

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY

F.A.P. 350 ILLINOIS ROUTE 50 (CICERO AVENUE)
OVER NORTH BRANCH CHICAGO RIVER
STRUCTURE REMOVAL & REPLACEMENT AND ROADWAY RECONSTRUCTION
SECTION 57B-31
~~PROJECT NO.~~
COOK COUNTY
C-91-355-97

TRAFFIC DATA
EXISTING ADT 14,500 (1999)
PROJECTED ADT 24,000 (2020)

SPEED LIMIT (POSTED)
35 MPH IL 50 (CICERO AVENUE)

PROJECT IS LOCATED IN
THE CITY OF CHICAGO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	1
STA.		STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60440				

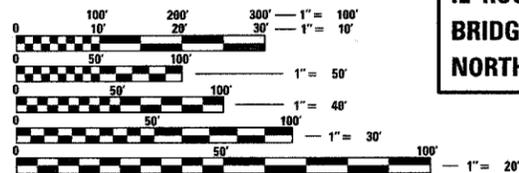
D-91-355-97



IDOT DESIGN-CONSULTANT PROJECT MANAGER: RAJENDRA C. SHAH (847) 705-4555

PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

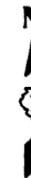
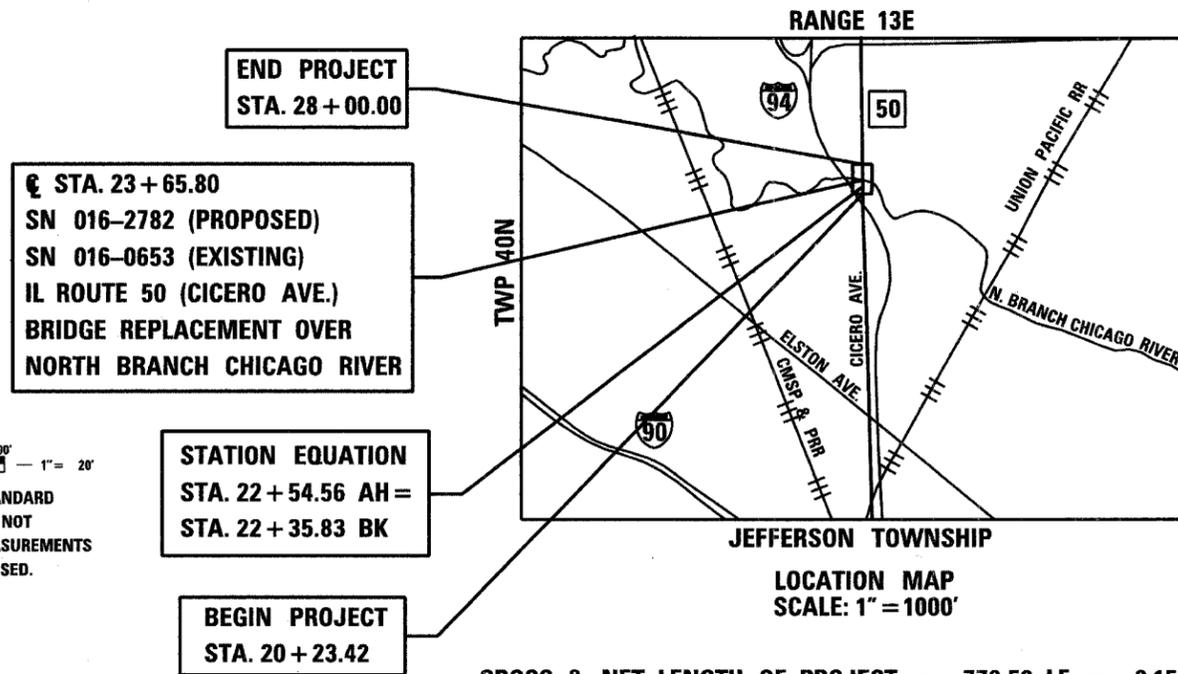
ENGLISH RATIOS



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

FOR UTILITY INFORMATION CONTACT
CHICAGO UTILITY ALERT NETWORK
312-744-7000

CONTRACT NO. 60440



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Aug. 21 20 06
Diane O'Keefe / cd
DISTRICT ENGINEER

October 13, 2006
Mike Hine / PD
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 20 06
Milton R. See, P.E. / PD
DIRECTOR, DIVISION OF HIGHWAYS

PATRICK ENGINEERING, INC.
PAUL M. LOPEZ, P.E.
* 062-044095

Paul M. Lopez



DATE: 8-18-06

EXP 11-30-07

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

F.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	2
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60440				

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- 420001-06 PAVEMENT JOINTS
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- 701606-04 LANE CLOSURE MULTILANE 2W WITH MOUNTABLE MEDIAN FOR SPEEDS < 45MPH
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GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." AT 1-312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FOOT 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.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES AND THE CITY OF CHICAGO.
- 4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 5. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED- ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.
- 6. ALL STORM SEWER CONNECTIONS WITH PIPES 27 INCHES DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 27 INCHES DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST "TEE" A "WYE" PIPE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST FOR THE STORM SEWERS.
- 7. USE NO. 25 (#8) EPOXY-COATED TIE BARS CONFORMING TO ART. 1006.10(B)(2) OF THE STANDARD SPECIFICATIONS FOR LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR AS SHOWN ON STATE STANDARD 420001 AND FOR TIEING PC CONCRETE WIDENING TO EXISTING CONCRETE PAVEMENT AS SHOWN ON THE PLANS. THE TIE BARS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PAVEMENT ITEMS BEING CONSTRUCTED.
- 8. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
- 9. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE BUTT JOINT AND BITUMINOUS TAPER DETAILS SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 10. REMOVAL OF EXISTING RAILROAD TRACKS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE PER SQUARE YARD OF "PAVEMENT REMOVAL"
- 11. CONTRACTOR SHALL RECEIVE AUTHORIZATION PRIOR TO MAKING ANY MWRD STRUCTURAL MODIFICATIONS, INCLUDING MANHOLE FRAME AND LID ADJUSTMENTS. AUTHORIZATION MAY BE OBTAINED BY CONTACTING MR. THOMAS K. O'CONNOR, CHIEF OF MAINTENANCE AND OPERATIONS DEPARTMENT, AT (312)-751-5101.

COMMITMENTS

- 1. THE IDOT/ENVIRONMENTAL STUDIES UNIT RECOMMENDED SAVING THE 36 INCH WHITE OAK LOCATED AT STA. 25+26.39 OFFSET 45.3 LEFT. THIS OAK TREE SHALL BE SAVED AND PROTECTED AS SHOWN IN THE PLANS.
- 2. THE EXISTING 24-INCH WATER MAIN CANNOT BE SHUT DOWN FOR A LONG PERIOD OF TIME. THEREFORE, THE WEST SIDE OF THE BRIDGE TOGETHER WITH A NEW 24-INCH WATER MAIN SHALL BE CONSTRUCTED FIRST. ONCE THE NEW WATER MAIN HAS BEEN INSTALLED ON THE WEST HALF, THE CITY OF CHICAGO WATER DEPARTMENT SHALL MAKE THE CONNECTION TO THE EXISTING WATER MAIN, ABANDONING THE EXISTING WATER MAIN LOCATED UNDER THE BRIDGE ON THE EAST SIDE UNTIL IT IS REMOVED DURING THE CONSTRUCTION OF THE EAST HALF OF THE PROPOSED BRIDGE.
- 3. THE ISGS CONDUCTED A PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT IN WHICH THEY CONCLUDED THIS PROJECT IS LOW RISK FOR THE OCCURRENCE OF HAZARDOUS MATERIALS. IF THE SCOPE OF WORK CHANGES AND/OR ADDITIONAL ROW/TEMPORARY EASEMENTS IS REQUIRED, PLEASE CONTACT THE ENVIRONMENTAL STUDIES UNIT AT 847-705-4101 TO DISCUSS ANY POTENTIAL IMPACTS.
- 4. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM CITY OF CHICAGO DEPARTMENT OF SEWERS IN ADVANCE FOR ANY UNDERGROUND SEWER WORK INCLUDING ADJUSTMENTS OF STRUCTURES, REMOVAL/REPLACEMENT OF FRAMES AND LIDS, TELEVISION SURVEYS, CLEANING, LINING AND INSPECTIONS BY A LICENSED SEWER CONTRACTOR.



REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

INDEX OF SHEETS, STATE STANDARDS,
GENERAL NOTES AND COMMITMENTS

SCALE: NONE
DATE: AUGUST 18, 2006

DRAWN BY: CLW
CHECKED BY: AAC

Rev.

F.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	3
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60440

CITY OF CHICAGO NOTES

1. ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWERS STANDARDS.
2. PRIOR TO THE START OF CONSTRUCTION, PERMITS FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION; AND FOR ALL WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS 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 SEWERS FOR THE ISSUE OF SEWER PERMIT TO SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. INSPECTION WILL BE PROVIDED BY THE DEPARTMENT OF SEWERS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUATE PROTECTION OF THE EXISTING SEWERS, DRAIN CONNECTIONS, SEWER STRUCTURES, AND BENCH MONUMENTS DURING CONSTRUCTION OPERATIONS AND USE OF HEAVY EQUIPMENT IN THE LIMITS OF THE PROJECT.
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 SEWERS AT (312) 747-7892 OR (312) 747-7893. THE CONTRACTOR SHALL, AT HIS/HER COST, REPLACE THE AFFECTED SEWERS, DRAIN CONNECTIONS, SEWER STRUCTURES AND/OR BENCH MONUMENTS AS NECESSARY. THE SEWER FLOW MUST BE MAINTAINED AT ALL TIMES.
4. THE CITY OF CHICAGO'S BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF SEWERS AT SUITE 410, 333 SOUTH STATE STREET CHICAGO, IL 60604-3971. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.
5. SIDEWALK ACCESSIBILITY RAMPS SHALL NOT BE CONSTRUCTED DIRECTLY OVER EXISTING OR PROPOSED DRAINAGE STRUCTURES.
6. ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS STANDARD FRAMES AND GRATES OR LIDS. OLD FRAMES AND GRATES OR LIDS SHALL BE DELIVERED TO THE DEPARTMENT OF SEWERS AT 39TH STREET AND ASHLAND AVENUE.
7. 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 AND/OR DEPARTMENT OF SEWERS.
8. CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 75 MM (3")
9. BACKFILL MATERIAL UNDER SIDEWALKS SHALL BE FA-2.
10. THE UTILITY COMPANY/GOVERNMENT AGENCY AND ITS CONTRACTORS ARE RESPONSIBLE FOR THE ADEQUATE PROTECTION OF THE EXISTING SEWERS, DRAIN CONNECTIONS, SEWER STRUCTURES AND BENCH MONUMENTS DURING CONSTRUCTION OF NEW UTILITIES AND/OR ADJUSTMENT TO EXISTING UTILITIES AND THE USE OF HEAVY EQUIPMENT WITHIN THE LIMITS OF THE PROJECT.
11. IT IS THE RESPONSIBILITY OF THE UTILITY COMPANY/GOVERNMENT AGENCY AND ITS CONSULTANTS/CONTRACTORS TO OBTAIN THE NECESSARY BACKGROUND INFORMATION FROM THE DEPARTMENT OF SEWERS IN MEETING THE DEPARTMENT OF SEWERS REQUIREMENTS FOR DESIGN DRAWINGS/CONTRACT PLANS AND FOR EXISTING FACILITIES PROTECTION DURING THE CONSTRUCTION STAGE.
RECORDS FROM THE DEPARTMENT OF SEWERS INCLUDE: EXISTING SEWERS, DRAIN CONNECTIONS, SEWER STRUCTURES, BENCH MONUMENT LOCATIONS, ORDINANCE GRADES, AGE OF SEWER AND PIPE MATERIAL.

12. IN THE RELOCATION OR CONSTRUCTION OF PRIVATE OR PUBLIC UTILITIES INCLUDING PIPE UNDERDRAINS AND/OR SUBDRAINS, THE UTILITY SHOULD BE LOCATED AS FAR AWAY AS POSSIBLE FROM THE DEPARTMENT OF SEWERS FACILITIES.
13. MANHOLES, CATCH BASINS AND INLETS MUST BE PROTECTED FROM THE ENTRY OF ASPHALT/ DEBRIS INTO THE SEWER SYSTEM DURING CONSTRUCTION. THE CONTRACTOR SHALL MARK LOCATIONS OF ALL SEWER STRUCTURES ON THE SIDEWALK BEFORE STARTING PAVEMENT REMOVAL/REPLACEMENT. ADJUSTMENT OF FRAMES AND LIDS OF SEWER STRUCTURES MUST BE COMPLETED PRIOR TO STREET RESURFACING.
14. NO TREES OR BALLARDS OR PERMANENT STRUCTURES ARE ALLOWED OVER THE EXISTING SEWERS AND SEWER STRUCTURES LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER/STRUCTURE AND THE CENTER OF TREES SHOULD BE 15 TO 20 FEET DEPENDING ON THE SIZE OF THE SEWER.
15. IN 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 SEWERS. THE SEWER FLOWS MUST BE MAINTAINED AT ALL TIMES.
16. ON WORK COMPLETION, THE CONTRACTOR SHALL PROVIDE TO THE DEPARTMENT OF SEWERS, FOR REVIEW AND ACCEPTANCE, A VIDEO TAPE OF THE SEWER MAINS. AS-BUILT PLANS MUST BE SUBMITTED SOON AFTER WORK COMPLETION. FINAL PAYMENT SHALL NOT BE MADE TO THE CONTRACTOR UNTIL THE DEPARTMENT OF SEWERS ACKNOWLEDGES RECEIPT OF AS-BUILT PLANS.
17. PRE CONSTRUCTION VIDEO TAPED INSPECTION REQUIRED PRIOR TO ISSUANCE OF SEWER PERMIT. POST CONSTRUCTION VIDEO TAPED INSPECTION REQUIRED PRIOR TO ACCEPTANCE OF SEWER BY THE DEPARTMENT OF SEWERS.
18. THE CONTRACTOR SHALL CONTACT GEORGE PANAGES, CITY OF CHICAGO WATER DEPT. CONSTRUCTION MANGER, AT (312) 742-5921 TWO WEEKS PRIOR TO CONSTRUCTION TO ARRANGE THE NECESSARY PERSONNEL TO BE PRESENT DURING THE WATER MAIN INSTALLATION.

PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

CITY OF CHICAGO NOTES

SCALE: NONE
DATE: AUGUST 18, 2006
DRAWN BY: CLW
CHECKED BY: AAC

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT	TOTAL QTY.	100% STATE		
				RDWY 1000-2A	BRIDGE X071-2A	LIGHTING Y030-1E
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	88	88		
20100210	TREE REMOVAL (GREATER THAN 15 UNITS DIAMETER)	UNIT	33	33		
20101000	TEMPORARY FENCE	FT	2160	2160		
20101100	TREE TRUNK PROTECTION	EACH	27	27		
20101200	TREE ROOT PRUNING	EACH	15	15		
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	4	4		
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	11	11		
20200100	EARTH EXCAVATION	CU YD	141	141		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	200		200	
20400800	FURNISHED EXCAVATION	CU YD	1058	1058		
20700400	POROUS GRANULAR EMBANKMENT (SPECIAL)	CU YD	576		576	
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2058	2058		
* 25000210	SEEDING, CLASS 2A	ACRE	0.22	0.22		
* 25000312	SEEDING, CLASS 4A	ACRE	0.21	0.21		
* 25000400	NITROGEN FERTILIZER NUTRIENTS	POUND	38	38		
* 25000500	PHOSPHORUS FERTILIZER NUTRIENTS	POUND	38	38		
* 25000600	POTASSIUM FERTILIZER NUTRIENTS	POUND	38	38		
25100630	EROSION CONTROL BLANKET	SQ YD	2869	2869		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	237	237		
28000400	PERIMETER EROSION BARRIER	FT	1212	1212		
28000510	INLET FILTERS	EACH	4	4		
28100109	STONE RIPRAP, CLASS A5	SQ YD	977		977	
28200200	FILTER FABRIC	SQ YD	1008		1008	
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	3281	3281		
35300400	PORTLAND CEMENT CONCRETE BASE COURSE, 9"	SQ YD	3124	3124		
40300200	BITUMINOUS MATERIALS (PRIME COAT)	TON	3	3		
40600300	AGGREGATE (PRIME COAT)	TON	1.5	1.5		
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	30	30		

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT	TOTAL QTY.	100% STATE		
				RDWY 1000-2A	BRIDGE X071-2A	LIGHTING Y030-1E
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	377	377		
42001300	PROTECTIVE COAT	SQ YD	1198	1198		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5"	SQ FT	599	599		
44000100	PAVEMENT REMOVAL	SQ YD	4611	4611		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	117	117		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FT	1767	1767		
44000600	SIDEWALK REMOVAL	SQ FT	1144	1144		
44003100	MEDIAN REMOVAL	SQ FT	5708	5708		
48202400	BITUMINOUS SHOULDERS SUPERPAVE 6"	SQ YD	415	415		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	596		596	
50202901	COFFERDAM (LOCATION - 1)	EACH	1		1	
50202902	COFFERDAM (LOCATION - 2)	EACH	1		1	
50202903	COFFERDAM (LOCATION - 3)	EACH	1		1	
50300225	CONCRETE STRUCTURES	CU YD	146.7		146.7	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	342.1		342.1	
50300260	BRIDGE DECK GROOVING	SQ YD	740		740	
50300300	PROTECTIVE COAT	SQ YD	1067		1067	
50300440	ERECTING BEARING ASSEMBLY, TYPE I	EACH	10		10	
50500305	ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	STUD SHEAR CONNECTORS	EACH	3810		3810	
50800105	REINFORCEMENT BARS	POUND	32440		32440	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	88590		88590	
51205200	TEMPORARY SHEET PILING	SQ FT	3206		3206	
51500100	NAME PLATES	EACH	1		1	

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
 NORTH BRANCH CHICAGO RIVER

SUMMARY OF QUANTITIES

SCALE: NONE
 DATE: AUGUST 18, 2006

DRAWN BY: CLW
 CHECKED BY: AAC



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	5
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440
100% STATE

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT	TOTAL QTY.	RDWY 1000-2A	BRIDGE X071-2A	LIGHTING Y030-1E
55039700	STORM SEWERS TO BE CLEANED	FT	330	330		
55100300	STORM SEWER REMOVAL 8"	FT	147	147		
55100700	STORM SEWER REMOVAL 15"	FT	93	93		
* 56103520	DUCTILE IRON PIPE WATERMAIN - 24 INCHES	FT	48	48		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	168		168	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FT	235		235	
60202505	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO)	EACH	4	4		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FT	723	723		
60608300	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12	FT	797	797		
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	2671	2671		
60622000	CONCRETE MEDIAN, TYPE SM-2.12	SQ FT	1059	1059		
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FT	400	400		
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	2	2		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	9		
67100100	MOBILIZATION	L SUM	1	1		
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	164	164		
70300100	SHORT-TERM PAVEMENT MARKING	FT	543	543		
70300220	TEMPORARY PAVEMENT MARKING-LINE 4"	FT	3106	3106		
70300520	PAVEMENT MARKING TAPE TYPE III, 4"	FT	10563	10563		
70300570	PAVEMENT MARKING TAPE TYPE III, 24"	FT	24	24		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1035	1035		
70400100	TEMPORARY CONCRETE BARRIER	FT	429	429		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FT	429	429		
* 78008300	POLYUREA PAVEMENT MARKING, TYPE II - LETTERS AND SYMBOLS	SQ FT	78	78		

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT	TOTAL QTY.	RDWY 1000-2A	BRIDGE X071-2A	LIGHTING Y030-1E
* 78008310	POLYUREA PAVEMENT MARKING, TYPE II - LINE 4"	FT	7815	7815		
* 78008330	POLYUREA PAVEMENT MARKING, TYPE II - LINE 6"	FT	202	202		
* 78008350	POLYUREA PAVEMENT MARKING, TYPE II - LINE 12"	FT	588	588		
* 78008370	POLYUREA PAVEMENT MARKING, TYPE II - LINE 24"	FT	84	84		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	118	118		
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	8	8		
78300405	PAVEMENT MARKING REMOVAL	FT	4102	4102		
* 81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FT	700			700
* 81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FT	700			700
* X8300100	LIGHT POLE, ALUMINUM, WITH MAST ARM, INSTALL ONLY	EACH	7			7
* 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FT	63			63
* 84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	7			7
* 84200700	LIGHTING FOUNDATION REMOVAL	EACH	7			7
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FT	700			700
* B2000764	TREE, AMELANCHIER X GRANDIFLORA AUTUMN BRILLIANCE (AUTUMN BRILLIANCE SERVICE BERRY), 5' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	20	20		
X0321600	FORM LINER TEXTURED SURFACE	SQ FT	2100		2100	
* X0322738	ELECTRIC CABLE IN CONDUIT, 600V (EPRN-TRIPLEXED) 2-1/C NO.6 1-1/C NO.8 GROUND	FOOT	750			750
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	450	450		
X0323080	DRAINAGE SCUPPER, DS-12	EACH	4		4	
X0712400	TEMPORARY PAVEMENT	SQ YD	296	296		
X3550300	BITUMINOUS BASE COURSE SUPERPAVE 6"	SQ YD	162	162		
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	3	3		
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1		
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	18	18		

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

SUMMARY OF QUANTITIES

SCALE: NONE
DATE: AUGUST 18, 2006

DRAWN BY: CLW
CHECKED BY: AAC



100% STATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	6
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60440				

SUMMARY OF QUANTITIES			TOTAL QTY.	CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT		RDWY 1000-2A	BRIDGE X071-2A	LIGHTING Y030-1E
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	320	320		
X4066602	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	270	270		
X4066770	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N70	TON	28	28		
X4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	667	667		
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	12	12		
* X8210407	LUMINARE, INSTALL ONLY	EACH	7			7
Z0002600	BAR SPLICERS	EACH	1054		1054	
* Z0008236	DRILLED SHAFT IN SOIL 36"	FT	114		114	
* Z0008242	DRILLED SHAFT IN SOIL 42"	FT	229		229	
* Z0008248	DRILLED SHAFT IN SOIL 48"	FT	114		114	
* Z0008330	DRILLED SHAFT IN ROCK 30"	FT	4		4	
* Z0008336	DRILLED SHAFT IN ROCK 36"	FT	8		8	
* Z0008342	DRILLED SHAFT IN ROCK 42"	FT	4		4	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	14	14		
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	6	6		
Z0018600	DRAINAGE STRUCTURES TO BE RECONSTRUCTED	EACH	7	7		
Z0018700	DRAINAGE STRUCTURE TO BE REMOVED	EACH	9	9		
Z0018913	DRILL AND GROUT #8 TIE BARS	EACH	4	4		
Z0039300	PERMANENT CASING	FT	176		176	
△ Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	12	12		
△ Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2		
△ Z0030320	IMPACT ATTENUATORS, RELOCATED (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2	2		
X6020270	MANHOLES, TYPE B, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID (CITY OF CHICAGO)	EACH	2	2		
X6040220	FRAMES AND LIDS, TYPE 1, OPEN LID (CITY OF CHICAGO)	EACH	4	4		
* X5615915	DUCTILE IRON PIPE WATERMAIN - 24 INCHES - SUSPENDED	FT	125	125		
* X0324631	REMOVAL OF CONDUIT IN TRENCH	FT	700			700
* X0322124	STORM SEWER (WATERMAIN REQUIREMENTS, 8")	FT	130	130		
* X0322033	STORM SEWER (WATERMAIN REQUIREMENTS, 12")	FT	70	70		
* X0322034	STORM SEWER (WATERMAIN REQUIREMENTS, 15")	FT	100	100		

* SPECIALTY ITEMS
 △ SFTY-3N

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
 NORTH BRANCH CHICAGO RIVER

SUMMARY OF QUANTITIES

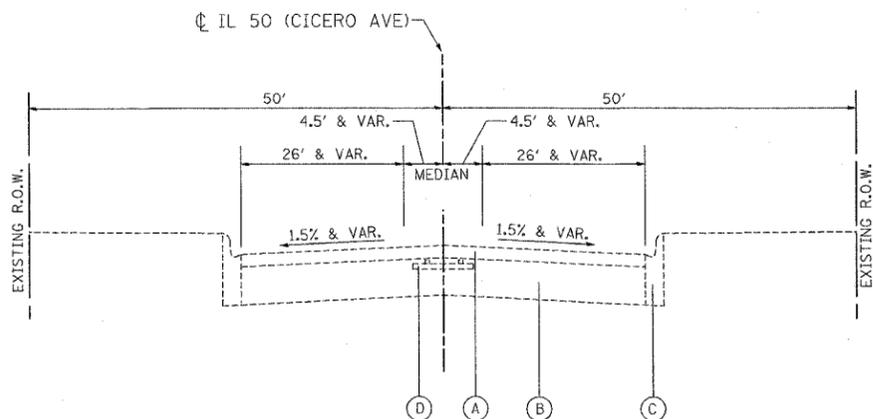
SCALE: NONE
 DATE: AUGUST 18, 2006

DRAWN BY: CLW
 CHECKED BY: AAC

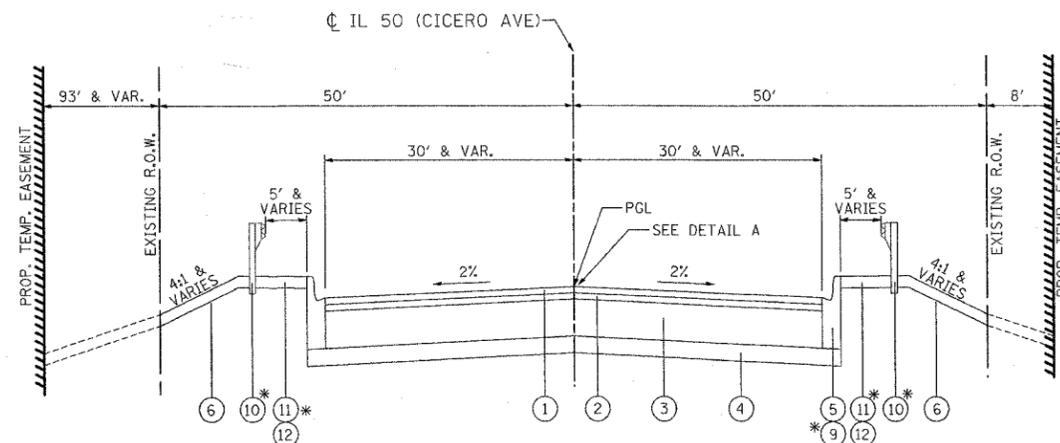
PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	578-31	COOK	62	7
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

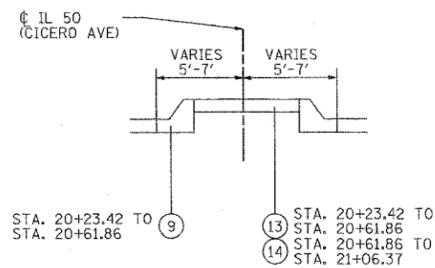
CONTRACT NO. 60440



E-1 EXISTING IL ROUTE 50 TYPICAL SECTION
 STA. 20+23.42 TO STA. 23+37.96
 STA. 24+74.73 TO STA. 28+00.00



P-1 PROPOSED IL ROUTE 50 TYPICAL SECTION
 STA. 20+23.42 TO STA. 23+04.13
 STA. 23+04.13 TO STA. 24+27.47 (SEE BRIDGE PLANS)
 STA. 24+27.47 TO STA. 27+00.00
 * SEE PLAN AND PROFILE FOR LOCATION



DETAIL A

EXISTING LEGEND:

- (A) BITUMINOUS SURFACE, 3"
- (B) P.C.C. PAVEMENT, 8"
- (C) COMBINATION CONCRETE CURB & GUTTER TYPE B6.12
- (D) RAILROAD TRACKS (SEE NOTE 1)

PROPOSED LEGEND:

- (1) BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70 1 1/2"
- (2) BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70 2 1/4"
- (3) PORTLAND CEMENT CONCRETE BASE COURSE, 9"
- (4) SUB-BASE GRANULAR MATERIAL, TYPE B 4"
- (5) COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12
- (6) TOPSOIL FURNISH AND PLACE 4", WITH SODDING, SALT TOLERANT
- (7) BITUMINOUS SURFACE REMOVAL 2 1/4"
- (8) LEVELING BINDER (MACHINE METHOD), SUPERPAVE, 3/4"
- (9) COMBINATION CONCRETE CURB & GUTTER TYPE M-2.12
- (10) STEEL PLATE BEAM GUARDRAIL
- (11) BITUMINOUS SHOULDERS SUPERPAVE 6"
- (12) PCC SIDEWALK 5"
- (13) CONCRETE MEDIAN SURFACE 4"
- (14) CONCRETE MEDIAN TY SM-2.12

NOTE : 1. REMOVAL OF EXISTING RAILROAD TRACKS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE PER SQUARE YARD OF "PAVEMENT REMOVAL".

BITUMINOUS MIX. REQUIREMENTS			
PAY ITEMS	MAX RAP %	AC TYPE	VOID
ROADWAY			
BIT. CONC. SURF. CSE, SUPERPAVE, MIX D, N70, 1 1/2"	10	PG 64-22	4% @ 70 GYR.
BIT. CONC. BIND. CSE, SUPERPAVE, IL-19.0, N70, 2 1/4"	15/25	PG 64-22/58-22	4% @ 70 GYR.
LEVEL BINDER (MACHINE METHOD), SUPERPAVE, N70, 3/4"	10	PG 64-22	4% @ 70 GYR.
DRIVEWAY			
BIT. CONC. SURF. CSE, SUPERPAVE, MIX "C", N50, 2"	15	PG 64-22	4% @ 50 GYR.
BIT. BASE CSE, SUPERPAVE, 6"	50	PG 58-22	2% @ 50 GYR.
SHOULDER			
BIT. SHLD. SUPERPAVE, 6"	50	PG 58-22	2% @ 30 GYR.

* THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS/SQYD/IN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
 NORTH BRANCH CHICAGO RIVER
 TYPICAL SECTIONS
 SCALE: NONE
 DATE: SEPTEMBER 19, 2006
 DRAWN BY: CLW
 CHECKED BY: AAC

PATRICK ENGINEERING INC.
 LISLE, ILLINOIS

CONTRACT NO. 60440

20100110 - TREE REMOVAL (6 TO 15 UNITS DIAMETER)

STATION	OFFSET (FT)	RT/LT	UNITS
21+57.73	44.0	RT	11
22+08.68	47.9	RT	9
22+30.16	46.4	RT	12
22+91.50	54.0	RT	13
22+93.50	51.9	RT	10
24+09.60	44.0	RT	10
24+50.75	43.5	RT	13
26+17.30	37.6	LT	10
TOTAL			88

20101100 - TREE TRUNK PROTECTION

RT/LT	STATION	OFFSET	EACH
RT	21+53.00	51.4	1
RT	22+01.25	51.5	1
RT	22+30.65	54	1
LT	22+38.30	58.4	1
LT	22+58.35	58.3	1
LT	22+95.85	75.0	1
LT	22+99.92	58.3	1
LT	23+11.99	58.4	1
LT	23+12.09	77.4	1
LT	24+15.28	48.4	1
LT	24+39.80	59.8	1
LT	24+56.50	59.8	1
RT	24+60.50	51.3	1
RT	24+76.45	44.8	1
LT	24+80.23	59.8	1
RT	24+83.70	47.7	1
LT	24+97.11	59.8	1
LT	25+17.18	59.8	1
LT	25+26.40	41.6	1
LT	25+63.50	39.7	1
LT	25+73.65	42.1	1
RT	26+29.80	44.3	1
RT	26+75.20	42.8	1
LT	27+04.90	46.7	1
RT	27+16.80	40.9	1
LT	27+48.65	46.8	1
RT	27+66.35	35.3	1
TOTAL			27

20101300 - TREE PRUNING (1 TO 10 INCH DIAMETER)

RT/LT	STATION	OFFSET	EACH
LT	21+75.58	43.60	1
LT	25+63.50	39.70	1
RT	27+16.80	40.90	1
RT	27+66.35	35.30	1
RT	22+30.65	54.00	1
TOTAL			5

44000200 - DRIVEWAY PAVEMENT REMOVAL

NB/SB	STATION		SQ YD
SB	26+85.80	LT	39.26
NB	26+90.14	RT	21.69
NB	27+36.28	RT	28.45
NB	27+79.65	RT	28.03
TOTAL			117.43

20101350 - TREE PRUNING (OVER 10 INCH DIAMETER)

RT/LT	STATION	OFFSET	EACH
RT	21+53.00	51.4	1
RT	22+01.25	51.5	1
RT	24+60.50	51.3	1
RT	24+76.45	44.8	1
RT	24+83.70	47.7	1
LT	25+26.40	41.6	1
LT	25+73.65	42.1	1
RT	26+29.80	44.3	1
RT	26+75.20	42.8	1
LT	27+04.90	46.7	1
LT	27+48.65	46.8	1
TOTAL			11

28000400 - PERIMETER EROSION BARRIER

NB/SB	START STATION	END STATION	FEET
NB	20+23.42	22+35.83	212.41
NB	22+54.56	22+98.00	66.94
NB	24+34.00	26+00.00	195.50
SB	20+23.42	22+35.83	212.41
SB	22+54.56	22+98.00	78.44
SB	24+32.00	26+00.00	197.50
TOTAL			964.00

44000500 - COMBINATION CURB AND GUTTER REMOVAL

NB/SB	START STATION	END STATION	FEET
NB	16+35.25	18+00.00	164.75
SB	16+35.25	18+00.00	164.75
NB	20+23.42	22+35.83	212.41
NB	20+23.42	21+70.00	146.58
NB	22+54.56	23+22.30	67.74
NB	24+08.17	27+00.00	291.83
SB	20+23.42	22+35.83	212.41
SB	20+23.42	21+70.00	146.58
SB	22+54.56	23+21.95	67.39
SB	24+07.77	27+00.00	292.23
TOTAL =			1767.00

20100210 - TREE REMOVAL (GREATER THAN 15 UNITS DIAMETER)

STATION	OFFSET (FT)	RT/LT	UNITS
24+45.10	43.2	RT	16
25+30.82	37.9	RT	17
TOTAL			33

21101615 - TOPSOIL FURNISH AND PLACE, 4"

NB/SB	START STATION	END STATION	LENGTH	AVERAGE WIDTH	SQ YD
NB	20+23.42	20+60.71	37.29	20.55	85.15
NB	20+60.71	20+94.56	33.85	17.82	67.02
NB	20+94.56	22+35.83	141.27	16.67	261.66
NB	22+54.56	22+98.22	43.66	19.12	92.75
NB	24+34.00	25+65.50	131.50	17.32	253.06
NB	25+65.50	26+01.17	35.67	18.98	75.22
NB	26+01.17	26+85.63	84.46	21.80	204.58
NB	26+97.63	27+30.03	32.40	20.00	72.00
NB	27+42.04	27+74.84	32.80	20.00	72.89
NB	27+84.84	28+00.44	15.60	19.50	33.80
SB	20+23.42	21+11.50	88.08	15.25	149.25
SB	21+11.50	21+45.50	34.00	12.20	46.09
SB	21+45.50	22+35.83	90.33	10.30	103.38
SB	22+54.56	22+94.56	40.00	11.50	51.11
SB	24+32.00	26+11.72	179.72	9.88	197.29
SB	26+11.72	26+72.18	60.46	12.00	80.61
SB	26+87.71	28+00.00	112.29	17.00	212.10
TOTAL					2058.00

40600980 - BITUMINOUS SURFACE REMOVAL - BUTT JOINT

NB/SB	START STATION	END STATION	LENGTH	AVERAGE WIDTH	SQ YD
NB	27+95.50	28+00.00	4.50	30.00	15.00
SB	27+95.50	28+00.00	4.50	30.00	15.00
TOTAL					30.00

44000600 - SIDEWALK REMOVAL

NB/SB	START STATION	END STATION	LENGTH	AVERAGE WIDTH	SO FT
NB	22+87.26	23+21.90	SHAPE	-	248.24
NB	24+07.72	24+44.14	SHAPE	-	292.76
SB	22+75.22	23+22.39	SHAPE	-	346.07
SB	24+08.22	24+44.14	SHAPE	-	257.14
TOTAL =					1144.21

42001165 - BRIDGE APPROACH PAVEMENT

N/S	START STATION	END STATION	LENGTH	AVERAGE WIDTH	SQ YD
N	24+25.76	24+55.76	30.00	56.50	188.33
S	22+75.80	23+05.80	30.00	56.50	188.33
TOTAL					377.00

20101200 - TREE ROOT PRUNING

RT/LT	STATION	OFFSET	EACH
RT	21+53.00	51.4	1
RT	22+01.25	51.5	1
RT	22+30.65	54	1
RT	24+60.50	51.3	1
RT	24+76.45	44.8	1
RT	24+83.70	47.7	1
LT	25+26.40	41.6	1
LT	25+63.50	39.7	1
LT	25+73.65	42.1	1
RT	26+29.80	44.3	1
RT	26+75.20	42.8	1
LT	27+04.90	46.7	1
RT	27+16.80	40.9	1
LT	27+48.65	46.8	1
RT	27+66.35	35.3	1
TOTAL			16

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

SCHEDULE OF QUANTITIES

SCALE: NONE
DATE: SEPTEMBER 19, 2006

DRAWN BY: SPG
CHECKED BY: AAC



CONTRACT NO. 60440

55100300 - STORM SEWER REMOVAL 8"

BEGIN STATION	OFFSET	RT/LT	END STATION	OFFSET	RT/LT	FEET
22+22.50	29.55	RT	22+18.75	1.14	RT	28.70
22+23.00	29.5	LT	22+18.75	1.14	RT	28.70
23+93.87	1.05	LT	24+23.00	0.45	LT	29.00
24+29.80	29.4	RT	24+23.00	0.45	LT	29.00
24+31.45	30.25	LT	24+23.00	0.45	LT	31.00
TOTAL						147.00

55100700 - STORM SEWER REMOVAL 15"

BEGIN STATION	OFFSET	RT/LT	END STATION	OFFSET	RT/LT	FEET
22+18.75	1.14	RT	23+29.83	1.45	RT	92.60
TOTAL						93.00

60202505 - CATCH BASINS, TYPE A, 4' DIA., TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO)

NB/SB	STATION	RT/LT	EACH
SB	22+23.14	28.7RT	1
NB	22+23.14	28.7LT	1
NB	24+65.79	28.2RT	1
SB	24+65.79	28.2LT	1
TOTAL			4

60218400 - MANHOLES, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID

NB/SB	STATION	RT/LT	EACH
CL	22+18.88	0'	1
CL	24+65.79	0'	1
TOTAL			2

60603800 - COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

NB/SB	START STATION	END STATION	FEET
NB	16+35.25	18+00.00	164.75
SB	16+35.25	18+00.00	164.75
NB	20+23.34	20+60.71	37.37
NB	22+75.81	23+05.81	30.00
NB	24+25.81	24+55.81	30.00
NB	26+01.17	27+00.00	98.83
SB	20+23.34	21+11.52	88.18
SB	22+75.88	23+05.79	29.91
SB	24+25.76	24+55.71	29.95
SB	26+50.92	27+00.00	49.08
TOTAL =			723

60608300 - COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12

NB/SB	START STATION	END STATION	FEET
NB	20+23.43	20+61.90	38.47
SB	20+23.43	20+61.90	38.47
NB	20+60.71	22+75.81	215.10
NB	24+55.81	26+01.17	145.36
SB	21+11.52	22+75.88	164.36
SB	24+55.71	26+50.92	195.21
TOTAL			797.00

70400100 - TEMPORARY CONCRETE BARRIER

STAGE	START STATION	END STATION	FEET
1	21+41	25+89	429
TOTAL			429

70400200 - RELOCATE TEMPORARY CONCRETE BARRIER

STAGE	START STATION	END STATION	FEET
2	21+41	25+89	429
TOTAL			429

Z0018400 - DRAINAGE STRUCTURES TO BE ADJUSTED

STATION	OFFSET (FT)	LT/RT	EACH
16+14.40	0.450	RT	1
17+56.91	0.800	RT	1
17+91.35	5.370	LT	1
20+34.08	5.150	LT	1
20+69.66	1.100	RT	1
21+59.38	14.500	RT	1
21+76.75	12.300	RT	1
21+98.18	14.300	RT	1
22+15.37	13.000	RT	1
26+40.58	0.800	RT	1
26+42.90	29.750	RT	1
26+46.25	30.500	LT	1
26+55.25	1.000	RT	1
26+89.20	1.150	LT	1
TOTAL =			14

Z0018500 - DRAINAGE STRUCTURES TO BE CLEANED

STATION	LT/RT	EACH
16+15.00	30' RT	1
16+15.00	30' RT	1
18+25.00	30' LT	1
18+25.00	30' RT	1
20+36.35	30' LT	1
20+36.35	30' RT	1
TOTAL		6

Z0018600 - DRAINAGE STRUCTURES TO BE RECONSTRUCTED

STATION	OFFSET	LT/RT	EACH
22+30.46	7	RT	1
24+56.70	23.10	LT	1
24+66.94	4.50	RT	1
24+69.74	21.30	RT	1
24+97.53	12.75	RT	1
25+19.84	10.00	RT	1
25+39.27	15.00	RT	1
TOTAL =			7

Z0018700 - DRAINAGE STRUCTURES TO BE REMOVED

STATION	OFFSET	LT/RT	EACH
22+18.50	1.00	RT	1
22+22.25	30.25	RT	1
22+23.10	30.50	LT	1
24+03.35	27.00	RT	1
24+12.44	12.90	RT	1
24+23.00	3.50	RT	1
24+29.75	26.35	RT	1
24+30.54	29.5	RT	1
24+31.03	30.75	LT	1
TOTAL =			9

IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2

STAGE	SOUTH END STATION	STAGE	NORTH END STATION	LENGTH	EACH
1	21+23.06	1	21+43.33	20.27	1
1	25+89.91	1	26+08.34	18.43	1
TOTAL					2

IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2

STAGE	SOUTH END STATION	STAGE	NORTH END STATION	LENGTH	EACH
2	21+35.91	2	21+49.73	13.82	1
2	25+80.07	2	25+93.84	13.77	1
TOTAL					2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

SCHEDULE OF QUANTITIES

SCALE: NONE DRAWN BY: SPG
DATE: SEPTEMBER 19, 2006 CHECKED BY: AAC



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60440

MAINTENANCE OF TRAFFIC NOTES

- (1) ALL OF THE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED.
- (2) THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- (3) THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE STAGING PLANS.
- (4) THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGHOUT THE PROJECT AREA AT ALL TIMES. FLAGGERS SHALL BE USED WHEN TEMPORARY ONE LANE IS REQUIRED TO MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION ACTIVITIES.
- (5) THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APPROACHES, SIDE ROADS AND TEMPORARY ROADS WITHIN THE PROJECT LIMITS.
- (6) TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FT CENTER TO CENTER ON TANGENT, AND 25 FT CENTER TO CENTER ON TAPERS AND CURVES.
- (7) ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- (8) THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION SPECIAL".
- (9) ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY IN THE UNIT PRICE PER SQUARE FEET FOR "TEMPORARY INFORMATION SIGNING".
- (10) BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.
- (11) FOR BRIDGE CONSTRUCTION STAGING, SEE STRUCTURAL PLANS.
- (12) ANY SAW CUTTING OF THE EXISTING PAVEMENT FOR STAGE CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR "PAVEMENT REMOVAL".

MAINTENANCE OF TRAFFIC DESCRIPTION

- STAGE 1 CONSTRUCTION
- (1) FROM STA. 20+23.42 TO STA. 27+00 RECONSTRUCT PROPOSED SOUTHBOUND PAVEMENTS
 - (2) CONSTRUCT WEST SIDE OF ILLINOIS RTE 50 OVER NORTH BRANCH CHICAGO RIVER BRIDGE
 - (3) PERFORM DRAINAGE IMPROVEMENTS ALONG MAINLINE AT LOCATIONS SHOWN IN THE PLANS.

MAINTENANCE OF TRAFFIC
REDUCE EXISTING TWO LANES IN EACH DIRECTION TO ONE ONE LANE IN EACH DIRECTION AND SHIFT SOUTHBOUND LANE TO EAST SIDE OF ROADWAY CENTERLINE AS SHOWN IN THE PLANS.

- STAGE 2 CONSTRUCTION
- (1) FROM STA. 20+23.42 TO STA. 27+00 RECONSTRUCT PROPOSED NORTHBOUND PAVEMENTS
 - (2) CONSTRUCT EAST SIDE OF ILLINOIS RTE 50 OVER NORTH BRANCH CHICAGO RIVER BRIDGE
 - (3) DRAINAGE IMPROVEMENTS ALONG MAINLINE AT LOCATIONS SHOWN IN THE PLANS.
 - (4) RELOCATE EXISTING WATERMAIN AS SHOWN IN THE PLANS.

MAINTENANCE OF TRAFFIC
REDUCE EXISTING TWO LANES IN EACH DIRECTION TO ONE ONE LANE IN EACH DIRECTION AND SHIFT NORTHBOUND LANE TO WEST SIDE OF ROADWAY CENTERLINE AS SHOWN IN THE PLANS.

- STAGE 3 CONSTRUCTION
- (1) FROM STA. 27+00 TO STA. 28+00 MILL AND RESURFACE PAVEMENT
 - (2) FROM STA. 20+23.42 TO STA. 28+00 INSTALL FINAL PAVEMENT MARKING AND LANDSCAPING

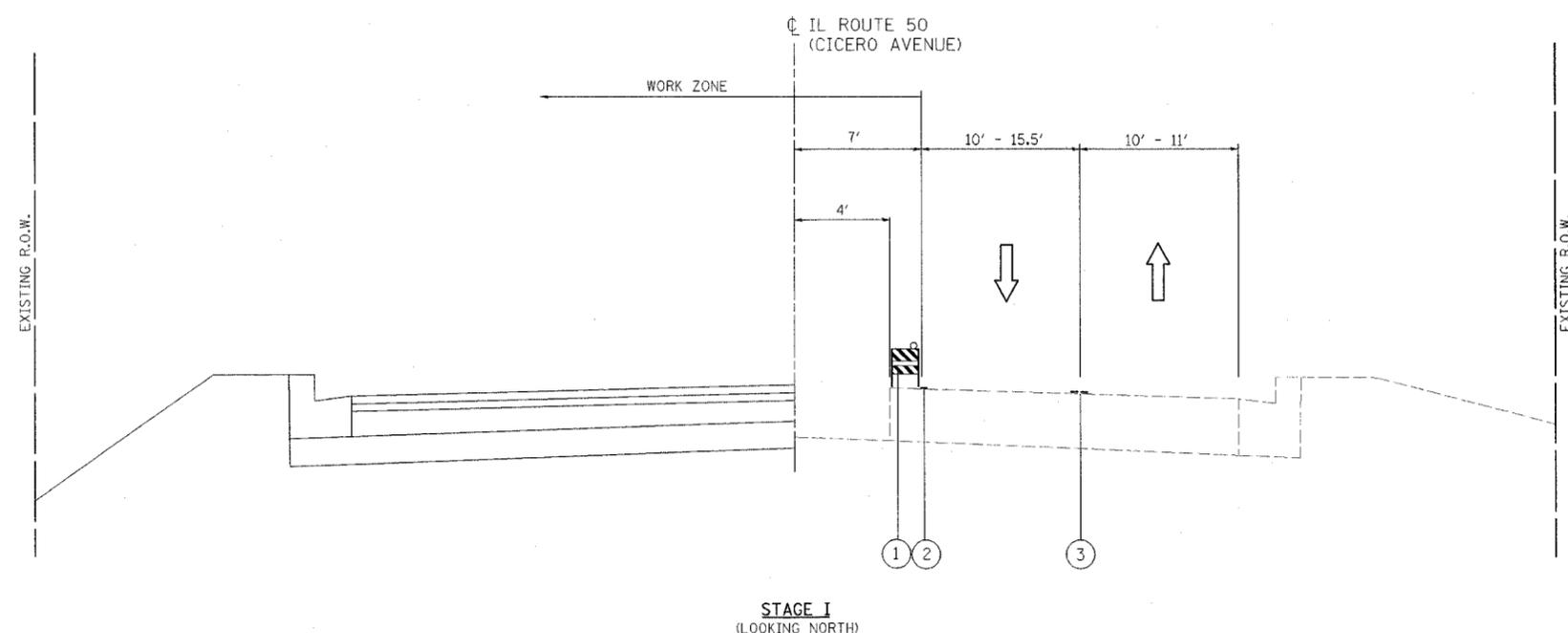
MAINTENANCE OF TRAFFIC
UTILIZE IDOT TRAFFIC CONTROL STANDARD 701606.

REVISIONS	
NAME	DATE

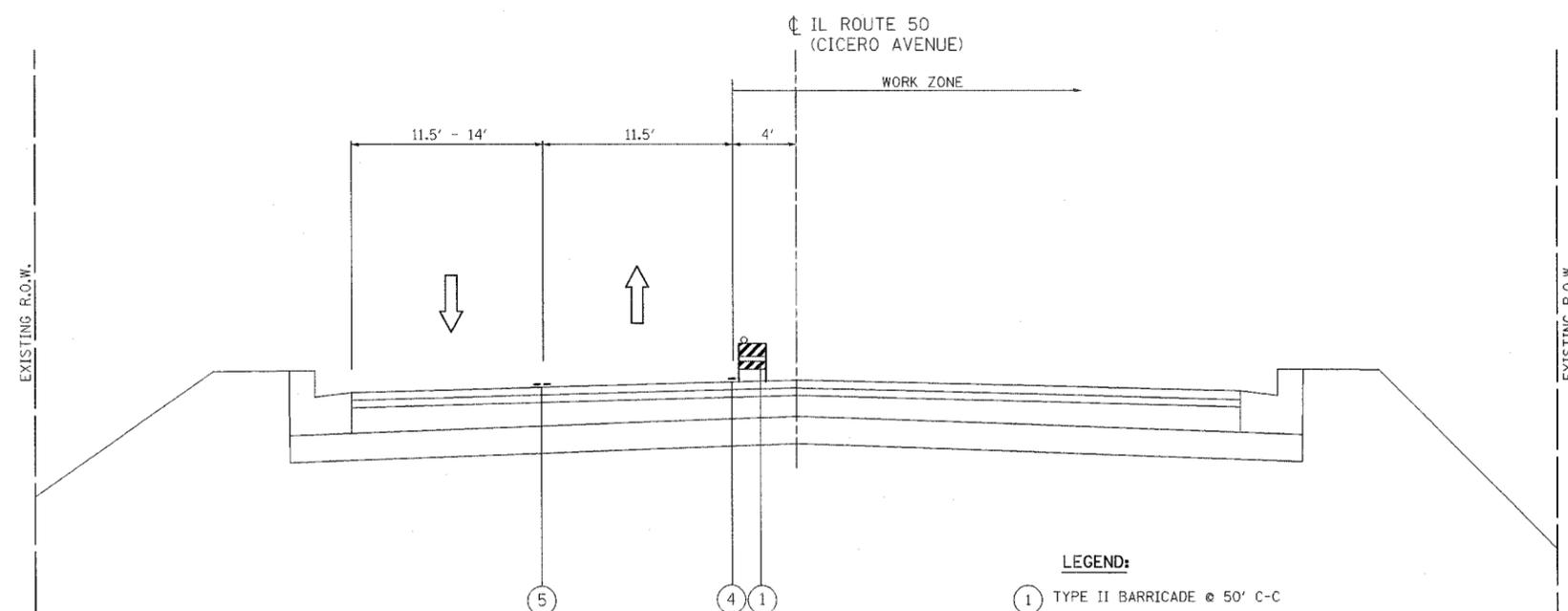
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL
TYPICAL SECTIONS

SCALE: NONE
DATE: AUGUST 18, 2006
DRAWN BY: CLW
CHECKED BY: AAC



STAGE I
(LOOKING NORTH)



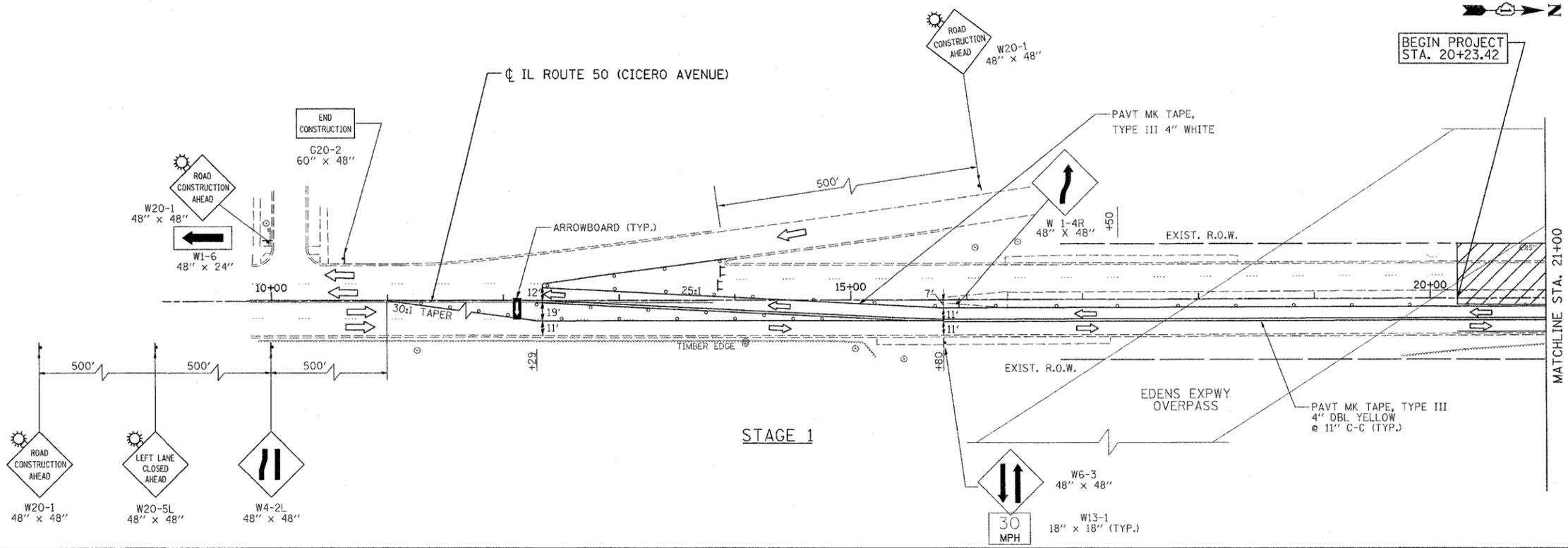
STAGE II
(LOOKING NORTH)

LEGEND:

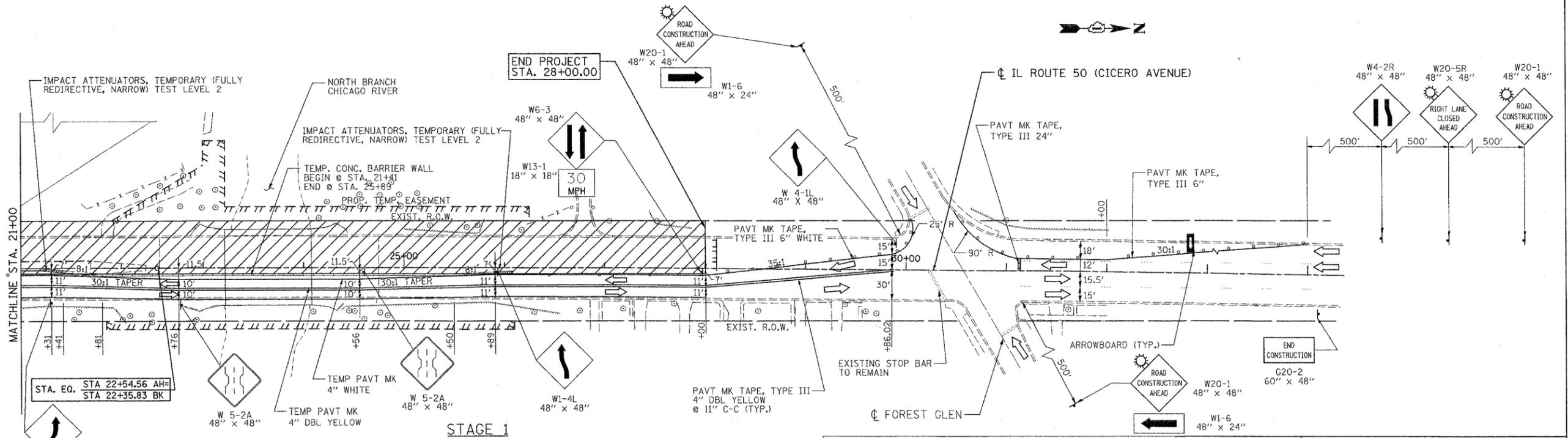
- ① TYPE II BARRICADE @ 50' C-C
- ② TEMPORARY PAVEMENT MKG, 4" WHITE
- ③ TEMPORARY PAVEMENT MKG, 4" DBL YELLOW @ 11" C-C
- ④ PAVEMENT MARKING TAPE, TY III, 4" WHITE
- ⑤ PAVEMENT MARKING TAPE, TY III, 4" DBL YELLOW @ 11" C-C

PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	12
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60440				



NOTE: TEMPORARY PAVEMENT MARKING SHALL BE PLACED WITHIN PAVEMENT RECONSTRUCTION LIMIT ONLY.



LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE W/ TWO FLASHING BEACONS EACH (TYP.)
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- TYPE II BARRICADES OR DRUMS W/ MONODIRECTIONAL STEADY BURNING LIGHT @ 50' C-C ALONG ROADWAY (TANGENT), 25' C-C ALONG TAPERS, AND 12' C-C ALONG RADII.

REVISIONS	
NAME	DATE

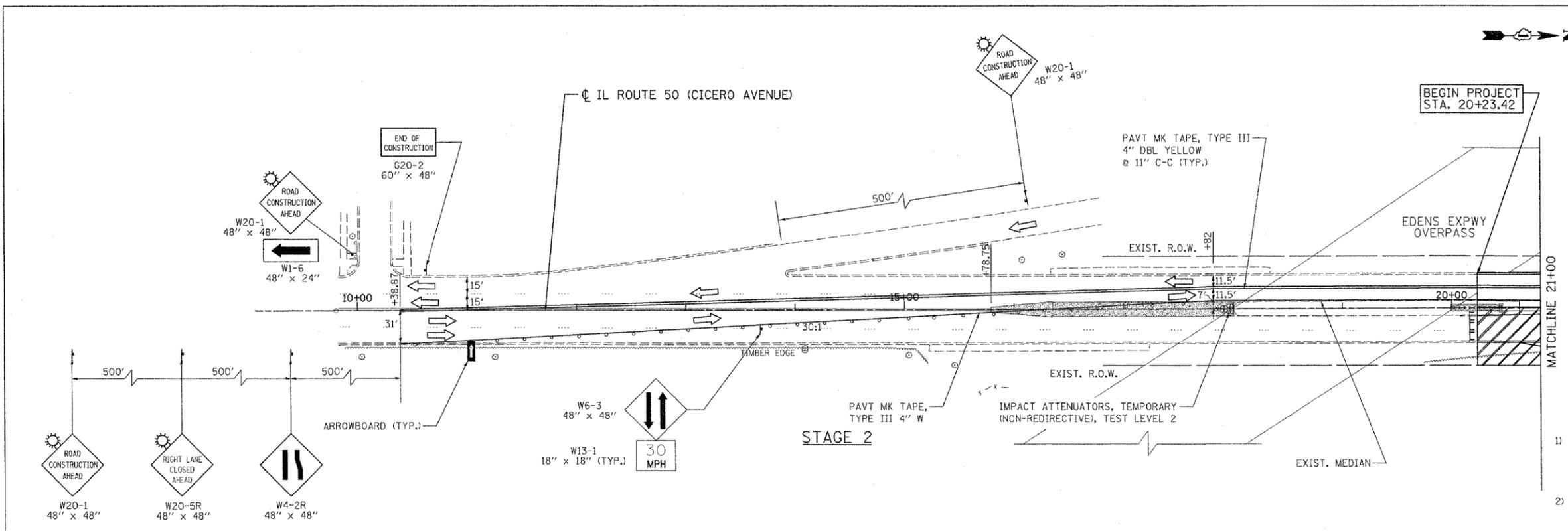
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL
STAGE 1

SCALE: 1"=50'
DATE: SEPTEMBER 19, 2006
DRAWN BY: CLW
CHECKED BY: AAC

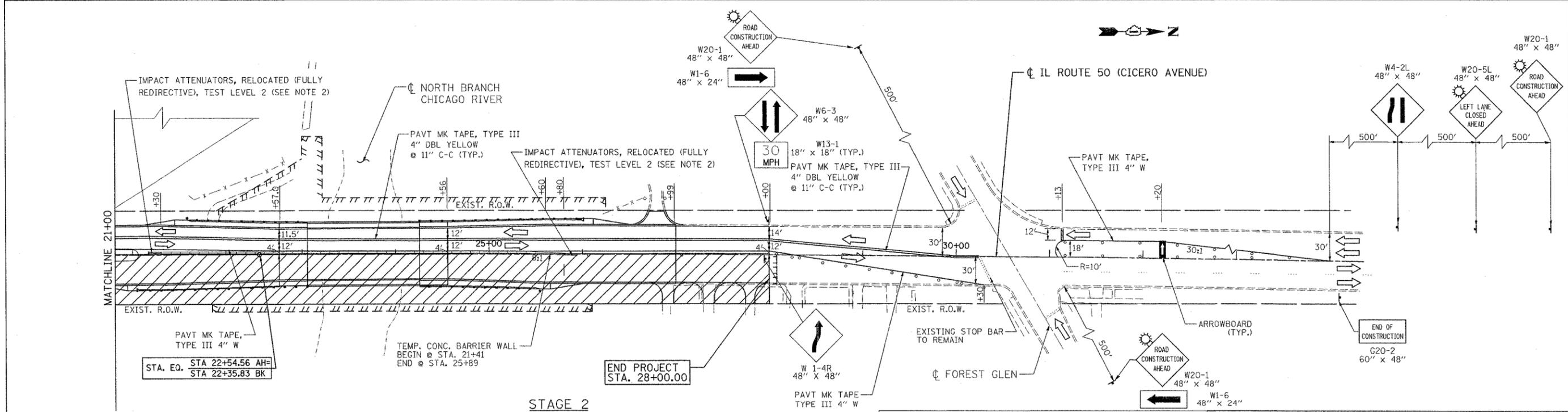
PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	13
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60440



- NOTE:
- TEMPORARY PAVEMENT SHALL CONSIST OF 2" BIT. CONC. SURF. CSE, SUPERPAVE, MIX D, N70 8" BIT. BASE CSE, SUPERPAVE (SEE TEMPORARY PAVEMENT SPECIAL PROVISION)
 - RELOCATED FROM STAGE 1



LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT (SEE NOTE)
- TYPE III BARRICADE W/ TWO FLASHING BEACONS EACH (TYP.)
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- TYPE II BARRICADES OR DRUMS W/ MONODIRECTIONAL STEADY BURNING LIGHT @ 50' C-C ALONG ROADWAY (TANGENT), 25' C-C ALONG TAPERS, AND 12' C-C ALONG RADII.

REVISIONS

NAME	DATE

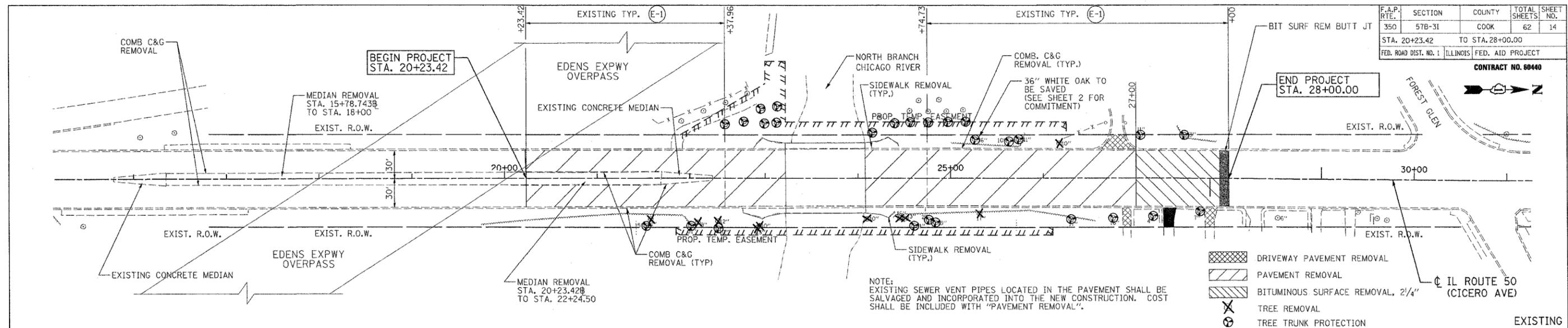
ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL
STAGE 2

SCALE: 1" = 50'
DATE: SEPTEMBER 19, 2006
DRAWN BY: CLW
CHECKED BY: AAC

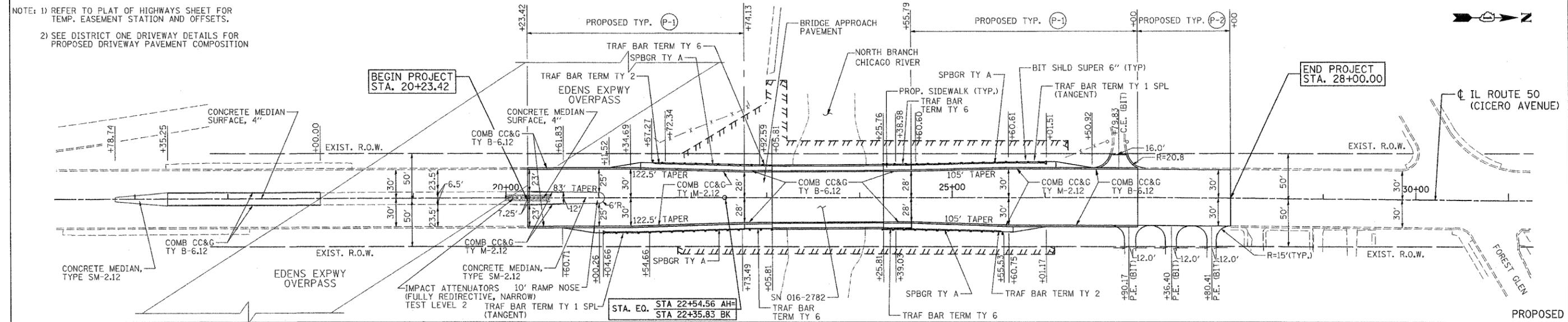
PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	14
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

CONTRACT NO. 60440



- NOTE: 1) REFER TO PLAT OF HIGHWAYS SHEET FOR TEMP. EASEMENT STATION AND OFFSETS.
 2) SEE DISTRICT ONE DRIVEWAY DETAILS FOR PROPOSED DRIVEWAY PAVEMENT COMPOSITION



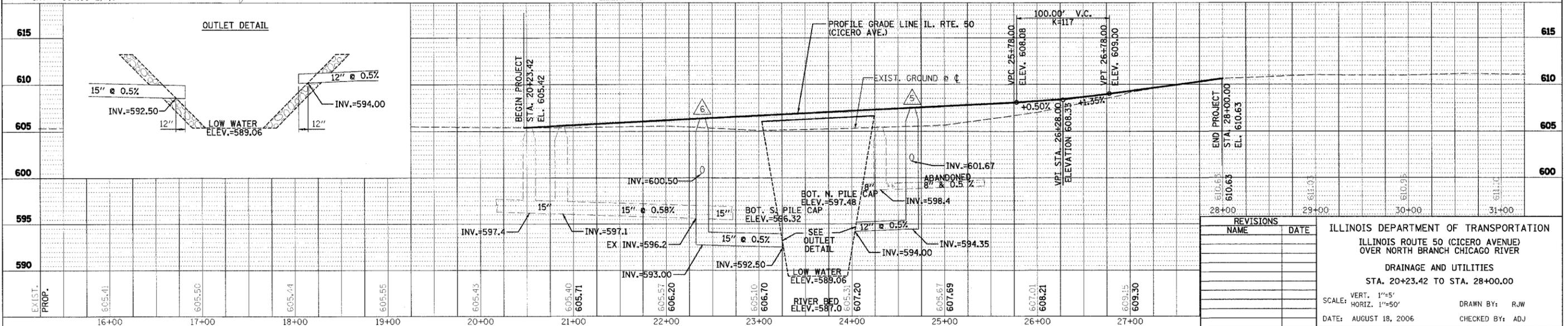
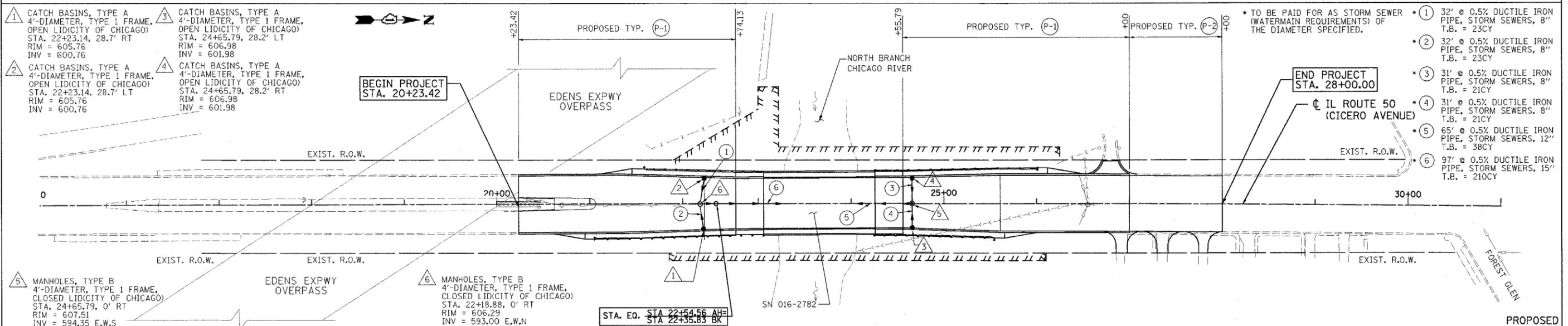
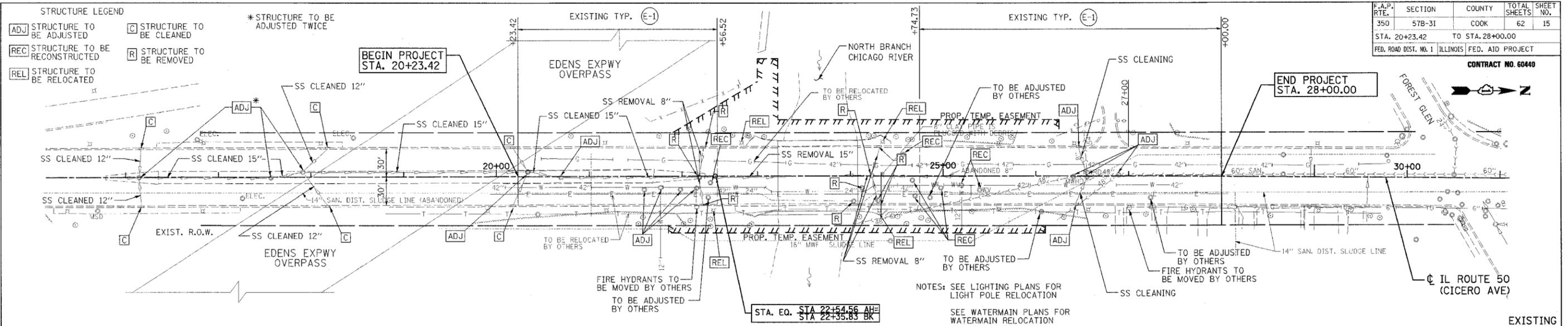
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE)
 OVER NORTH BRANCH CHICAGO RIVER
 PLAN & PROFILE
 STA. 20+23.42 TO STA. 28+00.00
 SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE: SEPTEMBER 19, 2006
 DRAWN BY: RJW
 CHECKED BY: ADJ

PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	15
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

CONTRACT NO. 60440



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE)
 OVER NORTH BRANCH CHICAGO RIVER
 DRAINAGE AND UTILITIES
 STA. 20+23.42 TO STA. 28+00.00

SCALE: VERT. 1"=5'
 HORIZ. 1"=50'

DATE: AUGUST 18, 2006

DRAWN BY: RJW
 CHECKED BY: ADJ

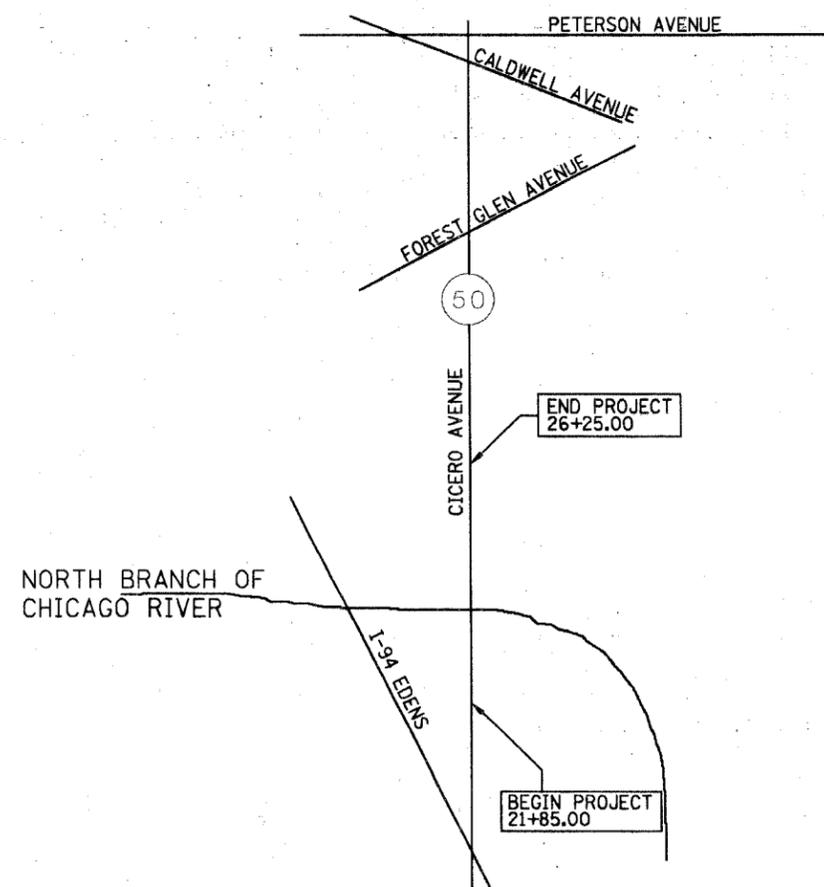
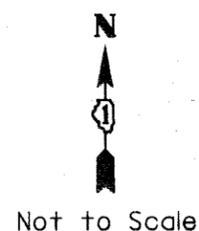
PATRICK
 ENGINEERING INC.
 Lisle, Illinois

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F.A.P. RTE.	SECTIONS	COUNTY	TOTAL SHEETS	SHEET NO.
		ILLINOIS	62	16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY PLANS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

ROUTE: FAP 350 (IL 50)
 SECTION: 57B-31
 LIMITS: AT NORTH BRANCH CHICAGO RIVER
 JOB NO.: R-90-044-01
 COUNTY: COOK



Project Length
 (Cicero Avenue) - (440 feet) = 0.083 miles

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
 ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT
 CONFORM TO STANDARD SCALES.

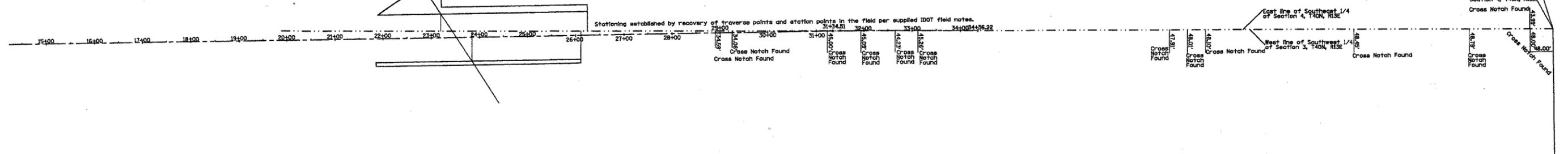
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 _____
 _____ DISTRICT ENGINEER
 _____ 20 _____
 _____ ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION
 _____ 20 _____
 _____ ENGINEER OF DESIGN AND ENVIRONMENT
 _____ 20 _____
 _____ DIRECTOR, DIVISION OF HIGHWAYS

SECTIONS 3 & 4, TOWNSHIP 40 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS

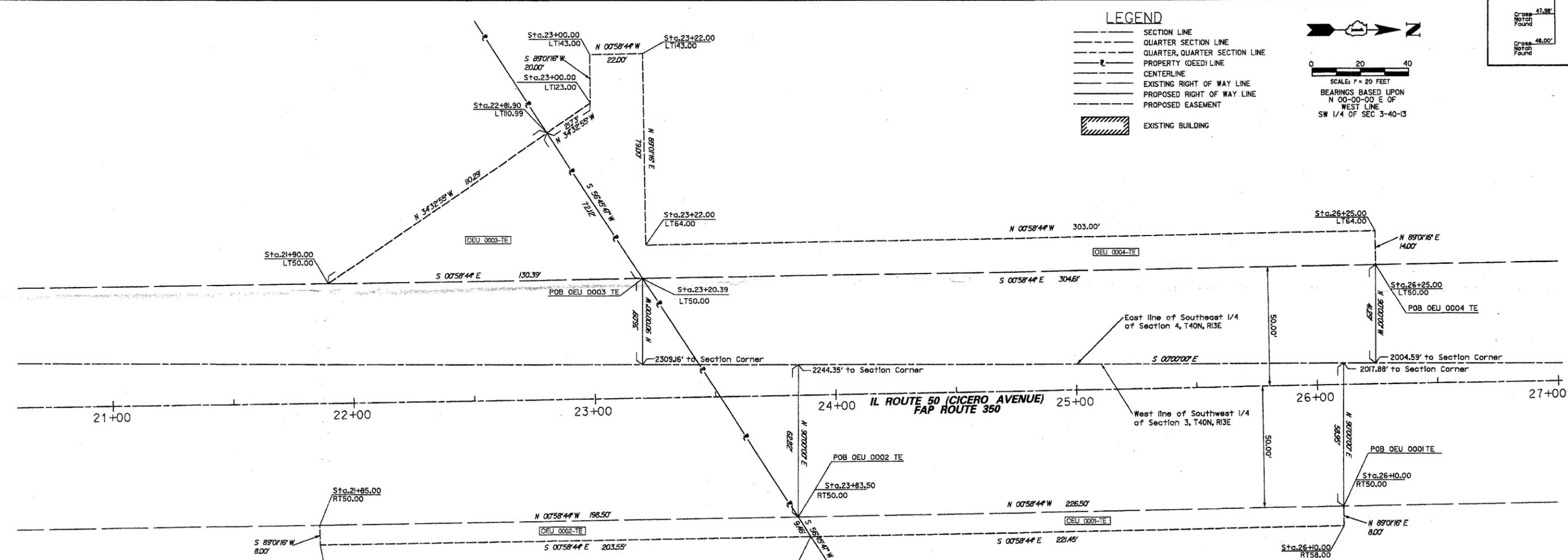
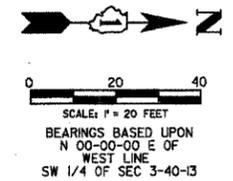
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
62	17		

DETAIL
SCALE: 1" = 100 FEET



LEGEND

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PROPERTY (DEED) LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- ▨ EXISTING BUILDING



STATE OF ILLINOIS)
) S.S.
COUNTY OF COOK)

THIS IS TO CERTIFY THAT MACKIE CONSULTANTS, INC., AN ILLINOIS PROFESSIONAL LAND SURVEYING FIRM NO. 184-001162, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTION 3, TOWNSHIP 40 NORTH, RANGE 13 AND SECTION 4, TOWNSHIP 40 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

GIVEN UNDER MY HAND AND SEAL THIS 21st DAY OF DECEMBER, 2001 IN ROSEMONT, ILLINOIS.

MACKIE CONSULTANTS, INC.
ILLINOIS PROFESSIONAL LAND SURVEYING FIRM NO. 184-001162

Brian C. Plautz
BRIAN C. PLAUTZ
ILLINOIS PROFESSIONAL LAND SURVEYOR LICENSE NO. 003167
LICENSE EXPIRES: NOVEMBER 30, 2002

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREV. DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
OEU 0001-TE	COOK COUNTY FOREST PRESERVE	N/A	N/A	N/A	N/A	0.0411	CONSTRUCTION	13-03-316-005	N/A
OEU 0002-TE					N/A	0.0369	CONSTRUCTION	13-03-316-014	N/A
OEU 0003-TE					N/A	0.0913	CONSTRUCTION	13-03-316-014	N/A
OEU 0004-TE					N/A	0.1453	CONSTRUCTION	13-04-414-002	N/A

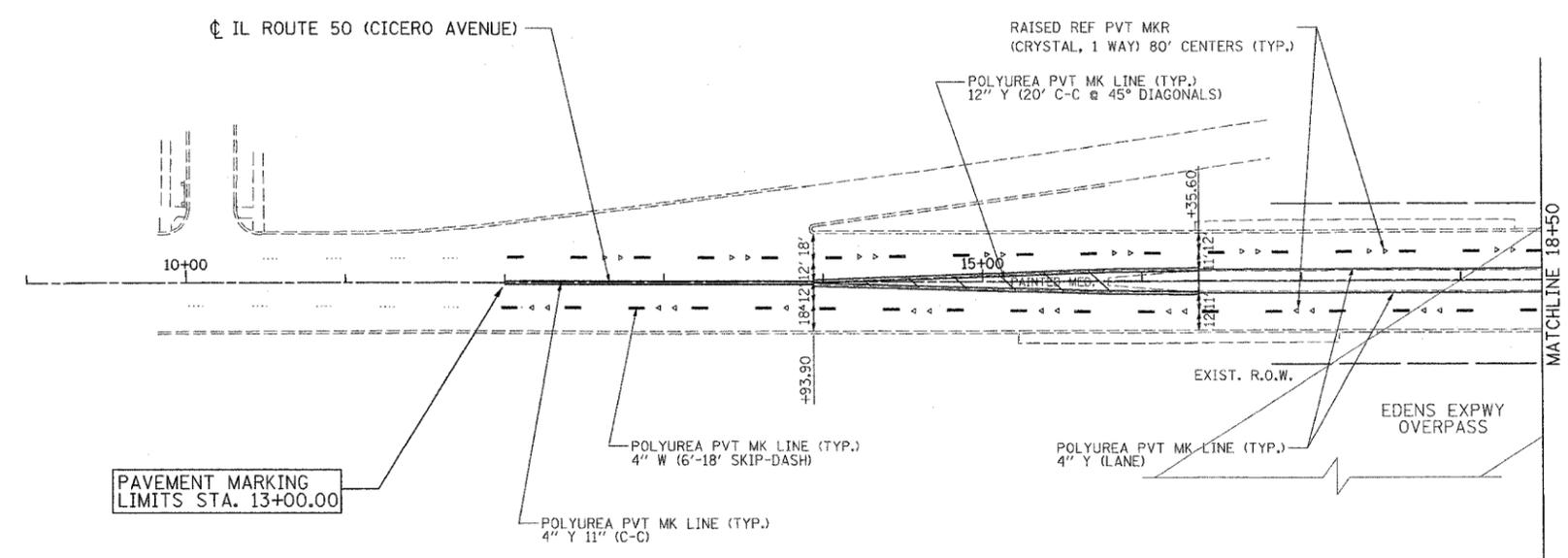
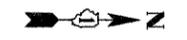
MACKIE CONSULTANTS, INC.
9575 W. HIGGINS RD., SUITE 500, ROSEMONT, IL 60018
847-898-1400 ENGINEERS 847-898-1410 PLANNERS 847-898-1410 SURVEYORS
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NUMBER 184-001162

REVISION		ILLINOIS DEPT. OF TRANSPORTATION PLAT OF HIGHWAYS FAP 350 (IL 50)
DATE	DESCRIPTION	
9/04/01	PER IDOT COMMENTS	COUNTY: COOK JOB# R-90-044-01 PROJECT# SEC 3 & 4 T 40 N, R 13 E OF 3RD P.M. DRAWN BY: BCP CHECKED BY: BCP SCALE: 1" = 20' SHEET NO. 2 OF 2
9/17/01	PER IDOT COMMENTS	

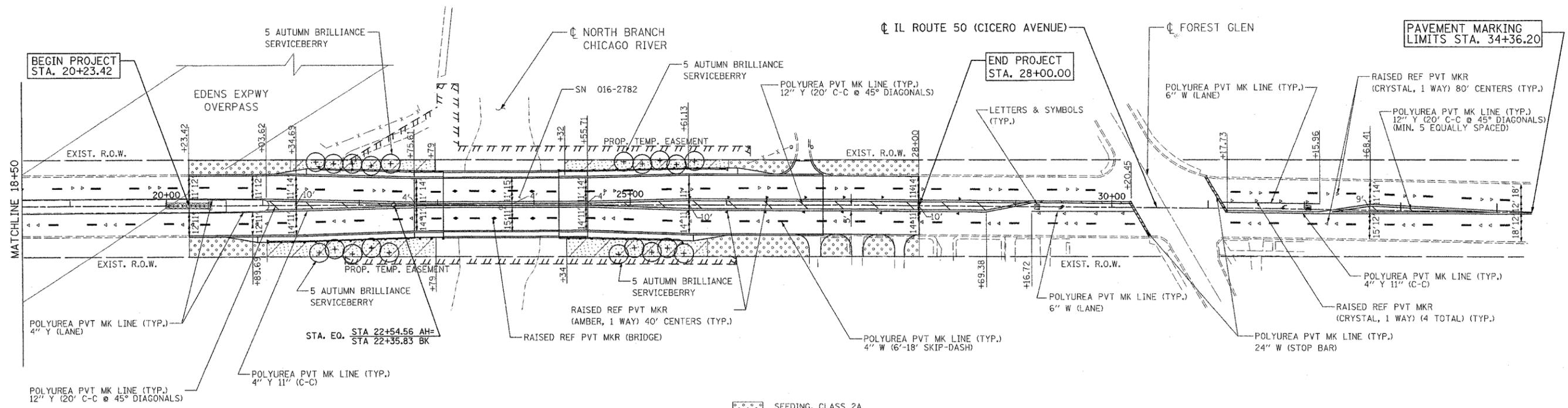
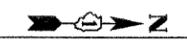
BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	18
STA. 13+00		TO STA. 34+36.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440



PAVEMENT MARKING LIMITS STA. 13+00.00



PAVEMENT MARKING LIMITS STA. 34+36.20

- SEEDING, CLASS 2A
- SEEDING, CLASS 4A

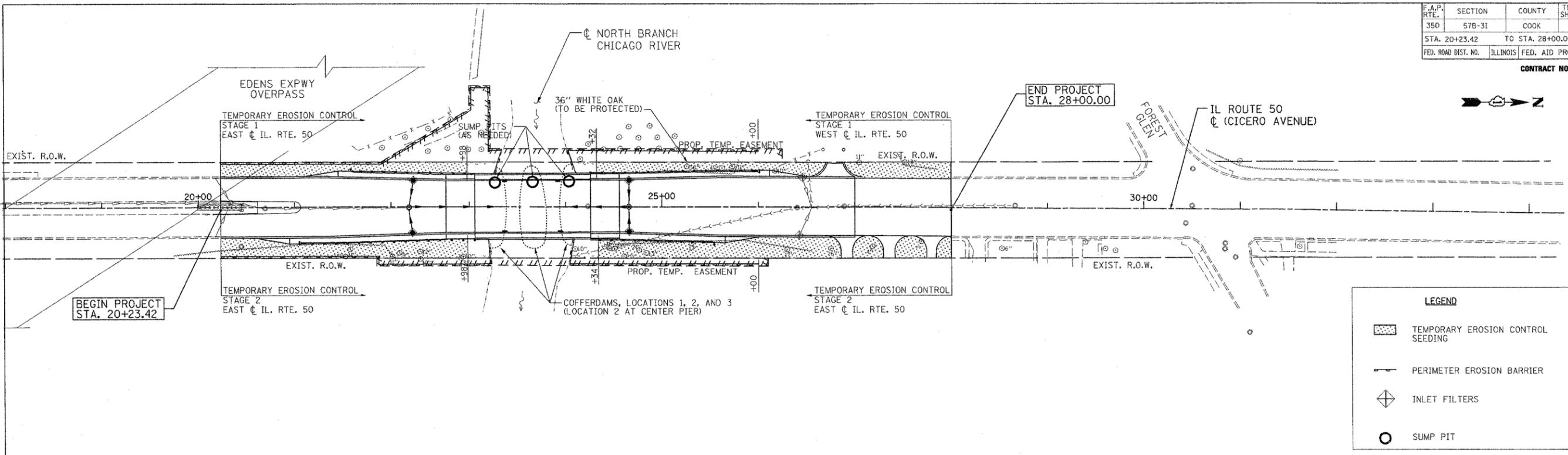
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
 NORTH BRANCH CHICAGO RIVER
 PAVEMENT MARKING AND LANDSCAPING PLAN
 STA. 13+00 TO STA. 34+36.20
 SCALE: 1" = 50'
 DATE: SEPTEMBER 19, 2006
 DRAWN BY: CLW
 CHECKED BY: AAC

PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	19
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

CONTRACT NO. 60440



PLAN

**GENERAL NOTES
SOIL EROSION & SEDIMENT CONTROL**

- A PRE-CONSTRUCTION MEETING TO REVIEW IMPLEMENTATION OF THIS PLAN AND ALL SESC MEASURES WILL TAKE PLACE WITH A REPRESENTATIVE FROM THE NORTH COOK SOIL AND WATER CONSERVATION DISTRICT, NATURAL RESOURCES CONSERVATION SERVICE, OR THE ARMY CORPS OF ENGINEERS DISTRICT PRESENT.
 - THE ENGINEER SHALL INSPECT ALL TEMPORARY AND PERMANENT EROSION CONTROL STRUCTURES WEEKLY AND AFTER 1/2 INCH OR GREATER RAINSTORM EVENT AND INFORM AND DIRECT THE CONTRACTOR TO REPAIR/REPLACE ALL EROSION CONTROL MATERIALS/STRUCTURES PROMPTLY AS NEEDED. A COPY OF EACH INSPECTION REPORT WILL BE FAXED TO THE NORTH COOK SOIL AND WATER CONSERVATION DISTRICT.
 - THE FOLLOWING EROSION CONTROL NOTES AND DETAILS MEET REQUIREMENTS FOR EROSION CONTROL OF THE ILLINOIS URBAN MANUAL AND IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 - ONCE CONSTRUCTION IN A DISTURBED AREA HAS BEEN COMPLETED, PERMANENT STABILIZATION MEASURES WILL BE IMPLEMENTED WITHIN SEVEN DAYS.
 - THE SOIL AND WATER CONSERVATION DISTRICT IS RESPONSIBLE FOR CONDUCTING SITE VISITS AND VERIFYING THAT THE PRACTICES ARE WORKING PROPERLY AND DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE SWCD THE CONTRACTOR WILL IMPLEMENT THE PRACTICES IN A TIMELY MANNER.
 - THE NORTH COOK SOIL AND WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO FINAL INSPECTION.
 - THE USE OF STRAW BALES AS DEPICTED ON IDOT HIGHWAY STANDARD 280001 IS NOT ACCEPTABLE.
- TOPSOIL**
- SUITABLE TOPSOIL AS DESCRIBED IN SECTION 211 SHALL BE USED. ORGANIC CONTENT SHALL BE NOT LESS THAN 1.5% BY WEIGHT AND pH SHALL RANGE FROM 6.0-7.5.
 - IF TOPSOIL IS TO BE STOCKPILED AT THE SITE, A LOCATION SHALL BE SELECTED SO THAT IT WILL NOT ERODE, BLOCK DRAINAGE, OR INTERFERE WITH WORK ON THE SITE AND SHALL BE APPROVED BY THE ENGINEER. LOCATIONS SHALL BE DISCUSSED AND DETERMINED AT THE PRE-CONSTRUCTION CONFERENCE.
 - ALL STOCKPILES SHALL BE IMMEDIATELY PROTECTED WITH SILT FENCE/PERIMETER BARRIER. TEMPORARY PRIOR SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 7 DAYS OF FORMATION OF STOCKPILE IF IT IS TO REMAIN SOIL UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT SEEDING OF STOCKPILE SHALL BE COMPLETED WITHIN 7 DAYS OF FORMATION OF STOCKPILE IF IT IS TO REMAIN UNDISTURBED FOR LONGER THAN 12 MONTHS.
 - ADDITIONAL TOPSOIL FROM OUTSIDE THE R.O.W. SHALL BE APPROVED BY THE ENGINEER PRIOR TO ITS USE, PROVIDED THAT THE MATERIAL MEETS THE REQUIREMENTS DESCRIBED ABOVE FOR TOPSOIL.

- PERIMETER EROSION BARRIER/SILT FENCE**
- EROSION CONTROL FENCE SHALL BE INSTALLED AND FUNCTIONING PROPERLY PRIOR TO ANY EARTHWORK ACTIVITIES IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
 - FABRIC FILTER MATERIAL SHALL MEET THE REQUIREMENTS OF SECTION 1080.02 MATERIAL STANDARD.
- EROSION CONTROL BLANKET**
- EROSION CONTROL BLANKET MAY BE USED TO PROTECT ALL AREAS GRADED PRIOR TO LANDSCAPING AS DIRECTED BY THE ENGINEER.
 - THE BLANKET WILL BE IN FIRM CONTACT WITH THE SOIL. IT SHALL BE ANCHORED PER MANUFACTURER'S RECOMMENDATION WITH PROPER NUMBER AND SPACING OF WIRE STAPLES WHOSE LENGTH AND HEIGHT MEET THE MANUFACTURER'S RECOMMENDATION.
 - THE EROSION CONTROL BLANKET SHALL BE LOOSELY PLACED OVER GROUND SURFACE AND STAPLED. DO NOT STRETCH MATERIAL.
 - THE TYPE OF BLANKET SHALL BE DETERMINED BY THE ENGINEER AND INSTALLED AS DETAILED IN THE PLANS. THE BLANKET WILL BE UNROLLED UPSTREAM TO DOWNSTREAM PARALLEL TO THE DIRECTION OF FLOW IN THE CHANNEL AND PERPENDICULAR TO THE FLOW ON SLOPES. THE UPSTREAM END OF EACH BLANKET WILL BE ANCHORED IN A MINIMUM 150mm (6 IN) ANCHOR TRENCH. THESE BLANKETS WHEN LAID SIDE BY SIDE SHALL OVERLAP A MIN. OF 4 INCHES. BLANKETS SHALL OVERLAP 300mm (12 IN) AT THE DOWNSTREAM ENDS.
- INLET AND PIPE PROTECTION**
- FABRIC DROP INLETS SHALL BE USED FOR INLET AND PIPE PROTECTION ON INLET-SIDE OF FLARED END SECTIONS AND SHALL CONFORM TO THE DETAILS PROVIDED IN THE PLANS FOR EROSION AND SEDIMENT CONTROL.
 - THE STAKES SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVEN INTO THE GROUND APPROXIMATELY 18 INCHES DEEP.
 - THE SILT FENCE SHOULD BE ENTRENCHED 12 INCHES AND BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.
 - SEDIMENT SHOULD BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE HEIGHT OF THE INLET PROTECTION.
 - INLET FILTER BAGS SHALL BE USED AS INLET PROTECTION IN CATCH BASINS.
- STONE RIPRAP - SLOPE STABILIZATION**
- THE STONE RIPRAP IS PROVIDED FOR USE AT LOCATIONS DESIGNATED ON THE PLANS TO PROVIDE FOR SCOUR PROTECTION/SLOPE STABILIZATION. FABRIC FILTER MATERIAL SHALL MEET THE REQUIREMENTS OF SECTION 1080.03 MATERIAL STANDARD.

- SEEDING**
- FERTILIZER NUTRIENTS SHALL BE APPLIED TO THE AREA TO BE SEEDED AT A RATIO OF 1:1:1. RATE PER ACRE:
90 LB NITROGEN NUTRIENT FERTILIZER
90 LB PHOSPHORUS NUTRIENT FERTILIZER
90 LB POTASSIUM NUTRIENT FERTILIZER
 - PRIOR TO SEED PLACEMENT, AREAS TO BE SEEDED SHALL BE BROUGHT TO FINAL GRADE. ANY IRREGULARITIES IN SOIL SURFACE SHALL BE FILLED OR SHAPED TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - SEEDING SHALL BE PLACED IN ACCORDANCE WITH SECTION 250.
 - AFTER SEEDING IS COMPLETE, SEED SHALL BE IRRIGATED AT A RATE THAT DOES NOT RESULT IN RUNOFF. SUPPLEMENTAL WATERING HAS BEEN PROVIDED IN THE EVENT OF PERIODS EXCEEDING 26 DEGREES CELSIUS (80 DEGREES FAHRENHEIT) OR SUBNORMAL RAINFALL.
 - SEEDING SHALL ONLY OCCUR DURING THE APPROPRIATE PLANTING TIMES, WHICH ARE APRIL 1 TO JUNE 1 AND AUGUST 15 TO SEPTEMBER 30.
- BRIDGE RECONSTRUCTION**
- APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL METHODS WILL BE INCLUDED FOR EACH STEP OF THE BRIDGE RECONSTRUCTION BY THE CONTRACTOR AND RESIDENT ENGINEER. AT A MINIMUM, THE WORK AREA NEEDS TO BE ISOLATED FROM ANY FLOWING WATER. THIS SHOULD BE DONE VIA A COFFERDAM AND BY-PASS PIPING THE FLOW AROUND THE WORK AREA.
 - THE NORTH COOK SOIL AND WATER CONSERVATION DISTRICT WILL BE CONTACTED SEVEN DAYS BEFORE ANY IN-STREAM WORK BEGINS TO ENSURE ADEQUATE SESC PRACTICES ARE IN PLACE BEFORE CONSTRUCTION BEGINS.
 - THE NORTH COOK COUNTY SOIL AND WATER CONSERVATION DISTRICT CAN BE CONTACTED AT (847) 468-0071, MONDAY-FRIDAY 8:00 AM - 4:30 PM OR BY FAX AT (847) 608-8302.
- SUMP PIT INFORMATION**
- SEE ADDITIONAL NOTES ADJACENT TO DETAIL.

PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE)
OVER NORTH BRANCH CHICAGO RIVER
EROSION CONTROL PLAN & NOTES
STA. 20+23.42 TO STA. 28+00.00

SCALE: VERT. 1"=5'
HORIZ. 1"=50'

DATE: SEPTEMBER 19, 2006

DRAWN BY: RJW
CHECKED BY: ADJ

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	20
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

POSSIBLE COFFERDAM ALTERNATE

**WATER INFLATED DAM
PRODUCT SPECIFICATION**

(AQUA-BARRIER™ OR EQUIVALENT)

1.1 SPECIFICATION

A WATER-INFLATED TEMPORARY DAM (AQUA-BARRIER™ OR EQUIVALENT) SHALL CONSIST OF THE FOLLOWING:

- 1) THE WATER INFLATED DAM WILL CONSIST OF A SELF CONTAINED, SINGLE TUBE WITH AN INNER RESTRAINT BAFFLE(S)/DIAPHRAGM(S) STABILIZATION SYSTEM. THE WATER-INFLATED DAM MUST HAVE THE ABILITY TO STAND ALONE, WITHOUT ANY ADDITIONAL EXTERNAL MECHANICAL OR GRAVITATIONAL STABILIZATION DEVICES, AS A POSITIVE WATER BARRIER AND WATER MANAGEMENT SYSTEM.
- 2) THE WATER-INFLATED DAM SHALL BE PRODUCED FROM HEAVY GAUGE POLYVINYL CHLORIDE (PVC) REINFORCED WITH POLYESTER. THE PVC FABRIC USED TO CREATE THE INFLATABLE DAM WILL BE INFELD REPAIRABLE UTILIZING A VINYL ADHESIVE AND PATCH MATERIAL.
- 3) THE WATER-INFLATED DAM MUST MAINTAIN MECHANICAL STABILITY IN ADDITION TO PROVIDING ANTI-ROLLING WHEN EXPOSED TO UNEVEN HYDROSTATIC PRESSURE FROM EITHER SIDE.
- 4) THE SELF-CONTAINED WATER INFLATED DAM SHALL HAVE THREADED FILL PORTS AND DRAIN PORTS FOR RAPID INFLATION AND DRAINING. THE DAM WILL BE EQUIPPED WITH END LIFTING LOOPS USED TO CONTROL THE DAM WITH EQUIPMENT DURING THE INSTALLATION AND REMOVAL PROCESS.
- 5) METHOD FOR CONNECTING THE INDIVIDUAL UNITS TOGETHER WILL CONSIST OF OVERLAPPING THE END OF THE UNITS A SPECIFIC LENGTH WHICH WILL CREATE A WATERTIGHT CONNECTION. NO OTHER DEVICES OR METHODS FOR CONNECTING THE BARRIERS ARE REQUIRED.

1.2 PRODUCT DESCRIPTION

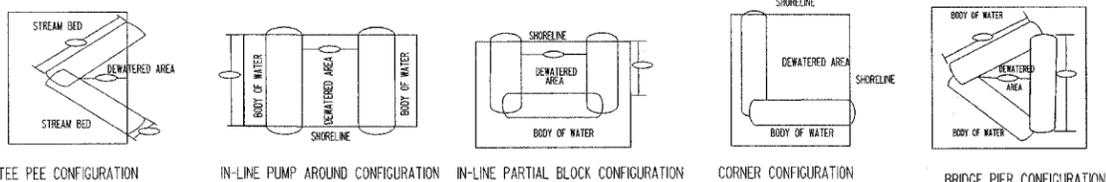
WATER-INFLATED DAMS ARE USED TO CONTROL INVASIVE WATER IN FLOODWATER SITUATIONS. AS A MEANS OF WATER MANAGEMENT TO PROVIDE ACCESS TO UNDERWATER AREAS FOR CONSTRUCTION AND MAINTENANCE OPERATIONS, HAZARDOUS LIQUID CONTAINMENT, SEDIMENT RETENTION IN ENVIRONMENTALLY SENSITIVE AREAS IN ADDITION TO A CONTINUALLY EXPANDING LIST OF WATER CONTROL RELATED APPLICATIONS.

1.3 DAM SIZE REQUIREMENTS

THE WATER-INFLATED TEMPORARY DAM HEIGHT SHALL BE DETERMINED AS FOLLOWS:

- 1) STATIC WATER HEIGHT CONDITIONS SHALL NOT EXCEED 75% OF THE PROPERLY FILLED HEIGHT OF THE BARRIER.
- 2) DYNAMIC WATER HEIGHT CONDITIONS SHALL NOT EXCEED STATED VALUE DURING HYDRODYNAMIC INSTALLATION PROCEDURES (SEE DYNAMIC INSTALLATION INSTRUCTIONS FOR COMPLETE LIST OF REQUIREMENTS.)
- 3) INSTALLATION SITE CRITERIA ARE REQUIRED FOR ASSESSMENT OF ALL RELEVANT FACTORS.

EXCESS SLOPE, HIGH WATER VELOCITIES, DYNAMIC LOADS RESULTING FROM WAVE ACTIONS, MOUNTING SURFACE IRREGULARITIES, AND CHANGES IN INTERRELATED HYDROLOGICAL CONDITIONS CAN INCREASE THE REQUIRED WATER INFLATED DAM HEIGHT VERSES RETENTION HEIGHT REQUIREMENTS.



AQUA-BARRIER™ CONNECTION REQUIREMENTS

EACH INFLATED AQUA-BARRIER SECTION IS STRAIGHT WITHOUT THE ABILITY TO BEND. WHEN JOINING AQUA-BARRIERS, AN OVERLAPPING TECHNIQUE IS USED. SIMPLY PLACE THE BARRIER TO BE INFLATED ON TOP OF THE END OF THE INFLATED BARRIER AND BEGIN THE INFLATION PROCESS. THE AMOUNT OF OVERLAP WILL BE DETERMINED BY BARRIER HEIGHT.

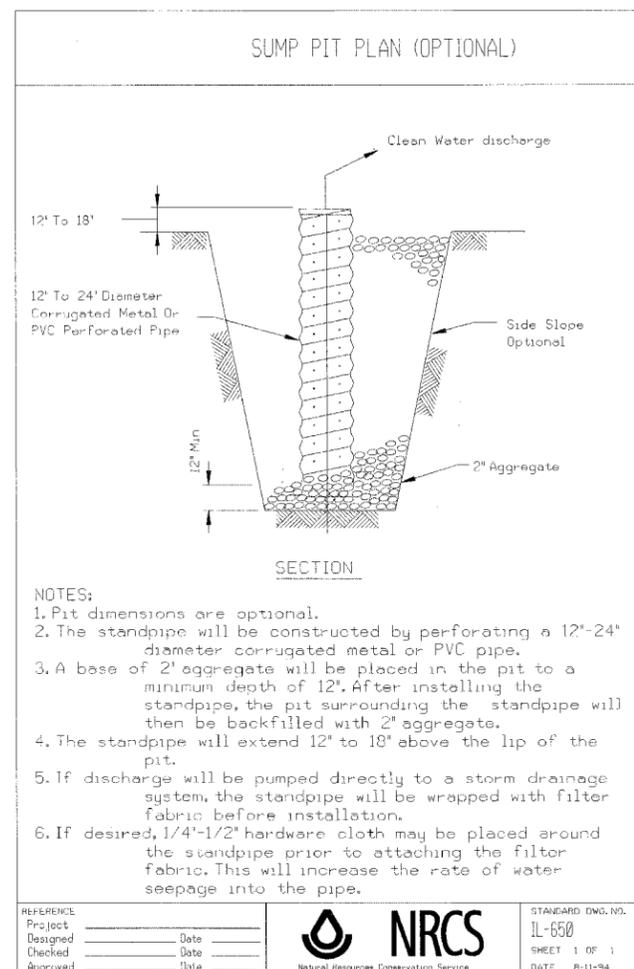
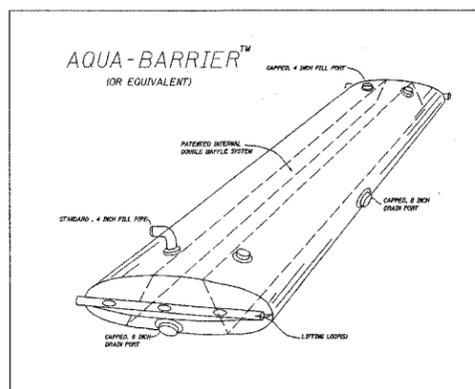
WHEN CONNECTING AQUA-BARRIERS A MINIMUM OF 8FT TO 12FT LOSS OF BARRIER LENGTH WILL BE EXPERIENCED. ALLOWANCES SHOULD BE MADE FOR THE LOSS IN LENGTH OF THE AQUA-BARRIERS DUE TO THE OVERLAP CONNECTION.

AQUA-BARRIER INFLATED HEIGHT (FT)	OVERLAP LENGTH (FT)
2	3
3	4.5
4	6
5	7.5
6	9
7	10.5
8	12

AQUA-BARRIER STANDARD HEIGHTS & DIMENSIONS

INFLATED HEIGHT (FT)	LAYFLAT WIDTH EMPTY (FT)	LAYFLAT WIDTH INFLATED (FT)	GALLONS PER LINEAR FOOT	800 FT SECTION WEIGHT	MAXIMUM DEPTH OF WATER (IN)
2 (22 OZ 130 OZ)	5	4	60	380	18
3 (22 OZ 130 OZ)	6.5	7	108	270	27
4 (22 OZ 130 OZ)	12	10	256	390	36
5 (30 OZ)	15	12.5	390	931	45
6 (30 OZ)	18	15	564	1098	54
7 (30 OZ)	21	17.5	770	1924	63
8 (30 OZ)	24	20	1007	3520	72

** THIS DEPTH OF WATER REPRESENTS 75% OF THE HEIGHT OF A FULLY INFLATED AQUA-BARRIER. IT IS REQUIRED THAT A MINIMUM 85% FREEBOARD CAPACITY BE MAINTAINED DURING ALL PHASES OF A PROJECT. EXCESS SLOPE AND UNWELL-SUB COMPOSITION MOVING WATER, AND RELATED HYDROLOGICAL CRITERIA MAY INCREASE OR DECREASE THE ABILITY OF AN AQUA-BARRIER TO PERFORM AS PROJECTED.



- NOTES:**
1. Pit dimensions are optional.
 2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
 3. A base of 2" aggregate will be placed in the pit to a minimum depth of 12". After installing the standpipe, the pit surrounding the standpipe will then be backfilled with 2" aggregate.
 4. The standpipe will extend 12" to 18" above the lip of the pit.
 5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with filter fabric before installation.
 6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

REFERENCE Project _____	Date _____	<p>STANDARD DWG. NO. IL-650 SHEET 1 OF 1 DATE 8-11-94</p>
Designed _____	Date _____	
Checked _____	Date _____	
Approved _____	Date _____	

PRACTICE STANDARD
SUMP PIT
CODE 950

DEFINITION

A TEMPORARY PIT WHICH IS CONSTRUCTED TO TRAP AND FILTER WATER FOR PUMPING WATER INTO A SUITABLE DISCHARGE AREA.

PURPOSE

THE PURPOSE OF THIS PRACTICE IS TO REMOVE EXCESSIVE WATER IN A MANNER THAT IMPROVES THE QUALITY OF THE WATER BEING PUMPED.

CONDITIONS WHERE PRACTICE APPLIES

SUMP PITS ARE CONSTRUCTED WHEN WATER COLLECTS DURING THE EXCAVATION. THIS PRACTICE IS PARTICULARLY USEFUL IN URBAN AREAS DURING EXCAVATION FOR BUILDING FOUNDATIONS.

CRITERIA

A PERFORATED VERTICAL STANDPIPE IS PLACED IN THE CENTER OF THE PIT TO COLLECT FILTERED WATER. THE STANDPIPE WILL BE A PERFORATED 12 TO 24 - INCH DIAMETER CORRUGATED METAL OR PVC PIPE. WATER IS THEN PUMPED FROM THE CENTER OF THE PIPE TO A SUITABLE DISCHARGE AREA. THE PIT WILL BE FILLED WITH COURSE AGGREGATE MEETING THE REQUIREMENTS OF IDOT STANDARDS FOR GRADATIONS OF CA-2 OR CA-4.

CONSIDERATIONS

DISCHARGE OF WATER PUMPED FROM THE STANDPIPE SHOULD BE TO A SUITABLE PRACTICE SUCH AS PRACTICE STANDARD IMPOUNDMENT STRUCTURE-ROUTED 842, PORTABLE SEDIMENT TANK 895, TEMPORARY SEDIMENT TRAP 960, OR STABILIZED AREA.

IF WATER FROM THE SUMP PIT WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, FILTER FABRIC WILL BE WRAPPED AROUND THE STANDPIPE TO ENSURE CLEAN IF WATER DISCHARGE. THE FABRIC, IF USED, SHALL MEET THE REQUIREMENTS AS SHOWN IN MATERIAL SPECIFICATION 692 GEOTEXTILE TABLE 1 OR 2 CLASS 1 WITH AN EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NON-WOVEN OR 50 FOR WOVEN. IT IS RECOMMENDED THAT 1/4 TO 1/2 INCH HARDWARE CLOTH WIRE BE WRAPPED AROUND AND SECURED TO THE STANDPIPE TO ATTACHING THE FILTER FABRIC. THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE STANDPIPE.

PLANS AND SPECIFICATIONS

PLANS AND SPECIFICATIONS FOR INSTALLING AND UTILIZING SUMP PITS SHALL BE IN KEEPING WITH STANDARD AND SHALL DESCRIBE THE REQUIREMENTS FOR APPLYING THE PRACTICE TO ACHIEVE ITS INTENDED PURPOSE.

THE CONTRACTOR OR RESPONSIBLE REVIEWING AUTHORITY WILL DETERMINE THE NUMBER OF SUMP PITS AND THEIR LOCATIONS.

STANDARD DRAWING IL-650 SUMP PIT PLAN MAY BE USED AS A PLAN SHEET.

ALL PLANS SHALL INCLUDE THE INSTALLATION, INSPECTION, AND MAINTENANCE SCHEDULES WITH THE RESPONSIBLE PARTY IDENTIFIED.

OPERATION AND MAINTENANCE

THE SUMP PIT MAY HAVE TO BE REPLACED IF THE PIT AND FILTER FABRIC PLUGS WITH SEDIMENT.

ALL WORK DESCRIBED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT RATHER CONSIDERED INCIDENTAL TO THE CONTRACT.

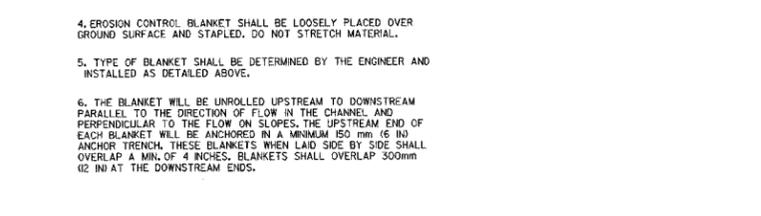
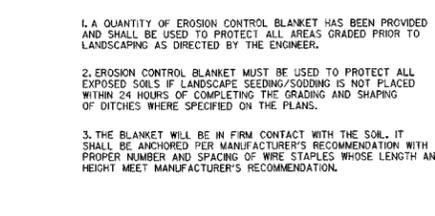
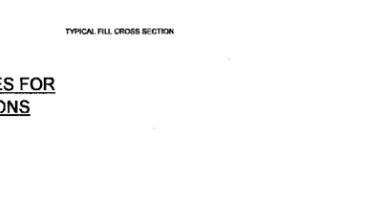
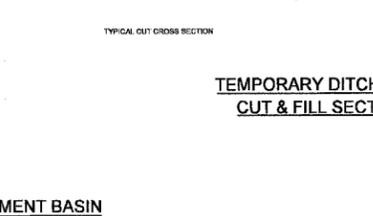
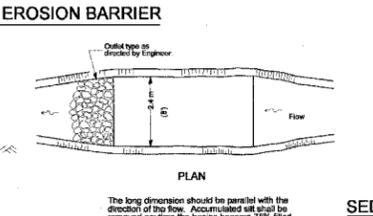
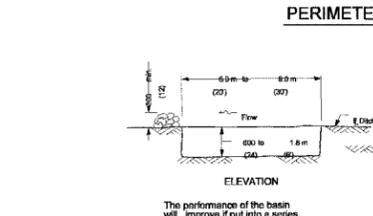
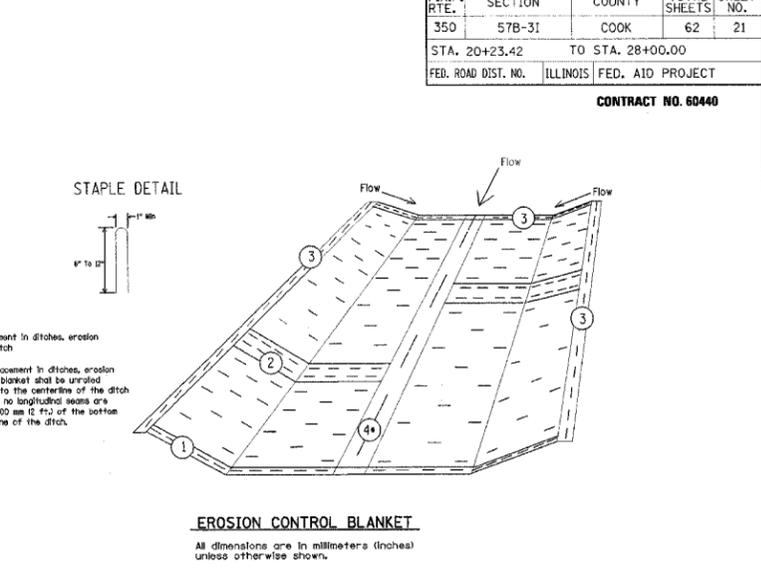
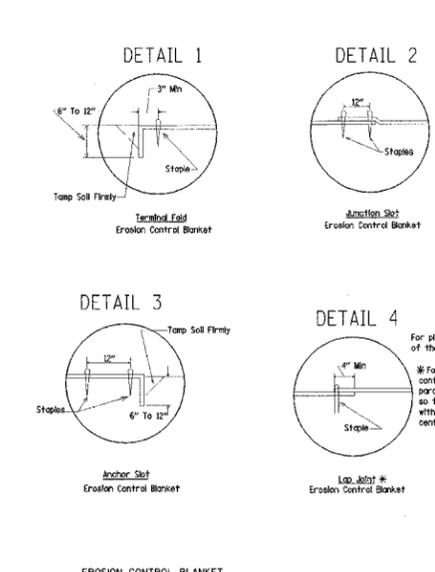
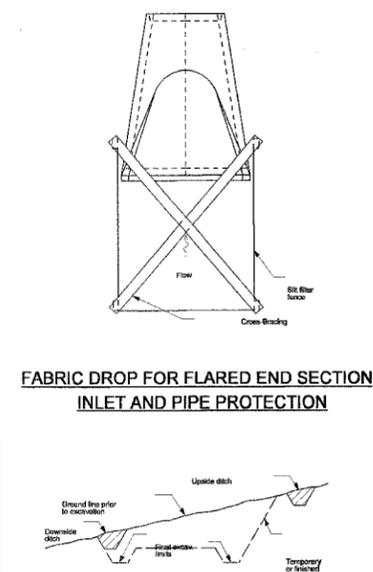
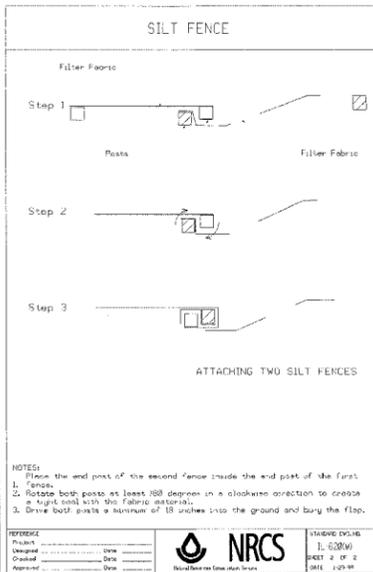
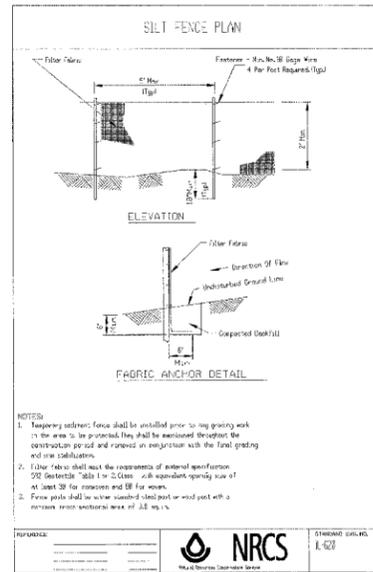
NRCS IL

AUGUST 1994

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 50 (CICERO AVENUE) OVER NORTH BRANCH CHICAGO RIVER EROSION CONTROL DETAILS SHEET 1
NAME	DATE	
		SCALE: VERT. 1"=5' HORIZ. 1"=50' DATE: AUGUST 18, 2006 DRAWN BY: RJW CHECKED BY: ADJ

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	21
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60440



PATRICK ENGINEERING INC.
LISLE, ILLINOIS

INLET AND PIPE PROTECTION

DESCRIPTION: This work shall consist of furnishing, installation, and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag, to collect sediment in surface storm water runoff at locations shown on the plans or as directed by the Engineer.

The Contractor shall inspect the worksite and review the plans to determine the number and dimensions of the various types of drainage structure frames (circular and rectangular) into which the inlet filters will be installed prior to ordering materials.

The drainage structure inlet filter assembly shall be installed under the grates on the lip of the drainage structure frame with the fabric bag hanging down into the drainage structure.

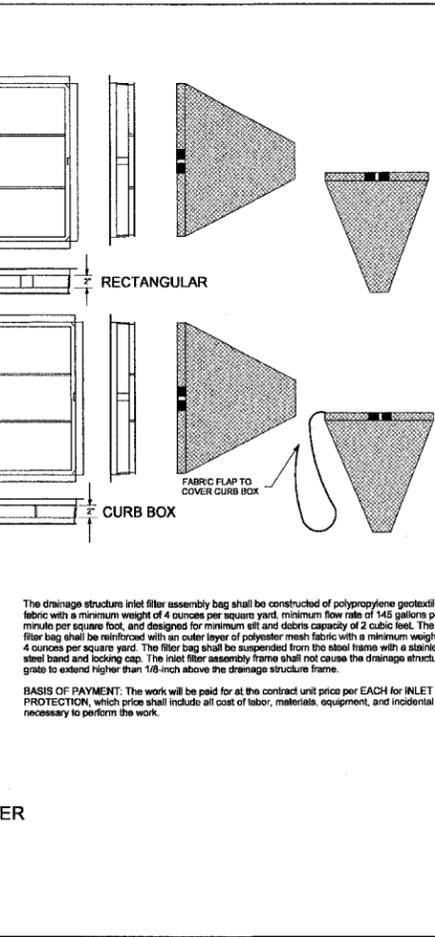
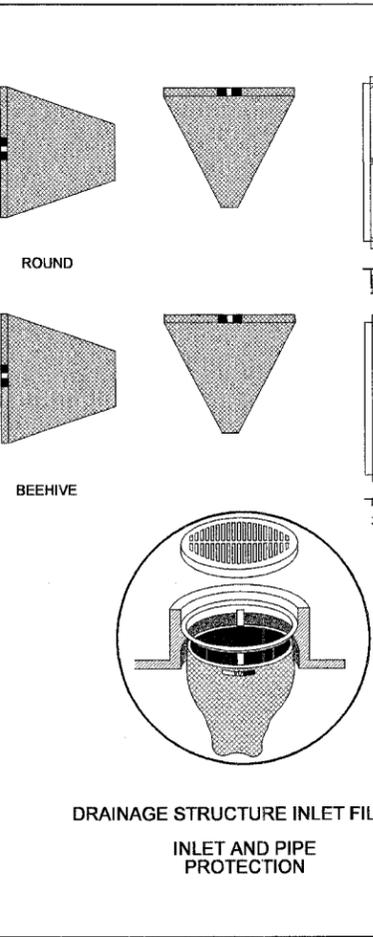
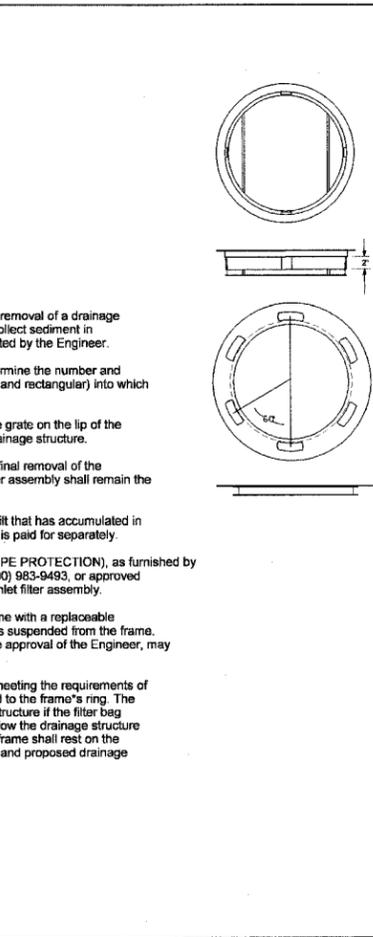
The drainage structure inlet filter assembly shall remain in place until final removal of the assembly is directed by the Engineer. The drainage structure inlet filter assembly shall remain the property of the Contractor.

Final removal of the assembly shall include the disposal of debris or silt that has accumulated in the filter bag at the time of final removal. Periodic cleaning of the filter is paid for separately.

MATERIALS: The drainage structure inlet shall be the (INLET AND PIPE PROTECTION), as furnished by Marathon Materials, Inc. 25523 W. Shultz St., Plainfield, IL 60544, (800) 983-9493, or approved equal. A detailed drawing in the plans depicts the drainage structure inlet filter assembly.

The drainage structure inlet filter assembly shall consist of a steel frame with a replaceable geotextile fabric bag attached with a steel band with locking cap that is suspended from the frame. A clean used bag and used steel frame in good condition, meeting the approval of the Engineer, may be substituted for new materials.

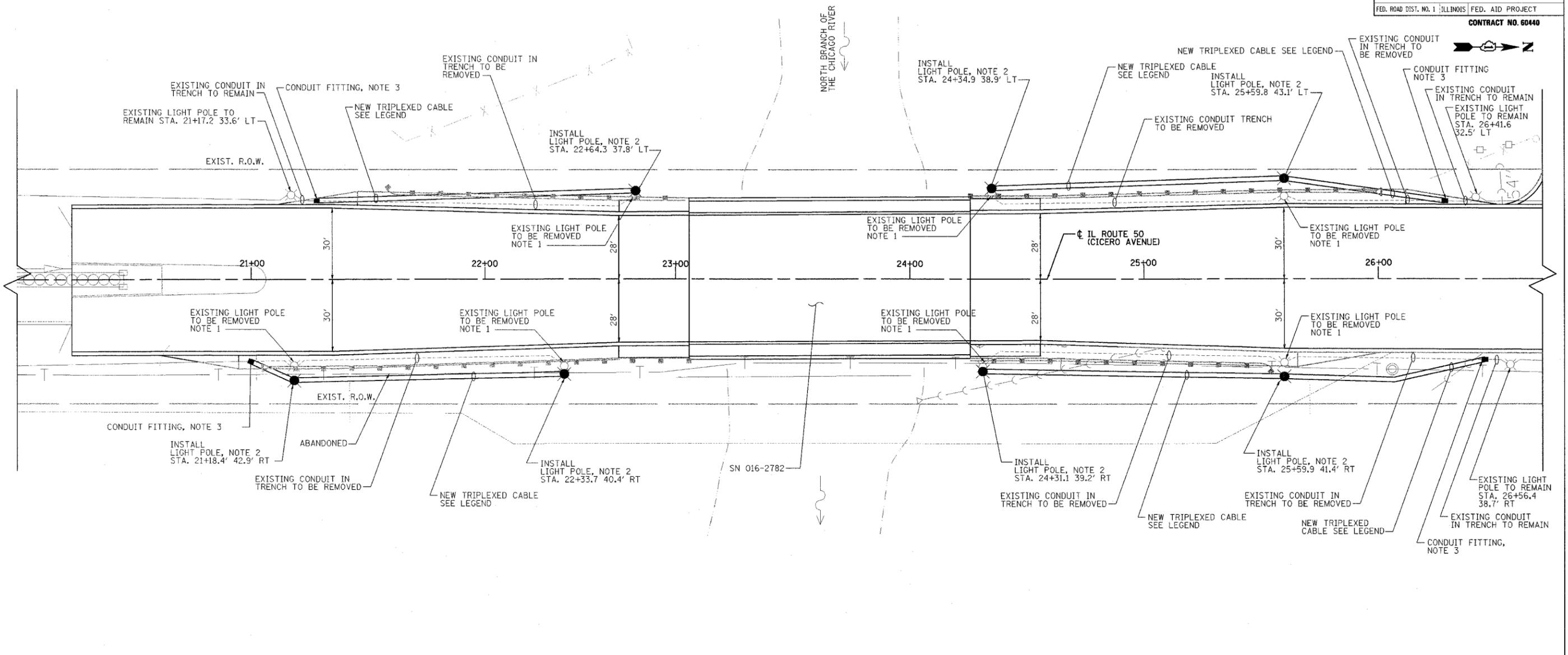
The drainage structure inlet filter assembly frame shall be rigid steel meeting the requirements of ASTM-A36. The frame shall include an overflow feature that is welded to the frame's ring. The overflow feature shall be designed to allow full flow of water into the structure if the filter bag is filled with sediment. The dimensions of the assembly frame shall allow the drainage structure grate to fit into the inlet filter assembly frame opening. The assembly frame shall rest on the inside lip of the drainage structure frame for the full variety of existing and proposed drainage structure frames that are present on this contract.



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 50 (CICERO AVENUE) OVER NORTH BRANCH CHICAGO RIVER EROSION CONTROL DETAILS SHEET 2
NAME	DATE	
		SCALE: VERT. 1"=5' HORIZ. 1"=50' DATE: AUGUST 18, 2006
		DRAWN BY: RJW CHECKED BY: ADJ

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	22
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60440



NOTES:

- REMOVAL AND DISPOSAL OF EXISTING LIGHTING UNIT, INCLUDING POLE, LUMINAIRE, FOUNDATION, ETC. PER IDOT STANDARD SPECS 842.
- INSTALL NEW ALUMINUM 30' MOUNTING HT, 8' DAVIT ARM LIGHT POLE WITH A 480W SEMI-CUT-OFF LUMINAIRE PROVIDED BY OTHERS AT THE LOCATIONS SHOWN. INSTALL NEW CONCRETE FOUNDATION WITH ANCHOR RODS AND GROUND ROD AS SPECIFIED.
- REMOVE EXISTING CABLE FROM CONDUIT. CUT EXISTING CONDUIT 10 FEET FROM THE POLE BASE AND CONNECT NEW CONDUIT.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH CDOT (CONTACT PATRICK SULLIVAN AT 312-746-8208) TO SCHEDULE PICK UP OF THE LIGHT POLES AND LUMINAIRES. COST SHALL BE INCLUDED WITH LIGHT POLE ITEM.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH CDOT AND MAINTAIN LIGHTS OPERATIONAL FOR THE SIDE OF THE ROAD THE TRAFFIC IS ON DURING STAGE CONSTRUCTION AS FOLLOWS:
 -MAINTAIN EXISTING LIGHTS ON THE EAST SIDE OF THE ROAD DURING STAGE 1 CONSTRUCTION.
 -NEW LIGHTS ON THE WEST SIDE SHALL BE OPERATIONAL PRIOR TO STAGE 2 CONSTRUCTION.
 THE COST OF MAINTAINING THE LIGHTS OPERATIONAL SHALL BE INCLUDED WITH THE COST OF REMOVAL OF EXISTING LIGHTING UNIT ITEM.

BILL OF MATERIALS

CODE NO.	ITEM	UNIT	QUANTITY
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	700
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	700
X8300100	LIGHT POLE, ALUMINUM, WITH MAST ARM, INSTALL ONLY	EACH	7
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	63
84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	7
84200700	LIGHTING FOUNDATION REMOVAL	EACH	7
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	700
X0322738	ELECTRIC CABLE IN CONDUIT, 600V (EPRN-TRIPLEXED) 2-1/C NO. 6, 1-1/C NO. 8 GROUND	FOOT	750
-	LUMINAIRE, INSTALL ONLY	EACH	7
-	REMOVAL OF CONDUIT IN TRENCH	FOOT	700

LEGEND

- PROF. EXIST.
- EXISTING LIGHT POLE
 - NEW LIGHT POLE PROVIDED BY OTHERS
 - EXISTING CONDUIT TO BE REMOVED
 - EXISTING CONDUIT TO REMAIN
 - CONDUIT FITTING
 - NEW 2" PVC CONDUIT WITH 2-1/C #6, 1-1/C #8 GROUND TYPE EPRN-TRIPLEXED, 600V

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
 NORTH BRANCH CHICAGO RIVER

LIGHTING PLAN

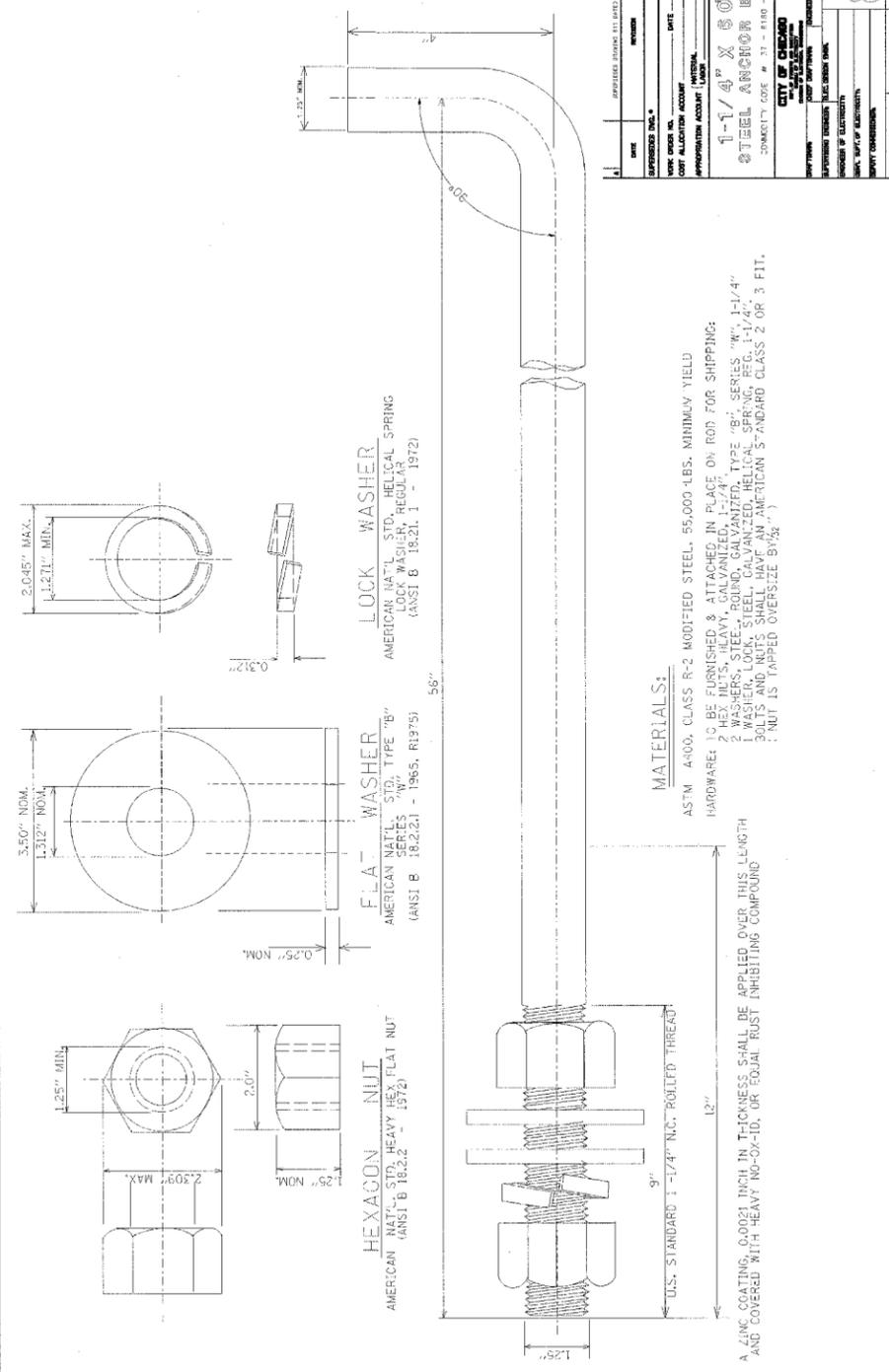
SCALE: 1"=20'

DATE AUGUST 18, 2006

DRAWN BY GMC

CHECKED BY VVK

PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

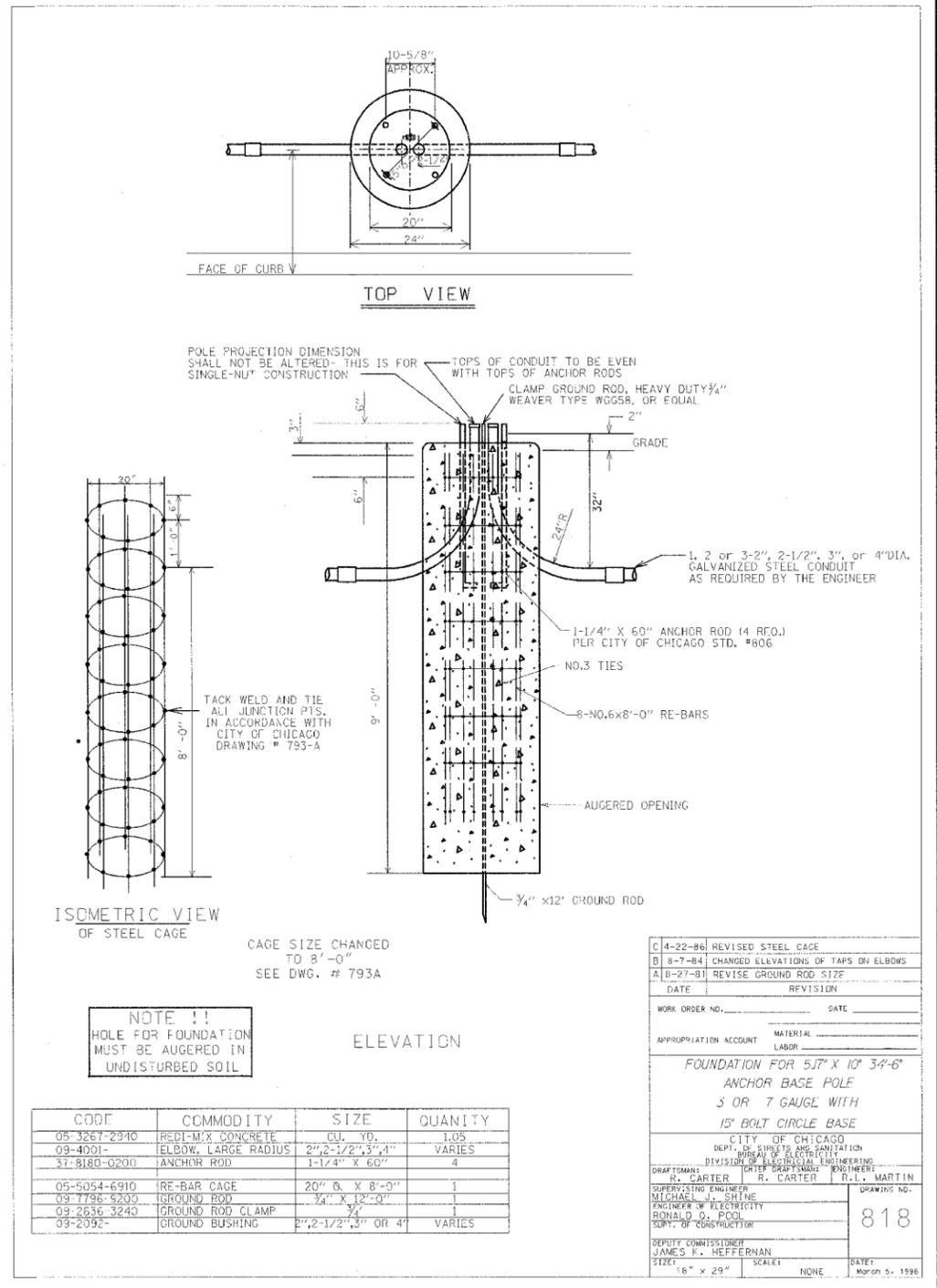


DATE	APPROVED DRAWING BY	DATE
DATE	APPROVED BY	DATE
DATE	APPROVED BY	DATE

1-1/4" X 60"
STEEL ANCHOR BOLT
CITY OF CHICAGO
STANDARD SPEC. FOR MATERIALS
SECTION 05-11.00 - 0220

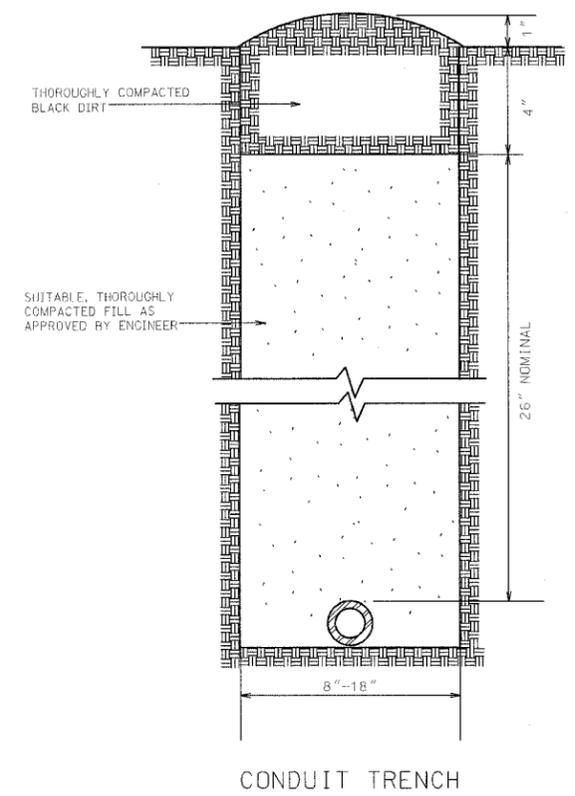
MATERIALS:
ASTM A400, CLASS R-2 MODIFIED STEEL, 55,000-LBS. MINIMUM YIELD
HARDWARE TO BE FURNISHED & ATTACHED IN PLACE ON ROD FOR SHIPPING:
2 HEX. NUTS, HEAVY GALVANIZED, 1-1/4" TYPE "B" SERIES "B", 1-1/4"
2 WASHERS, HEAVY GALVANIZED, 1-1/4" TYPE "B" SERIES "B", 1-1/4"
BOLTS AND NUTS SHALL HAVE AN AMERICAN STANDARD CLASS 2 OR 3 FIT.
NUT IS TAPPED OVERSIZE BY 1/32".

A ZINC COATING, 0.0021 INCH IN THICKNESS SHALL BE APPLIED OVER THIS LENGTH AND COVERED WITH HEAVY NO. 10, OR EQUAL, RUST INHIBITING COMPOUND



CODE	COMMODITY	SIZE	QUANTITY
05-3267-2940	REDI-MIX CONCRETE	CU. YD.	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" Ø X 8'-0"	1
09-1796-5200	GROUND ROD	3/4" X 12'-0"	1
09-2636-3240	GROUND ROD CLAMP	3/4"	1
09-2092-	GROUND BUSHING	2", 2-1/2", 3" OR 4"	VARIES

C 4-22-86	REVISED STEEL CAGE
B 8-7-84	CHANGED ELEVATIONS OF TAPS ON ELBOWS
A 18-27-81	REVISE GROUND ROD SIZE
DATE	REVISION
WORK ORDER NO.	DATE
APPROPRIATION ACCOUNT	MATERIAL
	LABOR
FOUNDATION FOR 5 1/2" X 10' 3/4-6" ANCHOR BASE POLE 3 OR 7 GAUGE WITH 15' BOLT CIRCLE BASE	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
DRAFTSMAN: R. CARTER	ENGINEER: R. CARTER
SUPERVISING ENGINEER: MICHAEL J. SHINE	DRAWING NO.: 818
ENGINEER OF ELECTRICITY: RONALD D. POOL	DATE: MAY 5, 1996
DEPT. OF CONSTRUCTION	SCALE: NONE
DEPUTY COMMISSIONER: JAMES K. HEFFERMAN	DATE: MAY 5, 1996



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

STANDARD METHOD FOR BACKFILLING CONDUIT TRENCHES IN SODDED PARKWAY & LAWNS

579

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 50 (CICERO AVENUE) OVER
NORTH BRANCH CHICAGO RIVER

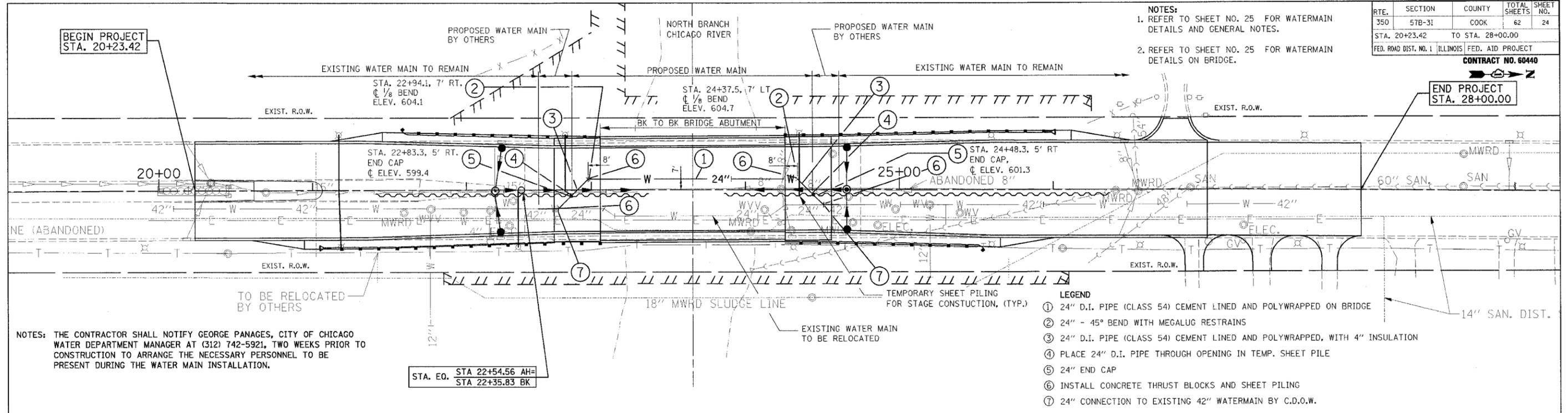
STANDARD DETAILS

SCALE: 1"=20'
DATE: AUGUST 18, 2006
DRAWN BY: GMC
CHECKED BY: VVK

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	24
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60440

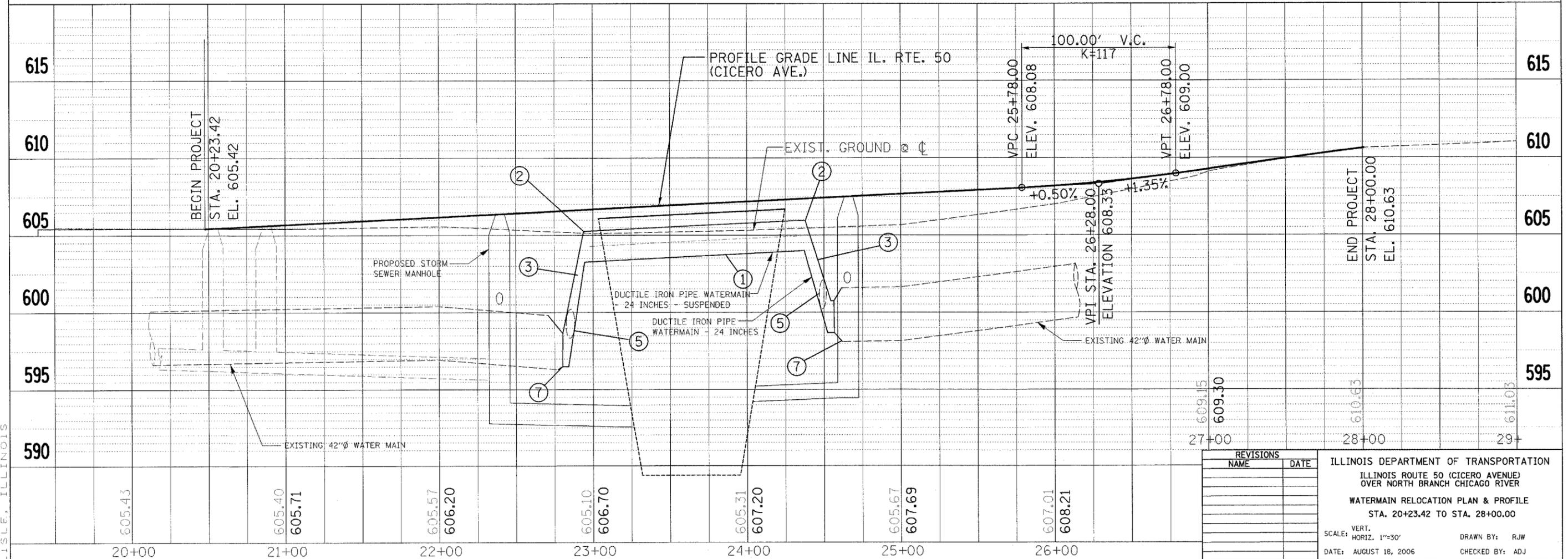
NOTES:
 1. REFER TO SHEET NO. 25 FOR WATERMAIN DETAILS AND GENERAL NOTES.
 2. REFER TO SHEET NO. 25 FOR WATERMAIN DETAILS ON BRIDGE.



NOTES: THE CONTRACTOR SHALL NOTIFY GEORGE PANAGES, CITY OF CHICAGO WATER DEPARTMENT MANAGER AT (312) 742-5921, TWO WEEKS PRIOR TO CONSTRUCTION TO ARRANGE THE NECESSARY PERSONNEL TO BE PRESENT DURING THE WATER MAIN INSTALLATION.

LEGEND

- ① 24" D.I. PIPE (CLASS 54) CEMENT LINED AND POLYWRAPPED ON BRIDGE
- ② 24" - 45° BEND WITH MEGALUG RESTRAINS
- ③ 24" D.I. PIPE (CLASS 54) CEMENT LINED AND POLYWRAPPED, WITH 4" INSULATION
- ④ PLACE 24" D.I. PIPE THROUGH OPENING IN TEMP. SHEET PILE
- ⑤ 24" END CAP
- ⑥ INSTALL CONCRETE THRUST BLOCKS AND SHEET PILING
- ⑦ 24" CONNECTION TO EXISTING 42" WATERMAIN BY C.D.O.W.

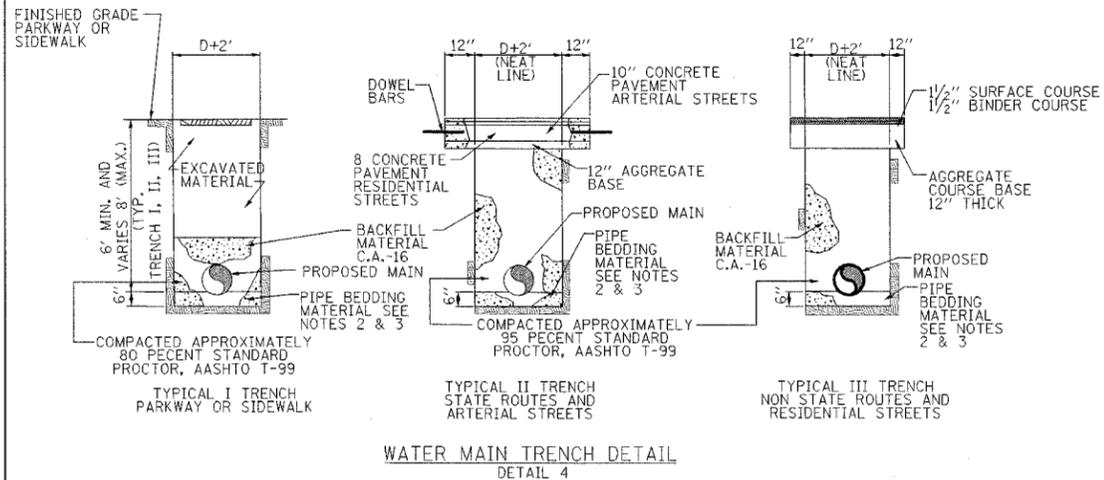


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE 50 (CICERO AVENUE)
 OVER NORTH BRANCH CHICAGO RIVER
 WATERMAIN RELOCATION PLAN & PROFILE
 STA. 20+23.42 TO STA. 28+00.00
 SCALE: VERT. 1"=30'
 DATE: AUGUST 18, 2006
 DRAWN BY: RJW
 CHECKED BY: ADJ

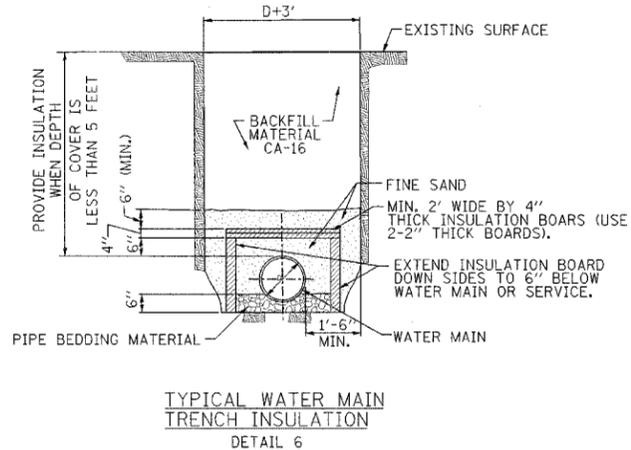
PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	25
STA. 20+23.42 TO STA. 28+00.00				
FED. RD. DIST. NO. ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 60440				



NOTES:

1. PROVIDE PIPE BEDDING OF COMPACTED GRANULAR MATERIAL, GRAVEL, OR CRUSHED STONE TO A DEPTH OF 1/8" OF PIPE DIAMETER, 6" MINIMUM.
2. BEDDING MATERIAL CA-16 UP TO 16-INCH DIA. PIPES.
3. BEDDING MATERIAL CA-11 FOR LARGER THAN 16-INCH DIA. PIPES.
4. POUR CONCRETE PATCH FLUSH WITH SURROUNDING PAVEMENT WHEN TYPE II TRENCH IS USED IN STREETS WITH CONCRETE PAVEMENT.
5. BACKFILL MUST BE COMPACTED UP TO TRENCH AND TO THE TOP OF THE TRENCHES.
6. ALL EXCAVATIONS SHALL BE PROPERLY SHORED, SHEETED AND BRACED TO PROVIDE SAFE WORKING CONDITIONS, ALL IN COMPLIANCE WITH THE U.S. DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION STIPULATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT, (O.S.H.A.).
7. FOR PAVEMENT RESTORATION SEE CDOT OR IDOT REQUIREMENTS.



NOTES:

1. INSULATION BOARD TO BE DOW CHEMICAL CORP. (SM OR XFS4399I) OR APPROVED EQUAL.
2. BACKFILL MATERIAL AROUND INSULATION SHALL BE FINE SAND FREE FROM ROOTS, ORGANIC MATTER, OR OTHER INJURIOUS MATERIALS.
3. OVERLAP ALL INSULATION BOARD JOINTS.

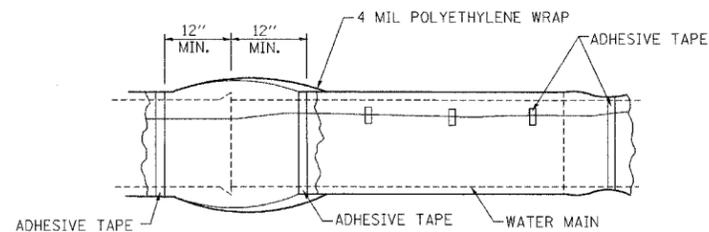
GENERAL NOTES AND SPECIFICATIONS

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF CHICAGO DEPARTMENT (CDOW) OF WATER STANDARD SPECIFICATION AND CONSTRUCTION DETAILS FOR WATER MAIN INSTALLATION EXCEPT AS MODIFIED IN THE SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL CONTACT GEORGE PANAGES, CHICAGO WATER PARTNERS (CWP) CONSTRUCTION MANAGER AT (312) 742-5921 TWO WEEKS PRIOR TO CONSTRUCTION OF WATERMAIN.
3. 2-2" AND 1-1" TAPS AND VALVE BOX AND LID FOR 1" TAP TO BE PROVIDED BY CDOW. CONTRACTOR SHALL CONTACT EDWIN AFARIN OF CDOW AT (312) 744-5060 TO COORDINATE DELIVERY.
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND SEQUENCING WATERMAIN INSTALLATION ACTIVITIES WITH ROADWAY IMPROVEMENTS AND CDOW EFFORTS.
5. ALL WATERMAIN PIPE SHALL BE 24" DIAMETER ASPHALT COATED (ANSI A21.10/AWWA C10), CEMENT LINED (ANSI A21.4/AWWA C104) CLASS 54 DUCTILE IRON PIPE (ANSI A21.51/AWWA C151).
6. CONTRACTOR SHALL PROVIDE A CUT OPENING IN THE TEMPORARY SHEET PILING FOR EXTENSION OF THE 24" WATERMAIN THROUGH THE SHEET PILING. OPENING SHALL BE OF SUFFICIENT SIZE TO ENABLE INSTALLATION OF WATERMAIN WITHOUT DAMAGE TO THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL PROTECT INSTALLED IMPROVEMENTS DURING DISMANTLING/ABANDONMENT OF TEMPORARY SHEET PILING. SHEET PILING UNDER WATERMAIN SHALL REMAIN IN PLACE. THE COST SHALL BE INCLUDED IN THE DUCTILE IRON PIPE WATERMAIN - 24 INCHES ITEM.
7. CONTRACTOR SHALL PROVIDE AND INSTALL SUITABLE END CAPS AT ENDS OF INSTALLED WATERMAIN.
8. CONCRETE THRUST BLOCKS WITH STEEL SHEET PILING (SECTION MODULUS > 37.7 IN³/FT) SHALL BE PROVIDED AT ALL PIPE BEND LOCATIONS. SHEET PILING SHALL CONSIST OF TWO-18" WIDE SHEETS EXTENDING TO THE ELEVATIONS INDICATED IN TABLE BELOW.

THRUST BLOCK SHEET PILE ELEVATION TABLE

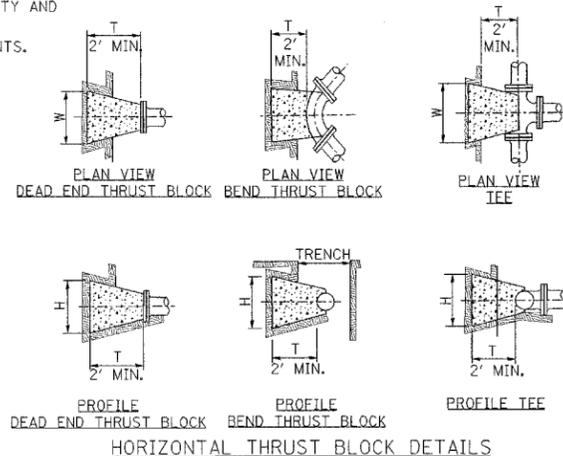
STATION	TOP ELEVATION	BOT. ELEV.	DESCRIPTION
TBD	602.2	583.4	CONNECTION TO EXISTING (S/O BRIDGE)
STA. 22+94.1, 7' LT	9" BELOW SLAB	589.3	1/8 BEND
STA. 24+36.3, 7' LT	9" BELOW SLAB	589.7	1/8 BEND
TBD	603.7	585.8	CONNECTION TO EXISTING (N/O BRIDGE)

STATION PROVIDED IS FOR CORRESPONDING BEND. ACTUAL LOCATION OF PILING TO BE COORDINATED IN THE FIELD.



NOTE:

1. ONE LENGTH OF POLYETHYLENE TUBE FOR EACH LENGTH OF PIPE. OVERLAPPED AT JOINT AND EXCESS FOLDED OVER TOP FOR SLACK REDUCTION. INSTALL PER ANSI A21.5/AWWA C105.



NOTES:

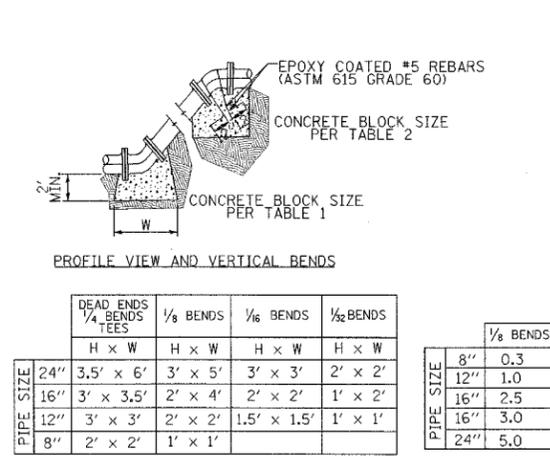
1. FULL CONCRETE THRUST BLOCKS AS SHOWN ARE REQUIRED WHEN MEGALUGS ARE NOT USED FOR THE CONNECTIONS.
2. WHEN MEGALUGS ARE INSTALLED FOR THE CONNECTIONS, CONCRETE THRUST BLOCKS SHALL BE PROVIDED UP TO THE DOTTED LINE AS SHOWN IN THE DRAWINGS.
3. ALL BOLTS, NUTS, MEGALUGS AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE TUBING TO PREVENT CORROSION AND CONCRETE ADHESION.

TEE SIZE	L _B
8" x 8" (8", 12", 16" OR 24") x 12"	0
16" x 16"	42'
24" x 36"	277'

HORIZONTAL TEES (RESTRAINT JOINTS)

PIPE SIZE	L1	L2
8"	26'	26'
12"	37'	11'
16"	67'	20'
24"	67'	20'

1/8 VERTICAL BENDS DISTANCE OF RESTRAINED JOINTS



PIPE SIZE	DEAD ENDS 1/4 BENDS TEES	1/8 BENDS	1/8 BENDS	1/8 BENDS
	H x W	H x W	H x W	H x W
24"	3.5' x 6'	3' x 5'	3' x 3'	2' x 2'
16"	3' x 3.5'	2' x 4'	2' x 2'	1' x 2'
12"	3' x 3'	2' x 2'	1.5' x 1.5'	1' x 1'
8"	2' x 2'	1' x 1'		

TABLE 1
T = THICKNESS OF THE THRUST BLOCK
H = HEIGHT OF THE THRUST BLOCK
W = WIDTH OF THRUST BLOCK

PIPE SIZE	1/8 BENDS	
	MIN. VOLUME OF CONCRETE REQUIRED IN CUBIC YARDS FOR VARIOUS PIPE SIZES AND BENDS.	
8"	0.3	
12"	1.0	
16"	2.5	
16"	3.0	
24"	5.0	

TABLE 2
MINIMUM VOLUME OF CONCRETE REQUIRED IN CUBIC YARDS FOR VARIOUS PIPE SIZES AND BENDS.

THRUST BLOCK DIMENSIONS FOR VARIOUS PIPE SIZES AND FITTINGS MINIMUM DIMENSIONS IN FEET

VERTICAL CONCRETE THRUST BLOCK DETAILS (WITH RESTRAINED JOINTS)

PIPE SIZE	DISTANCE OF RESTRAINED JOINTS REQUIRED EITHER SIDE OF BENDS			
	1/2	1/4	1/4	1/4
8"	3'	6'	12'	29'
12"	4'	8'	17'	41'
16"	7'	15'	30'	73'
24"	7'	15'	30'	73'

HORIZONTAL BENDS (RESTRAINED JOINTS)

JOINT RESTRAINT DETAILS
DETAIL 8

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 50 (CICERO AVENUE) OVER NORTH BRANCH CHICAGO RIVER
NAME	DATE	
		WATERMAIN DETAILS

SCALE: NONE
DATE AUGUST 18, 2006
DRAWN BY SPG
CHECKED BY AAC



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	26
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60440	

BRIDGE BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.		200	200
Porous Granular Embankment (Special)	Cu. Yd.		576	576
Stone Riprap, Class A5	Sq. Yd.		977	977
Filter Fabric	Sq. Yd.	1,008		1,008
Protective Coat	Sq. Yd.	1,067		1,067
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		596	596
Cofferdam (Location - 1)	Each		1	1
Cofferdam (Location - 2)	Each		1	1
Cofferdam (Location - 3)	Each		1	1
Concrete Structures	Cu. Yd.		146.7	146.7
Concrete Superstructure	Cu. Yd.	342.1		342.1
Bridge Deck Grooving	Sq. Yd.	740		740
Erecting Elastomeric Bearing Assembly, Type 1	Each	10		10
Stud Shear Connectors	Each	3,810		3,810
Erecting Structural Steel	L. Sum	1		1
Reinforcement Bars	Pound		32,440	32,440
Reinforcement Bars, Epoxy Coated	Pound	63,750	24,840	88,590
Temporary Sheet Piling	Sq. Ft.		3,206	3,206
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		168	168
Pipe Underdrains for Structures 4"	Foot		235	235
Drainage Scuppers, DS-12	Each	4		4
Bar Splicers	Each	984	70	1,054
Drilled Shaft in Soil 36"	Foot		114	114
Drilled Shaft in Soil 42"	Foot		229	229
Drilled Shaft in Soil 48"	Foot		114	114
Drilled Shaft in Rock 30"	Foot		4	4
Drilled Shaft in Rock 36"	Foot		8	8
Drilled Shaft in Rock 42"	Foot		4	4
Permanent Casing	Foot		176	176
Form Liner Textured Surface	Sq. Ft.	2,100		2,100

INDEX OF SHEETS

- S1. GENERAL PLAN AND ELEVATION
- S2. GENERAL NOTES & STAGING DETAILS
- S3. SUBSTRUCTURE LAYOUT & DETAILS
- S4. DECK ELEVATIONS I
- S5. DECK ELEVATIONS II
- S6. DECK PLAN & DETAILS
- S7. DECK DETAILS
- S8. DIAPHRAGM DETAILS
- S9. FRAMING PLAN & DETAILS
- S10. BEARING & DIAPHRAGM DETAILS
- S11. NORTH ABUTMENT
- S12. SOUTH ABUTMENT
- S13. ANCHOR BOLTS
- S14. BAR SPLICERS
- S15. TEMPORARY CONCRETE BARRIER
- S16. DRAINAGE SCUPPER DETAILS
- S17. WATER MAIN DETAILS
- S18. BORING LOGS I
- S19. BORING LOGS II
- S20. BORING LOGS III
- S21. BORING LOGS IV

PATRICK ENGINEERING, INC.
PAUL M. LOPEZ, S.E.



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Paul M. Lopez
PAUL M. LOPEZ, S.E.
081-005231

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

EXP 11-30-06
DATE 9-14-06

Bench Mark:

Chisled square on top of the wingwall at the south east corner of the Cicero Avenue Bridge over the North Branch of the Chicago River. Elev. 605.37

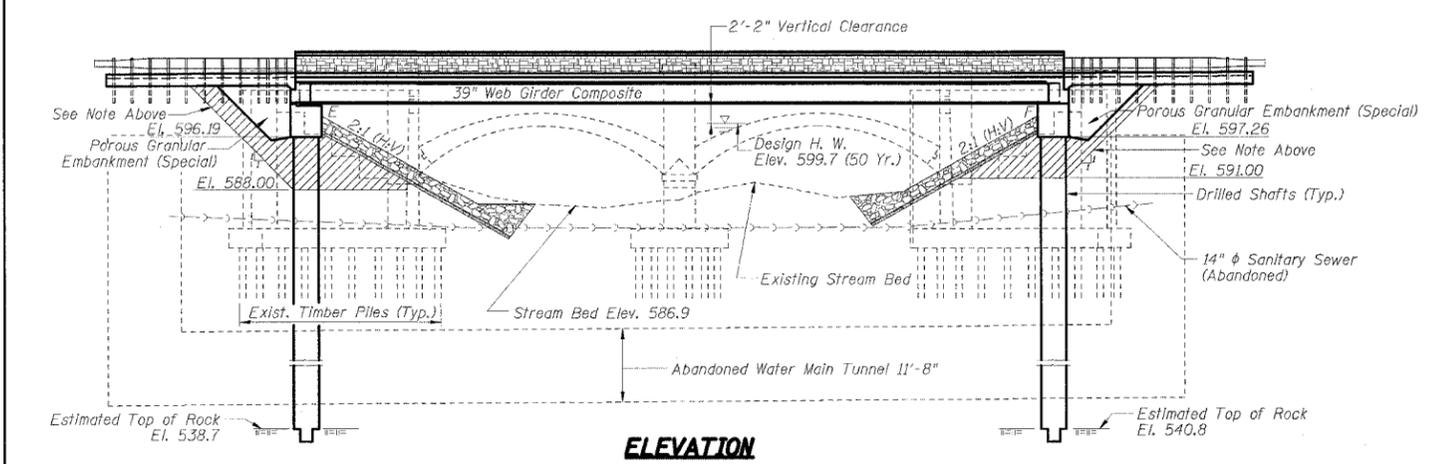
Existing Structure:

S.N. 016-0653 built as S.B.1 Route 57 Sec. 57B-NRM3 in 1935. The existing bridge has two simple spans which consist of a PCC wearing surface and reinforced concrete tee beams. The existing deck is 76'-0" wide and 86'-0" long. The existing structure is to be removed and replaced. Traffic to be maintained utilizing stage construction.

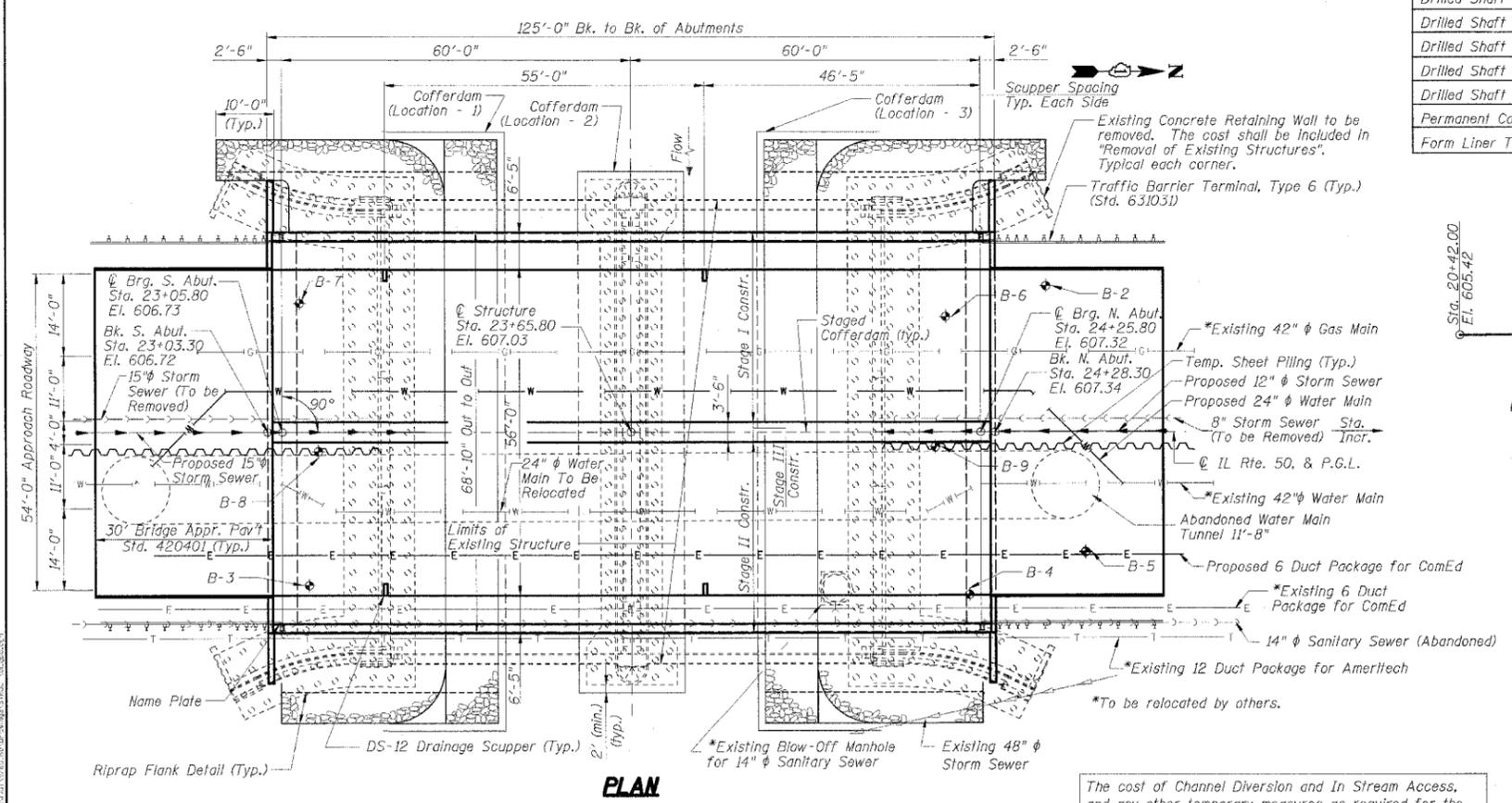
No salvage

Note:

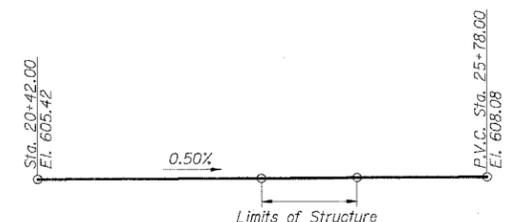
Hatched area indicates unsuitable soils behind the existing abutments in the western half of the northwest and southwest quadrants. This material shall be removed and replaced with suitable embankment. The replacement material shall be porous granular embankment (Special) with a gradation of CA-5 or CA-7. Removal of unsuitable material shall be done after temporary sheet piling is in place.



ELEVATION



PLAN

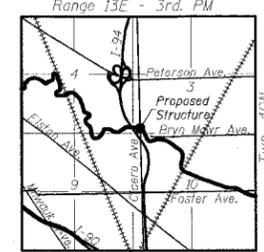


PROPOSED PROFILE GRADE
(Along PGL Roadway)

STATION 23+65.80
BUILT 200... BY
STATE OF ILLINOIS
F.A.P. RT. 350 SEC. 57B-31
LOADING HS20
STR. NO. 016-2782

NAME PLATE

See Standard 515001



LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (M270 Grade 50W)

LOADING HS20-44

Allowance for Future Wearing Surface = 50 lb/ft²

DESIGN SPECIFICATIONS

1996 AASHTO Standard Specifications for Highway Bridges and 1997-2002 Interims

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

DRAINAGE AREA = 112.3 Sq. Mi.		PROPOSED LOW GRADE ELEV. = 605.4 @ Sta. 20+42							
FLOOD	FREQ. YR.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Ft.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
	10	2318	620	908	597.7	0.3	0.2	598.0	597.9
DESIGN	50	3510	636	1131	599.7	0.9	0.4	600.6	600.1
BASE	100	4080	636	1257	600.8	1.3	0.5	602.1	601.3
OVERTOPPING	420	5180	636	-	603.4	2.1	-	605.5	-
MAX. CALC.	500	5460	-	1427	603.5	-	0.8	-	604.3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782
SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



The cost of Channel Diversion and In Stream Access, and any other temporary measures as required for the completion of work in or adjacent to the river not otherwise covered, shall be included in "Removal of Existing Structures". The design and details of each of the temporary systems required shall be submitted to the Engineer for Approval.

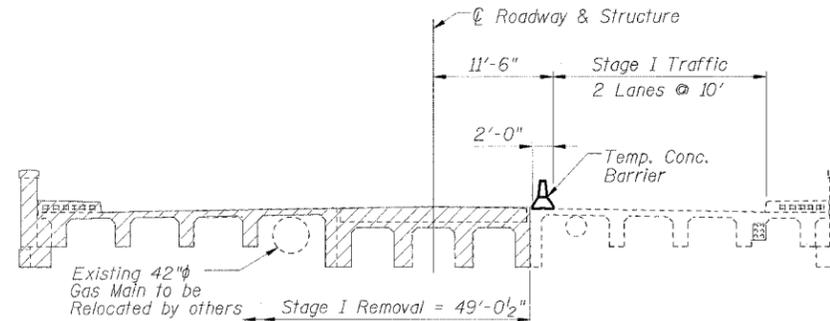
GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
2. Field welding of construction accessories will not be permitted to beams or girders.
3. The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50W.
4. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs.
5. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
6. All structural steel shall be AASHTO M270 Grade 50W.
7. Fasteners shall be high strength bolts AASHTO M164, Type 3 in unpainted areas and mechanically galvanized AASHTO M164, Type 1 or 2 in painted areas. Bolts $\frac{3}{4}$ " ϕ , open holes $\frac{5}{16}$ " ϕ , unless otherwise noted.
8. AASHTO M270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".
9. Exploratory probe information is available at The Illinois Department of Transportation District 1 Office, and will be made available to the Contractor upon written request.
10. Inserts for the proposed electrical conduits will be made available to the Contractor and shall be included in the deck construction. The Contractor shall coordinate this work with ComEd.
11. Calculated weight of structural steel = 341,632 lb
12. All construction joints shall be bonded.

Sheet S2 of S21

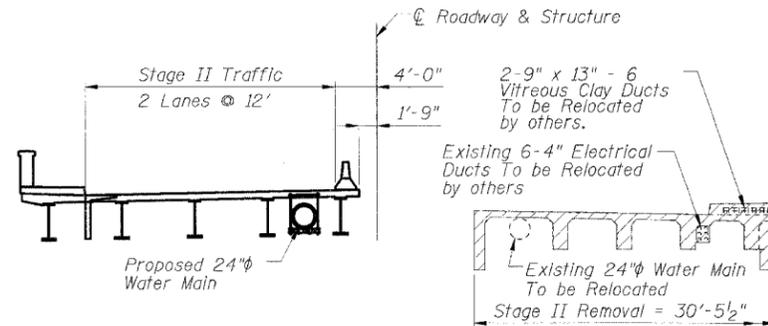
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	27
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440



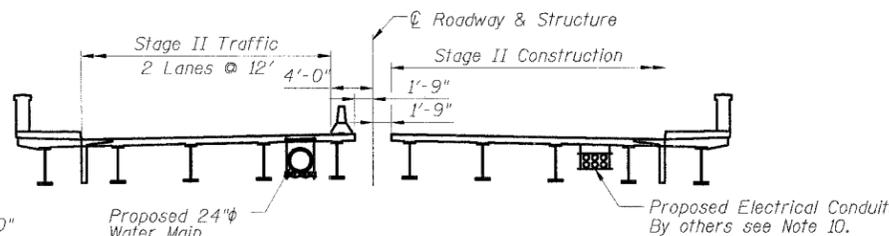
STAGE I REMOVAL

(Looking North)



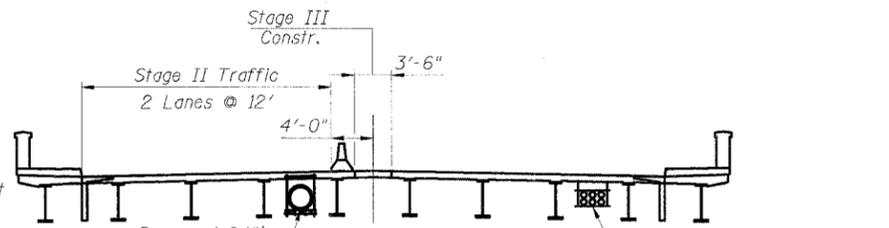
STAGE I CONSTRUCTION & STAGE 2 REMOVAL

(Looking North)



STAGE II CONSTRUCTION

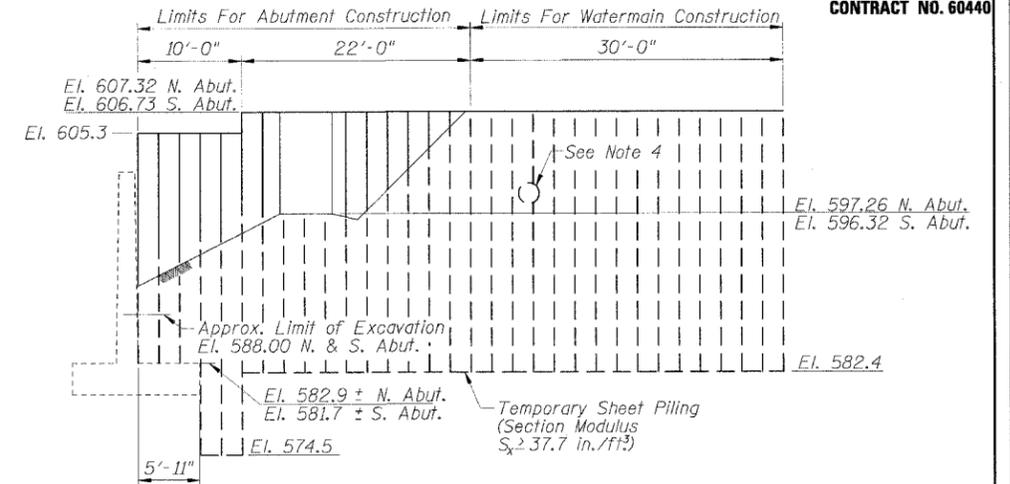
(Looking North)



STAGE III CONSTRUCTION

(Looking North)

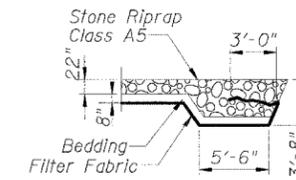
- Note:
1. For quantity of Temporary Concrete Barrier see Roadway Plans



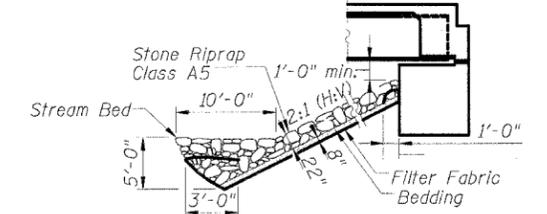
ELEVATION TEMPORARY SHEET PILING

Notes:

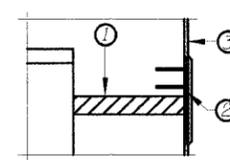
1. To ensure stability of sheets driven to the top of the existing footing, the contractor shall brace as necessary and connect the first sheet to the existing abutment wall. This connection shall be approved by the engineer and the cost included with Temporary Sheet Piling.
2. If the contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans for lesser design requirements, then full design submittals sealed by a licensed Structural Engineer in Illinois will be expected by the Department for review and approval.
3. Removal and realignment of sheet piling for Stage II is included with Temporary Sheet Piling.
4. The contractor shall cut hole in sheet piling to accommodate watermain installation. Sections of sheet piling under the watermain to remain in place at the conclusion of work. Sheet piling above hole shall be braced as necessary. The bracing shall be approved by the Engineer. All costs for cutting hole and bracing shall be included with the Temporary Sheet Piling item. The contractor shall use extreme care when removing sheet piling adjacent to watermain as to not damage or disturb the watermain pipe.



RIPRAP FLANK DETAIL



STONE RIPRAP ANCHOR DETAIL



DETAIL "A"

1. 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to abutment cap with approved adhesive (full width of cap)
2. Fabric Reinforced Elastomeric Mat (See Special Provisions). Fabric mat shall be 24" wide and attached full width to the abutment cap with a $\frac{3}{8}$ "x5" steel plate and $\frac{1}{2}$ " ϕ studs with nuts and washers at 12" cts.
3. Geocomposite Wall Drain (Section 591 of the Standard Specifications - full width of cap)

Items 1 & 2 shall be included in the cost of "Concrete Superstructure"

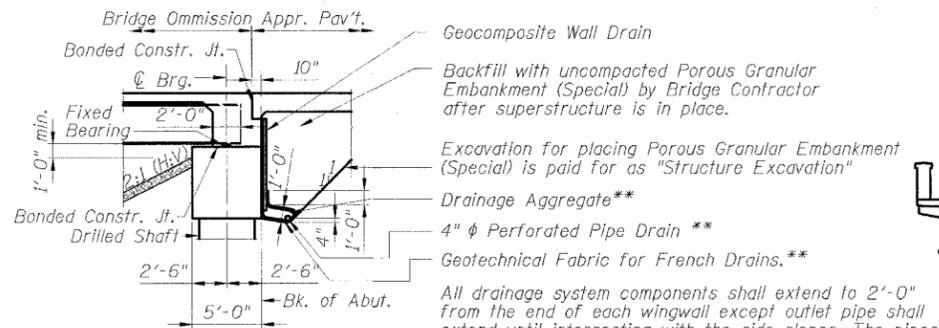
BILL OF MATERIAL

Item	Unit	Quantity
Temporary Sheet Piling	Sq. Ft.	3206
Stone Riprap, Class A5	Sq. Yd.	977
Filter Fabric	Sq. Yd.	1008

REVISIONS	
NAME	DATE

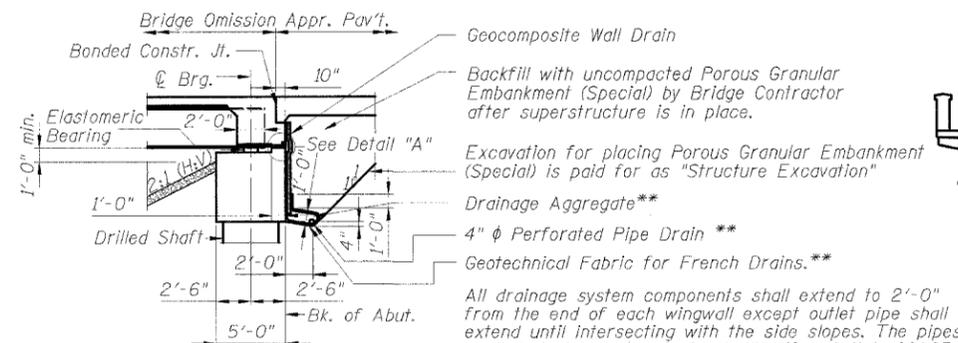
ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL NOTES & STAGING DETAILS
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



SEC. AT NORTH ABUTMENT

** Included in the cost of "Pipe Underdrains for Structures"



SEC. AT SOUTH ABUTMENT

** Included in the cost of "Pipe Underdrains for Structures"

PATRICK
 ENGINEERING INC.
 LISLE, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	28
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		CONTRACT NO. 60440

DRILLED SHAFT SCHEDULE

Caisson Mark	Shaft Diameter D	Socket Diameter E	Top Elev. (ft.)	Estimated Bottom Elev. (ft.)	Estimated Length (ft.)	Permanent Casing Length (ft.)	Reinforcement Bars							
							"n" bars			"v" bars			"sp" bars	
							Mark	No.	Size	Mark	No.	Size	Mark	Size
C1	3'-6"	3'-0"	596.19	536.70	59.49	N.R.	n1(E)	12	#10	v1	12	#10	sp1	#4
C2	4'-0"	3'-6"	596.19	536.70	59.49	43.32	n1(E)	16	#10	v1	16	#10	sp2	#4
C3	3'-6"	3'-0"	596.19	536.70	59.49	43.32	n1(E)	12	#10	v1	12	#10	sp1	#4
C4	3'-0"	2'-6"	596.19	536.70	59.49	N.R.	n2(E)	14	#8	v2	14	#8	sp3	#3
C5	3'-6"	3'-0"	597.26	538.80	58.46	N.R.	n1(E)	12	#10	v3	12	#10	sp4	#4
C6	4'-0"	3'-6"	597.26	538.80	58.46	44.26	n1(E)	16	#10	v3	16	#10	sp5	#4
C7	3'-6"	3'-0"	597.26	538.80	58.46	44.26	n1(E)	12	#10	v3	12	#10	sp4	#4
C8	3'-0"	2'-6"	597.26	538.80	58.46	N.R.	n2(E)	14	#8	v4	14	#8	sp6	#3

N.R. - indicates that Permanent Casing is not required.

BAR LIST

Bar	No.	Size	Length	Shape
n1(E)	80	#10	7'-6"	—
n2(E)	28	#8	5'-11"	—
sp1	2	#4	59'-10"	⋈
sp2	1	#4	59'-10"	⋈
sp3	1	#3	59'-10"	⋈
sp4	2	#4	58'-11"	⋈
sp5	1	#4	58'-11"	⋈
sp6	1	#3	58'-11"	⋈
v1	80	#10	33'-4"	—
v2	28	#8	31'-11"	—
v3	80	#10	32'-10"	—
v4	28	#8	31'-6"	—

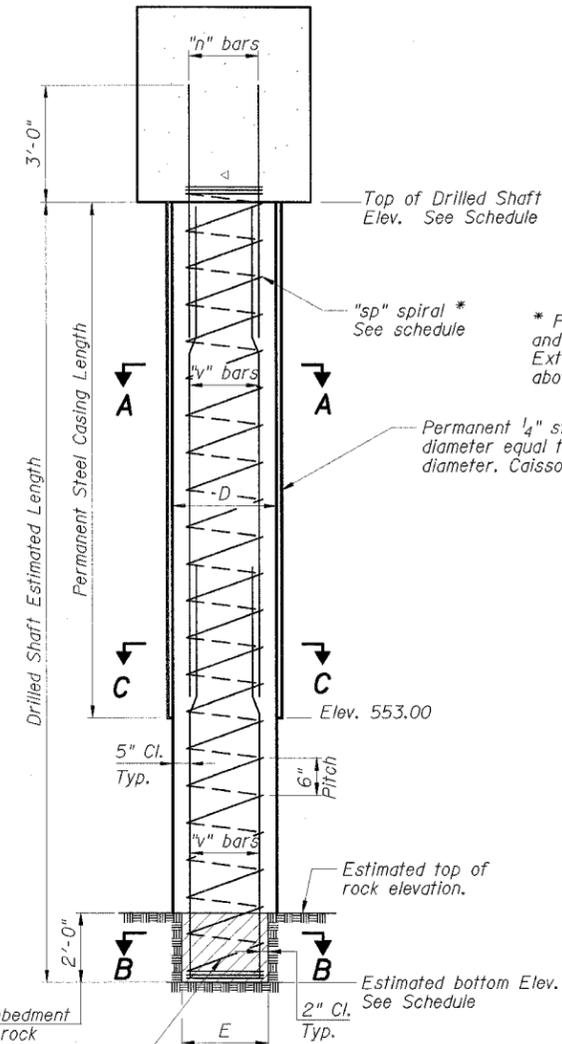
** - Length is Height of Spiral

BILL OF MATERIAL

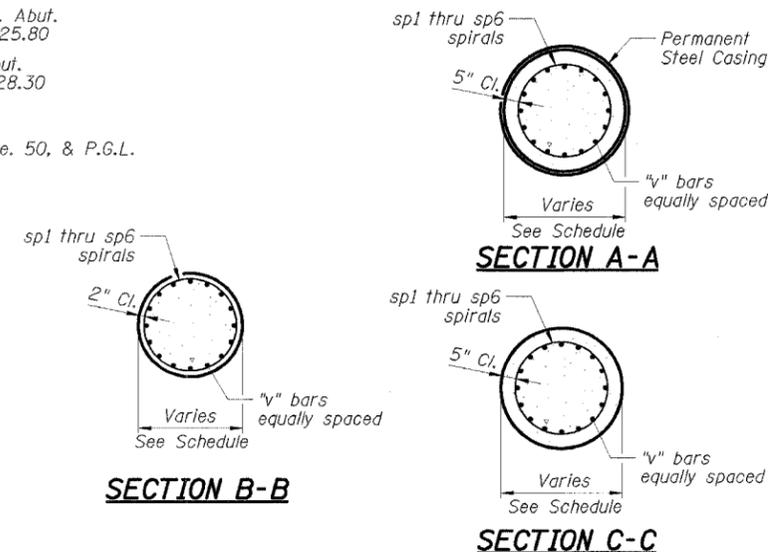
Item	Unit	Total
Reinforcement Bars	Lbs.	32,440
Reinforcement Bars, Epoxy Coated	Lbs.	3020
Drilled Shaft in Soil 36"	Foot	114
Drilled Shaft in Soil 42"	Foot	229
Drilled Shaft in Soil 48"	Foot	114
Drilled Shaft in Rock 30"	Foot	4
Drilled Shaft in Rock 36"	Foot	8
Drilled Shaft in Rock 42"	Foot	4
Permanent Casing	Foot	176

TYP. LAP SPLICE

Bar Size	Min. Lap
#3	1'-6"
#4	2'-0"
#8	4'-6"
#10	7'-3"



TYPICAL DRILLED SHAFT SECTION



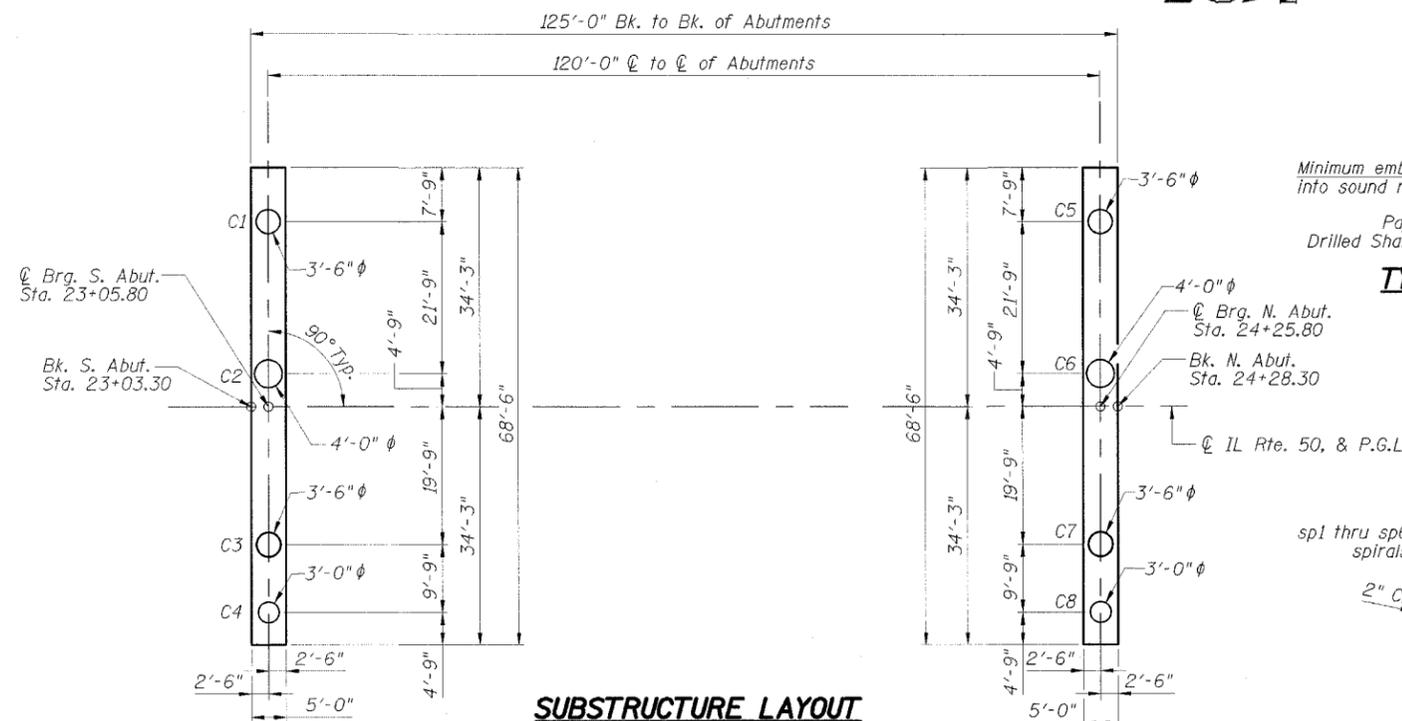
Notes:

- The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.
- Drilled Shafts are sized for a net allowable bearing capacity of 30 tsf.
Minimum Concrete $f'c = 4,000$ psi at 14 Days
Reinforcement $fy = 60,000$ psi
- The Contractor shall note the existence of concrete obstructions up to 5 feet thick at the proposed North and South Abutments.
- The Contractor shall be responsible for locating all utilities and the abandoned water main tunnel prior to drilling of shafts.
- Reinforcement bars designated (E) shall be epoxy coated.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUBSTRUCTURE LAYOUT & DETAILS
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



SUBSTRUCTURE LAYOUT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	29
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

GIRDER #1

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-31.5	606.087	606.087
☉ Brg. S. Abut.	23+05.80	-31.5	606.099	606.099
A	23+15.80	-31.5	606.149	606.233
B	23+25.80	-31.5	606.198	606.360
C	23+35.80	-31.5	606.248	606.476
D	23+45.80	-31.5	606.298	606.576
E	23+55.80	-31.5	606.347	606.657
F	23+65.80	-31.5	606.397	606.717
G	23+75.80	-31.5	606.447	606.756
H	23+85.80	-31.5	606.496	606.774
I	23+95.80	-31.5	606.546	606.774
J	24+05.80	-31.5	606.595	606.757
K	24+15.80	-31.5	606.645	606.729
☉ Brg. N. Abut.	24+25.80	-31.5	606.695	606.695
Bk. N. Abut.	24+28.30	-31.5	606.707	606.707

WEST GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-28.0	606.157	606.157
☉ Brg. S. Abut.	23+05.80	-28.0	606.169	606.169
A	23+15.80	-28.0	606.219	606.309
B	23+25.80	-28.0	606.268	606.442
C	23+35.80	-28.0	606.318	606.562
D	23+45.80	-28.0	606.368	606.665
E	23+55.80	-28.0	606.417	606.748
F	23+65.80	-28.0	606.467	606.809
G	23+75.80	-28.0	606.517	606.847
H	23+85.80	-28.0	606.566	606.863
I	23+95.80	-28.0	606.616	606.859
J	24+05.80	-28.0	606.665	606.839
K	24+15.80	-28.0	606.715	606.805
☉ Brg. N. Abut.	24+25.80	-28.0	606.765	606.765
Bk. N. Abut.	24+28.30	-28.0	606.777	606.777

GIRDER #2

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-24.5	606.227	606.227
☉ Brg. S. Abut.	23+05.80	-24.5	606.239	606.239
A	23+15.80	-24.5	606.289	606.385
B	23+25.80	-24.5	606.338	606.523
C	23+35.80	-24.5	606.388	606.647
D	23+45.80	-24.5	606.438	606.754
E	23+55.80	-24.5	606.487	606.839
F	23+65.80	-24.5	606.537	606.901
G	23+75.80	-24.5	606.587	606.939
H	23+85.80	-24.5	606.636	606.953
I	23+95.80	-24.5	606.686	606.945
J	24+05.80	-24.5	606.735	606.920
K	24+15.80	-24.5	606.785	606.881
☉ Brg. N. Abut.	24+25.80	-24.5	606.835	606.835
Bk. N. Abut.	24+28.30	-24.5	606.847	606.847

GIRDER #3

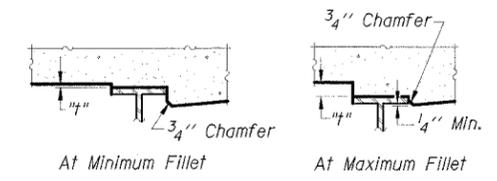
Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-17.5	606.367	606.367
☉ Brg. S. Abut.	23+05.80	-17.5	606.379	606.379
A	23+15.80	-17.5	606.429	606.525
B	23+25.80	-17.5	606.478	606.663
C	23+35.80	-17.5	606.528	606.787
D	23+45.80	-17.5	606.578	606.894
E	23+55.80	-17.5	606.627	606.979
F	23+65.80	-17.5	606.677	607.041
G	23+75.80	-17.5	606.727	607.079
H	23+85.80	-17.5	606.776	607.093
I	23+95.80	-17.5	606.826	607.085
J	24+05.80	-17.5	606.875	607.060
K	24+15.80	-17.5	606.925	607.021
☉ Brg. N. Abut.	24+25.80	-17.5	606.975	606.975
Bk. N. Abut.	24+28.30	-17.5	606.987	606.987

GIRDER #4

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-10.5	606.507	606.507
☉ Brg. S. Abut.	23+05.80	-10.5	606.519	606.519
A	23+15.80	-10.5	606.569	606.665
B	23+25.80	-10.5	606.618	606.803
C	23+35.80	-10.5	606.668	606.927
D	23+45.80	-10.5	606.718	607.034
E	23+55.80	-10.5	606.767	607.119
F	23+65.80	-10.5	606.817	607.181
G	23+75.80	-10.5	606.867	607.219
H	23+85.80	-10.5	606.916	607.233
I	23+95.80	-10.5	606.966	607.225
J	24+05.80	-10.5	607.015	607.200
K	24+15.80	-10.5	607.065	607.161
☉ Brg. N. Abut.	24+25.80	-10.5	607.115	607.115
Bk. N. Abut.	24+28.30	-10.5	607.127	607.127

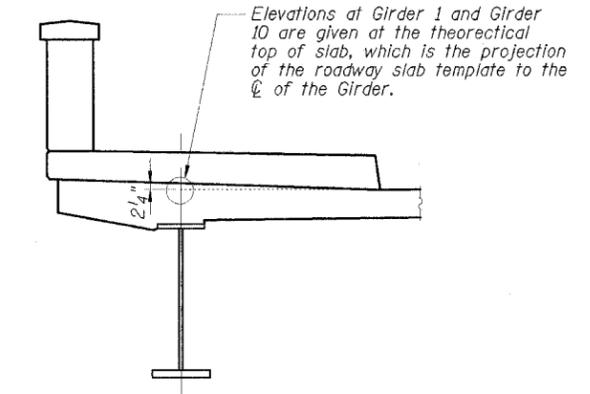
GIRDER #5

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-3.5	606.647	606.647
☉ Brg. S. Abut.	23+05.80	-3.5	606.659	606.659
A	23+15.80	-3.5	606.709	606.782
B	23+25.80	-3.5	606.758	606.900
C	23+35.80	-3.5	606.808	607.007
D	23+45.80	-3.5	606.858	607.101
E	23+55.80	-3.5	606.907	607.178
F	23+65.80	-3.5	606.957	607.237
G	23+75.80	-3.5	607.007	607.277
H	23+85.80	-3.5	607.056	607.299
I	23+95.80	-3.5	607.106	607.305
J	24+05.80	-3.5	607.155	607.297
K	24+15.80	-3.5	607.205	607.279
☉ Brg. N. Abut.	24+25.80	-3.5	607.255	607.255
Bk. N. Abut.	24+28.30	-3.5	607.267	607.267



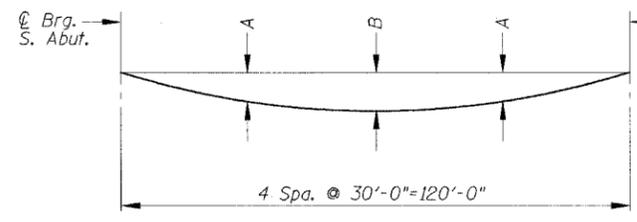
To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet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

FILLET HEIGHTS



LOCATION OF ELEVATIONS AT CENTERLINE OF GIRDERS

Beam	A	B
2-4, 7-9	3 7/8"	5 1/2"
5 & 6	3 1/4"	4 5/8"
1 & 10	3 5/8"	5"



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

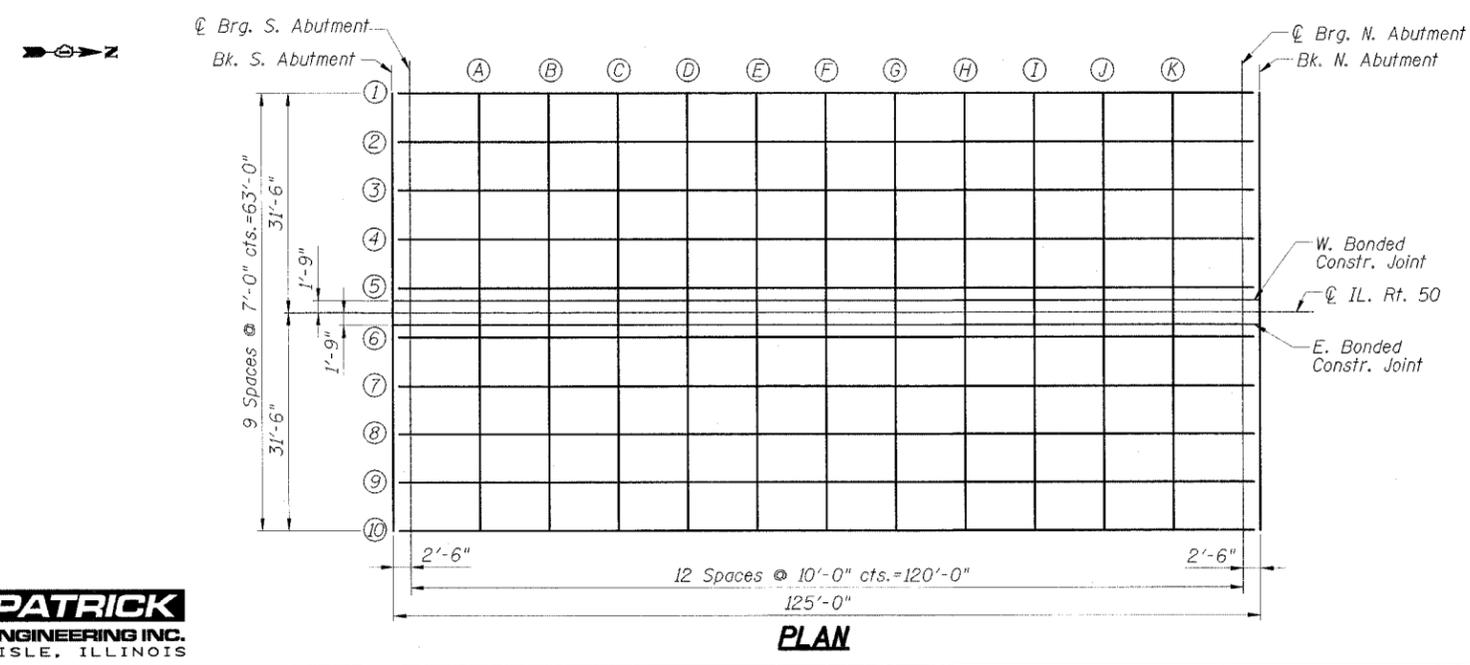
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

- Notes:
- ① - Indicates girder numbers.
 - Positive offsets are to the east of ☉ IL. Rt. 50.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS I
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



PLAN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	30
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

WEST BONDED CONSTRUCTION JOINT

CENTERLINE ROADWAY & P.G.L.

EAST BONDED CONSTRUCTION JOINT

GIRDER #6

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	-1.75	606.682	606.682
☉ Brg. S. Abut.	23+05.80	-1.75	606.694	606.694
A	23+15.80	-1.75	606.744	606.817
B	23+25.80	-1.75	606.793	606.935
C	23+35.80	-1.75	606.843	607.042
D	23+45.80	-1.75	606.893	607.136
E	23+55.80	-1.75	606.942	607.213
F	23+65.80	-1.75	606.992	607.272
G	23+75.80	-1.75	607.042	607.312
H	23+85.80	-1.75	607.091	607.334
I	23+95.80	-1.75	607.141	607.340
J	24+05.80	-1.75	607.190	607.332
K	24+15.80	-1.75	607.240	607.314
☉ Brg. N. Abut.	24+25.80	-1.75	607.290	607.290
Bk. N. Abut.	24+28.30	-1.75	607.302	607.302

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	0.0	606.717	606.717
☉ Brg. S. Abut.	23+05.80	0.0	606.729	606.729
A	23+15.80	0.0	606.779	606.782
B	23+25.80	0.0	606.828	606.835
C	23+35.80	0.0	606.878	606.887
D	23+45.80	0.0	606.928	606.938
E	23+55.80	0.0	606.977	606.989
F	23+65.80	0.0	607.027	607.039
G	23+75.80	0.0	607.077	607.088
H	23+85.80	0.0	607.126	607.137
I	23+95.80	0.0	607.176	607.184
J	24+05.80	0.0	607.225	607.232
K	24+15.80	0.0	607.275	607.278
☉ Brg. N. Abut.	24+25.80	0.0	607.325	607.325
Bk. N. Abut.	24+28.30	0.0	607.337	607.337

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	1.75	606.682	606.682
☉ Brg. S. Abut.	23+05.80	1.75	606.694	606.694
A	23+15.80	1.75	606.744	606.817
B	23+25.80	1.75	606.793	606.935
C	23+35.80	1.75	606.843	607.042
D	23+45.80	1.75	606.893	607.136
E	23+55.80	1.75	606.942	607.213
F	23+65.80	1.75	606.992	607.272
G	23+75.80	1.75	607.042	607.312
H	23+85.80	1.75	607.091	607.334
I	23+95.80	1.75	607.141	607.340
J	24+05.80	1.75	607.190	607.332
K	24+15.80	1.75	607.240	607.314
☉ Brg. N. Abut.	24+25.80	1.75	607.290	607.290
Bk. N. Abut.	24+28.30	1.75	607.302	607.302

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	3.5	606.647	606.647
☉ Brg. S. Abut.	23+05.80	3.5	606.659	606.659
A	23+15.80	3.5	606.709	606.782
B	23+25.80	3.5	606.758	606.900
C	23+35.80	3.5	606.808	607.007
D	23+45.80	3.5	606.858	607.101
E	23+55.80	3.5	606.907	607.178
F	23+65.80	3.5	606.957	607.237
G	23+75.80	3.5	607.007	607.277
H	23+85.80	3.5	607.056	607.299
I	23+95.80	3.5	607.106	607.305
J	24+05.80	3.5	607.155	607.297
K	24+15.80	3.5	607.205	607.279
☉ Brg. N. Abut.	24+25.80	3.5	607.255	607.255
Bk. N. Abut.	24+28.30	3.5	607.267	607.267

GIRDER #7

GIRDER #8

GIRDER #9

EAST GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	10.5	606.507	606.507
☉ Brg. S. Abut.	23+05.80	10.5	606.519	606.519
A	23+15.80	10.5	606.569	606.665
B	23+25.80	10.5	606.618	606.803
C	23+35.80	10.5	606.668	606.927
D	23+45.80	10.5	606.718	607.034
E	23+55.80	10.5	606.767	607.119
F	23+65.80	10.5	606.817	607.181
G	23+75.80	10.5	606.867	607.219
H	23+85.80	10.5	606.916	607.233
I	23+95.80	10.5	606.966	607.225
J	24+05.80	10.5	607.015	607.200
K	24+15.80	10.5	607.065	607.161
☉ Brg. N. Abut.	24+25.80	10.5	607.115	607.115
Bk. N. Abut.	24+28.30	10.5	607.127	607.127

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	17.5	606.367	606.367
☉ Brg. S. Abut.	23+05.80	17.5	606.379	606.379
A	23+15.80	17.5	606.429	606.525
B	23+25.80	17.5	606.478	606.663
C	23+35.80	17.5	606.528	606.787
D	23+45.80	17.5	606.578	606.894
E	23+55.80	17.5	606.627	606.979
F	23+65.80	17.5	606.677	607.041
G	23+75.80	17.5	606.727	607.079
H	23+85.80	17.5	606.776	607.093
I	23+95.80	17.5	606.826	607.085
J	24+05.80	17.5	606.875	607.060
K	24+15.80	17.5	606.925	607.021
☉ Brg. N. Abut.	24+25.80	17.5	606.975	606.975
Bk. N. Abut.	24+28.30	17.5	606.987	606.987

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	24.5	606.227	606.227
☉ Brg. S. Abut.	23+05.80	24.5	606.239	606.239
A	23+15.80	24.5	606.289	606.385
B	23+25.80	24.5	606.338	606.523
C	23+35.80	24.5	606.388	606.647
D	23+45.80	24.5	606.438	606.754
E	23+55.80	24.5	606.487	606.839
F	23+65.80	24.5	606.537	606.901
G	23+75.80	24.5	606.587	606.939
H	23+85.80	24.5	606.636	606.953
I	23+95.80	24.5	606.686	606.945
J	24+05.80	24.5	606.735	606.920
K	24+15.80	24.5	606.785	606.881
☉ Brg. N. Abut.	24+25.80	24.5	606.835	606.835
Bk. N. Abut.	24+28.30	24.5	606.847	606.847

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	28.0	606.157	606.157
☉ Brg. S. Abut.	23+05.80	28.0	606.169	606.169
A	23+15.80	28.0	606.219	606.309
B	23+25.80	28.0	606.268	606.442
C	23+35.80	28.0	606.318	606.562
D	23+45.80	28.0	606.368	606.665
E	23+55.80	28.0	606.417	606.748
F	23+65.80	28.0	606.467	606.809
G	23+75.80	28.0	606.517	606.847
H	23+85.80	28.0	606.566	606.863
I	23+95.80	28.0	606.616	606.859
J	24+05.80	28.0	606.665	606.839
K	24+15.80	28.0	606.715	606.805
☉ Brg. N. Abut.	24+25.80	28.0	606.765	606.765
Bk. N. Abut.	24+28.30	28.0	606.777	606.777

GIRDER #10

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted For Dead Load Deflections
Bk. S. Abut.	23+03.30	31.5	606.087	606.087
☉ Brg. S. Abut.	23+05.80	31.5	606.099	606.099
A	23+15.80	31.5	606.149	606.233
B	23+25.80	31.5	606.198	606.360
C	23+35.80	31.5	606.248	606.476
D	23+45.80	31.5	606.298	606.576
E	23+55.80	31.5	606.347	606.657
F	23+65.80	31.5	606.397	606.717
G	23+75.80	31.5	606.447	606.756
H	23+85.80	31.5	606.496	606.774
I	23+95.80	31.5	606.546	606.774
J	24+05.80	31.5	606.595	606.757
K	24+15.80	31.5	606.645	606.729
☉ Brg. N. Abut.	24+25.80	31.5	606.695	606.695
Bk. N. Abut.	24+28.30	31.5	606.707	606.707

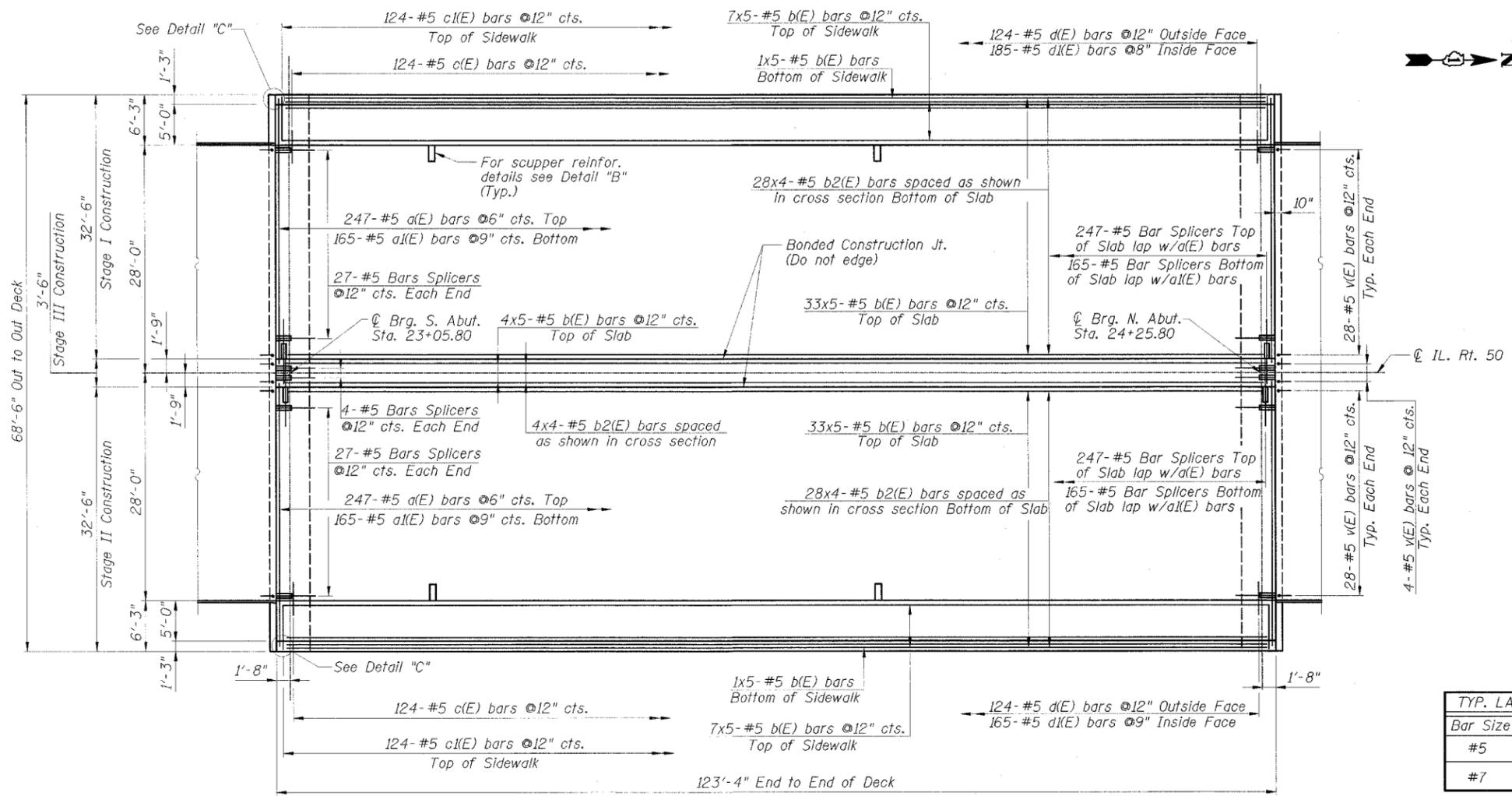


REVISIONS	
NAME	DATE

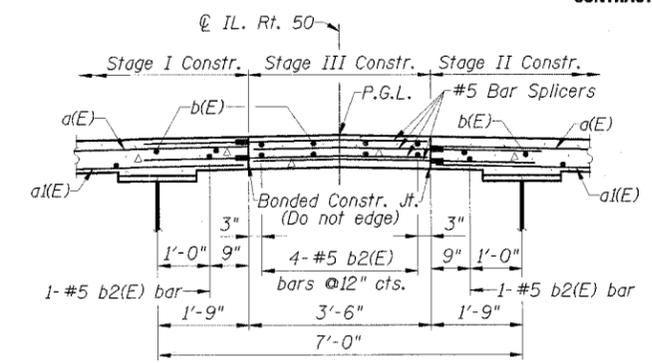
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK ELEVATIONS II
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

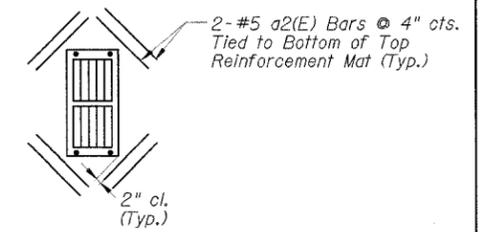
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	31
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		CONTRACT NO. 60440



DECK PLAN



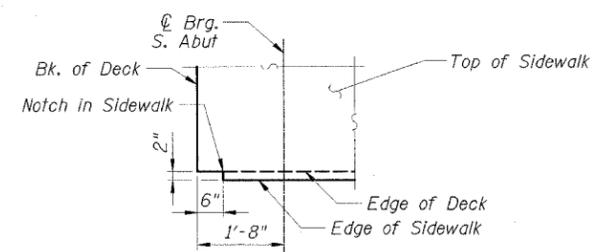
DETAIL "A"



DETAIL "B"

Cut longitudinal reinforcement to clear drainage scuppers.

TYP. LAP SPLICE		
Bar Size	Min. Lap	
#5	2'-2"	
#7	4'-10"	

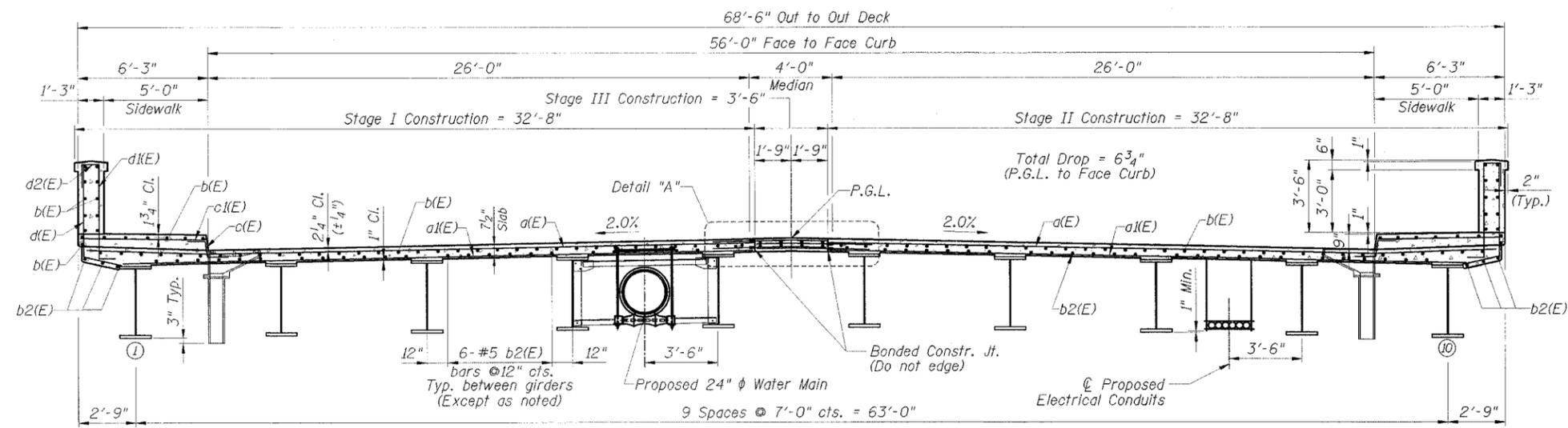


DETAIL "C"

(East edge shown)
(West edge similar)

Notes:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Sheet S1 for Scupper Spacing.
4. See Sheet S7 for Parapet Details and Bill of Material.
5. See Sheet S14 for Bar Splicer Details.
6. See Sheet S16 for Scupper Details.
7. See Sheet S17 for Water Main Details.



CROSS SECTION
(Looking North)

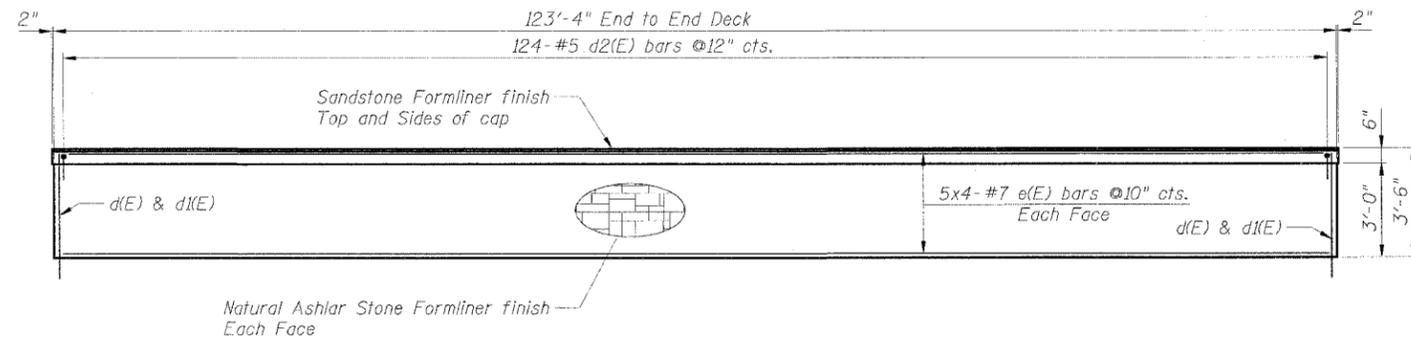
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK PLAN & DETAILS
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE
DATE: AUGUST 18, 2006
DRAWN BY: M. Belton
CHECKED BY: R. Clinton

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	32
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440



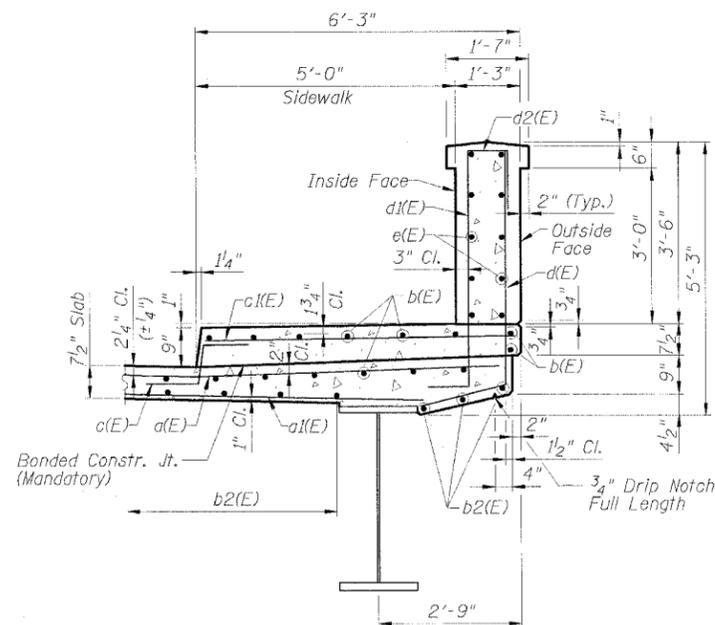
PARAPET ELEVATION

Notes:

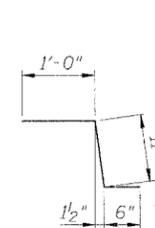
1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus: 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. For deck plan see Sheet S6 of S21.
4. For diaphragm details see Sheet S8 of S21.

BILL OF MATERIAL

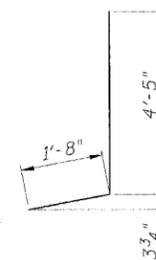
Bar	No.	Size	Length	Shape
a(E)	494	#5	32'-2"	—
a1(E)	330	#5	31'-0"	—
a2(E)	32	#5	2'-0"	—
b(E)	430	#5	26'-4"	—
b2(E)	240	#5	32'-5"	—
c(E)	248	#5	2'-5"	—
c1(E)	248	#5	6'-0"	—
d(E)	248	#5	5'-5"	—
d1(E)	370	#5	5'-6"	—
d2(E)	248	#4	3'-5"	—
e(E)	80	#7	34'-5"	—
m(E)	16	#6	32'-2"	—
m1(E)	22	#6	6'-8"	—
m2(E)	8	#6	32'-0"	—
m3(E)	2	#6	6'-10"	—
m4(E)	2	#6	2'-5"	—
m5(E)	2	#6	2'-3"	—
m6(E)	14	#6	32'-4"	—
s(E)	69	#5	8'-2"	—
s1(E)	60	#4	12'-9"	—
s2(E)	60	#4	10'-5"	—
s3(E)	69	#5	7'-11"	—
v(E)	120	#5	3'-6"	—
Concrete Superstructure			Cu. Yd.	342.1
Reinforcement Bars, Epoxy Coated			Lbs.	63,750
Bar Splacers			Each	984
Protective Coat			Sq. Yd.	1,067
Bridge Deck Grooving			Sq. Yd.	740
Form Liner Textured Surface			Sq. Ft.	2,100



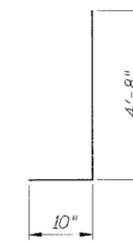
SIDEWALK AND PARAPET SECTION



BAR c(E)



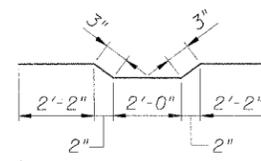
BAR d(E)



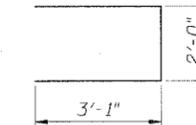
BAR d1(E)



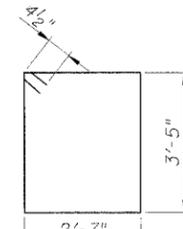
BAR d2(E)



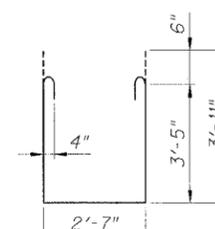
BAR m3(E)



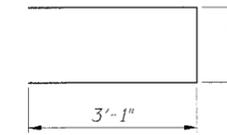
BAR s(E)



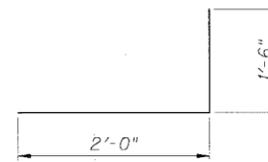
BAR s1(E)



BAR s2(E)



BAR s3(E)



BAR v(E)

REVISIONS	
NAME	DATE

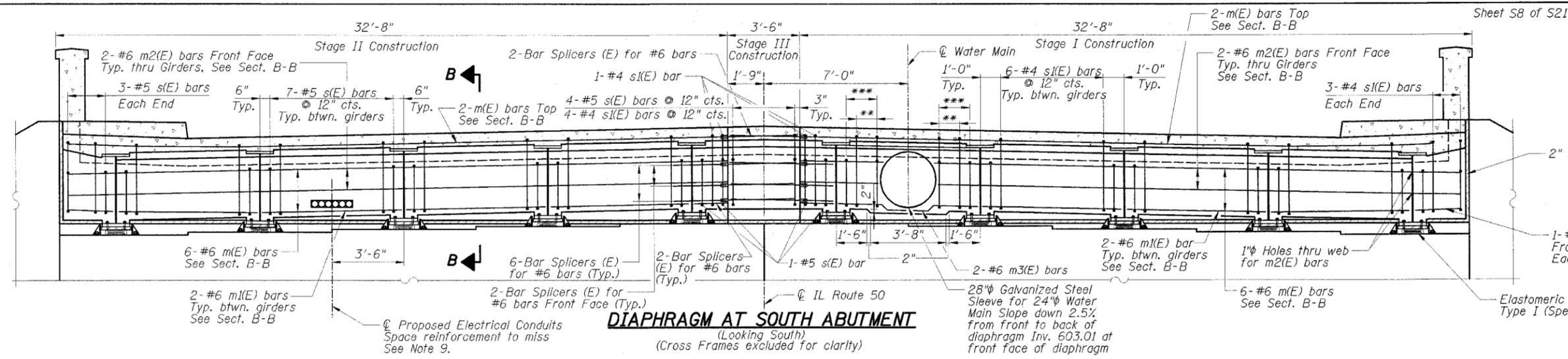
ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK DETAILS
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

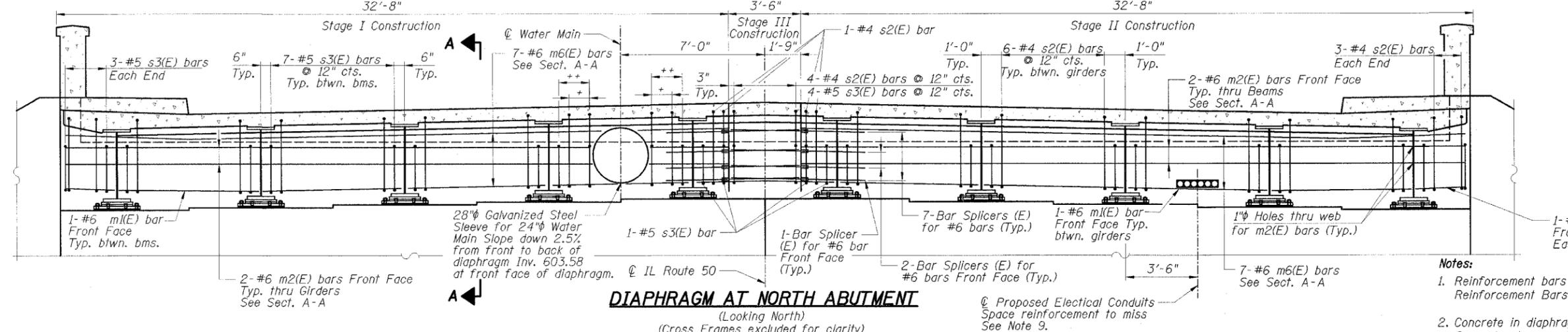
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	33
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

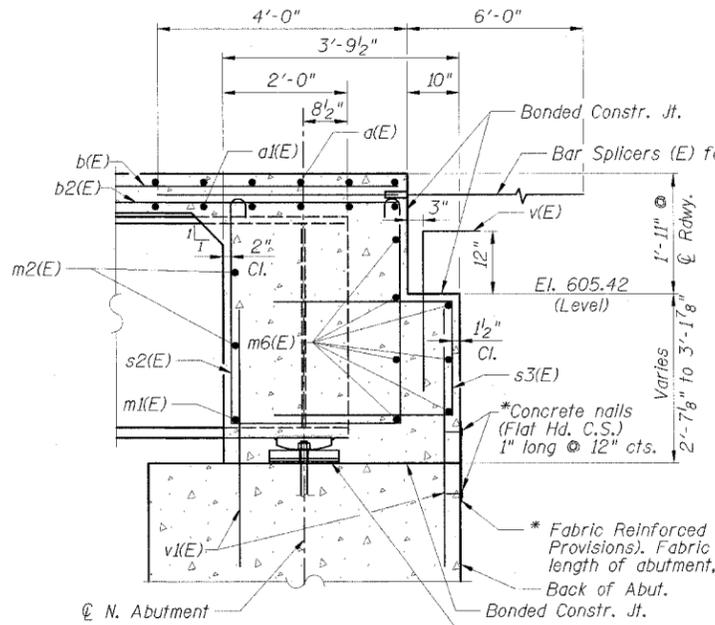
Sheet S8 of S21



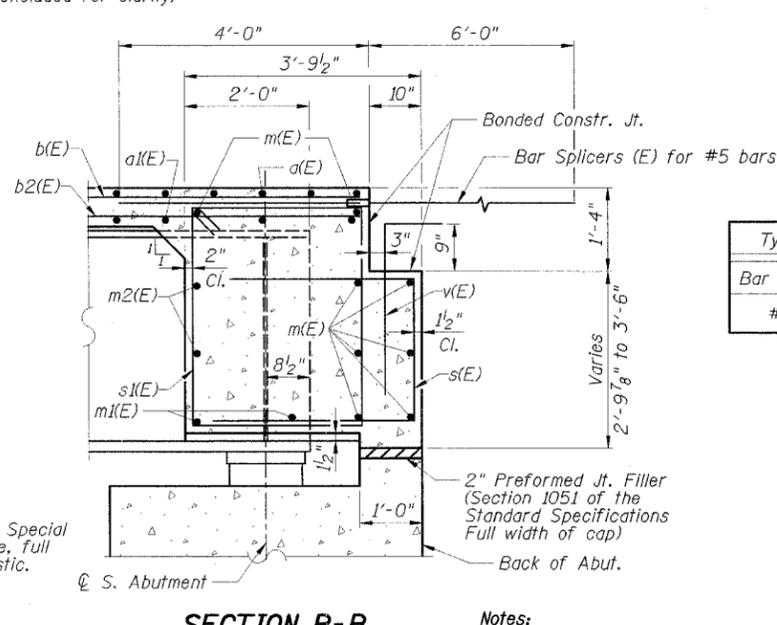
DIAPHRAGM AT SOUTH ABUTMENT
(Looking South)
(Cross Frames excluded for clarity)



DIAPHRAGM AT NORTH ABUTMENT
(Looking North)
(Cross Frames excluded for clarity)



SECTION A-A
(At North Abutment)



SECTION B-B
(At South Abutment)

Typ. Lap Splice	
Bar Size	Min. Lap
#6	3'-7"

- Notes:**
- Reinforcement bars in diaphragm are included with Reinforcement Bars, Epoxy Coated, on Sheet S7 of S21.
 - Concrete in diaphragm is included with Concrete Superstructure on Sheet S7 of S21.
 - For details of bars m3(E), s(E), s1(E), s2(E), and s3(E) see Sheet S7 of S21.
 - The s(E), s1(E), s2(E), and s3(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
 - For anchor bolt details see Sheet S13 of S21.
 - For bar splicer details see Sheet S14 of S21.
 - For spacing of v1(E) and approach slab bar splicers see Sheet S6 of S21.
 - For water main details see Sheet S17 of S21.
 - Vertical location of proposed electrical conduits to be determined in field at time of construction.
 - For Cross Frame details see Sheet S10 of S21.
 - For bearing details see Sheet S10 of S21.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIAPHRAGM DETAILS
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

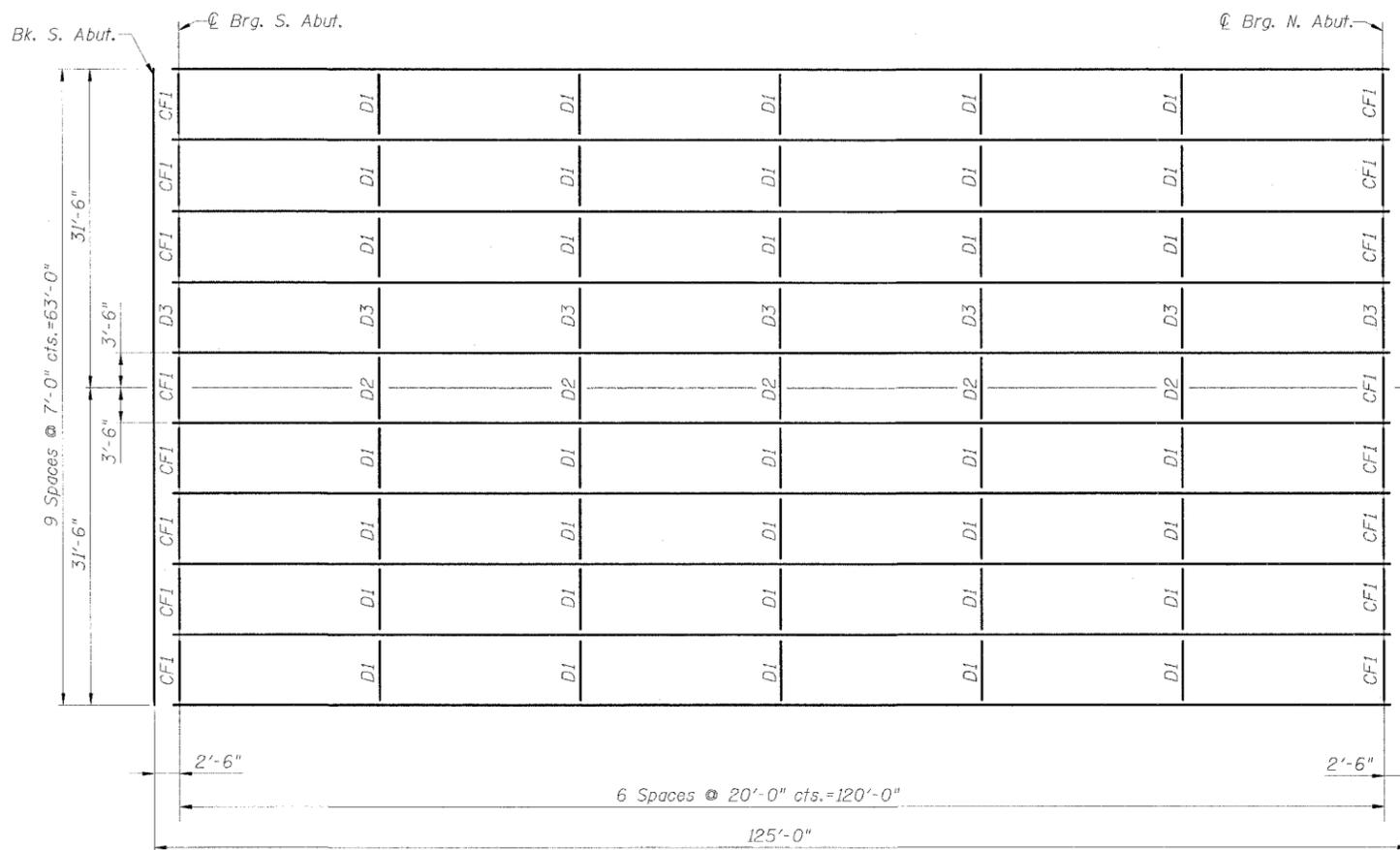
SCALE: NONE
DATE: AUGUST 18, 2006
DRAWN BY: M. Belton
CHECKED BY: R. Clinton



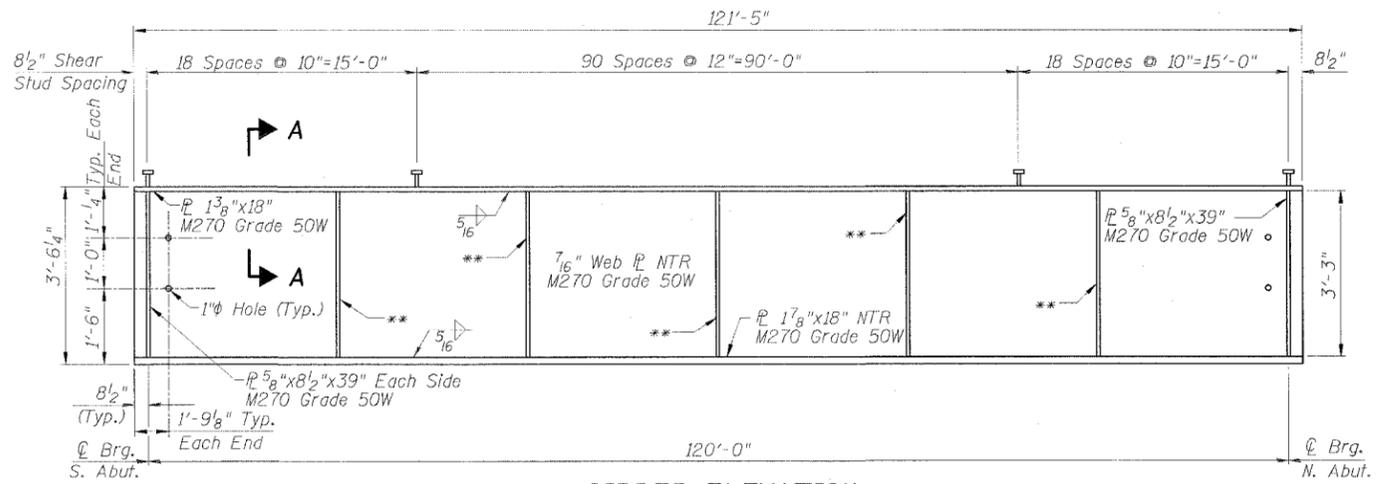
*Cost included with Concrete Structures

Notes:
1. See Sheet S2 of S21 for additional abutment details not shown.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	34
FED. ROAD DIST. NO. 7			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60440				



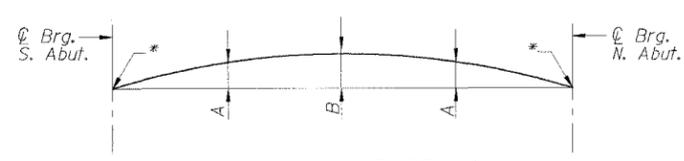
PLAN



GIRDER ELEVATION

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

** $\phi 5/8 \times 5/2 \times 38$ " M270 Grade 50W West face of Web Girder 5, East face of Web Girder 4 Only. See Section at Diaphragm D3



CAMBER DIAGRAM

* Final top of web elevations to be used in computing the bearing's seat elevation.

Girder	A	B
2-4, 7-9	4 3/8"	6 1/4"
5 & 6	3 3/4"	5 1/4"
1 & 10	4"	5 5/8"

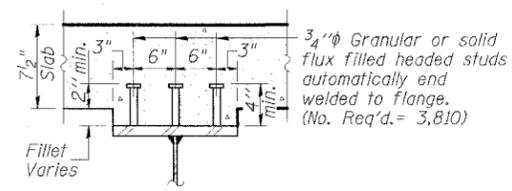
Girder	℄ Brg. S. Abut.	℄ Brg. N. Abut.
1	605.297	605.893
2	605.437	606.033
3	605.577	606.173
4	605.717	606.313
5	605.857	606.453
6	605.857	606.453
7	605.717	606.313
8	605.577	606.173
9	605.437	606.033
10	605.297	605.893

		0.5 Sp. 1
I_s	(in ⁴)	25,882
I_c (n)	(in ⁴)	52,467
I_c (3n)	(in ⁴)	38,757
S_s	(in ³)	1,372
S_c (n)	(in ³)	1,657
S_c (3n)	(in ³)	1,545
ϕ	(k/')	0.977
$M\phi$	(k)	1,758
* $s\phi$	(k/')	0.825
* $M_s\phi$	(k)	1,485
$M\phi$	(k)	1,196
M (Imp)	(k)	244
$s_3[M\phi + M$ (Imp)]	(k)	2,400
* M_a	(k)	7,337
M_u	(k)	7,457
$f_s\phi$ non-comp	(ksi)	15
* $f_s\phi$ (comp)	(ksi)	12
$f_s s_3[M\phi + M$ (Imp)]	(ksi)	17
* f_s (Overload)	(ksi)	44
f_s (Total)	(ksi)	44
VR	(k)	57

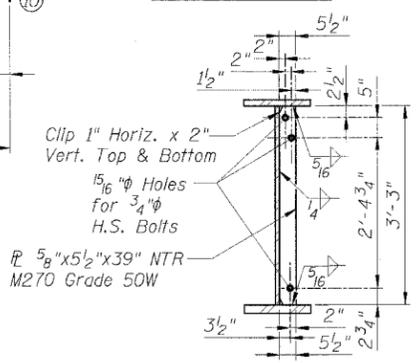
	N. Abut.	S. Abut.
$R\phi$	(k)	94.1
* $R_s\phi$	(k)	49.5
$R\phi$	(k)	47.0
Imp.	(k)	9.6
* R (Total)	(k)	200.2

* Includes additional superimposed dead load due to utilities.

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & 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 loads.
 VR is the maximum live Load + Impact shear range in span.
 M_a (Applied Moment) = $1.3[M\phi + M_s\phi + s_3(M\phi + I)]$.
 M_u is the Full Plastic Moment Capacity for Compact, Braced section.
 f_s (Overload) is the sum of the stresses due to $M\phi + M_s\phi + s_3(M\phi + I)$.
 f_s (Total) is the sum of the stresses due to $1.3[M\phi + M_s\phi + s_3(M\phi + I)]$.
 $M_s\phi$ Moment due to dead loads on composite section.
 $M\phi$ Moment due to live load on non-composite or composite section.
 M (Imp) Moment due to live load impact on non-composite or composite section.

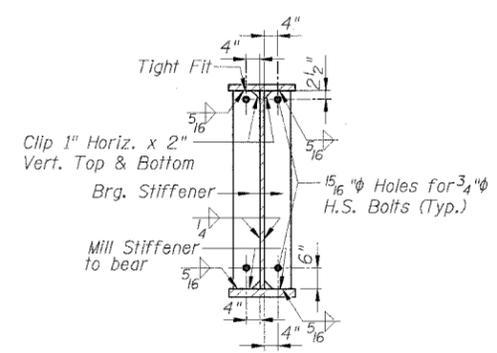


SECTION A-A



SECTION AT DIAPHRAGM D3

(Girder 4 shown, Girder 5 similar)



SECTION AT ABUTMENT

Notes:
 1. For diaphragm details see Sheet S10.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Erecting Structural Steel	L. Sum	1
Stud Shear Connectors	Each	3,810

Structural Steel provided in a separate Fabrication Contract. Only Stud Shear connectors and Erecting Structural Steel are included in this Contract.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FRAMING PLAN & DETAILS
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

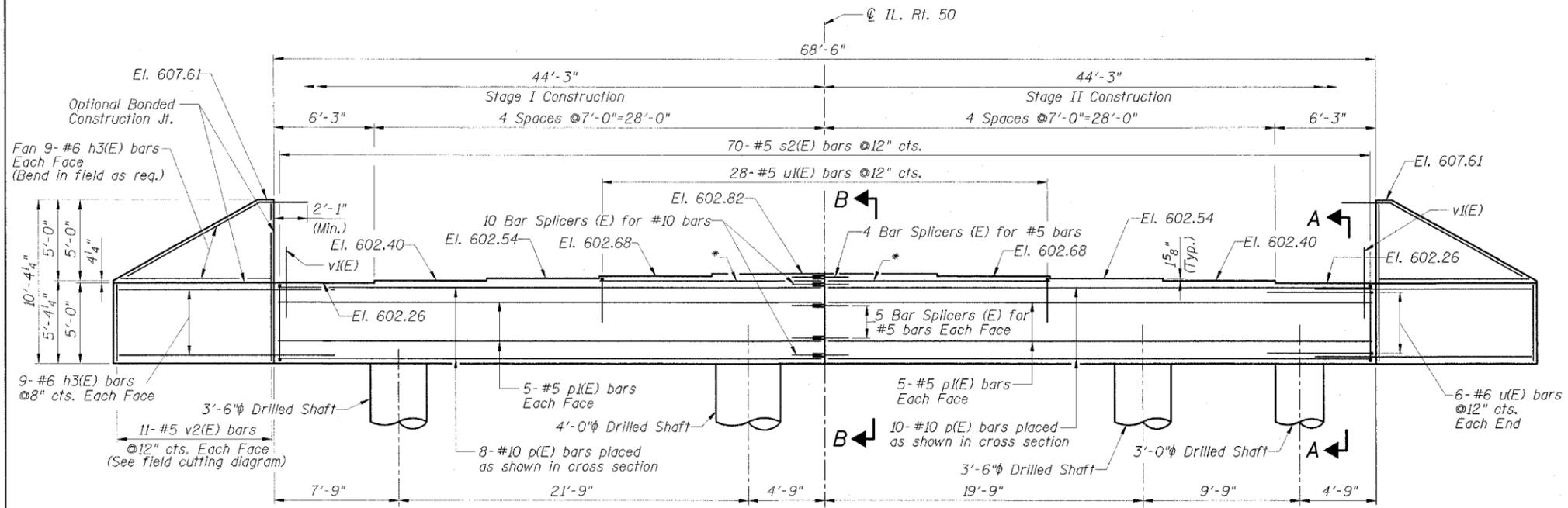
NAME	DATE

SCALE: NONE
 DATE: AUGUST 18, 2006
 DRAWN BY: M. Belton
 CHECKED BY: R. Clinton

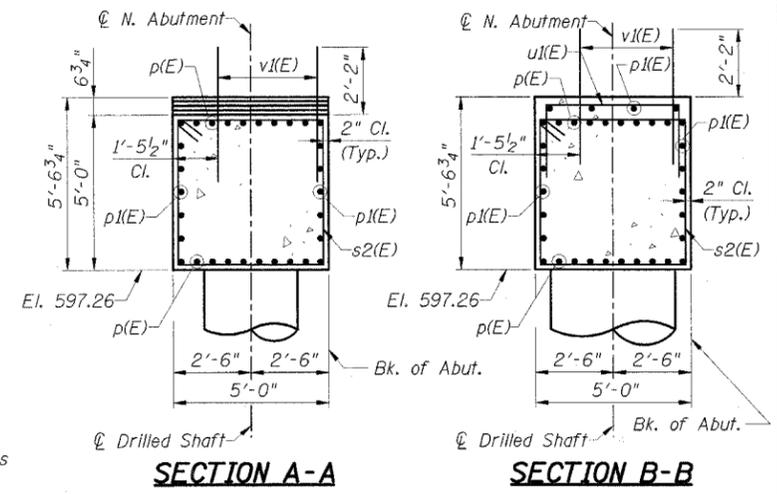


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	36
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60440



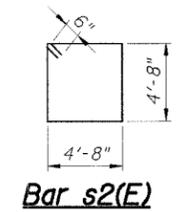
NORTH ABUTMENT ELEVATION
(Looking North)



SECTION A-A **SECTION B-B**

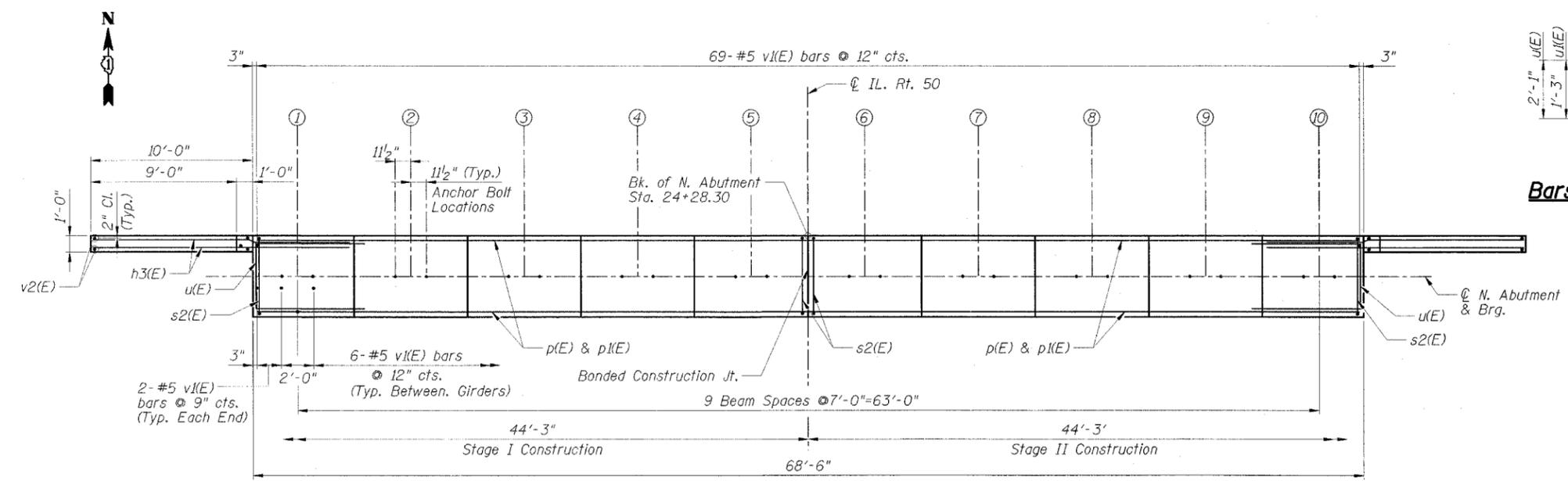
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	72	#6	13'-0"	—
p(E)	40	#10	33'-11"	—
p(E)	28	#5	33'-11"	—
s2(E)	70	#5	19'-8"	□
u(E)	12	#6	8'-8"	□
u(E)	28	#5	6'-10"	□
v(E)	127	#5	4'-4"	—
v2(E)	22	#5	14'-6"	—
Structure Excavation		Cu. Yd.	274.9	
Concrete Structures		Cu. Yd.	72.8	
Reinforcement Bars, Epoxy Coated		Lbs.	10,930	
Bar Splicers		Each	34	
Porous Granular Embankment (Special)		Cu. Yd.	177.7	
Geocomposite Wall Drain		Sq. Yd.	81	
Pipe Underdrains for Structures 4"		Foot	115	



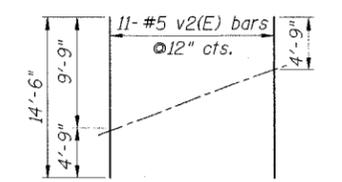
Bar s2(E)

Bars u(E) & u(E)



PLAN

- Notes:**
1. For Anchor Bolt details see Sheet S13.
 2. For Drilled Shaft details see Sheet S3.
 3. Reinforcement bars designated (E) shall be epoxy coated.
 4. Space reinforcement to miss anchor bolts.
 5. Cast steps monolithically with abutment.
 6. For PGE and Filter Fabric details see Sheet S2.
 7. For Bar Splicer details see Sheet S14.



FIELD CUTTING DIAGRAM
Order v2(E) bars full length. Cut as shown and use remainder of bars in opposite face.

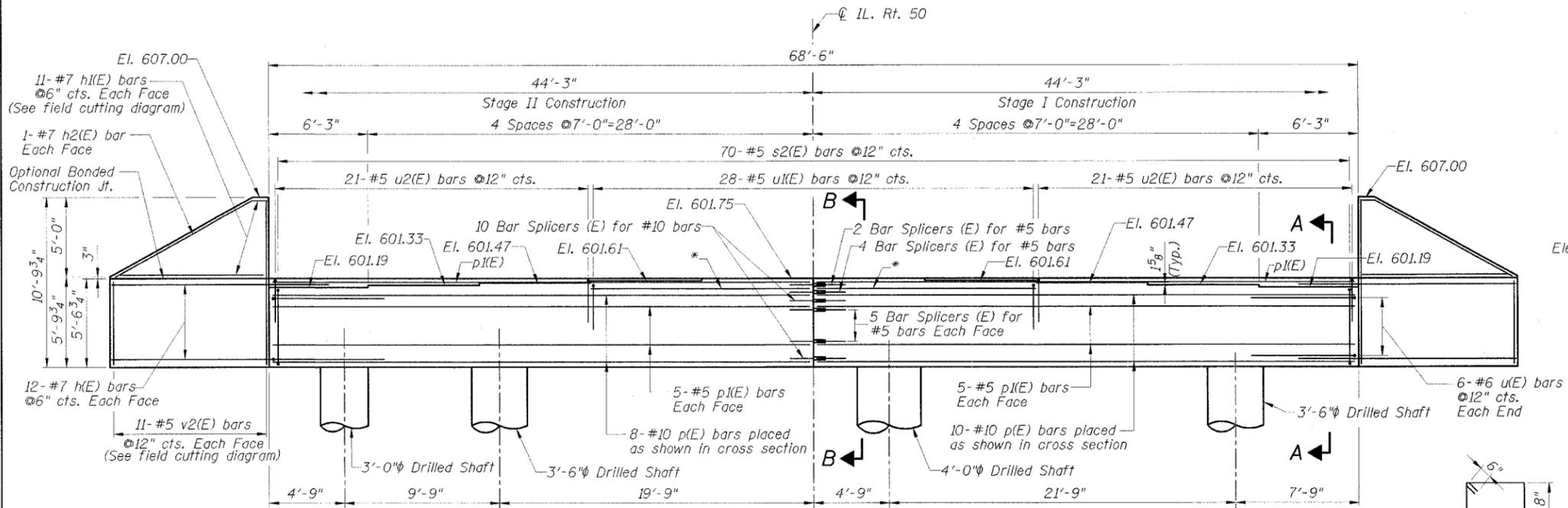
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NORTH ABUTMENT
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

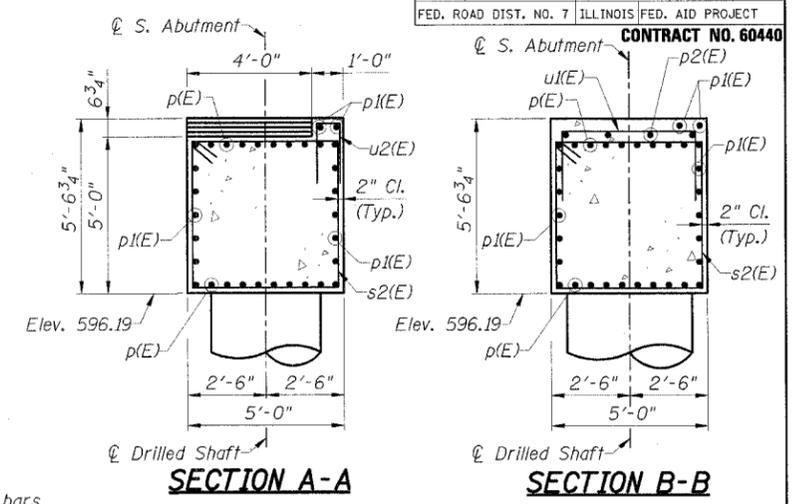
SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	37
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60440



SOUTH ABUTMENT ELEVATION
(Looking South)



SECTION A-A

SECTION B-B

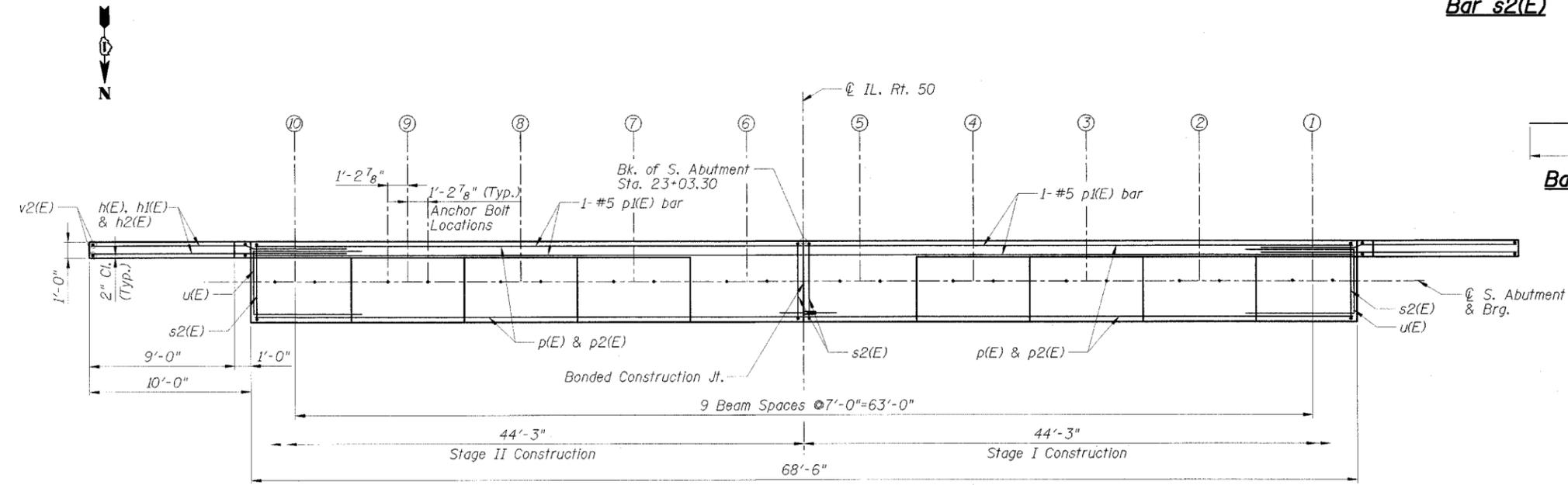
BILL OF MATERIAL

Bar No.	Size	Length	Shape
h(E) 48	#7	12'-8"	—
h1(E) 22	#7	10'-4"	—
h2(E) 4	#7	10'-8"	—
p(E) 40	#10	33'-11"	—
p1(E) 24	#5	33'-11"	—
p2(E) 8	#5	13'-8"	—
s2(E) 70	#5	19'-8"	□
u(E) 12	#6	8'-8"	□
u1(E) 28	#5	6'-10"	□
u2(E) 42	#5	4'-0"	□
v2(E) 22	#5	14'-6"	—
Structure Excavation	Cu. Yd.	321.1	
Concrete Structures	Cu. Yd.	73.9	
Reinforcement Bars, Epoxy Coated	Lbs.	10,890	
Bar Splicers	Each	36	
Porous Granular Embankment (Special)	Cu. Yd.	198.1	
Geocomposite Wall Drain	Sq. Yd.	87	
Pipe Underdrains for Structures 4"	Foot	120	

Bar s2(E)

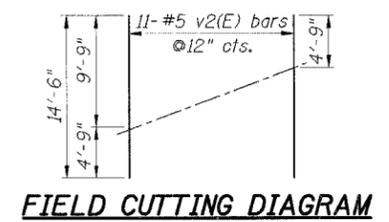
Bars u(E), u1(E) & u2(E)

Bar h2(E)



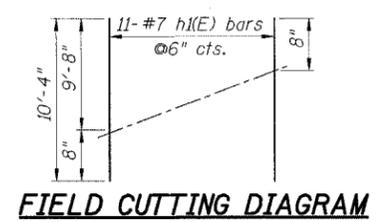
PLAN

- Notes:**
1. For Anchor Bolt details see Sheet S13.
 2. For Drilled Shaft details see Sheet S3.
 3. Reinforcement bars designated (E) shall be epoxy coated.
 4. Space reinforcement to miss anchor bolts.
 5. Cast steps monolithically with abutment.
 6. For PGE and Filter Fabric details see Sheet S2.
 7. For Bar Splicer details see Sheet S14.



FIELD CUTTING DIAGRAM

Order v2(E) bars full length. Cut as shown and use remainder of bars in opposite face.



FIELD CUTTING DIAGRAM

Order h1(E) bars full length. Cut as shown and use remainder of bars in opposite face.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOUTH ABUTMENT
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE
DATE: AUGUST 18, 2006
DRAWN BY: M. Belton
CHECKED BY: R. Clinton

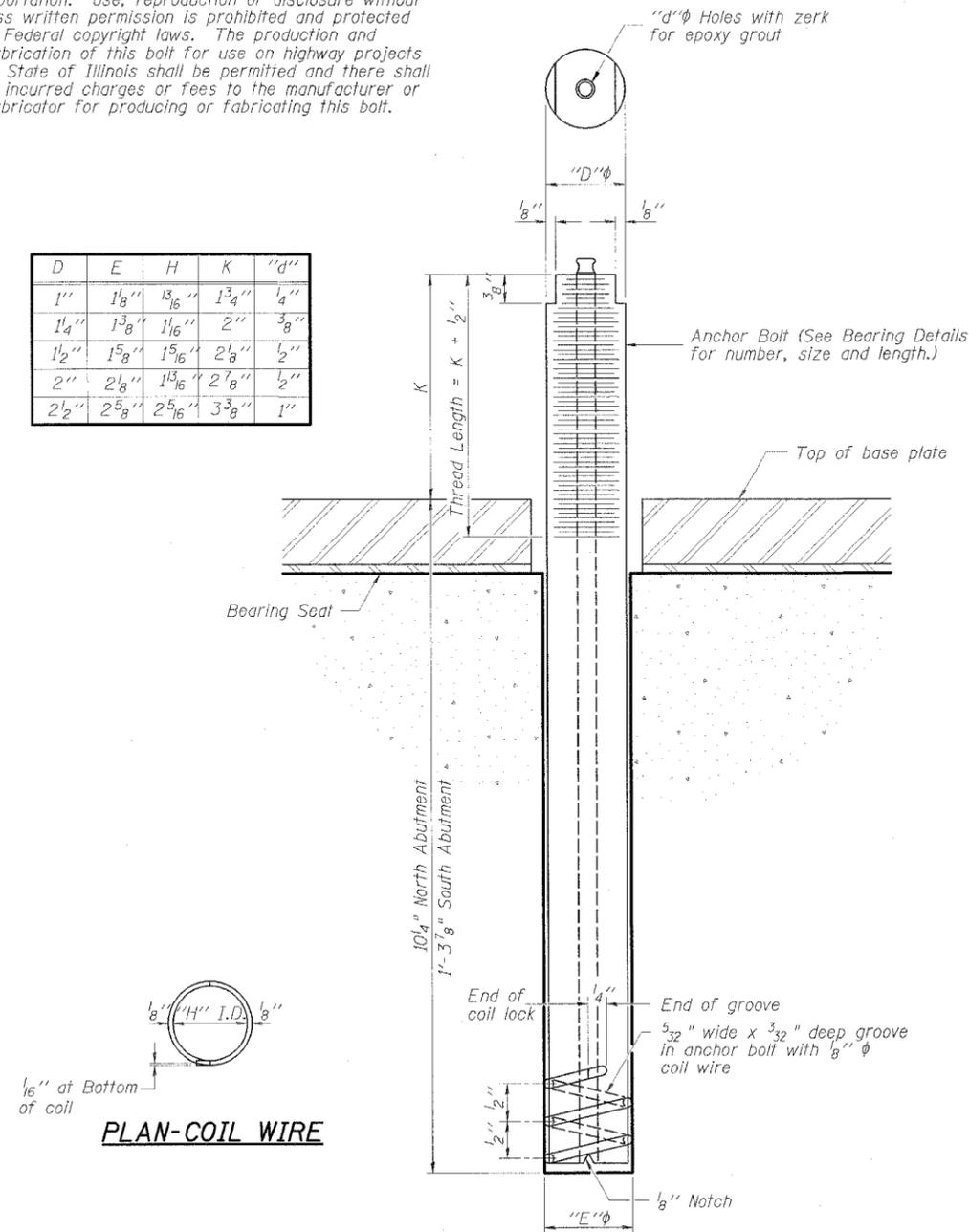


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	38
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

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"
1"	1 1/8"	1 3/8"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/2"	2"	3/8"
1 1/2"	1 5/8"	1 5/8"	2 1/8"	1/2"
2"	2 1/8"	1 3/4"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/8"	3 3/8"	1"



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 A 519, Grade 1026, CW 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 C 881, Type 1, 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 shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

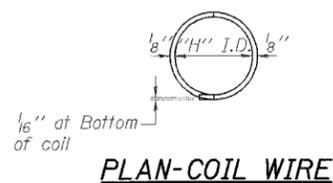
The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
 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 a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
S. Abut.	A307
N. Abut.	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

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 "Erecting Structural Steel".



PLAN-COIL WIRE

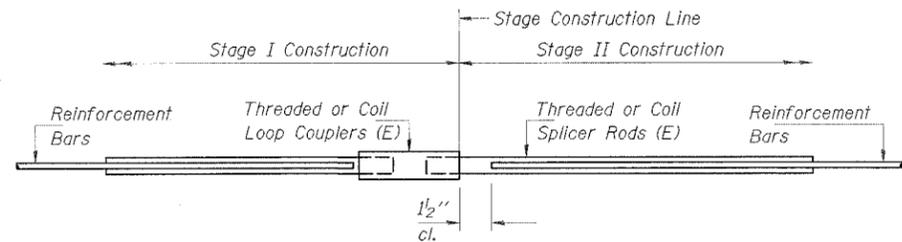
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ANCHOR BOLTS
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	39
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440



SPLICER DETAIL

Bar Size	No. Assemblies Required	Location
#5	824	Deck
#5	14	N. Abut.
#10	20	N. Abut.
#5	20	S. Abut.
#10	16	S. Abut.
#6	20	Diaphragm @ N. Abut.
#6	24	Diaphragm @ S. Abut.

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

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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

NOTES

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

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

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

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

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_s \text{ allow} \times A_t$

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

$f_s \text{ allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

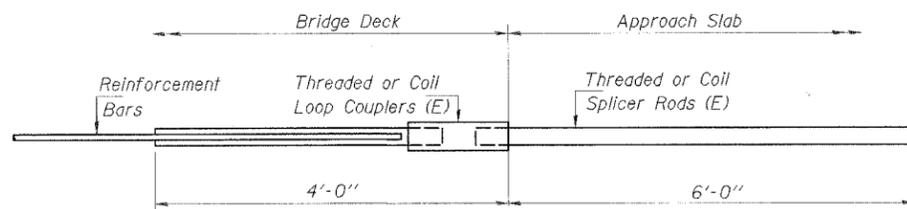
A_t = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

BAR SPLICER ASSEMBLIES

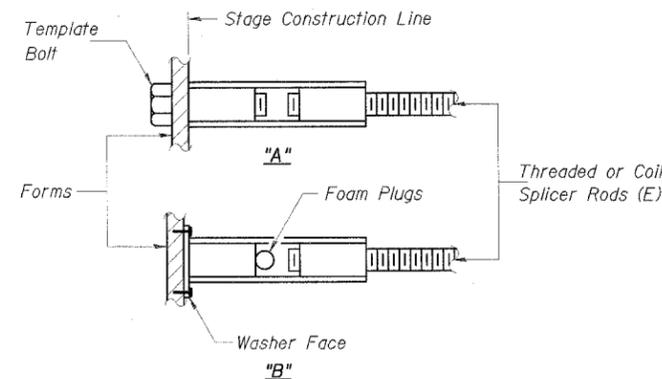
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-8"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#10	7'-3"	95.0	38.0

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



INTEGRAL ABUTMENT BAR SPLICER ASSEMBLY DETAIL FOR #5 BAR

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 116



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.

REVISIONS	
NAME	DATE

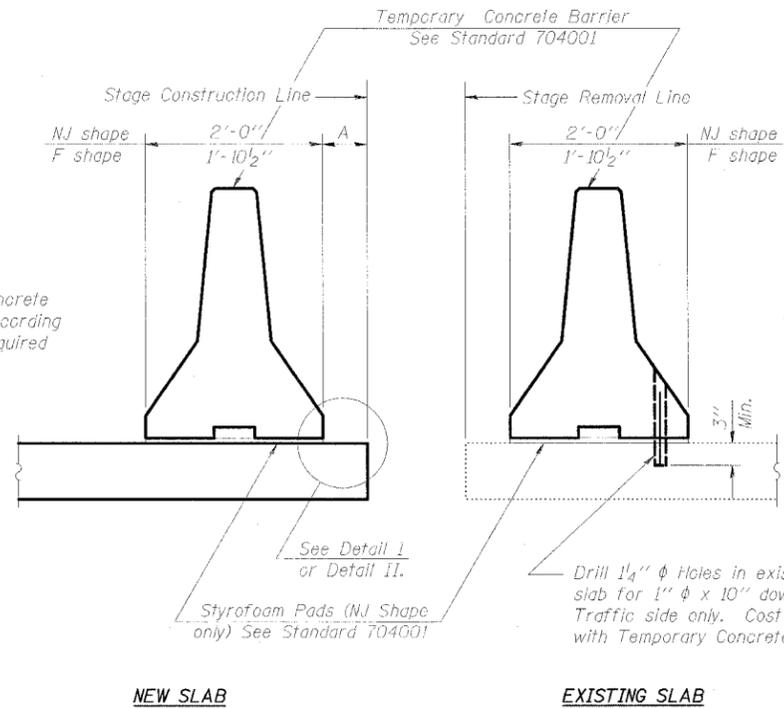
ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICERS
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	40
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60440

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



See Detail I or Detail II.

Styrofoam Pads (NJ Shape only) See Standard 704001

Drill 1/4" ϕ Holes in existing slab for 1" ϕ x 10" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NEW SLAB

EXISTING SLAB

SECTIONS THRU SLAB

NOTES

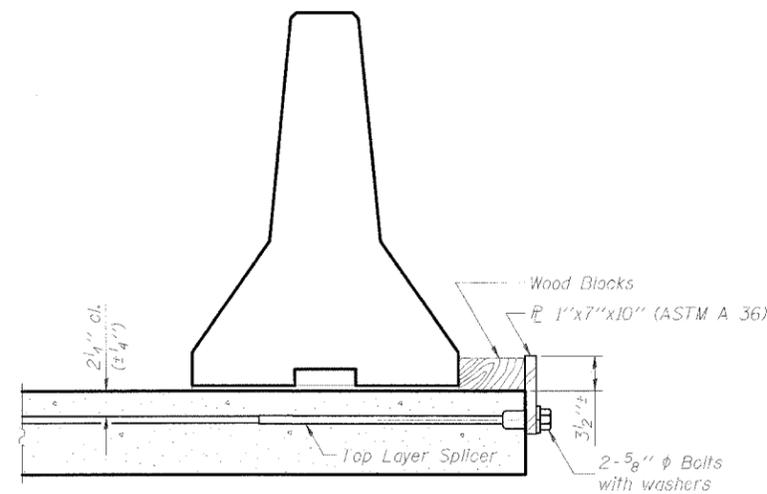
Detail I - With Bar Splicer or Couplers:

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

Detail II - With Extended Reinforcement Bars:

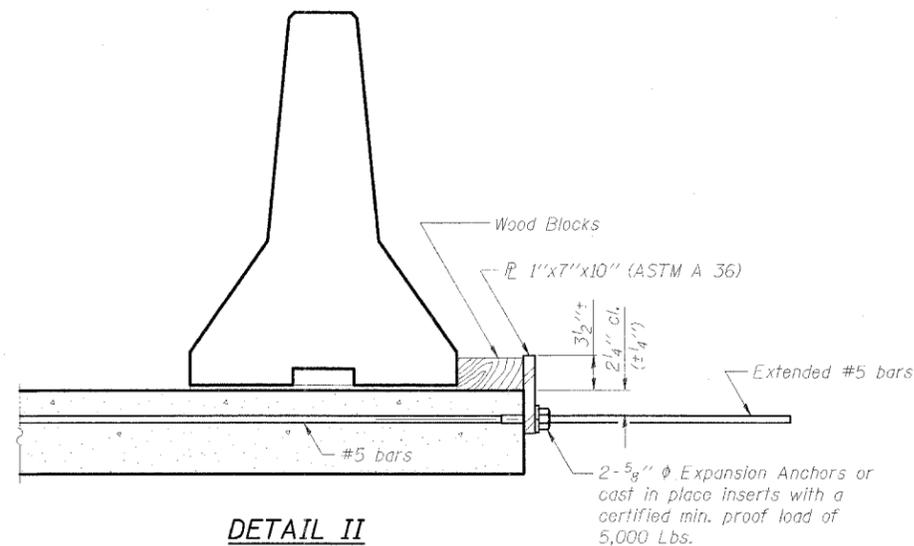
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.



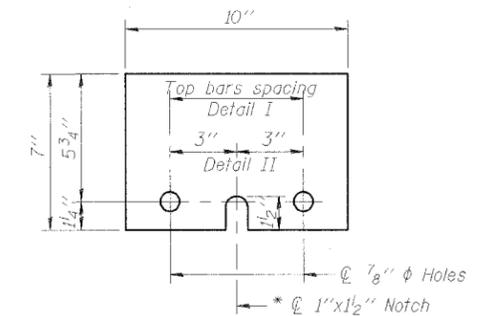
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" 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.



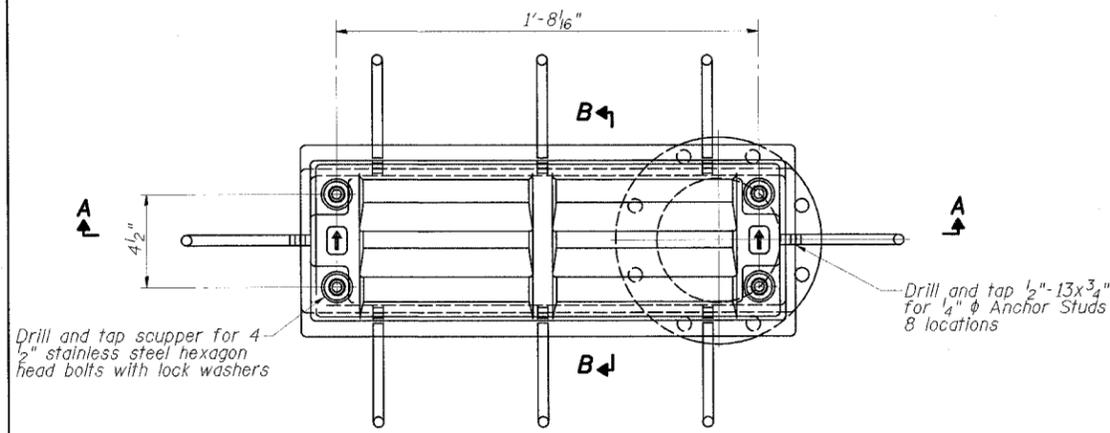
1"x7"x10"

* Required only with Detail II

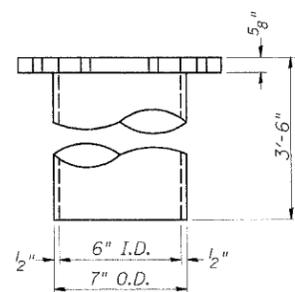
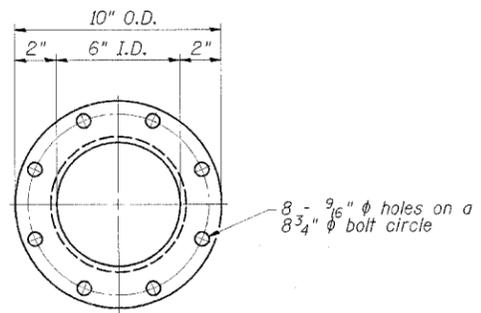
REVISIONS	
NAME	DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	41
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

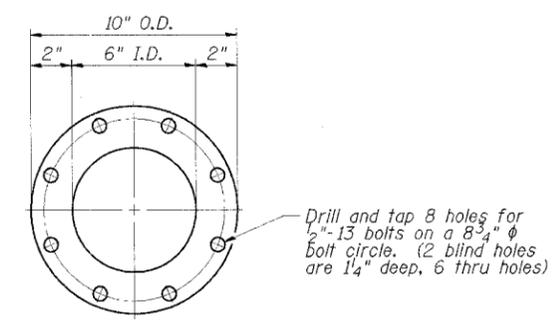
CONTRACT NO. 60440



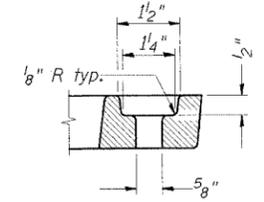
PLAN



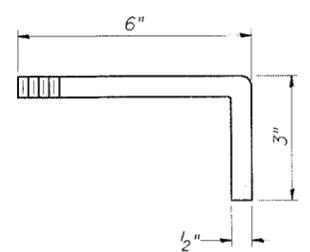
DOWNSPOUT



VIEW C-C



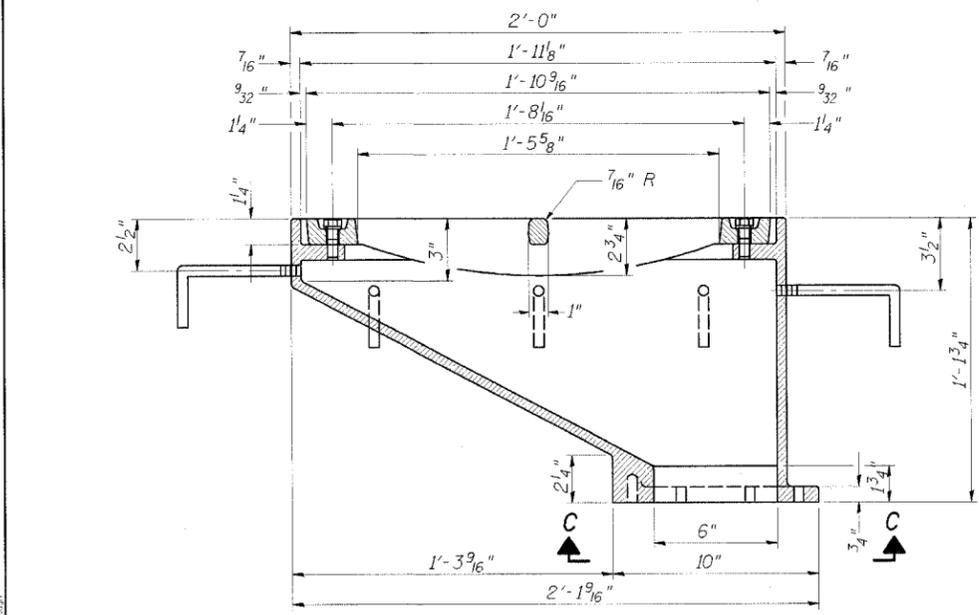
BOLT HOLE DETAIL



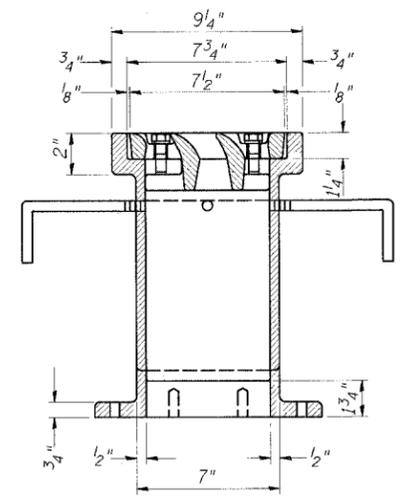
ANCHOR STUD DETAIL

Notes:

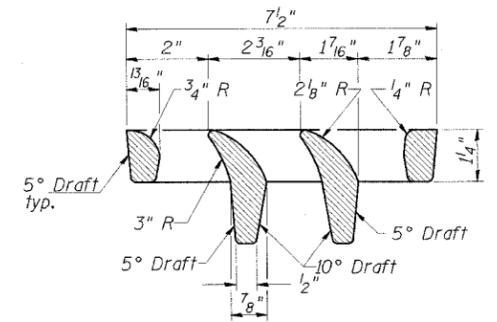
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B. Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232. The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam. As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications. Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper. Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12. For Drainage Scupper locations see Sheet S1.



SECTION A-A



SECTION B-B



VANE GRATE DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-12	Each	4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAINAGE SCUPPER DETAILS
FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
NORTH BRANCH OF THE CHICAGO RIVER
COOK COUNTY STATION 23+65.80
SECTION 57B-31
STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Belton
DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	43
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60440				

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 1
Date 8/8/01

ROUTE FAP-0350 DESCRIPTION IL 50 over N. Branch Chicago River
 SECT. 57B-NRN-3 STRUCT. NO. 016-2782 DRILLED BY PDI SEO 9260.B0
 COUNTY Cook LOCATION Chicago, IL S. 3&4, TWP. 40N, RNG. 13E

Boring No.	DEPTH	BLOW	QU	W	Surface Water Elev.	DEPTH	BLOW	QU	W
	H	S	tsf	%	when drilling	H	S	tsf	%
B-2					578.7				
Station	24 + 43.97				N/A				
Offset	25.00ft L								
Surface Elev.	604.70 ft								
Asphalt 8" over 11" PCC									
Mottled brown clay fill, trace organics, stiff to medium stiff, moist									
	1	1.45	16			6	2.56	16	
	2					10			
	3					9			
Auger refusal at 28.2'									
Boring grouted upon completion.									
Possible utility tunnel at 28.2'									
Broken sample									
	1	.75	27						
	2								
Brown and gray clay loam fill, organic fibers, moist									
	1	1.0	31						
	1								
Broken sample									
	1								
Brown clay, stiff to very stiff, moist									
	0	1.03	26						
	1								
	2								
Grades with wood and crushed stone									
	5	1.86	21						
	7								
	10								
Wood									
	6								
	3								
	11								
Wood and crushed stone									
	7	3.5	77						
	12								
	7								
No recovery									
	4								
	5								
	7								

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 2
Date 8/9/01

ROUTE FAP-0350 DESCRIPTION IL 50 over N. Branch Chicago River
 SECT. 57B-NRN-3 STRUCT. NO. 016-2782 DRILLED BY PDI SEO 9260.B0
 COUNTY Cook LOCATION Chicago, IL S. 3&4, TWP. 40N, RNG. 13E

Boring No.	DEPTH	BLOW	QU	W	Surface Water Elev.	DEPTH	BLOW	QU	W
	H	S	tsf	%	when drilling	H	S	tsf	%
B-3					Dry				
Station	23 + 02.72				Dry				
Offset	26.00ft R								
Surface Elev.	604.68 ft								
Asphalt 8" over 11" PCC									
Gray brown silty clay fill, trace organics, stiff, moist									
	1	.99	19			5	4.54	17	
	3					8			
	3					12			
Gray clay very stiff to hard with wood pieces, moist									
	8	4.54	17						
	11								
	12								
Grades with wood and crushed stone									
	2	.91	21						
	2								
	3								
Gray clay (possible fill), medium stiff to stiff, moist									
	1	.66	18			5	3.5	15	
	1					10			
	2					11			
	2					11			
Grades with wood and crushed stone									
	4	1.5	21						
	11								
	3								
Wood									
	6					7	6.40	13	
	3					12			
	11					12			
Wood and crushed stone									
	7	3.5	77						
	12								
	7								
Stiff to very stiff									
	4					16	1.65	23	
	5					26			
	7					36			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 2 of 2
Date 8/9/01

STRUCTURE NO. 016-2782 ROUTE FAP-0350
 ROUTE FAP-0350 SECTION 57B-NRN-3 COUNTY Cook
 SECTION 57B-NRN-3 COUNTY Cook

Boring No.	DEPTH	BLOW	QU	W	Surface Water Elev.	DEPTH	BLOW	QU	W
	H	S	tsf	%	when drilling	H	S	tsf	%
B-3					Dry				
Station	23 + 02.72				Dry				
Offset	26.00ft R								
Surface Elev.	554.68 ft								
Gray clay, stiff to hard, moist									
	5	4.54	17						
	8								
	12								
Gray silty clay, hard, moist									
	8	4.54	17						
	11								
	12								
Sampler and auger refusal									
	5	5.0	11						
	12								
	15								
Hard, fresh, gray, dolomite limestone with tight undulation horizontal joints.									
	6	4.5+	22						
	12								
	15								
Open planar horizontal joint at 68.7'									
NX Rock Core 64.25' to 74.25'									
100% Recovery									
97% HQD									
Chert nodules at 69.2'									
Stylolite bedding at 73.3'-73.6'									
End of Boring at 74.2'									

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BORING LOGS 1
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

SCALE: NONE DRAWN BY: M. Beiton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-31	COOK	62	44
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60440

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 1
Date 9/14/01

ROUTE FAP-0350 DESCRIPTION IL 50 over N. Branch Chicago River
 SECT. 57B-NRN-3 STRUCT. NO. 016-2782 DRILLED BY PDI JTD 9260.B0
 COUNTY Cook LOCATION Chicago, IL S. 3&4, TWP. 40N, RNG. 13E

Boring No.	Station	Offset	Surface Elev.	DEPTH	BLOWS	Qu	W	Surface Water Elev.	Groundwater Elev.:	when drilling	at Completion	Hrs.	DEPTH	BLOWS	Qu	W
B-4	24 + 23.85	28.00ft R	605.24 ft					N/A	Dry	N/A						
Asphalt overlaid concrete pavement 603.84																
Dark brown silty clay fill, soft to medium stiff, moist																
				2	0.5	P										
Borehole abandoned after encountering obstruction at 16.5'																
Fill samples were disturbed preventing accurate Firmac compression tests																
				1	1.75	P										
				2	0.75	P										
Grades with wood																
				1	0.5	P										
				2												
Sampler refusal at 16.5'																
			588.74	16		NS										
Concrete Auger refusal																
			587.24													
End of Boring at 18.0'. Borehole grouted upon completion.																

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 2
Date 12/19/01

ROUTE FAP-0350 DESCRIPTION IL 50 over N. Branch Chicago River
 SECT. 57B-NRN-3 STRUCT. NO. 016-2782 DRILLED BY PDI JTD 9260.B0
 COUNTY Cook LOCATION Chicago, IL S. 3&4, TWP. 40N, RNG. 13E

Boring No.	Station	Offset	Surface Elev.	DEPTH	BLOWS	Qu	W	Surface Water Elev.	Groundwater Elev.:	when drilling	at Completion	Hrs.	DEPTH	BLOWS	Qu	W
B-5	24 + 43.80	21.00ft R	605.31 ft					N/A	Dry	N/A						
Asphalt overlaid concrete pavement 603.65																
Black and gray sandy clay fill, trace brick, soft, moist																
				2	0.5	23										
				2	E											
			599.81	1												
Gray brown silty clay fill, soft to medium stiff, moist																
				2	0.8	19										
				2	B											
				3												
				2	1.6	22										
				3	B/S											
				4												
			594.81													
Brown clay to silty clay, very stiff to hard, moist																
				2	2.4	25										
				5	B/S											
				8												
				5	5.3	19										
				10	B/S											
				18												
			589.81													
Gray silty clay, very stiff to hard, moist																
				6	4.9	18										
				11	B											
				13												
				3	2.4	19										
				8	B											
				9												
				2	2.4	19										
				7	B											
				12												
				7	2.4	18										
				8	B											
				11												
			557.31													
Gray clay, stiff, moist																
				3	1.4	33										
				5	B											
				8												
			555.31													

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 2 of 2
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STRUCTURE NO. 016-2782 STRUCTURE NO. 016-2782
 ROUTE FAP-0350 ROUTE FAP-0350
 SECTION 57B-NRN-3 SECTION 57B-NRN-3
 COUNTY Cook COUNTY Cook

Boring No.	Station	Offset	Surface Elev.	DEPTH	BLOWS	Qu	W	Surface Water Elev.	Groundwater Elev.:	when drilling	at Completion	Hrs.	DEPTH	BLOWS	Qu	W
B-5	24 + 43.80	21.00ft R	555.31 ft													
Gray clay, stiff, moist																
				2	3.3	18										
				6	B											
				9	7.0	16										
				16	B											
				27												
				3	1.4											
				5	B											
				8												
			546.31													
Gray silt, very dense, moist																
				13		13										
				26	NP											
				32												
			542.81													
Auger refusal																
Hard, fresh, gray aphanitic dolomitic limestone with stylonite bedding, horizontal undulating tight joints along chert nodule at 63.4', 69.8', 75.0' and 71.1'.																
NX Core #1 62.5 to 72.5 feet 98% Recovery 96% RQD																
				6	6.8	11										
				16	B											
				19												
				9	7.4	13										
				16	S											
				18												
				2	2.4	19										
				7	B											
				12												
				7	2.4	18										
				8	B											
				11												
			532.81													
End of Boring at 72.5' Boring grouted at completion.																

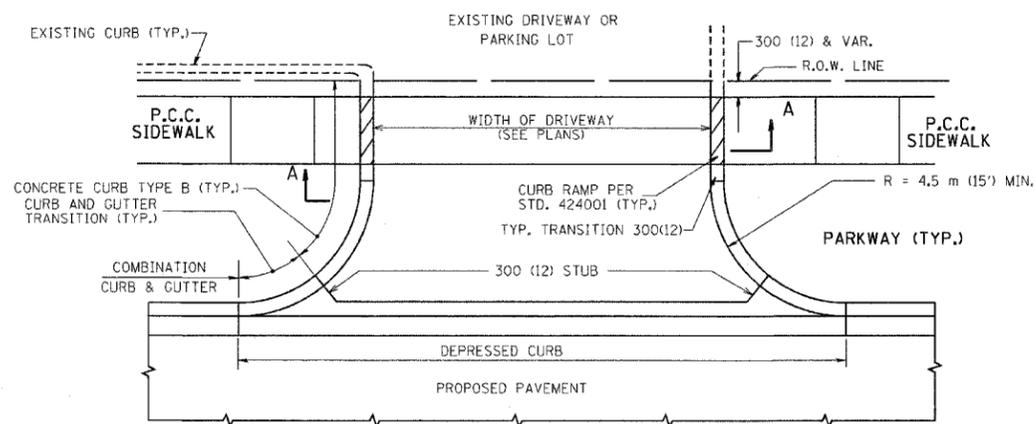
SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet



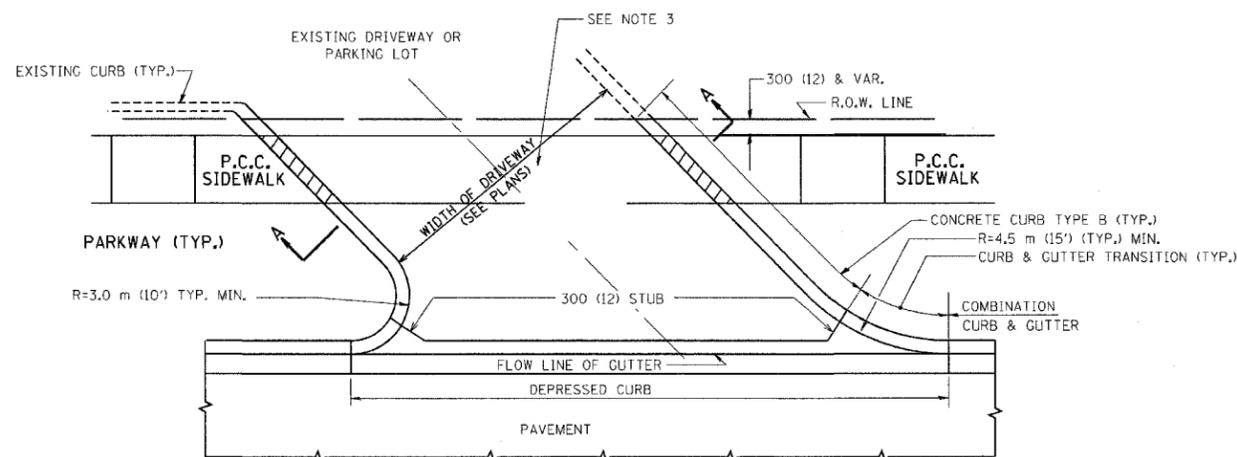
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BORING LOGS 11
 FAP 350 IL ROUTE 50 (CICERO AVE.) OVER
 NORTH BRANCH OF THE CHICAGO RIVER
 COOK COUNTY STATION 23+65.80
 SECTION 57B-31
 STRUCTURE NO. 016-2782

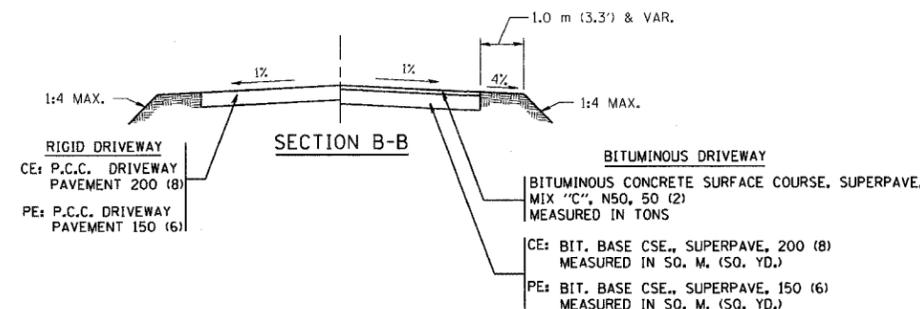
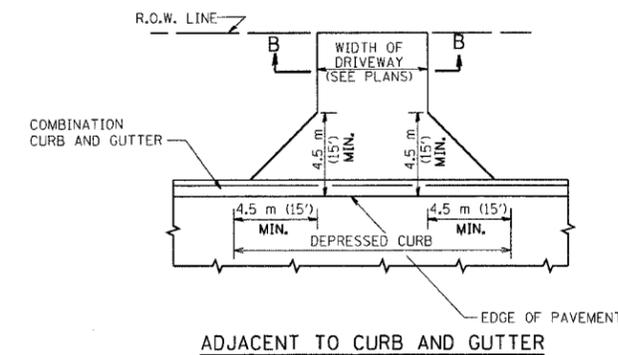
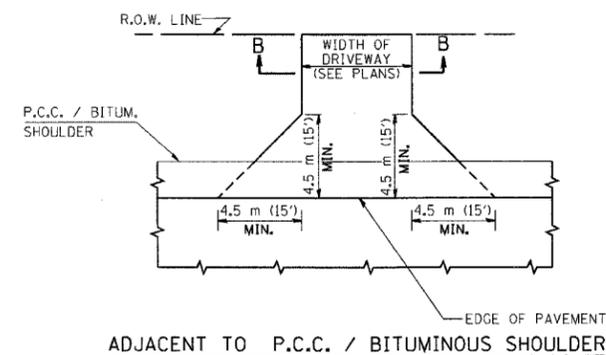
SCALE: NONE DRAWN BY: M. Belton
 DATE: AUGUST 18, 2006 CHECKED BY: R. Clinton



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

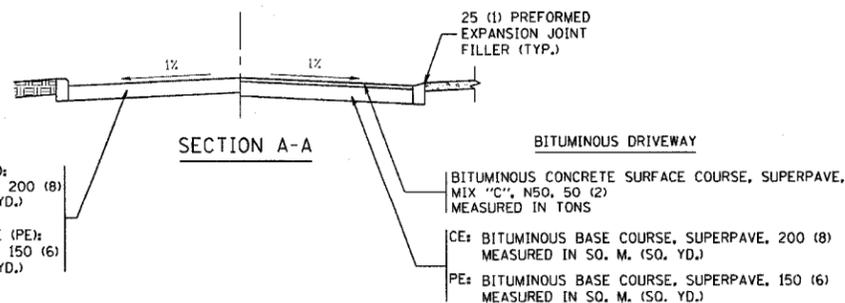
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 1.2 METERS (4 FEET) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

25 (1) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE
P. Lefleur	04-15-03
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS

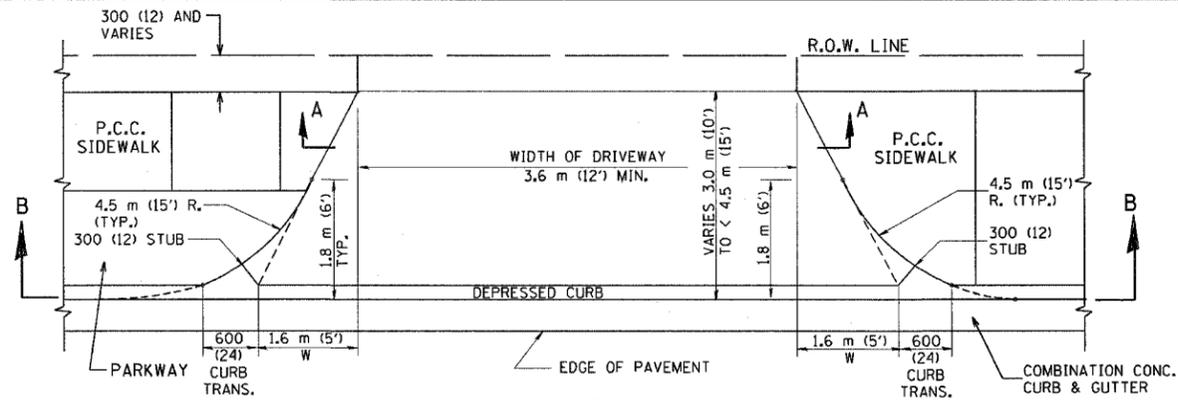
DISTANCE BETWEEN R.O.W. AND FACE OF CURB / EDGE OF SHOULDER >= 4.5 m (15')

SCALE: VERT. HORIZ. DATE: 2/15/2006

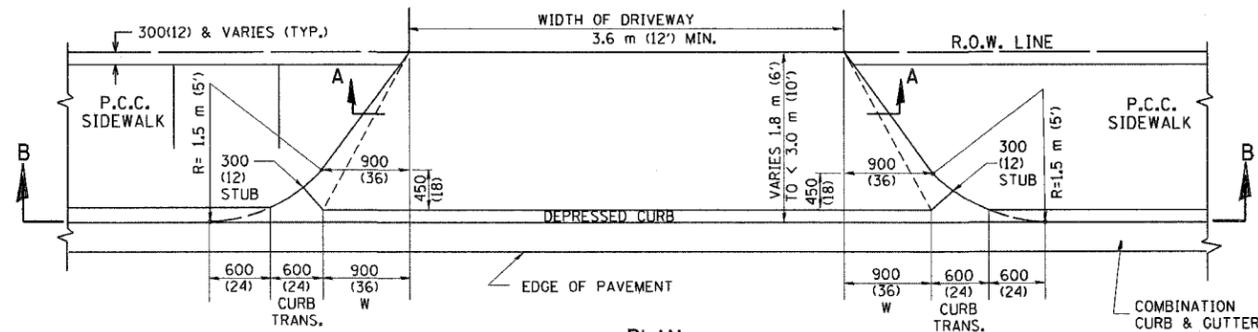
DRAWN BY CHECKED BY

BD400-01 (BD-01) REVISION DATE: 04/15/03

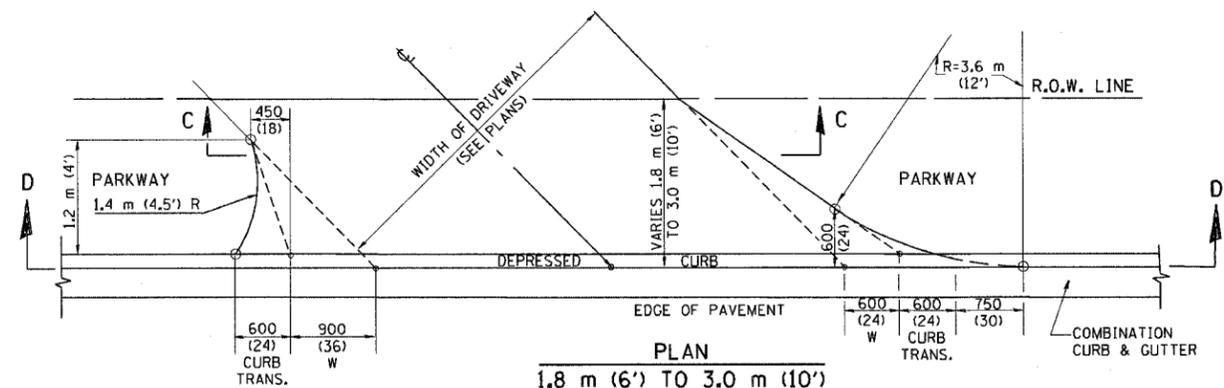
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			62	48
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



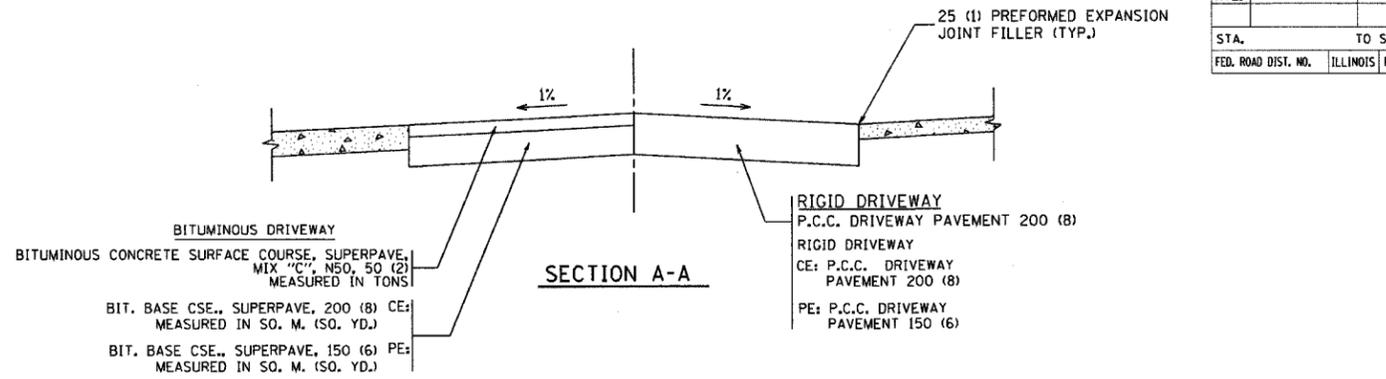
PLAN
3.0 m (10') TO < 4.5 m (15')



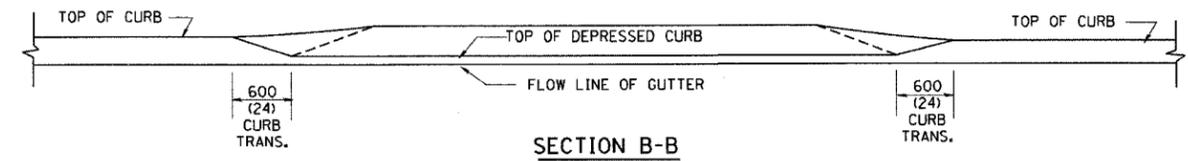
PLAN
1.8 m (6') < 3.0 m (10')



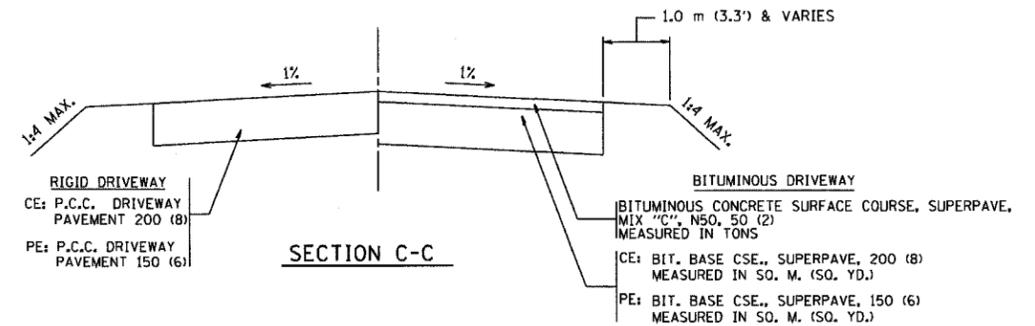
PLAN
1.8 m (6') TO 3.0 m (10')



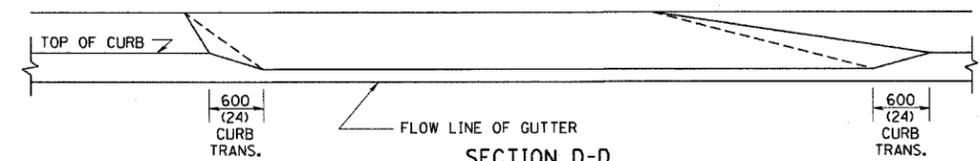
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 2.4 M (8'), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

25 (1) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 900 (36) TO 1.5 m (5 FT.) PROPORTIONAL TO THE LENGTH (L), FROM 1.8 m (6 FT.) TO 3 m (10 FT.).

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

REVISIONS	
NAME	DATE
P. LOFLEUR	04/15/03
M. GOMEZ	04/06/01
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97

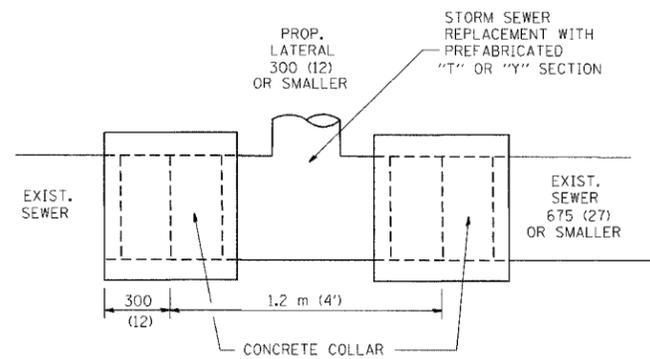
ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 4.5 m (15')

SCALE: VERT.
HORIZ.
DATE: 2/15/2006

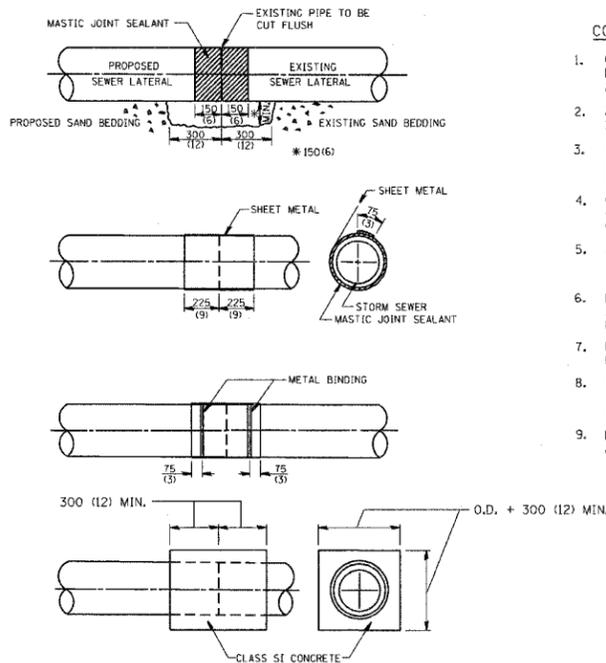
DRAWN BY
CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			62	49
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



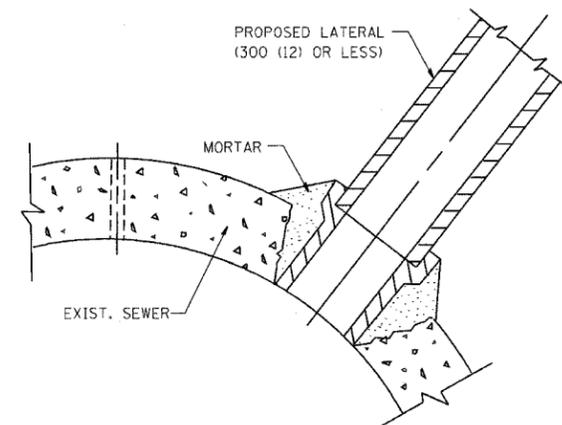
DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER



DETAIL "B"

CLASS SI CONCRETE COLLAR



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 x 150 (12 x 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 450 (18) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 75 (3) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

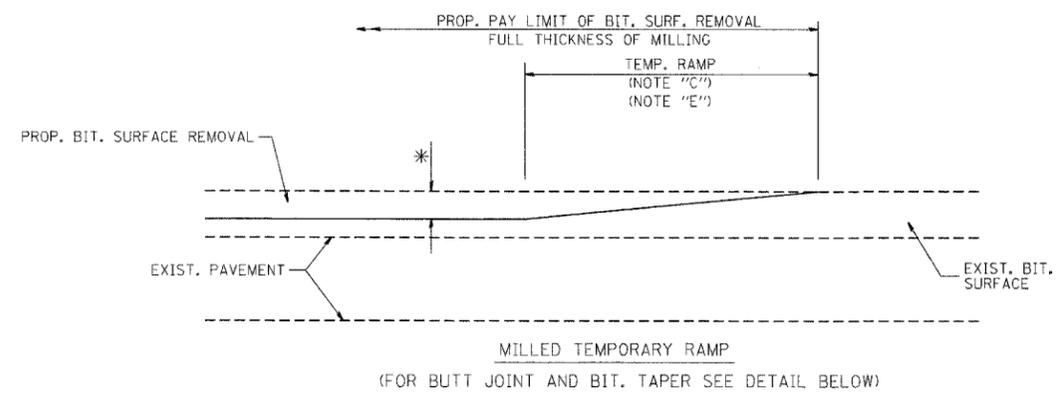
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: VERT.
 HORIZ.
 DATE: 2/15/2006

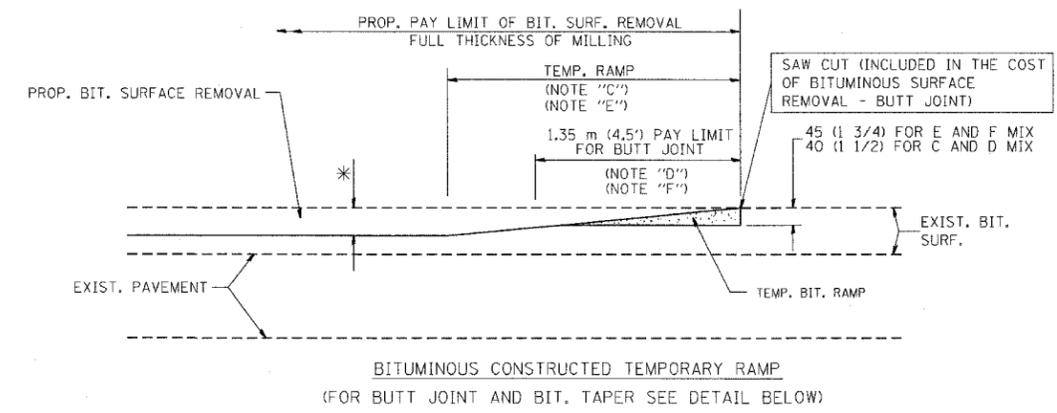
DRAWN BY
 CHECKED BY

BD500-01 (BD-7)
 REVISION DATE: 06/12/96

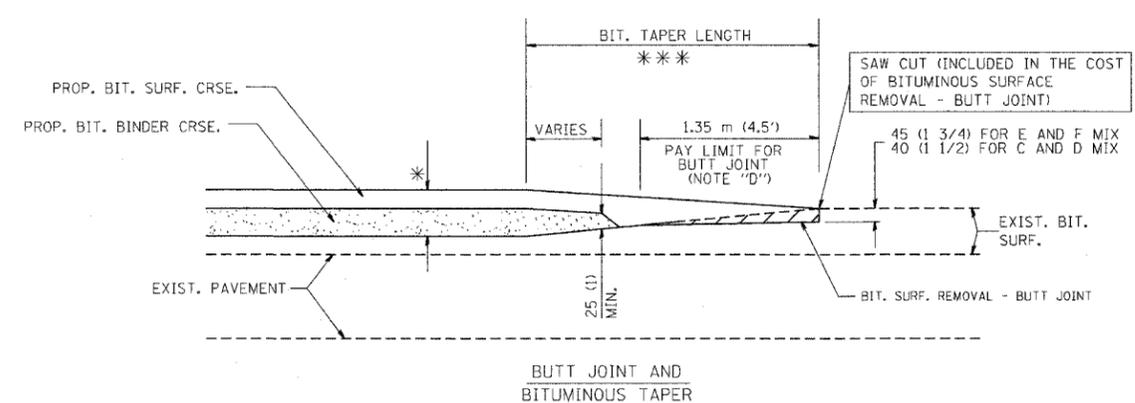
CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
			62
SHEET NO.		50	
STA.		TO STA.	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



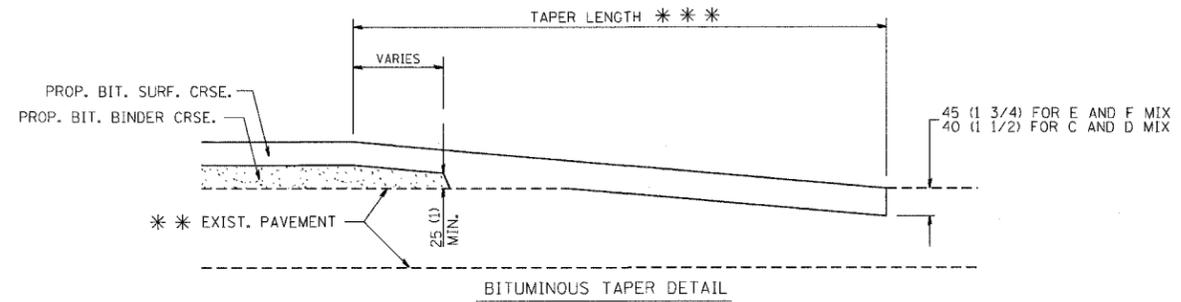
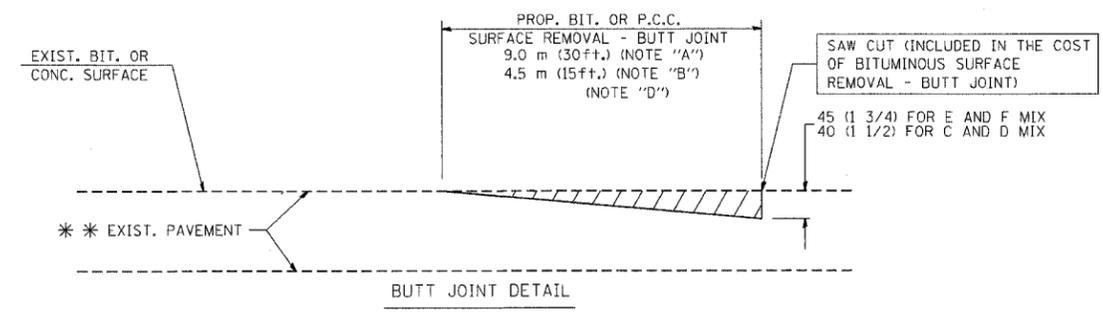
OPTION 1



**OPTION 2
TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND BITUMINOUS TAPER
FOR MILLING AND RESURFACING**



**TYPICAL BUTT JOINT AND BITUMINOUS TAPER
FOR RESURFACING ONLY**

*** PC CONCRETE, BITUMINOUS OR BITUMINOUS 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 BITUMINOUS SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
 - G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

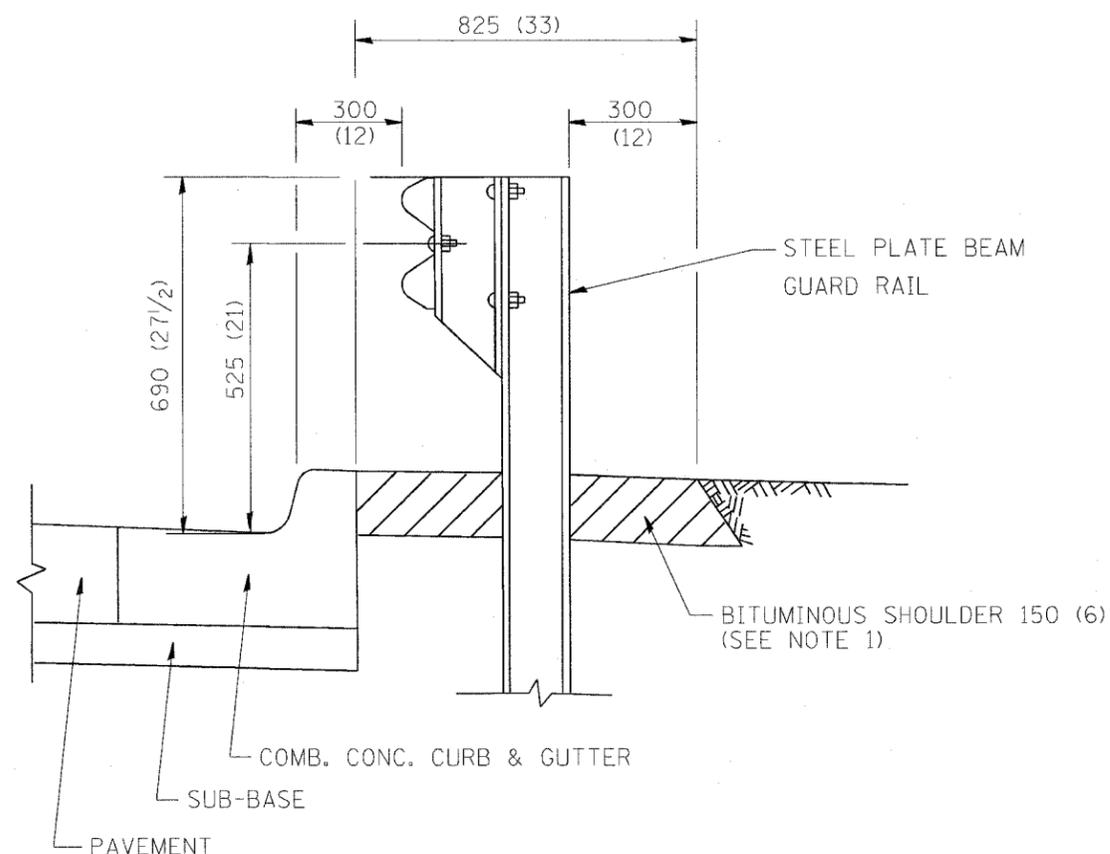
SCALE: VERT. HORIZ. DATE: 2/15/2006

DRAWN BY CHECKED BY

BD400-05 (VI-BD32) REVISION DATE: 04/06/01

PLOT DATE = 2/15/2006
FILE NAME = M:\data\bd400\bd02.dgn
PLOT SCALE = 400/1000 / IN.
USER NAME = gregjames

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
			62
			51
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

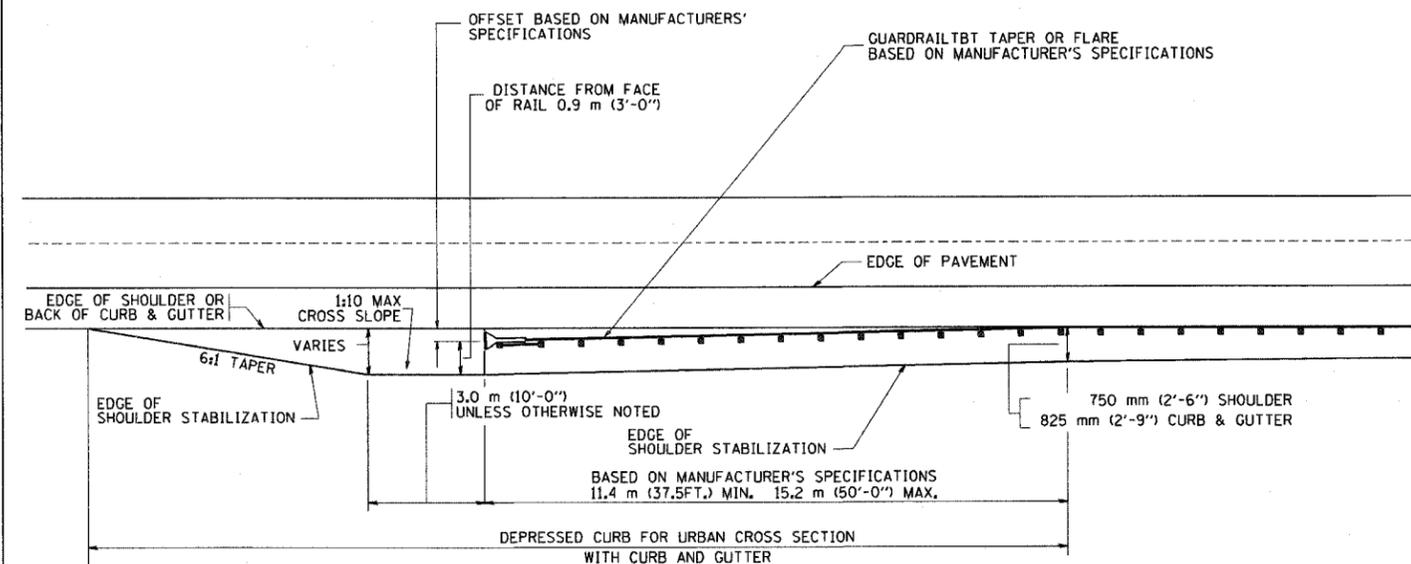


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: BITUMINOUS SHOULDER 150 (6) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER m² (sq. yd.) AS "BITUMINOUS SHOULDER 150 (6)."

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
[FOR ROADWAY SPEED 60 kmh (35 MPH) TO 70 kmh (45 MPH)]



STABILIZATION AT TBT TY. 1 SPL.

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

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR
STEEL PLATE BEAM GUARD RAIL
ADJACENT TO CURB AND GUTTER
STABILIZATION AT TBT TY 1 SPL.

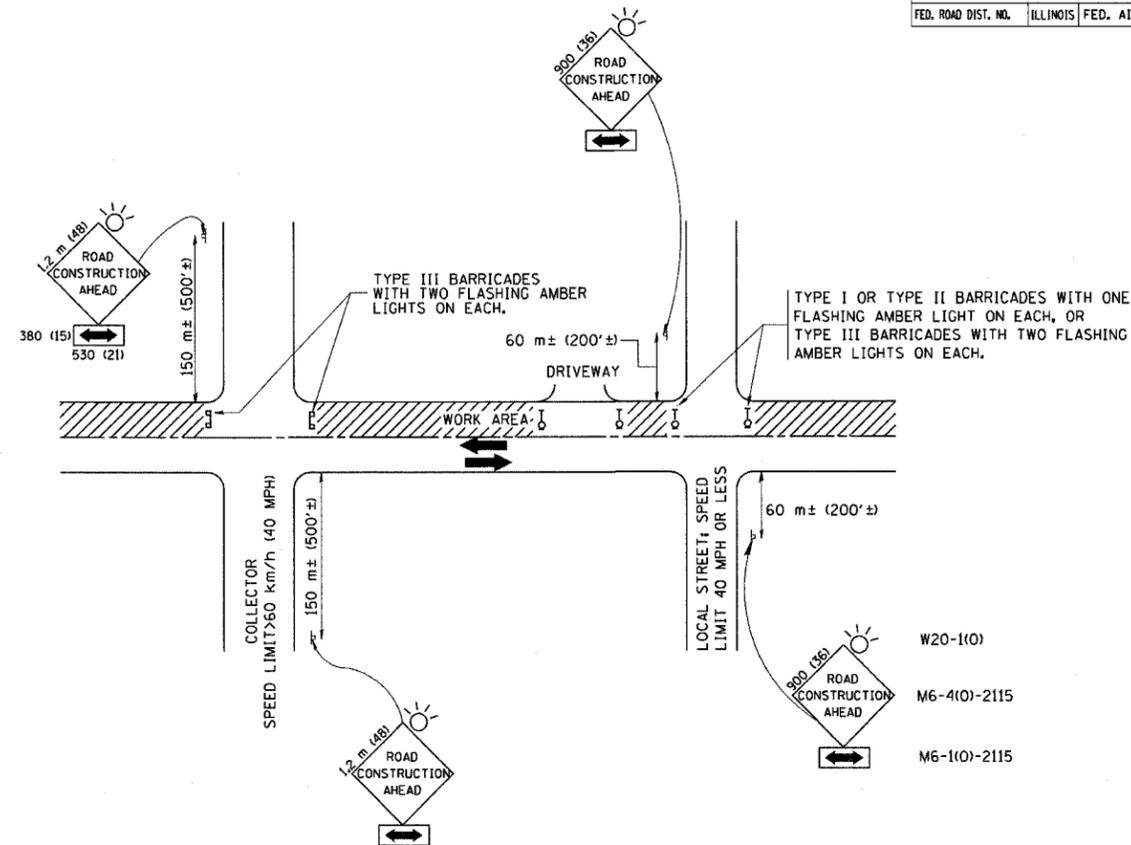
VERT. SCALE: HORIZ. DATE: 2/15/2006

DRAWN BY JIS
CHECKED BY

BD600-10 (BD 34)
REVISION DATE: 08/28/00

PLOT DATE: 2/15/2006
FILE NAME: M:\projects\bd600\bd600.dgn
PLOT SCALE: 481183.2395 1' = 1"
USER NAME: greggiant

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
			62
SHEET NO.			52
STA.		TO STA.	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
 - THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

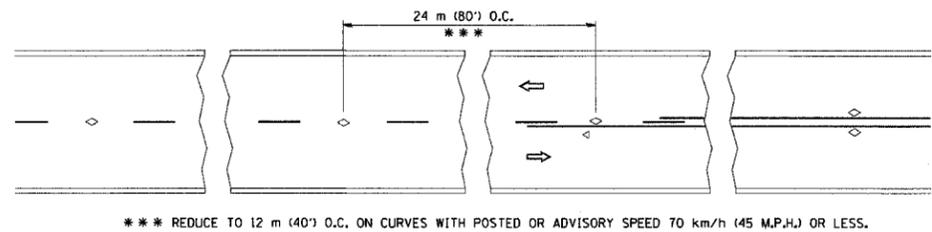
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE:
 DATE: 2/15/2006

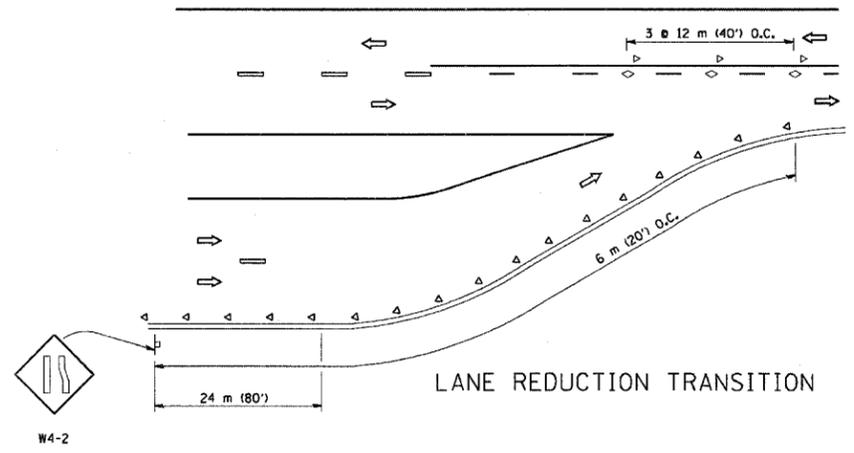
DRAWN BY
 CHECKED BY
 TC-10

REVISION DATE: 01/06/00

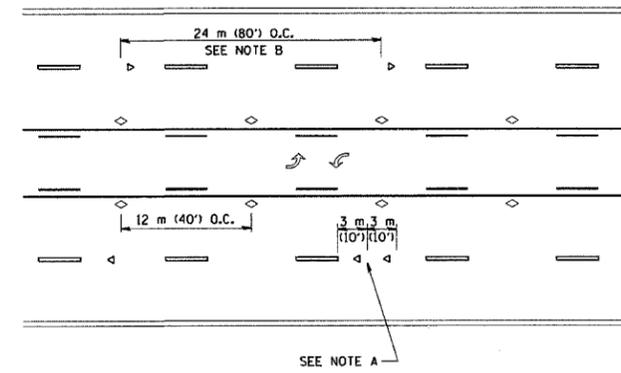
PLOT DATE : 2/15/2006
 PLOT SCALE : 1/8" = 1'-0"
 USER NAME : epljlm001



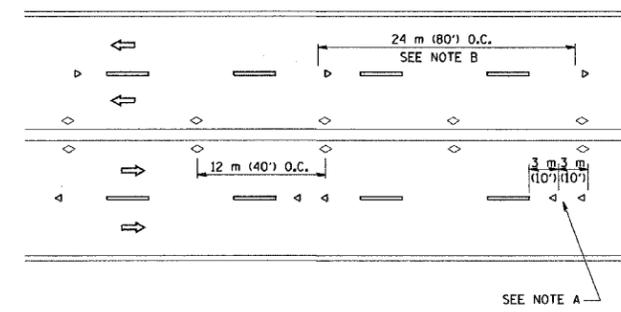
TWO-LANE/TWO-WAY



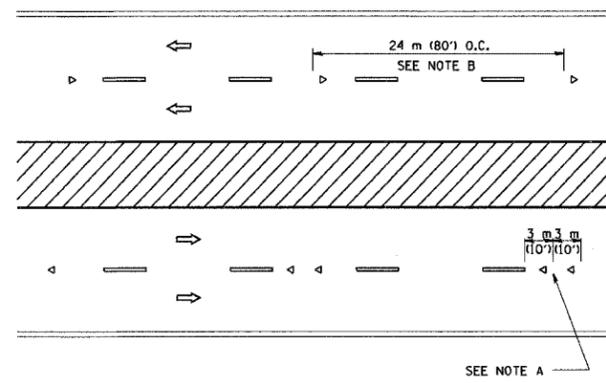
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

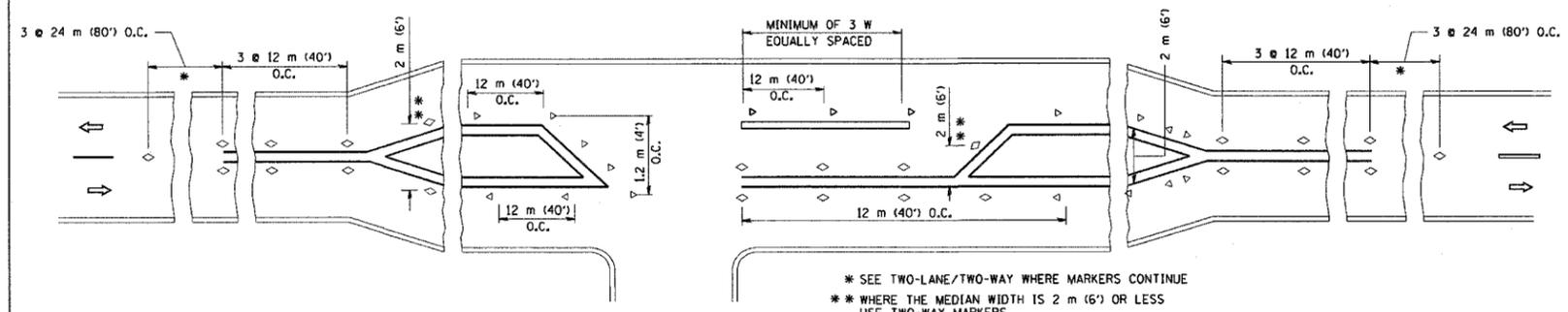
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◇ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

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

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

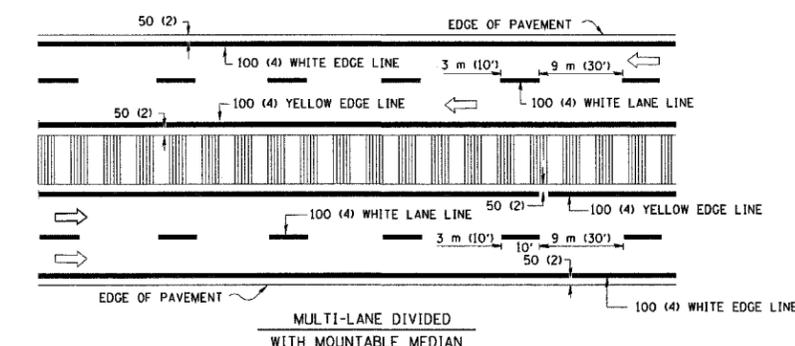
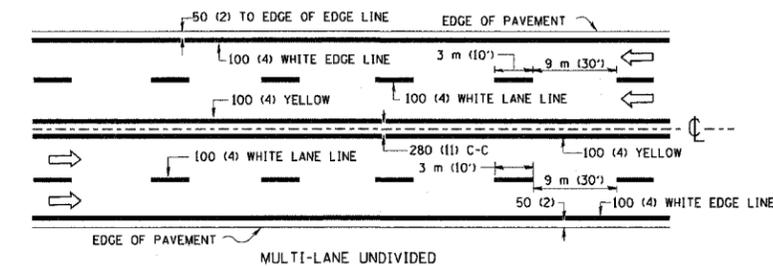
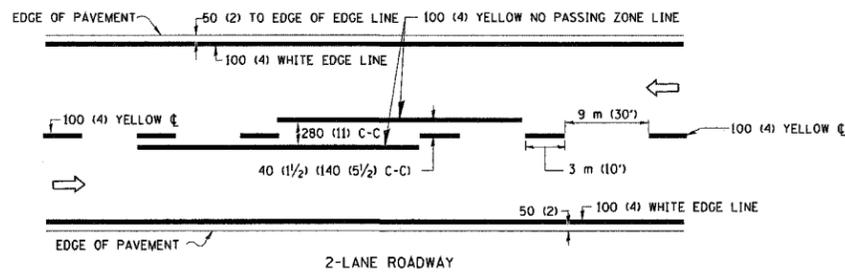
ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE
DATE: 2/15/2006

DRAWN BY CADD
CHECKED BY
TC-11

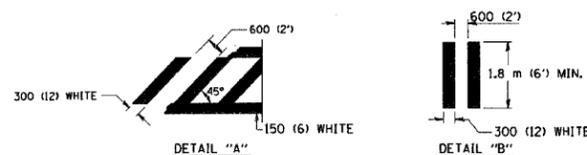
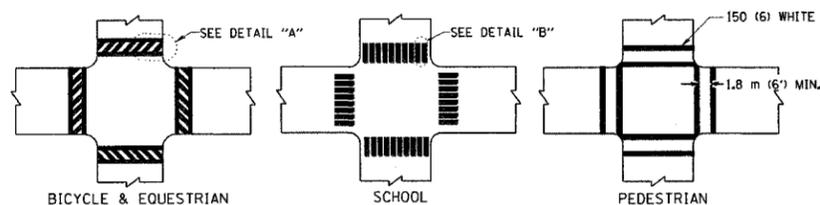
REVISION DATE: 01/06/00

PLOT DATE = 2/15/2006
PLOT SCALE = 1:1
PLOT USER = gregjones
USER NAME = gregjones

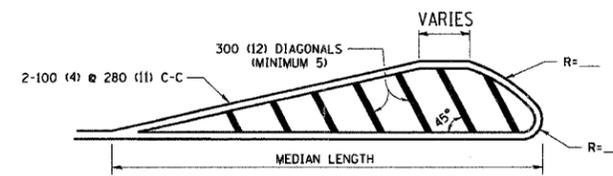
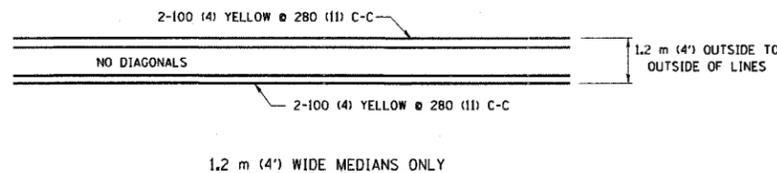


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

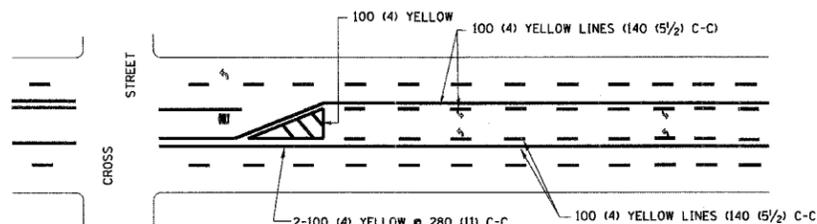


TYPICAL CROSSWALK MARKING

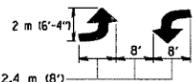


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

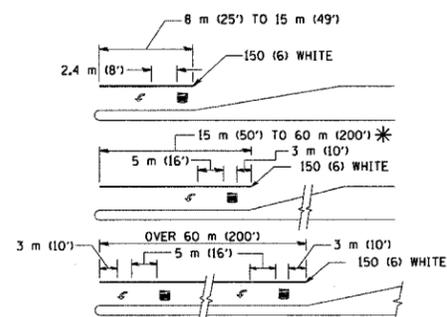


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

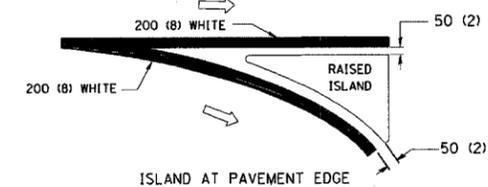
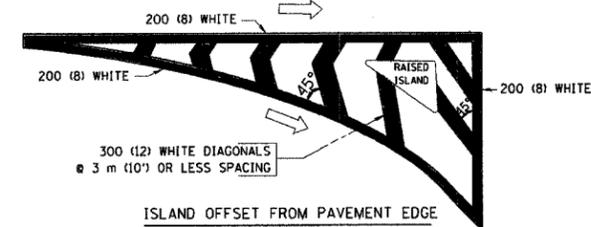


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. AREA = 1.5 m² (115.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)

* TURN LANES IN EXCESS OF 120 m (400') 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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) 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 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

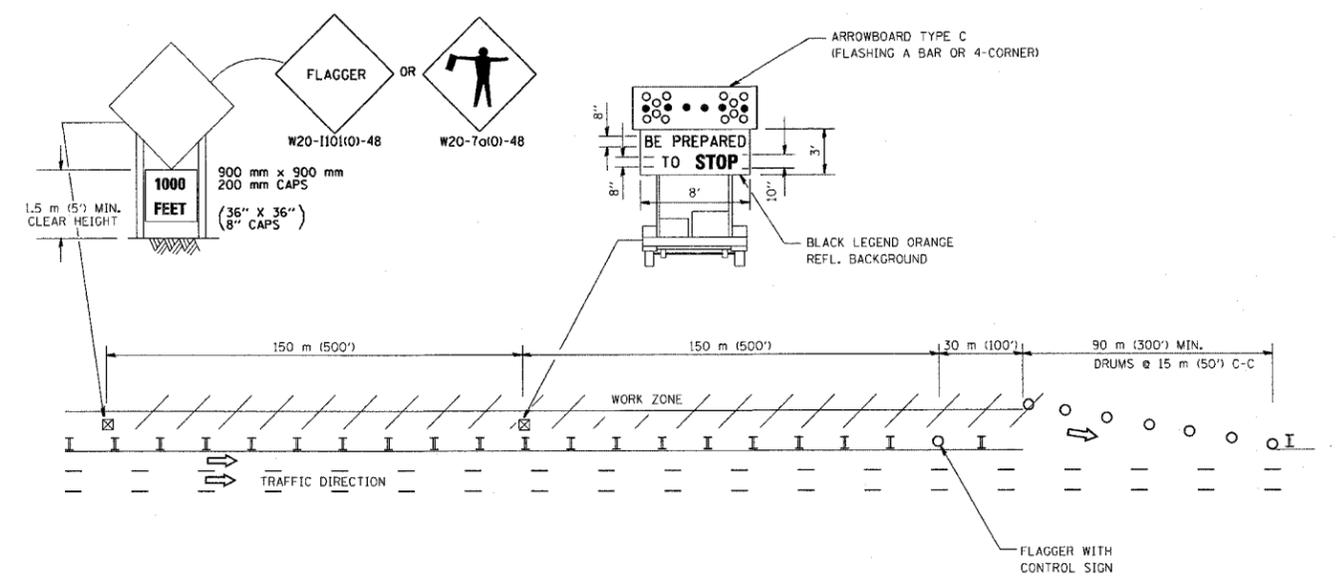
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 DATE: 2/15/2006

DRAWN BY CADD
 CHECKED BY
 TC-13
 REVISION DATE: 01/06/00

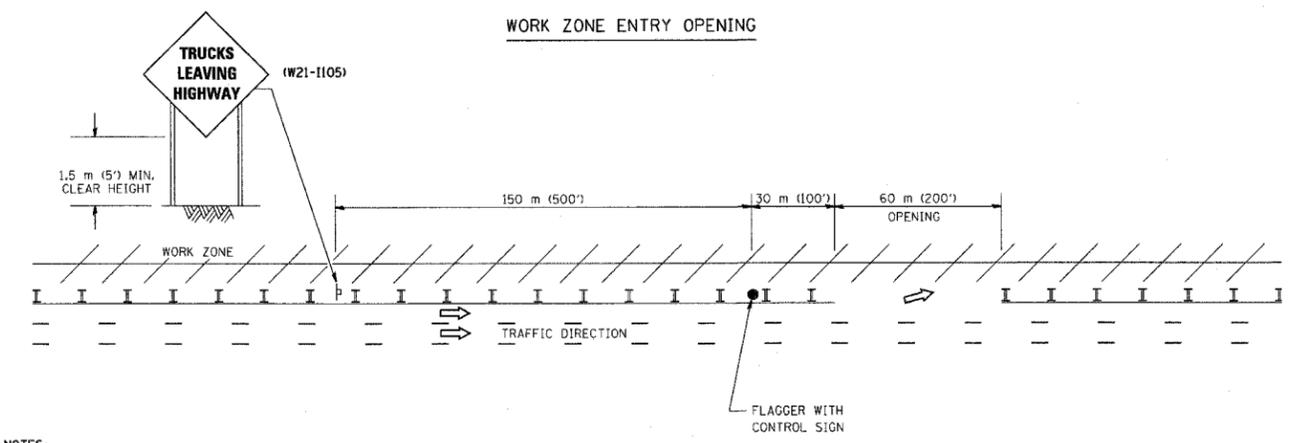
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			62	55
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06

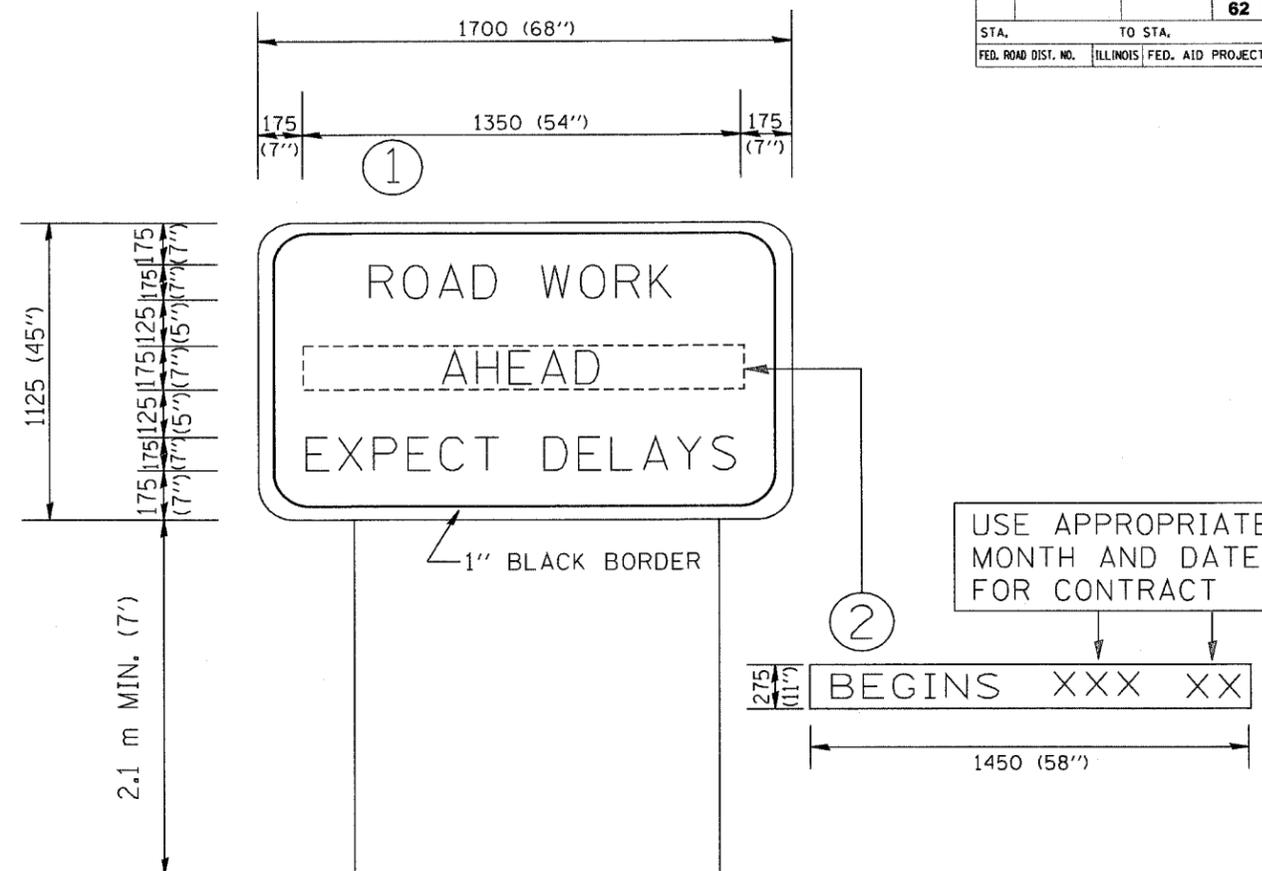
ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE
DATE: 3/1/2006

DRAWN BY CADD
CHECKED BY TC-18

REVISION DATE: 02/28/06

PLOT DATE = 3/1/2006
FILE NAME = K:\data\12\1218.dgn
PLOT SCALE = 50:000 / 1"
USER NAME = Taylor



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 2.3 SQ. M. (25.70 SQ. FT.)

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

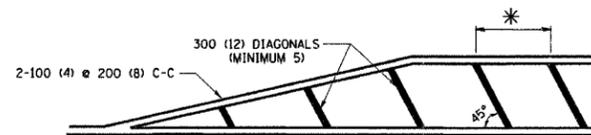
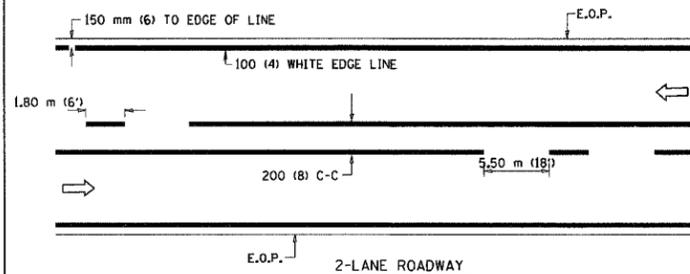
REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INFORMATION SIGNING

SCALE:
DATE: 2/15/2006

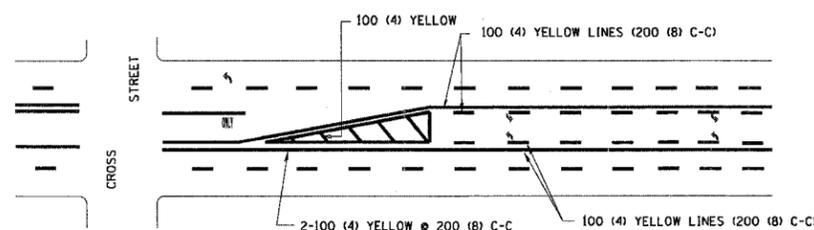
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CHECKED BY

TC22
REVISION DATE: 02/02/99

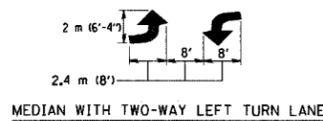


* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 * DIAGONAL LINE SPACING: 6.1 m (20') C-C

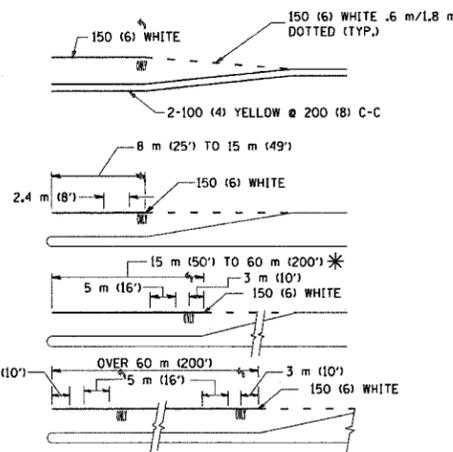
PAINTED MEDIANS



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



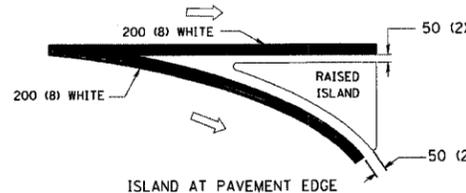
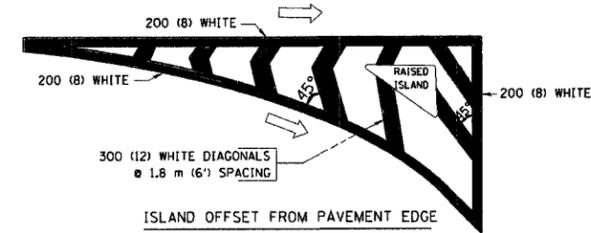
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. AREA = 1.47 m² (15.8 SQ. FT.) ONLY AREA = 2.13 m² (22.9 SQ. FT.)
 * TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

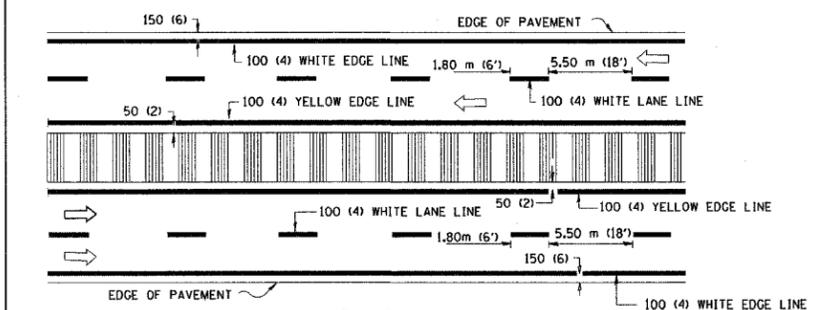
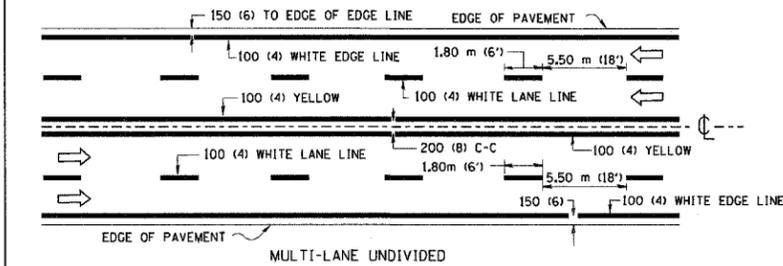
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



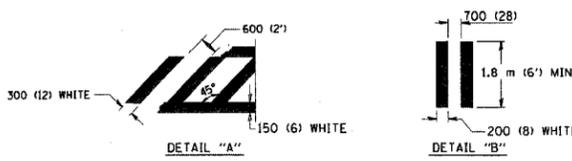
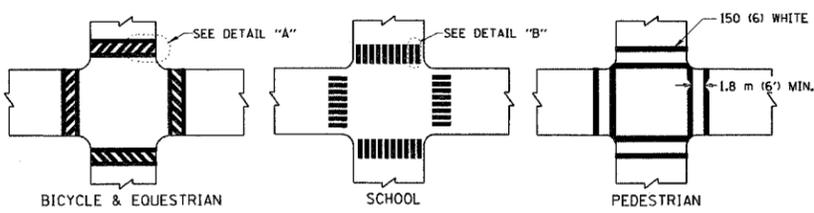
TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	1.80 m (6') LINE WITH 5.50 m (18') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	200 (8) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	200 (8) C-C
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	1.80 m (6') LINE WITH 5.50 m (18') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	1.8 m (6') LINE WITH 5.50 m (18') SPACE FOR SKIP-DASH; 200 (8) 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 @ 150 (6) 300 (12) @ 45° 200 (8) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 700 (2'-4") APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK; IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	200 (8) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS; 6.1 m (20') (LESS THAN 50 km/h (30 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)



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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

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

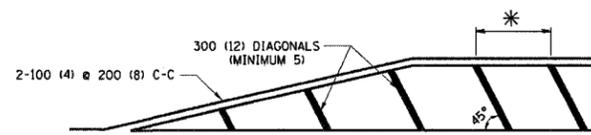
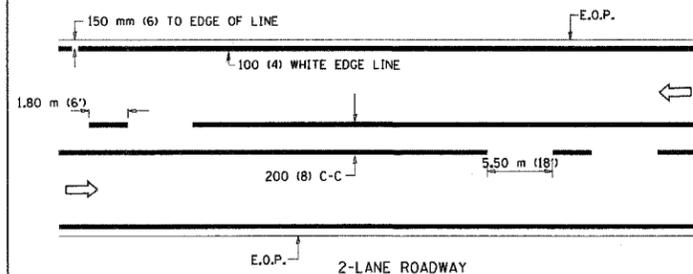
All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF CHICAGO
 TYPICAL PAVEMENT MARKINGS

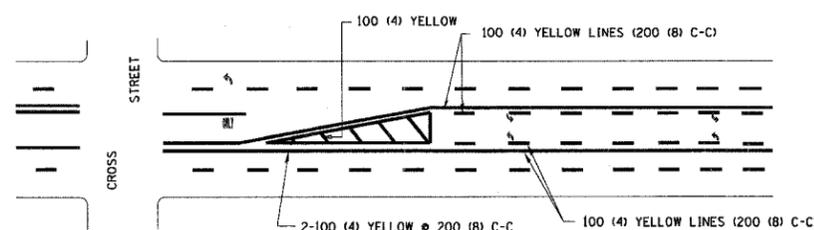
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 CHECKED BY
 TC-24
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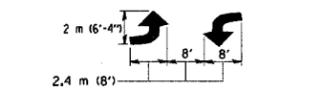


* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 * DIAGONAL LINE SPACING: 6.1 m (20') C-C

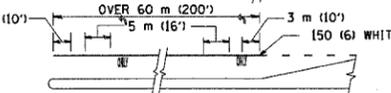
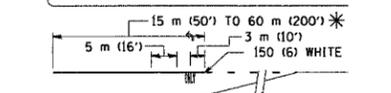
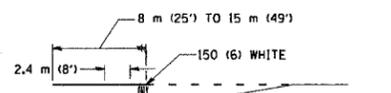
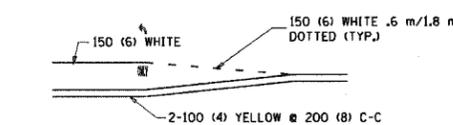
PAINTED MEDIANS



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



TYPICAL PAINTED MEDIAN MARKING

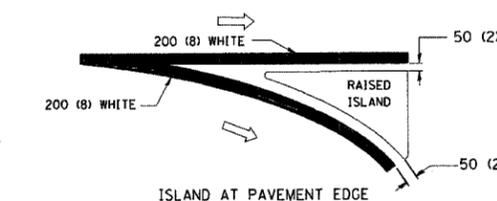
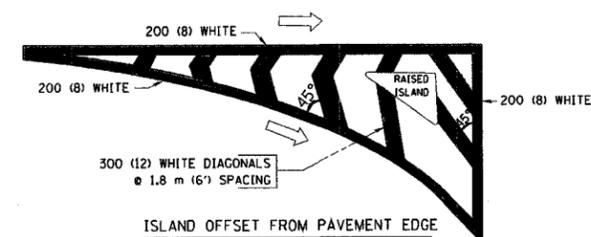


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. AREA = 1.47 m² (15.8 SQ. FT.) ONLY AREA = 2.13 m² (22.9 SQ. FT.)

* TURN LANES IN EXCESS OF 120 m (400') 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

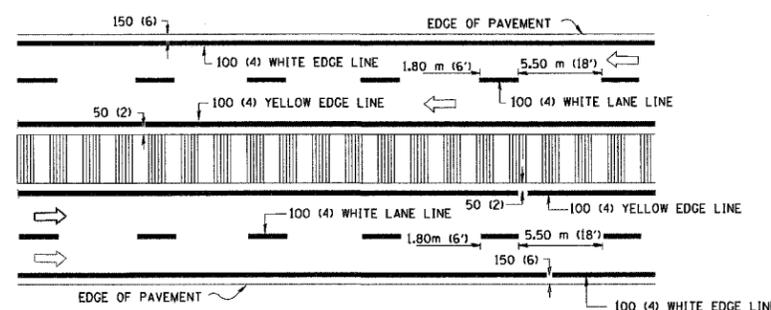
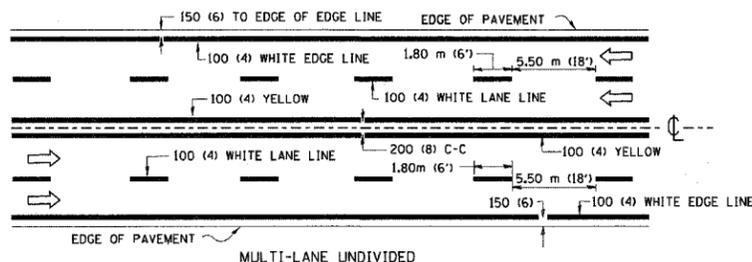
TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

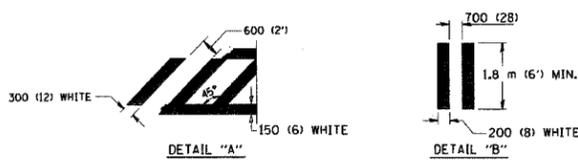
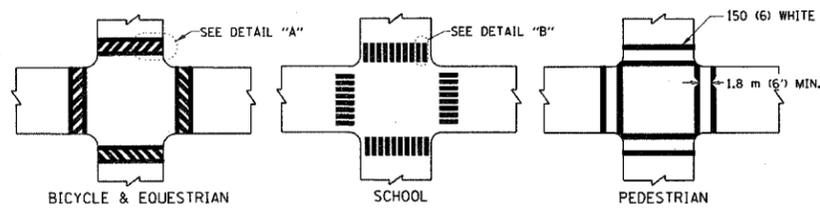
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	1.80 m (6') LINE WITH 5.50 m (18') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	200 (8) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	200 (8) C-C
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	1.80 m (6') LINE WITH 5.50 m (18') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	1.8 m (6') LINE WITH 5.50 m (18') SPACE FOR SKIP-DASH; 200 (8) 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 @ 150 (6) 300 (12) @ 45° 200 (8) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 700 (2'-4") APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	200 (8) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS; 6.1 m (20') (LESS THAN 50 km/h (30 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)

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



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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

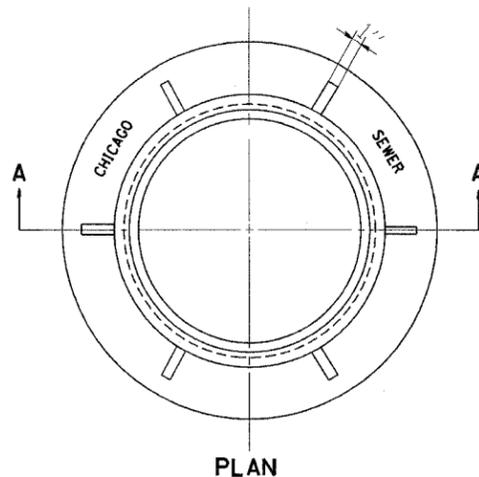
All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

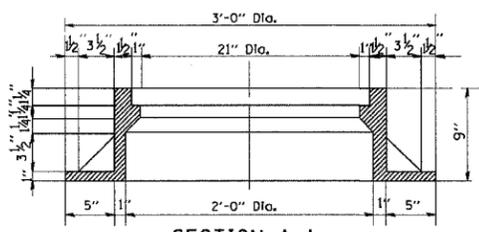
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF CHICAGO
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DATE: 2/15/2006
 DRAWN BY CADD
 CHECKED BY
 TC-24
 REVISION DATE: 12/07/00

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
			62
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	59



PLAN



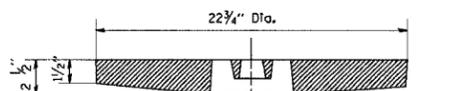
SECTION A-A

NOTE: Metal Plates Must Be Furnished For Perforated Lids On Manholes

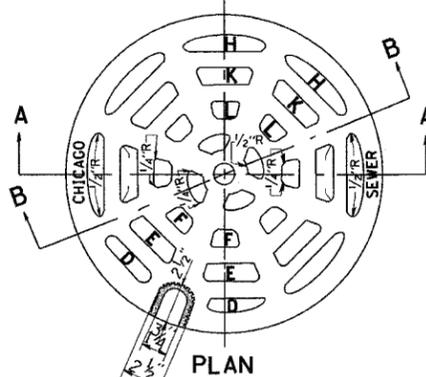
CHICAGO STANDARD MANHOLE FRAME

Scale: 1/2"=1'-0"

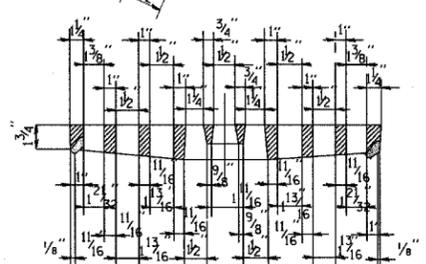
Material: Cast Iron



SECTION B-B



PLAN



SECTION A-A

PERFORATED LID FOR CATCH BASINS & MANHOLES

Scale: 2"=1'-0"

Material: Cast Iron

SECTION D-D

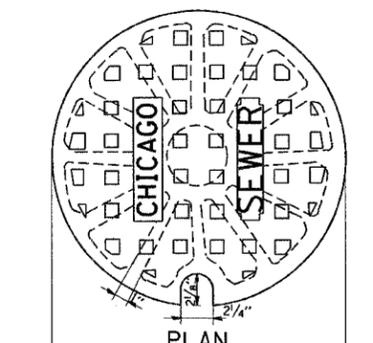
SECTION E-E

SECTION F-F

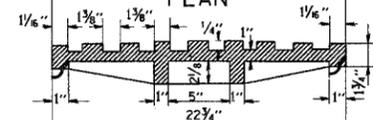
SECTION H-H

SECTION K-K

SECTION L-L



PLAN

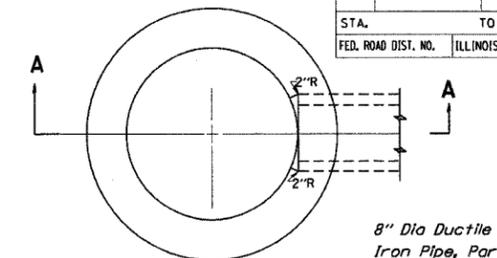


SECTION

SOLID LID FOR MANHOLES

Scale: NONE

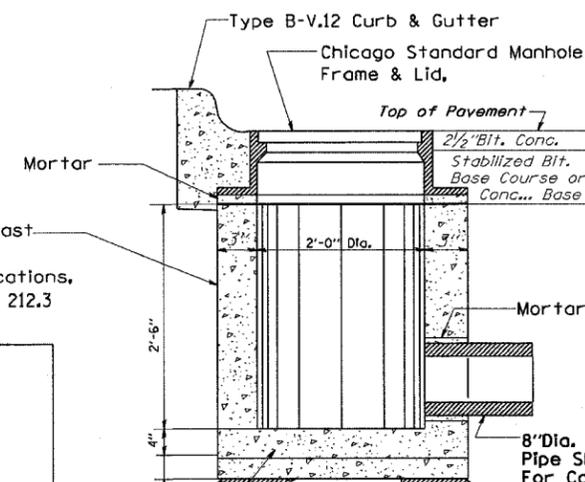
Material: Cast Iron



PLAN

(Frame & Lid Not Shown)

8" Dia Ductile Iron Pipe, Part of Item 7G



SECTION A-A

8" Dia. Ductile Iron Pipe Shall Be Used For Connection to Catch Basin Pipe To Be Laid On A Minimum Grade of 1%

Reinf. Conc. Base Cast as Integral Part of 24" Dia. Precast Conc. Ring

6" Minimum Granular Embedment Under All Inlets. Furnishing and Installing Granular Embedment Shall Be Included In The Unit Price Bid For Item 12

STANDARD INLETS

Scale: 1"=1'-0"

Item 12

This Inlet Detail Is Sometimes Referred To As "Chicago Standard Inlet, Type A"

NOTE:

INLETS SHALL NOT BE CONSTRUCTED UNLESS IT IS IMPOSSIBLE TO CONSTRUCT A CATCH BASIN. THE CONTRACTOR SHALL HAVE THE DEPARTMENT OF SEWERS APPROVAL BEFORE CONSTRUCTING INLETS

CITY OF CHICAGO
DEPARTMENT OF SEWERS
ENGINEERING DIVISION

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
CATCH BASIN, INLET AND
MANHOLE DETAILS

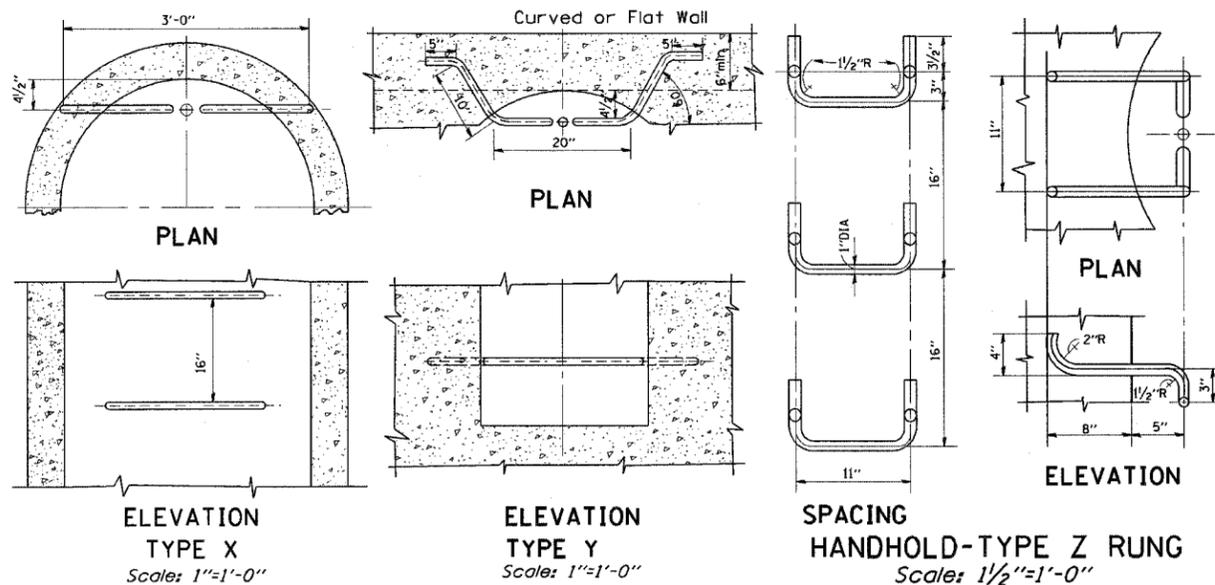
REVISIONS	
NAME	DATE
M. COMEZ	01/25/01

SCALE: VERT.
HORIZ.
DATE: 2/15/2006

DRAWN BY
CHECKED BY

BD600-13 (BD47)

REVISION DATE: 01/25/01



ELEVATION TYPE X

Scale: 1"=1'-0"

ELEVATION TYPE Y

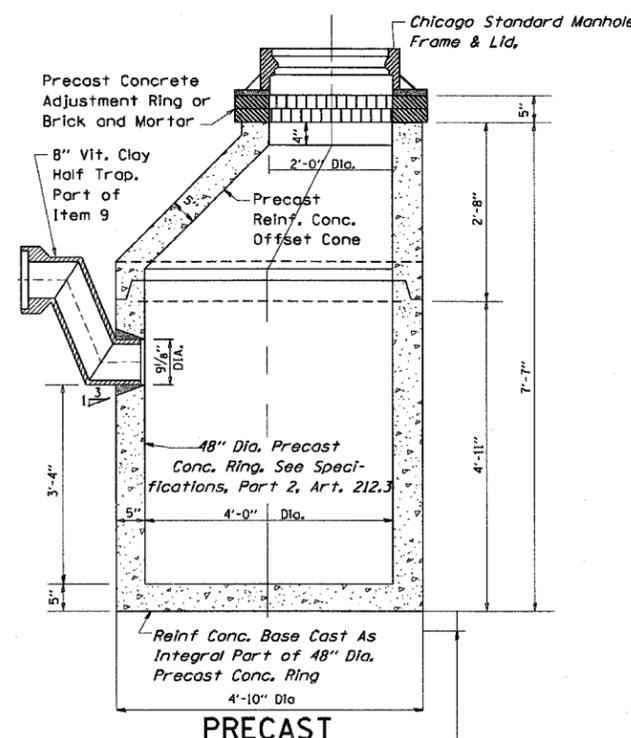
Scale: 1"=1'-0"

SPACING HANDHOLD-TYPE Z RUNG

Scale: 1/2"=1'-0"

STANDARD LADDER RUNGS

All Ladder Rungs Shall Be Aluminum or Galvanized Wrought Iron As Specified in Specifications, Part 2, Article 214.2. Rungs Shall Be 1" Diameter or of A Shape Having An Equivalent Cross-Sectional Area



PRECAST

Note:

6" Minimum Granular Embedment Under All Catch Basins

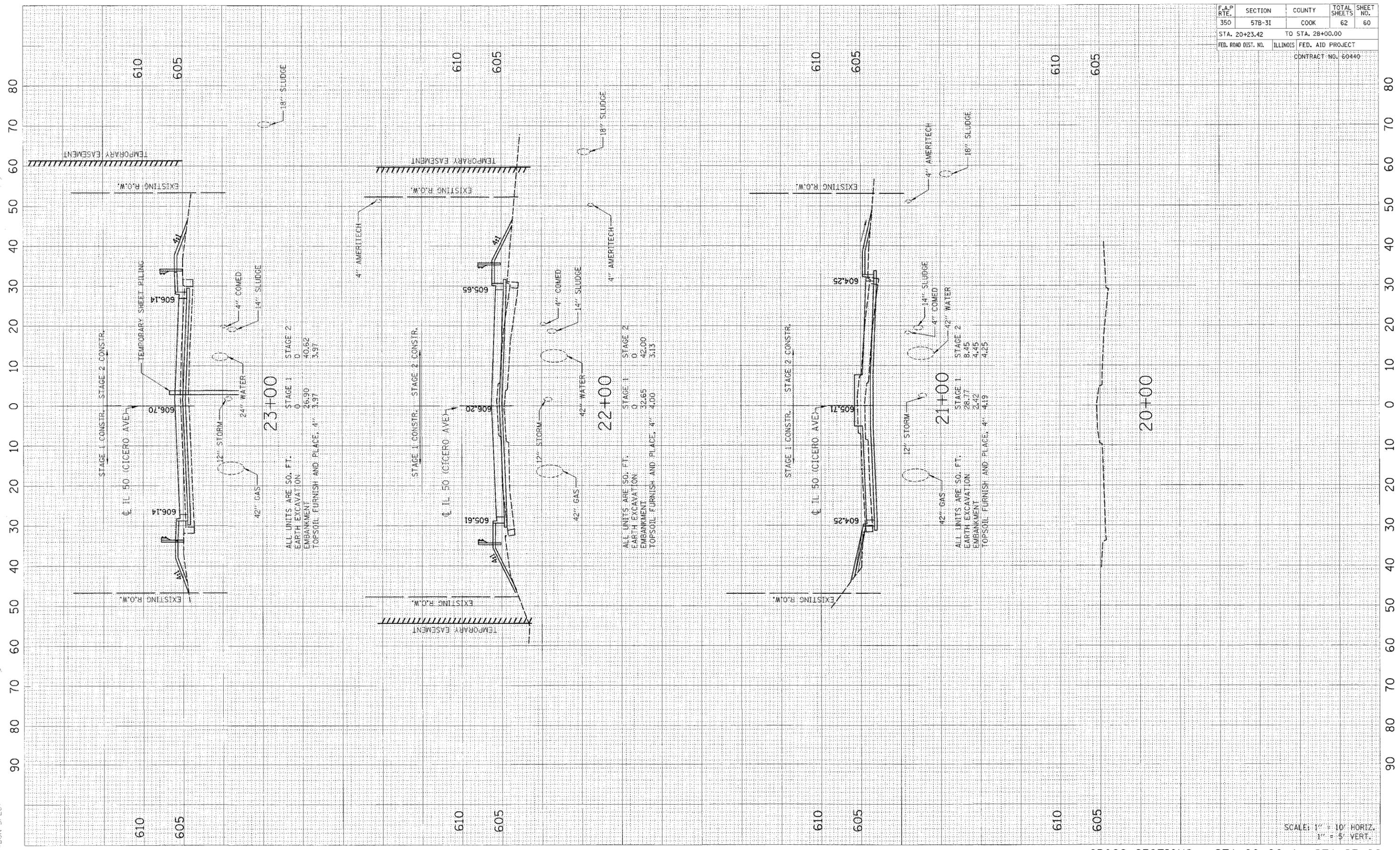
STANDARD CATCH BASINS

Scale: 3/4"=1'-0"

Item 9

PLOT DATE = 2/16/2006
FILE NAME = M:\data\chicago\bd47.dwg
PLOT SCALE = 483999 / 1 IN.
USER NAME = gregmason

DATE - TIME
 DGN-SPEC



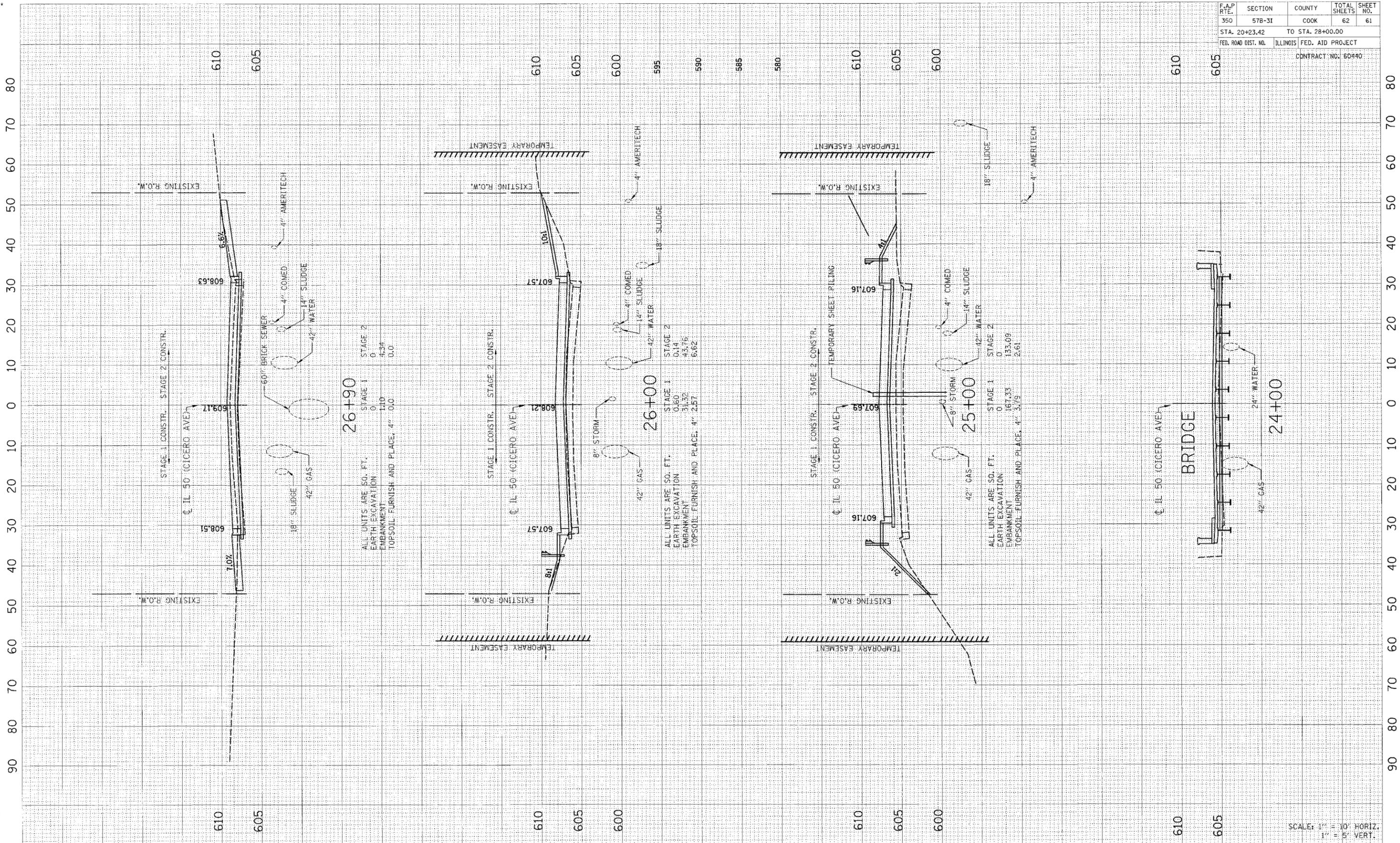
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	60
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60449				

SCALE: 1" = 10' HORIZ.
 1" = 5' VERT.

CROSS SECTIONS - STA 20+00 to STA 23+00

DATE - TIME
 DGN-SPEC

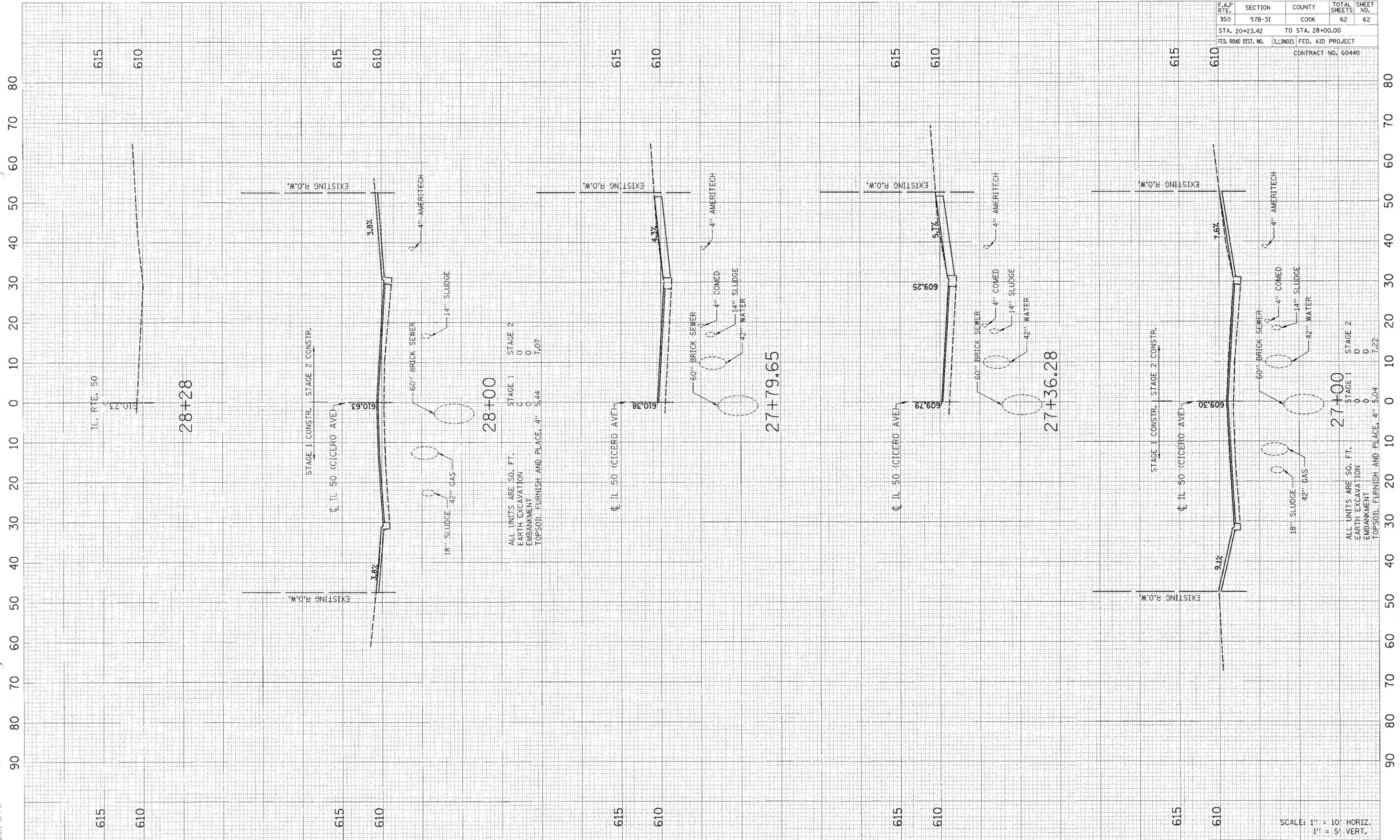
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	61
STA. 20+23.42		TO STA. 28+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60440				



CROSS SECTIONS - STA 24+00 to STA 26+90

SCALE: 1" = 10' HORIZ.
 1" = 5' VERT.

DATE - TIME
 DGN-SPEC



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	57B-3I	COOK	62	62
STA. 20+23.42 TO STA. 28+00.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60440				

ALL UNITS ARE SQ. FT.

STAGE 1	STAGE 2
0	0
0	0
5.44	7.07
TOPSOIL FURNISH AND PLACE, 4"	

ALL UNITS ARE SQ. FT.

STAGE 1	STAGE 2
0	0
0	0
5.04	7.22
TOPSOIL FURNISH AND PLACE, 4"	

SCALE: 1" = 10' HORIZ.
 1" = 5' VERT.

CROSS SECTIONS - STA 27+00 to STA 28+28