

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	1
		ILLINOIS	CONTRACT NO. 60X41	

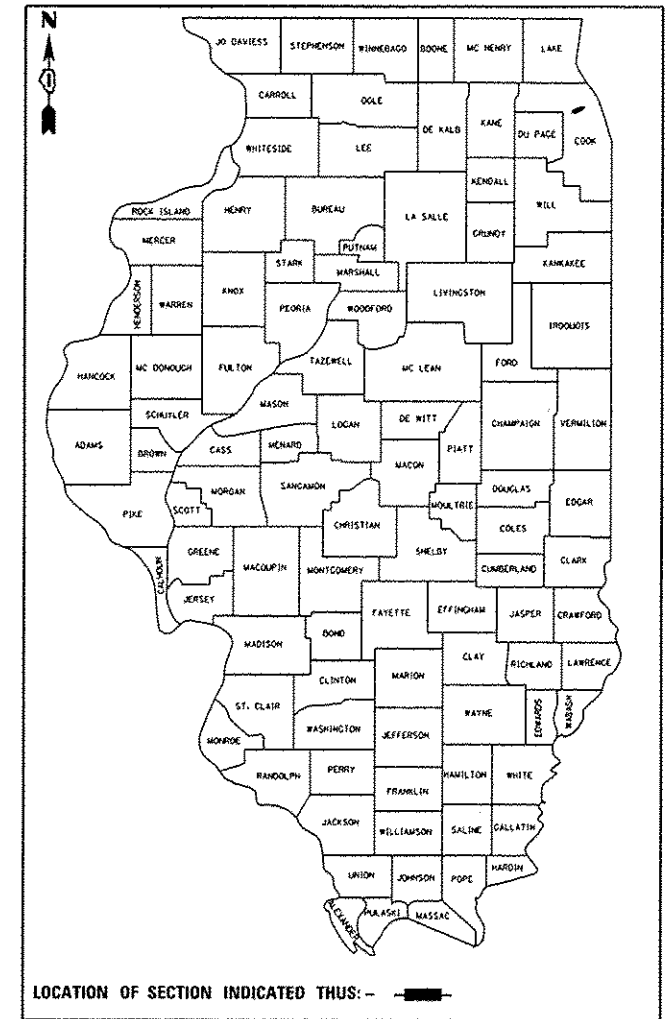
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE VILLAGE OF NILES

**PROPOSED  
HIGHWAY PLANS**

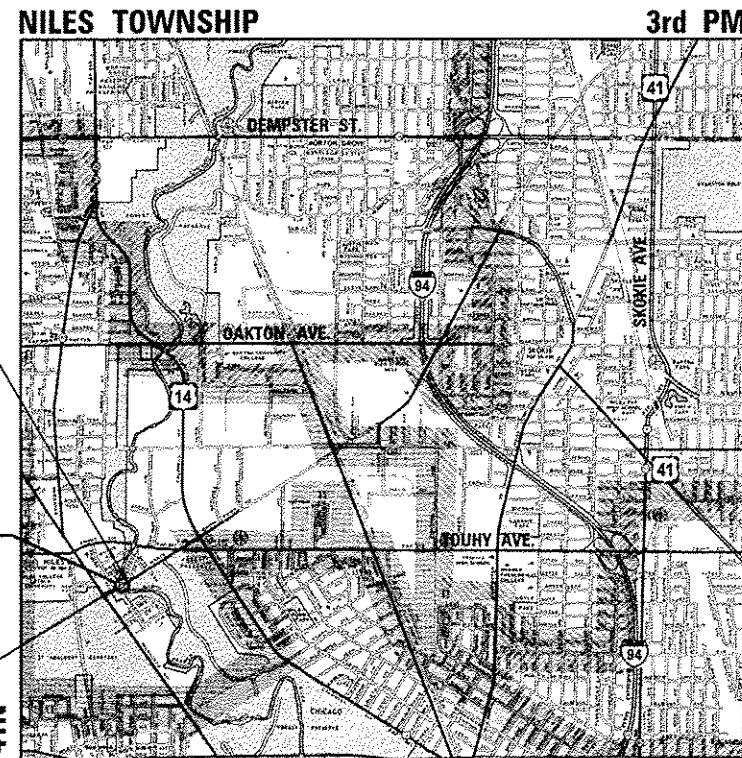
FAU ROUTE 3519: (HARTS ROAD AT NORTH BRANCH CHICAGO RIVER)  
SECTION 66-B  
PROJECT NUMBER: STP-3519(002)  
BRIDGE SUPERSTRUCTURE REPLACEMENT  
COOK COUNTY

D-91-091-14



LOCATION OF SECTION INDICATED THUS: —

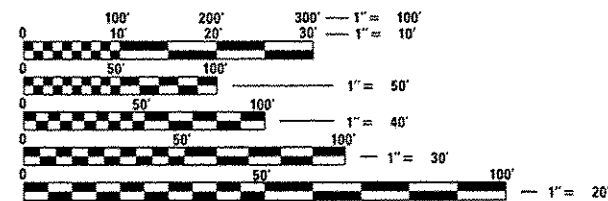
C-91-091-14



LOCATION MAP NOT TO SCALE R13E

GROSS AND NET LENGTH = 363.00 FT = 0.07 MILES

DESIGN DESIGNATION: MAJOR COLLECTOR  
2009 ADT = 4450  
2030 ADT = 5000  
DESIGN SPEED = 40 MPH  
POSTED SPEED = 35 MPH



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

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

END PROJECT  
STA. 106 + 95

IMPROVEMENT LOCATION  
HARTS ROAD OVER NORTH  
BRANCH CHICAGO RIVER  
STRUCTURE NO.: 016-0726

BEGIN PROJECT  
STA. 103 + 32

*Professional Engineer Seal*  
DATE SIGNED: 3/16/17  
EXP. DATE: 11/30/17

*Professional Engineer Seal*

DATE SIGNED: 03/16/17  
EXP. DATE: 11/30/18

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
SUBMITTED March 20 2017  
Regional Engineer  
REGIONAL ENGINEER  
May 12 2017  
Engineer of Design and Construction  
ENGINEER OF DESIGN AND CONSTRUCTION  
Director of Program Development  
DIRECTOR OF PROGRAM DEVELOPMENT

PROJECT ENGINEER: MR. J. ALAIN MIDY, P.E. (847) 221-3056  
PROJECT MANAGER: MR. ISSAM RAYYAN, P.E. (847) 705-4178

CONTRACT NO. 60X41

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OF THE STATE OF ILLINOIS

**Accurate**  
GROUP, INC.  
WWW.ACCGI.COM  
101 SCHELTER RD., SUITE B-200  
LINCOLNSHIRE, ILLINOIS 60069  
T (847) 613-1100 F (847) 613-1110  
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184.0020 3

**INDEX OF SHEETS**

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1	COVER SHEET
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18	PROPOSED PLAN & PROFILE
19	DETOUR PLAN
20	EROSION AND SEDIMENT CONTROL NOTES & TREE PROTECTION SCHEDULE
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58	TC-11 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW - PLOW RESISTANT)
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66-67	HARTS ROAD CROSS SECTIONS
68-69	N. BRANCH CHICAGO RIVER CROSS SECTIONS

**COMMITMENTS:**

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

- 1. NORTH BRANCH TRAIL SHALL REMAIN OPEN AT ALL TIMES TO PEDESTRIAN TRAFFIC DURING CONSTRUCTION

**INDEX OF HIGHWAY STANDARDS**

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
515001-03	NAME PLATE FOR BRIDGES
602001-02	CATCH BASIN TYPE A
602601-04	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604056-04	FRAME AND GRATE TYPE IIV
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
630001-11	STEEL PLATE BEAM GUARDRAIL
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS-DAY ONLY
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
814001-03	HANDHOLES

FILE NAME : D:\Engineering\Projects\13003 (001) DART\13003b - NO 2 Contract No. 60X41\CD\CD Sheets\Civil\01608141-Sht-Index and Stds.dgn



USER NAME : john	DESIGNED - AB	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 2.0000 / 1 in.	CHECKED - JMT	REVISED -
PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS AND COMMITMENTS  
HARTS ROAD**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	2
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 1-800-892-0213 AND THE VILLAGE OF NILES FOR FIELD LOCATIONS OF BURIED UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
2. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES; IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THE CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIAL OR A FIELD OFFICE SHALL BE SET UP OR STORED ON STATE, COUNTY OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE STATE, COUNTY OR THE PROPERTY OWNER.
4. PAVEMENT ELEVATIONS: THE ELEVATION SHOWN ON THE PLANS ARE FINISHED GRADE FOR THE PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
6. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
7. THE RESIDENT ENGINEER SHALL CONTACT MR. JOE ECKERT, AREA TRAFFIC FIELD ENGINEER AT (847)705-4141 (EMAIL: JOE.ECKERT@ILLINOIS.GOV), A MINIMUM OF TWO(2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
9. THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF PLATED STRUCTURES BY STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT.
10. THE CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED AT ALL TIMES DURING AND AFTER THE CONSTRUCTION OF THE PROPOSED COMBINATION CONCRETE CURB AND GUTTER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE TYPE OF COMBINATION CONCRETE CURB AND GUTTER.
11. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE TYPE OF COMBINATION CONCRETE CURB AND GUTTER.
12. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF NILES.
13. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
14. THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR "GUARDRAIL REMOVAL".
15. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINES SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
16. THE COST OF CONNECTING EXISTING STORM SEWERS TO THE PROPOSED DRAINAGE SYSTEM AND/OR CONNECTING PROPOSED STORM SEWER TO EXISTING STRUCTURES SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROPOSED STORM SEWER. ALL NECESSARY ADDITIONAL PIPE USED WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR STORM SEWER OF THE SIZE REQUIRED.
17. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. THEY SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THEY SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET SHALL BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT ROADSIDE DRAINAGE SYSTEM IS BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
18. DRAINAGE STRUCTURE GRADES SHALL BE VERIFIED IN THE FIELD PRIOR TO INSTALLATION OF DRAINAGE ITEMS, DRAINAGE STRUCTURES MAY REQUIRE REVISIONS TO MEET EXISTING FIELD CONDITIONS. ANY ADJUSTMENT SHALL BE AS DIRECTED BY THE ENGINEER.
19. UNLESS OTHERWISE IDENTIFIED ON THE PLANS, PIPE DRAINS SHALL BE INSTALLED AT A SLOPE OF 0.20%.
20. FOR WORK OUTSIDE THE LIMITS OF THE BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER AND COMBINATION CURB AND GUTTER, SHALL BE EPOXY COATED, UNLESS NOTED OTHERWISE ON THE PLANS.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THIS CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.
22. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-FLOW RESISTANT)" SHOWN IN THE PLANS.
23. THIS PROJECT REQUIRES AN US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
24. THE FRAMES AND LIDS OF EXISTING UTILITIES OR DRAINAGE STRUCTURES WITHIN THE LIMITS OF THIS IMPROVEMENT PROJECT THAT ARE NOT NOTED ON THE PLANS FOR REPLACEMENT OR RECONSTRUCTION SHALL BE ADJUSTED TO MATCH THE PROPOSED ROADWAY GRADES. THE FRAMES AND LIDS OF PRIVATE UTILITY STRUCTURES SHALL BE ADJUSTED BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT. HOWEVER, THE CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY OWNERS TO HAVE ADJUSTMENTS PERFORMED.
25. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
26. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
27. DE-ENERGIZING COMED'S DISTRIBUTION LINES (12KV) MAY BE NECESSARY IN ORDER TO ACCOMMODATE THE CONTRACTOR'S EQUIPMENT. THE BRIDGE CONTRACTOR SHALL CALL 1-800-EDISONIL.
28. ACCESS TO THIS SITE IS LIMITED. THE CONTRACTOR SHALL ONLY ACCESS THIS SITE BY RAISING AND/OR LOWERING ALL EQUIPMENT AND MATERIAL OVER THE SIDES OF THE BRIDGE. THE CONTRACTOR WILL NOT BE ALLOWED OTHER ACCESS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
29. NORTH BRANCH TRAIL SHALL REMAIN OPEN AT ALL TIMES TO PEDESTRIAN TRAFFIC DURING CONSTRUCTION.
30. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE PLANS AND IMPLEMENT, MAINTAIN, AND REMOVE ESC BEST-MANAGEMENT PRACTICES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
31. EARTHWORK BREAKDOWN IS INCLUDED IN THE SCHEDULE OF QUANTITIES FOR CONTRACTOR INFORMATION ONLY. THE COST OF EARTHWORK IS INCLUDED IN THE PAY ITEM PAVEMENT REMOVAL (SPECIAL).

FILE NAME: D:\Engineering\Projects\12003 IDOT DUFY13003b - NO 2 Contract No. 60X41-CAD00-CAD00 Sheets\Civil\0160X41-Sht-Gen Notes.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
	DRAWN - AB	REVISED -
PLOT SCALE = 2.0000" = 1'	CHECKED - TCM	REVISED -
PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	3
CONTRACT NO. 60X41				
[ILLINOIS] FED. AID PROJECT				

FILE NAME = D:\Engineering\Live\Projects\1003 DOT BUR\3003b - MO 2 Contract No. 60X41\CD\CMO Sheets\Civil\60X41-Sht-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FEDERAL 20% STATE		
				ROADWAY 0004 URBAN	BRIDGE 0014 016-0726	TRAFFIC SIGNALS 0021 URBAN
				URBAN		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	100	100		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	106	106		
20101000	TEMPORARY FENCE	FOOT	613	613		
20101100	TREE TRUNK PROTECTION	EACH	8	8		
20300100	CHANNEL EXCAVATION	CU YD	318	318		
20800150	TRENCH BACKFILL	CU YD	25	25		
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	75	75		
21101805	COMPOST FURNISH AND PLACE, 2"	SO YD	662	662		
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25		
25000300	SEEDING, CLASS 3	ACRE	0.25	0.25		
25000310	SEEDING, CLASS 4	ACRE	0.25	0.25		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	7	7		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	7	7		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	7	7		

14

\* SPECIALTY ITEM



USER NAME * jenc	DESIGNED - PP	REVISED -
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PLOT DATE * 3/29/2017	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	4
			CONTRACT NO. 60X41	
ILLINOIS FED. AID PROJECT				





FILE NAME = D:\Engineering\LiveProjects\13003 1001 DIRT\13003b - W0 2 Contract No. 60X41\CD\CD00 Sheets\Civil\60X41-Sht-500.dgn

14

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				ROADWAY	BRIDGE	TRAFFIC SIGNALS
				0004 URBAN	0014 016-0726	0021 URBAN
44004250	PAVED SHOULDER REMOVAL	SO YD	24	24		
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1	
50102400	CONCRETE REMOVAL	CU YD	26.9		26.9	
50104400	CONCRETE HEADWALL REMOVAL	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	90		90	
50200300	COFFERDAM EXCAVATION	CU YD	85		85	
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1	
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1	
50300225	CONCRETE STRUCTURES	CU YD	48.3		48.3	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	49		49	
50300260	BRIDGE DECK GROOVING	SQ YD	337		337	
50300300	PROTECTIVE COAT	SQ YD	554		554	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	125.5		125.5	
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SO FT	1868		1868	

\* SPECIALTY ITEM



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	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RATE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	6
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FEDERAL 20% STATE		
				ROADWAY 0004 URBAN	BRIDGE 0014 016-0726	TRAFFIC SIGNALS 0021 URBAN
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	60940		60940	
50900105	ALUMINUM RAILING, TYPE L	FOOT	140		140	
51500100	NAME PLATES	EACH	1		1	
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	93	93		
55100500	STORM SEWER REMOVAL 12"	FOOT	50	50		
55100700	STORM SEWER REMOVAL 15"	FOOT	26	26		
58700300	CONCRETE SEALER	50 FT	25		25	
59100100	GEOCOMPOSITE WALL DRAIN	50 YD	50		50	
60201110	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11V FRAME AND GRATE	EACH	4	4		
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1		
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	1	1		
60500050	REMOVING CATCH BASINS	EACH	4	4		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	81	81		
60608562	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12	FOOT	46	46		

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14

\* SPECIALTY ITEM

FILE NAME = D:\Engineering\Live\Projects\13003 IDOT DIR\13003b - VD 2 Contract No. 60X41\CAD\CAD Sheets\Civil\60x41-Sht-500.dgn



USER NAME = jmt	DESIGNED - PF	REVISED -
DRAWN - PP	CHECKED - JMT	REVISED -
PLOT SCALE = 2.0000" / 1"	DATE - 3-17-2017	REVISED -
PLOT DATE = 3/29/2017		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 3519	SECTION 66-B	COUNTY COOK	TOTAL SHEETS 69	SHEET NO. 7
CONTRACT NO. 60X41				
[ILLINOIS] FED. AID PROJECT				

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FEDERAL 20% STATE		
				ROADWAY 0004 URBAN	BRIDGE 0014 016-0726	TRAFFIC SIGNALS 0021 URBAN
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	87.5	87.5		
* 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		
63200310	GUARDRAIL REMOVAL	FOOT	458	458		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	250	250		
* 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	1		
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
* 67100100	MOBILIZATION	LSUM	1	1		
* <i>X7015005</i>	CHANGEABLE MESSAGE SIGN	CAL PA	<i>28</i>	<i>28</i>		
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2		
* 78008210	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4"	FOOT	831	831		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2		

URBAN

\* SPECIALTY ITEM

14

FILE NAME = D:\Engineering\Live\Projects\13093\DOT DUR\13093b - W2 Contract No. 60X41C-000-C600 Sheets\Civil\60X41-Sht-500.dgn



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PLOT DATE = 3/29/2017	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	8
ILLINOIS FED. AID PROJECT				

REV

URBAN

CONSTRUCTION CODE		
80% FEDERAL		
20% STATE		
ROADWAY	BRIDGE	TRAFFIC SIGNALS
0004	0014	0021
URBAN	016-0726	URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE	TRAFFIC SIGNALS
* 78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	8	8		
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	119			119
* 81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	76		76	
* 81400100	HANDHOLE	EACH	1			1
* 81400200	HEAVY-DUTY HANDHOLE	EACH	1			1
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2			2
* 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2172			2172
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2172			2172
* 89502380	REMOVE EXISTING HANDHOLE	EACH	2			2
* X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	2162			2162
X0325748	ACRYLIC COATING	SQ YD	277		277	
X0325749	FIBER WRAP	SQ FT	2488		2488	
* X0325938	TEMPORARY WIRELESS INTERCONNECT, COMPLETE	LSUM	1			1

14

\* SPECIALTY ITEM

FILE NAME = G:\Engineering\Live\Projects\1003 100T CURV\3003b - W 2 Contract No. 60X41\CD\CAD Sheets\Civil\0160X41-SR-500.dwg



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PLOT DATE - 3/29/2017	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES				
HARTS ROAD				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X41	

REV

FILE NAME: G:\Engineering\Projects\18083\DOT\60X41\60X41\001\001.dwg - NO. 2 Contract No. 60X41-C-001-CADD Sheets\Civil\0160X41-Sht-500.dwg

14

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FEDERAL 20% STATE		
				ROADWAY 0004 URBAN	BRIDGE 0014 016-0726	TRAFFIC SIGNALS 0021 URBAN
X0327638	STREAM GAUGE	EACH	1		1	
X2020502	BRACED EXCAVATION	CU YD	8		8	
X4404400	PAVEMENT REMOVAL (SPECIAL)	SO YD	416	416		
X5030305	CONCRETE WEARING SURFACE, 5"	SO YD	208		208	
* X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	90		90	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1		
* X8430100	REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE	FOOT	43			43
* X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2195			2195
* X8950450	REMOVE EXISTING UNDERGROUND CONDUIT	FOOT	152			152
* X8950510	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	2195			2195
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	28		28	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	579		579	
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO FT	30		30	
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1		

\* SPECIALTY ITEM



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	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>			
<b>HARTS ROAD</b>			
SCALE:	SHEET	OF	SHEETS
			STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	10
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60X41



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FEDERAL 20% STATE		
				ROADWAY 0004 URBAN	BRIDGE 0014 016-0726	TRAFFIC SIGNALS 0021 URBAN
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4		
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	2			2
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	152		152	
Z0051500	REMOVING AND RESETTING STREET SIGNS	EACH	2	2		
Z0073700	TEMPORARY WALL BRACING SYSTEM	LSUM	1		1	
Z0076600	TRAINEES	HOUR	0			

URBAN

6

\* SPECIALTY ITEM

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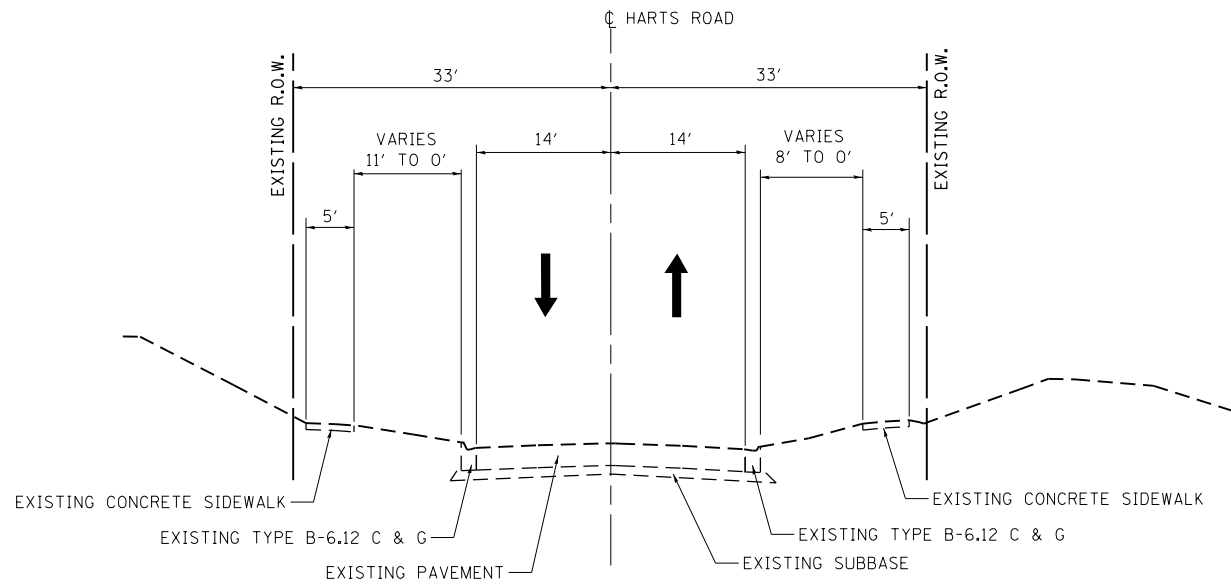
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

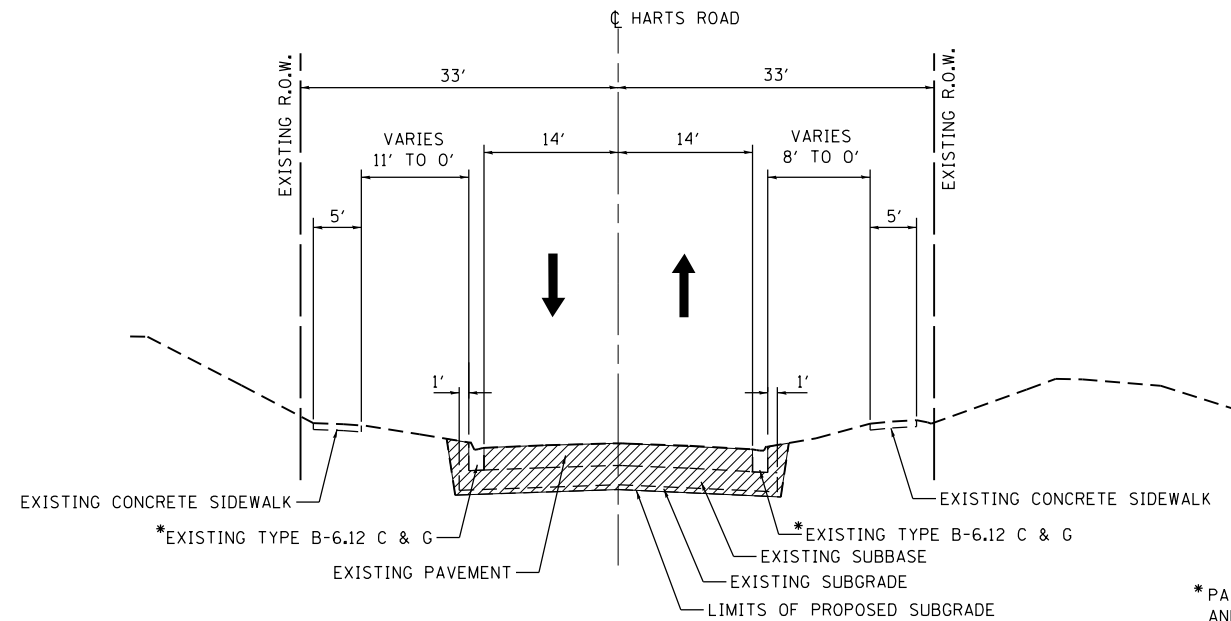
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3519	66-B	COOK	69	11
				CONTRACT NO. 60X41
ILLINOIS FED. AID PROJECT				



**EXISTING TYPICAL SECTION**

STA. 103+32 TO STA. 105+85

APPROACH SLABS AND BRIDGE OMISSION: STA. 104+62.86 TO STA. 105+50.06

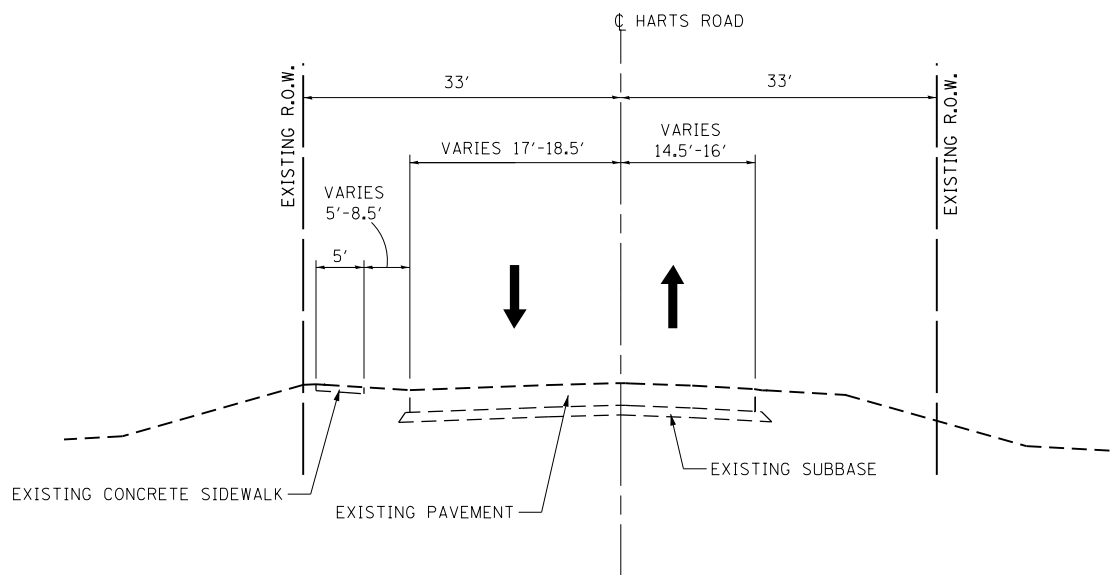


**PAVEMENT REMOVAL (SPECIAL) TYPICAL SECTION**

STA. 104+42.53 TO STA. 105+85

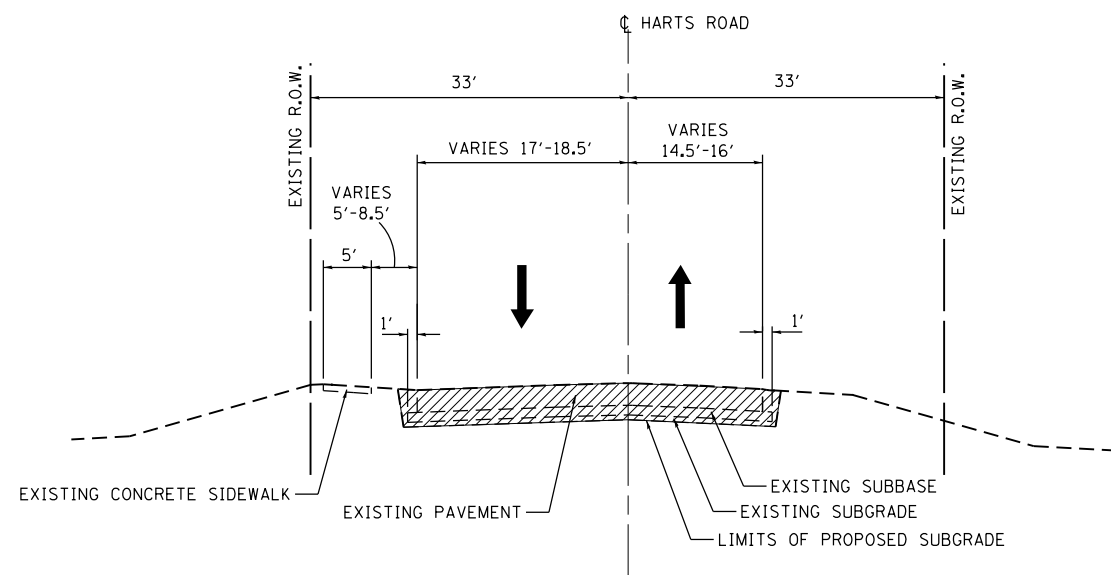
APPROACH SLABS AND BRIDGE OMISSION: STA. 104+62.86 TO STA. 105+50.06

\*PAID AS COMBINATION CURB AND GUTTER REMOVAL



**EXISTING TYPICAL SECTION**

STA. 105+85 TO STA. 106+95



**PAVEMENT REMOVAL (SPECIAL) TYPICAL SECTION**

STA. 105+85 TO STA. 106+50

AREA TO BE REMOVED AND PAID AS PAVEMENT REMOVAL (SPECIAL)

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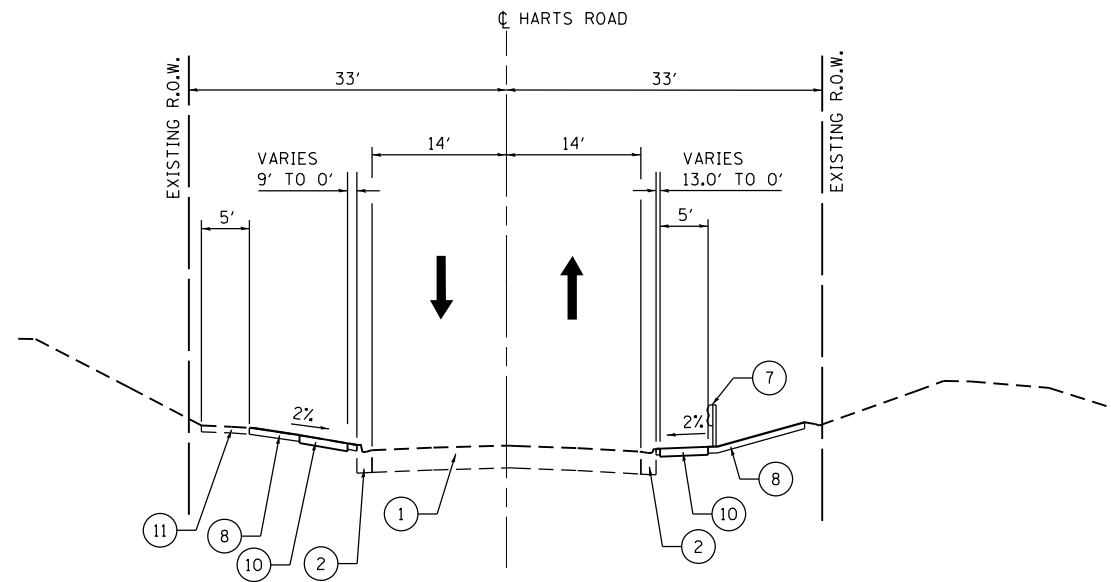
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	12
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

NOTE:  
PROPOSED SIDEWALK LT.  
BEGINS AT STA. 103+89

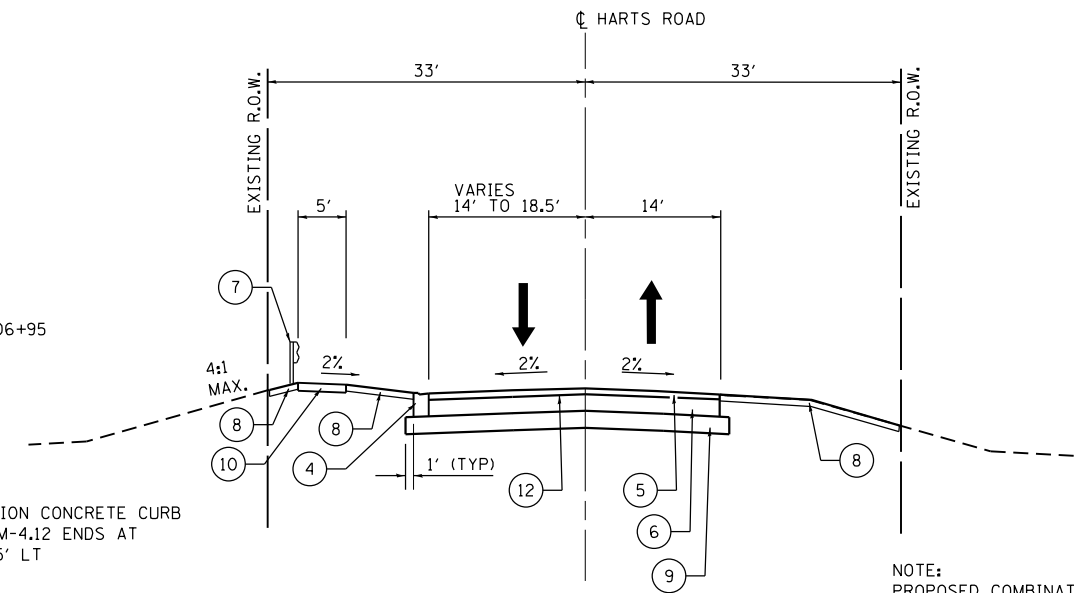


**PROPOSED TYPICAL SECTION**

STA. 103+32 TO STA. 104+42.53

NOTE:  
PROPOSED SIDEWALK  
EXTENDS TO STA. 106+95

NOTE:  
PROPOSED COMBINATION CONCRETE CURB  
AND GUTTER, TYPE M-4.12 ENDS AT  
STA. 106+33.50, 17.5' LT



**PROPOSED TYPICAL SECTION**

STA. 105+88 TO STA. 106+50

NOTE:  
PROPOSED COMBINATION CONCRETE CURB  
AND GUTTER, TYPE B-6.12 ENDS AT  
STA. 105+89, 15' RT

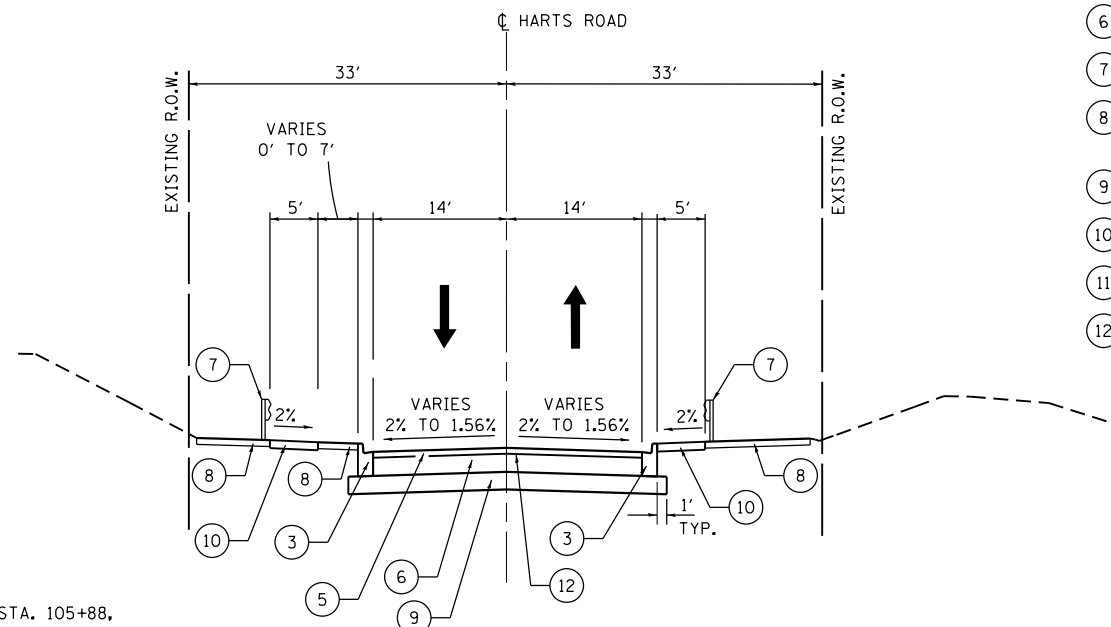
**LEGEND**

- ① EXISTING PAVEMENT
- ② EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ③ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ④ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- ⑤ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑥ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19, N70, 6.25"
- ⑦ PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑧ TOPSOIL EXCAVATION AND PLACEMENT WITH SEEDING, CLASS 2A OR CLASSES 3 AND 4; ALL WITH EROSION CONTROL BLANKET
- ⑨ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑩ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- ⑪ EXISTING PCC SIDEWALK TO REMAIN
- ⑫ PROPOSED BITUMINOUS MATERIALS (TACK COAT)

**HMA MIXTURE REQUIREMENTS CHART**

OPERATION	MIXTURE TYPE	AIR VOIDS (%) @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 2"	4% @ 70 GYR.	QC/OA
	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 6.25"	4% @ 70 GYR.	QC/OA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA)			

- NOTES:
- THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
  - THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
  - FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
  - QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE



**PROPOSED TYPICAL SECTION**

STA. 104+42.53 TO STA. 105+88

APPROACH SLABS AND BRIDGE OMISSION: STA. 104+52.53 TO STA. 105+60.40

NOTE:  
LT STA. 105+85 TO LT STA. 105+88,  
TRANSITION PROPOSED COMBINATION  
CONCRETE CURB AND GUTTER, TYPE B-6.12  
TO COMBINATION CONCRETE CURB AND GUTTER,  
TYPE M-4.12

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PROPOSED TYPICAL SECTIONS HARTS ROAD</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		3519	66-B	COOK	69	13
SCALE:		SHEET OF SHEETS		STA. TO STA.		CONTRACT NO. 60X41
ILLINOIS FED. AID PROJECT						

PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB		
LOCATION STATION TO STATION	HOT MIX ASPHALT SURFACE COURSE, MIX "D" N70 (IL-9.5 mm), 2" HOT MIX ASPHALT BINDER COURSE, IL 19.0 N70, 6.25" (SQ YD)	BITUMINOUS MATERIALS (TACK COAT) (POUND)
104+42.53 TO 104+52.53	31	8
105+60.40 TO 106+50.00	309	77
<b>TOTAL</b>	<b>340</b>	<b>85</b>

AGGREGATE SUBGRADE IMPROVEMENT 12"	
LOCATION STATION TO STATION	AREA (SQ YD)
104+42.53 TO 104+52.53	37
105+60.40 TO 106+50.00	347
<b>TOTAL</b>	<b>384</b>

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS				
LOCATION STATION TO STATION	OFFSET	LENGTH (FT)	GUARDRAIL REFLECTORS, TYPE B (EACH)	TERMINAL MARKER DIRECT APPLIED (EACH)
103+99.40 TO 104+24.40	RT	25		1
105+88.70 TO 106+01.20	RT	12.5		
105+88.70 TO 106+38.70	LT	50		1
104+03, 104+56, 105+09, 105+62	RT		4	
104+63, 105+17, 105+71, 106+25	LT		4	
<b>TOTAL</b>		<b>87.5</b>	<b>8</b>	<b>2</b>

LANDSCAPING SCHEDULE						
LOCATION STATION TO STATION	OFFSET (LT / RT)	TOPSOIL EXCAVATION AND PLACEMENT (CU YD)	SEEDING CLASS 2A (ACRE)	SEEDING CLASS 3 (ACRE)	SEEDING CLASS 4 (ACRE)	COMPOST FURNISH AND PLACE, 2" (SQ YD)
103+31.00 TO 103+48.15	RT	1.6	0.003			14
103+31.00 TO 104+42.50	RT	15.3	0.028			137
103+96.50 TO 104+05.80	LT	0.7	0.001			6
104+03.75 TO 104+52.52	LT	4.6	0.008			41
104+42.53 TO 104+81.50	RT	4.7		0.009	0.009	42
104+52.52 TO 104+83.14	LT	3.2		0.006	0.006	29
105+30.90 TO 106+95.00	LT	7.7		0.014	0.014	70
105+33.36 TO 106+60.00	RT	18.2		0.034	0.034	164
105+60.40 TO 106+96.00	LT	12.1	0.023			109
106+13.00 TO 107+05.00	RT	5.5	0.010			49
<b>ROUNDED TOTAL</b>		<b>75</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>357</b>

CURB AND GUTTER				
LOCATION STATION TO STATION	OFFSET	COMBINATION CURB AND GUTTER REMOVAL (FOOT)	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (FOOT)	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12 (FOOT)
104+42.53 TO 104+52.53	LT		10	
104+42.53 TO 104+52.53	RT		10	
104+42.53 TO 104+81.58	RT	40		
104+42.53 TO 104+81.52	LT	40		
105+30.89 TO 105+84.94	LT	55		
105+30.99 TO 105+84.86	RT	54		
105+60.40 TO 105+93.00	RT		33	
105+60.40 TO 105+88.00	LT		28	
105+88.00 TO 106+33.50	LT			46
<b>TOTAL</b>		<b>189</b>	<b>81</b>	<b>46</b>

TEMPORARY FENCE		
LOCATION	OFFSET	LENGTH (FT)
NORTHWEST QUADRANT	LT	80
NORTHEAST QUADRANT	LT	212
SOUTHWEST QUADRANT	RT	140
SOUTHEAST QUADRANT	RT	181
<b>TOTAL</b>		<b>613</b>

SIDEWALK SCHEDULE				
LOCATION STATION TO STATION	OFFSET	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (SQ FT)	SIDEWALK REMOVAL (SQ FT)	PAVED SHOULDER REMOVAL (SQ YD)
103+32.00 TO 104+52.53	RT	630		
103+32.30 TO 104+82.83	RT		760	
103+97.50 TO 104+52.53	LT	290		
104+00	LT		33	
104+38.23 TO 104+82.83	LT		240	
105+30.64 TO 105+84.86	RT			24
105+31.23 TO 106+95.00	LT		825	
105+60.40 TO 105+88.00	RT	140		
105+60.40 TO 106+95.00	LT	680		
<b>TOTAL</b>		<b>1740</b>	<b>1858</b>	<b>24</b>

PAVEMENT MARKING				
LOCATION STATION TO STATION	TYPE	POLYUREA PAVEMENT MARKING TYPE I-LINE 4" (FOOT)	RAISED REFLECTIVE PAVEMENT MARKER (EACH)	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE) (EACH)
104+42.53 TO 106+50.00	DOUBLE YELLOW CL	415	2	2
104+42.53 TO 106+50.00	WHITE EDGE LINE	416		
<b>TOTAL</b>		<b>831</b>	<b>2</b>	<b>2</b>

STONE RIPRAP-ROADWAY	
LOCATION STATION TO STATION	STONE RIPRAP, CLASS A3 (TONS)
299+44 TO 299+50 RT	3
299+50 TO 299+56 RT	3
300+04 TO 300+25 LT	6
300+25 TO 300+54 LT	12
<b>TOTAL</b>	<b>24</b>

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCHEDULES OF QUANTITIES			
HARTS ROAD			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	14
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE							
STATION	LENGTH (FT)	CUT (SQ FT)	AVG END AREA (SQ FT)	TOTAL (CU YD)	FILL (SQ FT)	AVG END AREA (SQ FT)	TOTAL (CU YD)
FROM BEGINNING OF IMPROVEMENT TO WEST ABUTMENT:							
103+32.00		0			0		
	8.27		1.85	0.6		0	0
103+40.27		3.7			0		
	59.73		4.85	10.7		1.9	4.2
104+00.00		6			3.8		
	42.4		6	9.4		3.8	6
104+42.40		6			3.8		
	0.13		13.5	0.1		3.45	0
104+42.53		21			3.1		
	7.47		21	5.8		3.1	0.9
104+50.00		21			3.1		
	31.36		10.5	12.2		3.1	3.6
104+81.36		0			3.1		
TOTAL				39			15

NOTE: COST INCLUDED IN CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL (SPECIAL)

EARTHWORK SCHEDULE							
STATION	LENGTH (FT)	CUT (SQ FT)	AVG END AREA (SQ FT)	TOTAL (CU YD)	FILL (SQ FT)	AVG END AREA (SQ FT)	TOTAL (CU YD)
FROM EAST ABUTMENT TO END OF IMPROVEMENT:							
105+31.57		0			14.9		
	18.43		8.95	6.1		14.9	10.2
105+50.00		17.9			14.9		
	10.4		17.9	6.9		14.9	5.7
105+60.40		17.9			14.9		
	39.6		27.55	40.4		12.15	17.8
106+00.00		37.2			9.4		
	50		36.25	67.1		7.65	14.2
106+50.00		35.3			5.9		
	0.1		18.15	0.1		2.95	0
106+50.10		1			0		
	44.9		0.5	0.8		0	0
106+95.00		0			0		
TOTAL				121			48

NOTE: COST INCLUDED IN CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL (SPECIAL)

EARTHWORK SUMMARY				
LOCATION STATION TO STATION	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (15%)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
103+32 TO 104+81.4	39	33	15	18
105+31.6 TO 106+95	121	103	48	55
TOTAL	160	136	63	73

NOTE: COST INCLUDED IN CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL (SPECIAL)

PAVEMENT REMOVAL (SPECIAL)	
LOCATION STATION TO STATION	PAVEMENT REMOVAL (SQ YD)
104+42.53 TO 104+63.42	71
105+51.30 TO 106+50.00	345
TOTAL	416

FILTER FABRIC	
LOCATION	FILTER FABRIC (SQ YD)
UNDER BRIDGE	373
SOUTHWEST QUADRANT	52
SOUTHEAST QUADRANT	13
NORTHWEST QUADRANT	228
NORTHEAST QUADRANT	168
TOTAL	834

CHANNEL EXCAVATION	
LOCATION	CHANNEL EXCAVATION (CU YD)
UPSTREAM-SLOPE MATTRESS AND GABIONS (SUPPORT & END)	144
UNDER BRIDGE-SLOPE MATTRESS AND END GABIONS	162
DOWNSTREAM-SLOPE MATTRESS AND GABIONS (SUPPORT & END)	12
TOTAL	318

SLOPE MATTRESS AND GABIONS		
LOCATION	SLOPE MATTRESS, 12" (SQ YD)	GABIONS (CU YD)
UNDER BRIDGE	259	30
SOUTHWEST QUADRANT	15	13
SOUTHEAST QUADRANT	9	--
NORTHWEST QUADRANT	115	44
NORTHEAST QUADRANT	65	41
TOTAL	463	128

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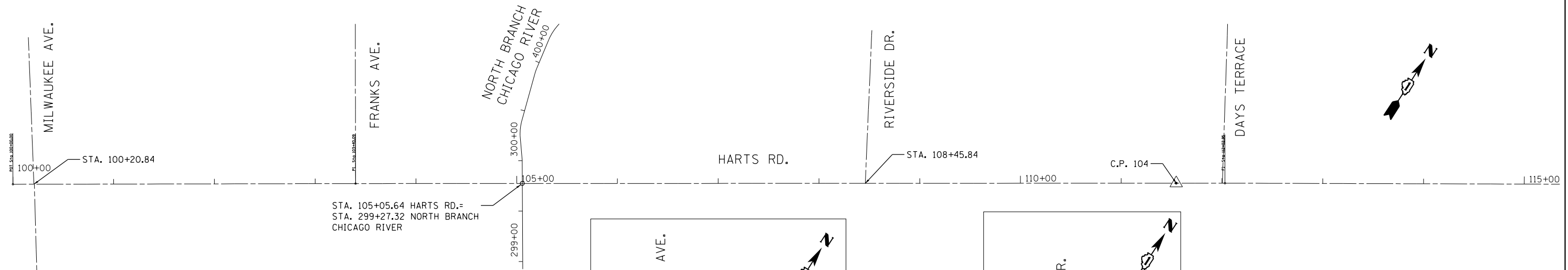
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PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

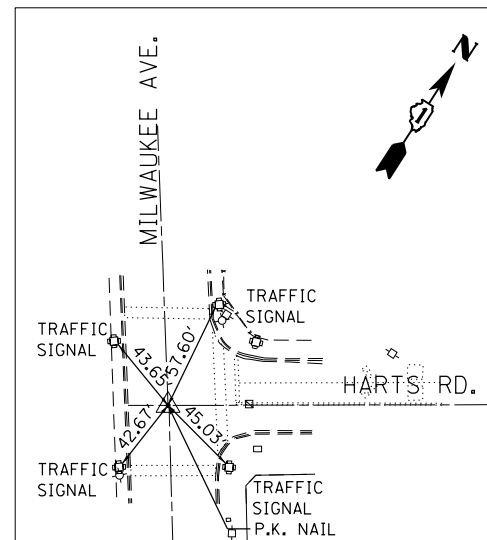
SCHEDULES OF QUANTITIES  
HARTS ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	15
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

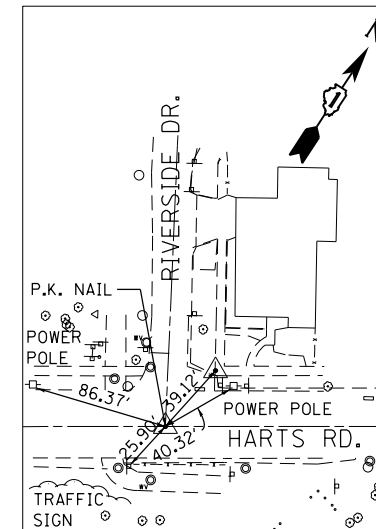


STA. 105+05.64 HARTS RD.=  
STA. 299+27.32 NORTH BRANCH  
CHICAGO RIVER



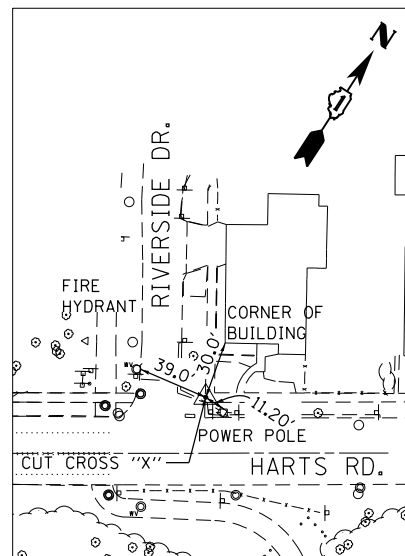
**MILWAUKEE AVE. & HARTS RD.**

CENTERLINE TIE  
P.K. NAIL  
STA. 100+20.84



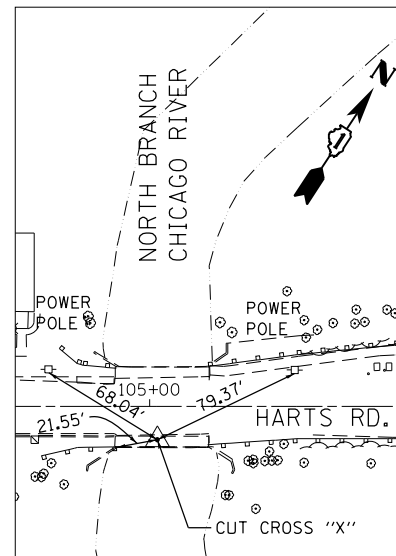
**RIVERSIDE DR. & HARTS RD.**

CENTERLINE TIE  
P.K. NAIL  
STA. 108+45.84



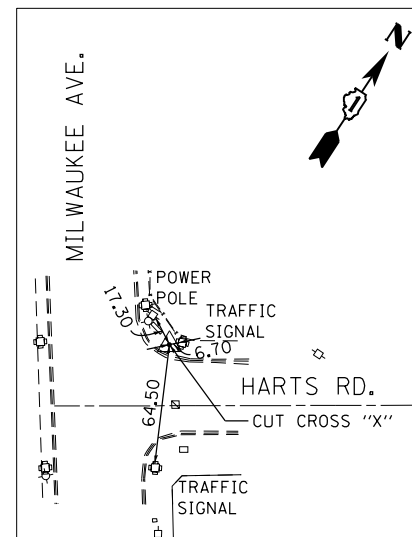
**CONTROL POINT #101**

STA. 108+72.13, LT.  
N 1946705.20  
E 1130361.07  
ELEV. 611.48



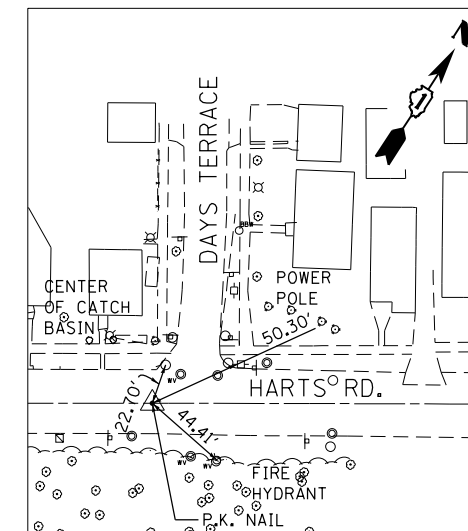
**CONTROL POINT #102**

STA. 105+04.82, RT.  
N 1946465.46  
E 1130077.89  
ELEV. 616.03



**CONTROL POINT #103**

STA. 100+60.03, LT.  
N 1946264.16  
E 1129679.10  
ELEV. 624.27



**CONTROL POINT #104**

CENTERLINE TIE  
STA. 111+54.62  
N 1946845.77  
E 1130632.71  
ELEV. 615.18

**BENCHMARK**

CHISELED SQUARE ON NORTHWEST WINGWALL OF  
HARTS RD BRIDGE OVER N. BRANCH CHICAGO RIVER.  
STA. 104+81.42, OFFSET 23' LEFT, ELEV. = 616.25.

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PLOT SCALE = 100.0000' / 1" =	DRAWN - JN	REVISED -
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ALIGNMENTS, TIES AND BENCHMARKS  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. TO STA.

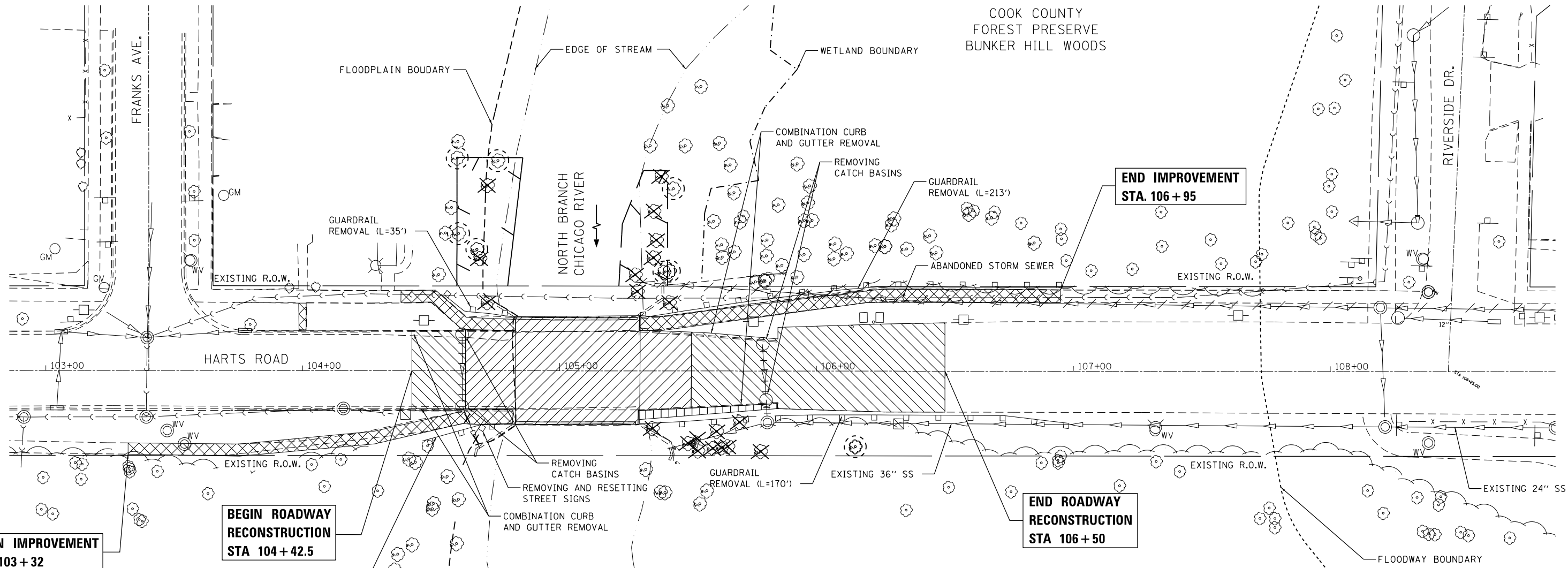
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	16
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



COOK COUNTY  
FOREST PRESERVE  
BUNKER HILL WOODS

COOK COUNTY  
FOREST PRESERVE  
BUNKER HILL WOODS

COOK COUNTY FOREST PRESERVE  
BUNKER HILL WOODS



**BEGIN ROADWAY  
RECONSTRUCTION  
STA 104 + 42.5**

**BEGIN IMPROVEMENT  
STA. 103 + 32**

**END ROADWAY  
RECONSTRUCTION  
STA 106 + 50**





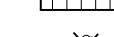

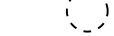
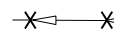
**END IMPROVEMENT  
STA. 106 + 95**

**TREE REMOVAL SCHEDULE**

STATION	OFFSET (FEET)	SIZE (INCH)
104+69	44' LT	15"
104+72	27' LT	18"
104+72	72' LT	24"
105+30	31' LT	6"
105+36	22' RT	7"
105+37	44' LT	24"
105+37	62' LT	8"
105+39	76' LT	7"
105+43	27' LT	16"

STATION	OFFSET (FEET)	SIZE (INCH)
105+50	28' RT	8"
105+53	26' RT	24"
105+54	31' RT	8"
105+61	24' RT	7"
105+63	30' RT	8"
105+66	29' RT	8"
105+70	20' RT	6"
105+78	31' RT	12"

**LEGEND**

-  REMOVAL OF EXISTING SUPERSTRUCTURES (SEE STRUCTURAL SHEETS)
-  PAVEMENT REMOVAL (SPECIAL)
-  SIDEWALK REMOVAL
-  PAVED SHOULDER REMOVAL (S.E. PATH)
-  TREE REMOVAL
-  TREE TRUNK PROTECTION
-  STORM SEWER REMOVAL 15"
-  STORM SEWER REMOVAL 12"

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	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING CONDITIONS AND REMOVAL PLAN  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. TO STA.

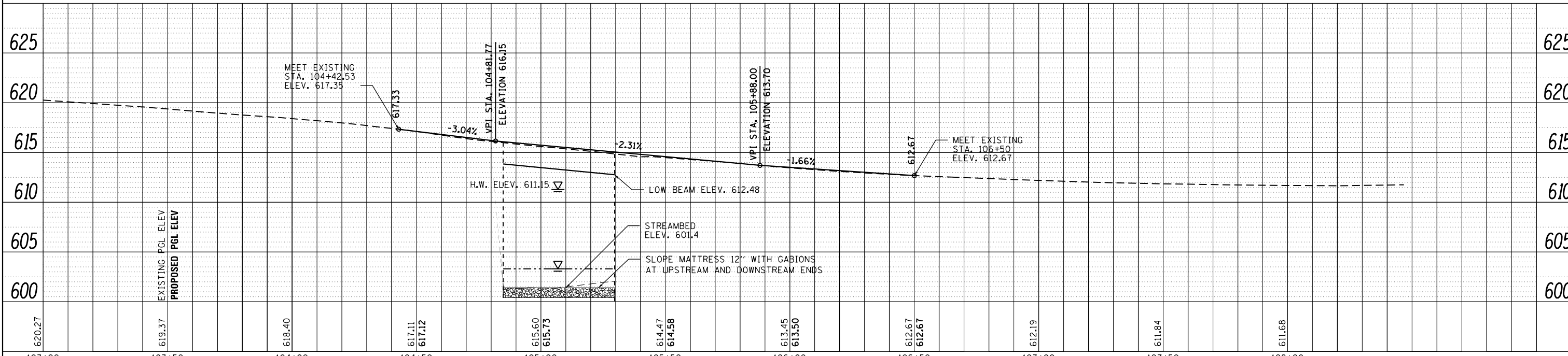
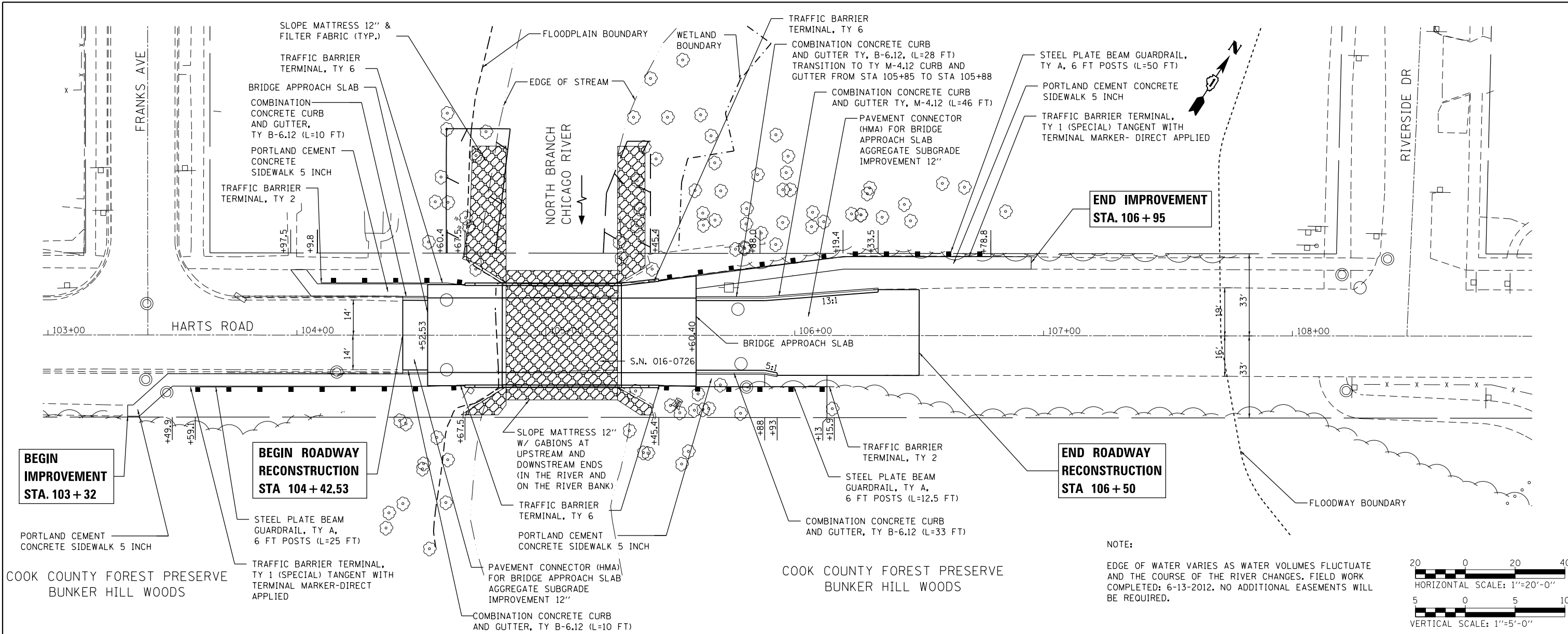
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	17

CONTRACT NO. 60X41  
ILLINOIS FED. AID PROJECT

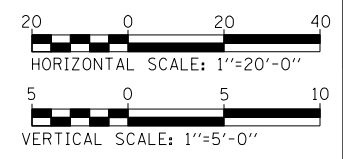
PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	FILED	
	NO.	

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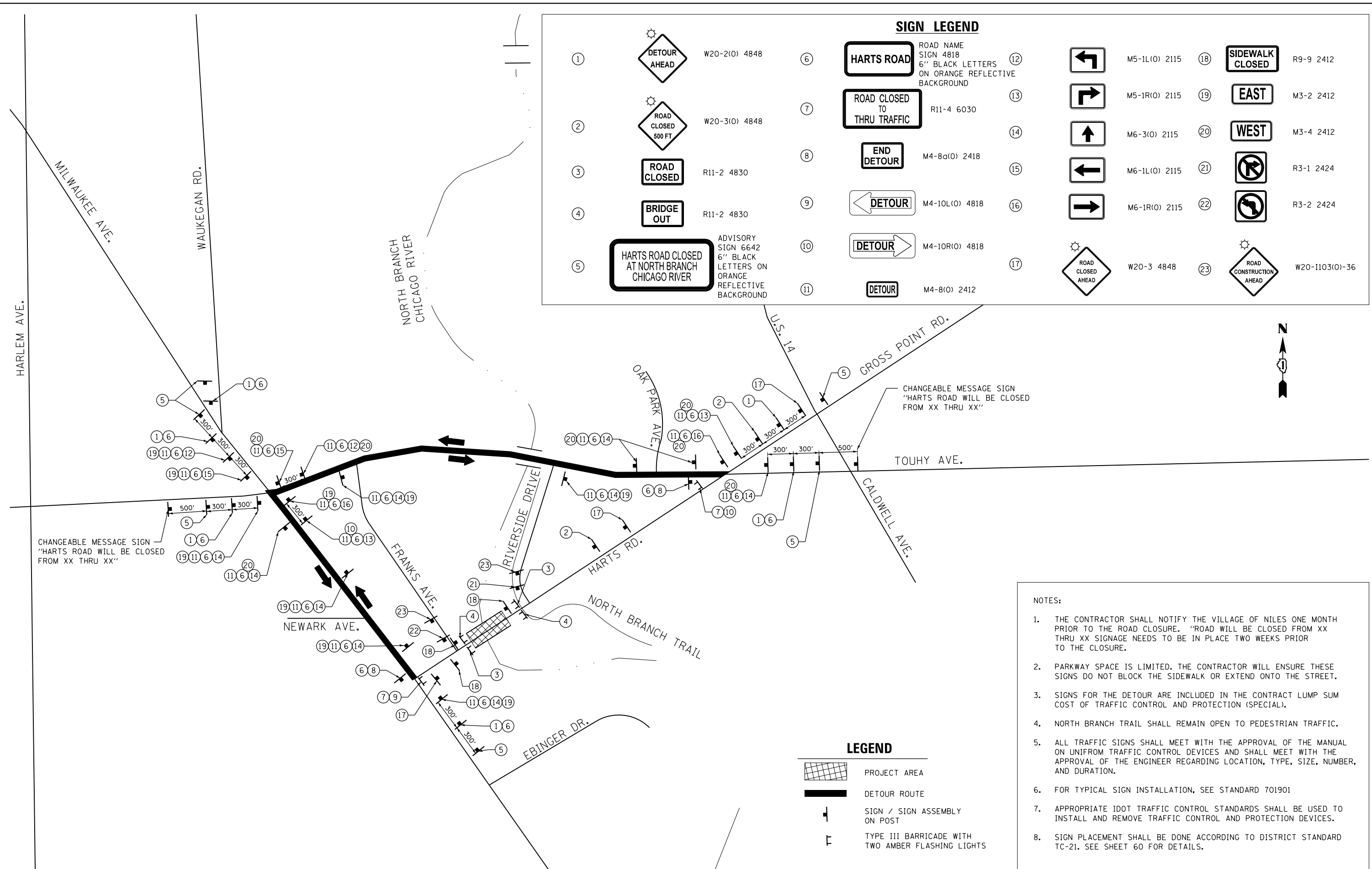


NOTE:  
EDGE OF WATER VARIES AS WATER VOLUMES FLUCTUATE AND THE COURSE OF THE RIVER CHANGES. FIELD WORK COMPLETED: 6-13-2012. NO ADDITIONAL EASEMENTS WILL BE REQUIRED.

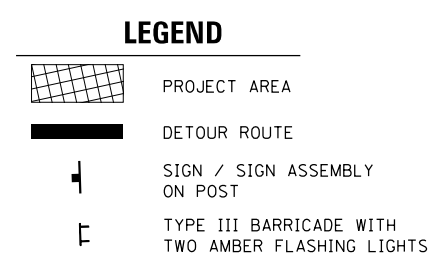


	USER NAME = johnn	DESIGNED - SAT	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED PLAN &amp; PROFILE</b> <b>HARTS ROAD</b>			F.A.U. RTE. 3519	SECTION 66-B	COUNTY COOK	TOTAL SHEETS 69	SHEET NO. 18
	PLOT SCALE = 40.00' / in. PLOT DATE = 3/16/2017	DRAWN - JN CHECKED - JMT DATE - 3-17-2017	REVISED - REVISED - REVISED - REVISED -		SCALE: SHEET OF SHEETS STA. 103+32 TO STA. 106+95	CONTRACT NO. 60X41 ILLINOIS FED. AID PROJECT						

SIGN LEGEND					
①		W20-2(0) 4848	⑬		R11-4 6030
②		W20-3(0) 4848	⑭		M4-8a(0) 2418
③		R11-2 4830	⑮		M4-10L(0) 4818
④		R11-2 4830	⑯		M4-10R(0) 4818
⑤		ADVISORY SIGN 6642 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND	⑰		M4-10R(0) 4818
			⑱		R9-9 2412
			⑲		M3-2 2412
			⑳		M3-4 2412
			㉑		R3-1 2424
			㉒		R3-2 2424
			㉓		W20-1103(0)-36



- NOTES:
1. THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF NILES ONE MONTH PRIOR TO THE ROAD CLOSURE. "ROAD WILL BE CLOSED FROM XX THRU XX" SIGNAGE NEEDS TO BE IN PLACE TWO WEEKS PRIOR TO THE CLOSURE.
  2. PARKWAY SPACE IS LIMITED. THE CONTRACTOR WILL ENSURE THESE SIGNS DO NOT BLOCK THE SIDEWALK OR EXTEND ONTO THE STREET.
  3. SIGNS FOR THE DETOUR ARE INCLUDED IN THE CONTRACT LUMP SUM COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).
  4. NORTH BRANCH TRAIL SHALL REMAIN OPEN TO PEDESTRIAN TRAFFIC.
  5. ALL TRAFFIC SIGNS SHALL MEET WITH THE APPROVAL OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL MEET WITH THE APPROVAL OF THE ENGINEER REGARDING LOCATION, TYPE, SIZE, NUMBER, AND DURATION.
  6. FOR TYPICAL SIGN INSTALLATION, SEE STANDARD 701901
  7. APPROPRIATE IDOT TRAFFIC CONTROL STANDARDS SHALL BE USED TO INSTALL AND REMOVE TRAFFIC CONTROL AND PROTECTION DEVICES.
  8. SIGN PLACEMENT SHALL BE DONE ACCORDING TO DISTRICT STANDARD TC-21. SEE SHEET 60 FOR DETAILS.



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETOUR PLAN HARTS ROAD</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	19
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

**EROSION AND SEDIMENT CONTROL GENERAL NOTES**

- ALL CONTROL MEASURES NECESSARY MUST MEET THE MINIMUM REQUIREMENTS AS DESCRIBED IN THE LATEST EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. ADDITIONAL DETAILS AND BMPs ARE ALSO AVAILABLE AND CAN BE UTILIZED AS SHOWN IN THE ILLINOIS URBAN MANUAL, REVISED TO LATEST VERSION AS AMENDED. ALL ESC MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION AND IDOT'S BEST MANAGEMENT PRACTICES - MAINTENANCE GUIDE: (HTTP://WWW.IDOT.ILLINOIS.GOV/TRANSPORTATION-SYSTEM/ENVIRONMENT/EROSION-AND-SEDIMENT-CONTROL).
- ALL THE SOIL EROSION AND SEDIMENT CONTROL FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND THE INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT. A COPY OF THE EROSION AND SEDIMENT CONTROL SCHEDULE BEING IMPLEMENTED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER, WILL BE ON THE CONSTRUCTION SITE AT ALL TIMES.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE NORTH COOK SOIL & WATER CONSERVATION DISTRICT (N.C.S.W.C.D.) AND CORPS OF ENGINEERS.
- THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION. THE CONTRACTOR SHALL DESIGNATE ONE OF HIS EMPLOYEES TO BE RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN ON ALL DISTURBED AREAS THROUGHOUT THE PROJECT.
- THE US ARMY CORPS OF ENGINEERS MUST BE NOTIFIED 10 DAYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN AN EFFECTIVE WORKING CONDITION.
- THE CONTRACTOR'S REPRESENTATIVE HAS TO BE KNOWLEDGEABLE ABOUT INSTALLATION AND MAINTENANCE OF THE REQUIRED MEASURES AND HAVE TAKEN AN ILLINOIS DEPARTMENT OF TRANSPORTATION OR APPROVED EQUAL EROSION AND SEDIMENT CONTROL COURSE. THIS PERSON SHALL HAVE THE AUTHORITY TO CARRY OUT THE IMPLEMENTATION OF ANY INSTRUCTION CONCERNING THE EROSION AND SEDIMENT CONTROL PLAN PROVIDED BY THE ENGINEER. THIS INDIVIDUAL AND THE ENGINEER MUST MAKE INSPECTIONS A MINIMUM OF ONCE EVERY SEVEN DAYS OF THE FOLLOWING:
  - DISTURBED AREAS OF THE PROJECT SITE THAT HAVE NOT BEEN FULLY STABILIZED.
  - STRUCTURAL CONTROL MEASURES (SUCH AS PERIMETER EROSION BARRIER, ETC.)
  - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE PROJECT SITE.
  - AN ADDITIONAL INSPECTION OF THE ITEMS LISTED ABOVE MUST BE MADE WITHIN 24-HOURS AFTER A 24-HOUR RAINFALL OR EQUIVALENT SNOWFALL EVENT GREATER THAN 0.5-INCH. DURING WINTER MONTHS, ALL MEASURES MUST BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. AREAS OF THE DEVELOPMENT SITE THAT ARE NOT TO BE GRADED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL SEEDING IS PERFORMED.
- WORK IN OR NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.
- IF DEWATERING ACTIVITIES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AND EFFECTIVE SEDIMENT CONTROL MEASURE AND FILTERED (E.G. SEDIMENT BASIN WITH BAFFLE SYSTEM OR OTHER APPROPRIATE MEASURES).
- WHERE STREAM DISTURBANCE IS NECESSARY, THE STREAM, INCLUDING BED AND BANKS, SHALL BE RESTABILIZED WITHIN FORTY-EIGHT (48) HOURS AFTER DISTURBANCE IS COMPLETED OR INTERRUPTED.
- PROPERTIES AND CHANNELS ADJOINING THE DEVELOPMENT SITE SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD-PRONE AREA, WETLAND AREAS OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES OR ISOLATED WATERS OF COOK COUNTY.
- LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF GUTTERS OR DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.

- ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- SEE DRAINAGE PLANS FOR LOCATIONS OF EXISTING UTILITIES, PROPOSED STORM SEWER AND PROPOSED DRAINAGE STRUCTURES.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE. ALL AREAS OF BARE GROUND WILL BE TEMPORARILY SEEDED EVERY 7 DAYS UNTIL PERMANENT EROSION CONTROL IS IN PLACE.
- TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 14 DAYS OR MORE.
- ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED.
- ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED.
- IF AND/OR WHEN THE CONTRACTOR REQUESTS CHANGE TO POSTPONE COMPLETION OF THE EXCAVATION OF A SPECIFIC AREA AS A CONTINUOUS OPERATION AND PLACING THE TOPSOIL AS DEFINED IN THE STANDARD SPECIFICATIONS, THE ENGINEER MAY ALLOW THE CONTRACTOR TO STABILIZE THE AREA USING TEMPORARY STABILIZATION WITH STRAW MULCH 25 FEET AWAY FROM THE SHOULDER OF THE ROAD PROVIDED THE FOLLOWING CONDITIONS ARE MET:
  - ALL AREAS BEING STABILIZED ARE 1:3 SLOPES OR FLATTER
  - THE CONTRACTOR BEARS THE COST OF PREPARING THE SEED BED AND STABILIZING THE AREA WITH TEMPORARY STABILIZATION WITH MULCH, METHOD 2.
  - ALL REQUIRED SEDIMENT CONTROL MEASURES FOR THE SECTION OF ROAD IN QUESTION HAVE BEEN INSTALLED AND ARE BEING MAINTAINED.
- ALL AREAS WITHIN R.O.W. WILL BE RESTORED WITH TOPSOIL PLACEMENT AND EXCAVATION, SEEDING CLASS 2A OR CLASS 3 AND CLASS 4 WITH EROSION CONTROL BLANKET.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE RECEPTACLES FOR THE DEPOSITION OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, WATER OF THE U.S. OR ISOLATED WATERS OF COOK COUNTY. THE CONTRACTOR SHALL MAINTAIN THE DEVELOPMENT SITE FREE OF CONSTRUCTION MATERIAL DEBRIS.
- TEMPORARY FENCE SHOULD BE ERECTED ALONG THE DRIP LINE OF EXISTING TREES TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION. AFTER TREES ARE SAFELY FENCED, NOTHING IS TO BE STORED, DRIVEN OR DISTURBED INSIDE THE FENCE. REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL ERECT A PERIMETER EROSION BARRIER AROUND EXISTING WETLANDS TO ESTABLISH A "WETLAND PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOBSITE. NO WORK IS TO BE PERFORMED, MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "WETLAND PROTECTION ZONE". REMOVE PERIMETER EROSION BARRIER ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
- THE CONTRACTOR SHALL ATTACH AN ALUMINUM SIGN WITH THE FOLLOWING TEXT: "PROTECTED WETLAND-NO INTRUSION". THE SIGN(S) SHALL BE ATTACHED TO THE STAKES BY THE METHOD APPROVED BY THE ENGINEER. THE SIGN(S) WILL BE PROVIDED BY THE DEPARTMENT AND SHALL BE PICKED UP BY THE CONTRACTOR FROM THE DISTRICT ONE ROADSIDE DEVELOPMENT ARCHITECT IN SCHAUMBURG, ILLINOIS. SCHEDULING THE PICKUP OF THE SIGNS CAN BE ARRANGED BY CONTACTING THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171. WHEN WORK HAS BEEN COMPLETED, THE SIGN(S) SHALL BE RETURNED TO THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT. THE COST OF PICKING UP, ATTACHING THE SIGNS TO THE TEMPORARY STAKES AND RETURNING THE SIGNS WILL BE NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER.
- EROSION CONTROL BLANKET SHALL BE PLACED ON ALL AREAS WITH TEMPORARY SEEDING THAT ARE ON SLOPES 1:3 AND STEEPER OR WITHIN 25 FEET FROM THE EDGE OF SHOULDER/ BACK OF CURB AS SHOWN ON THE EROSION AND SEDIMENT CONTROL ON PLAN SHEET 21. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL AREAS WITH PERMANENT SEEDING, CLASS 2A SEEDING OR CLASSES 3 AND 4 AS SHOWN ON THE LANDSCAPING AND PAVEMENT MARKING PLAN ON SHEET 26.
- PROPER DRAINAGE SHALL BE MAINTAINED IN THE IMPROVEMENT AREA DURING CONSTRUCTION. THE CONTRACTOR IS TO PREVENT DAMAGE OR CHANGE TO FLOOD PLAINS AND WETLANDS DURING THE DRAINAGE MAINTENANCE PROCESS. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR PAVEMENT REMOVAL (SPECIAL).

**SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE**

- INSTALL TRAFFIC CONTROL DEVICES.
- PRESERVE AND PROTECT EXISTING VEGETATION.
- REMOVE EXISTING PAVEMENT, SIDEWALKS AND SUPERSTRUCTURE AS SHOWN ON THE PLANS.
- INSTALL TEMPORARY SOIL STABILIZATION CONTROL MEASURES.
- INSTALL NEW BRIDGE SUPERSTRUCTURE.
- INSTALL DRAINAGE STRUCTURES AND STORM SEWERS AS SHOWN ON DRAINAGE PLANS.
- INSTALL EMBANKMENT WIDENING AND ROADWAY SUBGRADE.
- INSTALL CURB AND GUTTER AND NEW PAVEMENT.
- INSTALL SIDEWALKS.
- PROVIDE SEEDING.
- PROVIDE LANDSCAPING ITEMS.
- PERFORM CONTINUING MAINTENANCE OF SEDIMENT CONTROL MEASURES.
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER STABILIZATION OF DISTURBED GROUND.

**SOIL PROTECTION SCHEDULE:**

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
PERMANENT SEEDING						→					→	
DORMANT SEEDING	→		→							→		→
TEMPORARY SEEDING										→		
EROSION BLANKET / HYDROMULCH											→	

**TREE PROTECTION SCHEDULE**

STATION	OFFSET (FEET)	SIZE (INCH)	RECOMMENDED ACTION
104+60	53' LT	14	TREE TRUNK PROTECTION
104+60	83' LT	4	TREE TRUNK PROTECTION
104+68	47' LT	15	TREE TRUNK PROTECTION
104+76	82' LT	10	TREE TRUNK PROTECTION
105+40	39' LT	18	TREE TRUNK PROTECTION
105+43	39' LT	17	TREE TRUNK PROTECTION
105+44	71' LT	21	TREE TRUNK PROTECTION
106+15	29' RT	30	TREE TRUNK PROTECTION

**HIGHWAY STANDARDS**

STD. NO. TITLE  
280001 TEMPORARY EROSION CONTROL SYSTEMS

FILE NAME = G:\Engineering\Live\Projects\13003 IDOT DURY\3003b - W 2 Contract No. 60X41\CAOD\CAOD Sheets\G:\1\16041-Sht-EROSION CONTROL 00.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
	DRAWN - AB	REVISED -
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PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

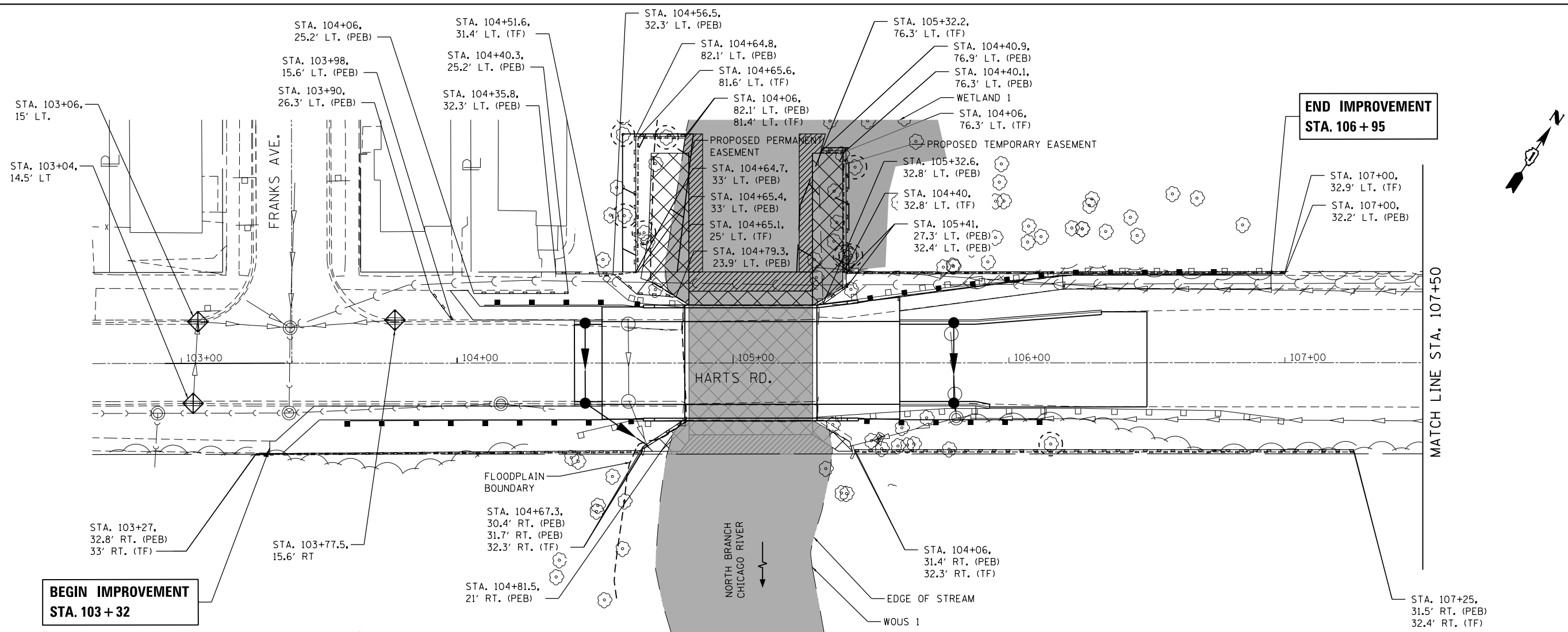
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION AND SEDIMENT CONTROL NOTES &  
TREE PROTECTION SCHEDULE  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	20
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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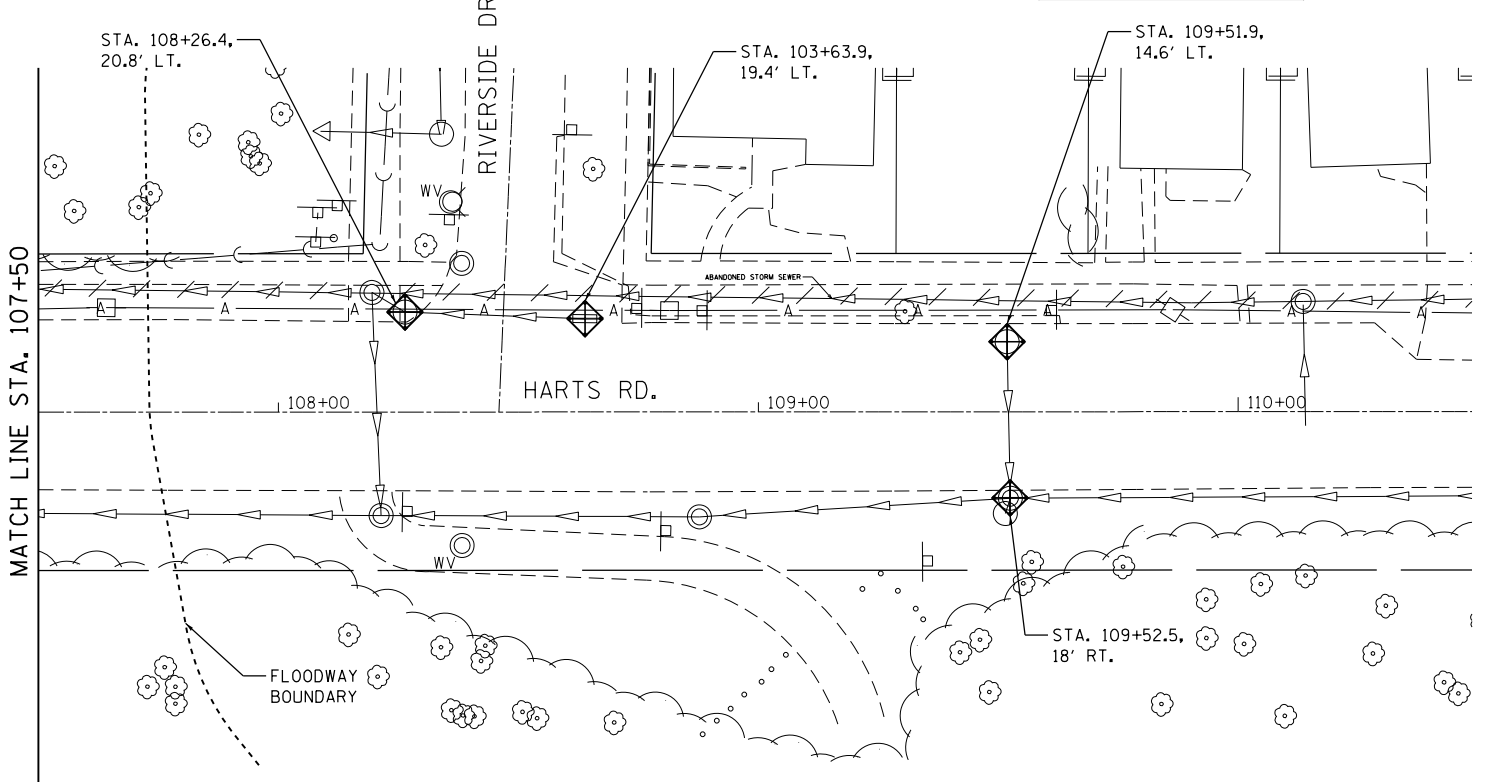


**BEGIN IMPROVEMENT  
STA. 103 + 32**





**END IMPROVEMENT  
STA. 106 + 95**

MATCH LINE STA. 107+50

MATCH LINE STA. 107+50



**LEGEND**

-  INLET FILTER
-  PERIMETER EROSION BARRIER (PEB)
-  TEMPORARY FENCE (TF)
-  TREE TRUNK PROTECTION



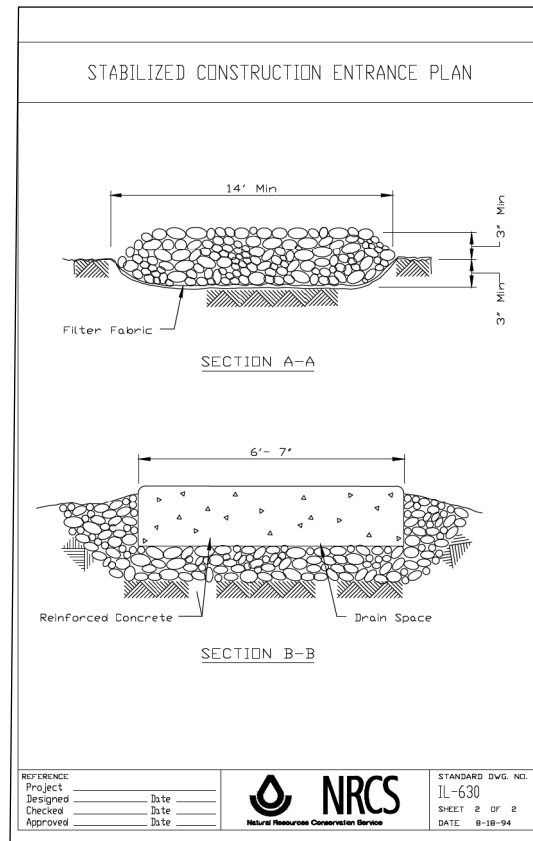
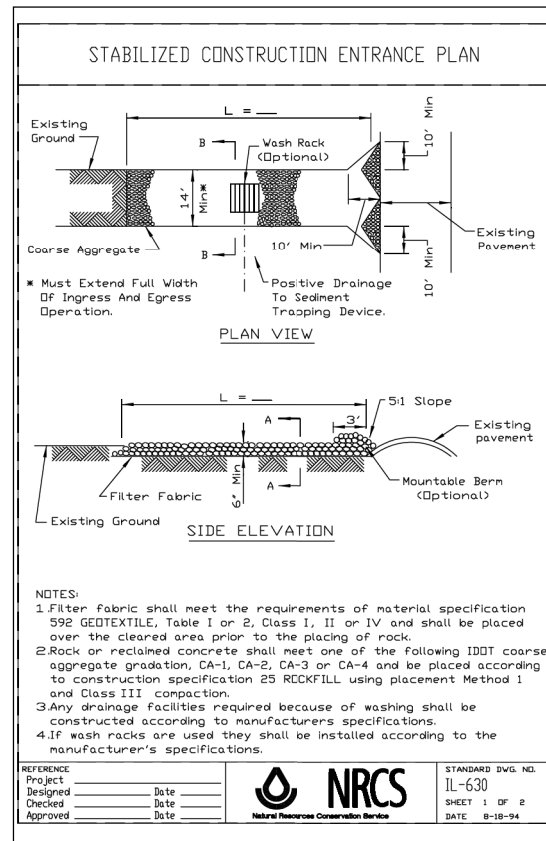
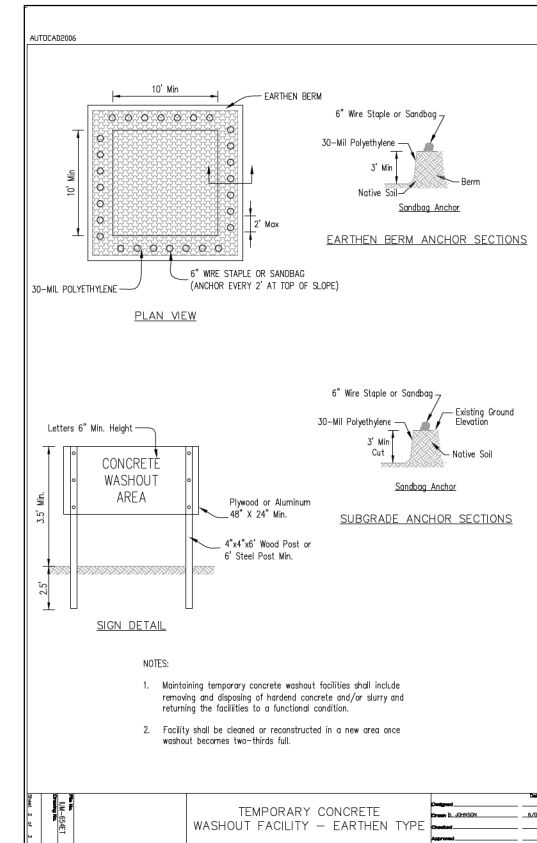
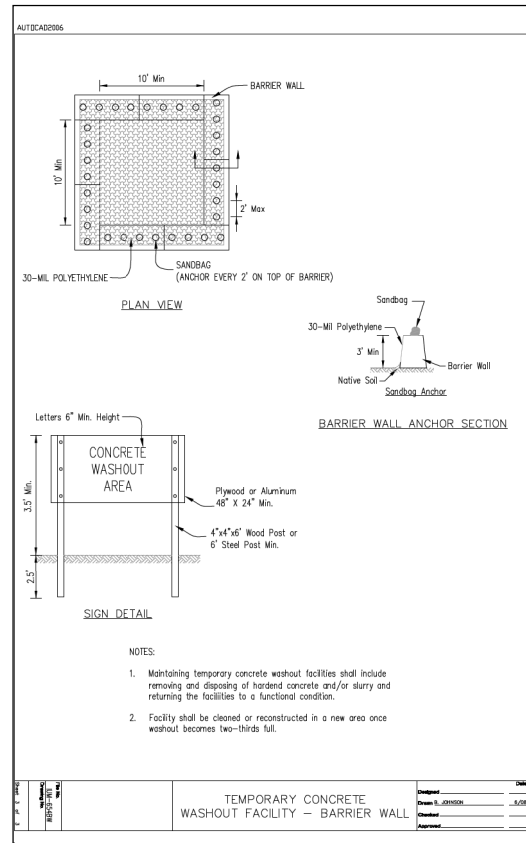
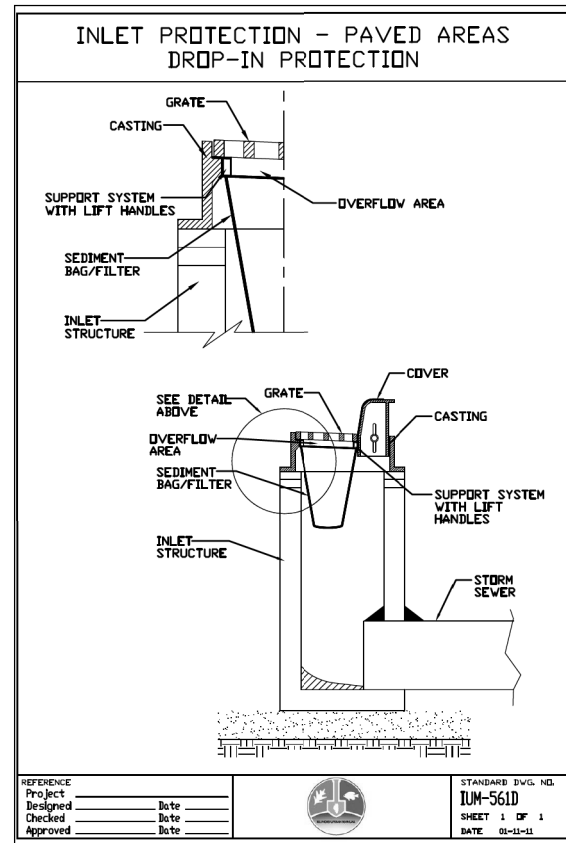
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DRAWN - JN	REVISED -	
CHECKED - JMT	REVISED -	
DATE - 3-17-2017	REVISED -	
PLOT SCALE = 48.0000' / in.		
PLOT DATE = 3/16/2017		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION AND SEDIMENT CONTROL PLAN  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. 103+32 TO STA. 106+95

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	21
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



FILE NAME = Q:\Engineering\Live\Projects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA00\CA00 Sheets C.v1\160X41-sht-ErosContraDet.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
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	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

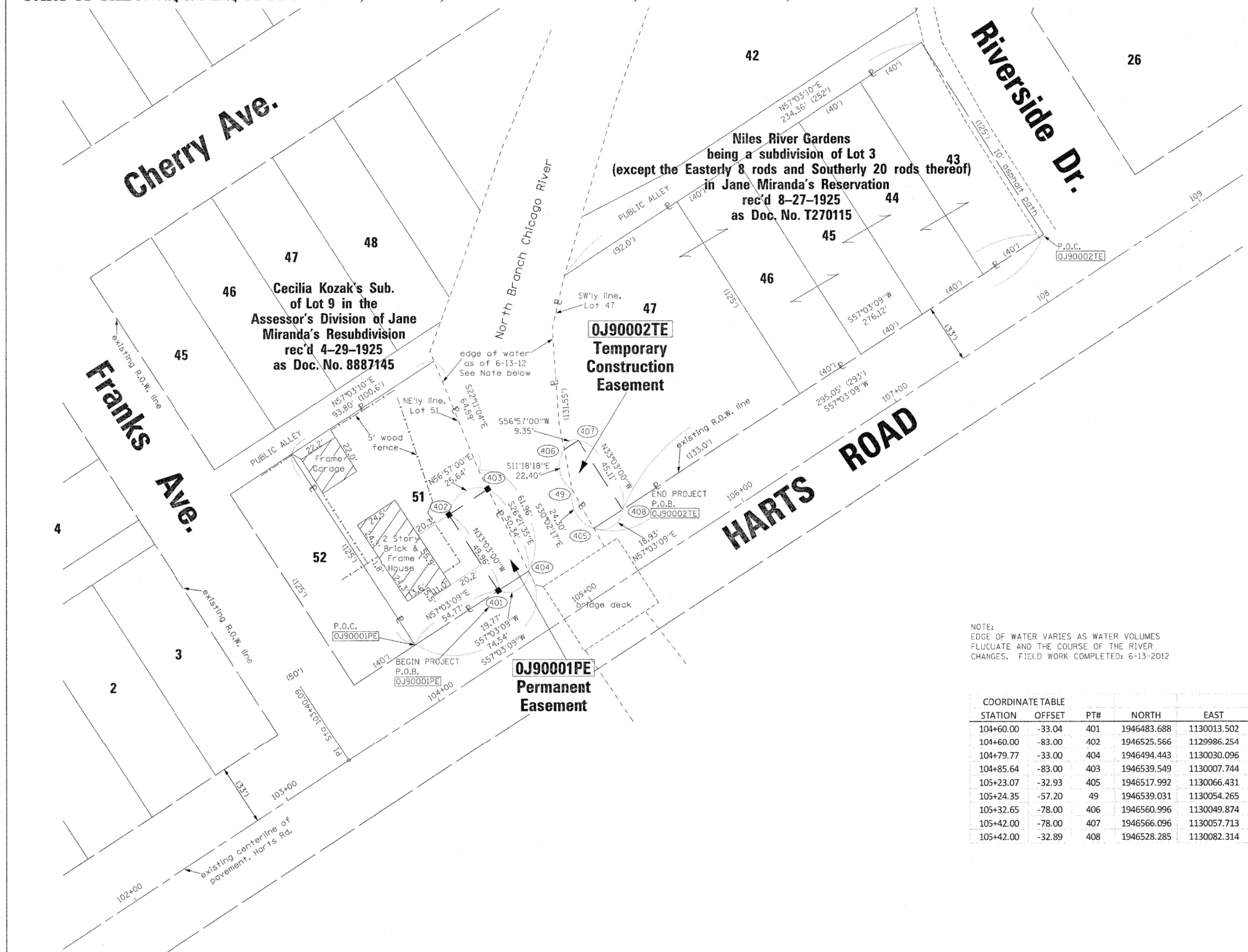
**EROSION CONTROL DETAILS  
HARTS ROAD**

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	22
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



PART OF THE NW 1/4 & NE 1/4 OF SECTION 31, TWP.41N., R.13E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.



**LEGEND**

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

GRAPHIC SCALE  
 0 20.40 30.60 50.100  
 FEET  
 SCALE: 1" = 30'

- Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone.
- IRON PIPE OR ROD FOUND
  - ⊕ "MAG" NAIL SET
  - + CUT CROSS FOUND OR SET
  - 5/8" REBAR SET
  - T1, T2, T3 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
  - BT1, BT2, BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
  - STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
  - M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
  - ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
  - RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS )  
 COUNTY OF WILL )

THIS IS TO CERTIFY THAT I, KENNETH J. PESAVENTO, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001251,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 31, TOWNSHIP 41 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, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT \_\_\_\_\_, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3425  
 LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

**RT & A** Ruettiger, Tonelli & Associates, Inc.  
 Surveyors • Engineers • Planners • Landscape Architects • GIS Consultants  
 2174 ONONDAGA STREET • JOLIET, ILLINOIS 60435  
 P.O. BOX 744-6600 FAX (815) 744-0101  
 Website: www.ruettiger.com  
**R.T. & A. Dwg. No.: 2012-0601**

NOTE: EDGE OF WATER VARIES AS WATER VOLUMES FLUCTUATE AND THE COURSE OF THE RIVER CHANGES. FIELD WORK COMPLETED: 6-13-2012

STATION	OFFSET	PT#	NORTH	EAST
104+60.00	-33.04	401	1946483.688	1130013.502
104+60.00	-83.00	402	1946525.566	1129986.254
104+79.77	-33.00	404	1946494.443	1130030.096
104+85.64	-83.00	403	1946539.549	1130007.744
105+23.07	-32.93	405	1946517.992	1130066.431
105+24.35	-57.20	49	1946539.031	1130054.265
105+32.65	-78.00	406	1946560.996	1130049.874
105+42.00	-78.00	407	1946566.096	1130057.713
105+42.00	-32.89	408	1946528.285	1130082.314

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT ACRES	AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
0J90001	DAVE C. SCHELER AND JEAN E. SCHELER, HIS WIFE, IN JOINT TENANCY	0.238	N/A	N/A	0.238	0.026	N/A	PERMANENT	10-31-201-004	
0J90002	THE FOREST PRESERVE DISTRICT OF COOK COUNTY	0.788	N/A	N/A	0.788	0.017	N/A	CONST.	10-31-203-022PT	

FILE NAME = Q:\Engineering\Live\Projects\13003 IDOT DUR\13003b - W 2 Contract No. 60X41\CA00\CA00 Sheets\Civil\180X41-Sht-PLAT OF HIGHWAYS.dgn



USER NAME = johnn	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/16/2017	CHECKED - PP	REVISED -
	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS  
 HARTS ROAD

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	23
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

PLAT OF HIGHWAYS  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 HARTS ROAD

LIMITS: @ CHICAGO RIVER COUNTY: COOK  
 PROJECT JOB NO.: R-90-019-12  
 STATION 102+00 TO STATION 108+00  
 SCALE: 1"=30' SHEET 2 OF 2

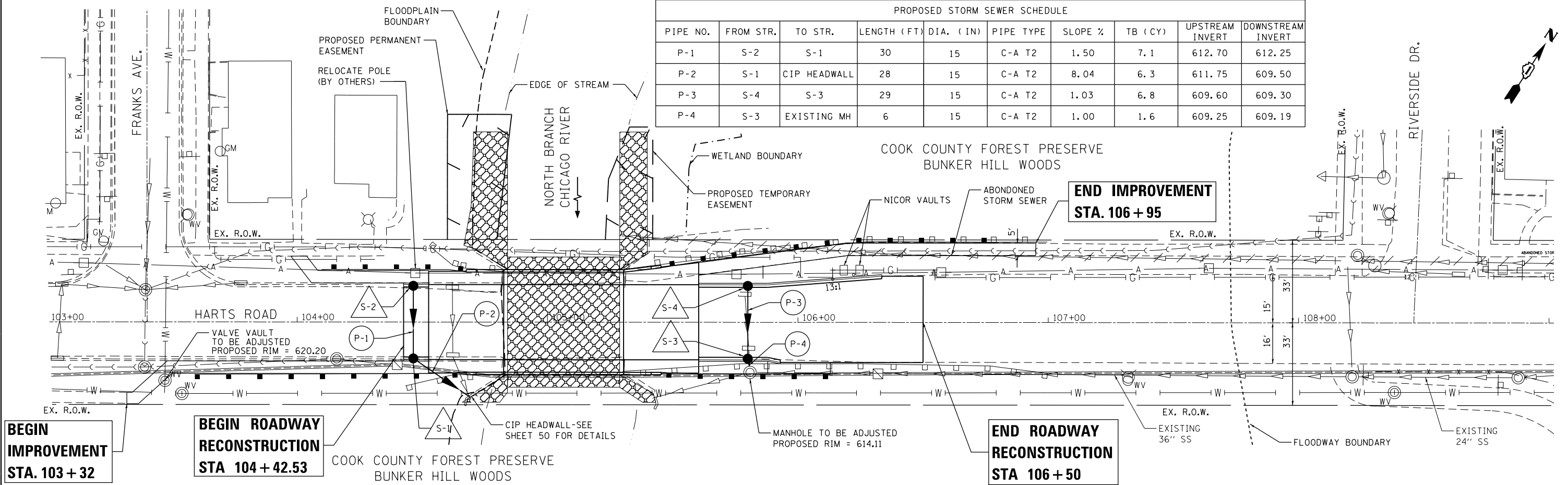
BUREAU OF LAND ACQUISITION  
 201 WEST CENTER COURT  
 SCHAMBURG, ILLINOIS 60196

RECEIVED  
 APR 24 2014  
 PLATS & LEGALS

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	

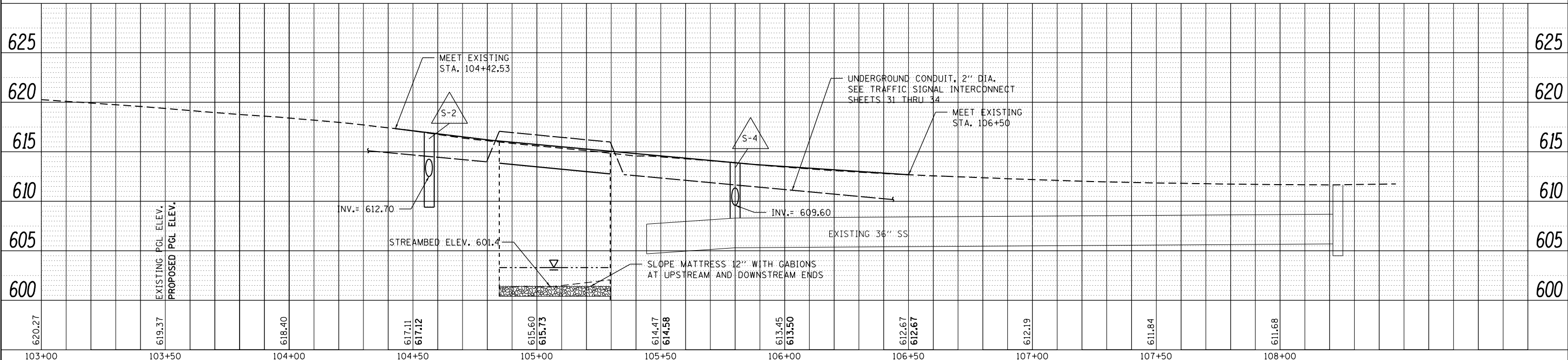
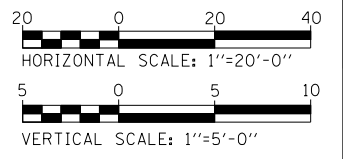
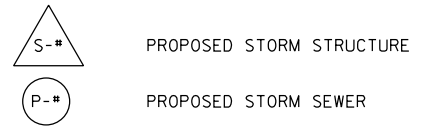
PIPE NO.	FROM STR.	TO STR.	LENGTH (FT)	DIA. (IN)	PIPE TYPE	SLOPE %	TB (CY)	UPSTREAM INVERT	DOWNSTREAM INVERT
P-1	S-2	S-1	30	15	C-A T2	1.50	7.1	612.70	612.25
P-2	S-1	CIP HEADWALL	28	15	C-A T2	8.04	6.3	611.75	609.50
P-3	S-4	S-3	29	15	C-A T2	1.03	6.8	609.60	609.30
P-4	S-3	EXISTING MH	6	15	C-A T2	1.00	1.6	609.25	609.19



STRUCTURE NO.	DESCRIPTION	STATION	OFFSET	INVERT EL.	E/P EL.
S-1	CATCH BASINS, TY A, 4' -DIA, TY 11V FRAME & GRATE	104+46.50	14' RT	612.25 (NW) 611.75 (SE)	616.95
S-2	CATCH BASINS, TY A, 4' -DIA, TY 11V FRAME & GRATE	104+46.50	14' LT	612.70 (SE)	616.95
S-3	CATCH BASINS, TY A, 4' -DIA, TY 11V FRAME & GRATE, FLAT SLAB TOP	105+80	14' RT	609.30 (NW) 609.25 (SE)	613.60
S-4	CATCH BASINS, TY A, 4' -DIA, TY 11V FRAME & GRATE, FLAT SLAB TOP	105+80	14' LT	609.60 (SE)	613.60

COOK COUNTY FOREST PRESERVE  
BUNKER HILL WOODS

**LEGEND**



USER NAME = johnn	DESIGNED - SAT	REVISED -
	DRAWN - CC	REVISED -
	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DRAINAGE AND UTILITY PLAN**  
**HARTS ROAD**

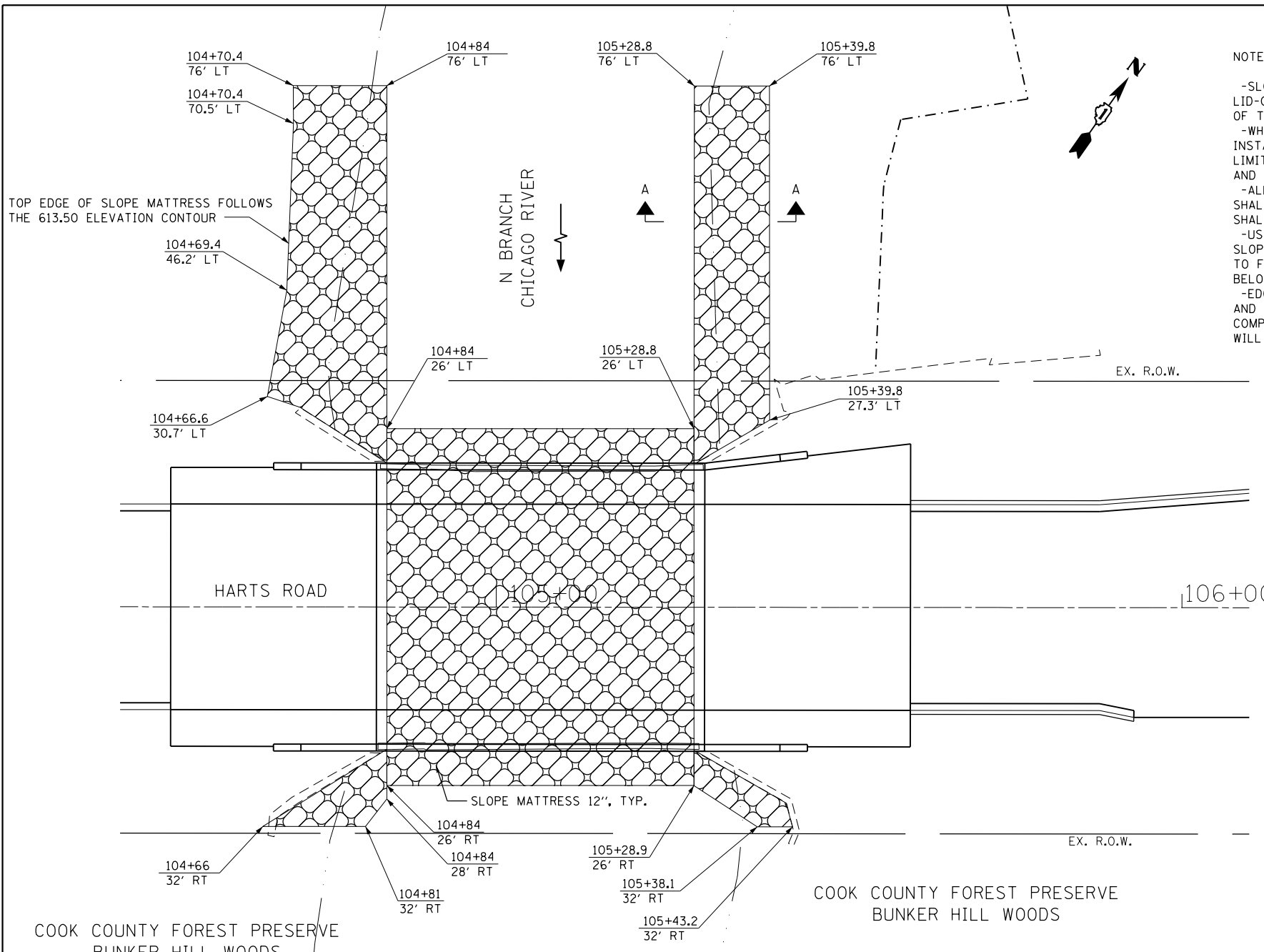
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	24
CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT

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FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\Civil\60X41-sht-SlopeProtection.dgn



**NOTES:**

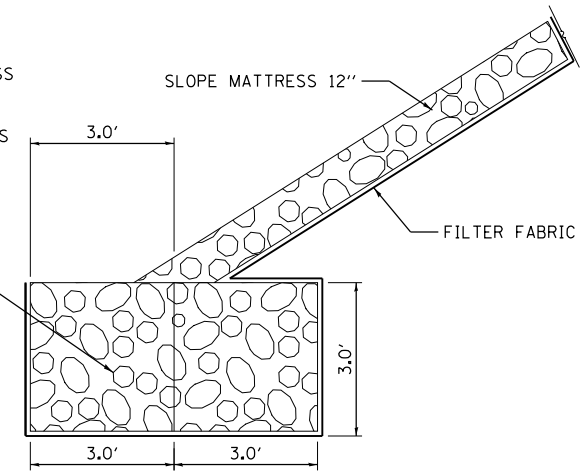
- SLOPE MATTRESS ASSEMBLY, INSTALLATION, FILLING AND LID-CLOSING SHALL BE IN ACCORDANCE WITH SECTION 284 OF THE STANDARD SPECIFICATIONS.
- WHERE A COMPLETE SLOPE MATTRESS UNIT CANNOT BE INSTALLED AS SHOWN ON THE PLANS BECAUSE OF SPACE LIMITATIONS, THE BASKET UNIT SHALL BE CUT, FOLDED AND WIRED TOGETHER TO SUIT SITE CONDITIONS.
- ALL WIRE FABRIC, BASKET ASSEMBLIES, AND TIE WIRES SHALL BE VINYL COATED. ALL NON-ALUMINUM MATERIAL SHALL BE GALVANIZED PRIOR TO VINYL COATING.
- USE STONE RIPRAP, CLASS A3 IN FILL AREAS UNDER THE SLOPE MATTRESS AS NEEDED TO BRING THE SLOPE MATTRESS TO FINISH GRADE. THE FILTER FABRIC SHALL BE PLACED BELOW THIS RIPRAP.
- EDGE OF WATER VARIES AS WATER ELEVATION FLUCTUATES AND THE COURSE OF THE RIVER CHANGES. FIELD WORK COMPLETED: 6-13-2012. NO ADDITIONAL EASEMENTS WILL BE REQUIRED.

**NOTES:**

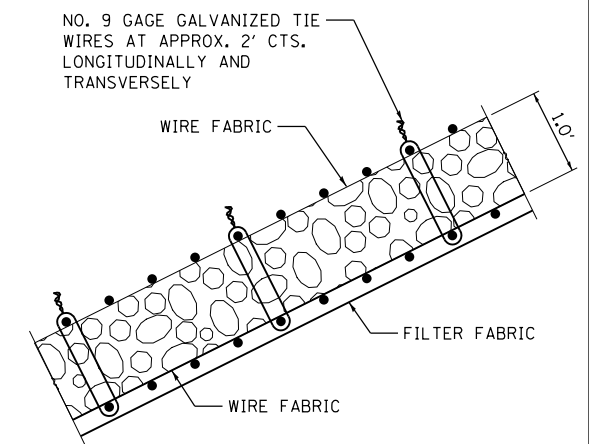
- GABIONS (3 FT X 3 FT) ARE TO BE PLACED ALONG THE UPSTREAM EDGE OF ALL SLOPE MATTRESS INSTALLATIONS.
- GABIONS (3 FT X 3 FT) ARE TO BE PLACED ALONG THE DOWNSTREAM EDGE OF ALL SLOPE MATTRESS INSTALLATIONS EXCEPT FOR THE MATTRESS IN THE SE QUADRANT.

**SLOPE PROTECTION QUANTITIES**

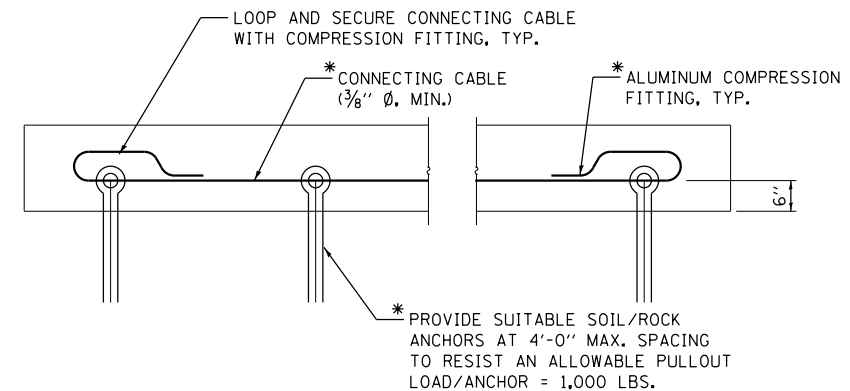
ITEM	UNIT	TOTAL
FILTER FABRIC	SQ. YD.	834
SLOPE MATTRESS 12"	SQ. YD.	463
STONE RIPRAP, CLASS A3	TON	10
GABIONS	CU. YD.	128



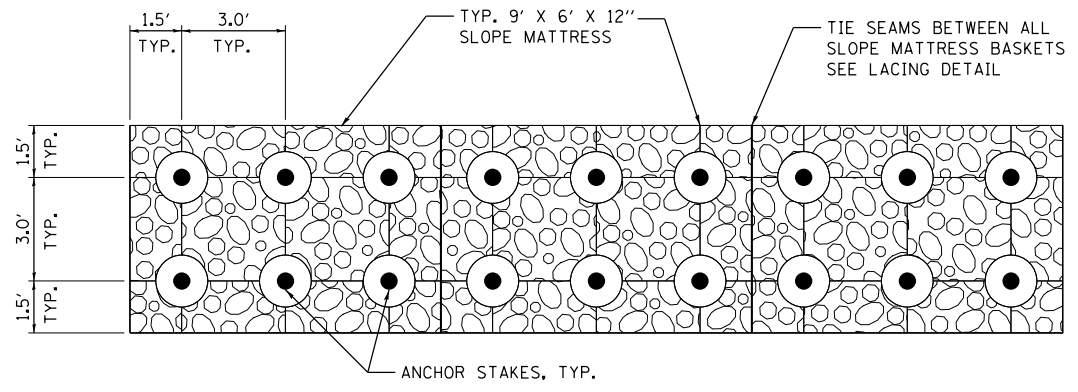
**SECTION A-A**



**SLOPE PROTECTION LAYOUT**

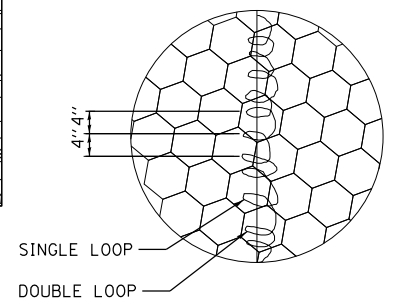


**SLOPE MATTRESS SECURING DETAIL**



**NOTE:**  
ANCHOR STAKES ARE TO BE PLACED ON 3.0' CTS. WITH AN ARRANGEMENT AS SHOWN ABOVE.

**TYPICAL ANCHOR STAKE LAYOUT DETAIL**



**LACING DETAIL**



USER NAME = johnn	DESIGNED - DH	REVISED -
PLOT SCALE = 20.00' / in.	DRAWN - JN	REVISED -
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SLOPE PROTECTION DETAILS  
HARTS ROAD**

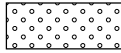
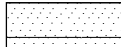
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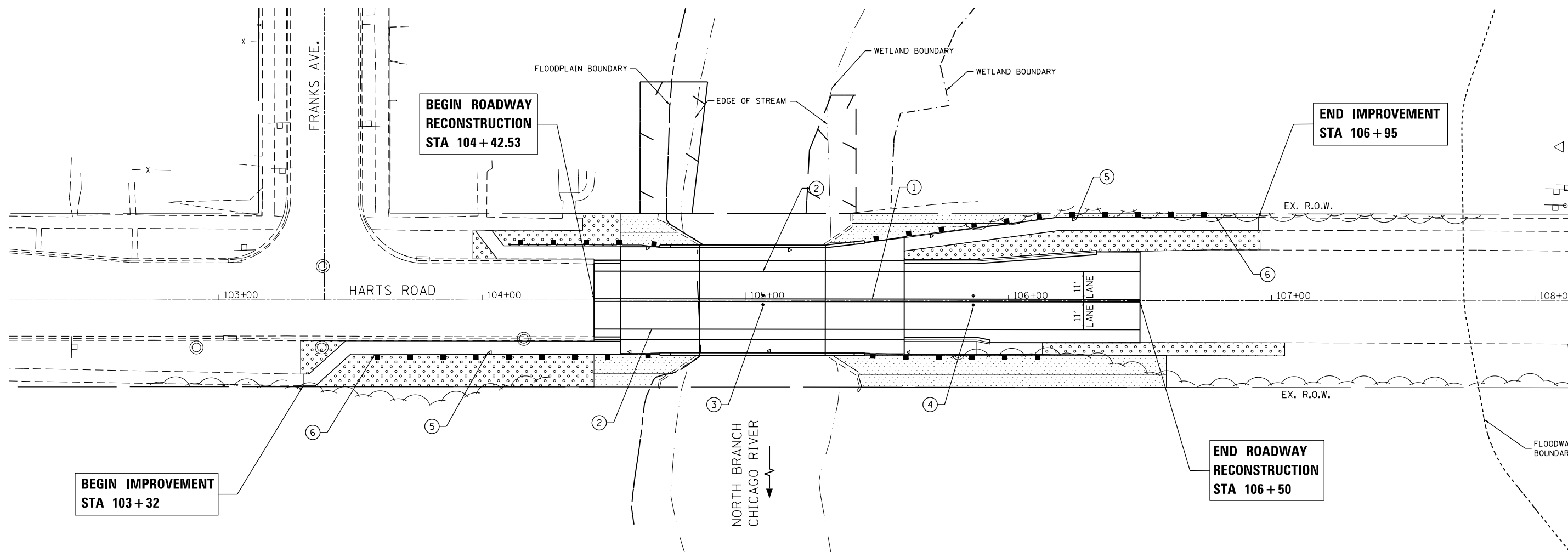
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	25
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

**PAVEMENT MARKING LEGEND**

- ① POLYUREA PAVEMENT MARKING TYPE I - LINE 4", DOUBLE YELLOW
- ② POLYUREA PAVEMENT MARKING TYPE I - LINE 4", WHITE
- ③ RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE) - 2 WAY AMBER
- ④ RAISED REFLECTIVE PAVEMENT MARKER - 2 WAY AMBER
- ⑤ GUARDRAIL REFLECTORS, TYPE B, MONODIRECTIONAL CRYSTAL
- ⑥ TERMINAL MARKER - DIRECT APPLIED

**LANDSCAPING LEGEND**

-  SEEDING, CLASS 2A W/EROSION CONTROL BLANKET
-  SEEDING, CLASS 3 AND CLASS 4 W/EROSION CONTROL BLANKET



FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUFV13003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\CA00\CA00 Sht-Pavement Marking.dgn



USER NAME = johnn	DESIGNED - SAT	REVISED -
DRAWN - CC	REVISOR -	
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PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISOR -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

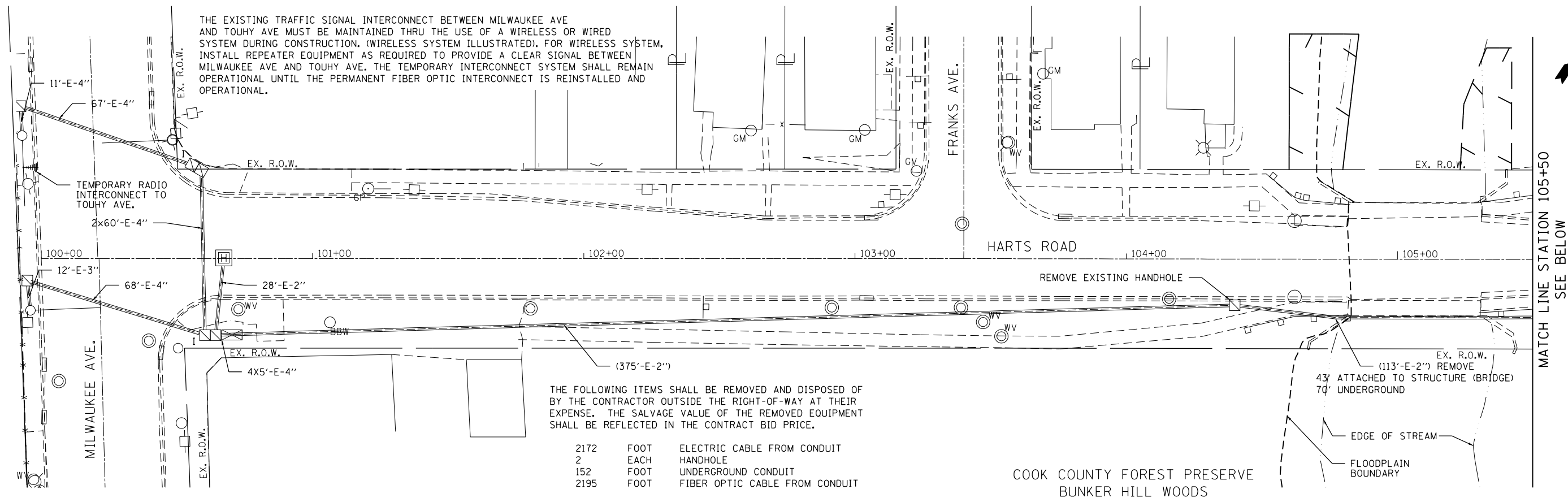
**LANDSCAPING AND PAVEMENT MARKING PLAN  
HARTS ROAD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	26
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

TEMPORARY INTERCONNECT NOTES

THE EXISTING TRAFFIC SIGNAL INTERCONNECT BETWEEN MILWAUKEE AVE AND TOUHY AVE MUST BE MAINTAINED THRU THE USE OF A WIRELESS OR WIRED SYSTEM DURING CONSTRUCTION. (WIRELESS SYSTEM ILLUSTRATED). FOR WIRELESS SYSTEM, INSTALL REPEATER EQUIPMENT AS REQUIRED TO PROVIDE A CLEAR SIGNAL BETWEEN MILWAUKEE AVE AND TOUHY AVE. THE TEMPORARY INTERCONNECT SYSTEM SHALL REMAIN OPERATIONAL UNTIL THE PERMANENT FIBER OPTIC INTERCONNECT IS REINSTALLED AND OPERATIONAL.

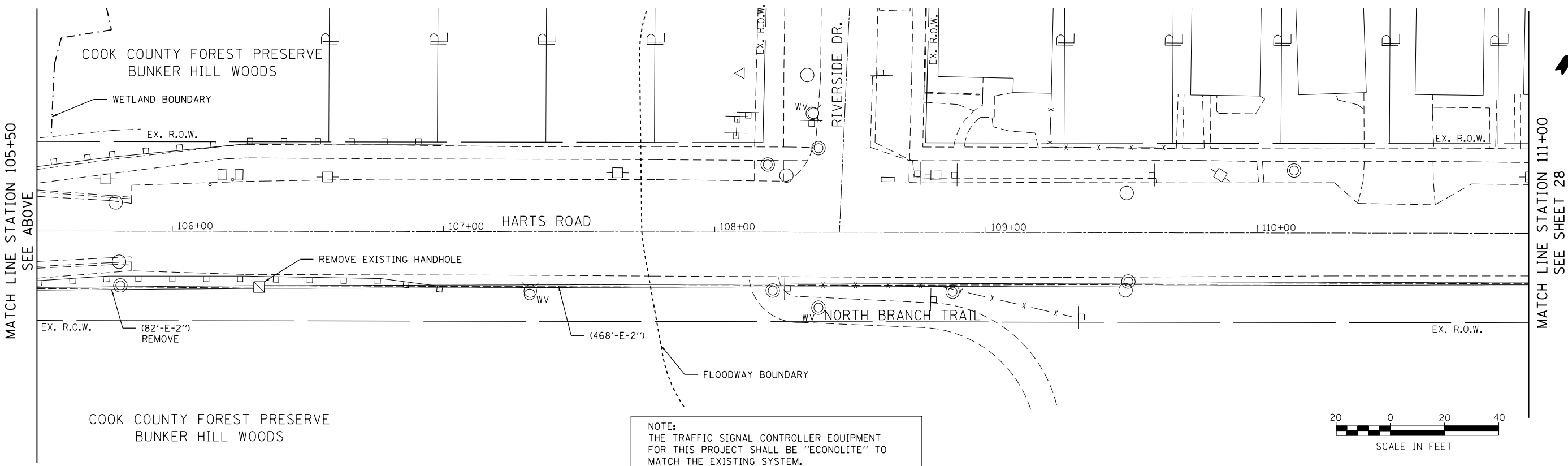


THE FOLLOWING ITEMS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2172	FOOT	ELECTRIC CABLE FROM CONDUIT
2	EACH	HANDHOLE
152	FOOT	UNDERGROUND CONDUIT
2195	FOOT	FIBER OPTIC CABLE FROM CONDUIT

COOK COUNTY FOREST PRESERVE  
BUNKER HILL WOODS

MATCH LINE STATION 105+50  
SEE BELOW



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



MATCH LINE STATION 111+00  
SEE SHEET 28

COOK COUNTY FOREST PRESERVE  
BUNKER HILL WOODS

MATCH LINE STATION 105+50  
SEE ABOVE

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA00\CA00 Sheets\G:\1\160X41-Sig-TempInterconnect\_01.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - CC	REVISED -	
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INTERCONNECT & REMOVAL PLAN  
HARTS ROAD - MILWAUKEE AVE. TO TOUHY AVE.

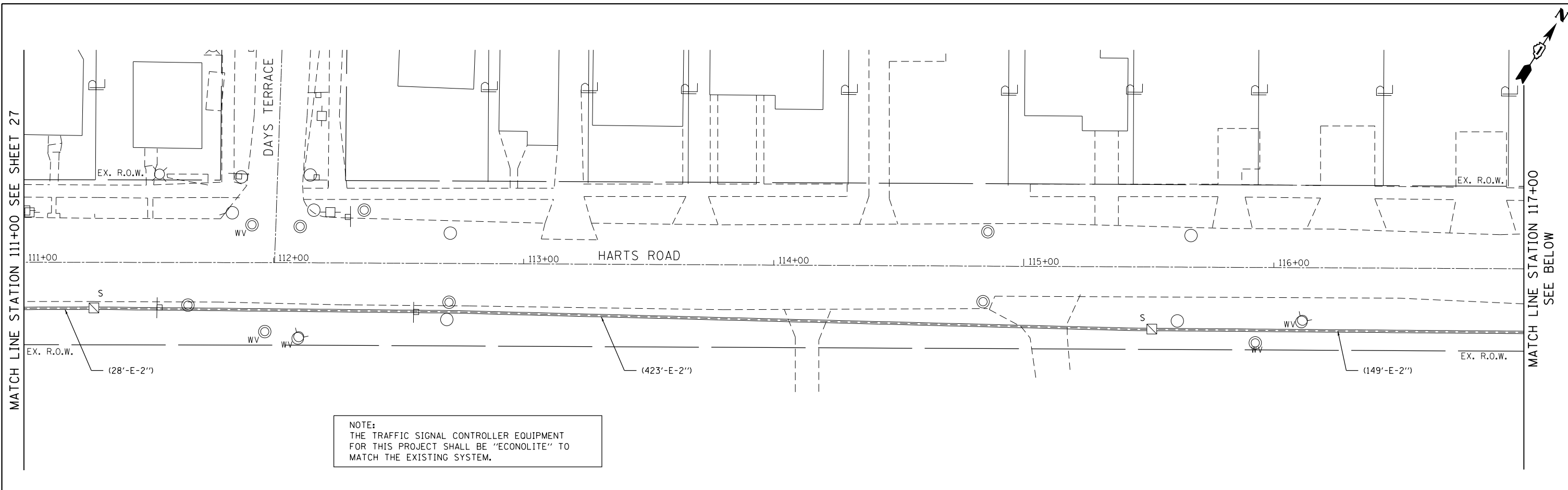
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	27
CONTRACT NO. 60X41				

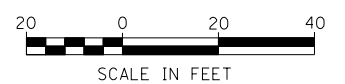
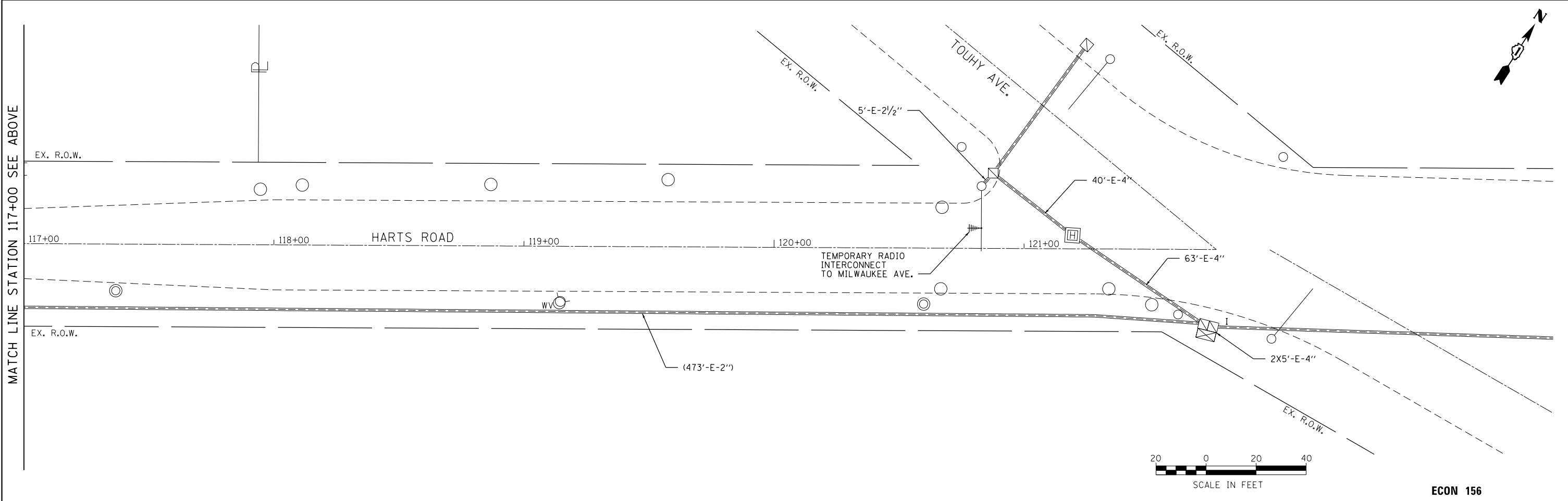
ECON 156

ILLINOIS FED. AID PROJECT

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\1\1\60X41-Sig-Templ\interconnect\_02.dgn



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



ECON 156



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - CC	REVISOR -	
CHECKED - JMT	REVISOR -	
DATE - 3-17-2017	REVISOR -	

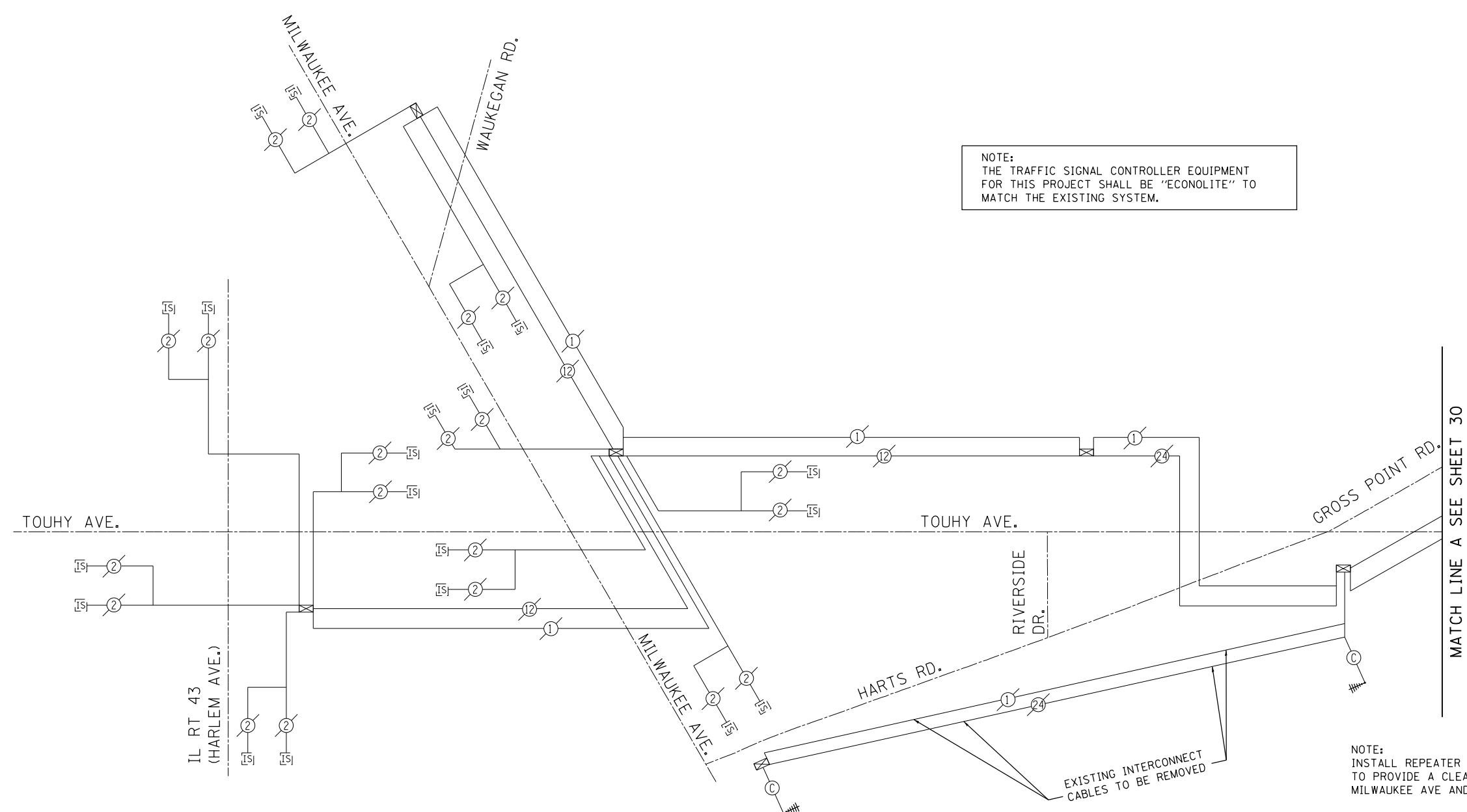
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INTERCONNECT & REMOVAL PLAN  
HARTS ROAD - MILWAUKEE AVE. TO TOUHY AVE.  
SCALE: 1" = 20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	28
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA00\CA00 Sheets C:\1\DI60X41-Sig-Interconnect SchematicPlan\_TEMP.dgn



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

NOTE:  
INSTALL REPEATER EQUIPMENT AS REQUIRED  
TO PROVIDE A CLEAR SIGNAL BETWEEN  
MILWAUKEE AVE AND TOUHY AVE

EXISTING INTERCONNECT  
CABLES TO BE REMOVED

ECON 156



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - GP	REVISED -	
CHECKED - JMT	REVISED -	
DATE - 3-17-2017	REVISED -	

PLOT SCALE = 40.0000' / in.
PLOT DATE = 3/16/2017

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC**  
**GROSS POINT ROAD /HARTS ROAD (FROM MILWAUKEE AVE. TO U.S. 14)**  
**TOUHY AVE. (FROM RIVERSIDE DR. TO U.S. 14)**

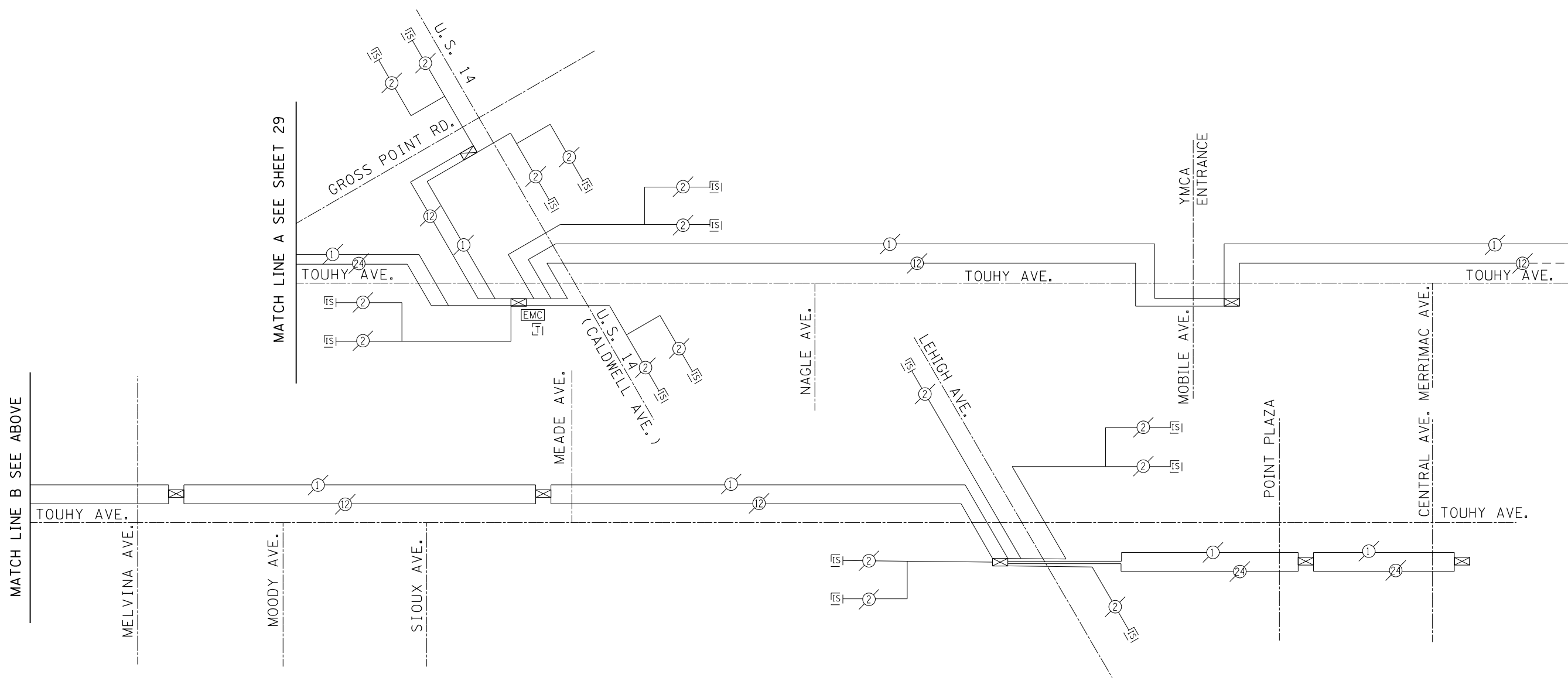
SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	29
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - GP	REVISED -	
CHECKED - JMT	REVISED -	
DATE - 3-17-2017	REVISED -	
PLOT SCALE = 40.0000' / in.		
PLOT DATE = 3/16/2017		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC  
GROSS POINT ROAD /HARTS ROAD (FROM MILWAUKEE AVE. TO U.S. 14)  
TOUHY AVE. (FROM RIVERSIDE DR. TO U.S. 14)**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

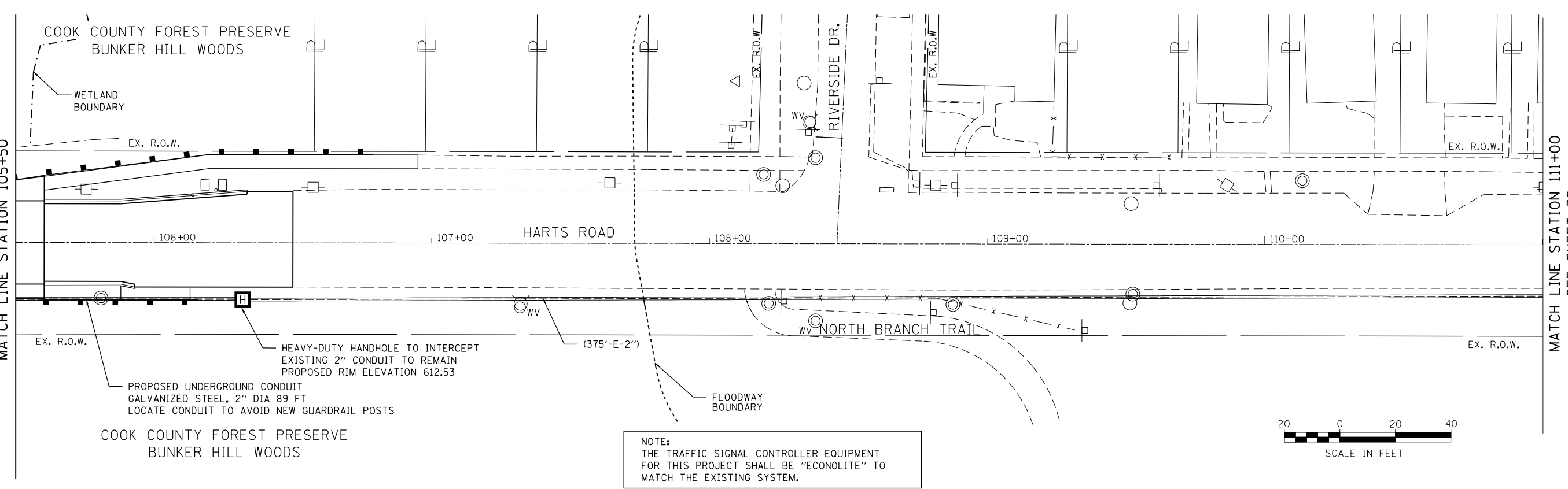
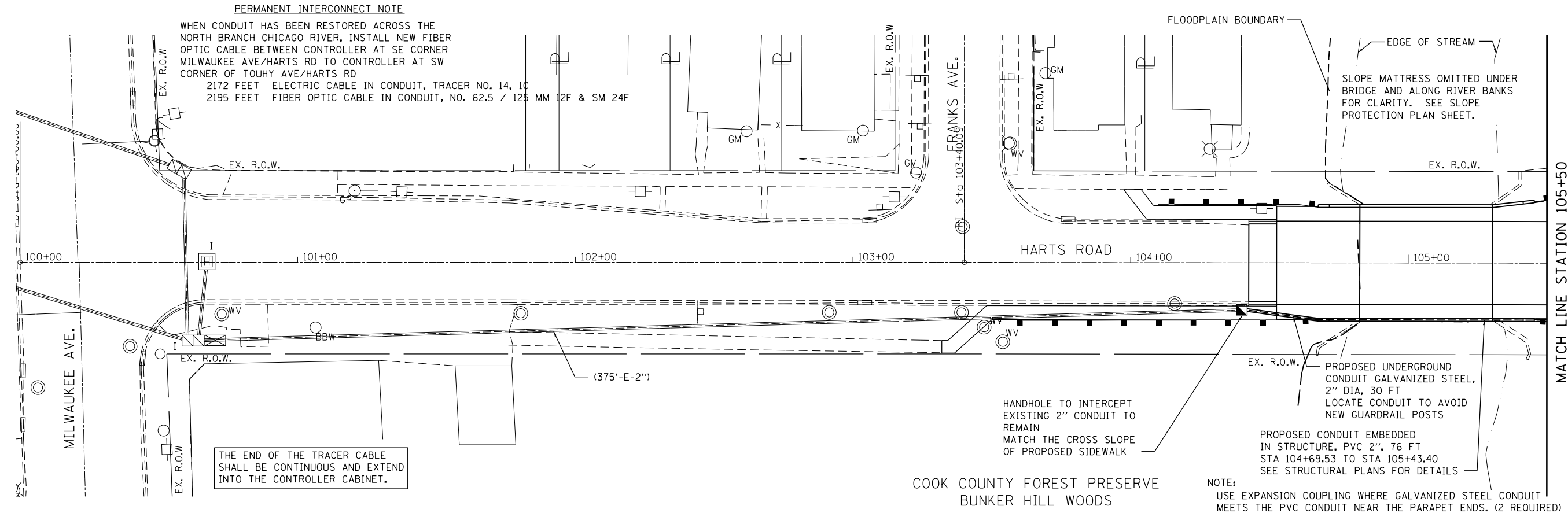
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	30
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

**ECON 156**

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W 2 Contract No. 60X41\CA00\CA00 Sheets\G:\1\160X41-Sig-ProposedInterconnect 01.dgn

**PERMANENT INTERCONNECT NOTE**

WHEN CONDUIT HAS BEEN RESTORED ACROSS THE NORTH BRANCH CHICAGO RIVER, INSTALL NEW FIBER OPTIC CABLE BETWEEN CONTROLLER AT SE CORNER MILWAUKEE AVE/HARTS RD TO CONTROLLER AT SW CORNER OF TOUHY AVE/HARTS RD  
 2172 FEET ELECTRIC CABLE IN CONDUIT, TRACER NO. 14, 1C  
 2195 FEET FIBER OPTIC CABLE IN CONDUIT, NO. 62.5 / 125 MM 12F & SM 24F



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - CC	REVISED -
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

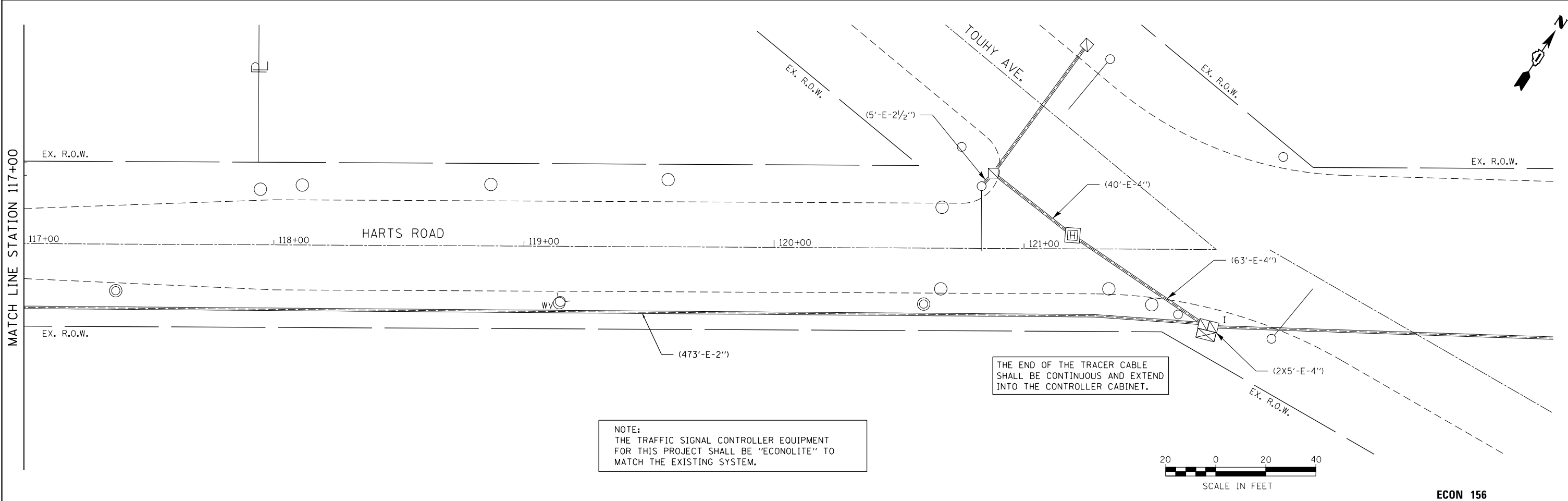
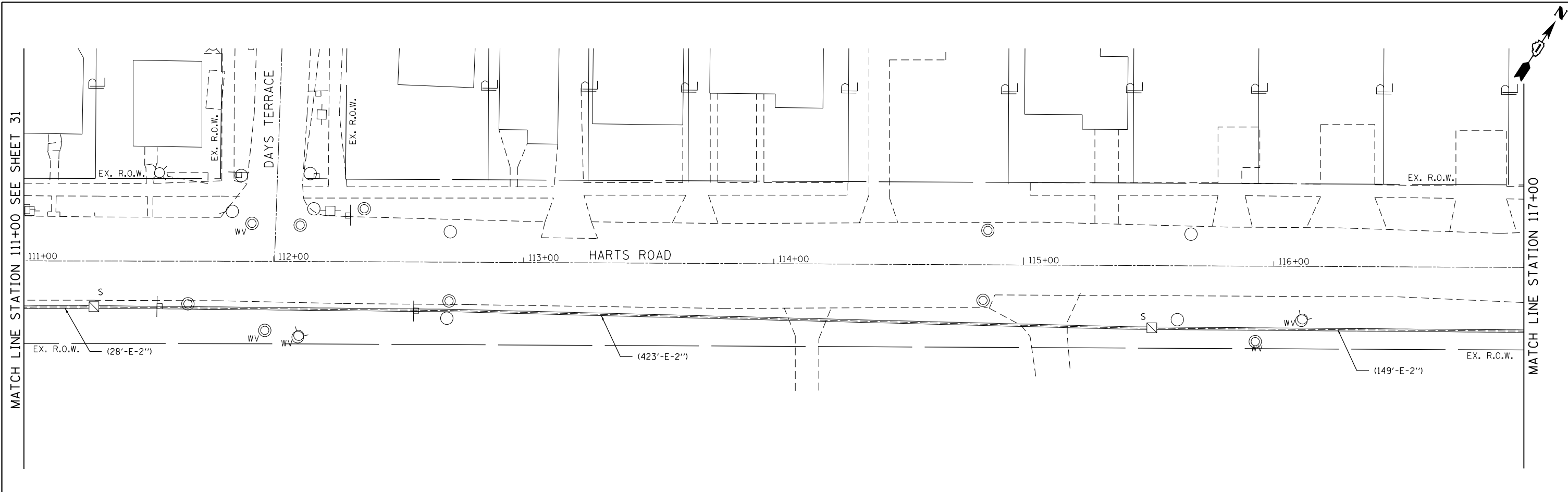
**PROPOSED TRAFFIC SIGNAL INTERCONNECT PLAN  
 HARTS ROAD - MILWAUKEE AVE. TO TOUHY AVE.**

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	31
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

ECON 156

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\G:\1\16041-Sig-ProposedInterconnect 02.dgn



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



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PLOT SCALE = 40.0000' / in.	DRAWN - CC	REVISED -
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TRAFFIC SIGNAL INTERCONNECT PLAN  
HARTS ROAD - MILWAUKEE AVE. TO TOUHY AVE.**

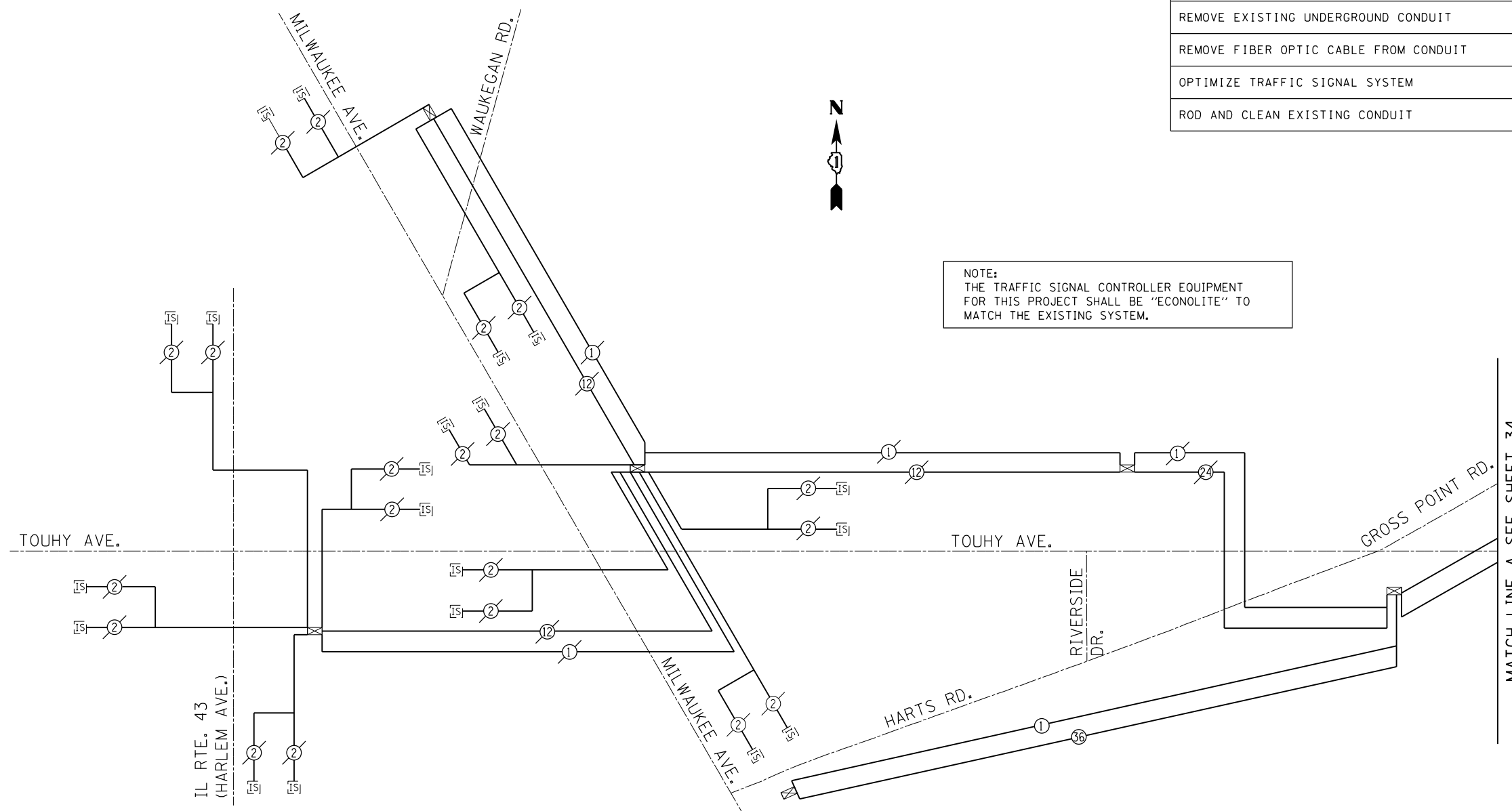
SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	32
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

ECON 156

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA	FOOT	119
HANDHOLE	EACH	1
HEAVY DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	2172
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2172
REMOVE EXISTING HANDHOLE	EACH	2
TEMPORARY WIRELESS INTERCONNECT, COMPLETE	L. SUM	1
REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE	FOOT	43
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM24F	FOOT	2195
REMOVE EXISTING UNDERGROUND CONDUIT	FOOT	152
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	2195
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	2
ROD AND CLEAN EXISTING CONDUIT	FOOT	2162



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

ECON 156

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA00\CA00 Sheets\Civil\06041-Sig-Interconnect SchematicPlan.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
	DRAWN - GP	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC  
GROSS POINT ROAD /HARTS ROAD (FROM MILWAUKEE AVE. TO U.S. 14)  
TOUHY AVE. (FROM RIVERSIDE DR. TO U.S. 14)**

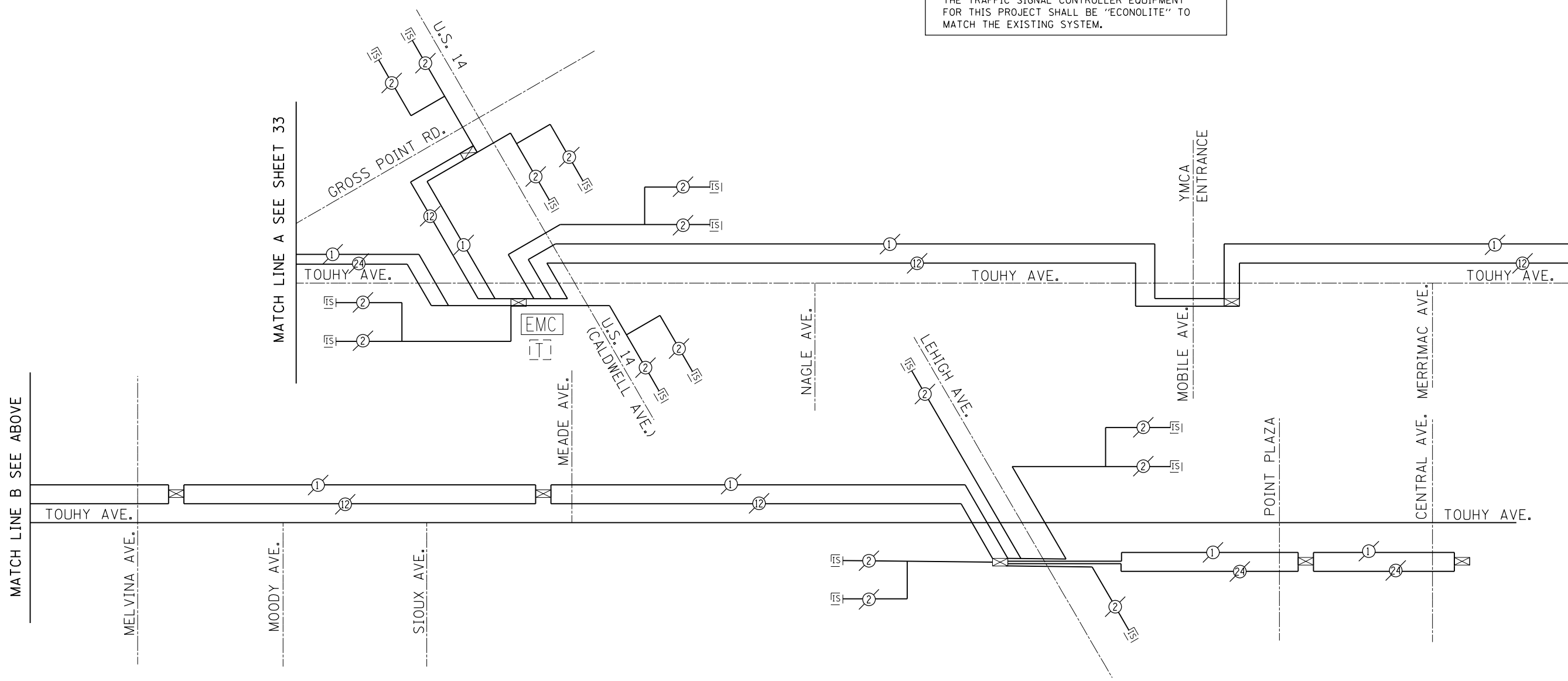
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	33
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\Civil\60X41-Sig-Interconnect SchematicPlan.dgn



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



USER NAME = johnn	DESIGNED - TGM	REVISED -
DRAWN - GP	REVISIONS -	
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 3/16/2017	DATE - 3-17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC**  
**GROSS POINT ROAD /HARTS ROAD (FROM MILWAUKEE AVE. TO U.S. 14)**  
**TOUHY AVE. (FROM RIVERSIDE DR. TO U.S. 14)**

SCALE: NONE SHEET 2 OF 2 SHEETS STA. TO STA.

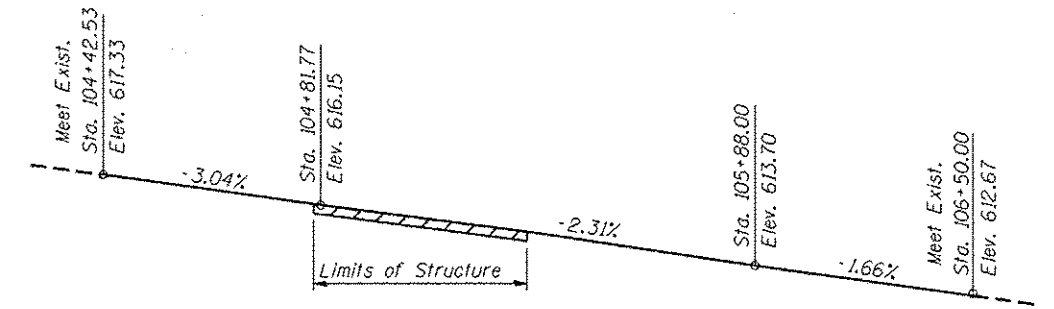
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	34
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

ECON 156

Benchmark: Chiseled square on the west wingwall. Elev. 616.25.

Existing Structure: Existing S.N. 016-0726 carrying Harts Road over North Branch of Chicago River was originally built in 1921 as a single span reinforced concrete slab bridge under Construction Route SA3-A, Section 66-15D. The structure was reconstructed in 1970 as PPC deck beams under Contract 28227 as Construction Route CHS 47, Section 1970-15BR. The structure was resurfaced in 2001 under contract 83547 as Construction Route FAU 3519 Section 99-00100-00-WR. The existing structure is a single span PPC deck beam bridge with bituminous concrete wearing surface and waterproofing membrane system. The structure is 47'-8 1/2" back to back of closed abutments and 42'-0" out to out of deck including 5'-0" raised sidewalk with parapet and L-type aluminum railing on each side of the roadway. There is no skew with the roadway alignment. Traffic shall be detoured during construction.

No Salvage.



**PROFILE GRADE**  
(Along Harts Rd.)

STATION 105+06.46  
RE-BUILT 201 BY  
STATE OF ILLINOIS  
F.A.U. RTE. 3519  
SEC. 66-B  
LOADING HL-93  
STRUCTURE NO. 016-0726

**NAME PLATE**

See Std. 515001  
Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.

**DESIGN SPECIFICATIONS**

For Existing Abutment & Southwest Headwall Construction  
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

For all other New Construction  
2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Horizontal Bedrock Acceleration Coefficient = 0.038g  
Site Coefficient = 1.2

**DESIGN STRESSES**

**EXISTING STRUCTURE**

$f'_c = 1,400$  psi (Substructure)  
 $f_y = 20,000$  psi (Reinforcement)

**DESIGN STRESSES**

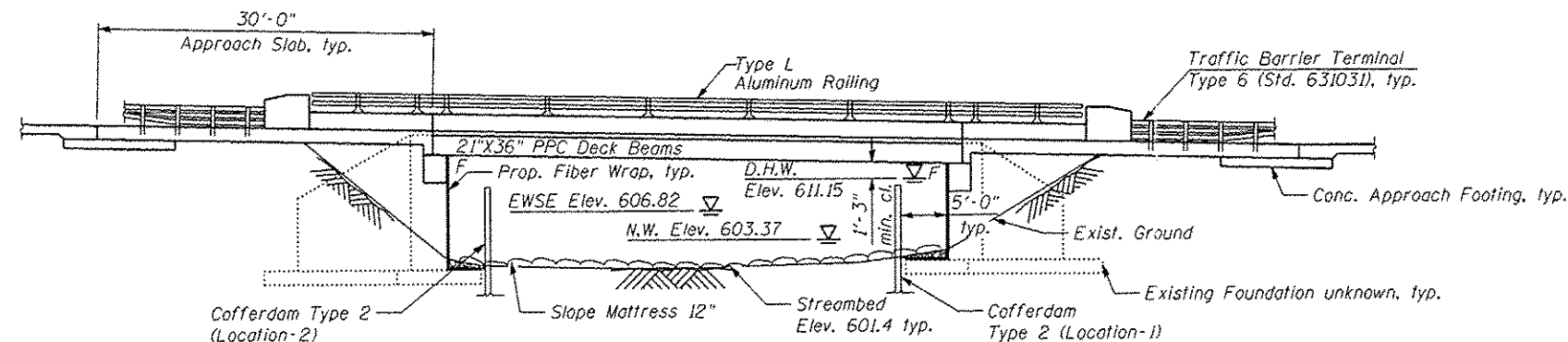
**FIELD UNITS (NEW CONSTRUCTION)**

$f'_c = 35,000$  psi  
 $f'_c = 4,000$  psi (Superstructure)  
 $f_y = 60,000$  psi (Reinforcement)

**PRECAST PRESTRESSED CONCRETE DECK BEAMS**  
 $f'_c = 6,000$  psi  
 $f'_ci = 5,000$  psi  
 $f_{pu} = 270,000$  psi (1/2"  $\phi$  low lax strands)  
 $f_{pbt} = 201,960$  psi (1/2"  $\phi$  low lax strands)

**LOADING HL-93**

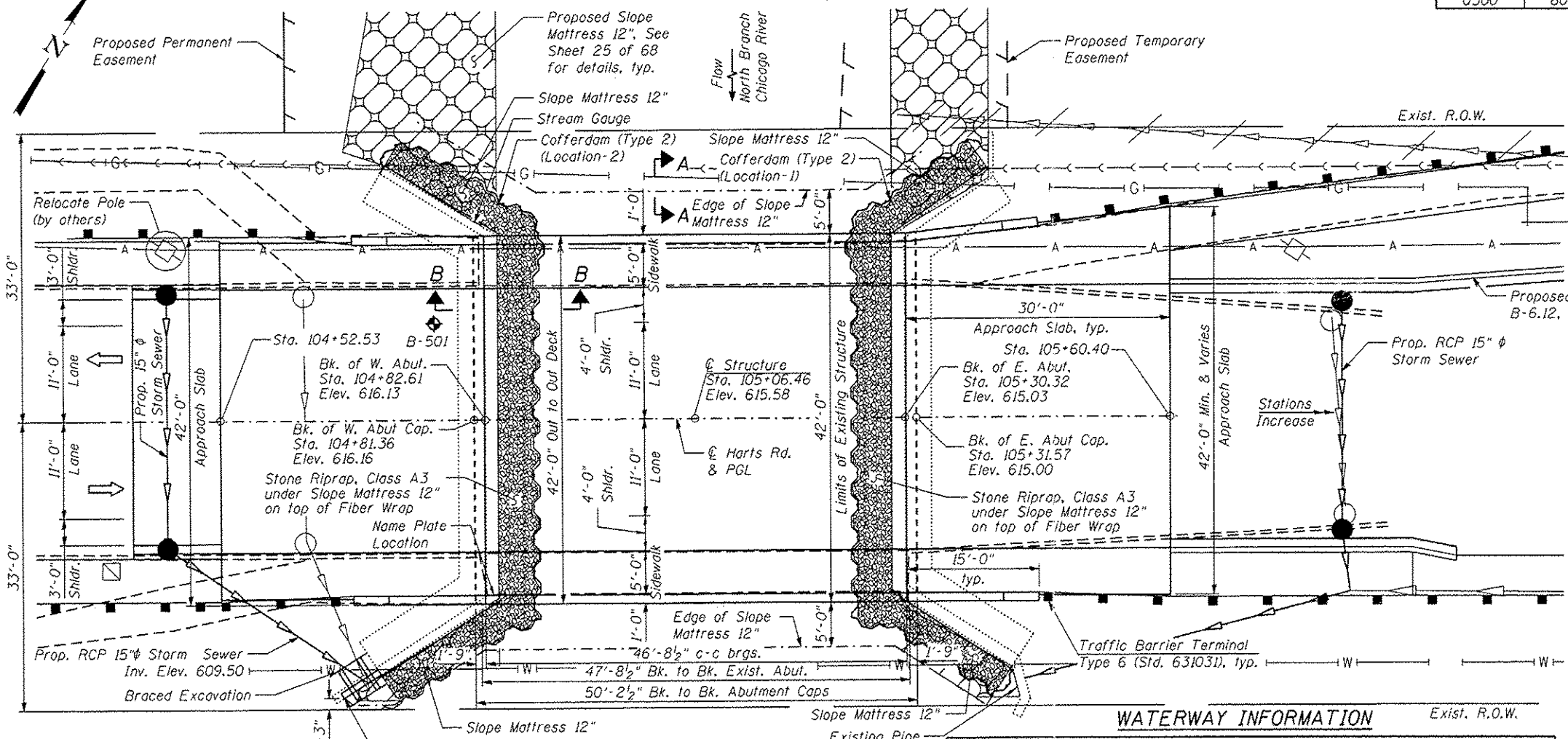
No future wearing surface will be allowed.



**ELEVATION**

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)		
	W. Abut.	E. Abut.
0100	601.4	601.4
0500	601.4	601.4



**PLAN**

**WATERWAY INFORMATION**

Drainage Area=100.0+ Sq. Mi. Prop. Low Grade Elev.=611.19 @ Sta. 108+27.50 Rdwy.

Flood	Freq. Yr.	Opening Sq. Ft.		Nat. Head - Ft.		Headwater Elev.	
		Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.
Peak	2	2350	336	336	608.93		
	10	2851	408	408	610.44	0.81	0.81
Design	50	3650	440	440	611.15	1.17	1.17
Base	100	3936	451	451	611.39	1.22	1.22
Overtopping	+10	2851	408	408	610.44	0.81	0.81
Max. Calc.	500	4900	486	486	612.15	1.70	1.70

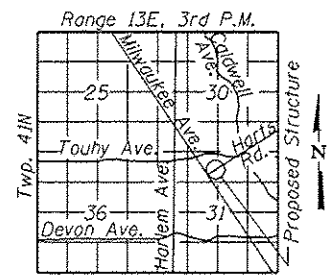
Notes:  
The existing structure is scour critical.  
Boring B-501 was taken in 1994.



DATE SIGNED: 03/16/17  
EXP. DATE: 11/30/18

**APPROVED**  
For Structural Adequacy Only

*Sheila Privang*  
Engineer of Bridges & Structures



**LOCATION SKETCH**

**GENERAL PLAN**  
**HARTS ROAD OVER NORTH BRANCH CHICAGO RIVER**  
**F.A.U. RTE. 3519**  
**SEC. 66-B**  
**COOK COUNTY**  
**STATION 105+06.46**  
**STRUCTURE NO. 016-0726**

FILE NAME: B:\Engineering\Live\Projects\3203 1001 DWR\1300326 - WD 2 Contract No. 68K11VAD000 Sheets\Structural\016-0726-60X41-01.dgn



USER NAME = johnn  
DESIGNED - SAT  
CHECKED - JW  
DRAWN - SAT  
PLOT DATE = 3/16/2017

DESIGNED - SAT  
CHECKED - JW  
REVISOR -  
REVISIONS

REVISOR -  
REVISIONS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. 1 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	35

CONTRACT NO. 60X41  
ILLINOIS FED. AID PROJECT

**GENERAL NOTES**

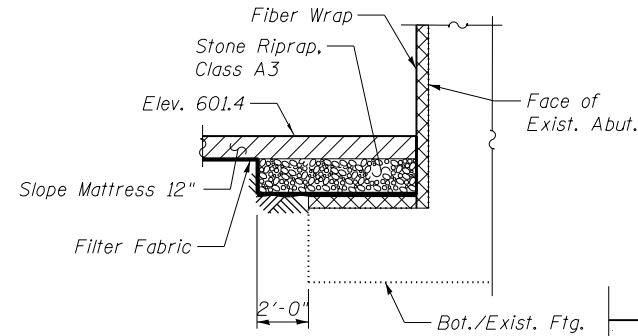
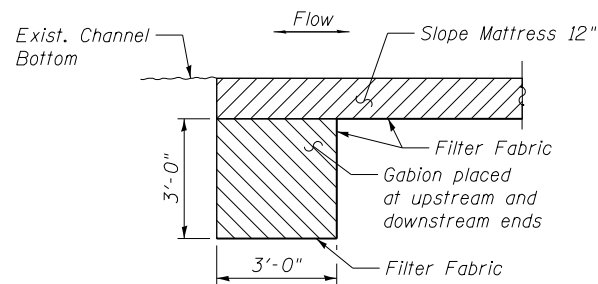
- Reinforcement bars designated (E) shall be epoxy coated.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Concrete Sealer shall be applied to the top and front face of the Southwest headwall.
- Existing Asbestos Bearing Pads are located on the East Abutment. See Special Provisions.
- The Contractor shall locate all underground utilities before constructing the cofferdams.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Supplemental Specifications and Recurring Special Provisions Adopted January 1, 2017.
- For Filter Fabric Quantity, See Sheet 25 of 68.

**INDEX OF SHEETS**

- General Plan
- General Notes and Total Bill of Material
- Top of West Approach Slab Elevations
- Top of East Approach Slab Elevations
- Superstructure Plan and Cross Section
- Superstructure Details
- West Bridge Approach Slab
- West Bridge Approach Slab Details
- East Bridge Approach Slab
- East Bridge Approach Slab Details
- Aluminum Railing, Type L
- 21"x36" PPC Deck Beam
- 21"x36" PPC Deck Beam Details
- West Abutment Repairs
- Northwest Wingwall Stream Gauge
- Southwest Headwall Details
- East Abutment Repairs
- Abutment Seat Reconstruction
- Existing Substructure (For Information Only)
- Soil Boring Log - I (For Information Only)
- Soil Boring Log - II (For Information Only)

**TOTAL BILL OF MATERIAL**

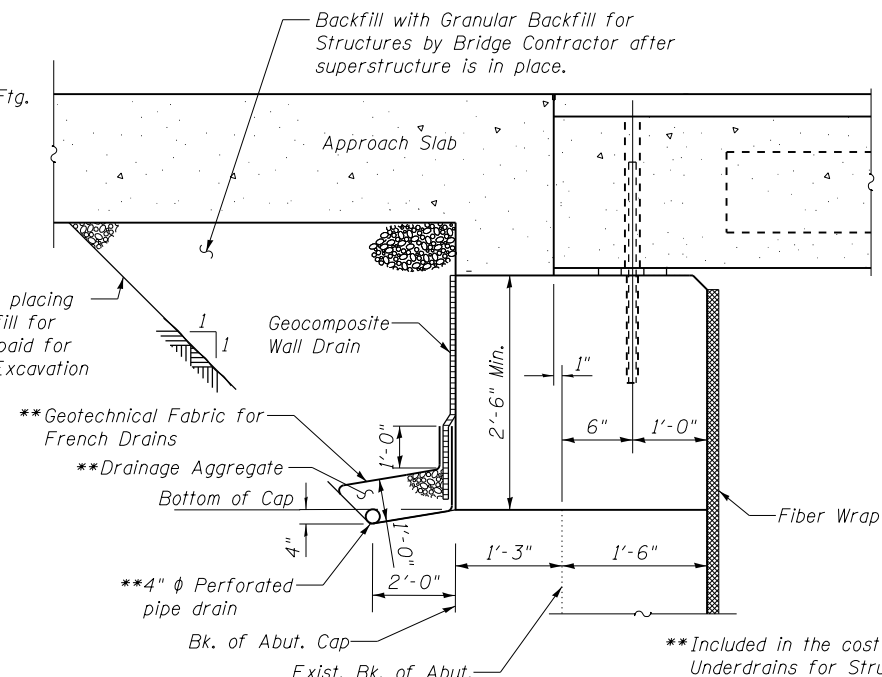
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Ton		92	92
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu Yd		26.9	26.9
Concrete Headwall Removal	Each		1	1
Structure Excavation	Cu Yd		90	90
Cofferdam Excavation	Cu Yd		85	85
Cofferdam (Type 2) (Location - 1)	Each		1	1
Cofferdam (Type 2) (Location - 2)	Each		1	1
Concrete Structures	Cu Yd		48.3	48.3
Concrete Superstructure	Cu Yd	49		49
Bridge Deck Grooving	Sq Yd	337		337
Protective Coat	Sq Yd	554		554
Concrete Superstructure (Approach Slab)	Cu Yd	125.5		125.5
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq Ft	1868		1868
Reinforcement Bars, Epoxy Coated	Pound	52,990	7950	60,940
Aluminum Railing, Type L	Foot	140		140
Name Plates	Each	1		1
Concrete Sealer	Sq Ft		25	25
Geocomposite Wall Drain	Sq Yd		50	50
Conduit Embedded in Structure, 2" Dia., PVC	Foot	76		76
Acrylic Coating	Sq Yd		277	277
Fiber Wrap	Sq Ft		2488	2488
Stream Gauge	Each		1	1
Braced Excavation	Cu Yd		8	8
Concrete Wearing Surface, 5"	Sq Yd	208		208
Granular Backfill for Structures	Cu Yd		90	90
Asbestos bearing Pad Removal	Each	28		28
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq Ft		579	579
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq Ft		30	30
Pipe Underdrains for Structures 4"	Foot		152	152
Temporary Wall Bracing System	L Sum		1	1



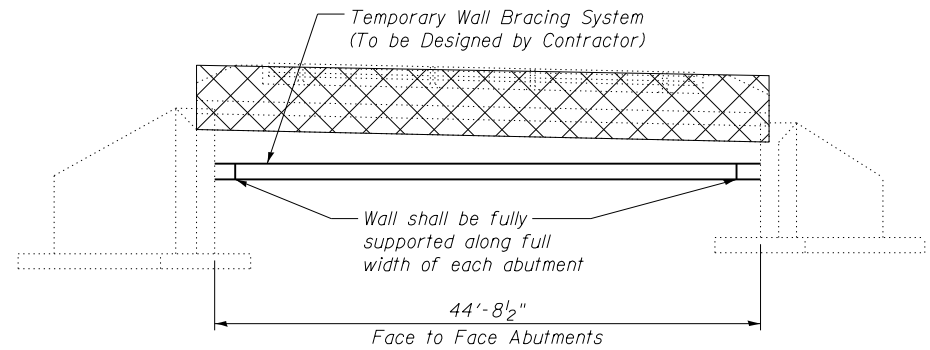
Note: Slope Mattress shall be securely wired down to the gabions in accordance with the requirements of Article 284 of the Standard Specifications. See Sheet 25 of 68 for Slope Mattress and Gabions Details and Bill of Materials.

**SCOPE OF WORK**

- Install Temporary Wall Bracing System and excavate behind the abutment walls.
- Remove abandoned natural gas line from existing structure.
- Remove existing 3" Bituminous Overlay, existing 21"x36" PPC Deck Beams and Approach Slabs.
- Install Cofferdam, Type 2 at both abutments and all four wingwalls.
- Remove and reconstruct abutment seat of both abutments.
- Install Braced Excavation at southwest wingwall.
- Remove existing concrete headwall at the southwest wingwall and replace with a C.I.P. concrete headwall in the southwest ditch.
- Perform structural repair of concrete on both of the abutments and all four wingwalls and then install Fiber Wrap on face of both of the abutments, footings and all four wingwalls.
- Remove Cofferdam, Type 2.
- Install Slope Mattress 12" along the channel bottom under the bridge from face to face of abutments, along all wingwalls and 5'-0" outside of edge of deck.
- Install new 21"x36" PPC Deck Beams.
- Dowel Rods for new deck beams shall be installed and the grout shall be cured prior to removal of the Temporary Wall Bracing System.
- Install 5" min. Concrete Wearing Surface.
- Construct Granular Backfill for Structures and approach slabs.
- Install sidewalks and parapets on both the sides of the roadway. Embed traffic signal interconnect conduit in south parapet.
- Slope stabilization methods shall be used to the North (upstream) side of the bridge.
- Install Stream Gauge after Structural Repair of Concrete and Fiber Wrap has been installed on northwest wingwall.



Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



**LEGEND**

Removal of Existing Superstructures

FILE NAME = Q:\Engineering\LiveProjects\3003 IDOT DUR\3003b - W 2 Contract No. 60X41\CAADD\CADD Sheets\Structure\016-0726-60X41-02-GenNo1Index.dgn



USER NAME = johnn	DESIGNED - SAT	REVISED
CHECKED - JMT	CHECKED - JMT	REVISED
PLOT SCALE = 0.2' = 1" IN.	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND TOTAL BILL OF MATERIAL  
STRUCTURE NO. 016-0726**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	36
CONTRACT NO. 60X41				



**NORTH EDGE OF W. APPROACH SLAB**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of West Approach Slab	104+52.53	20.33 Lt.	616.73
A1	104+62.53	20.33 Lt.	616.42
A2	104+72.53	21.00 Lt.	616.10
E. End of West Approach Slab	104+82.53	21.00 Lt.	615.80

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of West Approach Slab	104+52.53	15.00 Lt.	616.81
A1	104+62.53	15.00 Lt.	616.50
A2	104+72.53	15.00 Lt.	616.20
E. End of West Approach Slab	104+82.53	15.00 Lt.	615.90

**☉ HARTS RD. & PROFILE GRADE LINE**

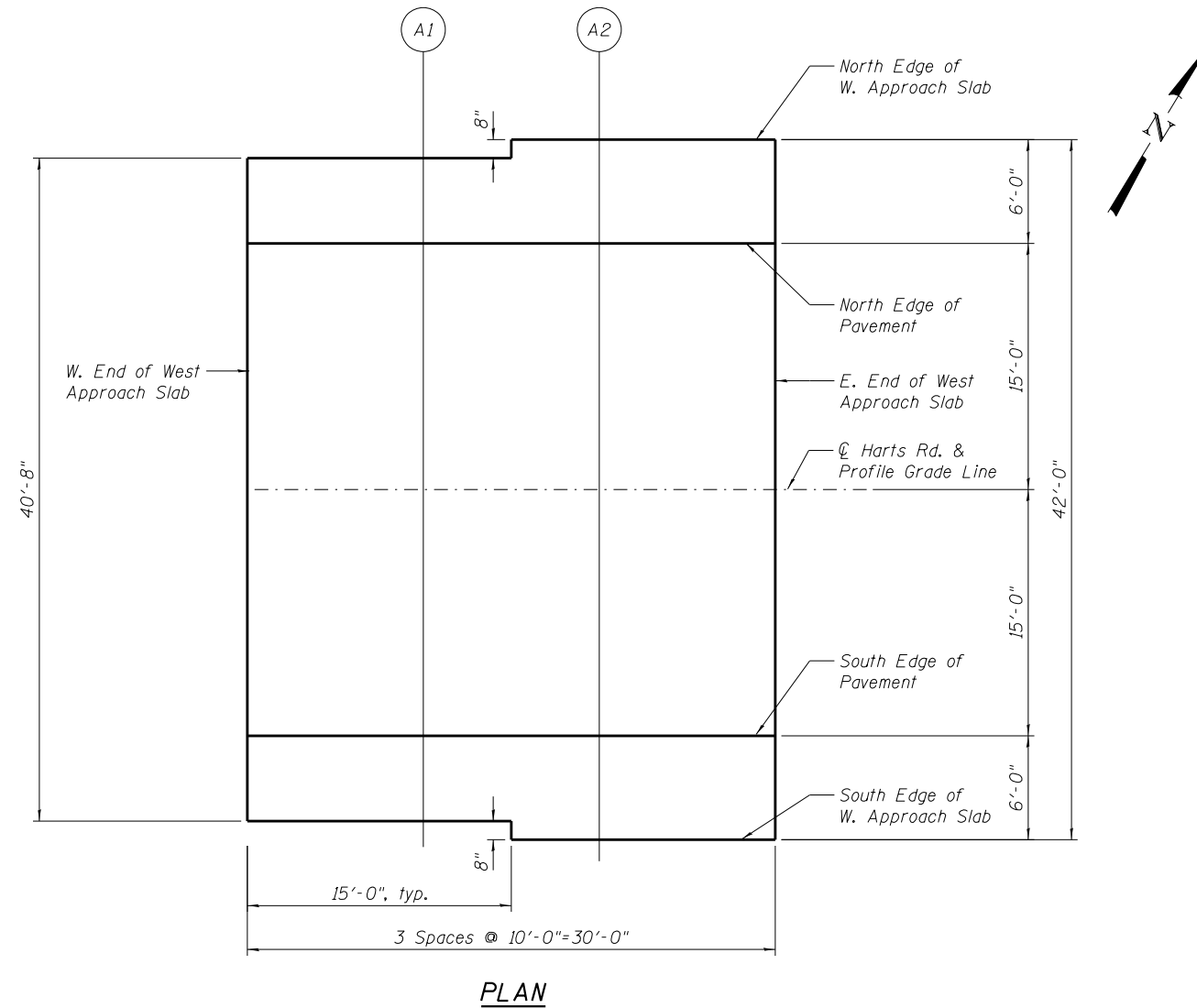
Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of West Approach Slab	104+52.53	0.00	617.04
A1	104+62.53	0.00	616.74
A2	104+72.53	0.00	616.43
E. End of West Approach Slab	104+82.53	0.00	616.13

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of West Approach Slab	104+52.53	15.00 Rt.	616.81
A1	104+62.53	15.00 Rt.	616.50
A2	104+72.53	15.00 Rt.	616.20
E. End of West Approach Slab	104+82.53	15.00 Rt.	615.90

**SOUTH EDGE OF W. APPROACH SLAB**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of West Approach Slab	104+52.53	20.33 Rt.	616.73
A1	104+62.53	20.33 Rt.	616.42
A2	104+72.53	21.00 Rt.	616.10
E. End of West Approach Slab	104+82.53	21.00 Rt.	615.80



**PLAN**

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUV\13003b - WD 2 Contract No. 60X41\CAADD\CAADD Sheets Structural\016-0726-60X41-03-TSE MAP.dgn



USER NAME = johnn	DESIGNED - AB	REVISED
	CHECKED - JMT	REVISED
PLOT SCALE = 0.2' / 1"	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED - SAT	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 016-0726**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	37
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

**NORTH EDGE OF E. APPROACH SLAB**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of East Approach Slab	105+30.40	21.00 Lt.	614.70
A3	105+40.40	22.17 Lt.	614.45
A4	105+50.40	22.67 Lt.	614.21
E. End of East Approach Slab	105+60.40	23.84 Lt.	613.96

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of East Approach Slab	105+30.40	15.00 Lt.	614.79
A3	105+40.40	15.00 Lt.	614.56
A4	105+50.40	15.00 Lt.	614.33
E. End of East Approach Slab	105+60.40	15.00 Lt.	614.10

**☉ HARTS RD. & PROFILE GRADE LINE**

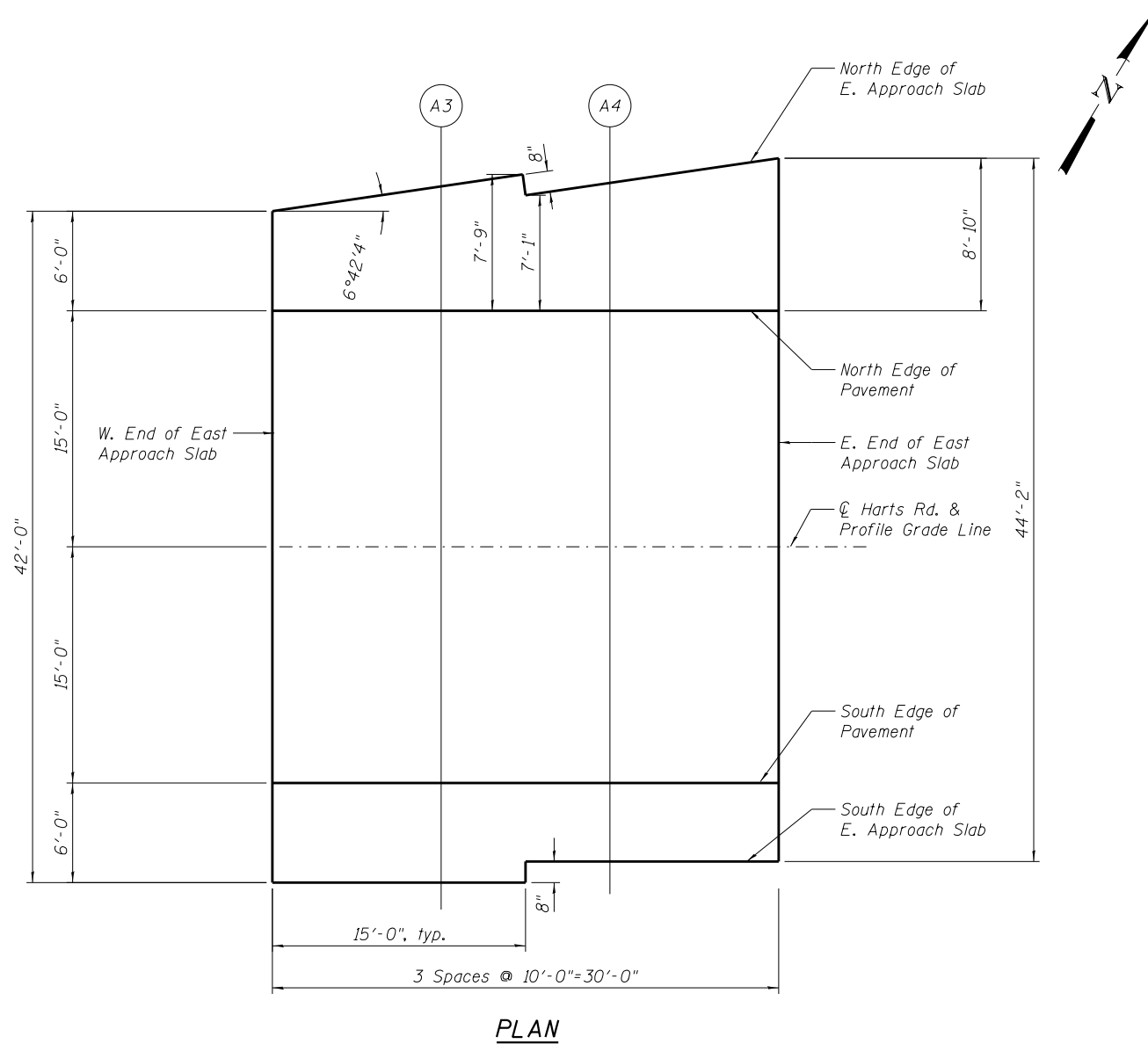
Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of East Approach Slab	105+30.40	0.00	615.03
A3	105+40.40	0.00	614.80
A4	105+50.40	0.00	614.57
E. End of East Approach Slab	105+60.40	0.00	614.34

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of East Approach Slab	105+30.40	15.00 Rt.	614.79
A3	105+40.40	15.00 Rt.	614.56
A4	105+50.40	15.00 Rt.	614.33
E. End of East Approach Slab	105+60.40	15.00 Rt.	614.10

**SOUTH EDGE OF E. APPROACH SLAB**

Location	Station	Offset (Ft.)	Theoretical Grade Elevations
W. End of East Approach Slab	105+30.40	21.00 Rt.	614.70
A3	105+40.40	21.00 Rt.	614.47
A4	105+50.40	20.33 Rt.	614.25
E. End of East Approach Slab	105+60.40	20.33 Rt.	614.02



**PLAN**

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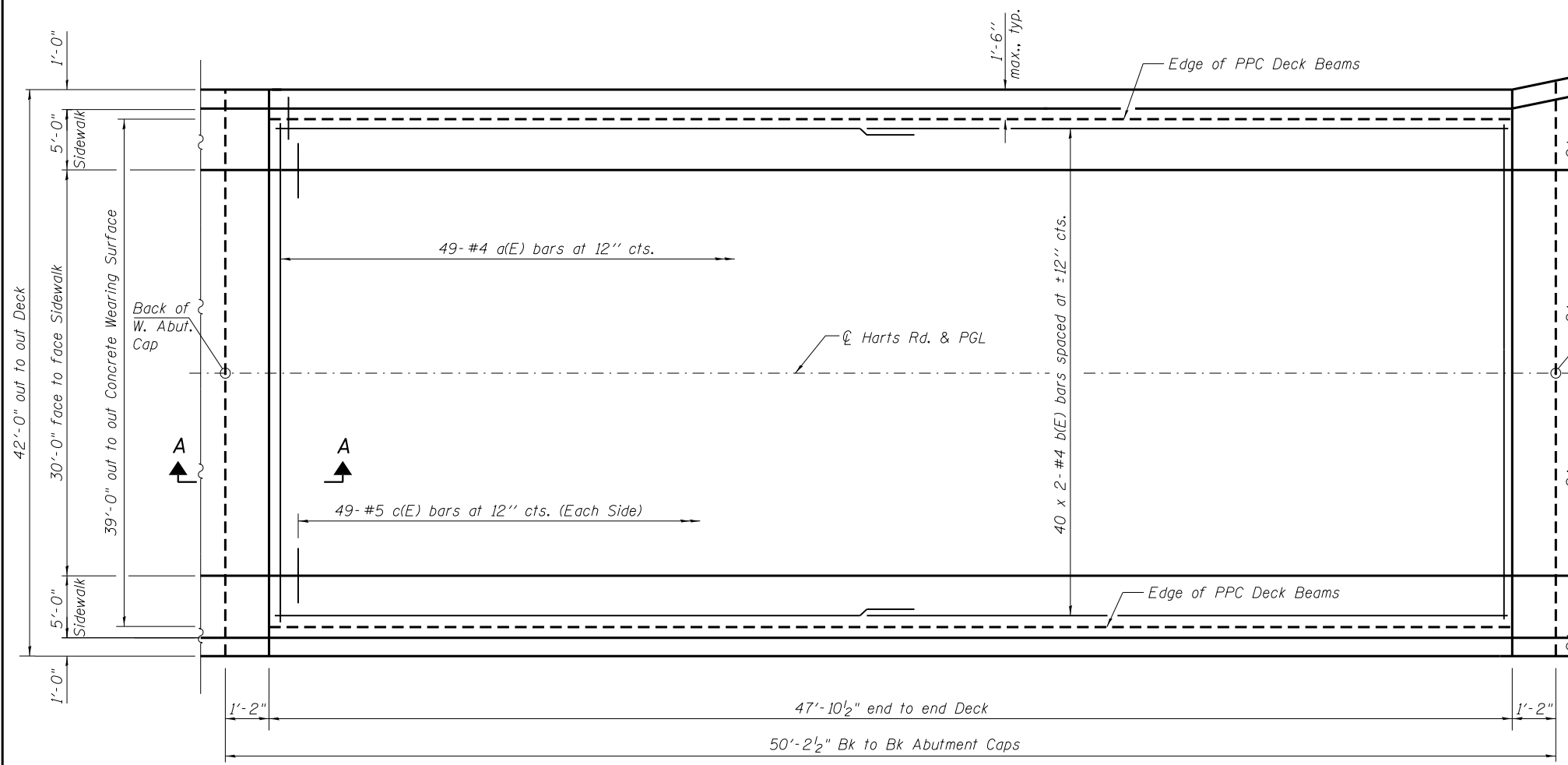
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	CHECKED - JMT	REVISED
PLOT SCALE = 0.2' / in.	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED - SAT	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

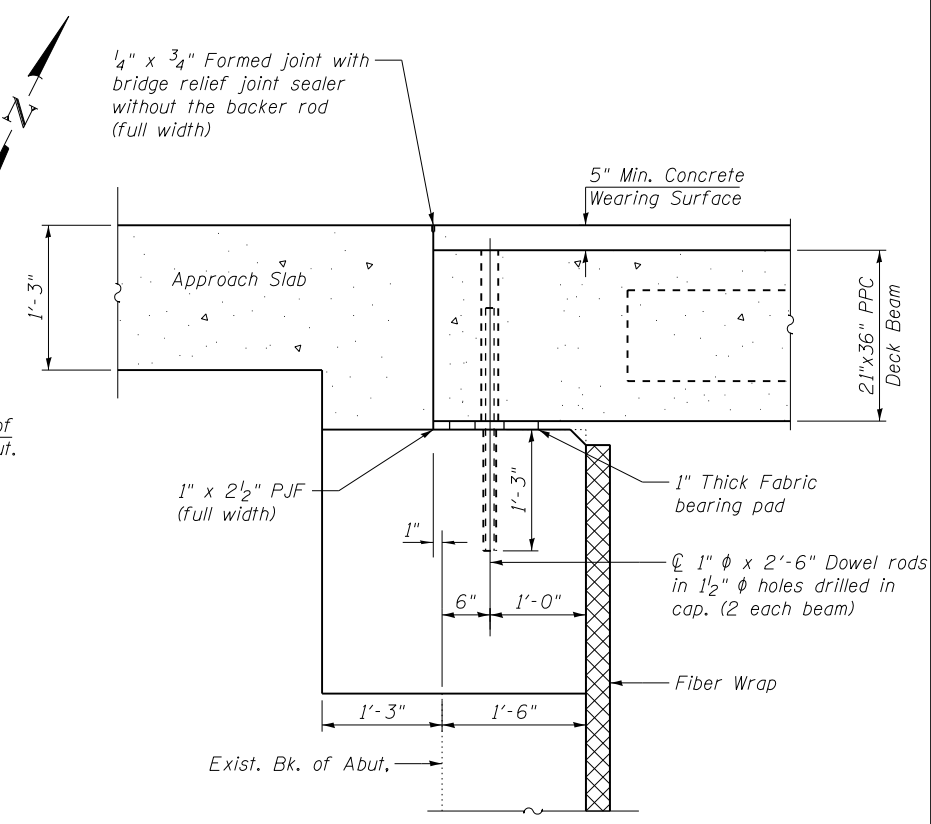
**TOP OF EAST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 016-0726**

SHEET NO. 4 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	38
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

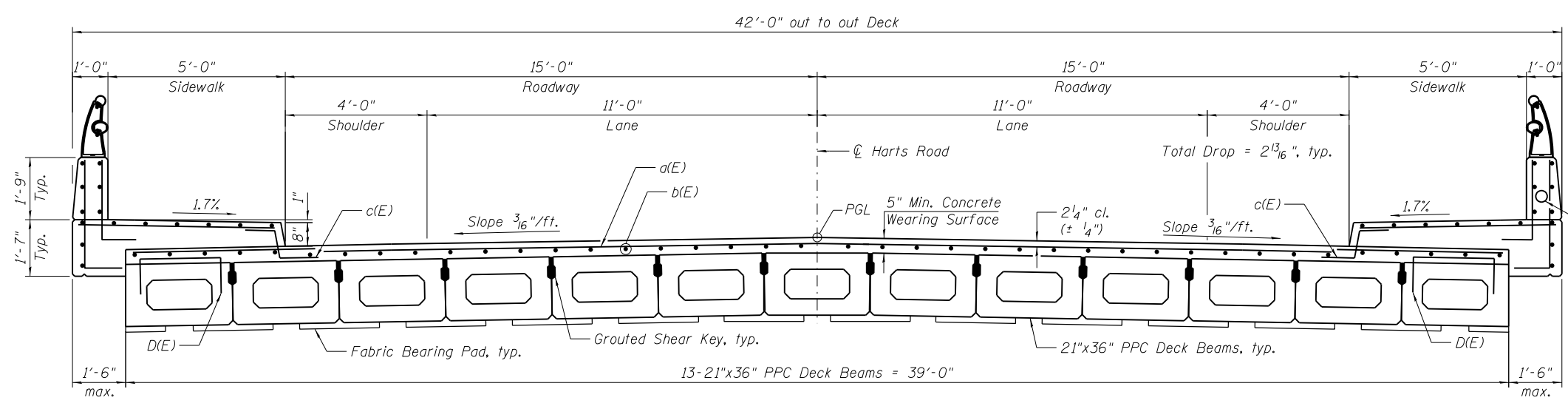


**PLAN**



**SECTION A-A**

Notes:  
 All concrete wearing surfaces shall be placed prior to casting the approach slab.  
 See Sheet 13 of 21 for fabric bearing pad details.



**DECK CROSS SECTION**  
 (Looking East)

Notes:  
 See Sheet 6 of 21 for Superstructure Details and Bill of Material.  
 Bars indicated thus 40 x 2-#4 etc. indicates 40 lines of bars with 2 lengths per line.  
 D(E) bars included in the cost of PPC Deck Beams. See Sheets 12 and 13 of 21 for Bar Details.

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

FILE NAME = \$FILEL\$



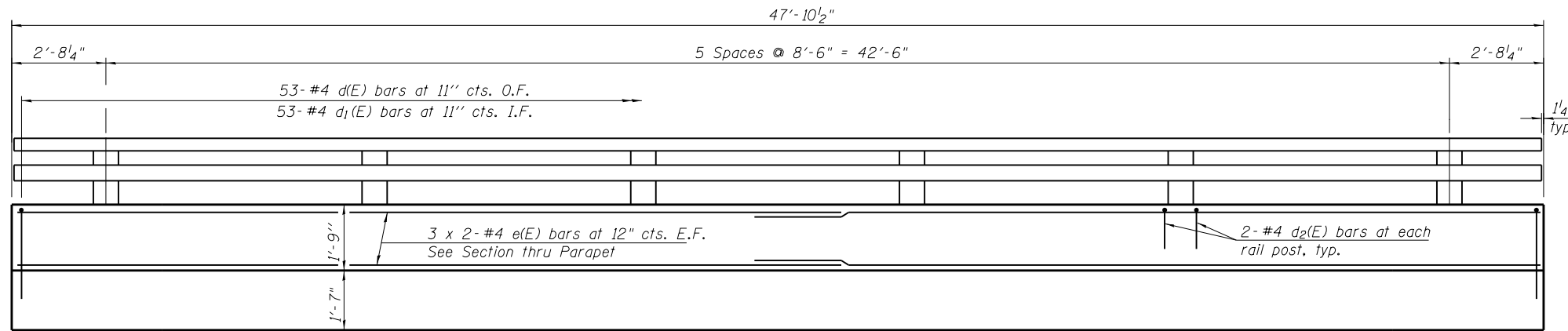
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PLOT SCALE = \$SCALE\$	CHECKED - JMT	REVISED
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

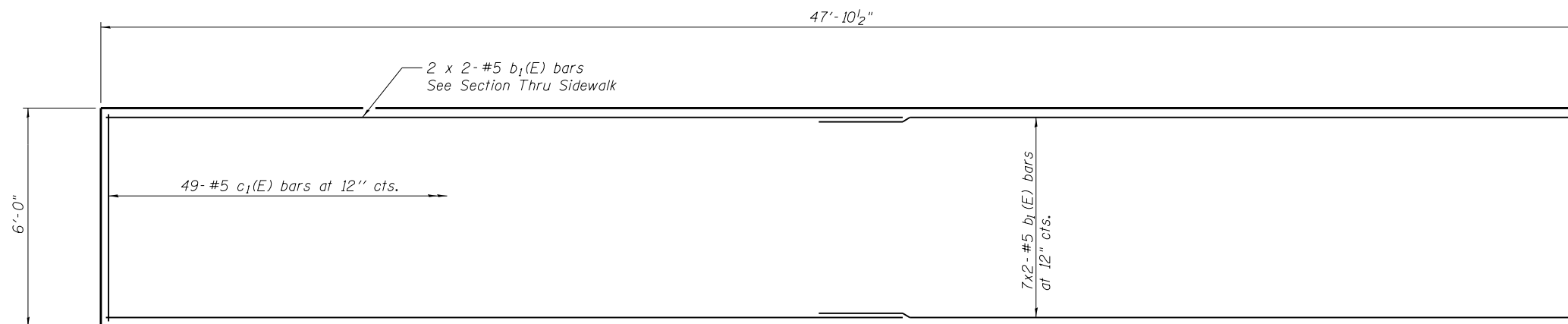
**SUPERSTRUCTURE PLAN AND CROSS SECTION**  
**STRUCTURE NO. 016-0726**

SHEET NO. 5 OF 21 SHEETS

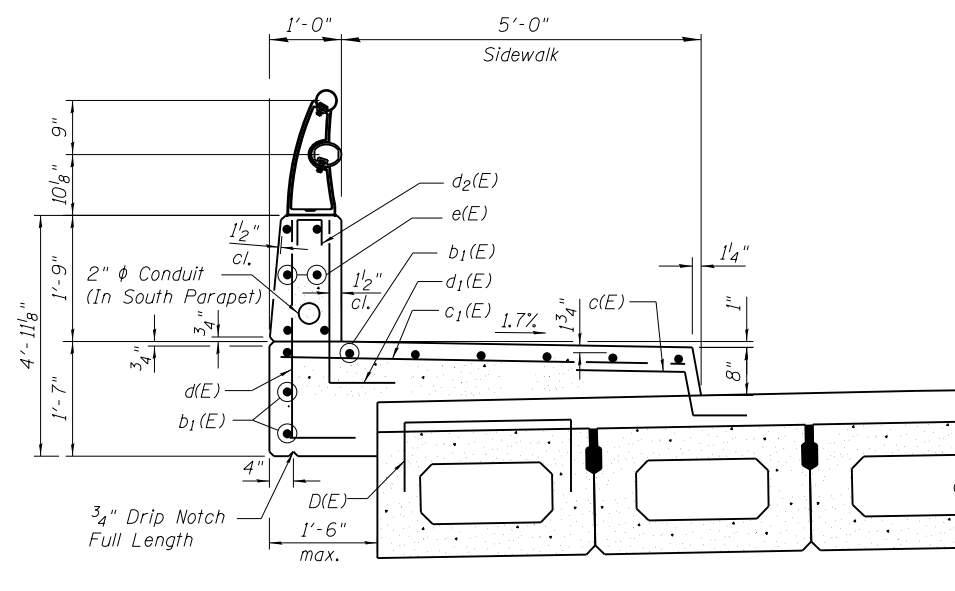
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	39
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



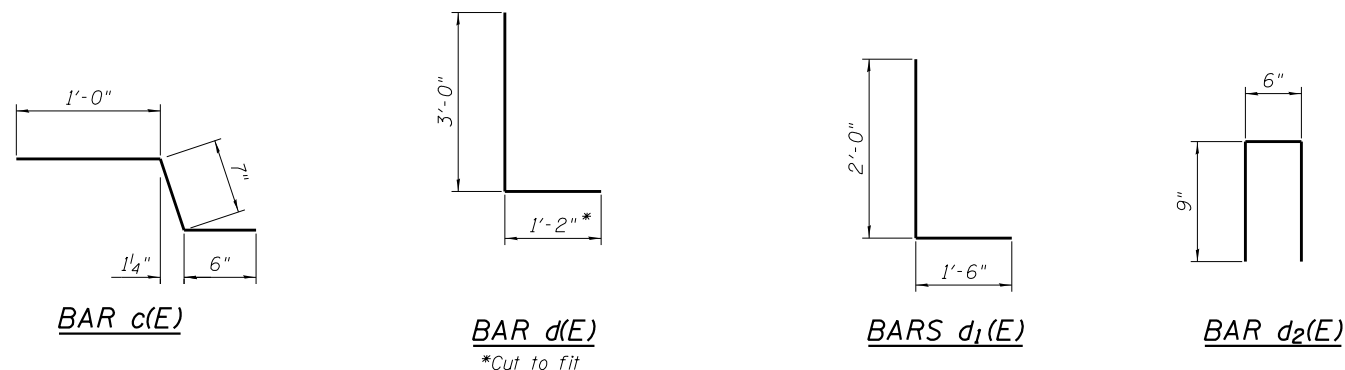
**INSIDE ELEVATION OF PARAPET**



**SIDEWALK PLAN**

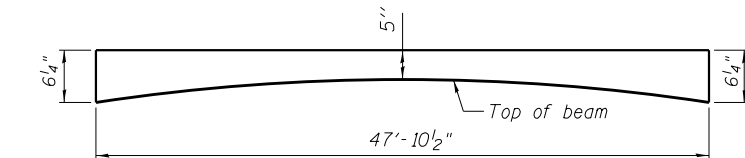


**SECTION THRU SIDEWALK**



**MINIMUM BAR LAP**

#4 Bar = 2'-8"  
#5 Bar = 3'-4"



**ANTICIPATED CONCRETE WEARING SURFACE PROFILE**  
(For information only)

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	49	#4	38'-8"	—
b(E)	80	#4	25'-0"	—
b1(E)	36	#5	25'-6"	—
c(E)	98	#5	2'-1"	—
c1(E)	98	#5	5'-6"	—
d(E)	106	#4	4'-2"	L
d1(E)	106	#6	3'-6"	L
d2(E)	24	#4	2'-0"	□
e(E)	24	#4	25'-2"	—
Item	Unit	Total		
Reinforcement Bars, Epoxy Coated	Pound	5630		
Concrete Superstructure	Cu. Yd.	25.5		
Concrete Wearing Surface, 5"	Sq. Yd.	208		
Bridge Deck Grooving	Sq. Yd.	149		
Protective Coat	Sq. Yd.	248		

Bars indicated thus 3 x 2- #4 etc. indicates 3 lines of bars with 2 lengths per line.

O.F. denotes Outer Face

I.F. denotes Inside Face

See Sheet 13 of 21 for D(E) bar details.

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DURV13003b - W2 Contract No. 60X41\CAADD\CADD Sheets\Structure\016-0726-60x41-06-Super-De-Edgn



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PLOT DATE = 3/16/2017	DRAWN - JN	REVISED
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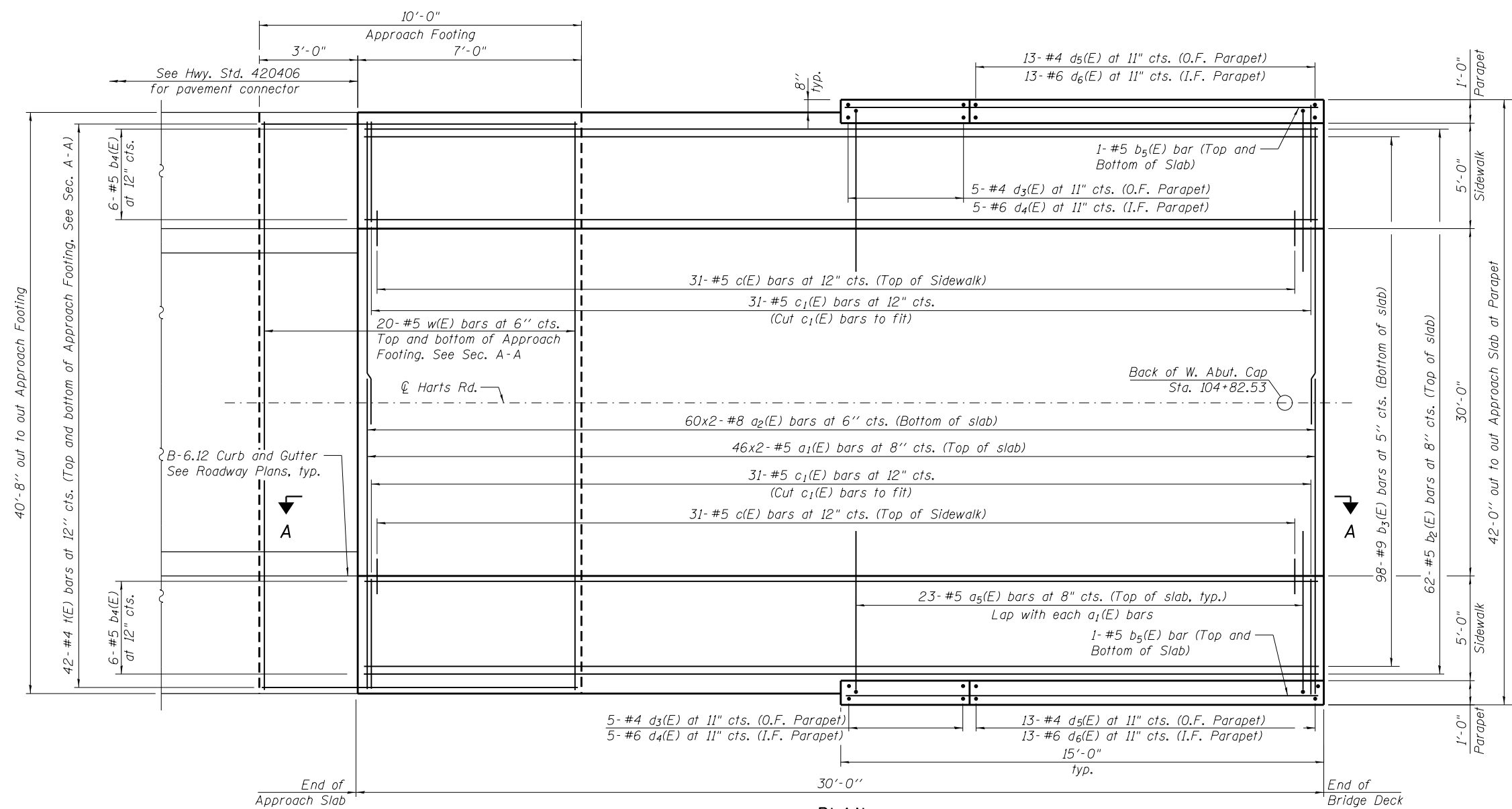
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 016-0726**

SHEET NO. 6 OF 21 SHEETS

F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	40
CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT

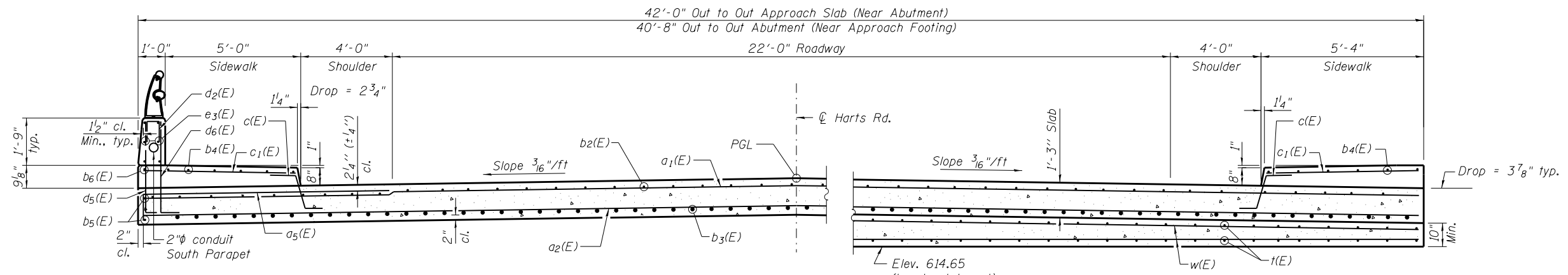


**PLAN**

**MINIMUM BAR LAP**

#5 Bar = 3'-4"  
#8 Bar = 5'-4"

I.F. denotes Inside Face  
O.F. denotes Outside Face



**NEAR ABUTMENT**

**CROSS SECTION**

(See Plan for dimensions not shown)  
(Looking East)

**AT APPROACH FOOTING**

(Sheet 1 of 2)

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\1300330 - W0 2 Contract No. 60X41\CAADD\CADD Sheets Structural\016-0726-60X41-07-Appro.dgn



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PLOT DATE = 3/16/2017

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DRAWN - JN  
CHECKED - SAT

REVISED  
REVISED  
REVISED  
REVISED

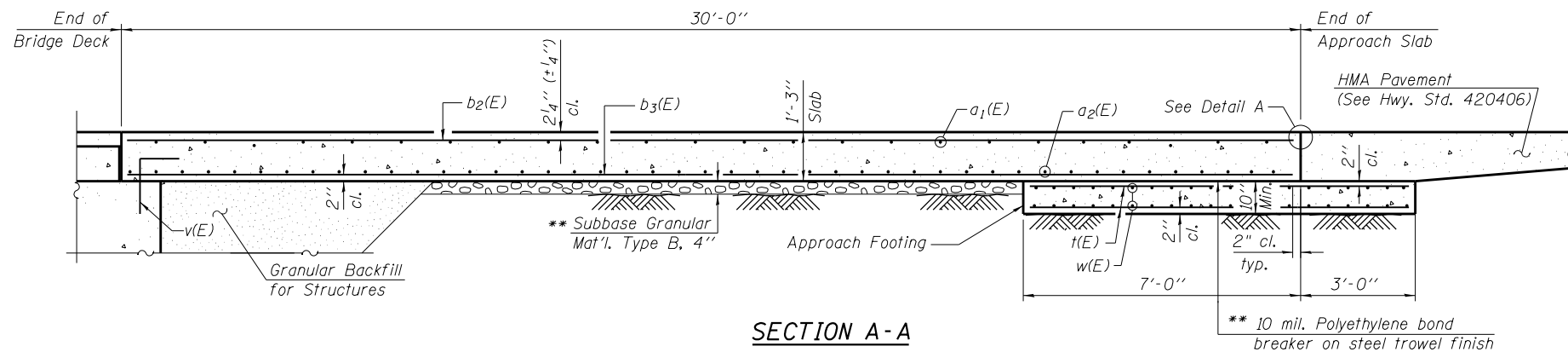
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST BRIDGE APPROACH SLAB  
STRUCTURE NO. 016-0726**

SHEET NO. 7 OF 21 SHEETS

F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	41
CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT



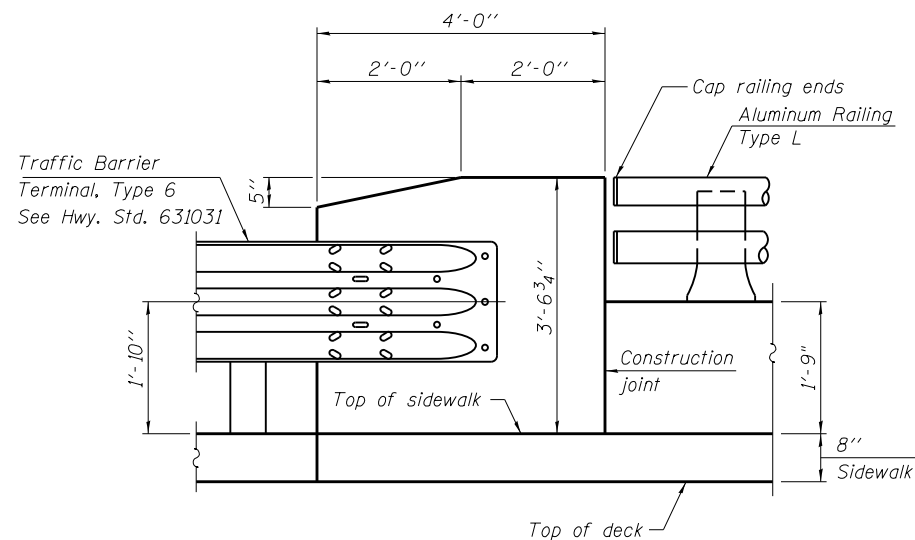
SECTION A-A

**NOTES:**

- The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.
- Parapet and Sidewalk concrete shall be paid for as Concrete Superstructure.
- Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- For v(E) bar details, see sheet 18 of 21.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 21.
- For Aluminum Railing, Type L details, see Sheet 11 of 21.

E.F. denotes Each Face

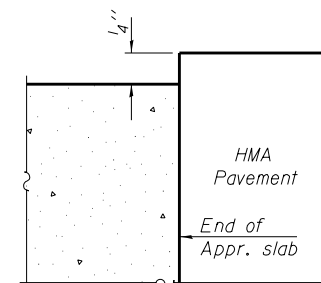
\*\* Cost included with Concrete Superstructure (Approach Slab).



GUARDRAIL ATTACHMENT DETAIL

**MINIMUM BAR LAP**

- #4 Bar = 2'-11"
- #5 Bar = 3'-3"

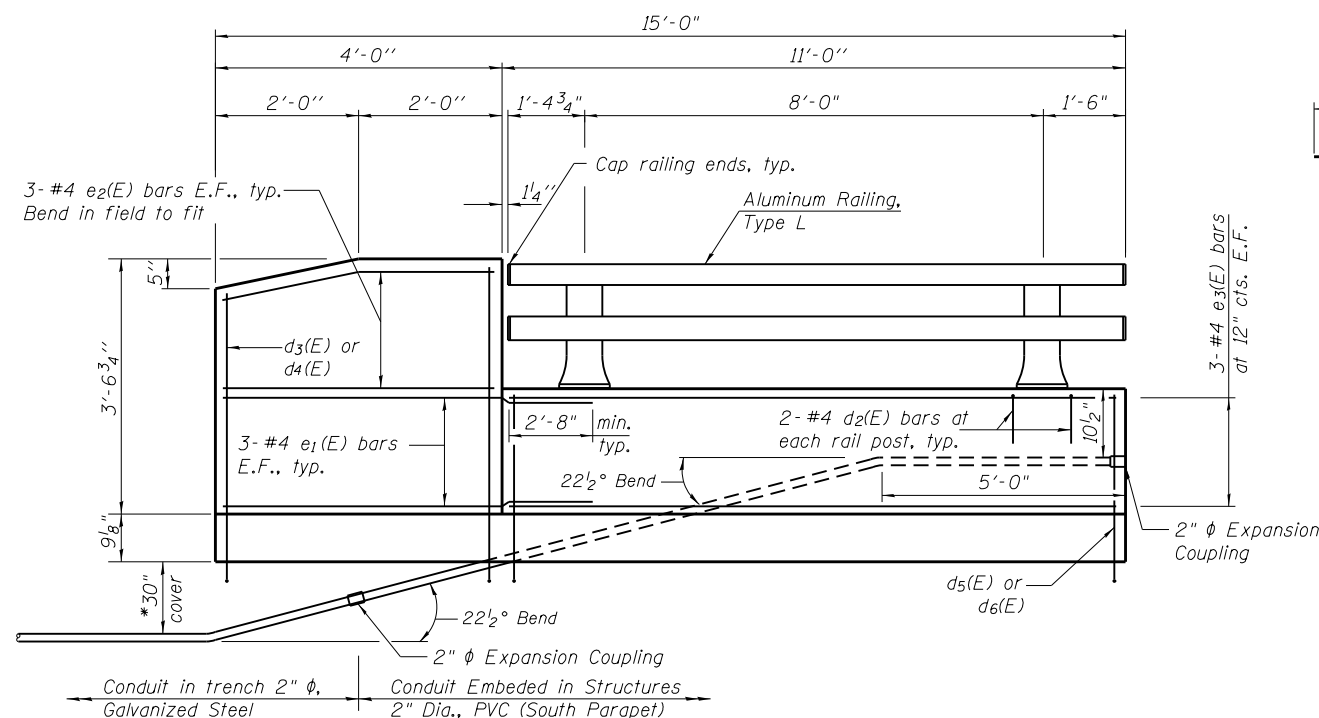


FLEXIBLE PAVEMENT

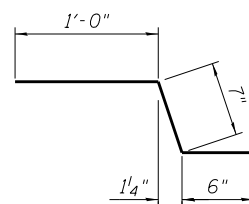
DETAIL A

**WEST APPROACH BILL OF MATERIAL**

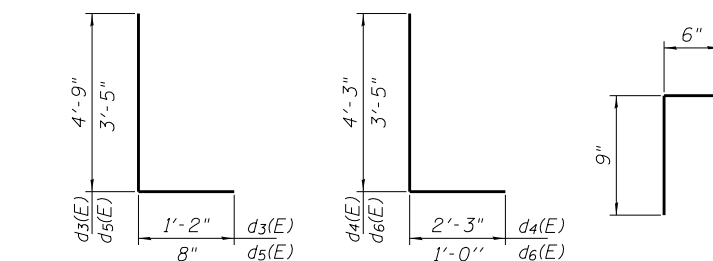
Bar	No.	Size	Length	Shape
a1(E)	92	#5	22'-6"	—
a2(E)	120	#8	23'-6"	—
a5(E)	46	#5	7'-4"	—
b2(E)	62	#5	29'-8"	—
b3(E)	98	#9	29'-8"	—
b4(E)	12	#5	29'-8"	—
b5(E)	4	#5	14'-8"	—
b6(E)	2	#5	14'-8"	—
c(E)	62	#5	2'-1"	—
c1(E)	62	#5	5'-6"	—
d2(E)	8	#4	2'-0"	—
d3(E)	10	#4	5'-11"	—
d4(E)	10	#6	6'-6"	—
d5(E)	26	#4	4'-1"	—
d6(E)	26	#6	4'-5"	—
e1(E)	12	#4	6'-8"	—
e2(E)	12	#4	3'-8"	—
e3(E)	12	#4	10'-8"	—
t(E)	84	#4	9'-8"	—
w(E)	40	#5	40'-4"	—
Concrete Structures		Cu. Yd.	15.9	
Concrete Superstructure		Cu. Yd.	11.1	
Bridge Deck Grooving		Sq. Yd.	94	
Protective Coat		Sq. Yd.	150	
Concrete Superstructure (Approach Slab)		Cu. Yd.	61.5	
Reinforcement Bars, Epoxy Coated		Pound	25,590	



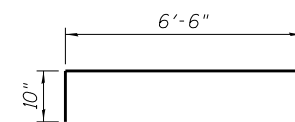
PARAPET ELEVATION



BAR c(E)



BARS d3(E) & d5(E) BARS d4(E) & d6(E) BAR d2(E)



BAR a5(E)

(Sheet 2 of 2)



USER NAME = johnn	DESIGNED - AB	REVISIONS
PLOT SCALE = 0:2' = 1" = 1/8"	CHECKED - JMT	REVISIONS
PLOT DATE = 3/16/2017	DRAWN - JN	REVISIONS
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

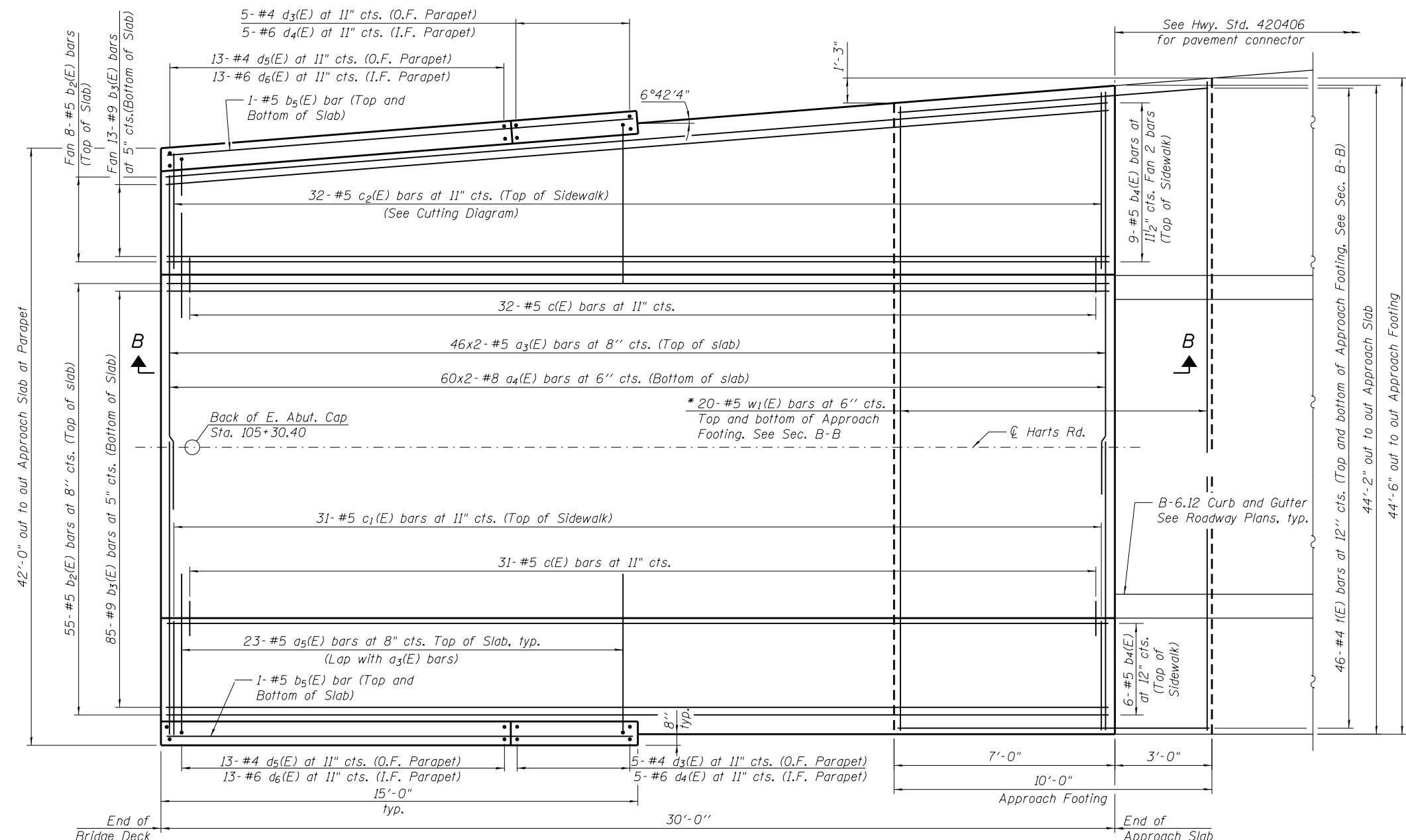
WEST BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 016-0726

SHEET NO. 8 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	42
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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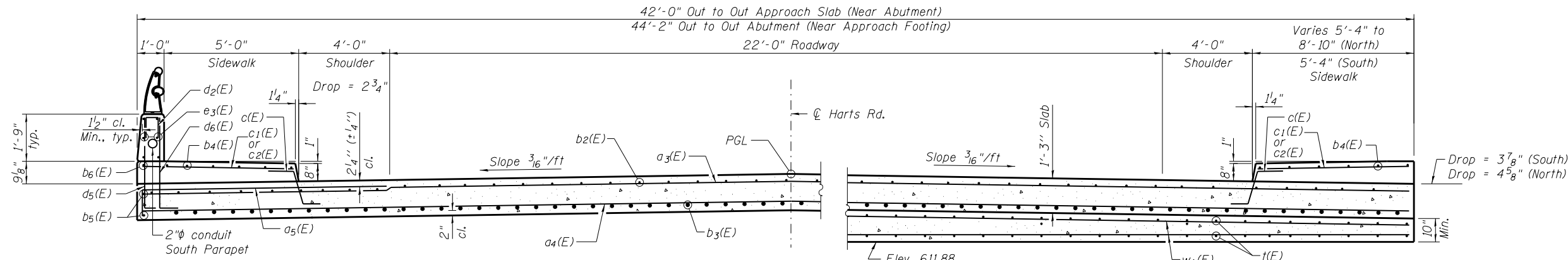
PLAN

**MINIMUM BAR LAP**

- #5 Bar = 3'-4"
- #8 Bar = 5'-4"

I.F. denotes Inside Face  
O.F. denotes Outside Face

\* Cut w<sub>1</sub>(E) bars in field as necessary to fit.



NEAR ABUTMENT

CROSS SECTION

(See Plan for dimensions not shown)  
(Looking East)

AT APPROACH FOOTING

(Sheet 1 of 2)



USER NAME = johnn	DESIGNED - PP	REVISED
PLOT SCALE = 0.2" = 1' - 0"	CHECKED - JMT	REVISED
PLOT DATE = 3/16/2017	DRAWN - JN	REVISED
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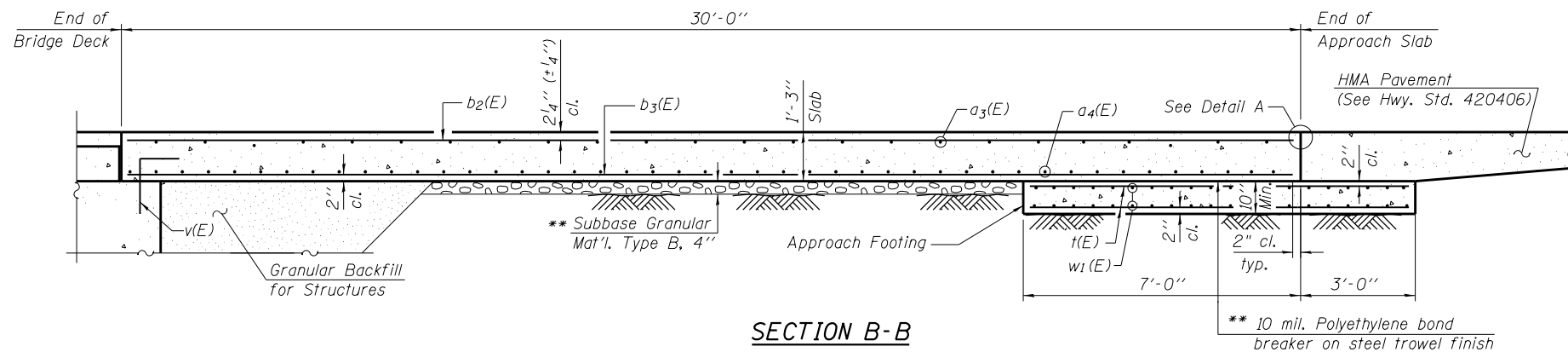
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EAST BRIDGE APPROACH SLAB**  
**STRUCTURE NO. 016-0726**

SHEET NO. 9 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT



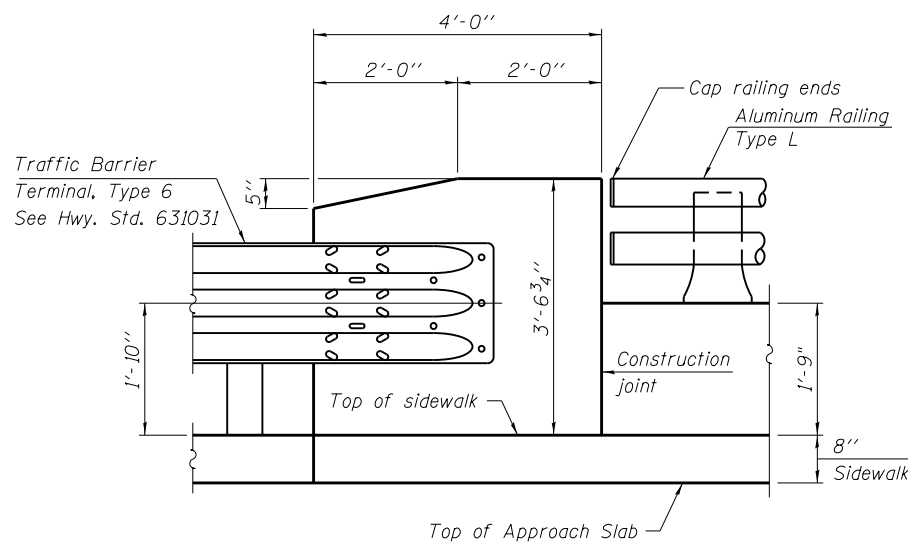
SECTION B-B

**NOTES:**

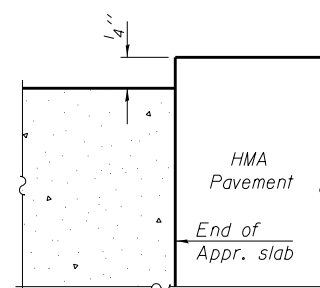
- The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.
- a<sub>3</sub>(E) and a<sub>4</sub>(E) bar spacings measured along C.Rdwy.
- Parapet and Sidewalk concrete shall be paid for as Concrete Superstructure.
- Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- For v(E) bar details, see sheet 18 of 21.
- The approach footing maximum applied service bearing pressure (Q<sub>max</sub>) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 21.
- For Aluminum Railing, Type L details, see Sheet 11 of 21.

E.F. denotes Each Face

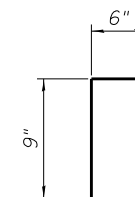
\*\* Cost included with Concrete Superstructure (Approach Slab).



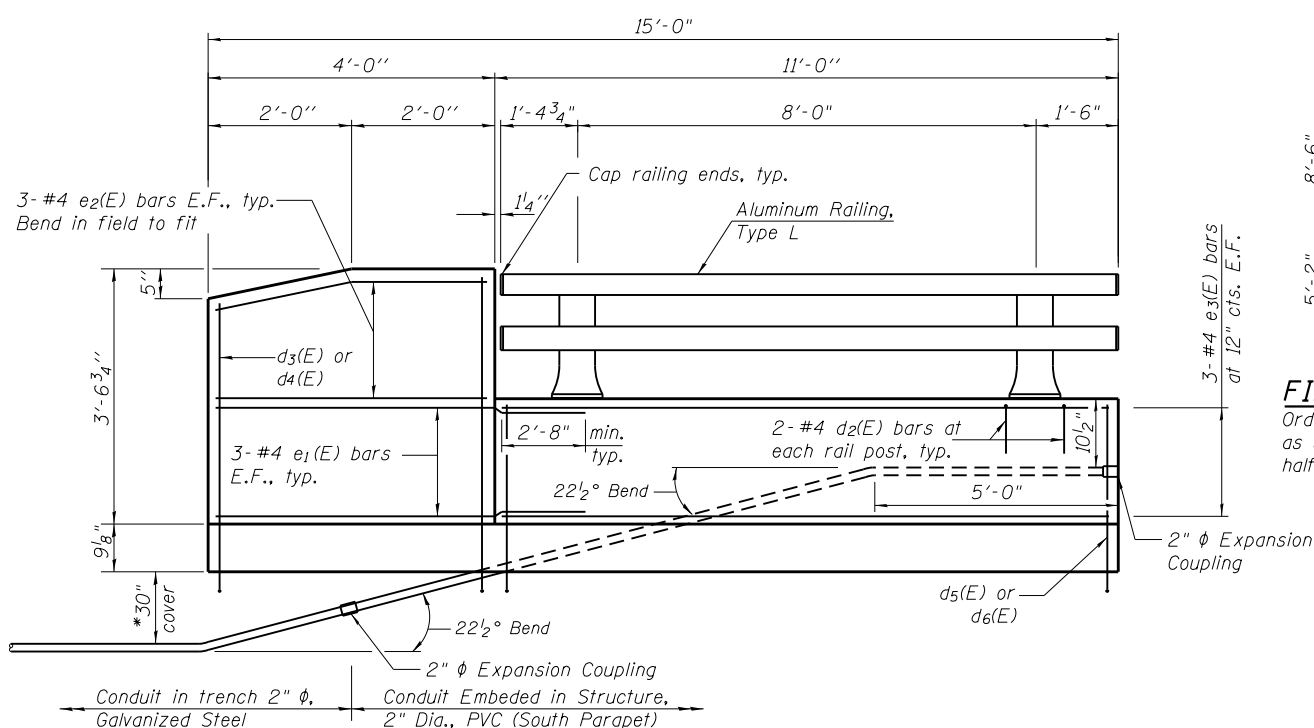
GUARDRAIL ATTACHMENT DETAIL



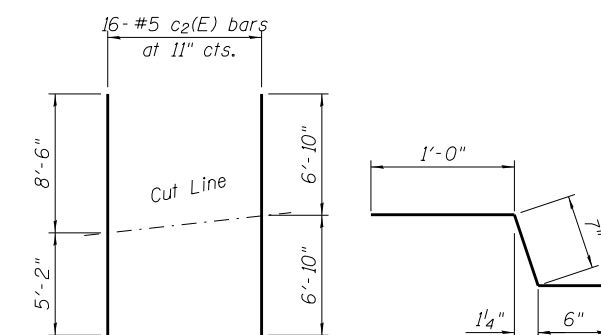
FLEXIBLE PAVEMENT DETAIL A



BAR d<sub>2</sub>(E)



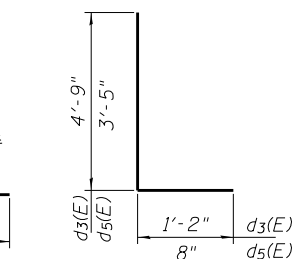
PARAPET ELEVATION



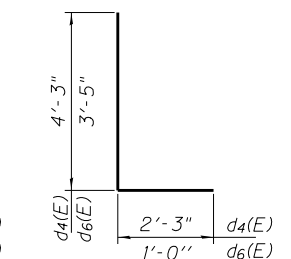
FIELD CUTTING DIAGRAM

Order c<sub>2</sub>(E) bars full length. Cut bars as shown and use remainder in other half of North Sidewalk.

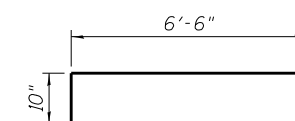
BAR c(E)



BARS d<sub>3</sub>(E) & d<sub>5</sub>(E)



BARS d<sub>4</sub>(E) & d<sub>6</sub>(E)



BAR a<sub>5</sub>(E)

**EAST APPROACH BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a <sub>3</sub> (E)	92	#5	23'-7"	—
a <sub>4</sub> (E)	120	#8	24'-7"	—
a <sub>5</sub> (E)	46	#5	7'-4"	—
b <sub>2</sub> (E)	63	#5	29'-8"	—
b <sub>3</sub> (E)	98	#9	29'-8"	—
b <sub>4</sub> (E)	15	#5	29'-8"	—
b <sub>5</sub> (E)	4	#5	14'-8"	—
b <sub>6</sub> (E)	2	#5	14'-8"	—
c(E)	63	#5	2'-1"	—
c <sub>1</sub> (E)	31	#5	5'-6"	—
c <sub>2</sub> (E)	16	#5	14'-2"	—
d <sub>2</sub> (E)	8	#4	2'-0"	—
d <sub>3</sub> (E)	10	#4	5'-11"	—
d <sub>4</sub> (E)	10	#6	6'-6"	—
d <sub>5</sub> (E)	26	#4	4'-1"	—
d <sub>6</sub> (E)	26	#6	4'-5"	—
e <sub>1</sub> (E)	12	#4	6'-8"	—
e <sub>2</sub> (E)	12	#4	3'-8"	—
e <sub>3</sub> (E)	12	#4	10'-8"	—
t(E)	92	#4	9'-8"	—
w <sub>1</sub> (E)	40	#5	44'-2"	—
Concrete Structures		Cu. Yd.	17.5	
Concrete Superstructure		Cu. Yd.	12.4	
Bridge Deck Grooving		Sq. Yd.	94	
Protective Coat		Sq. Yd.	156	
Concrete Superstructure (Approach Slab)		Cu. Yd.	64	
Reinforcement Bars, Epoxy Coated		Pound	26,440	

(Sheet 2 of 2)

FILE NAME = Q:\Engineering\Live\Projects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CAADD\CADD Sheets\Structural\016-0726-60X41-10 - E Appr-De\adgn



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PLOT SCALE = 0.2" = 1' or in.	CHECKED - JMT	REVISOR
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

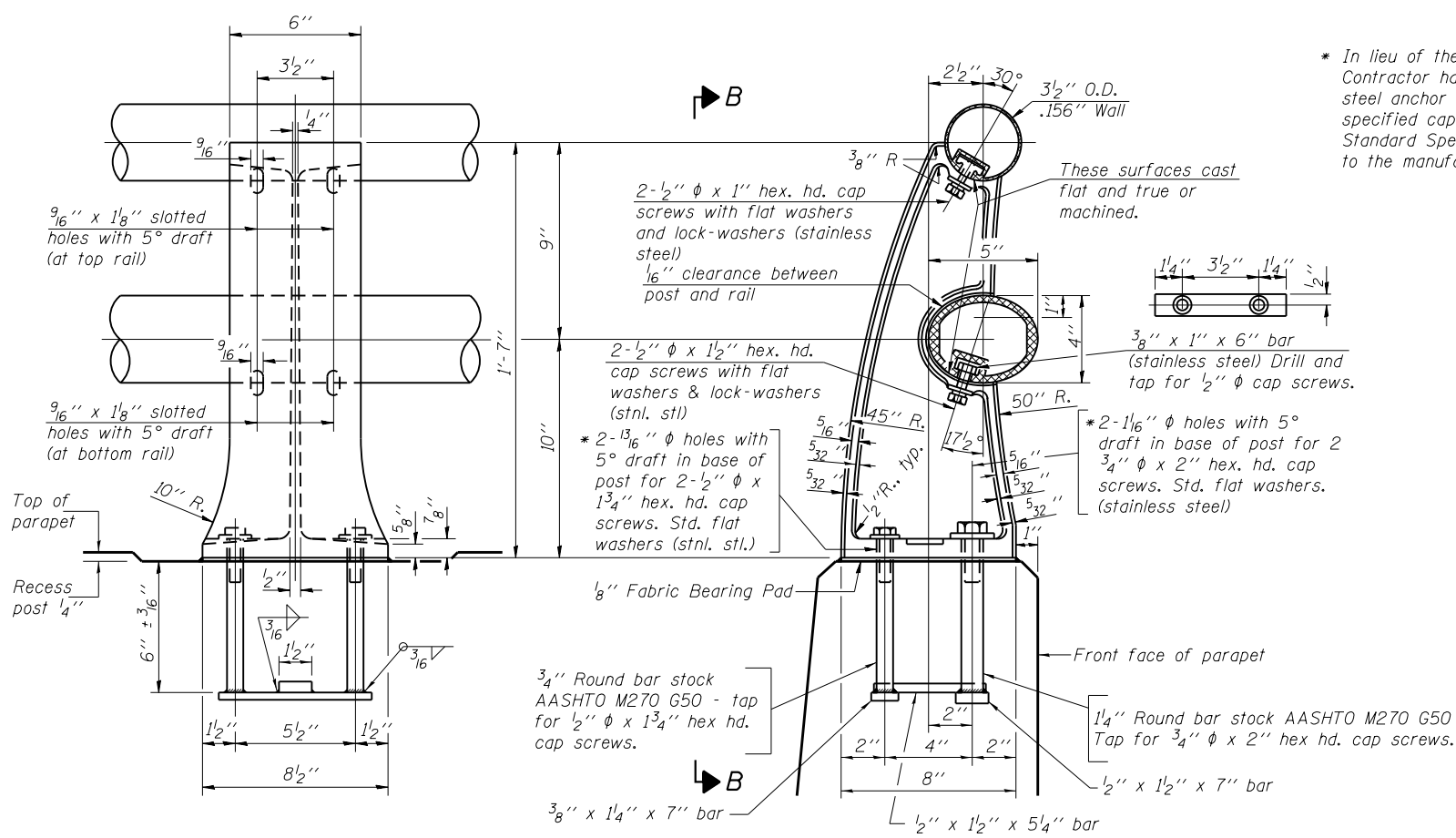
EAST BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 016-0726

SHEET NO. 10 OF 21 SHEETS

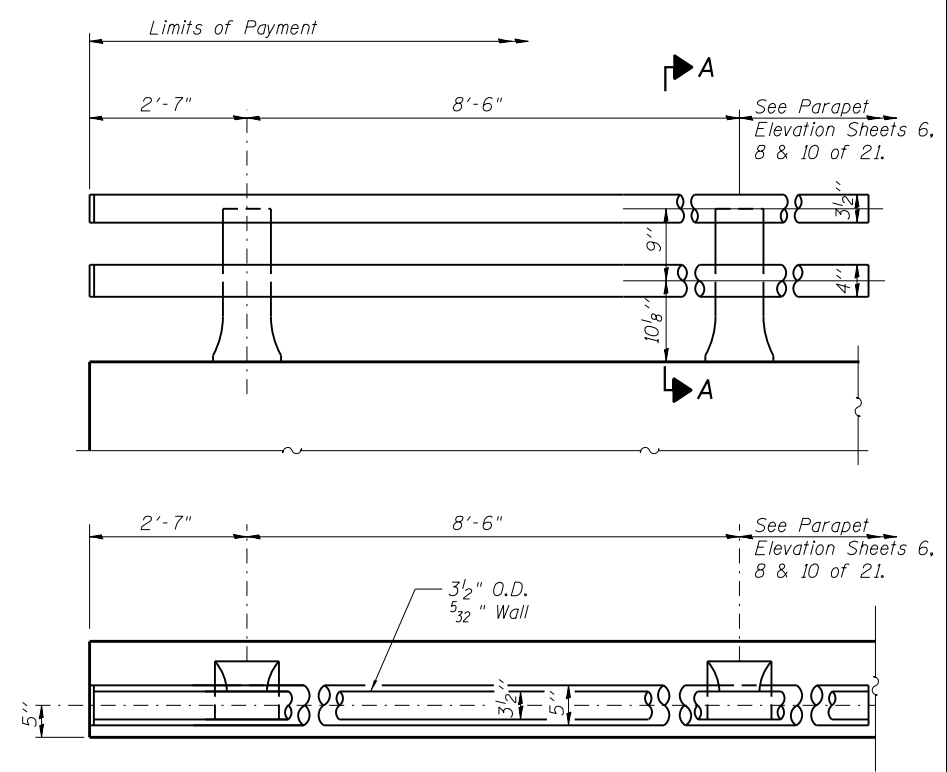
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	44
				CONTRACT NO. 60X41
ILLINOIS FED. AID PROJECT				



FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - WD 2 Contract No. 60X41\CAADD\CADD Sheets\Structural\016-0726-60X41-11-AlumRail.dgn

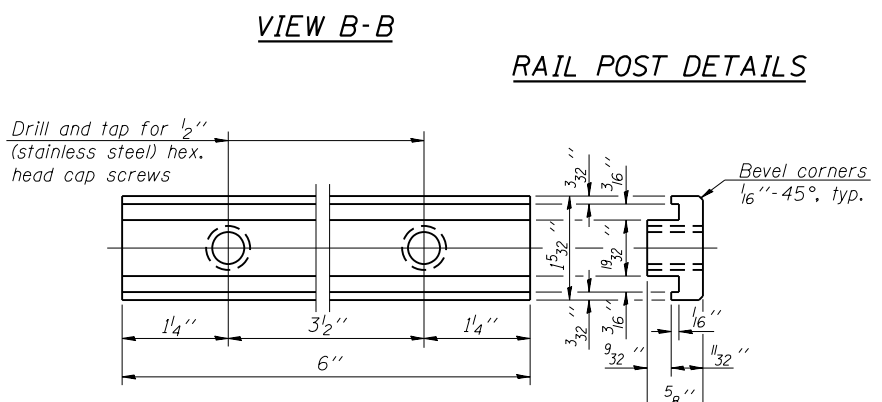


\* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



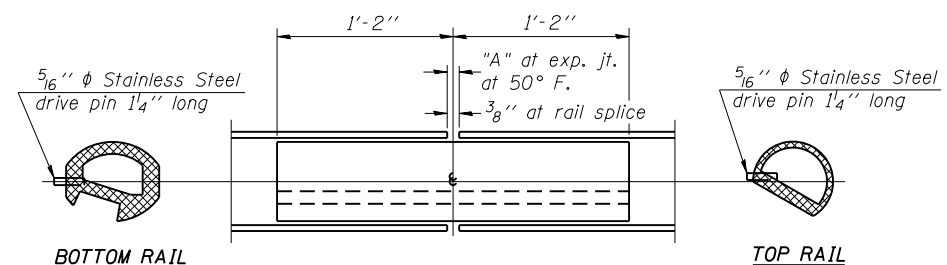
**RAIL TERMINAL SECTION**

Note:  
The end rail post shall be set back as required for the terminal rail section.



**RAIL POST CLAMP BAR**

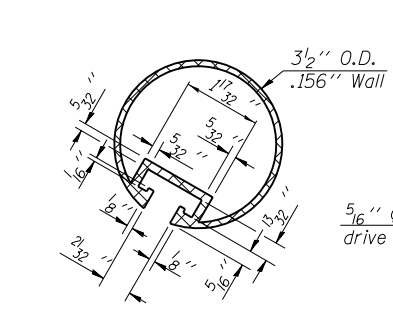
For Top Rail



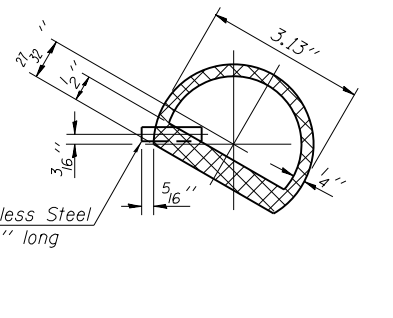
**RAIL SPLICE**

T	"A"
≤ 4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"
> 6 1/2" ≤ 9"	5"
> 9" ≤ 13"	7"

T = Total movement at expansion joint as shown on the design plans.

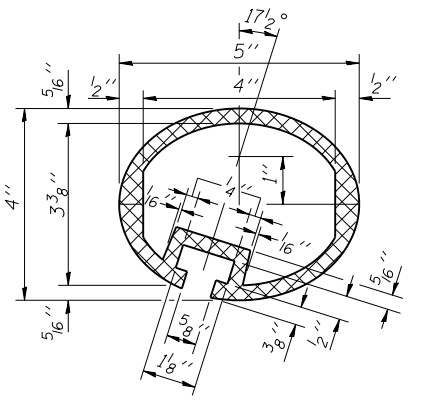


**SECTION THRU TOP RAIL**

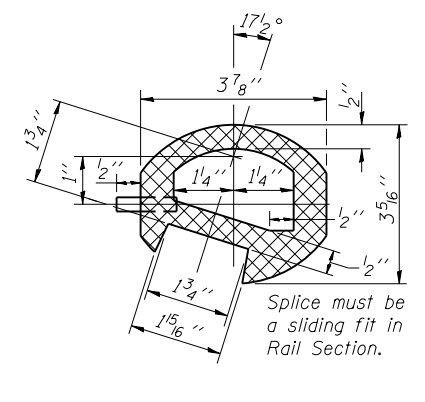


**SECTION THRU SPLICE**

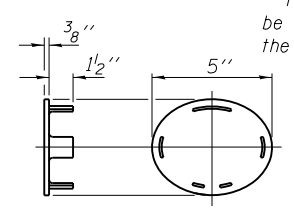
For Top Rail



**SEC. THRU ELLIPTICAL RAIL SECTION**

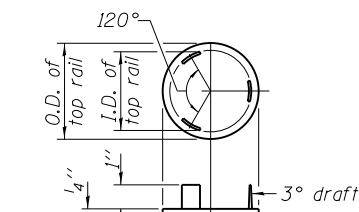


**SEC. THRU SPLICE**



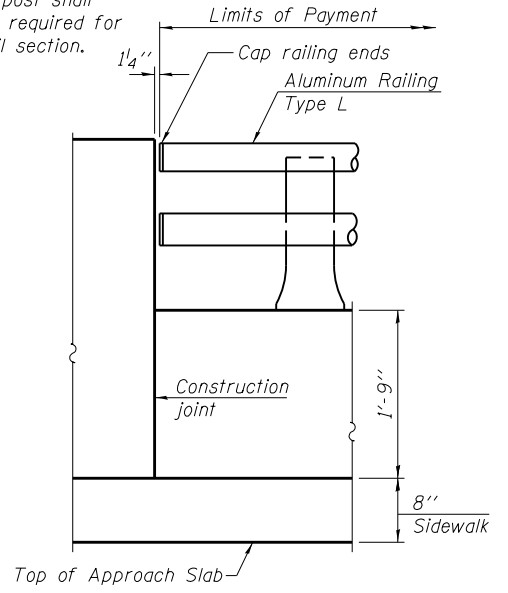
**CAST END CAP**

For bottom rail  
DRIVE FIT TYPE



**CAST END CAP**

For top rail



**RAIL END TREATMENT FOR TYPE 5 AND 6 TERMINAL**

**BILL OF MATERIAL**

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	140

Notes:  
All Posts shall be normal to parapet.  
All joints in rail shall be spliced per detail.  
All exposed rail ends shall be capped per detail.  
Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.  
See sheet 6 of 21 for rail post spacing.

R-20

11-22-2016 (7'-0" to 10'-0" Post spacing)



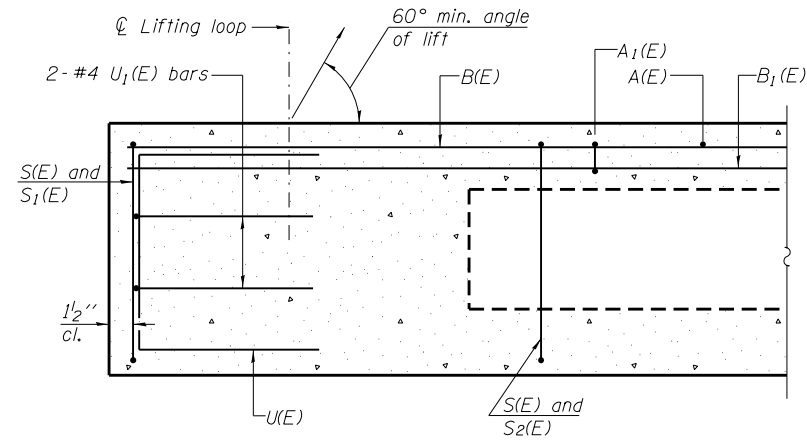
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PLOT DATE = 3/16/2017	DRAWN - JN	REVISED
	CHECKED - JMT	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ALUMINUM RAILING, TYPE L  
STRUCTURE NO. 016-0726**

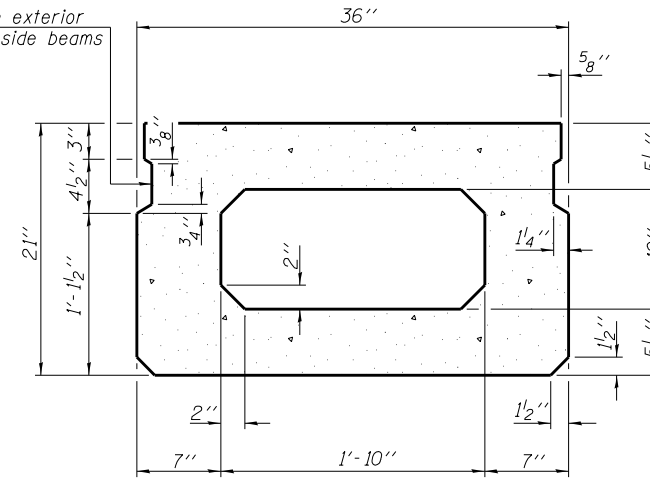
SHEET NO. 11 OF 21 SHEETS

F.A.U R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	45
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

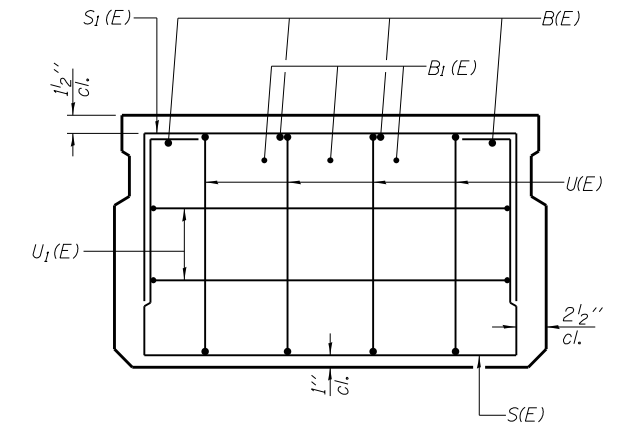


SECTION A-A

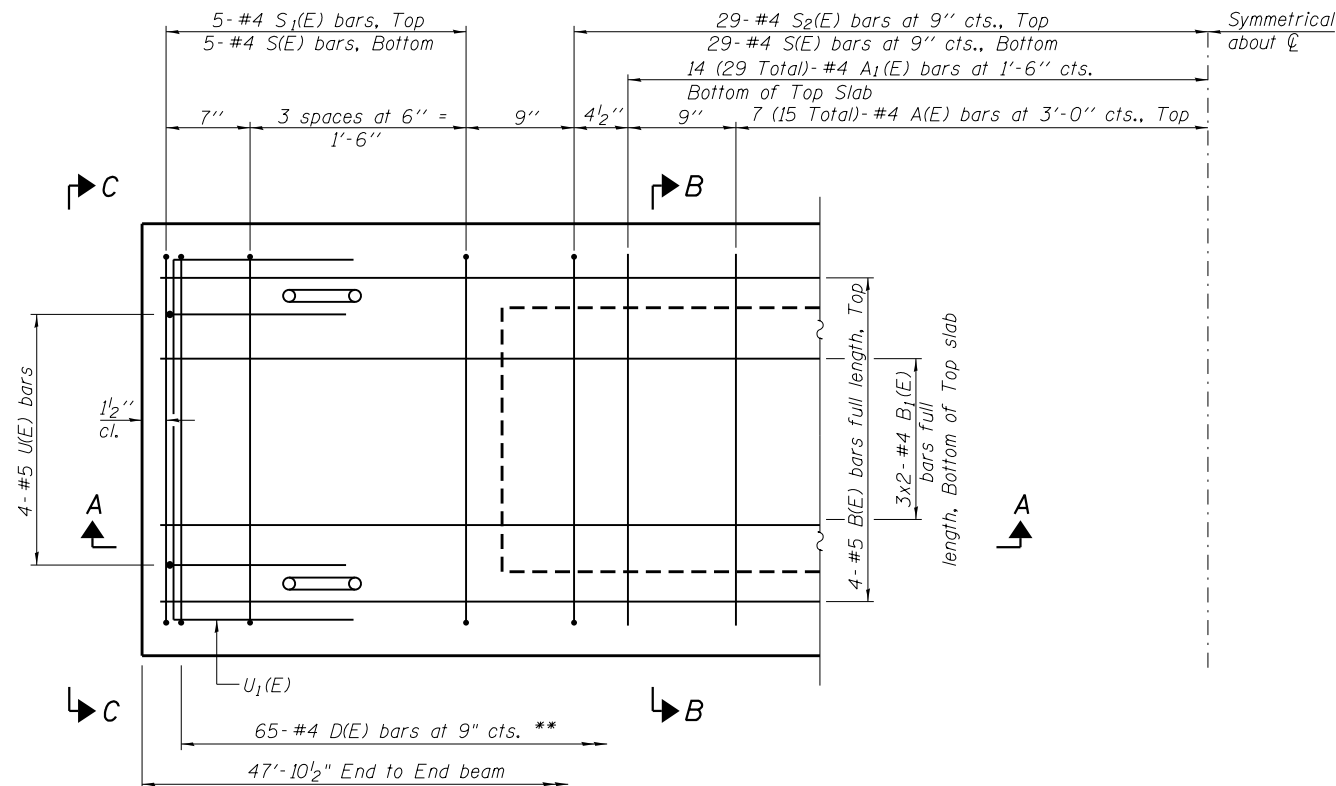
Omit key on exterior face of outside beams



SECTION B-B  
(Showing dimensions)

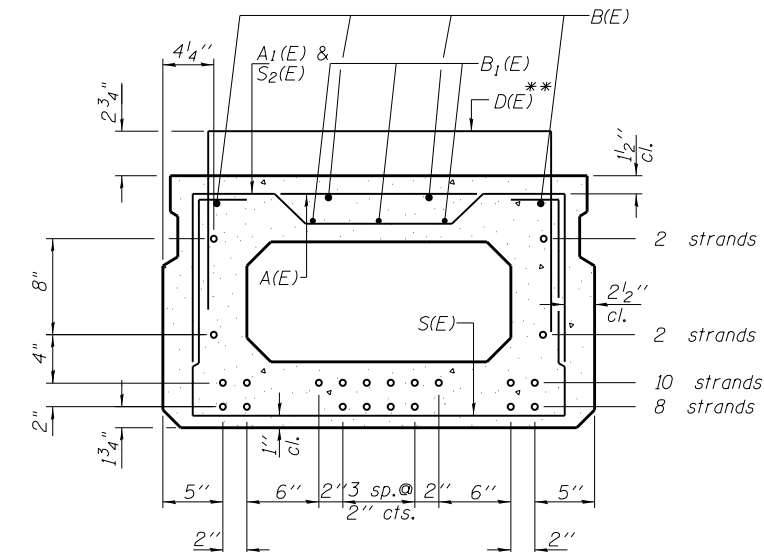


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION B-B

(Showing reinforcement and permissible strand locations)

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

BAR LIST  
ONE BEAM ONLY

(For information only)

Bar	No.	Size	Length	Shape
A(E)	15	#4	2'-7"	—
A1(E)	29	#4	2'-10"	~
B(E)	4	#5	47'-6"	—
B1(E)	6	#4	24'-10"	—
D(E)	65	#4	5'-1"	⌋
S(E)	68	#4	6'-5"	⌋
S1(E)	10	#4	4'-11"	⌋
S2(E)	58	#4	5'-2"	⌋
U(E)	8	#5	4'-0"	⌋
U1(E)	4	#4	5'-0"	⌋

Note: See sheet 13 of 21 for additional details and Bill of Material.

\*\* Place #4 D(E) bars at 9" cts. in fascia beam only. D(E) bars included in the cost of PPC Deck Beams.

Bars indicated thus 3x2-#4 etc. indicates 3 lines of bars with 2 lengths per line.

MINIMUM BAR LAP

#4 bar = 1'-11"  
#5 bar = 2'-6"

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAM  
STRUCTURE NO. 016-0726

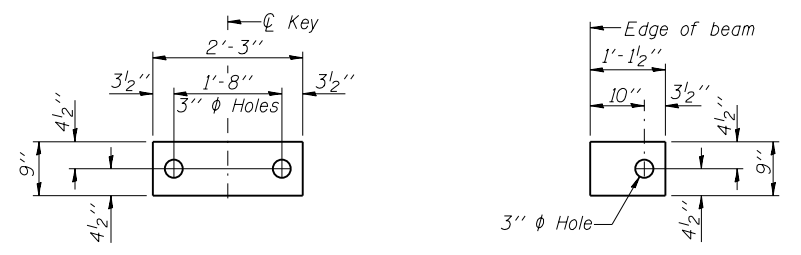
SHEET NO. 12 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	46
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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CHECKED - JMT	REVISIED	
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PLOT DATE = 3/16/2017	CHECKED - JMT	REVISIED

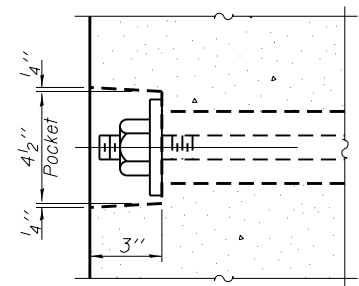


**FABRIC BEARING PAD**  
(Interior 24-required)

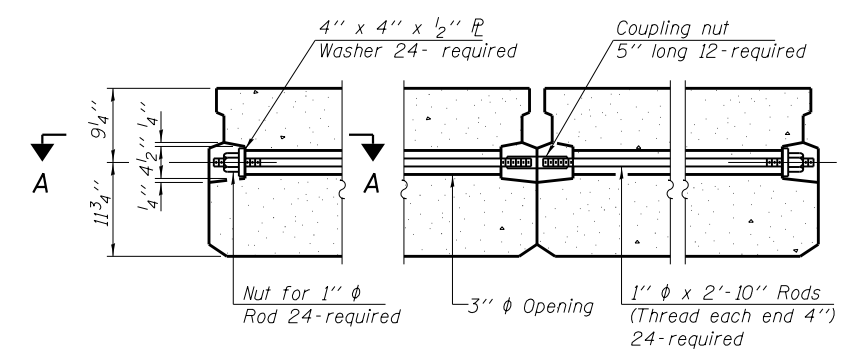
**FABRIC BEARING PAD**  
(Exterior 4-required)

**FIXED**

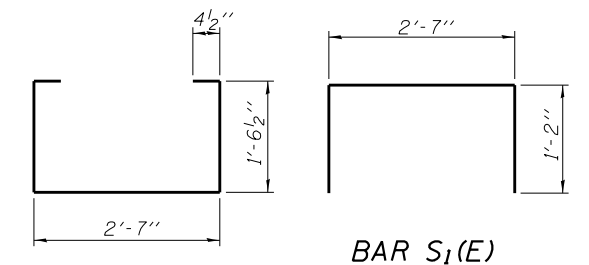
Notes:  
All bearing pads shall be 1" thick.



**SECTION A-A**

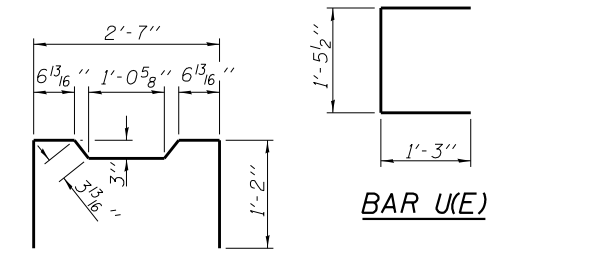


**TYPICAL TRANSVERSE TIE ASSEMBLY**



**BAR S(E)**

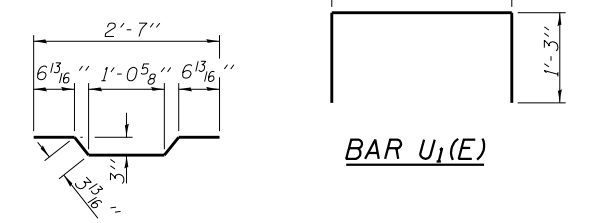
**BAR S<sub>1</sub>(E)**



**BAR U(E)**

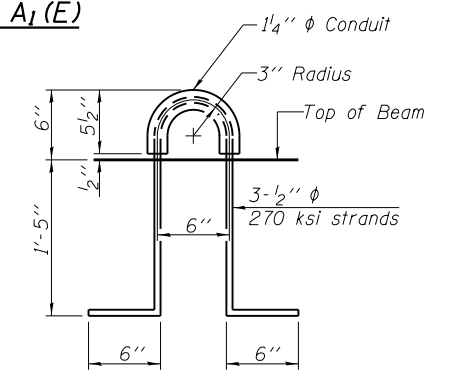
**BAR S<sub>2</sub>(E)**

**BAR U<sub>1</sub>(E)**

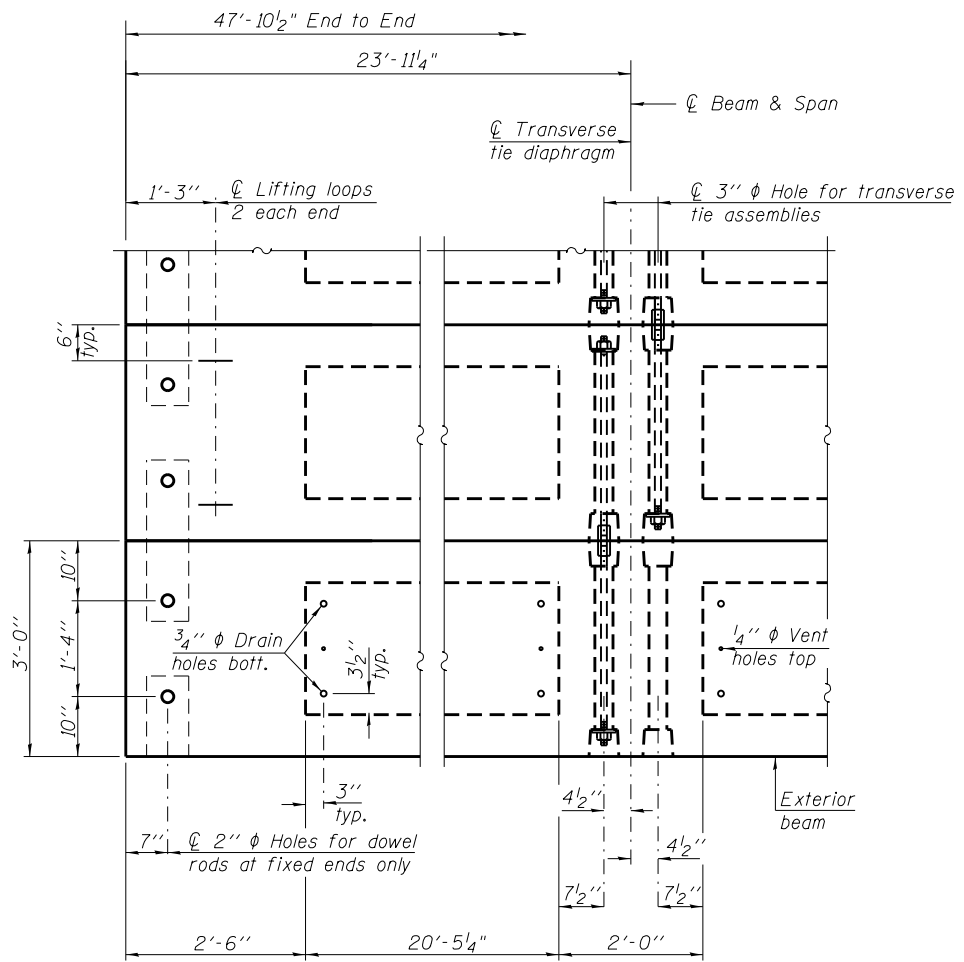


**BAR A<sub>1</sub>(E)**

**BAR D(E)**



**LIFTING LOOP DETAIL**



**PLAN VIEW**

**NOTES**

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.  
The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.  
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.  
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.  
Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.  
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

**BILL OF MATERIAL**

Precast Prestressed Concrete Deck Beams (21" depth)	Sq. Ft.	1868
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FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUFV\3003b - W0 2 Contract No. 60X41\CA00\CADD Sheets\Structural\016-0726-60X41-13-DeckBeamDedgn



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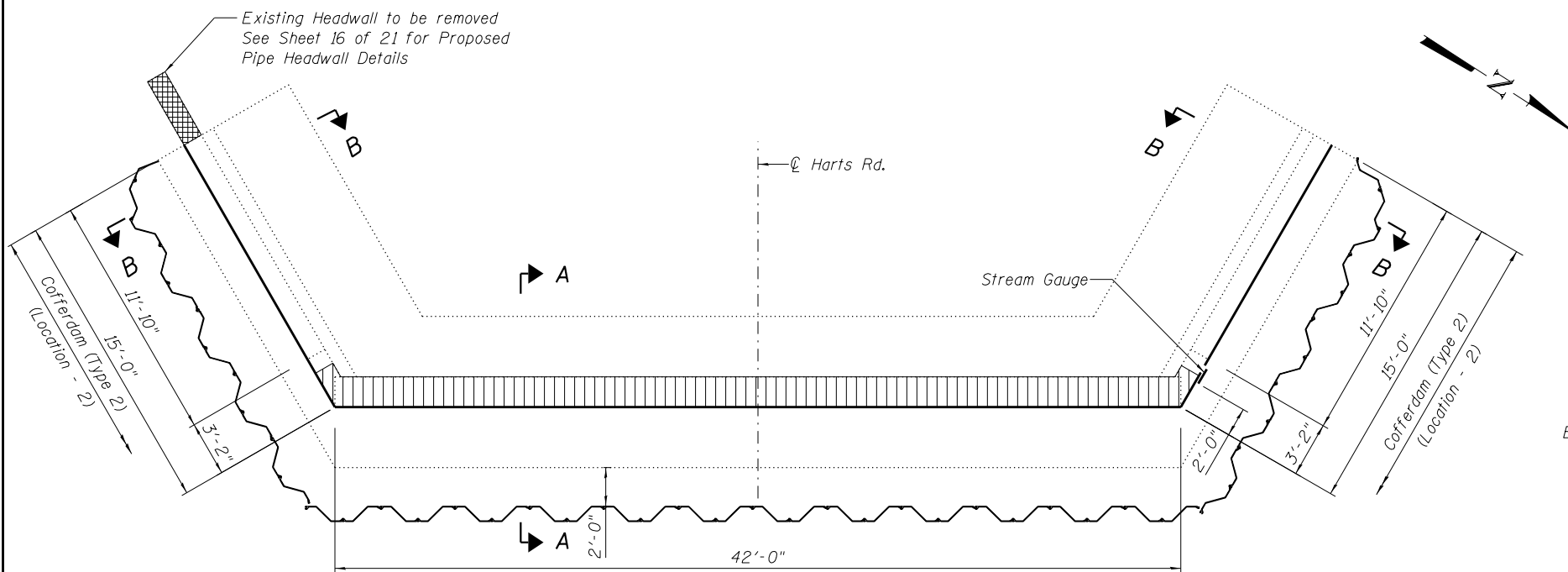
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**21" x 36" PPC DECK BEAM DETAILS**  
**STRUCTURE NO. 016-0726**

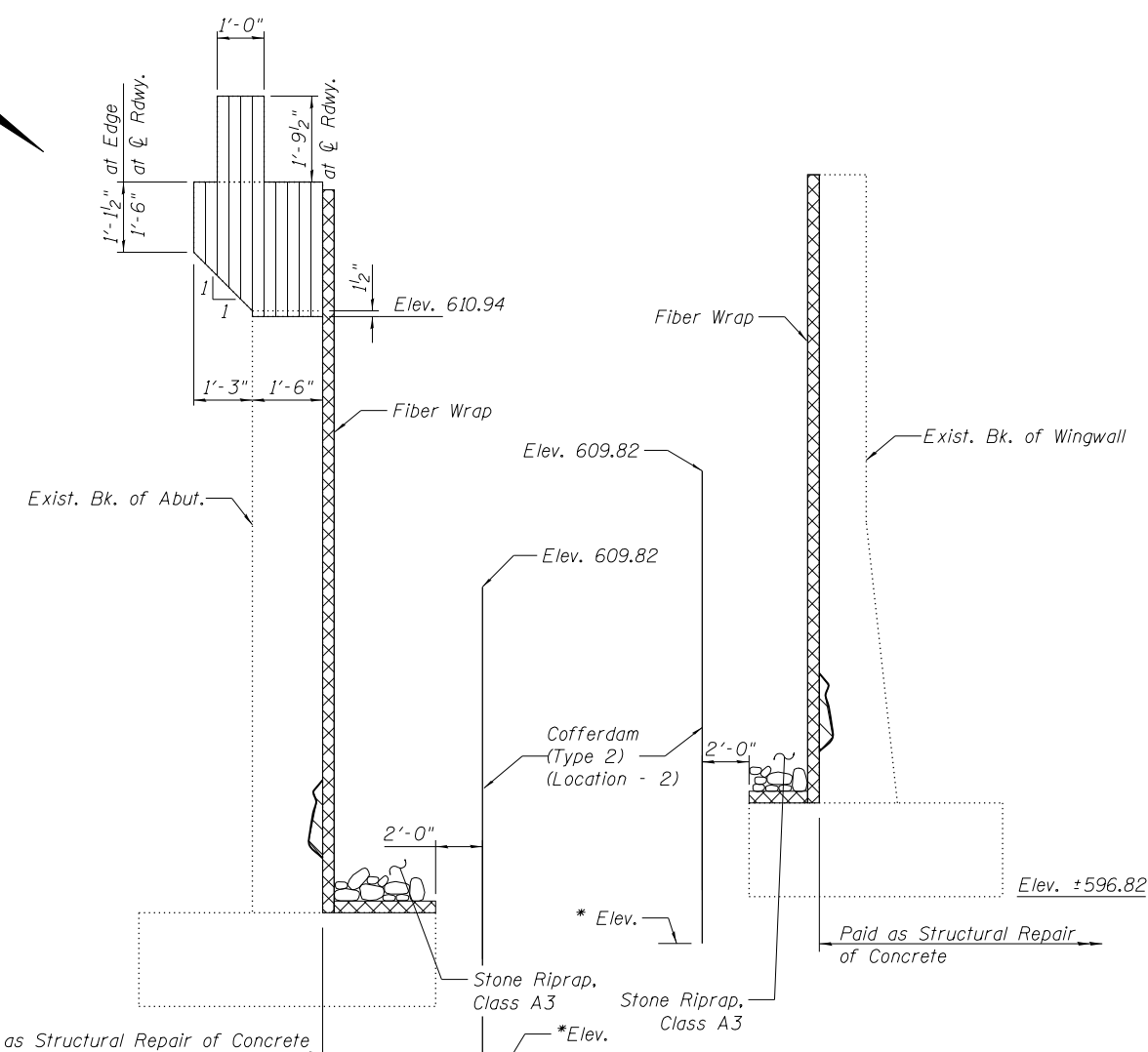
SHEET NO. 13 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

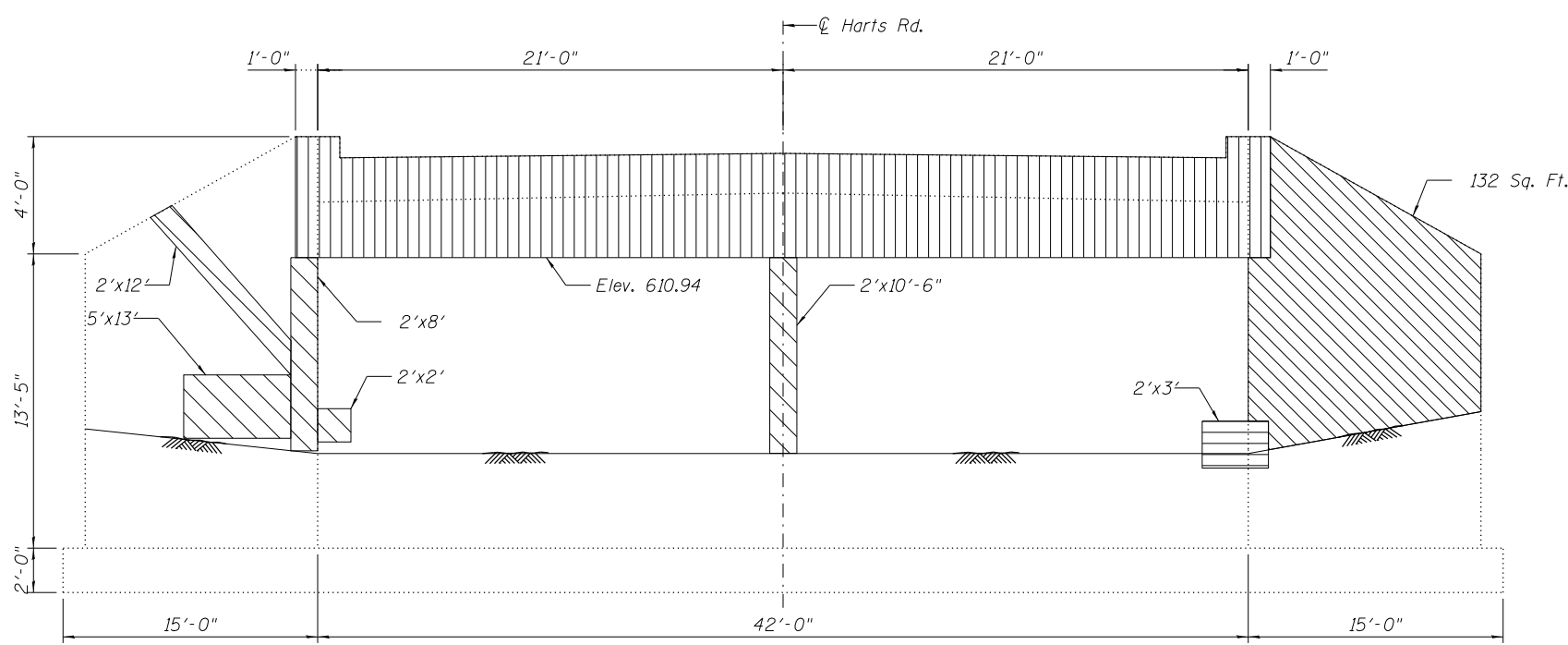
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PLAN



SECTION B-B



SW WINGWALL ELEVATION

WEST ABUTMENT ELEVATION

NW WINGWALL ELEVATION

SECTION A-A

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Structural Repair of Concrete (Depth Greater than 5 Inches)
- Concrete Removal
- Concrete Headwall Removal
- Fiber Wrap

Note:  
Install Fiber Wrap on face of abutment, wingwalls and footings. Perform this work as per the manufacturer's recommendations and Special Provision for "Fiber Wrap".

Structural Repair of Concrete shall be performed prior to the application of Fiber Wrap.

Install Fiber Wrap strips equivalent to #5 bars at 12" cts. both horizontally and vertically.

The adhesive to apply Fiber Wrap shall meet Specifications in Special Provision for "Fiber Wrap".

WEST ABUTMENT REPAIRS  
BILL OF MATERIAL

Item	Unit	Total
Stone Riprap, Class A3	Ton	45
Concrete Removal	Cu. Yd.	13.5
Concrete Headwall Removal	Each	1
Cofferdam Excavation	Cu. Yd.	42
Cofferdam (Type 2) (Location - 2)	Each	1
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	262
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	6
Acrylic Coating	Sq. Yd.	142
Fiber Wrap	Sq. Ft.	1279
Stream Gauge	Each	1



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

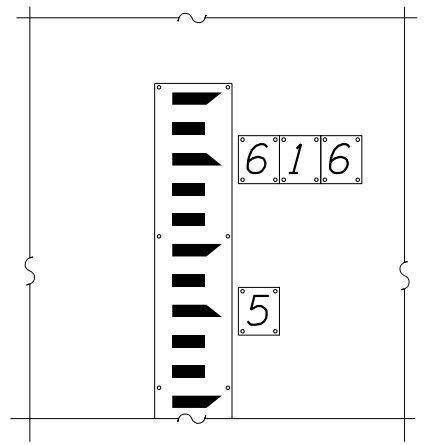
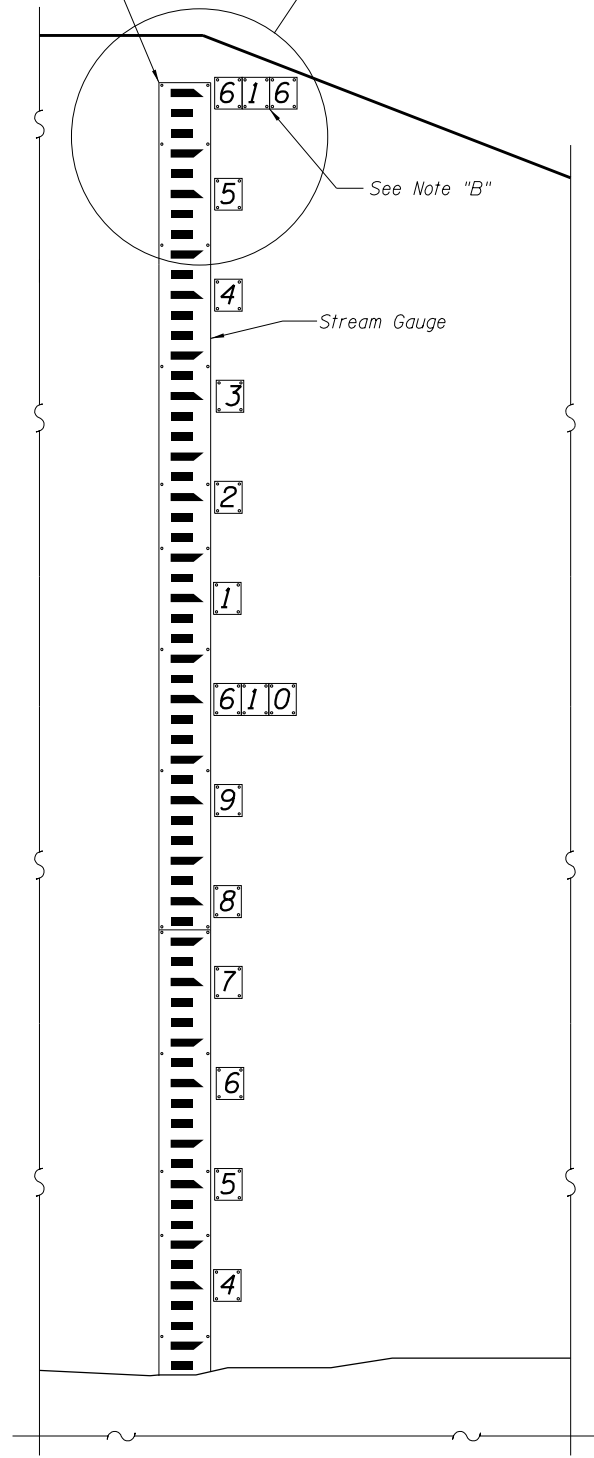
WEST ABUTMENT REPAIRS  
STRUCTURE NO. 016-0726

SHEET NO. 14 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	48
CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT

See Note "A"      See Detail A this sheet



DETAIL A

NORTHWEST WINGWALL STREAM GAUGE

Note "A":

The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered and 3 1/2" wide. Gauge plates shall be "WaterMark" Style "E" or approved equivalent.

Note "B":

Each individual number plate should be a black numeral on a 2"x3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent. Elevations shall be installed as shown.

Notes:

All plates shall be fastened directly to the wingwall with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head.

The Contractor must determine exact elevation of the Gauge Plates in the field and install Gauge Plates within a tolerance of 1/4".

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the example to the left.

See Special Provisions.

FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DURV13003b - WD 2 Contract No. 60X41\CAADD\CADD Sheets\Structural\016-0726-60X41-15-NW WW stream gauge.dgn



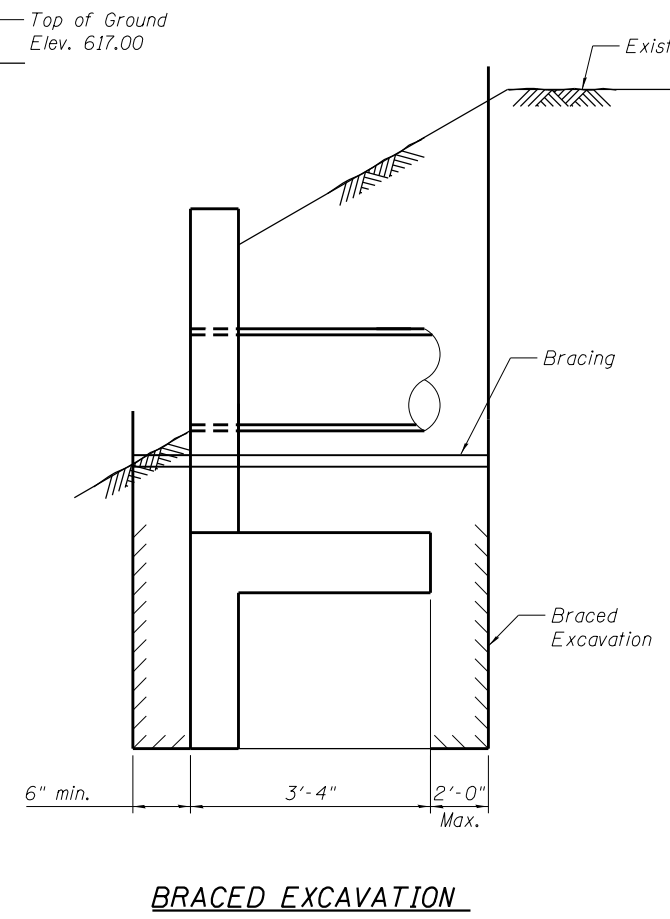
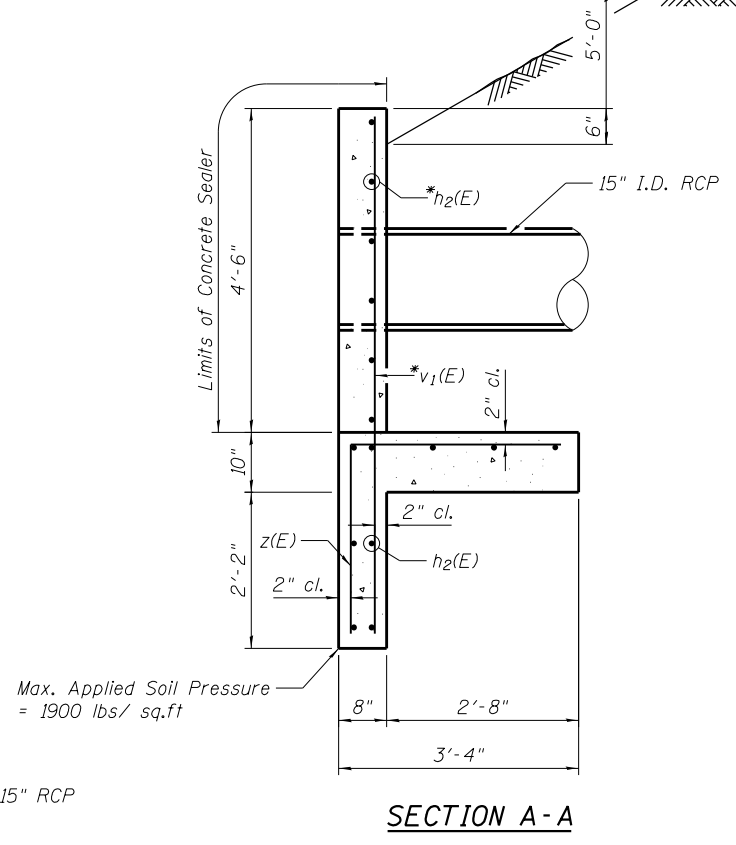
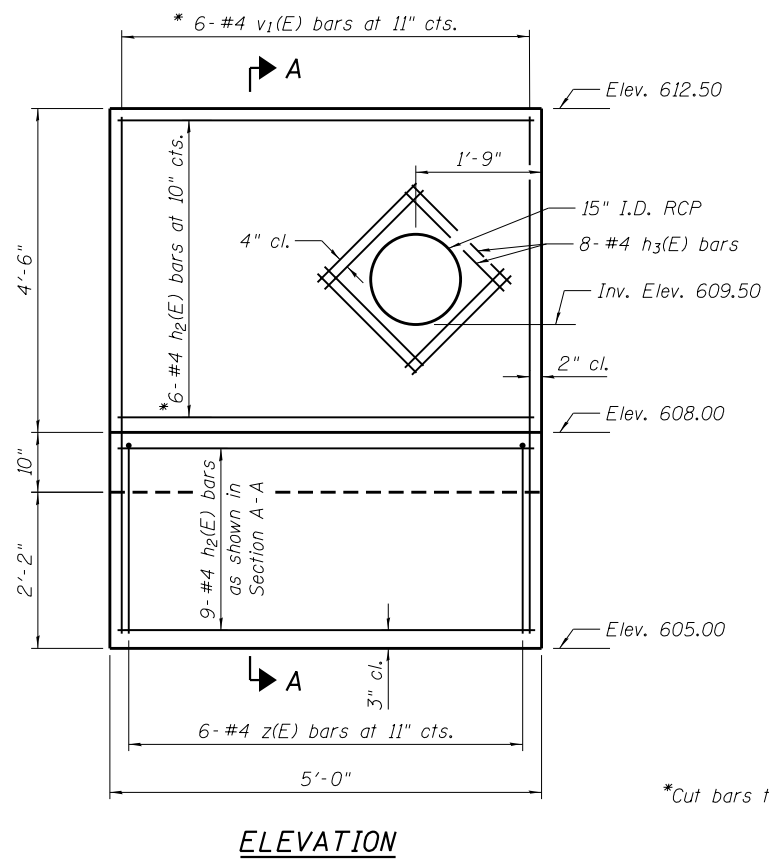
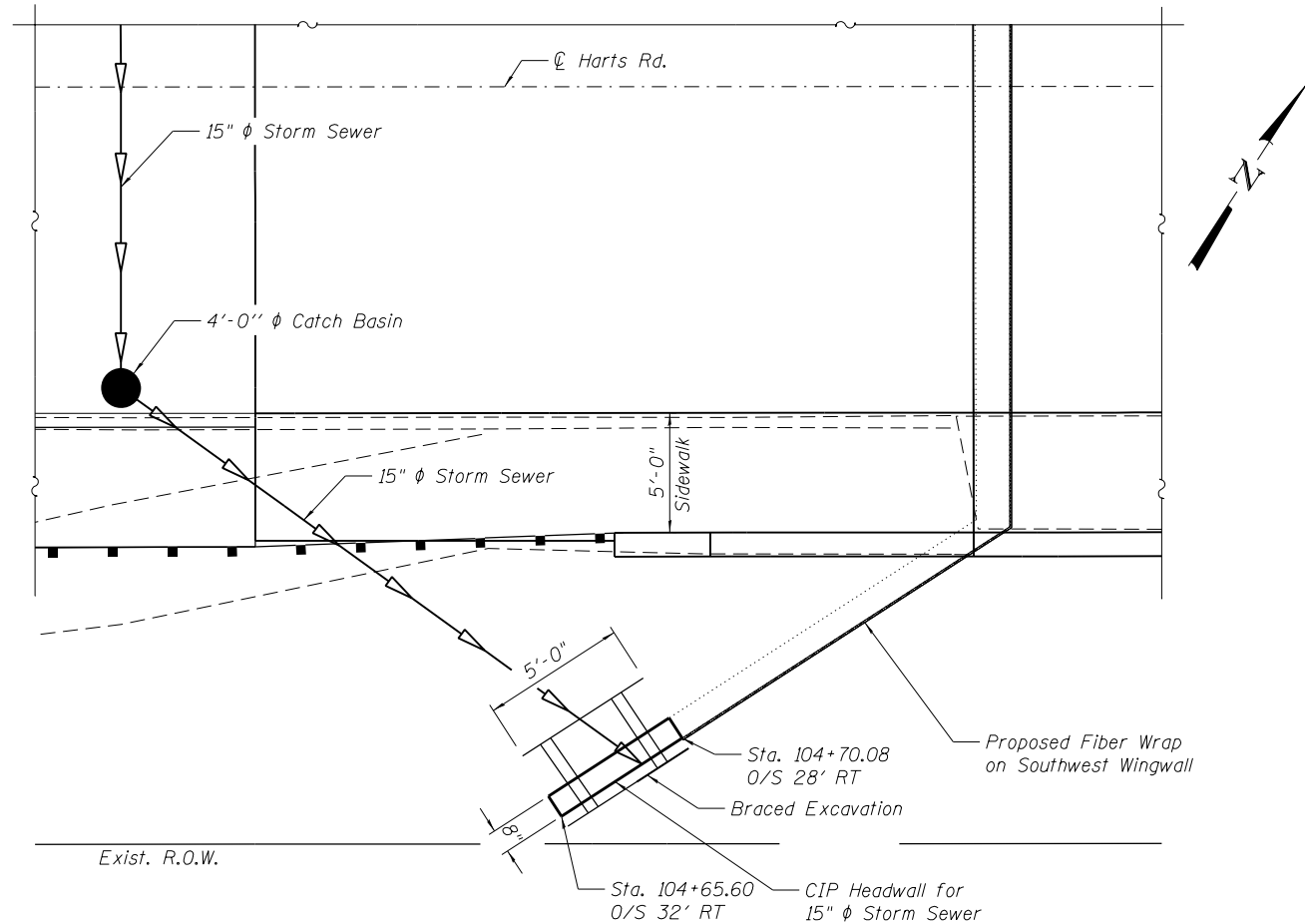
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**NORTHWEST WINGWALL STREAM GAUGE  
STRUCTURE NO. 016-0726**

SHEET NO. 15 OF 21 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	49
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



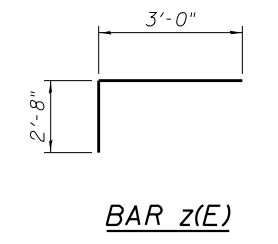
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_2(E)$	15	#4	4'-8"	—
$h_3(E)$	8	#4	3'-1"	—
$v_1(E)$	6	#4	7'-1"	—
$z(E)$	6	#4	5'-8"	┌
Concrete Structures			Cu. Yd.	1.3
Reinforcement Bars, Epoxy Coated			Pound	120
Concrete Sealer			Sq. Ft.	25
Braced Excavation			Cu. Yd.	8

Notes:

See Drainage sheet in Roadway Plans for drainage structure and storm sewer information.

Bracing shall be installed as per Special Provisions for "Braced Excavation".



FILE NAME = Q:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA\ADD Sheets\Structural\016-0726-60X41-16-Headwall.dgn



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 DRAWN - JN  
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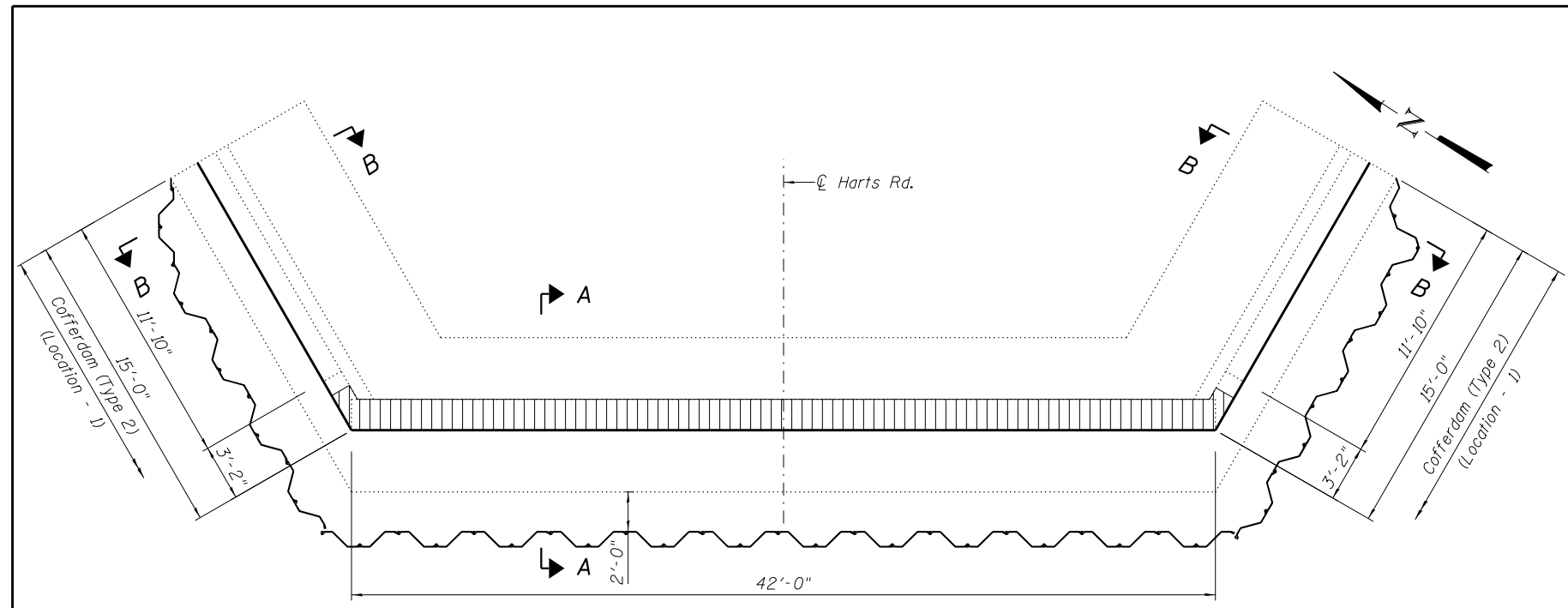
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOUTHWEST HEADWALL DETAILS  
 STRUCTURE NO. 016-0726

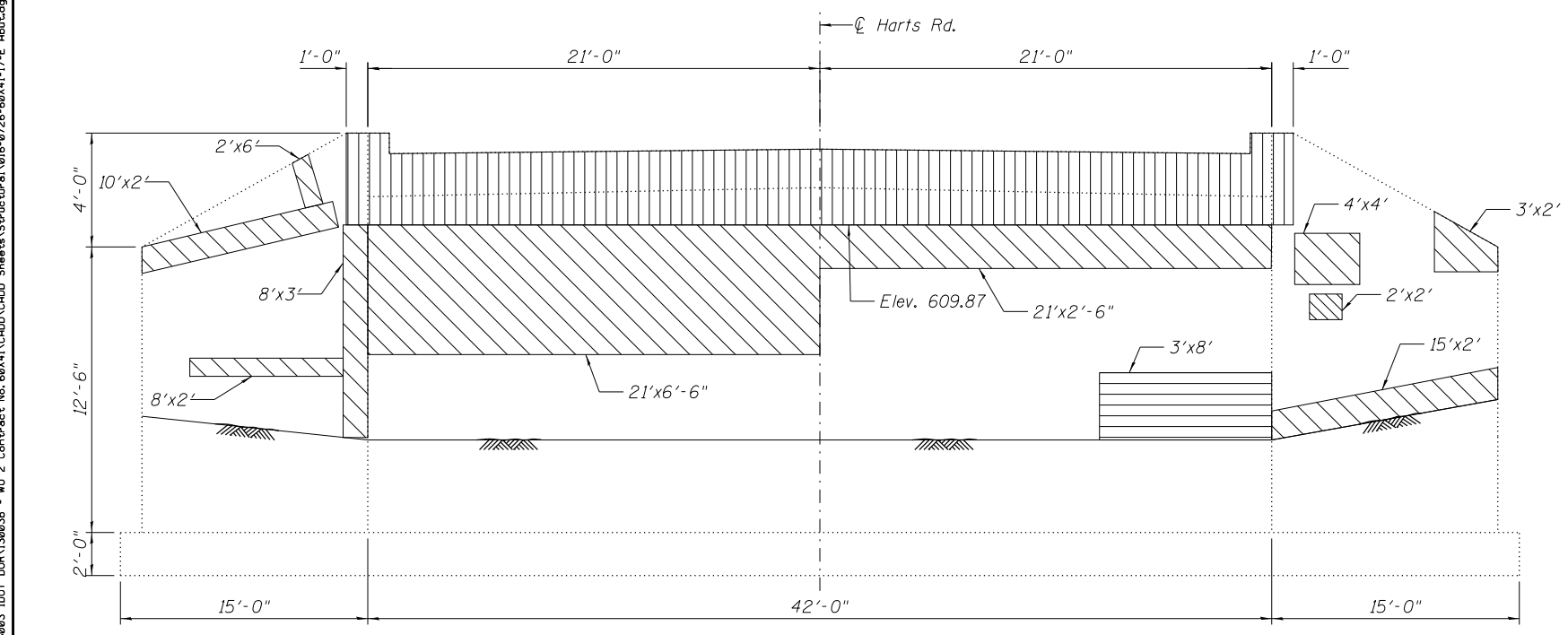
SHEET NO. 16 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	50
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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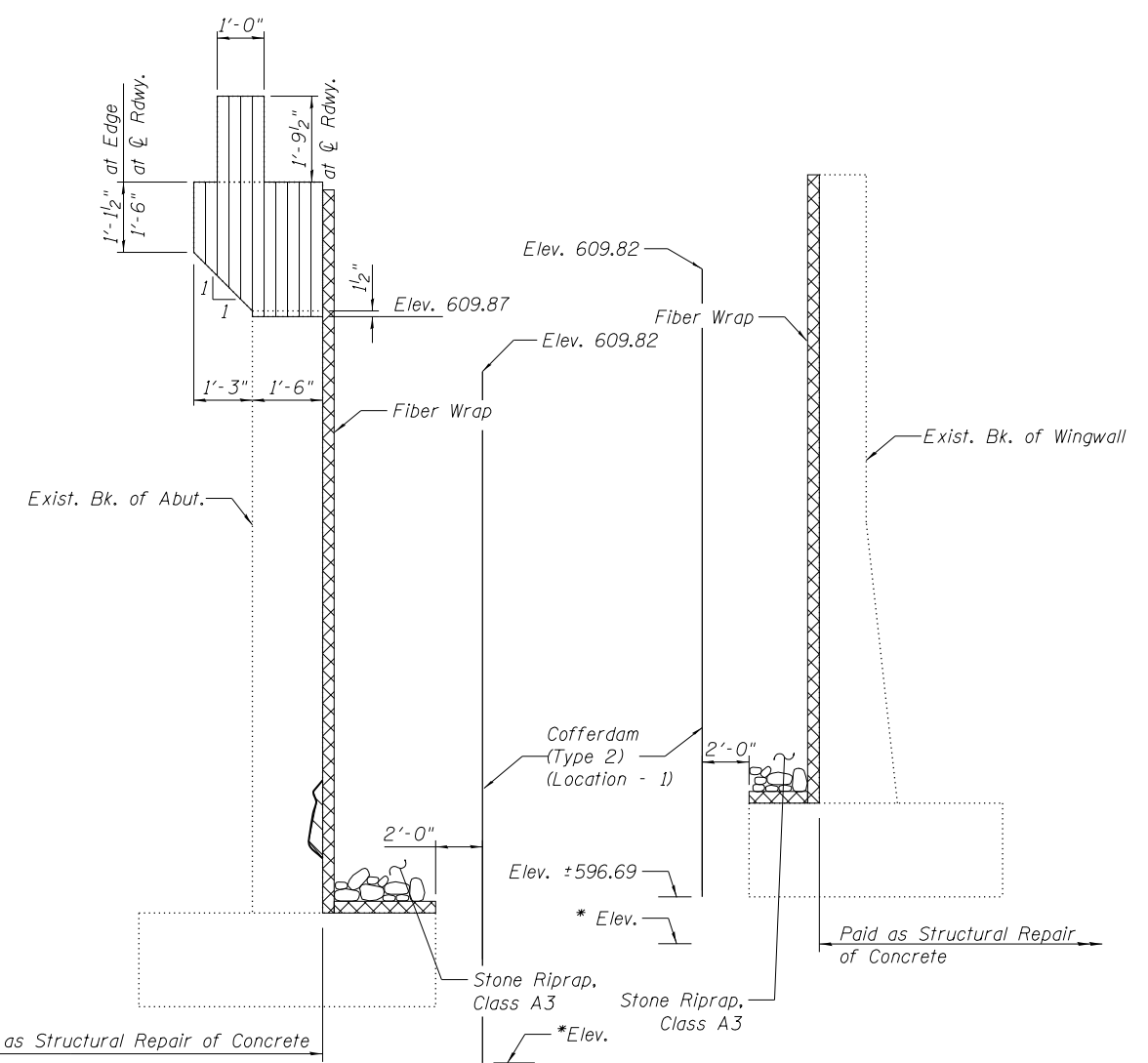
PLAN



NE WINGWALL ELEVATION

EAST ABUTMENT ELEVATION

SE WINGWALL ELEVATION



SECTION B-B

SECTION A-A

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Structural Repair of Concrete (Depth Greater than 5 Inches)
- Concrete Removal
- Fiber Wrap

Note:  
Install Fiber Wrap on face of abutment, wingwalls and footings. Perform this work as per the manufacturer's recommendations and Special Provision for "Fiber Wrap".

Structural Repair of Concrete shall be performed prior to the application of Fiber Wrap.

Install Fiber Wrap strips equivalent to #5 bars at 12" cts. both horizontally and vertically.

The adhesive to apply Fiber Wrap shall meet Specifications in Special Provision for "Fiber Wrap".

\* Bottom elevation of cofferdam shall be determined by the Contractor.

EAST ABUTMENT REPAIRS  
BILL OF MATERIAL

Item	Unit	Total
Stone Riprap, Class A3	Ton	47
Concrete Removal	Cu. Yd.	13.4
Cofferdam Excavation	Cu. Yd.	43
Cofferdam Type 2 (Location - 1)	Each	1
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	317
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	24
Acrylic Coating	Sq. Yd.	135
Fiber Wrap	Sq. Ft.	1209
Asbestos Bearing Pad Removal	Each	28



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

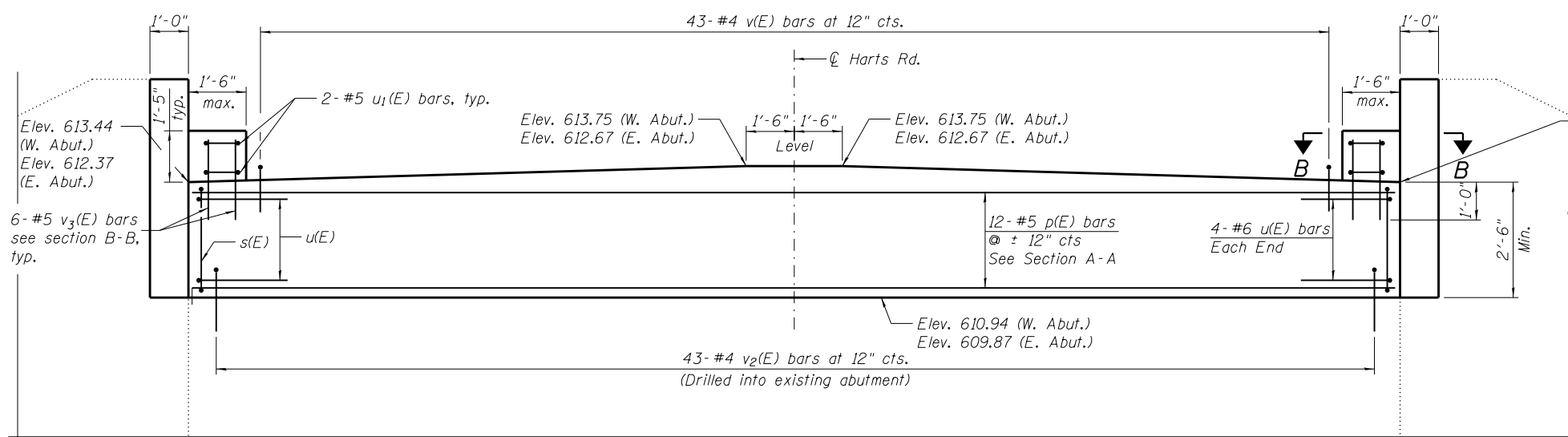
EAST ABUTMENT REPAIRS  
STRUCTURE NO. 016-0726

SHEET NO. 17 OF 21 SHEETS

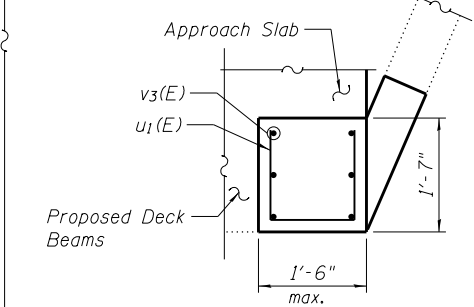
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CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT

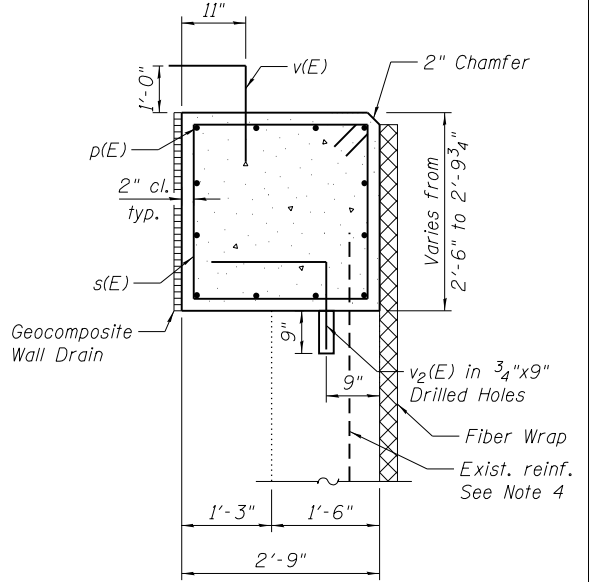
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Elev. 613.44 (W. Abut.)  
Elev. 612.37 (E. Abut.)



SECTION B-B

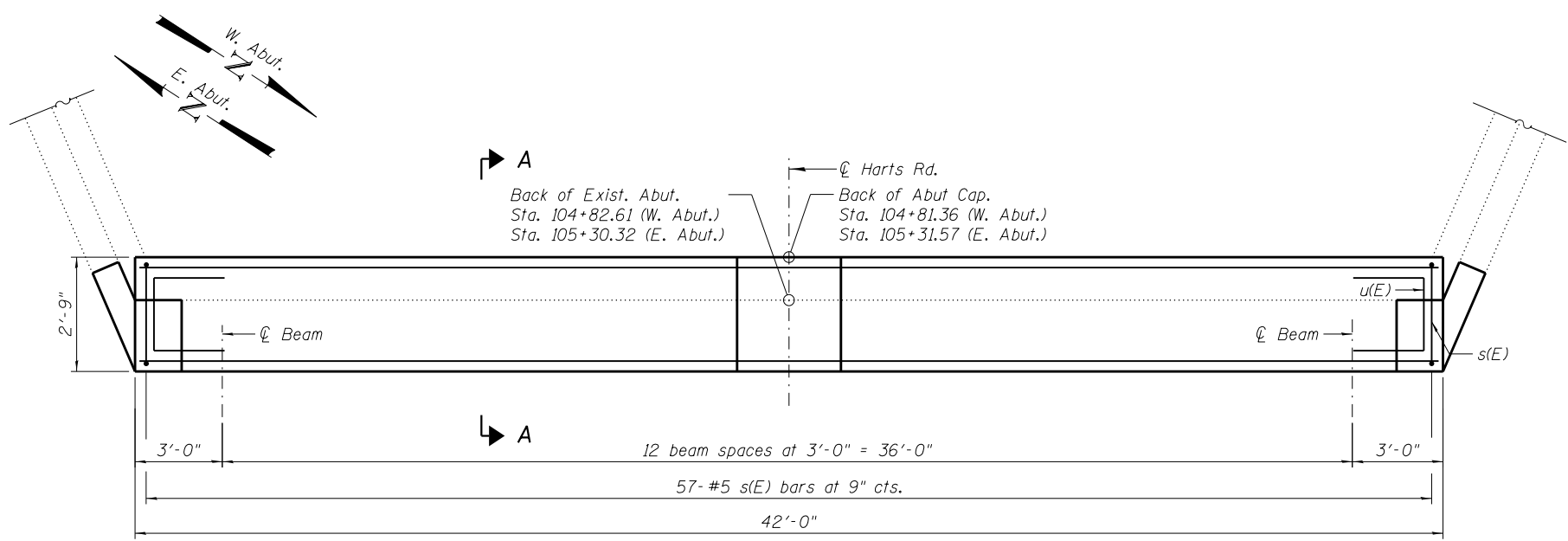


SECTION A-A

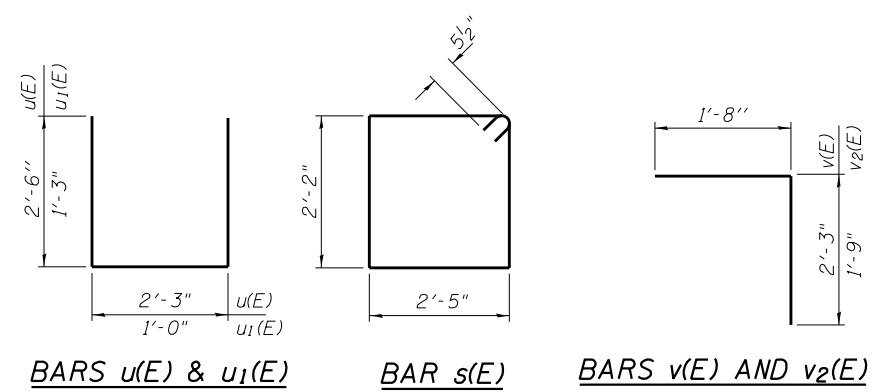
ELEVATION

BILL OF MATERIAL  
EAST AND WEST ABUTMENTS

Bar	No.	Size	Length	Shape
p(E)	24	#5	41'-8"	—
s(E)	114	#5	10'-1"	□
u(E)	16	#6	7'-3"	U
u1(E)	8	#5	3'-6"	U
v(E)	86	#5	3'-11"	┌
v2(E)	86	#5	3'-5"	┌
v3(E)	24	#5	2'-2"	—
Item		Unit	Total	
Structure Excavation		Cu. Yd.	90	
Concrete Structures		Cu. Yd.	13.6	
Reinforcement Bars, Epoxy Coated		Pound	3,160	
Geocomposite Wall Drain		Sq. Yd.	50	
Granular Backfill for Structures		Cu. Yd.	90	
Pipe Underdrains for Structures 4"		Foot	152	



PLAN



BARS u(E) & u1(E)

BAR s(E)

BARS v(E) AND v2(E)

NOTES:

1. Drill and grout v2(E) bars according to section 584 of Standard Specifications. Cost included with cost of Reinforcement Bars, Epoxy Coated.
2. See Sheet 14 and 17 of 21 for Fiber Wrap details.
3. See Sheet 2 of 21 for Section Thru Abutment.
4. Use of the existing reinforcement shall be determined by the Engineer based on the condition of reinforcement. If reused the reinforcement shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.



USER NAME = johnn	DESIGNED - SAT	REVISED
	CHECKED - JMT	REVISED
PLOT SCALE = 8:0' = 1" / in.	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ABUTMENT SEAT RECONSTRUCTION  
STRUCTURE NO. 016-0726

SHEET NO. 18 OF 21 SHEETS

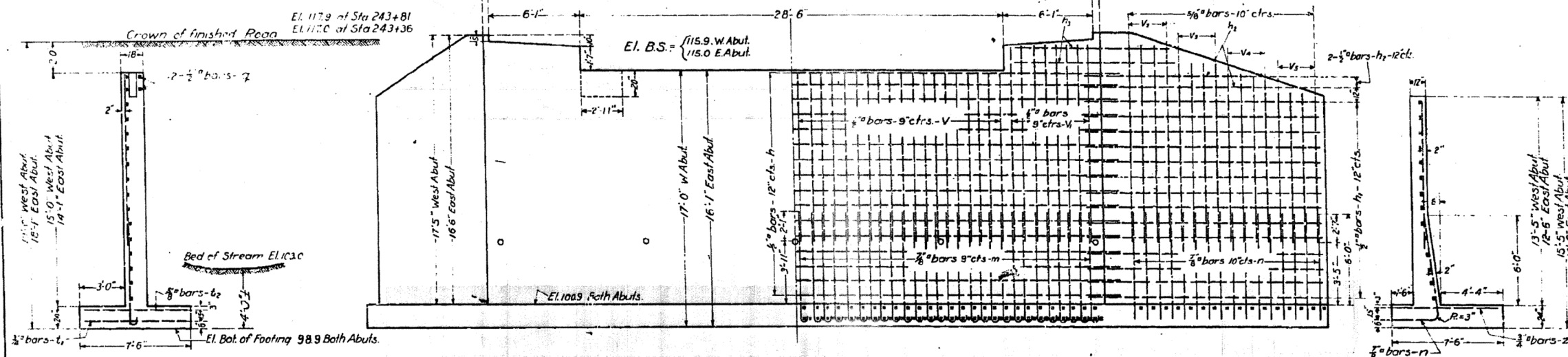
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	52
CONTRACT NO. 60X41				

ILLINOIS FED. AID PROJECT



DEPARTMENT OF HIGHWAYS  
COOK COUNTY  
REINFORCED CONCRETE SUBSTRUCTURE

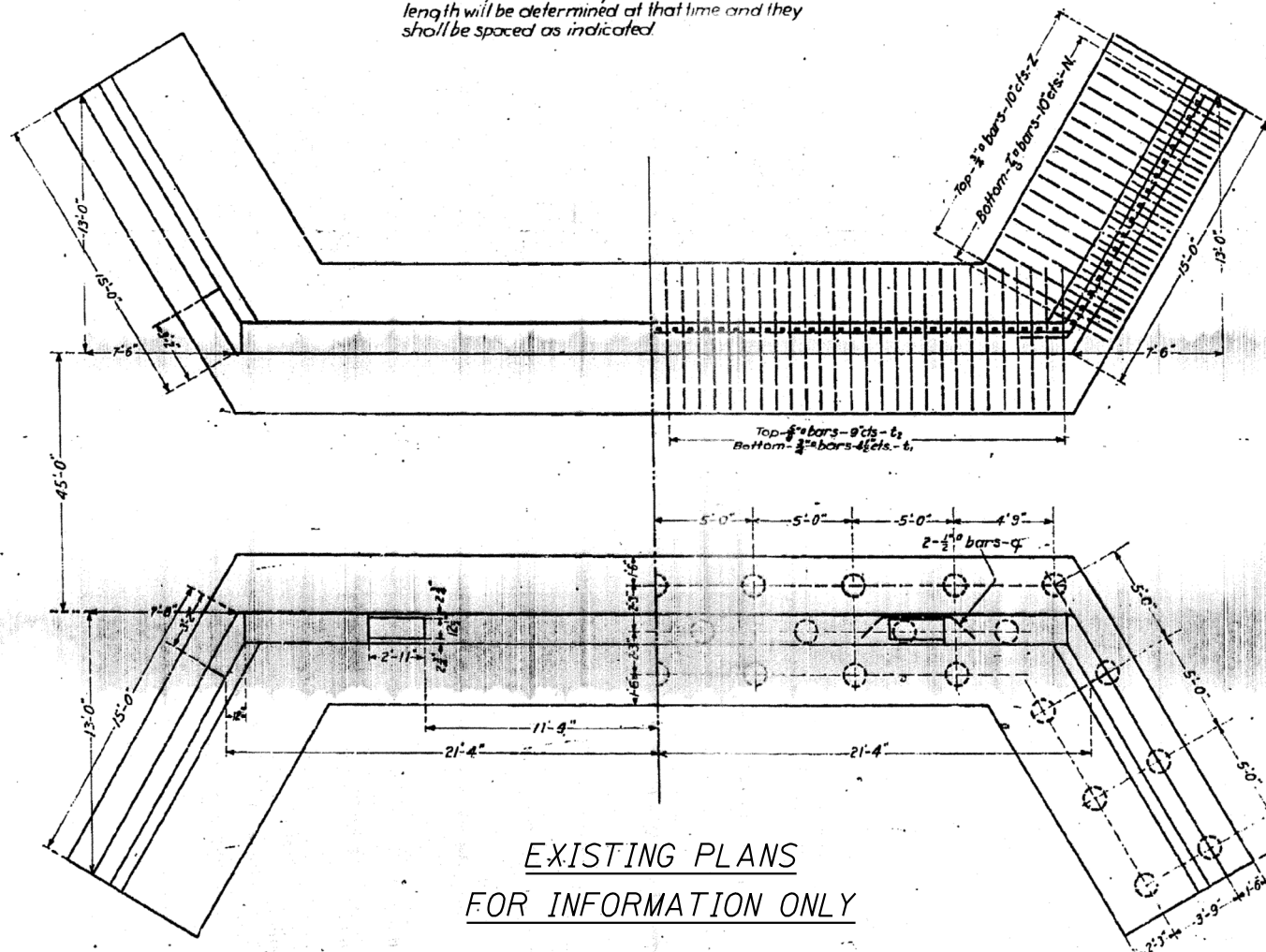
Sheet No. 21  
3-A 1920 21 21  
SEC 66-15 D



Note: The necessity of driving piles will be determined by the Engineer at the time the excavation for the footings is made. If piles are to be used their length will be determined at that time and they shall be spaced as indicated.

NOTE

1. All reinforcement shall be placed in accordance with the specifications for reinforced concrete structures and shall be placed in the concrete before the concrete is poured. The reinforcement shall be placed in the concrete in the form of a cage and shall be secured to the formwork by means of chairs or other devices. The reinforcement shall be placed in the concrete in the form of a cage and shall be secured to the formwork by means of chairs or other devices.



BILL OF MATERIAL

Letter	No.	SIZE	Length
v	75	1/2"	11'-0"
v <sub>1</sub>	32	1/2"	13'-0"
v <sub>2</sub>	16	3/8"	13'-0"
v <sub>3</sub>	16	3/8"	12'-0"
v <sub>4</sub>	16	3/8"	11'-0"
v <sub>5</sub>	16	3/8"	10'-0"
h	60	1/2"	22'-0"
h <sub>1</sub>	56	1/2"	16'-0"
h <sub>2</sub>	8	1/2"	12'-0"
h <sub>3</sub>	8	1/2"	10'-6"
m	108	3/8"	8'-0"
n	64	3/8"	10'-0"
t <sub>1</sub>	210	3/8"	7'-3"
t <sub>2</sub>	108	3/8"	7'-3"
z	64	3/8"	7'-3"
q	4	1/2"	6'-0"

Reinforcing Steel, lbs. 12965  
Concrete Cu Yds. 179.7

STA. 243+58

EXISTING PLANS  
FOR INFORMATION ONLY

Do not Scale this Plan

APPROVED: *John G. Reed*  
CHIEF ENGINEER  
DEPARTMENT OF HIGHWAYS  
DESIGNED: *Ed. Reed*  
CHECKED: *Henry H. Williams*  
DATE: *11-10-20*

FILE NAME = G:\Engineering\LiveProjects\13003 IDOT DURV\3003b - W0 2 Contract No. 60X41\CA00\CADD Sheets\Structural\016-0726-60X41-19-EXSUB.dgn



USER NAME = john	DESIGNED -	REVISED
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PLOT DATE = 3/16/2017	DRAWN -	REVISED
	CHECKED -	REVISED

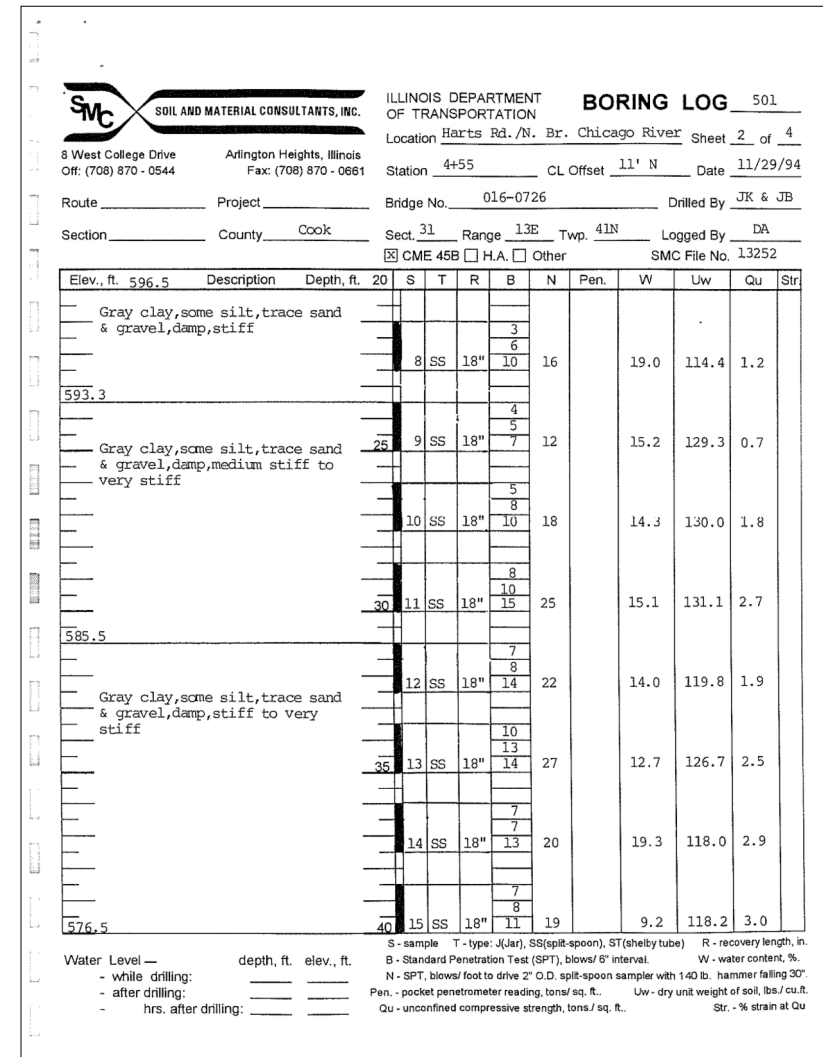
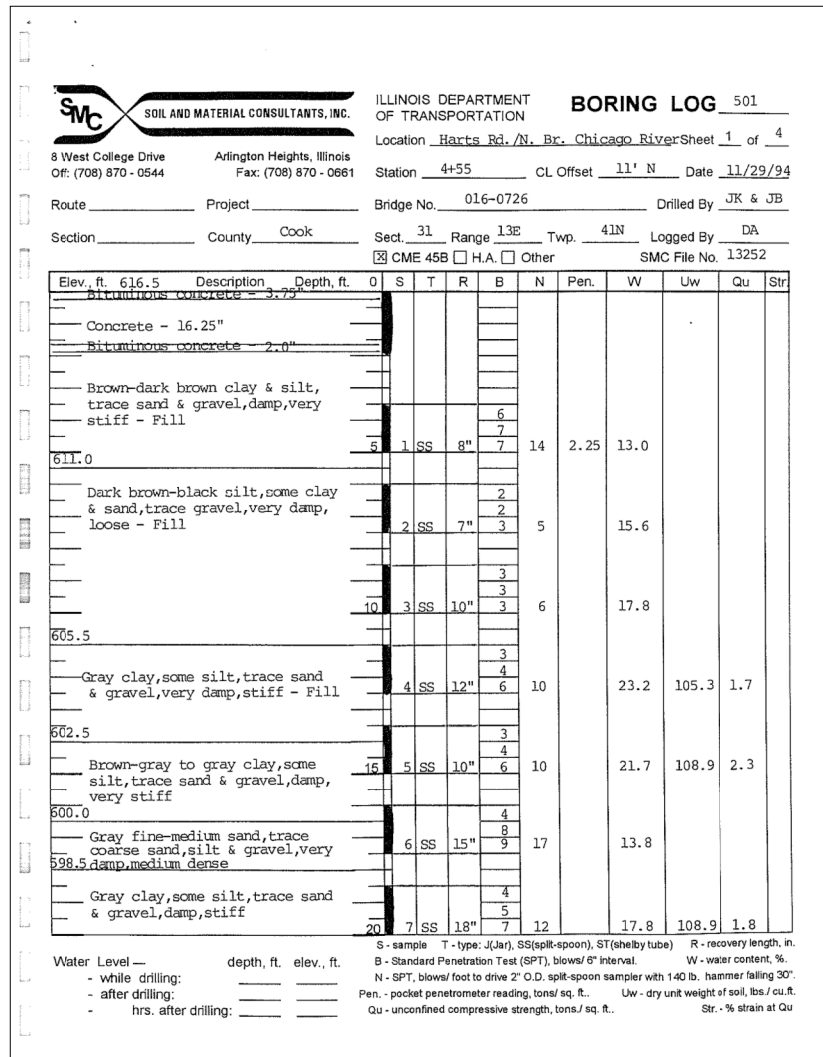
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING SUBSTRUCTURE (FOR INFORMATION ONLY)  
STRUCTURE NO. 016-0726

SHEET NO. 19 OF 21 SHEETS

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	53
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

FILE NAME = G:\Engineering\LiveProjects\13003 IDOT DUR\13003b - W0 2 Contract No. 60X41\CA00\CA00 Sheets Structural\016-0726-60X41-20-BOR1.dgn



Note:  
Boring logs taken in 1994.



USER NAME = johnn	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE = 0.2' = 1"	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED -	REVISED

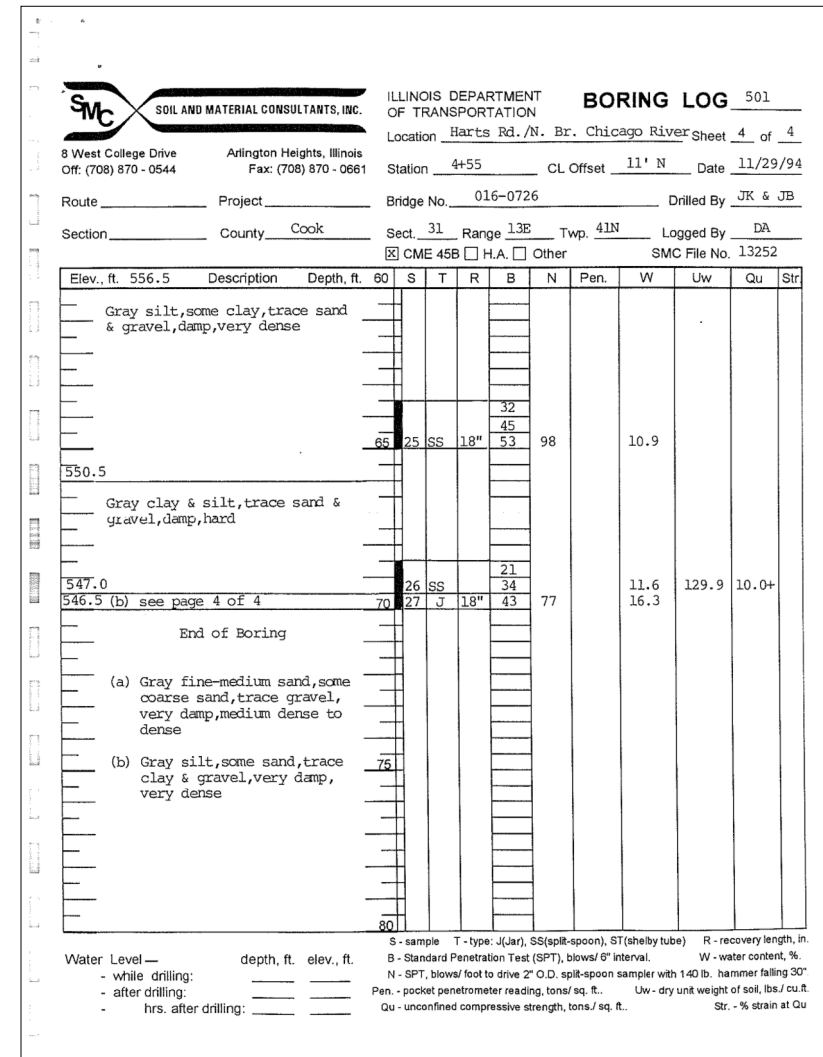
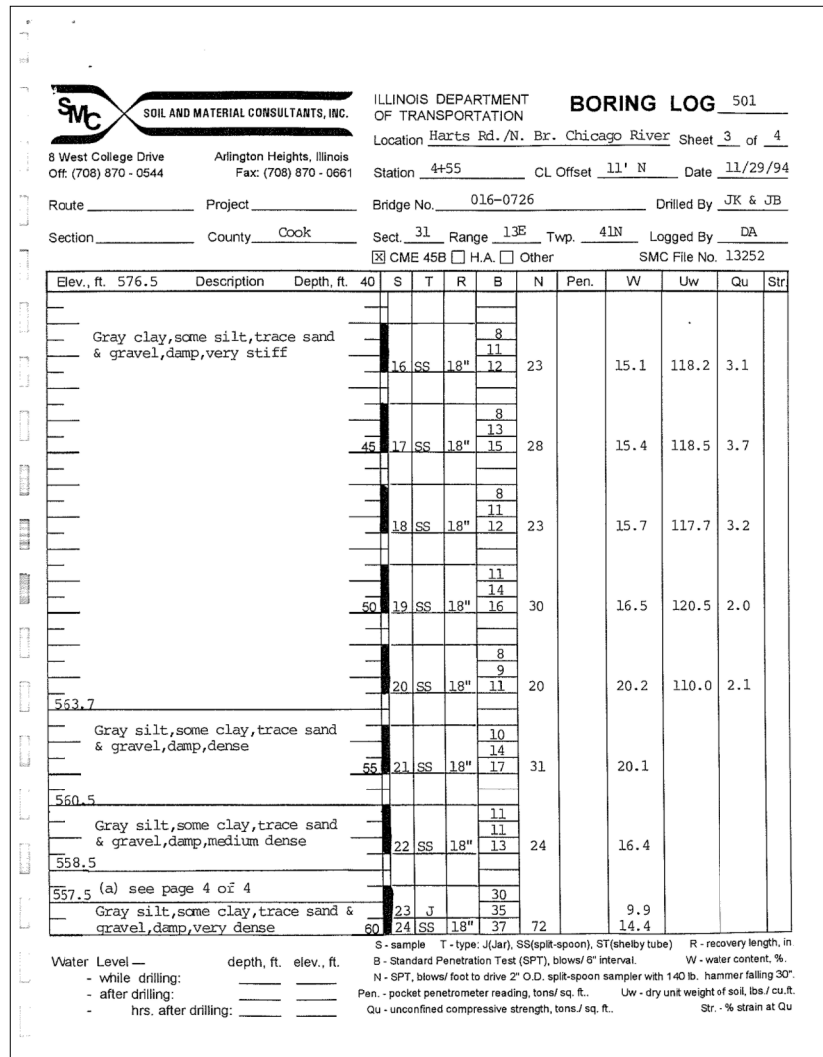
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG - I (FOR INFORMATION ONLY)  
STRUCTURE NO. 016-0726

SHEET NO. 20 OF 21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	54
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

FILE NAME = G:\Engineering\LiveProjects\3003 IDOT DURV\3003b - WD 2 Contract No. 60X41\CA00\CA00 Sheets\Structural\016-0726-60X41-21-B0F2.dgn



Note:  
Boring logs taken in 1994.



USER NAME = johnn	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE = 0.2" = 1' - 0"	DRAWN - JN	REVISED
PLOT DATE = 3/16/2017	CHECKED -	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG - II (FOR INFORMATION ONLY)  
STRUCTURE NO. 016-0726  
SHEET NO. 21 OF 21 SHEETS

F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	55
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) \*\*

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

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

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

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

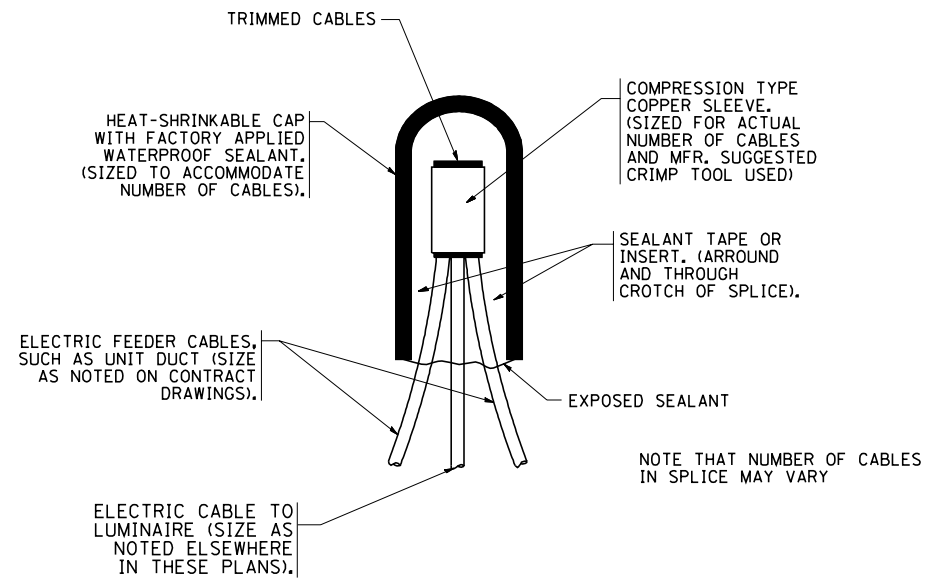
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

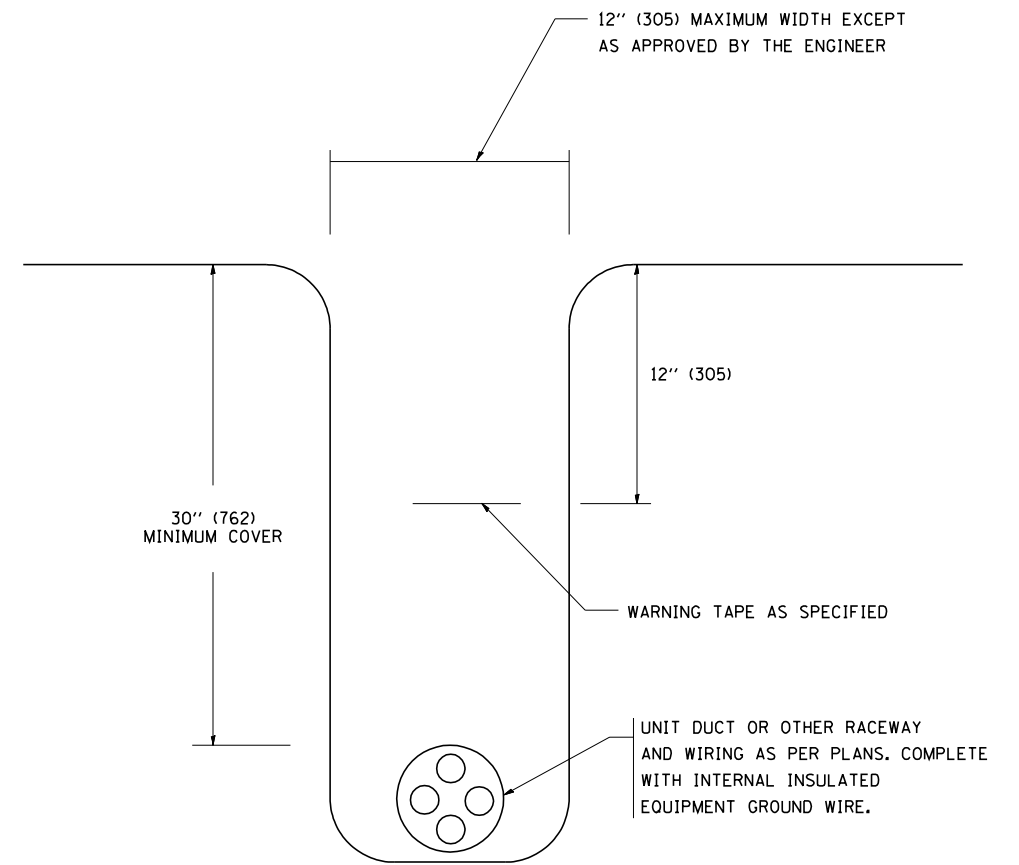
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ct:\pw\work\pwidot\drivakosgn\d0108315\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97					3519	66-B	COOK	69	56
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	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09					SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.



**TYPICAL SPLICE DETAIL**

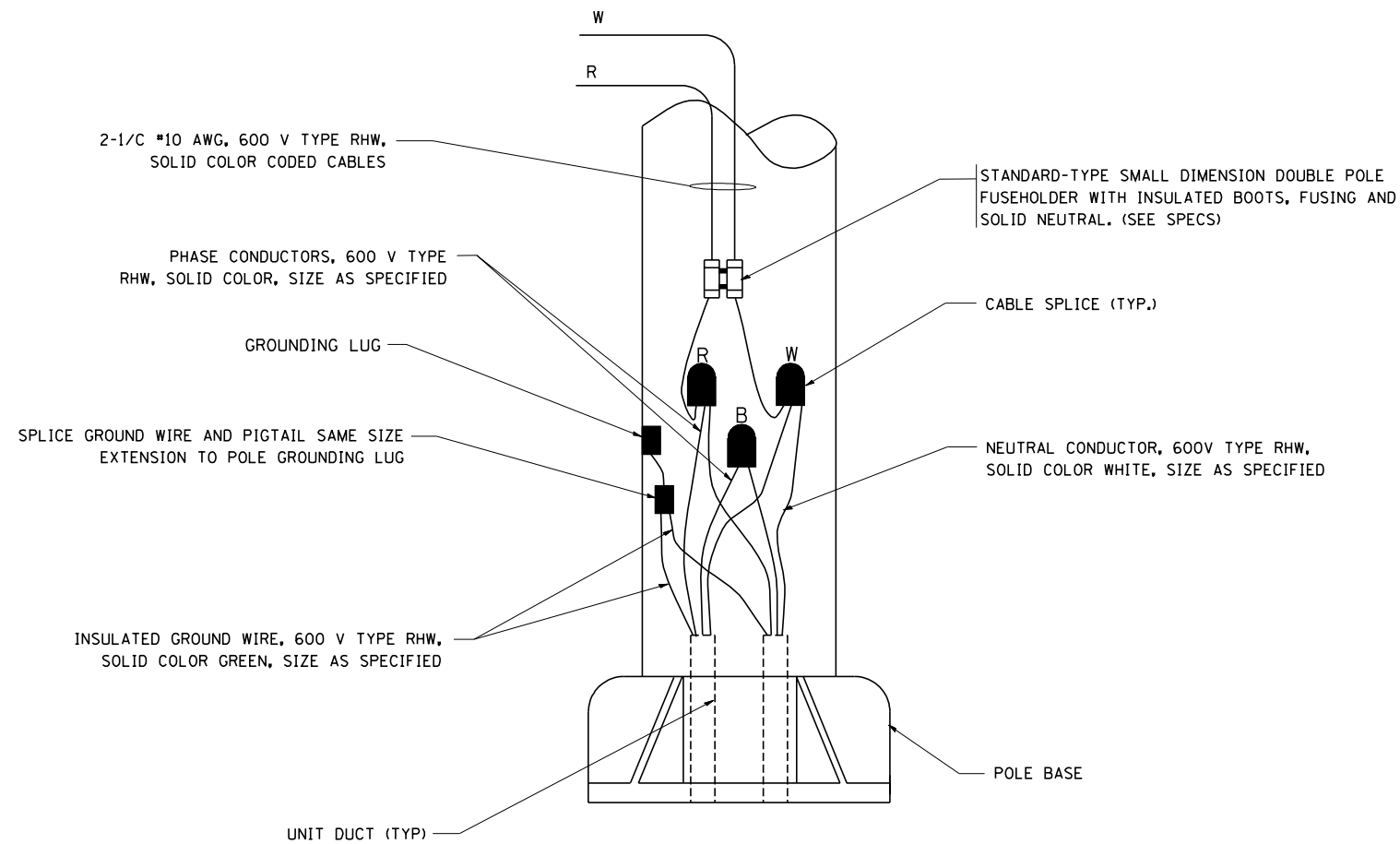
N.T.S.

NOTE THAT NUMBER OF CABLES IN SPLICE MAY VARY



**TYPICAL WIRING IN TRENCH DETAIL**

N.T.S.



**POLE WIRING DETAIL**

N.T.S.

FILE NAME = W:\diststd\22x34\be702.dgn

USER NAME = gaglionobt  
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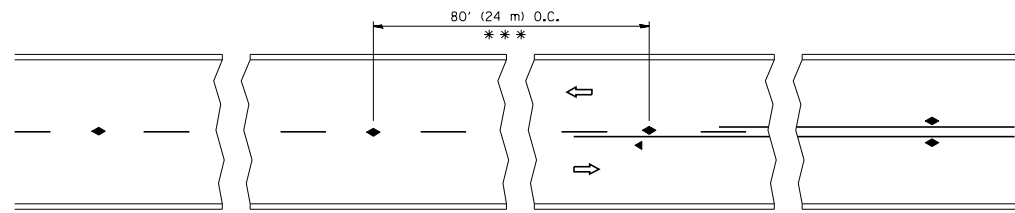
DESIGNED -	REVISED - 08-08-03
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MISC. ELECTRICAL DETAILS  
 SHEET A**

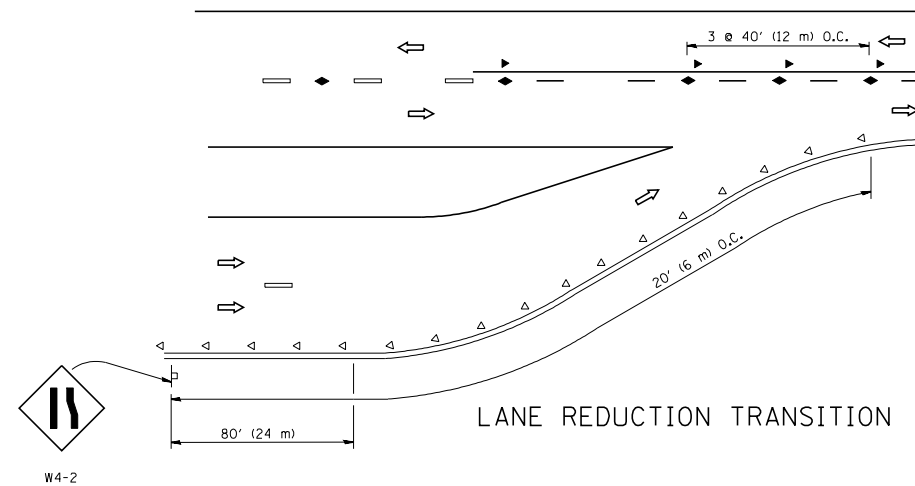
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	57
<b>BE-702</b>			<b>CONTRACT NO. 60X41</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

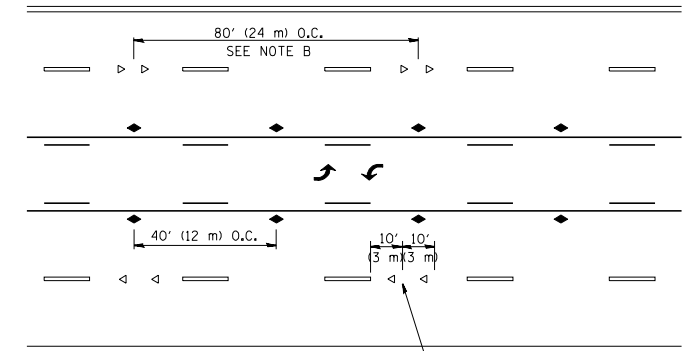


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

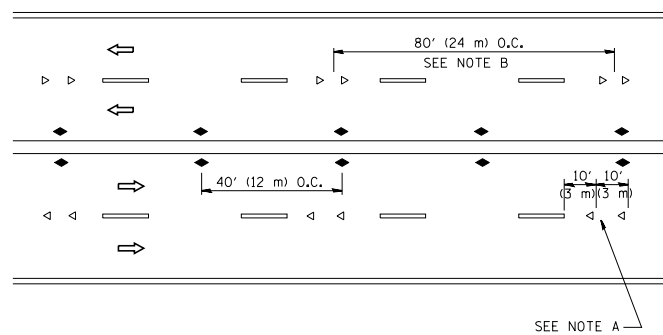
TWO-LANE/TWO-WAY



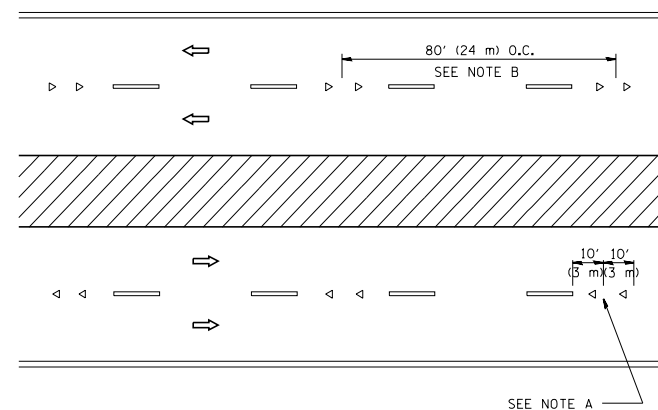
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

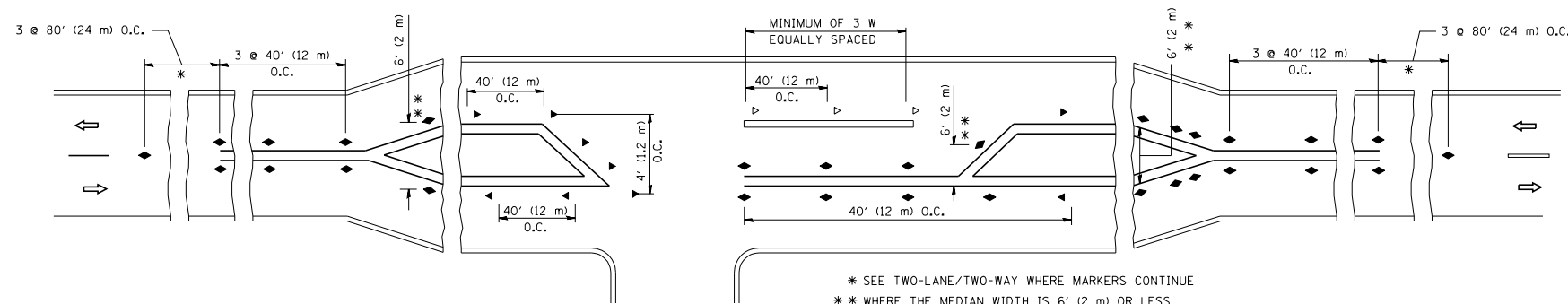
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
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

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

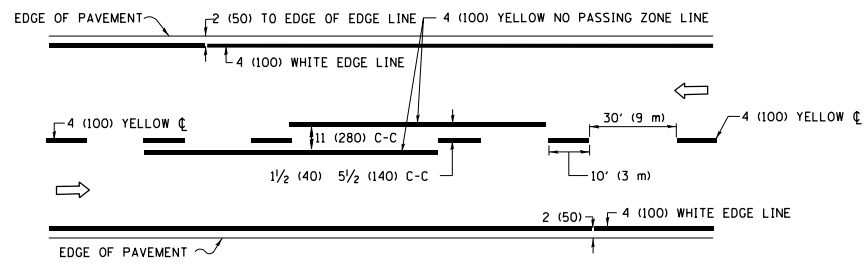
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

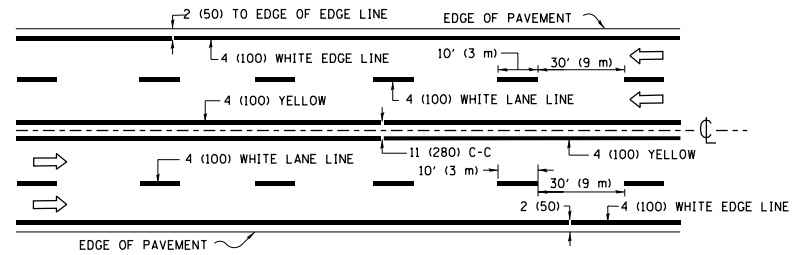
TYPICAL APPLICATIONS  
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

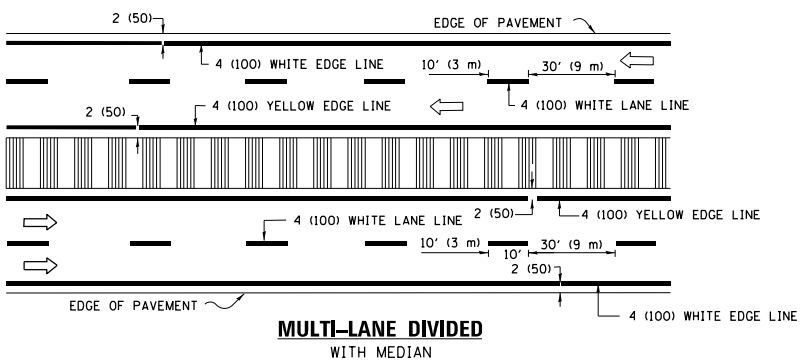
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	58
TC-11		CONTRACT NO. 60X41		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

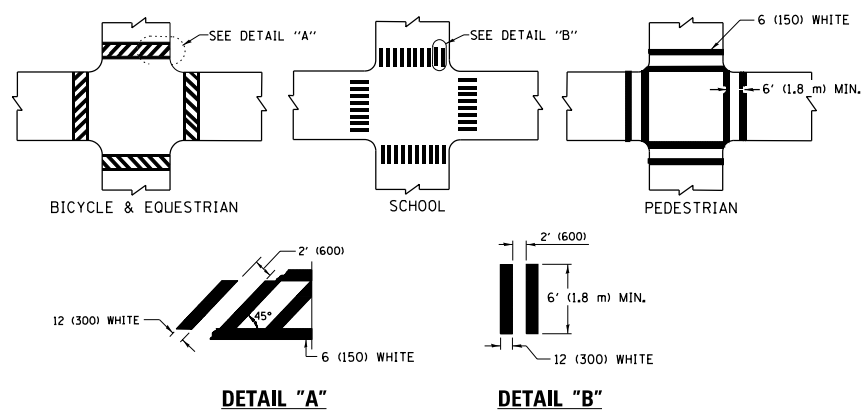


**MULTI-LANE UNDIVIDED**



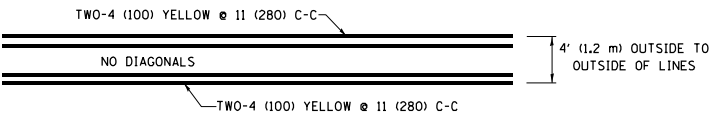
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

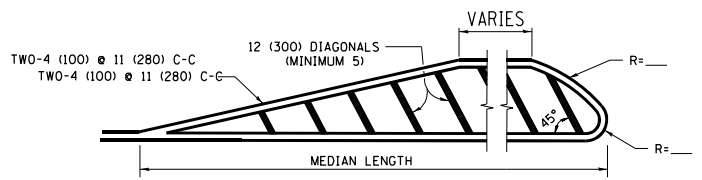


**DETAIL "A"**  
**DETAIL "B"**  
**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

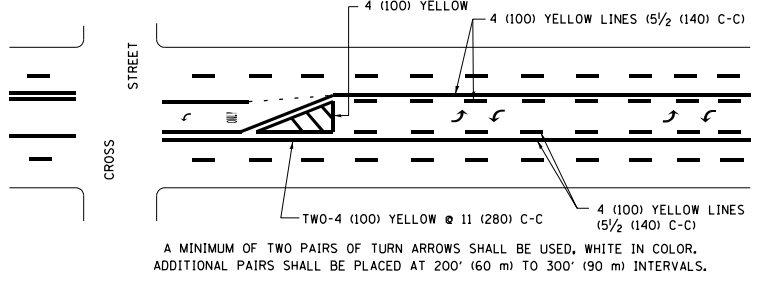


**4' (1.2 m) WIDE MEDIANS ONLY**

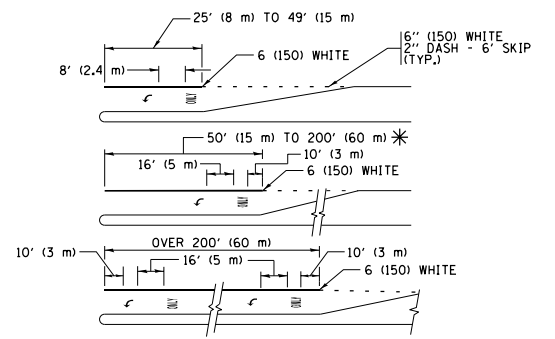


**MEDIANS OVER 4' (1.2 m) WIDE**

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

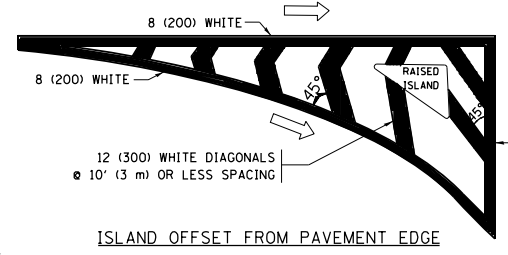


**MEDIAN WITH TWO-WAY LEFT TURN LANE**  
**TYPICAL PAINTED MEDIAN MARKING**

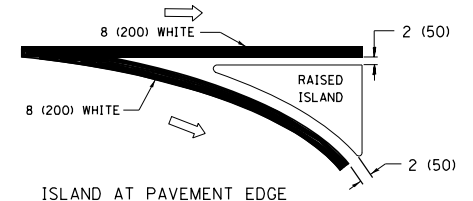


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

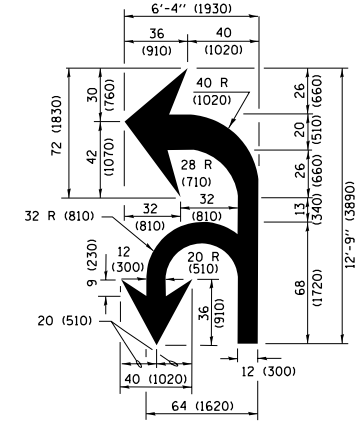
**TYPICAL LEFT (OR RIGHT) TURN LANE**  
**TYPICAL TURN LANE MARKING**



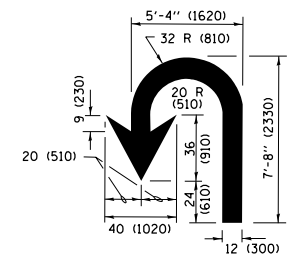
**ISLAND OFFSET FROM PAVEMENT EDGE**



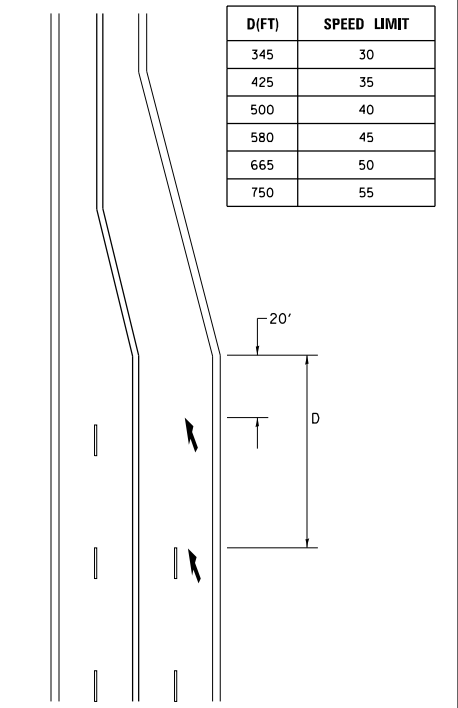
**ISLAND AT PAVEMENT EDGE**  
**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**



**LANE REDUCTION TRANSITION**  
\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw:\IL084EBIDINTEG\11nois.gov\PIWDD\Documents\DOT Offices\District 1\Projects\Dist 1\084EBID\CADData\CADsheets\tc13.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	59
<b>TC-13</b>			CONTRACT NO. 60X41	
ILLINOIS FED. AID PROJECT				

**ROUTE MARKERS**

FOR U.S. ROUTES  
MI-40-2424

FOR ILLINOIS ROUTES  
MI-50-2424

R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-2-2115

M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

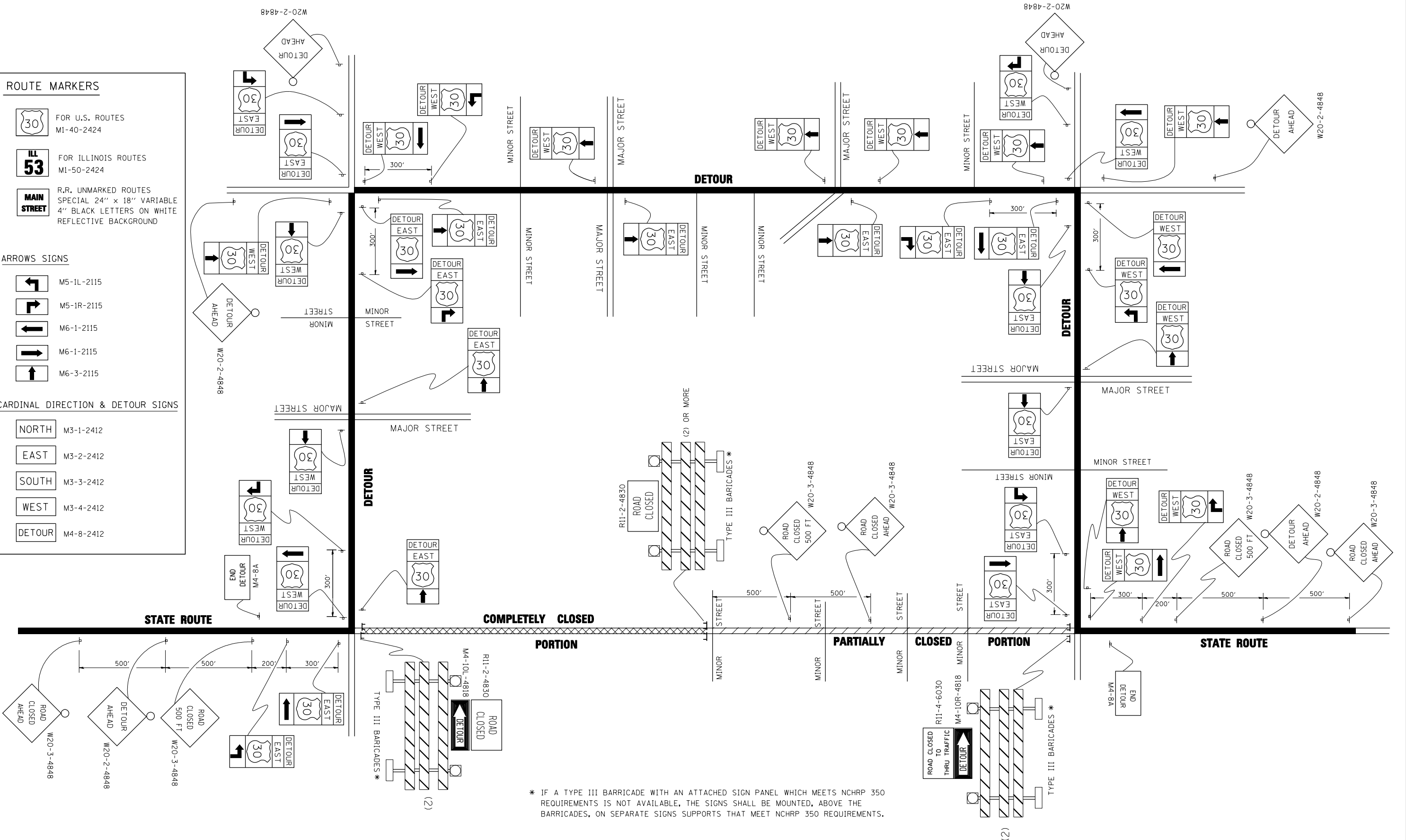
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

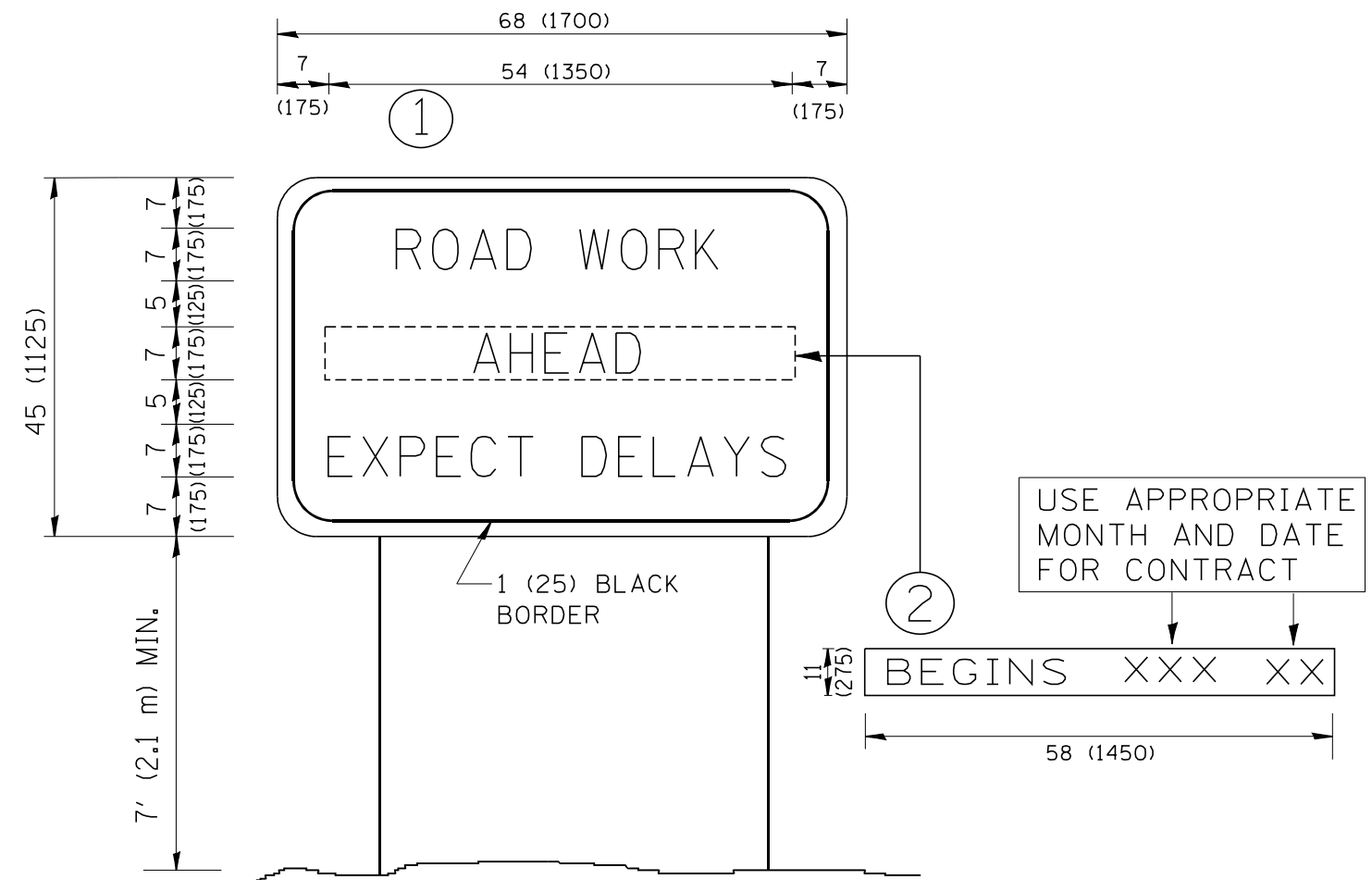
FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\st21.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		PLOT SCALE = 49.9999' / IN.	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	60
<b>TC-21</b>		CONTRACT NO. 60X41		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





**NOTES:**

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

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	REVISED - R. MIRS 09-15-97
PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07	REVISED - R. MIRS 12-11-97

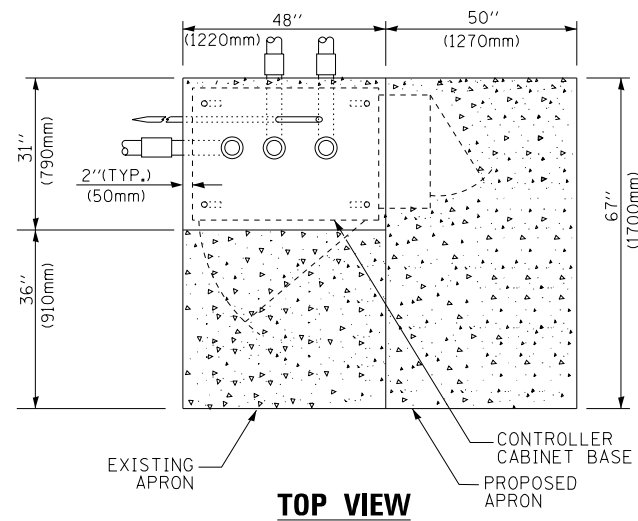
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

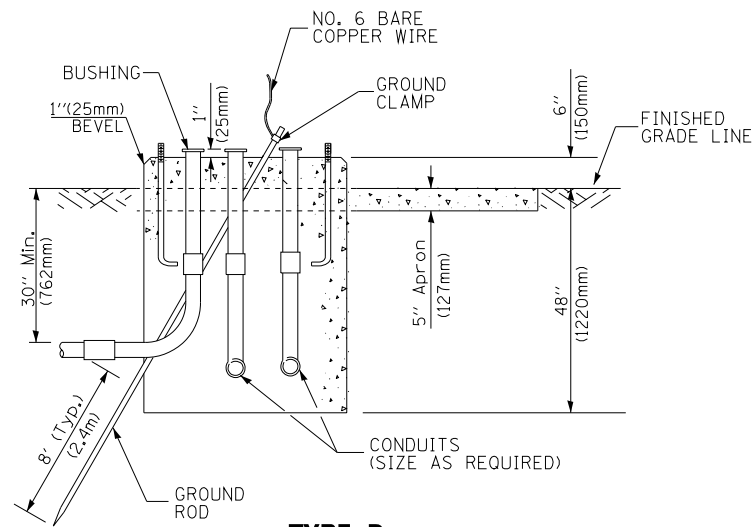
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 3519	SECTION 66-B	COUNTY COOK	TOTAL SHEETS 69	SHEET NO. 61
TC-22			CONTRACT NO. 60X41	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

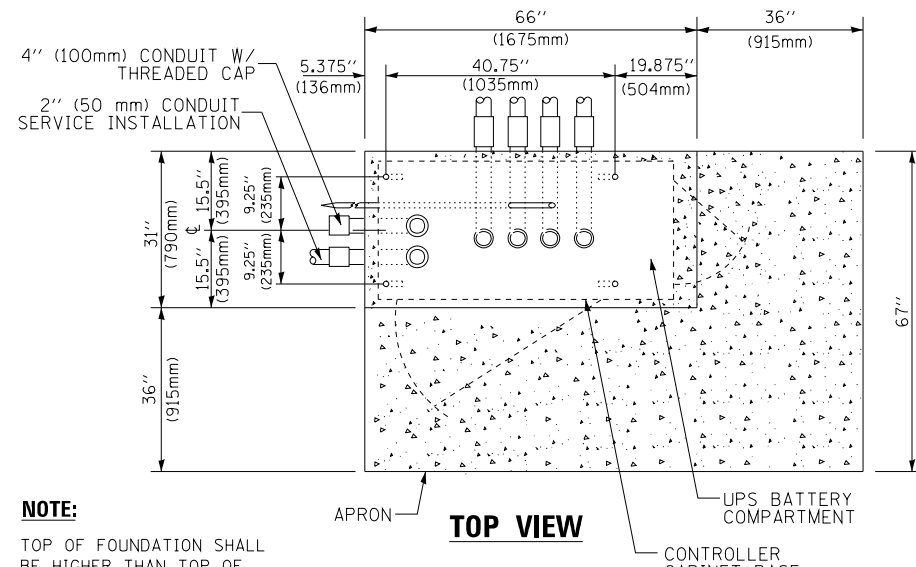




**TOP VIEW**



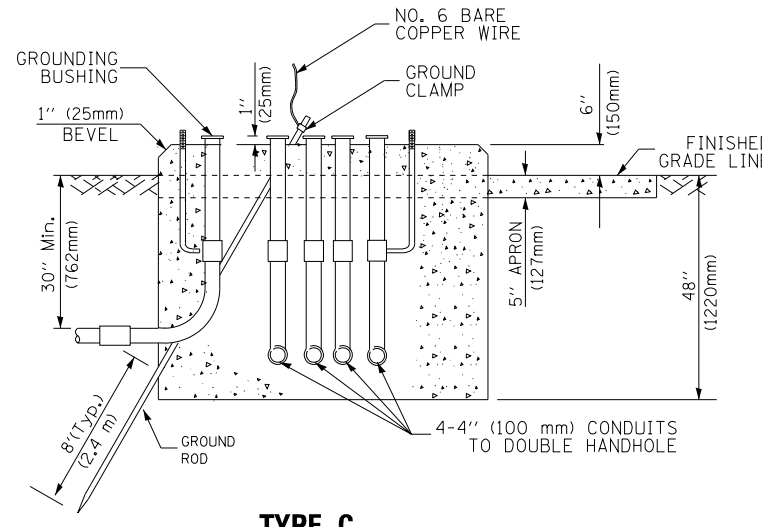
**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**



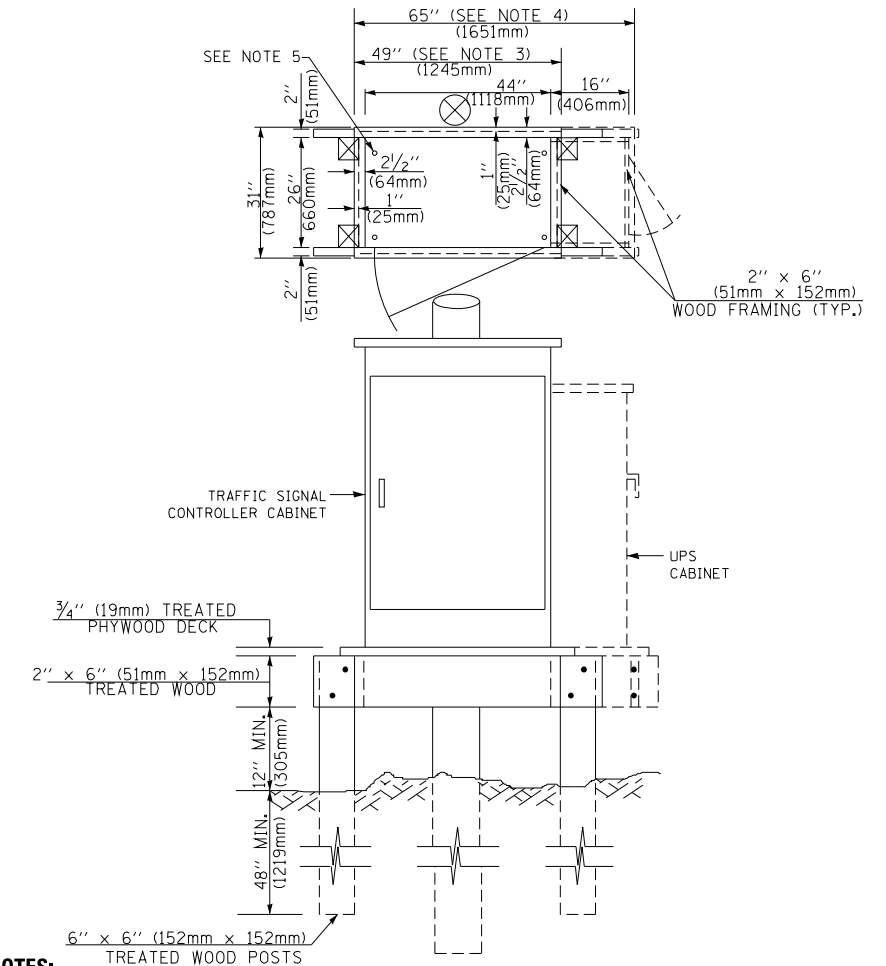
**TOP VIEW**

**NOTE:**

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

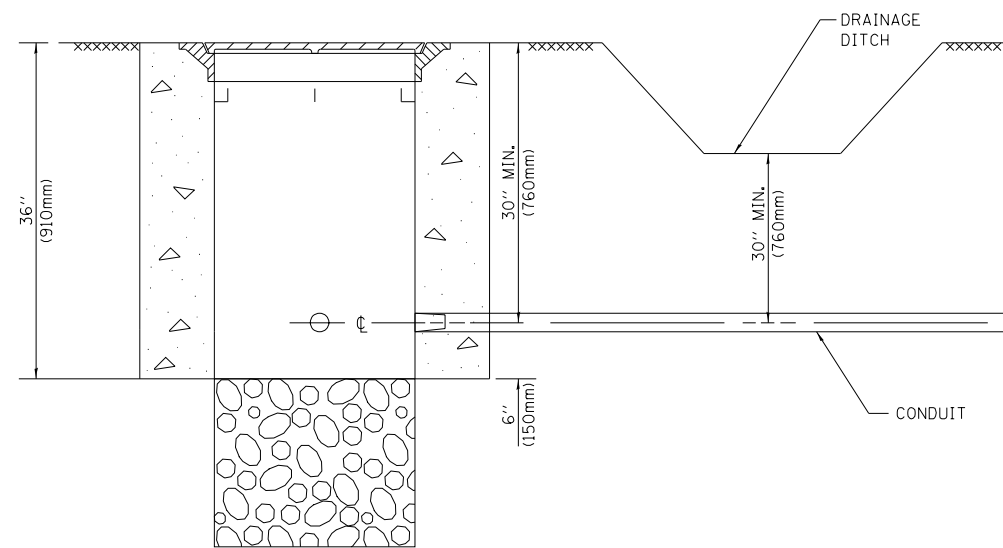
**DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

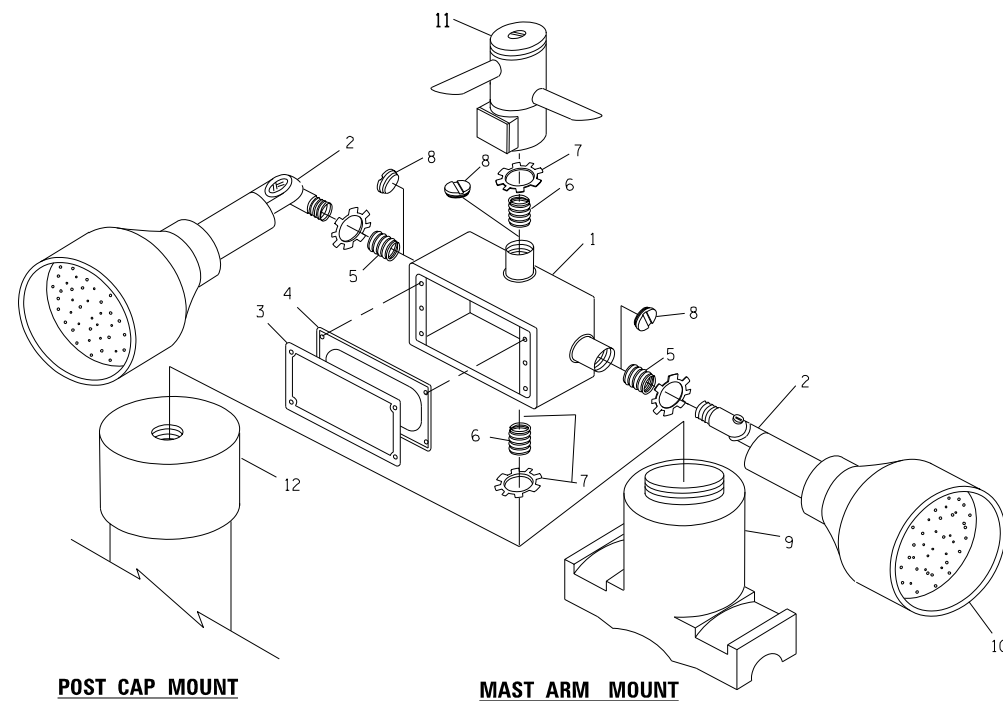
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



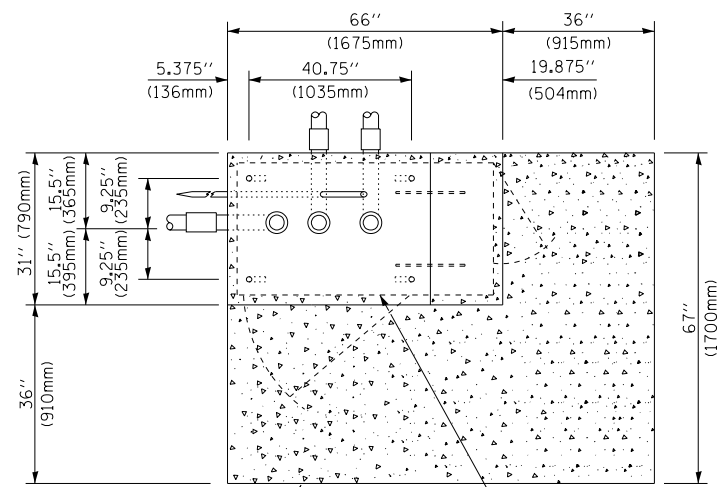
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

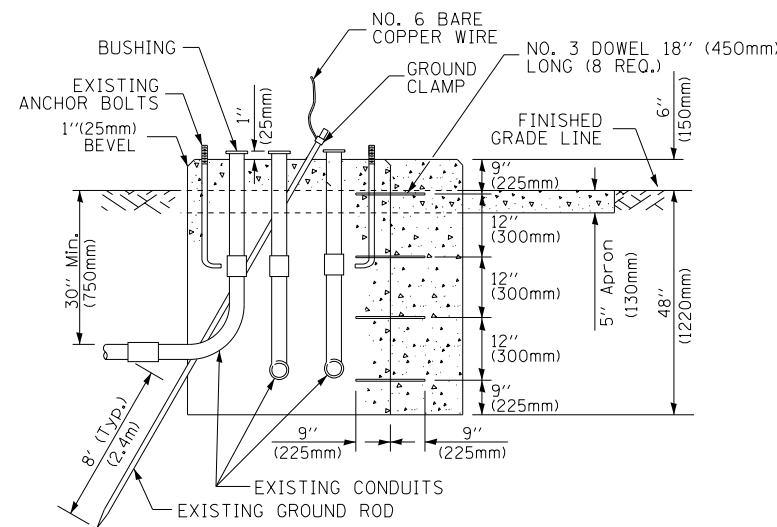
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

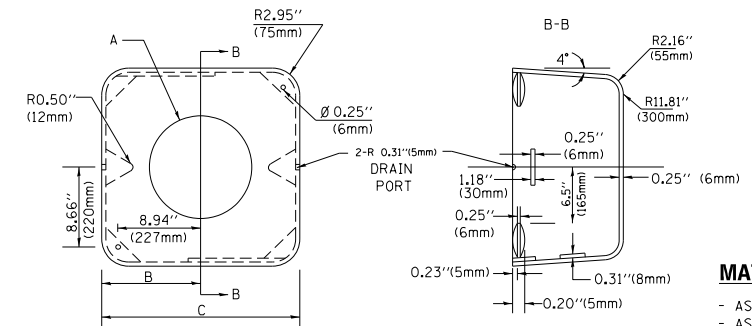


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

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

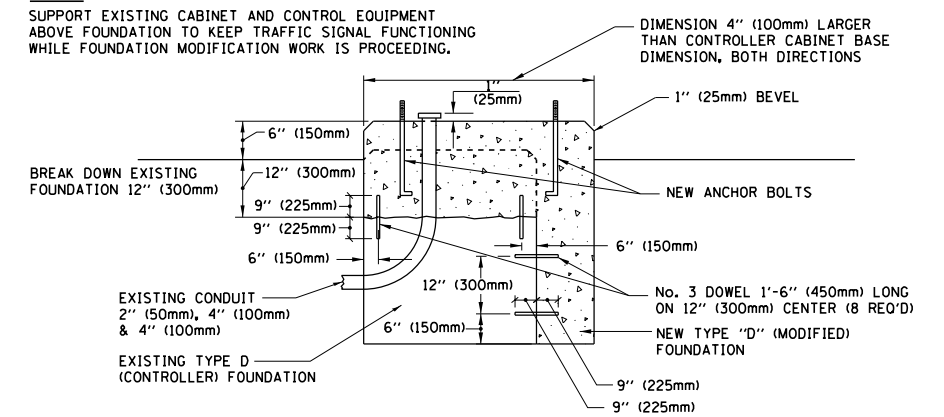
**SHROUD**

**NOTES:**

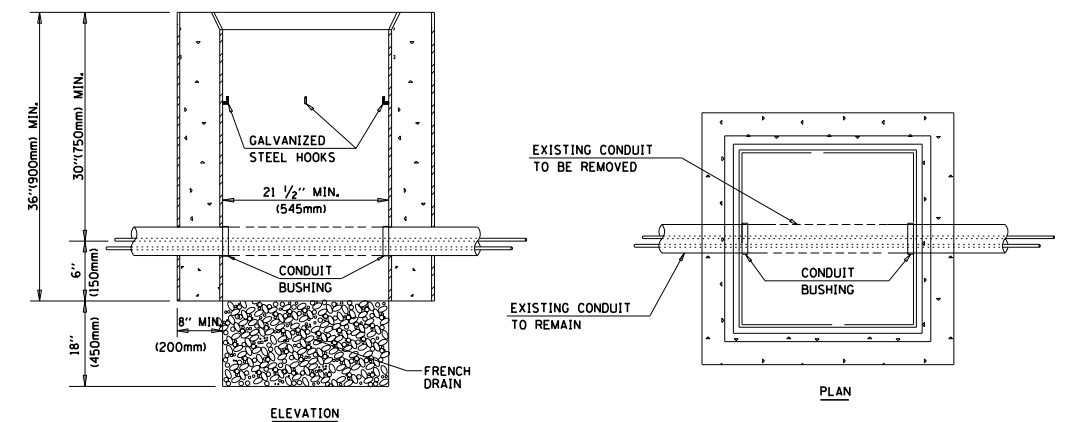
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

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



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwork\pwork\footemj\d0188315\ts05.dgn		DRAWN - BCK	REVISED -
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

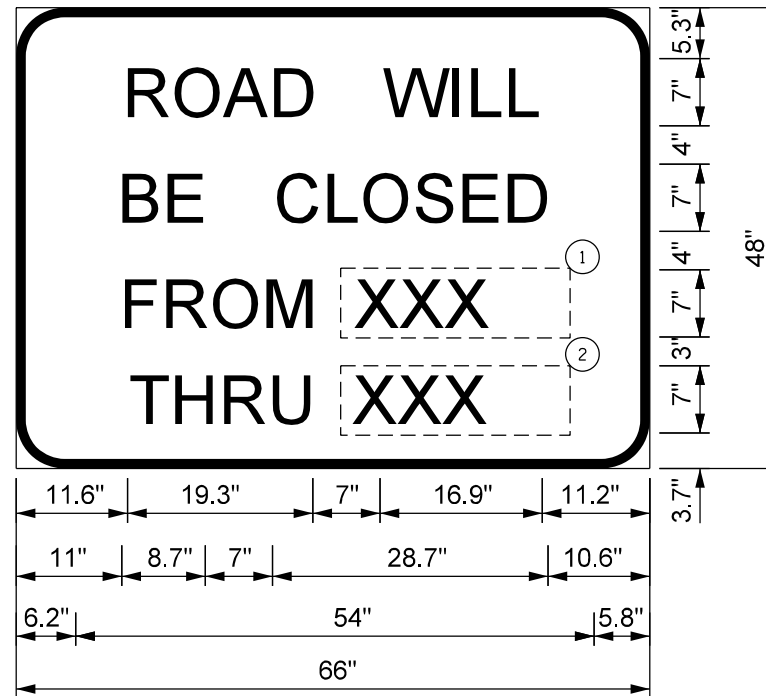
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	64
<b>TS-05</b>		CONTRACT NO. 60X41		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FILE NAME = O:\Engineering\LiveProjects\3003 IDOT DUR\3003b - W0 2 Contract No. 60X41\CAADD\CAADD Sheets\Civil\DL60X41-InfoSign.dgn



1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGN ASSEMBLY (POST-MOUNTED) WITH PANELS ① AND ② IN PLACE ON ROAD TO BE CLOSED IN EACH DIRECTION NEAR POINT OF CLOSURE OR WITHIN SECTION TO BE FULLY CLOSED TWO (2) WEEKS PRIOR TO START DATE OF FULL CLOSURE. REMOVE ASSEMBLY AFTER CLOSURE.
3. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
4. ONE SIGN ASSEMBLY EQUALS 27.3 SQ. FT.
5. EACH SIGN ASSEMBLY SHALL BE PAID FOR AS "TEMPORARY INFORMATION SIGNING".



USER NAME = johnn	DESIGNED - JMT	REVISED -
DRAWN - CC	CHECKED - TGM	REVISED -
PLOT SCALE = 20.0000' / in.	DATE - 3-17-2017	REVISED -
PLOT DATE = 3/16/2017		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD INFORMATION SIGN  
FOR ROADS TO BE FULLY CLOSED AND DETOURED**

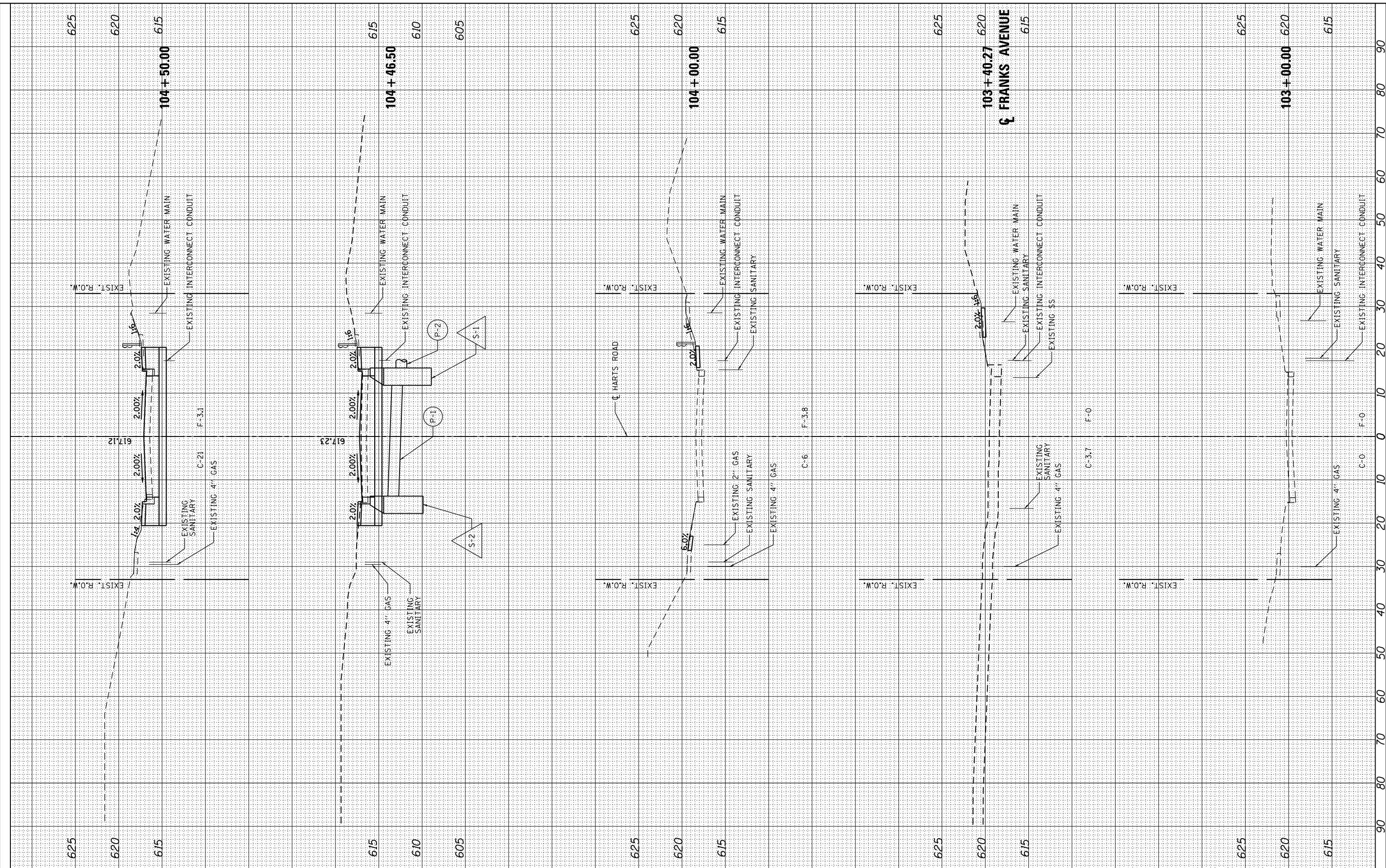
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	65
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

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

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

D:\Engineering\LiveProjects\3003\_IDOT\_DUR\32023b - W0 2 Contract No. 60X41\CAD\CADD\CADD\_Sheets\Civil\0160X41-Sht-Section\_Sheets.dgn



USER NAME	= johnn
DESIGNED	- TGM
DRAWN	- CC
CHECKED	- JMT
DATE	- 3-17-2017

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

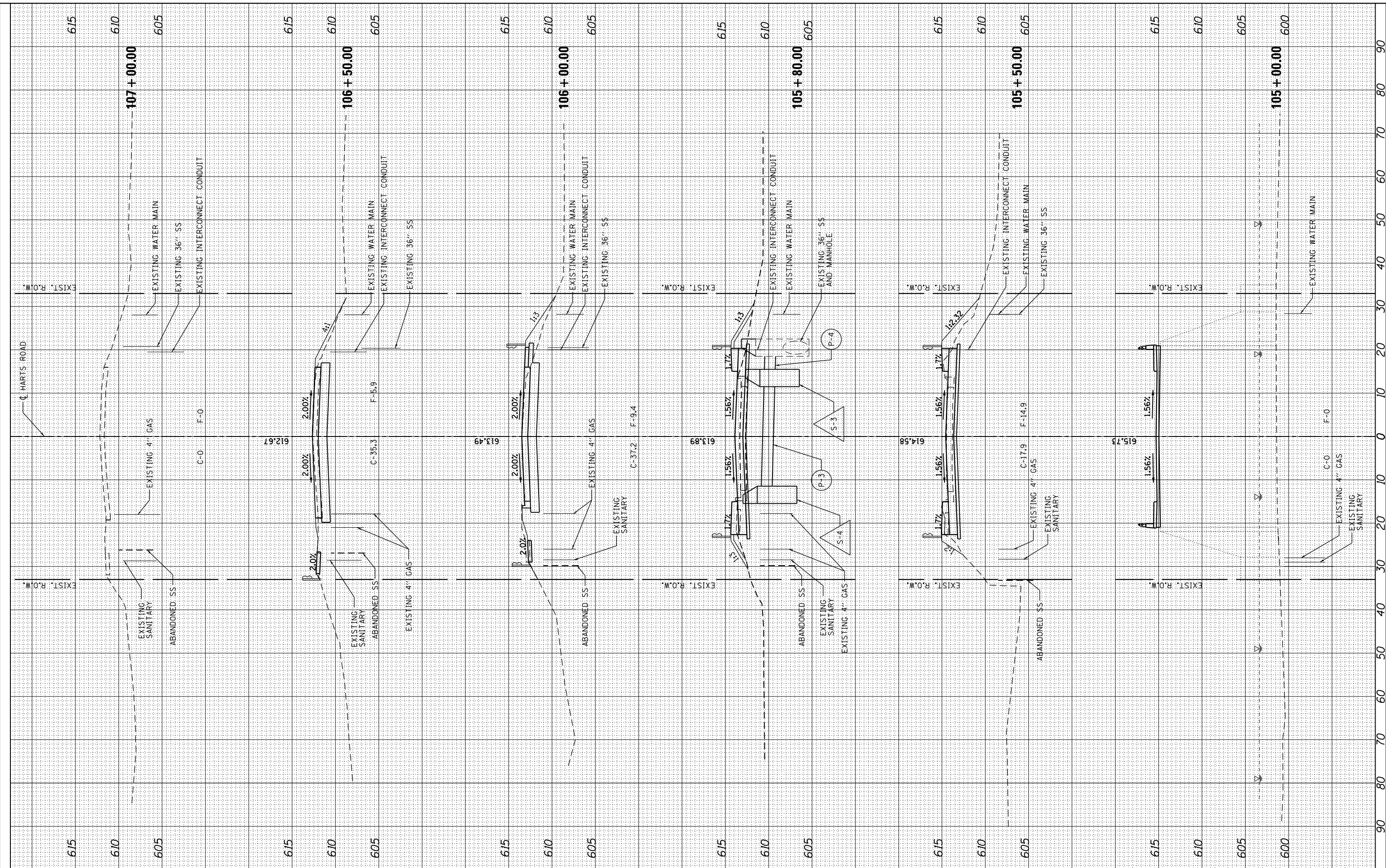
HARTS ROAD CROSS SECTIONS  
SCALE: SHEET OF SHEETS STA. 103+00 TO STA. 105+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	66
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

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USER NAME = johnn	DESIGNED	REVISED -
	DRAWN	REVISED -
PLOT SCALE = 20.000' / in.	CHECKED	REVISED -
PLOT DATE = 3/16/2017	DATE 17-2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HARTS ROAD CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 105+50 TO STA. 107+00

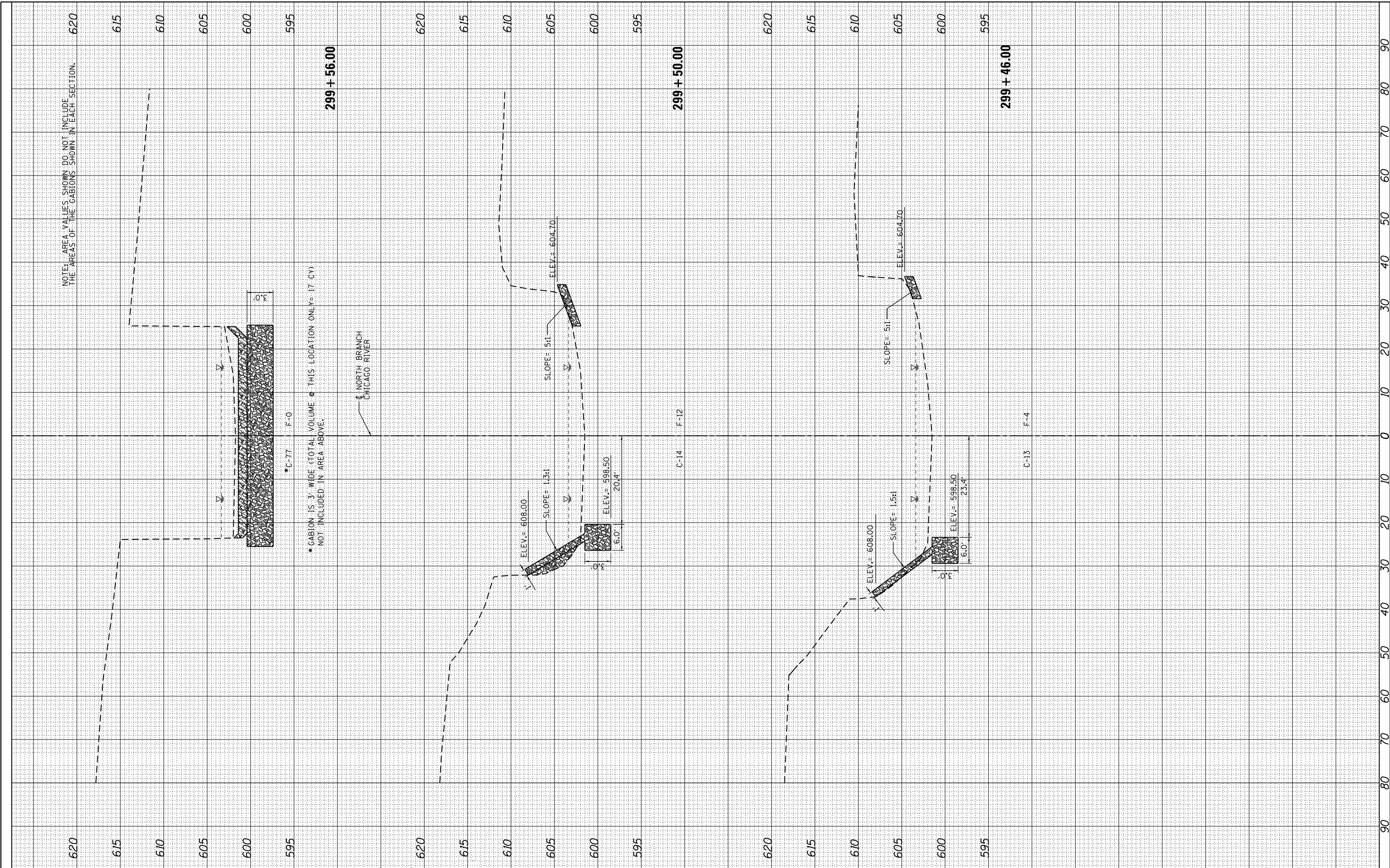
F.A. RTE. 3519	SECTION 66-B	COUNTY COOK	TOTAL SHEETS 69	SHEET NO. 67
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



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

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

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USER NAME	= johnn
DESIGNED	- TGM
DRAWN	- CC
CHECKED	- JMT
DATE	- 3-17-2017

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**N. BRANCH CHICAGO RIVER CROSS SECTIONS**

SCALE:      SHEET      OF      SHEETS      STA. 299+46      TO STA. 299+56

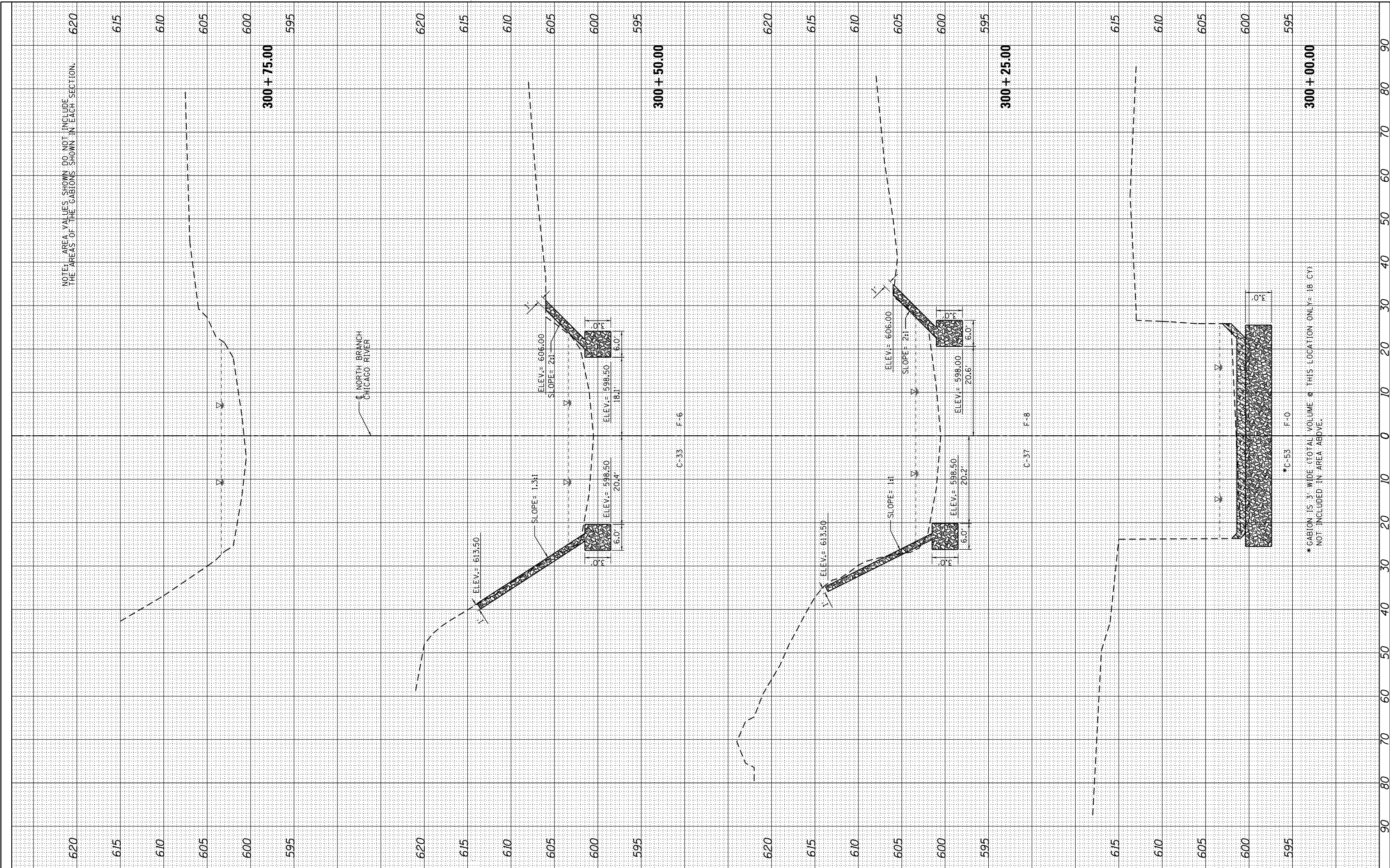
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	68
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				



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

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

D:\Engineering\Live\Projects\3003\_IDOT\_DUR\3003b - W0 2 Contract No. 60X41\CADD\CADD\_Sheets\Civil\0160X41-Shr-Section\_Sheets.dgn



USER NAME = johnn	DESIGNED - TGM	REVISED -
PLOT SCALE = 20.000' / in.	DRAWN - CC	REVISED -
PLOT DATE = 3/16/2017	CHECKED - JMT	REVISED -
	DATE - 3-17-2017	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

N. BRANCH CHICAGO RIVER CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 300+00 TO STA. 300+75

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3519	66-B	COOK	69	69
CONTRACT NO. 60X41				
ILLINOIS FED. AID PROJECT				