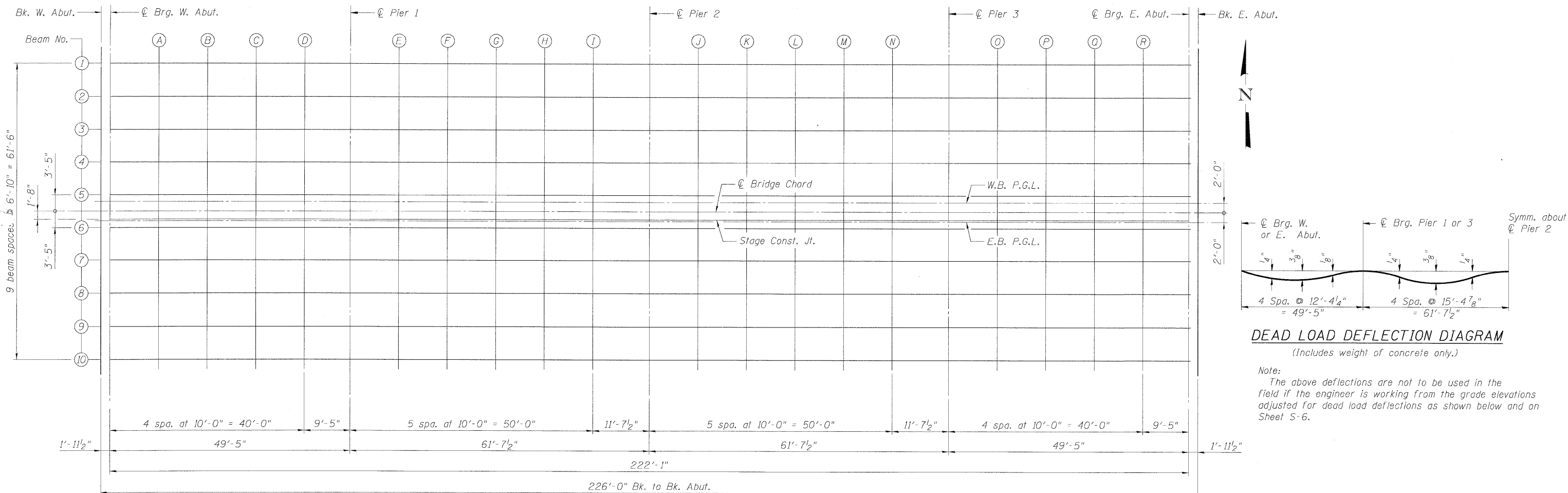


SHEET NO. S-4
S-30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	49
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0275

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



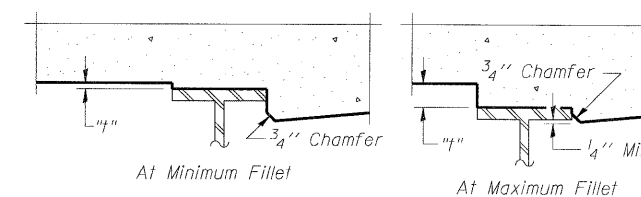
PLAN

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-30.75	657.94	657.94
☉ BRG. W. ABUT	1888.96	-30.75	657.95	657.95
A	1898.96	-30.75	658.02	658.04
B	1908.96	-30.75	658.08	658.11
C	1918.96	-30.75	658.14	658.16
D	1928.96	-30.75	658.19	658.20
☉ PIER 1	1938.38	-30.75	658.23	658.23
E	1948.38	-30.75	658.27	658.28
F	1958.38	-30.75	658.30	658.33
G	1968.38	-30.75	658.33	658.36
H	1978.38	-30.75	658.35	658.38
I	1988.38	-30.75	658.36	658.38
☉ PIER 2	2000.00	-30.75	658.37	658.37
J	2010.00	-30.75	658.37	658.38
K	2020.00	-30.75	658.36	658.39
L	2030.00	-30.75	658.35	658.39
M	2040.00	-30.75	658.33	658.36
N	2050.00	-30.75	658.31	658.32
☉ PIER 3	2061.63	-30.75	658.27	658.27
O	2071.63	-30.75	658.23	658.24
P	2081.63	-30.75	658.19	658.21
Q	2091.63	-30.75	658.14	658.16
R	2101.63	-30.75	658.08	658.10
☉ BRG. E. ABUT	2111.05	-30.75	658.02	658.02
BK. E. ABUT	2113.00	-30.75	658.00	658.00

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-23.92	658.04	658.04
☉ BRG. W. ABUT	1888.96	-23.92	658.06	658.06
A	1898.96	-23.92	658.13	658.15
B	1908.96	-23.92	658.19	658.22
C	1918.96	-23.92	658.25	658.27
D	1928.96	-23.92	658.30	658.31
☉ PIER 1	1938.38	-23.92	658.34	658.34
E	1948.38	-23.92	658.38	658.39
F	1958.38	-23.92	658.41	658.44
G	1968.38	-23.92	658.44	658.47
H	1978.38	-23.92	658.46	658.49
I	1988.38	-23.92	658.47	658.48
☉ PIER 2	2000.00	-23.92	658.48	658.48
J	2010.00	-23.92	658.48	658.49
K	2020.00	-23.92	658.47	658.50
L	2030.00	-23.92	658.46	658.49
M	2040.00	-23.92	658.44	658.47
N	2050.00	-23.92	658.41	658.43
☉ PIER 3	2061.63	-23.92	658.38	658.38
O	2071.63	-23.92	658.34	658.35
P	2081.63	-23.92	658.29	658.32
Q	2091.63	-23.92	658.24	658.27
R	2101.63	-23.92	658.18	658.20
☉ BRG. E. ABUT	2111.05	-23.92	658.12	658.12
BK. E. ABUT	2113.00	-23.92	658.11	658.11



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 and on Sheet S-6. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown below and on Sheet S-6, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

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

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

TOP OF SLAB ELEVATIONS LAYOUT
STRUCTURE NO. 016-0275

SHEET NO. S-5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-30 SHEETS	0353	0303.1B-1	COOK	91	50
SN 016-0275			CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-17.08	658.15	658.15
Ⓞ BRG. W. ABUT	1888.96	-17.08	658.17	658.17
A	1898.96	-17.08	658.23	658.25
B	1908.96	-17.08	658.30	658.33
C	1918.96	-17.08	658.35	658.38
D	1928.96	-17.08	658.41	658.41
Ⓞ PIER 1	1938.38	-17.08	658.45	658.45
E	1948.38	-17.08	658.49	658.50
F	1958.38	-17.08	658.52	658.55
G	1968.38	-17.08	658.54	658.58
H	1978.38	-17.08	658.56	658.59
I	1988.38	-17.08	658.58	658.59
Ⓞ PIER 2	2000.00	-17.08	658.58	658.58
J	2010.00	-17.08	658.58	658.60
K	2020.00	-17.08	658.58	658.61
L	2030.00	-17.08	658.57	658.60
M	2040.00	-17.08	658.55	658.58
N	2050.00	-17.08	658.52	658.54
Ⓞ PIER 3	2061.63	-17.08	658.48	658.48
O	2071.63	-17.08	658.45	658.45
P	2081.63	-17.08	658.40	658.42
Q	2091.63	-17.08	658.35	658.38
R	2101.63	-17.08	658.29	658.31
Ⓞ BRG. E. ABUT	2111.05	-17.08	658.23	658.23
BK. E. ABUT	2113.00	-17.08	658.22	658.22

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-10.25	658.26	658.26
Ⓞ BRG. W. ABUT	1888.96	-10.25	658.27	658.27
A	1898.96	-10.25	658.34	658.36
B	1908.96	-10.25	658.40	658.43
C	1918.96	-10.25	658.46	658.48
D	1928.96	-10.25	658.51	658.52
Ⓞ PIER 1	1938.38	-10.25	658.55	658.55
E	1948.38	-10.25	658.59	658.60
F	1958.38	-10.25	658.62	658.65
G	1968.38	-10.25	658.65	658.69
H	1978.38	-10.25	658.67	658.70
I	1988.38	-10.25	658.68	658.70
Ⓞ PIER 2	2000.00	-10.25	658.69	658.69
J	2010.00	-10.25	658.69	658.70
K	2020.00	-10.25	658.69	658.71
L	2030.00	-10.25	658.67	658.71
M	2040.00	-10.25	658.65	658.68
N	2050.00	-10.25	658.63	658.64
Ⓞ PIER 3	2061.63	-10.25	658.59	658.59
O	2071.63	-10.25	658.55	658.56
P	2081.63	-10.25	658.51	658.53
Q	2091.63	-10.25	658.46	658.48
R	2101.63	-10.25	658.40	658.42
Ⓞ BRG. E. ABUT	2111.05	-10.25	658.34	658.34
BK. E. ABUT	2113.00	-10.25	658.33	658.33

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-3.42	658.36	658.36
Ⓞ BRG. W. ABUT	1888.96	-3.42	658.38	658.38
A	1898.96	-3.42	658.45	658.47
B	1908.96	-3.42	658.51	658.54
C	1918.96	-3.42	658.57	658.59
D	1928.96	-3.42	658.62	658.63
Ⓞ PIER 1	1938.38	-3.42	658.66	658.66
E	1948.38	-3.42	658.70	658.71
F	1958.38	-3.42	658.73	658.76
G	1968.38	-3.42	658.76	658.79
H	1978.38	-3.42	658.78	658.81
I	1988.38	-3.42	658.79	658.80
Ⓞ PIER 2	2000.00	-3.42	658.80	658.80
J	2010.00	-3.42	658.80	658.81
K	2020.00	-3.42	658.79	658.82
L	2030.00	-3.42	658.78	658.81
M	2040.00	-3.42	658.76	658.79
N	2050.00	-3.42	658.73	658.75
Ⓞ PIER 3	2061.63	-3.42	658.70	658.70
O	2071.63	-3.42	658.66	658.67
P	2081.63	-3.42	658.61	658.64
Q	2091.63	-3.42	658.56	658.59
R	2101.63	-3.42	658.51	658.52
Ⓞ BRG. E. ABUT	2111.05	-3.42	658.45	658.45
BK. E. ABUT	2113.00	-3.42	658.43	658.43

WESTBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	-2.00	658.39	658.39
Ⓞ BRG. W. ABUT	1888.96	-2.00	658.40	658.40
A	1898.96	-2.00	658.47	658.49
B	1908.96	-2.00	658.53	658.56
C	1918.96	-2.00	658.59	658.61
D	1928.96	-2.00	658.64	658.65
Ⓞ PIER 1	1938.38	-2.00	658.68	658.68
E	1948.38	-2.00	658.72	658.73
F	1958.38	-2.00	658.75	658.78
G	1968.38	-2.00	658.78	658.81
H	1978.38	-2.00	658.80	658.83
I	1988.38	-2.00	658.81	658.83
Ⓞ PIER 2	2000.00	-2.00	658.82	658.82
J	2010.00	-2.00	658.82	658.83
K	2020.00	-2.00	658.81	658.84
L	2030.00	-2.00	658.80	658.84
M	2040.00	-2.00	658.78	658.81
N	2050.00	-2.00	658.76	658.77
Ⓞ PIER 3	2061.63	-2.00	658.72	658.72
O	2071.63	-2.00	658.68	658.69
P	2081.63	-2.00	658.64	658.66
Q	2091.63	-2.00	658.58	658.61
R	2101.63	-2.00	658.53	658.55
Ⓞ BRG. E. ABUT	2111.05	-2.00	658.47	658.47
BK. E. ABUT	2113.00	-2.00	658.45	658.45

Ⓞ BRIDGE CHORD & CROWN POINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	0.00	658.42	658.42
Ⓞ BRG. W. ABUT	1888.96	0.00	658.43	658.43
A	1898.96	0.00	658.50	658.52
B	1908.96	0.00	658.56	658.59
C	1918.96	0.00	658.62	658.64
D	1928.96	0.00	658.67	658.68
Ⓞ PIER 1	1938.38	0.00	658.71	658.71
E	1948.38	0.00	658.75	658.76
F	1958.38	0.00	658.79	658.81
G	1968.38	0.00	658.81	658.85
H	1978.38	0.00	658.83	658.86
I	1988.38	0.00	658.84	658.86
Ⓞ PIER 2	2000.00	0.00	658.85	658.85
J	2010.00	0.00	658.85	658.86
K	2020.00	0.00	658.85	658.87
L	2030.00	0.00	658.83	658.87
M	2040.00	0.00	658.81	658.84
N	2050.00	0.00	658.79	658.80
Ⓞ PIER 3	2061.63	0.00	658.75	658.75
O	2071.63	0.00	658.71	658.72
P	2081.63	0.00	658.67	658.69
Q	2091.63	0.00	658.62	658.64
R	2101.63	0.00	658.56	658.58
Ⓞ BRG. E. ABUT	2111.05	0.00	658.50	658.50
BK. E. ABUT	2113.00	0.00	658.49	658.49

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	1.67	658.39	658.39
Ⓞ BRG. W. ABUT	1888.96	1.67	658.41	658.41
A	1898.96	1.67	658.48	658.50
B	1908.96	1.67	658.54	658.57
C	1918.96	1.67	658.60	658.62
D	1928.96	1.67	658.65	658.65
Ⓞ PIER 1	1938.38	1.67	658.69	658.69
E	1948.38	1.67	658.73	658.74
F	1958.38	1.67	658.76	658.79
G	1968.38	1.67	658.78	658.82
H	1978.38	1.67	658.80	658.83
I	1988.38	1.67	658.82	658.83
Ⓞ PIER 2	2000.00	1.67	658.83	658.83
J	2010.00	1.67	658.83	658.84
K	2020.00	1.67	658.82	658.85
L	2030.00	1.67	658.81	658.84
M	2040.00	1.67	658.79	658.82
N	2050.00	1.67	658.76	658.78
Ⓞ PIER 3	2061.63	1.67	658.73	658.73
O	2071.63	1.67	658.69	658.70
P	2081.63	1.67	658.64	658.66
Q	2091.63	1.67	658.59	658.62
R	2101.63	1.67	658.53	658.55
Ⓞ BRG. E. ABUT	2111.05	1.67	658.47	658.47
BK. E. ABUT	2113.00	1.67	658.46	658.46

**TOP OF SLAB ELEVATIONS I
STRUCTURE NO. 016-0275**

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

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

SHEET NO. S-6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0353	0303.1B-1	COOK	91	51
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	2.00	658.39	658.39
⊙ BRG. W. ABUT	1888.96	2.00	658.40	658.40
A	1898.96	2.00	658.47	658.49
B	1908.96	2.00	658.53	658.56
C	1918.96	2.00	658.59	658.61
D	1928.96	2.00	658.64	658.65
⊙ PIER 1	1938.38	2.00	658.68	658.68
E	1948.38	2.00	658.72	658.73
F	1958.38	2.00	658.75	658.78
G	1968.38	2.00	658.78	658.81
H	1978.38	2.00	658.80	658.83
I	1988.38	2.00	658.81	658.83
⊙ PIER 2	2000.00	2.00	658.82	658.82
J	2010.00	2.00	658.82	658.83
K	2020.00	2.00	658.81	658.84
L	2030.00	2.00	658.80	658.84
M	2040.00	2.00	658.78	658.81
N	2050.00	2.00	658.76	658.77
⊙ PIER 3	2061.63	2.00	658.72	658.72
O	2071.63	2.00	658.68	658.69
P	2081.63	2.00	658.64	658.66
Q	2091.63	2.00	658.58	658.61
R	2101.63	2.00	658.53	658.55
⊙ BRG. E. ABUT	2111.05	2.00	658.47	658.47
BK. E. ABUT	2113.00	2.00	658.45	658.45

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	3.42	658.36	658.36
⊙ BRG. W. ABUT	1888.96	3.42	658.38	658.38
A	1898.96	3.42	658.45	658.47
B	1908.96	3.42	658.51	658.54
C	1918.96	3.42	658.57	658.59
D	1928.96	3.42	658.62	658.63
⊙ PIER 1	1938.38	3.42	658.66	658.66
E	1948.38	3.42	658.70	658.71
F	1958.38	3.42	658.73	658.76
G	1968.38	3.42	658.76	658.79
H	1978.38	3.42	658.78	658.81
I	1988.38	3.42	658.79	658.80
⊙ PIER 2	2000.00	3.42	658.80	658.80
J	2010.00	3.42	658.80	658.81
K	2020.00	3.42	658.79	658.82
L	2030.00	3.42	658.78	658.81
M	2040.00	3.42	658.76	658.79
N	2050.00	3.42	658.73	658.75
⊙ PIER 3	2061.63	3.42	658.70	658.70
O	2071.63	3.42	658.66	658.67
P	2081.63	3.42	658.61	658.64
Q	2091.63	3.42	658.56	658.59
R	2101.63	3.42	658.51	658.52
⊙ BRG. E. ABUT	2111.05	3.42	658.45	658.45
BK. E. ABUT	2113.00	3.42	658.43	658.43

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	10.25	658.26	658.26
⊙ BRG. W. ABUT	1888.96	10.25	658.27	658.27
A	1898.96	10.25	658.34	658.36
B	1908.96	10.25	658.40	658.43
C	1918.96	10.25	658.46	658.48
D	1928.96	10.25	658.51	658.52
⊙ PIER 1	1938.38	10.25	658.55	658.55
E	1948.38	10.25	658.59	658.60
F	1958.38	10.25	658.62	658.65
G	1968.38	10.25	658.65	658.69
H	1978.38	10.25	658.67	658.70
I	1988.38	10.25	658.68	658.70
⊙ PIER 2	2000.00	10.25	658.69	658.69
J	2010.00	10.25	658.69	658.70
K	2020.00	10.25	658.69	658.71
L	2030.00	10.25	658.67	658.71
M	2040.00	10.25	658.65	658.68
N	2050.00	10.25	658.63	658.64
⊙ PIER 3	2061.63	10.25	658.59	658.59
O	2071.63	10.25	658.55	658.56
P	2081.63	10.25	658.51	658.53
Q	2091.63	10.25	658.46	658.48
R	2101.63	10.25	658.40	658.42
⊙ BRG. E. ABUT	2111.05	10.25	658.34	658.34
BK. E. ABUT	2113.00	10.25	658.33	658.33

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	17.08	658.15	658.15
⊙ BRG. W. ABUT	1888.96	17.08	658.17	658.17
A	1898.96	17.08	658.23	658.25
B	1908.96	17.08	658.30	658.33
C	1918.96	17.08	658.35	658.38
D	1928.96	17.08	658.41	658.41
⊙ PIER 1	1938.38	17.08	658.45	658.45
E	1948.38	17.08	658.49	658.50
F	1958.38	17.08	658.52	658.55
G	1968.38	17.08	658.54	658.58
H	1978.38	17.08	658.56	658.59
I	1988.38	17.08	658.58	658.59
⊙ PIER 2	2000.00	17.08	658.58	658.58
J	2010.00	17.08	658.58	658.60
K	2020.00	17.08	658.58	658.61
L	2030.00	17.08	658.57	658.60
M	2040.00	17.08	658.55	658.58
N	2050.00	17.08	658.52	658.54
⊙ PIER 3	2061.63	17.08	658.48	658.48
O	2071.63	17.08	658.45	658.45
P	2081.63	17.08	658.40	658.42
Q	2091.63	17.08	658.35	658.38
R	2101.63	17.08	658.29	658.31
⊙ BRG. E. ABUT	2111.05	17.08	658.23	658.23
BK. E. ABUT	2113.00	17.08	658.22	658.22

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	23.92	658.04	658.04
⊙ BRG. W. ABUT	1888.96	23.92	658.06	658.06
A	1898.96	23.92	658.13	658.15
B	1908.96	23.92	658.19	658.22
C	1918.96	23.92	658.25	658.27
D	1928.96	23.92	658.30	658.31
⊙ PIER 1	1938.38	23.92	658.34	658.34
E	1948.38	23.92	658.38	658.39
F	1958.38	23.92	658.41	658.44
G	1968.38	23.92	658.44	658.47
H	1978.38	23.92	658.46	658.49
I	1988.38	23.92	658.47	658.48
⊙ PIER 2	2000.00	23.92	658.48	658.48
J	2010.00	23.92	658.48	658.49
K	2020.00	23.92	658.47	658.50
L	2030.00	23.92	658.46	658.49
M	2040.00	23.92	658.44	658.47
N	2050.00	23.92	658.41	658.43
⊙ PIER 3	2061.63	23.92	658.38	658.38
O	2071.63	23.92	658.34	658.35
P	2081.63	23.92	658.29	658.32
Q	2091.63	23.92	658.24	658.27
R	2101.63	23.92	658.18	658.20
⊙ BRG. E. ABUT	2111.05	23.92	658.12	658.12
BK. E. ABUT	2113.00	23.92	658.11	658.11

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT	1887.00	30.75	657.94	657.94
⊙ BRG. W. ABUT	1888.96	30.75	657.95	657.95
A	1898.96	30.75	658.02	658.04
B	1908.96	30.75	658.08	658.11
C	1918.96	30.75	658.14	658.16
D	1928.96	30.75	658.19	658.20
⊙ PIER 1	1938.38	30.75	658.23	658.23
E	1948.38	30.75	658.27	658.28
F	1958.38	30.75	658.30	658.33
G	1968.38	30.75	658.33	658.36
H	1978.38	30.75	658.35	658.38
I	1988.38	30.75	658.36	658.38
⊙ PIER 2	2000.00	30.75	658.37	658.37
J	2010.00	30.75	658.37	658.38
K	2020.00	30.75	658.36	658.39
L	2030.00	30.75	658.35	658.39
M	2040.00	30.75	658.33	658.36
N	2050.00	30.75	658.31	658.32
⊙ PIER 3	2061.63	30.75	658.27	658.27
O	2071.63	30.75	658.23	658.24
P	2081.63	30.75	658.19	658.21
Q	2091.63	30.75	658.14	658.16
R	2101.63	30.75	658.08	658.10
⊙ BRG. E. ABUT	2111.05	30.75	658.02	658.02
BK. E. ABUT	2113.00	30.75	658.00	658.00

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

TOP OF SLAB ELEVATIONS II
STRUCTURE NO. 016-0275

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



SHEET NO. S-7
S-30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	52
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	-32.42	657.66
A1	1867.00	-32.42	657.75
A2	1877.00	-32.42	657.83
East End of West Appr Pvmt	1887.00	-32.42	657.91

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	-26.0	657.76
A1	1867.00	-26.0	657.85
A2	1877.00	-26.0	657.93
East End of West Appr Pvmt	1887.00	-26.0	658.01

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	-2.0	658.14
A1	1867.00	-2.0	658.23
A2	1877.00	-2.0	658.31
East End of West Appr Pvmt	1887.00	-2.0	658.39

Q BRIDGE CHORD

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	0.0	658.17
A1	1867.00	0.0	658.26
A2	1877.00	0.0	658.34
East End of West Appr Pvmt	1887.00	0.0	658.42

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	1.67	658.14
A1	1867.00	1.67	658.23
A2	1877.00	1.67	658.32
East End of West Appr Pvmt	1887.00	1.67	658.39

E.B. P.G.L.

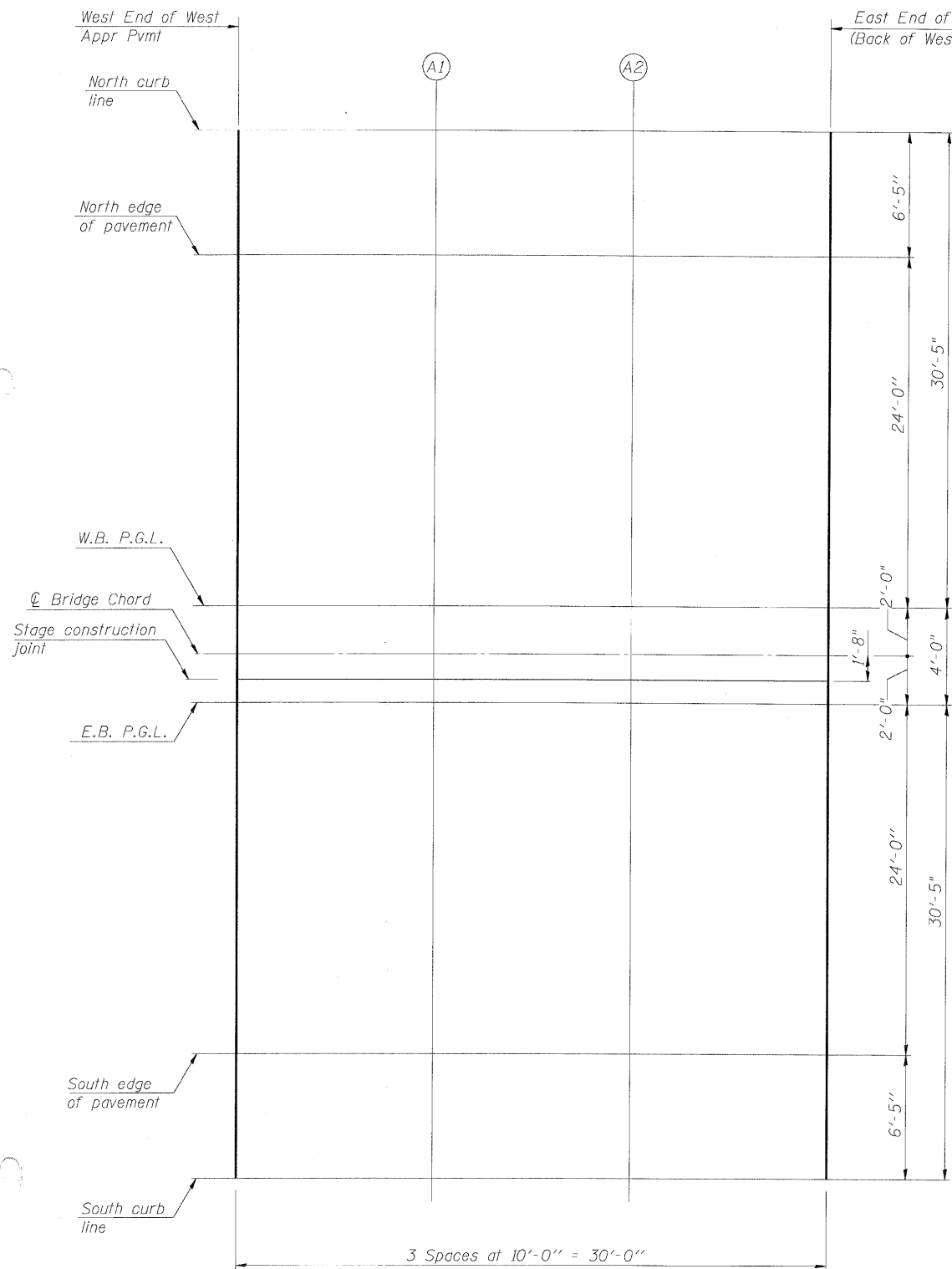
Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	2.0	658.14
A1	1867.00	2.0	658.23
A2	1877.00	2.0	658.31
East End of West Appr Pvmt	1887.00	2.0	658.39

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	26.0	657.76
A1	1867.00	26.0	657.85
A2	1877.00	26.0	657.93
East End of West Appr Pvmt	1887.00	26.0	658.01

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of West Appr Pvmt	1857.00	32.42	657.66
A1	1867.00	32.42	657.75
A2	1877.00	32.42	657.83
East End of West Appr Pvmt	1887.00	32.42	657.91



PLAN



DESIGNED - DF
CHECKED - TL
DRAWN - TL
CHECKED - BLU

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



SHEET NO. S-8	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0353	0303.1B-1	COOK	91	53
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

TOP OF WEST APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 016-0275

5/6/2009 9:38:44 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	-32.42	657.98
B1	2123.00	-32.42	657.91
B2	2133.00	-32.42	657.83
East End of East Appr Pvm	2143.00	-32.42	657.75

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	-26.0	658.08
B1	2123.00	-26.0	658.01
B2	2133.00	-26.0	657.93
East End of East Appr Pvm	2143.00	-26.0	657.85

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	-2.0	658.45
B1	2123.00	-2.0	658.38
B2	2133.00	-2.0	658.31
East End of East Appr Pvm	2143.00	-2.0	658.22

Q BRIDGE CHORD

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	0.0	658.49
B1	2123.00	0.0	658.41
B2	2133.00	0.0	658.34
East End of East Appr Pvm	2143.00	0.0	658.25

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	1.67	658.46
B1	2123.00	1.67	658.39
B2	2133.00	1.67	658.31
East End of East Appr Pvm	2143.00	1.67	658.23

E.B. P.G.L.

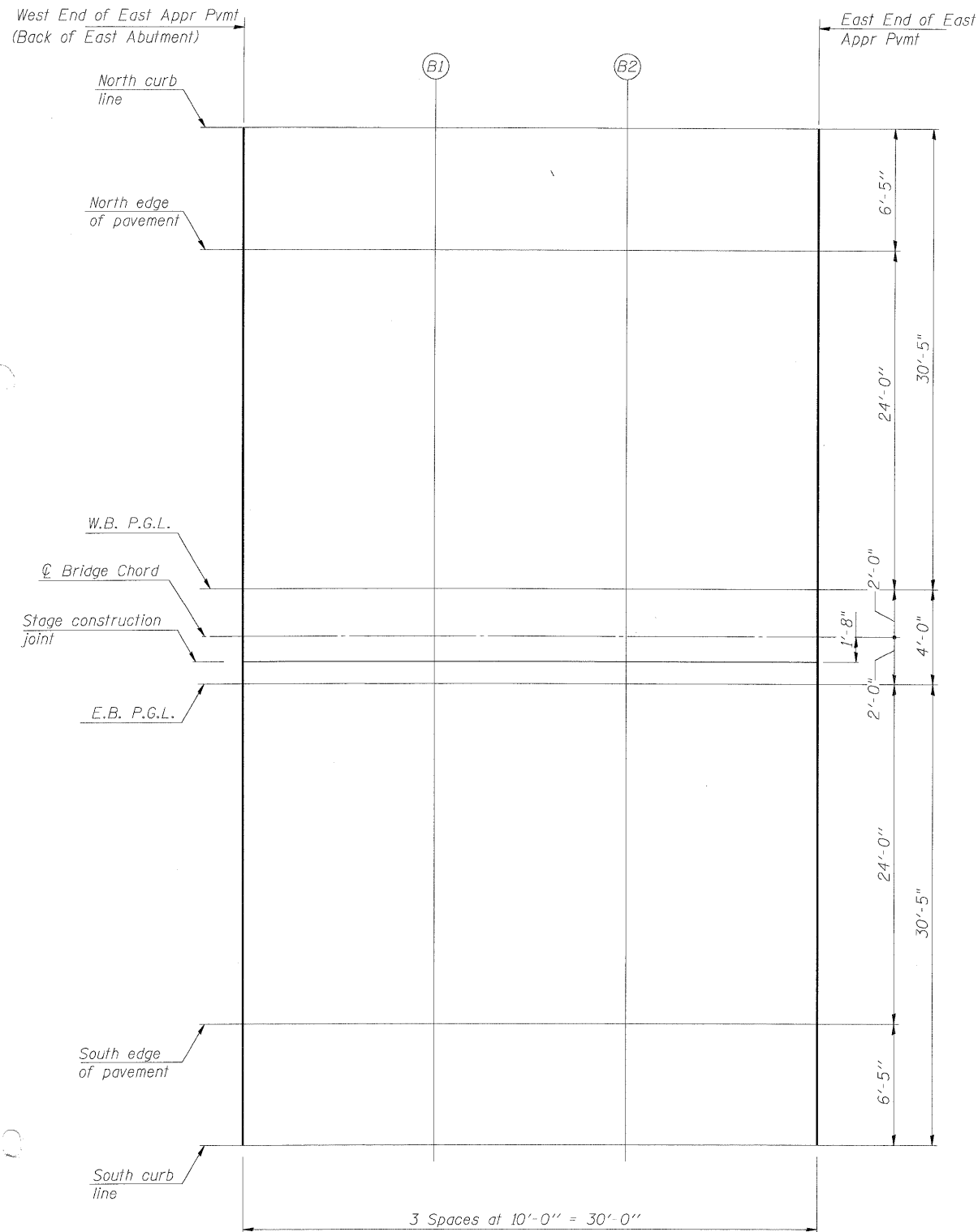
Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	2.0	658.45
B1	2123.00	2.0	658.38
B2	2133.00	2.0	658.31
East End of East Appr Pvm	2143.00	2.0	658.22

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	26.0	658.08
B1	2123.00	26.0	658.01
B2	2133.00	26.0	657.93
East End of East Appr Pvm	2143.00	26.0	657.85

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of East Appr Pvm	2113.00	32.42	657.98
B1	2123.00	32.42	657.91
B2	2133.00	32.42	657.83
East End of East Appr Pvm	2143.00	32.42	657.75



PLAN



DESIGNED - DF
CHECKED - TL
DRAWN - TL
CHECKED - BLU

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

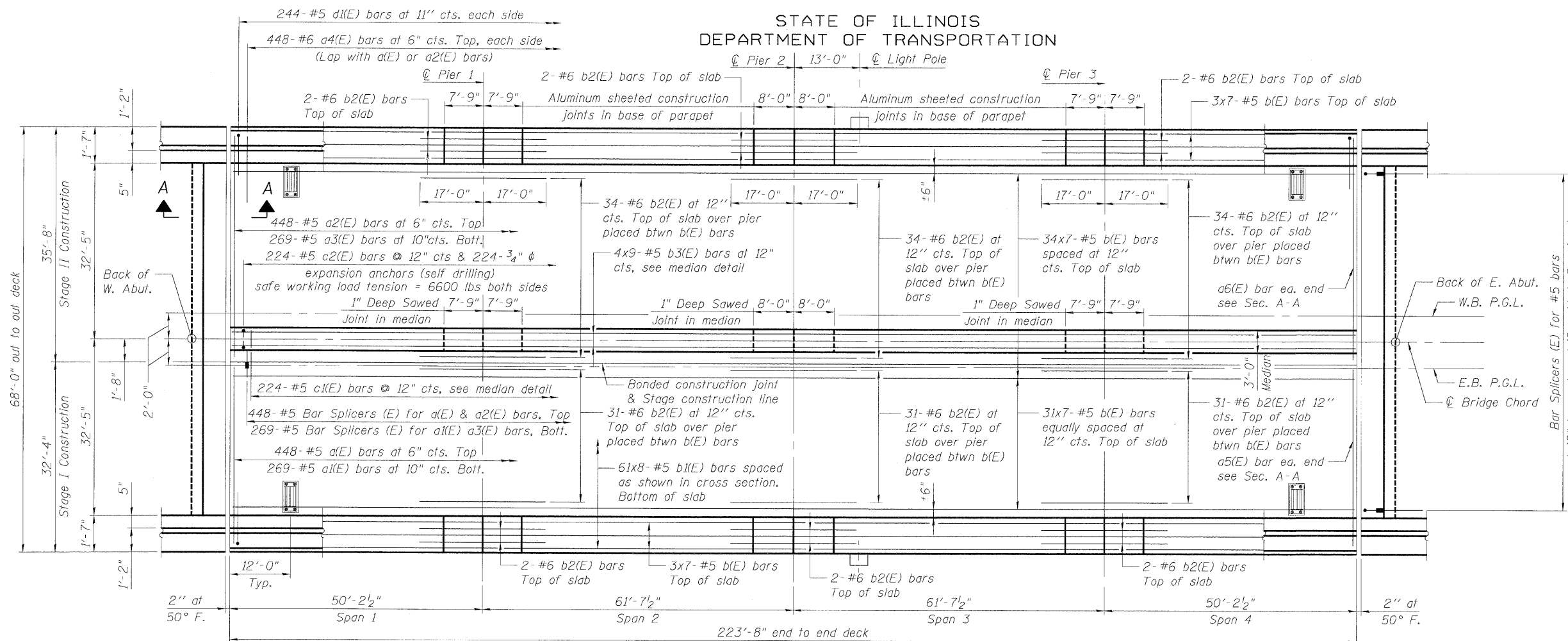


SHEET NO. S-9 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 54
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

TOP OF EAST APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 016-0275

5/6/2005 9:58:46 AM

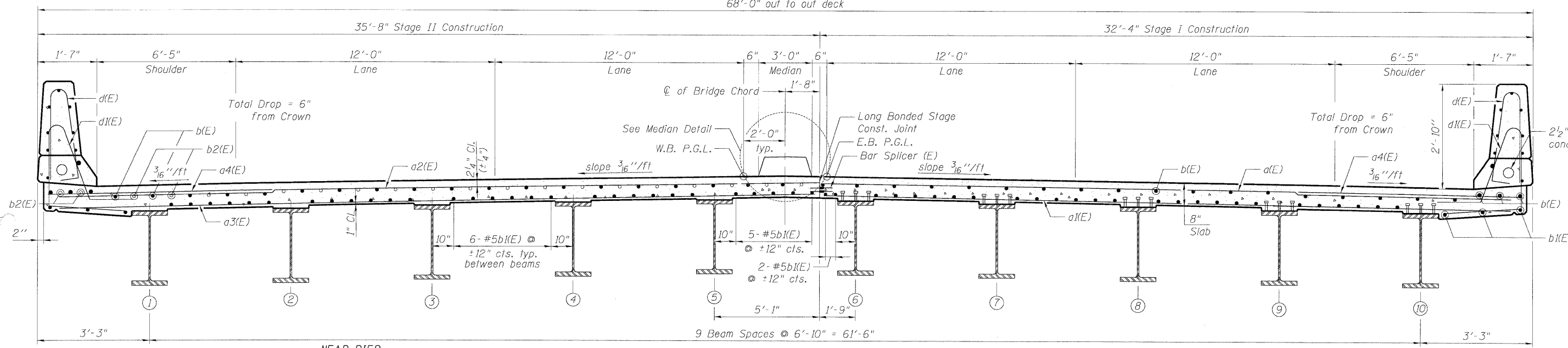
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DECK PLAN

- Notes:
1. Bars Indicated 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
 2. All edges shall have standard 3/4" chamfer except as noted.
 3. See Sheet S-12 of S-30 for superstructure details and Bill of Material.
 4. See Sheet S-11 of S-30 for parapet reinforcement & light pole details.
 5. See Sheet S-12 of S-30 for Section A-A.
 6. Provide 1" deep sawed joint in median at ϕ of piers and cut locations shown. See median detail Sheet S-12 of S-30.
 7. Cross section view is looking east.

MIN. BAR LAP
#5 Bar = 2'-2"



CROSS SECTION

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

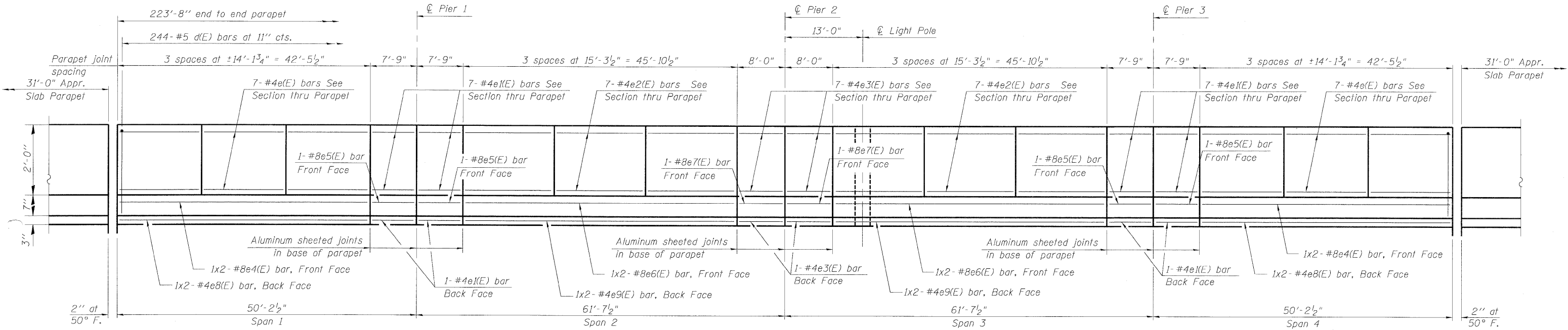
SUPERSTRUCTURE PLAN
STRUCTURE NO. 016-0275

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

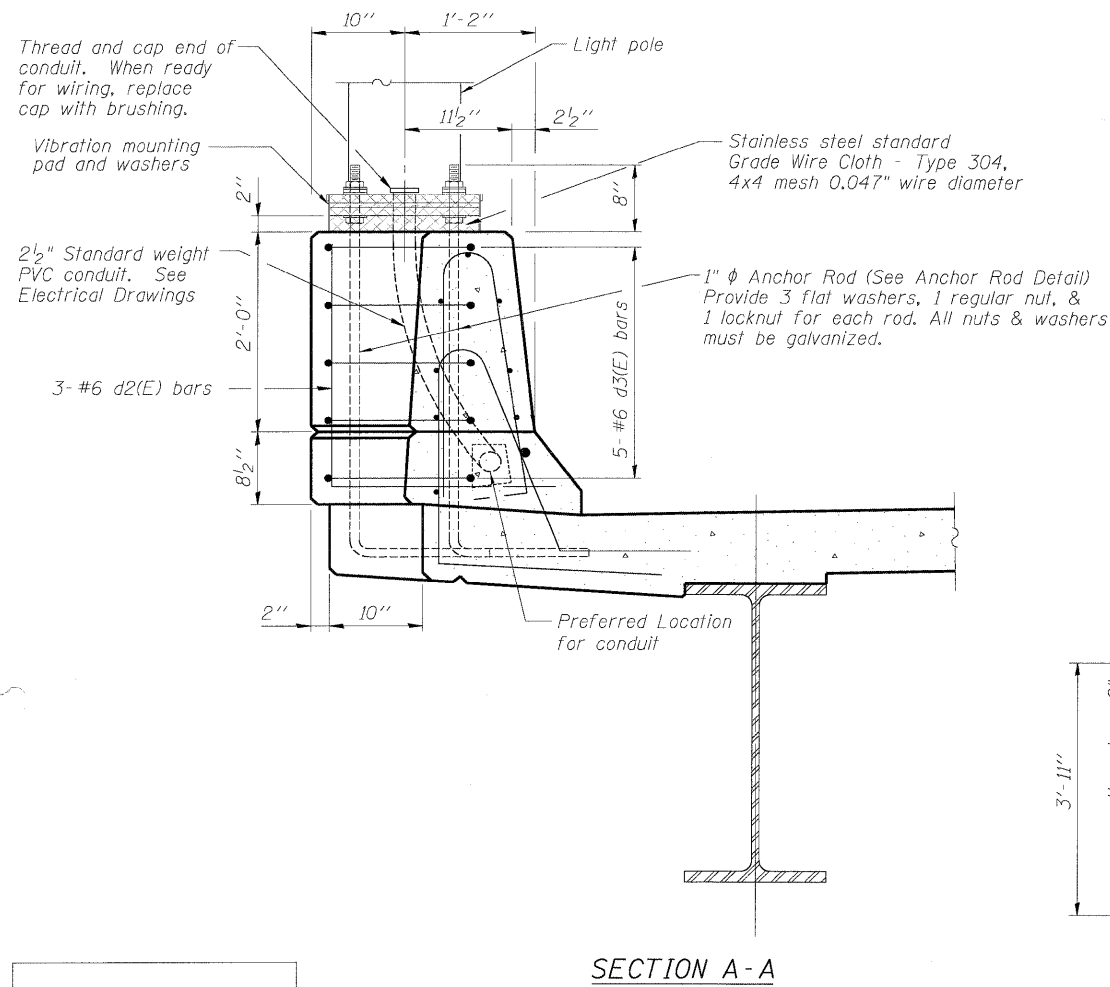
SHEET NO. S-10
S-30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	55
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

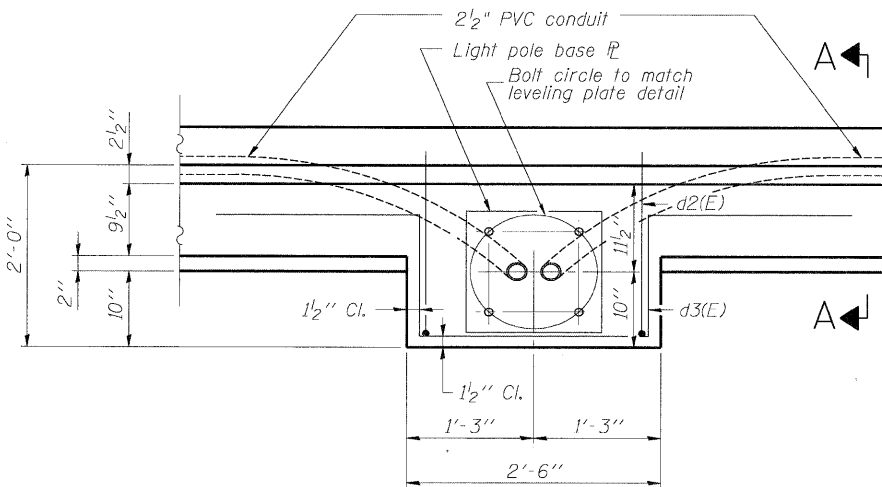
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



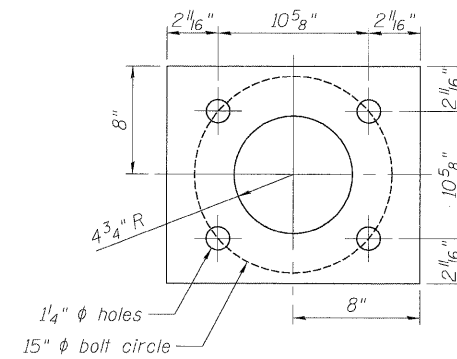
INSIDE ELEVATION OF NORTH PARAPET
(South parapet opposite hand)



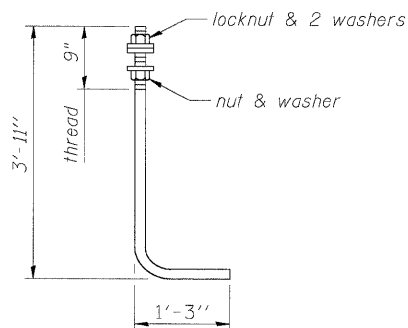
SECTION A-A



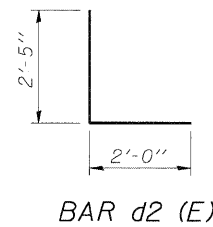
PLAN



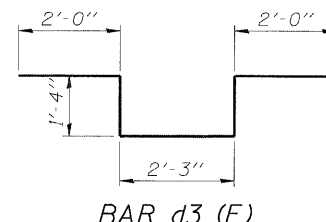
LEVELING PLATE DETAIL



1" ANCHOR ROD
(ASTM F 1554 Grade 105)



BAR d2 (E)



BAR d3 (E)

Note:
Cost of Anchor rods, leveling plate, stainless steel wire cloth, nuts and washers is included with Concrete Superstructure

MINIMUM BAR LAP

- (Parapet)
- #4 bar = 1'-8"
- #8 bar = 4'-6"

Notes:

- Bars indicated thus 1x2-#8 etc. indicates 1 line of bars with 2 lengths per line.
- See electrical drawings for lighting details.
- See sheets S-14 and S-15 for approach slab parapet details.

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

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



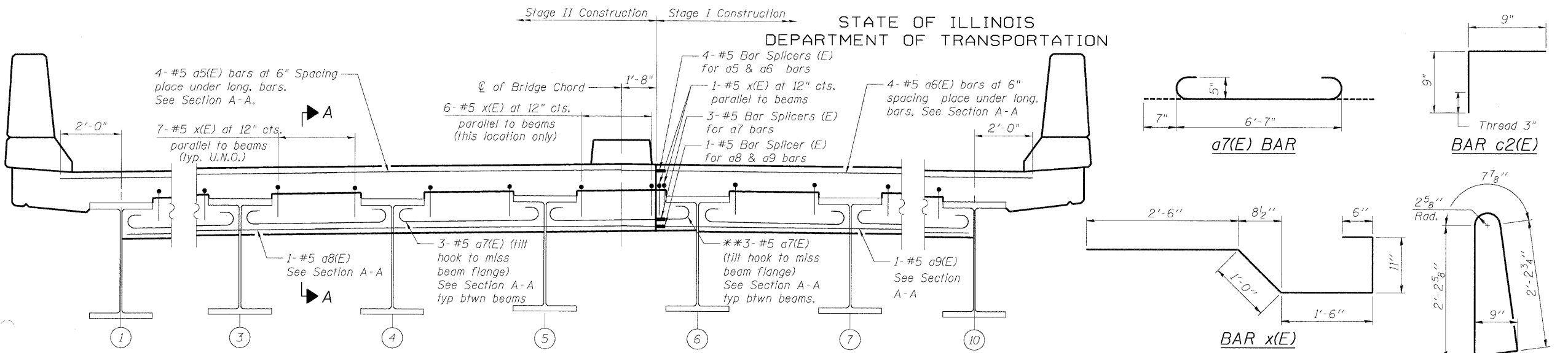
SHEET NO. S-11
S-30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	56
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUPERSTRUCTURE DETAILS I
STRUCTURE NO. 016-0275

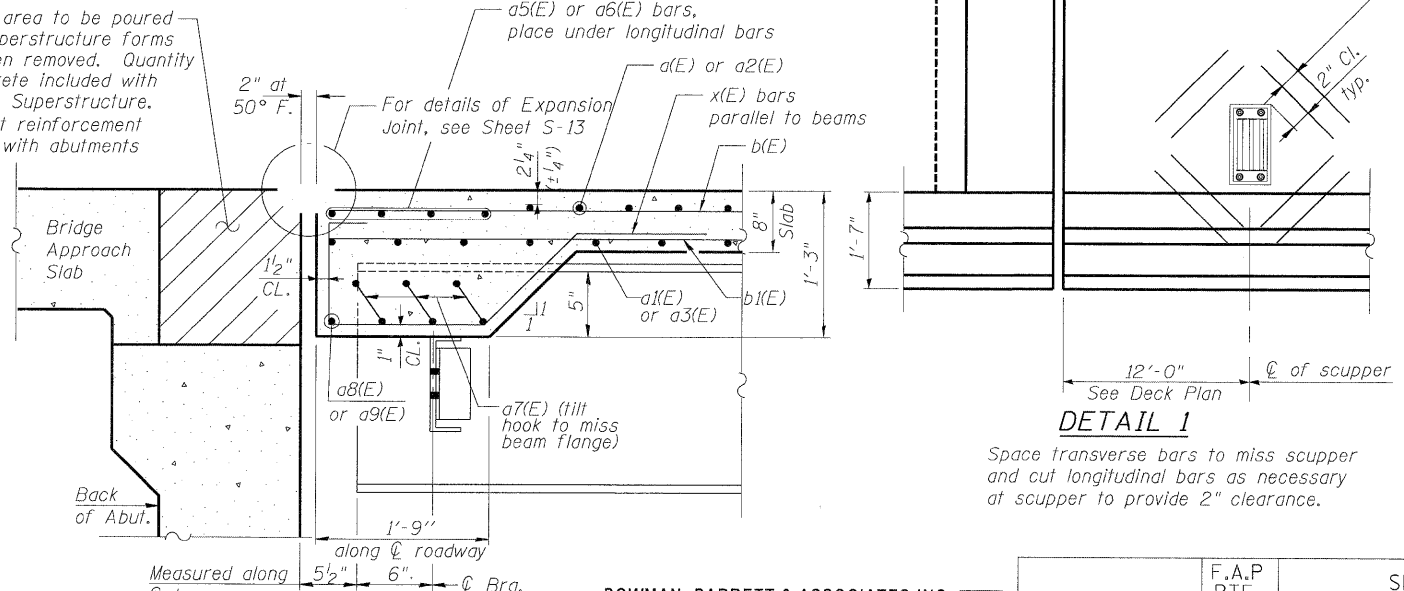
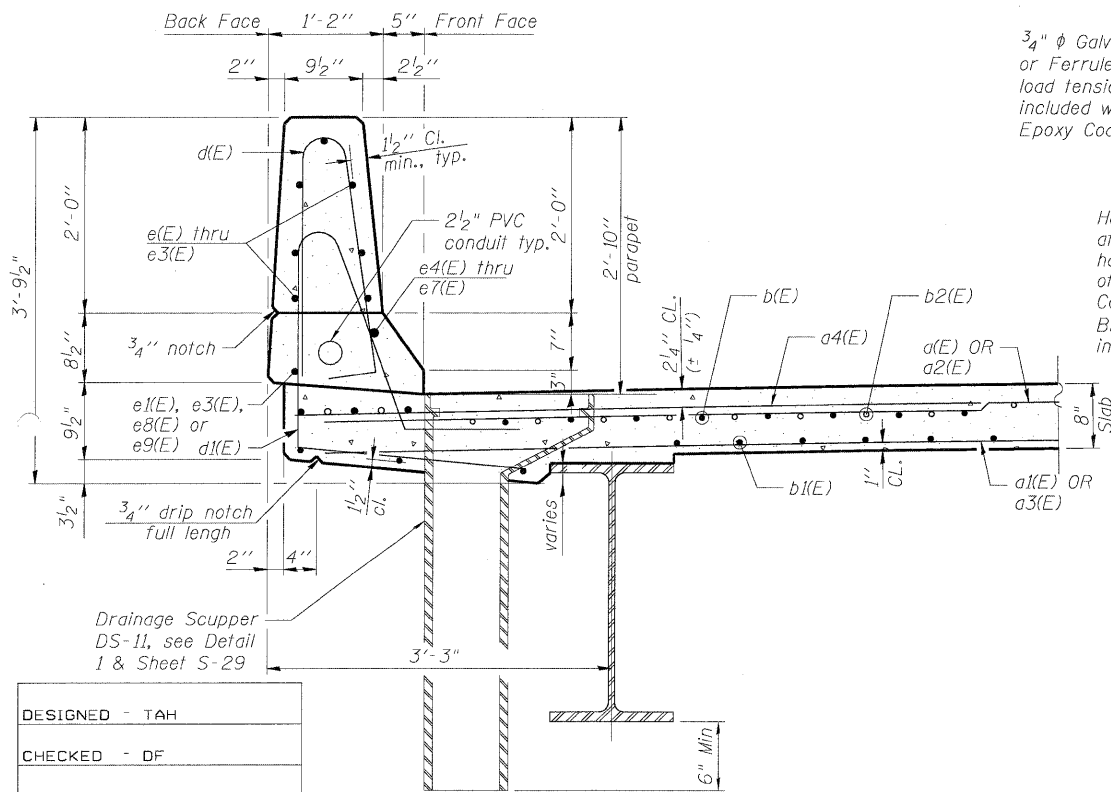
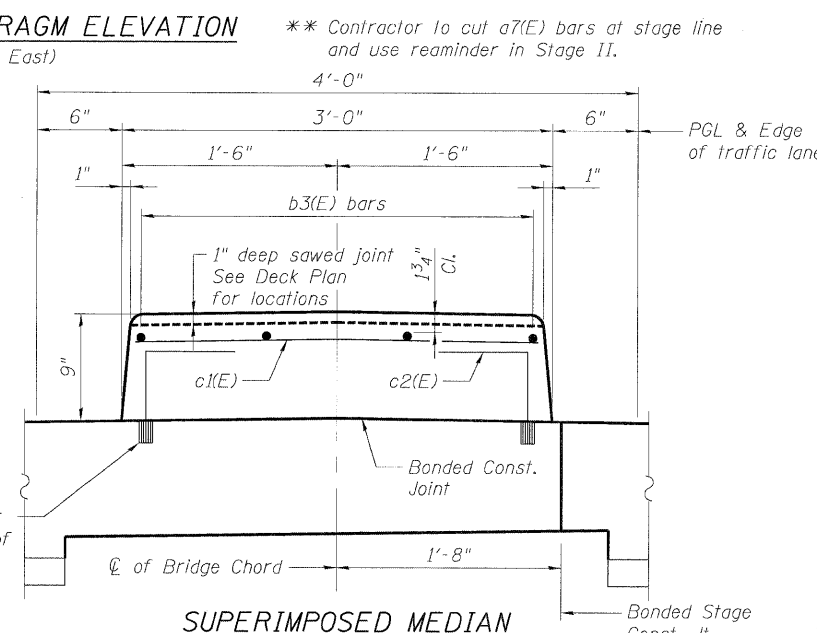
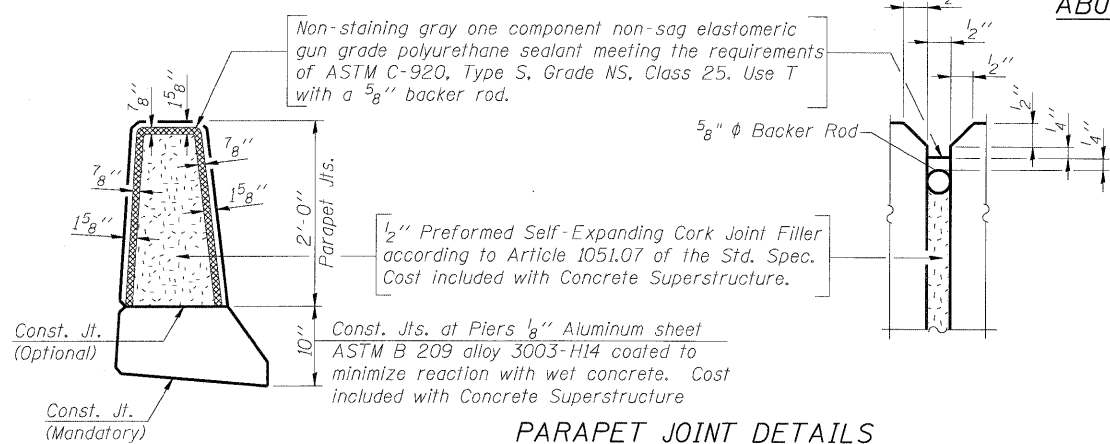
S:\S\05-CAD\DWG\2016-0275-01-50.dwg 5/6/2016 9:59:52 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	448	#5	31'-10"	—
a2(E)	269	#5	31'-4"	—
a3(E)	269	#5	34'-9"	—
a4(E)	896	#6	6'-0"	—
a5(E)	8	#5	31'-1"	—
a6(E)	8	#5	34'-5"	—
a7(E)	54	#5	7'-9"	—
a8(E)	2	#5	28'-9"	—
a9(E)	2	#5	32'-1"	—
a10(E)	32	#5	1'-6"	—
b(E)	497	#5	33'-10"	—
b1(E)	488	#5	29'-11"	—
b2(E)	207	#6	34'-0"	—
b3(E)	36	#5	26'-10"	—
c1(E)	224	#5	2'-8"	—
c2(E)	448	#5	1'-6"	—
d(E)	500	#5	5'-7"	—
d1(E)	488	#5	7'-4"	—
d2(E)	6	#6	4'-5"	—
d3(E)	10	#6	8'-11"	—
e(E)	84	#4	13'-11"	—
e1(E)	64	#4	7'-5"	—
e2(E)	84	#4	15'-0"	—
e3(E)	32	#4	7'-8"	—
e4(E)	8	#8	23'-5"	—
e5(E)	8	#8	7'-5"	—
e6(E)	8	#8	25'-3"	—
e7(E)	4	#8	7'-8"	—
e8(E)	8	#4	22'-0"	—
e9(E)	8	#4	23'-9"	—
x(E)	128	#5	6'-5"	—
Reinforcement Bars Epoxy Coated		Pound	111950	
Concrete Superstructure		Cu. Yds.	478	
Bridge Deck Grooving		Sq Yd	1435	
Protective Coat		Sq Yd	1842	
Bar Splicers		Each	733	



* Includes 12 d(E) bars for parapet over abutment

Notes:

1. Bars Indicated 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
2. All edges shall have standard 3/4" chamfer except as noted.
3. The Contractor can pour the deck end to end, starting at one abutment, as long as a hold down is provided at the opposite abutment from the start of pour. The hold down shall withstand a force of 2 kips. For all other pouring sequences, the Contractor shall submit details & calculations stamped by an Illinois licensed Structural Engineer to the Engineer for review & approval.

SUPERSTRUCTURE DETAILS II
STRUCTURE NO. 016-0275

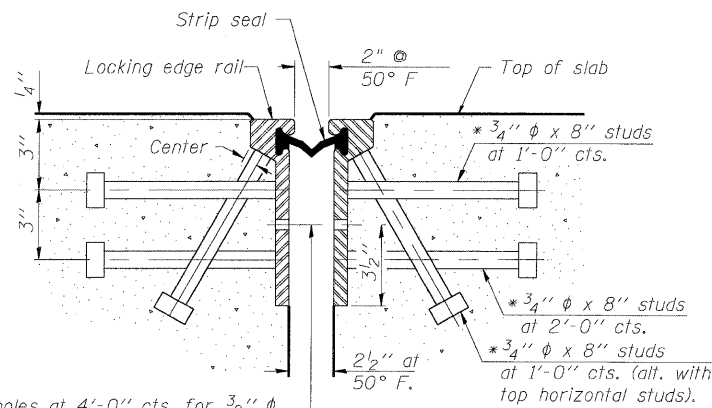
DESIGNED - TAH
CHECKED - DF
DRAWN - TAH
CHECKED - DF

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

SHEET NO. S-12	F.A.P RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 57
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

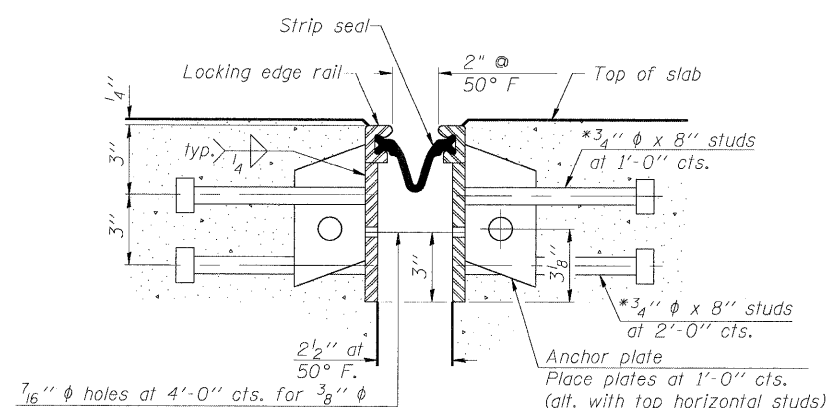
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



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.

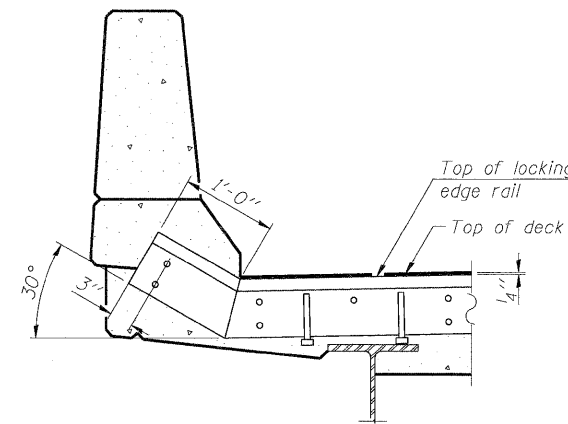
SECTION THRU
WELDED RAIL JOINT

Notes:

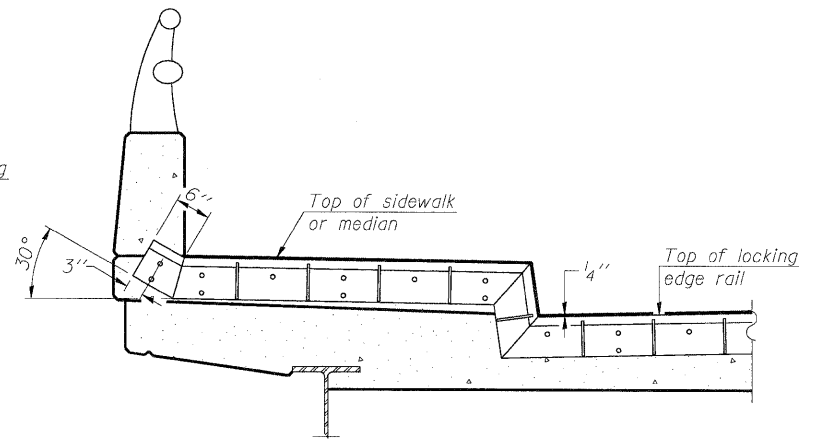
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of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

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.

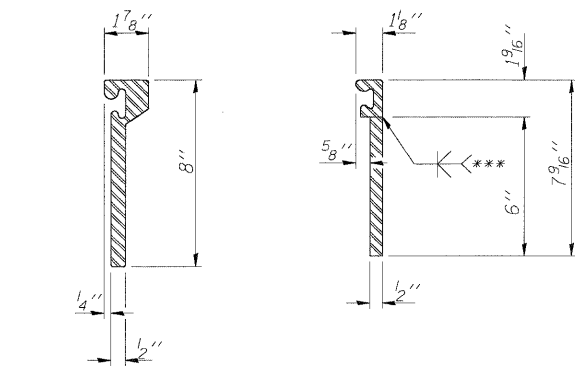


AT PARAPET

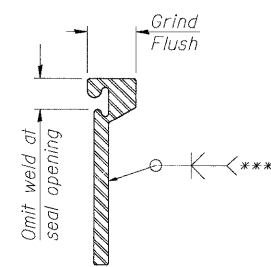


AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

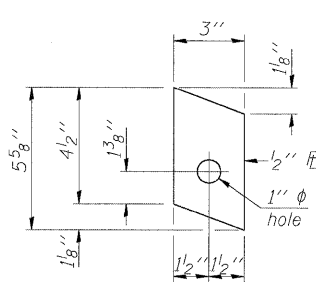


ROLLED
EXTRUDED RAIL WELDED RAIL



LOCKING EDGE
RAIL SPLICE

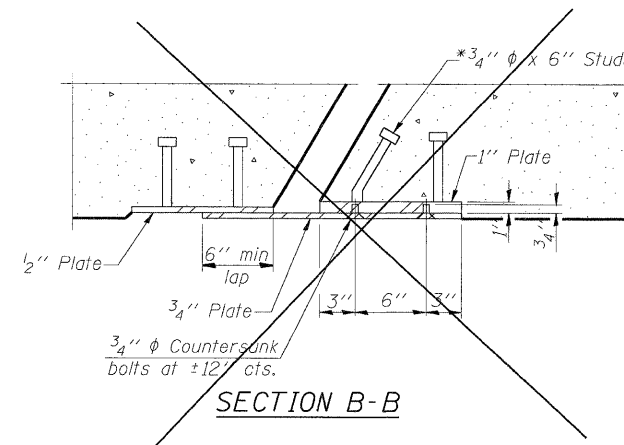
The inside of the locking edge rail groove shall be free of weld residue.



ANCHOR PLATE
(for welded rail)

***Back gouge not required if complete joint penetration is verified by mock-up.

TYPICAL END TREATMENTS

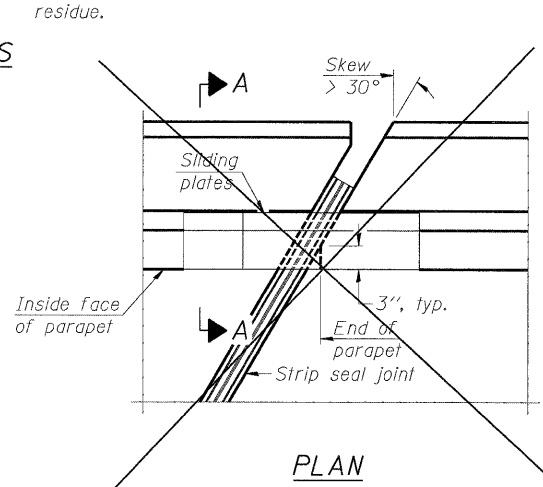


SECTION B-B

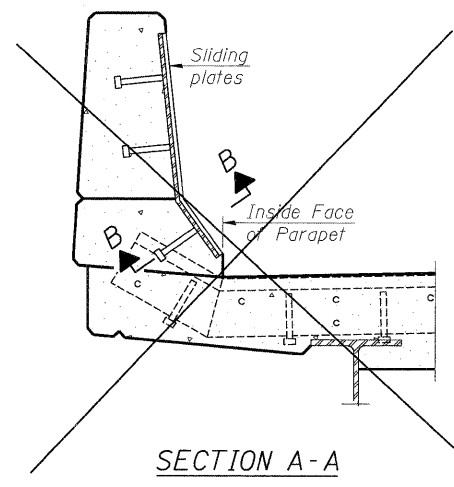
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	136

LOCKING EDGE RAILS



PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)

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

EJ-SSJ

10-1-08

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



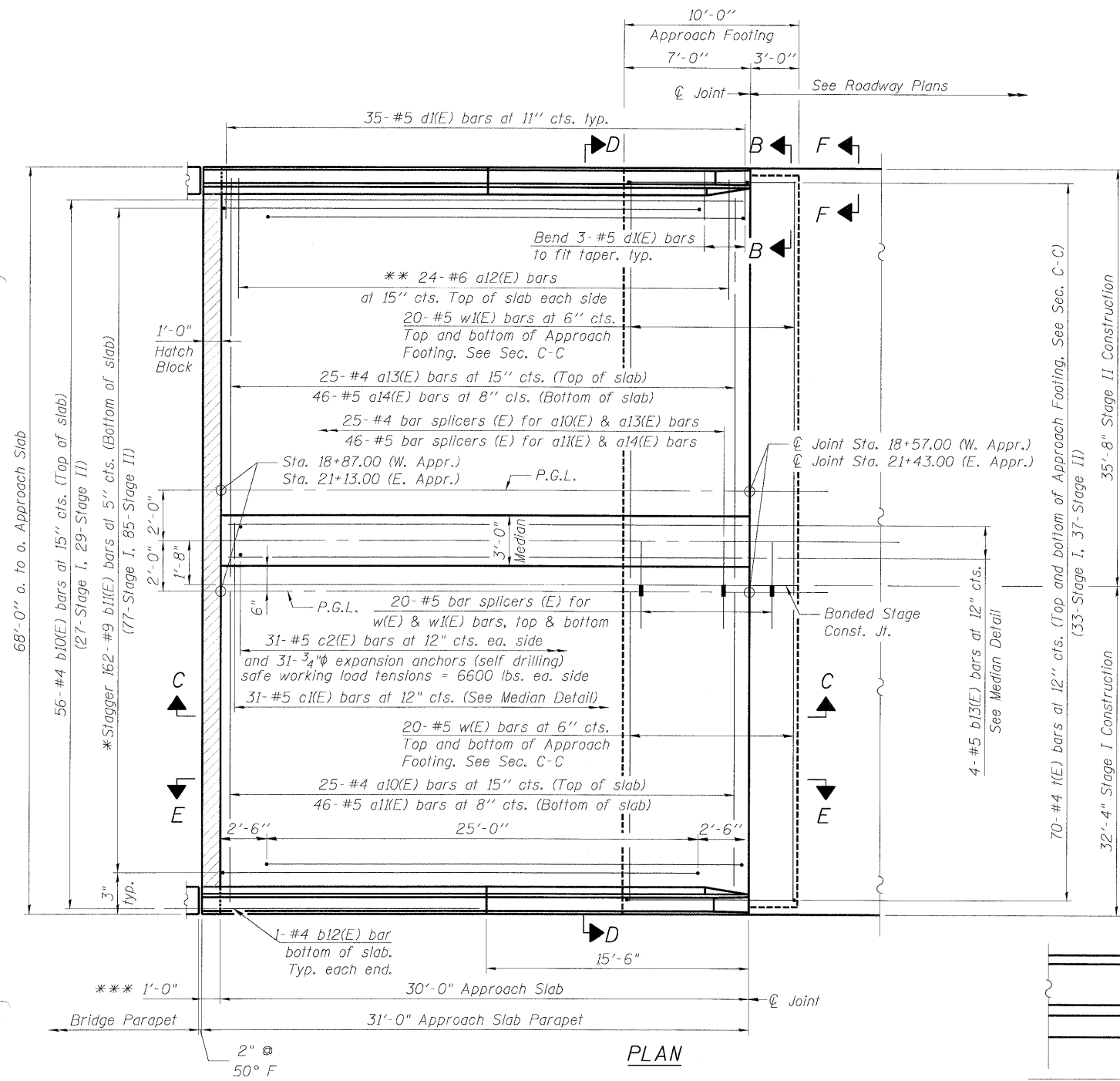
SHEET NO. S-13
S-30 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	58
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0275

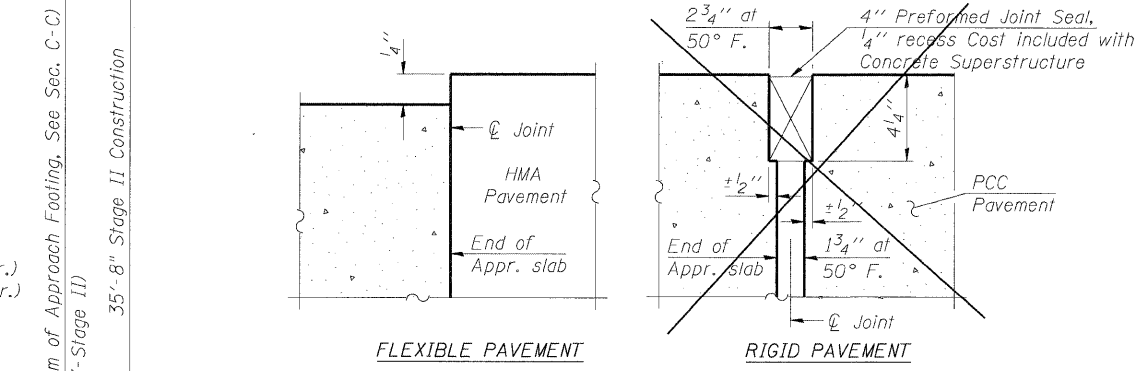
5/6/2008 9:49:51 AM S:\PROJ\05\CAD\US\02\FE-60C05-03-17.dwg

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

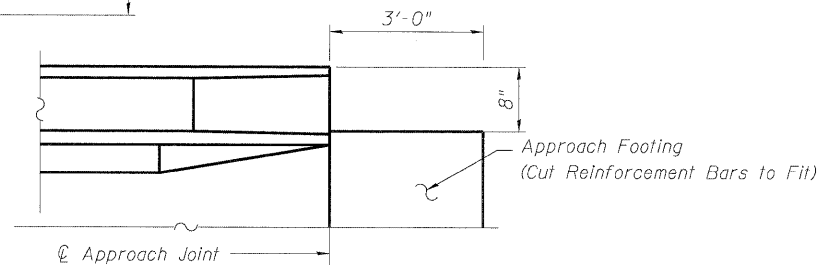
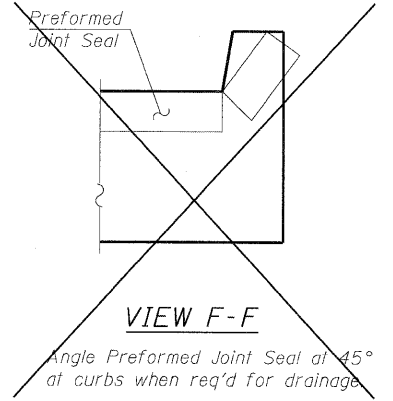
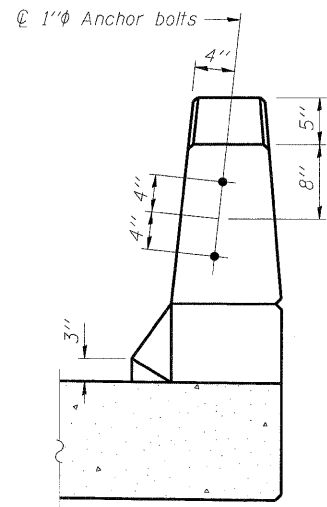
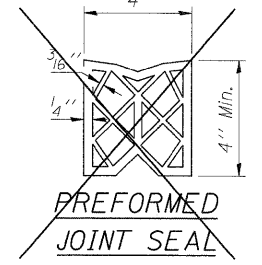


PLAN

- * Tilt #9 b11(E) bars as required to maintain clearance.
- ** Alternate with a10(E) or a13(E) bars, typ. ea. parapet.
- *** 1'-0" portion of parapet constructed on abutment backwall.



DETAIL A



NOTE: Type B6 curb not shown for clarity.
See Highway Standard 631031 for details.

APPROACH FOOTING NOTCH FOR
TRAFFIC BARRIER TERMINAL, TYPE 6

BRIDGE APPROACH SLAB DETAILS I
STRUCTURE NO. 016-0275

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

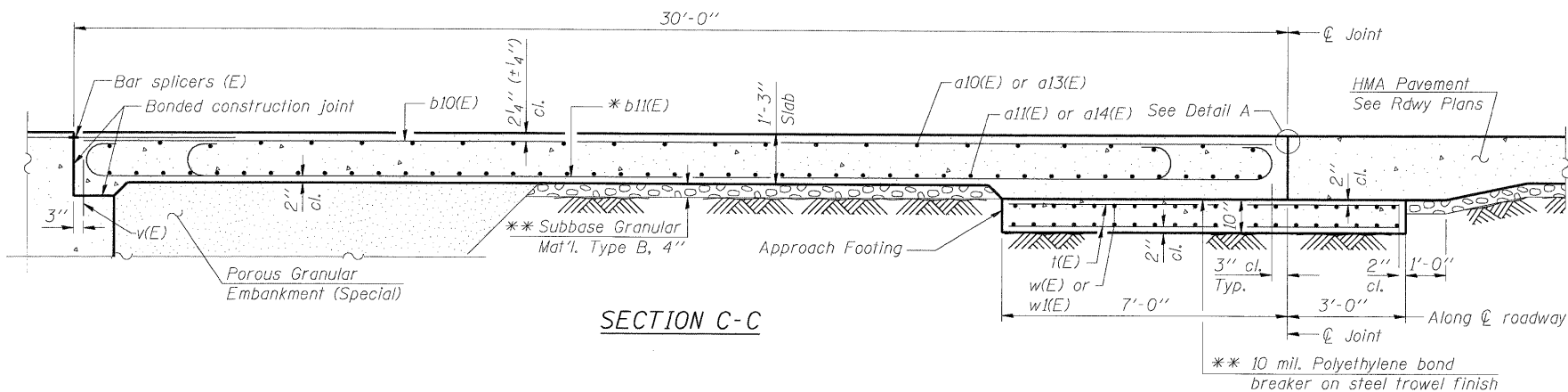
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job No. 910

SHEET NO. S-14 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 59
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

S:\9805\CAD\0160275\0005-04-APR03.dwg 5/16/2003 9:20:02 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TWO APPROACHES BILL OF MATERIAL



SECTION C-C

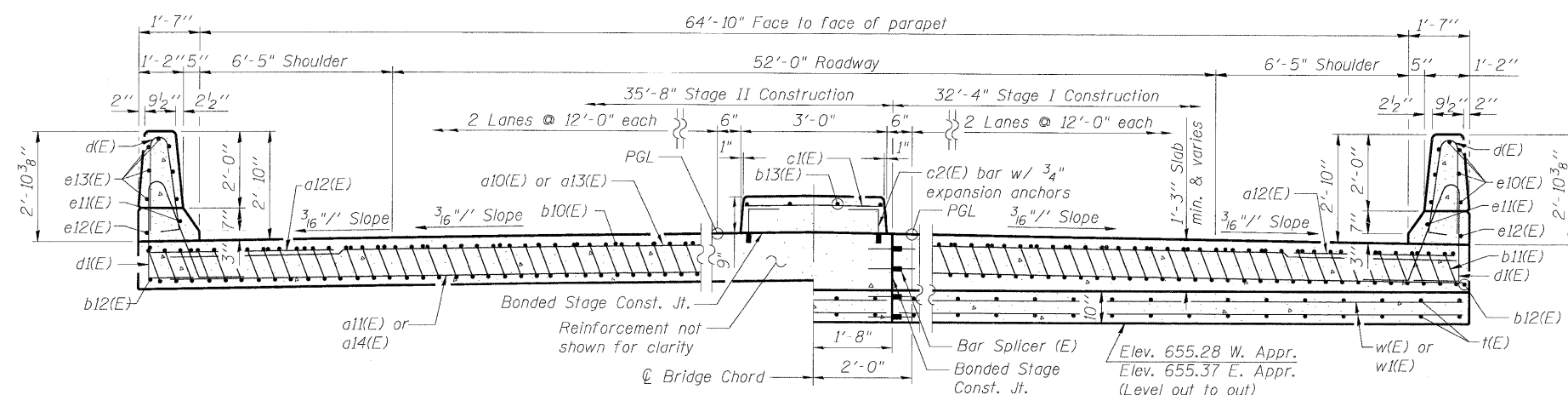
Notes:
See sheet S-14 of S-30 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
For bar splicer details, see sheet S-28 of S-30.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet S-22 of S-30. Cost included with Concrete Superstructure.
Cost of parapet joint is included with Concrete Superstructure. See sheet S-12 of S-30.

* Tilt #9 b11(E) bars as required to maintain clearance.
** Cost included with Concrete Superstructure.
*** 1'-0" portion of parapet constructed on abutment backwall.

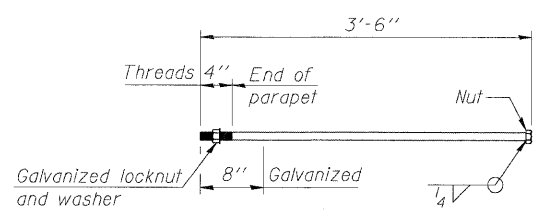
Bar	No.	Size	Length	Shape
a10(E)	50	#4	32'-0"	—
a11(E)	92	#5	32'-0"	—
a12(E)	96	#6	6'-0"	—
a13(E)	50	#4	35'-4"	—
a14(E)	92	#5	35'-4"	—
b10(E)	112	#4	29'-8"	—
b11(E)	324	#9	29'-9"	—
b12(E)	4	#4	29'-4"	—
b13(E)	8	#5	29'-8"	—
c1(E)	62	#5	2'-8"	—
c2(E)	124	#5	1'-6"	—
d(E)	140	#5	5'-7"	—
d1(E)	140	#5	7'-11"	—
e10(E)	28	#4	15'-2"	—
e11(E)	4	#8	30'-8"	—
e12(E)	4	#4	30'-8"	—
e13(E)	28	#4	15'-2"	—
f(E)	280	#4	9'-8"	—
w(E)	80	#5	32'-0"	—
w1(E)	80	#5	35'-4"	—

Material	Unit	Quantity
Concrete Superstructure	Cu. Yd.	218.0
Concrete Structures	Cu. Yd.	42
Reinforcement Bars, Epoxy Coated	Pound	55,640
Bar Splicers (E)	Each	222
Bridge Deck Grooving	Sq. Yd.	384
Protective Coat	Sq. Yd.	495

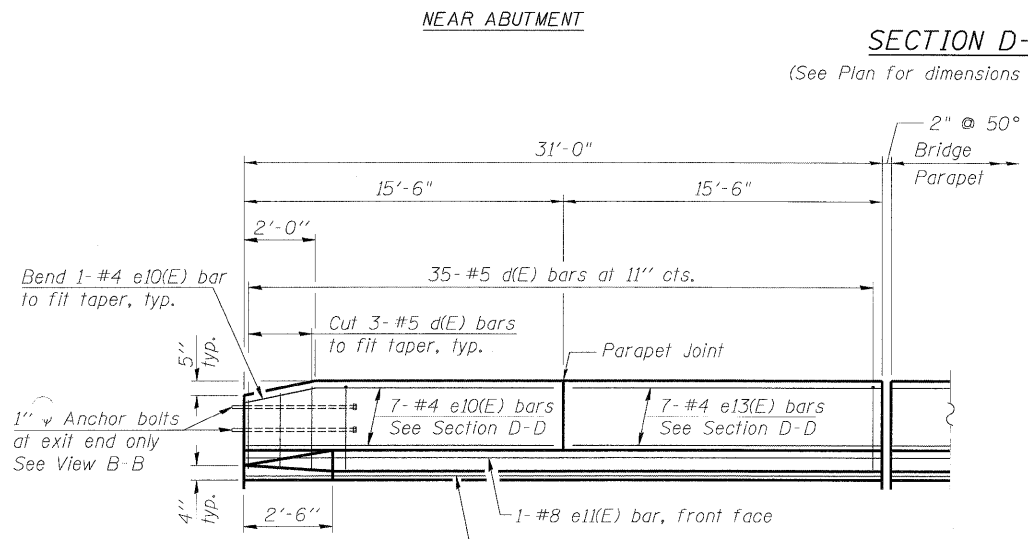
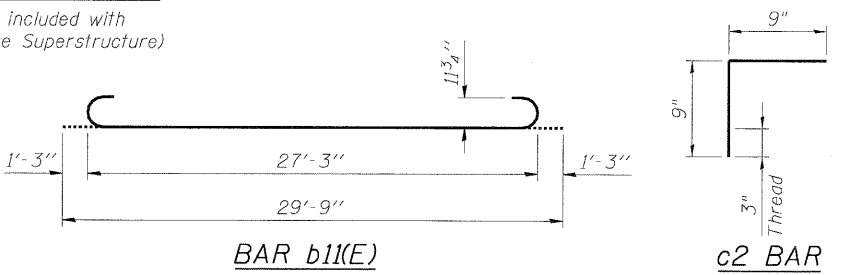
① Extend bars into portion of parapet over abutment



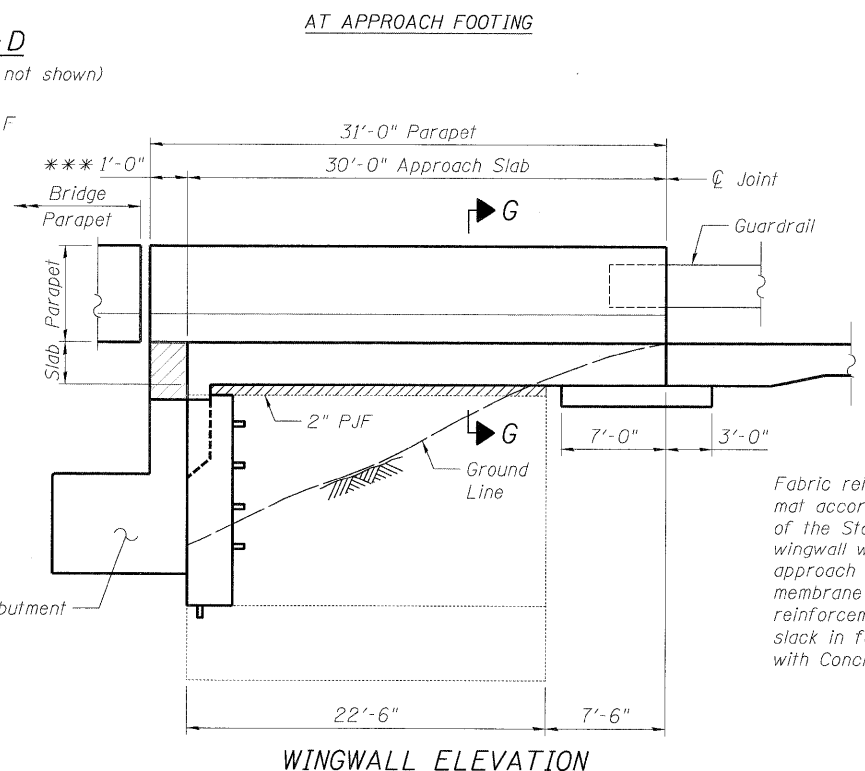
SECTION D-D
(See Plan for dimensions not shown)



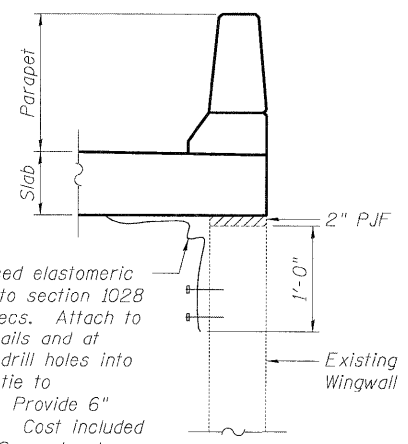
1" ANCHOR BOLT
(Cost included with Concrete Superstructure)



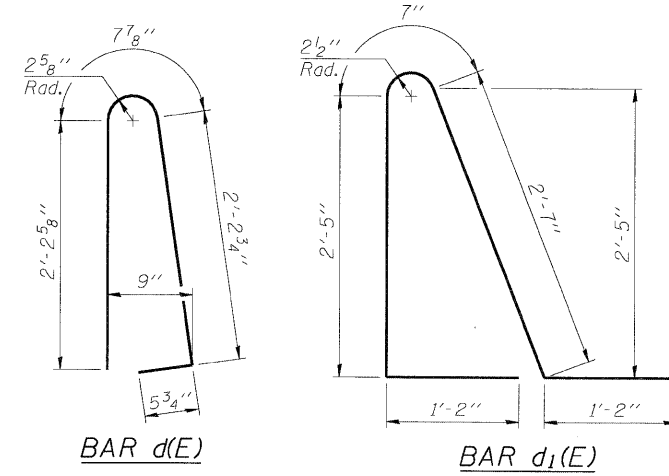
VIEW E-E



WINGWALL ELEVATION



SECTION G-G



BRIDGE APPROACH SLAB DETAILS II
STRUCTURE NO. 016-0275

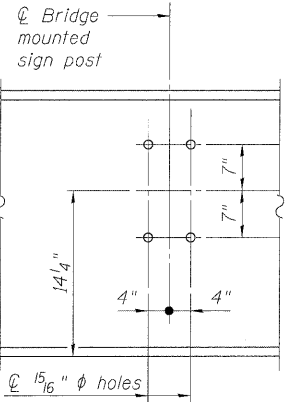
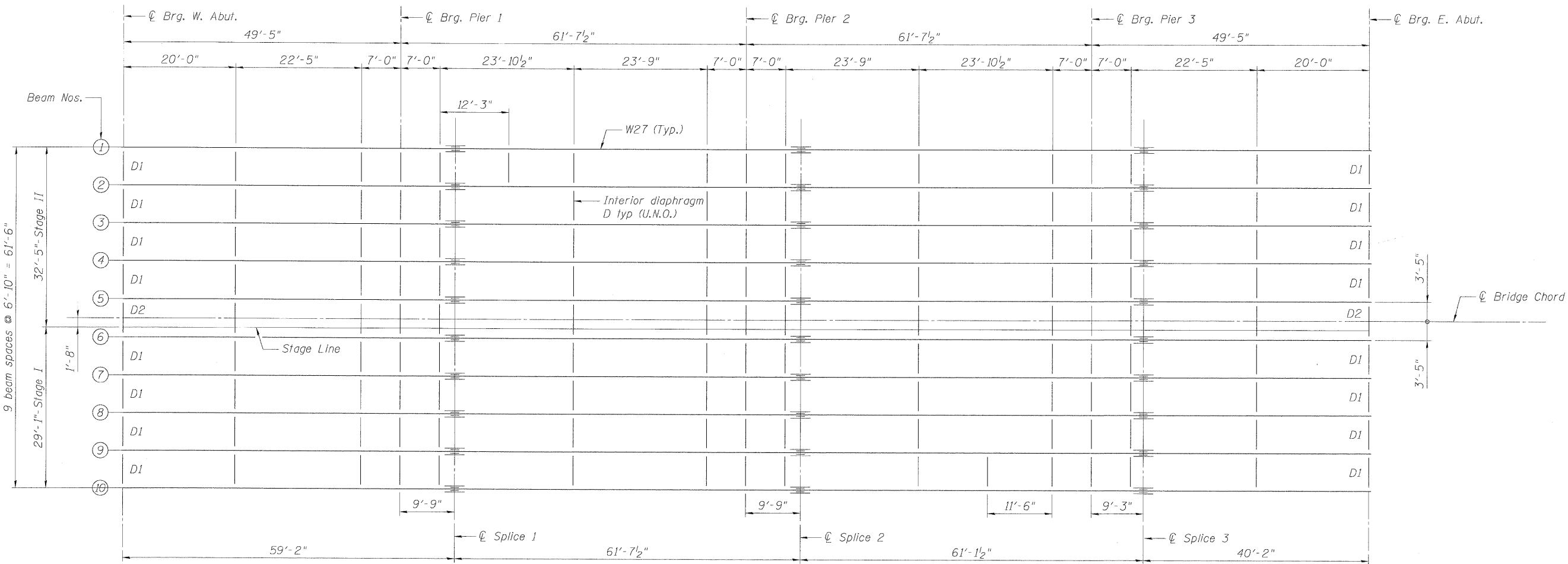
DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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

SHEET NO. S-15
S-30 SHEETS

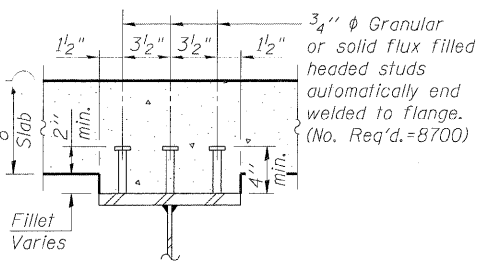
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	60
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



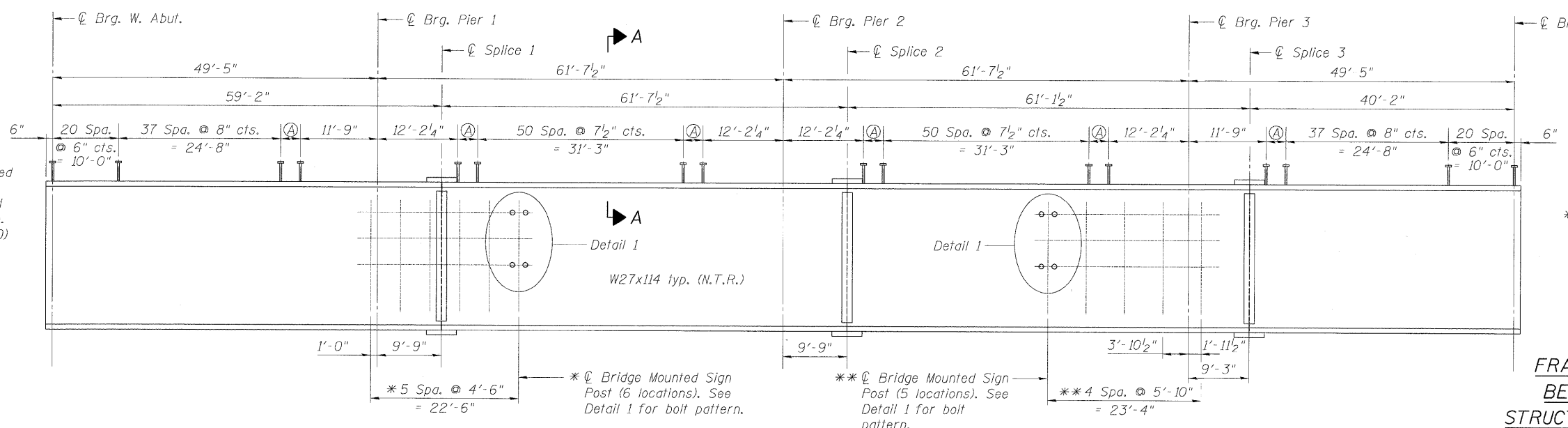
DETAIL 1

(Bolt pattern for bridge mounted sign post typical at all post locations)
See civil sheets for additional bridge mounted sign post details.



SECTION A-A

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



* Beam 1 only
** Beam 10 only
Ⓐ 12 spaces @ 3" cts. = 3'-0"

BEAM ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

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



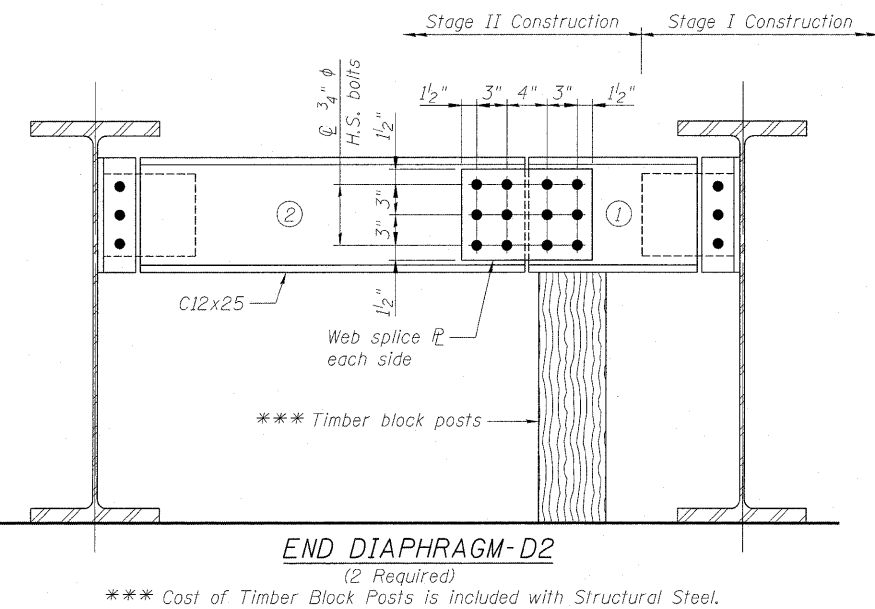
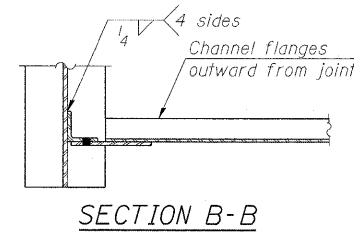
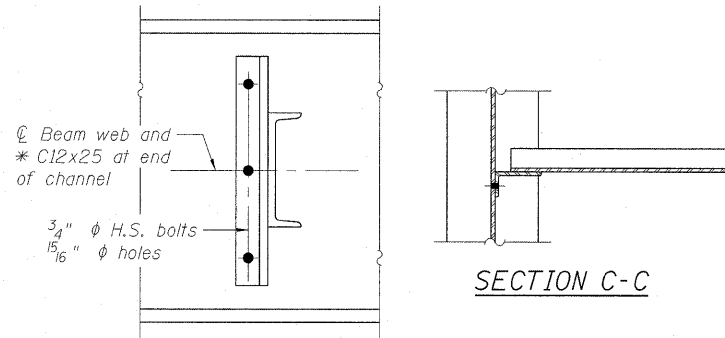
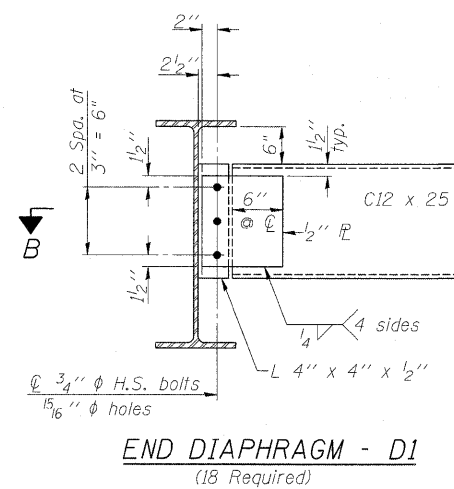
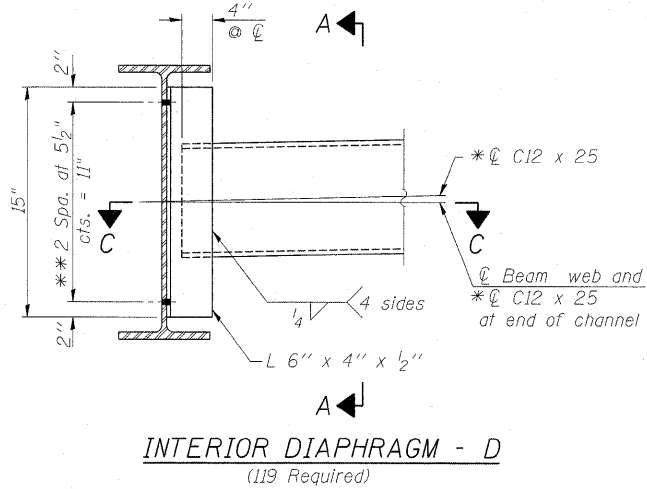
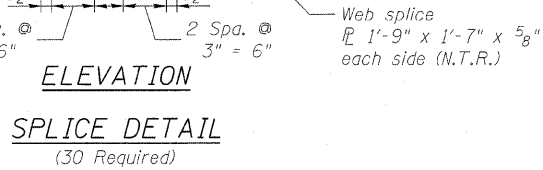
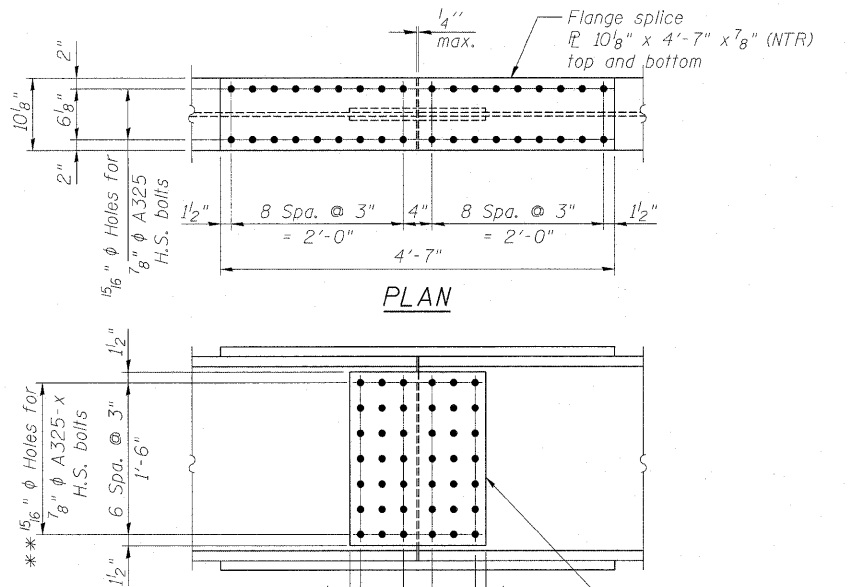
SHEET NO. S-16
S-30 SHEETS

F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 61
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**FRAMING PLAN AND
BEAM ELEVATION
STRUCTURE NO. 016-0275**

5/16/2008 AM 9:20:08 5/16/2008 AM 9:20:08 5/16/2008 AM 9:20:08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



*** Cost of Timber Block Posts is included with Structural Steel.

STAGE CONSTRUCTION SEQUENCE

1. Order Diaphragm in two sections.
2. Attach section ① of Diaphragm to Beam 5.
3. Place Timber Block Posts between section ① of diaphragm and sbutment bearing section.
4. Attach section ② of diaphragm to both Beam 6 and section ① of diaphragm during Stage II Construction with splice plates.
5. Remove Timber Block Posts.

TOP OF BEAM ELEVATIONS

For fabrication only

Beam No.	¢ Brg. W. Abut.	¢ Brg. Pier 1	¢ Splice 1	¢ Brg. Pier 2	¢ Splice 2	¢ Brg. Pier 3	¢ Splice 3	¢ Brg. W. Abut.
1	657.222	657.438	657.481	657.565	657.580	657.463	657.442	657.288
2	657.329	657.545	657.587	657.671	657.687	657.569	657.548	657.395
3	657.436	657.652	657.694	657.778	657.793	657.676	657.655	657.502
4	657.543	657.758	657.801	657.884	657.900	657.783	657.762	657.609
5	657.649	657.865	657.908	657.991	658.007	657.889	657.868	657.715
6	657.649	657.865	657.908	657.991	658.007	657.889	657.868	657.715
7	657.543	657.758	657.801	657.884	657.900	657.783	657.762	657.609
8	657.436	657.652	657.694	657.778	657.793	657.676	657.655	657.502
9	657.329	657.545	657.587	657.671	657.687	657.569	657.548	657.395
10	657.222	657.438	657.481	657.565	657.580	657.463	657.442	657.288

(1) INTERIOR BEAM MOMENT TABLE

	0.4 Sp. 1 or 0.6 Sp. 2	Pier 1 or Pier 3	0.5 Sp. 2 or Sp. 3	Pier 2
I_s	4080	4080	4080	4080
$I_c(n)$	11985		11985	
$I_c(3n)$	8952		8952	
S_s	299	299	299	299
$S_c(n)$	457		457	
$S_c(3n)$	414		414	
DC1	0.826	0.826	0.826	0.826
MDC1	140	258	133	265
DC2	0.138	0.138	0.138	0.138
MDC2	26	35	29	38
DW	0.344	0.344	0.344	0.344
MDW	66	88	71	96
$M\epsilon + IM$	561	343	637	378
M_u (Strength I)	1288.3	1098.5	1423.8	1184.3
$\phi_r M_n, \phi_r M_{nc}$	2337.2	-	2342.1	-
f_s DC1	5.62	10.35	5.34	10.64
f_s DC2	1.04	1.40	1.16	1.53
f_s DW	1.91	3.53	2.06	3.85
f_s 1.3($\epsilon + IM$)	19.2	17.9	21.7	19.7
f_s (Service II)	27.7	33.2	30.3	35.7
f_s (Total)(Strength I)	44.1	44.1	47.5	47.5
V_r	20.1		17.7	

BEAM REACTION TABLE

	W. Abut.	Pier 1 or 3	Pier 2	E. Abut.
(2) R_{DC1}	16.7	53.3	53.8	18.3
R_{DC2}	2.7	8.3	8.6	2.7
R_{DW}	6.7	20.8	21.5	6.7
$R\epsilon + IM$	66.0	95.6	97.4	66.0
R_{Total}	92.1	177.9	181.2	93.8

Ⓑ Compact section
Ⓒ Braced non-compact and partially braced section

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in^4 and in^3).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in^4 and in^3).

$I_c(3n), S_c(3n)$: 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in^4 and in^3).

DC1: Un-factored non-composite dead load (kips/ft.).
MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 $M\epsilon + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M\epsilon + IM$
 $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
 $\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
 f_s (Service II): Sum of stresses as computed from the moments below (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M\epsilon + IM$
 f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M\epsilon + IM$
 V_r : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

- (1) Sign structure loading does not result in significant differences to exterior beam moment table, therefore, not shown for clarity.
- (2) Exterior beam accounting for sign structure loading, all other values for interior beam.

NOTES

1. Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
2. All beams and splice plates shall be AASHTO M270 Grade 50.
3. Two hardened washers required for each set of oversized holes.
4. See sheet S-18 of S-30 for Bearing Details.
5. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

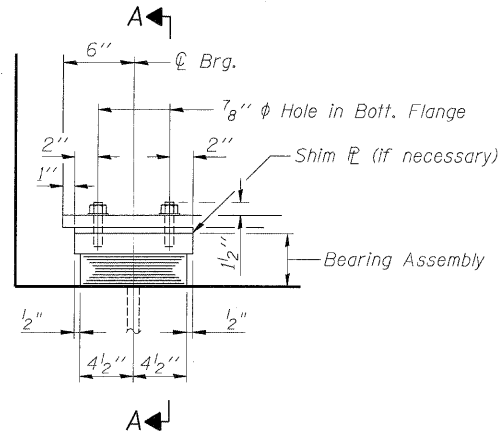
DESIGNED - DF
CHECKED - TAH
DRAWN - LAM
CHECKED - DF

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

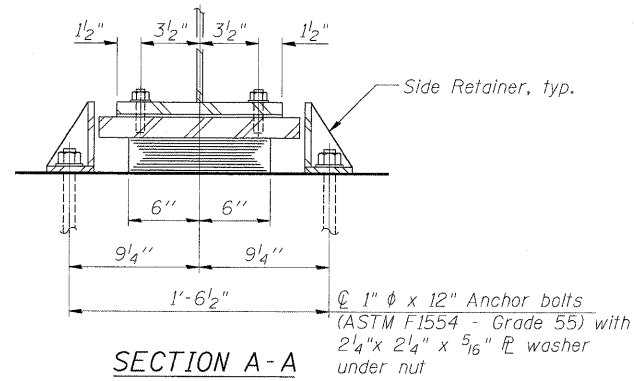
SHEET NO. S-17	F.A.P RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 62
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

BEAM DETAILS
STRUCTURE NO. 016-0275

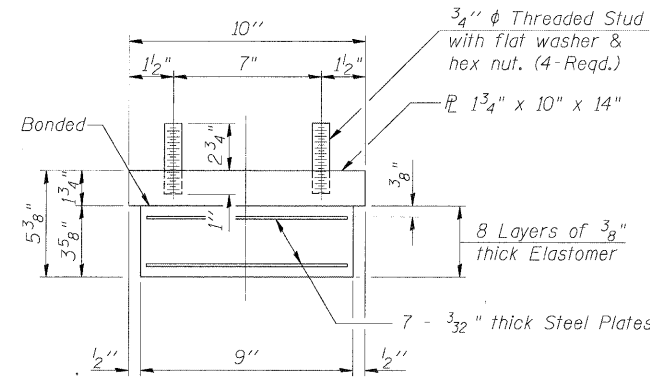
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT ABUTMENTS

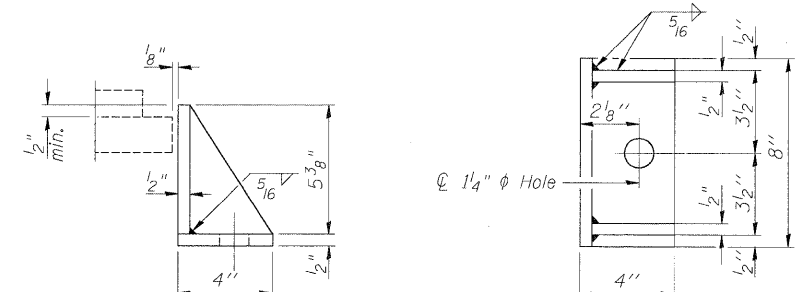


SECTION A-A



BEARING ASSEMBLY

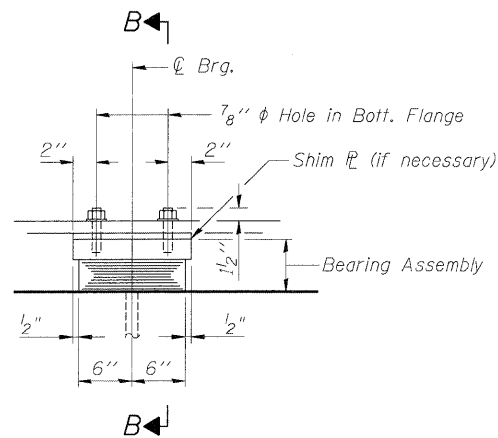
Note: Shim plates shall not be placed under Bearing Assembly.



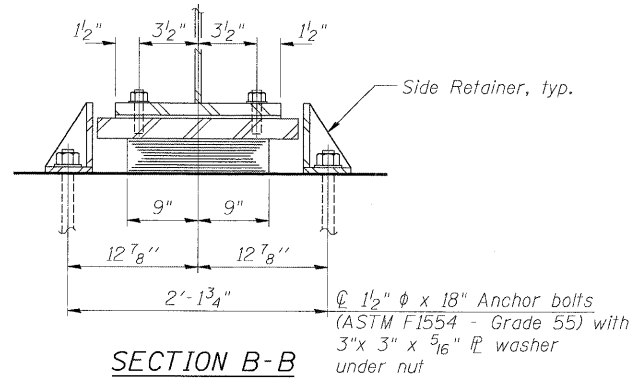
SIDE RETAINER

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

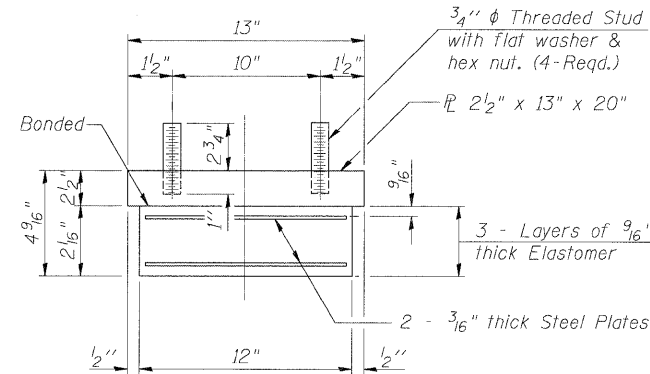
TYPE I ELASTOMERIC EXPANSION BEARING AT WEST ABUTMENT & EAST ABUTMENT



ELEVATION AT PIER 1 & PIER 3

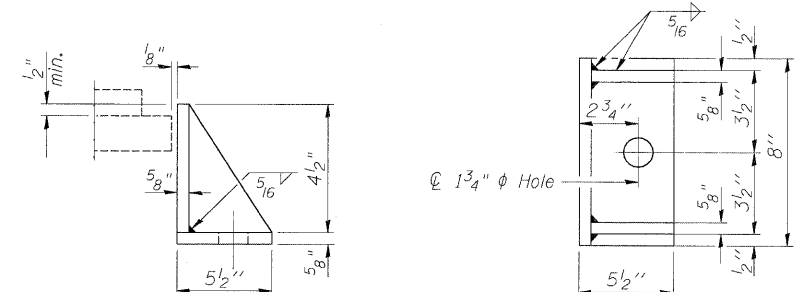


SECTION B-B



BEARING ASSEMBLY

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



SIDE RETAINER

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

TYPE I ELASTOMERIC EXPANSION BEARING AT PIER 1 AND PIER 3

Notes:

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Anchor bolts shall be ASTM F1554 Gr 55 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. 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.

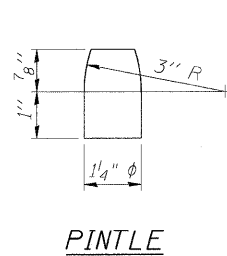
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

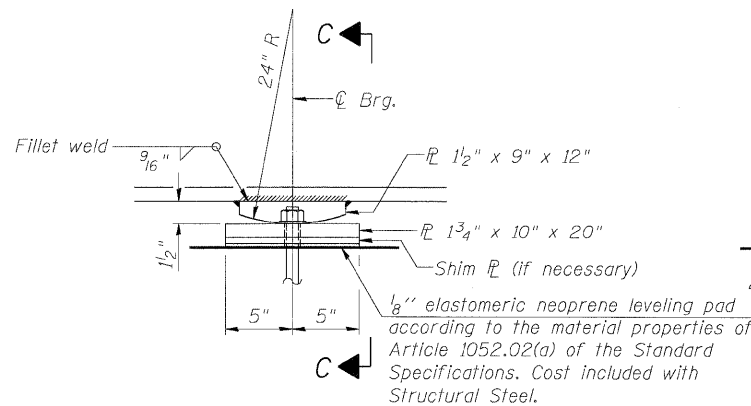
All bearing assembly and pintles shall be AASHTO M270 Gr 50 steel. Furnishing and installing fixed steel bearing assembly, including shim plates and neoprene mats, shall be included in the cost of "Furnishing and Erecting Structural Steel."

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	40
Anchor Bolts, 1"	Each	40
Anchor Bolts, 1 1/4"	Each	20
Anchor Bolts, 1 1/2"	Each	40

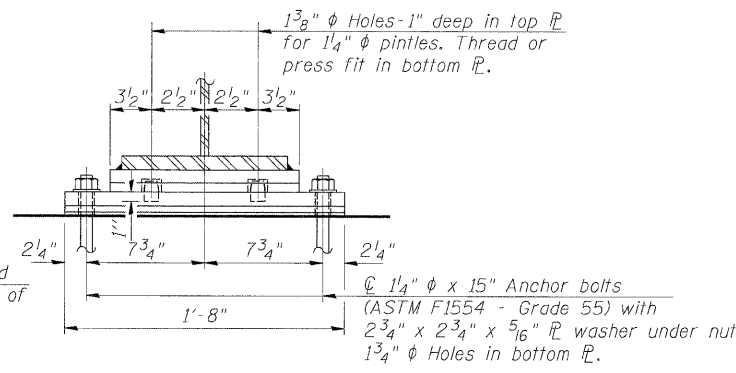


PINTLE



ELEVATION AT PIER 2

FIXED BEARING AT PIER 2
(10 Required)



SECTION C-C

DESIGNED - DF
CHECKED - TAH
DRAWN - TL
CHECKED - DF

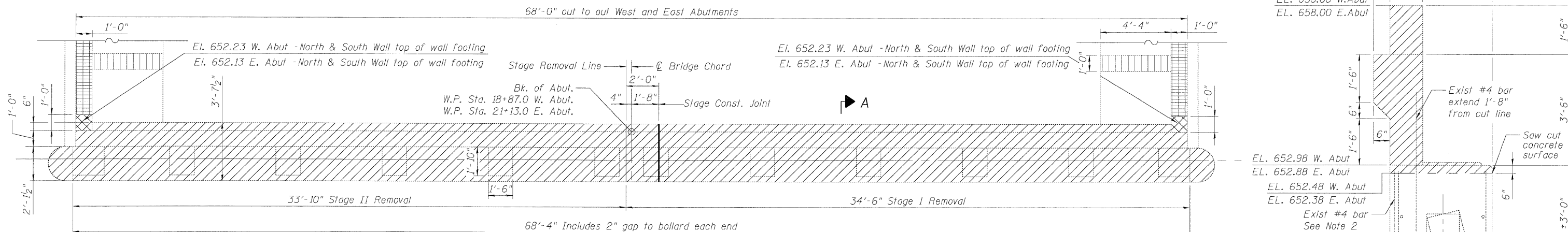
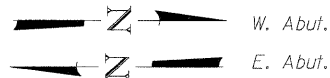
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com
Job No. 910



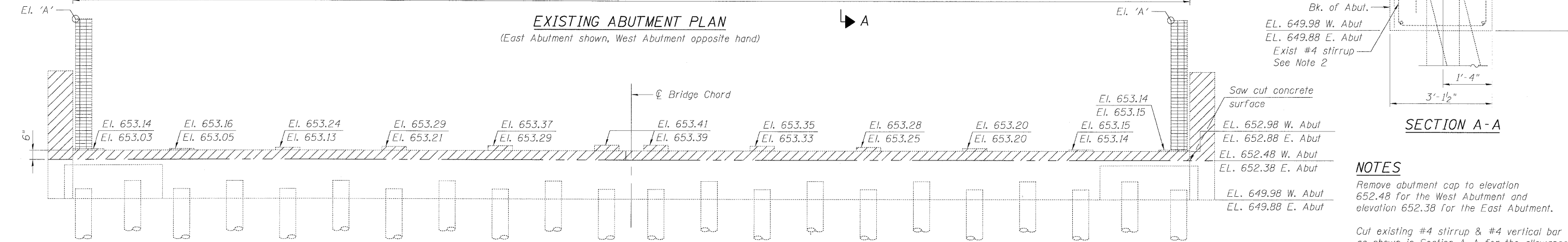
SHEET NO. S-18 S-30 SHEETS	F.A.P RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 63
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

BEARING DETAILS
STRUCTURE NO. 016-0275

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

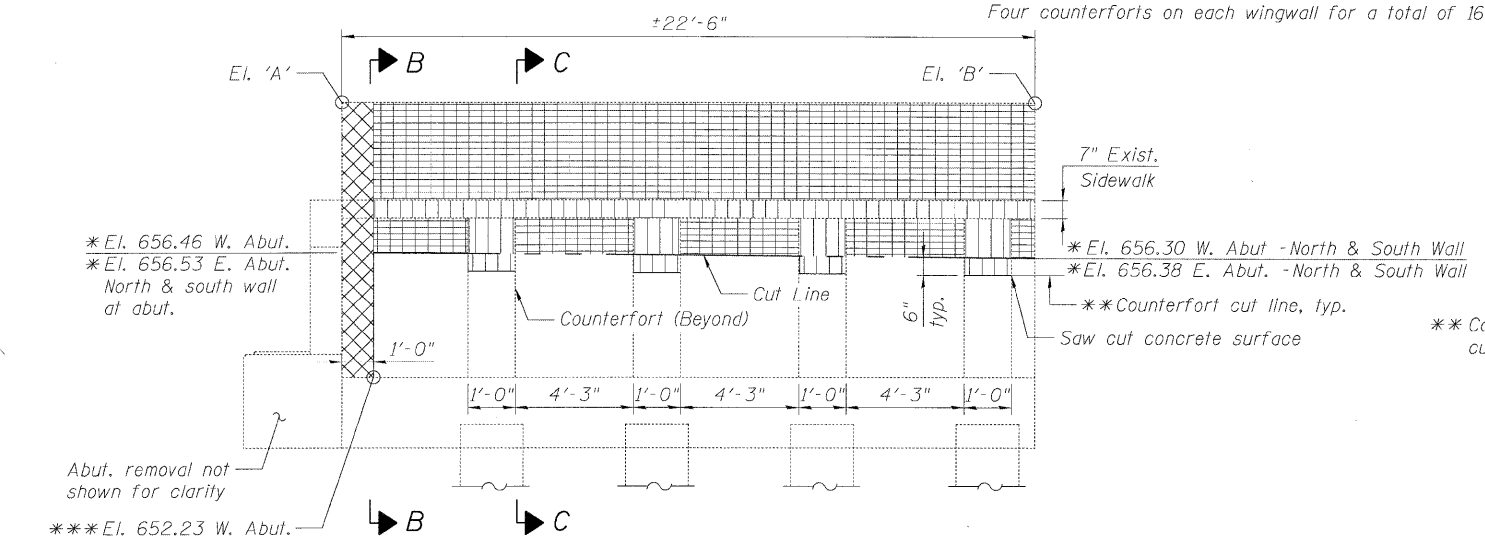


EXISTING ABUTMENT PLAN
(East Abutment shown, West Abutment opposite hand)



EXISTING ABUTMENT ELEVATION

Top elevations W. Abutment
Lower elevations E. Abutment
Four counterforts on each wingwall for a total of 16

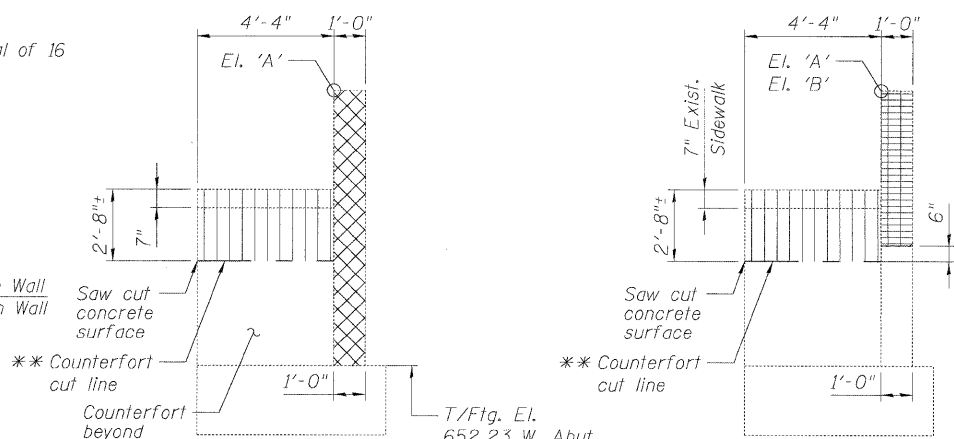


EXISTING RETAINING WALL ELEVATION

- * Remove wing wall along cut line defined by the elevations shown. Elevations are based on proposed edge of curb elevation minus 15" approach slab and 2" PJF joint.
- ** Remove counterfort 6" below wall as shown. Fill void with Porous Granular Embankment, Special. Cost included with Concrete Superstructure.
- *** Remove 1'-0" width of retaining wall to top of wall footing

WALL ELEVATIONS

	'A'	'B'
E. Abut. S Wall	660.94	660.80
E. Abut. N. Wall	660.91	660.85
W. Abut. S Wall	660.94	660.72
W. Abut. N. Wall	660.96	660.94



SECTION B-B

SECTION C-C

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu Yd	62

SECTION A-A

NOTES

- Remove abutment cap to elevation 652.48 for the West Abutment and elevation 652.38 for the East Abutment.
- Cut existing #4 stirrup & #4 vertical bar as shown in Section A-A for the allowance of mechanical bar splicers.
- Prior to removal of concrete, a 3/4" deep saw cut shall be made along all boundaries of removal areas to remain in place.
- Concrete removal shall be according to Section 501 of the Std. Specs.

LEGEND

- = Concrete Removal - abutment
- = Concrete Removal - retaining wall top of wall footing
- = Concrete Removal - retaining wall
- = Concrete Removal - counterfort

ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0275




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

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

SHEET NO. S-19 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 64
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

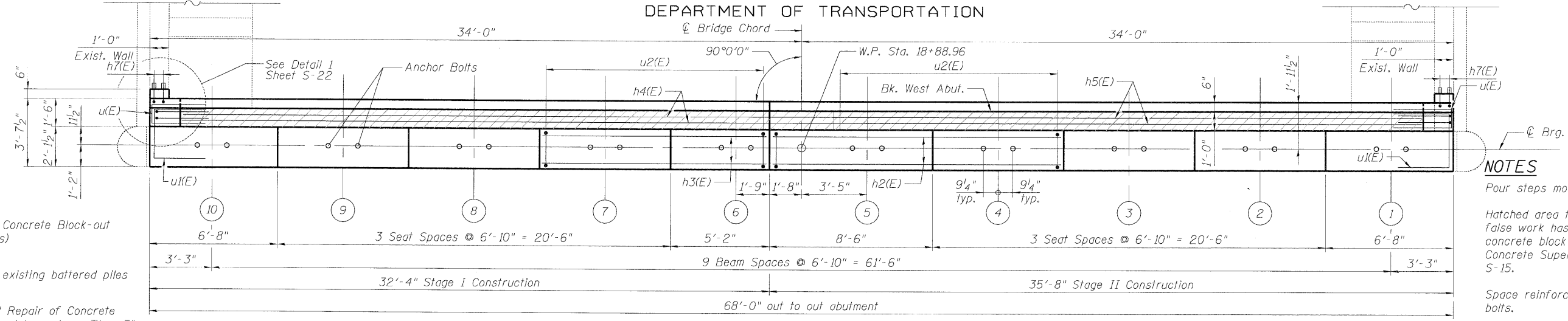
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LEGEND

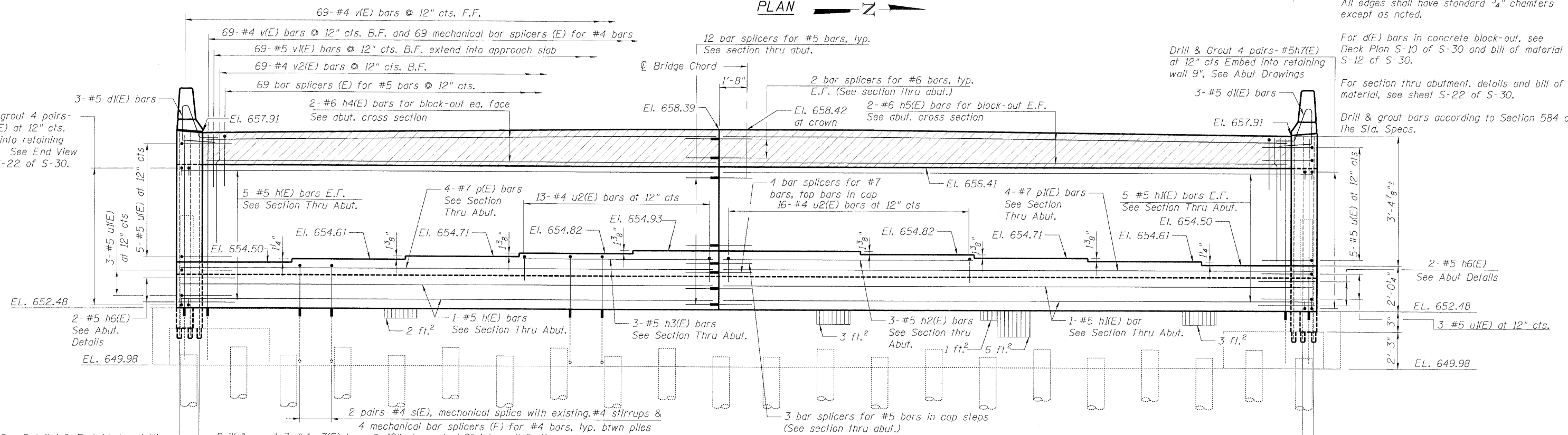
-  Indicates Concrete Block-out (See notes)
-  Indicates existing battered piles
-  Structural Repair of Concrete (Depth Equal to or Less Than 5")

NOTES

- Four steps monolithically with cap.
- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete block-out and parapet included with Concrete Superstructure. See sheet S-14 and S-15.
- Space reinforcement in cap to miss anchor bolts.
- All edges shall have standard 3/4" chamfers except as noted.
- For d(E) bars in concrete block-out, see Deck Plan S-10 of S-30 and bill of material S-12 of S-30.
- For section thru abutment, details and bill of material, see sheet S-22 of S-30.
- Drill & grout bars according to Section 584 of the Std. Specs.



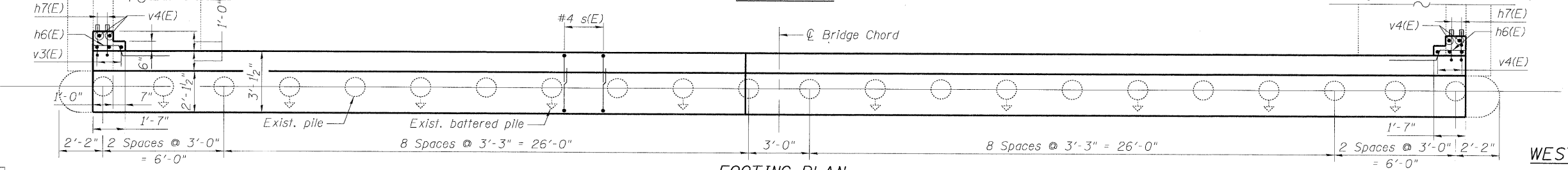
PLAN



ELEVATION

MIN. BAR LAPS

#4 = 1'-8"



FOOTING PLAN

WEST ABUTMENT
PLAN AND ELEVATION
STRUCTURE NO. 016-0275

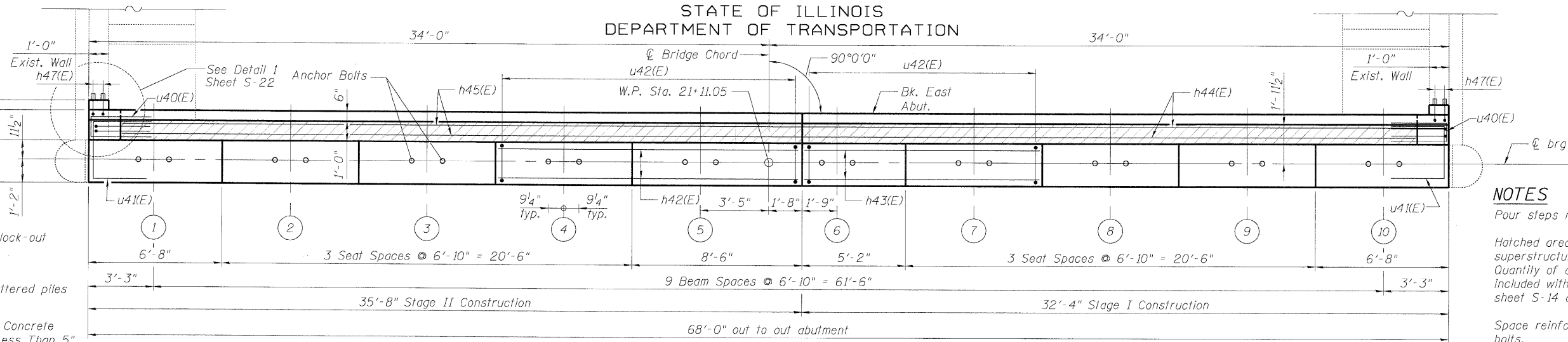
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

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

SHEET NO. S-20 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 65
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

5/15/2009 9:20:30 AM S:\BIDDING\016-0275\0303.1B-1\0303.1B-1.dwg

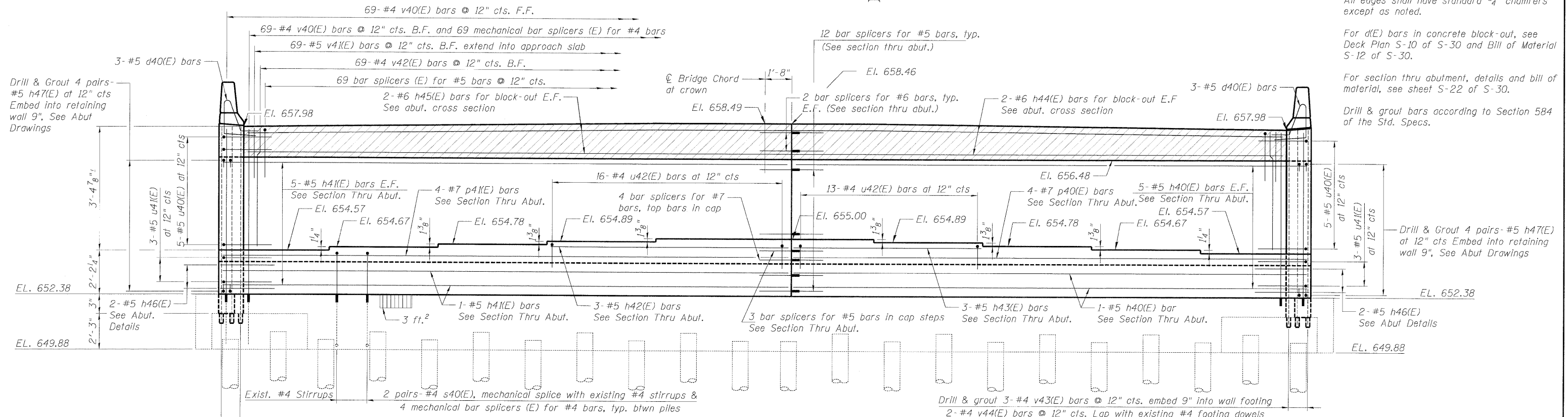
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

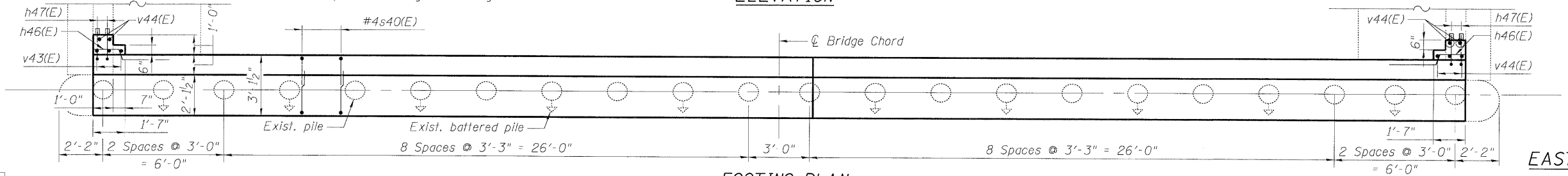
- LEGEND**
- Indicates concrete block-out (See notes)
 - Indicates existing battered piles
 - Structural Repair of Concrete (Depth Equal to or Less Than 5")

- NOTES**
- Four steps monolithically with cap.
 - Hatched area to be poured after superstructure false work has been removed. Quantity of concrete block-out and parapet included with Concrete Superstructure. See sheet S-14 and S-15.
 - Space reinforcement in cap to miss anchor bolts.
 - All edges shall have standard $\frac{3}{4}$ " chamfers except as noted.
 - For d(E) bars in concrete block-out, see Deck Plan S-10 of S-30 and Bill of Material S-12 of S-30.
 - For section thru abutment, details and bill of material, see sheet S-22 of S-30.
 - Drill & grout bars according to Section 584 of the Std. Specs.



ELEVATION

MIN. BAR LAP
#4 = 1'-8"



FOOTING PLAN

**EAST ABUTMENT
PLAN AND ELEVATION
STRUCTURE NO. 016-0275**

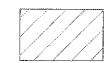
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

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

SHEET NO. S-21 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 66
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LEGEND



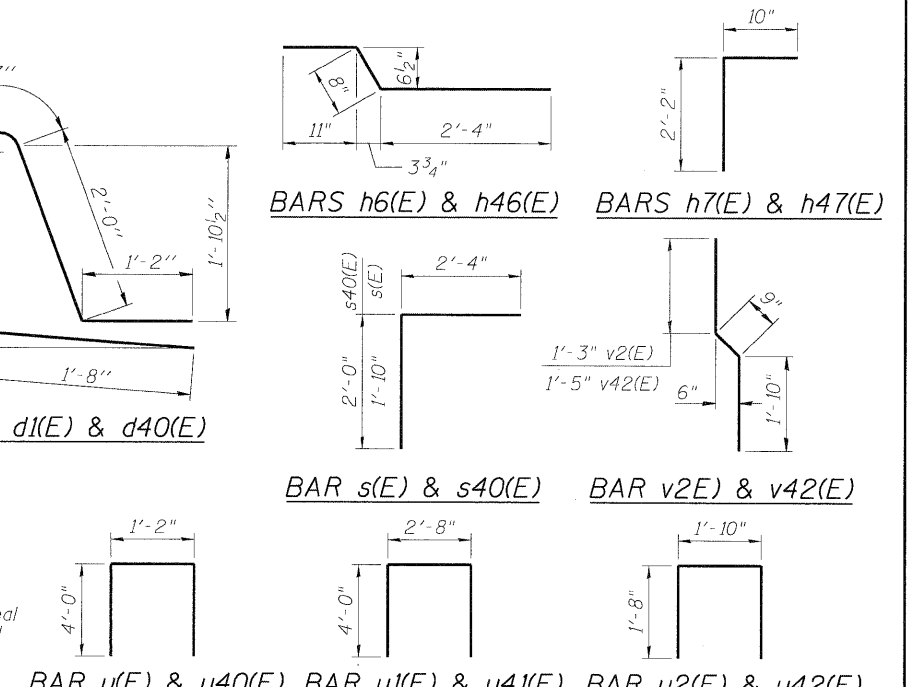
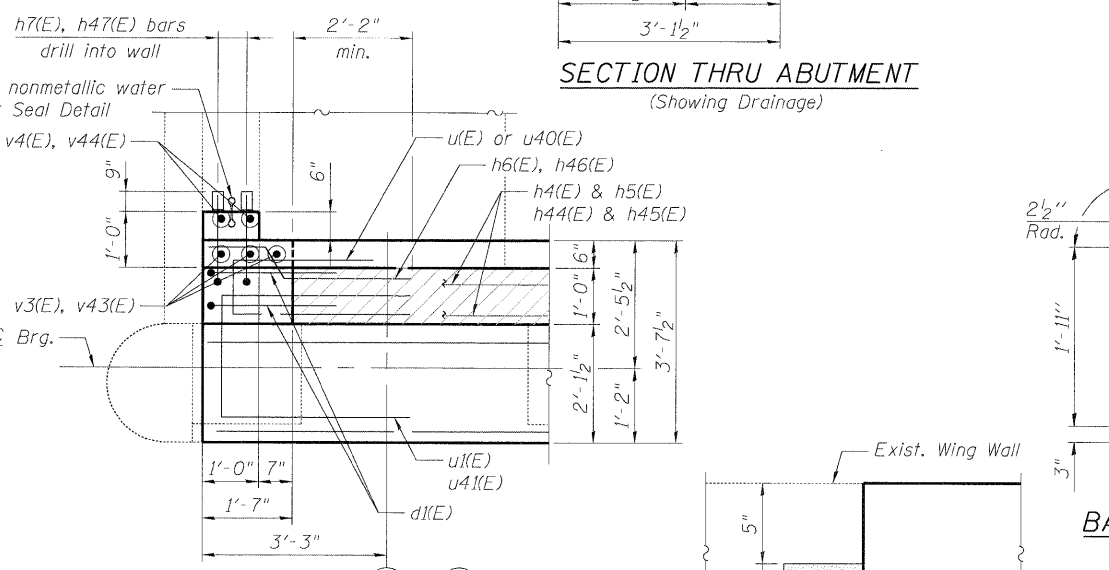
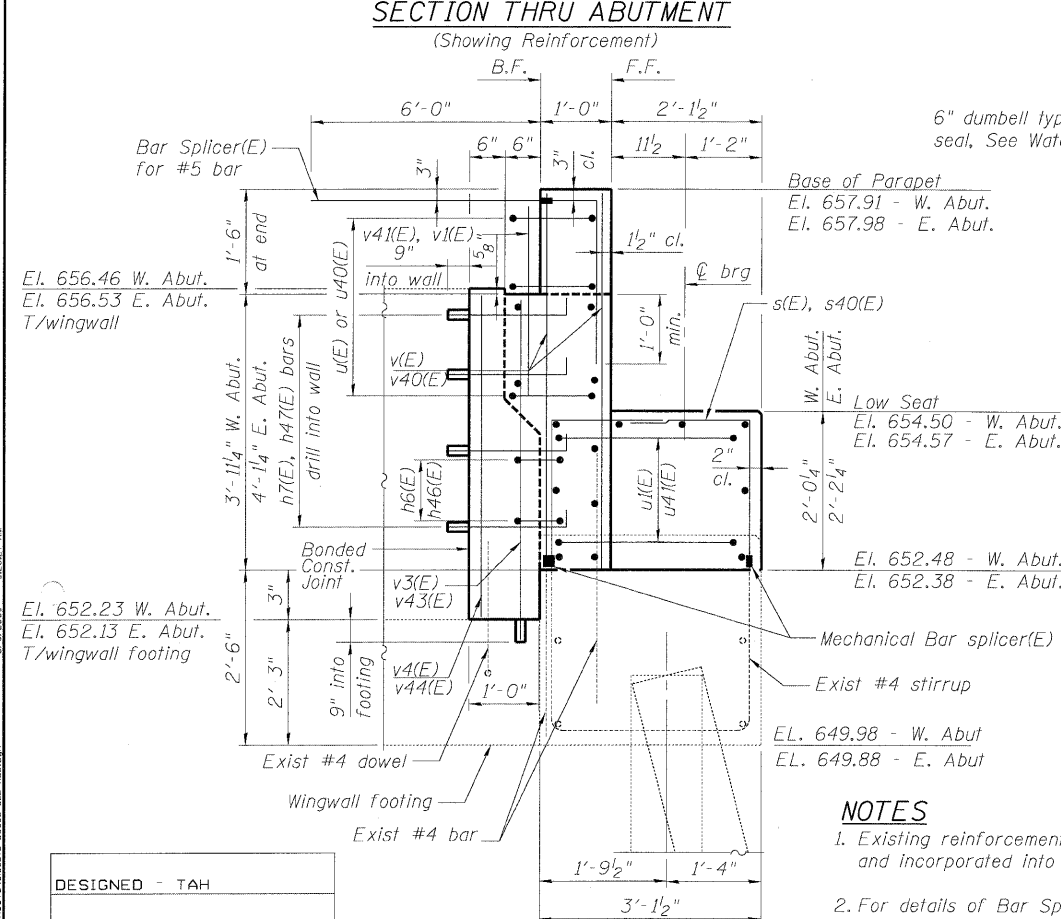
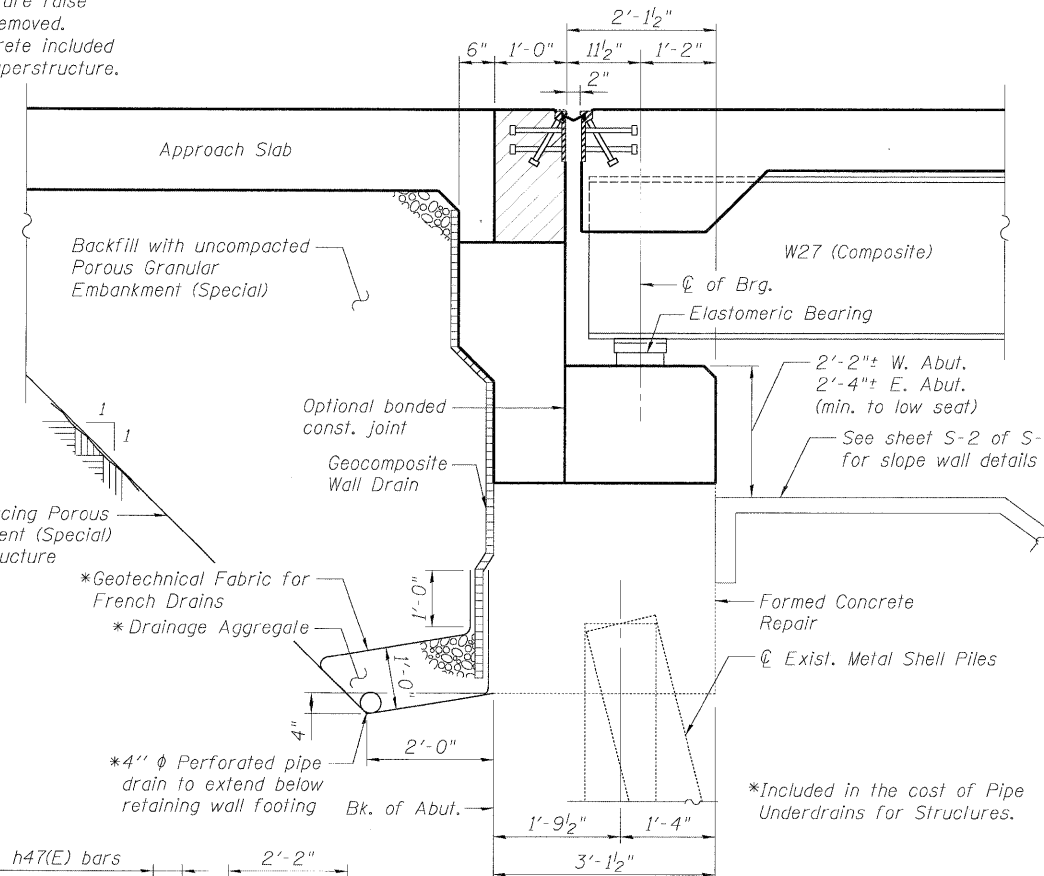
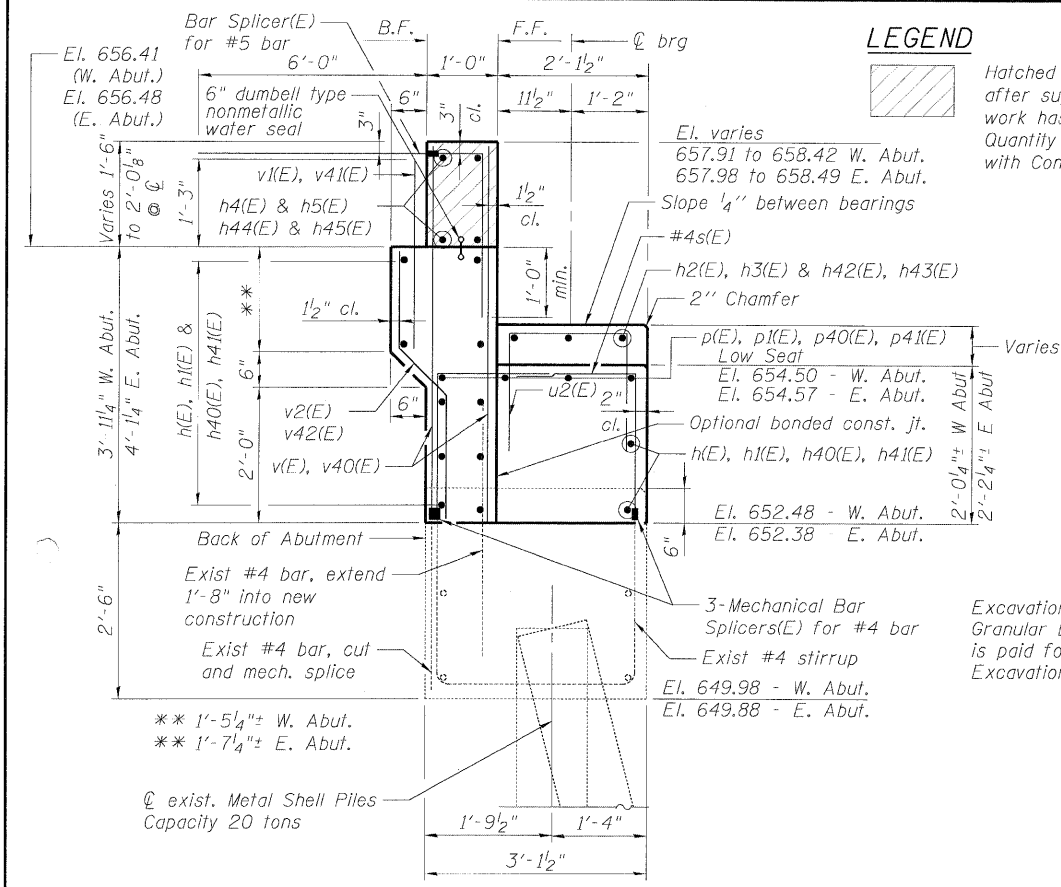
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

W. ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	6	#5	7'-4"	
h(E)	12	#5	32'-0"	
h1(E)	12	#5	35'-4"	
h2(E)	3	#5	15'-0"	
h3(E)	3	#5	11'-8"	
h4(E)	4	#6	30'-7"	
h5(E)	4	#6	33'-9"	
h6(E)	4	#5	3'-11"	
h7(E)	16	#5	3'-0"	
p(E)	4	#7	32'-0"	
p1(E)	4	#7	35'-4"	
s(E)	84	#4	4'-2"	
u(E)	10	#5	9'-2"	
u1(E)	6	#5	10'-8"	
u2(E)	29	#4	5'-2"	
v(E)	138	#4	5'-1"	
v1(E)	69	#5	2'-8"	
v2(E)	69	#4	3'-10"	
v3(E)	6	#4	4'-9"	
v4(E)	4	#4	3'-11"	
Item	Unit	Quantity		
Bar Splicers	Each	92		
Structure Excavation	Cu. Yd.	95		
Concrete Structures	Cu. Yd.	30.5		
Reinforcement Bars, Epoxy Coated	Pound	3350		
Concrete Sealer	Sq. Ft.	535		
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	15		
Mechanical Bar Splicers	Each	153		
Geocomposite Wall Drain	Sq. Yd.	55		

E. ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d40(E)	6	#5	7'-4"	
h40(E)	12	#5	32'-0"	
h41(E)	12	#5	35'-4"	
h42(E)	3	#5	15'-0"	
h43(E)	3	#5	11'-8"	
h44(E)	4	#6	30'-7"	
h45(E)	4	#6	33'-9"	
h46(E)	4	#5	3'-11"	
h47(E)	16	#5	3'-0"	
p40(E)	4	#7	32'-0"	
p41(E)	4	#7	35'-4"	
s40(E)	84	#4	4'-4"	
u40(E)	10	#5	9'-2"	
u41(E)	6	#5	10'-8"	
u42(E)	29	#4	5'-2"	
v40(E)	138	#4	5'-3"	
v41(E)	69	#5	2'-10"	
v42(E)	69	#4	4'-0"	
v43(E)	6	#4	4'-11"	
v44(E)	4	#4	4'-1"	
Item	Unit	Quantity		
Bar Splicers	Each	92		
Structure Excavation	Cu. Yd.	95		
Concrete Structures	Cu. Yd.	31.6		
Reinforcement Bars, Epoxy Coated	Pound	3390		
Concrete Sealer	Sq. Ft.	550		
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	3		
Mechanical Bar Splicers	Each	153		
Geocomposite Wall Drain	Sq. Yd.	55		



NOTES

- Existing reinforcement extending into new construction shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
- For details of Bar Splicers, see sheet S-28 of S-30.
- All drainage system components shall extend along length of abutments from wingwall to wingwall except a 4" ϕ outlet pipe shall sleeve below wingwall footing and extend until intersecting with the side slope (20 ft). The pipes shall drain into concrete headwalls (See Special Provisions and Article 601.05 of the Standard Specifications and Highway Standard 601101). Cost included with Pipe Underdrains for Structures.

WATER SEAL DETAIL AT WINGWALL

Costs of water seal, epoxy grout, joint filler, concrete nails and saw cutting included with Concrete Structures.

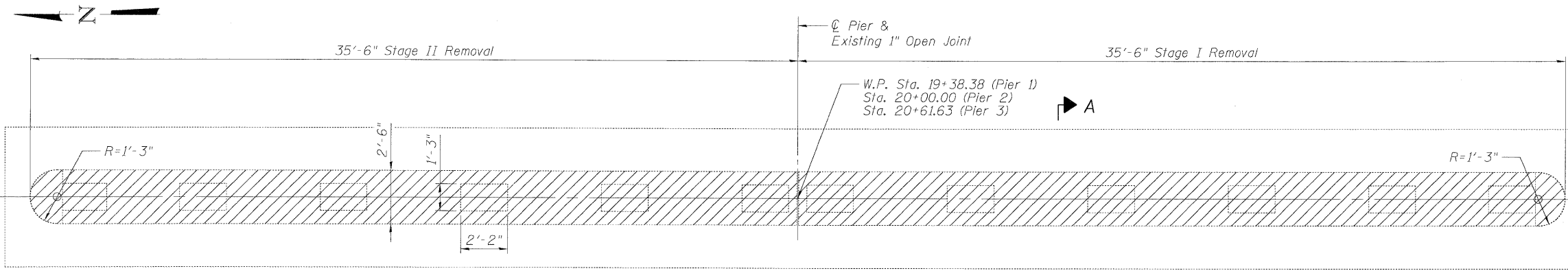
ABUTMENT DETAILS
STRUCTURE NO. 016-0275

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

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

SHEET NO. S-22 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 67
	SN 016-0275			CONTRACT NO. 60C05	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

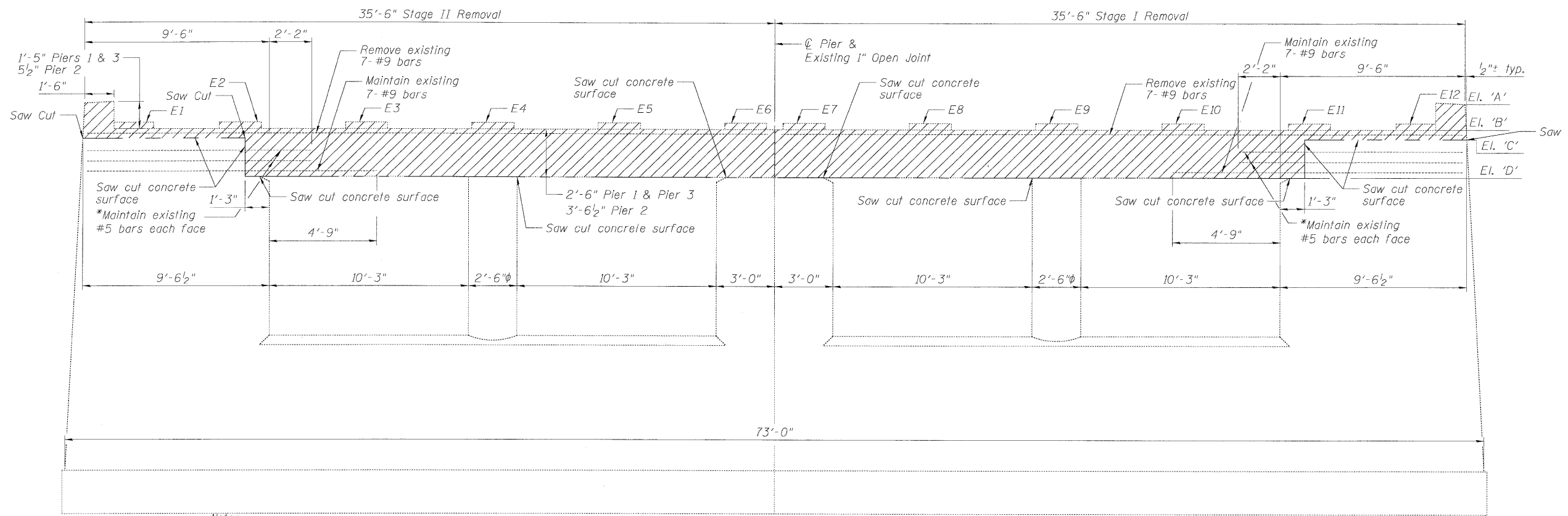
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING PIER PLAN

ELEVATIONS

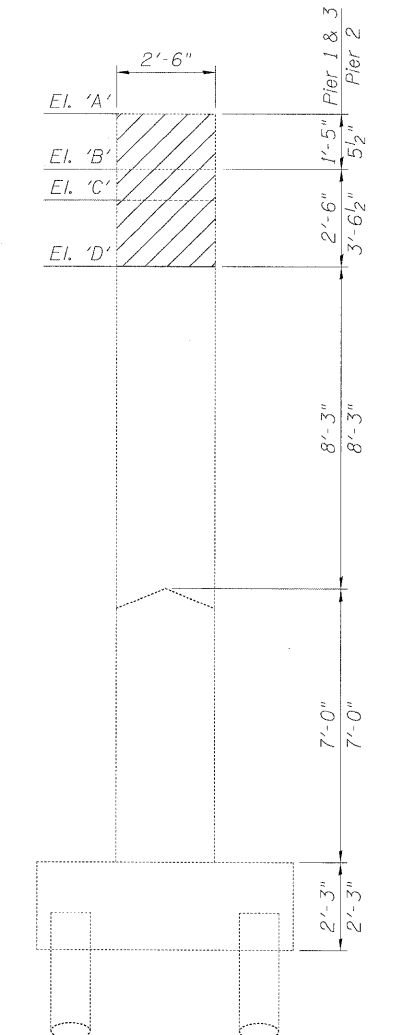
	'A'	'B'	'C'	'D'
Pier 1	654.08	652.66	652.16	650.16
Pier 2	654.15	653.69	653.19	650.15
Pier 3	654.05	652.63	652.13	650.13



EXISTING PIER ELEVATION

EXISTING BEAM SEAT ELEVATIONS

	Pier 1	Pier 2	Pier 3
B1	652.78	653.83	652.75
B2	652.78	653.85	652.76
B3	652.86	653.91	652.83
B4	652.92	653.98	652.90
B5	653.00	654.04	652.97
B6	653.07	654.11	653.05
B7	653.07	654.14	653.05
B8	653.00	654.04	652.97
B9	652.95	653.98	652.90
B10	652.87	653.91	652.83
B11	652.81	653.85	652.76
B12	652.80	653.83	652.75



SECTION A-A

Notes:
All existing vertical reinforcement in columns shall remain. Existing column reinforcement shall extend into cap a length of 2'-2".

Existing reinforcement incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal. See Section 501 of the Standard Specifications.

Existing Horizontal bottom 7-#9 bars shall extend beyond exterior column face 4'-9".

Remove pier cap to face of exterior & interior columns. Saw cut remainder of cap at interior columns. Any damage caused by the Contractor shall be repaired at the Contractor's expense.

For exterior columns, saw cut & remove concrete to elevation shown at elevation "c". Retain existing vertical column bars & remove existing top 7-#9 bars. On the vertical face sawcut & remove 1'-3" horizontal of concrete on interior face as shown on Elevation view. Retain existing column reinforcement & horizontal 7-#9 bars.

Prior to removal of concrete, a 3/4" deep saw cut shall be made along all boundaries of removal areas to remain in place.

Concrete removal shall be according to Section 501 of the Std. Specs.

*Maintain 2-#5 bars each face for pier 2 and 1-#5 bar each face for piers 1 & 3. Extend #5 bars 2'-2" from face of exterior pier column.

LEGEND
[Hatched Box] = Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu Yd	50

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

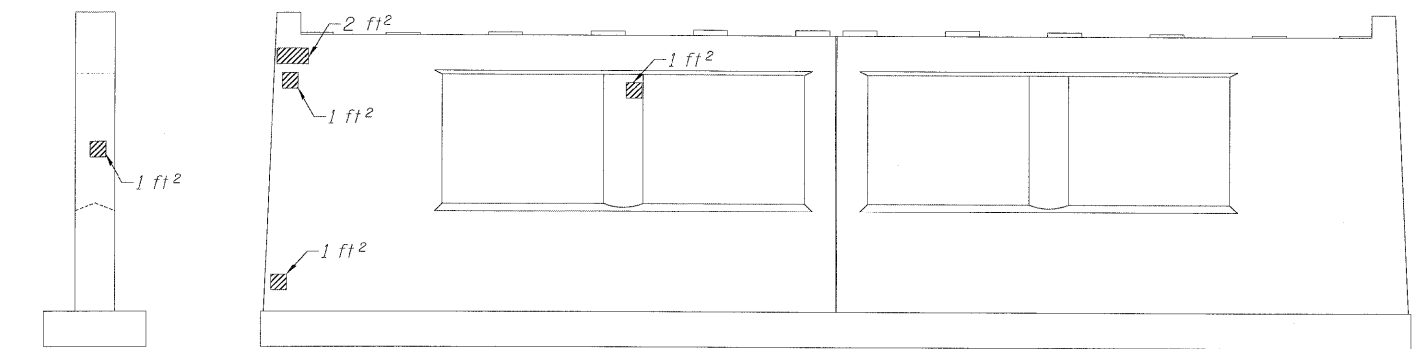
SHEET NO. S-23 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 68
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

PIER REMOVAL DETAILS
STRUCTURE NO. 016-0275

5/16/2009 9:20:31 AM S:\BOWMAN\BARR\0303\016-0275-60C05-023-REM.dwg

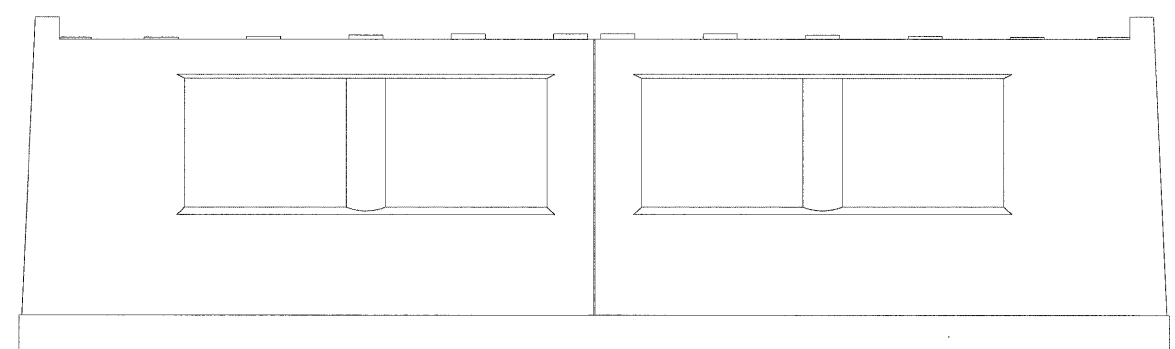
DESIGNED - TAH
CHECKED - DF
DRAWN - LAM
CHECKED - TAH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

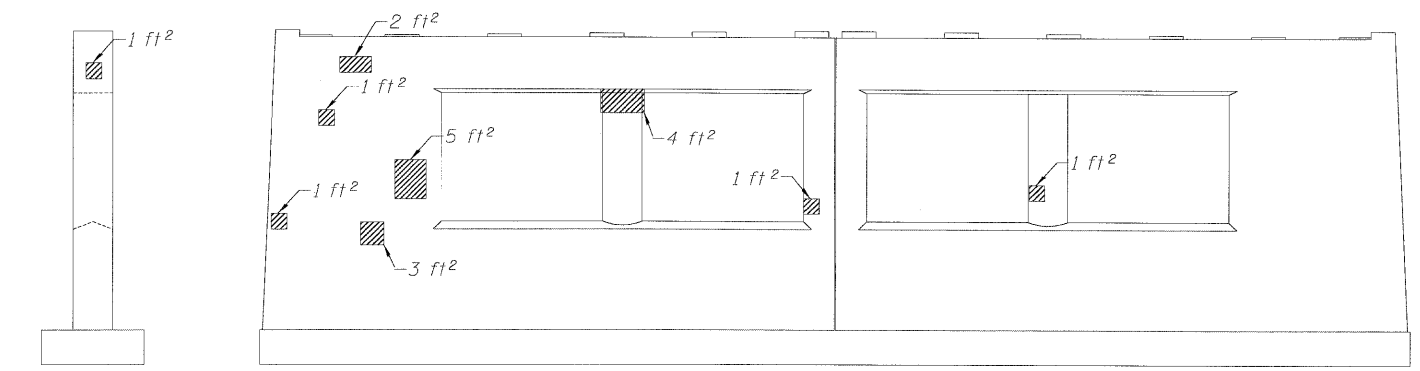


NORTH END

PIER 1
(Looking East)

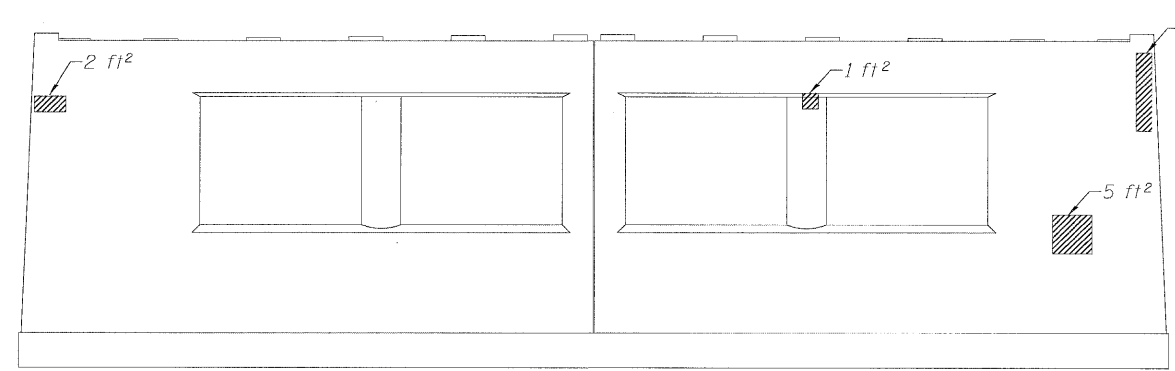


PIER 1
(Looking West)

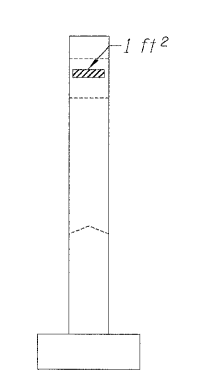


NORTH END

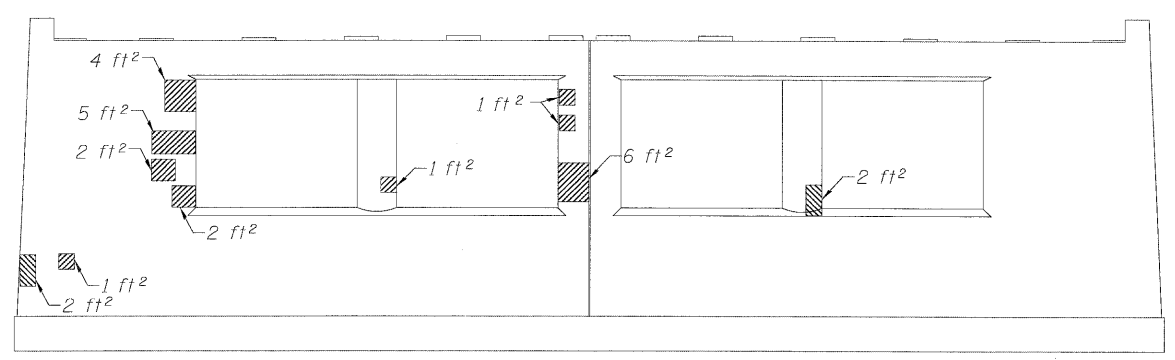
PIER 2
(Looking East)



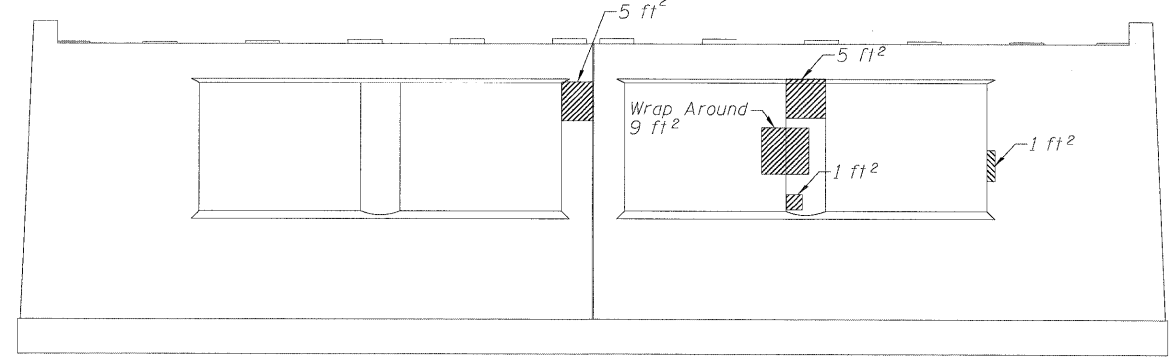
PIER 2
(Looking West)



SOUTH END



PIER 3
(Looking East)



PIER 3
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	87

LEGEND

 = Structural Repair of Concrete

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

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



SHEET NO. S-24
S-30 SHEETS

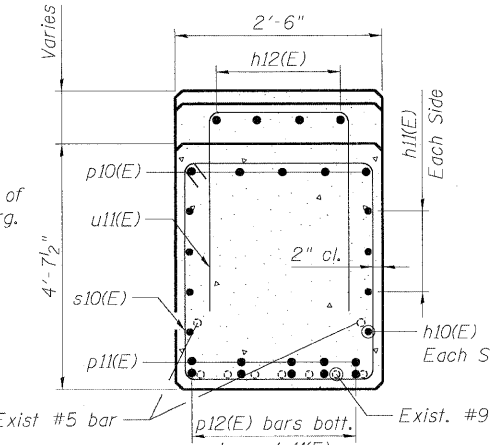
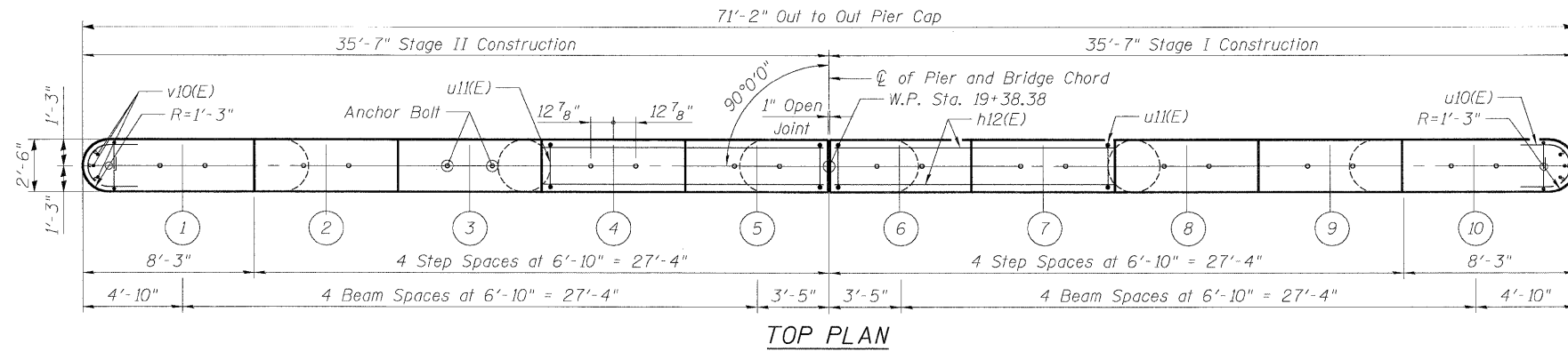
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	69
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PIER REPAIR DETAILS
STRUCTURE NO. 016-0275

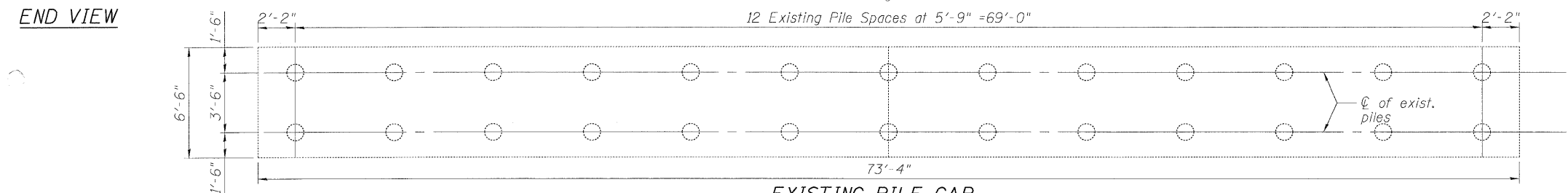
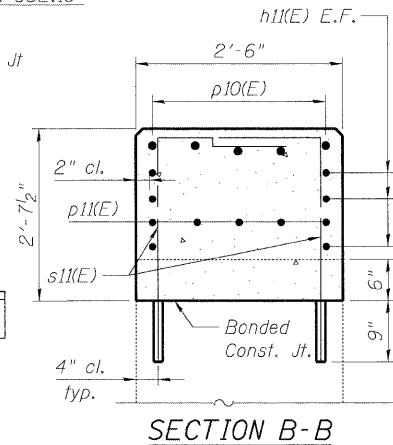
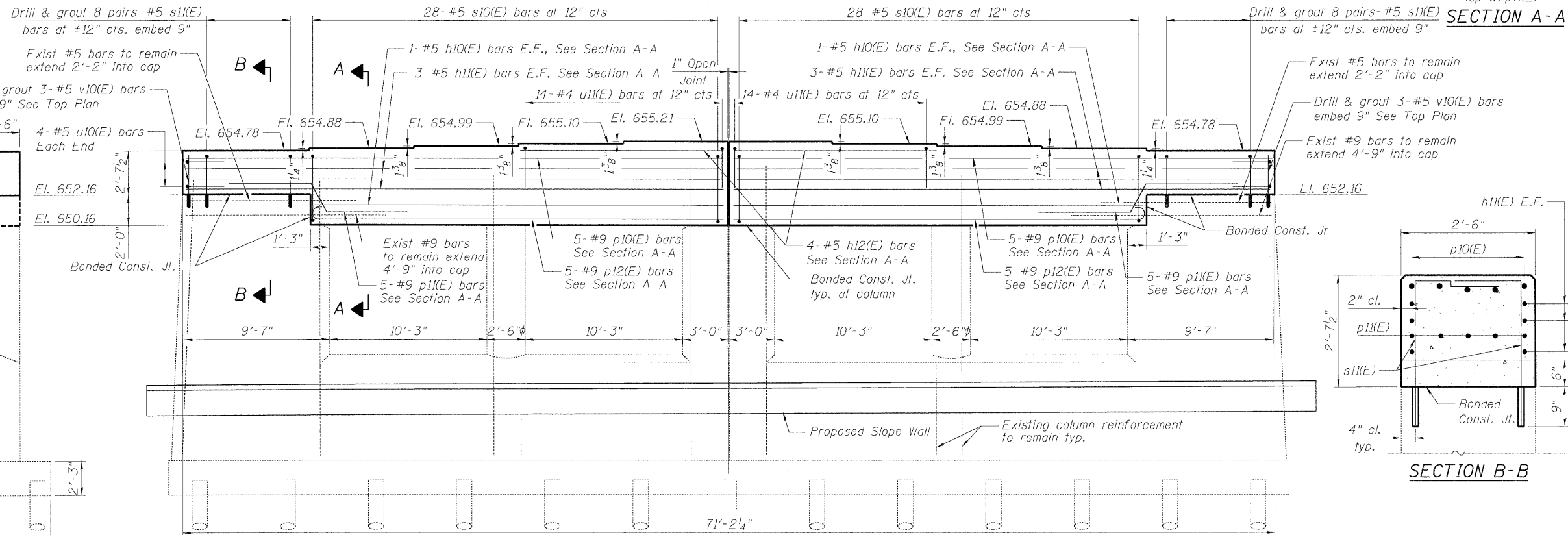
5/6/2008 9:20:33 AM S:\PROJECTS\CAD\15010275-60C05-024-RP5.dwg

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

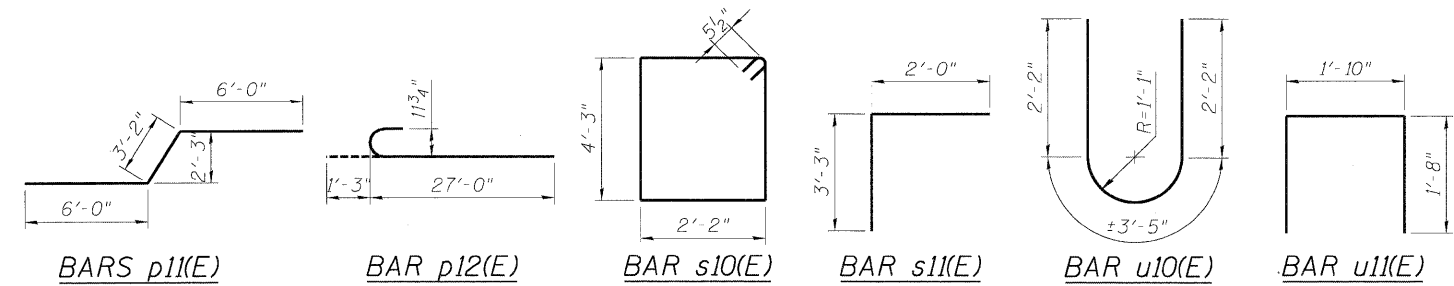
PIER 1
BILL OF MATERIAL



Bar	No.	Size	Length	Shape	
h10(E)	4	#5	27'-0"	—	
h11(E)	12	#5	34'-1"	—	
h12(E)	8	#5	13'-4"	—	
p10(E)	10	#9	34'-1"	—	
p11(E)	10	#9	15'-2"	—	
p12(E)	10	#9	28'-3"	—	
s10(E)	56	#5	13'-9"	□	
s11(E)	32	#5	5'-3"	□	
u10(E)	8	#5	7'-9"	—	
u11(E)	28	#4	5'-2"	—	
v10(E)	6	#5	3'-3"	—	
Concrete Structures				Cu. Yd.	30.2
Reinforcement Bars, Epoxy Coated				Pound	4450
Concrete Sealer				Sq. Ft.	940



END VIEW



Notes:

- Space reinforcement in cap to miss anchor bolts.
- Existing reinforcement incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal.
- All edges shall have standard 3/4" chamfers except as noted.
- Pour steps monolithically with cap.
- All construction joints shall be bonded.
- All existing vertical reinforcement in columns shall remain. Existing column reinforcement shall extend into cap min length of 2'-2".
- Existing Horizontal bottom 7-#9 bars shall lap with p(E) bars with a minimum lap of 4'-9".
- For exterior columns, saw cut & remove concrete to elevation 652.16. Retain existing vertical column bars & remove existing top 7-#9 bars. On the vertical face sawcut & remove 1'-3" of concrete on interior face as shown on Elevation view. Retain existing column reinforcement & horizontal 7-#9 bars.
- Concrete Sealer shall be applied to all surfaces of new concrete.
- Drill & epoxy grout #5s11(E) & v10(E) bars according to section 584 of the std. specs.
- Bar p11(E) should maintain 2" clearance from edge of concrete.
- For anchor bolts see bearing detail Sheet S-18 of S-30.

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

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

SHEET NO. S-25
S-30 SHEETS

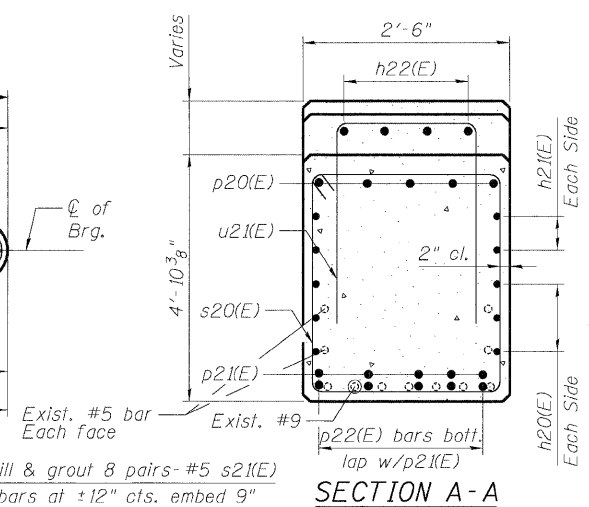
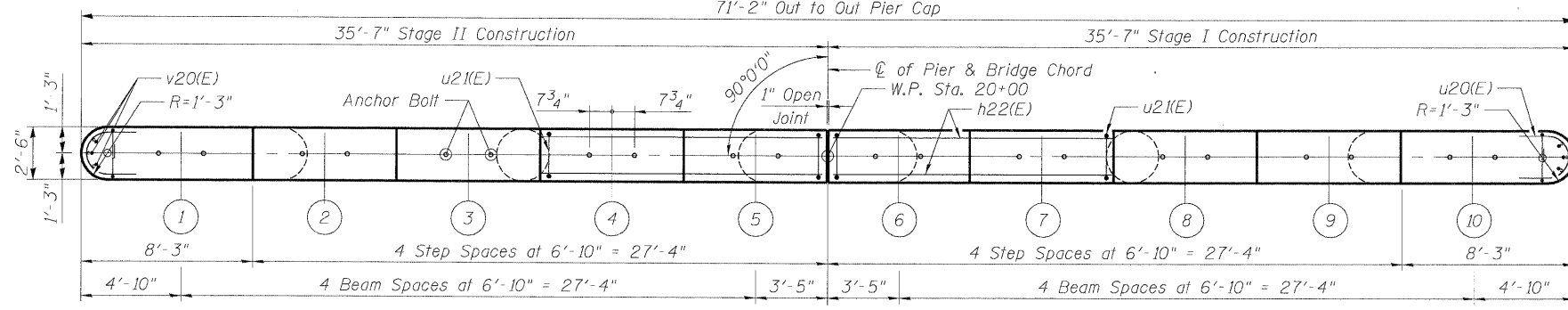
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	70
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PIER 1 CAP MODIFICATIONS
STRUCTURE NO. 016-0275

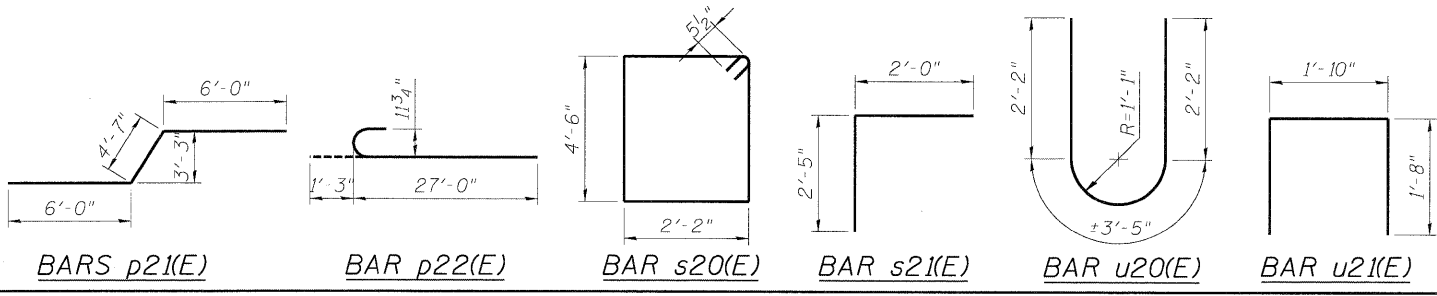
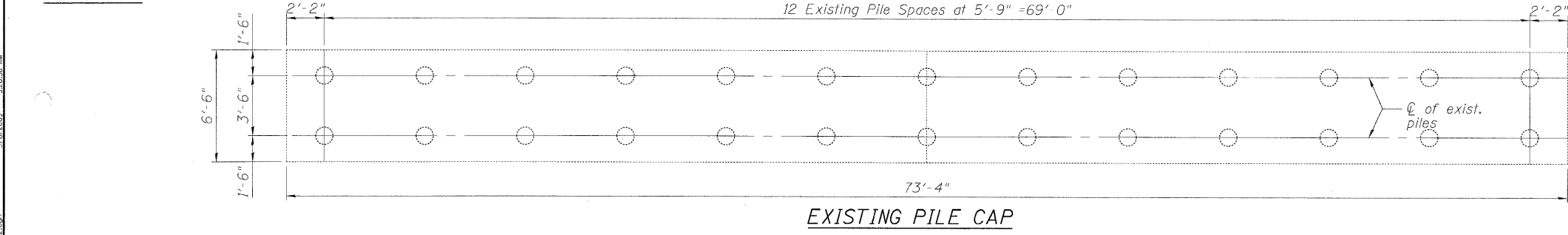
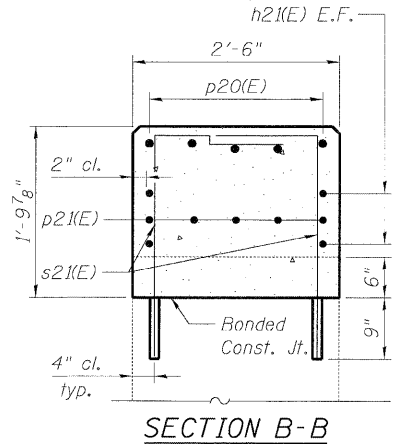
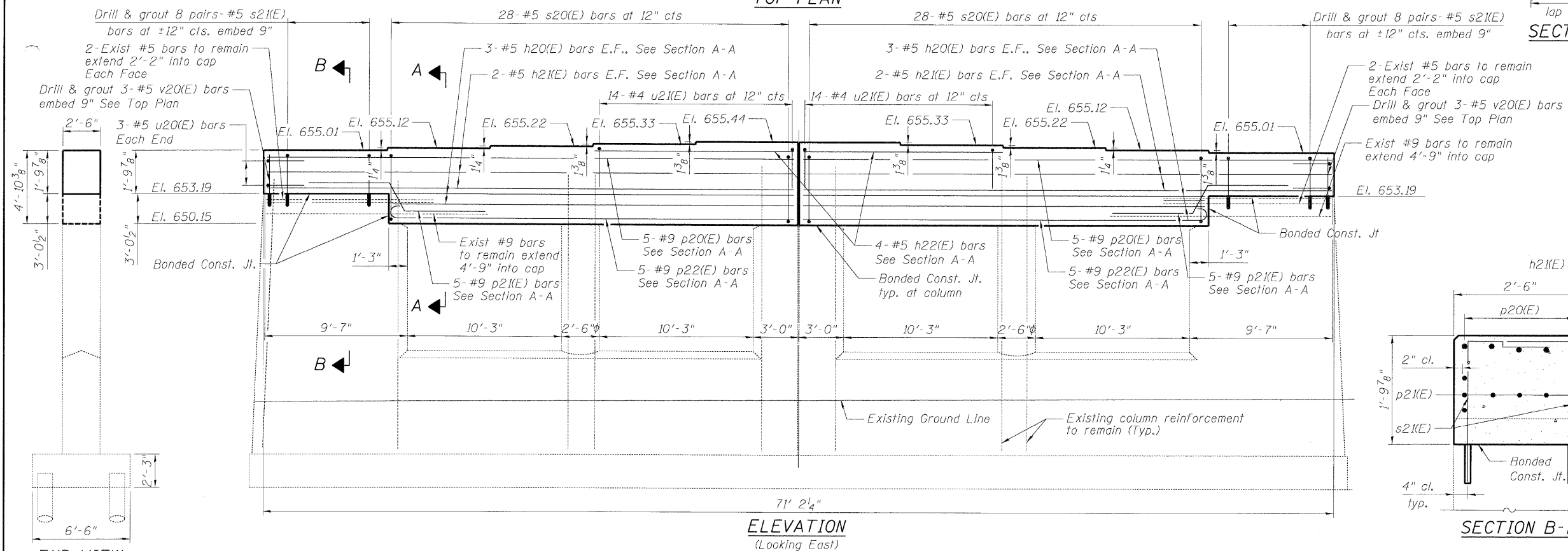
S:\9105 CAD\IN\30\3000 - Sheets\016-0275-50005-025-PIR1.dwg 5/6/2009 9:00:36 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
BILL OF MATERIAL



Bar	No.	Size	Length	Shape
h20(E)	12	#5	26'-10"	
h21(E)	8	#5	34'-1"	
h22(E)	8	#5	13'-4"	
p20(E)	10	#9	34'-1"	
p21(E)	10	#9	16'-7"	
p22(E)	10	#9	28'-3"	
s20(E)	56	#5	14'-3"	
s21(E)	32	#5	4'-5"	
u20(E)	6	#5	7'-9"	
u21(E)	28	#4	5'-2"	
v20(E)	6	#5	2'-5"	
			Cu. Yd.	29.1
Concrete Structures			Pound	4510
Reinforcement Bars, Epoxy Coated			Sq. Ft.	935



- Notes:
- Space reinforcement in cap to miss anchor bolts.
 - Existing reinforcement incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal.
 - All edges shall have standard 3/4" chamfers except as noted.
 - Pour steps monolithically with cap.
 - All construction joints shall be bonded.
 - All existing vertical reinforcement in columns shall remain. Existing column reinforcement shall extend into cap min length of 2'-2".
 - Existing Horizontal bottom 7-#9 bars shall lap with p(E) bars with a minimum lap of 4'-9".
 - For exterior columns, saw cut & remove concrete to elevation 653.19. Retain existing vertical column bars & remove existing top 7-#9 bars. On the vertical face sawcut & remove 1'-3" of concrete on interior face as shown on Elevation view. Retain existing column reinforcement & horizontal 7-#9 bars.
 - Concrete Sealer shall be applied to all surfaces of new concrete.
 - Drill & epoxy grout #5s21(E) & v20(E) bars according to section 584 of the std. specs.
 - Bar p21(E) should maintain min 2" clearance from edge of concrete.
 - For anchor bolts see bearing detail Sheet S-18 of S-30.

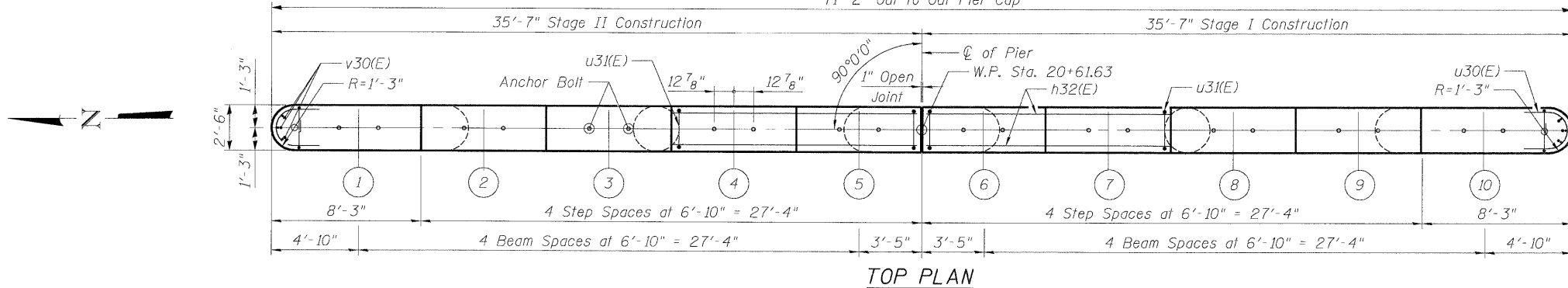
PIER 2 CAP MODIFICATIONS
STRUCTURE NO. 016-0275

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

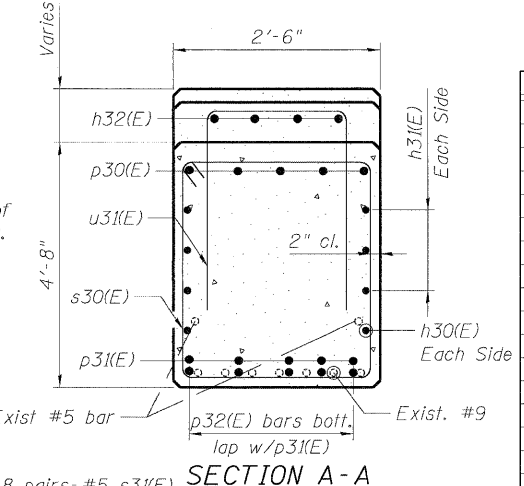
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job No. 910

SHEET NO. S-26 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 71
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



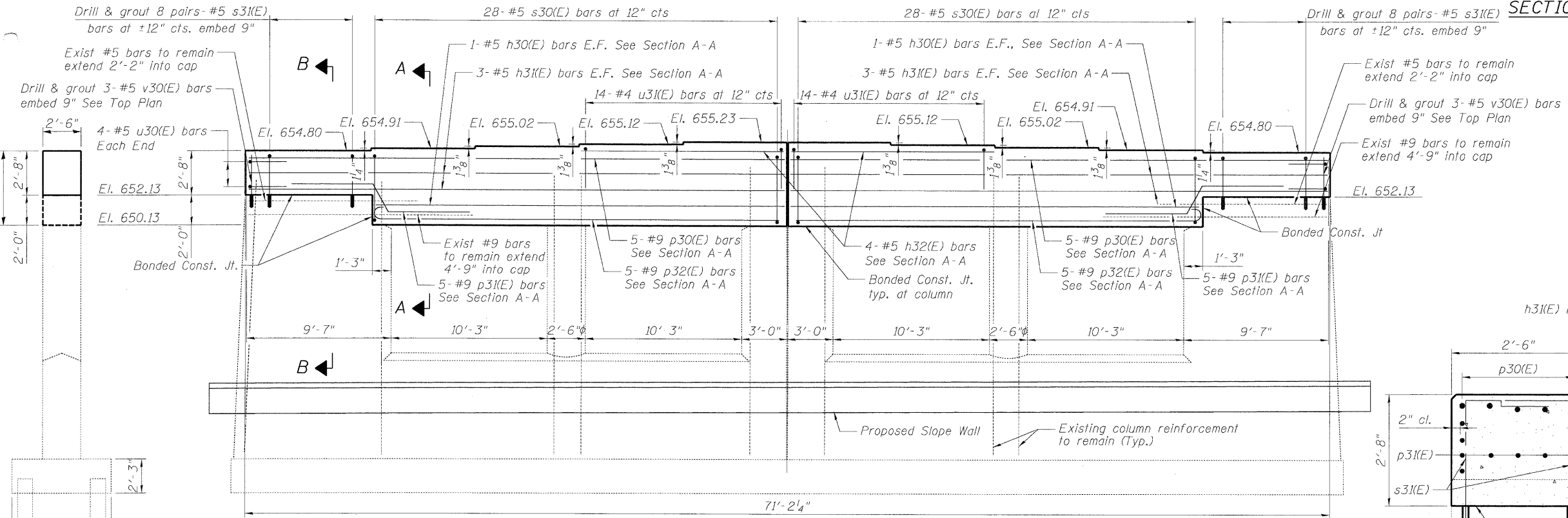
TOP PLAN



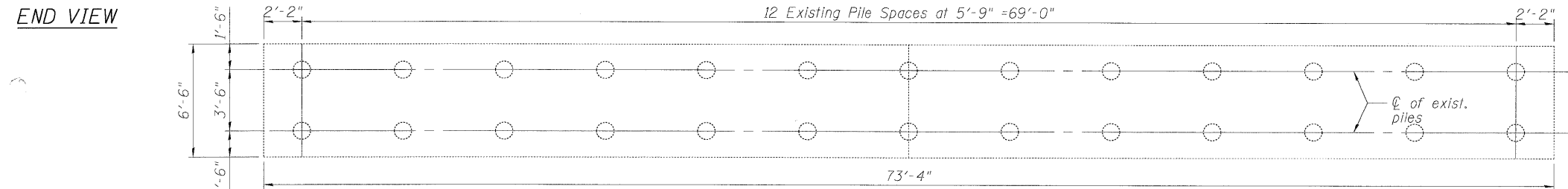
SECTION A-A

**PIER 3
BILL OF MATERIAL**

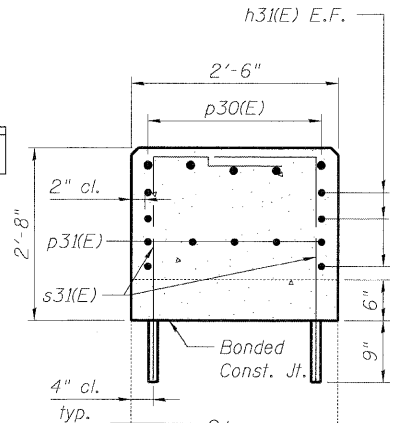
Bar	No.	Size	Length	Shape
h30(E)	4	#5	27'-0"	
h31(E)	12	#5	34'-1"	
h32(E)	8	#5	13'-4"	
p30(E)	10	#9	34'-1"	
p31(E)	10	#9	15'-2"	
p32(E)	10	#9	28'-3"	
s30(E)	56	#5	13'-9"	
s31(E)	32	#5	5'-3"	
u30(E)	8	#5	7'-9"	
u31(E)	28	#4	5'-2"	
v30(E)	6	#5	3'-3"	
Concrete Structures	Cu. Yd.		30.2	
Reinforcement Bars, Epoxy Coated	Pound		4450	
Concrete Sealer	Sq. Ft.		940	



ELEVATION
(Looking East)



EXISTING PILE CAP

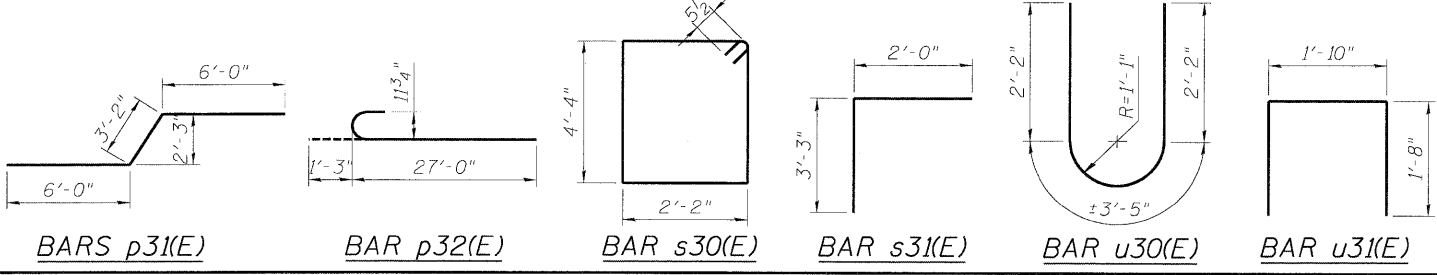


SECTION B-B

- Notes:
- Space reinforcement in cap to miss anchor bolts.
 - Existing reinforcement incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal.
 - All edges shall have standard $\frac{3}{4}$ " chamfers except as noted.
 - Pour steps monolithically with cap.
 - All construction joints shall be bonded.
 - All existing vertical reinforcement in columns shall remain. Existing column reinforcement shall extend into cap min length of 2'-2".
 - Existing Horizontal bottom 7-#9 bars shall lap with p(E) bars with a minimum lap of 4'-9".
 - For exterior columns, saw cut & remove concrete to elevation 652.13. Retain existing vertical column bars & remove existing top 7-#9 bars. On the vertical face sawcut & remove 1'-3" of concrete on interior face as shown on Elevation view. Retain existing column reinforcement & horizontal 7-#9 bars.
 - Concrete Sealer shall be applied to all surfaces of new concrete.
 - Drill & epoxy grout #5s31(E) & h30(E) bars according to section 584 of the std. specs.
 - Bar p31(E) should maintain min 2" clearance from edge of concrete.
 - For anchor bolts see bearing detail Sheet S-18 of S-30.

END VIEW

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



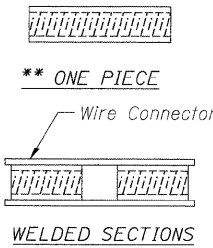
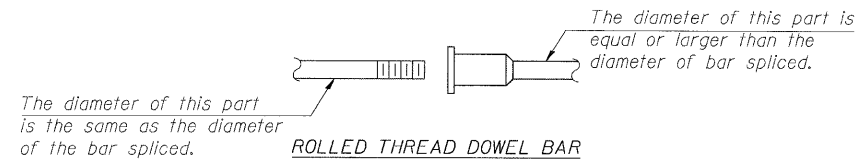
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com
Job. No. 910

SHEET NO. S-27 S-30 SHEETS	F.A.P. RTE. 0353	SECTION 0303.1B-1	COUNTY COOK	TOTAL SHEETS 91	SHEET NO. 72
	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

**PIER 3 CAP MODIFICATIONS
STRUCTURE NO. 016-0275**

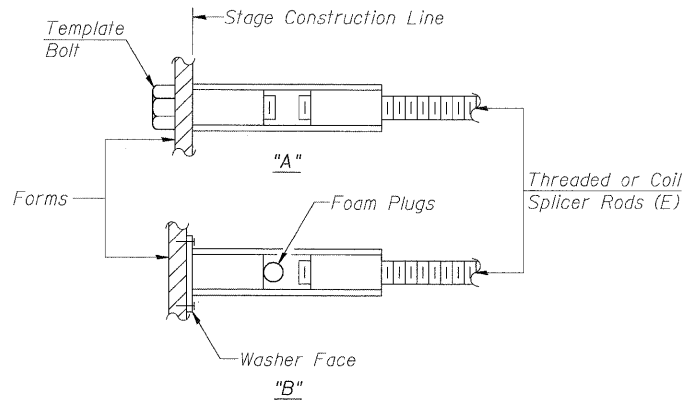
5/6/2009 9:50:42 AM S:\016-0275\PIER 3\PIER 3.dwg

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

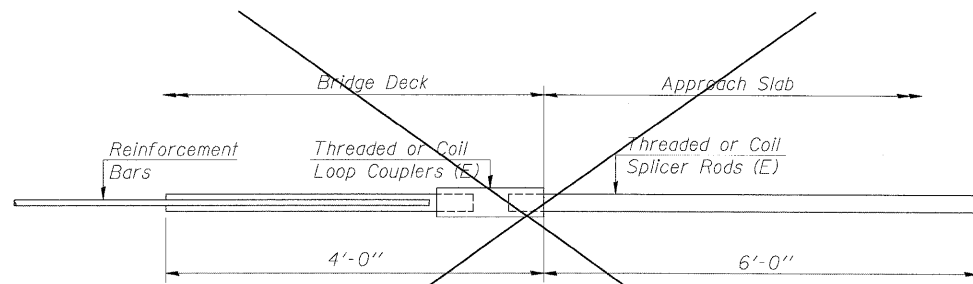
"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

NOTES

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

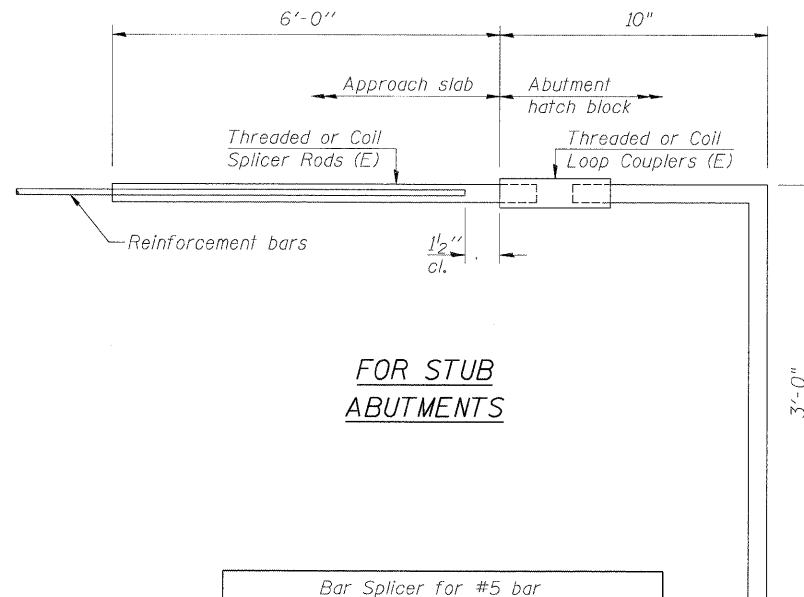
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_1$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_1$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_1 = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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



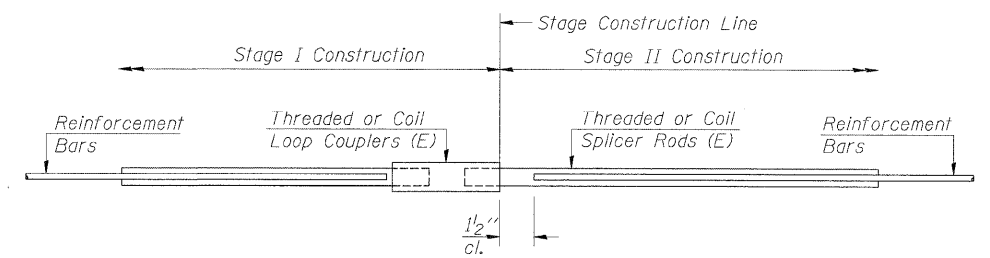
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 138



STANDARD

Bar Size	No. Assemblies Required	Location
#5	733	Deck
#4	50	Appr. Slab
#5	172	Appr. Slab
#5	30	E. & W. Abut.
#6	8	E. & W. Abut.
#7	8	E. & W. Abut.

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

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

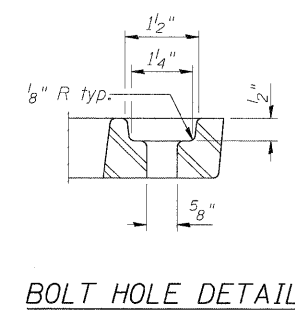
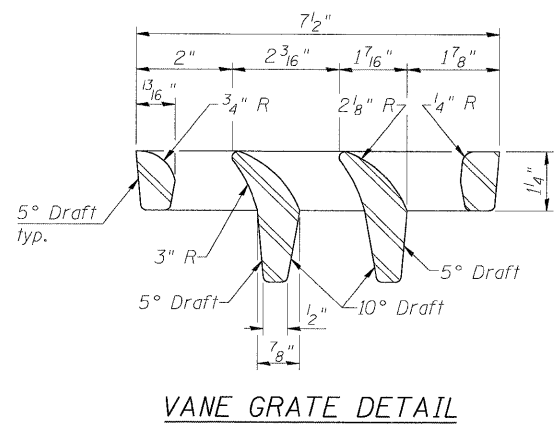
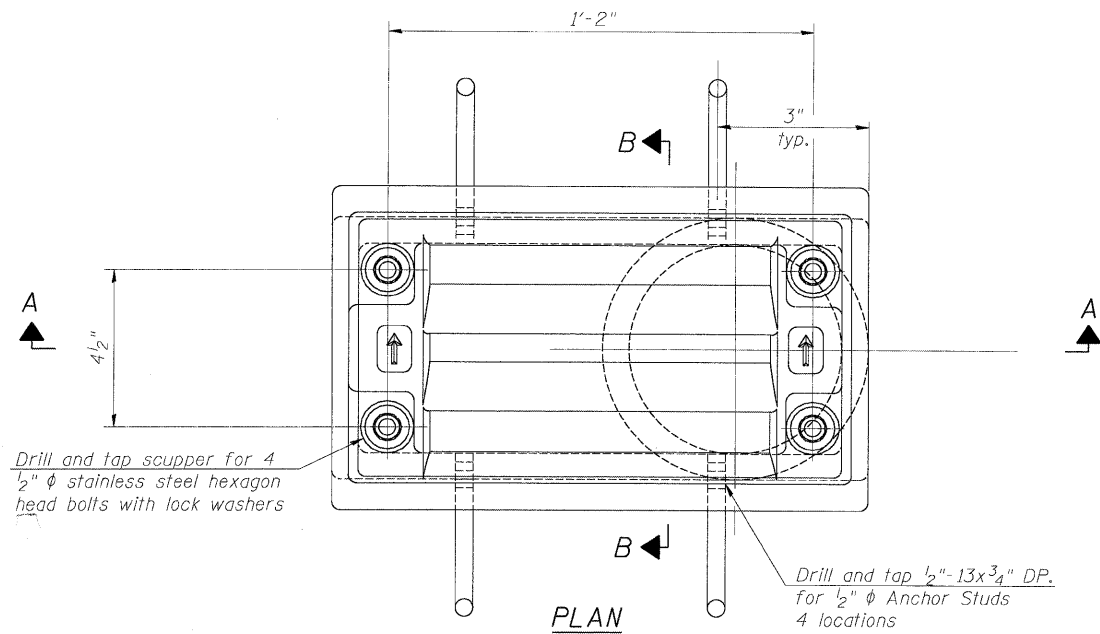


SHEET NO. S-28	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0353	0303.1B-1	COOK	91	73
S-30 SHEETS	SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 016-0275

5/6/2009 9:20:45 AM S:\BID\05_CAD\BID\05\0275-60C05-028-85-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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.

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.

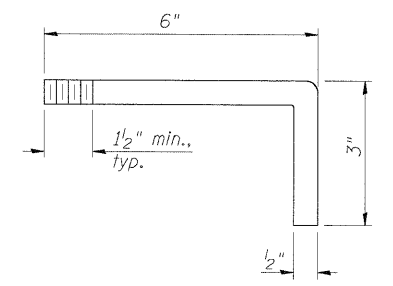
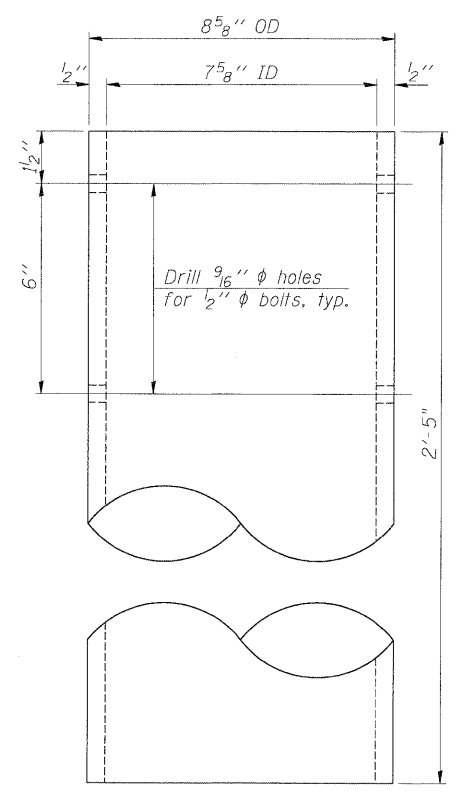
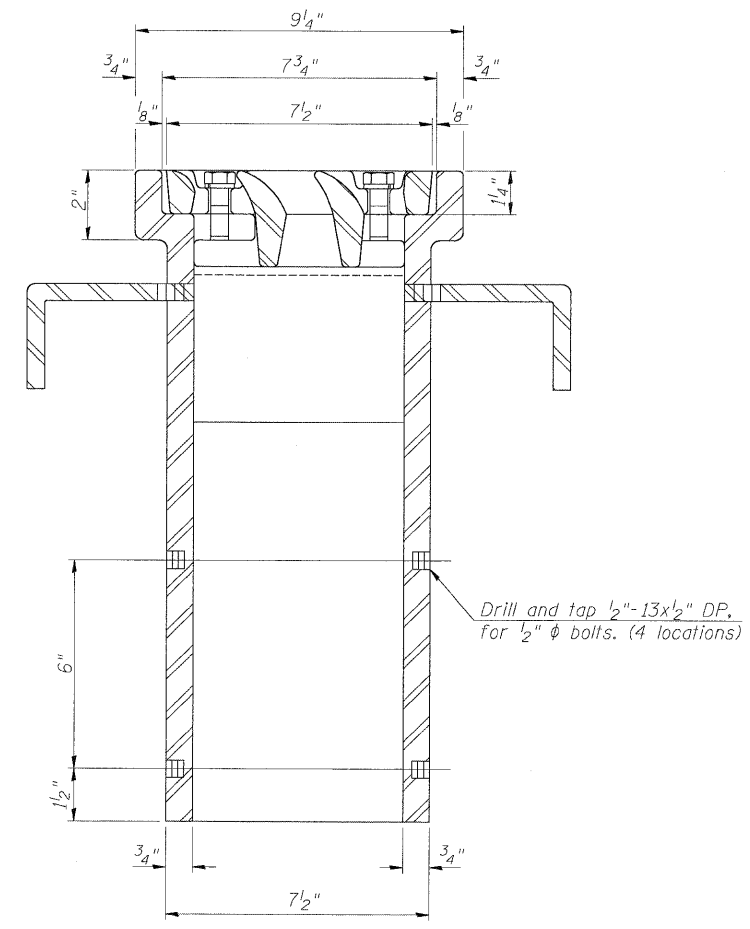
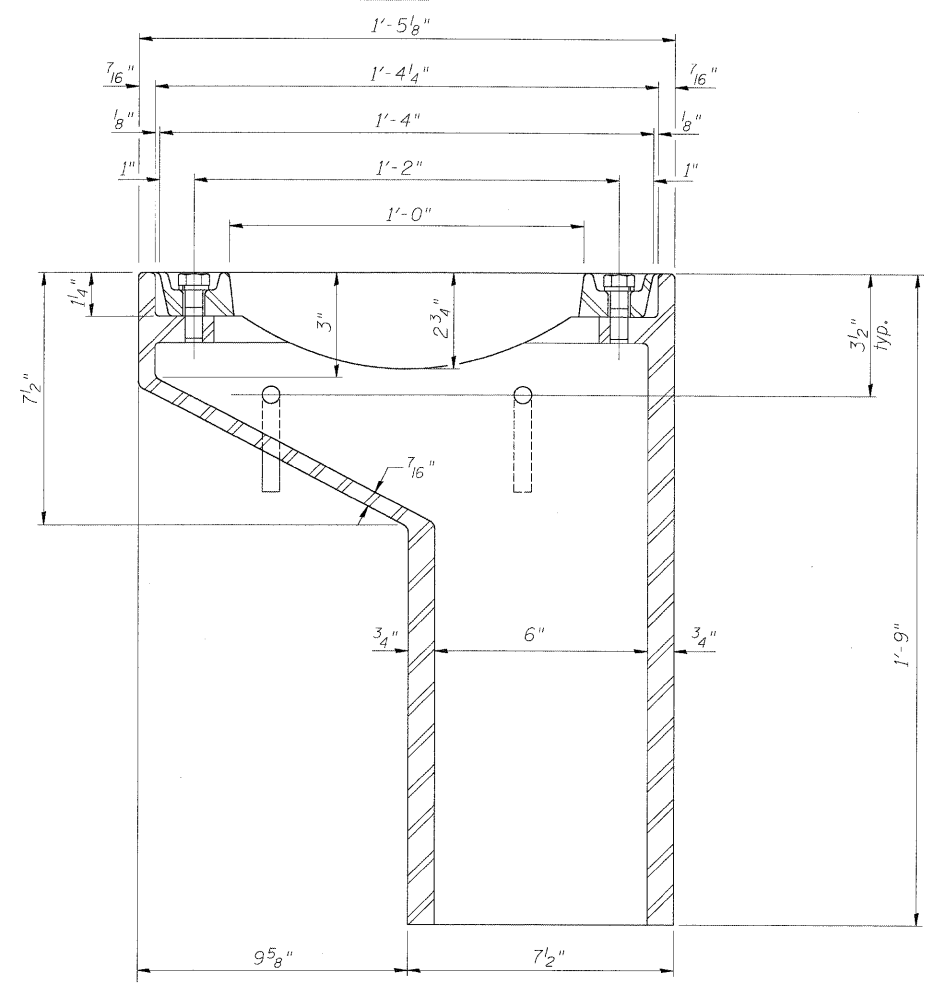
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

DESIGNED	TAH
CHECKED	DF
DRAWN	LAM
CHECKED	DF

DS-11 10-1-08

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



SHEET NO. S-29
S-30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	74
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 016-0275

S:\310.05\DRAWING\310.CADD_Sheet\A\0160275-60C05-029-05.dwg 5/6/2009 9:20:48 AM

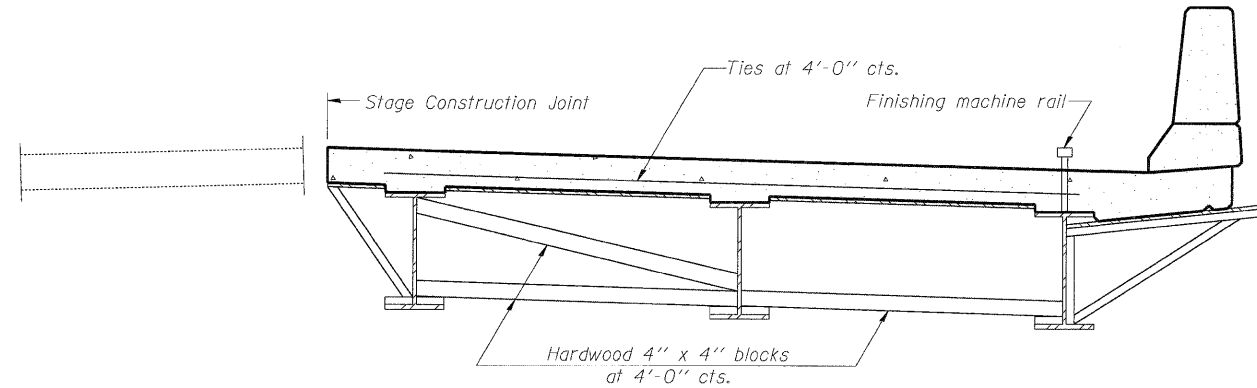
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

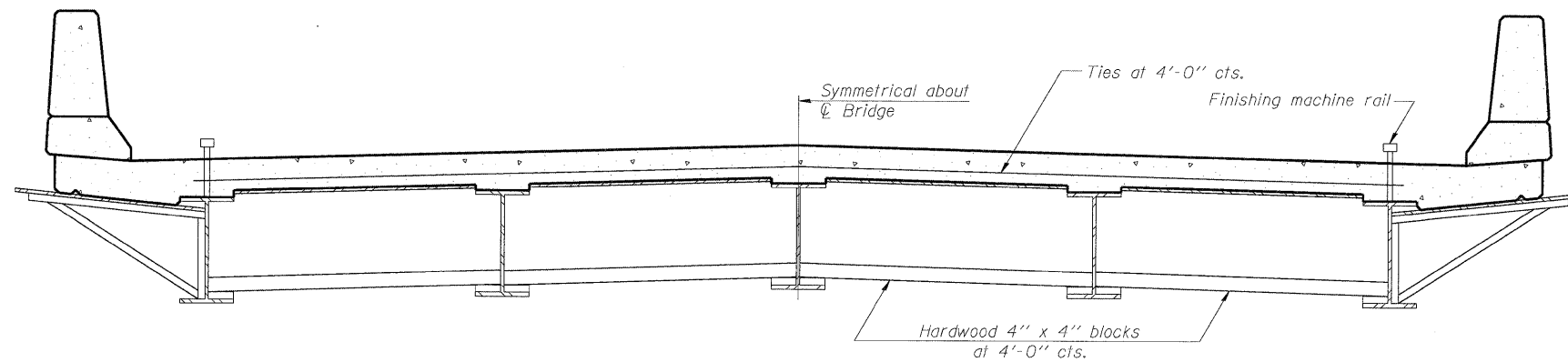
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

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

SB-1

10-1-08

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

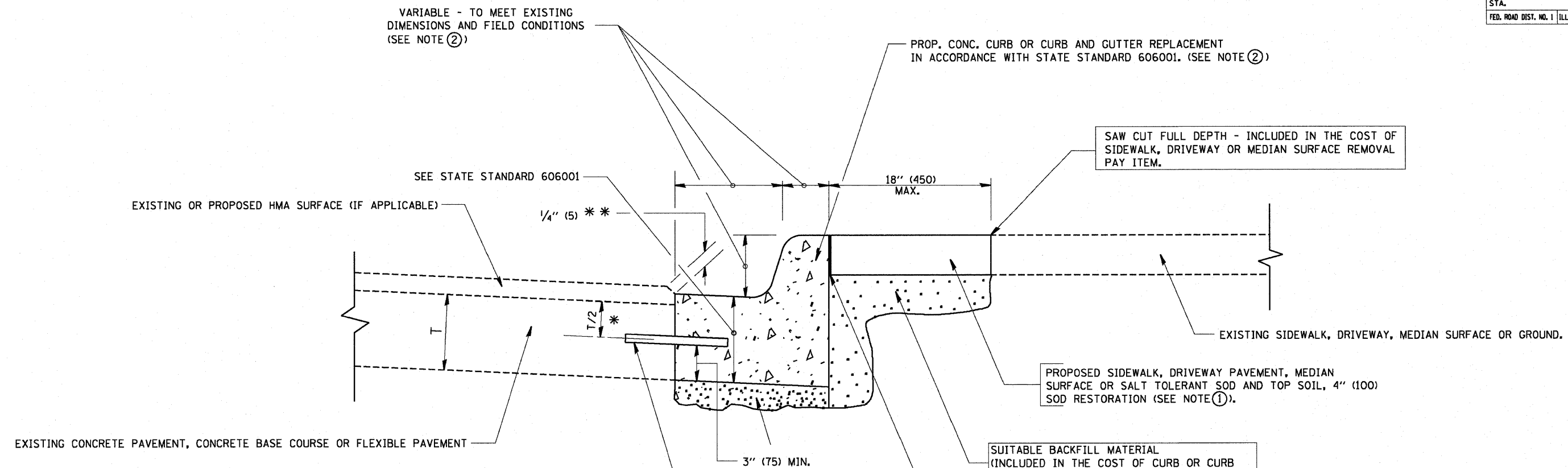


SHEET NO. S-30
S-30 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	75
SN 016-0275		CONTRACT NO. 60C05		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
STRUCTURE NO. 016-0275

FED. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	76
STA.		TO STA.		
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.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ 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.
- ⑤ 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.
- ⑥ 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.
- ⑦ 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.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

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

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

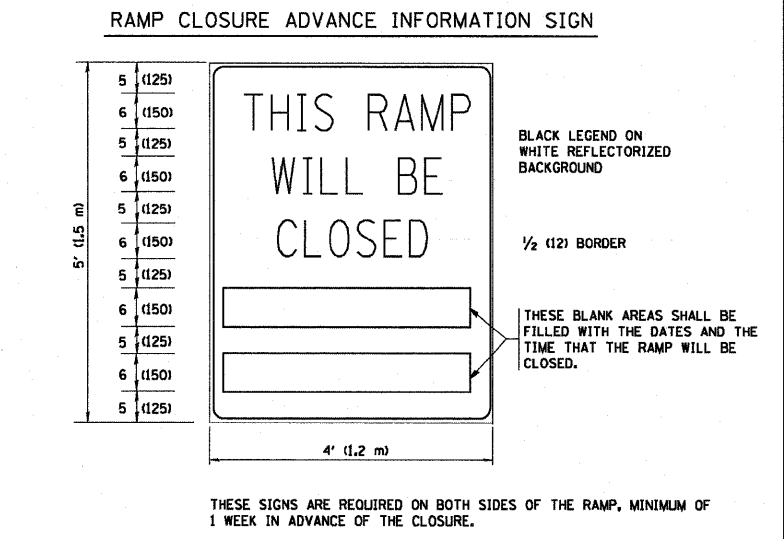
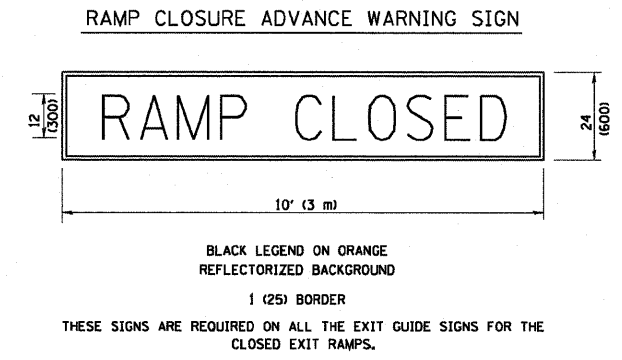
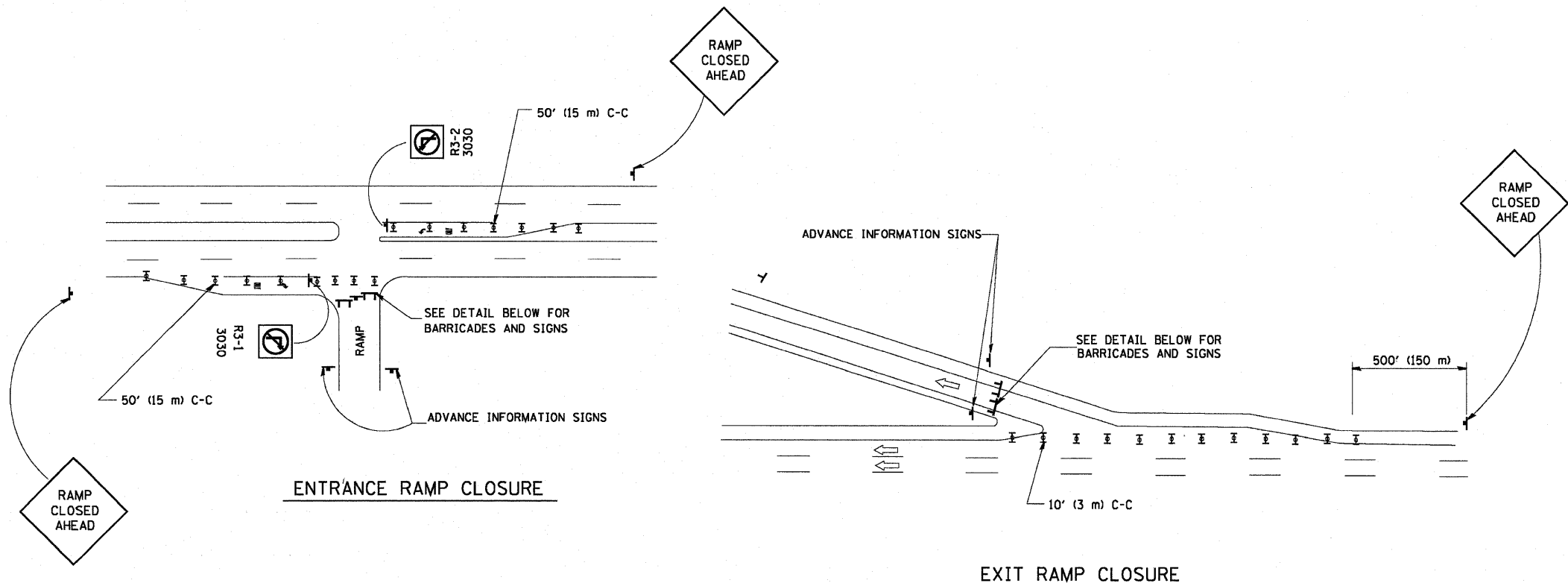
ILLINOIS DEPARTMENT OF TRANSPORTATION
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
HORIZ.
DRAWN BY
CHECKED BY
BD600-06 (BD-24)

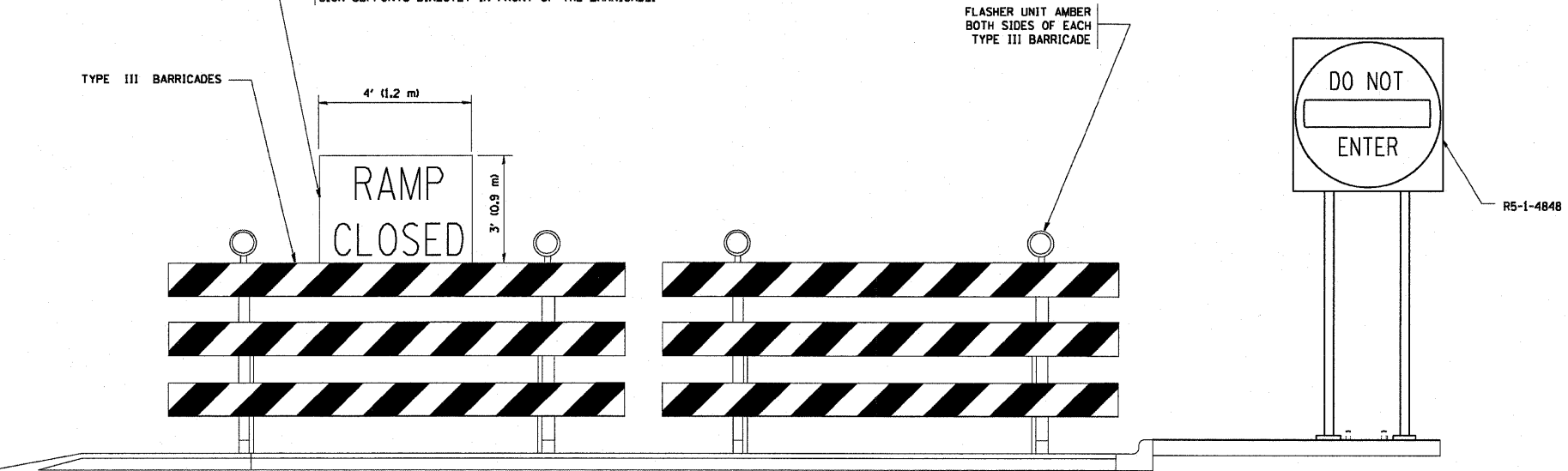
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

PLOT DATE = 3/10/2007
FILE NAME = I:\Users\mshah\My Documents\240606.dgn
USER NAME = mshah

CONTRACT NO. 60C05				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	77
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.



DETAIL FOR REQUIRED BARRICADES & SIGNS

- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ⊠ TYPE III BARRICADE WITH FLASHING LIGHT

- GENERAL NOTES:**
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 - ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 - THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
 - AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
 - THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

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

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
JAF	2/06
SPB	1/07
Revise devices to meet NCHRP 350	4/03

ILLINOIS DEPARTMENT OF TRANSPORTATION

FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

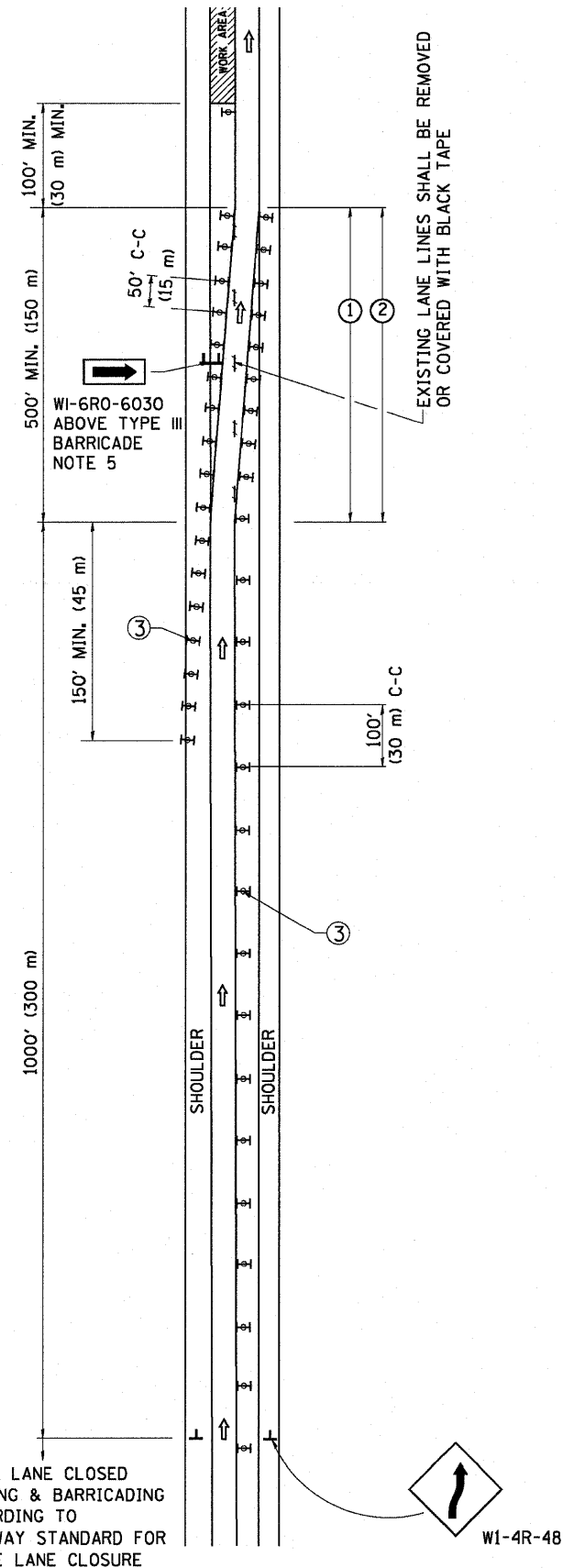
SCALE: NONE

DRAWN BY
CHECKED BY
TC-8

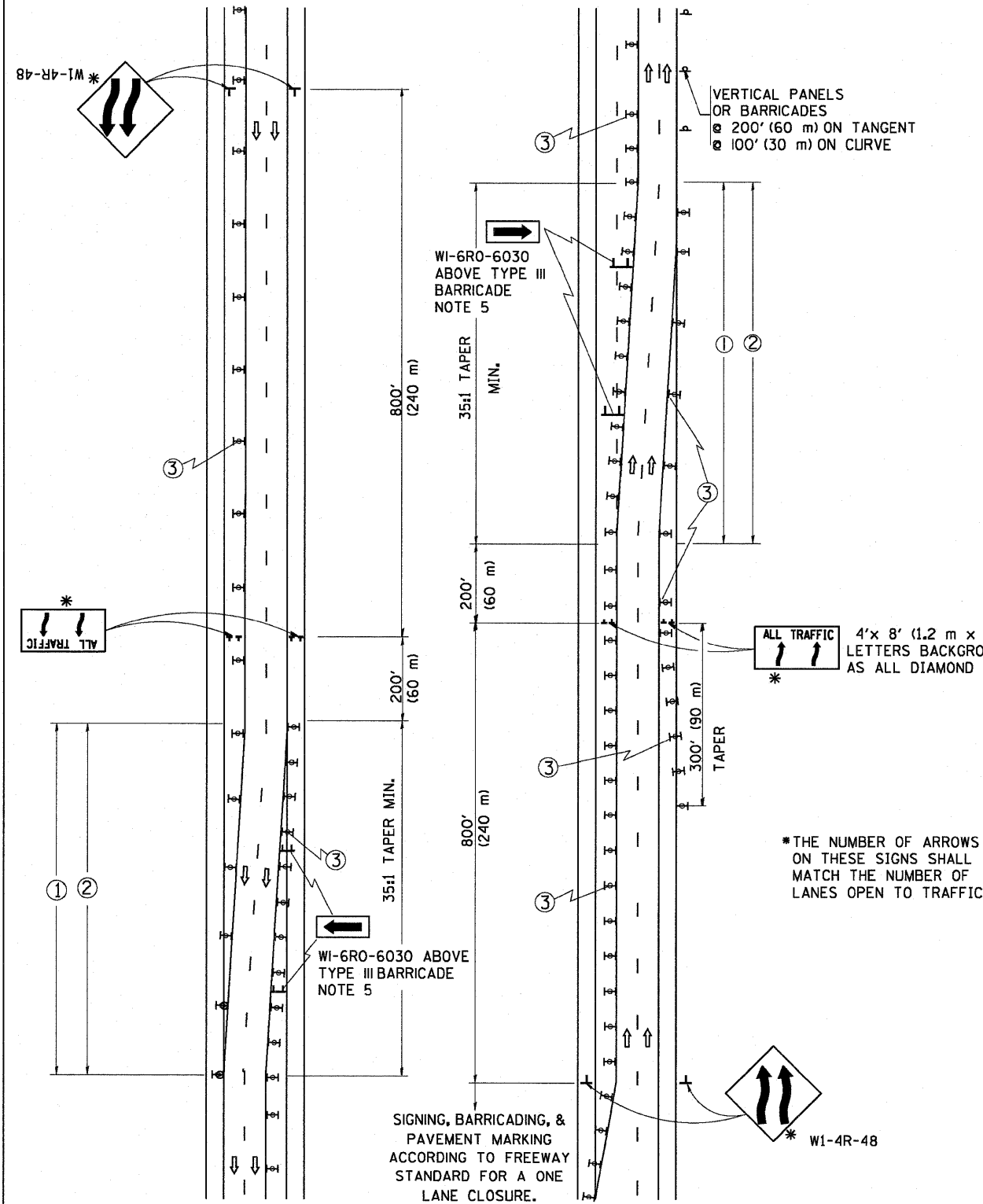
PLOT DATE = 2/6/2007
FILE NAME = N:\GIS\DATA\100818.dgn
PLOT SCALE = 0.8000 / IN.
USER NAME = bbaard

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	78
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.
- IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

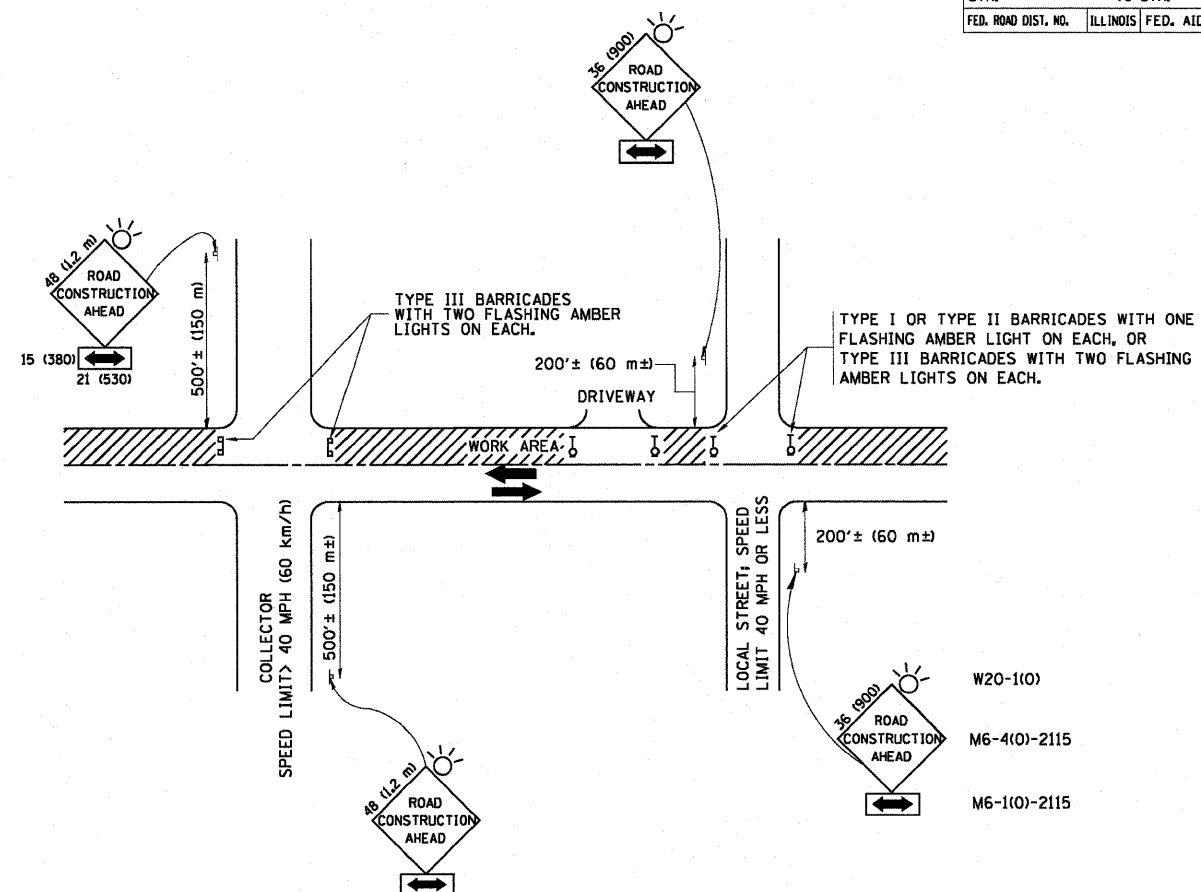
REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/95
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SINGLE & MULTI-LANE WEAVE

SCALE: NONE

DRAWN BY R.H.
 CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	79
STA.		TO STA.		
FED. ROAD DIST. NO.	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.
- 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.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

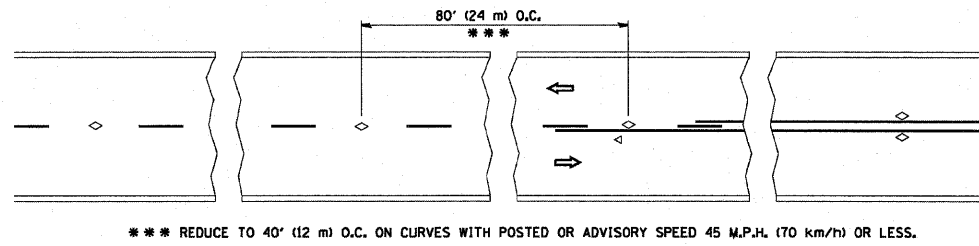
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: NONE

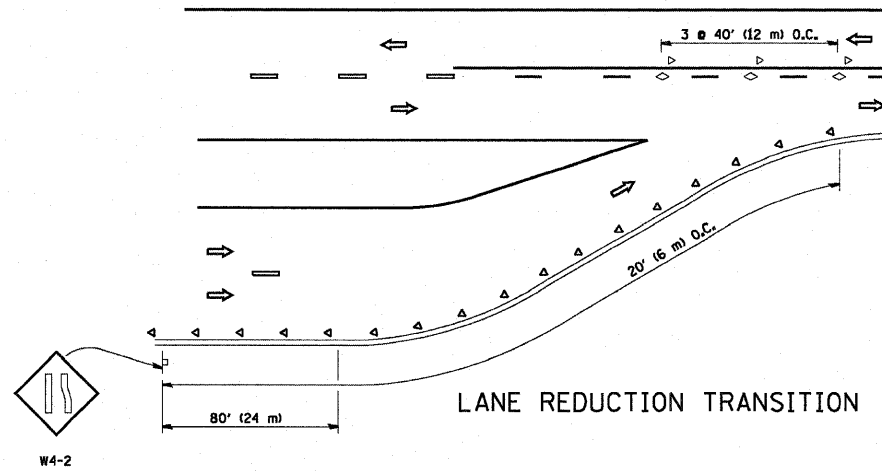
DRAWN BY
 CHECKED BY

TC-10

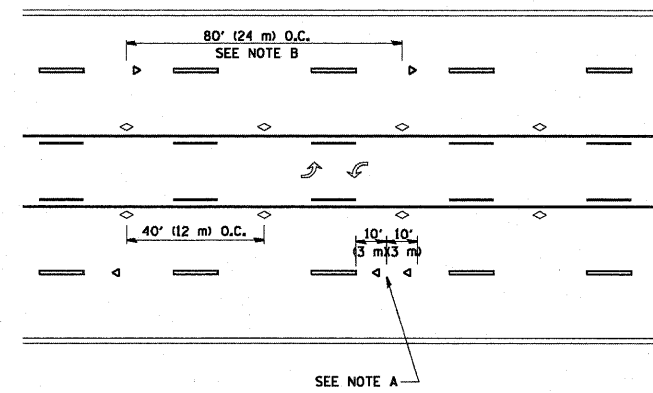
CONTRACT NO. 60005				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	80
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



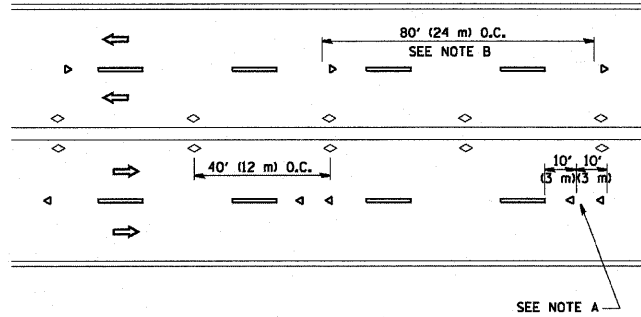
TWO-LANE/TWO-WAY



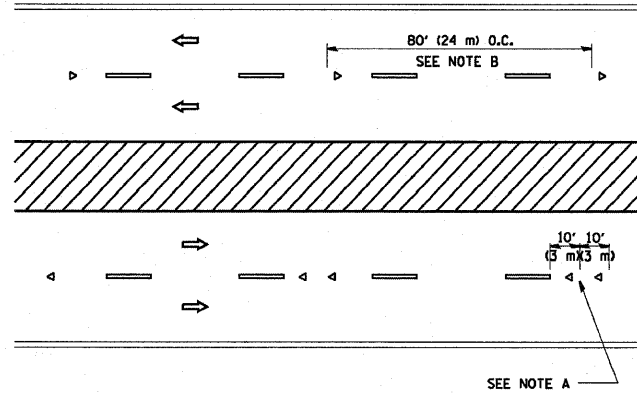
LANE REDUCTION TRANSITION



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

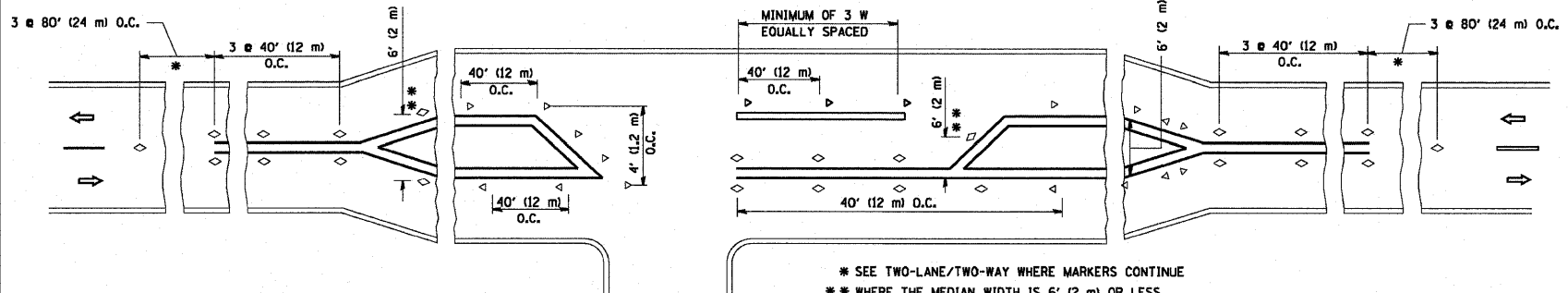
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- 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.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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.

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

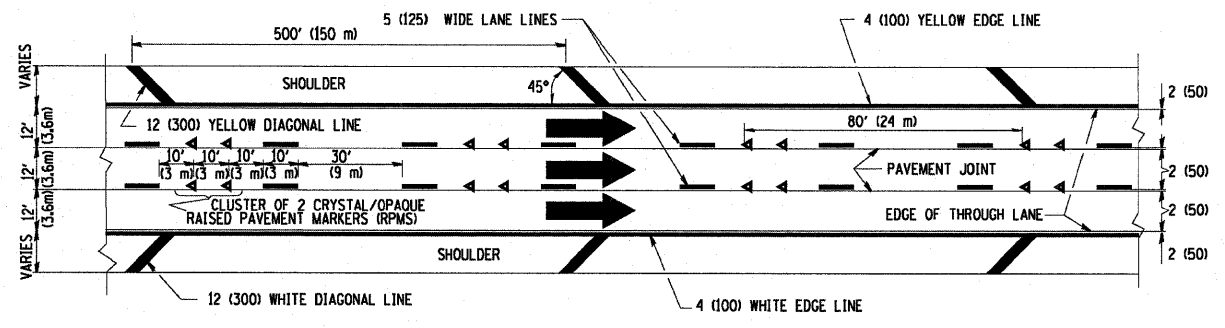
DRAWN BY CADD
 CHECKED BY

TC-11

PLOT DATE = 3/6/2007
 FILE NAME = N:\mstsd\wall.dgn
 PLOT SCALE = 0.8000 / IN.
 USER NAME = bouard

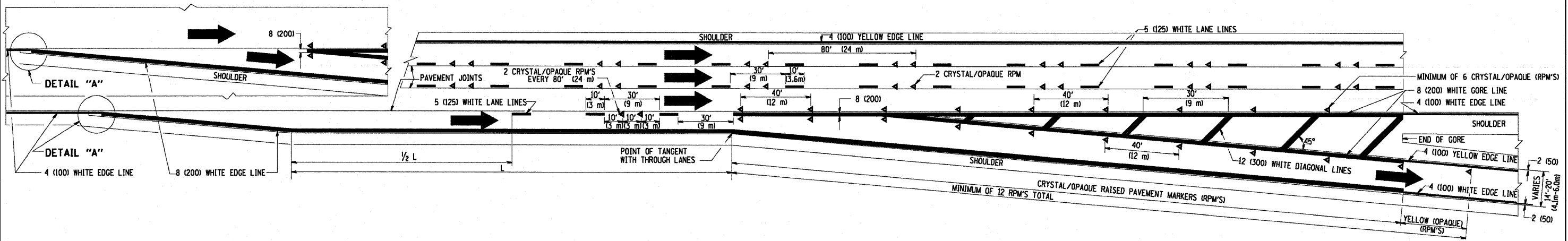
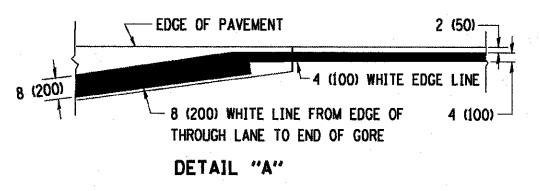
CONTRACT NO. 60C05			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
0353	0303.1B-1	COOK	91 81
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	

THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
 THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

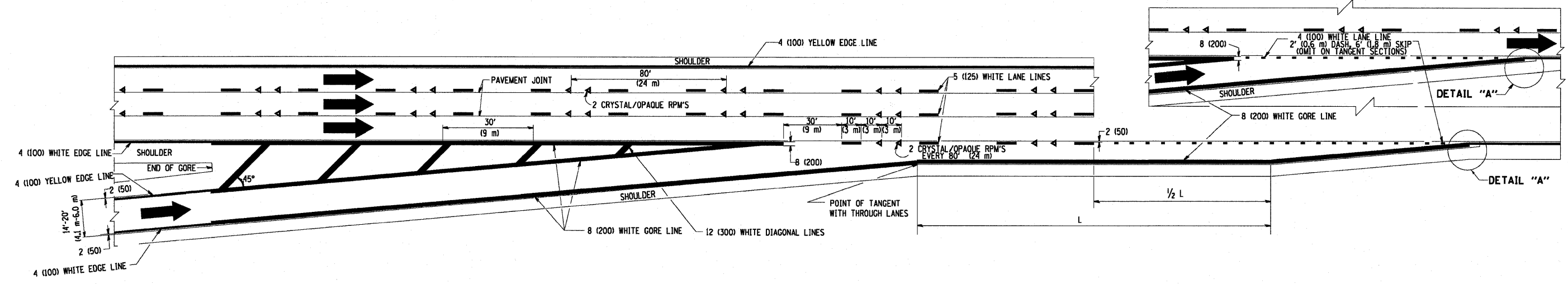


TYPICAL EDGE LINES & LANE LINES

- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
 3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



TYPICAL EXIT RAMP PAVEMENT MARKINGS



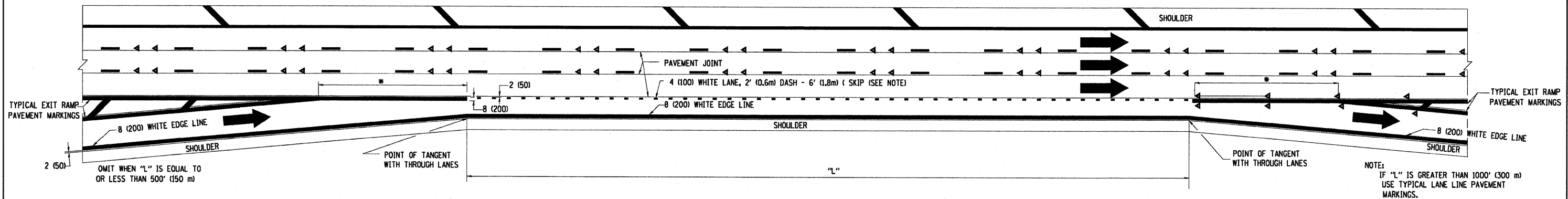
TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AH	3/96
DWS	7/96
JAF	2/06
SPB	1/07

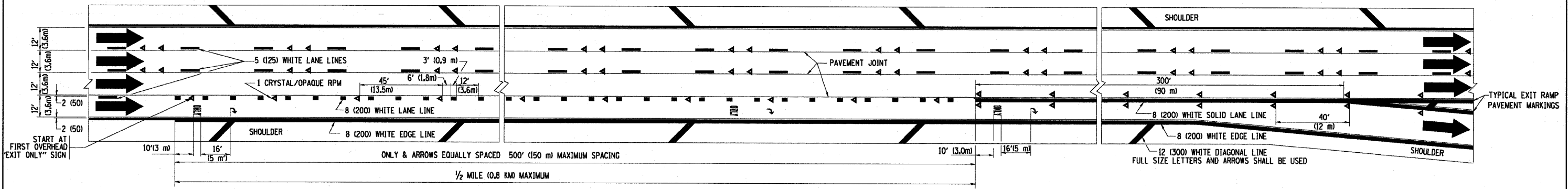
ILLINOIS DEPARTMENT OF TRANSPORTATION
 MULTI-LANE FREEWAY
 PAVEMENT MARKING
 DETAILS
 SCALE: NONE
 DRAWN BY C.A.D.D.
 CHECKED BY
 TC12 SHEET 1 OF 2

PLOT DATE = 3/6/2007
 FILE NAME = K:\data\1212.dgn
 PLOT SCALE = 0.8000 / IN.
 USER NAME = bauevdl

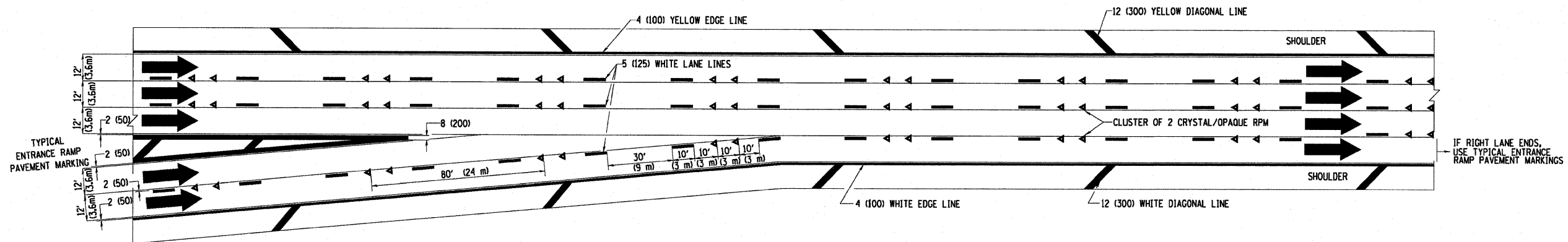
CONTRACT NO. 60005				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	82
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
**MULTI-LANE FREEWAY
 PAVEMENT MARKING
 DETAILS**

SCALE: NONE

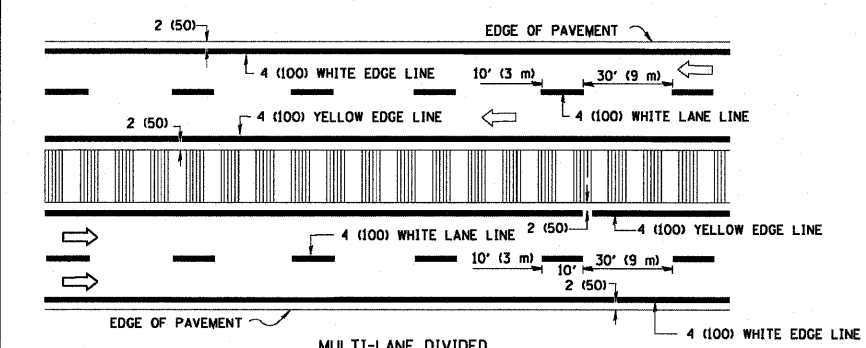
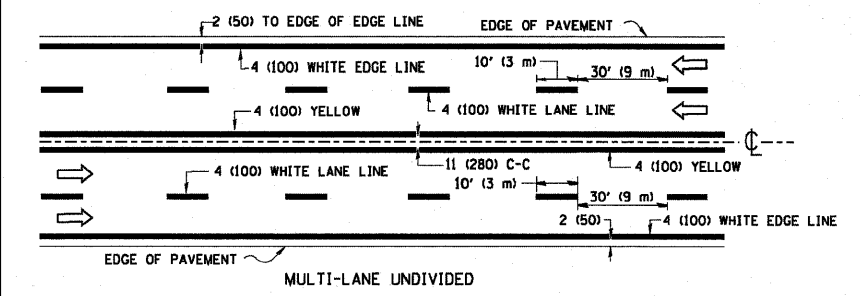
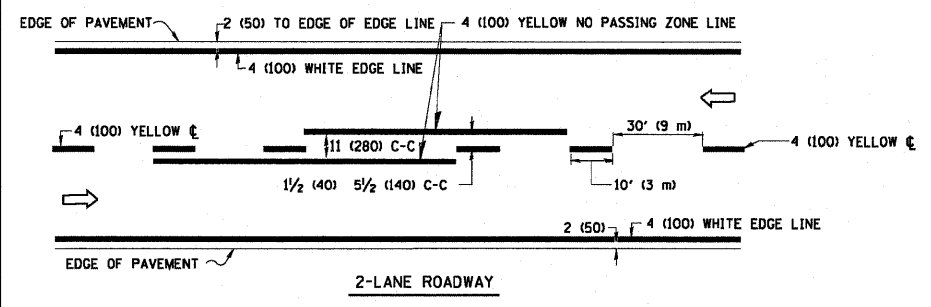
DRAWN BY C.A.D.D.

CHECKED BY

TC12 SHEET 2 OF 2

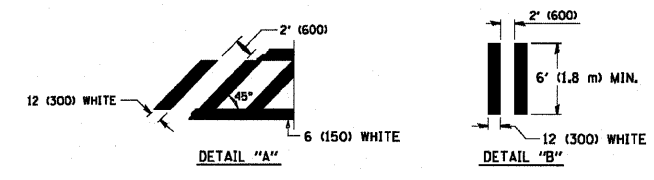
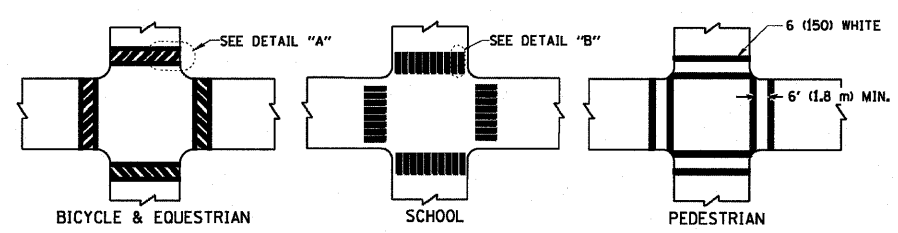
PLOT DATE = 3/6/2007
 FILE NAME = K:\dms\td\12.dgn
 PLOT SCALE = 0.8000 / IN.
 USER NAME = bward

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	83
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

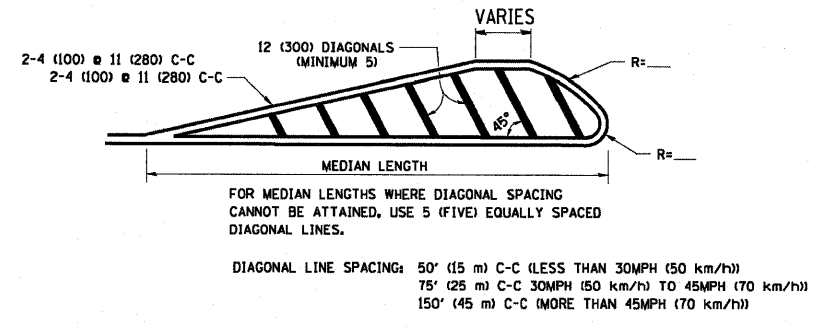
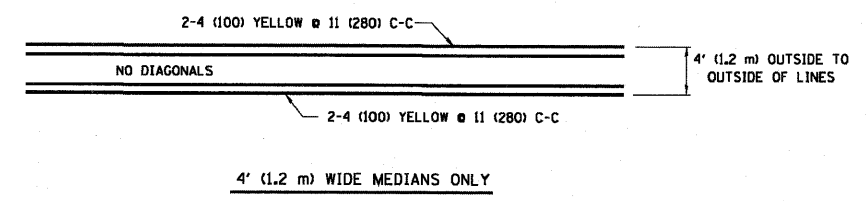


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

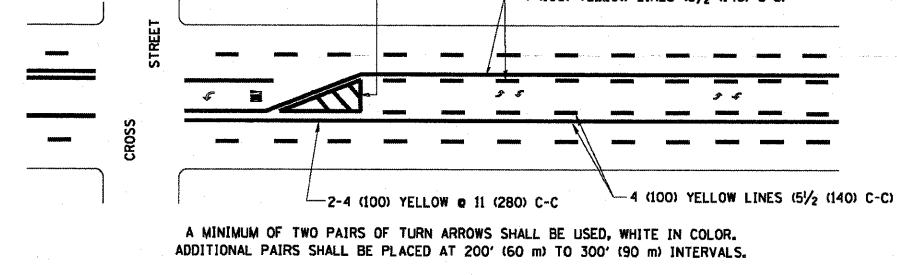
TYPICAL LANE AND EDGE LINE MARKING



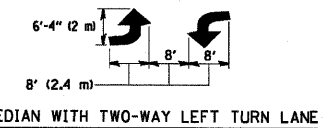
TYPICAL CROSSWALK MARKING



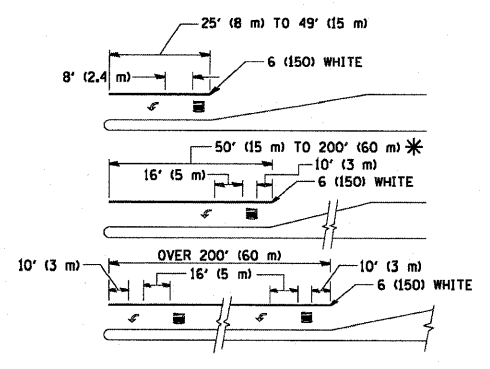
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



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.

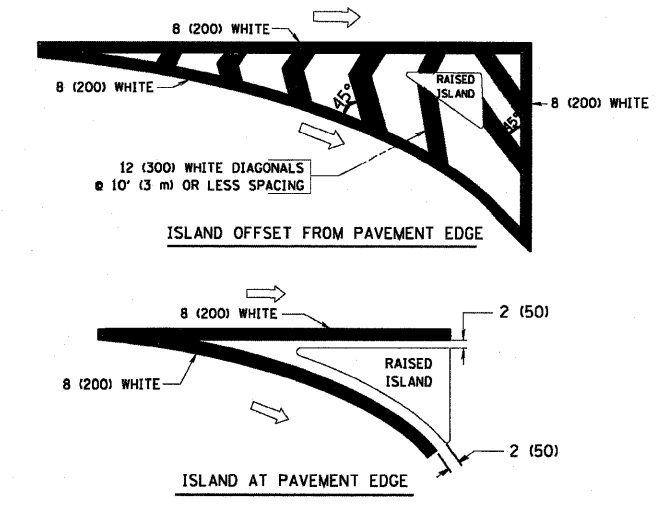


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * 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 ISLAND 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° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	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" (5 6' (1.8 m) AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)	SOLID	WHITE	SEE STATE STANDARD 780001
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.

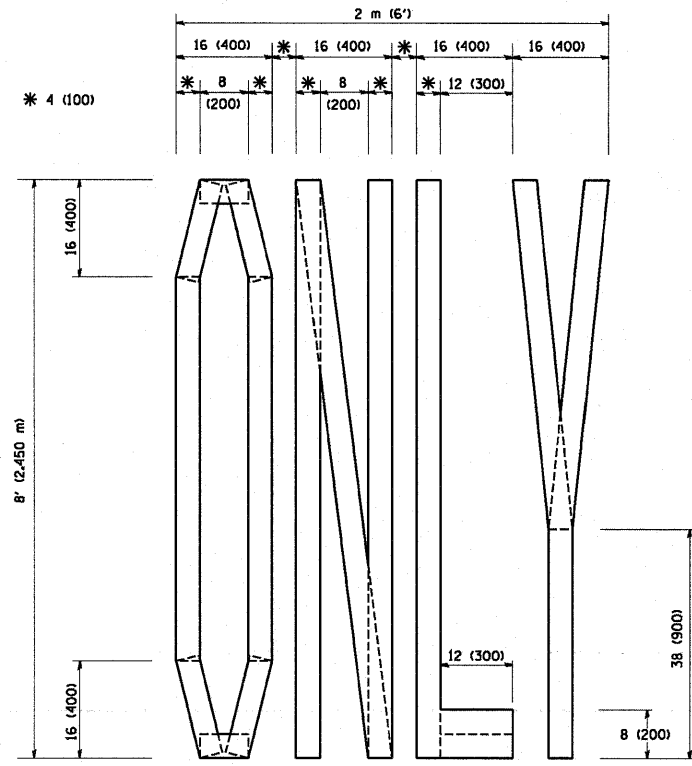
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

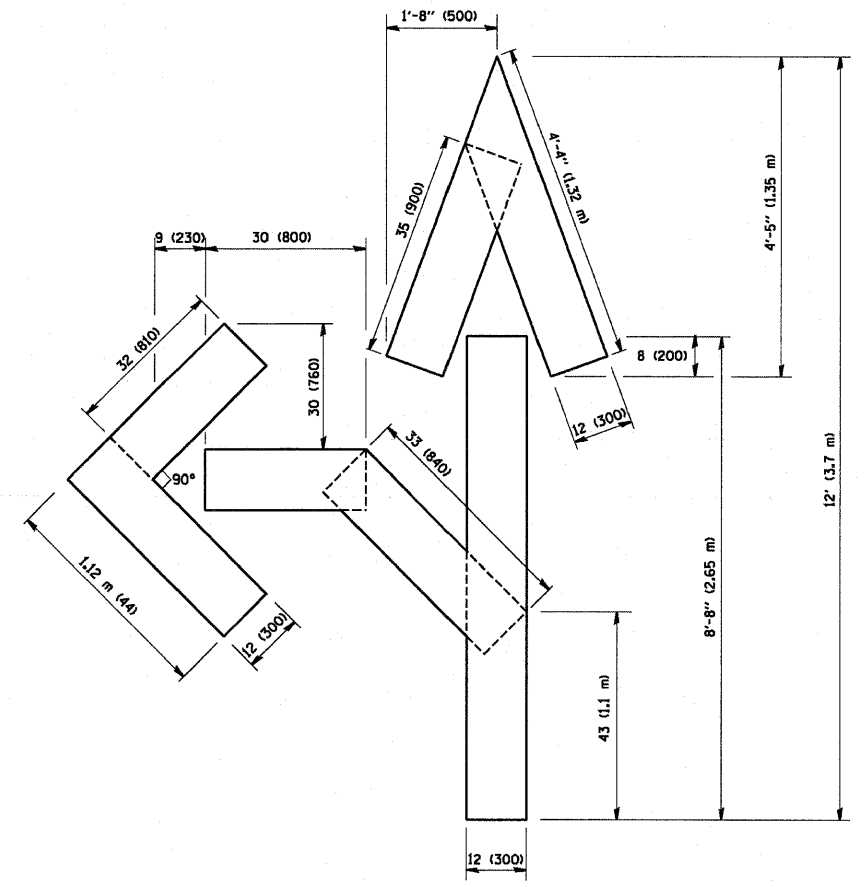
SCALE: NONE
 DRAWN BY CADD
 CHECKED BY
 TC-13

PLOT DATE = 3/6/2007
 FILE NAME = K:\projects\103369p
 PLOT SCALE = 0.001000 / 1 IN.
 USER NAME = bburndt

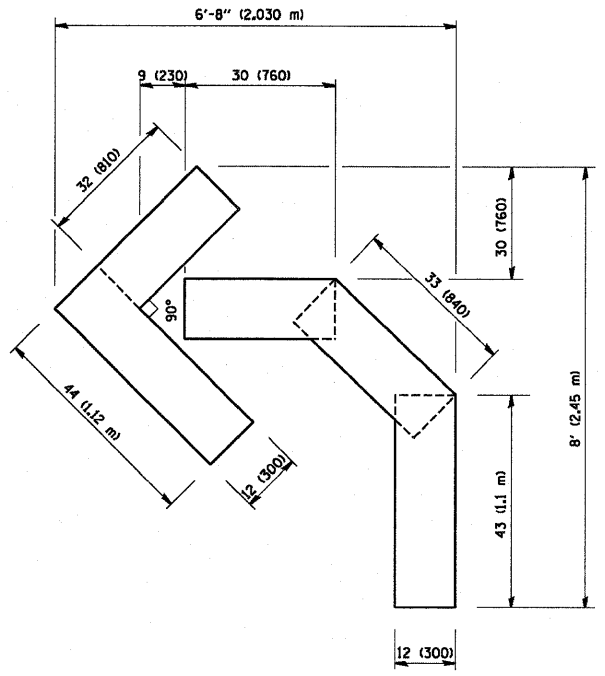
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	83A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKING
LETTERS AND SYMBOLS
FOR TRAFFIC STAGING**

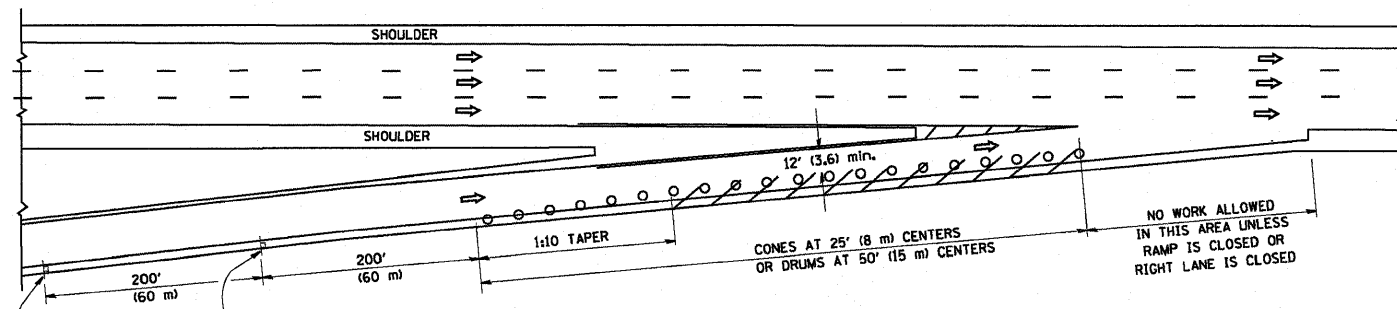
SCALE: NONE
DRAWN BY CADD
CHECKED BY
TC-16

PLOT DATE = 3/7/2007
FILE NAME = K:\data\cal\6.dgn
PLOT SCALE = 80.0000 / IN.
USER NAME = bauer-dl

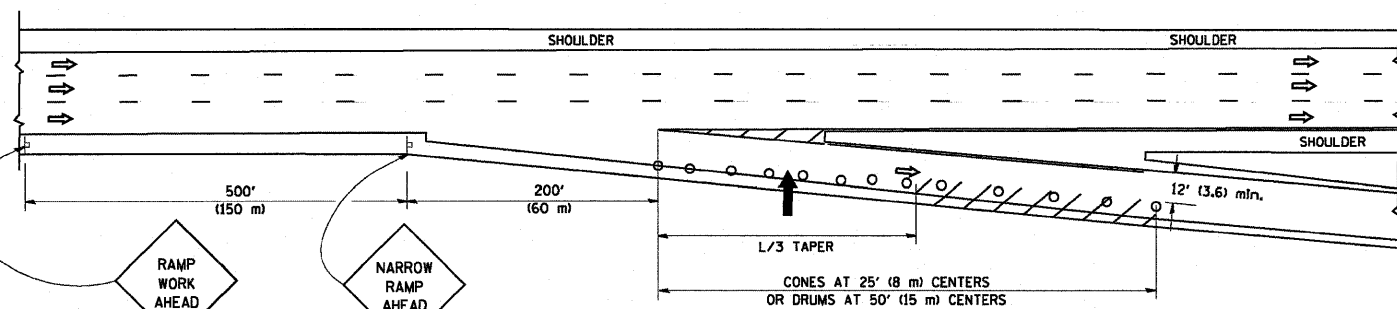
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

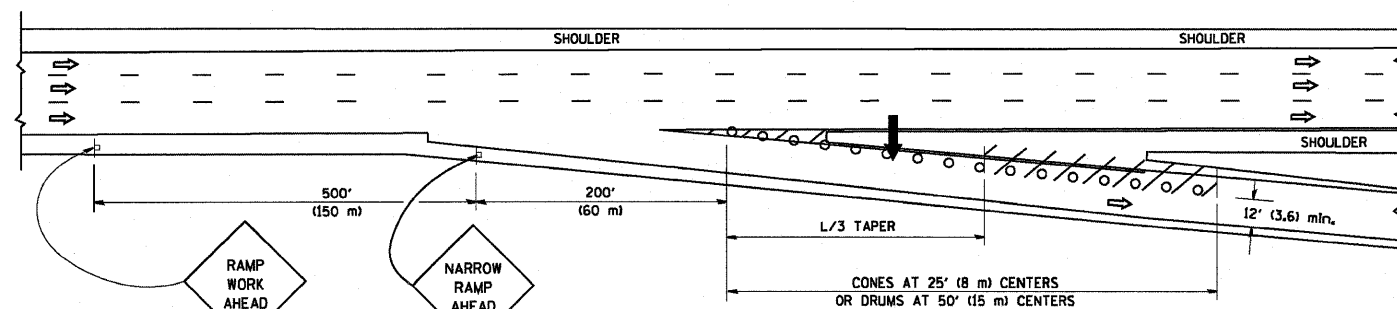
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	84
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

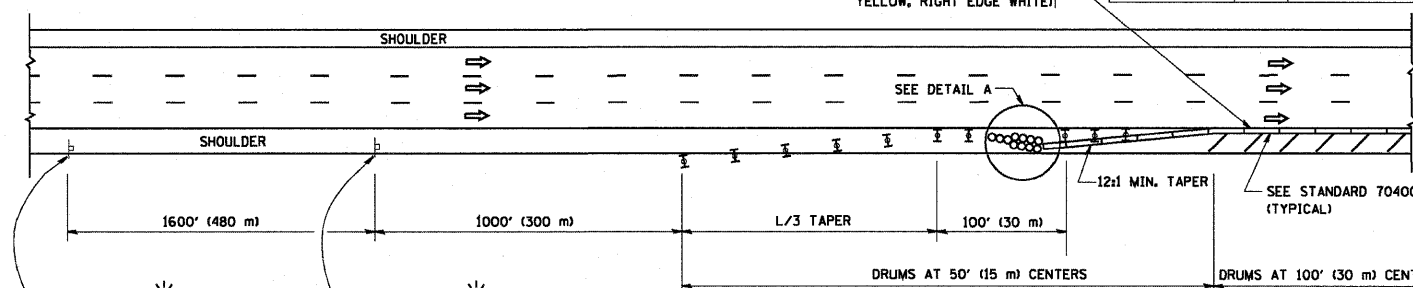
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

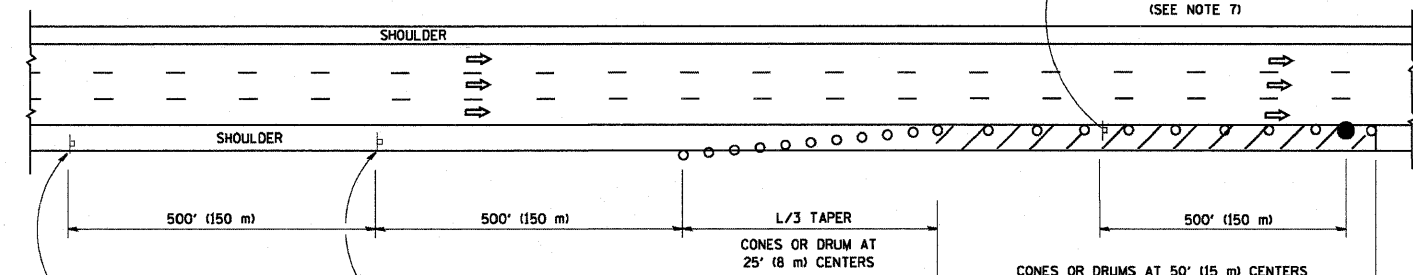
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH
	$L=0.65(W)(S)$ $L=(W)(S)$
W = WIDTH OF OFFSET IN FEET (METERS)	
S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

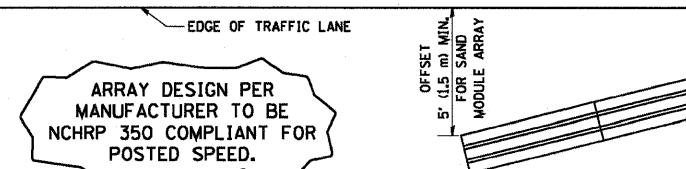


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

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

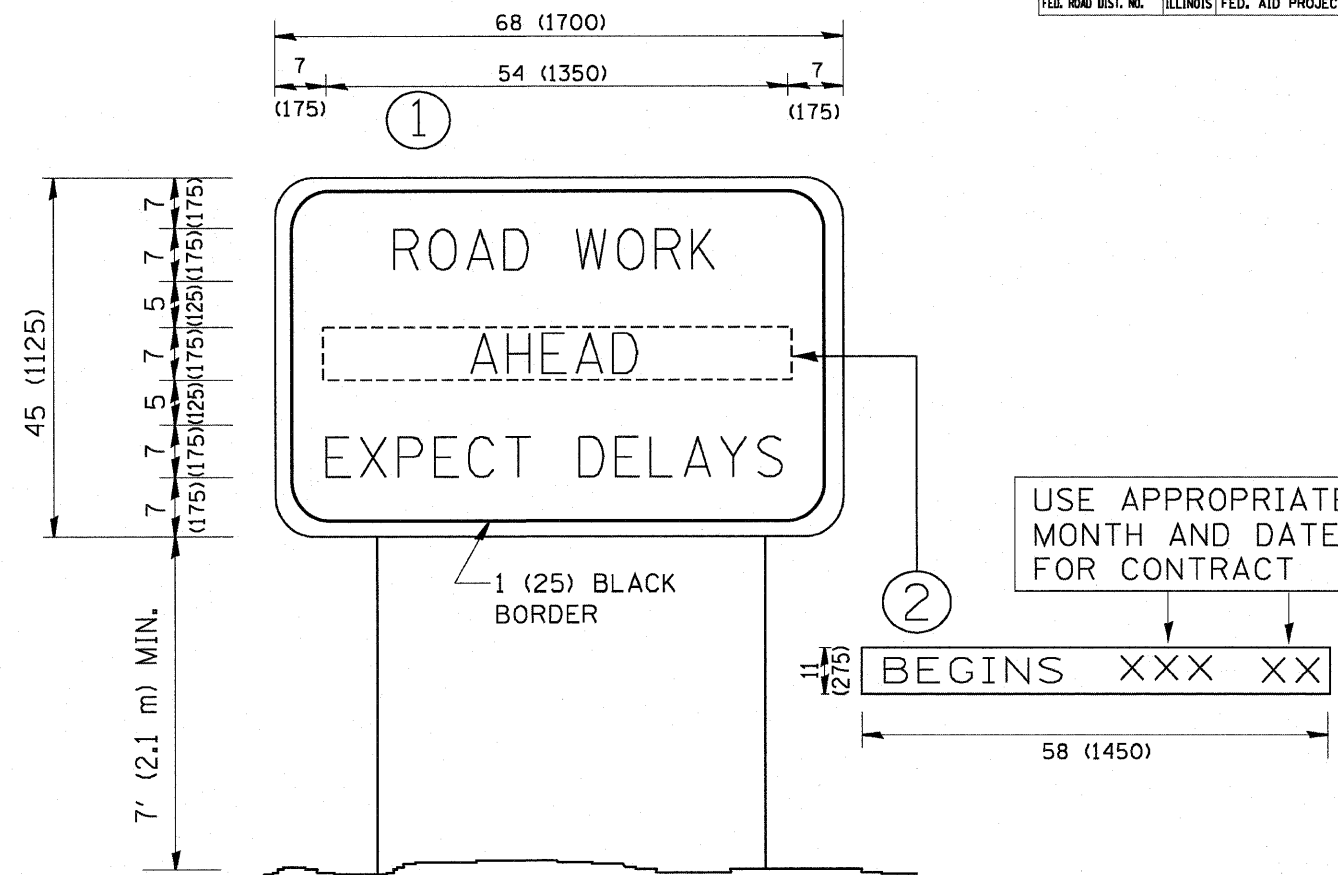
REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
FOR FREEWAY
SHOULDER CLOSURES
PARTIAL RAMP CLOSURES

SCALE: NONE

DESIGNED BY: DWS
DRAWN BY:
CHECKED BY:
TC-17

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	85
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

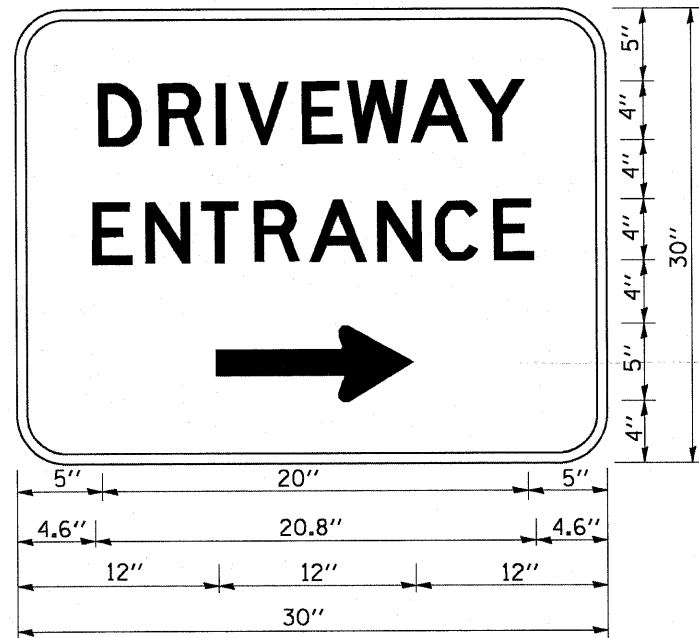
SCALE: NONE

DRAWN BY DESIGN

CHECKED BY

TC22

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	86
STA.		TO STA.		
FED. ROAD DIST. NO.	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".

PLOT DATE = 02/15/07
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = bauer-d

REVISIONS	
NAME	DATE
C. JUCIUS	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DRIVEWAY ENTRANCE
SIGNING**

SCALE: NONE
DATE

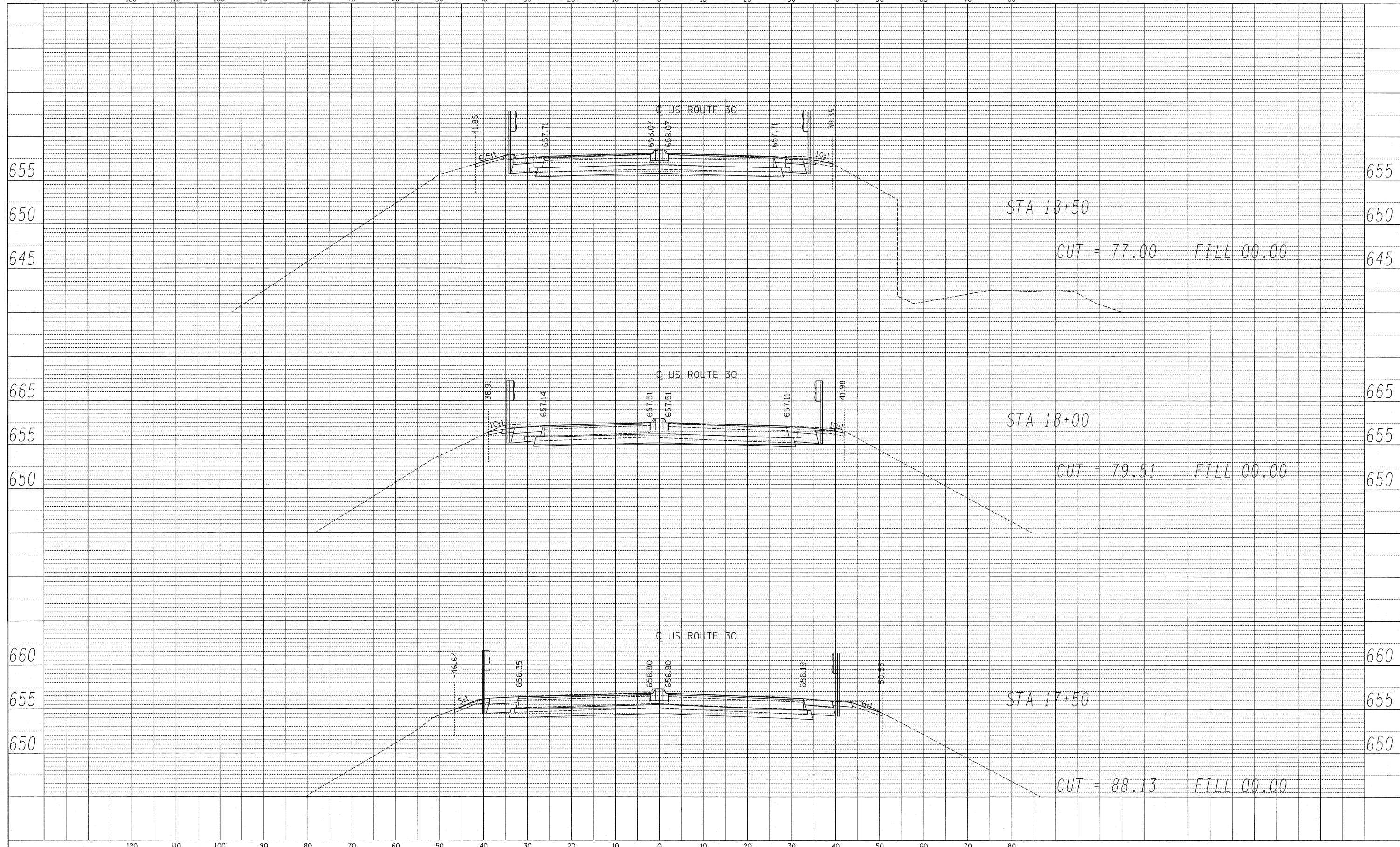
DRAWN BY R.H.
CHECKED BY

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

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

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



FILE NAME = D:\B2C25-ah-t-xssht.dgn

USER NAME = default
 PLOT SCALE = #SCALE#
 PLOT DATE = 5/22/2009

DESIGNED -
 DRAWN - RA
 CHECKED - RS
 DATE - 5/6/2009

REVISED - 05/22/2009
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

US ROUTE 30 CROSS SECTIONS

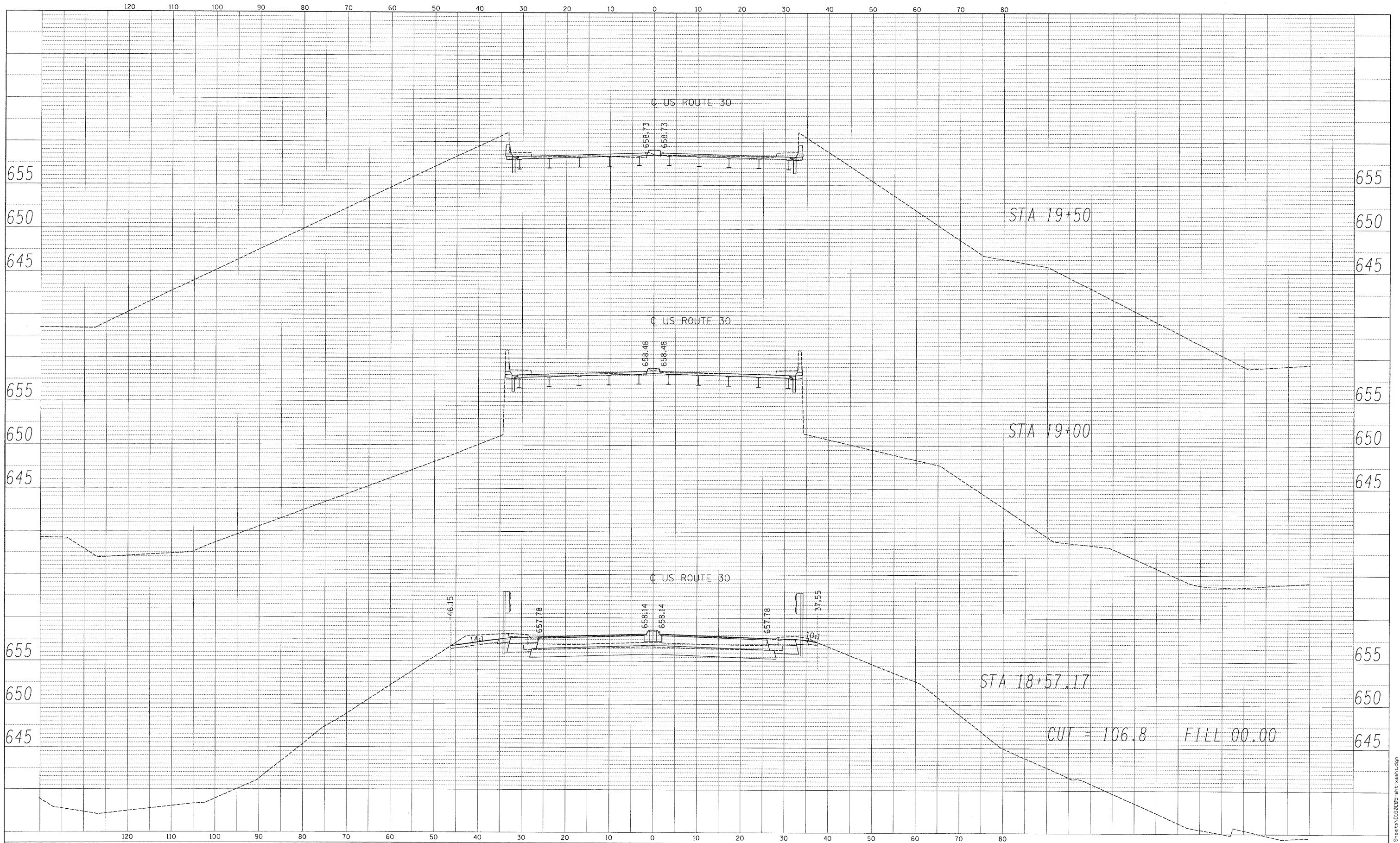
SCALE: H: 1/10 V: 1/5
 SHEET NO. 01 OF 05 SHEETS STA. 17+50 TO STA. 18+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	87
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60C05	

s:\1\18\05\CADD\US30\US30-ah-t-xssht.dgn

DATE: _____ BY: _____
 REVIEWED: _____
 PLAN PLOTTED: _____
 NOTE BOOK: _____
 NO. _____

DATE: _____ BY: _____
 CHECKED: _____
 PROFILE PLOTTED: _____
 NOTE BOOK: _____
 NO. _____



FILE NAME = D160C05-sht-xssht.dgn
 USER NAME = default
 PLOT SCALE = #SCALE#
 PLOT DATE = 5/5/2009

DESIGNED -
 DRAWN - RA
 CHECKED - RS
 DATE - 5/6/2009

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

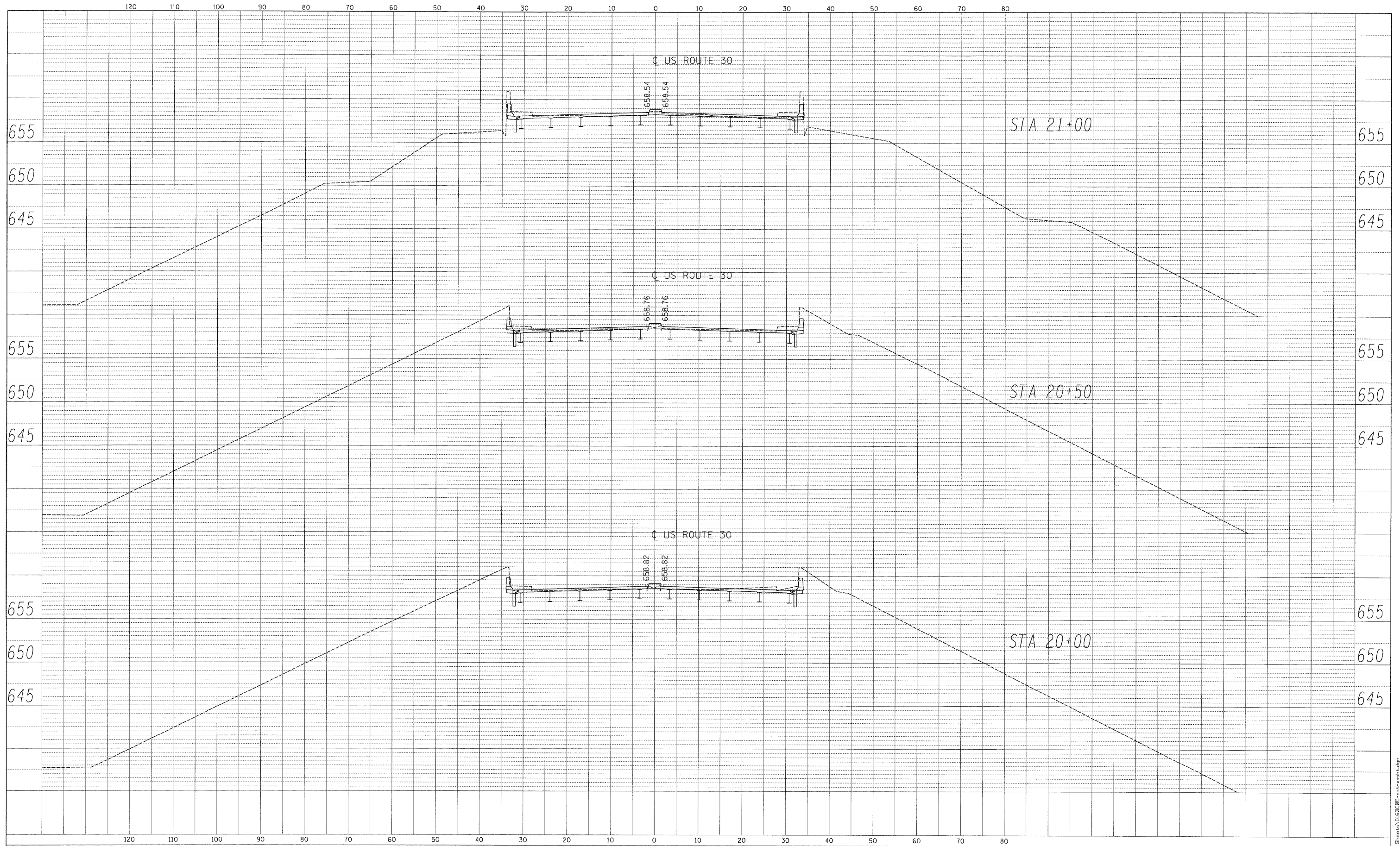
US ROUTE 30 CROSS SECTIONS

SCALE: H: 1:10 V: 1:5 SHEET NO. 02 OF 05 SHEETS STA. 18+57.17 TO STA. 19+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	88
CONTRACT NO. 60C05				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	REVISIONS	DATE
NO.	BY	
NOTE BOOK	ALIGNED	CHECKED
	PLANNED	CHECKED
	PAID FILE	CHECKED

PROFILE	DESIGNED	DATE
NO.	BY	
NOTE BOOK	CHECKED	
	PLANNED	
	PAID FILE	



FILE NAME = D:\160C05-sht-xshd.dgn

USER NAME = defaut

DESIGNED -

REVISED -

DRAWN - RA

CHECKED - RS

REVISED -

SCALE = #SCALE#

DATE - 5/6/2009

REVISED -

PLOT DATE = 5/5/2009

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 30 CROSS SECTIONS

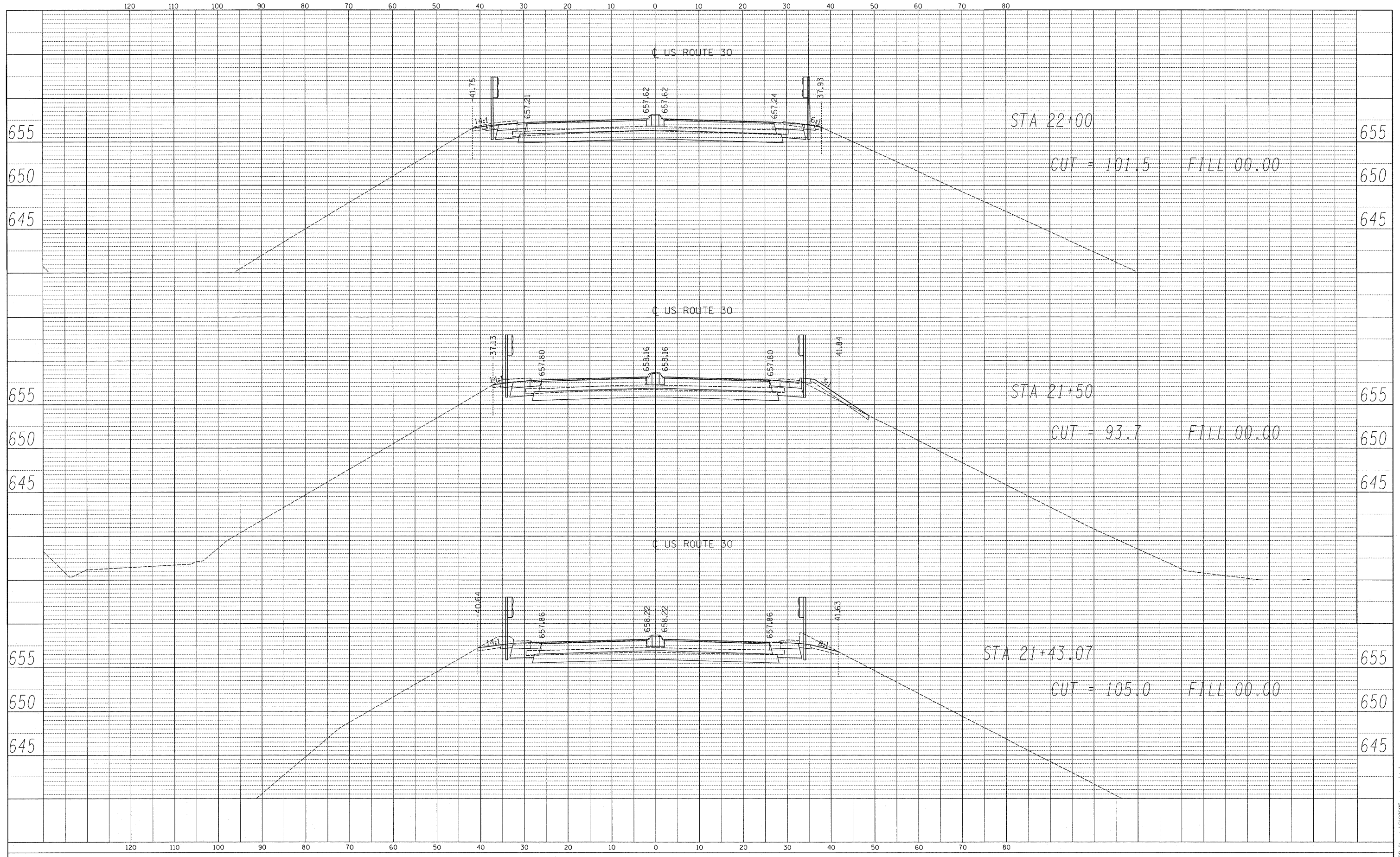
SCALE: H: 1/10
V: 1/5 SHEET NO. 03 OF 05 SHEETS STA. 20+00 TO STA. 21+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	89
FED. ROAD DIST. NO.			CONTRACT NO. 60C05	
ILLINOIS FED. AID PROJECT				

s:\160C05-sht-xshd.dgn

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		



FILE NAME = D:\62005-ah-ssht.dgn
 USER NAME = default
 PLOT SCALE = *SCALE*
 PLOT DATE = 5/22/2009

DESIGNED	-	REVISED	-
DRAWN	- RA	REVISED	-
CHECKED	- RS	REVISED	-
DATE	- 5/6/2009	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 30 CROSS SECTIONS

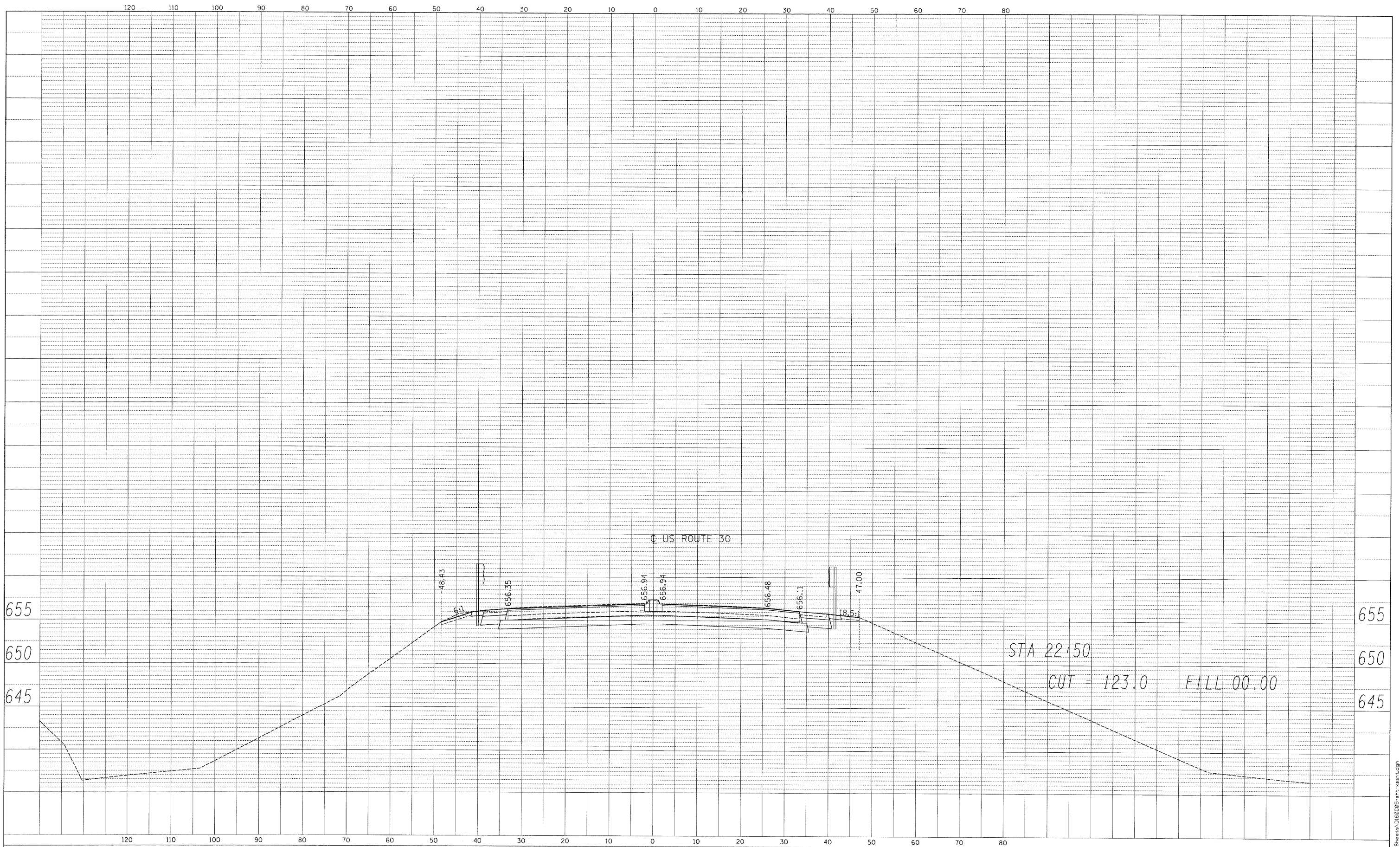
SCALE: H: 1:10 V: 1:5
 SHEET NO. 04 OF 05 SHEETS
 STA. 21+43.07 TO STA. 22+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	90
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60C05	

st:\9106-CADD-US30\CADD-Sheets\168000-ah-ssht.dgn

PLAN	REVISIONS	DATE
NO.	BY	
NOTE BOOK	NOTED	
NO.	ALIGNMENT CHECKED	
	PAID FILE NAME	

PROFILE	REVISIONS	DATE
NO.	BY	
NOTE BOOK	NOTED	
NO.	GRADE CHECKED	
	STRUCTURE NOTATIONS CHECKED	



FILE NAME = D:\60C05-shi-xssht.dgn

USER NAME = default

DESIGNED -
 DRAWN - RA
 CHECKED - RS
 DATE - 5/6/2009

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

US ROUTE 30 CROSS SECTIONS

SCALE: H: 1:10 V: 1:5 SHEET NO. 05 OF 05 SHEETS STA. 22+50 TO STA. 22+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0353	0303.1B-1	COOK	91	91
CONTRACT NO. 60C05				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

s:\1910\05-cadd\un30\CADD_Sheets\1660C05-shi-xssht.dgn