

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	2
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640

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LIST OF STATE STANDARDS

280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420101-04	24' (7.2M) JOINTED PCC PAVEMENT
420401-07	BRIDGE APPROACH PAVEMENT CONNECTOR
421001-02	BAR REINFORCEMENT FOR CRC PAVEMENT
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
664001-02	CHAIN LINK FENCE
701400-03	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-05	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-05	LANE CLOSURE, MULTILANE AT ENTRANCE OR EXIT RAMP FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRANVERSABLE MEDIAN
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT

PROJECT COMMITMENTS

- BEFORE UNDERGROUND SEWER WORK IS STARTED, A PERMIT FROM THE CHICAGO DEPARTMENT OF SEWERS WILL BE REQUIRED. THE COST OF THE PERMIT SHALL BE INCLUDED IN THE COST OF THE DRAINAGE ITEMS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS,
LIST OF STANDARDS
AND COMMITMENTS

SCALE: NONE
DATE: JANUARY 16, 2009

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.



CHRISTIAN-ROGE & ASSOCIATES, INC.
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211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

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90	1213B-1	COOK	94	3
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CONTRACT NO. 60640

GENERAL NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEET NO. 49.
2. UTILITY LOCATIONS SHOWN ON THESE PLANS MAY NOT BE CORRECT OR COMPLETE. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH RESPECTIVE UTILITIES OR THE CITY OF CHICAGO INCLUDING CTA. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "CUAN" CHICAGO UTILITY ALERT NETWORK AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED). CONTACT THE DEPARTMENT OF WATER MANAGEMENT AT (312) 747-7893 FOR WATER AND SEWER LOCATIONS. CONTACT THE CTA AT (312) 922-4080 FOR ELECTRIC SERVICE LOCATIONS.

CTA IS NOT PART OF CUAN, DIGGER OR JULIE.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. NOT USED.
5. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
6. THE CONTRACTOR SHALL SUBTRACT 176.747 M FROM THE ELEVATIONS SHOWN ON THE PLANS TO OBTAIN CITY OF CHICAGO DATUM (CCD).
7. THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.00038 M TON/SQ M.
8. 3 METER (10 FEET) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED. ALL PAVEMENT STUBS SHALL BE 2 FEET.
9. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE CITY OF CHICAGO, AND THE CTA.
10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 MM (1.5 INCHES) WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH) OR LESS AND 25 MM (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80 KM/H. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75 MM (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
11. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
12. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE NOTED.
13. NOT USED.
14. THIS WORK IS IN THE CHICAGO GATEWAY GREEN PARTNERSHIP AREA. THE CONTRACTOR WILL NOT BE ALLOWED TO STORE MATERIALS OR EQUIPMENT ON THE KENNEDY EXPRESSWAY RIGHT OF WAY.
15. THE SIGN ATTACHED TO THE FENCE ON THE EXISTING CENTRAL AVENUE BRIDGE SHALL BE RELOCATED TO WOOD SIGN SUPPORTS TO BE PLACED IN THE EAST-BOUND I-90 EMBANKMENT AT A LOCATION APPROVED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AS "WOOD SIGN SUPPORTS" AND "RELOCATE SIGN PANEL - TYPE 3" AND SHALL INCLUDE ALL EQUIPMENT, LABOR, AND MATERIALS REQUIRED TO RELOCATE THE SIGN PANEL.
16. ADA RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION; APPENDIX B; REQUIREMENTS FOR PUBLIC OPENING, CONSTRUCTION AND REPAIR IN THE PUBLIC WAY - ADA STANDARDS. SEE SPECIAL PROVISIONS.

GENERAL NOTES (CONTINUED):

17. CITY OF CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES SHALL NOT BE CLOSED, COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT.
18. CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 75 MM (3").
19. BACKFILL MATERIAL UNDER SIDEWALKS SHALL BE FA-2 AND SHALL BE INCLUDED IN THE COST OF THE P.C.C. SIDEWALK.
20. PAVEMENT REPLACEMENT AROUND FRAMES AND GRATES OR LIDS WHERE DRAINAGE, WATER MAIN OR ELECTRICAL STRUCTURES ARE ADJUSTED OR RECONSTRUCTED, SHALL BE WITH CLASS SI CONCRETE.
21. ALL PAVEMENT PATCHING SHALL BE CLASS C.
22. NOT USED.
23. THE CITY OF CHICAGO, BUREAU OF FORESTRY REQUIRES THAT THE CONTRACTOR OBTAIN A PERMIT TO REMOVE, PLANT, TRIM, SPRAY OR IN ANY WAY AFFECT THE GENERAL HEALTH OR STRUCTURE OF TREES IN THE PUBLIC WAY. THIS INCLUDES THE DISTURBANCE OR REMOVAL OF ROOT SYSTEMS OF EXISTING TREES IN THE PROJECT AREA.

PERMITS FOR ALL TREE RELATED ACTIVITIES WILL BE ISSUED TO INSURED TREE SERVICE COMPANIES BY THE:

DEPARTMENT OF STREETS AND SANITATION
BUREAU OF FORESTRY
3200 SOUTH KEDZIE AVENUE
CHICAGO, ILLINOIS 60623
(312) 747-2098

FORESTRY PERMITS WILL EXPIRE AFTER 60 DAYS.
24. THE EXISTING PROTECTIVE SHIELD SHALL BE SALVAGED BY THE CONTRACTOR AND DELIVERED TO THE I.D.O.T. DISTRICT BRIDGE MAINTENANCE YARD LOCATED AT 1101 BIESTERFIELD ROAD, ELK GROVE VILLAGE, ILLINOIS 60007; TELEPHONE NUMBER (847)956-1444 (48 HOURS ADVANCE NOTICE REQUIRED). THIS WORK SHALL INCLUDE REMOVING, TRANSPORTING AND UNLOADING THE PROTECTIVE SHIELD AT THE ABOVE YARD WHICH COST SHALL BE CONSIDERED INCLUDED IN THE COST OF "REMOVAL OF EXISTING CONCRETE DECK."
25. THE CONTRACTOR SHALL MEASURE THE MINIMUM VERTICAL CLEARANCE BETWEEN THE BOTTOM OF BEAM AND PAVEMENT SURFACE AT THE LOCATION SHOWN ON THE "GENERAL PLAN" ON SHEET NO. 48. THIS SHALL BE DONE PRIOR TO THE REMOVAL OF THE DECK. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "CONSTRUCTION LAYOUT." THE CONTRACTOR SHALL PROVIDE THE RESIDENT ENGINEER WITH THE MEASUREMENT.

CTA NOTES:

- A. THE CONTRACTOR SHALL INFORM THE CTA BUS OPERATIONS 28 DAYS PRIOR TO THE START OF CONSTRUCTION ON CENTRAL AVENUE.
- B. WHEN THE CONTRACTOR IS DISMANTLING AND CONSTRUCTING THE BRIDGE HE SHALL AVOID ANY DAMAGE TO THE CTA STRUCTURE AND MAINTAIN THE EXISTING CLEARANCES. A SPECIAL CONSTRUCTION PROCESS IS REQUIRED TO PROTECT THE DECK POUR FROM IMPACTING THE CTA SWITCHING HUT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF CONCRETE SUPERSTRUCTURE.

PLAN NOTES - CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT:

1. SEWER SIZES 525 MM (21") DIAMETER OR SMALLER MUST BE EXTRA STRENGTH VITRIFIED CLAY PIPE C-700 OR DUCTILE IRON PIPE WITH PUSH-ON OR MECHANICAL JOINTS. SEWER SIZES 600 MM (24") DIAMETER OR LARGER MUST BE REINFORCED CONCRETE PIPE TYPE C-75, CLASS III, WALL "B" WITH "O-RING" JOINTS.
2. PERMITS FROM THE DEPARTMENT OF W.M. ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR ALL WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF W.M. PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION. THE LICENSED SEWER CONTRACTOR/SUBCONTRACTOR MUST SUBMIT TWO SETS OF PLANS APPROVED BY THE DEPARTMENT OF W.M. FOR THE ISSUE OF THE SEWER PERMIT TO SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. INSPECTION WILL BE PROVIDED BY THE DEPARTMENT OF W.M.
3. IF THE SEWER PIPE COVER IS REDUCED TO LESS THAN 1 METER (3 FT.), CONCRETE ENCASEMENT OF THE SEWER OR REPLACEMENT OF THE SEWER WITH CLASS 52 DUCTILE IRON PIPE WILL BE REQUIRED.
4. IN CASE OF DAMAGE TO CITY OF CHICAGO SEWERS, PRIVATE AND PUBLIC DRAINS, SEWER STRUCTURES AND/OR BENCH MONUMENTS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DEPARTMENT OF W.M. AT (312) 747-8117 OR (312) 747-7893. THE CONTRACTOR MUST, AT HIS/HER COST REPLACE THE AFFECTED SEWERS, DRAIN CONNECTIONS, SEWER STRUCTURES AND/OR BENCH MONUMENTS AS NECESSARY. THE SEWER FLOWS MUST BE MAINTAINED AT ALL TIMES.
5. PERFORATED LIDS SHALL BE PLACED ON ALL MANHOLES AND CATCH BASINS.
6. BENCH MONUMENT LOCATIONS CAN BE OBTAINED FROM THE DEPARTMENT OF W.M. AT SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971.
7. ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND GRATES OR LIDS ON SEWER STRUCTURES SHALL BE REPLACED WITH NEW DEPARTMENT OF W.M. STANDARD FRAMES AND GRATES OR LIDS. THE FRAMES AND LIDS OF SEWER STRUCTURES TO BE ABANDONED, REMOVED OR FILLED MUST BE SALVAGED AND THE SEWER UNIT OF THE DEPARTMENT OF W.M. NOTIFIED FOR PICK-UP.
8. ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF W.M. STANDARDS.
9. THE MINUTES OF THE PRE-CONSTRUCTION MEETING SHOULD STATE THAT A LIST OF "DEPARTMENT OF W.M. REQUIREMENTS FOR EXISTING FACILITIES PROTECTION" WAS PROVIDED TO THE RESIDENT ENGINEER AND THE CONTRACTOR FOR COMPLIANCE.
10. THE LOCATIONS WHERE THE MAIN SEWER IS NOT BEING REPLACED AND THE EXISTING DRAINAGE FACILITIES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE AND REPLACE THE DAMAGED FACILITIES AT HIS/HER EXPENSE TO THE SATISFACTION OF THE DEPARTMENT OF W.M.. THE SEWER FLOW SHOULD BE MAINTAINED AT ALL TIMES.
11. EXISTING CATCH BASIN LATERALS TO BE REUSED MUST BE RODDED AND FLUSHED IN THE PRESENCE OF THE SEWER UNIT OF THE DEPARTMENT OF WATER MANAGEMENT INSPECTOR. A NEW CONNECTION TO THE MAIN SEWER IS REQUIRED, IF THE EXISTING CATCH BASIN LATERAL IS NOT APPROVED BY THE SEWER INSPECTOR.

CR & A
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
CITY OF CHICAGO NOTES

SCALE: NONE
DATE: JANUARY 16, 2009
DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

PROJECT: I-90 (KENNEDY EXPRESSWAY) AT CENTRAL AVENUE
COOK COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	4
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60640				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% FED.	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				1000-2A	X831-2A	1000-2A	1000-2A
20101100	TREE TRUNK PROTECTION	EACH	3	3			
28000510	INLET FILTERS	EACH	4	4			
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1		
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	30		30		
50800515	BAR SPLICERS	EACH	970		970		
51500100	NAME PLATES	EACH	1		1		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	30		30		
60250200	CATCH BASINS TO BE ADJUSTED	EACH	3	3			
60406520	FRAMES AND LIDS, OPEN LID (CITY OF CHICAGO)	EACH	4	4			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8			
67100100	MOBILIZATION	L SUM	1	1			
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	50	50			
70106800	CHANGEABLE MESSAGE SIGN	CAL MQ	2	2			
73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	1	1			
78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	70	70			
80500300	SERVICE INSTALLATION, TYPE C	EACH	1				1
* 81400200	HEAVY-DUTY HANDHOLE	EACH	5				5
* X0326323	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING	EACH	8			8	
* 84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	8			8	
* 84200700	LIGHTING FOUNDATION REMOVAL	EACH	2			2	
* 87900200	DRILL EXISTING HANDHOLE	EACH	17			17	
* 89500510	CABINET HOUSING EQUIPMENT REMOVAL	EACH	2				2
* 89502380	REMOVE EXISTING HANDHOLE	EACH	1				1
* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2				2
M2010210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	20	20			
M2011000	TEMPORARY FENCE	METER	300	300			
M2020010	EARTH EXCAVATION	CU M	271	271			
M2070400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU M	107		107		
M2113100	TOPSOIL FURNISH AND PLACE, 100MM	SQ M	148	148			

* SPECIALTY ITEM

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ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE
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DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% FED.	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				I000-2A	X831-2A	I000-2A	I000-2A
M2500210	SEEDING, CLASS 2A	HA	0.03	0.03			
M2500400	NITROGEN FERTILIZER NUTRIENT	KG	1	1			
M2500500	PHOSPHORUS FERTILIZER NUTRIENT	KG	1	1			
M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	1	1			
M2510630	EROSION CONTROL BLANKET	SQ M	300	300			
M2520110	SODDING, SALT TOLERANT	SQ M	148	148			
M2520200	SUPPLEMENTAL WATERING	UNIT	1	1			
M2800400	PERIMETER EROSION BARRIER	METER	45	45			
M3111100	SUB-BASE GRANULAR MATERIAL, TYPE B 100MM	SQ M	299	299			
M4060200	BITUMINOUS MATERIALS (PRIME COAT)	M TON	1	1			
M4060300	AGGREGATE (PRIME COAT)	M TON	10	10			
M4060982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ M	25	25			
M4061005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	M TON	66	66			
M4062135	LEVELING BINDER (MACHINE METHOD), N70	M TON	100	100			
M4063340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	M TON	150	150			
M4202265	PORTLAND CEMENT CONCRETE PAVEMENT 260MM (JOINTED)	SQ M	414	414			
M4205050	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ M	346	346			
M4206100	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ M	24	24			
M4230250	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 250 MM	SQ M	37	37			
M4240125	PORTLAND CEMENT CONCRETE SIDEWALK 125MM	SQ M	224	224			
M4248000	DETECTABLE WARNINGS	SQ M	5	5			
M4400765	HOT-MIX ASPHALT SURFACE REMOVAL, 65MM	SQ M	1,523	1,523			
M4401150	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 50MM	SQ M	550	550			
M4402000	PAVEMENT REMOVAL	SQ M	650	650			
M4402010	DRIVEWAY PAVEMENT REMOVAL	SQ M	44	44			
M4402020	CURB REMOVAL	METER	11	11			
M4402040	COMBINATION CURB AND GUTTER REMOVAL	METER	229	229			
M4402050	SIDEWALK REMOVAL	SQ M	288	288			
M4402060	APPROACH SLAB REMOVAL	SQ M	165	165			
M4402420	MEDIAN REMOVAL	SQ M	140	140			

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SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% FED.	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				I000-2A	X831-2A	I000-2A	I000-2A
M4427235	CLASS C PATCHES, TYPE II, 300MM	SQ M	100	100			
M4427335	CLASS C PATCHES, TYPE III, 300MM	SQ M	150	150			
M4427435	CLASS C PATCHES, TYPE IV, 300MM	SQ M	300	300			
M5010240	CONCRETE REMOVAL	CU M	34.5		34.5		
M5010570	PROTECTIVE SHIELD	SQ M	1,206		1,206		
M5020100	STRUCTURE EXCAVATION	CU M	155		155		
M5030350	CONCRETE STRUCTURES	CU M	24.6		24.6		
M5030360	CONCRETE SUPERSTRUCTURE	CU M	491		491		
M5030390	BRIDGE DECK GROOVING	SQ M	1,004		1,004		
M5030450	PROTECTIVE COAT	SQ M	2,400	705	1,695		
M5050405	FURNISHING AND ERECTING STRUCTURAL STEEL	KG	1,109		1,109		
M5080205	REINFORCEMENT BARS, EPOXY COATED	KG	60,850		60,850		
M5090520	BRIDGE FENCE RAILING	METER	168		168		
M5120900	TEMPORARY SHEET PILING	SQ M	25		25		
M5200225	PREFORMED JOINT STRIP SEAL	METER	75		75		
M5210022	ANCHOR BOLTS, M24	EACH	20		20		
** M5504800	STORM SEWERS TO BE CLEANED	METER	77	77			
M5870300	CONCRETE SEALER	SQ M	69		69		
M5900200	EPOXY CRACK INJECTION	METER	36		36		
M6020230	CATCH BASINS, TYPE A, 1.2M DIAMETER, TYPE I FRAME, OPEN LID (CITY OF CHICAGO)	EACH	1	1			
M6060070	CONCRETE CURB, TYPE B	METER	11	11			
M6060500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30	METER	171	171			
M6060520	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30 (SPECIAL)	METER	48	48			
M6063753	CONCRETE MEDIAN, TYPE M-5.30 (SPECIAL)	SQ M	14	14			
M6064100	CONCRETE MEDIAN, TYPE SB-15.30	SQ M	47	47			
M6064130	CONCRETE MEDIAN, TYPE SB-15.30 (SPECIAL)	SQ M	114	114			
M6641930	CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED	METER	42	42			
M7030100	SHORT-TERM PAVEMENT MARKING	METER	25	25			
M7030220	TEMPORARY PAVEMENT MARKING - LINE 100MM	METER	524	524			
M7030240	TEMPORARY PAVEMENT MARKING - LINE 150MM	METER	52	52			

* SPECIALTY ITEM
** NON-PARTICIPATING



CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE
DATE: JANUARY 16, 2009
DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

PROJECT: I-90 (KENNEDY EXPRESSWAY) AT CENTRAL AVENUE
COOK COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	7
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60640				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% F&O	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				I000-2A	XB31-2A	I000-2A	I000-2A
M7030280	TEMPORARY PAVEMENT MARKING - LINE 600MM	METER	8	8			
M7030510	PAVEMENT MARKING TAPE, TYPE III - LETTERS & SYMBOLS	SQ M	7.8	7.8			
M7030520	PAVEMENT MARKING TAPE, TYPE III - 100MM	METER	1,881	1,881			
M7030540	PAVEMENT MARKING TAPE, TYPE III - 150MM	METER	126	126			
M7030560	PAVEMENT MARKING TAPE, TYPE III - 300MM	METER	28	28			
M7031000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ M	223	223			
M7040100	TEMPORARY CONCRETE BARRIER	METER	256	256			
M7040200	RELOCATE TEMPORARY CONCRETE BARRIER	METER	168	168			
* M7200100	SIGN PANEL - TYPE 1	SQ M	1	1			
* M7240730	RELOCATE SIGN PANEL - TYPE 3	SQ M	5	5			
* M7280100	TELESCOPING STEEL SIGN SUPPORT	METER	3	3			
* M7300100	WOOD SIGN SUPPORT	METER	8	8			
* M7800100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ M	4	4			
* M7800105	THERMOPLASTIC PAVEMENT MARKING - LINE 100MM	METER	550	550			
* M7800115	THERMOPLASTIC PAVEMENT MARKING - LINE 150MM	METER	54	54			
* M7800120	THERMOPLASTIC PAVEMENT MARKING - LINE 200MM	METER	336	336			
* M7800125	THERMOPLASTIC PAVEMENT MARKING - LINE 300MM	METER	27	27			
* M7802010	POLYUREA PAVEMENT MARKING TYPE I - LINE 100MM	METER	36	36			
* M7802015	POLYUREA PAVEMENT MARKING TYPE I - LINE 150MM	METER	20	20			
* M7802020	POLYUREA PAVEMENT MARKING TYPE I - LINE 200MM	METER	208	208			
* M7802060	POLYUREA PAVEMENT MARKING TYPE I - LINE 600MM	METER	9	9			
* M7830100	PAVEMENT MARKING REMOVAL	SQ M	66	66			
* M8100060	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	335				335
* M8100080	CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	42			42	
* M8100260	CONDUIT IN TRENCH, 50MM DIA., PVC	METER	93			93	
* M8101050	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	35				35
* M8120230	CONDUIT EMBEDDED IN STRUCTURE, 50MM DIA., PVC	METER	157			157	
* M8130120	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 150MM x 150MM x 100MM	EACH	8			8	
* M8130185	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 300MM x 250MM x 150MM	EACH	2			2	
* M8130223	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 400MM x 350MM x 150MM	EACH	1			1	

* SPECIALTY ITEM

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1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE
DATE: JANUARY 16, 2009

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

PROJECT: I-90 (KENNEDY EXPRESSWAY) AT CENTRAL AVENUE
COOK COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	I213B-1	COOK	94	8
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60640				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% FED.	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				I000-2A	X831-2A	I000-2A	I000-2A
* M8160400	UNIT DUCT, WITH 3-1/C NO.4 AND 1/C NO.6 GROUND, 600V (EPR-TYPE RHW), 30MM DIA., POLYETHYLENE	METER	81			81	
* M8170425	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO.10	METER	403			403	
* M8190200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	893			558	335
* M8780200	CONCRETE FOUNDATION, TYPE D	METER	2				2
* M8950230	REMOVE ELECTRIC CABLE FROM CONDUIT	METER	450			450	
MX030199	TEMPORARY PAVEMENT	SQ M	40	40			
* MX030207	CONDUIT ATTACHED TO STRUCTURE, 50MM DIA. GALVANIZED STEEL, PVC COATED	METER	213				213
* MX030243	CONDUIT ATTACHED TO STRUCTURE, 75MM DIA. GALVANIZED STEEL, PVC COATED	METER	379			379	
* MX030300	CONDUIT ATTACHED TO STRUCTURE, 25MM DIA. GALVANIZED STEEL, PVC COATED	METER	98			98	
MX032178	TEMPORARY INFORMATION SIGNING	SQ M	5	5			
* MX032308	ELECTRIC CABLE IN CONDUIT, 600V (EPRN TRIPLEXED) 2-1/C NO.6, 1-1 C NO.8 GROUND	METER	453			453	
* MX032507	PVC CONDUIT IN TRENCH 50MM (SCHEDULE #80)	METER	71			71	
* MX032768	CONCRETE FOUNDATION, 600MM DIAMETER	METER	10			10	
* MX032777	ELECTRICAL CABLE IN CONDUIT NO.19 6/C	METER	359				359
MX032779	EXTRA STRENGTH CLAY PIPE STORM SEWERS, TYPE 2, 200MM	METER	2	2			
* MX033100	REMOVAL OF ASBESTOS CEMENT CONDUIT	METER	320			320	
MX033693	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 125MM)	SQ M	5.0		5.0		
MX033694	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 125MM)	SQ M	73.7		73.7		
* MX870010	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 600V (EPR-TYPE TC) 2/C NO. 6 AND NO. 8 GROUND	METER	382				382
MZ001050	AGGREGATE SUBGRADE 300MM	SQ M	538	538			
** X0320080	ROD AND CLEAN DUCT IN EXISTING CONDUIT SYSTEM	METER	95			95	
* X0322426	RELOCATE CTA ELECTRICAL SERVICE	L SUM	1	1			
* X0322440	DIGITAL LOOP DETECTOR SENSOR UNIT (2 CHANNEL)	EACH	1				1
* X0322443	TONE EQUIPMENT - 3 FREQUENCY TRANSMITTER PROGRAMMABLE	EACH	2				2
* X0322444	TONE EQUIPMENT - POWER SUPPLY	EACH	1				1
* X0322445	TONE EQUIPMENT - MOUNTING FRAME	EACH	1				1
* X0322446	CABINET HOUSING EQUIPMENT, TYPE III	EACH	2				2
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6			6	
** X0324435	CLEANING EXISTING MANHOLE OR HANDHOLE	EACH	6			6	
X0325015	ADJUST FRAME AND LID	EACH	4			4	

* SPECIALTY ITEM
** NON-PARTICIPATING

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE
DATE: JANUARY 16, 2009

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

PROJECT: I-90 (KENNEDY EXPRESSWAY) AT CENTRAL AVENUE
COOK COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	9
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY 100% FED.	ROADWAY	BRIDGE	ROADWAY LIGHTING	TRAFFIC SURVEILLANCE
				I000-2A	X831-2A	I000-2A	I000-2A
* X0329863	INTERCEPT EXISTING CONDUIT	EACH	3			3	
* X0329867	INSTALL LIGHT POLE MAST ARM AND LUMINAIRE (MATERIAL PROVIDED BY THE CITY OF CHICAGO)	EACH	8			8	
* X0329888	REMOVE EXISTING STREET LIGHTING EQUIPMENT	L SUM	1			1	
* X0945500	PAINT EXISTING POLE COMPLETE	EACH	7			7	
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1			
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1			
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	30	30			
** XX005656	INLET FILTER CLEANING	EACH	3	3			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Z0030020	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1			
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1			
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2			
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1			
Z0073500	TEMPORARY SUPPORT SYSTEM	L SUM	1	1			
Δ Z0076600	TRAINEES	HOUR	1000	1000			
MX033761	ANCHOR BOLTS, M30	EACH	40		40		

- Δ Y080
- * SPECIALTY ITEM
- ** NON-PARTICIPATING

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REVISIONS	
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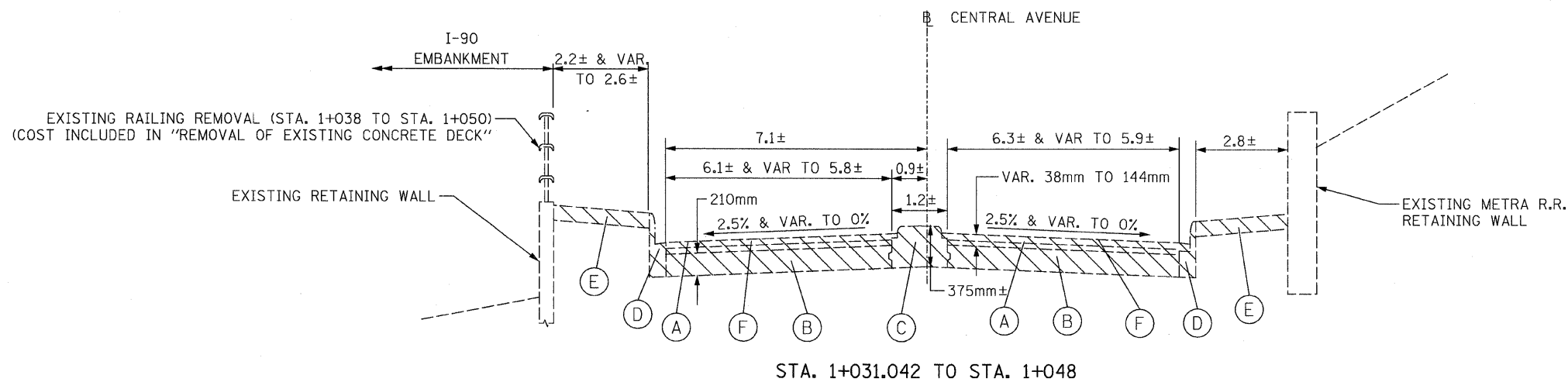
ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

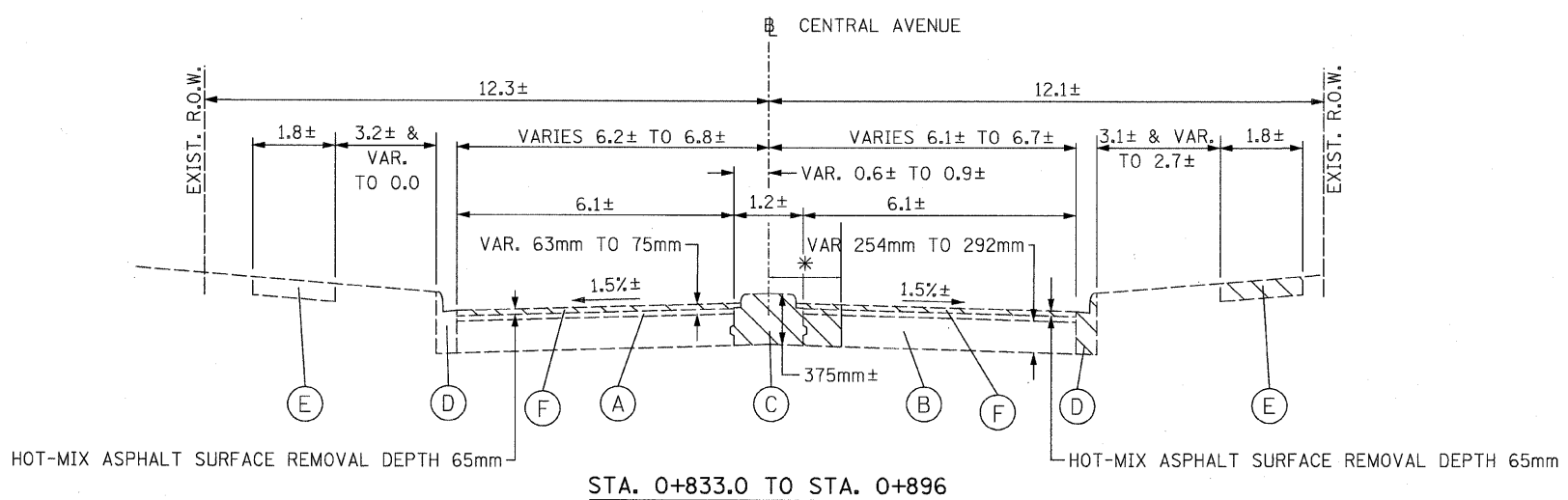
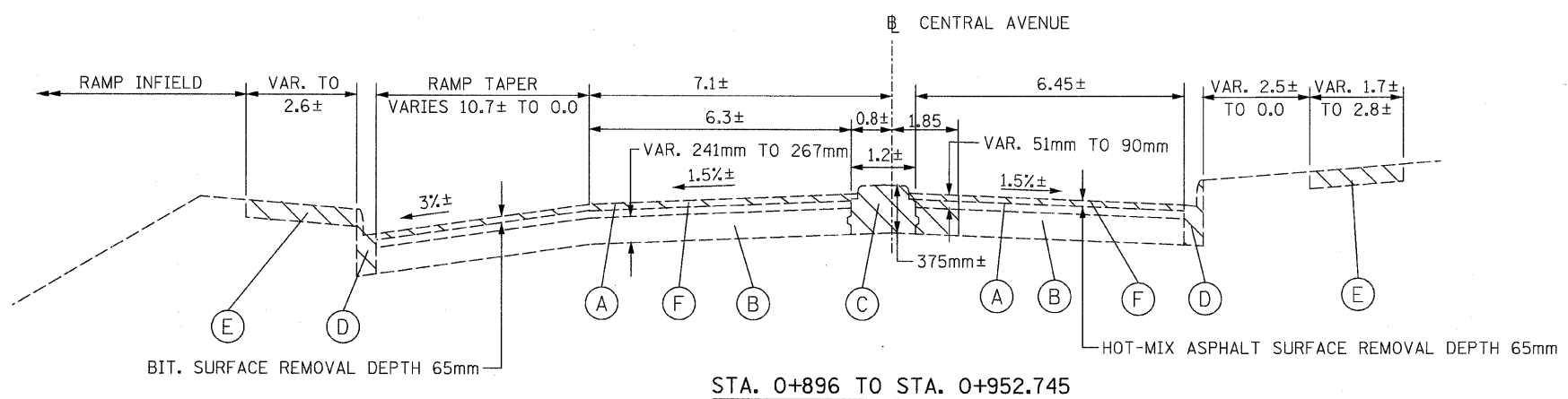
SCALE: NONE
DATE: JANUARY 16, 2009

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	10
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60640				



BRIDGE OMISSION
STA. 0+952.745 TO STA. 1+031.042



EXISTING LEGEND

- (A) HOT-MIX ASPHALT SURFACE - RANGE 38mm TO 90mm
- (B) CONCRETE BASE COURSE, 210mm±
- (C) CONCRETE BARRIER MEDIAN
- (D) CONCRETE CURB & GUTTER, TYPE B-15.30
- (E) CONCRETE SIDEWALK, 127mm±
- (F) HOT-MIX ASPHALT SURFACE REMOVAL, 65mm & VARIES ± 25mm, PAID AS 65mm REMOVAL

REMOVAL ITEMS. SEE PROPOSED PLAN SHEETS FOR LIMITS.

PAVEMENT PATCHING NOTES:

- HOT-MIX ASPHALT REMOVAL OVER PATCHES AND HOT-MIX ASPHALT REPLACEMENT OVER PATCHES:
- AN ESTIMATED AVERAGE DEPTH OF 50mm OF HOT-MIX ASPHALT SURFACE NEEDS TO BE REMOVED AND REPLACED FOR TYPE C PAVEMENT PATCHING.
- THE EXISTING PAVEMENT WAS RESURFACED IN 2006 WITH NO PAVEMENT PATCHING. THE CONTRACTOR SHALL PERFORM THE HOT-MIX ASPHALT SURFACE REMOVAL PRIOR TO ANY PAVEMENT PATCHING.

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REVISIONS	
NAME	DATE

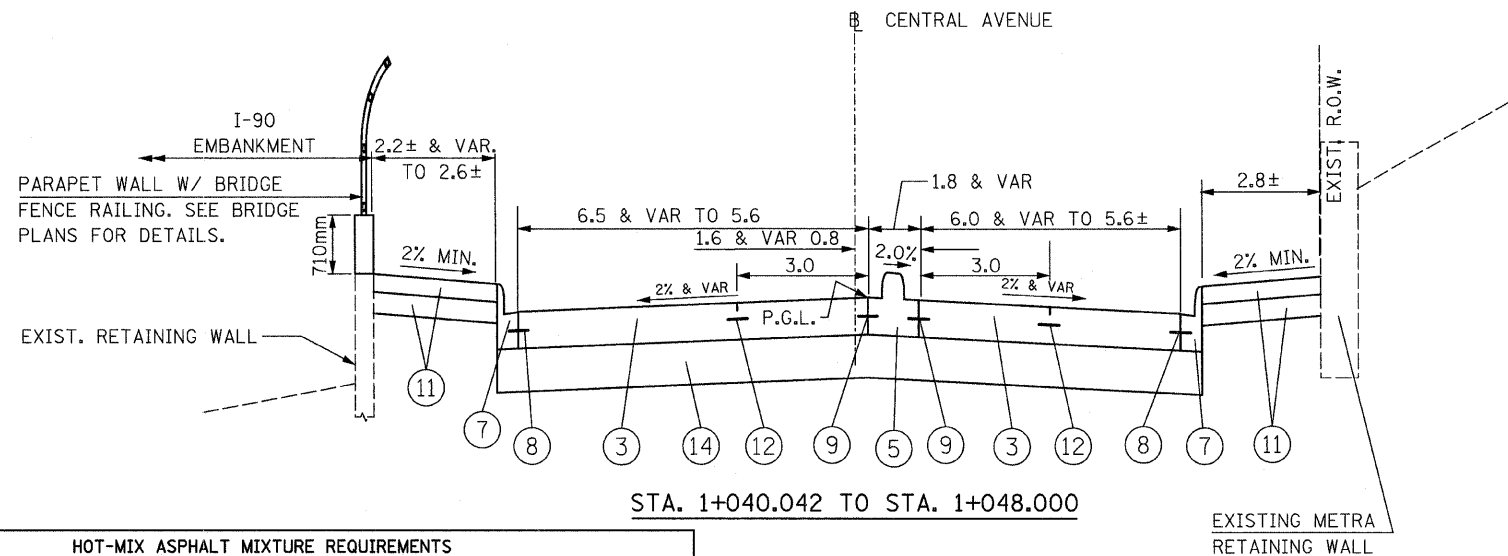
ILLINOIS DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE
EXISTING TYPICAL SECTIONS

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: B.K.
CHECKED BY: S.J.P.

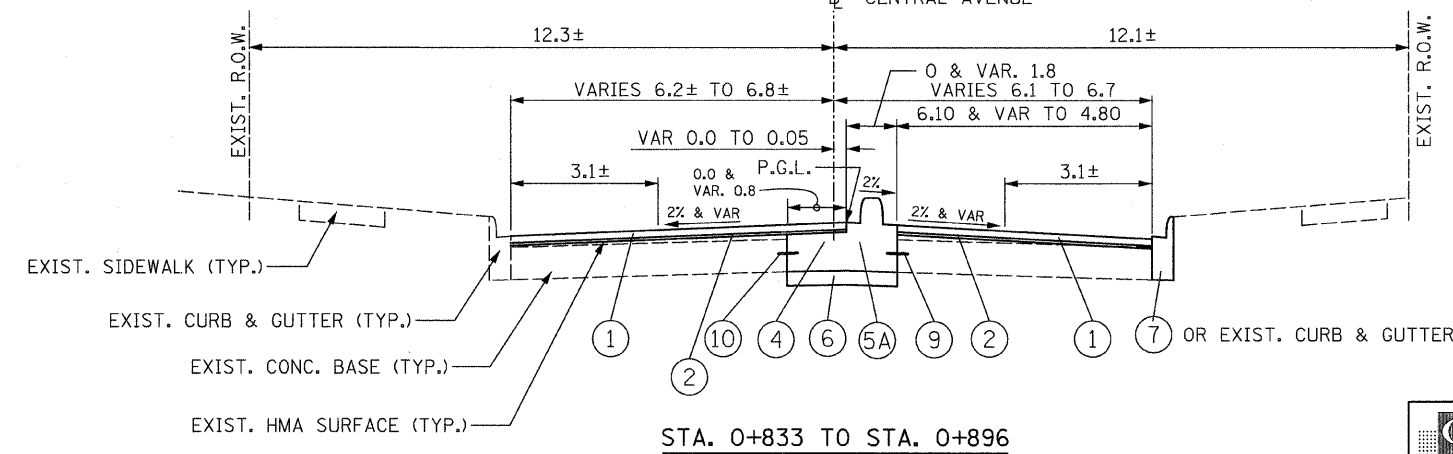
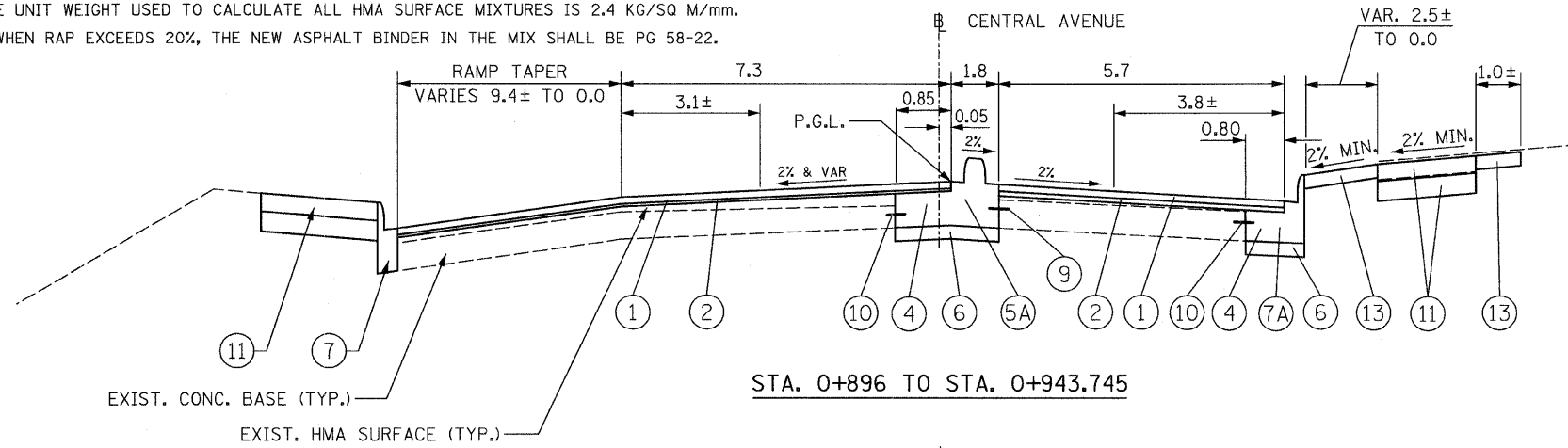
* STA. 0+866, 0.65 RT TO 0+896, 1.85 RT. REMOVE EXISTING PAVEMENT



HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
PAVEMENT OVERLAY DEPTH VARIES		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm)	PG 64-22	4% @ 70 Gyr.
LEVELING BINDER (MACHINE METHOD), N70	PG 64-22*	4% @ 70 Gyr.
TEMPORARY PAVEMENT		
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 250mm	PG 64-22*	4% @ 50 Gyr.
PATCHING		
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	PG 64-22*	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES IS 2.4 KG/SQ M/MM.
 * WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

BRIDGE OMISSION
 STA. 0+952.745 TO STA. 1+031.042
 BRIDGE APPROACH PAVEMENT
 STA. 0+943.745 TO STA. 0+952.745
 STA. 1+031.042 TO STA. 1+040.042



PROPOSED LEGEND

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 38mm
- ② LEVELING BINDER (MACHINE METHOD), N70, 25mm (MAX.)
- ③ P.C.C. PAVEMENT 260mm JOINTED
- ④ P.C.C. BASE COURSE, 255mm (MINIMUM) POURED MONOLITHIC WITH CONCRETE MEDIAN OR CURB & GUTTER. COST WILL BE INCLUDED WITH CONCRETE MEDIAN TYPE SB-15.30 (SPECIAL) OR CURB & GUTTER TYPE B-15.30 (SPECIAL). SEE NOTE 1.
- ⑤ CONC. MEDIAN, TYPE SB-15.30
- ⑤A CONCRETE MEDIAN, TYPE SB-15.30 (SPECIAL)
- ⑥ SUB-BASE GRANULAR MATERIAL, TYPE B 100mm
- ⑦ COMB. CONC. CURB & GUTTER, TYPE B-15.30
- ⑦A COMB. CONCRETE CURB & GUTTER, TYPE B-15.30 (SPECIAL)
- ⑧ NO. 20 EPOXY-COATED TIE BARS @ 600mm c-c. AND 600mm LONG, DRILLED AND GROUTED (COST WILL BE INCLUDED IN CONC. CURB & GUTTER)
- ⑨ NO. 20 EPOXY-COATED SMOOTH DOWEL BAR @ 600mm c-c. AND 600mm LONG, DRILLED AND GROUTED (COST WILL BE INCLUDED IN P.C.C. PAVEMENT AND CONCRETE MEDIAN)
- ⑩ NO. 25 EPOXY-COATED TIE BARS @ 600mm c-c. 600mm LONG, DRILLED & GROUTED (COST WILL BE INCLUDED IN P.C.C. PAVEMENT AND CONCRETE MEDIAN)
- ⑪ P.C.C. SIDEWALK, 125mm & FA-2 BASE, 150mm (COST OF FA-2 BASE TO BE INCLUDED IN P.C.C. SIDEWALK)
- ⑫ SAWED LONGITUDINAL JOINT - USE NO. 20 EPOXY-COATED DEFORMED TIE BARS @ 750mm c-c. AND 750mm LONG (COST WILL BE INCLUDED IN P.C.C. PAVEMENT)
- ⑬ SODDING (SALT TOLERANT) & TOPSOIL FURNISH AND PLACE, 100mm
- ⑭ AGGREGATE SUBGRADE, 300mm

NOTE:

1. THE P.C.C. BASE COURSE SHALL HAVE A MINIMUM THICKNESS OF 225mm AND SHALL BE POURED MONOLITHIC WITH THE CONCRETE MEDIAN OR CURB & GUTTER. P.C.C. BASE COURSE SHALL EXTEND FROM THE BOTTOM OF THE EXISTING PAVEMENT TO 65mm BELOW THE FINISH ELEVATION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**CENTRAL AVENUE
 PROPOSED TYPICAL SECTIONS**

SCALE: NONE
 DATE: NOVEMBER 2007

DRAWN BY: B.K.
 CHECKED BY: S.J.P.

CR & A
 CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	12
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60640

COMBINATION CONCRETE CURB & GUTTER SCHEDULE			
STATION	P. C. C. CURB & GUTTER TYPE B-15.30 (M)	P. C. C. CURB & GUTTER, TYPE B-15.30(SPECIAL) (M)	COMB. CURB & GUTTER REMOVAL (M)
CENTRAL AVE. 0+858.4 TO 0+897.8, RT	29.6	9.8	39.4
0+897.8 TO 0+936.4, RT		38.6	38.6
0+903.0 TO 0+947.6, LT	45.4		45.4
0+936.4 TO 0+947.4, RT	10.6		11.0
0+947.3 TO 0+958.4, LT	11.1		11.1
1+036.4 TO 1+067.0, LT	30.6		30.6
1+025.8 TO RAMP, RT(12+10)	13.8		22.0
RAMP(10+21) TO 1+067.0, RT	29.9		31.0
TOTAL	171	48.4	229

P. C. C. SIDEWALK SCHEDULE		
STATION	P. C. C. SIDEWALK 125 MM (SQ M)	SIDEWALK REMOVAL (SQ M)
CENTRAL AVE 0+887.0 TO 0+890.2, RT	7	6
0+889.5 TO 0+892.9, LT	6	6
0+898.1 TO 0+936.0, RT	70	68
0+902.4 TO 0+906.8, LT	8	8
0+947.2 TO 0+958.4, LT	7	28
0+936.0 TO 0+947.2, RT		28
1+045 TO 1+067.0, LT	50	45
1+025 TO 1+037.5, RT	8	35
1+043.3 TO 1+067.0, RT	43	37
TOTALS	199	261

CATCH BASIN SCHEDULE					
STATION	FRAMES & LIDS, OPEN LID (CITY OF CHI.) (EACH)	CATCH BASIN, TYPE A TIF OPEN LID (EACH)	CLAY PIPE STORM SEWERS TYPE 2 200MM (M)	TRENCH BACKFILL (CU M)	CATCH BASINS TO BE ADJUSTED (EACH)
CENTRAL AVE 0+886, RT	1				1
0+886, LT	1				1
0+897, LT	1				1
1+027, 7.5' RT		1	2.0	1.2	
1+057, 3.5' LT	1				
TOTALS	4	1	2.0	* 1.2	3

*THE COST OF TRENCH BACKFILL IS INCLUDED IN THE COST OF STORM SEWER.

CONCRETE MEDIAN SCHEDULE				
STATION	CONCRETE MEDIAN TY M-5.30 (SQ M)	CONCRETE MEDIAN TY SB-15.30 (SQ M)	CONC. MEDIAN TY SB-15.30 (SPECIAL) (SQ M)	CONCRETE MEDIAN REMOVAL (SQ M)
CENTRAL AVE 0+866.0 TO 0+895.0			41	35
0+895.0 TO 0+902.5	14			9
0+902.5 TO 0+943.0			73	56
1+041.1 TO 1+067.0		47		40
TOTALS	14	47	114	140

CONCRETE CURB SCHEDULE		
STATION	P. C. C. CURB TYPE B (M)	CURB REMOVAL (M)
CENTRAL AVE 0+890.0, RT	5.5	5.5
0+898.0, RT	5.5	5.5
TOTAL	11.0	11.0

PAVING QUANTITIES SCHEDULE							
STATION	AGGREGATE SUBGRADE 300 MM SQ M	P. C. C. PAVT. (JOINTED) 260 MM SQ M	HMA SURFACE CSE, 38MM M TON	PRIME COAT		PAVEMENT REMOVAL SQ M	HMA SURFACE REMOVAL (65MM & VAR.) SQ M
				BITUM. PRIME M TON	AGGRE. MAT. M TON		
CENTRAL AVE 0+833.0 TO 0+866.0			39.8	0.3	2.5		422
0+866.0 TO 0+925.0			78	0.7	5.6	73	765
ON-RAMP 0+925.0 TO 0+943.0			9.8			81	109
1+033.5 TO 1+067.0	443	329	22.5	0.2	1.5	368	227
OFF-RAMP TEMPORARY PAVEMENT	95	85				88	
						40	
TOTALS	538	414	150	1.2	9.6	650	1,523

TREE REMOVAL SCHEDULE	
STATION	SIZE
0+914 R	0.07 m
0+923 R	0.07 m
0+950 L	0.50 m

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: NONE
DATE: NOVEMBER 2007

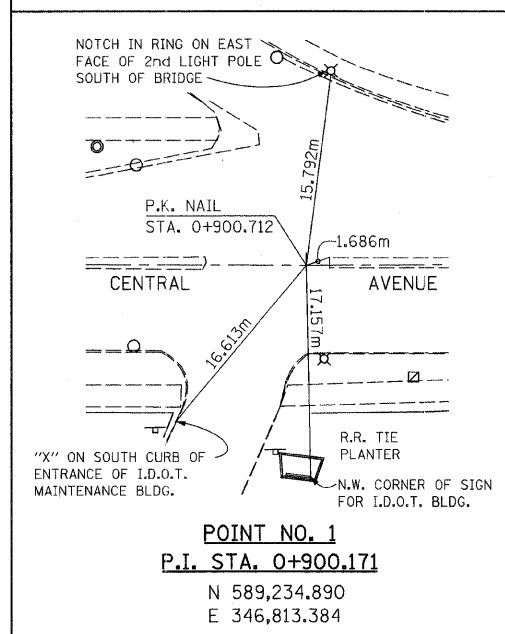
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CHECKED BY S.J.P.



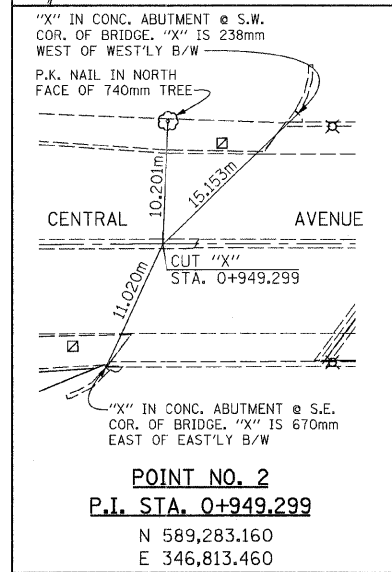
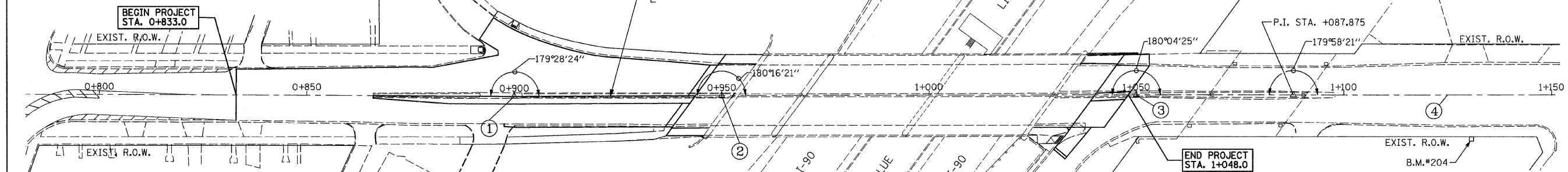
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	13
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

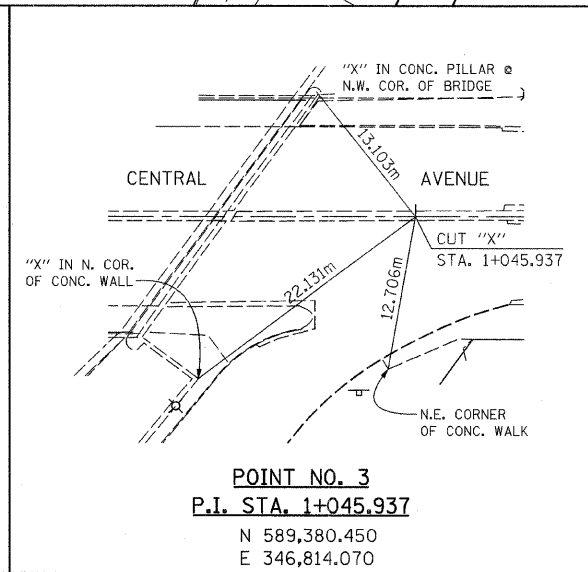
CONTRACT NO. 60640



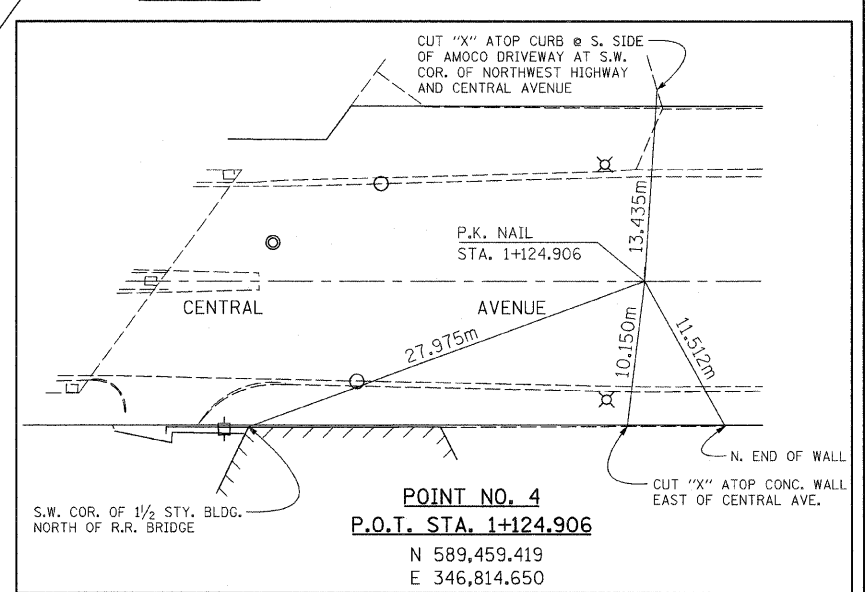
POINT NO. 1
P.I. STA. 0+900.171
 N 589,234.890
 E 346,813.384



POINT NO. 2
P.I. STA. 0+949.299
 N 589,283.160
 E 346,813.460



POINT NO. 3
P.I. STA. 1+045.937
 N 589,380.450
 E 346,814.070



POINT NO. 4
P.O.T. STA. 1+124.906
 N 589,459.419
 E 346,814.650

B.M. #204 ELEV. 188.264
 "□" AT N. END OF 0.260m CONC. WALL; SE COR. OF NORTHWEST HWY. & CENTRAL AVE. 15.5m SOUTH OF TRAFFIC SIGNAL AT NORTHWEST HWY. AND CENTRAL AVE.

B.M. #206 ELEV. 181.919
 "□" ON N.W. CORNER OF CONC. WALL ON SOUTH SIDE OF ENTRANCE RAMP TO EAST BOUND KENNEDY EXPWY.

B.M. #419 ELEV. 187.921
 CITY OF CHICAGO BENCHMARK; LEVEL WITH GROUND, 24.7m NORTH OF NORTH LINE OF LAWRENCE AVE; 2.4m WEST OF EAST LINE OF LINDER AVE; 0.4m WEST OF WEST EDGE OF EAST CONC. WALK

B.M. #202 ELEV. 187.854
 "X" ON NE BOLT OF LIGHT POLE, FIRST LIGHT ON SOUTH SIDE OF ENTRANCE RAMP FROM CENTRAL AVE. TO E.B. I-90

REVISIONS	
NAME	DATE

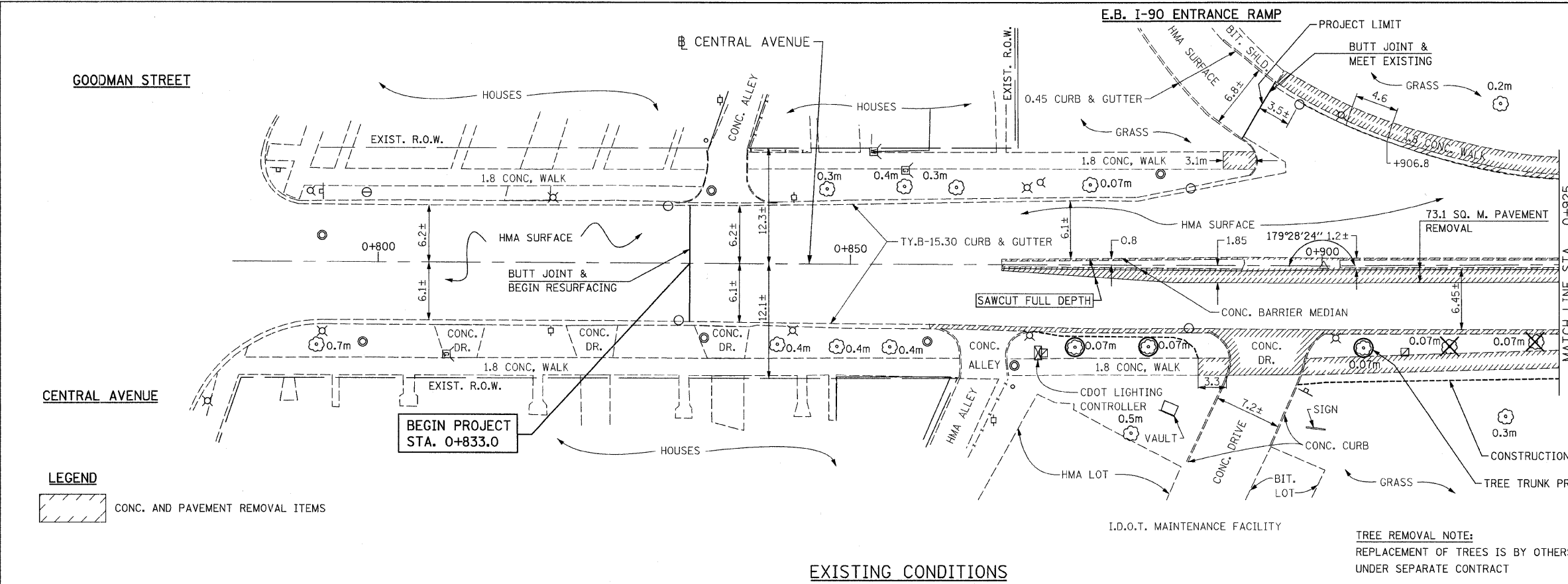
ILLINOIS DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE
ALIGNMENT PLAN, REFERENCE TIES
AND BENCHMARKS

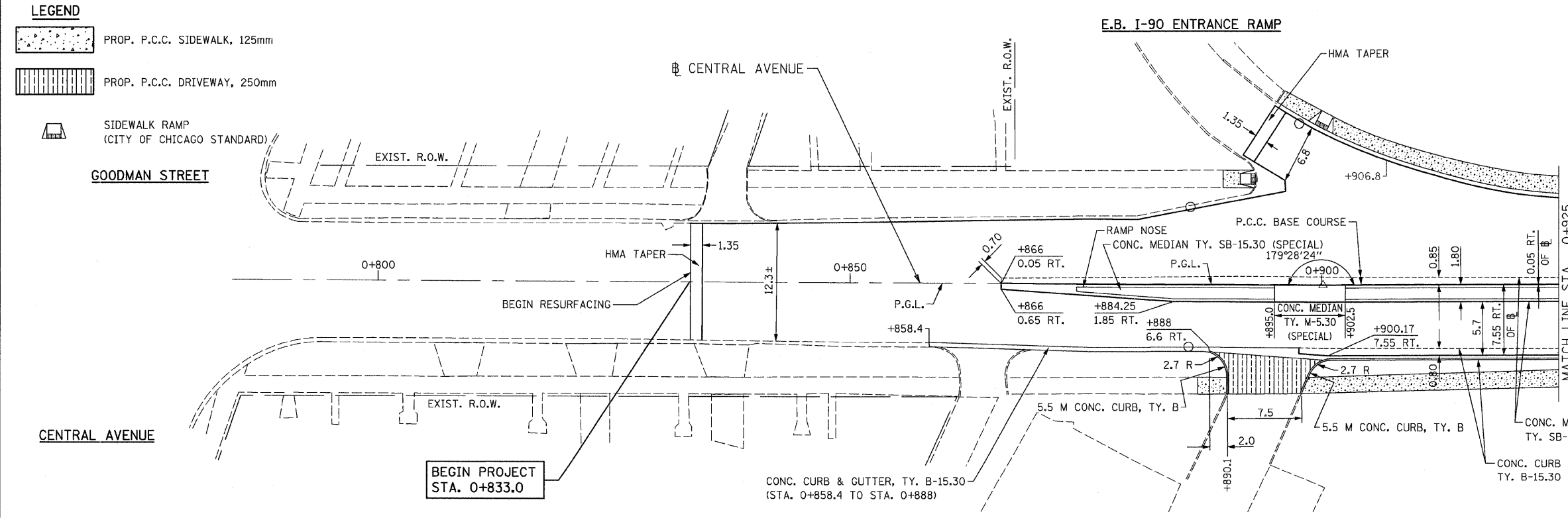
SCALE: 1 : 500
 DATE: NOVEMBER 2007
 DRAWN BY: B.K.
 CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	14
STA. 0+800		TO STA. 0+925		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



EXISTING CONDITIONS



PROPOSED PLAN

- NOTES:
1. FOR CENTRAL AVENUE PROFILE, SEE SHEET NO. 16
 2. FOR DETAILS & ELEVATIONS, SEE SHEET NO. 24

REVISIONS	
NAME	DATE

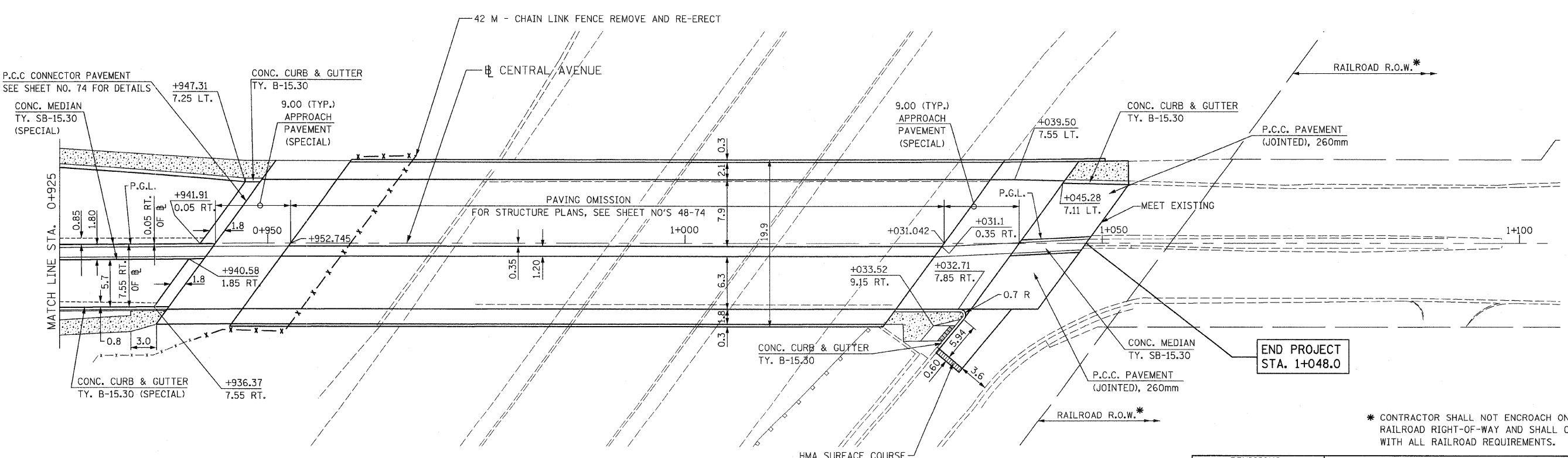
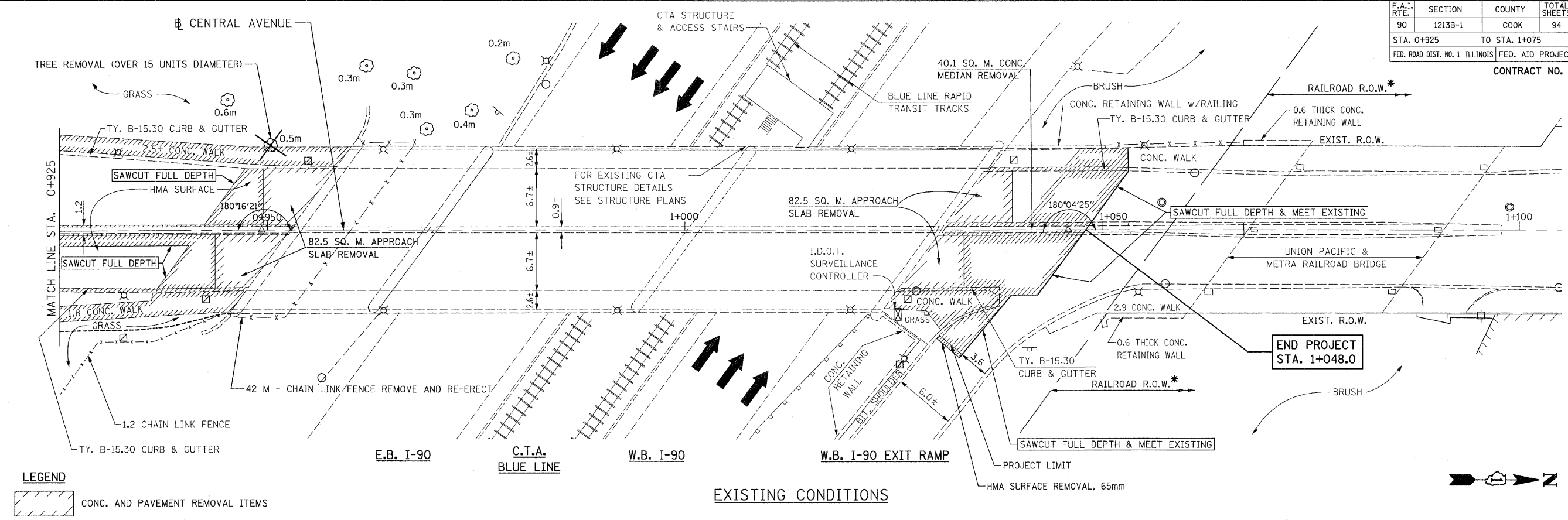
ILLINOIS DEPARTMENT OF TRANSPORTATION
**CENTRAL AVENUE
 EXISTING CONDITIONS
 AND PROPOSED PLAN**
 STA. 0+800 TO STA. 0+925

SCALE: 1 : 250
 DATE: NOVEMBER 2007

DRAWN BY: B.K.
 CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	15
STA. 0+925		TO STA. 1+075		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60640				



- NOTES:
1. FOR CENTRAL AVENUE PROFILE, SEE SHEET NO. 16
 2. ALL PAVEMENT STUBS SHALL BE 0.6.
 3. FOR LEGEND SEE SHEET NO. 14
 4. FOR DETAILS & ELEVATIONS, SEE SHEET NO. 24

REVISIONS	
NAME	DATE

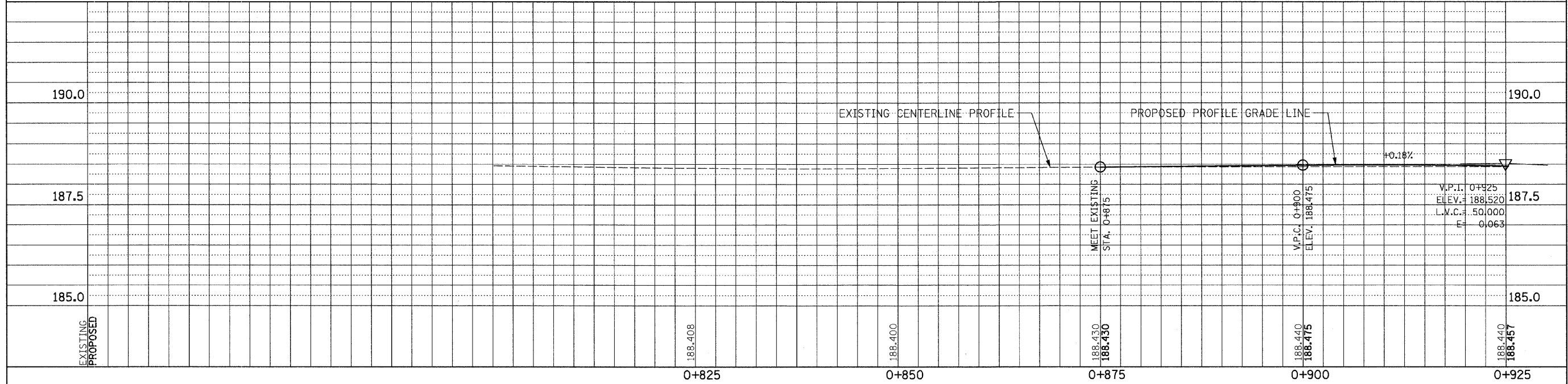
ILLINOIS DEPARTMENT OF TRANSPORTATION
**CENTRAL AVENUE
EXISTING CONDITIONS
AND PROPOSED PLAN**
STA. 0+925 TO STA. 1+100

SCALE: 1 : 250
DATE: NOVEMBER 2007
DRAWN BY: B.K.
CHECKED BY: S.J.P.

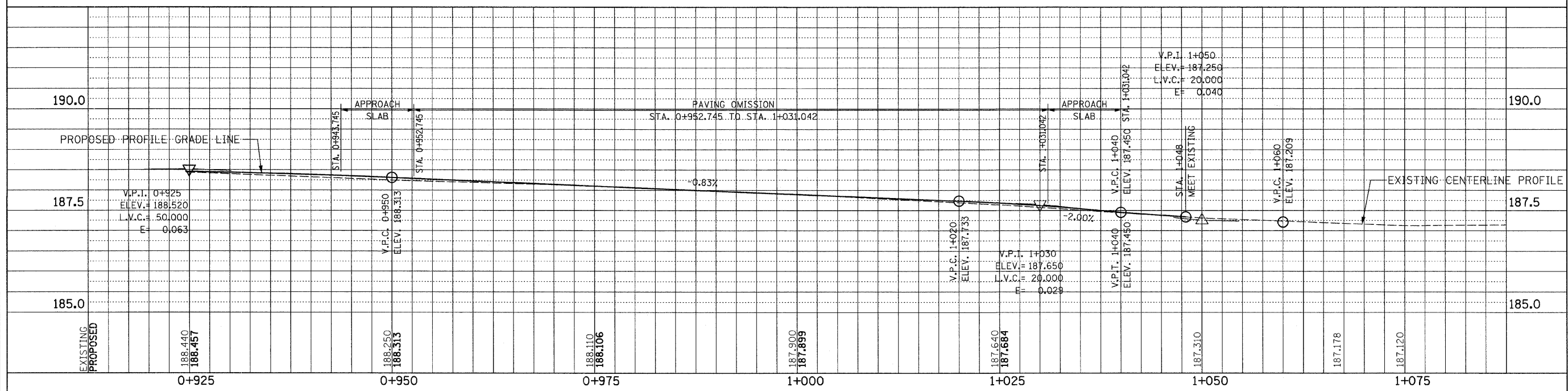
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	16
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

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



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



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE PROFILE

SCALE: 1 : 250
DATE: NOVEMBER 2007

DRAWN BY: B.K.
CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	17
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

I-90 EXPRESSWAY / RAMPS

PRE-STAGE
(NOT ILLUSTRATED)

CONSTRUCTION

1. TEMPORARY PAVEMENT MARKINGS FOR STAGE I.

TRAFFIC CONTROL

1. UTILIZE STD.'s 701606, 701701 AND 701801.

STAGES I & II

CONSTRUCTION

1. PROVIDE PROTECTIVE SHIELD.
2. REMOVAL OF EXISTING DECK.
3. REPAIR OF THE PIER CAPS.
4. BEARING PAD REPLACEMENT.
5. DECK PLACEMENT.

TRAFFIC CONTROL

1. DAILY LANE CLOSURES UTILIZING STANDARDS 701400, 701401 AND 701411 DURING NIGHT-TIME OFF-PEAK HOURS.
2. SAME AS #1 ABOVE TO REMOVE DEBRIS AND PROTECTIVE SHIELDING.
3. SAME AS #1 ABOVE. PERMANENT SHOULDER CLOSURES WILL BE REQUIRED USING DISTRICT STD (TC-B). FOR SHOULDER CLOSURE AND SEE SHEET NO.15 FOR LOOP RAMP DETAILS. THE WORK ON THE CENTER PIER MUST BE COORDINATED WITH THE C.T.A.
4. SAME AS #3 ABOVE.
5. SAME AS #1 ABOVE.

NOTES:
A 4-DUCT BANK OF ELECTRICAL CONDUITS, OWNED BY THE CITY OF CHICAGO BUREAU OF ELECTRICITY WILL BE REMOVED (#2 ABOVE) AND REINSTALLED DURING OR AFTER (#5 ABOVE).

ALL WORK IN ITEMS 1-4 THAT WILL BE OVER THE C.T.A. BLUE LINE TRACKS MUST BE COORDINATED IN ADVANCE WITH THE C.T.A.

SCHEDULE OF QUANTITIES

	PRE-STAGE	STAGE I	STAGE II	TOTAL
SHORT-TERM PAVEMENT MARKING	-	-	-	25 M
PAVT MARKING TAPE, TY III, LT & SYM	3.9	3.9	-	7.8 SQ M
PAVT MARKING TAPE, TY III-LINE 100MM	-	532	1,349	1,881 M
PAVT MARKING TAPE, TY III-LINE 150MM	-	90	36	126 M
PAVT MARKING TAPE, TY III-LINE 300MM	-	12	16	28 M
TEMP PAVEMENT MARKING - LINE 100MM	-	524	-	524 M
TEMP PAVEMENT MARKING - LINE 150MM	-	52	-	52 M
TEMP PAVEMENT MARKING - LINE 600MM	-	-	8	8 M
WORK ZONE PAVEMENT MARKING REM	-	78	145	223 SQ M
RELOCATE TEMP CONC BARRIER	-	-	168	168 M
TEMPORARY CONC BARRIER	-	256	-	256 M
IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	-	-	1	1 EACH
IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	-	1	-	1 EACH
IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	-	2	-	2 EACH
PAVEMENT MARKING REMOVAL	66	-	-	66 SQ M
TEMPORARY PAVEMENT	-	40	-	40 SQ M

CENTRAL AVENUE

STAGE I

CONSTRUCTION

1. CONSTRUCT THE EAST HALF OF CENTRAL AVENUE FROM STA. 0+833 TO STA. 1+048, INCLUDING THE EAST HALF OF THE BRIDGE AND APPROACH SLABS.

PERFORM HOT-MIX ASPHALT SURFACE REMOVAL 65mm, PATCH NORTH BOUND PAVEMENT AND CONSTRUCT WIDENING ALONG THE N.B. EDGE OF PAVEMENT.
2. CONCRETE MEDIAN REMOVAL AND REPLACEMENT WITH TEMPORARY PAVEMENT FOR EASTBOUND ENTRANCE RAMP TRAFFIC TO USE DURING STAGE II. PLACE TEMPORARY PAVEMENT IN MEDIAN STA. 1+040 TO 1+048 FOR STAGE II.

TRAFFIC CONTROL

1. TRAFFIC WILL BE MAINTAINED IN ONE LANE IN EACH DIRECTION ON THE EAST HALF OF CENTRAL AVENUE.

REDUCE LOOP RAMP WIDTH AT THE I-90 EXPRESSWAY TO PROVIDE FOR PERMANENT SHOULDER CLOSURE DURING BRIDGE CONSTRUCTION.
2. UTILIZE STD. 701606.

STAGE II

CONSTRUCTION

1. CONSTRUCT THE WEST HALF OF CENTRAL AVENUE FROM STA. 0+833 TO STA. 1+048, INCLUDING THE WEST HALF OF THE BRIDGE AND APPROACH SLABS.
2. A. CONSTRUCT THE CONCRETE MEDIAN STA. 0+866 TO 1+048.
B. PLACE SURFACE COURSES AND FINAL PAVEMENT MARKINGS.

TRAFFIC CONTROL

1. TRAFFIC WILL BE MAINTAINED AS INDICATED IN STAGE II CENTRAL AVENUE.
2. UTILIZE STD. 701701.

TRAFFIC CONTROL AND STAGING NOTES

1. LOOP RAMP TO E.B. I-90 TO REMAIN OPEN AT ALL TIMES. SEE SHEET NOS. 19 - 21.
2. COORDINATION MUST BE MAINTAINED WITH THE C.T.A. DURING ALL CONSTRUCTION ON OR OVER THEIR TRACKS, INCLUDING:
 - a. ANY WORK ADJACENT TO OR OVER TRACKS.
 - b. PATCHING OF THE CENTER PIER CAP.


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 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

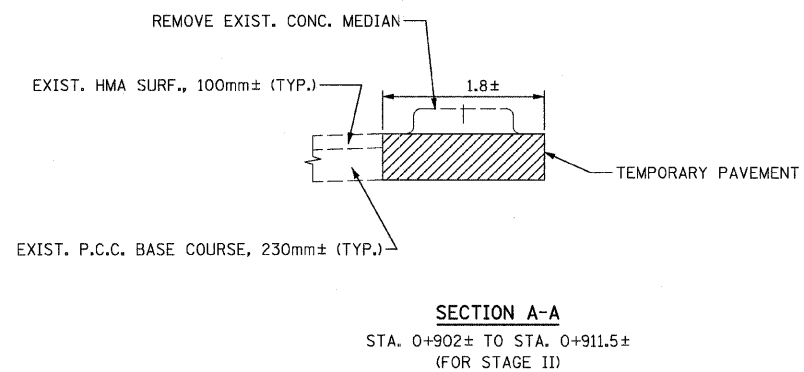
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL NOTES
CENTRAL AVENUE AND
I-90 EXPRESSWAY/RAMP

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: B.K.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	18
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



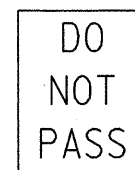
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R1-1



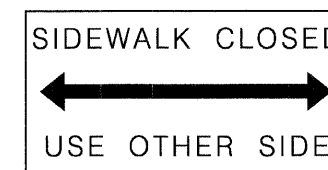
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R4-7b



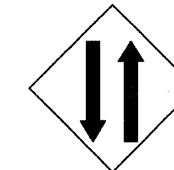
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R4-1



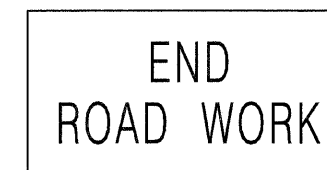
600mm x 300mm

R9-10



1200mm

W6-3



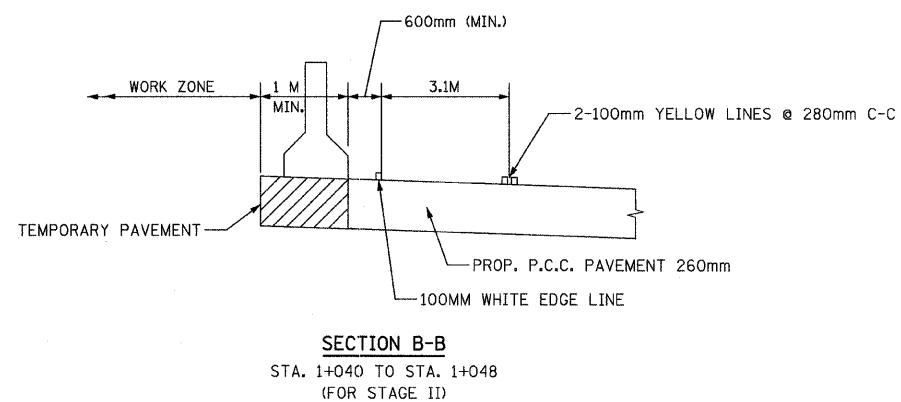
900mm x 450mm

G20-2a

TEMPORARY SIGN LEGEND

NOTES:

1. FOR BRIDGE DECK STAGING TYPICAL SECTIONS, SEE STRUCTURAL PLANS, SHEET NO. 50.
2. THE COST OF REMOVAL OF THE TEMPORARY PAVEMENT SHALL BE PAID FOR AS PAVEMENT REMOVAL.



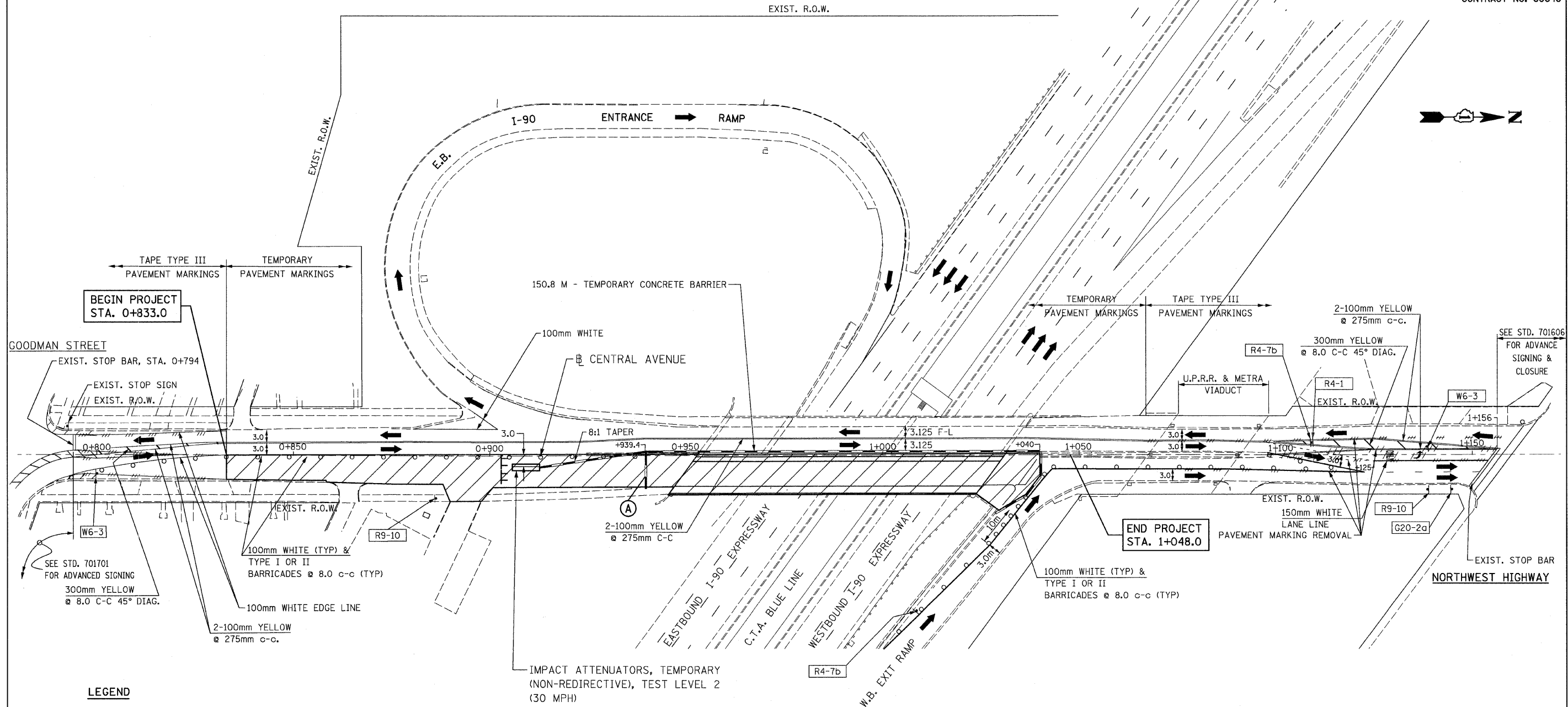
CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL
TEMPORARY SIGNS AND DETAILS
CENTRAL AVENUE AND
I-90 EXPRESSWAY / RAMP

SCALE: NONE
DATE: NOVEMBER 2007
DRAWN BY: B.K.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	19
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



LEGEND

- TYPE I OR TYPE II BARRICADE (MAXIMUM 8.0 M C-C)
- TRAFFIC MOVEMENT
- TEMPORARY CONCRETE BARRIER
- WORK ZONE
- TEMPORARY PAVEMENT MARKING (LETTERS & SYMBOLS) - TYP.
- TEMPORARY PAVEMENT
- TEMPORARY SIGN & SIGN DESIGNATION
- TYPE III BARRICADE w/FLASHING LIGHTS
- PAVEMENT MARKING REMOVAL

NOTES:

1. FOR STAGING NOTES SEE SHEET NO. 17.
2. FOR MOT BRIDGE TYPICAL SECTIONS SEE SHEET NO. 50.
3. ALL INTERSTATE ROUTE MARKING SIGNS ON CENTRAL AVENUE AND RELATED DIRECTIONAL ARROWS SHALL BE RELOCATED TO TEMPORARY SUPPORTS AT LOCATIONS DESIGNATED BY THE ENGINEER. THIS COST SHALL BE INCLUDED IN TRAFFIC CONTROL AND PROTECTION SPECIAL.
4. FOR TEMPORARY SIGN LEGEND, SEE SHEET NO. 18.
5. ALL TEMPORARY CONCRETE BARRIER SHALL BE F-SHAPE DESIGN.
6. THE NUMBER OF TYPE III BARRICADES REQUIRED SHALL BE AS DIRECTED BY THE ENGINEER.

(A) 9.15 M - TEMPORARY CONCRETE BARRIER TO BE PLACED PRIOR TO REMOVING EXISTING DECK AND UNTIL NEW DECK AND PARAPET WALL IS COMPLETE.

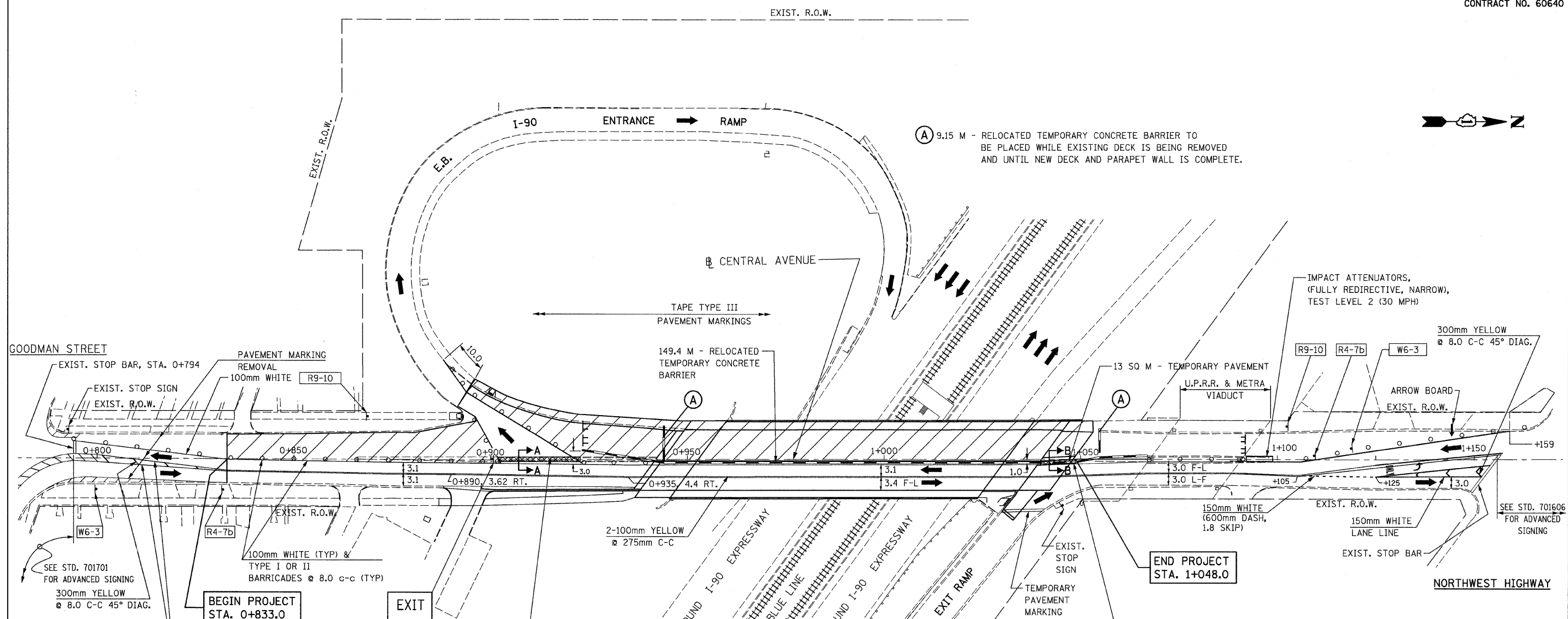
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CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED STAGES OF CONSTRUCTION
 AND TRAFFIC CONTROL
 CENTRAL AVENUE
 STAGE I

SCALE: 1 : 500
 DATE: NOVEMBER 2007
 DRAWN BY: B.K.
 CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	20
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



- LEGEND**
- TYPE I OR TYPE II BARRICADE (MAXIMUM 8.0 M C-C)
 - TRAFFIC MOVEMENT
 - TEMPORARY CONCRETE BARRIER
 - WORK ZONE
 - TEMPORARY PAVEMENT MARKING (LETTERS & SYMBOLS) - TYP.
 - TEMPORARY PAVEMENT
 - TEMPORARY SIGN & SIGN DESIGNATION
 - TYPE III BARRICADE w/FLASHING LIGHTS
 - PAVEMENT MARKING REMOVAL

- NOTES:**
1. FOR STAGING NOTES SEE SHEET NO. 17.
 2. FOR MOT BRIDGE TYPICAL SECTIONS SEE SHEET NO. 50.
 3. ALL INTERSTATE ROUTE MARKING SIGNS AND RELATED DIRECTIONAL ARROWS SHALL BE RELOCATED TO TEMPORARY SUPPORTS AT LOCATIONS DESIGNATED BY THE ENGINEER. AT THE END OF STAGE TWO THESE SIGNS WILL BE REMOUNTED TO THEIR ORIGINAL LOCATION. THIS COST SHALL BE INCLUDE IN TRAFFIC CONTROL AND PROTECTION (SPECIAL).
 4. FOR SECTIONS A-A & B-B, SEE SHEET NO. 18.
 5. FOR TEMPORARY SIGN LEGEND SEE SHEET NO. 18.
 6. THE NUMBER OF TYPE III BARRICADES REQUIRED SHALL BE AS DIRECTED BY THE ENGINEER.

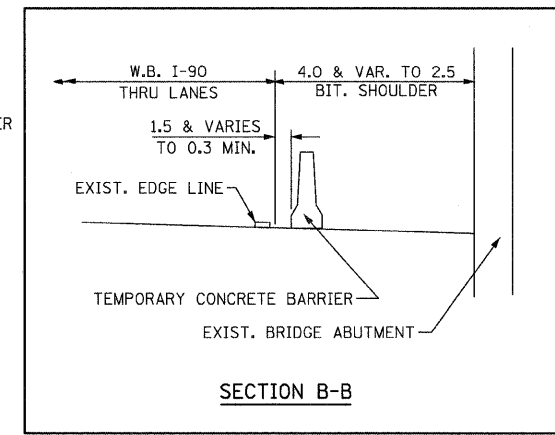
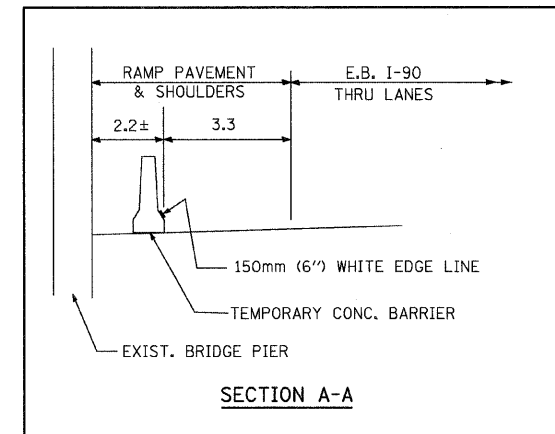
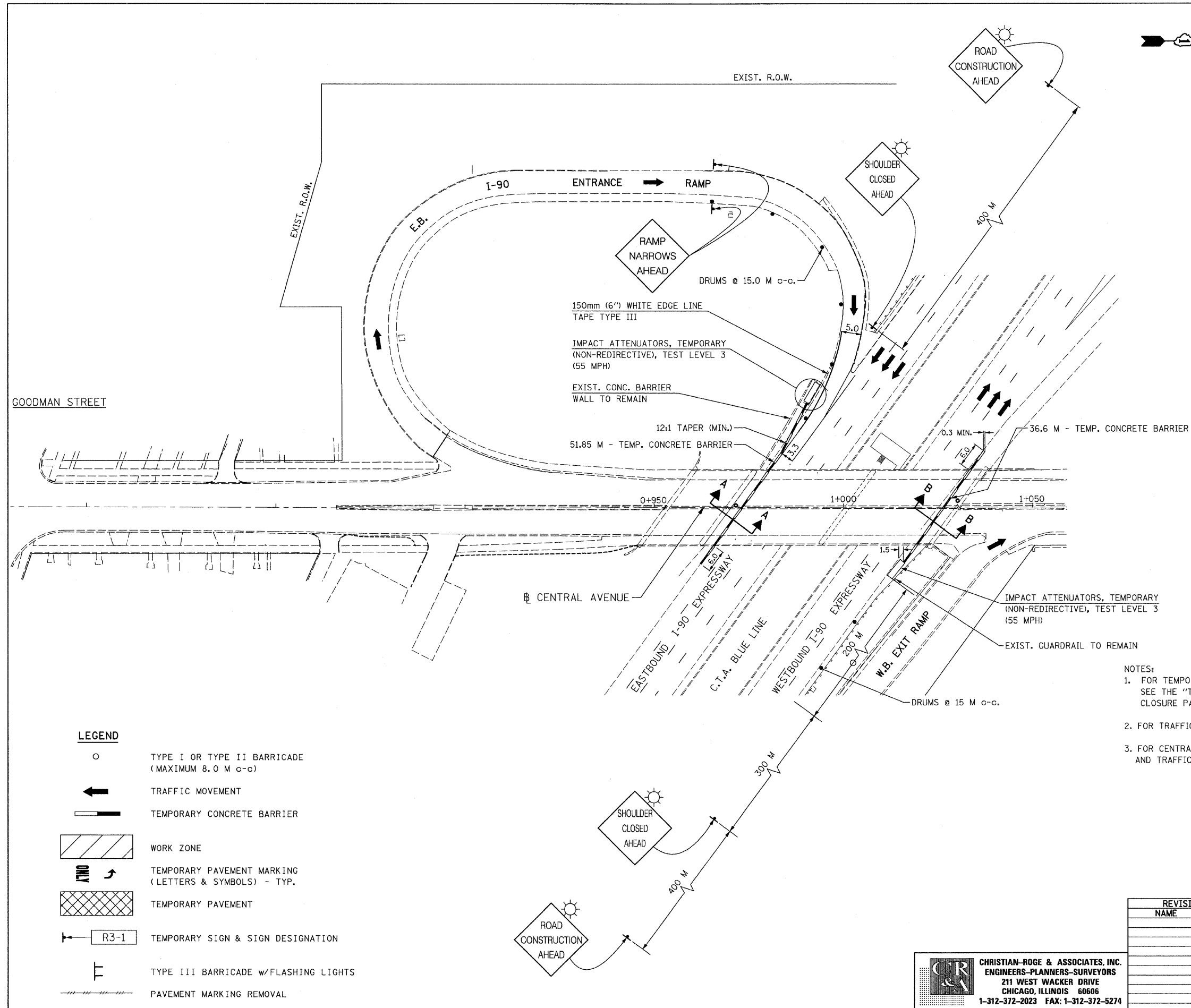
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 CHICAGO, ILLINOIS 60606
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED STAGES OF CONSTRUCTION
 AND TRAFFIC CONTROL
 CENTRAL AVENUE
 STAGE II

SCALE: 1 : 500
 DATE: NOVEMBER 2007
 DRAWN BY: B.K.
 CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	21
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60640				



LEGEND

- TYPE I OR TYPE II BARRICADE (MAXIMUM 8.0 M c-c)
- TRAFFIC MOVEMENT
- TEMPORARY CONCRETE BARRIER
- WORK ZONE
- TEMPORARY PAVEMENT MARKING (LETTERS & SYMBOLS) - TYP.
- TEMPORARY PAVEMENT
- TEMPORARY SIGN & SIGN DESIGNATION
- TYPE III BARRICADE w/FLASHING LIGHTS
- PAVEMENT MARKING REMOVAL

NOTES:

1. FOR TEMPORARY CONCRETE BARRIER LAYOUT AND ADDITIONAL DETAILS SEE THE "TC-17 - TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURE PARTIAL RAMP CLOSURES" ON SHEET NO. 91.
2. FOR TRAFFIC CONTROL AND STAGING NOTES SEE SHEET NO. 17.
3. FOR CENTRAL AVENUE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL SEE SHEET NO. 19 & NO. 20.

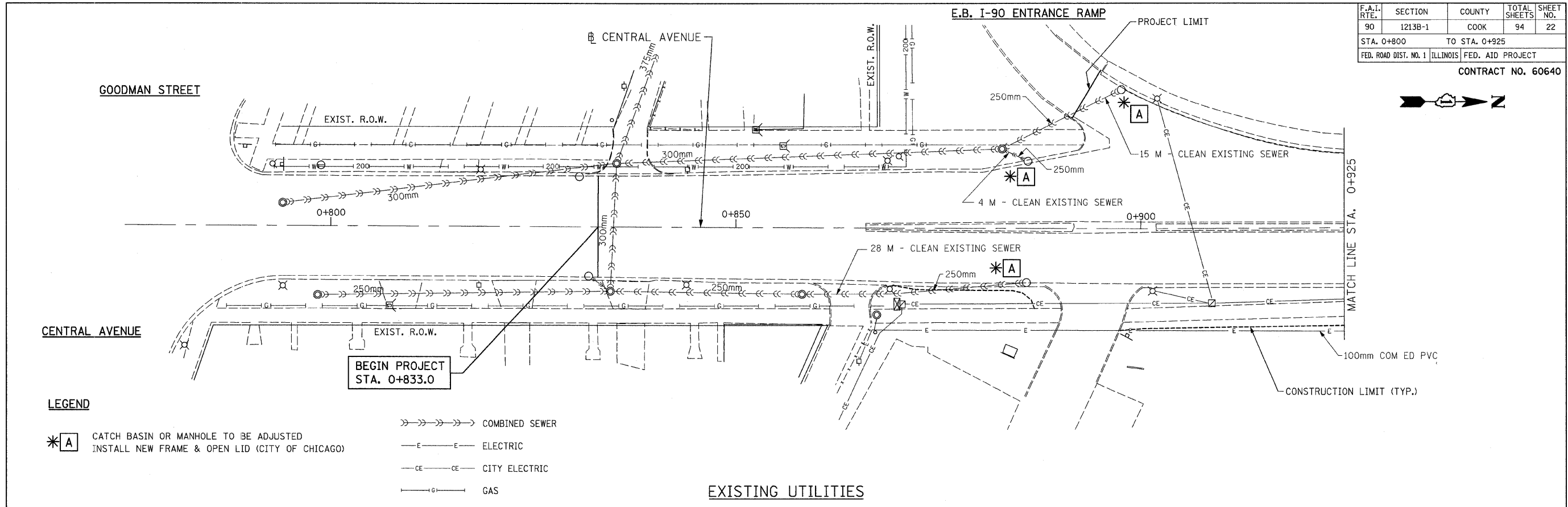
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL
E.B. I-90 ENTRANCE RAMP
W.B. I-90 OUTSIDE SHOULDER
STAGES I & II

SCALE: 1 : 500
DATE: NOVEMBER 2007
DRAWN BY: B.K.
CHECKED BY: S.J.P.

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
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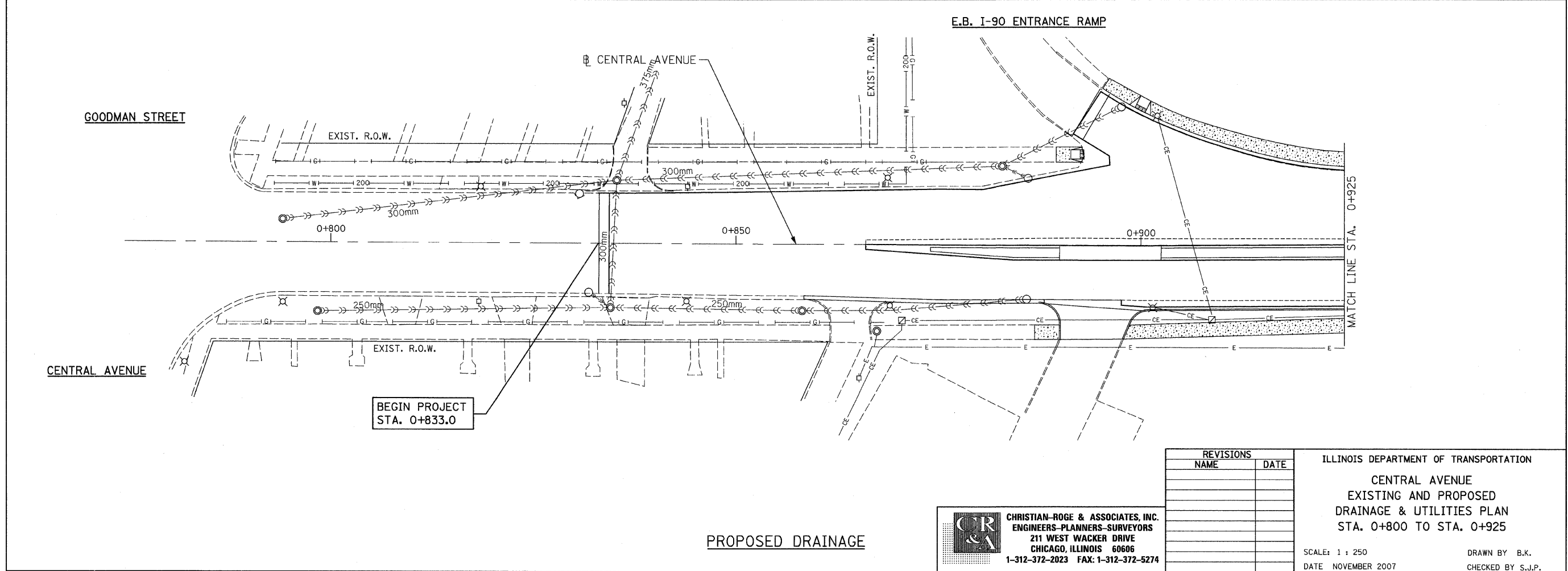
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	22
STA. 0+800		TO STA. 0+925		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60640				



LEGEND

- *A CATCH BASIN OR MANHOLE TO BE ADJUSTED
INSTALL NEW FRAME & OPEN LID (CITY OF CHICAGO)
- >--->---> COMBINED SEWER
- E---E--- ELECTRIC
- CE---CE--- CITY ELECTRIC
- G---G--- GAS

EXISTING UTILITIES



PROPOSED DRAINAGE

REVISIONS	
NAME	DATE

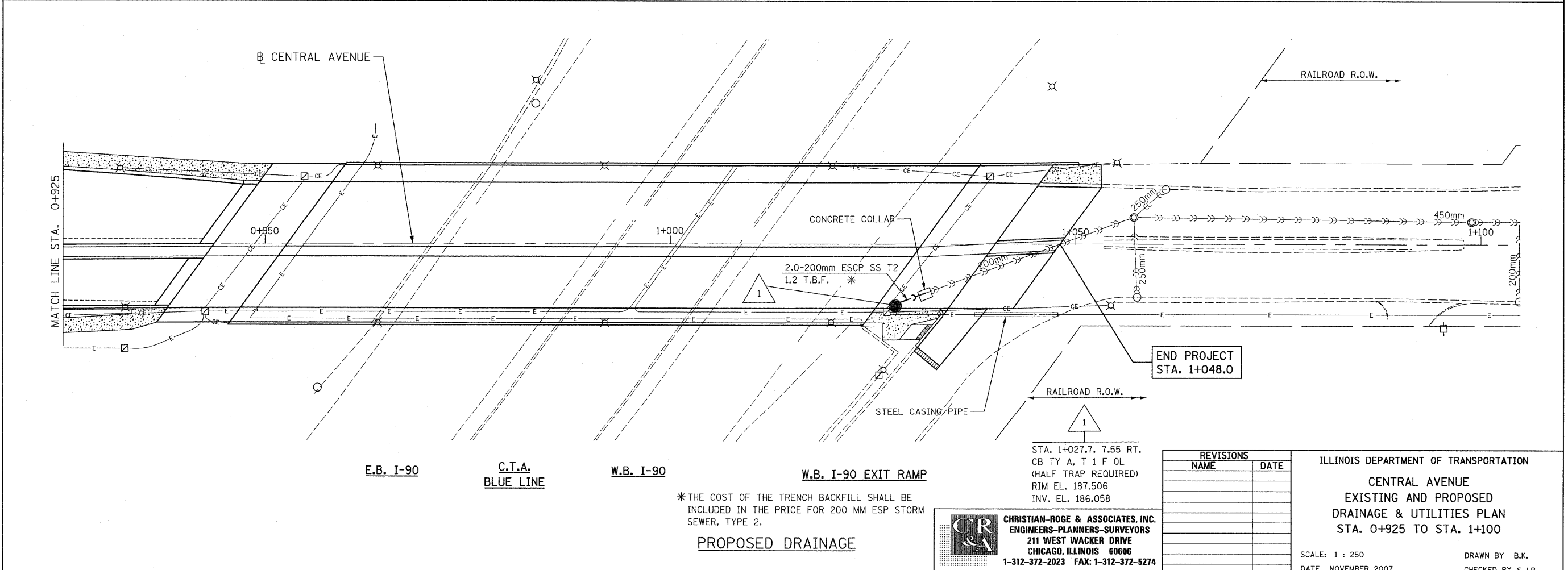
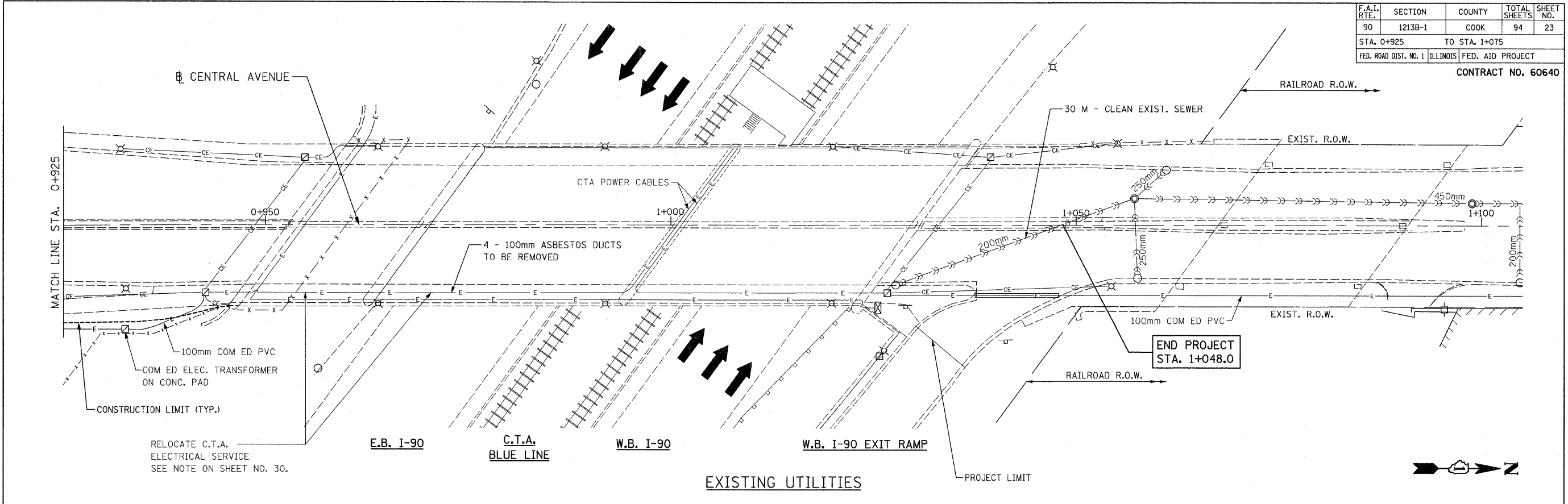
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CHRISTIAN-ROGE & ASSOCIATES, INC.
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 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CENTRAL AVENUE
 EXISTING AND PROPOSED
 DRAINAGE & UTILITIES PLAN
 STA. 0+800 TO STA. 0+925

SCALE: 1 : 250
 DATE: NOVEMBER 2007

DRAWN BY: B.K.
 CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	23
STA. 0+925		TO STA. 1+075		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60640				



*THE COST OF THE TRENCH BACKFILL SHALL BE INCLUDED IN THE PRICE FOR 200 MM ESP STORM SEWER, TYPE 2.

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CENTRAL AVENUE
 EXISTING AND PROPOSED
 DRAINAGE & UTILITIES PLAN
 STA. 0+925 TO STA. 1+100

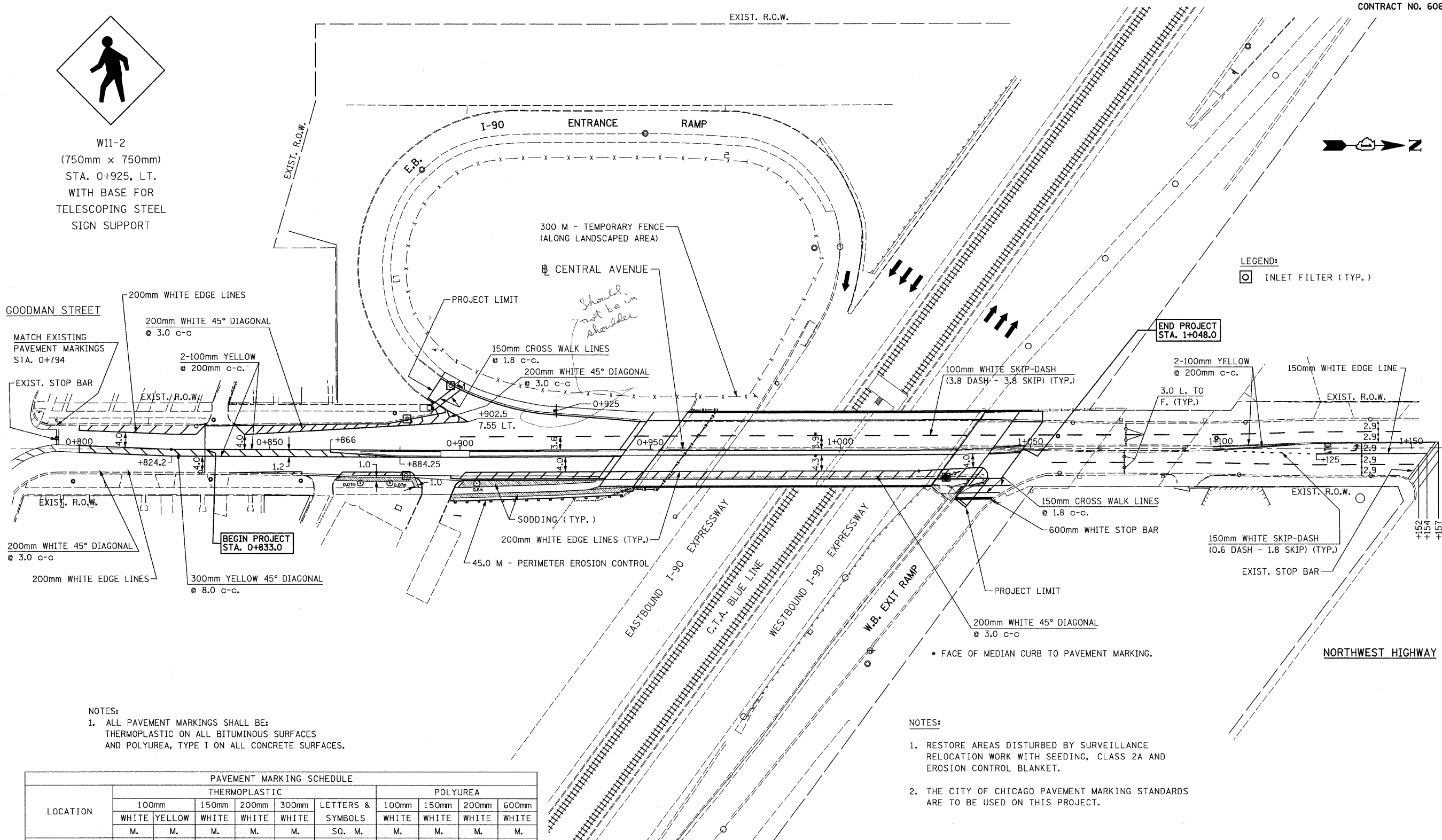
SCALE: 1 : 250
 DATE: NOVEMBER 2007
 DRAWN BY: B.K.
 CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	25
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640



W11-2
(750mm x 750mm)
STA. 0+925, LT.
WITH BASE FOR
TELESCOPING STEEL
SIGN SUPPORT



LEGEND:
[Symbol] INLET FILTER (TYP.)

NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE:
THERMOPLASTIC ON ALL BITUMINOUS SURFACES
AND POLYUREA, TYPE I ON ALL CONCRETE SURFACES.

NOTES:
1. RESTORE AREAS DISTURBED BY SURVEILLANCE
RELOCATION WORK WITH SEEDING, CLASS 2A AND
EROSION CONTROL BLANKET.
2. THE CITY OF CHICAGO PAVEMENT MARKING STANDARDS
ARE TO BE USED ON THIS PROJECT.

LOCATION	PAVEMENT MARKING SCHEDULE									
	THERMOPLASTIC						POLYUREA			
	100mm WHITE M.	150mm YELLOW M.	200mm WHITE M.	300mm WHITE M.	LETTERS & SYMBOLS SQ. M.	100mm WHITE M.	150mm WHITE M.	200mm WHITE M.	600mm WHITE M.	
CENTRAL AVENUE 0+778 - 0+943	11	324		322	27					
0+943 - 1+063						36		185		
1+063 - 1+156	47	168	36		3.3					
OFF-RAMP							20	23	9.0	
ON-RAMP			18	14						
PROJECT TOTAL	58	492	54	336	27	36	20	208	9.0	











CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**PROPOSED PAVEMENT MARKING,
LANDSCAPING, AND
EROSION CONTROL PLAN**

SCALE: 1 : 500
DATE: NOVEMBER 2007
DRAWN BY: B.K.
CHECKED BY: S.J.P.

UNDERPASS LIGHTING LEGEND

-  EXISTING UNDERPASS LUMINAIRE 55W LPS
-  PROPOSED UNDERPASS LUMINAIRE 70W HPS
-   PROPOSED JUNCTION BOXES (VARIOUS SIZES)
-  PROPOSED CONDUITS (ATTACHED TO STRUCTURE)
-  PROPOSED FLEXIBLE CONDUIT
-  EXISTING JUNCTION BOXES (VARIOUS SIZES)
-  EXISTING CONDUIT
-  EXISTING LIGHT UNIT
-  EXISTING HANDHOLE (IDOT)

STREET LIGHTING LEGEND

SEE SHEET NO. 32
FOR CITY OF CHICAGO
STANDARD SYMBOLS

GENERAL NOTES:

1. FOR CITY OF CHICAGO STREET LIGHTING AND INSTALLATIONS, ALL CATALOG CUTS AND MATERIAL SPECIFICATIONS SHALL CONFORM TO DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY STANDARDS. SUBMITTALS SHALL BE REVIEWED BY BOTH THE CITY OF CHICAGO AND IDOT PRIOR TO THE PURCHASE OF ELECTRICAL EQUIPMENT.
2. CENTRAL AVENUE ROADWAY LIGHTING SHALL BE MAINTAINED AS DETAILED IN THE SPECIAL PROVISION FOR "MAINTAIN CENTRAL AVENUE ROADWAY LIGHTING".

ELECTRICAL WORK

- PRELIMINARY STAGE
- NO WORK SHALL BE DONE UNTIL AFTER THE PRECONSTRUCTION INSPECTION OF BOTH THE ROADWAY LIGHTING AND THE UNDERPASS LIGHTING.
 - FORMAL TRANSFER OF MAINTENANCE SHALL BE COMPLETED BEFORE ANY WORK SHALL BEGIN.
- STAGE I
- USE THE EXISTING ROADWAY LIGHTS ALONG THE WEST SIDE OF CENTRAL AVENUE TO ILLUMINATE CENTRAL AVENUE DURING STAGE I.
 - REMOVE EXISTING ROADWAY LIGHTING UNITS ALONG THE EAST SIDE OF CENTRAL AVENUE.
 - DISCONNECT THE UNDERPASS LIGHTING SYSTEM FOR THE EAST SIDE OF THE BRIDGE AND REMOVE THE UNDERPASS LUMINAIRES. THE LUMINAIRES SHALL BE DELIVERED TO THE IDOT MAINTENANCE YARD AT CENTRAL AVENUE.
 - INSTALL THE PROPOSED ROADWAY LIGHTING ALONG THE EAST SIDE OF CENTRAL AVENUE.
 - CONNECT AND ENERGIZE PROPOSED CENTRAL AVENUE LIGHTING SYSTEM INSTALLED DURING STAGE I.
 - LIGHTING SYSTEM AND THE UNDERPASS LIGHTING INSTALLED DURING STAGE I SHALL BE INSPECTED, TESTED AND APPROVED BEFORE ANY REMOVAL WORK FOR STAGE II.
- STAGE II
- UTILIZE THE STREET AND UNDERPASS LIGHTING INSTALLED DURING STAGE I TO ILLUMINATE CENTRAL AVENUE DURING STAGE II.
 - REMOVE THE EXISTING LIGHTING UNITS ALONG THE WEST SIDE OF CENTRAL AVENUE.
 - INSTALL THE PROPOSED LIGHTING ALONG THE WEST SIDE OF CENTRAL AVENUE.
 - CONNECT AND ENERGIZE PROPOSED LIGHTING SYSTEM INSTALLED DURING STAGE II.
 - LIGHTING SYSTEM INSTALLED DURING STAGE II SHALL BE INSPECTED, TESTED AND APPROVED.
 - INSTALL ALL UNDERPASS LUMINAIRES AS SHOWN ON THE PLANS, AND ENERGIZE ALL UNDERPASS LUMINAIRES.
 - THE UNDERPASS LIGHTING SYSTEM SHALL BE INSPECTED, TESTED AND APPROVED BY IDOT.

SCHEDULE OF LIGHTING QUANTITIES

ITEM	UNIT	TOTAL QUANTITY
UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING	EACH	8
REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	8
LIGHTING FOUNDATION REMOVAL	EACH	3
DRILL EXISTING HANDHOLE	EACH	17
CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	M	44
CONDUIT IN TRENCH, 50MM DIA., PVC	M	93
CONDUIT EMBEDDED IN STRUCTURE 50MM DIA., PVC	M	157
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 150MM X 150MM X 100MM	EACH	8
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 300MM X 250MM X 150MM	EACH	2
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 400MM X 350MM X 150MM	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	M	558
UNIT DUCT, WITH 3-1/C NO. 4 AND 1/C NO. 6 GROUND, 600V (EPR-TYPE RHW), 30MM DIA, POLYETHYLENE	M	81
CONDUIT ATTACHED TO STRUCTURE, 75MM DIA., GALVANIZED STEEL, PVC COATED	M	382
CONDUIT ATTACHED TO STRUCTURE, 25MM DIA., GALVANIZED STEEL, PVC COATED	M	98
ELECTRIC CABLE IN CONDUIT, 600V (EPRN TRIPLEXED), 2-1/C NO. 6, 1-1/C NO. 8 GROUND	M	453
ADJUST FRAME AND LID	EACH	4
PVC CONDUIT IN TRENCH, 50MM (SCHEDULE #80)	M	71
CONCRETE FOUNDATION, 600MM DIAMETER	M	10
REMOVAL OF ASBESTOS CEMENT CONDUIT	M	316
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6
CLEANING EXISTING MANHOLE OR HANDHOLE	EACH	6
INTERCEPT EXISTING CONDUIT	EACH	3
** INSTALL LIGHT POLE, MAST ARM AND LUMINAIRE (MATERIAL PROVIDED BY THE CITY OF CHICAGO)	EACH	8
REMOVE EXISTING STREET LIGHTING EQUIPMENT	L SUM	1
ROD AND CLEAN DUCT IN AN EXISTING CONDUIT SYSTEM	M	95
PAINT EXISTING POLE COMPLETE	EACH	7

** 3 - 10.5M LIGHT POLES AND 6 - 9.9M LIGHT POLES WILL NEED TO BE INSTALLED WITH 3.5M MAST ARMS AND 480W LUMINAIRES AT THE LOCATIONS SHOWN ON THE PLANS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LIGHTING GENERAL NOTES, LEGEND
AND SCHEDULE OF QUANTITIES

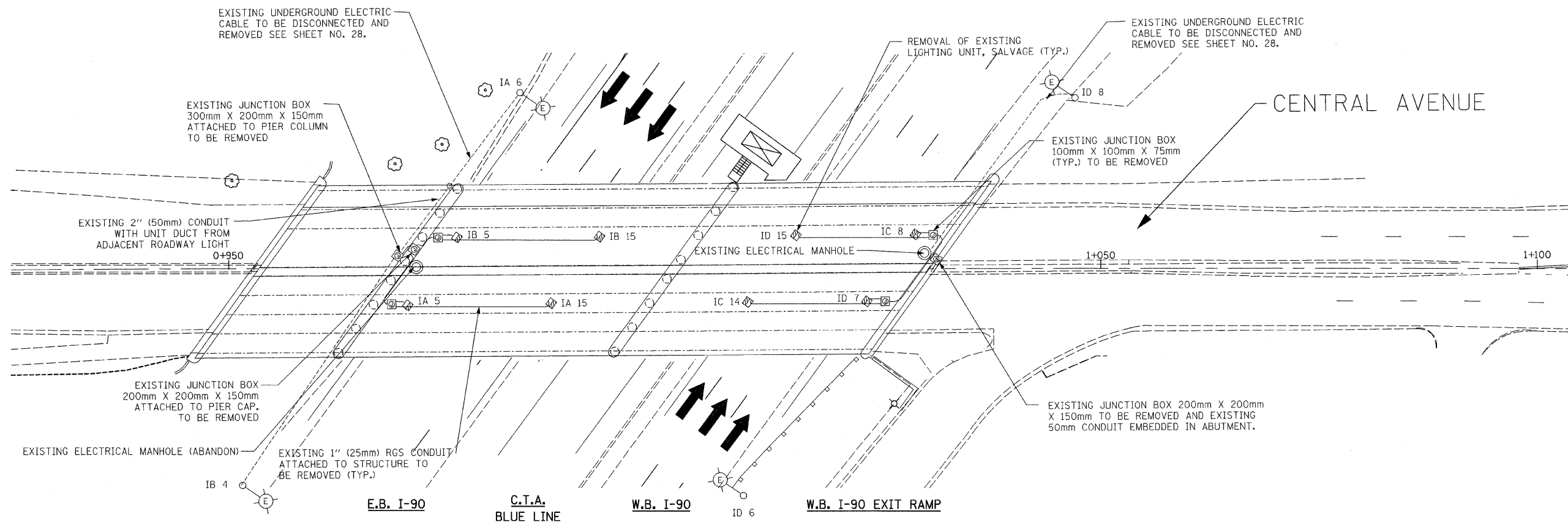
 **CHRISTIAN-ROGE & ASSOCIATES, INC.**
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
DATE: NOVEMBER 2007
DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	27
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

CONSTRUCTION NOTES:

1. THE EXISTING LIGHTING CONTROLLER "CABINET 1" FOR THE UNDERPASS LIGHTING IS LOCATED 366 METERS EAST OF CENTRAL AVENUE ON THE SOUTH SIDE OF THE EXPRESSWAY.
2. THE COST OF THE REMOVAL OF THE EXISTING CABLE, RGS CONDUIT AND JUNCTION BOXES SHALL BE INCLUDED IN THE "REMOVAL OF EXISTING SUPERSTRUCTURES" PAY ITEM.



FOR LEGEND SEE SHEET NO. 26.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
REMOVAL PLAN
 I.D.O.T. EXISTING LIGHTING PLAN
 I-90 BRIDGE UNDERPASS
 AT CENTRAL AVENUE

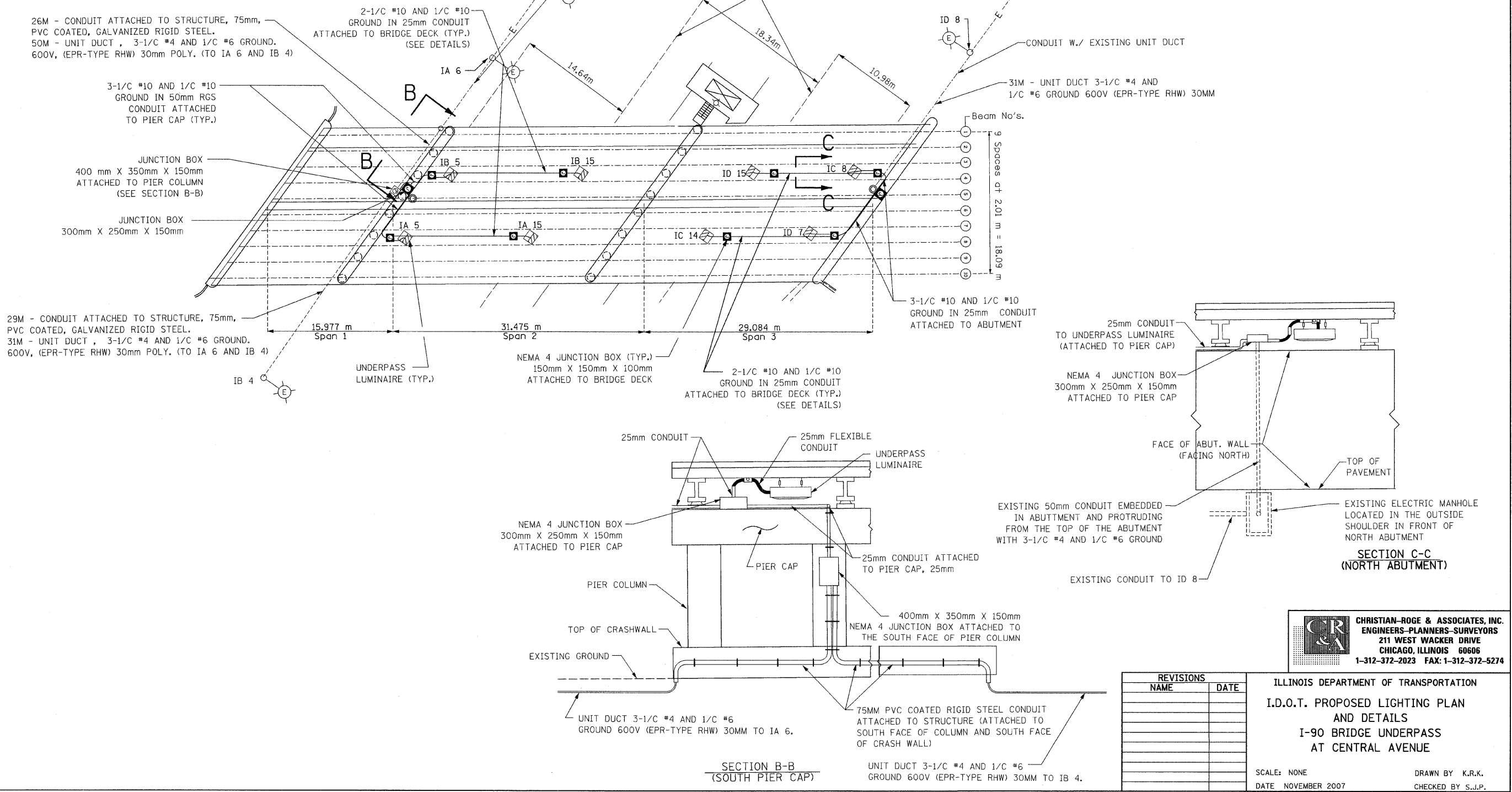
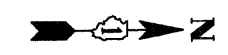
SCALE: NONE
 DATE: NOVEMBER 2007
 DRAWN BY: P.J.B.
 CHECKED BY: S.J.P.

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 211 WEST WACKER DRIVE
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	28
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

PROPOSED LIGHTING NOTES:

- SEE SHEET NO. 29 FOR PROPOSED LUMINAIRE HANGER ASSEMBLY AND CONDUIT HANGER ASSEMBLY DETAILS.
- 5 AMP FUSING AND NEUTRAL SLUG IN STANDARD FUSE HOLDERS SHALL BE INCLUDED IN PAY ITEMS FOR JUNCTION BOXES.
- ALL UNDERPASS WIRING SHALL INCLUDE A GREEN 1/C #10 GROUND WIRE. THIS WIRE SHALL BE EXTENDED TO EACH LUMINAIRE AND SHALL BE BONDED TO LUMINAIRE HOUSING AND JUNCTION BOX.
- SPLICES SHALL BE MADE AT JUNCTION BOXES ONLY, LUMINAIRE TERMINALS SHALL NOT BE USED AS SPLICE POINTS FOR PHASE CONDUCTORS, NEUTRAL CONDUCTORS OR GROUND CONDUCTORS.
- FOR LEGEND SEE SHEET NO. 26.
- THE PROPOSED 25mm LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE INCLUDED IN THE PRICE FOR CONDUIT ATTACHED TO STRUCTURE.
- CONTRACTOR SHALL USE THE EXISTING CIRCUITS TO WIRE THE PROPOSED UNDERPASS LIGHTING
- THE UNDERPASS LUMINAIRES SHALL BE POSITIONED TO HAVE THE LONGITUDINAL CENTERLINE OF THE FIXTURE PARALLEL TO AND 600mm OUTSIDE THE EDGE OF PAVEMENT.
- ALL CONDUIT SHALL BE PVC COATED GALVANIZED STEEL, ATTACHED TO STRUCTURE UNLESS OTHERWISE NOTED.
- ALL PROPOSED JUNCTION BOXES SHALL BE NEMA 4 STAINLESS STEEL.



REVISIONS	
NAME	DATE

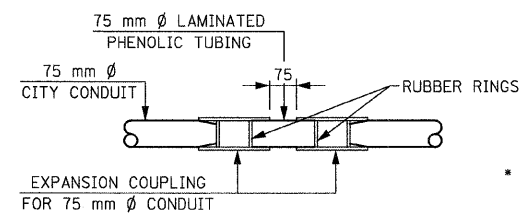
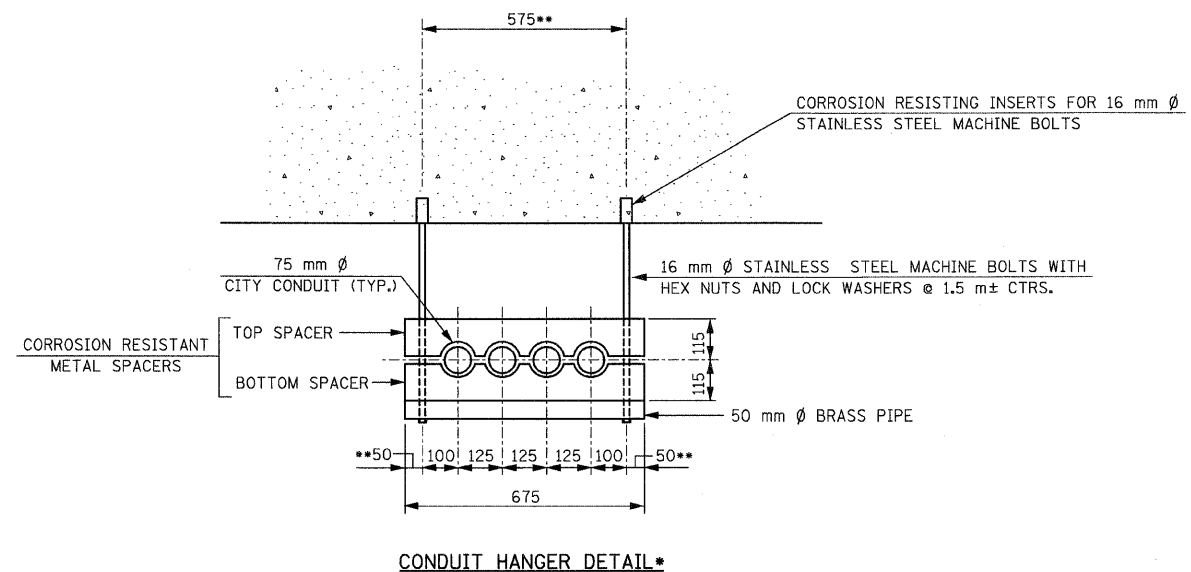
ILLINOIS DEPARTMENT OF TRANSPORTATION
I.D.O.T. PROPOSED LIGHTING PLAN AND DETAILS
I-90 BRIDGE UNDERPASS AT CENTRAL AVENUE

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	29
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



- * COST INCLUDED WITH CONDUIT ATTACHED TO STRUCTURE, 75 mm Ø GALVANIZED STEEL.
- ** TO BE ADJUSTED BY THE MANUFACTURER.

REVISIONS	
NAME	DATE

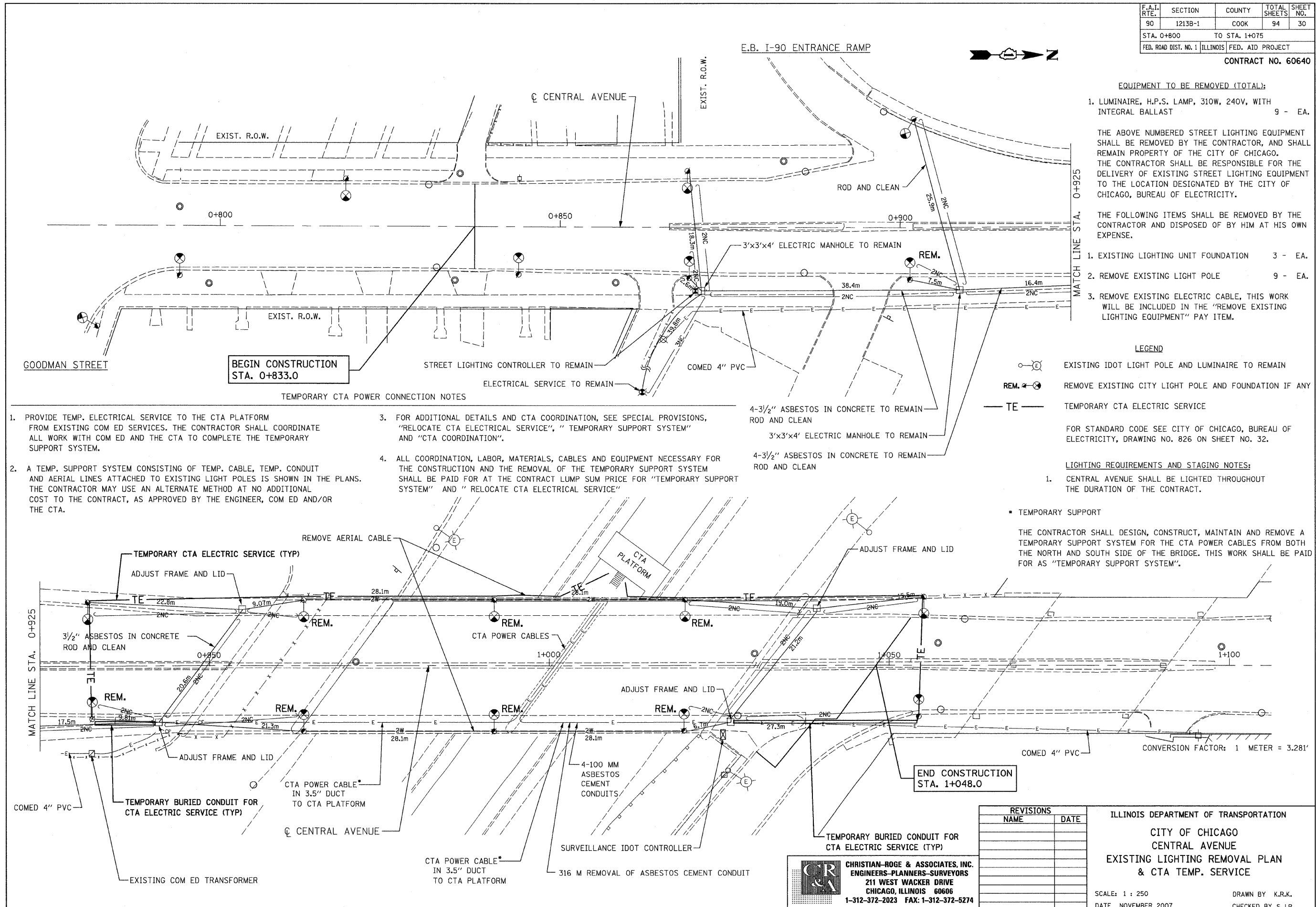
ILLINOIS DEPARTMENT OF TRANSPORTATION
I.D.O.T. LIGHTING PLAN DETAILS
I-90 BRIDGE UNDERPASS
AT CENTRAL AVENUE

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
DATE: NOVEMBER 2007
DRAWN BY: B.K.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	30
STA. 0+800		TO STA. 1+075		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640



- EQUIPMENT TO BE REMOVED (TOTAL):**
1. LUMINAIRE, H.P.S. LAMP, 310W, 240V, WITH INTEGRAL BALLAST 9 - EA.

THE ABOVE NUMBERED STREET LIGHTING EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND SHALL REMAIN PROPERTY OF THE CITY OF CHICAGO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DELIVERY OF EXISTING STREET LIGHTING EQUIPMENT TO THE LOCATION DESIGNATED BY THE CITY OF CHICAGO, BUREAU OF ELECTRICITY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF BY HIM AT HIS OWN EXPENSE.

1. EXISTING LIGHTING UNIT FOUNDATION 3 - EA.
2. REMOVE EXISTING LIGHT POLE 9 - EA.
3. REMOVE EXISTING ELECTRIC CABLE, THIS WORK WILL BE INCLUDED IN THE "REMOVE EXISTING LIGHTING EQUIPMENT" PAY ITEM.

- LEGEND**
- ⊙ E EXISTING IDOT LIGHT POLE AND LUMINAIRE TO REMAIN
 - REM. ⊙ REMOVE EXISTING CITY LIGHT POLE AND FOUNDATION IF ANY
 - TE — TEMPORARY CTA ELECTRIC SERVICE

FOR STANDARD CODE SEE CITY OF CHICAGO, BUREAU OF ELECTRICITY, DRAWING NO. 826 ON SHEET NO. 32.

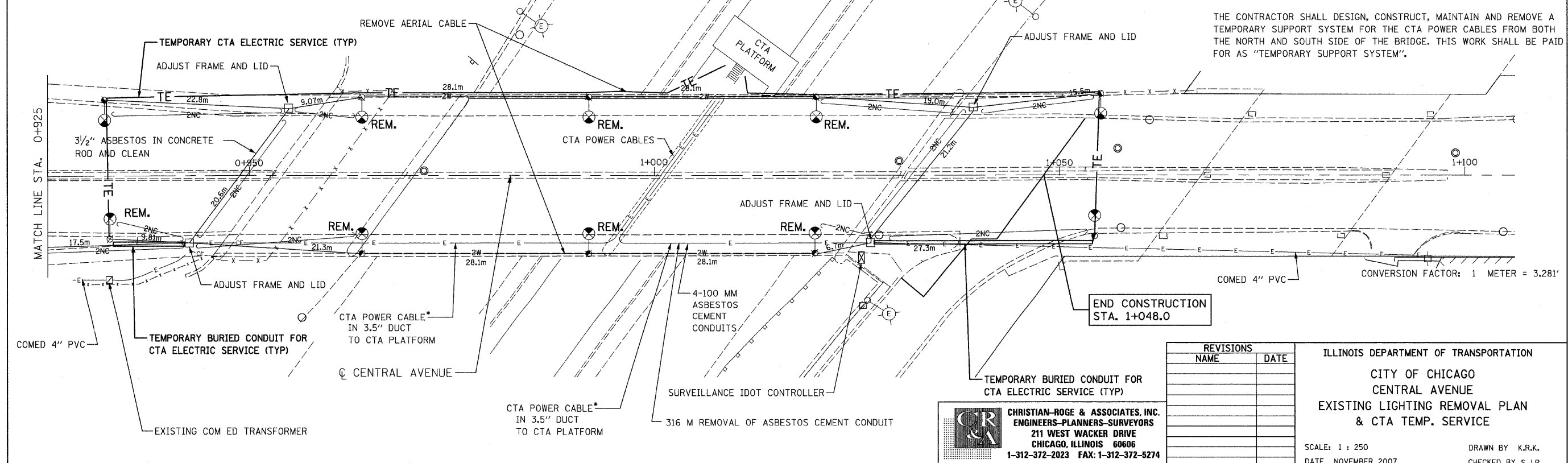
- LIGHTING REQUIREMENTS AND STAGING NOTES:**
1. CENTRAL AVENUE SHALL BE LIGHTED THROUGHOUT THE DURATION OF THE CONTRACT.

* TEMPORARY SUPPORT
THE CONTRACTOR SHALL DESIGN, CONSTRUCT, MAINTAIN AND REMOVE A TEMPORARY SUPPORT SYSTEM FOR THE CTA POWER CABLES FROM BOTH THE NORTH AND SOUTH SIDE OF THE BRIDGE. THIS WORK SHALL BE PAID FOR AS "TEMPORARY SUPPORT SYSTEM".

- TEMPORARY CTA POWER CONNECTION NOTES**
1. PROVIDE TEMP. ELECTRICAL SERVICE TO THE CTA PLATFORM FROM EXISTING COM ED SERVICES. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH COM ED AND THE CTA TO COMPLETE THE TEMPORARY SUPPORT SYSTEM.
 2. A TEMP. SUPPORT SYSTEM CONSISTING OF TEMP. CABLE, TEMP. CONDUIT AND AERIAL LINES ATTACHED TO EXISTING LIGHT POLES IS SHOWN IN THE PLANS. THE CONTRACTOR MAY USE AN ALTERNATE METHOD AT NO ADDITIONAL COST TO THE CONTRACT, AS APPROVED BY THE ENGINEER, COM ED AND/OR THE CTA.

3. FOR ADDITIONAL DETAILS AND CTA COORDINATION, SEE SPECIAL PROVISIONS, "RELOCATE CTA ELECTRICAL SERVICE", "TEMPORARY SUPPORT SYSTEM" AND "CTA COORDINATION".
4. ALL COORDINATION, LABOR, MATERIALS, CABLES AND EQUIPMENT NECESSARY FOR THE CONSTRUCTION AND THE REMOVAL OF THE TEMPORARY SUPPORT SYSTEM SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "TEMPORARY SUPPORT SYSTEM" AND "RELOCATE CTA ELECTRICAL SERVICE"

- 4-3/2" ASBESTOS IN CONCRETE TO REMAIN ROD AND CLEAN
- 3'x3'x4' ELECTRIC MANHOLE TO REMAIN
- 4-3/2" ASBESTOS IN CONCRETE TO REMAIN ROD AND CLEAN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF CHICAGO
CENTRAL AVENUE
EXISTING LIGHTING REMOVAL PLAN
& CTA TEMP. SERVICE

SCALE: 1 : 250
DATE: NOVEMBER 2007
DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

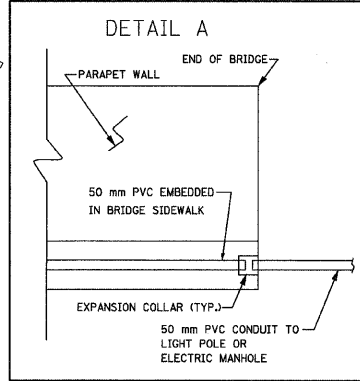
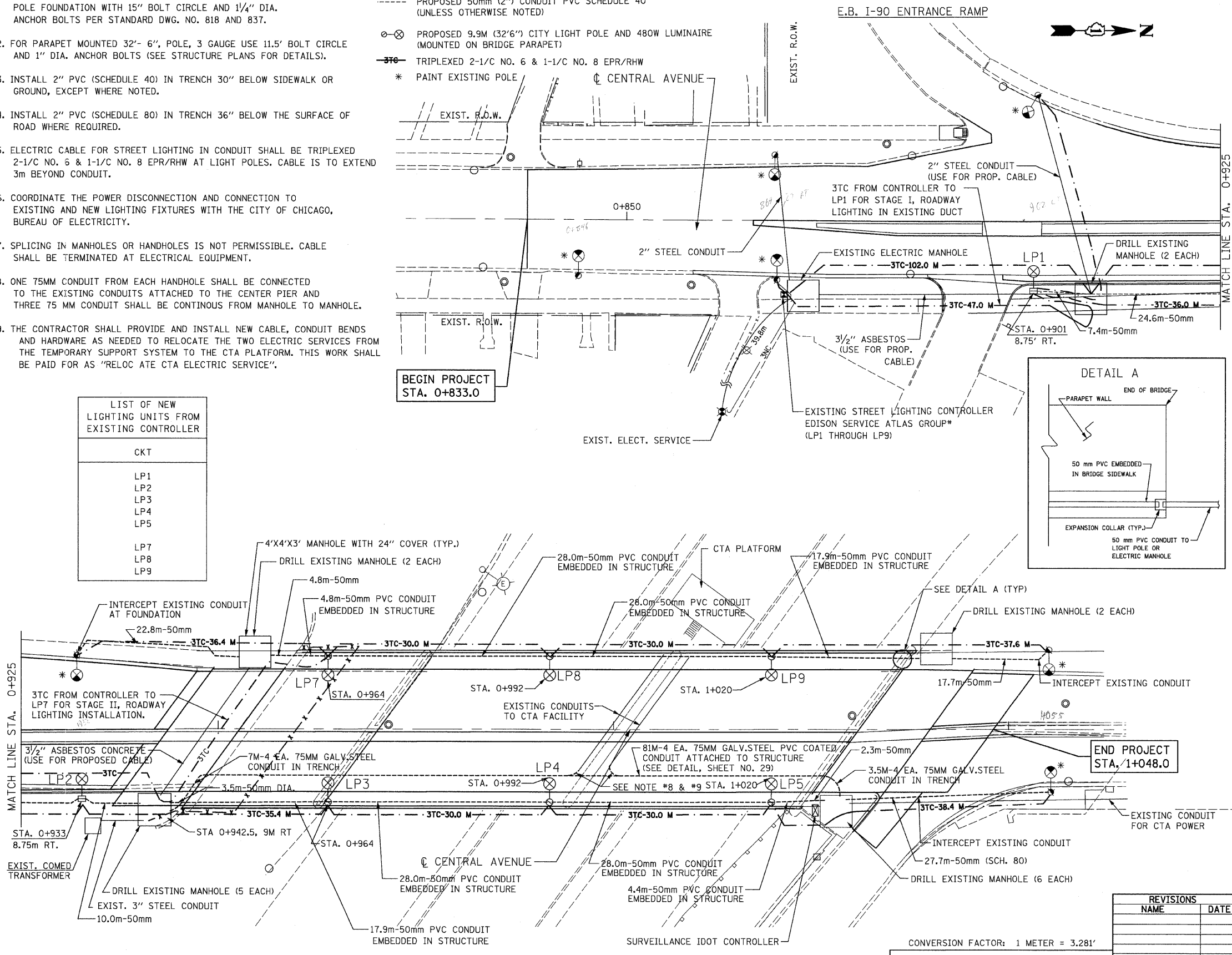
INSTALLATION NOTES:

- FOR 34'-6", 7 GAUGE, 10" POLE INSTALL 24" DIA. 9' DEEP POLE FOUNDATION WITH 15" BOLT CIRCLE AND 1/4" DIA. ANCHOR BOLTS PER STANDARD DWG. NO. 818 AND 837.
- FOR PARAPET MOUNTED 32'- 6", POLE, 3 GAUGE USE 11.5' BOLT CIRCLE AND 1" DIA. ANCHOR BOLTS (SEE STRUCTURE PLANS FOR DETAILS).
- INSTALL 2" PVC (SCHEDULE 40) IN TRENCH 30" BELOW SIDEWALK OR GROUND, EXCEPT WHERE NOTED.
- INSTALL 2" PVC (SCHEDULE 80) IN TRENCH 36" BELOW THE SURFACE OF ROAD WHERE REQUIRED.
- ELECTRIC CABLE FOR STREET LIGHTING IN CONDUIT SHALL BE TRIPLEXED 2-1/C NO. 6 & 1-1/C NO. 8 EPR/RHW AT LIGHT POLES. CABLE IS TO EXTEND 3m BEYOND CONDUIT.
- COORDINATE THE POWER DISCONNECTION AND CONNECTION TO EXISTING AND NEW LIGHTING FIXTURES WITH THE CITY OF CHICAGO, BUREAU OF ELECTRICITY.
- SPlicing IN MANHOLES OR HANDHOLES IS NOT PERMISSIBLE. CABLE SHALL BE TERMINATED AT ELECTRICAL EQUIPMENT.
- ONE 75MM CONDUIT FROM EACH HANDHOLE SHALL BE CONNECTED TO THE EXISTING CONDUITS ATTACHED TO THE CENTER PIER AND THREE 75 MM CONDUIT SHALL BE CONTINUOUS FROM MANHOLE TO MANHOLE.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW CABLE, CONDUIT BENDS AND HARDWARE AS NEEDED TO RELOCATE THE TWO ELECTRIC SERVICES FROM THE TEMPORARY SUPPORT SYSTEM TO THE CTA PLATFORM. THIS WORK SHALL BE PAID FOR AS "RELOC ATE CTA ELECTRIC SERVICE".

LIST OF NEW LIGHTING UNITS FROM EXISTING CONTROLLER

CKT
LP1
LP2
LP3
LP4
LP5
LP7
LP8
LP9

- LEGEND**
- ⊕-⊗ PROPOSED 10.5M (34'6") CITY LIGHT POLE AND 480W LUMINAIRE
 - PROPOSED 50mm (2") CONDUIT PVC SCHEDULE 40 (UNLESS OTHERWISE NOTED)
 - ⊕-⊗ PROPOSED 9.9M (32'6") CITY LIGHT POLE AND 480W LUMINAIRE (MOUNTED ON BRIDGE PARAPET)
 - TRIPLEXED 2-1/C NO. 6 & 1-1/C NO. 8 EPR/RHW
 - * PAINT EXISTING POLE



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	31

STA. 0+800 TO STA. 1+075
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
CONTRACT NO. 60640

- GENERAL NOTES:**
- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL & THE CITY OF CHICAGO ELECTRICAL CODES.
 - SEE THE CITY OF CHICAGO, BUREAU OF ELECTRICITY DRAWING NO. 826 STANDARD LEGEND ON SHEET NO. 32.
 - THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF STREET LIGHTING FROM START OF THE PROJECT UNTIL THE CITY OF CHICAGO, BUREAU OF ELECTRICITY ACCEPTS NEW INSTALLATION.
 - FOR THE STAGED CONSTRUCTION OF ROADWAY LIGHTING AND LIGHTING QUANTITIES, SEE ELECTRIC STAGING SHEET NO. 26.
 - ALL CONDUIT SHALL BE INSTALLED PRIOR TO ANY PAVEMENT WIDENING OR PAVEMENT CONSTRUCTION.
 - ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED.
 - ALL SIDEWALK REMOVED TO ACCOMMODATE THE LIGHTS, CONDUITS AND HANDHOLES SHALL BE PAID FOR AS: "SIDEWALK REMOVED AND REPLACED."
 - FOUNDATION LOCATIONS:
 - IF SIDEWALK IS 2.4m (8') WIDE OR LESS LOCATE FOUNDATION 0.3m (1') OFF PROPERTY LINE
 - IF SIDEWALK IS MORE THAN 2.4m (8') WIDE OR IF THE FOUNDATION IS IN THE GRASS PARKWAY, LOCATE THE ϕ OF FOUNDATION A MINIMUM OF 0.9m (3') FROM THE FACE OF CURB.

DATE	REVISION

SUPERSEDES DWG. # _____
 WORK ORDER NO. _____ DATE _____
 COST ALLOCATION ACCOUNT _____
 APPROPRIATION ACCOUNT { MATERIAL _____
 LABOR _____

CITY OF CHICAGO
 DEPT. OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING

DRAFTSMAN: _____ CHIEF DRAFTSMAN: _____ ENGINEER: _____
 SUPERVISING ENGINEER: ELEC. DESIGN ENGR. _____ DWG. NO. _____
 ENGINEER OF ELECTRICITY: _____
 GEN'L Supt. OF CONSTRUCTION: _____
 DEPUTY COMMISSIONER: _____

SCALE: 1 : 250 DATE: _____

CONVERSION FACTOR: 1 METER = 3.281'

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
CENTRAL AVENUE
PROPOSED LIGHTING PLAN
STA. 0+833 TO STA. 1+062

SCALE: 1 : 250 DRAWN BY K.R.K.
 DATE: NOVEMBER 2007 CHECKED BY S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	32
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

PROPOSED	PRESENT	
		SIGNAL, TRAFFIC 3 SECTION 1-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL, TRAFFIC 3 SECTION 2-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL OPTICALLY PROGRAMMED
		SIGNAL, PEDESTRIAN, DON'T WALK/WALK
		SIGNAL FACE ARROW, 12" COLOR AS NOTED
		SIGNAL FACE, 1 SECTION YELLOW/GREEN ARROW DUAL INDICATION
		PUSH BUTTON, PEDESTRIAN
		SIGN, ILLUMINATED, WITH MESSAGE OR SYMBOL AS INDICATED
		MAST ARM, MONOTUBE, STEEL, SIZE AS INDICATED (SEE DWG. #870)
		MAST ARM, TRUSS, ALUMINUM, SIZE AS INDICATED
		CONTROLLER, TRAFFIC SIGNAL, PEDESTAL OR BASE MOUNTED AS INDICATED
		CONTROLLER, STREET LIGHTING, PEDESTAL OR BASE MOUNTED, (DWG. 876 or 880)
		CONTROLLER, STREET LIGHTING, POLE MOUNTED (DWG. #11940)
		POLE, WOOD, COMMONWEALTH EDISON COMPANY, SERVICE
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 7 GA., 10" DIA. AND 15" B.C. 24"x7" FND. W/1 1/4" ANCHOR RODS DRG. #818.
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 10" DIA. AND 15" B.C. 24"x9" FND. W/1 1/4" ANCHOR RODS DRG. #818 (16', 20' or 26' M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 11" DIA. AND 17 1/4" B.C. 30"x9" FND. W/1 1/4" ANCHOR RODS DRG. #816. (30' M.A.)
		POLE, CITY STEEL, ANCHOR BASE 34'-6", 3 GA., 12 1/2" DIA. AND 16 1/2" B.C. 30"x11" FND. W/1 1/2" ANCHOR RODS DRG. #817. (35', 40' or 44' M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., 10" DIA., WITH 3 GA. BAL. HSG. BASE AND 17 1/4" B.C. ON 30"x9" FND. W/ 1 1/4" ANCHOR RODS DRG. #816.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 7 GA., WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #716.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 3 GA., WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #719.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 7 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 3 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 7 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6" 7 GA., ALUM. BHB AND FND. WITH 15" B.C. 24"x7" WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., ALUM. BHB AND FND. WITH 15" B.C. 24"x7" WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY ALUMINUM, WITH ROUND BAL. HSG. BASE, 25', 28', or 30' ON FND. WITH 14" B.C., ACQUIRED FROM CHICAGO PARK DISTRICT.
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 7 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 3 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED, (ACQUIRED FROM CTA)
		COLUMN, ELEVATED STRUCTURE
		POLE, WOOD, (SIZE AS NOTED)
		POLE, FOUNDATION WITH ELBOWS AS INDICATED. (SIZE AS NOTED)
		POLE, ORNAMENTAL OR OTHER, AS INDICATED ON THE PLANS

PROPOSED	PRESENT	
		HANDHOLE, HEAVY DUTY, 36" I.D. (DWG. #866)
		HANDHOLE, CIRCULAR WITH 24" FRAME & COVER, 30" I.D. (#867)
		MANHOLE, CITY 3'X4'X4' DWG. #729 or 730; 4'X6'X6' DWG. #732 or 733.
		FOUNDATION, CONTROLLER OR PEDESTAL, 13" B.C., 20"X5' (DWG. #709)
		FOUNDATION, TRAFFIC CONTROLLER DWG. #854. F.A. TERMINAL FND. DWG. #11972
		FOUNDATION, TRAFFIC TYPE "P", BASE MOUNT. (DWG. #888)
		FOUNDATION, CONTROLLER STREET LIGHT, SPECIAL, 100A & 200A. (DWG. #876 & # 880)
		FOUNDATION, TRANSCLOSURE; TRANSCLOSURE HOUSING. (DWG. # 583 & #891)
		CONTROLLER, UNDERPASS LIGHTING 120V. & 240V. (DWG. #860 & #861)
		MANHOLE, UTILITY, E=COMMONWEALTH EDISON; T=ILL. BELL TEL.; C=PEOPLES GAS; W=CITY WATER; P=CHGO PARK DISTRICT; CTA=C.T.A.; S=SEWER
		JUNCTION BOX, IN PAVEMENT (DWG. #815)
		DETECTOR LOOP IN PAVEMENT
		CONDUIT or P.V.C., NUMBER, SIZE & TYPE. (AS NOTED)
		CONDUIT or P.V.C. ENCASED IN CONCRETE. (SECTION OR NUMBER OF CONDUIT INDICATED)
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, SEMI-CUTOFF
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 310W LAMP, 240V
		LUMINAIRE, H.P.S.V. 310W LAMP 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 150W LAMP, 240V
		LUMINAIRE, H.P.S.V. 150W LAMP, 120V
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V, (ALLEY LIGHT)
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V
		TERMINAL, CABINET F.A. & P.C.
		FIRE ALARM BOX, MOUNTED
		FIRE ALARM BOX, POLE MOUNTED
		CABLE, TRAFFIC SIGNAL, COMMUNICATION, 1-PAIR #14 SHIELDED, IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C- #4, 600 V. EPR. IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2 1/C-#2 or #1/0 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#10 or #6, 600V NSRI, IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 7/C-#12 or #14, 600V, EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 10/C-#12 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 14/C-#14, 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 19/C-#12 600V, EPR IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN PARKWAY
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6 EPRN 600V. & 1 1/C-#8 GREEN, TRIPLEXED, IN CONDUIT
		CABLE, STREET LIGHT, 3 1/C-#1/0, or #2/0, or #4, 600V. EPR IN CONDUIT
		WIRE, STREET LIGHT, 2 1/C-#6, HDNS. AERIAL
		WIRE, STREET LIGHT, 2 1/C-#6 & 1 1/C #8, HDNS. AERIAL
		CABLE, STREET LIGHT AERIAL, 3 1/C-#4 or #2 SELF SUPPORTING, 600V EPR
		WIRE, F.A. & P.C. AERIAL, 1/C-#10, NUMERAL DENOTES QUANTITY
		CABLE, F.A. & P.C. AERIAL, W/ MESSENGER #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C. AERIAL, SELF SUPPORTING, #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C., IN CONDUIT, #19-(NUMBER OF PAIRS AS INDICATED)
		DOWNLIGHT ASSEMBLY. (DWG. #850)
		LIGHT, TRAFFIC SAFETY ISLAND
		FLASHING BEACON & DOWNLIGHT

ORNAMENTAL LUMINAIRES

PROPOSED	EXISTING	
		310W PENDANT (240V)
		400W PENDANT (240V)
		250W PENDANT (240V)
		150W ACORN (120V)
		150W ACORN (240V)
		50W ACORN (240V)
		100W ACORN (240V)
		150W GLOBE (240V)
		100W GLOBE (240V)
		50W GLOBE (240V)

C 04-01-02	REVISED/REDRAW	R. POOL/B.I.
B 12-4-01	ADDED ORNAMENTAL SYMBOLS	
A 8-6-96	REDRAWN	
DATE	REVISION	

STANDARD CODE FOR TRAFFIC SIGNALS/ STREET LIGHTING

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY

DRAFTSMAN R. IVY	CHIEF DRAFTSMAN R. CARTER	ENGINEERS R. POOL/R.C./W.T.
SUPERVISING ENGINEER	ELEC. DESIGN. ENGR.	DWG. NO. 826
ENGINEER OF ELECTRICITY	GEN'L. SUPT. OF CONSTRUCTION	DATE:
DEPUTY COMMISSIONER	<i>Dean Schupp</i>	SCALE:
SIZE: 22" X 36"	SCALE:	

REVISIONS NAME	DATE

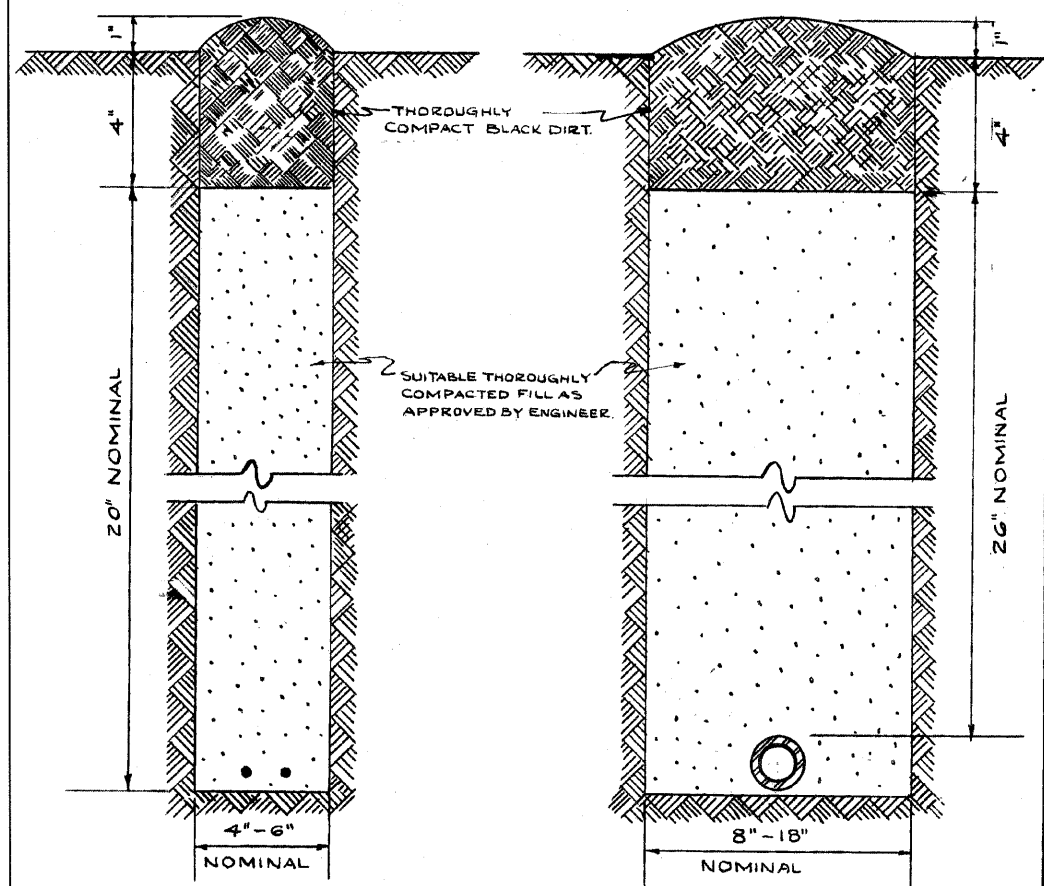
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
BUREAU OF ELECTRICITY DETAILS

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274



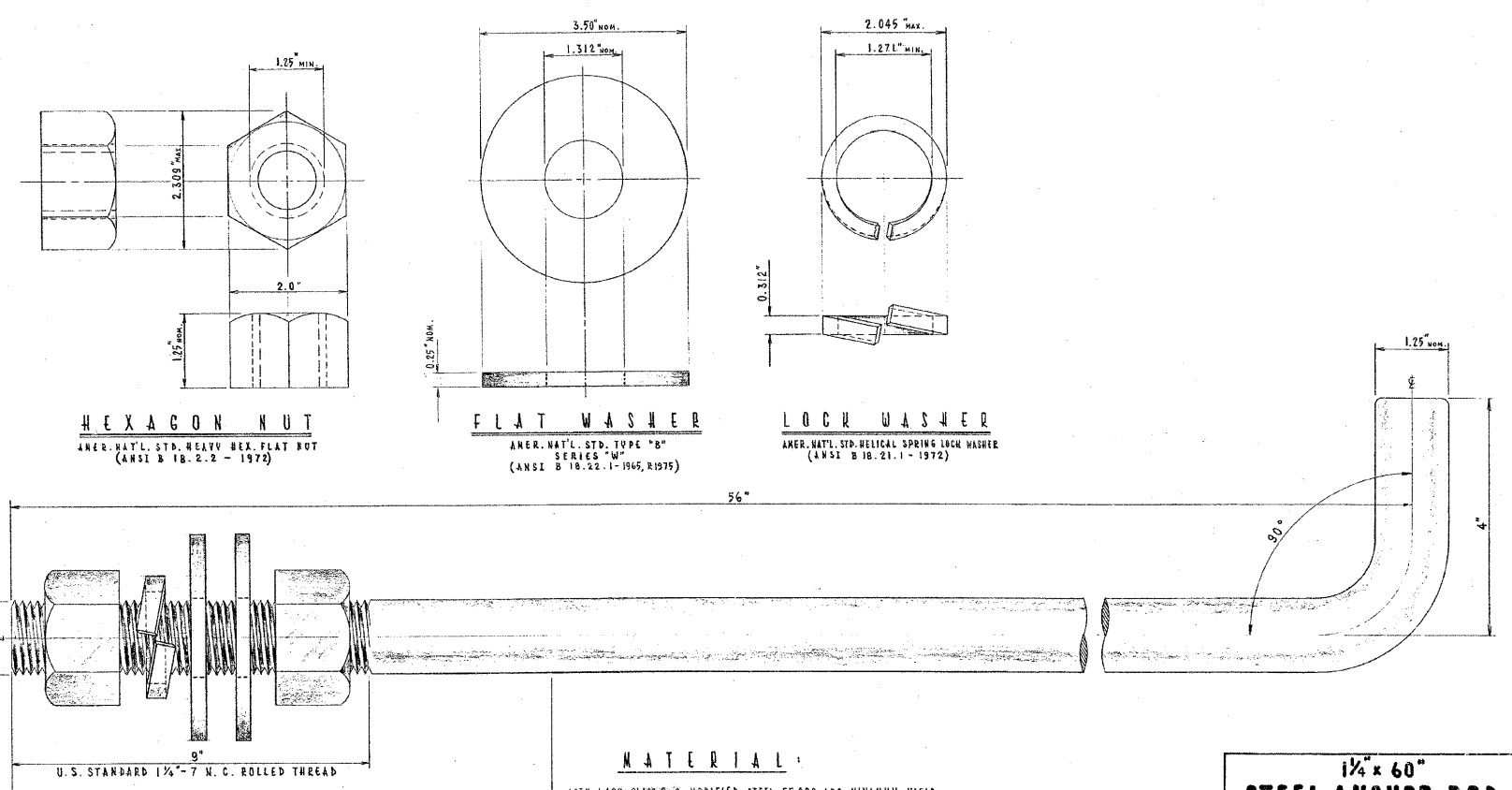
CABLE TRENCH

CONDUIT TRENCH

NOTE
 EXCESS SOIL FROM TRENCH TO BE COMPLETELY REMOVED FROM SITE AS SOON AS PRACTICABLE.
 BLACK DIRT TO BE TAMPED & THOROUGHLY COMPACTED AS SHOWN.

STANDARD METHOD FOR BACKFILLING CABLE & CONDUIT TRENCHES IN SODDED PARKWAY & LAWNS

CITY OF CHICAGO			
DEPT. OF STREETS & SANITATION			
DIVISION OF ELECTRICAL ENGINEERING			
REVISION	DRAWN	CHECKED	ENGINEER
A	W. E. HARP	M. J. HINE	J. O'CONNOR
B	ENG. IN CHARGE		DRG. NO.
C	Supt. of Const.		579
D	DEPUTY COM. Mgr.		
E	DATE: 7-14-61		
F	SIZE: 8 1/2 x 14"	SCALE: 1/4"	



HEXAGON NUT
 AMER. NAT'L. STD. HEAVY HEX. FLAT NUT (ANSI B 18.2.2 - 1972)

FLAT WASHER
 AMER. NAT'L. STD. TYPE "B" SERIES "W" (ANSI B 18.21.1-1945, R1975)

LOCK WASHER
 AMER. NAT'L. STD. HELICAL SPRING LOCK WASHER (ANSI B 18.21.1 - 1972)

MATERIAL:

ASTM A400, CLASS B-2 MODIFIED STEEL, 55,000 LBS. MINIMUM YIELD.
HARDWARE TO BE FURNISHED & ATTACHED IN PLACE ON ROD FOR SHIPPING:
 2 HEX. NUTS, HEAVY, GALV., 1/4"
 2 WASHERS, STEEL, ROUND, GALV., TYPE "B", SERIES "W", 1/4"
 1 WASHER, LOCK, STEEL, GALV., HELICAL SPRING, REGULAR, 1/4"
 BOLT & NUTS SHALL HAVE AN AMERICAN STANDARD CLASS 2 OR 3 FIT.
 (NUT IS TAPPED OVERSIZE BY 1/32")

1/4" x 60" STEEL ANCHOR ROD
 COMMODITY CODE 37-8180-0236

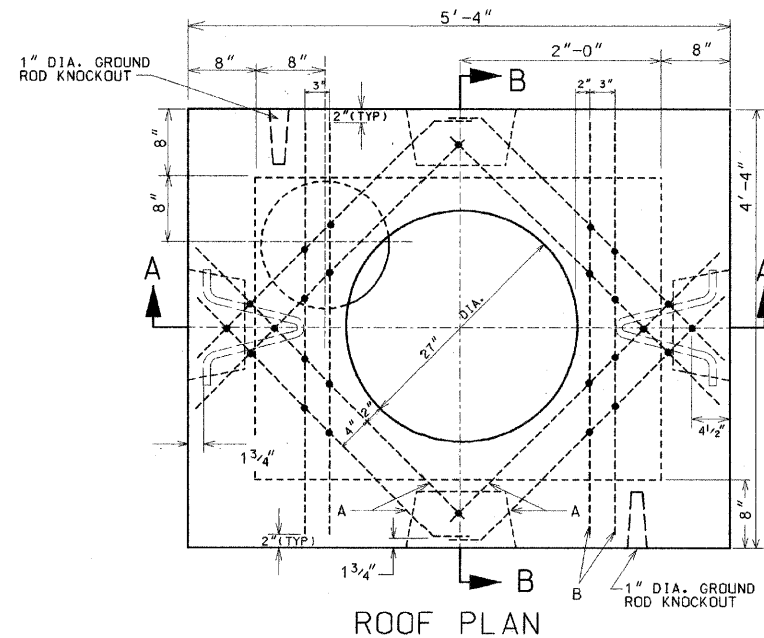
REVISED	DATE	BY	CHKD.
A	8/19/59	198E	
B			
C			
D			
E			
F			
G			

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF CHICAGO
 BUREAU OF ELECTRICITY DETAILS

CR & A
 CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
 DATE: NOVEMBER 2007
 DRAWN BY: K.R.K.
 CHECKED BY: S.J.P.

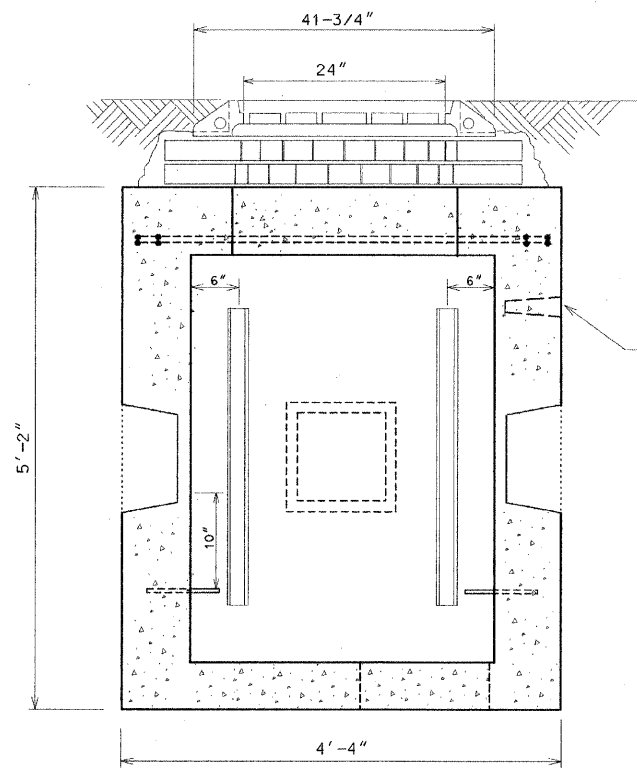
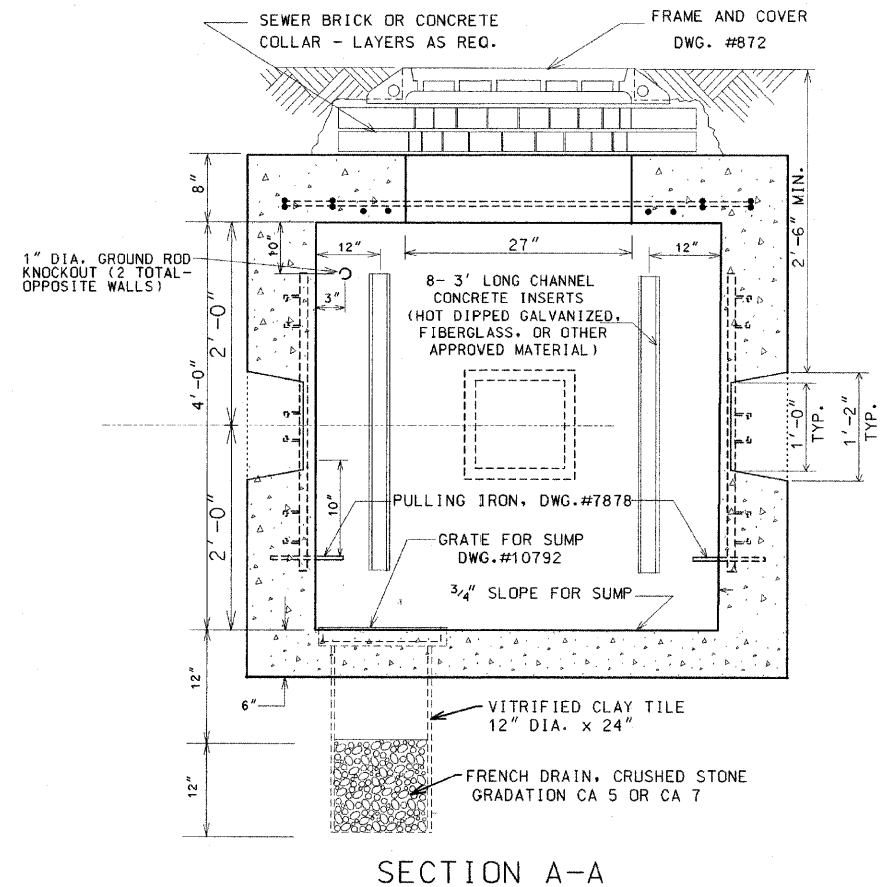


EXCAVATION (CONSTRUCTION INFORMATION)	
COMPLETE MANHOLE	6.0 CU. YDS.
NEW ROOF ONLY	2.0 CU. YDS
SHEETING MANHOLE	150.0 SQ. FT.

#5 REINFORCING BARS			
BAR	LENGTH	NO. OF RODS	TOTAL FT.
A	3'-4"	4	13'-4"
B	4'-0"	10	40'-0"

MATERIALS FOR ROOF ONLY	
CONCRETE	0.45 CU. YDS.
REINFORCING BARS #5	54'

DRG.	MATERIAL	CODE	SIZE	No. Req.
	FORM FOR MANHOLE	17-6674-6000 17-6648-5320	3x4x4	1
	CONDUIT END BELL		AS REQ.	
	TILE, SEWER	39-4038-3200	12"/24"	1
	SLAB BOLSTER		2"	20'
	BAR, REINFORCING	20-5472-9650	5/8" Ø	54'
	TIE WIRE	13-9938-6106	#20GA.	35'
7878	PULLING IRON	02-4483-6970	3/4" Ø	2
	CONCRETE	05-3267-2940	3 CU. YDS	
	SEWER BRICK	05-1452-9720	STD.	50
10792	GRATE FOR SUMP	02-4368-7100	15" Ø	1
	GROUND ROD	09-7796-9200	3/4"x10'	1
	GROUND ROD CLAMP	09-2636-3240	3/4"	1
	CRUSHED STONE	05-9057-5471	3/4" TWO BAGS	
872	MANHOLE FRAME	02-4299-5524	24"	1
872	MANHOLE COVER	02-4574-5040	24"	1
	CONC. CHANNEL INSERT	02-4574-5040	3'	8



NOTES:

1. PRECAST MANHOLES MUST BE PROVIDED WITH CHANNEL INSERTS, PULLING IRONS, AND CONDUIT KNOCK-OUTS.
2. ALL CONCRETE MUST BE PORTLAND CEMENT CONCRETE MEETING IDOT REQUIREMENTS FOR CLASS PC CONCRETE FOR PRE-CAST STRUCTURES, OR CLASS S1 CONCRETE FOR CAST-IN-PLACE STRUCTURES.
3. REINFORCING BARS MUST MEET ASTM A615 GRADE 60.

8/21/02	SUPERCEDES DWG. 730 DATED JAN 12, 1996
1/12/96	SUPERCEDES DWG. 730 DATED NOV. 21, 1973
DATE	REVISION
3' x 4' x 4'	
CONCRETE MANHOLE	
WITH 24" FRAME AND COVER	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
DRAFTSMAN: B. GARNSEY	CHIEF DRAFTSMAN: R. CARTER
ENGINEER OF ELECTRICITY B. GARNSEY	ENGINEER: B. GARNSEY
GENERAL SUPERINTENDENT [Signature]	DRAWING NO. 730
DEPUTY COMMISSIONER [Signature]	DATE: 8/21/02
SIZE: 17" x 22"	SCALE: NONE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

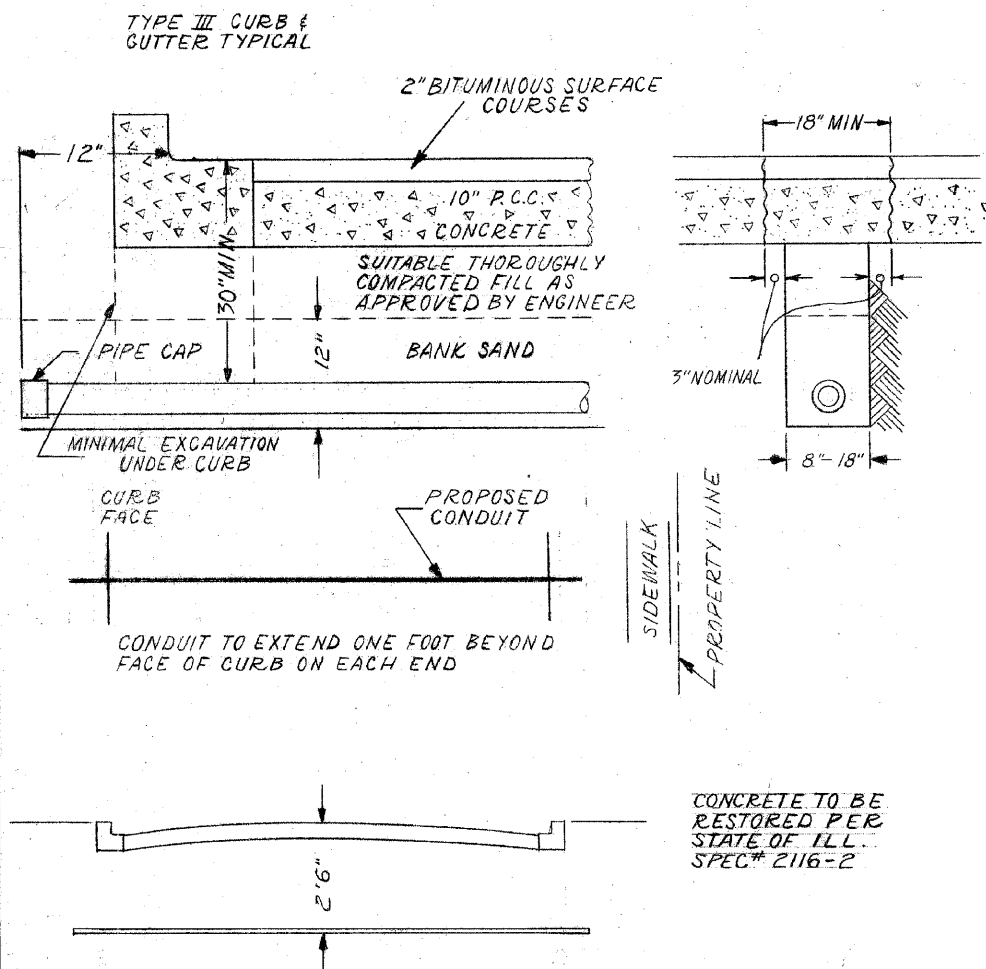
CITY OF CHICAGO
BUREAU OF ELECTRICITY DETAILS

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

CONDUIT INSTALLATION UNDER PAVED STREET

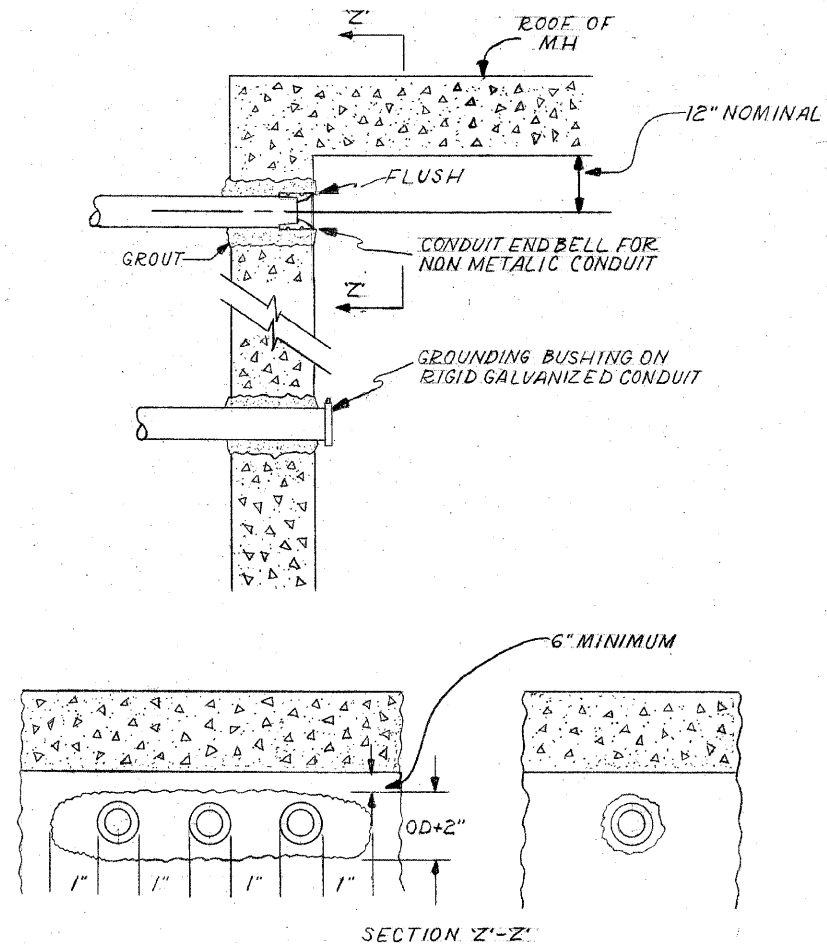


INSTALLATION METHOD OF
INSTALLING CONDUIT UNDER
PAVED ROADWAY

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAWN A.M. JOHNSON	CHECKED R. SYCKOWSKI	ENGINEER R.L. MARTIN
 THOMAS HILDRETH ENGINEER OF ELECTRICITY		DRG. NO. 813
SIZE 8 1/2" X 14"	SCALE N.T.S.	DATE 3-13-01

CONDUIT INSTALLATION THROUGH EXISTING
MANHOLE OR HANDHOLE WALL



OPENING THROUGH WALL TO BE KEPT TO MINIMUM SIZE TO ADMIT CONDUIT AND SUFFICIENT GROUT TO ASSURE SEALING WALL.

INSTALLATION METHOD OF
INSTALLING CONDUIT THRU
MANHOLE WALL

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAWN A.M. JOHNSON	CHECKED R. SYCKOWSKI	ENGINEER R.L. MARTIN
 THOMAS HILDRETH ENGINEER OF ELECTRICITY		DRG. NO. 814
SIZE 8 1/2" X 14"	SCALE N.T.S.	DATE 3-13-01

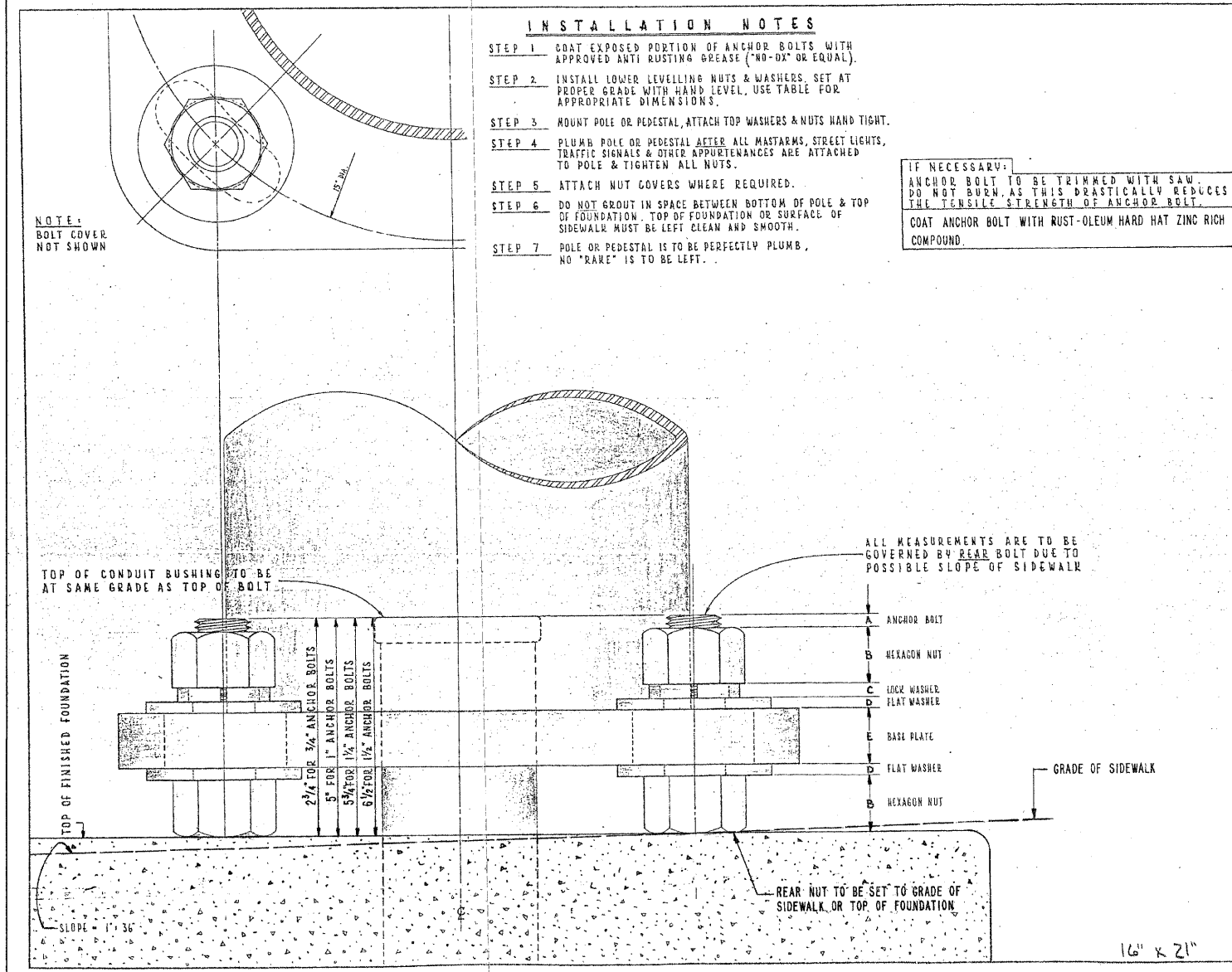
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
BUREAU OF ELECTRICITY DETAILS

SCALE: NONE
DATE: NOVEMBER 2007
DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274



INSTALLATION NOTES

- STEP 1. COAT EXPOSED PORTION OF ANCHOR BOLTS WITH APPROVED ANTI RUSTING GREASE ("NO-OX" OR EQUAL).
- STEP 2. INSTALL LOWER LEVELLING NUTS & WASHERS. SET AT PROPER GRADE WITH HAND LEVEL. USE TABLE FOR APPROPRIATE DIMENSIONS.
- STEP 3. MOUNT POLE OR PEDESTAL, ATTACH TOP WASHERS & NUTS HAND TIGHT.
- STEP 4. PLUMB POLE OR PEDESTAL AFTER ALL MASTARMS, STREET LIGHTS, TRAFFIC SIGNALS & OTHER APPURTENANCES ARE ATTACHED TO POLE & TIGHTEN ALL NUTS.
- STEP 5. ATTACH NUT COVERS WHERE REQUIRED.
- STEP 6. DO NOT GROUT IN SPACE BETWEEN BOTTOM OF POLE & TOP OF FOUNDATION. TOP OF FOUNDATION OR SURFACE OF SIDEWALK MUST BE LEFT CLEAN AND SMOOTH.
- STEP 7. POLE OR PEDESTAL IS TO BE PERFECTLY PLUMB, NO "RAKE" IS TO BE LEFT.

IF NECESSARY, ANCHOR BOLT TO BE TRIMMED WITH SAW. DO NOT BURR, AS THIS DRASTICALLY REDUCES THE TENSILE STRENGTH OF ANCHOR BOLT. COAT ANCHOR BOLT WITH RUST-OLEUM HARD HAT ZINC RICH COMPOUND.

TABLE						
UNIT	ANCHOR BOLT SIZE					
	1"	1 1/4"	1 1/2"	3/4"	ALUM. PED.	
UNIT	POLE GAUGES					
	7 GA.	3 GA.	7 GA.	3 GA.	7 GA.	3 GA.
A	7/16"	7/16"	1/8"	1/16"	1/8"	3/4"
B	1"	1"	1/4"	1/4"	1/2"	3/4"
C	1/4"	1/4"	3/16"	3/16"	3/8"	3/16"
D	5/32"	5/32"	1/4"	1/4"	1/4"	5/32"
E	1"	1"	1/4"	1/2"	1/2"	5/8"

CONSTRUCTION METHOD FOR "DOUBLE-NUT" INSTALLATION OF POLES AND PEDESTALS

CITY OF CHICAGO
 DEPT. OF STREET ENGINEERING
 DIVISION OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING

ENGINEER: *[Signature]*
 SUPERVISING ENGINEER: *[Signature]*
 ENGINEER OF ELECTRICITY: *[Signature]*
 DEPT. CHIEF OF ELECTRICITY: *[Signature]*

837

DATE: 12-3-71 SCALE: 1" = 1' DATE: 6-7-85

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

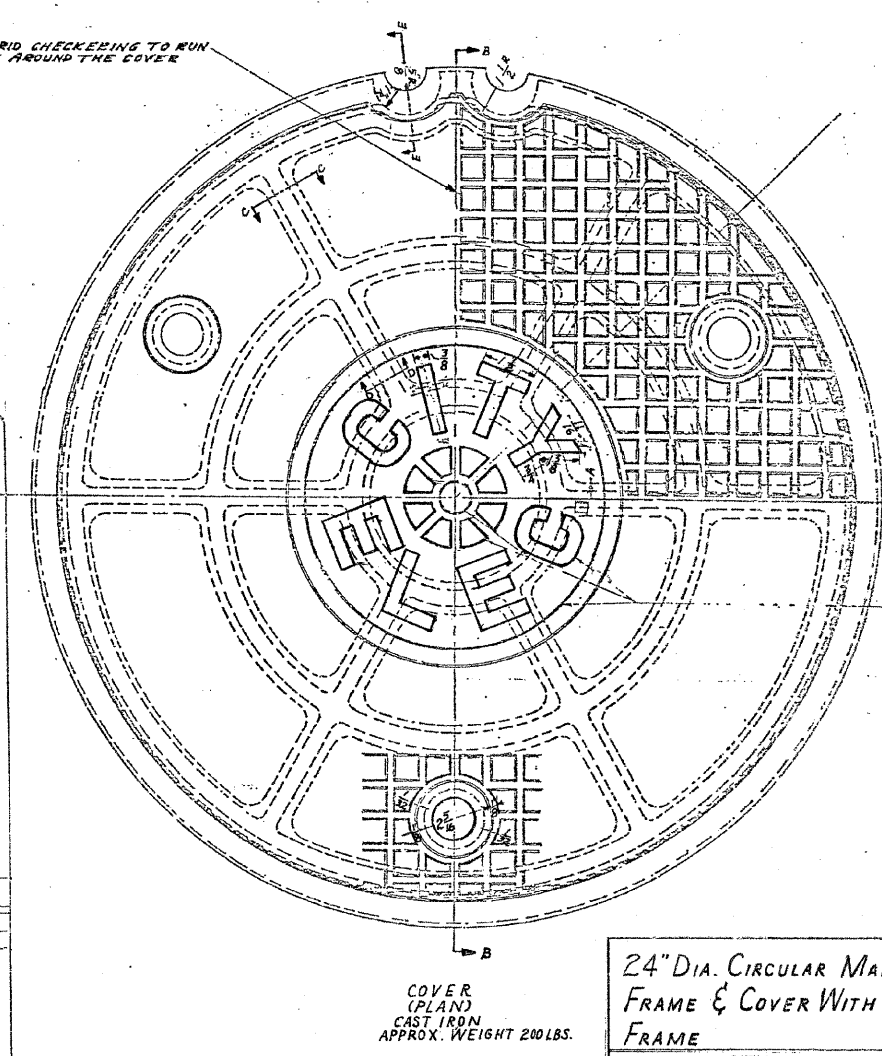
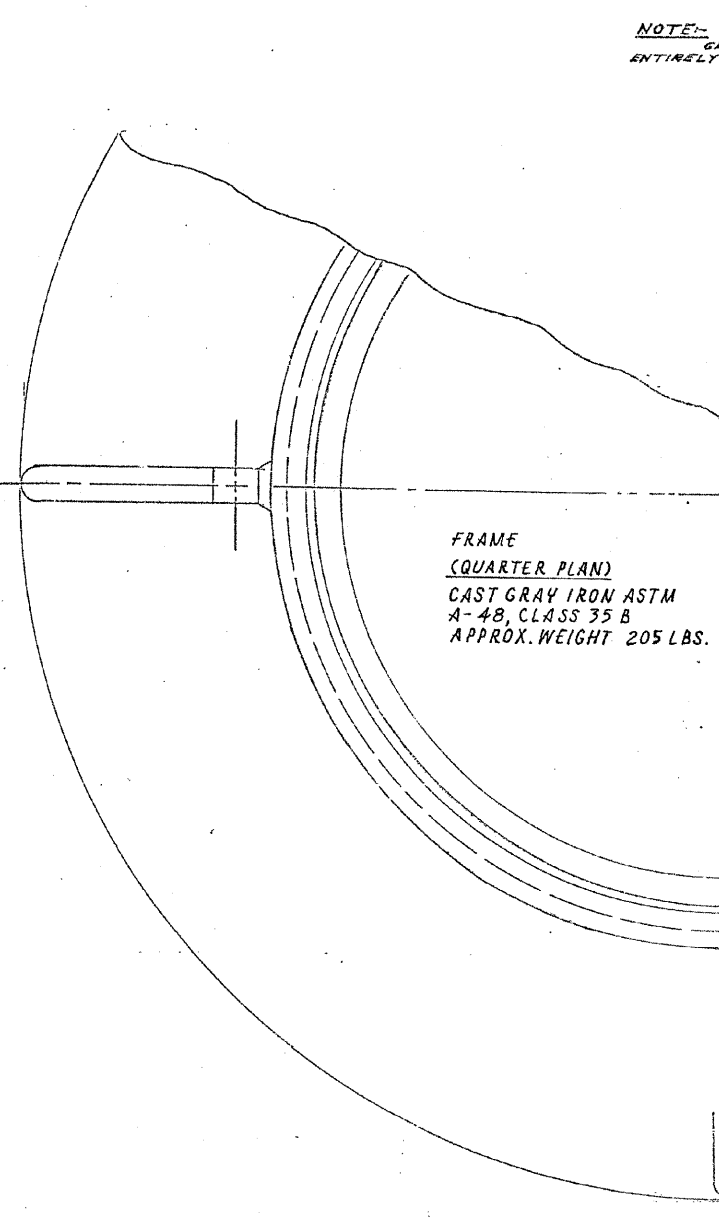
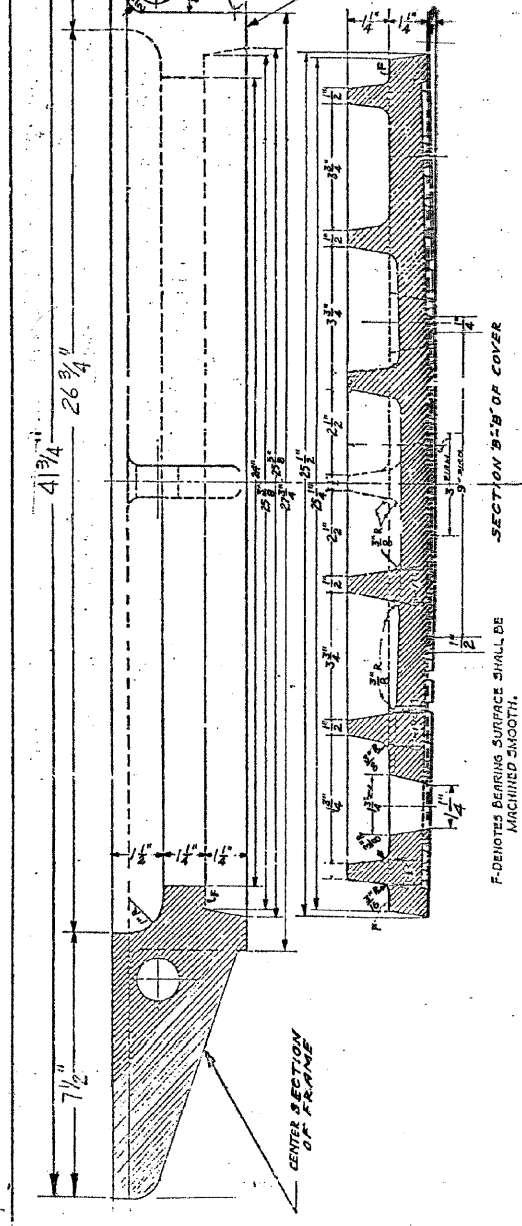
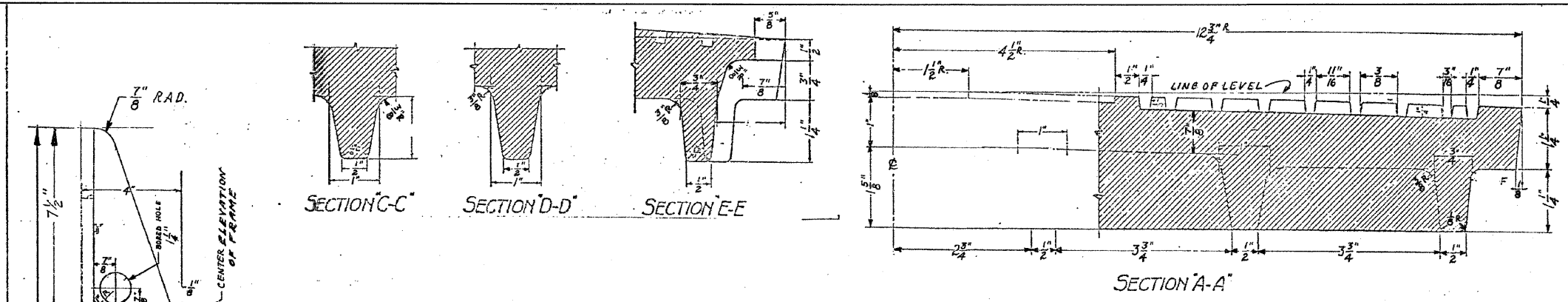
CITY OF CHICAGO
 BUREAU OF ELECTRICITY DETAILS

SCALE: NONE
 DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
 CHECKED BY: S.J.P.

CR & A
 CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	37
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



NOTE: THE TOP SURFACE OF THE 3 CIRCLES AND ALL OF THE LETTERS TO BE RAISED 1/8\"/>

24\"/>

CITY OF CHICAGO		
DEPT. OF STREETS AND SANITATION		
BUREAU OF ELECTRICITY		
DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN A. JOHNSON	CHIEF DRAFTSMAN C. RESPINO	ENGINEER M. De BARTOLO
SUPERVISING ENGINEER	ELEC. DESIGN ENGR.	DIV. OF ELEC.
ENGINEER OF ELECTRICITY		
DEPT. SUPV. OF ELECTRICITY		872
DEPUTY COMMISSIONER		
DATE: 4-24-92		

COMMODITY CODE
FRAME
COVER - 02 4574-5040

SUPERSEDES DWG # 10797
DATED 2-10-35

REVISIONS	
NAME	DATE

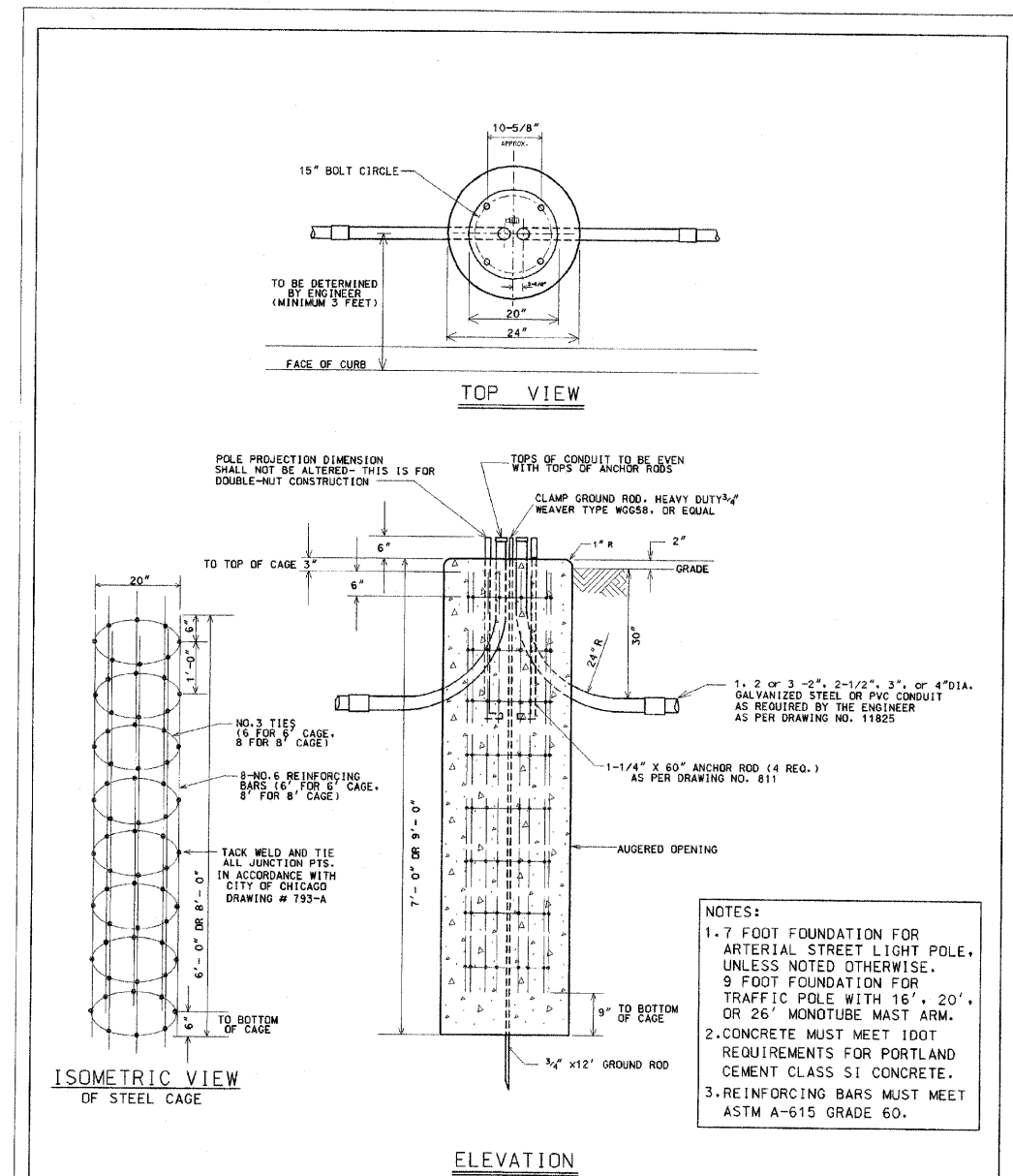
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
BUREAU OF ELECTRICITY DETAILS

SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274



- NOTES:**
- 1.7 FOOT FOUNDATION FOR ARTERIAL STREET LIGHT POLE, UNLESS NOTED OTHERWISE. 9 FOOT FOUNDATION FOR TRAFFIC POLE WITH 16", 20", OR 26" MONOTUBE MAST ARM.
 - CONCRETE MUST MEET 100T REQUIREMENTS FOR PORTLAND CEMENT CLASS SI CONCRETE.
 - REINFORCING BARS MUST MEET ASTM A-615 GRADE 60.

NOTE: HOLE FOR FOUNDATION MUST BE AUGERED IN UNDISTURBED SOIL

CODE	COMMODITY	SIZE	QUANTITY
05-3267-2940	REDI-MIX CONCRETE	CU. YD.	0.82 OR 1.05
09-4001-	ELBOW, LARGE RADIUS	2"-2-1/2", 3", 4"	VARIES
37-8180-0200	ANCHOR ROD	1-1/4" X 60"	4
05-5054-6910	RE-BAR CAGE	20" X 6" (or 8")	1
09-7796-9200	GROUND ROD	3/4" X 12'-0"	1
09-2638-3240	GROUND ROD CLAMP	3/4"	1
09-2092-	GROUND BUSHING	2"-2-1/2", 3" OR 4"	VARIES

8/21/02 SUPERCEDES DWG #818 DRAWN 4/21/81

DATE REVISION

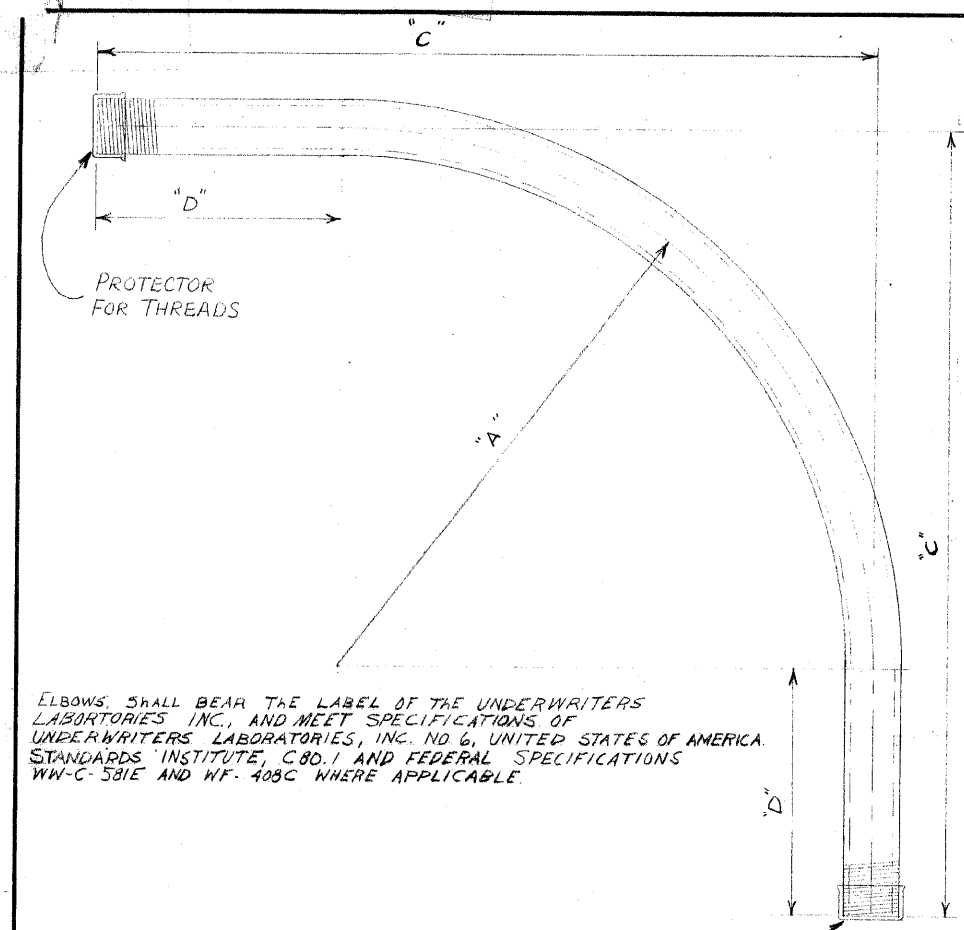
FOUNDATION FOR 34" ARTERIAL STREET LIGHT OR TRAFFIC SIGNAL POLE - 3 OR 7 GAUGE WITH 15" BOLT CIRCLE

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAFTSMAN: B. GARNSEY
ENGINEER: R. CARTER
DEPT. CHIEF ENGINEER: B. GARNSEY

DRAWING NO. 818

SIZE: 11" X 17" SCALE: NONE DATE: 8/21/02



NOTE: TWO THREAD PROTECTORS TO BE FURNISHED ON EACH ELBOW, PROTECTOR TO COVER A MINIMUM OF TEN THREADS.

REAM BOTH ENDS TO REMOVE BURRS

TABLE OF DIMENSIONS

CONDUIT SIZE	DIMENSIONS			COMMODITY CODE
	A"	C"	D"	
1 1/4"	24"	35"	11"	09-4001-0510
1 1/2"	24"	35"	11"	09-4001-0520
2"	24"	35"	11"	09-4001-4126
2 1/2"	24"	35"	11"	09-4001-4128
3"	24"	35"	11"	09-4001-4230
4"	24"	35"	11"	09-4001-0000

B SPECIFICATIONS REVISED

A REVISED DIMENSIONS ON 3" #4 CONDUIT L.P.

ELBOW, CONDUIT, RIGID GALVANIZED STEEL, LARGE RADIUS

REVISED	DATE	BY	CHECKED	DATE
A	7-22-71			
B	4-3-79	LON BURDY	M.S.	
C				
D				
E				
F				
G				

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

ENGINEER: M. SHINE
DRG. NO. 11825

DEPUTY COMM. DATE: 6-2-71

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

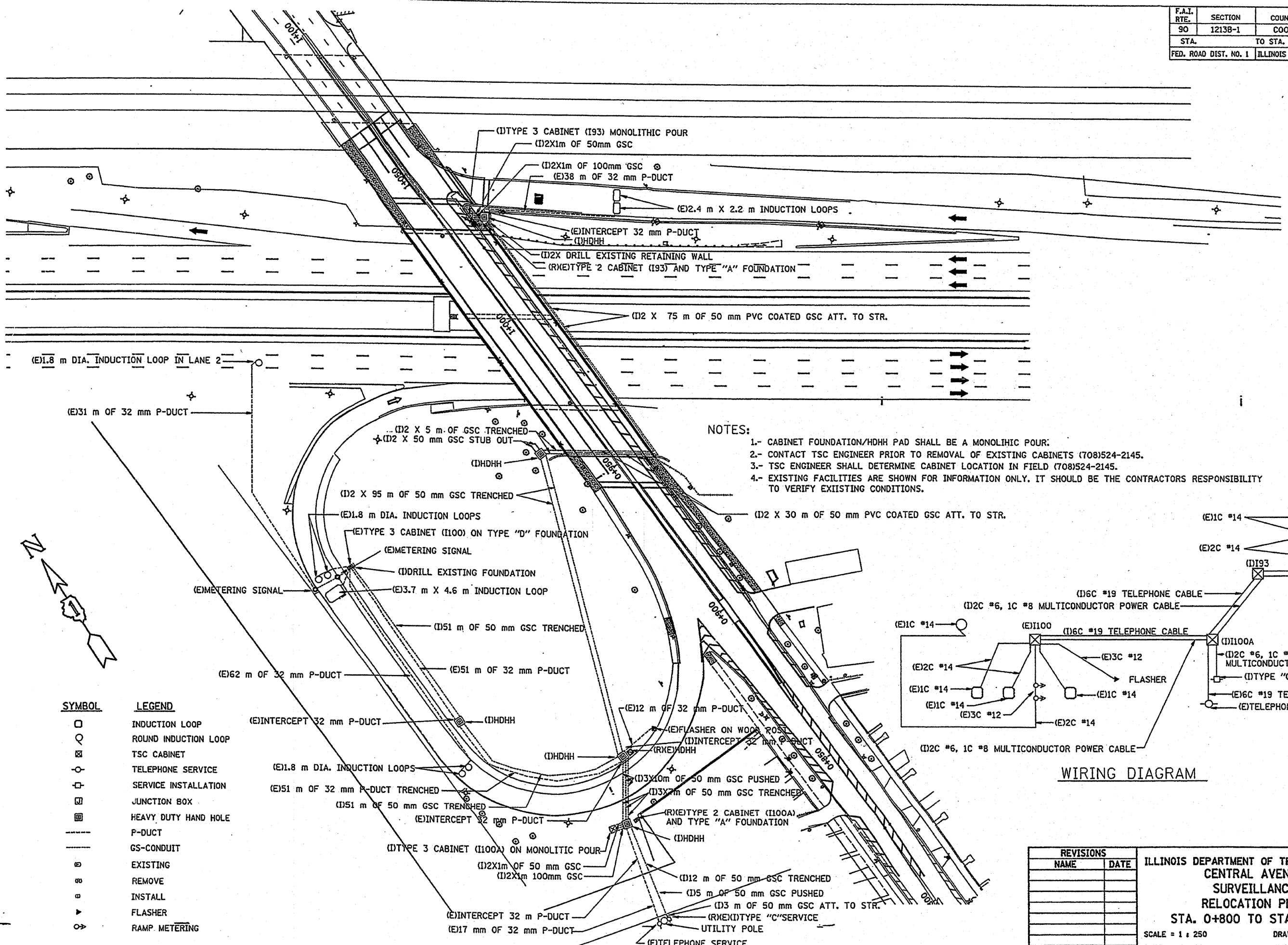
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
BUREAU OF ELECTRICITY DETAILS

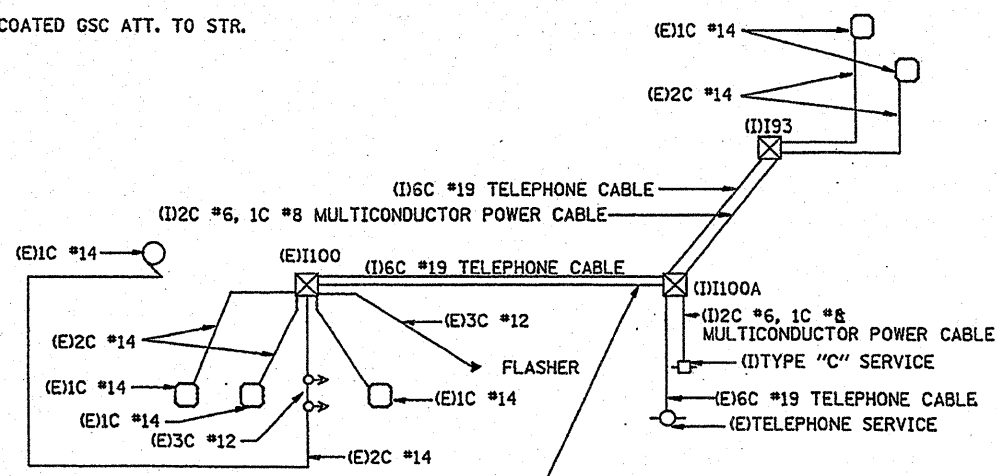
SCALE: NONE
DATE: NOVEMBER 2007

DRAWN BY: K.R.K.
CHECKED BY: S.J.P.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	39
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



- NOTES:**
- 1.- CABINET FOUNDATION/HDHH PAD SHALL BE A MONOLITHIC POUR.
 - 2.- CONTACT TSC ENGINEER PRIOR TO REMOVAL OF EXISTING CABINETS (708)524-2145.
 - 3.- TSC ENGINEER SHALL DETERMINE CABINET LOCATION IN FIELD (708)524-2145.
 - 4.- EXISTING FACILITIES ARE SHOWN FOR INFORMATION ONLY. IT SHOULD BE THE CONTRACTORS RESPONSIBILITY TO VERIFY EXISTING CONDITIONS.



WIRING DIAGRAM

SYMBOL	LEGEND
○	INDUCTION LOOP
○	ROUND INDUCTION LOOP
□	TSC CABINET
○	TELEPHONE SERVICE
□	SERVICE INSTALLATION
□	JUNCTION BOX
□	HEAVY DUTY HAND HOLE
---	P-DUCT
---	GS-CONDUIT
○	EXISTING
○	REMOVE
○	INSTALL
○	FLASHER
○	RAMP METERING

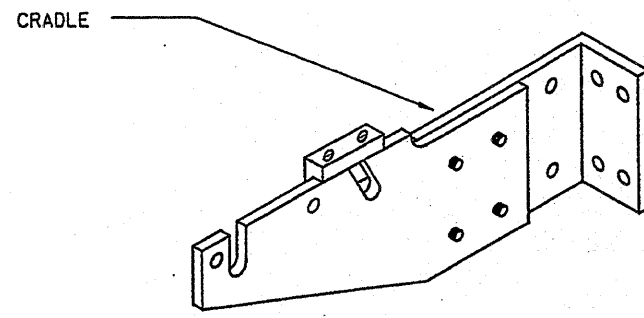
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CENTRAL AVENUE
 SURVEILLANCE
 RELOCATION PLAN
 STA. 0+800 TO STA. 0+925

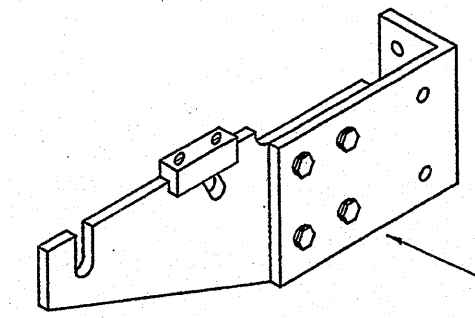
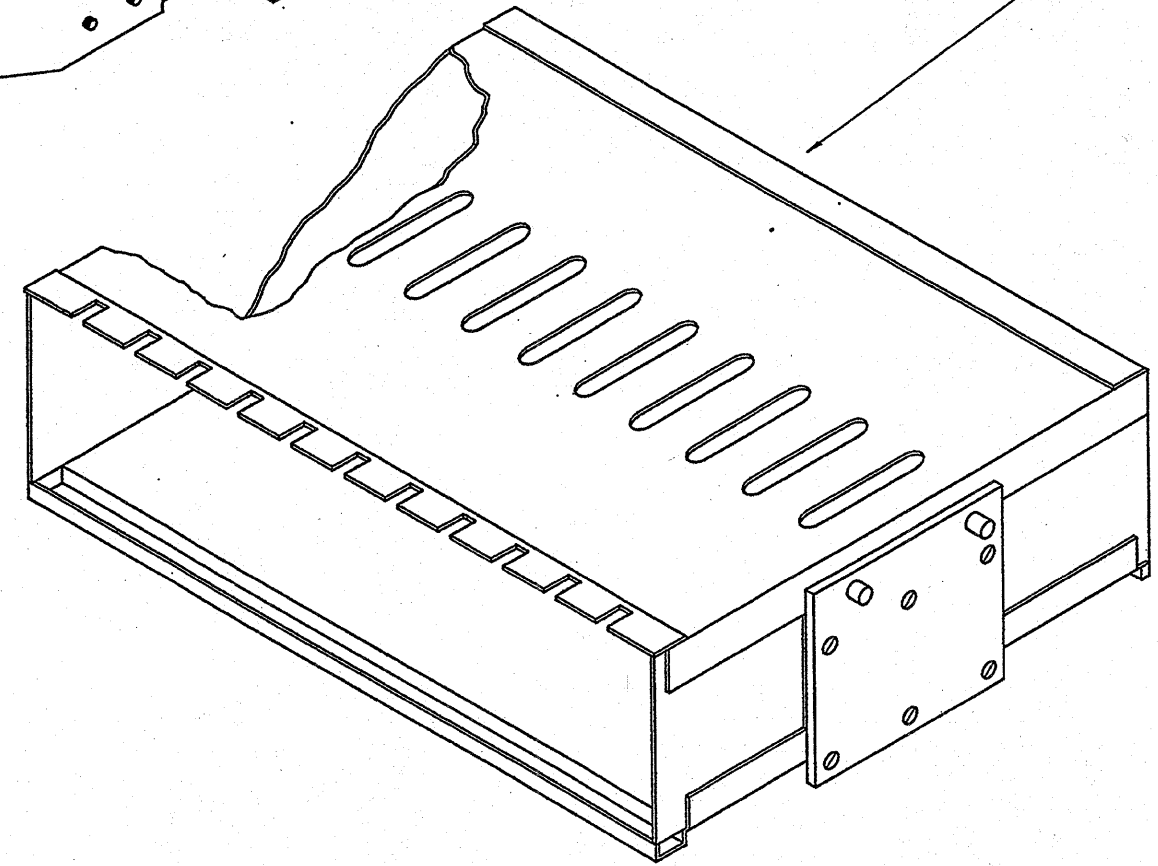
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 DATE 02/00
 DRAWN BY B.K.
 CHECKED BY S.J.P.

FILE NAME=C: CHRISTIA RYBORDER.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	40
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



II MODULE MOUNTING FRAME
(FOR II TYPE "A" PLUG-IN TYPE TONE MODULES)



CRADLE

NOTE:
TYPE "A" TONE MODULES ARE PLUG
IN UNIT MEASURING 5-7/32" (132.55 mm) X 1.5" (38.1 mm) X 13-3/4" (349.25 mm)

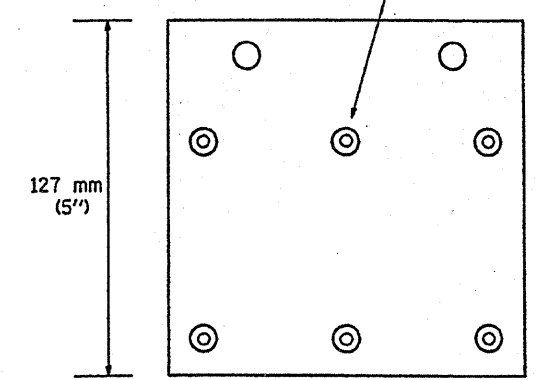
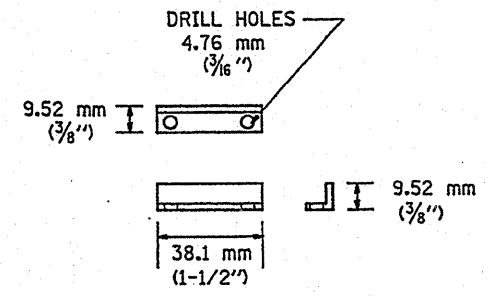
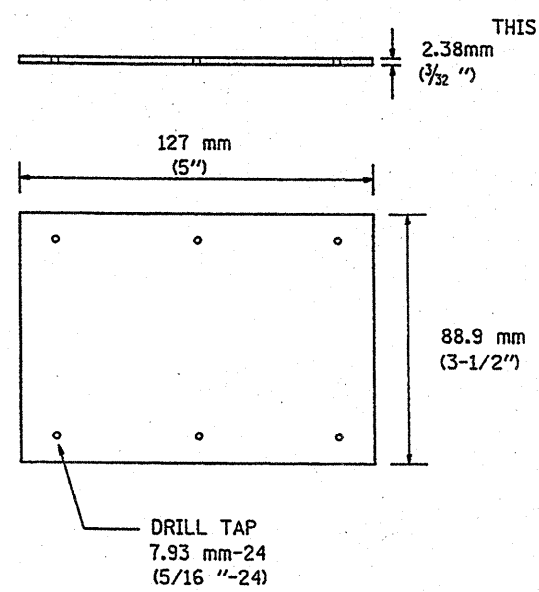
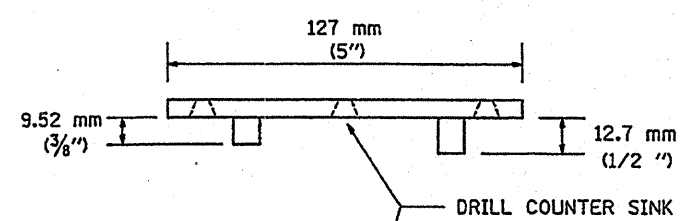
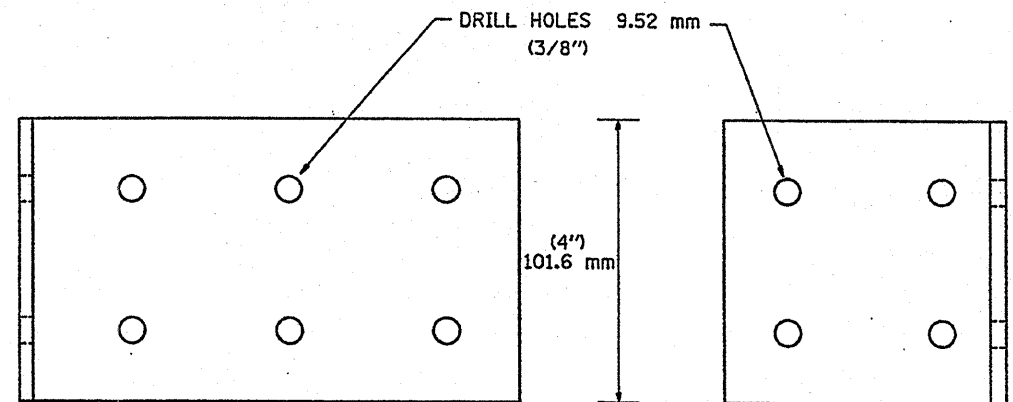
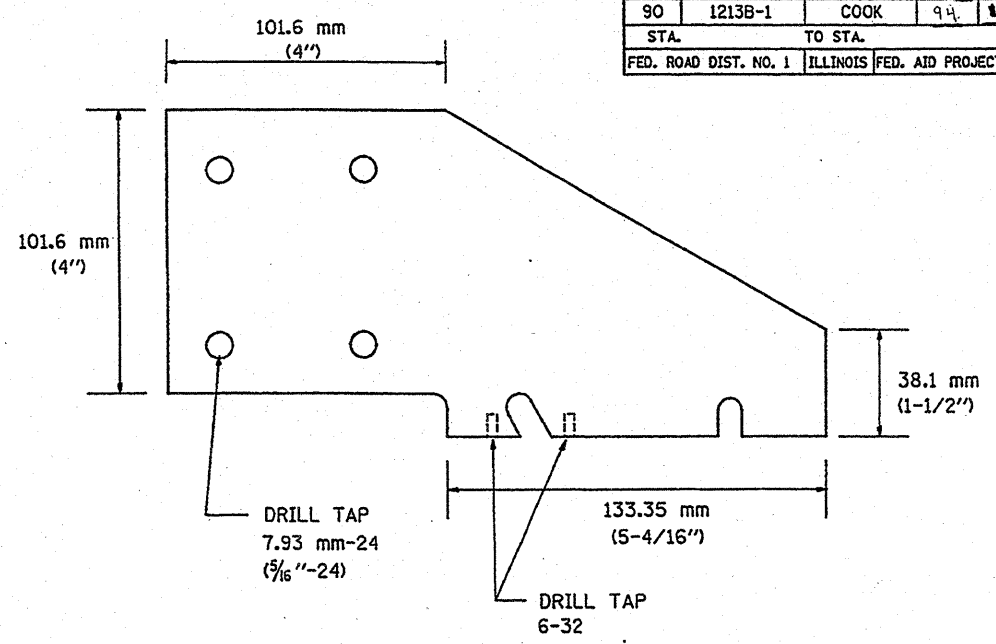
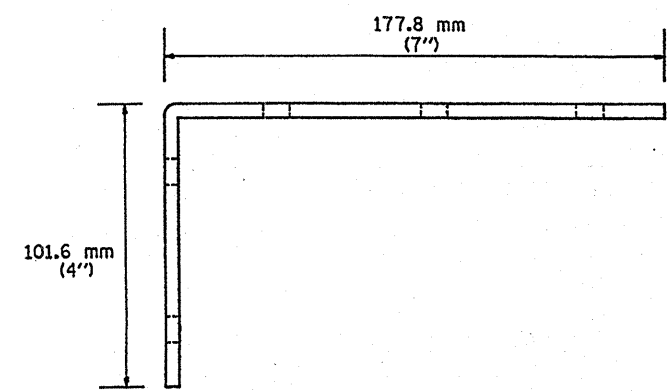
REVISIONS	
NAME	DATE
R.L.	6/94
T.C.	9/96

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**FIELD MOUNTING FRAME
WITH CRADLE ASSEMBLY**
SCALE: VERT. NONE
HORIZ. DATE 6-21-94
DRAWN BY G.M.
CHECKED BY R.L.

RD-TYPNET.DGN
RF-

VI-4006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET	SHEET NO.
90	1213B-1	COOK	94	41
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



REVISIONS	
NAME	DATE
R.L.	6/94
T.C.	9/96

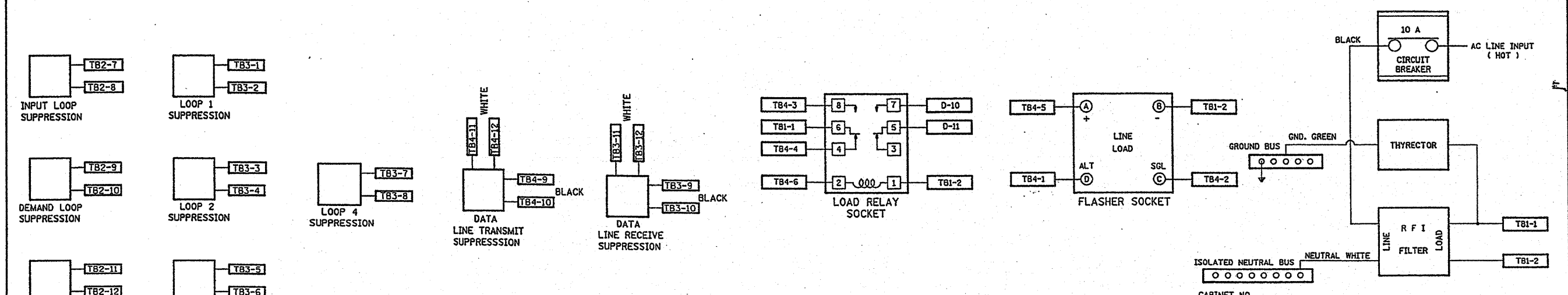
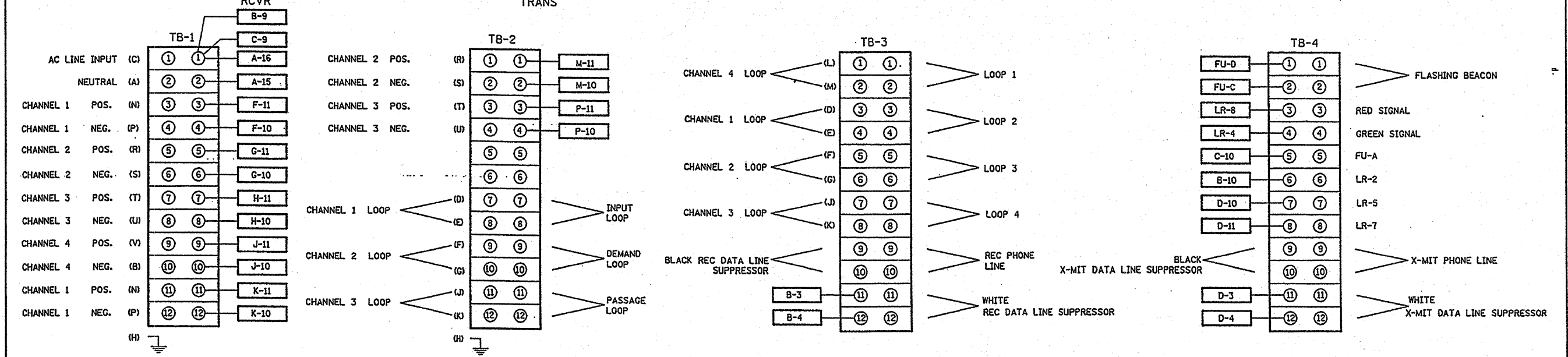
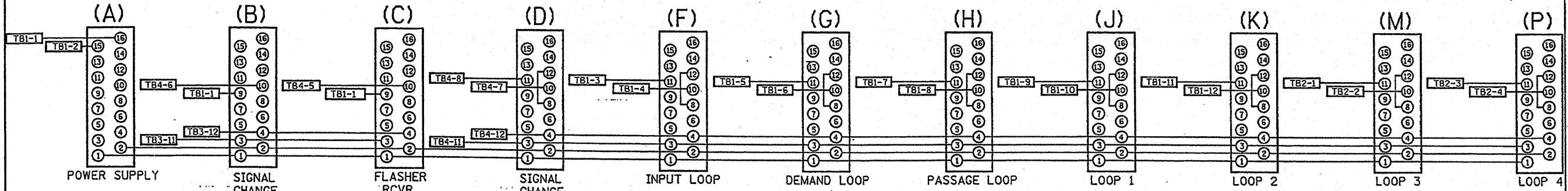
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
FIELD CRADLE ASSEMBLY
SCALE: VERT. NONE
HORIZ. DATE 6-21-94
DRAWN BY G.M.
CHECKED BY R.L.

RD=TYPMET.DGN
RF=

VI=4007

BACK VIEW OF TONE RACK

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET
90	1213B-1	COOK	94	42
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

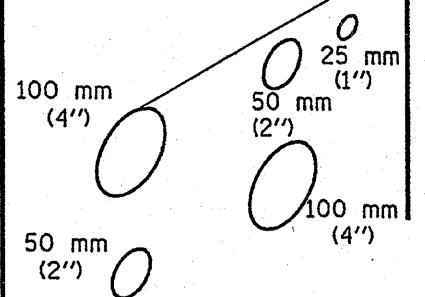
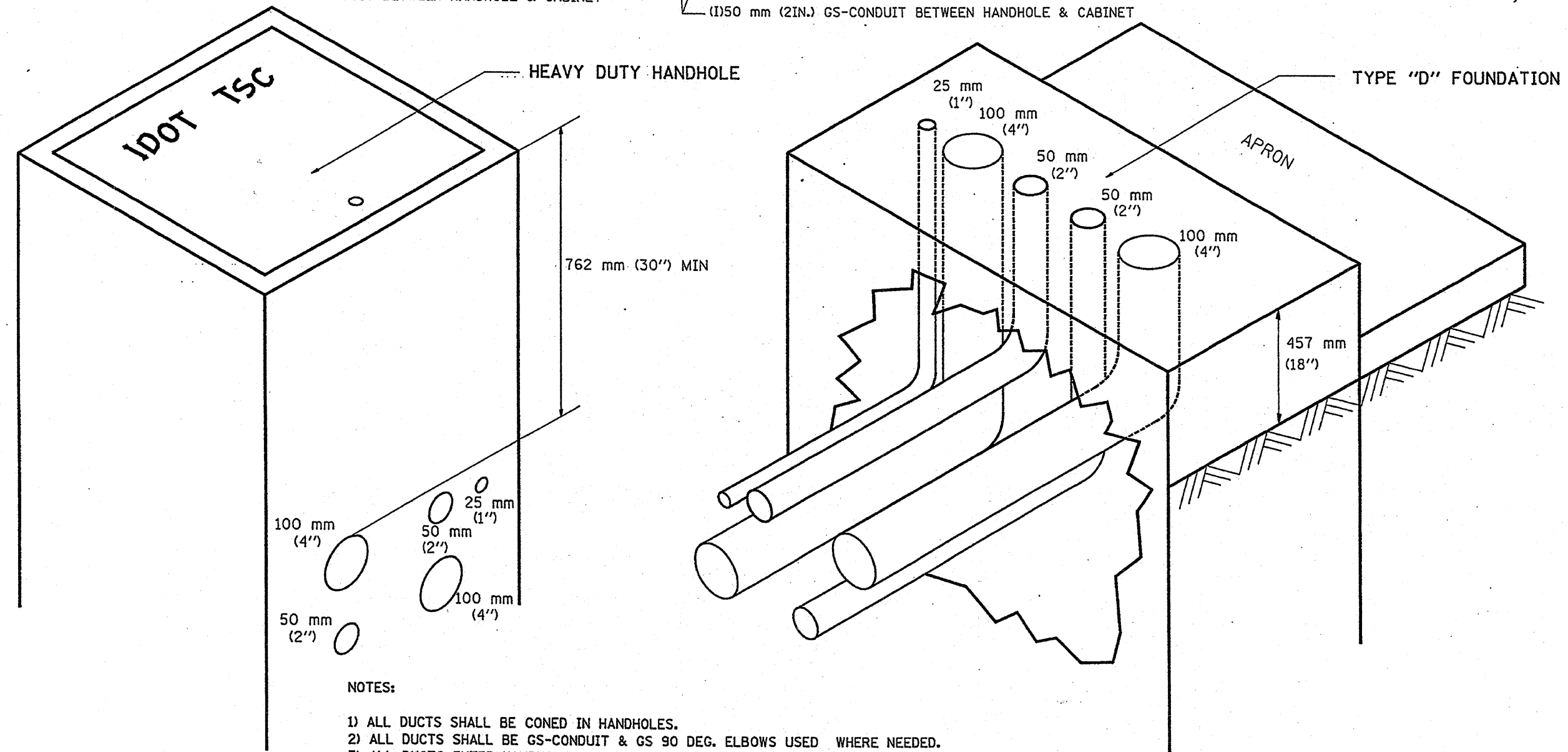
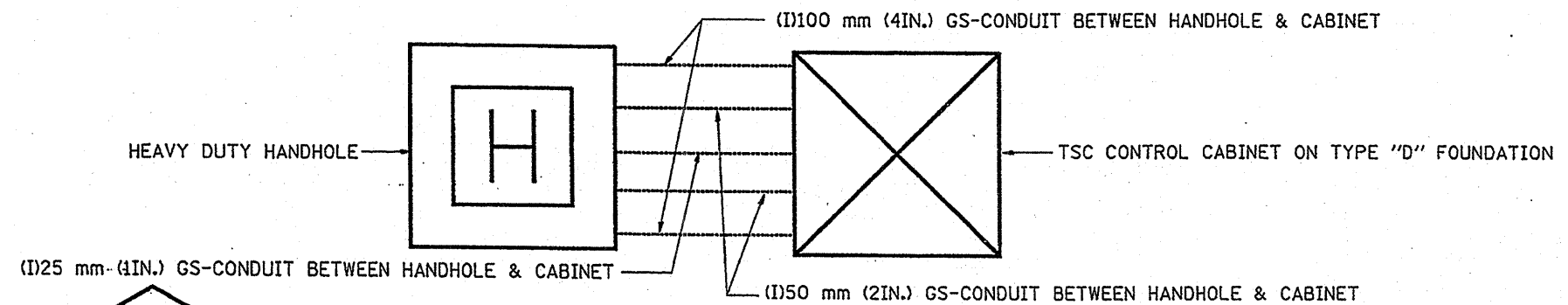


REVISIONS	
NAME	DATE
T.C.	6/94
R.L.	3/95
R.L.	5/99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
METERING CABINET WIRING DIAGRAM

SCALE: VERT. NONE
HORIZ. DATE 6/21/94
DRAWN BY G.J.
CHECKED BY T.C.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	143
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



NOTES:

- 1) ALL DUCTS SHALL BE CONED IN HANDHOLES.
- 2) ALL DUCTS SHALL BE GS-CONDUIT & GS 90 DEG. ELBOWS USED WHERE NEEDED.
- 3) ALL DUCTS ENTER HANDHOLE AT MINIMUM DEPTH OF 762 mm (30 INCH)
- 4) ALL HANDHOLE COVERS SHALL READ "IDOT TSC".
- 5) ALL CABINET HANDHOLES SHALL BE HEAVY DUTY.
- 6) DUCTS SHALL BE CENTERED IN CABINET FOUNDATION/HANDHOLE AS SHOWN.
- 7) CONDUITS SHALL BE SPACED 305 mm (1 FOOT) CENTER TO CENTER IN HEAVY DUTY HANDHOLE.
- 8) INSTALL 20 mm X 3 m (3/4" X 10') COPPER CLAD STEEL GROUND ROD IN HDHH PROVIDED AS CABINET PAD. EXOTHERMIC WELD CONNECTION FROM GROUND ROD TO #6 GROUND WIRE INSULATED (GREEN).
- 9) BOND ALL GSC CONDUITS IN CABINET FOUNDATION.
- 10) INSTALL #6 GROUND WIRE IN 25 mm (1") GSC FROM HANDHOLE TO CABINET.
- 11) TYPE "D" FOUNDATION SHALL BE 18" FROM TOP OF FOUNDATION TO FINISH GRADE.

REVISIONS	
NAME	DATE
T.C.	9/96
R.L.	3/99
R.L.	4/99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**CABINET - HANDHOLE
CONDUIT DETAIL**

SCALE: VERT. NONE
HORIZ. 1" = 1'-0"

DATE 6-5-95
DRAWN BY G.M.
CHECKED BY R.L.

RD-TYP/MTL/DGN
RF=

VI-40011

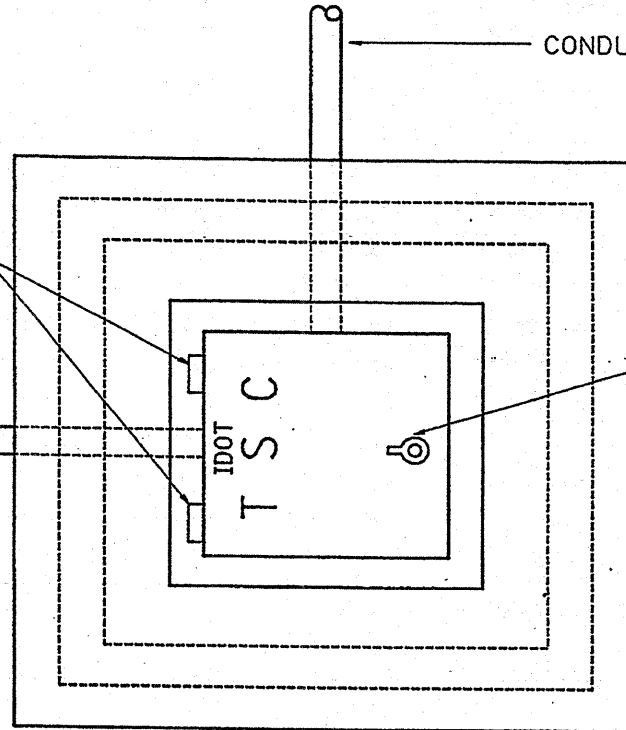
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	44
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

TYPE "T" HINGES REQUIRED ONLY ON HEAVY DUTY SPECIAL

CONDUIT TYP.

CONDUIT TYP.

TYPE "G" HANDLE FOR BOTH HDHH AND HDHH SPECIAL

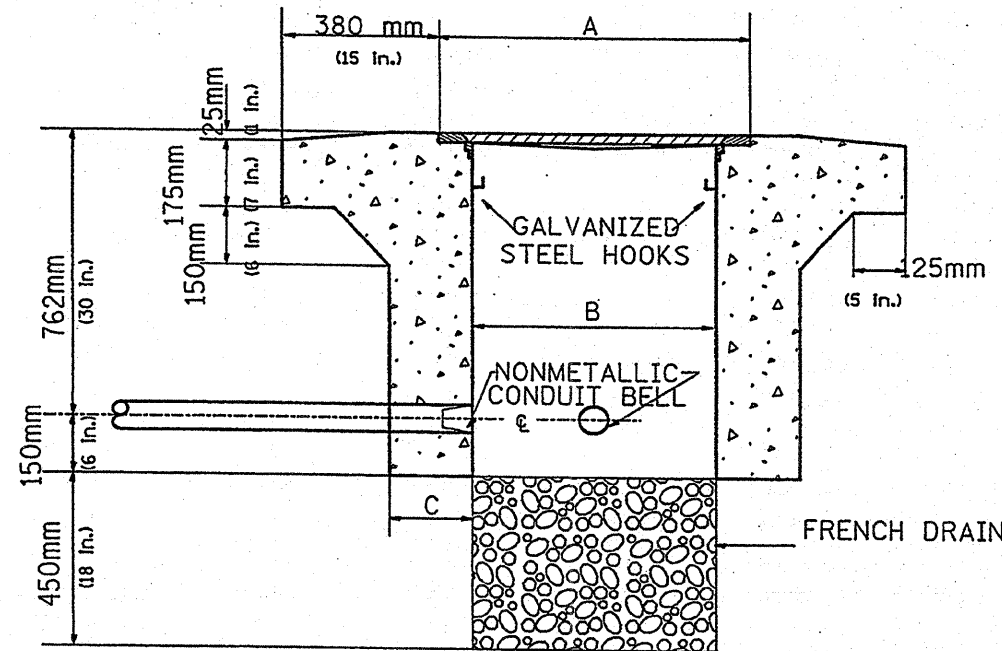


PLAN

HEAVY DUTY HANDHOLE MINIMUM DIMENSIONS (UNHINGED)

A	711 mm (28")
B	559 mm (22")
C	200 mm (8")

(FRAME AND COVER 118 Kg. (260 LBS.) MIN.)



ELEVATION

HEAVY DUTY HANDHOLE SPECIAL MINIMUM DIMENSIONS

A	800 mm (31.5")
B	762 mm (30")
C	250 mm (10")

(FRAME AND COVER 184 Kg. (405 LBS.))

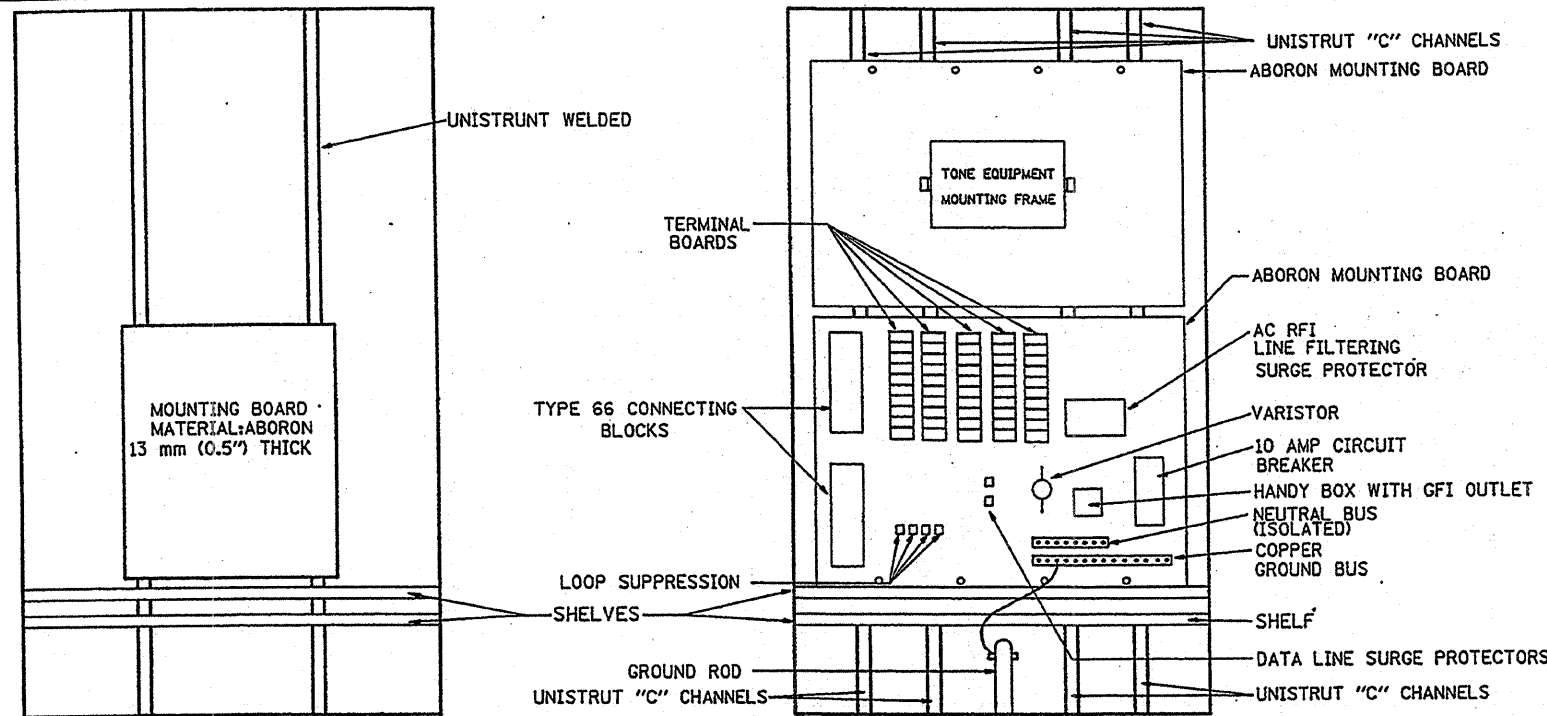
PC CONCRETE - HEAVY DUTY SPECIAL

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER
NAME	DATE	
R.L.	4-97	PC CONCRETE - HEAVY DUTY
		SCALE: VERT. NONE HORIZ.
		DATE 9-11-96
		DRAWN BY G.M. CHECKED BY R.L.

RD-TYPMET.DGN
RF=

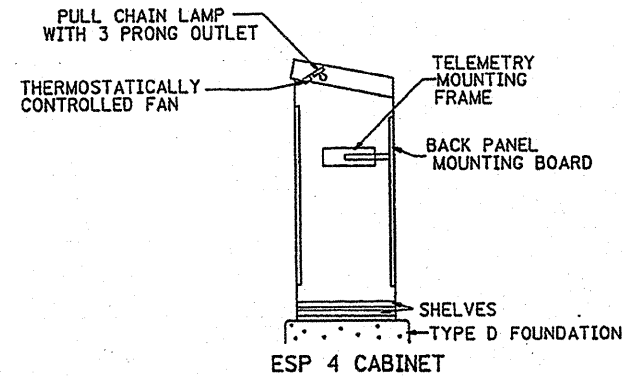
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

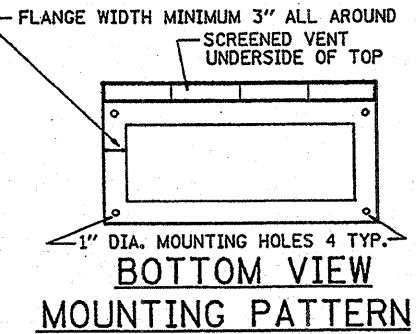


SIDE VIEW ESP 4 CABINET

FRONT VIEW ESP 4 CABINET



PROFILE VIEW



TYPICAL CABINET INTERIORS
STANDARD TRAFFIC SYSTEMS CENTER CABINETS

TYPE	MINIMUM DIMENSIONS			INSIDE THICKNESS (mm-IN)	MATERIAL
	HEIGHT (m-IN)	WIDTH (m-IN)	DEPTH (mm-IN)		
ESP4	1.4 m (55")	1.12 m (44")	660.4mm (26")	4.76mm (3/16 ")	FABRICATED ALUMINUM

NOTES:

- CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH SECTION T637 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS". THE FINAL COAT SHALL BE (X) IN COLOR. THE INTERIOR SHALL BE PAINTED WHITE. SIGNAL POSTS AND HEADS TO BE FEDERAL YELLOW 89-19(MAUTZ).
- CABINETS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION T400 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS".
- ALL CABINETS WHICH ARE SERVICED BY 117 VOLTS A.C. POWER SHALL BE EQUIPPED WITH A 10 AMP CIRCUIT BREAKER, A.C. R.F.I. LINE FILTERING SURGE PROTECTOR, VARISTOR, DATA SURGE AND LOOP SURGE PROTECTORS AS INCIDENTAL TO THE COST OF THE CABINET. CMS CABINETS TYPE IV SHALL HAVE A 60 AMP. CIRCUIT BREAKER MINIMUM.
- ESP 2/3/4 CABINETS SHALL BE FITTED WITH A THERMOSTATICALLY CONTROLLED FAN. IT SHALL BE MOUNTED AT THE TOP OF THE CABINET. THE FAN SHALL BE CAPABLE OF OPERATING AT 130 CPM AT 48.8 m (160') OF WATER STATIC PRESSURE. A PORCLAIN BASED PULL CHAIN FIXTURE WITH 3 PRONG OUTLET SHALL ALSO BE PROVIDED.
- INCIDENTAL TO THE COST OF EACH CABINET THE CONTRACTOR SHALL CONSTRUCT A 130mm (5 INCH) PCC SIDEWALK OF A RECTANGULAR AREA 915 mm (3 FEET) BY 1.25 m (4 FEET) IMMEDIATELY ADJACENT TO THE CABINET FOUNDATION ON THE SAME SIDE OF THE FOUNDATION AS THE CABINET DOOR TO PROVIDE FOOTING DURING INSTALLATION AND MAINTENANCE.
- ANCHOR BOLTS FOR PEDESTAL AND BASE MOUNTED CABINETS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
- ALL CABINETS SHALL HAVE TERMINAL BLOCKS AND SHELVES AS SHOWN. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
- THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE CABINET. THE DOOR SHALL BE FURNISHED WITH A GASKET THAT SHALL FORM A WEATHER TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE HINGES SHALL BE CONTINUOUS AND BOLTED TO THE CABINET AND DOOR UTILIZING 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGES WILL BE MADE OF STAINLESS STEEL WITH A 6.35 mm (0.25 INCH) DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER PROOF.
- THE LATCHING MECHANISM SHALL BE A 3 POINT DRAW ROLLER TYPE. THE CENTER CATCH AND PUSHRODS SHALL BE EITHER CADMIUM OR ZINC PLATED, TYPE II CLASS I. PUSHRODS WILL BE TURNED EDGEWISE AT THE OUTWARD SUPPORTS AND SHALL BE 6.35 mm (0.25 INCH) BY 19.05 mm (0.75 INCH), MINIMUM. ROLLERS SHALL HAVE A MINIMUM DIAMETER OF 22.22 mm (0.875 INCH) AND WILL BE MADE OF NYLON. THE CENTER CATCH SHALL BE FABRICATED FROM 3.55 mm (0.14 INCH) STEEL, MINIMUM. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION. AN OPERATING HANDLE SHALL BE FURNISHED WITH EACH LOCK. THE HANDLE WILL BE STAINLESS STEEL WITH A 19.05 mm (0.75 INCH) DIAMETER SHANK.
- THE ENCLOSURE SHALL BE EQUIPPED WITH TWO "C" MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.
- CABINET DOOR SHALL NOT HAVE COMPARTMENT DOORS OR LOUVERS.
- ALL FIELD CABINETS SHALL BE FITTED WITH BRASS LOCKS.
- ESP TYPE 4 CABINETS FITTED WITH TWO SHELVES AS SHOWN.
- POST TOP MOUNTED CABINETS, SHALL HAVE A 6.3 mm (0.25 INCH) BOTTOM OF CABINET WELDED.
- THE CONTROL CABINET SHALL BE SET PLUMB ON THE FOUNDATION AND FASTENED TO THE ANCHOR BOLTS WITH NUTS AND WASHERS. FLAT WASHERS SHALL BE INSTALLED BELOW AND ABOVE THE BASE PLATE OF THE CONTROL CABINET. LOCKWASHERS SHALL BE INSTALLED ON TOP OF THE TOP FLAT WASHER.

- | | |
|------------------|---------------------|
| EDENS | WALNUT • |
| KENNEDY | BLUE STREAK •• |
| EISENHOWER | CARIBBEAN BLUE • |
| I-290/IL53/I-355 | POST OFFICE BLUE •• |
| RYAN | YELLOW STONE II •• |
| I-55 | MEDIUM BRONZE • |
| I-57 | RED BARON •• |
| CAL-KING | BLUE STREAK •• |
| LAKE SHORE DR. | GREEN • |
| I-80 | STATUARY BRONZE •• |
- ALL RAMP METERING CABINETS LIME GREEN •••. ALL POSTS, T.S. HEADS AND SERVICES WILL BE PAINTED FEDERAL YELLOW.
- MORTON POWDER PAINT COLOR OR EQUIVALENT.
 - O'BRIEN POWDER PAINT COLOR OR EQUIVALENT.
 - BENJAMIN MOORE ENAMEL COLOR OR EQUIVALENT.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONFORMING TO COLOR REQUIREMENTS

REVISIONS	
NAME	DATE
R.L.	2-98
R.L.	3-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
**TYPE 4 CABINET
DETAIL SHEET**

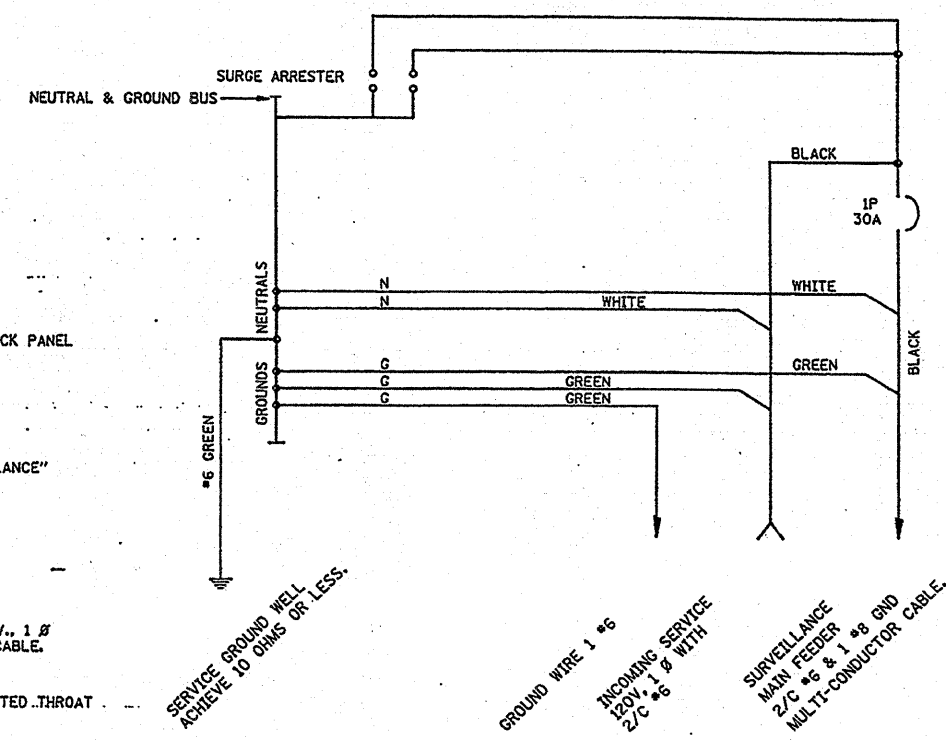
SCALE: VERT. NONE
DATE 4-26-97

DRAWN BY G.M.
CHECKED BY R.L.

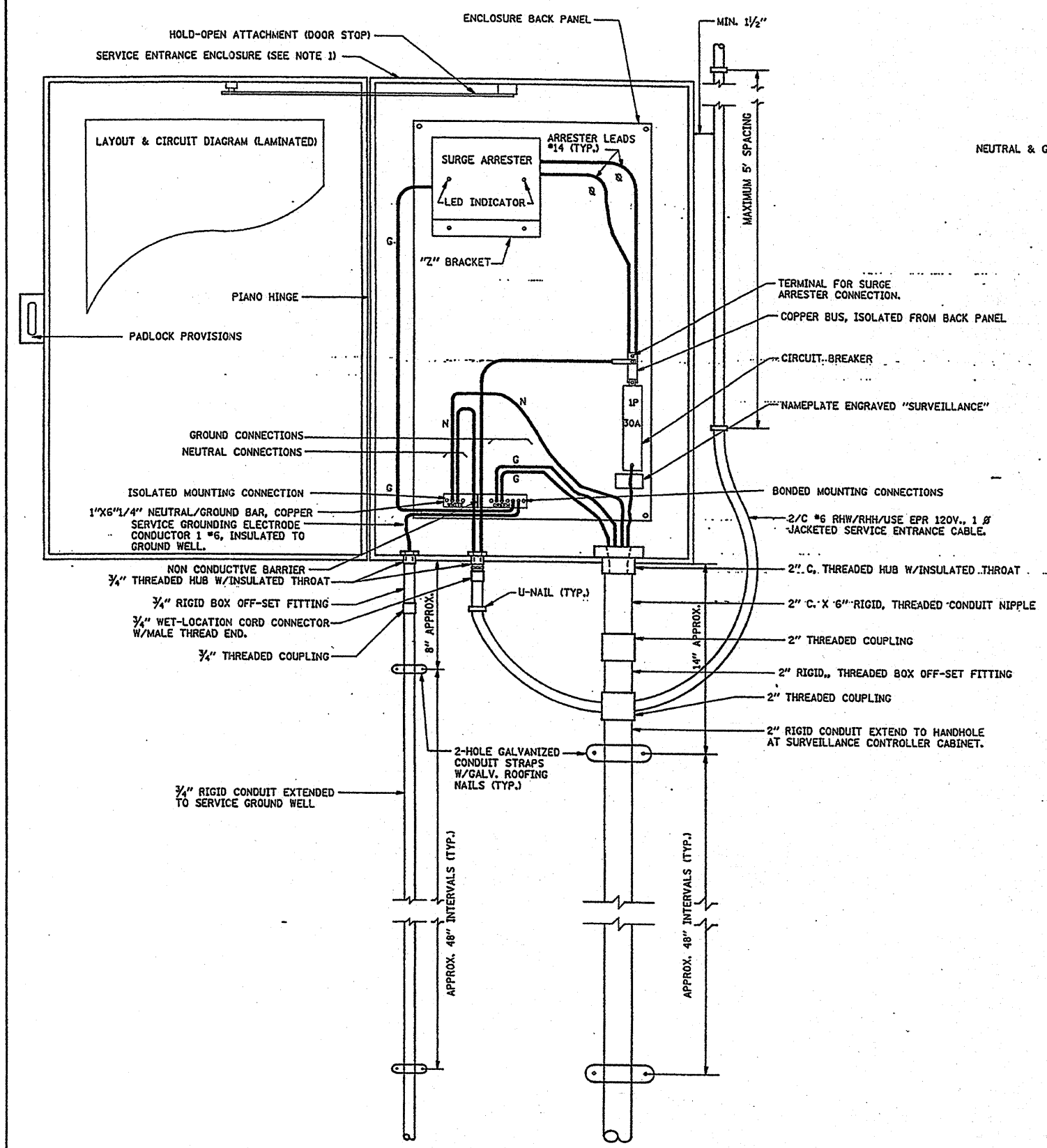
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	46
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED. WHERE 120-VOLT SERVICE IS INDICATED, SERVICE DROP CABLE SHALL BE INSTALLED ACCORDINGLY AND LIGHTING MAIN FEEDER CABLE SHALL BE OMITTED.
- THE ELECTRIC SERVICE BOX SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"x18"x8", WITH PIANO HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS, DOOR STOP KIT AND STEEL BACK PANEL, HOFFMAN CATLOG A-16H1208SS6LP/A-16P2/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELLED, SUITABLE FOR USE AS SERVICE EQUIPMENT.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF >3600 JOULES OR BETTER AT 8/20 MICROSECONDS, RATED -40 TO 65 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV 230L065XST OR APPROVED EQUAL. SURGE PROTECTOR SHALL BE WIRED FOR 120 V SERVICE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.
- BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- PROVIDE ON LAYOUT AND CIRCUIT DIAGRAM A BILL OF MATERIALS USED WITH CATALOG NUMBERS.
- REFER TO T.S.C. TYPICAL DRAWING TY-1TSC-400*20 FOR POLE MOUNTED DISCONNECT MOUNTING DETAILS.



SCHEMATIC DIAGRAM



ELECTRIC SERVICE
GENERAL LAYOUT DIAGRAM

REVISIONS	
NAME	DATE
R.L.	3/1/99
R.L.	3/30/99
R.L.	4/99
R.L.	4/12/99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER
DISTRICT 1
SURVEILLANCE POLE-MOUNTED
ELECTRIC SERVICE BOX DETAIL
SCALE: VERT. NONE HORIZ. NONE
DATE 02/24/99
DRAWN BY G.M.
CHECKED BY R.L.

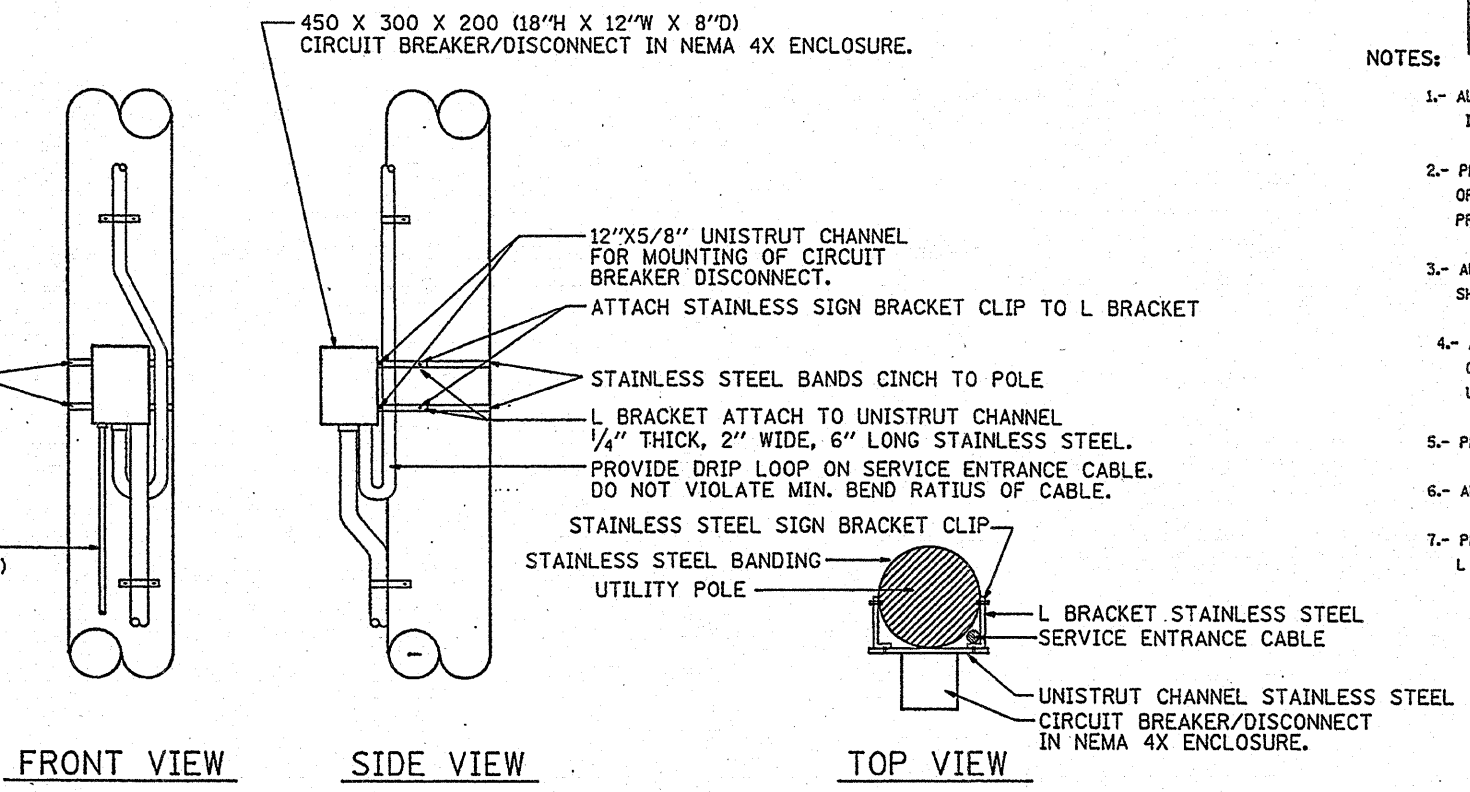
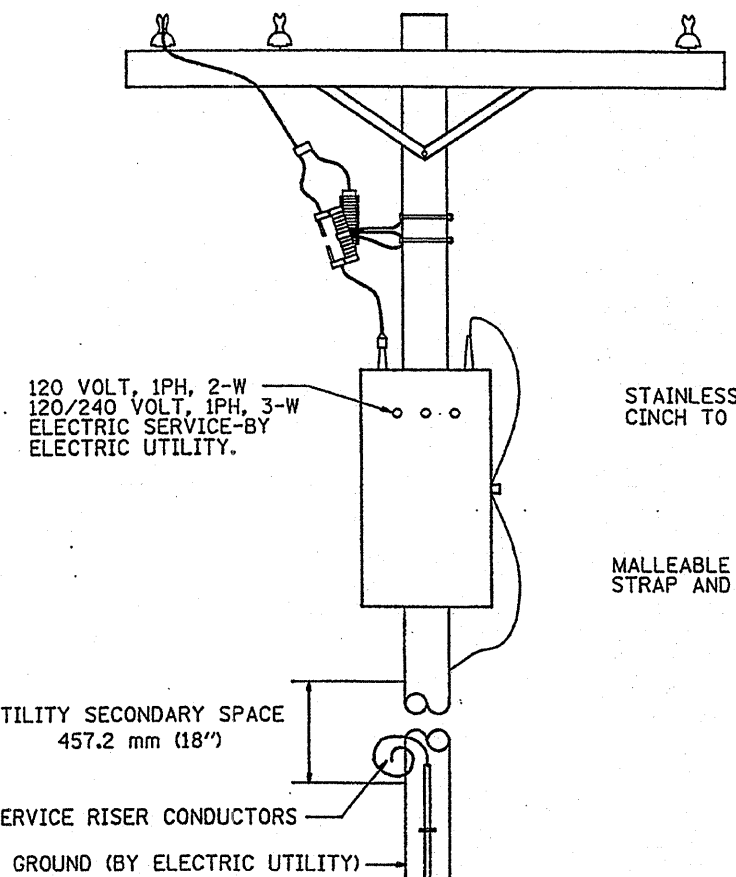
RD-TYPMET.DGN
RF#

VI-40019

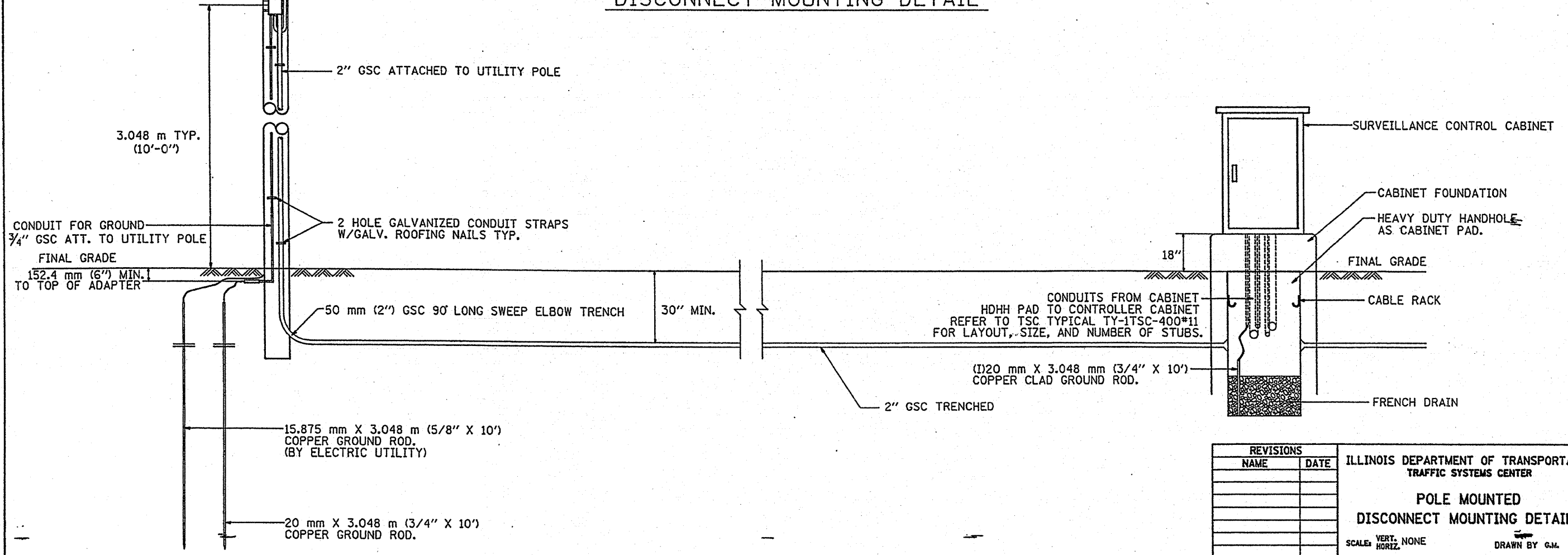
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	47
STA.		TO STA.		PROJECT
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID	

NOTES:

- 1.- ALL CONDUIT BUSHINGS SHALL HAVE AN ISOLATED THROAT.
- 2.- PROVIDE HEAT SHRINK BOOT AT THE TOP OF THE SERVICE ENTRANCE CABLE FOR MOISTURE PROOFING.
- 3.- ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC UNLESS OTHERWISE NOTED.
- 4.- ATTACH INCOMING ELECTRIC SERVICE CABLE TO UTILITY POLE EVERY 5 FEET USING INSULATED U-NAIL.
- 5.- PROVIDE CABLE RACK IN HANDHOLES.
- 6.- ALL CONDUCTORS SHALL BE COPPER.
- 7.- PROVIDE STAINLESS STEEL HARDWARE TO ATTACH L BRACKETS TO UNISTRUT AND TO SIGN HANGER.



NTS
DISCONNECT MOUNTING DETAIL



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER
NAME	DATE	
		POLE MOUNTED DISCONNECT MOUNTING DETAILS
SCALE: VERT. NONE HORIZ. NONE		DRAWN BY G.M.
DATE 03/30/99		CHECKED BY R.L.

RD= TYPMET.DGN
RF=

VI=40020

BENCH MARK No. 202, ELEV. 187.854:

"x" on N.E. bolt of Light Standard on Entrance Ramp to E.B. I-90, Sta. 0+872.7, 38.1 m Lt.

EXISTING STRUCTURE: SN 016-0659

Built in 1952 as FA Route 173, Section 267-1213-15D. Structure consist of two units; a single span and two span continuous composite reinforced concrete deck on WF beams supported by multi-column piers and spill thru (south) and closed (north) abutments. 76.603 m back to back abutments, 19.810 m out to out deck. Deck to be removed and replaced using stage construction.

NOTE:

All dimensions are in millimeters (mm) except as noted.

Note:

Painting of the existing structural steel shall be done under a separate painting contract.

SCOPE OF WORK

1. Remove and replace existing deck utilizing Stage Construction.
2. Remove existing expansion bearings at north abutment and Pier 2 and replace with elastomeric bearings.
3. Remove and replace abutment backwalls & approach slabs.
4. Repair all substructure units & concrete slopewall at south abutment.

SHEET S1 OF S27

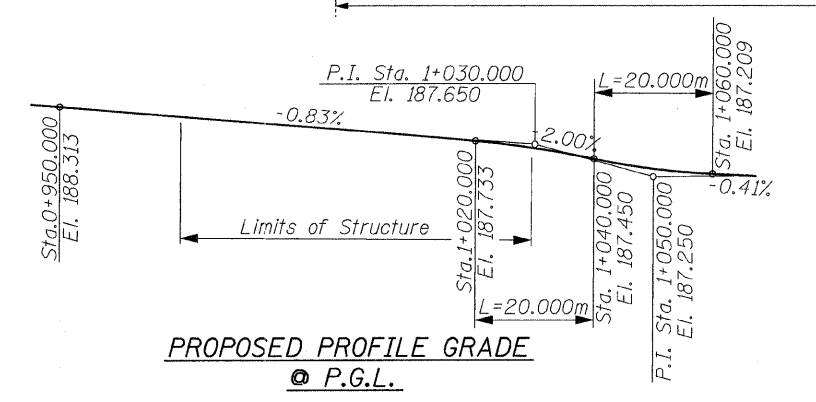
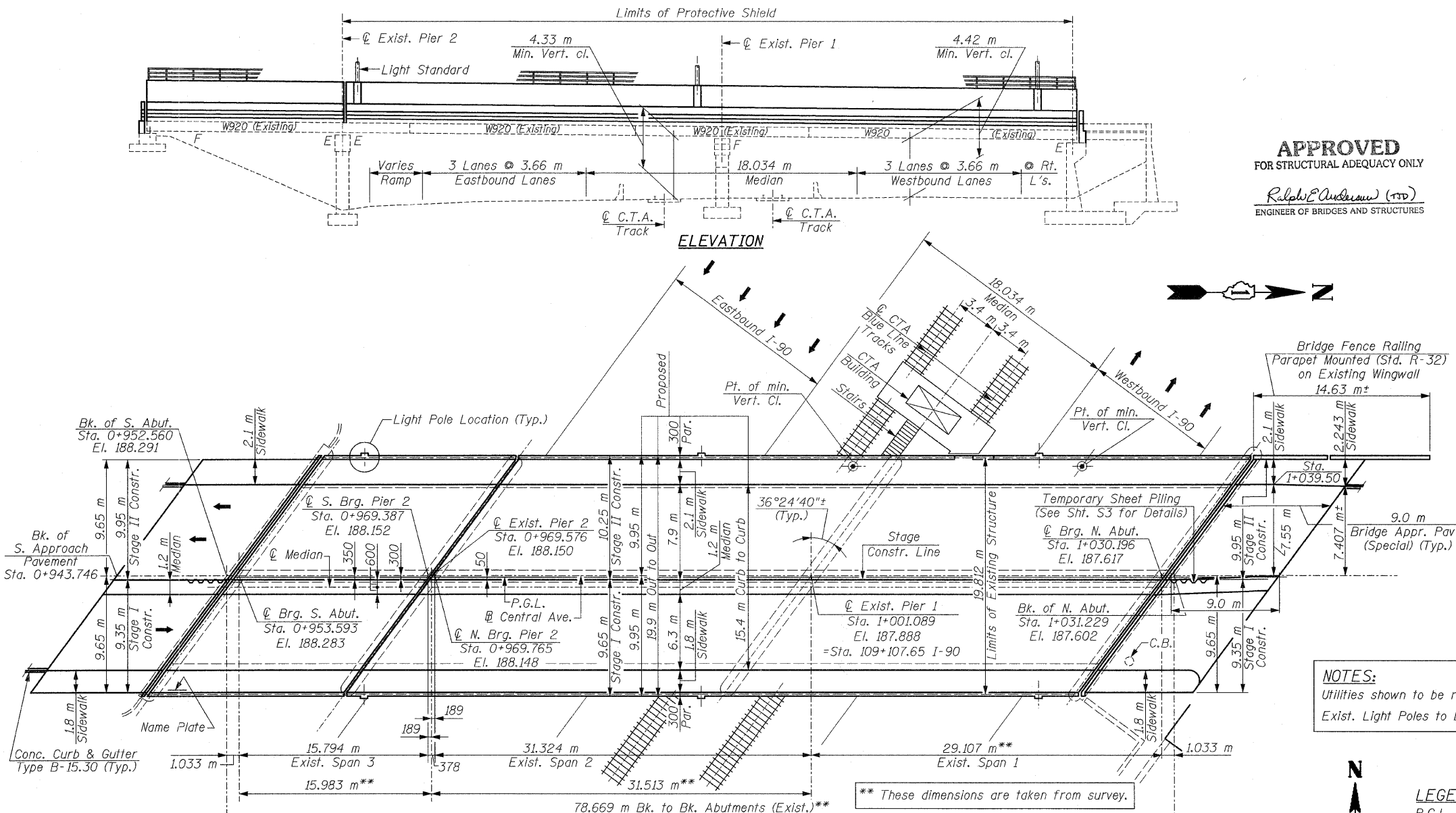
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	48
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640

INDEX OF SHEETS

- S1 GENERAL PLAN & ELEVATION
- S2 GENERAL NOTES & TOTAL BILL OF MATERIAL
- S3 CONSTRUCTION STAGING & TEMPORARY SHEET PILING
- S4 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- S5 TOP OF SLAB ELEVATIONS-I
- S6 TOP OF SLAB ELEVATIONS-II
- S7 TOP OF SLAB ELEVATIONS-III
- S8 TOP OF SLAB ELEVATIONS-IV
- S9 TOP OF SLAB ELEVATIONS-V
- S10 APPROACH PAVEMENT ELEVATIONS
- S11 DECK PLAN
- S12 SIDEWALK PLANS & PARAPETS
- S13 DECK CROSS SECTION & SUPERSTRUCTURE DETAILS
- S14 BRIDGE FENCE RAILING PARAPET MOUNTED
- S15 PREFORMED JOINT STRIP SEAL
- S16 FRAMING PLAN & DETAILS
- S17 STRUCTURAL STEEL DETAILS
- S18 BEARING DETAILS AT PIER 2
- S19 BEARING DETAILS AT ABUTMENTS
- S20 ANCHOR BOLT DETAILS FOR BEARINGS
- S21 CONCRETE REMOVAL DETAILS
- S22 SOUTH ABUTMENT
- S23 NORTH ABUTMENT
- S24 ABUTMENT DETAILS
- S25 PIER 1 REPAIRS
- S26 PIER 2 REPAIRS
- S27 BAR SPLICER ASSEMBLY DETAILS

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph Anderson (SE)
ENGINEER OF BRIDGES AND STRUCTURES



PLAN

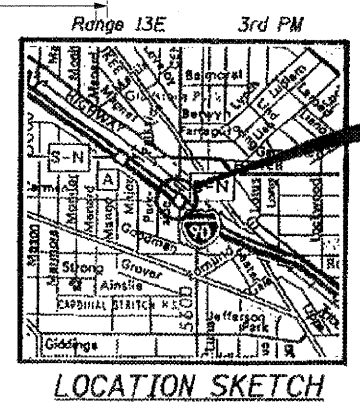
DESIGN SPECIFICATIONS
AASHTO 17th Edition-2002

LOADING MS18
Allow 1.2 kN/m² For future wearing surface.

DESIGN STRESSES-FIELD UNITS

EXISTING	NEW CONSTRUCTION
$f_s = 138$ MPa (Reinforcement)	$f'_c = 24$ MPa (Concrete)
$f_s = 124$ MPa (Structural Steel)	$f_y = 400$ MPa (Reinforcement)
$f_c = 9.65$ MPa	$f_y = 250$ MPa (Structural Steel)
$f_c = 5.50$ MPa (Substructure)	(M20M Grade 250)
$n = 10$	

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.038g
Site Coefficient (S) = 1.0



NOTES:
Utilities shown to be relocated by others.
Exist. Light Poles to be removed and replaced.

LEGEND:
P.G.L. = Profile Grade Line



PROPOSED IMPROVEMENT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE
DATE: JANUARY 16, 2009
DRAWN BY: D.L./F.M.
CHECKED BY: B.M.S./J.C.M.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	49
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

GENERAL NOTES:

Fasteners shall be High Strength Bolts. Bolts M20, open holes 22mm Dia. unless otherwise noted.

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

Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 400. See Special Provisions.

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 compension 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.

Concrete Sealer shall be applied to all exposed surface areas of both of the abutments and existing Pier 2.

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

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. See Special Provision for "Cleaning and Painting New Metal Structures".

Cleaning and Field Painting of the existing structural steel shall be done under a separate Painting Contract.

Existing structural steel shall only be cleaned and painted as required by The Special Provision Cleaning and Painting Contact Surface Areas of Existing Steel Structures.

Detailed Demolition Plans for work performed on or over the C.T.A. R.O.W. shall be submitted to the C.T.A. and the Engineer for review and approval. Refer to the Special Provision "Removal of Existing Concrete Deck" for additional requirements.

Sawcut existing Abutment Backwall at Stage Removal Line before removing the existing Backwall.

All dimensions are in millimeters (mm) except as noted.

The Contractor will be required to mark, on top of the Concrete Deck, the locations of all flanges of the Steel Beams, prior to any removal of the bridge Concrete Deck. Sawcutting directly over the top of the beam flanges is NOT permitted.

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

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that can not be removed by grinding 6mm deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

The Contractor shall test the existing welds by non-destructive methods within 6.00m of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye Penetrant (PT), Magnetic Particle (MT) or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

The Existing Protective Shield was only used to keep concrete from falling onto traffic and is to be removed by the Contractor. The cost of removal of Existing Shielding shall be included the Removal of Existing Concrete Deck.

Slipforming of Parapet is not allowed.

Reinforcement Bars designated (E) shall be Epoxy Coated.

Wherever Epoxy Crack Sealing is referenced in the plans it shall be interpreted to be Epoxy Crack Injection.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Porous Granular Embankment, Special	m3	-	107	107
Concrete Superstructure	m3	491	-	491
Concrete Structures	m3	-	24.6	24.6
Protective Coat	m2	1,695	-	1,695
Reinforcement Bars, Epoxy Coated	kg	57,680	3,170	60,850
Removal of Existing Concrete Deck	Each	1	-	1
Bridge Deck Grooving	m2	1,004	-	1,004
Concrete Sealer	m2	-	69	69
Furnishing and Erecting Structural Steel	kg	1,109	-	1,109
Name Plates	Each	1	-	1
Bridge Fence Railing	m	168	-	168
Protective Shield	m2	1,206	-	1,206
Epoxy Crack Injection	m	-	36	36
Bar Splicers	Each	784	186	970
Concrete Removal	m3	-	34.5	34.5
Jack and Remove Existing Bearings	Each	30	-	30
Elastomeric Bearing Assembly, Type I	Each	30	-	30
Structure Excavation	m3	-	155	155
Temporary Sheet Piling	m2	-	25	25
Preformed Joint Strip Seal	m	75	-	75
Structural Repair of Concrete (Depth Greater than 125mm)	m	-	5	5
Structural Repair of Concrete (Depth Equal to or Less than 125mm)	m2	-	73.7	73.7
Anchor Bolts, M24	Each	20	-	20
Anchor Bolts, M30	Each	40	-	40

STATION 1+000.000
REBUILT 20 BY
STATE OF ILLINOIS
F.A.I. RTE. 90 SEC. 1213B-1
LOADING MS 18
STR. NO. 016-0659

NAME PLATE
See Std. 515001

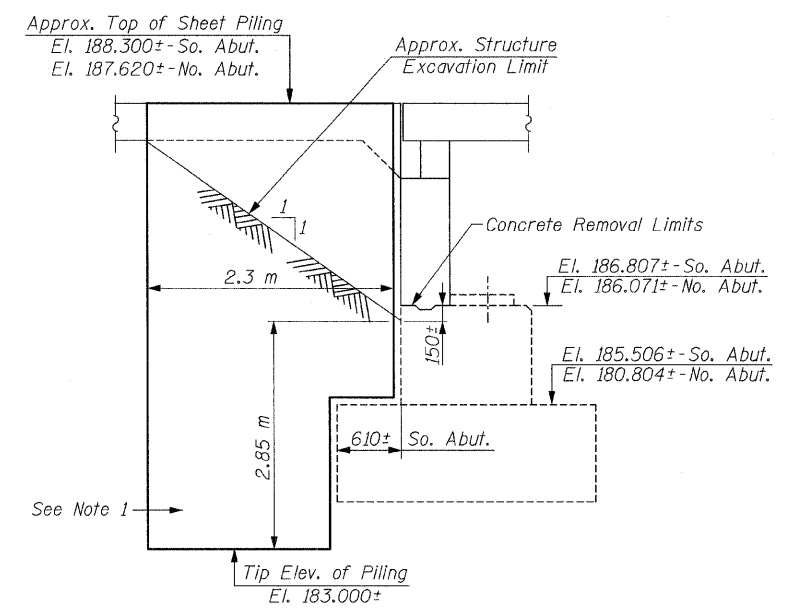
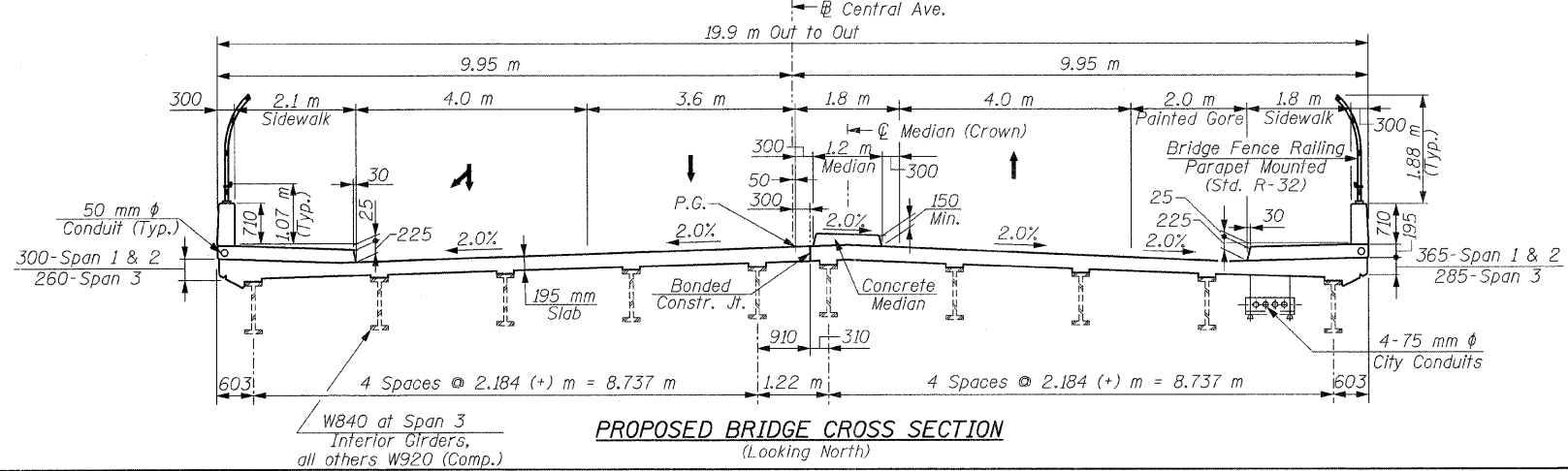
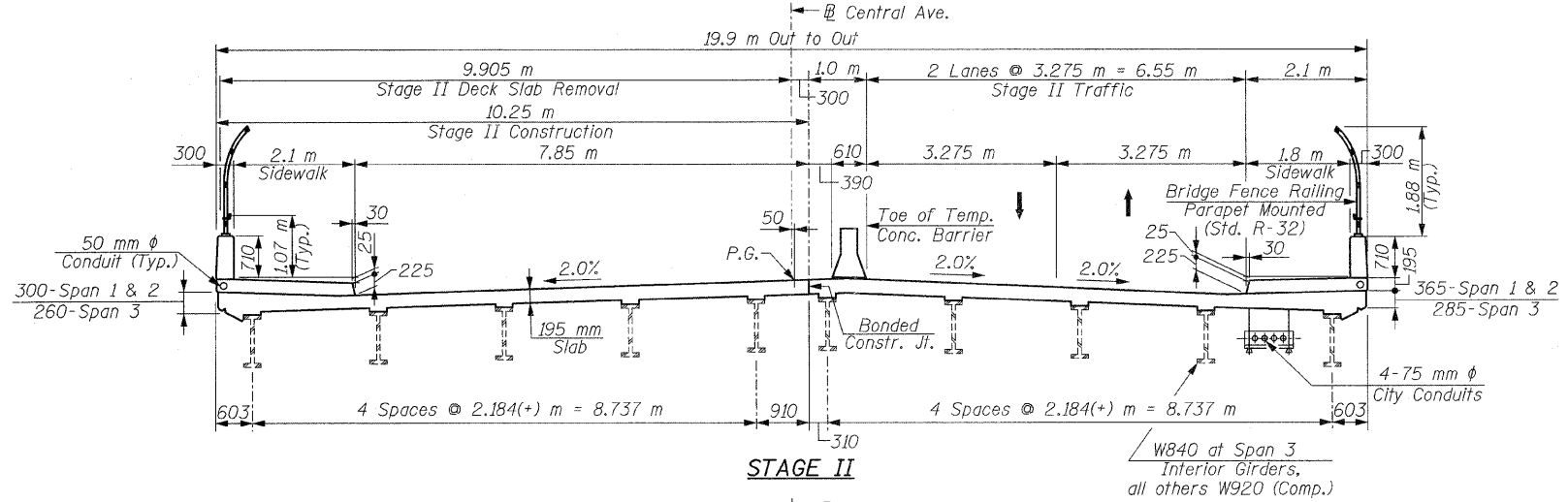
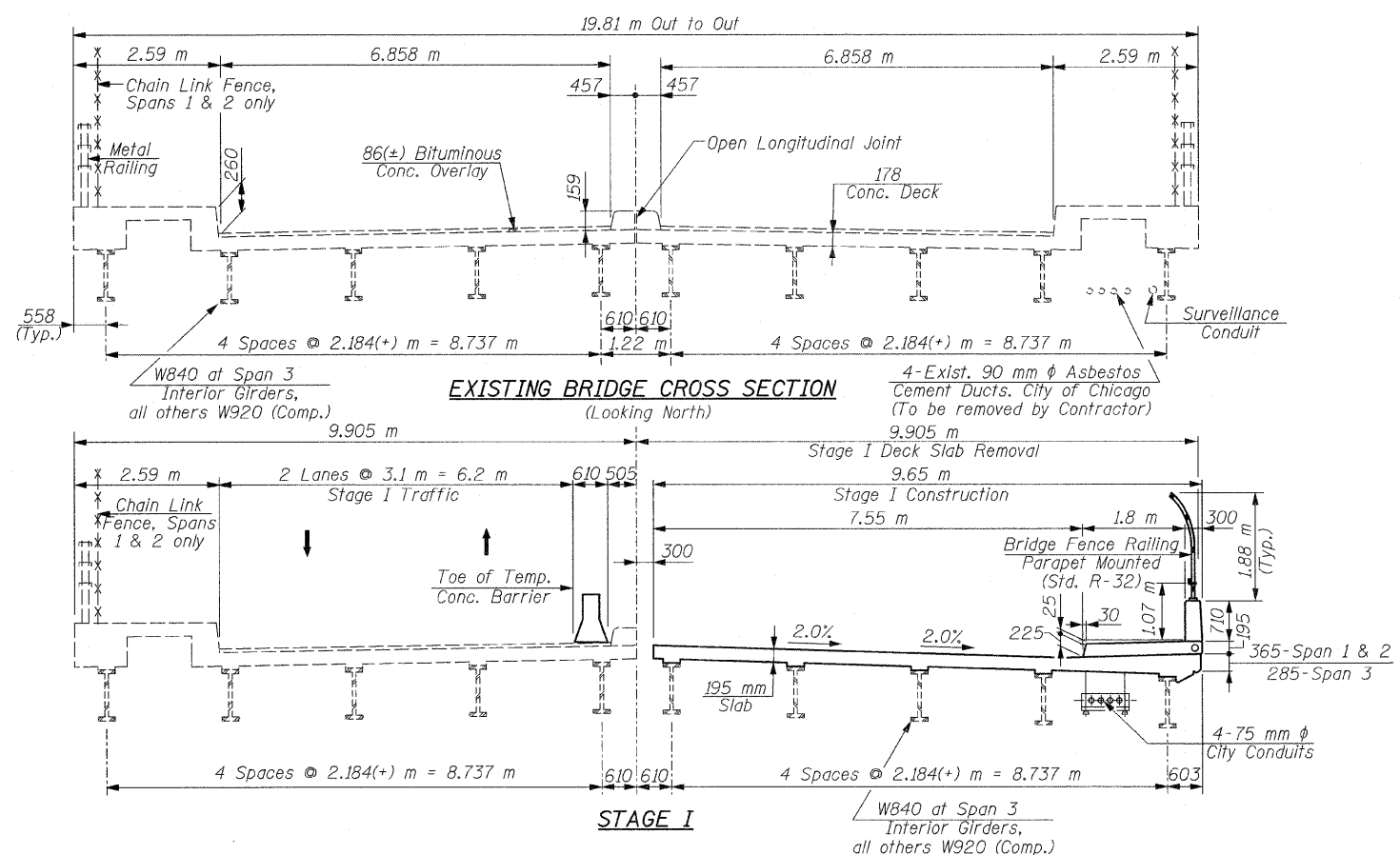
NOTES:

See Sht. S1 for location of Name Plate.

The Existing Name Plate shall be cleaned and relocated adjacent to the new Name Plate. Cost is included with Name Plates.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION	
GENERAL NOTES AND TOTAL BILL OF MATERIAL CENTRAL AVENUE (FAU RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A. F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659	
SCALE: NONE	DRAWN BY: D.L./J.M.
DATE: JANUARY 16, 2009	CHECKED BY: B.M.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS	



Minimum Embedment Depth = 2.85 m
Minimum section modulus of Sheet Piling = $388 \times 10^3 \text{ mm}^3/\text{m}$
Sheet Piling shall be anchored to the existing abutments.

- NOTES:**
- If the Contractor chooses to alter the Temporary Cantilevered Sheet Pile design requirements shown on the Plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
 - All dimensions are in millimeters (mm) unless otherwise noted.
 - Quantity of Temporary Concrete Barrier is included with Roadway Plans.
 - Any Sheet piling not reaching the required embedment due to footing shall be anchored to the existing Abutment. Subject to approval by the Engineer.
 - The Contractor shall connect the first Sheet to the Existing Abutment Wall to ensure stability of Sheets driven to the top of the Existing Footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING & TEMPORARY SHEET PILING

CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.

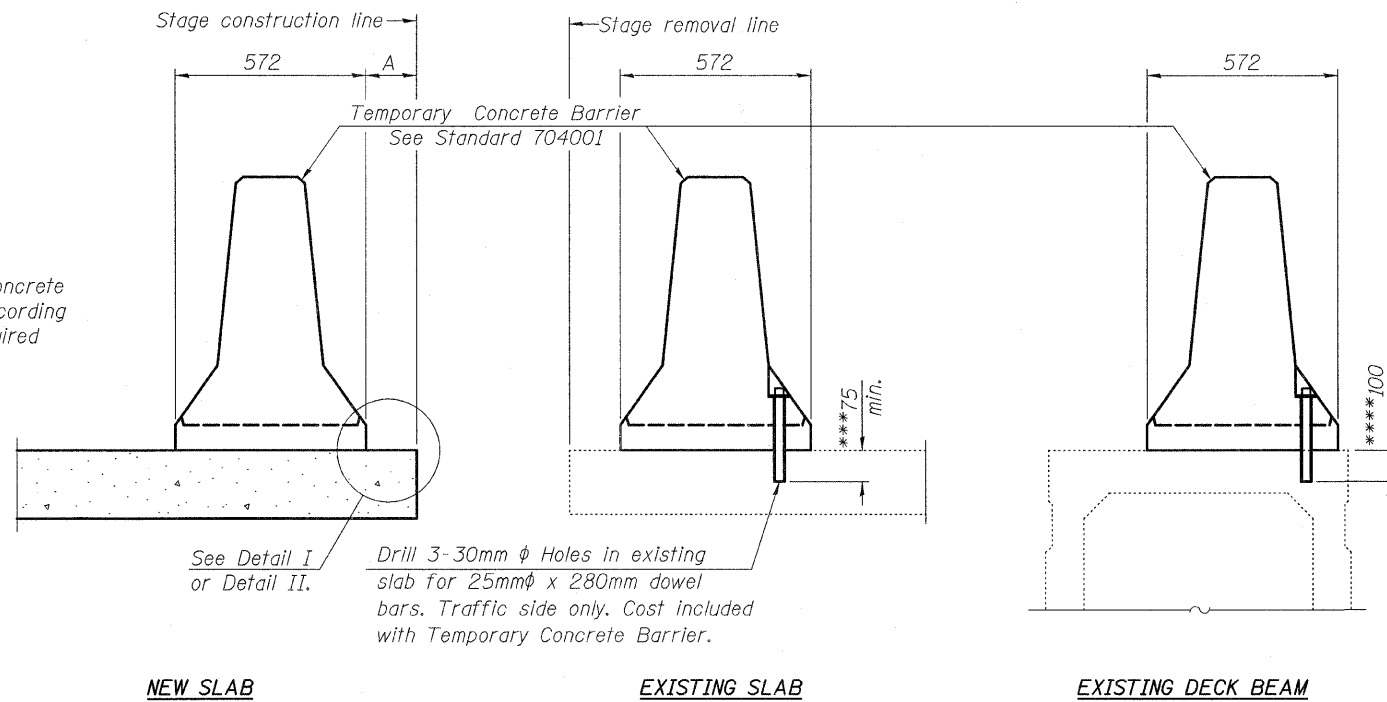
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	51
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

When "A" is 1.067m 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 1.067m.



Drill 3-30mm ϕ Holes in existing slab for 25mm ϕ x 280mm dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 25x180x250 steel \bar{P} to the top layer of couplers with 2- 16mm ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

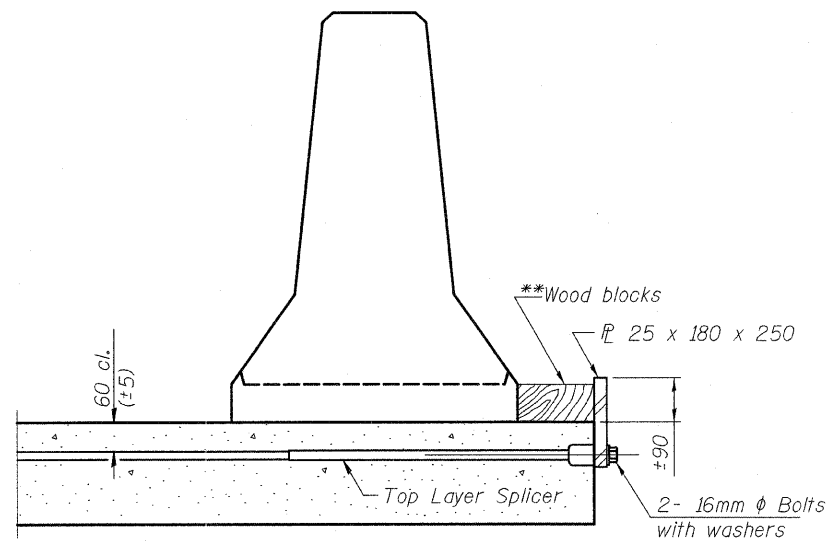
Detail II - With Extended Reinforcement Bars:
Connect one (1) 25x180x250 steel \bar{P} to the concrete slab or concrete wearing surface with 2- 16mm ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 25x180x250 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.

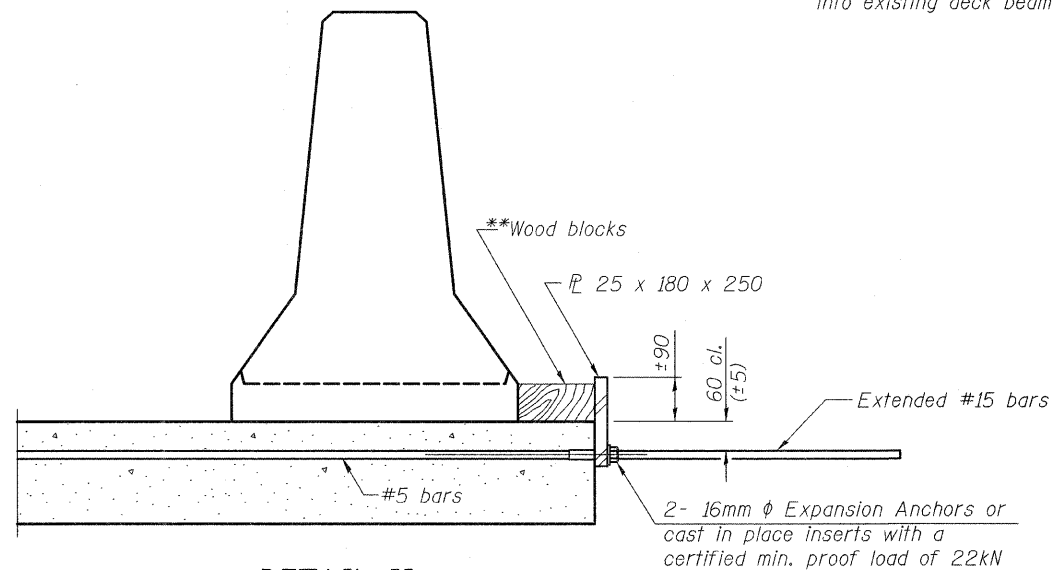
SECTIONS THRU SLAB OR DECK BEAM

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

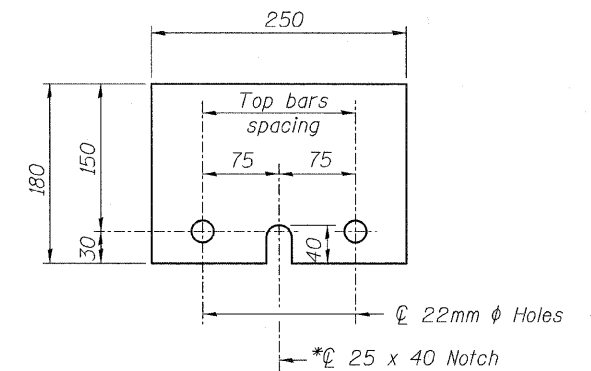
****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 25 x 180 x 250

*Required only with Detail II

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

R-27 10-1-08

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION

CENTRAL AVENUE (FAU RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.

F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

...\\PHEX\1803.cad\$DWG\$PLOT\$... 1/19/2009 7:28:30 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	54
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

BEAM 4					BEAM 5					CENTRAL AVE.					P. G. L.				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING	LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING	LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING	LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+954.621	-2.795	188.218	188.224	BK. OF S. ABUT.	0+953.010	-0.610	188.275	188.281	BK. OF S. ABUT.	0+952.560	0.000	188.291	188.297	BK. OF S. ABUT.	0+952.523	0.050	188.292	188.298
CL. BRG. S. ABUT.	0+955.654	-2.795	188.209	188.215	CL. BRG. S. ABUT.	0+954.043	-0.610	188.266	188.272	CL. BRG. S. ABUT.	0+953.593	0.000	188.282	188.288	CL. BRG. S. ABUT.	0+953.556	0.050	188.284	188.290
A	0+958.654	-2.795	188.184	188.198	A	0+957.043	-0.610	188.241	188.255	A	0+956.593	0.000	188.257	188.271	A	0+956.556	0.050	188.259	188.272
B	0+961.654	-2.795	188.160	188.178	B	0+960.043	-0.610	188.217	188.235	B	0+959.593	0.000	188.233	188.251	B	0+959.556	0.050	188.234	188.252
C	0+964.654	-2.795	188.135	188.155	C	0+963.043	-0.610	188.192	188.212	C	0+962.593	0.000	188.208	188.228	C	0+962.556	0.050	188.209	188.229
D	0+967.654	-2.795	188.110	188.125	D	0+966.043	-0.610	188.167	188.182	D	0+965.593	0.000	188.183	188.198	D	0+965.556	0.050	188.184	188.200
CL. S. BRG. PIER 2	0+971.448	-2.795	188.078	188.084	CL. S. BRG. PIER 2	0+969.837	-0.610	188.135	188.141	CL. S. BRG. PIER 2	0+969.387	0.000	188.151	188.157	CL. S. BRG. PIER 2	0+969.350	0.050	188.153	188.159
CL. PIER 2	0+971.637	-2.795	188.077	188.083	CL. PIER 2	0+970.026	-0.610	188.134	188.140	CL. PIER 2	0+969.576	0.000	188.150	188.156	CL. PIER 2	0+969.539	0.050	188.151	188.157
CL. N. BRG. PIER 2	0+971.826	-2.795	188.075	188.081	CL. N. BRG. PIER 2	0+970.215	-0.610	188.132	188.138	CL. N. BRG. PIER 2	0+969.765	0.000	188.148	188.154	CL. N. BRG. PIER 2	0+969.728	0.050	188.150	188.156
E	0+974.826	-2.795	188.050	188.074	E	0+973.215	-0.610	188.107	188.131	E	0+972.765	0.000	188.123	188.147	E	0+972.728	0.050	188.125	188.148
F	0+977.826	-2.795	188.026	188.061	F	0+976.215	-0.610	188.083	188.118	F	0+975.765	0.000	188.099	188.134	F	0+975.728	0.050	188.100	188.136
G	0+980.826	-2.795	188.001	188.046	G	0+979.215	-0.610	188.058	188.103	G	0+978.765	0.000	188.074	188.119	G	0+978.728	0.050	188.075	188.120
H	0+983.826	-2.795	187.976	188.025	H	0+982.215	-0.610	188.033	188.082	H	0+981.765	0.000	188.049	188.098	H	0+981.728	0.050	188.050	188.099
I	0+986.826	-2.795	187.951	187.999	I	0+985.215	-0.610	188.008	188.056	I	0+984.765	0.000	188.024	188.072	I	0+984.728	0.050	188.025	188.074
J	0+989.826	-2.795	187.926	187.969	J	0+988.215	-0.610	187.983	188.026	J	0+987.765	0.000	187.999	188.042	J	0+987.728	0.050	188.000	188.043
K	0+992.826	-2.795	187.901	187.935	K	0+991.215	-0.610	187.958	187.992	K	0+990.765	0.000	187.974	188.008	K	0+990.728	0.050	187.976	188.009
L	0+995.826	-2.795	187.876	187.901	L	0+994.215	-0.610	187.933	187.958	L	0+993.765	0.000	187.949	187.974	L	0+993.728	0.050	187.951	187.975
M	0+998.826	-2.795	187.852	187.868	M	0+997.215	-0.610	187.909	187.925	M	0+996.765	0.000	187.925	187.941	M	0+996.728	0.050	187.926	187.942
CL. PIER 1	1+003.150	-2.795	187.816	187.822	CL. PIER 1	1+001.539	-0.610	187.873	187.879	CL. PIER 1	1+001.089	0.000	187.889	187.895	CL. PIER 1	1+001.052	0.050	187.890	187.896
N	1+006.150	-2.795	187.791	187.797	N	1+004.539	-0.610	187.848	187.854	N	1+004.089	0.000	187.864	187.870	N	1+004.052	0.050	187.865	187.871
O	1+009.150	-2.795	187.766	187.775	O	1+007.539	-0.610	187.823	187.832	O	1+007.089	0.000	187.839	187.848	O	1+007.052	0.050	187.840	187.850
P	1+012.150	-2.795	187.741	187.758	P	1+010.539	-0.610	187.798	187.815	P	1+010.089	0.000	187.814	187.831	P	1+010.052	0.050	187.815	187.832
Q	1+015.150	-2.795	187.716	187.740	Q	1+013.539	-0.610	187.773	187.797	Q	1+013.089	0.000	187.789	187.813	Q	1+013.052	0.050	187.791	187.814
R	1+018.150	-2.795	187.691	187.720	R	1+016.539	-0.610	187.748	187.777	R	1+016.089	0.000	187.764	187.793	R	1+016.052	0.050	187.766	187.794
S	1+021.150	-2.795	187.666	187.697	S	1+019.539	-0.610	187.724	187.754	S	1+019.089	0.000	187.740	187.770	S	1+019.052	0.050	187.741	187.772
T	1+024.150	-2.795	187.637	187.666	T	1+022.539	-0.610	187.697	187.726	T	1+022.089	0.000	187.713	187.743	T	1+022.052	0.050	187.715	187.744
U	1+027.150	-2.795	187.602	187.626	U	1+025.539	-0.610	187.665	187.689	U	1+025.089	0.000	187.682	187.706	U	1+025.052	0.050	187.684	187.708
V	1+030.150	-2.795	187.562	187.576	V	1+028.539	-0.610	187.628	187.642	V	1+028.089	0.000	187.646	187.660	V	1+028.052	0.050	187.647	187.662
CL. BRG. N. ABUT.	1+032.257	-2.795	187.530	187.536	CL. BRG. N. ABUT.	1+030.646	-0.610	187.598	187.604	CL. BRG. N. ABUT.	1+030.196	0.000	187.617	187.623	CL. BRG. N. ABUT.	1+030.159	0.050	187.618	187.624
BK. OF N. ABUT.	1+033.290	-2.795	187.514	187.520	BK. OF N. ABUT.	1+031.679	-0.610	187.583	187.589	BK. OF N. ABUT.	1+031.229	0.000	187.602	187.608	BK. OF N. ABUT.	1+031.192	0.050	187.603	187.609

Notes:
See Sht. S5 for Elevations Location Plan.
All Elevations and Offsets are in meters.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
TOP OF SLAB ELEVATIONS-III CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.	
F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659	
SCALE: NONE	DRAWN BY: D.L./F.W.
DATE: JANUARY 16, 2009	CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS	

REVISIONS	
NAME	DATE

...TEMPERATURE CORRECTED... DATE: 7/19/2009 7:25:38 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	55
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60640				

BONDED CONSTR. JT.				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+952.339	0.300	188.299	188.305
CL. BRG. S. ABUT.	0+953.372	0.300	188.290	188.296
A	0+956.372	0.300	188.265	188.279
B	0+959.372	0.300	188.240	188.259
C	0+962.372	0.300	188.215	188.235
D	0+965.372	0.300	188.191	188.206
CL. S. BRG. PIER 2	0+969.166	0.300	188.159	188.165
CL. PIER 2	0+969.355	0.300	188.158	188.164
CL. N. BRG. PIER 2	0+969.544	0.300	188.156	188.162
E	0+972.544	0.300	188.131	188.154
F	0+975.544	0.300	188.106	188.142
G	0+978.544	0.300	188.081	188.126
H	0+981.544	0.300	188.057	188.106
I	0+984.544	0.300	188.032	188.080
J	0+987.544	0.300	188.007	188.050
K	0+990.544	0.300	187.982	188.016
L	0+993.544	0.300	187.957	187.982
M	0+996.544	0.300	187.932	187.948
CL. PIER 1	1+000.868	0.300	187.897	187.903
N	1+003.868	0.300	187.872	187.878
O	1+006.868	0.300	187.847	187.856
P	1+009.868	0.300	187.822	187.839
Q	1+012.868	0.300	187.797	187.821
R	1+015.868	0.300	187.772	187.801
S	1+018.868	0.300	187.747	187.778
T	1+021.868	0.300	187.721	187.751
U	1+024.868	0.300	187.691	187.715
V	1+027.868	0.300	187.655	187.669
CL. BRG. N. ABUT.	1+029.975	0.300	187.626	187.632
BK. OF N. ABUT.	1+031.008	0.300	187.611	187.617

BEAM 6				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+952.110	0.610	188.307	188.313
CL. BRG. S. ABUT.	0+953.143	0.610	188.298	188.304
A	0+956.143	0.610	188.273	188.287
B	0+959.143	0.610	188.248	188.267
C	0+962.143	0.610	188.224	188.244
D	0+965.143	0.610	188.199	188.214
CL. S. BRG. PIER 2	0+968.937	0.610	188.167	188.173
CL. PIER 2	0+969.126	0.610	188.166	188.172
CL. N. BRG. PIER 2	0+969.315	0.610	188.164	188.170
E	0+972.315	0.610	188.139	188.163
F	0+975.315	0.610	188.114	188.150
G	0+978.315	0.610	188.090	188.134
H	0+981.315	0.610	188.065	188.114
I	0+984.315	0.610	188.040	188.088
J	0+987.315	0.610	188.015	188.058
K	0+990.315	0.610	187.990	188.024
L	0+993.315	0.610	187.965	187.990
M	0+996.315	0.610	187.940	187.956
CL. PIER 1	1+000.639	0.610	187.905	187.911
N	1+003.639	0.610	187.880	187.886
O	1+006.639	0.610	187.855	187.864
P	1+009.639	0.610	187.830	187.847
Q	1+012.639	0.610	187.805	187.829
R	1+015.639	0.610	187.780	187.809
S	1+018.639	0.610	187.755	187.786
T	1+021.639	0.610	187.730	187.759
U	1+024.639	0.610	187.699	187.723
V	1+027.639	0.610	187.664	187.678
CL. BRG. N. ABUT.	1+029.746	0.610	187.636	187.642
BK. OF N. ABUT.	1+030.779	0.610	187.621	187.627

BEAM 7				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+950.499	2.795	188.290	188.296
CL. BRG. S. ABUT.	0+951.532	2.795	188.281	188.287
A	0+954.532	2.795	188.257	188.270
B	0+957.532	2.795	188.232	188.250
C	0+960.532	2.795	188.207	188.227
D	0+963.532	2.795	188.182	188.198
CL. S. BRG. PIER 2	0+967.326	2.795	188.151	188.157
CL. PIER 2	0+967.515	2.795	188.149	188.155
CL. N. BRG. PIER 2	0+967.704	2.795	188.147	188.153
F	0+970.704	2.795	188.123	188.146
G	0+973.704	2.795	188.098	188.134
H	0+976.704	2.795	188.073	188.118
I	0+979.704	2.795	188.048	188.097
J	0+982.704	2.795	188.023	188.072
K	0+985.704	2.795	187.998	188.041
L	0+988.704	2.795	187.973	188.007
M	0+991.704	2.795	187.949	187.973
N	0+994.704	2.795	187.924	187.940
CL. PIER 1	0+999.028	2.795	187.888	187.894
P	1+002.028	2.795	187.863	187.869
Q	1+005.028	2.795	187.838	187.848
R	1+008.028	2.795	187.813	187.830
S	1+011.028	2.795	187.788	187.812
T	1+014.028	2.795	187.764	187.792
U	1+017.028	2.795	187.739	187.770
V	1+020.028	2.795	187.714	187.743
W	1+023.028	2.795	187.686	187.710
X	1+026.028	2.795	187.653	187.668
CL. BRG. N. ABUT.	1+028.135	2.795	187.627	187.633
BK. OF N. ABUT.	1+029.168	2.795	187.613	187.619

BEAM 8				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+948.888	4.979	188.260	188.266
CL. BRG. S. ABUT.	0+949.921	4.979	188.251	188.257
A	0+952.921	4.979	188.226	188.240
B	0+955.921	4.979	188.201	188.220
C	0+958.921	4.979	188.177	188.197
D	0+961.921	4.979	188.152	188.167
CL. S. BRG. PIER 2	0+965.715	4.979	188.120	188.126
CL. PIER 2	0+965.904	4.979	188.119	188.125
CL. N. BRG. PIER 2	0+966.093	4.979	188.117	188.123
E	0+969.093	4.979	188.092	188.115
F	0+972.093	4.979	188.067	188.103
G	0+975.093	4.979	188.043	188.087
H	0+978.093	4.979	188.018	188.067
I	0+981.093	4.979	187.993	188.041
J	0+984.093	4.979	187.968	188.011
K	0+987.093	4.979	187.943	187.977
L	0+990.093	4.979	187.918	187.943
M	0+993.093	4.979	187.893	187.909
CL. PIER 1	0+997.417	4.979	187.858	187.864
N	1+000.417	4.979	187.833	187.839
O	1+003.417	4.979	187.808	187.817
P	1+006.417	4.979	187.783	187.800
Q	1+009.417	4.979	187.758	187.782
R	1+012.417	4.979	187.733	187.762
S	1+015.417	4.979	187.708	187.739
T	1+018.417	4.979	187.684	187.713
U	1+021.417	4.979	187.658	187.682
V	1+024.417	4.979	187.628	187.643
CL. BRG. N. ABUT.	1+026.524	4.979	187.604	187.610
BK. OF N. ABUT.	1+027.557	4.979	187.591	187.597

Notes:
See Sht. S5 for Elevations Location Plan.
All Elevations and Offsets are in meters.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
TOP OF SLAB ELEVATIONS-IV CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A. F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659	
SCALE: NONE	DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009	CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS	

REVISIONS	
NAME	DATE

1/16/2009 7:26:35 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
90	1213B-1	COOK	94	56
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				

BEAM 9					EDGE OF E. SIDEWALK					BEAM 10				
LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING	LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING	LOCATION	STATION	OFFSET	THEORET. GRADE EL.	THEORET. GRADE EL. ADJ. FOR DEAD LOAD DEFLECTIONS AND GRINDING
BK. OF S. ABUT.	0+947.277	7.163	188.229	188.235	BK. OF S. ABUT.	0+946.770	7.850	188.220	188.226	BK. OF S. ABUT.	0+945.666	9.347	188.199	188.205
CL. BRG. S. ABUT.	0+948.310	7.163	188.221	188.227	CL. BRG. S. ABUT.	0+947.803	7.850	188.211	188.217	CL. BRG. S. ABUT.	0+946.699	9.347	188.190	188.196
A	0+951.310	7.163	188.196	188.210	A	0+950.803	7.850	188.186	188.200	A	0+949.699	9.347	188.166	188.179
B	0+954.310	7.163	188.171	188.190	B	0+953.803	7.850	188.161	188.180	B	0+952.699	9.347	188.141	188.159
C	0+957.310	7.163	188.146	188.166	C	0+956.803	7.850	188.137	188.157	C	0+955.699	9.347	188.116	188.136
D	0+960.310	7.163	188.121	188.137	D	0+959.803	7.850	188.112	188.127	D	0+958.699	9.347	188.091	188.107
CL. S. BRG. PIER 2	0+964.104	7.163	188.090	188.096	CL. S. BRG. PIER 2	0+963.597	7.850	188.080	188.086	CL. S. BRG. PIER 2	0+962.493	9.347	188.060	188.066
CL. PIER 2	0+964.293	7.163	188.088	188.094	CL. PIER 2	0+963.786	7.850	188.079	188.085	CL. PIER 2	0+962.682	9.347	188.058	188.064
CL. N. BRG. PIER 2	0+964.482	7.163	188.087	188.093	CL. N. BRG. PIER 2	0+963.975	7.850	188.077	188.083	CL. N. BRG. PIER 2	0+962.871	9.347	188.056	188.062
E	0+967.482	7.163	188.062	188.085	E	0+966.975	7.850	188.052	188.076	E	0+965.871	9.347	188.032	188.055
F	0+970.482	7.163	188.037	188.073	F	0+969.975	7.850	188.027	188.063	F	0+968.871	9.347	188.007	188.043
G	0+973.482	7.163	188.012	188.057	G	0+972.975	7.850	188.003	188.047	G	0+971.871	9.347	187.982	188.027
H	0+976.482	7.163	187.987	188.037	H	0+975.975	7.850	187.978	188.027	H	0+974.871	9.347	187.957	188.006
I	0+979.482	7.163	187.962	188.011	I	0+978.975	7.850	187.953	188.001	I	0+977.871	9.347	187.932	187.981
J	0+982.482	7.163	187.938	187.980	J	0+981.975	7.850	187.928	187.971	J	0+980.871	9.347	187.907	187.950
K	0+985.482	7.163	187.913	187.947	K	0+984.975	7.850	187.903	187.937	K	0+983.871	9.347	187.882	187.916
L	0+988.482	7.163	187.888	187.912	L	0+987.975	7.850	187.878	187.903	L	0+986.871	9.347	187.858	187.882
M	0+991.482	7.163	187.863	187.879	M	0+990.975	7.850	187.853	187.870	M	0+989.871	9.347	187.833	187.849
CL. PIER 1	0+995.806	7.163	187.827	187.833	CL. PIER 1	0+995.299	7.850	187.818	187.824	CL. PIER 1	0+994.195	9.347	187.797	187.803
N	0+998.806	7.163	187.802	187.808	N	0+998.299	7.850	187.793	187.799	N	0+997.195	9.347	187.772	187.778
O	1+001.806	7.163	187.777	187.787	O	1+001.299	7.850	187.768	187.777	O	1+000.195	9.347	187.747	187.757
P	1+004.806	7.163	187.753	187.769	P	1+004.299	7.850	187.743	187.760	P	1+003.195	9.347	187.722	187.739
Q	1+007.806	7.163	187.728	187.751	Q	1+007.299	7.850	187.718	187.742	Q	1+006.195	9.347	187.697	187.721
R	1+010.806	7.163	187.703	187.731	R	1+010.299	7.850	187.693	187.722	R	1+009.195	9.347	187.673	187.701
S	1+013.806	7.163	187.678	187.709	S	1+013.299	7.850	187.669	187.699	S	1+012.195	9.347	187.648	187.679
T	1+016.806	7.163	187.653	187.682	T	1+016.299	7.850	187.644	187.673	T	1+015.195	9.347	187.623	187.652
U	1+019.806	7.163	187.628	187.652	U	1+019.299	7.850	187.619	187.643	U	1+018.195	9.347	187.598	187.622
V	1+022.806	7.163	187.601	187.616	V	1+022.299	7.850	187.592	187.607	V	1+021.195	9.347	187.573	187.587
CL. BRG. N. ABUT.	1+024.913	7.163	187.579	187.585	CL. BRG. N. ABUT.	1+024.406	7.850	187.571	187.577	CL. BRG. N. ABUT.	1+023.302	9.347	187.552	187.558
BK. OF N. ABUT.	1+025.946	7.163	187.567	187.573	BK. OF N. ABUT.	1+025.439	7.850	187.559	187.565	BK. OF N. ABUT.	1+024.335	9.347	187.542	187.548

Notes:
See Sht. S5 for Elevations Location Plan.
All Elevations and Offsets are in meters.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TOP OF SLAB ELEVATIONS-V CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A. F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659 SCALE: NONE DRAWN BY: D.L./F.M. DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.N.
NAME	DATE	
CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS		

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AT SOUTH APPROACH PAVEMENT

EDGE OF W. SIDEWALK

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
END S. APPR. PAV'T.	0+949.315	-7.550	188.167	188.173
A	0+952.315	-7.550	188.142	188.148
B	0+955.315	-7.550	188.117	188.123
BEGIN S. APPR. PAV'T.	0+958.315	-7.550	188.092	188.098

CENTRAL AVE.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
END S. APPR. PAV'T.	0+943.746	0.000	188.364	188.370
A	0+946.746	0.000	188.339	188.345
B	0+949.746	0.000	188.314	188.320
BEGIN S. APPR. PAV'T.	0+952.746	0.000	188.289	188.295

P.G.L.

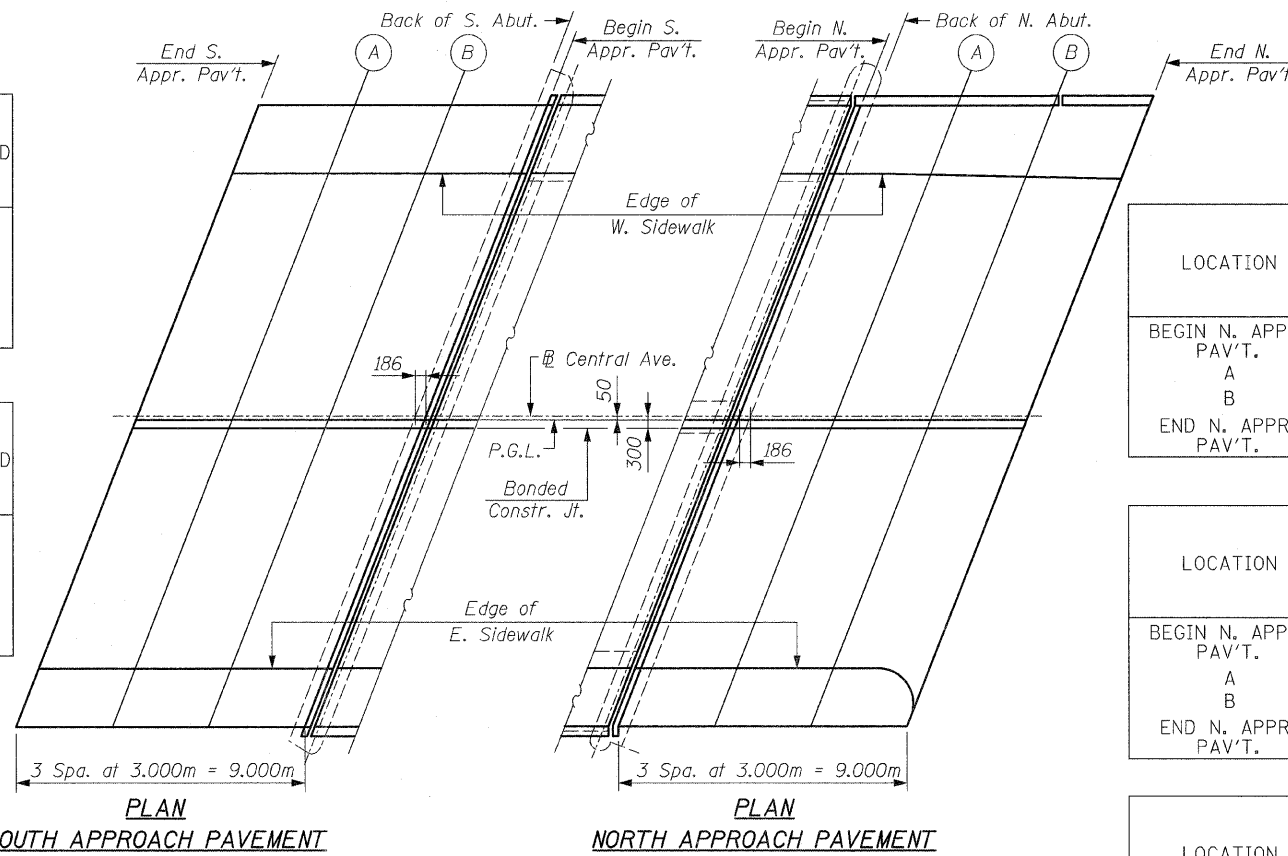
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
END S. APPR. PAV'T.	0+943.709	0.050	188.365	188.371
A	0+946.709	0.050	188.340	188.346
B	0+949.709	0.050	188.315	188.321
BEGIN S. APPR. PAV'T.	0+952.709	0.050	188.291	188.297

BONDED CONSTR. JT.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
END S. APPR. PAV'T.	0+943.525	0.300	188.372	188.378
A	0+946.525	0.300	188.347	188.353
B	0+949.525	0.300	188.322	188.328
BEGIN S. APPR. PAV'T.	0+952.525	0.300	188.297	188.303

EDGE OF E. SIDEWALK

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
END S. APPR. PAV'T.	0+937.956	7.850	188.293	188.299
A	0+940.956	7.850	188.268	188.274
B	0+943.956	7.850	188.243	188.249
BEGIN S. APPR. PAV'T.	0+946.956	7.850	188.218	188.224



PLAN SOUTH APPROACH PAVEMENT

PLAN NORTH APPROACH PAVEMENT

NOTE:
All Elevations and Offsets are in Meters

SHEET S10 OF S27

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	57
STA.		TO STA.		
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640

AT NORTH APPROACH PAVEMENT

EDGE OF W. SIDEWALK

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
BEGIN N. APPR. PAV'T.	1+036.612	-7.550	187.362	187.368
A	1+039.612	-7.550	187.306	187.312
B	1+042.612	-7.550	187.248	187.254
END N. APPR. PAV'T.	1+045.612	-7.550	187.198	187.204

CENTRAL AVE.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
BEGIN N. APPR. PAV'T.	1+031.043	0.000	187.605	187.611
A	1+034.043	0.000	187.558	187.564
B	1+037.043	0.000	187.506	187.512
END N. APPR. PAV'T.	1+040.043	0.000	187.448	187.454

P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
BEGIN N. APPR. PAV'T.	1+031.006	0.050	187.606	187.612
A	1+034.006	0.050	187.559	187.565
B	1+037.006	0.050	187.507	187.513
END N. APPR. PAV'T.	1+040.006	0.050	187.450	187.456

BONDED CONSTR. JT.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
BEGIN N. APPR. PAV'T.	1+030.822	0.300	187.614	187.620
A	1+033.833	0.300	187.567	187.573
B	1+036.822	0.300	187.516	187.522
END N. APPR. PAV'T.	1+039.822	0.300	187.459	187.465

EDGE OF E. SIDEWALK

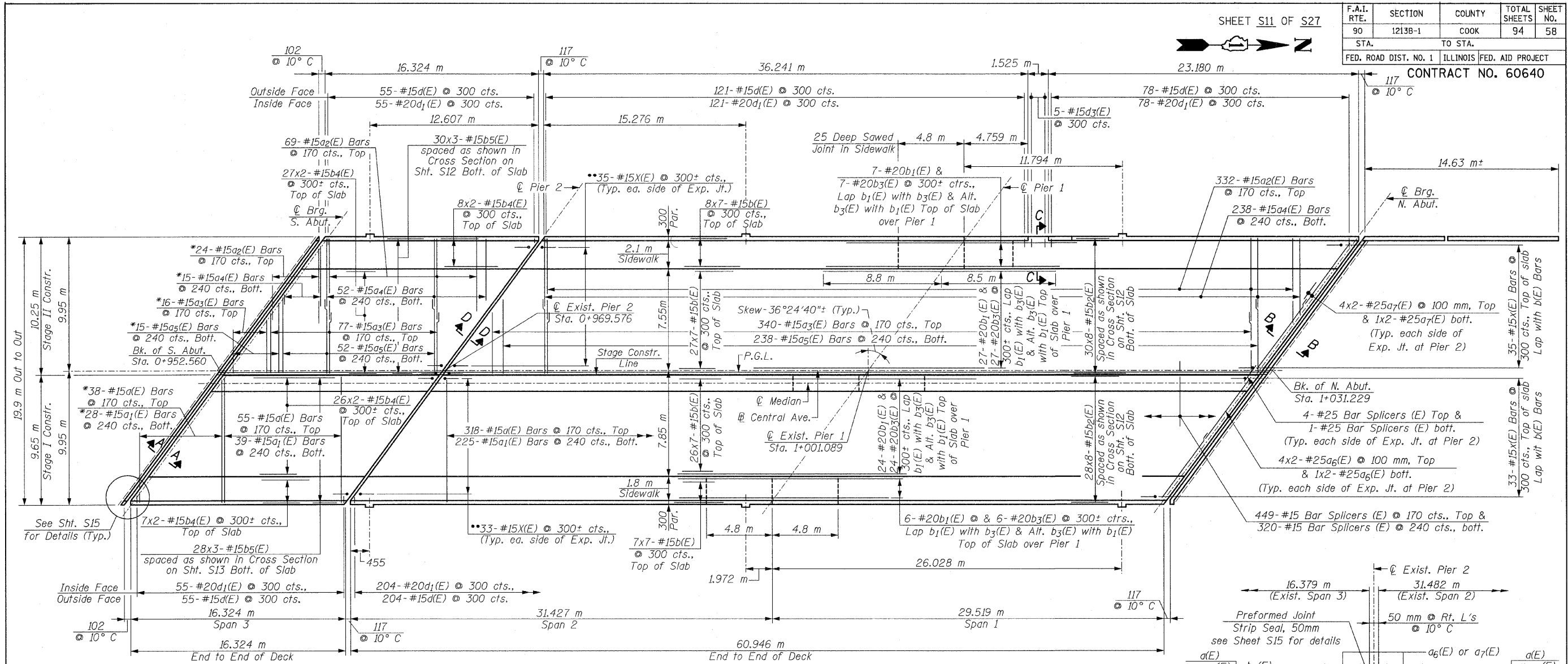
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR GRINDING
BEGIN N. APPR. PAV'T.	1+025.253	7.850	187.561	187.567
A	1+028.253	7.850	187.525	187.531
B	1+031.253	7.850	187.483	187.489
END N. APPR. PAV'T.	1+034.253	7.850	187.435	187.441

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**APPROACH PAVEMENT ELEVATIONS
 CENTRAL AVENUE (F.A.U. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659**
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	58
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

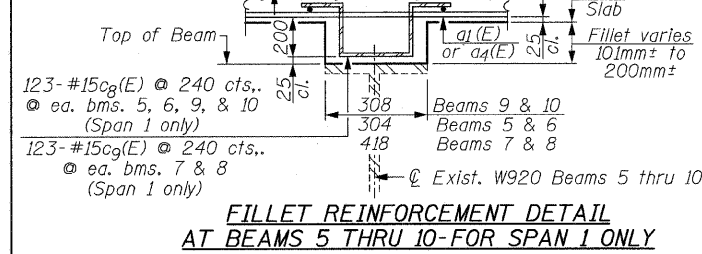
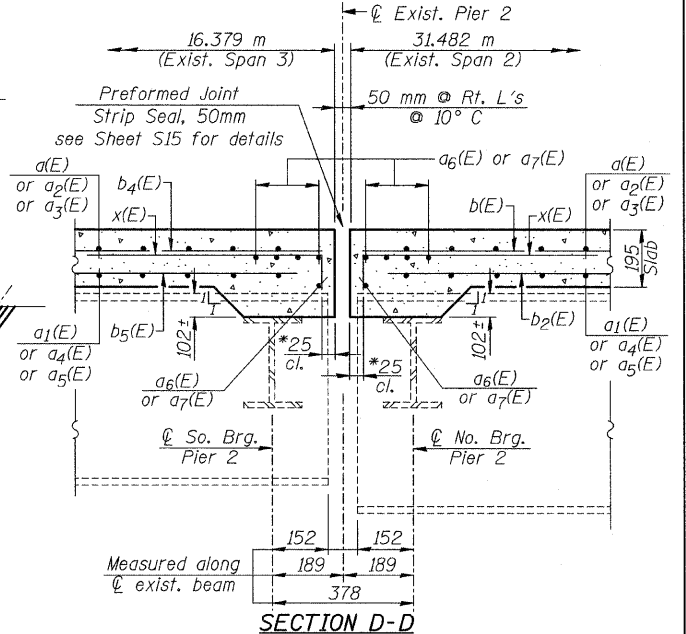
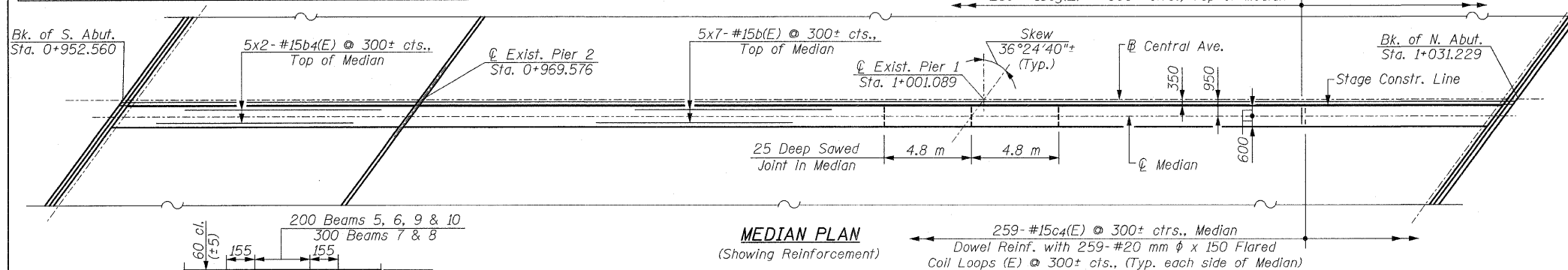
CONTRACT NO. 60640



* Order a(E) thru a5(E) Bars full length for Span 3 & Span 2. Cut to fit skew and use remainder of Bars in opposite end of Span 3 & Span 1

** Lap with b4(E) Bars at Span 1
Lap with b(E) Bars at Span 2
(See Section D-D, this Sheet)

Min. Bar Lap:
#15 Bars = 510 (Unless Otherwise Shown)
#20 Bars = 790



NOTES:
See Sht. S13 for Section A-A, Section B-B & Section C-C, Superstructure Details and Bill of Material.
See Sht. S12 for Sidewalk and Parapet Reinforcement.
See Sht. S13 for Deck Cross Section.
See Sht. S15 for Expansion Joint Details.
Bars indicated thus 28x8-#15 etc., indicates 28 lines of Bars with 8 lengths per line.
Reinforcement Bars designated (E) shall be Epoxy Coated.

See Sheet S27 for Bar Splicer Details.
See Lighting Plans for the locations and details for Underpass Lighting. Provide Expansion Anchors, heavy duty as approved by the Engineer for Lumina Hanger Assembly. For details see Lighting Plans. Cost of Expansion Anchors included with Concrete Superstructure.
All dimensions are in millimeter (mm) except as noted.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

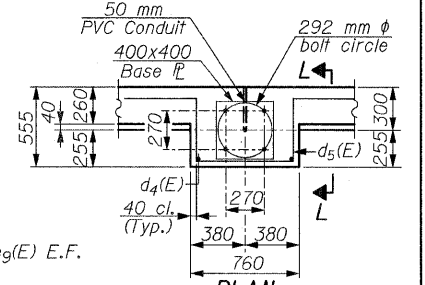
DECK PLAN
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.

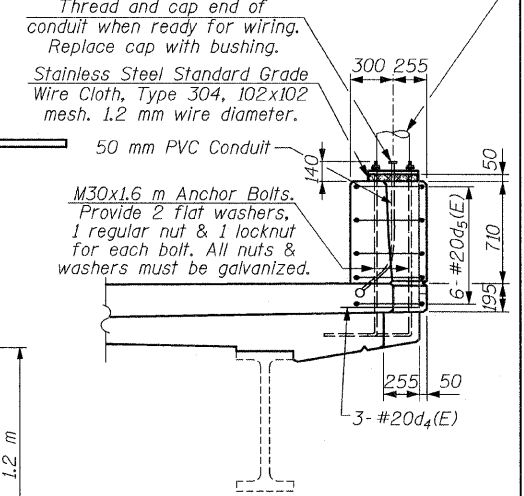
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	59
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			

CONTRACT NO. 60640
 * 13 mm Concrete Jt. Sealer at Existing Expansion Jt., Located at Existing Wingwall. Cost included with Concrete Superstructure.



NOTE:
 Cost of Anchor Bolts is included with "Concrete Superstructure"
 City of Chicago Light Pole to be mounted

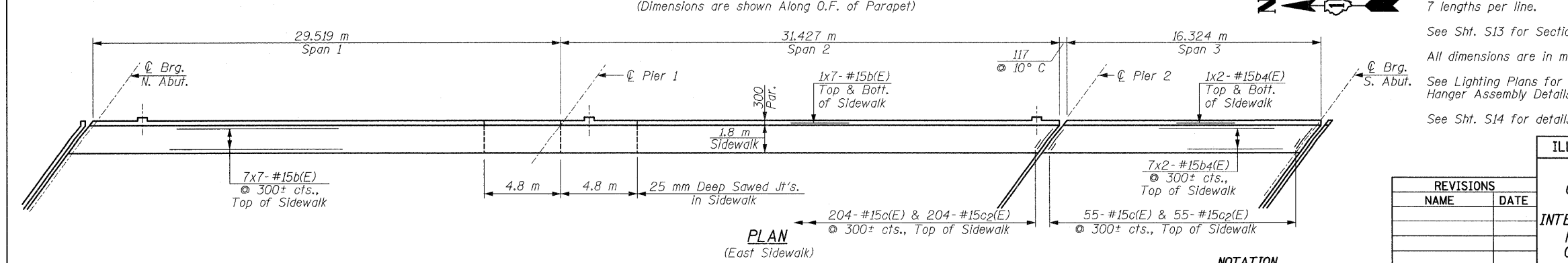
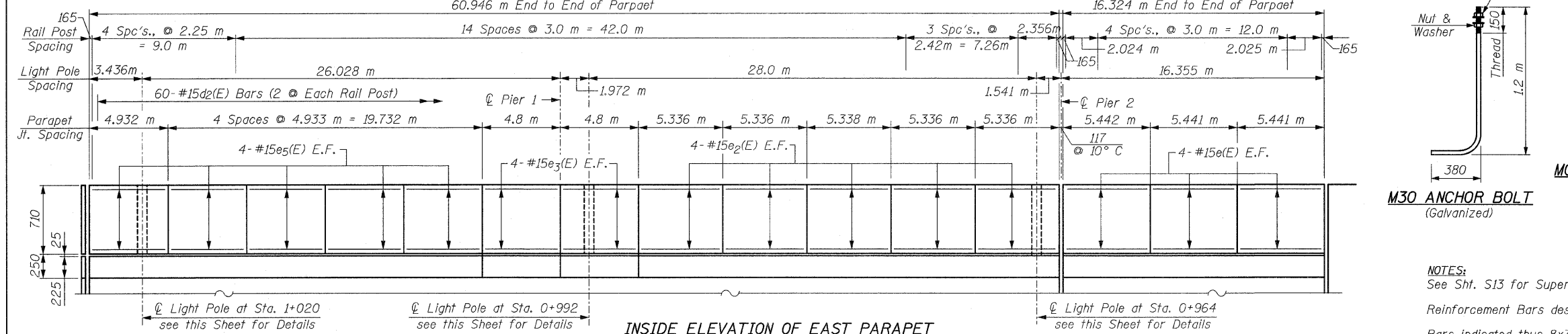
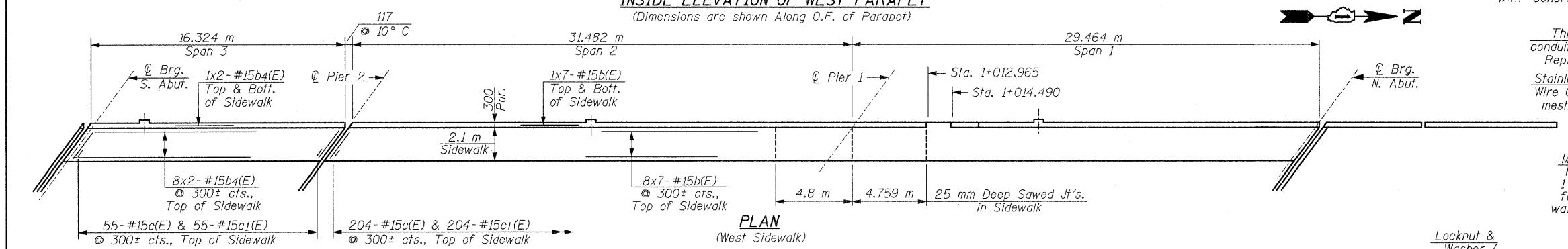
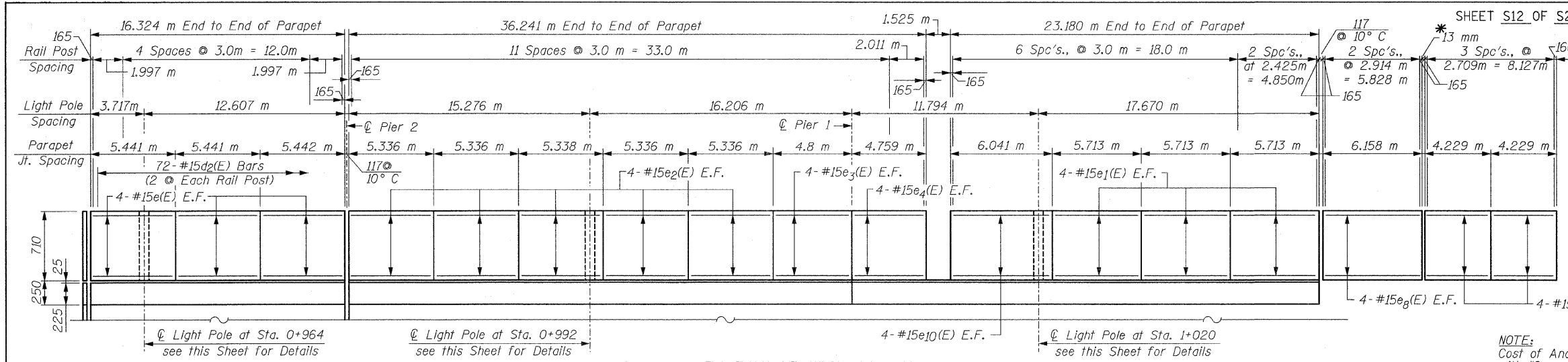


M30 ANCHOR BOLT
 (Galvanized)

NOTES:
 See Sht. S13 for Superstructure Bill of Material.
 Reinforcement Bars designated (E) shall be Epoxy Coated.
 Bars indicated thus 8x7-#15 ect., indicates 8 line of bars with 7 lengths per line.
 See Sht. S13 for Section thru East Sidewalk and Parapet Joint Details.
 All dimensions are in millimeters (mm) except as noted.
 See Lighting Plans for details of Embedded Conduit & Luminaire Hanger Assembly Details for Underpass Lighting.
 See Sht. S14 for details of Rail Post for Bridge Fence Railing.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIDEWALK PLANS AND PARAPETS
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./J.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS



MIN. BAR LAP
 #15 Bars = 510

NOTATION
 E.F. = Each Face
 I.F. = Inside Face
 O.F. = Outside Face

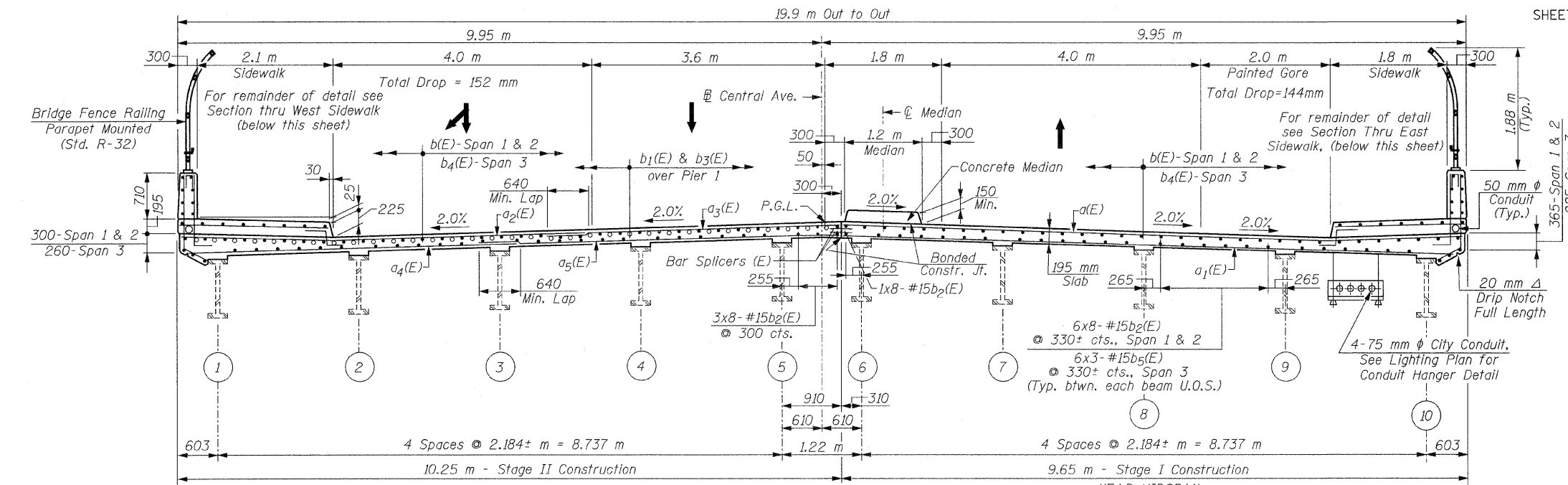
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	60
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

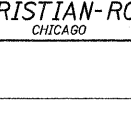
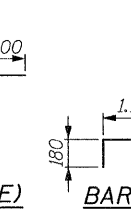
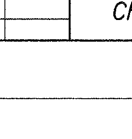
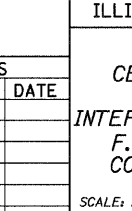
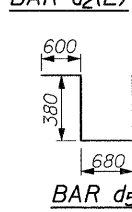
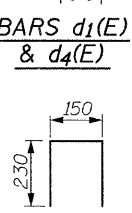
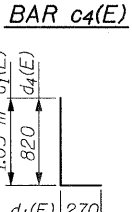
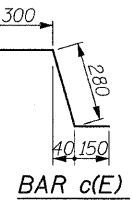
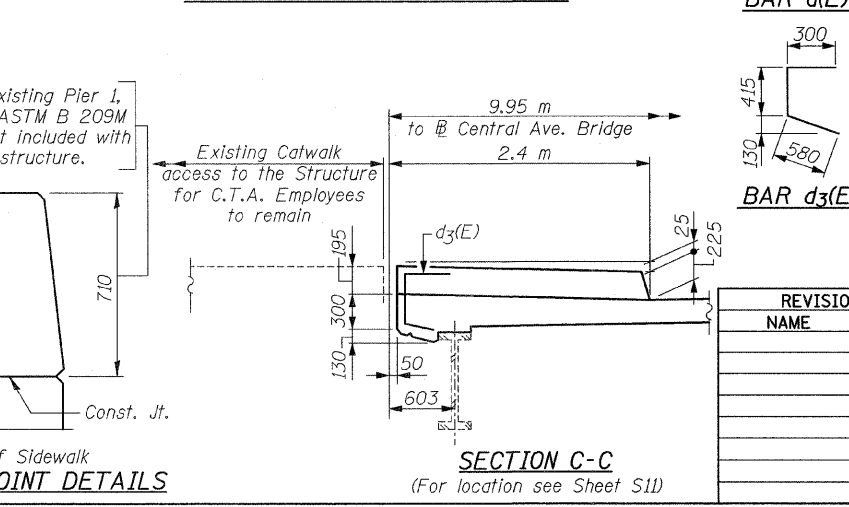
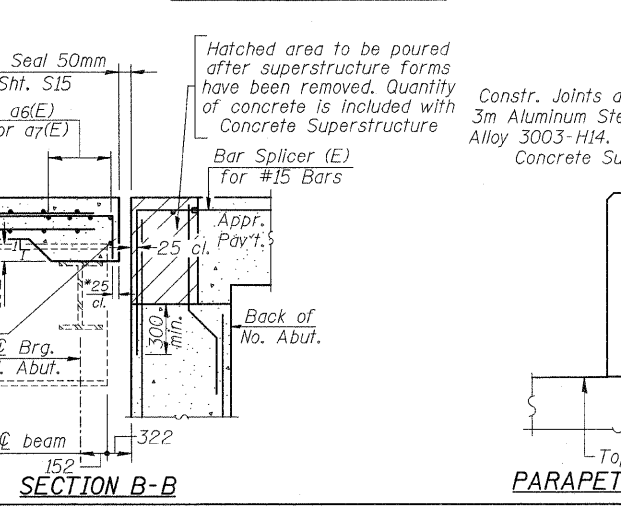
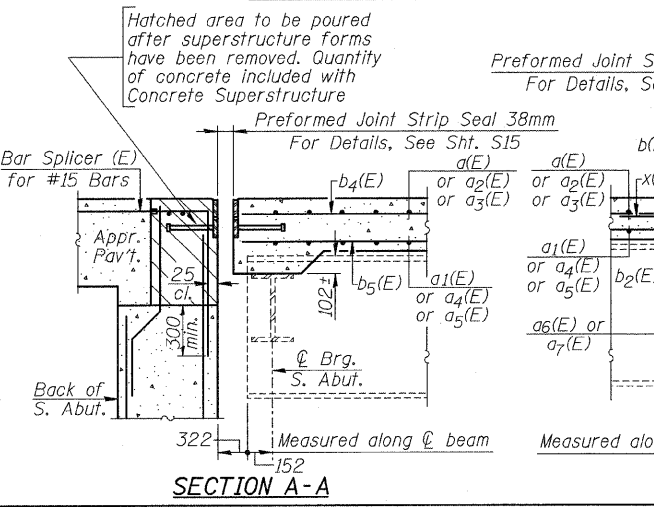
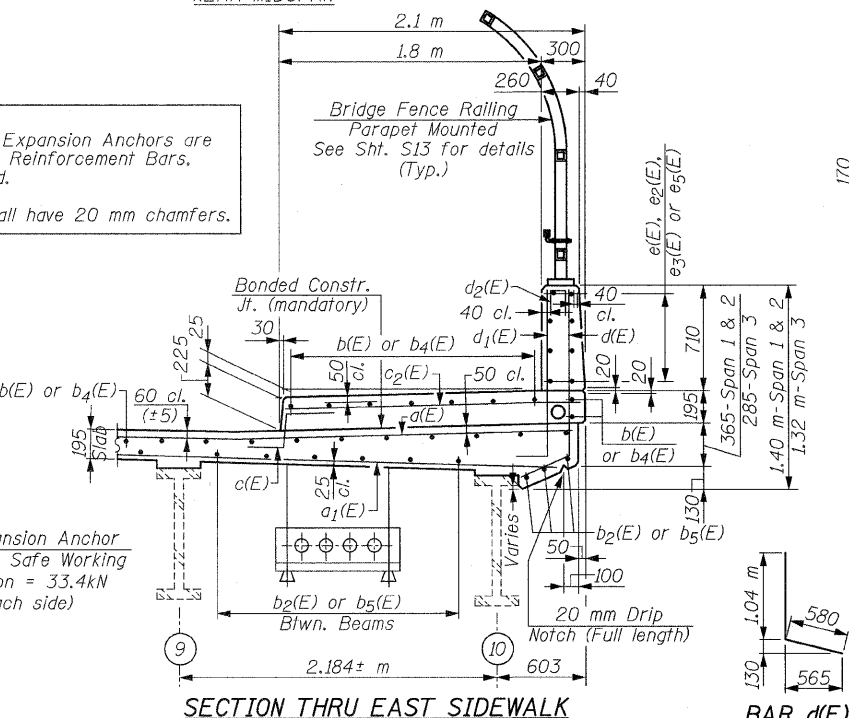
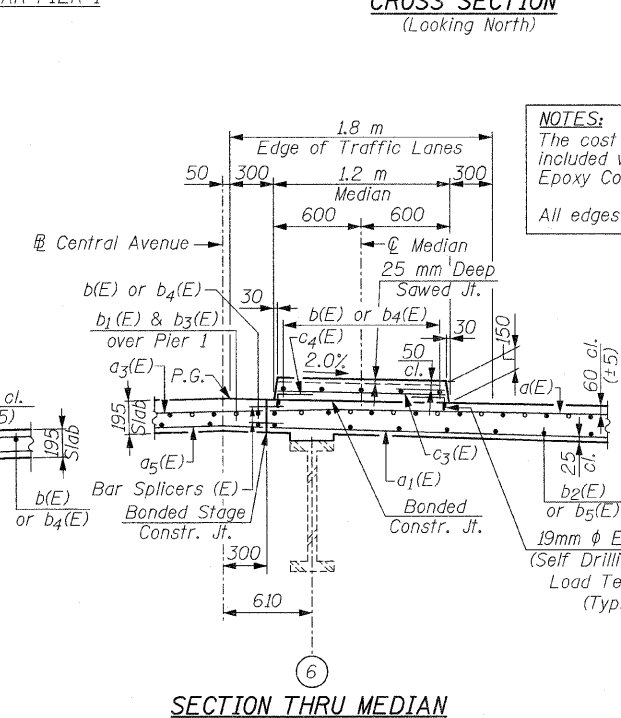
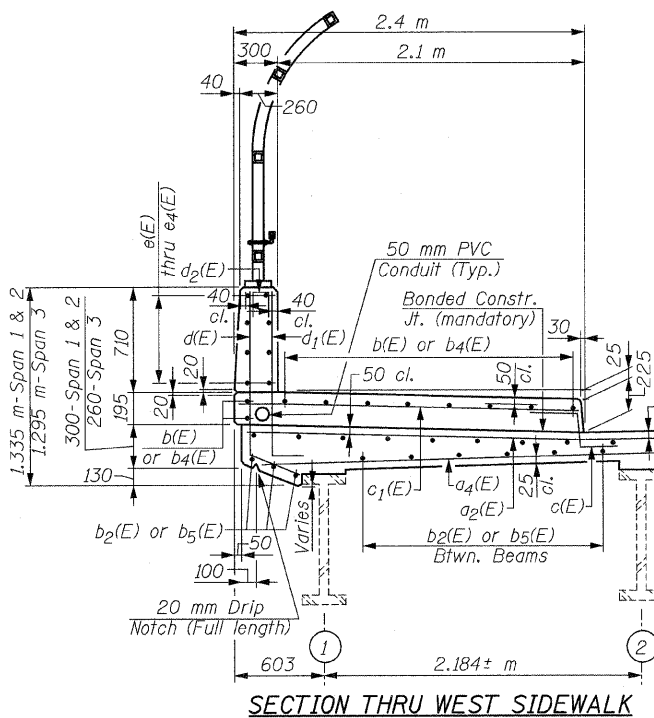
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length (m)	Shape
a(E)	449	#15	9.52	—
a ₁ (E)	320	#15	9.24	—
a ₂ (E)	449	#15	6.29	—
a ₃ (E)	449	#15	4.47	—
a ₄ (E)	320	#15	4.92	—
a ₅ (E)	320	#15	5.56	—
a ₆ (E)	30	#25	6.49	—
a ₇ (E)	30	#25	6.86	—
b(E)	644	#15	9.14	—
b ₁ (E)	64	#20	11.00	—
b ₂ (E)	464	#15	8.06	—
b ₃ (E)	64	#20	7.09	—
b ₄ (E)	184	#15	8.40	—
b ₅ (E)	174	#15	5.77	—
c(E)	518	#15	0.73	—
c ₁ (E)	259	#15	2.30	—
c ₂ (E)	259	#15	2.00	—
c ₃ (E)	259	#15	1.08	—
c ₄ (E)	518	#15	0.47	—
c ₈ (E)	492	#15	0.91	—
c ₉ (E)	246	#15	1.01	—
d(E)	513	#15	1.62	—
d ₁ (E)	513	#20	1.32	—
d ₂ (E)	132	#15	0.61	—
d ₃ (E)	5	#15	1.30	—
d ₄ (E)	18	#20	1.42	—
d ₅ (E)	36	#20	2.64	—
e(E)	48	#15	5.38	—
e ₁ (E)	24	#15	5.63	—
e ₂ (E)	80	#15	5.25	—
e ₃ (E)	24	#15	4.72	—
e ₄ (E)	8	#15	4.68	—
e ₅ (E)	40	#15	4.86	—
e ₈ (E)	8	#15	6.08	—
e ₉ (E)	16	#15	4.15	—
e ₁₀ (E)	8	#15	5.96	—
x(E)	204	#15	1.28	—
Concrete Superstructure			m ³	491
Reinforcement Bars, Epoxy Coated			kg	57,680
Bar Splicers			Each	784



**CROSS SECTION
(Looking North)**

NOTES:
The cost of Expansion Anchors is included with Reinforcement Bars, Epoxy Coated.
All edges shall have 20 mm chamfers.



ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK CROSS SECTION & SUPERSTRUCTURE DETAILS
CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A. F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.
DATE: JANUARY 16, 2009

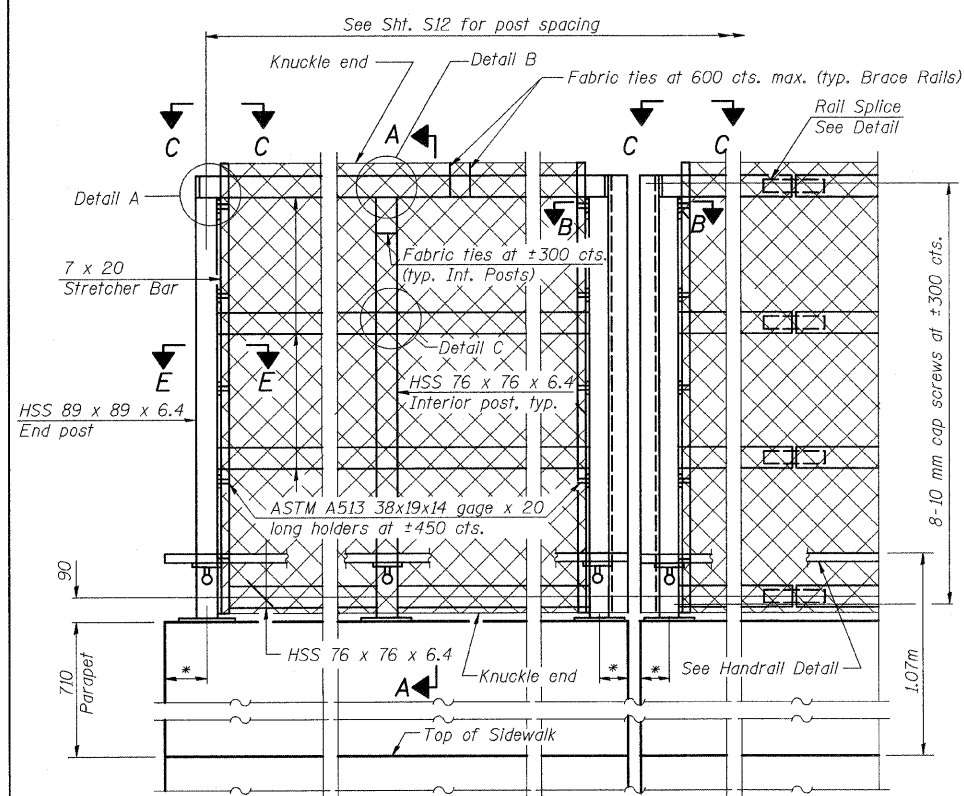
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

REVISIONS	
NAME	DATE

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	61
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

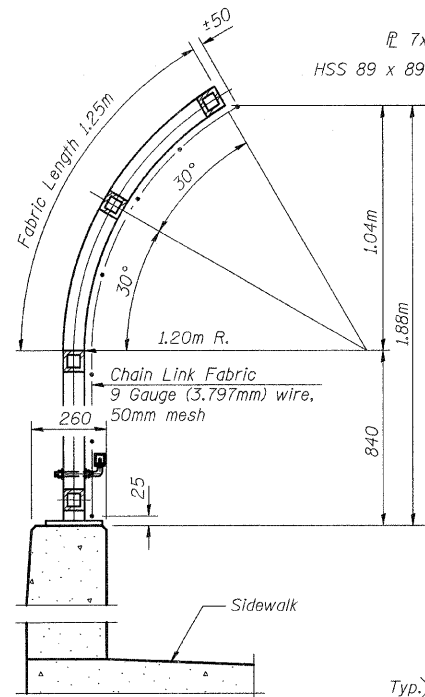
CONTRACT NO. 60640

All post, railing, splices, anchor devices and Plates shall be painted using the Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System. The color of the Acrylic finish shall be Reddish Brown, Munsell No. 2.5YR3/4.

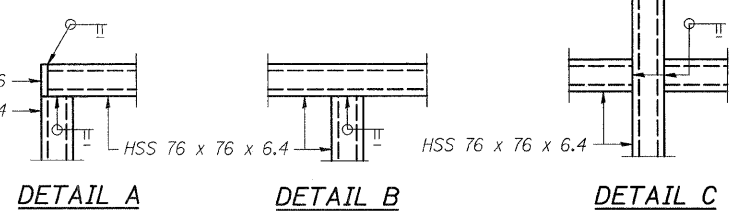


*Variable - See Sht. S12 or Sht. S15

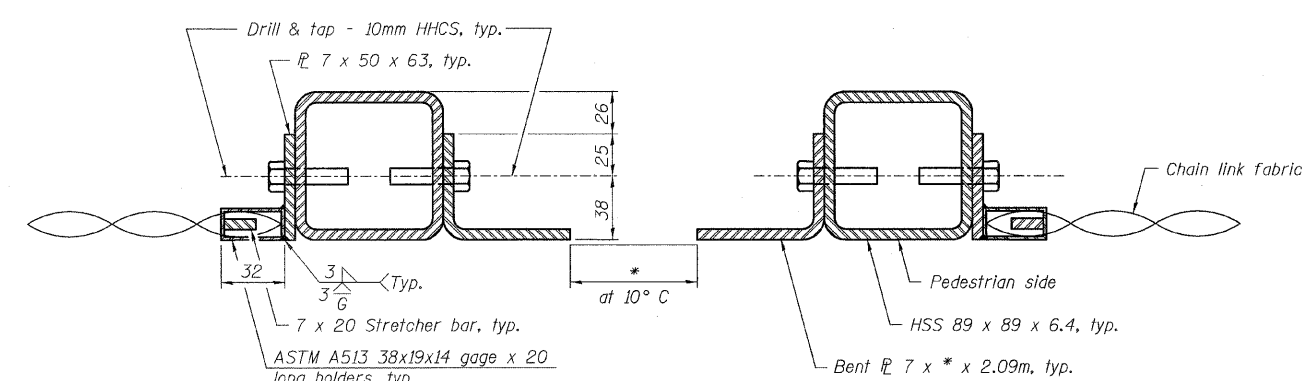
ELEVATION
(Inside Face)



SECTION A-A

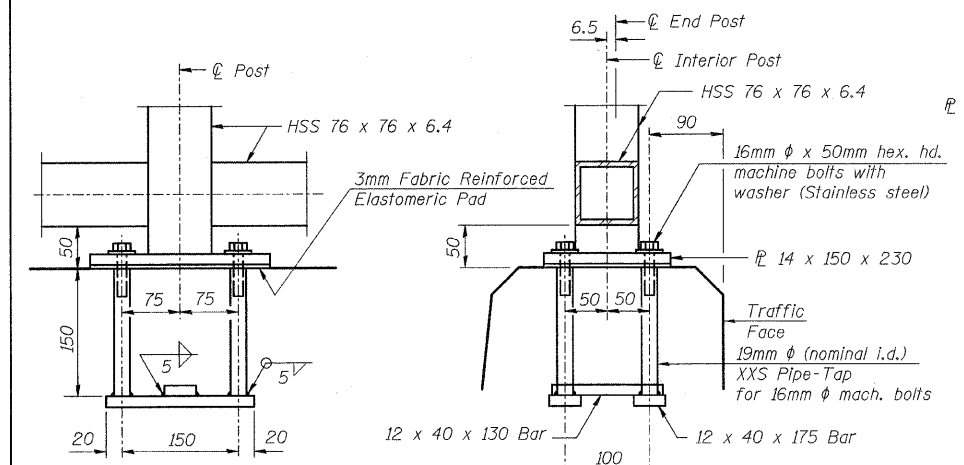


DETAIL A **DETAIL B** **DETAIL C**



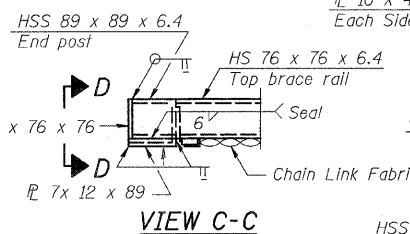
SECTION B-B
(At Expansion Joint)

*Variable - See Sht. S12 or Sht. S15

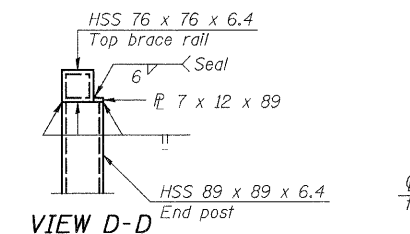


ANCHOR BOLT DETAILS

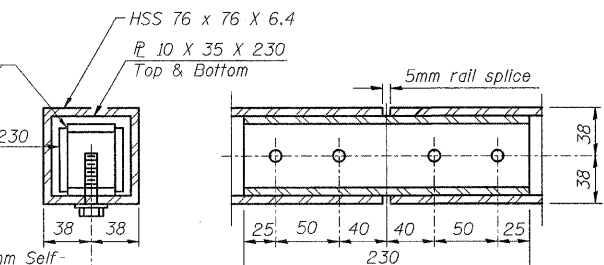
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 16mm diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



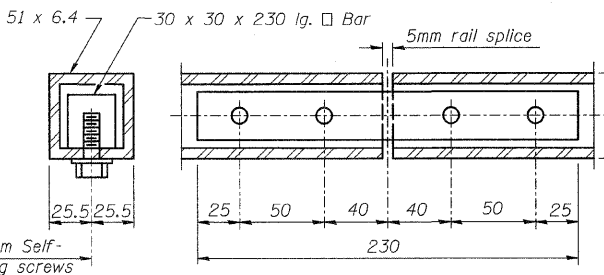
VIEW C-C



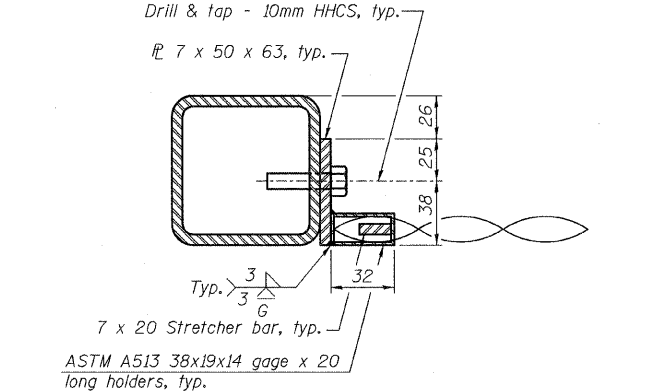
VIEW D-D



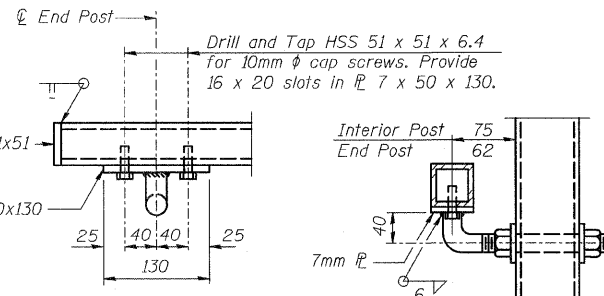
RAIL SPLICE



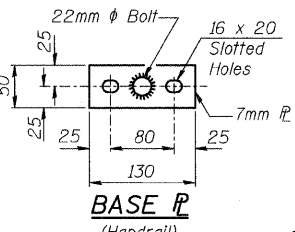
HANDRAIL SPLICE



SECTION E-E



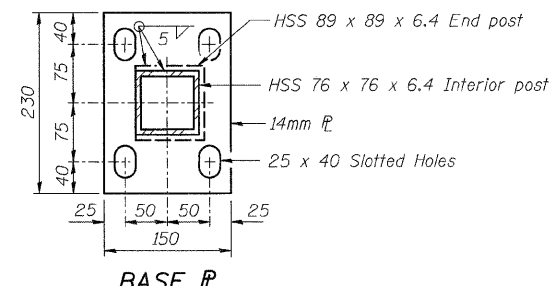
HANDRAIL DETAIL



BASE PLATE
(Handrail)

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	m	168



BASE PLATE

REVISIONS

NAME	DATE

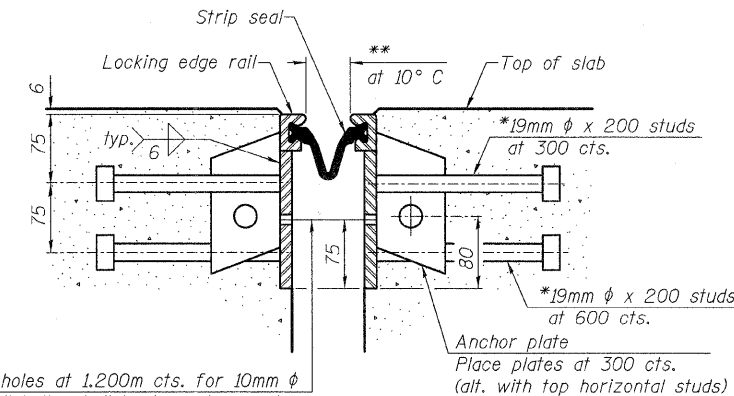
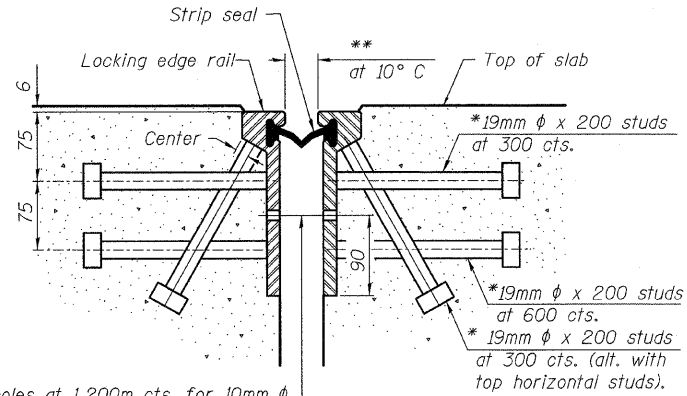
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE FENCE RAILING PARAPET MOUNTED
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	62
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640

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

**When joint is fixed, dimension is set at 38mm.
At S. Abut. (Fixed) 38mm
At N. Abut. & Pier 2 (Exp.) 50mm



11mm ϕ holes at 1,200m cts. for 10mm ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

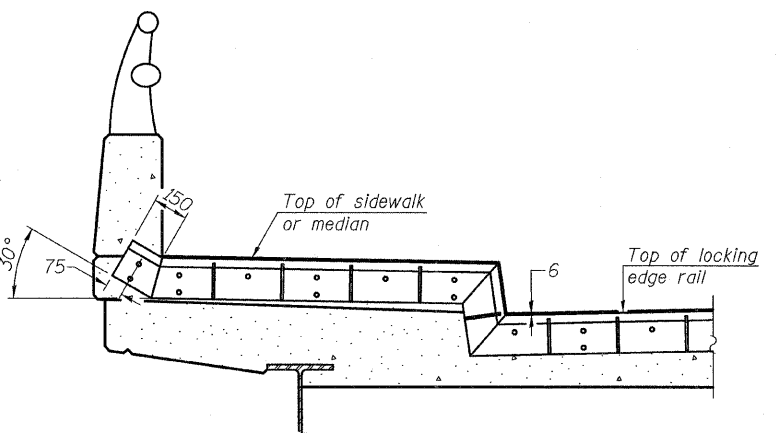
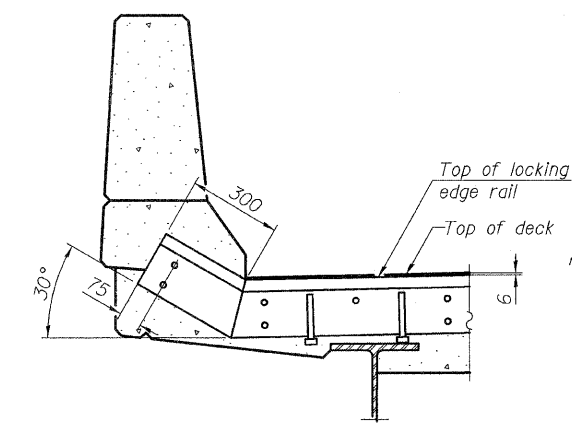
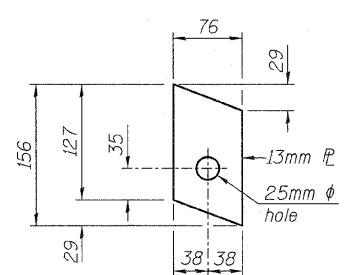
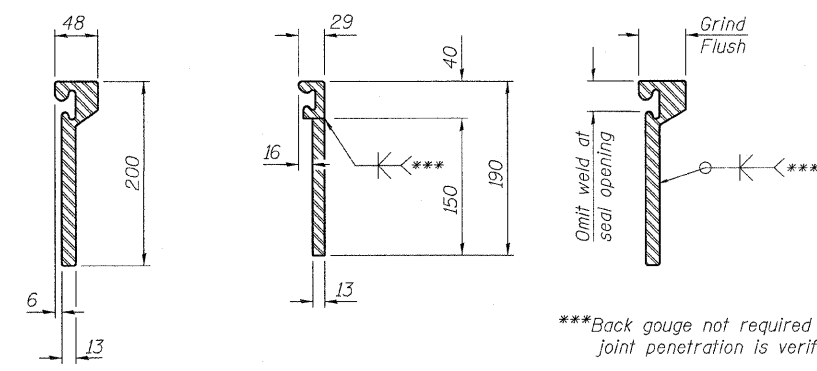
11mm ϕ holes at 1,200m cts. for 10mm ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 6mm. 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 100mm. 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.

SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL WELDED RAIL

LOCKING EDGE RAIL SPLICE
The inside of the locking edge rail groove shall be free of weld residue

ANCHOR PL (for welded rail)

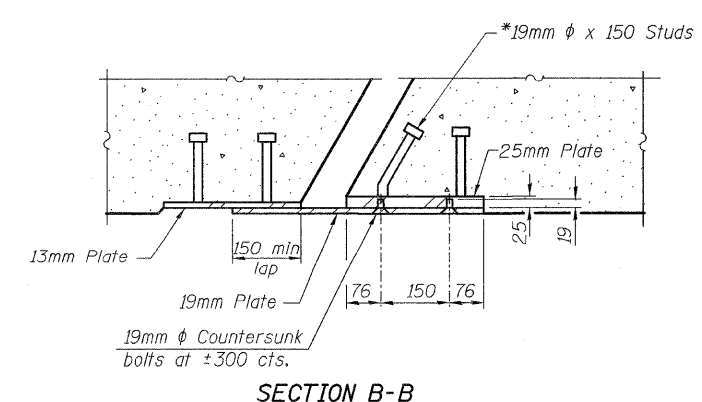
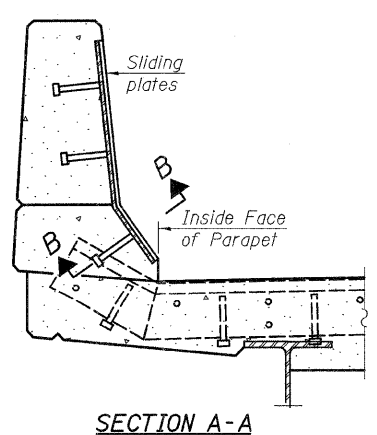
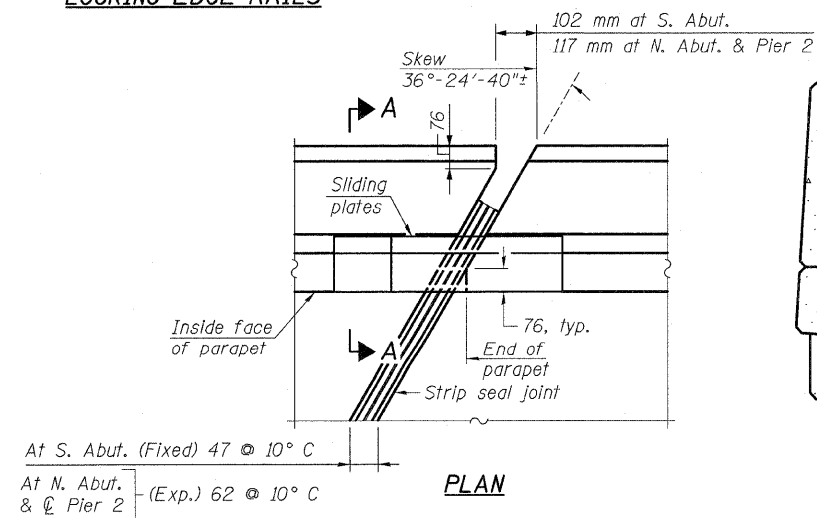
AT PARAPET

AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 300 cts., may be necessary on medians which are shallower than 230mm. See manufacturer's recommendation.

LOCKING EDGE RAILS

TYPICAL END TREATMENTS



At S. Abut. (Fixed) 47 @ 10° C
At N. Abut. & Pier 2 (Exp.) 62 @ 10° C

PLAN

SECTION A-A

SECTION B-B

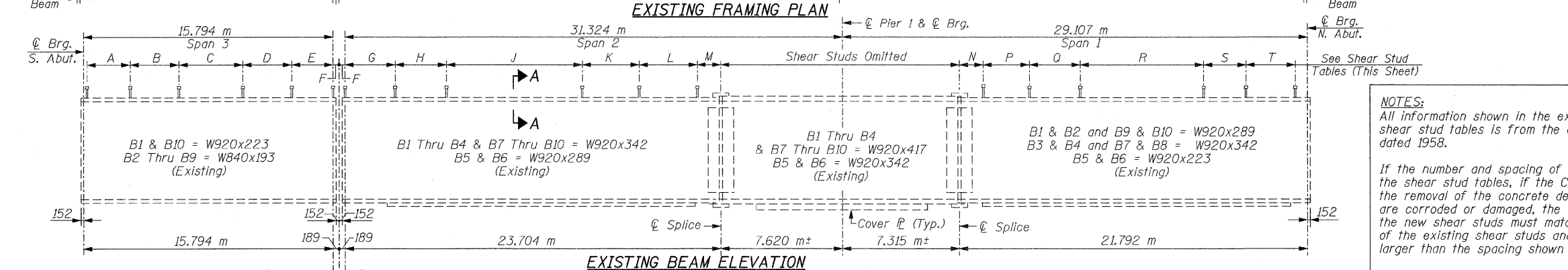
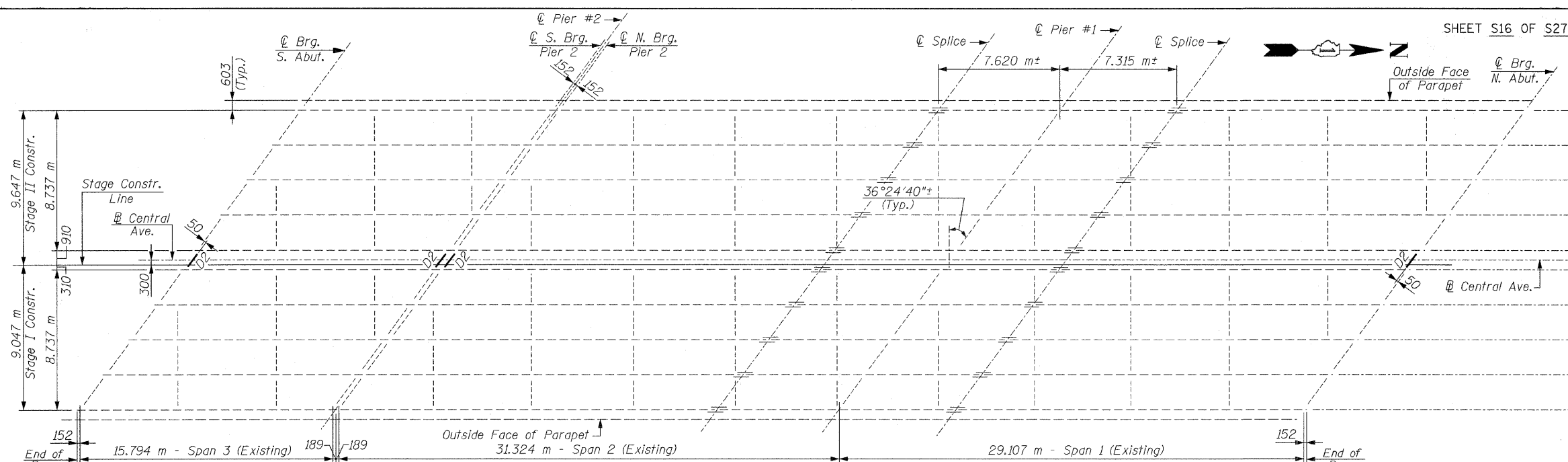
POINT BLOCK DETAILS (for skews > 30°)

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	m	75

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PREFORMED JOINT STRIP SEAL
 CENTRAL AVENUE (F.A.U. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS



SHEAR STUD TABLES (EXISTING)

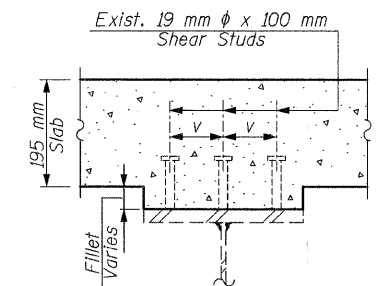
SOUTH ABUTMENT TO CL PIER 2																		
	NO. OF STUDS	A			B			C			D			E			V	
		SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH		
GIRDER 1	116	9	305	2.743	6	457	2.743	8	606	4.850	6	457	2.743	9	305	2.743	0.152	89
GIRDER 2	128	9	279	2.515	8	381	3.048	8	587	4.696	8	381	3.048	9	279	2.515	0.152	89
GIRDER 3	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 4	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 5	116	9	330	2.972	6	432	2.591	8	587	4.696	6	432	2.591	9	330	2.972	0.152	89
GIRDER 6	116	9	330	2.972	6	432	2.591	8	587	4.696	6	432	2.591	9	330	2.972	0.152	89
GIRDER 7	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 8	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 9	128	9	279	2.515	8	381	3.048	8	587	4.696	8	381	3.048	9	279	2.515	0.152	89
GIRDER 10	116	9	305	2.743	6	457	2.743	8	606	4.850	6	457	2.743	9	305	2.743	0.152	89

CL PIER 2 TO CL SPLICE																		
	NO. OF STUDS	G			H			J			K			L			V	
		SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH		
GIRDER 1	167	12	305	3.658	8	457	3.658	15	610	9.144	8	457	3.658	12	235	2.819	0.821	83
GIRDER 2	197	18	279	5.029	13	381	4.953	10	533	5.334	12	406	4.877	12	229	2.743	0.818	83
GIRDER 3	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 4	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 5	146	12	381	4.572	9	508	4.572	13	584	7.594	6	533	3.200	8	403	3.226	0.589	95
GIRDER 6	146	12	381	4.572	9	508	4.572	13	584	7.594	6	533	3.200	8	403	3.530	0.589	95
GIRDER 7	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 8	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 9	197	18	279	5.029	13	381	4.953	10	533	5.334	12	406	4.877	12	229	2.743	0.818	83
GIRDER 10	167	12	305	3.658	8	457	3.658	15	610	9.144	8	457	3.658	12	235	2.819	0.821	83

CL SPLICE TO NORTH ABUTMENT																			
	NO. OF STUDS	N			P			Q			R			S			TOTAL STUDS		
		LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA		LENGTH	
GIRDER 1	149	0.691	9	314	2.829	8	457	3.658	12	610	7.315	8	457	3.658	12	305	3.658	95	432
GIRDER 2	176	0.672	12	298	3.581	9	406	3.658	8	559	4.470	13	381	4.953	16	279	4.470	95	501
GIRDER 3	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 4	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 5	140	0.572	8	375	2.997	6	533	3.200	9	610	5.486	9	508	4.572	14	356	4.978	95	402
GIRDER 6	140	0.572	8	375	2.997	6	533	3.200	9	610	5.486	9	508	4.572	14	356	4.978	95	402
GIRDER 7	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 8	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 9	176	0.672	12	298	3.581	9	406	3.658	8	559	4.470	13	381	4.953	16	279	4.470	95	501
GIRDER 10	149	0.691	9	314	2.829	8	457	3.658	12	610	7.315	8	457	3.658	12	305	3.658	95	432

ALL DIMENSIONS ARE IN MILLIMETERS (mm), EXCEPT AS SHOWN.
 ALL LENGTHS ARE IN METERS (m).

NOTES:
 All information shown in the existing beam elevation and in the shear stud tables is from the original steel fabrication drawings dated 1958.
 If the number and spacing of shear studs differs from those shown in the shear stud tables, if the Contractor damage any shear studs during the removal of the concrete deck or if any of the existing shear studs are corroded or damaged, the Contractor must install new shear studs, the new shear studs must match existing type, size, amount and spacing of the existing shear studs and in no case should the spacing be any larger than the spacing shown in the shear stud tables.
 Existing shear studs are to be completely cleaned of any debris.
 Cost for the above work as described is to be included with "Removal of Existing Concrete Deck".



SECTION A-A
 SHEAR CONNECTOR DETAIL
 For dimensions "V", see Shear Stud Tables (this Sheet)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FRAMING PLAN & DETAILS
 CENTRAL AVENUE (F.A.U. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./J.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.N.
 CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

INTERIOR BEAM MOMENT TABLE

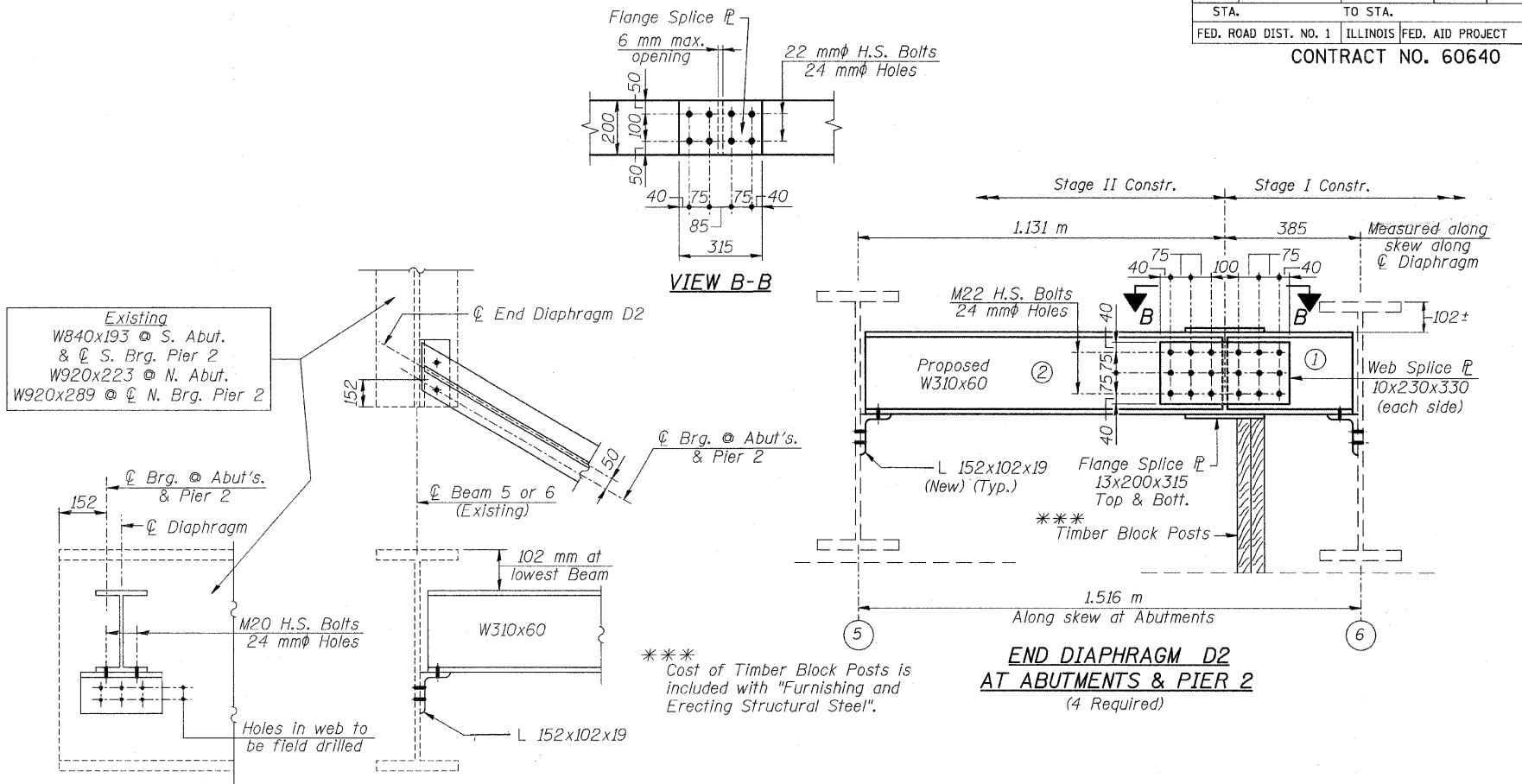
	0.5 Sp. 3	0.4 Sp. 2	Pier 2	0.6 Sp. 1
I_s (10^6 mm^4)	3,412	7,886	14,547	7,181
$I_c (n)$ (10^6 mm^4)	10,001	18,870	-	16,762
$I_c (3n)$ (10^6 mm^4)	7,134	13,174	-	11,882
S_s (10^3 mm^3)	8,947	19,674	29,355	16,874
$S_c (n)$ (10^3 mm^3)	13,200	26,495	-	22,824
$S_c (3n)$ (10^3 mm^3)	11,995	23,825	-	20,522
Z (10^3 mm^3)	-	-	30,143	-
M_D (kN.m)	12.99	15.16	21.49	14.97
M_L (kN.m)	398	968	2,688	720
s_D (kN/m)	6.57	6.42	-	6.42
M_s (kN.m)	202	477	-	380
M_L (kN.m)	570	1,166	936	1,018
M (Imp) (kN.m)	162	256	209	231
M_3 [$M_L + M$ (Imp)] (kN.m)	1,220	2,370	1,908	2,082
M_a (kN.m)	2,366	4,960	5,975	4,137
M_u (kN.m)	4,073	7,426	-	6,543
f_s non-comp (MPa)	44.5	49.2	91.6	42.7
f_s comp (MPa)	16.8	20.0	-	18.5
f_s $5/3$ ($L + Imp$) (MPa)	92.5	89.5	65.0	91.2
f_s (Overload) (MPa)	153.8	158.7	156.6	152.4
f_s (Total) (MPa)	-	-	203.6	-
VR (kN)	219	238	-	242

* Compact Braced Section
 ** Non-Compact Section

NOTES:
 I_s and S_s are the Moment of Inertia and Section Modulus of the steel section used in computing f_s (Total and Overload).
 $I_c(n)$ and $S_c(n)$ are the Moment of Inertia and section modulus of the Composite Section used in computing stresses due to Live Load.
 $I_c(3n)$ and $S_c(3n)$ are the Moment of Inertia and Section Modulus of the Composite Section used in computing stresses due to Superimposed Dead Load. (See AASHTO 10.38).
 VR is the maximum $L + Impact$ Shear Range in span.
 Z is the Plastic Section Modulus used to determine the fully Plastic Moments in the Non-Composite areas.
 The Plastic Moment Capacity (M_u) is computed according to AASHTO 10.48.1 & 10.50.1.1.
 f_s (Total) (Non-Compact Section) the sum of the stresses due to $1.3[M_D + M_s + 5/3(M_L + M(IMP))]$.
 f_s (Overload) is the sum of the stresses due to $M_D + M_s + 5/3(M_L + M(IMP))$.
 M_D - moment due to Dead Loads on Non-Composite Section.
 M_s - moment due to Dead Loads on Composite Section.
 M_L - moment due to Live Load on Non-Composite or Composite Section.
 $M(IMP)$ - moment due to Live Load Impact on Non-Composite or Composite Sections.
 M_a (Applied Moment) = $1.3[M_D + M_s + 5/3(M_L + M(IMP))]$

INTERIOR BEAM REACTION TABLE

	South Abutment	Pier 2		Pier 1	North Abutment
		Sp. 3	Sp. 2		
R_D (kN)	153	153	250	827	218
R_L (kN)	171	171	186	302	183
Imp. (kN)	48	48	41	68	42
R (Total) (kN)	372	372	477	1,197	443



- DIAPHRAGM D2 CONSTRUCTION SEQUENCE**
1. Order Diaphragm D2 in two sections with lengths of 1.11m and 365.
 2. Attach Section ① of Diaphragm to Beam 6 and Top Flange Splice Plate during Stage I Construction.
 3. Place Timber Block Posts between Section ① of Diaphragm and Abutment Bearing Seat.
 4. Attach Section ② of Diaphragm to both Beam 5 and Top Flange Splice Plate during Stage II Construction.
 5. Attach Web Splice Plates to Sections ① and ② of Diaphragms.
 6. Remove Timber Block Posts.
 7. Attach Bottom Flange Splice Plate to Sections 1 and 2 of Diaphragms.

NOTES:
 Two hardened washers shall be required over all oversize holes for diaphragms.
 All dimensions are in millimeters (mm) except as noted.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

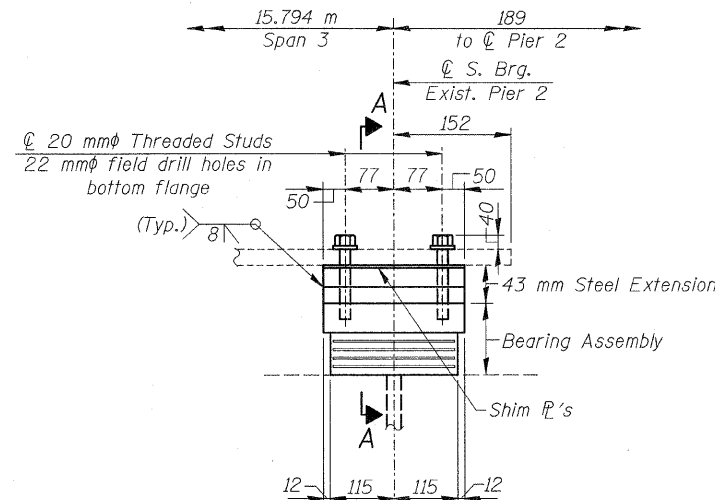
STRUCTURAL STEEL DETAILS
 CENTRAL AVENUE (F.A.U. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.

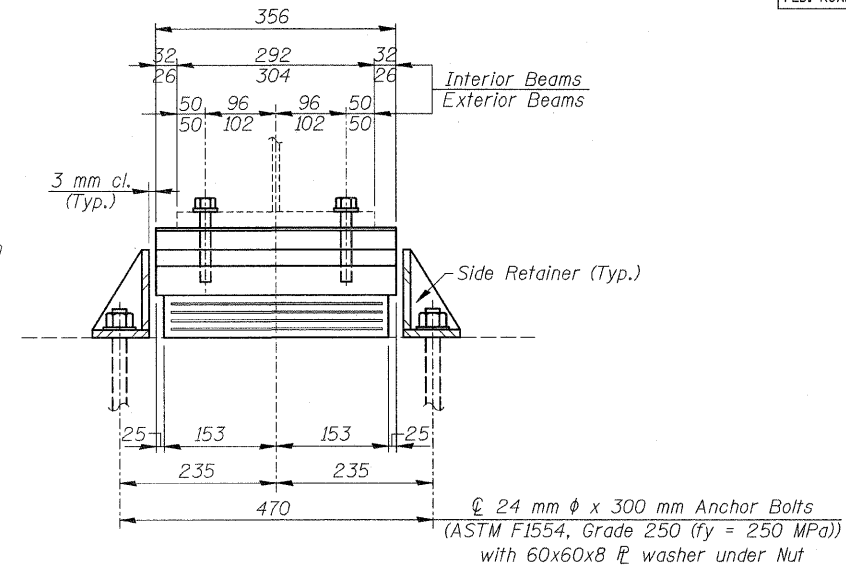
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
90	1213B-1	COOK	94	65
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

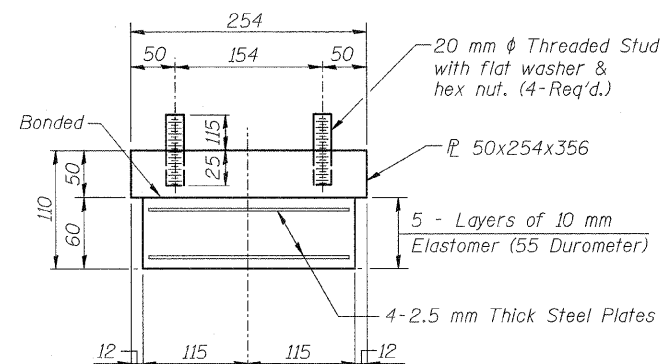


ELEVATION AT SOUTH BRG.
AT EXIST. PIER 2



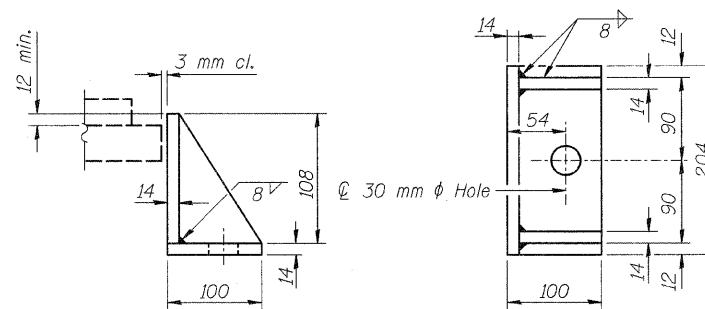
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG. AT PIER 2



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.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	10
Anchor Bolts, M24	Each	20

NOTES:

Anchor Bolts shall be ASTM F1554 all-thread (or an Engineer Approved Alternate Material) of the Grade (s) and Diameter (s) specified. ASTM A307 Grade C Anchor Bolts may be used in lieu of ASTM F1554, Grade 250 (fy = 250 MPa). The corresponding specified Grade of AASHTO M314M Anchor Bolts may be used in lieu of ASTM F1554.

Anchor Bolts for Side Retainers may be 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.

Two 3mm Adjusting Shims shall be provided for each Bearing in addition to all other Plates or Shims and placed as shown on the Bearing Details.

Side Retainers and other Steel Members required for the Bearing Assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Cost for New Steel Extensions is included with "Furnishing and Erecting Structural Steel".

Bearing Plates & Pintles to be AASHTO M270M, Grade 250.

Diaphragm removal and replacement may be required to facilitate drilling holes in bottom flange for bearing attachment. Cost is included with "Furnishing and Erecting Structural Steel".

All dimensions are in millimeters (mm) except as noted.

BEARING REPLACEMENT NOTES:

- The Contractor shall submit for approval by the Engineer plans for jacking Existing Superstructure prior to commencing any work at the Bearings. This submittal shall be prepared and sealed by a Licensed Structural Engineer in Illinois.
- Jacking and Removing Existing Bearings shall be done after the existing Deck removal is completed and before the New Deck is poured.
- The New Bearings shall be in place and the jacks shall be lowered before the New Concrete Deck is poured.
- Remove nuts from anchor bolts of bearings at the beams.
- Raise bridge 7 mm maximum (See General Notes below).
- Remove existing expansion bearings at North Abutment and at North & South bearings of Pier 2.
- Install Elastomeric Expansion Bearing on the existing Pedestals.

GENERAL NOTES:

- The Contractor shall supply additional shim plates if required to bring devices to grade. Cost included with Elastomeric Bearing Assembly, Type I.
- Drilling holes for expansion bearings in flanges of existing beams and in existing substructure shall be included in Elastomeric Bearing Assembly, Type I.
- It shall be the Contractor's responsibility to verify all dimensions between the bottom of the girder and the top of the bearing seat of the existing bearings in the field prior to construction or ordering of bearings.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT PIER 2
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

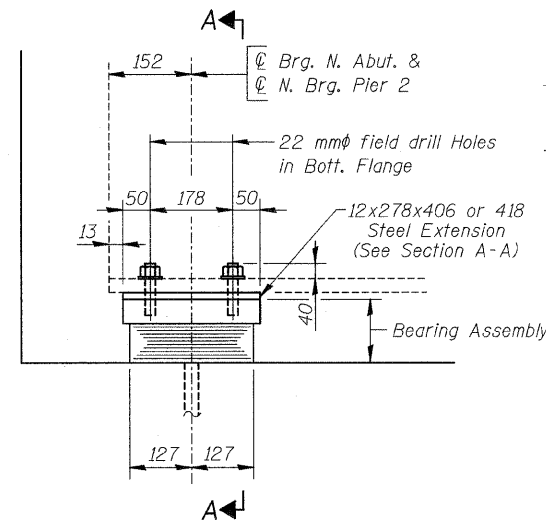
SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

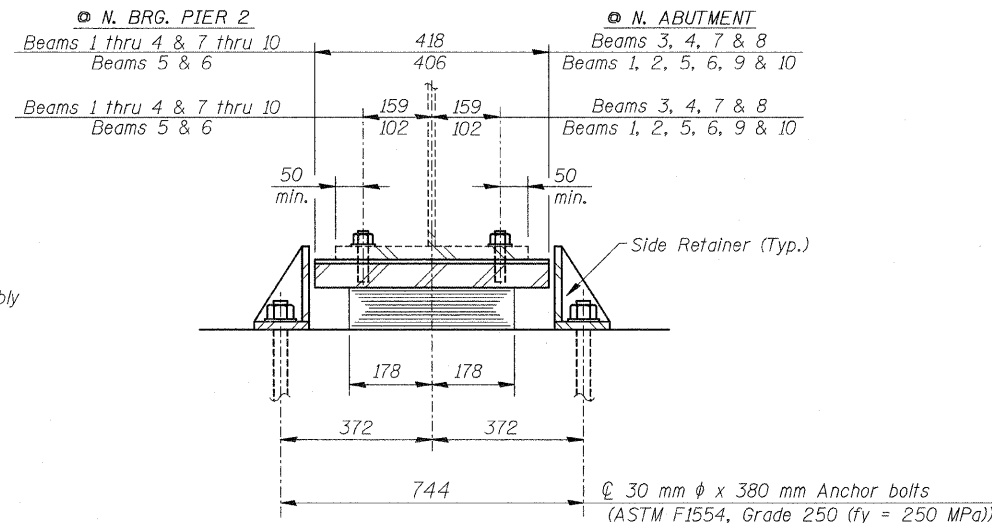
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	66
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60640

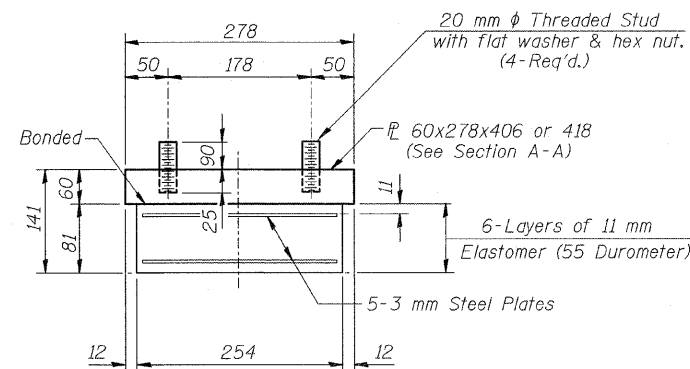


ELEVATION AT N. ABUT. (SHOWN) & N. BRG. PIER 2



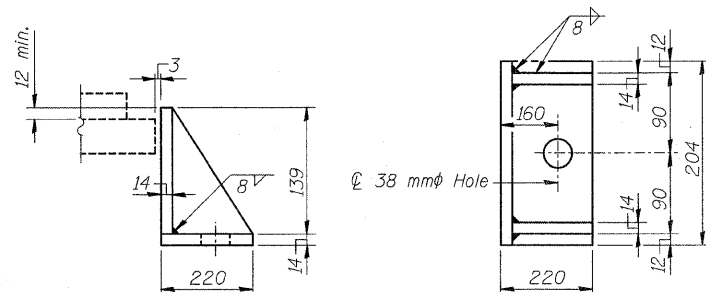
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



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.

NOTES:

Anchor Bolts shall be ASTM F1554 all-thread (or an Engineer Approved Alternate Material) of the Grade (s) and Diameter (s) specified. ASTM A307 Grade C Anchor Bolts may be used in lieu of ASTM F1554, Grade 250 (fy = 250 MPa). The corresponding specified Grade of AASHTO M314M Anchor Bolts may be used in lieu of ASTM F1554.

Anchor Bolts for Side Retainers may be 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.

Two 3mm Adjusting Shims shall be provided for each Bearing in addition to all other Plates or Shims and placed as shown on the Bearing Details. Side Retainers and other Steel Members required for the Bearing Assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

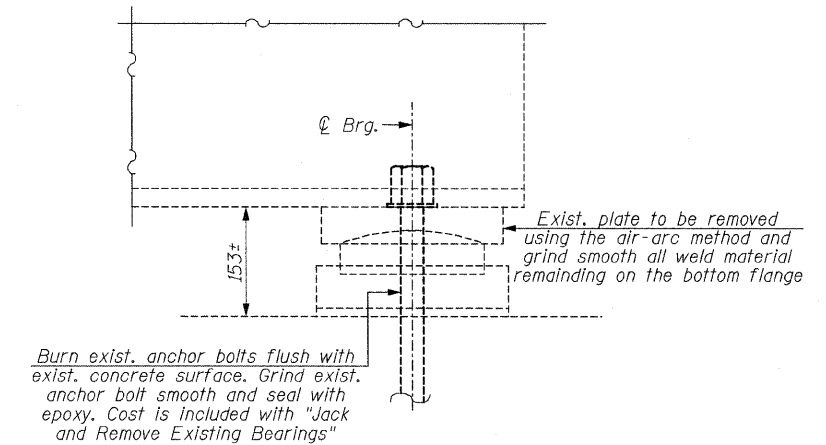
Cost for New Steel Extensions is included with "Furnishing and Erecting Structural Steel".

Bearing Plates & Pintles to be AASHTO M270M, Grade 250.

Diaphragm removal and replacement may be required to facilitate drilling holes in bottom flange for bearing attachment. Cost is included with "Furnishing and Erecting Structural Steel".

All dimensions are in millimeters (mm) except as noted.

BEAM @ REACTION	
Without Concrete Deck	
= 64 kn/Beam @ N. Abut.	
= 75 kn/Beam @ Pier 2	



SECTION AT NORTH ABUTMENT AND AT NO. AND SO. BEARINGS @ PIER 2 (Existing Expansion Bearing Removal)

BEARING REPLACEMENT NOTES:

- The Contractor shall submit for approval by the Engineer plans for jacking Existing Superstructure prior to commencing any work at the Bearings. This submittal shall be prepared and sealed by a Licensed Structural Engineer in Illinois.
- Jacking and Removing Existing Bearings shall be done after the existing Deck removal is completed and before the New Deck is poured.
- The New Bearings shall be in place and the jacks shall be lowered before the New Concrete Deck is poured.
- Remove nuts from anchor bolts of bearings at the beams.
- Raise bridge 7 mm maximum (See General Notes below).
- Remove existing expansion bearings at North Abutment and at North & South bearings of Pier 2.
- Install Elastomeric Expansion Bearing on the existing Pedestals.

GENERAL NOTES:

- The Contractor shall supply additional shim plates if required to bring devices to grade. Cost included with Elastomeric Bearing Assembly, Type I.
- Drilling holes for expansion bearings in flanges of existing beams and in existing substructure shall be included in Elastomeric Bearing Assembly, Type I.
- It shall be the Contractor's responsibility to verify all dimensions between the bottom of the girder and the top of the bearing seat of the existing bearings in the field prior to construction or ordering of bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	20
Anchor Bolts, M30	Each	40

ILLINOIS DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT ABUTMENTS CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A. F.A.I. RTE. 90 SECTION: 1213B-1 COOK COUNTY STATION 1+000.000 STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./J.M. DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC. CHICAGO ILLINOIS

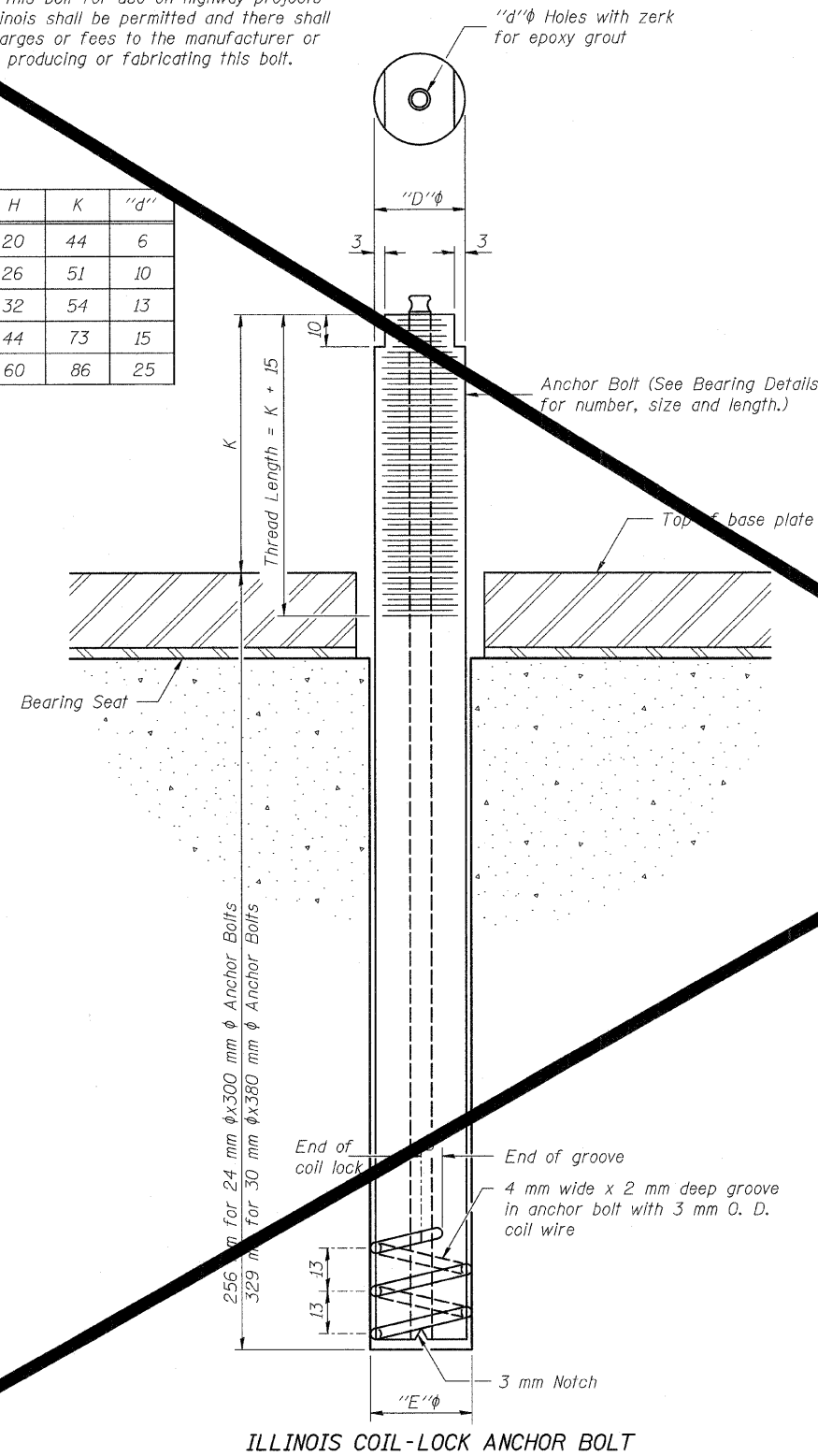
REVISIONS	
NAME	DATE

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	67
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
24	27	20	44	6
30	33	26	51	10
36	39	32	54	13
48	51	44	73	15
64	67	60	86	25



ILLINOIS COIL-LOCK ANCHOR BOLT

MATERIALS FOR ILLINOIS COIL-LOCK

ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade 1026 and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

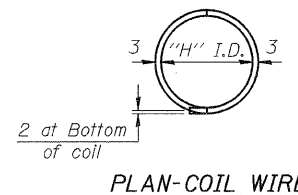
INSTALLATION PROCEDURE FOR THE ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shaft. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
 The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
 1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or sealed glass adhesive cartridge containing pre-measured amounts of the adhesive chemical.

LOCATION	TYPE
North Abutment	A307
Pier 2	A325M



PLAN-COIL WIRE

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

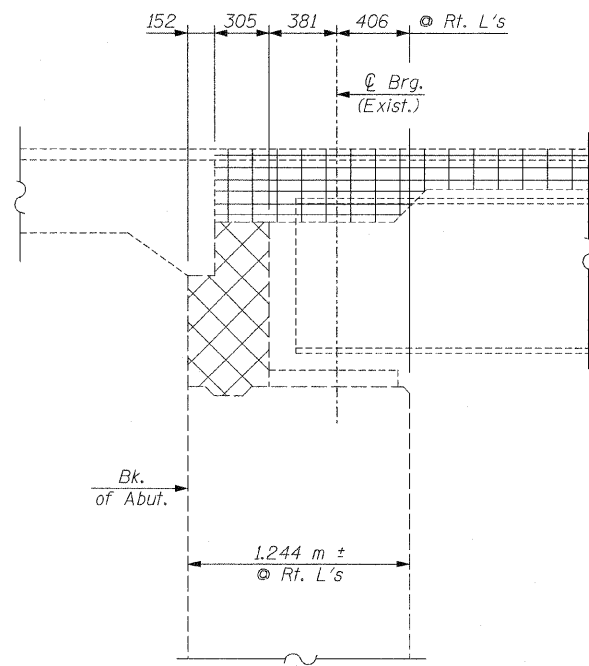
All dimensions are in millimeters (mm) except as noted.

REVISIONS	
NAME	DATE

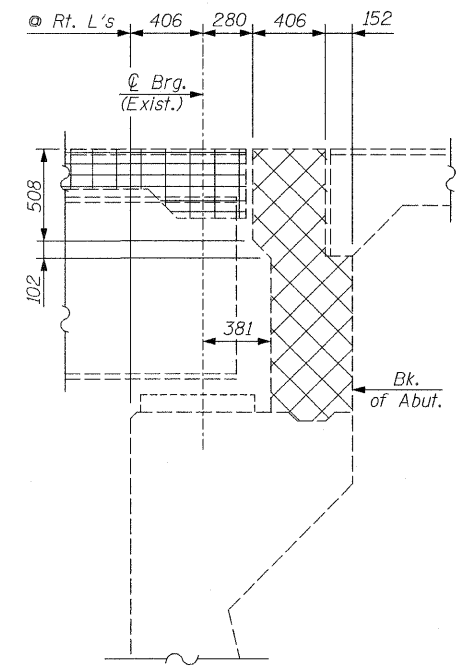
ILLINOIS DEPARTMENT OF TRANSPORTATION
ANCHOR BOLT DETAILS FOR BEARINGS
 CENTRAL AVENUE (F.A.I. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWAY) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	68
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

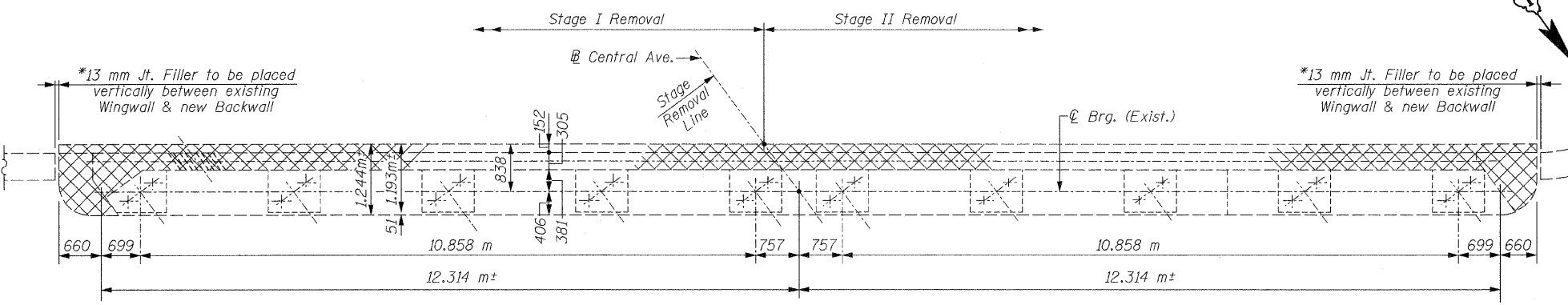
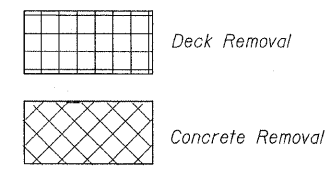
CONTRACT NO. 60640



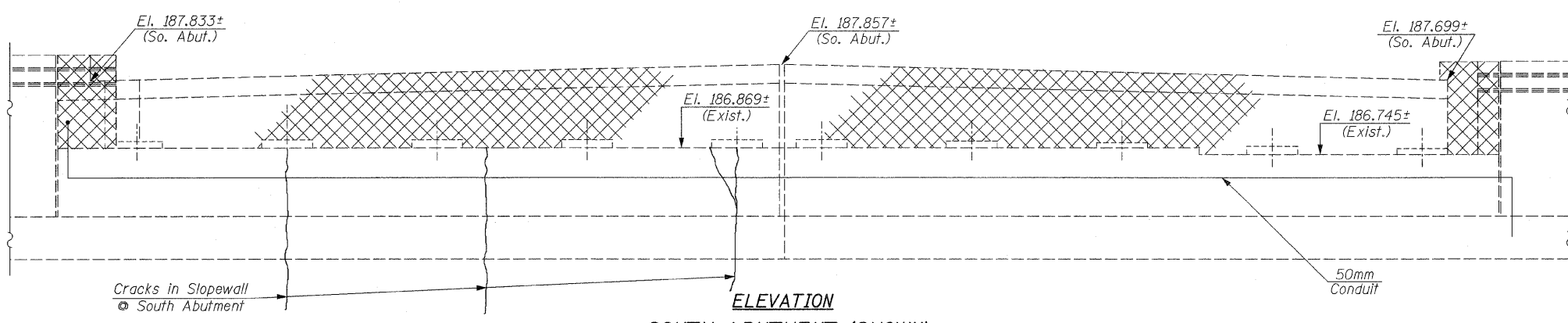
EXIST. SOUTH ABUT. SECTION



EXIST. NORTH ABUT. SECTION



PLAN



ELEVATION
SOUTH ABUTMENT (SHOWN)
NORTH ABUTMENT (SIMILAR)

LEGEND
Indicate Limits of Epoxy Crack Sealing

NOTES:

All elevations & dimensions on this sheet are based on a resurvey of the Structure. All elevations & dimensions shall be field verified prior to Concrete Removal Operations.

Existing vertical Reinforcement Bars projecting from the Abutment Backwall & Wingwall to remain in place. The existing Reinforcement shall be sandblasted, cleaned, straightened and incorporated into the new construction. Cost included with "Concrete Removal".

Existing horizontal Reinforcement Bars to be re-used, shall be cleaned to grey metal by sandblasting in place. The Contractor shall exercise care during Concrete Removal so as not to damage rebars to be re-used. Rebars which have been cut or corroded and have lost more than 10% of their cross-sectional area shall be supplemented by new bars of the same size either spliced in place, replaced with an approved bars splicer or replaced with approved anchorage system. The cost shall not be paid for separately but shall be included with Concrete Removal.

Repair of existing Abutment shall include but not limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

All dimensions are in millimeters (mm) unless otherwise noted.

For Bill Of Material, See Sheets S22 & S23.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONCRETE REMOVAL DETAILS
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
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CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

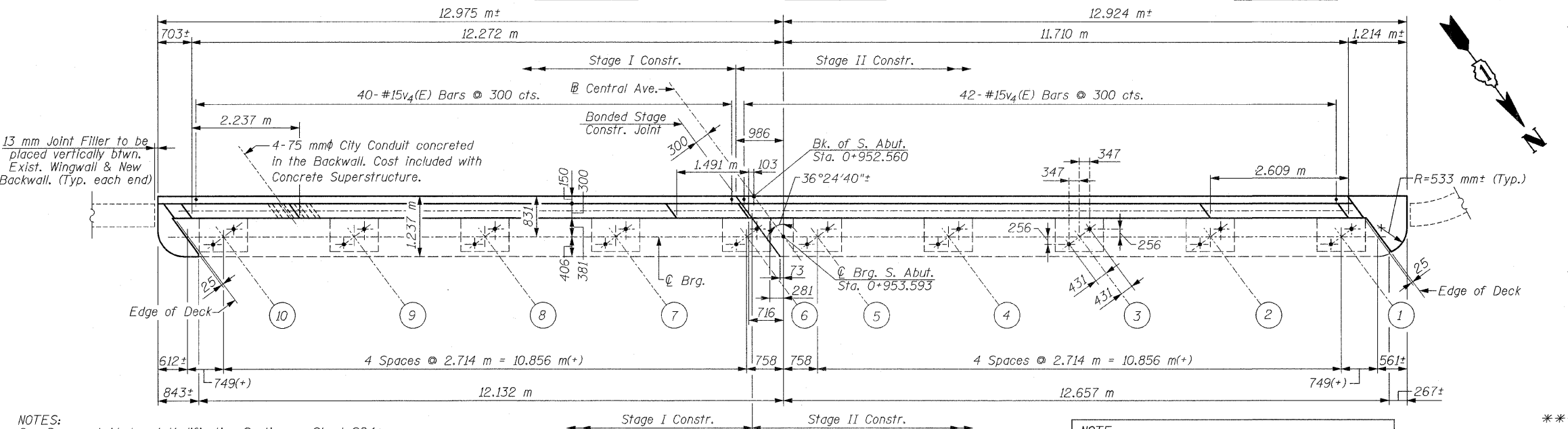
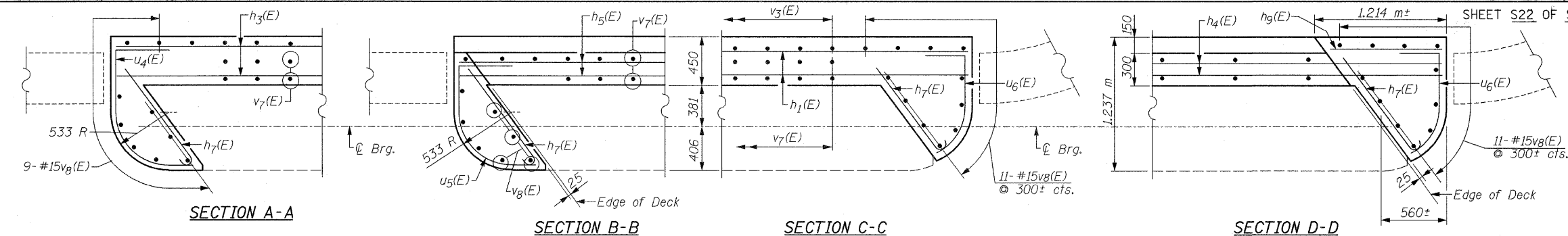
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	69
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60640

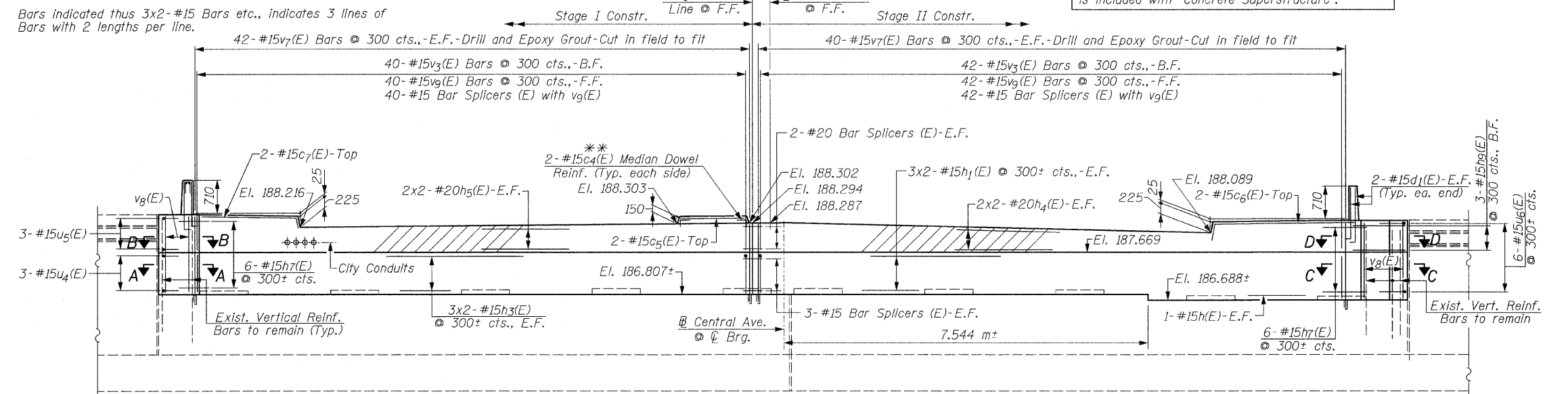
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
c4(E)	4	#15	0.47	┌
c5(E)	2	#15	1.33	┌
c6(E)	2	#15	2.95	┌
c7(E)	2	#15	2.58	┌
d1(E)	8	#20	1.32	J
h(E)	2	#15	4.11	—
h1(E)	12	#15	7.14	—
h3(E)	12	#15	6.21	—
h4(E)	8	#20	7.15	—
h5(E)	8	#20	6.40	—
h7(E)	12	#15	1.28	—
h9(E)	3	#15	1.07	—
u4(E)	3	#15	2.22	C
u5(E)	3	#15	2.09	C
u6(E)	6	#15	1.68	J
v3(E)	82	#15	0.95	┌
v4(E)	82	#15	0.60	┌
v7(E)	164	#15	1.64	—
v8(E)	20	#15	1.56	—
v9(E)	82	#15	1.07	┌
Structure Excavation		m ³	77	
Concrete Structures		m ³	10.8	
Reinforcement Bars, Epoxy Coated		kg	1,220	
Porous Granular Embankment, Special		m ³	53	
Concrete Removal		m ³	9.2	
Epoxy Crack Sealing		m	5.7	
Bar Splicers		Each	92	



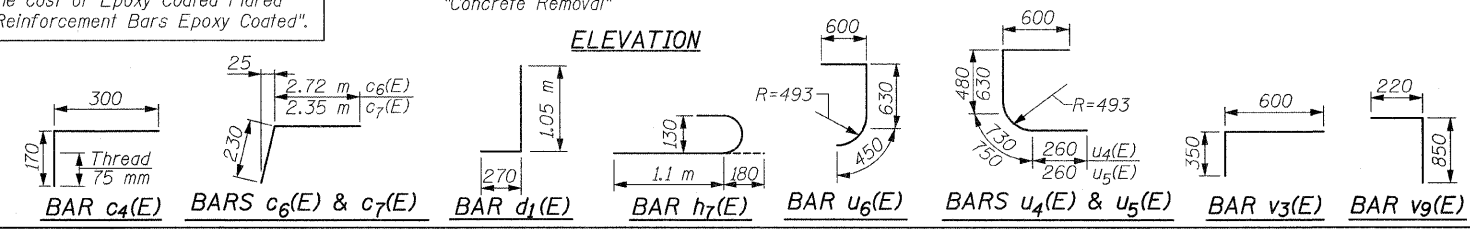
NOTES:
See Proposed Abutment Modification Section on Sheet S24.
Elevation shown are at Front Face of Abutment.

NOTE:
Hatched area to be poured after Superstructure. Falsework has been removed. Quantity of concrete is included with "Concrete Superstructure".



** Median Dowel c4(E) to be provided with 20 mm φ x150 Flared Coil Loop (Epoxy Coated). The cost of Epoxy Coated Flared Coil Loop is included with "Reinforcement Bars Epoxy Coated".

Seal Exist. Joint
Cost included with "Concrete Removal"



* To be cut in field to fit.
*** Cracks at Slope wall area, See Sheet S21 for locations.

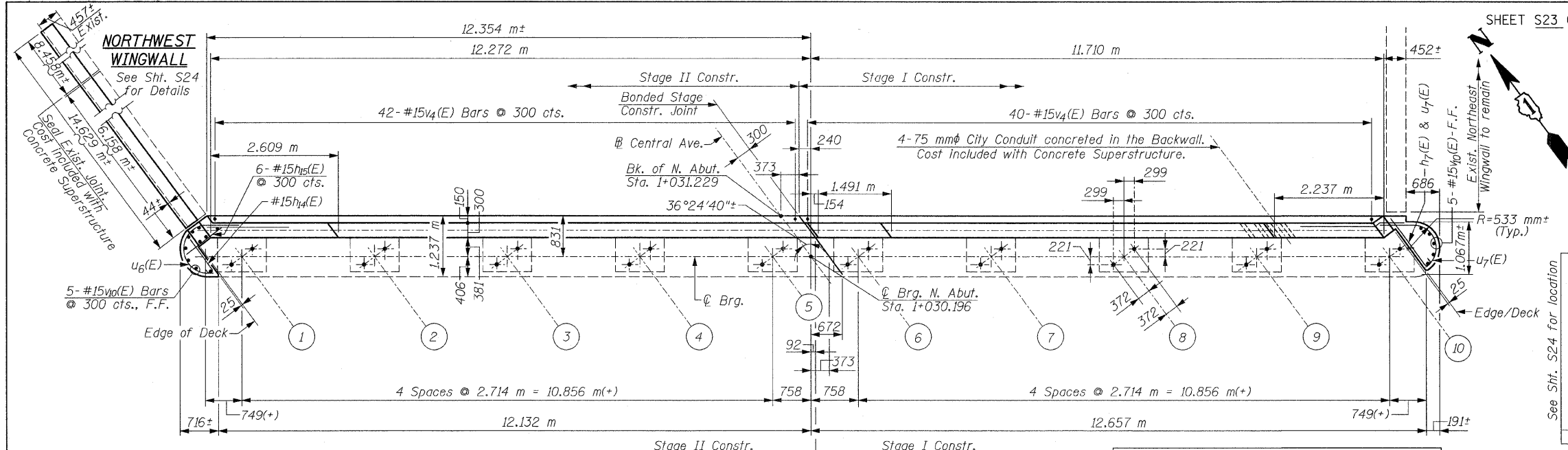
MIN. LAP
#15 Bars=510
#20 Bars=640

NOTATION:
E.F. = Each Face
B.F. = Back Face
F.F. = Front Face

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOUTH ABUTMENT
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659
SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	70
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60640				

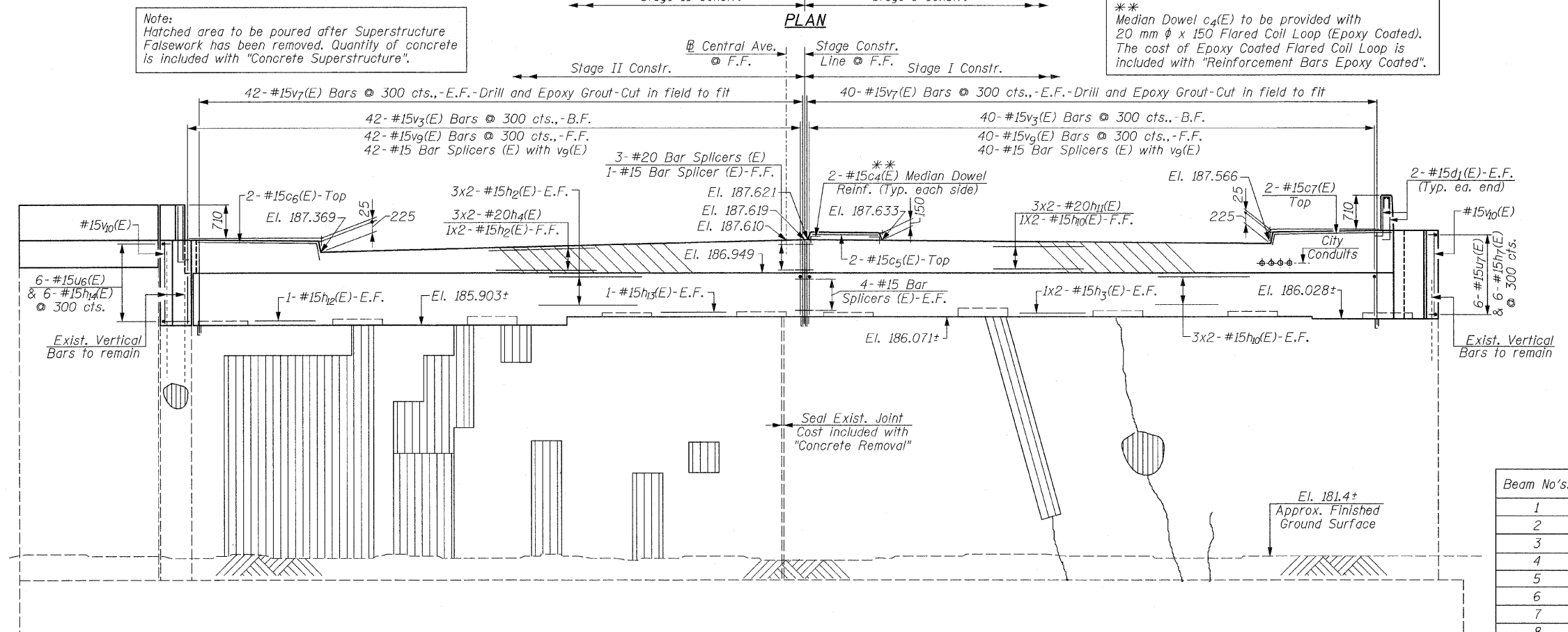


Note:
Hatched area to be poured after Superstructure Falsework has been removed. Quantity of concrete is included with "Concrete Superstructure".

** Median Dowel c4(E) to be provided with 20 mm φ x 150 Flared Coil Loop (Epoxy Coated). The cost of Epoxy Coated Flared Coil Loop is included with "Reinforcement Bars Epoxy Coated".

BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
c4(E)	4	#15	0.47	┐
c5(E)	2	#15	1.33	┐
c6(E)	2	#15	2.95	┐
c7(E)	2	#15	2.58	┐
d1(E)	8	#20	1.32	└
d6(E)	98	#20	1.24	└
h2(E)	14	#15	6.40	┐
h3(E)	4	#15	6.21	┐
h4(E)	6	#20	7.15	┐
h7(E)	6	#15	1.28	┐
h8(E)	14	#15	6.35	┐
h11(E)	6	#20	6.41	┐
h12(E)	2	#15	7.20	┐
h13(E)	2	#15	5.20	┐
h14(E)	6	#15	1.03	┐
h15(E)	6	#15	0.85	┐
h16(E)	6	#15	6.08	┐
h17(E)	6	#15	8.38	┐
u6(E)	6	#15	1.37	┐
u7(E)	6	#15	1.35	┐
v3(E)	82	#15	0.95	┐
v4(E)	82	#15	0.60	┐
v7(E)	164	#15	1.99	┐
v9(E)	82	#15	1.07	┐
v10(E)	10	#15	1.67	┐
Structure Excavation			m ³	78
Concrete Structures			m ³	13.8
Reinforcement Bars, Epoxy Coated			kg	1,950
Porous Granular Embankment, Special			m ³	54
Concrete Removal			m ³	25.3
Epoxy Crack Sealing			m	13.0
Bar Splicers			Each	94
Structural repair of Concrete (Depth equal to or less than 125mm)			m ²	32.7



* To be cut in field to fit.

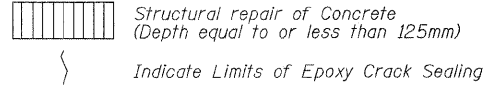
Beam No's.	Top of Existing Pad Elevations(±)
1	El. 185.955
2	El. 186.004
3	El. 186.068
4	El. 186.123
5	El. 186.172
6	El. 186.196
7	El. 186.159
8	El. 186.144
9	El. 186.111
10	El. 186.080

MIN. LAP
#15 Bars=510
#20 Bars=640

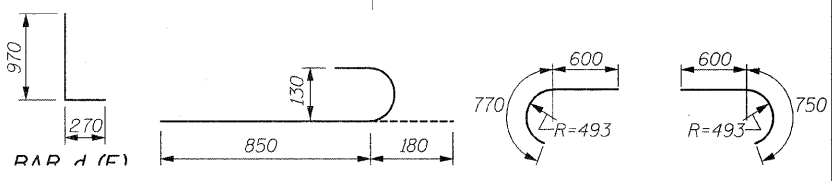
NOTATION:
E.F. = Each Face
B.F. = Back Face
F.F. = Front Face

ELEVATION

LEGEND



NOTES:
See Proposed Abutment Modification Section on Sheet S24.
Elevations shown are at Front Face of Abutments.
See South Abutment on Sheet S22 For Bar Bending for Bars c4(E), c6(E), c7(E), d1(E), h7(E), v3(E) & v9(E)
Bars indicated thus 3x2-#15 bars etc., indicates 3 lines of Bars with 2 lengths per line.

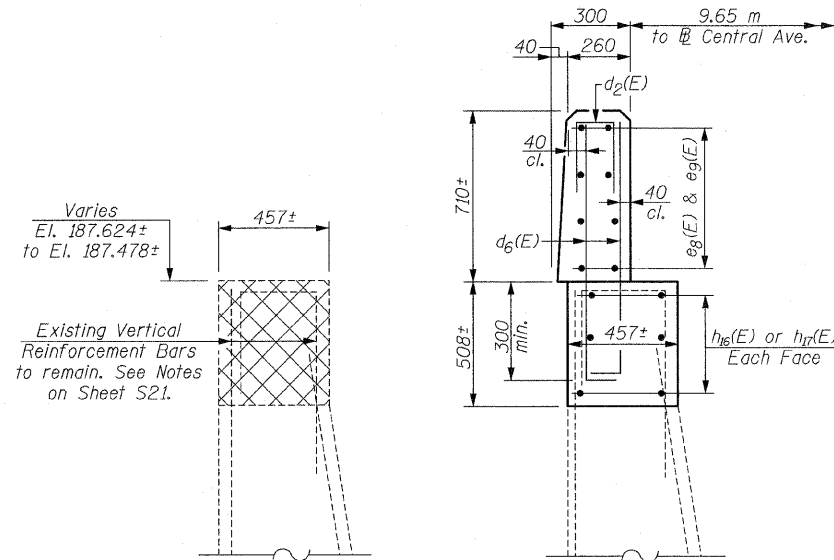


REVISIONS	
NAME	DATE

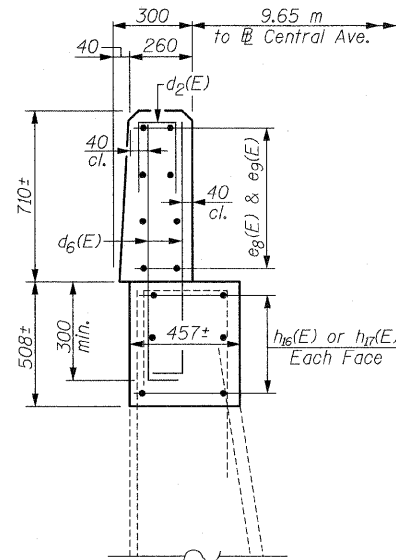
ILLINOIS DEPARTMENT OF TRANSPORTATION
NORTH ABUTMENT
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659
SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./I.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	71
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60640

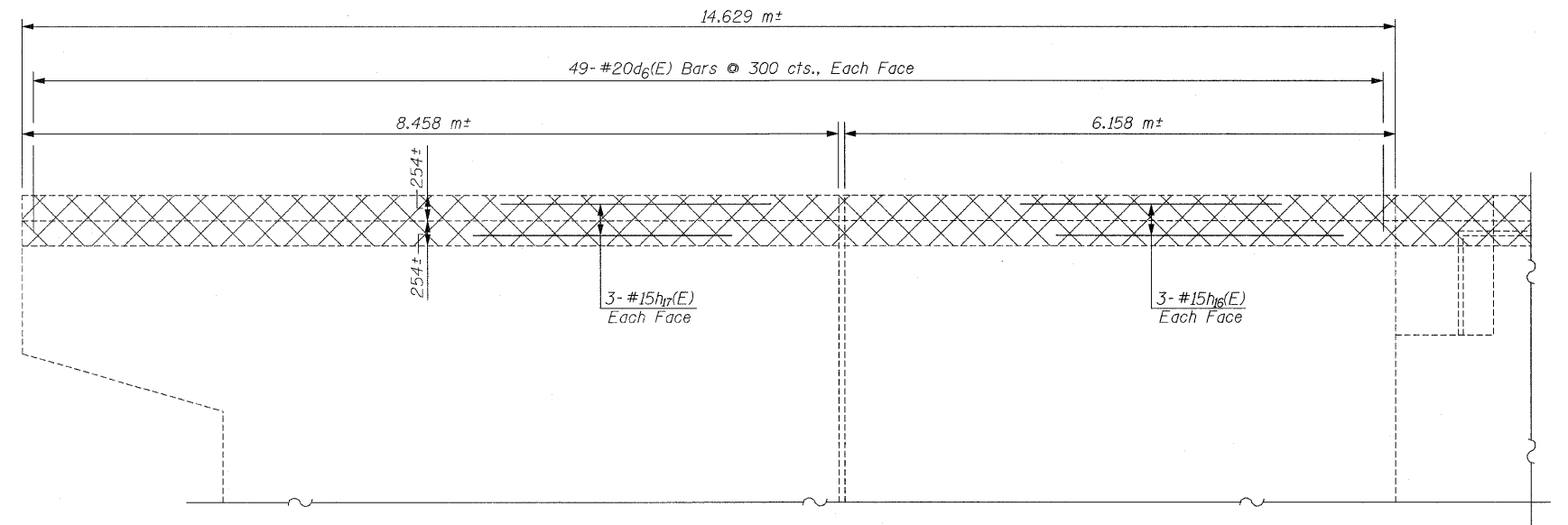


EXISTING NORTHWEST WINGWALL SECTION
(Showing Concrete Removal)



PROPOSED NORTHWEST WINGWALL SECTION
See Sheet S12 for Bars $e_8(E)$, $e_9(E)$ & $d_2(E)$ at each Rail Post.

NOTE:
Reinforcement Bars $d_6(E)$, $h_{16}(E)$ & $h_{17}(E)$ are included with North Abutment, see Sht. S23



ELEVATION OF EXISTING NORTHWEST WINGWALL

NOTES:

Reinforcement Bars that are to be grouted into existing concrete shall be spaced at least 150 mm from the edge of existing concrete. Cost of hole drilling and Epoxy Grouting is included with "Reinforcement Bars, Epoxy Coated".

Epoxy Grout $v_7(E)$ Bars in 230 mm min. deep drilled holes. According to Article 584 of The Standard Specifications.

Space reinforcement in cap to miss anchor bolts.

Verify existing seat elevations in the field prior to ordering materials.

For concrete removal, see Sheet S21.

See Sheet S27 for Bar Splicer (Coupler) Details at stage construction.

Cost of 13 mm joint filler is included with "Concrete Structures".

All dimensions are in millimeters (mm) unless otherwise noted.

Backfill with uncompacted Porous Granular Embankment, Special with a gradation of CA-5 or CA-7 by Bridge Contractor after Superstructure is in place. Limits shall be 300 mm from the end.

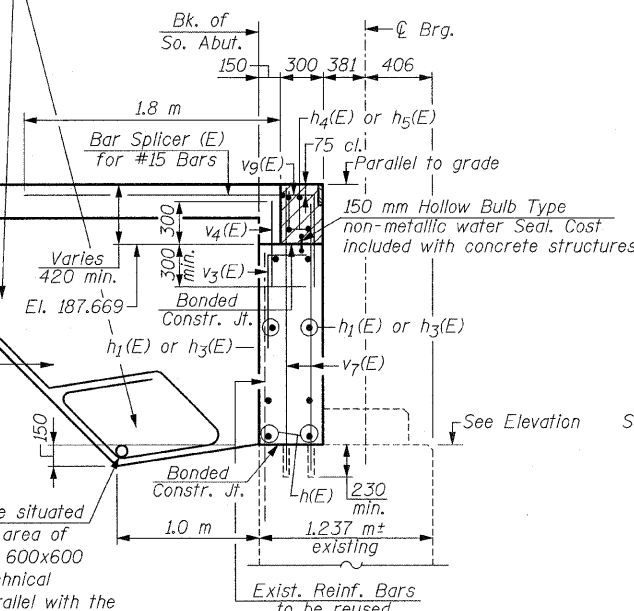
Excavation for placing Porous Granular Embankment, Special shall be paid for as "Structure Excavation"

Bridge Appr. Slab

Geotechnical Fabric for French Drains

Porous Granular Embankment, Special Between the End Posts of the Abutment

Perforated Drain Pipe shall be situated at the bottom of an approximate 600x600 area of Porous Granular Embankment, Special. The 600x600 area shall be wrapped completely in Geotechnical Fabric for French Drains. Extend pipe parallel with the cap until intersecting with the sideslopes. Drain Pipes shall be outletting through the Existing Wingwalls by Coring. The cost of the Coring will be included for payment in the Item Porous Granular Embankment (Special)



PROPOSED SOUTH ABUTMENT MODIFICATION
(Dimensions © Rt. L's)

* Place $h_2(E)$ or $h_{10}(E)$ Bars in back of Anchor Bolts as shown if required to maintain 25 mm cl. (± 0.3 mm). Anchor Bolts should be tied to $h_2(E)$ or $h_{10}(E)$ Bars

** Included in the cost of Porous Granular Embankment, Special

Backfill with uncompacted Porous Granular Embankment, Special with a gradation of CA-5 or CA-7 by Bridge Contractor after Superstructure is in place. Limits shall be 300 mm from the end.

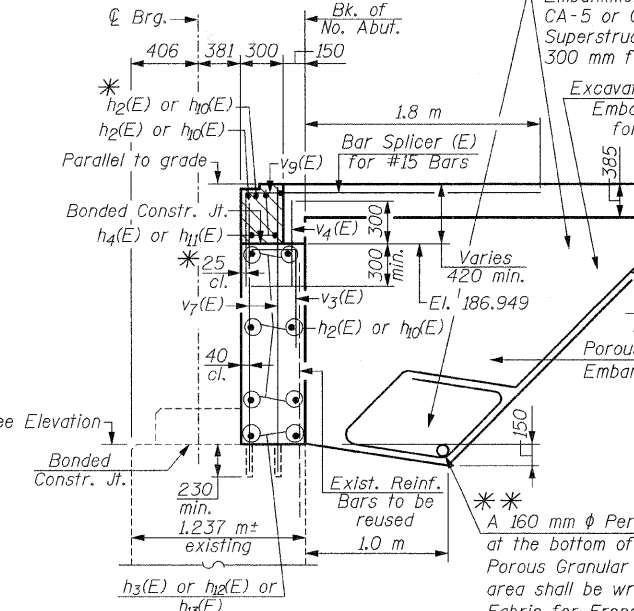
Excavation for placing Porous Granular Embankment, Special shall be paid for as "Structure Excavation"

Bridge Appr. Slab

Geotechnical Fabric for French Drains

Porous Granular Embankment, Special

Perforated Drain Pipe shall be situated at the bottom of an approximate 600x600 area of Porous Granular Embankment, Special. The 600x600 area shall be wrapped completely in Geotechnical Fabric for French Drains. Extend pipe parallel with the cap until intersecting with the sideslopes. Drain Pipes shall be outletting through the Existing Wingwalls by Coring. The cost of the Coring will be included for payment in the Item Porous Granular Embankment, Special



PROPOSED NORTH ABUTMENT MODIFICATION
(Dimensions © Rt. L's)

REVISIONS	
NAME	DATE

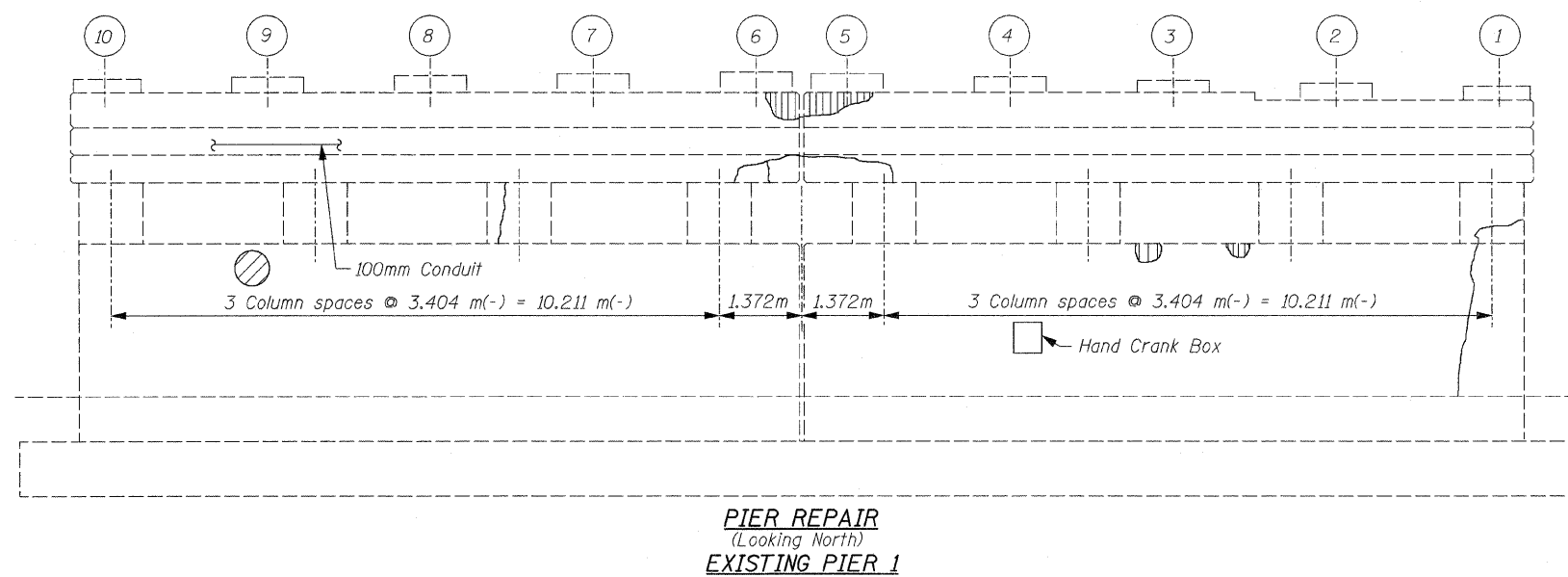
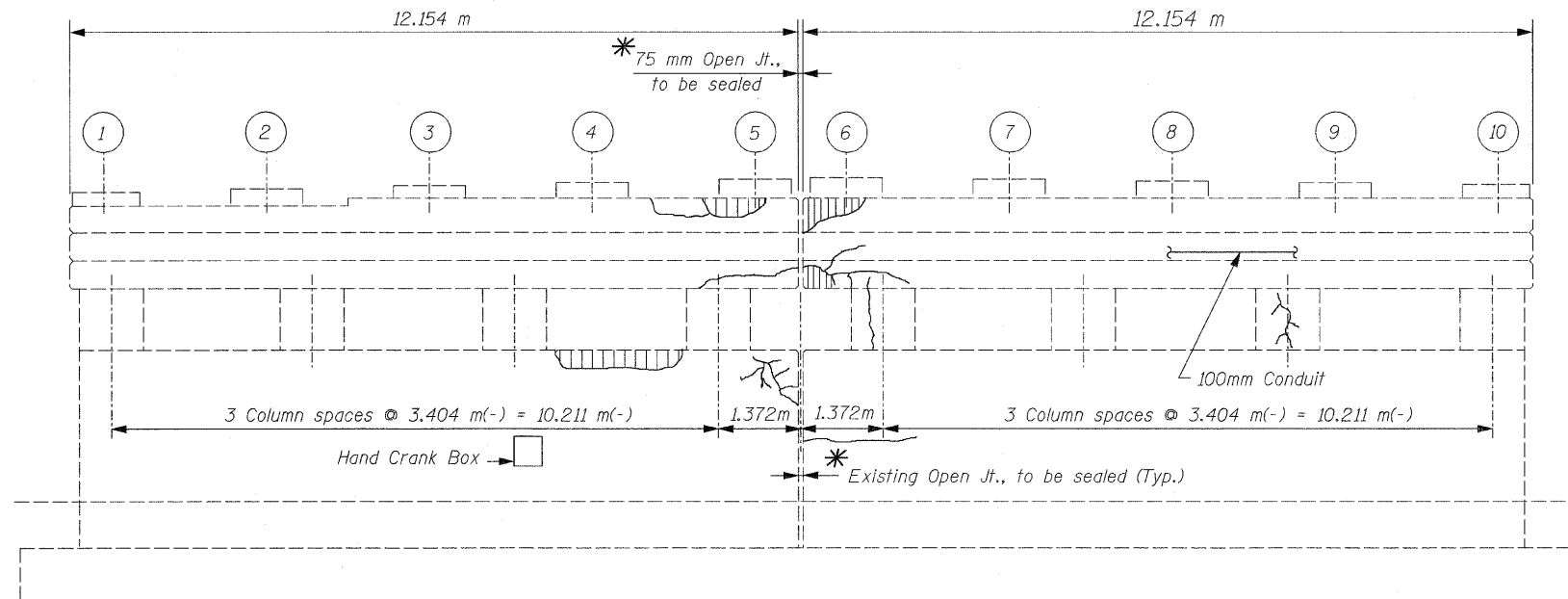
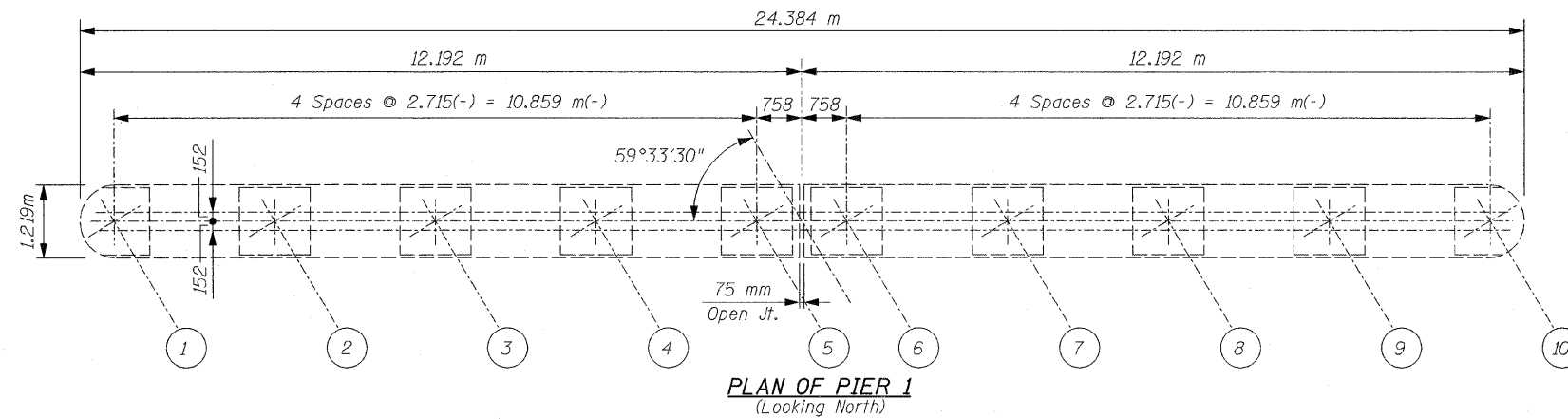
ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
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CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	72
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



* Cost included with Structural Repair of Concrete (Depth equal to or less than 125mm)

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Sealing	m	15.8
Structural Repair of Concrete (Depth equal to or less than 125mm)	m ²	11.6

NOTE:

Repair of the existing Pier shall include but not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

LEGEND

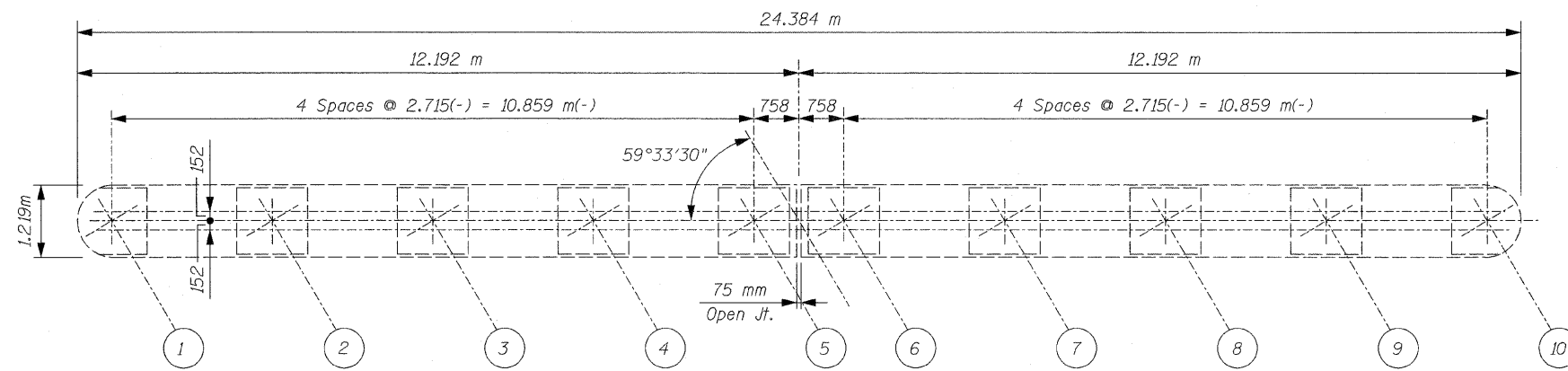
- Structural Repair of Concrete (Depth equal to or less than 125mm)
- Indicate Limits of Epoxy Crack Sealing

REVISIONS	
NAME	DATE

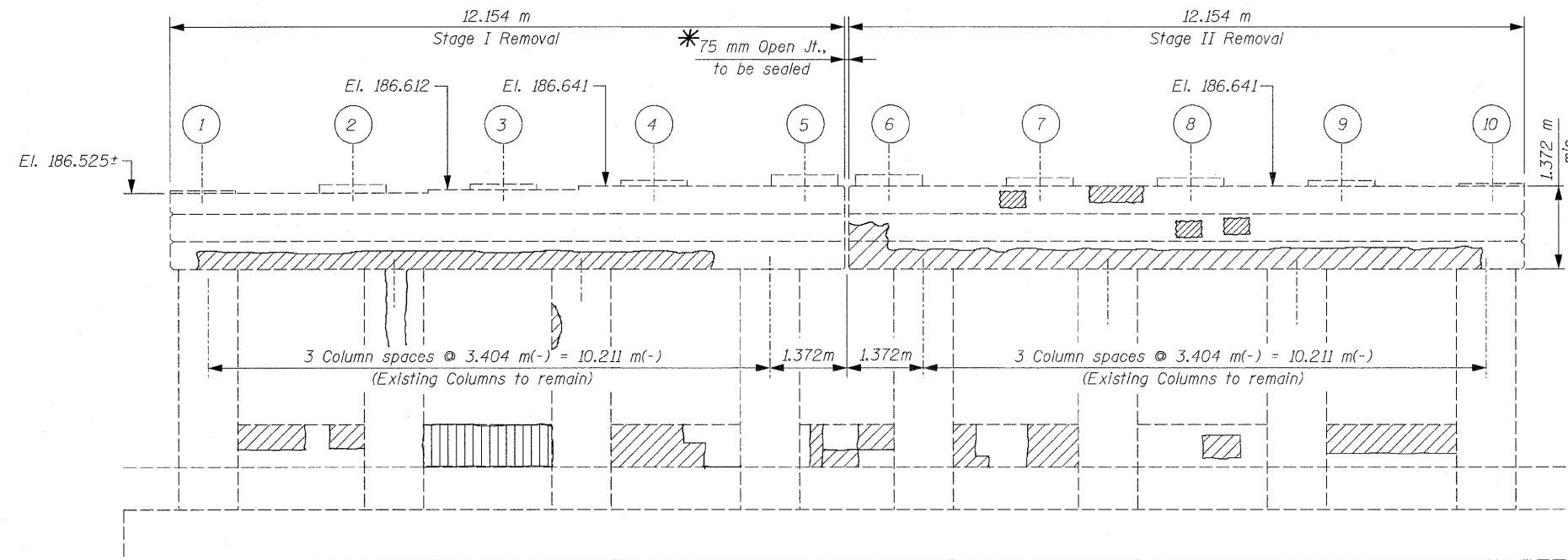
ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER 1 REPAIRS
 CENTRAL AVENUE (F.A.U. RTE. 2798)
 OVER
 INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659
 SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	73
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

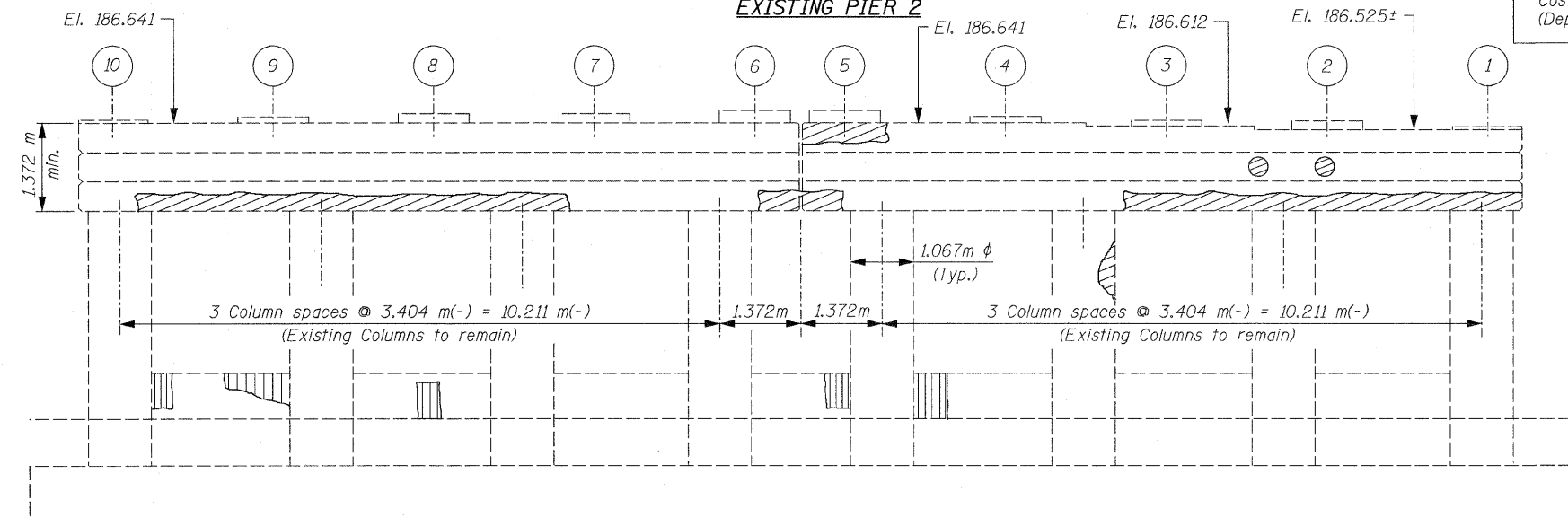
CONTRACT NO. 60640



PLAN OF PIER 2
(Looking North)



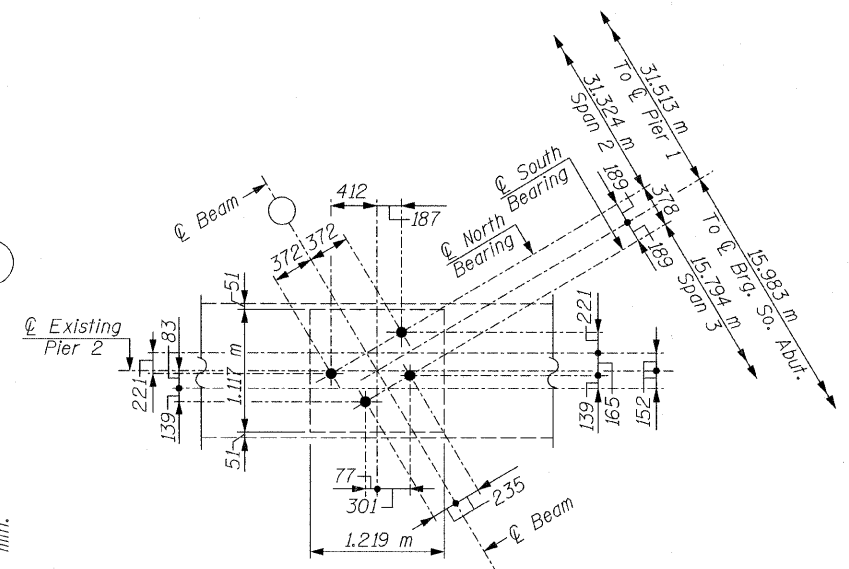
PIER REPAIR
(Looking North)
EXISTING PIER 2



PIER REPAIR
(Looking North)
EXISTING PIER 2

NOTE:
Repair of the existing Pier shall include but not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

* Cost included with Structural Repair of Concrete (Depth equal to or less than 125mm)



ANCHOR BOLT LAYOUT
EXISTING PIER 2

Top of Existing Bearing Pad Elevations		
Beam No.'s.	☉ So. Brg. Pier 2	☉ No. Brg. Pier 2
1	El. 186.589	El. 186.577
2	El. 186.702	El. 186.623
3	El. 186.743	El. 186.667
4	El. 186.790	El. 186.729
5	El. 186.836	El. 186.745
6	El. 186.830	El. 186.751
7	El. 186.830	El. 186.748
8	El. 186.779	El. 186.729
9	El. 186.787	El. 186.729
10	El. 186.687	El. 186.693

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Sealing	m	1.5
Structural Repair of Concrete (Depth equal to or less than 125mm)	m ²	29.4

LEGEND

- Structural Repair of Concrete (Depth equal to or less than 125mm)
- Indicate Limits of Epoxy Crack Sealing

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 2 REPAIRS
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659

SCALE: NONE DRAWN BY: D.L./F.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.M.S./J.C.M.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	74
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60640

NOTES

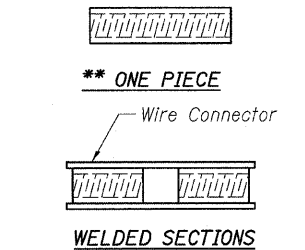
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 400 MPa yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the 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 = $1.25 \times f_y \times A_t$
(Tension in kN)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_t$
(Tension in kN)
- Where f_y = Yield strength of lapped reinforcement bars in kN.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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

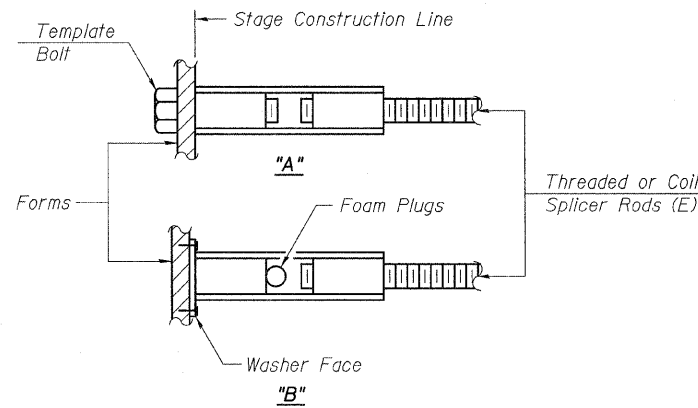
The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



BAR SPLICER ASSEMBLY ALTERNATIVES

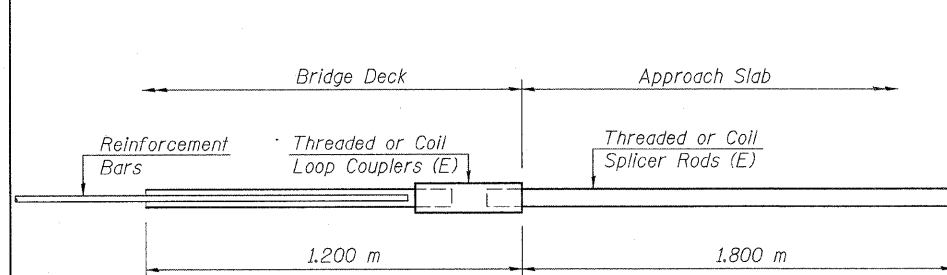
** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

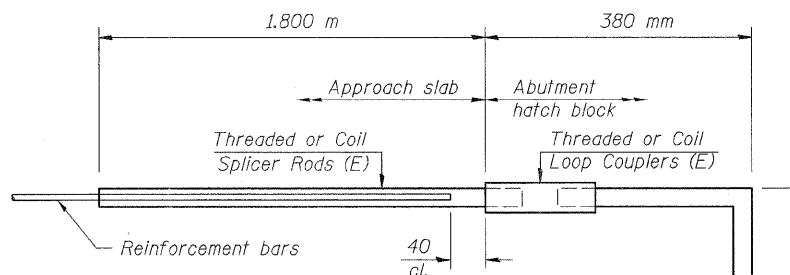
"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension
#15	660 mm	100	55
#20	790 mm	150	80
#25	1.04 m	250	135
#30	1.37 m	350	185



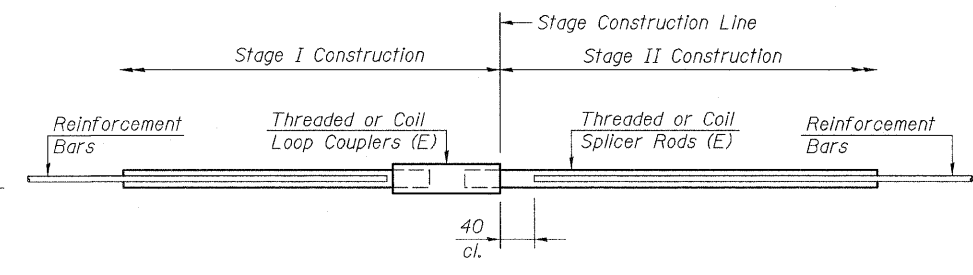
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #15 bar	
Min. Capacity = 102 KN - tension	
Min. Pull-out Strength = 55 KN - tension	
No. Required = -	



FOR STUB ABUTMENTS

Bar Splicer for #15 bar	
Min. Capacity = 102 KN - tension	
Min. Pull-out Strength = 55 KN - tension	
No. Required = 164	



STANDARD

Bar Size	No. Assemblies Required	Location
#15	769	Slab
#25	15	
#15	15	Abutments
#20	7	
Total	806	

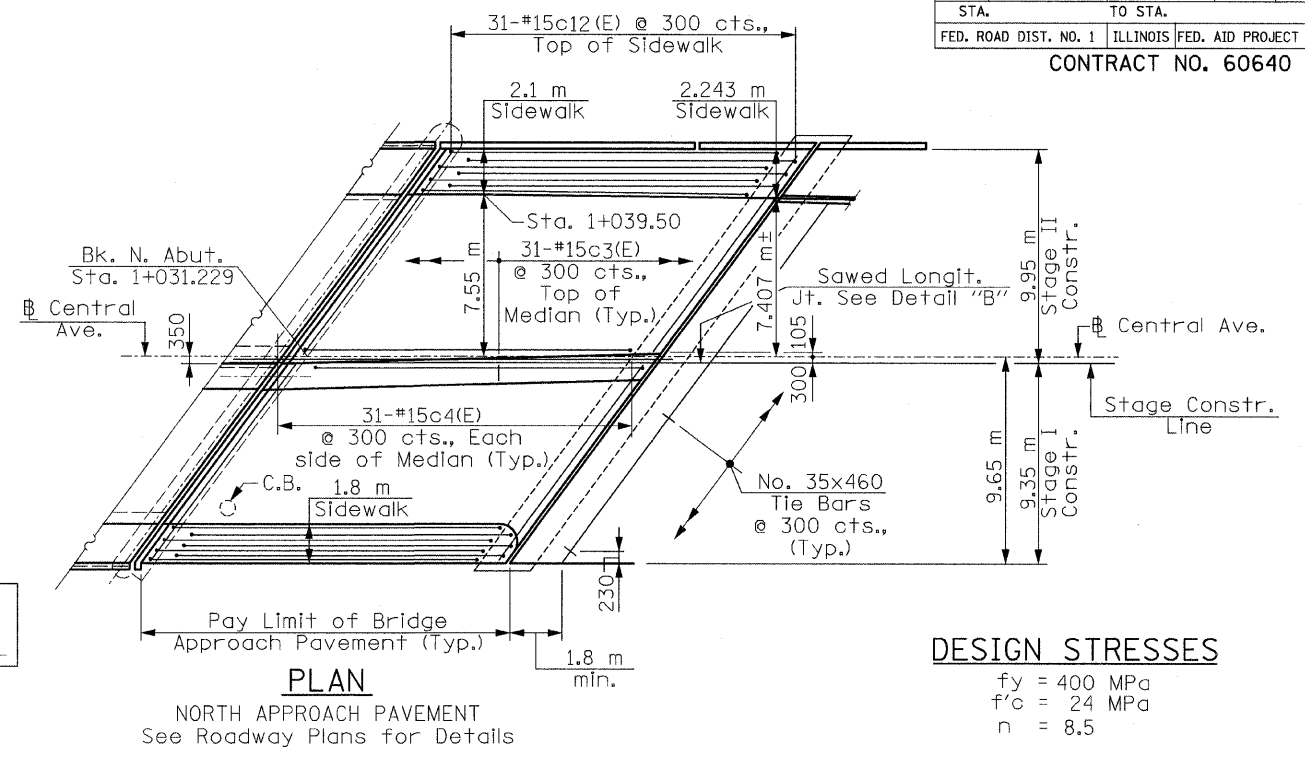
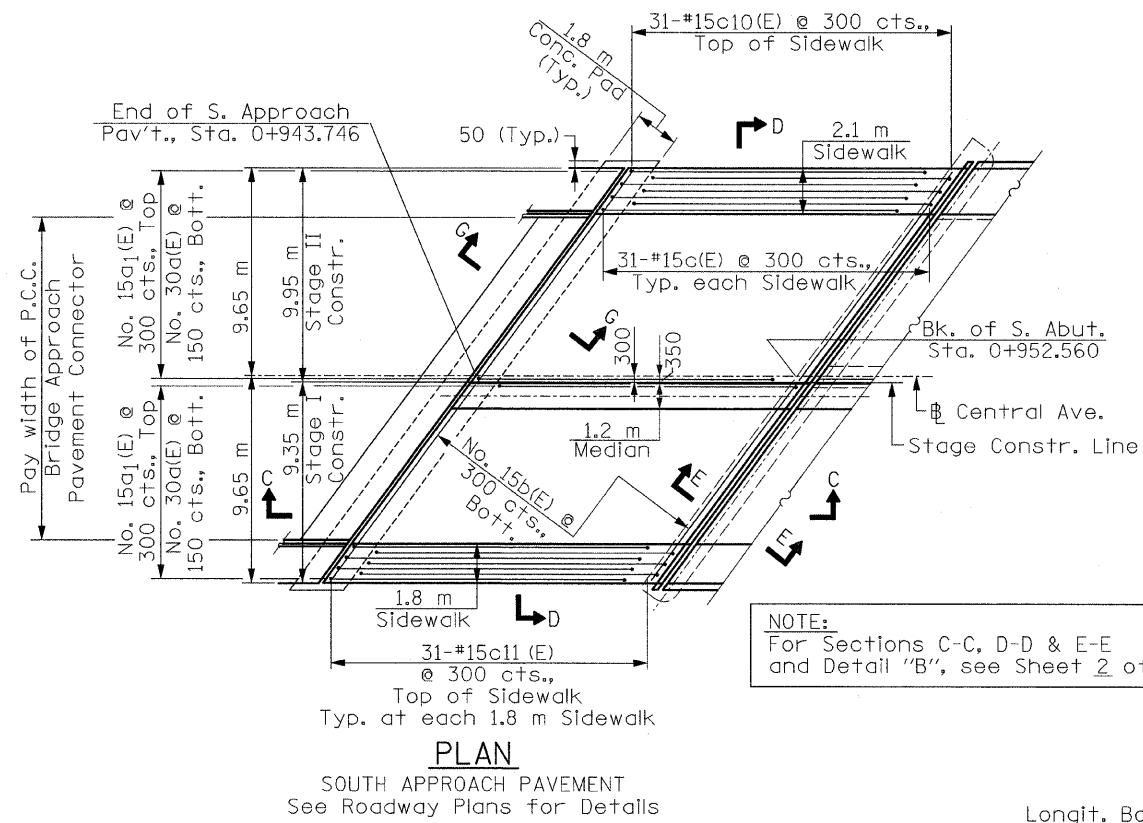
ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
 CENTRAL AVENUE (F.A.U. RTE. 2798) OVER INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
 F.A.I. RTE. 90 SECTION: 1213B-1
 COOK COUNTY STATION 1+000.000
 STRUCTURE NO. 016-0659

REVISIONS	
NAME	DATE

SCALE: NONE DRAWN BY: D.L./F.M.
 DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.M.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	75
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 60640				



NOTE:
For Sections C-C, D-D & E-E and Detail "B", see Sheet 2 of 2

DESIGN STRESSES
 $f_y = 400 \text{ MPa}$
 $f'_c = 24 \text{ MPa}$
 $n = 8.5$

BILL OF MATERIAL
TWO APPROACH PAVEMENTS, WEST SIDEWALK, EAST SIDEWALK & MEDIAN

Bar	No.	Size	Length	Shape	
b1d(E)	39	#15	8.85	—	
c(E)	124	#15	0.73	~	
c3(E)	62	#15	1.08	—	
c4(E)	124	#15	0.47	┌	
c1d(E)	31	#15	2.00	—	
c11(E)	62	#15	1.07	—	
c12(E)	31	#15	1.79	—	
Reinforcement Bars, Epoxy Coated				k_g	1,170
Bridge Approach (Special)				m^2	346

Reinforcement Bars designated (E) shall be Epoxy Coated.

GENERAL NOTES:

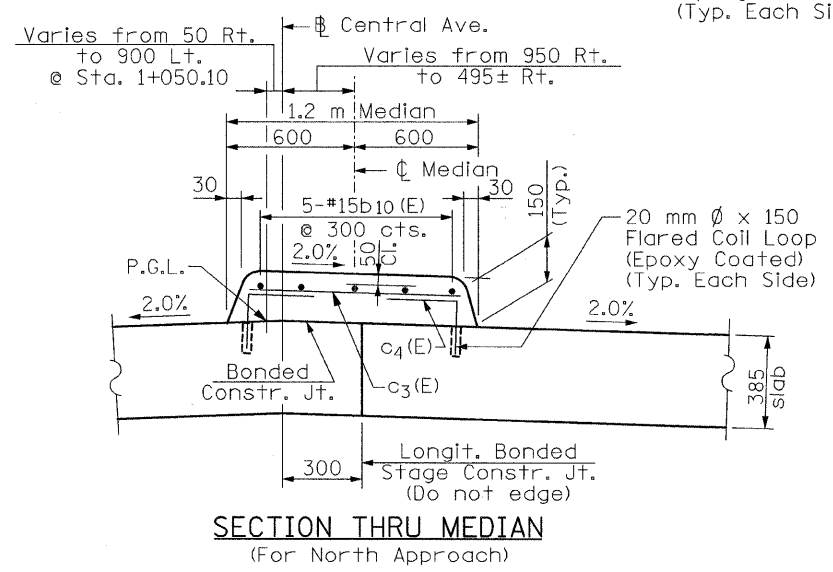
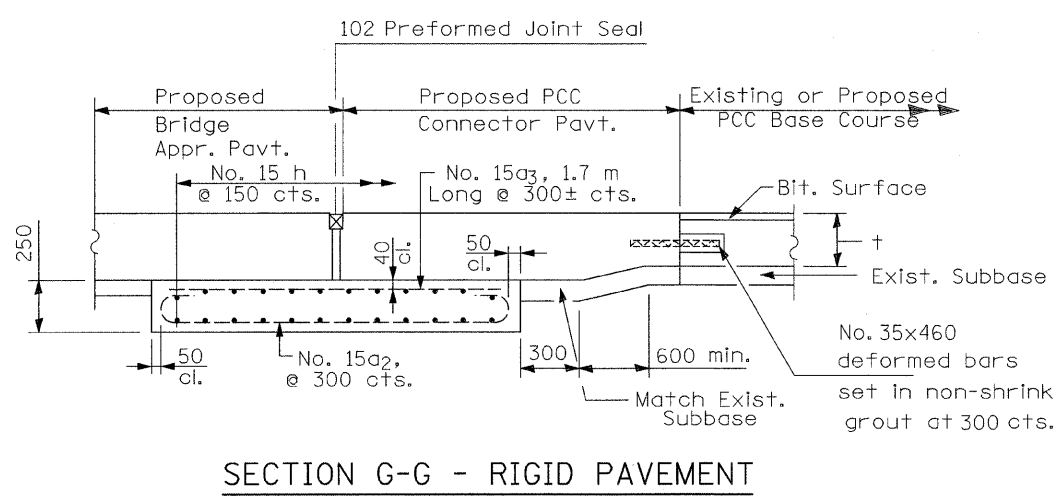
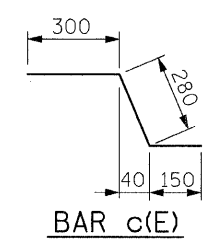
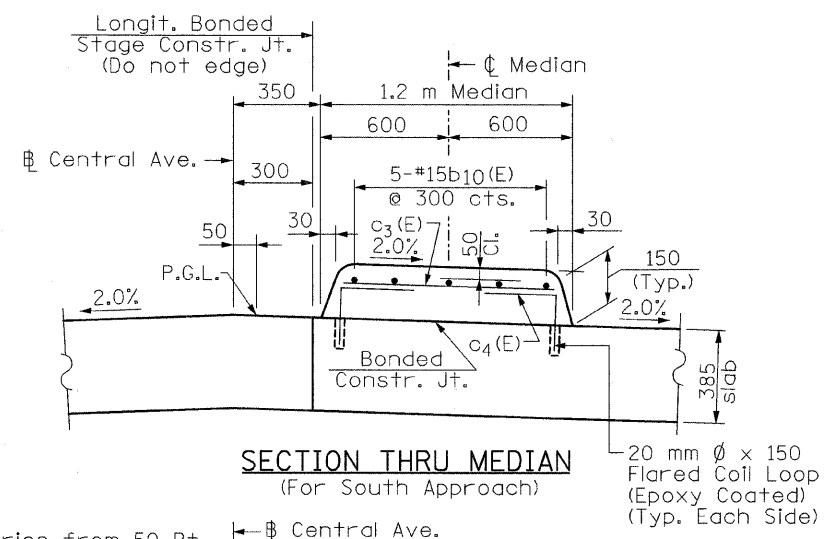
The Unit Price Bid for Bridge Approach Pavement (Special) shall include Tie Bars, Preformed Joint Seal, Polyethylene Bond Breaker, 50 mm P.J.F., Granular Subbase, Reinforcement Bars, The Concrete Pad (Including Reinforcement and Excavation), Median (Including Reinforcement and Epoxy Coated Flared Coil Loops), and all other items necessary to complete this Item of work.

Width of Bridge Approach Pavement (Special) shall be determined before the Reinforcement Bars are fabricated.

Thickness "t" = Thickness of Pavement.

See Standard 421001 for Reinforcement Details not shown.

See Standard 420001 for Details of Joints not shown.

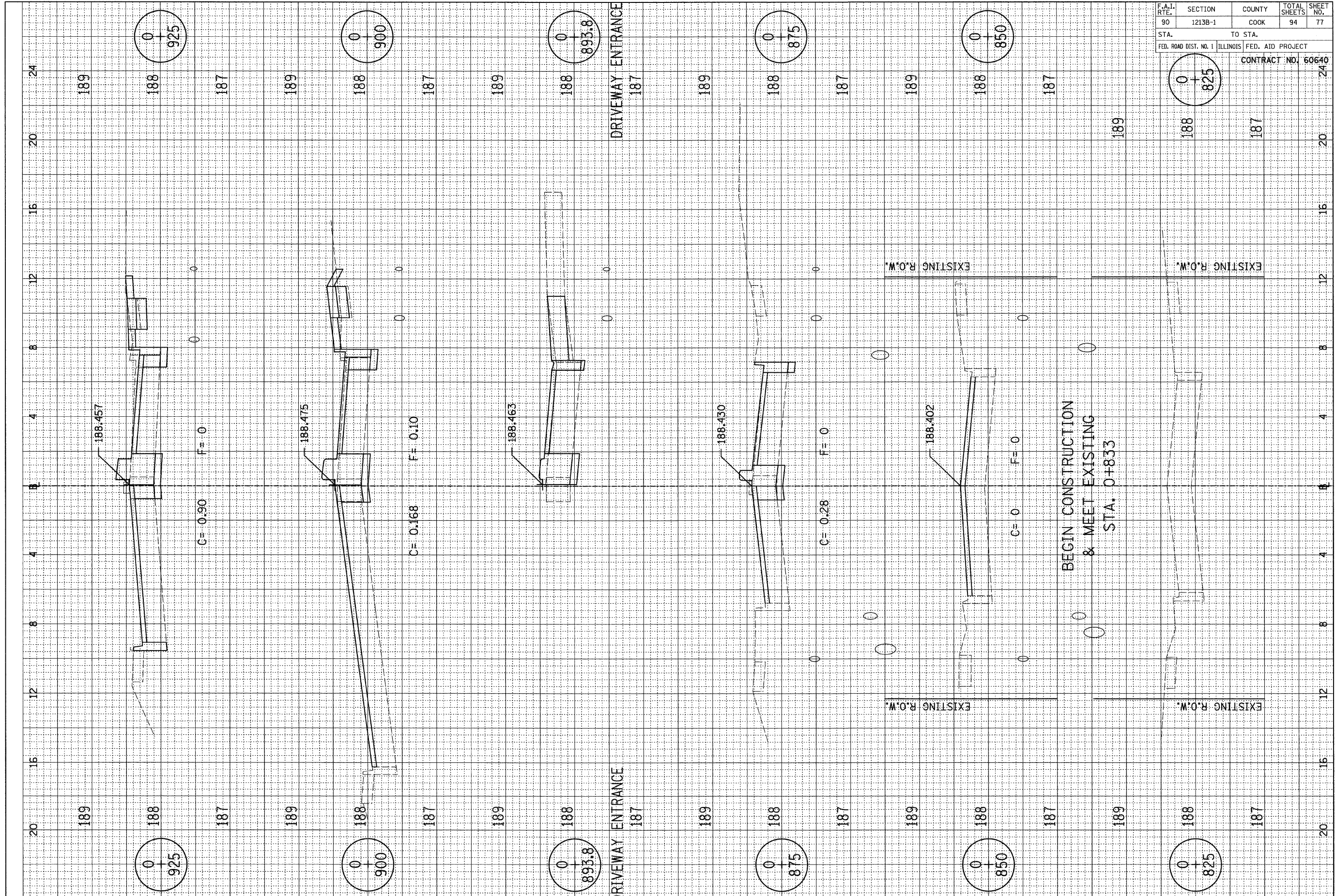


All dimensions are in millimeters unless otherwise shown.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT (SPECIAL)
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659
 SCALE: DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.M.
 DATE: NOVEMBER 28, 2007
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	77
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
				CONTRACT NO. 60640

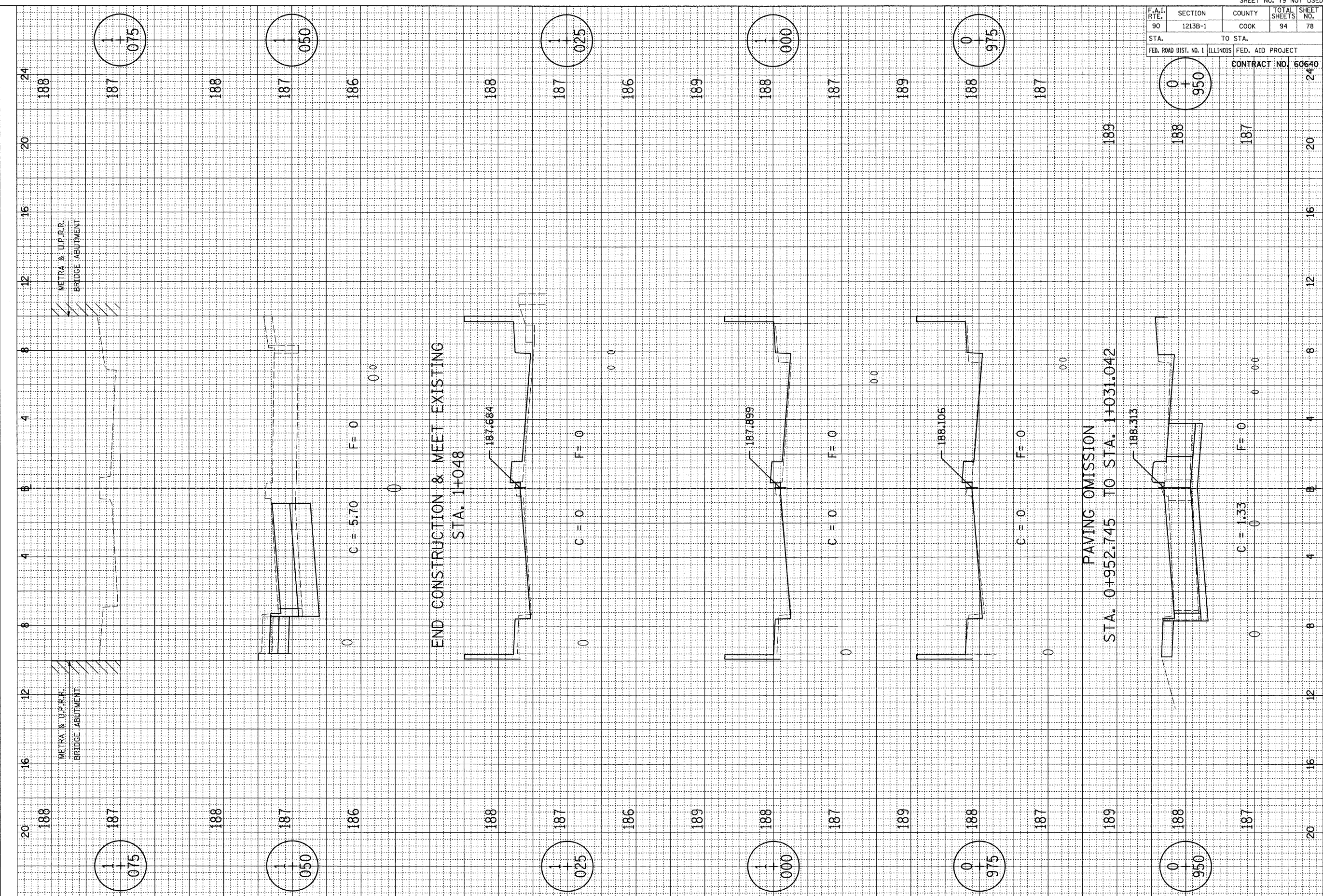


CENTRAL AVENUE - CROSS SECTIONS

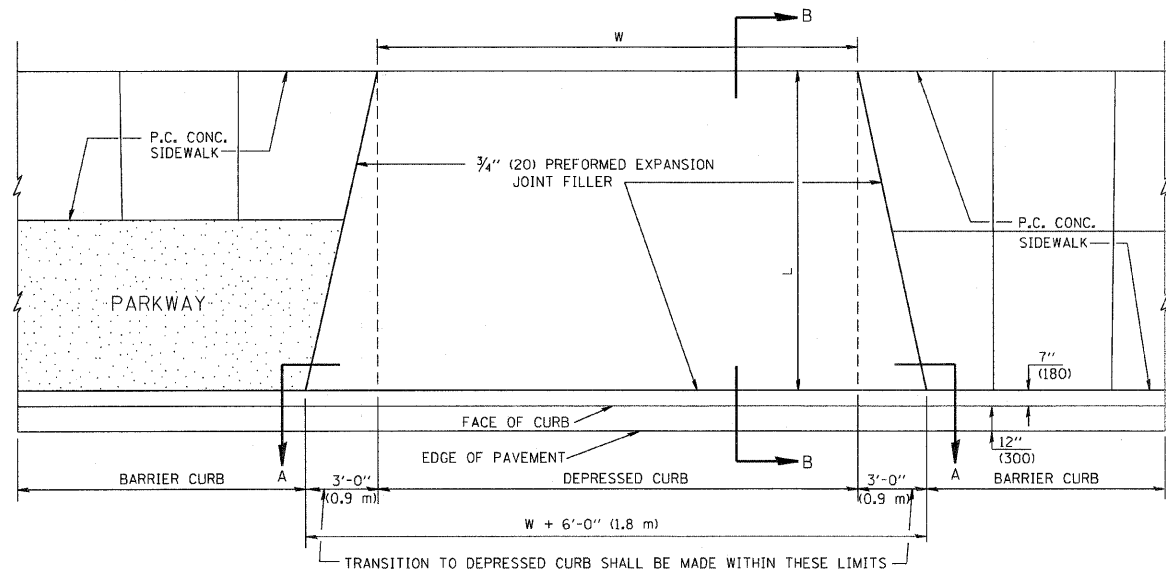
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	78

STA. TO STA.
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CONTRACT NO. 60640

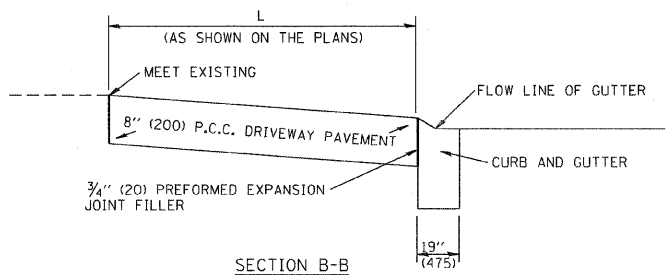


CENTRAL AVENUE - CROSS SECTIONS

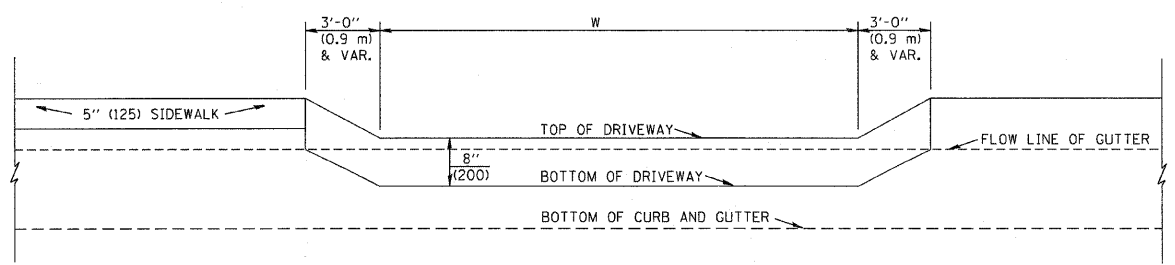


PLAN VIEW

- NOTES:
1. EXPANSION JOINTS SHALL BE CONSTRUCTED AS SHOWN ON THE DETAILS FOR P.C.C. SIDEWALK.
 2. THE CURB BETWEEN ADJACENT DRIVEWAYS SHALL BE FULL HEIGHT FOR A DISTANCE OF AT LEAST FOUR FEET (1.2 METERS).
 3. P.C. CONCRETE DRIVEWAYS SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
 4. 3/4" (20) PREFORMED EXPANSION JOINTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO P.C.C. DRIVEWAY PAVEMENT 8" (200).
 5. COMBINATION CONC. CURB AND GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE TRANSITION CURB AND GUTTER.

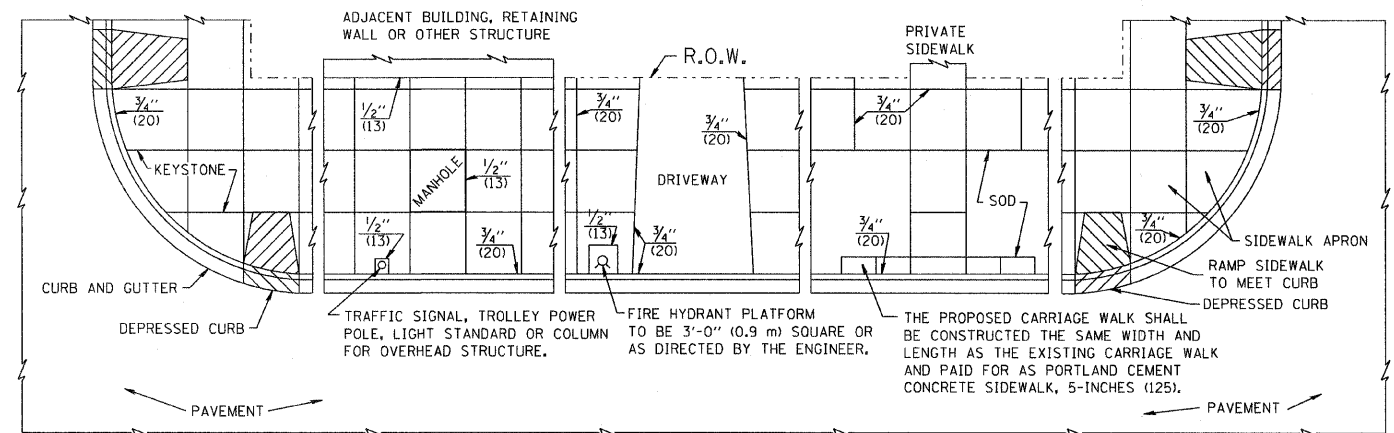


SECTION B-B



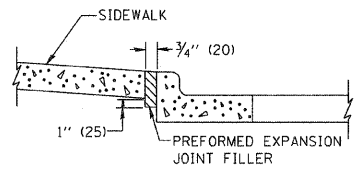
SECTION A-A

P.C.C. DRIVEWAY PAVEMENT DETAIL



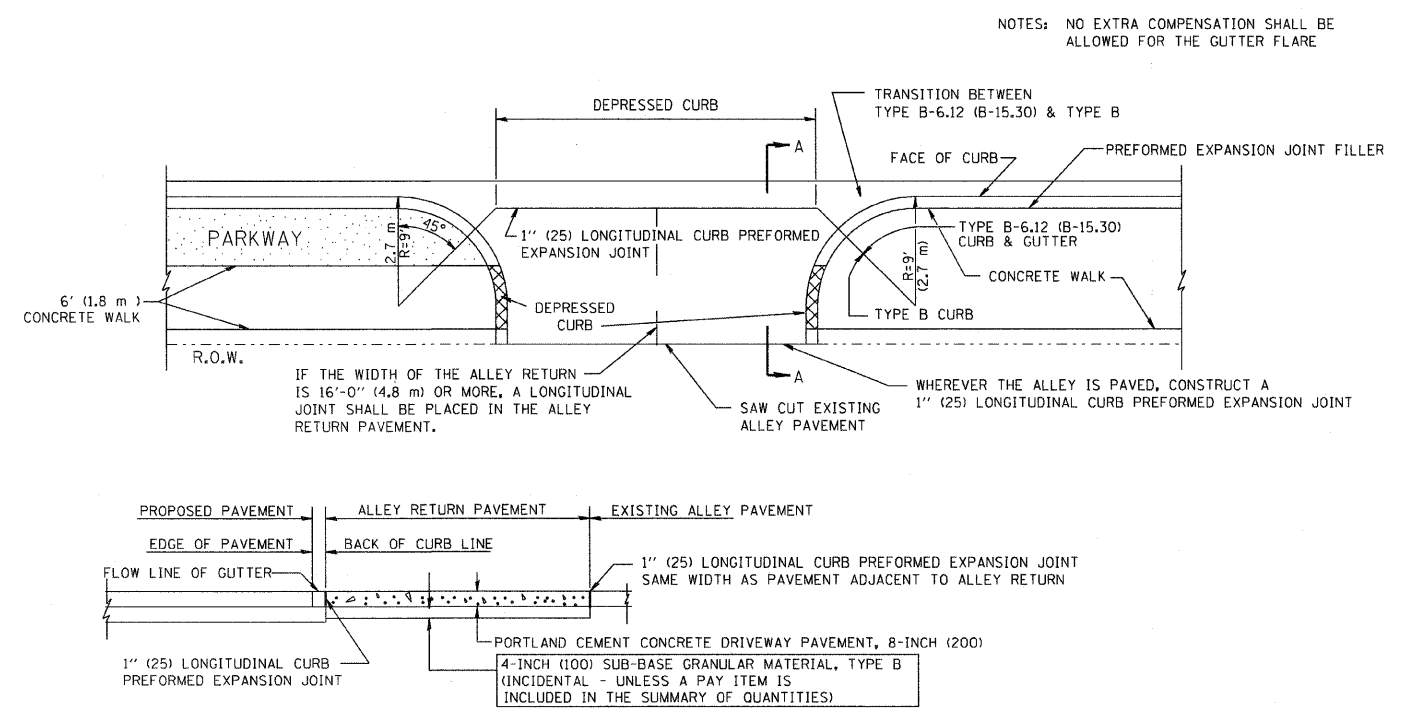
NOTES:

1. ONE-HALF INCH THICK EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIDEWALK AND ALL STRUCTURES SUCH AS LIGHT STANDARDS, TRAFFIC LIGHT STANDARDS, MANHOLES, WHICH EXTEND THROUGH THE SIDEWALK.
2. 3/4" (20) THICK EXPANSION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 100 FEET (30 METERS) IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT TO PAVEMENT OR CURB HAVING EXPANSION JOINTS, THE EXPANSION JOINTS IN THE SIDEWALK SHALL BE PLACED OPPOSITE THE EXISTING EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL ALSO BE PLACED WHERE THE SIDEWALK ABUTS EXISTING SIDEWALKS, BETWEEN DRIVEWAY PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK AND CURBS WHERE THE SIDEWALK ABUTS A CURB.



SLOPE FOR SIDEWALK
1" (25) IN 3'-0" (0.9 m) IN CHICAGO

PORTLAND CEMENT SIDEWALK DETAILS



SECTION A-A

ALLEY RETURN DETAIL

NOTES: NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE GUTTER FLARE

FILE NAME = W:\distatd\22x34\bd17.dgn

USER NAME = gaglianobt
PLOT SCALE = 50.0000' / IN.
PLOT DATE = 1/4/2008

DESIGNED - M. DE YONG
DRAWN -
CHECKED -
DATE - 06-13-90

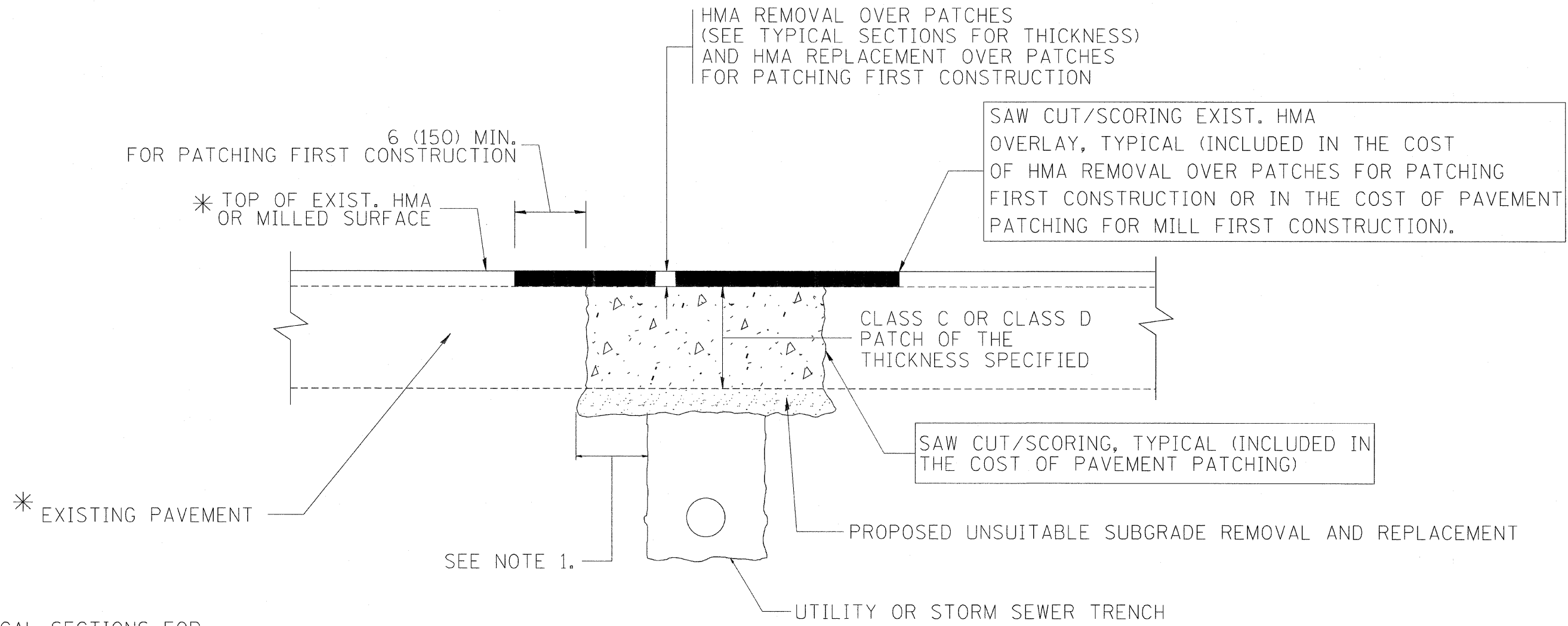
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
DETAILS FOR P.C. CONCRETE DRIVEWAY, ALLEY RETURN AND SIDEWALK
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213 B-1	COOK	94	80
BD400-03 (BD-17)		CONTRACT NO. 60640		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

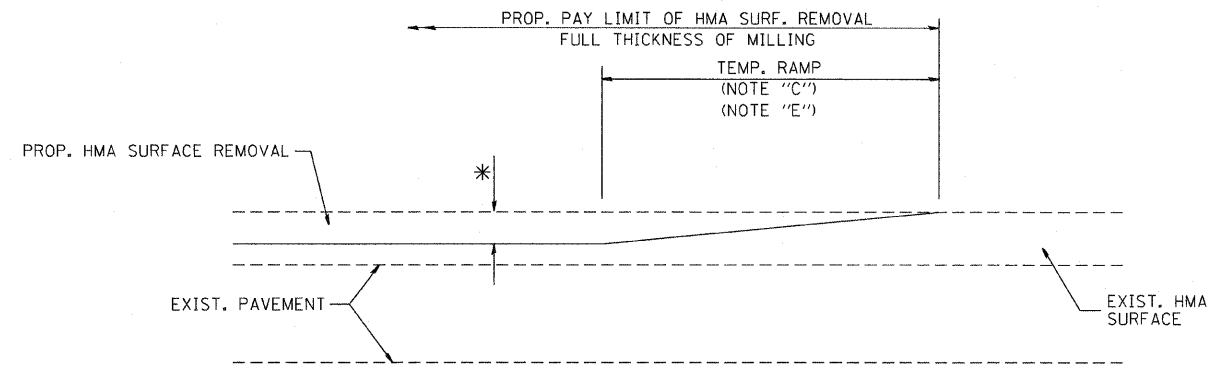
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

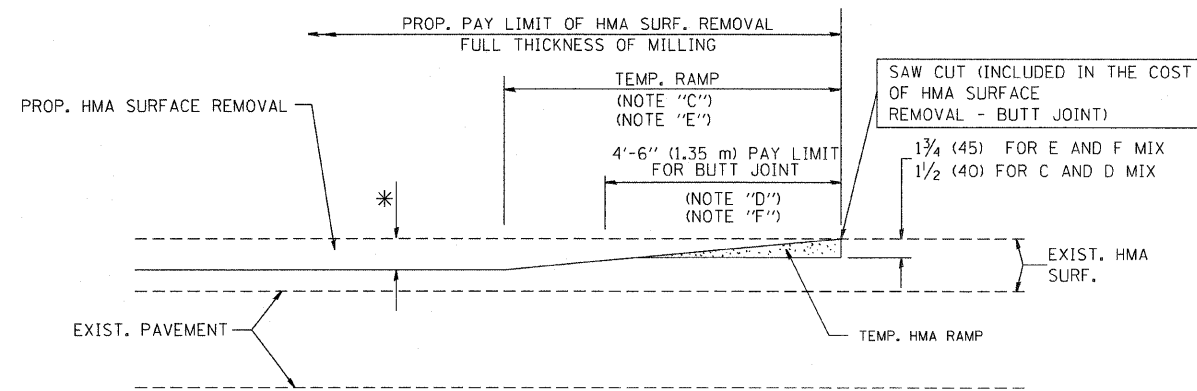
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. BORO 01-01-07					90	1213 B-1	COOK	94	81
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08					BD400-04 (BD-22) CONTRACT NO. 60640				
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 0+833	TO STA. 1+048		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



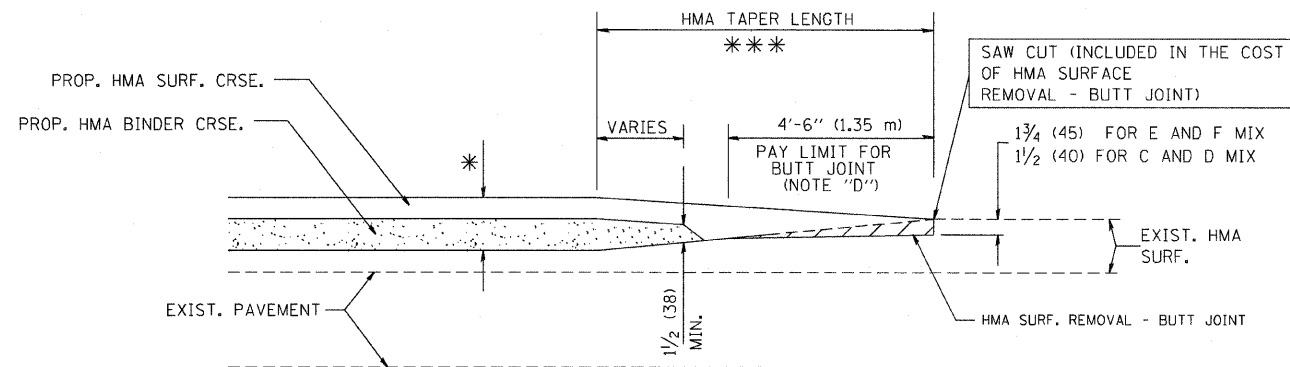
OPTION 1



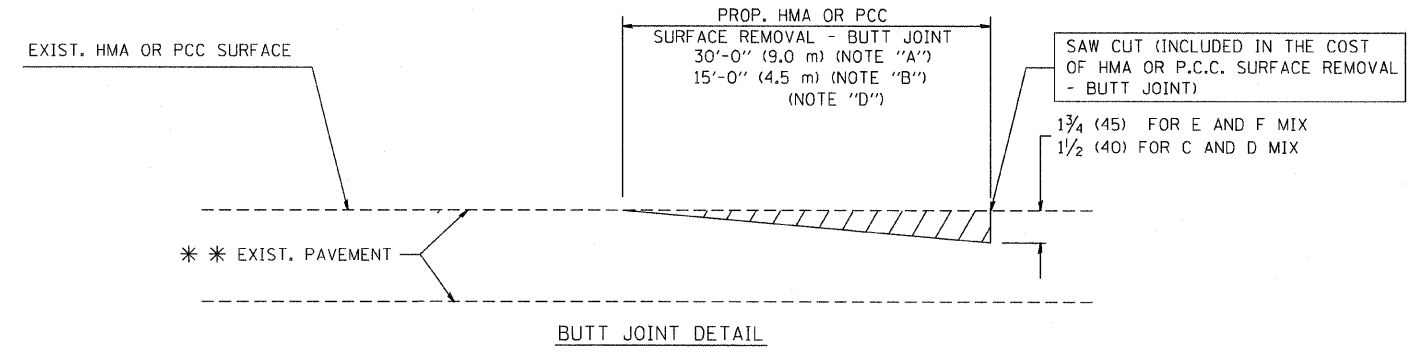
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

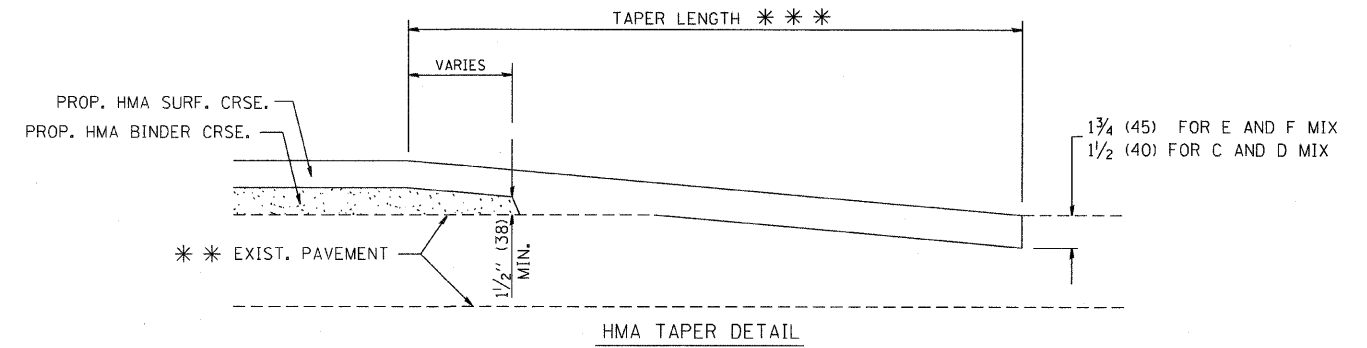
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

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

NOTES

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

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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

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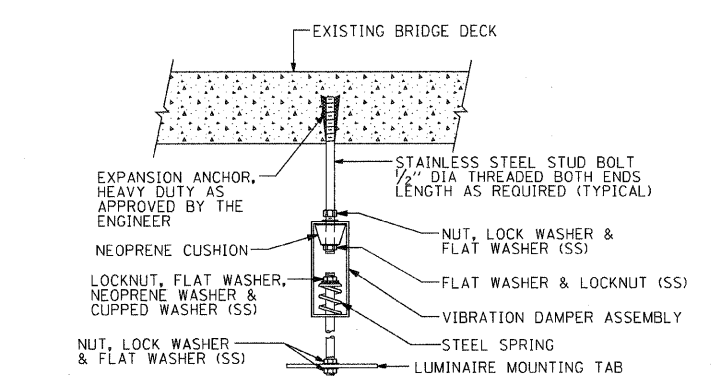
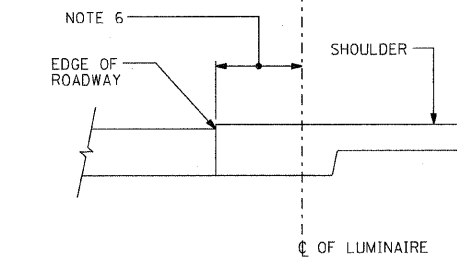
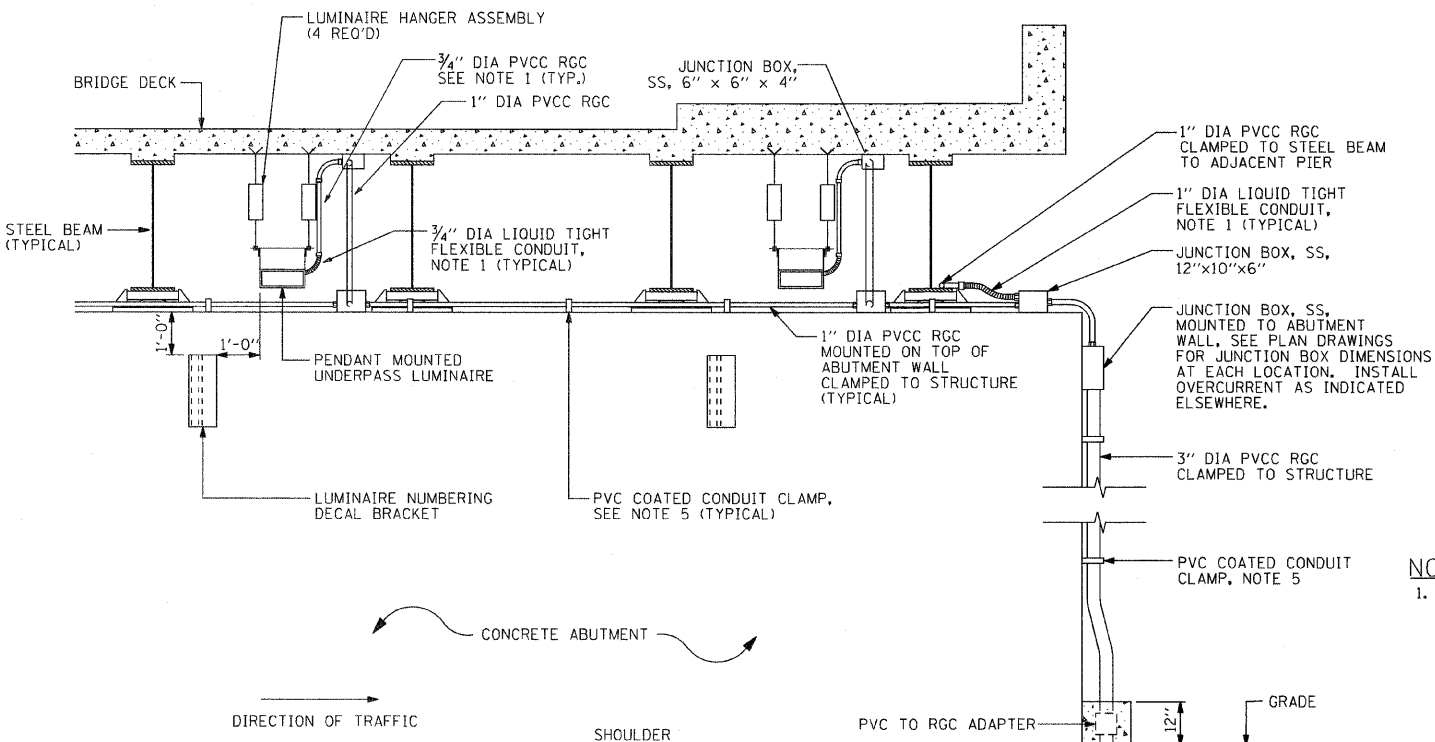
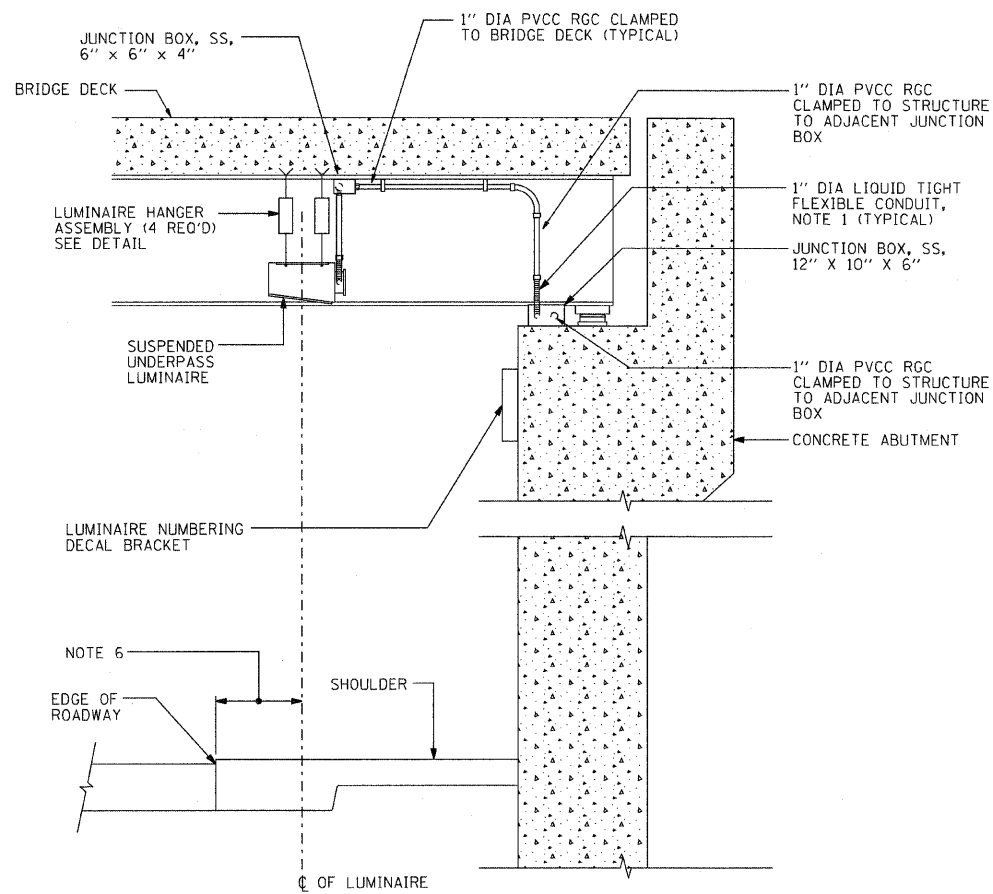
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PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - A. ABBAS 03-21-97
PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - M. GOMEZ 04-06-01
		REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

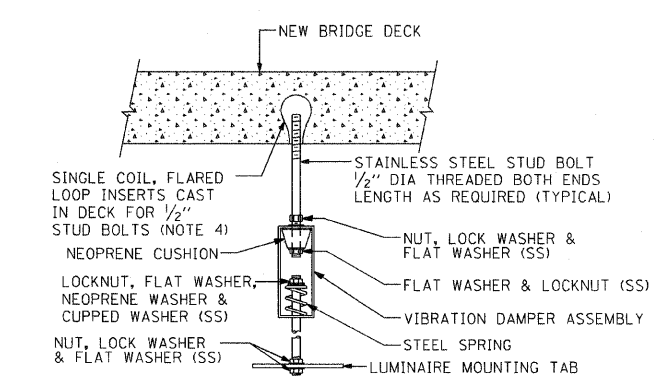
BUTT JOINT AND
HMA TAPER DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

F.A.I. RTE. 90	SECTION 1213 B-1	COUNTY COOK	TOTAL SHEETS 94	SHEET NO. 82
BD400-05 BD32			CONTRACT NO. 60640	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

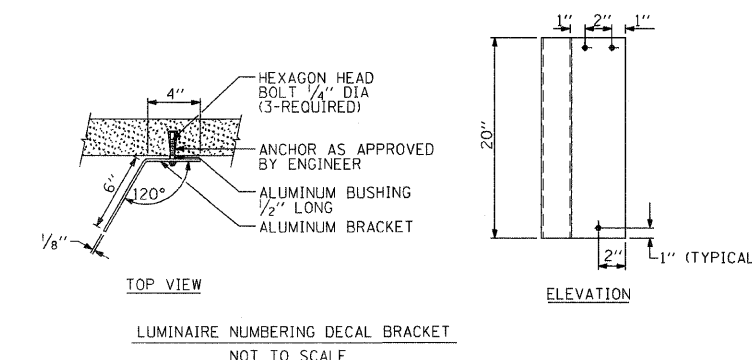
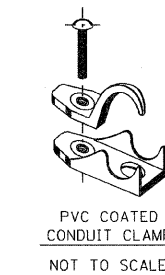
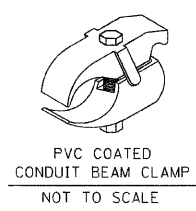


EXISTING BRIDGE DECK INSTALLATION



NEW BRIDGE DECK INSTALLATION

TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS



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 3/4" 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.

SHEET NO. 85 & SHEET NO. 86 NOT USED

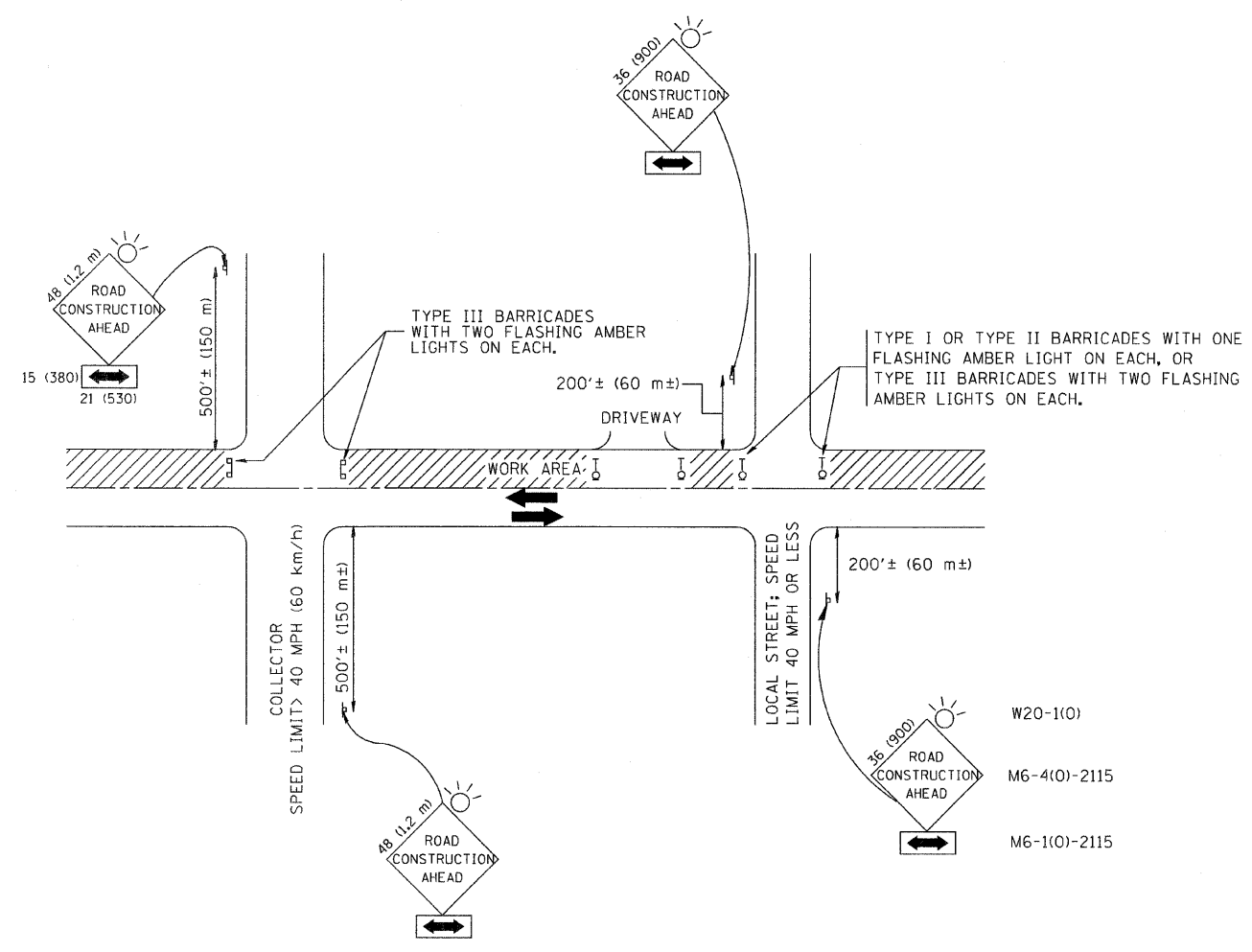
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	PLOT DATE = 1/4/2008	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUSPENDED MOUNT UNDERPASS
LUMINAIRE INSTALLATION DETAILS

SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 0+833	TO STA. 1+048
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F.A.J. RTE. 90	SECTION 1213 B-1	COUNTY COOK	TOTAL SHEETS 94	SHEET NO. 84
BE-900			CONTRACT NO. 60640	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



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

NOTES:

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

SHEET NO. 85 & SHEET NO. 86 NOT USED

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

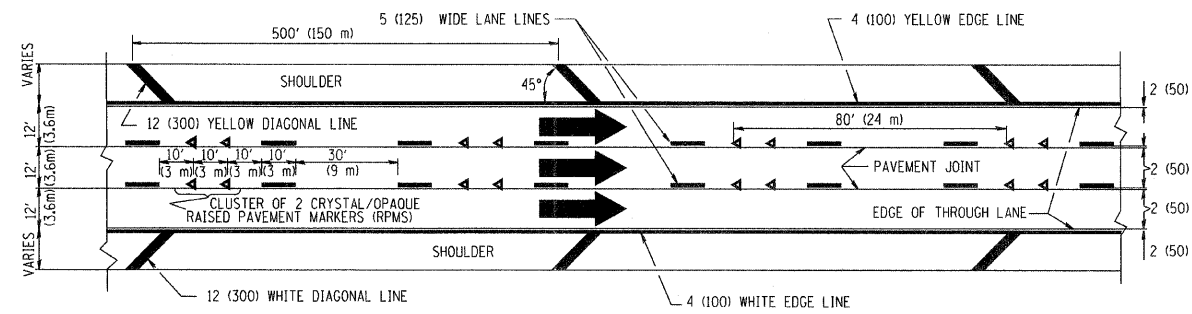
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	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

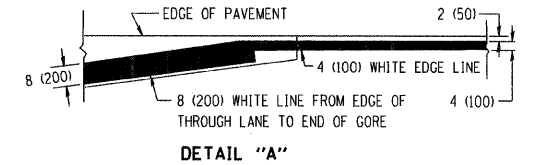
TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213 B-1	COOK	94	87
TC-10			CONTRACT NO. 60640	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

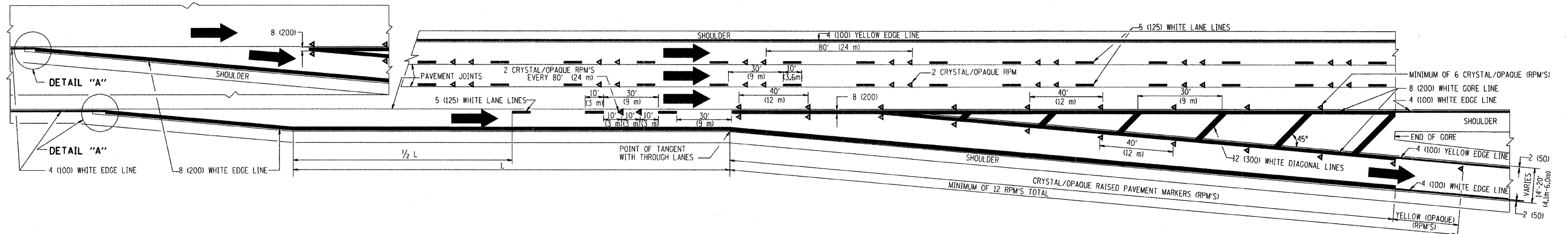
THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
 THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH



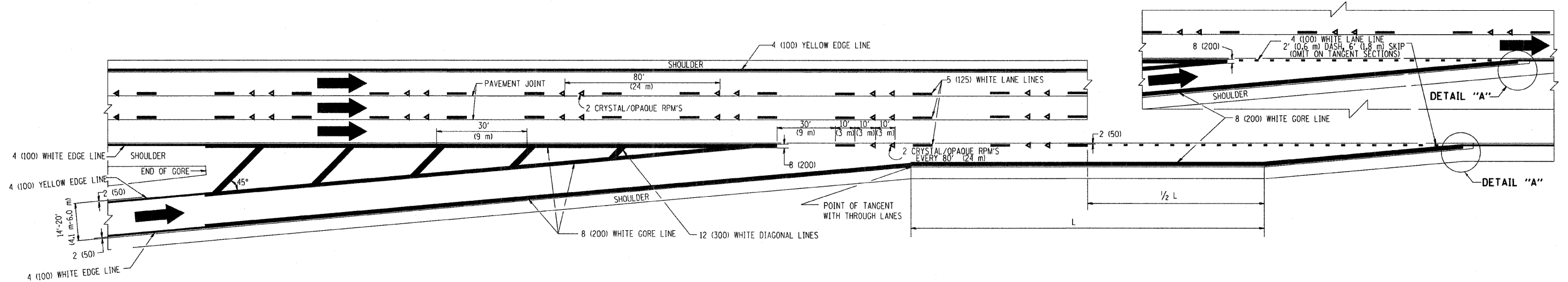
- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
 3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL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



TYPICAL EDGE LINES & LANE LINES



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

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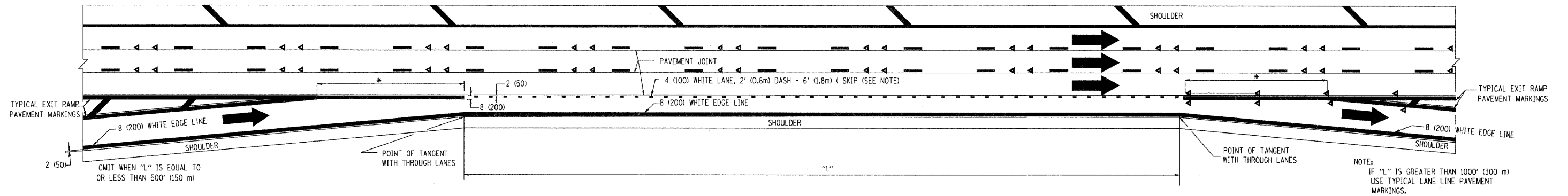
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PLOT DATE = 1/4/2008	CHECKED -	REVISED - J.A.F. 02-06
	DATE - 01-90	REVISED - S.P.B. 01-07

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

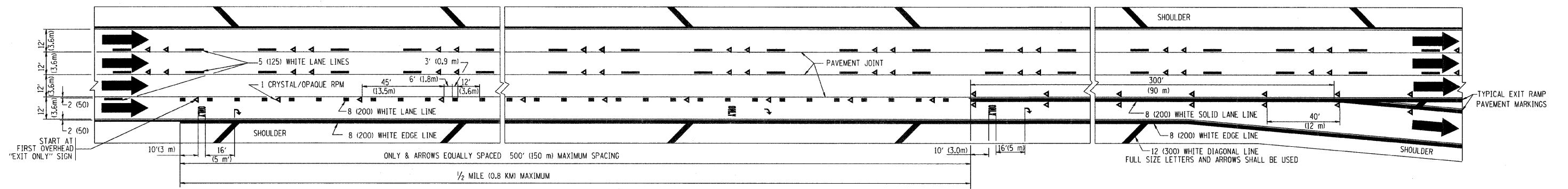
MULTI-LANE FREEWAY
 PAVEMENT MARKING DETAILS

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. 0+833 TO STA. 1+048

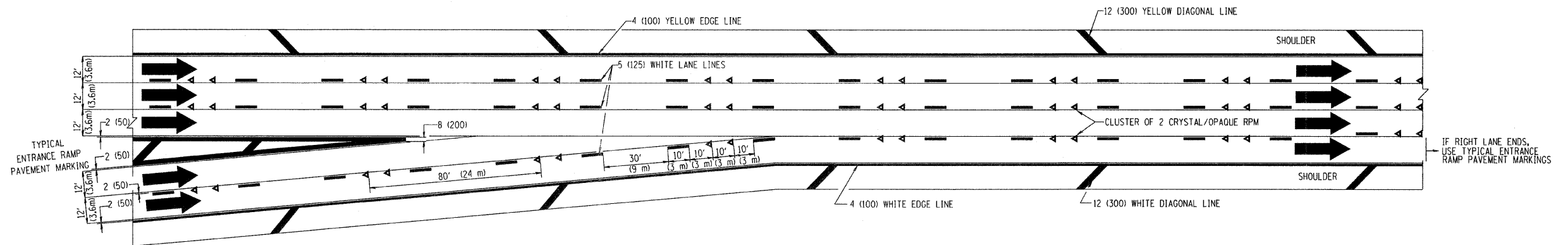
F.A.J. RTE. 90	SECTION 1213 B-1	COUNTY COOK	TOTAL SHEETS 94	SHEET NO. 88
TC-12		CONTRACT NO. 60640		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS

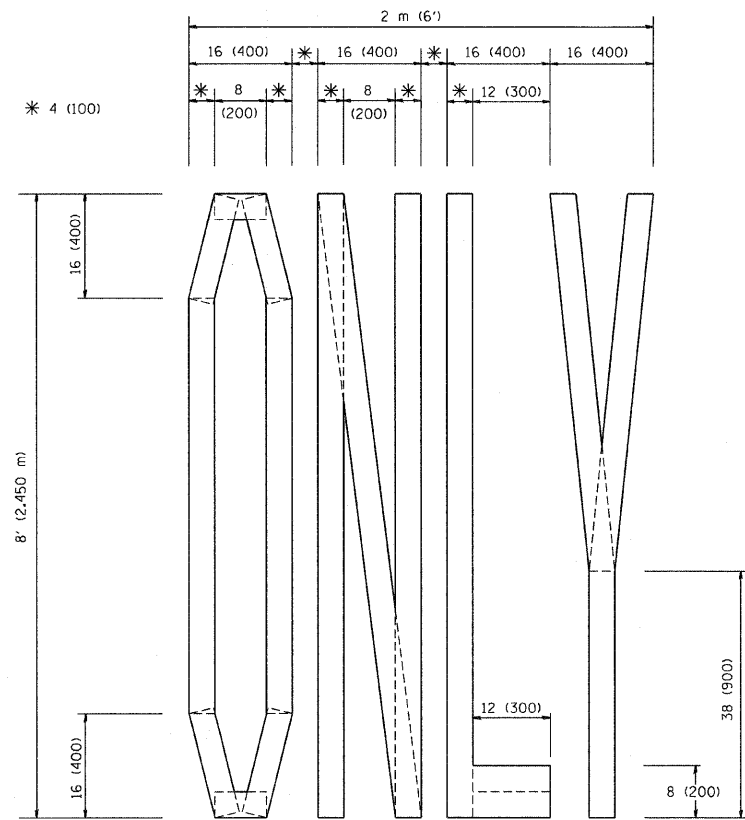


TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS

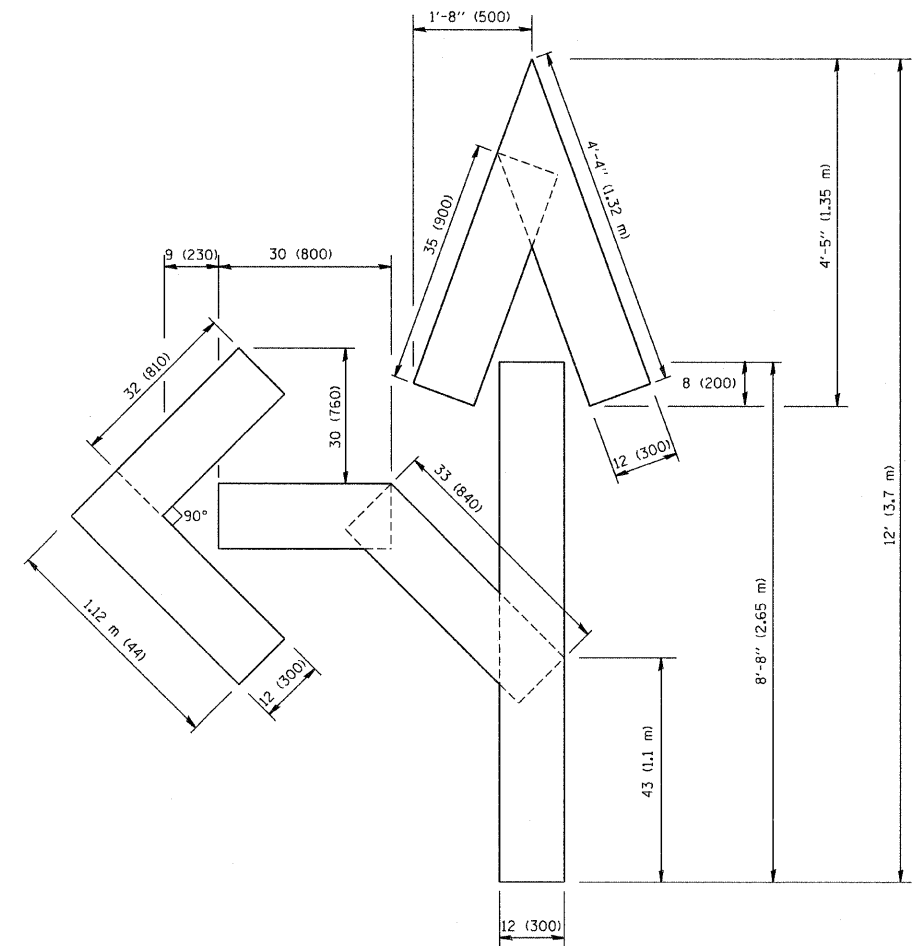


TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

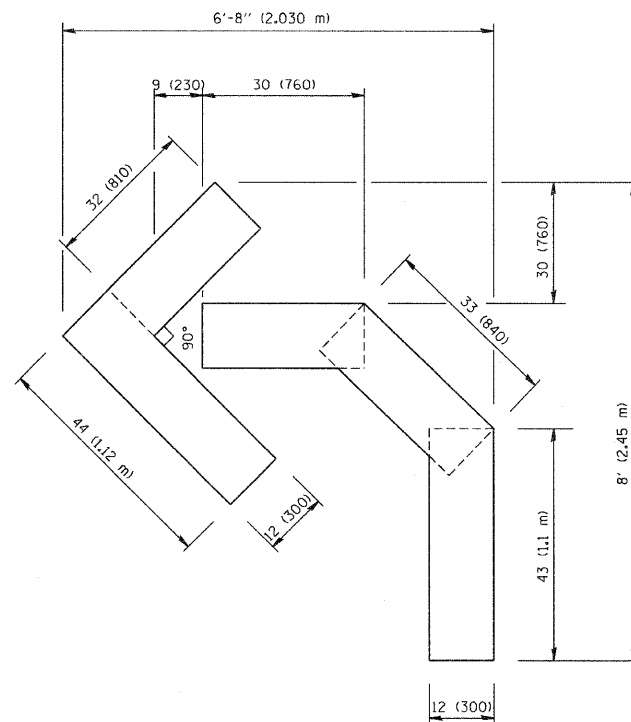
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	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - D.W.S. 07-96		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA. 0+833	TO STA. 1+048	FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60640	
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - J.A.F. 02-06									
			REVISED - S.P.B. 01-07									



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.

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		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

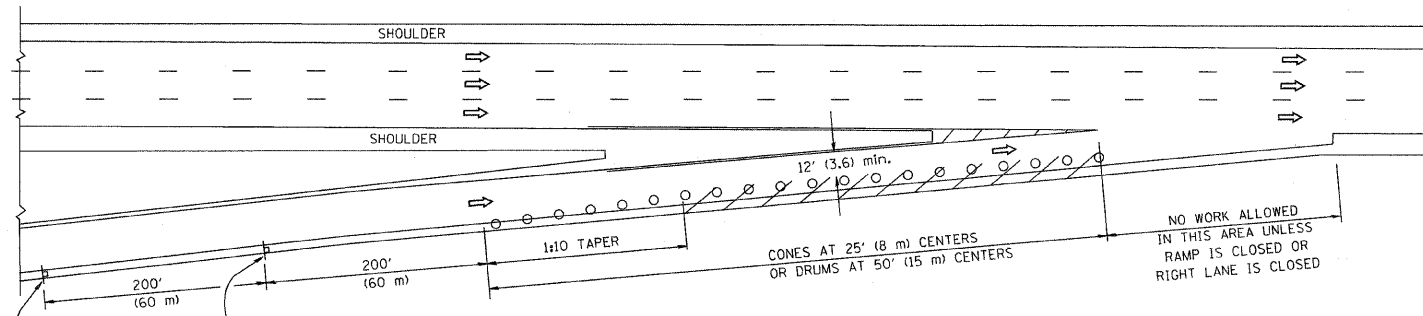
PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

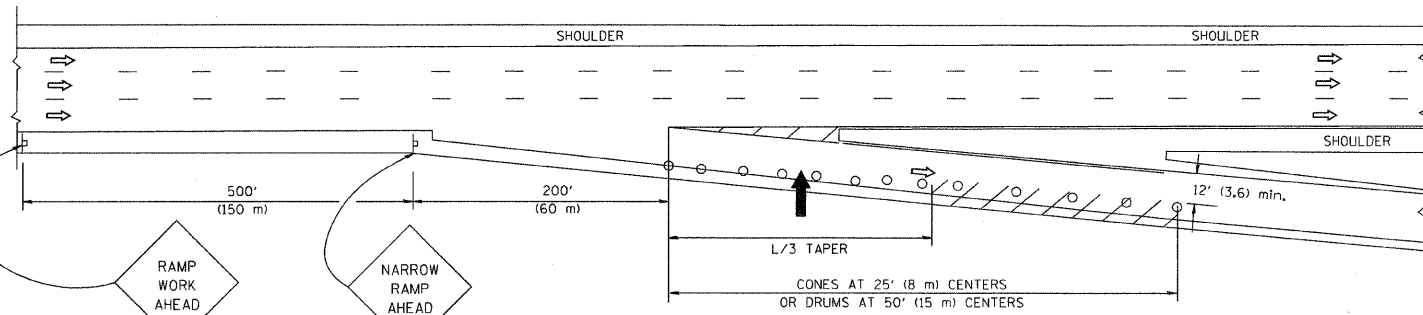
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TC-16		CONTRACT NO. 60640		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PARTIAL RAMP CLOSURE DETAILS

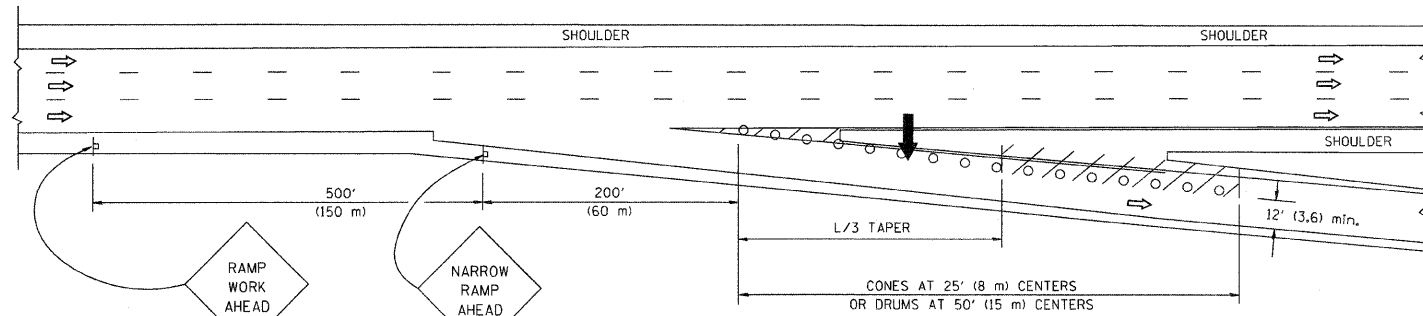
SHOULDER CLOSURE DETAILS



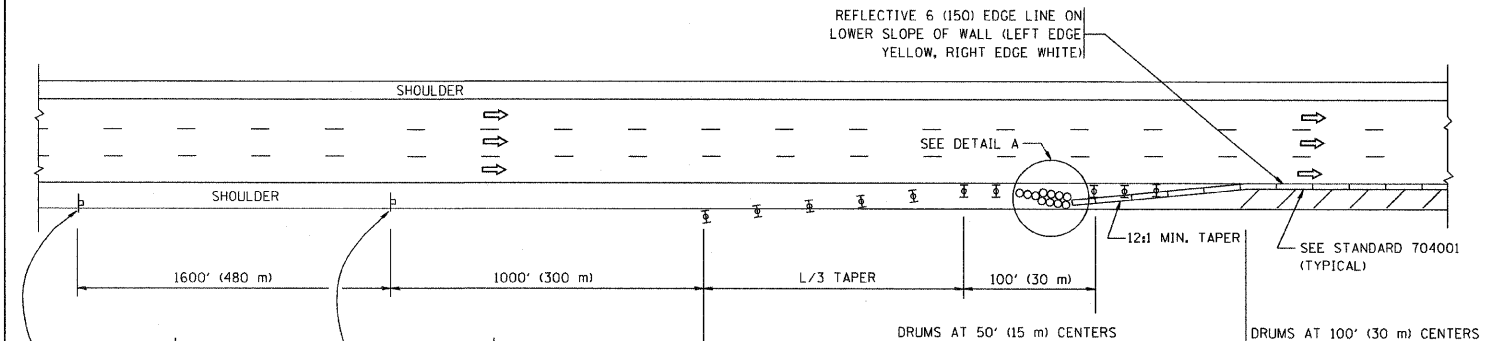
TYPICAL ENTRANCE RAMP



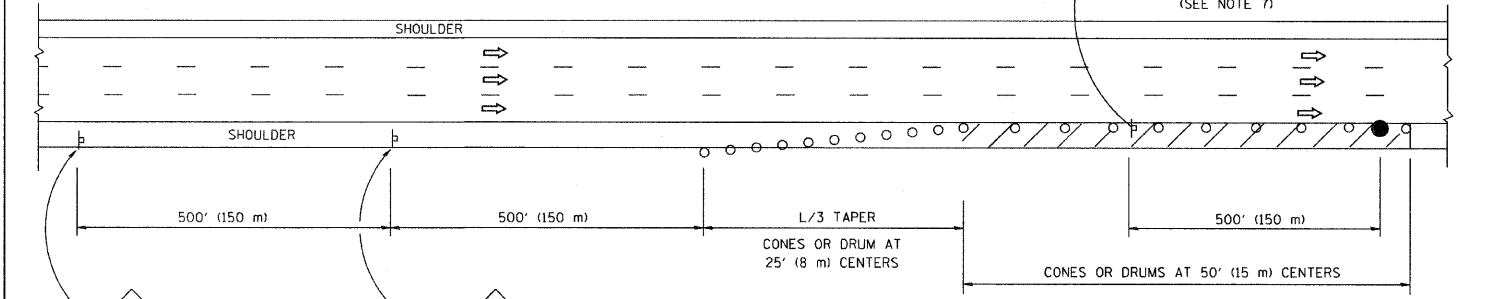
TYPICAL EXIT RAMP



TYPICAL EXIT RAMP



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

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)	METRIC ENGLISH
OR GREATER:	$L=0.65(W)S$ $L=(W)S$
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.

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

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

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

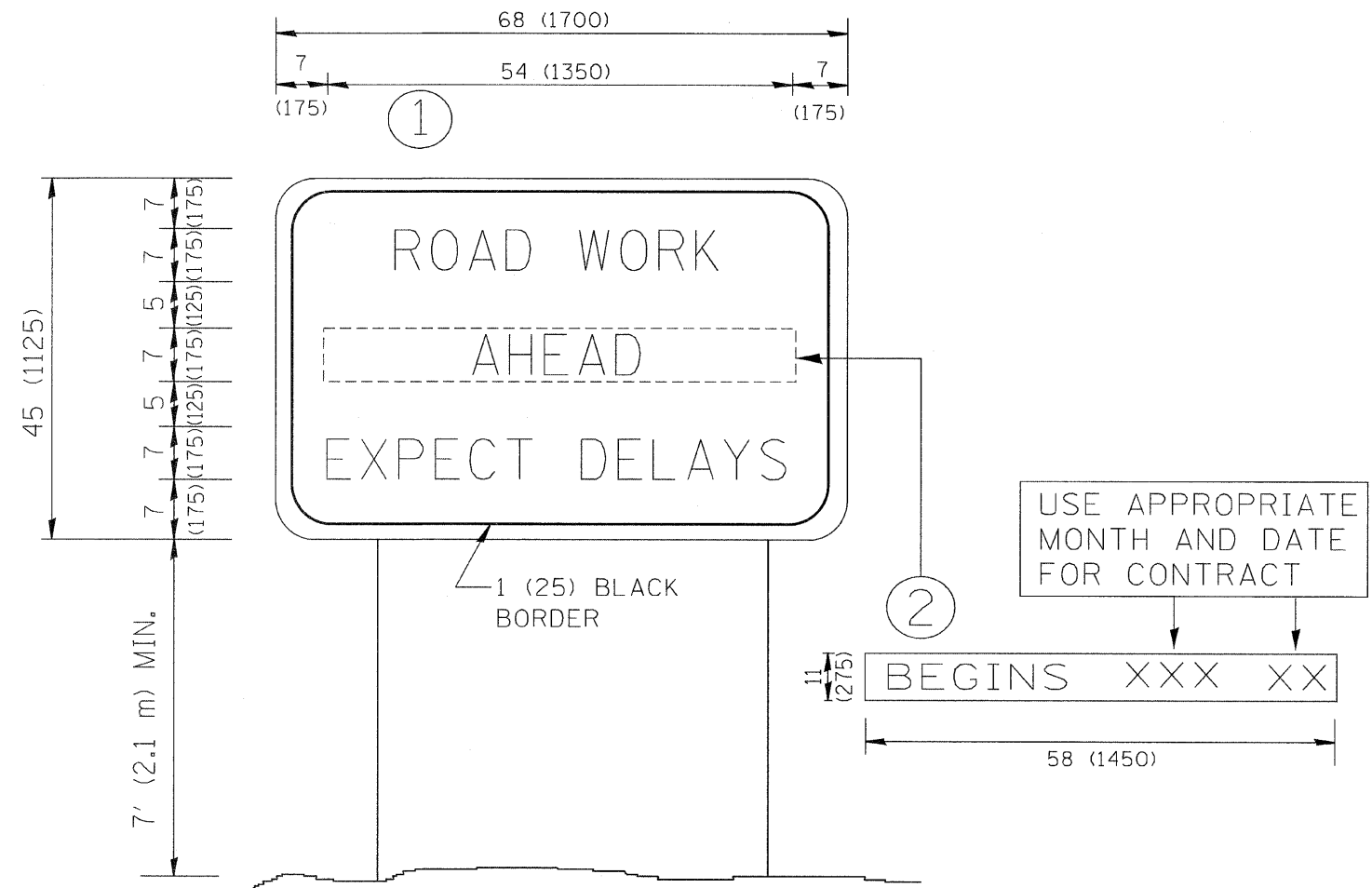
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	PLOT DATE = 1/4/2008	DATE - 11-96	REVISED - S.P.B. 01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

F.A.I. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213 B-1	COOK	94	91
TC-17			CONTRACT NO. 60640	
FED. ROAD DIST. NO. 1 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.

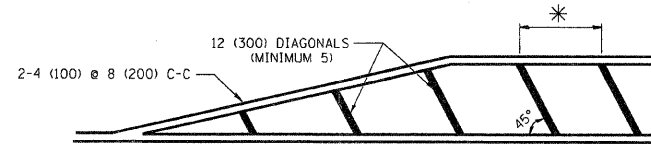
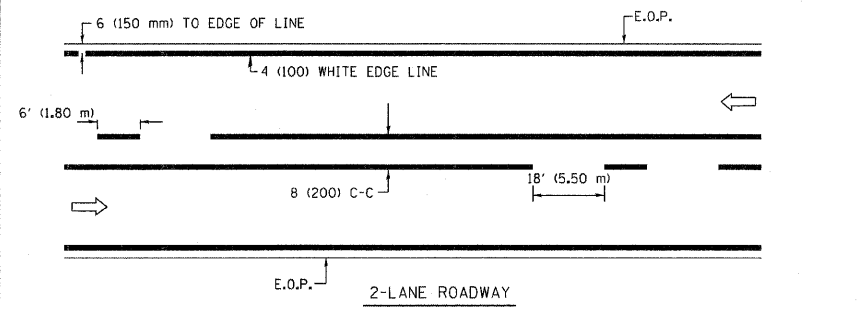
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	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 0+833 TO STA. 1+048

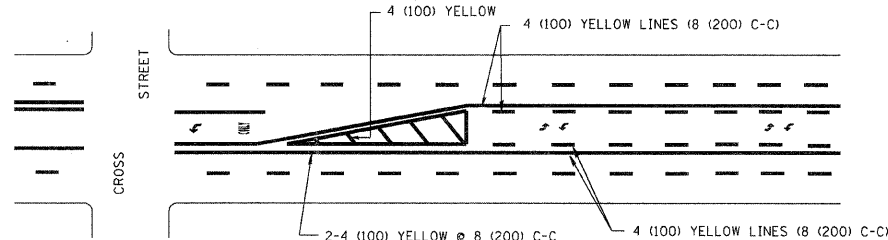
F.A.I. R.T.E. 90	SECTION 1213 B-1	COUNTY COOK	TOTAL SHEETS 94	SHEET NO. 92
TC-22			CONTRACT NO. 60640	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



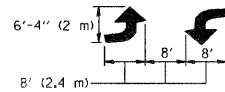
* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

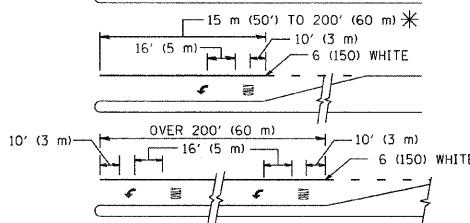
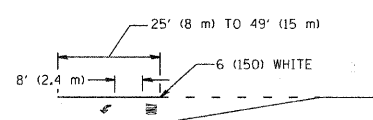
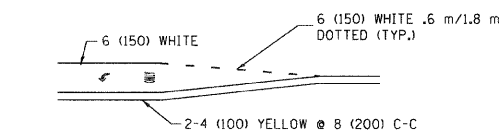


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

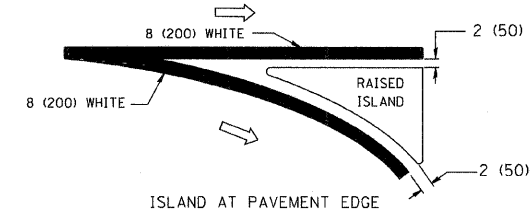
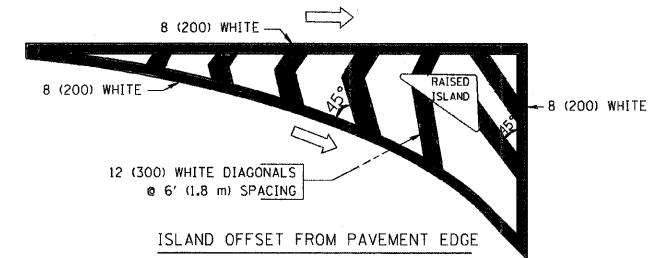


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m²) ONLY AREA = 22.9 SQ. FT. (2.13 m²)

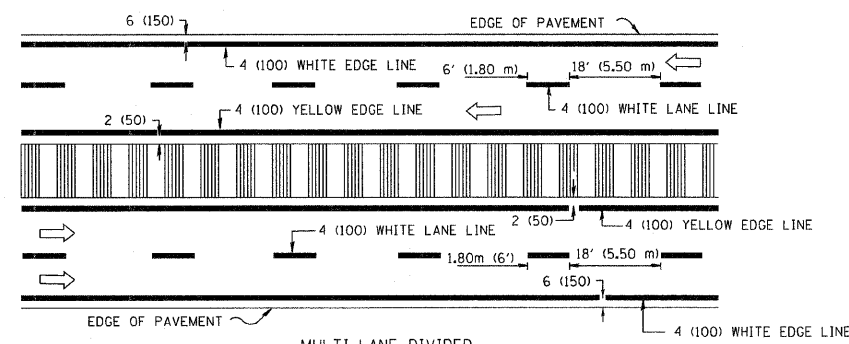
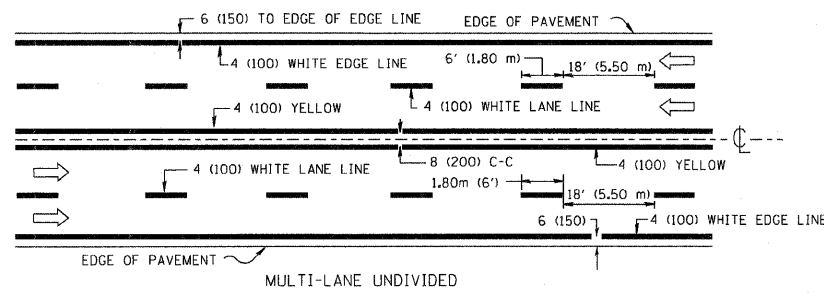
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

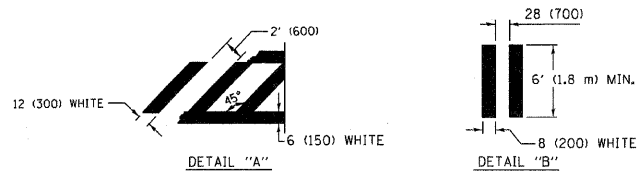
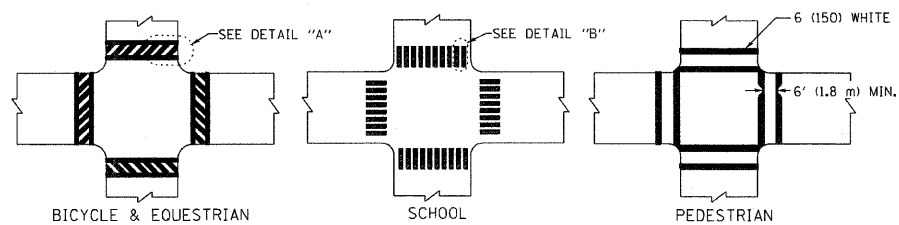


TYPICAL ISLAND MARKING



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

TYPICAL LANE AND EDGE LINE MARKING

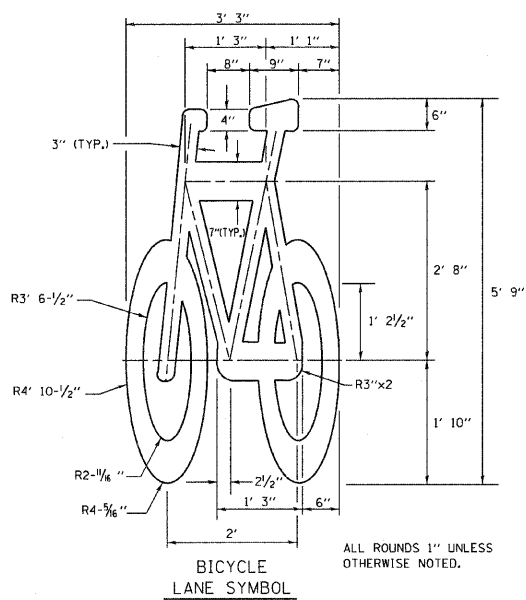
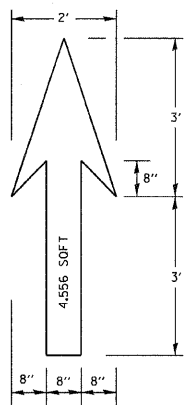


TYPICAL CROSSWALK MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 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) 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' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) 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° 8 (200) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2'-4' (700) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) 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: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)

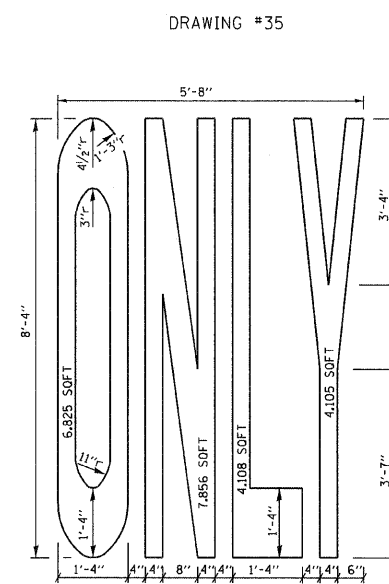
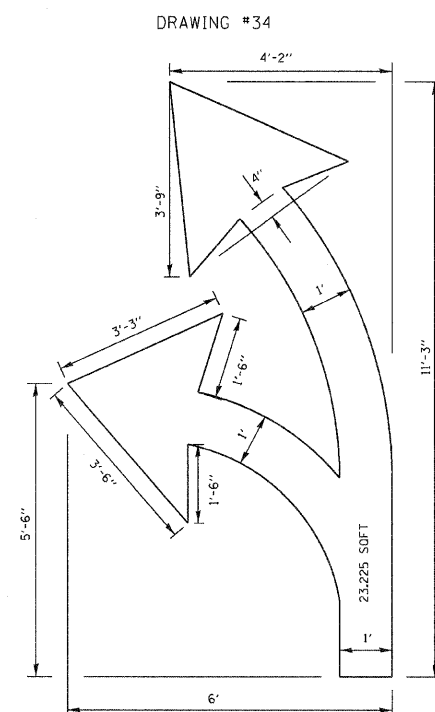
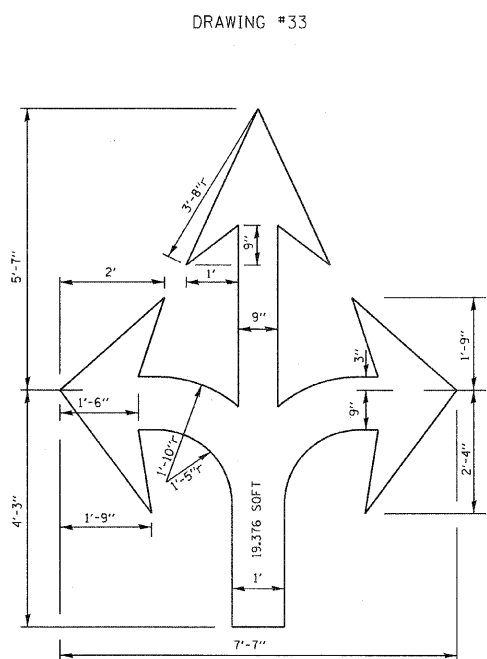
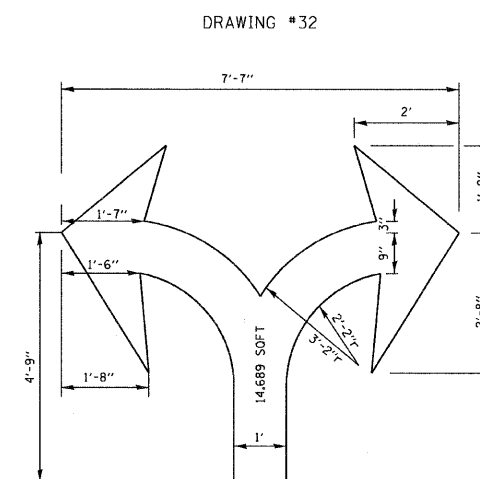
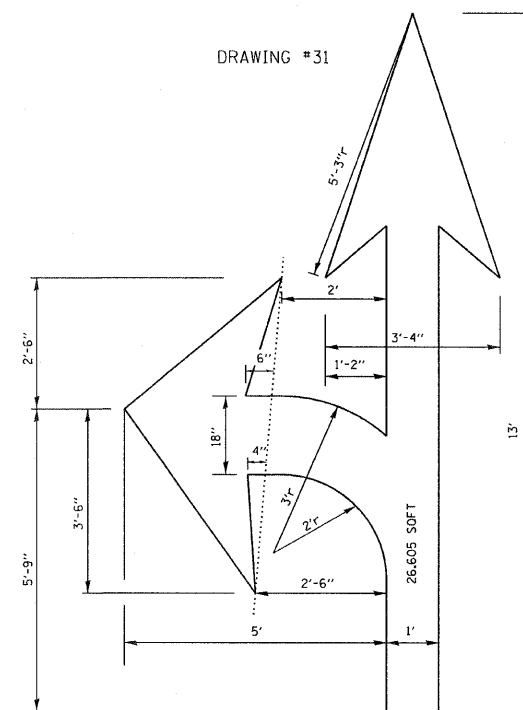
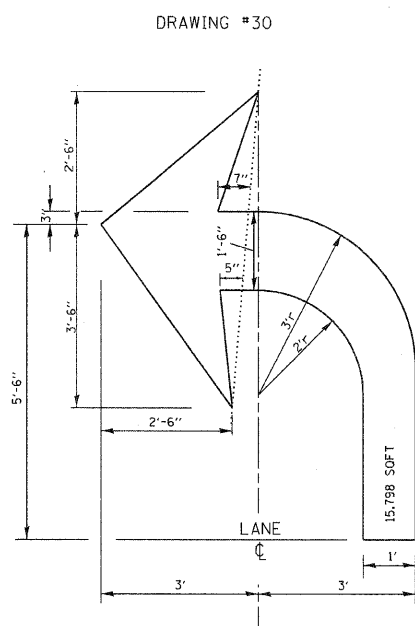
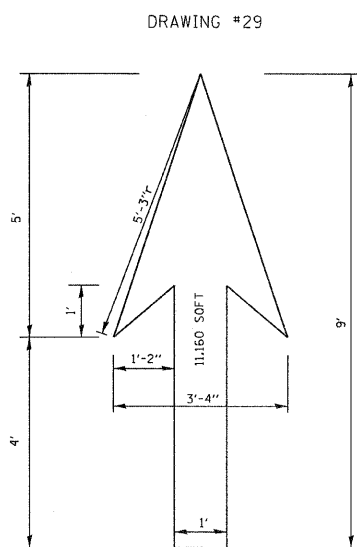
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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



- NOTE:**
- FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
 - THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
DRAWING #28



NOTE: ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

FILE NAME = W:\diststd\22x34\to24.dgn	USER NAME = geglionobt	DESIGNED - DRAWN -	REVISED - T. RAMMACHER 12-07-00
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA. 0+833	TO STA. 1+048

F.A.I. R.T.E. 90	SECTION 1213 B-1	COUNTY COOK	TOTAL SHEETS 94	SHEET NO. 94
TC-24		CONTRACT NO. 60640		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				