

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 114 + 4 = 118 TOTAL SHEETS

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2010-141-B	2010-141-B	COOK	114	1
ILLINOIS CONTRACT NO. 60N21				

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

F.A.U. RTE 3603 / CHICAGO HEIGHTS – GLENWOOD ROAD
AT THORN CREEK
SECTION: 2010-141-B
PROJECT: STP-DJRP(146)
BRIDGE BEAM REPLACEMENT & NEW DECK
COOK COUNTY

D-01-270-11

DESIGN DESIGNATION:
URBAN MINOR ARTERIAL (F.A.U. ROUTE 3603)

2014 ADT = 5,000
2030 ADT = 17,000
DESIGN SPEED: 30 M.P.H.
SPEED LIMIT: 30 M.P.H.

C-01-270-11

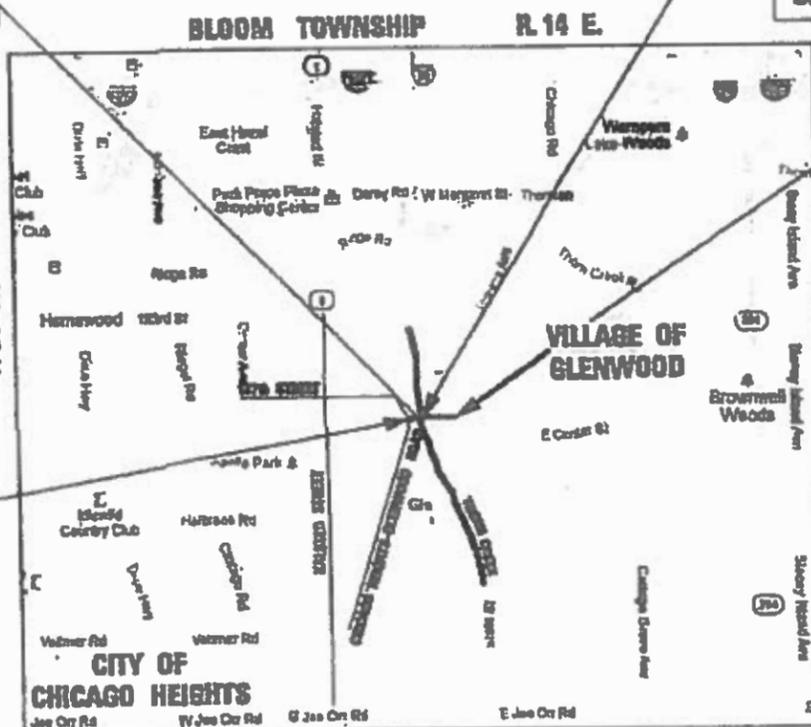
BRIDGE BEAM
REPLACEMENT
& NEW DECK
STA 31+64.02
S.N. 010-3417

PROJECT ENDS
STA 44+ 57.00

STA. 30+19.34
(CHICAGO HEIGHTS-GLENWOOD RD)
= STA. 15+99.37 (187TH ST.)

IMPROVEMENT IS LOCATED IN
THE VILLAGE OF GLENWOOD

PROJECT BEGINS
STA 29+92.45



LEONARD PROFESSIONAL ENGINEER
JAY HONER
02/24/19
STATE OF ILLINOIS

DATE SIGNED: 01/24/19
EXP. DATE: 11/30/19
SHEETS: 1-45, 47-114

ANNA PRICIANO
02/24/19
STATE OF ILLINOIS

DATE SIGNED: 01/24/19
EXP. DATE: 11/30/20
SHEETS: 76-96

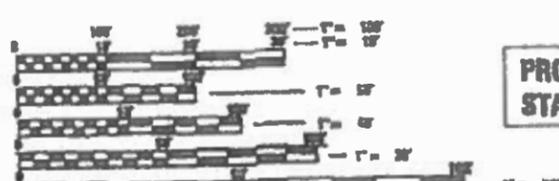
BRADLEY E. SCIPIONE
01/23/19
STATE OF ILLINOIS

DATE SIGNED: 1-23-19
EXP. DATE: 11-30-19
SHEETS: 50-66

01/24/2019
STATE OF ILLINOIS



LOCATION OF SECTION INDICATED THERE



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

JULIE
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-882-0123
ENR 011

PROJECT MANAGER: FAWAD AQUEEL, PE, PTOE (847) 705-4247

MAP NOT TO SCALE
GROSS LENGTH OF PROJECT = 1278 FEET = 0.241 MILES
NET LENGTH OF PROJECT = 1278 FEET = 0.241 MILES

Accurate
GROUP, INC.
WWW.ACGL.COM
101 SCHUYLER RD., SUITE 5-200
LINCOLNSHIRE, ILLINOIS 60069
T (847) 613-7100 F (847) 613-7110
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 191.0429 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED JANUARY 29, 2019
Anthony J. Danzky, PE
March 22, 2019
March 22, 2019
DIRECTOR OF DESIGN AND ENVIRONMENT
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

CONTRACT NO. 60N21

SHEET NO.

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COMMITMENTS

NONE

STATE HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
424016-05	MID-BLOCK CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
542001-06	CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 84" DIA.
542011-02	CONCRETE END SECTIONS FOR ELLIPTICAL PIPE CULVERTS 15" THRU 72" EQUIVALENT DIAMETER
602001-02	CATCH BASIN, TYPE A
602306-03	INLET - TYPE B
602401-06	PRECAST MANHOLE TYPE A 4' (1.22m) DIAMETER
602406-10	PRECAST MANHOLE TYPE A 6' DIAMETER
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS, TYPE 1
604051-04	FRAME AND GRATE TYPE 11
604086-03	FRAME AND GRATE TYPE 23
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-12	STEEL PLATE BEAM GUARDRAIL
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
643001-02	SAND MODULE IMPACT ATTENUATORS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
812001	RACEWAY EMBEDDED IN STRUCTURE
838001-01	BREAKAWAY DEVICES
814001-03	HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
878001-10	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

REV. - MS

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	DRAWN - IH	REVISED -
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PL DT DA E = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE HIGHWAY STANDARDS
AND COMMITMENTS**
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

F.A.U. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	2
CONTRACT NO.			60N21	
ILLINOIS FED AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0213 OR 811 FOR FIELD LOCATIONS OR BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
3. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
4. IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
7. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.
9. THE ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT PATRICE.HARRIS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
10. ANY SINAGE, PAVEMENT MARKINGS AND REFLECTORS DAMAGED DURING CONSTRUCTION OUTSIDE THE REMOVAL LINES SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, AND COMBINATION CURB AND GUTTER SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
12. THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A USACE PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO SECURE AND COMPLY WITH A USACE PERMIT FOR CONTRACTOR'S ACTIVITIES 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.
13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
14. FOR STORM SEWERS CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.
15. 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.
16. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTENT)" SHOWN IN PLANS.
17. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
18. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, 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. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS 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
20. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
21. DE-ENERGIZING COMED'S DISTRIBUTION LINES (34 KV) MAY BE NECESSARY IN ORDER TO ACCOMODATE THE CONTRACTOR'S EQUIPMENT. COSTS MAY BE INVOLVED. CALL 1-800-EDISON1.
22. STAGING AND WORK ZONES ARE ALLOWED ONLY ON THE WEST SIDE OF THORN CREEK. THEY ARE NOT ALLOWED ON THE EAST SIDE OF THORN CREEK.
23. THE COMMON FIVE - LINED SKINK HAS BEEN OBSERVED BY COOK COUNTY FOREST PRESERVE'S WILDLIFE BIOLOGIST. THE CONTRACTOR SHALL INSURE PRECAUTIONS ARE TAKEN TO MINIMIZE IMPACTS DURING CONSTRUCTION.

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USER NAME = johnn	DESIGNED - JMT	REVISED -
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PLOT SCALE = 100.0000' / in.	CHECKED - TGM	REVISED -
PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	3
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
				URBAN
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	36	36
20100500	TREE REMOVAL, ACRES	ACRE	0.25	0.25
20101000	TEMPORARY FENCE	FOOT	665	665
20101100	TREE TRUNK PROTECTION	EACH	3	3
20101200	TREE ROOT PRUNING	EACH	15	15
20200100	EARTH EXCAVATION	CU YD	547	547
20800150	TRENCH BACKFILL	CU YD	156	156
21101615	TOPSOIL FURNISH AND PLACE,4"	SQ YD	3572	3572
25000210	SEEDING, CLASS2A	ACRE	0.5	0.5
25000310	SEEDING, CLASS4	ACRE	0.5	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	34	34
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	34	34
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	34	34
25100630	EROSION CONTROL BLANKET	SQ YD	3572	3572

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
				URBAN
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	369	369
28000305	TEMPORARY DITCH CHECKS	FOOT	32	32
28000400	PERIMETER EROSION BARRIER	FOOT	2546	2546
28000510	INLET FILTERS	EACH	5	5
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	3572	3572
28100103	STONE RIPRAP, CLASS A2	SQ YD	7	7
28200200	FILTER FABRIC	SQ YD	7	7
31101400	SUBBASE GRANULAR MATERIAL, TYPE B6"	SQ YD	506	506
35101600	AGGREGATE BASE COURSE, TYPE B4"	SQ YD	477	477
35101800	AGGREGATE BASE COURSE, TYPE B6"	SQ YD	59	59
35501300	HOT-MIX ASPHALT BASE COURSE,4"	SQ YD	12	12
35501308	HOT-MIX ASPHALT BASE COURSE,6"	SQ YD	52	52
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1126	1126
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	170	170

* SPECIALTY ITEM

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PLOT DATE = 2/1/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	4
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

REV. - MS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE	80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	55		55
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	291		291
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	7		7
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	174		174
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	201		201
42001300	PROTECTIVE COAT	SQ YD	653		653
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3963		3963
42400800	DETECTABLE WARNINGS	SQ FT	58		58
44000100	PAVEMENT REMOVAL	SQ YD	538		538
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	1908		1908
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	52		52
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	825		825
44000600	SIDEWALK REMOVAL	SQ FT	3661		3661
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	10		10

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE	80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	19		19
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	120		120
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	19.7		19.7
50200100	STRUCTURE EXCAVATION	CU YD	32		32
50300225	CONCRETE STRUCTURES	CU YD	83.2		83.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	104.4		104.4
50300260	BRIDGE DECK GROOVING	SQ YD	646		646
50300300	PROTECTIVE COAT	SQ YD	1107		1107
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	171.7		171.7
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	5309		5309
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	106050		106050
50800515	BAR SPLICERS	EACH	401		401
50900105	ALUMINUM RAILING, TYPE L	FOOT	221		221

* SPECIALTY ITEM

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PLOT DATE = 1/31/2019		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	5
CONTRACT NO.			60N21	
[ILLINOIS] FED. AID PROJECT				

REV. - MS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE 80% FED 20% STATE BRIDGE 0013 S.N. 016-2417	
51500100	NAME PLATES	EACH	1	1	
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	1	1	
54010402	PRECAST CONCRETE BOX CULVERTS 4' X 2'	FOOT	618	618	
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1	
54260315	TRAVERSABLE PIPE GRATE FOR CONCRETE END SECTION	FOOT	16	16	
550A0340	STORM SEWERS, CLASS A, TYPE 212"	FOOT	136	136	
55100500	STORM SEWER REMOVAL 12"	FOOT	277	277	
55100700	STORM SEWER REMOVAL 15"	FOOT	647	647	
59000200	EPOXY CRACK INJECTION	FOOT	143	143	
60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1	
60200205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3	
60201330	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	2	2	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
60240310	INLETS, TYPE B, TYPE 11 FRAME AND GRATE	EACH	1	1	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE 80% FED 20% STATE BRIDGE 0013 S.N. 016-2417	
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2	
* 60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	1	1	
* 60500040	REMOVING MANHOLES	EACH	1	1	
* 60500050	REMOVING CATCH BASINS	EACH	1	1	
60500205	FILLING CATCH BASINS	EACH	2	2	
60600605	CONCRETE CURB, TYPE B	FOOT	36	36	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	184	184	
60604700	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MODIFIED)	FOOT	605	605	
60625600	ISLAND PAVEMENT (6")	SQ YD	8	8	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	25	25	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	315	315	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1	
63200310	GUARDRAIL REMOVAL	FOOT	452	452	
* 66901002	ON-SITE MONITORING OF REGULATED SUBSTANCES	DAYS	5	5	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1	

* SPECIALTY ITEM

REV. - MS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	6
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	CONSTR. CODE
					80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
67100100	MOBILIZATION	L SUM	1		1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1		1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	36		36
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56		56
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1689		1689
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	282		282
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	6620		6620
70300924	PAVEMENT MARKING TAPE, TYPE IV24"	FOOT	200		200
70400100	TEMPORARY CONCRETE BARRIER	FOOT	600		600
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1125		1125
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	3		3
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4		4
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	3		3
* 72400320	REMOVE SIGN PANEL - TYPE 2	SQ FT	35		35

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	CONSTR. CODE
					80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	3		3
* 72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	1		1
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	10.5		10.5
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2		2
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	88		88
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE4"	FOOT	1595		1595
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE6"	FOOT	810		810
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE8"	FOOT	113		113
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	43		43
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	69		69
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	62		62
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	308		308
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	150		150
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	28		28

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	

REV. - MS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE 80% FED 20% STATE BRIDGE 0013 S.N. 016-2417	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	21	21	
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	72	72	
* 78100300	REPLACEMENT REFLECTOR	EACH	6	6	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	93	93	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3	3	
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	404	404	
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	180	180	
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	186	186	
* 81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	195	195	
* 81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2	2	
* 81300830	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 6"	EACH	2	2	
* 81400100	HANDHOLE	EACH	2	2	
* 81603081	UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	735	735	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	
				CONSTR. CODE 80% FED 20% STATE BRIDGE 0013 S.N. 016-2417	
* 81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.4	FOOT	120	120	
* 81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.2	FOOT	360	360	
* 81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	490	490	
* 82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	3	3	
* 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	33	33	
* 83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	3	3	
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	3	3	
* 84200804	REMOVAL OF POLE FOUNDATION	EACH	3	3	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 143C	FOOT	290	290	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 145C	FOOT	980	980	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 147C	FOOT	1280	1280	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 141 PAIR	FOOT	1150	1150	
* 87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1	1	
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	4	4	

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	CONSTR. CODE
					80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
* 87900200	DRILL EXISTING HANDHOLE	EACH	4		4
* 88600100	DETECTOR LOOP, TYPE I	FOOT	62		62
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1
* 89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	3		3
* 89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1		1
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3275		3275
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1
* 89502376	REBUILD EXISTING HANDHOLE	EACH	1		1
* 89502380	REMOVE EXISTING HANDHOLE	EACH	1		1
* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1		1
* X0322141	REMOVE TEMPORARY WOOD POLE	EACH	1		1
* X0322936	REMOVE EXISTING FLARED END SECTION	EACH	1		1
* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	775		775
* X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	50		50
* X0326148	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	3		3

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	CONSTR. CODE
					80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
* X0327004	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	3		3
X0327036	BIKE PATH REMOVAL	SQ YD	7		7
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	699		699
* X1400338	UNDERGROUND CONDUIT, STAINLESS STEEL, 2" DIA.	FOOT	40		40
X4402800	ISLAND PAVEMENT REMOVAL	SQ YD	10		10
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	590		590
X5509900	ABANDON AND FILL EXISTING STORM SEWER	FOOT	24		24
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		1
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	967		967
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	282		282
* X8410118	MAINTENANCE OF TEMPORARY LIGHTING SYSTEM	L SUM	1		1
* X8440120	REMOVE AND RE-ERECT EXISTING LIGHTING UNIT	EACH	3		3
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	457		457
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	8		8
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1

* SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	9
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				80% FED 20% STATE BRIDGE 0013 S.N. 016-2417
				URBAN
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4
* Z0033020	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	3	3
Z0056668	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE,12"	FOOT	217	217
Z0056669	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE,15"	FOOT	640	640
Z0062456	TEMPORARY PAVEMENT	SQ YD	572	572
Z0062458	TEMPORARY PAVEMENT (VARIABLE DEPTH)	TON	27	27
* Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1
Z0073700	TEMPORARY WALL BRACING SYSTEM	L SUM	1	1
X03Z7998	BOLLARD TO BE RELOCATED	EACH	1	1

* SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

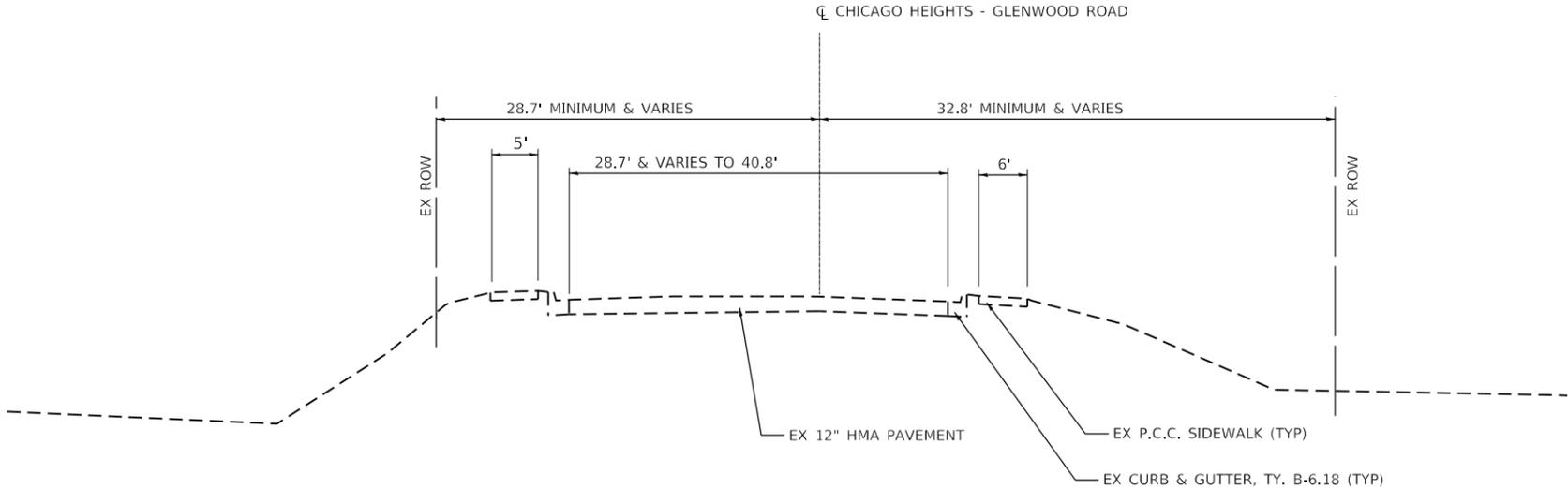
**SUMMARY OF QUANTITIES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	9A
			CONTRACT NO. 60N21	
ILLINOIS FED. AID PROJECT				

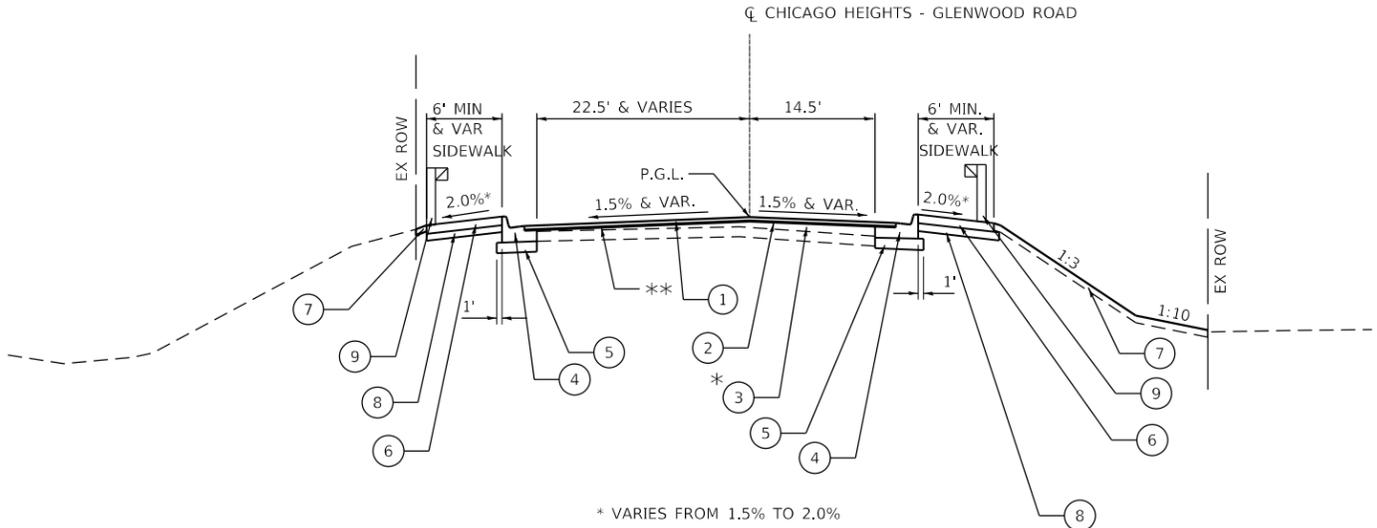
PROPOSED LEGEND

- ① PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1½"
- ② PROPOSED LEVELING BINDER (MACHINE METHOD), N70, ¾" - 2¼"
- ③ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2¼" & VAR. TO 6¼"
- ④ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MODIFIED)
- ⑤ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 6"
- ⑥ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- ⑦ PROPOSED TOPSOIL FURNISH & PLACE, 4" & SEEDING, CLASS 2A OR SEEDING, CLASS 4
- ⑧ PROPOSED AGGREGATE BASE COURSE, TYPE B, 4"
- ⑨ PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑩ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- ⑪ PROPOSED HOT-MIX ASPHALT BASE COURSE, 4"
- ⑫ PROPOSED AGGREGATE BASE COURSE, TYPE B, 6"



EXISTING TYPICAL SECTION

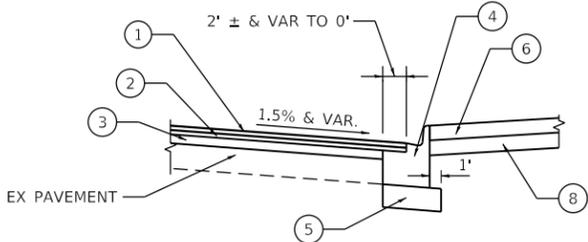
STA. 30+39.41 TO STA. 34+48
BRIDGE OMISSION: STA. 31+19.81 TO STA. 32+08.22



PROPOSED TYPICAL SECTION

STA. 30+39.41 TO STA. 34+48
BRIDGE APPROACH PAVEMENT: STA. 30+89.70 TO STA. 31+19.81 & STA. 32+08.22 TO STA. 32+38.95
BRIDGE OMISSION: STA. 31+19.81 TO STA. 32+08.22
SEE PLAN VIEW FOR LIMITS OF BIKE PATH

** PLACE BINDER IN THE AREAS WHERE THE DIFFERENCE BETWEEN THE PROPOSED PROFILE AND EXISTING PROFILE IS GREATER THAN 1½".
INCREASE THE THICKNESS OF LEVELING BINDER TO MAXIMUM 2¼" TO MAINTAIN PROPOSED 1½" THICKNESS OF HMA SURFACE.



COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MODIFIED) DETAIL

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 1½" LEVELING BINDER (MACHINE METHOD), N70; ¾" to 2¼" (IL-9.5mm) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 2¼" & VARIES TO 6¼"	4% @ 70 GYR. 4% @ 70 GYR. 4% @ 70 GYR.	QC/QA QC/QA QC/QA
TEMPORARY PAVEMENT (10") (AT PAVEMENT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 10" (3 LIFTS)	4% @ 70 GYR.	QC/QA
TEMPORARY PAVEMENT (3") (AT BRIDGE)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 3"	4% @ 70 GYR.	QC/QA
TEMPORARY PAVEMENT (VARIABLE DEPTH) (FOR MOT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; VARIES 1.5" TO 8" (EAST) AND VARIES 1.5" TO 6" (WEST).	4% @ 70 GYR.	QC/QA
PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLABS	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 1½" HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 10" & VARIES TO 13"	4% @ 70 GYR. 4% @ 70 GYR.	QC/QA
BIKE PATH	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" HOT-MIX ASPHALT BASE COURSE, 4", (HMA BINDER IL-19.0)	4% @ 50 GYR. 4% @ 50 GYR.	QC/QA QC/QA
FOREST PRESERVE DRIVEWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" HOT-MIX ASPHALT BASE COURSE, 6", (HMA BINDER IL-19.0)	4% @ 50 GYR. 4% @ 50 GYR.	QC/QA QC/QA
PATCHING	CLASS D PATCHES - (HMA BINDER IL-19)	4% @ 70 GYR.	QC/QA

QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QFP); PAY FOR PERFORMANCE (PFP)

NOTES

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
- THE "AC TYPE" FOR NON-POLYMERIZED HMA 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.
- THE PC CONCRETE TEMPORARY PAVEMENT OPTION SHALL CONSIST OF PCC PAVEMENT 10" THICK MEETING THE REQUIREMENTS OF SECTION 1020 OF THE STANDARD SPECIFICATIONS FOR CLASS PV CONCRETE. TEMPORARY PCC PAVEMENT DOES NOT REQUIRE DOWEL BARS. ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER AGGREGATE BASE COURSE, TYPE "B", 4". APPLIES TO TEMPORARY PAVEMENT ON PAVEMENT SEGMENT NOT ON BRIDGE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS	
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	

LANDSCAPING AND EROSION SCHEDULE											
STATION	STATION	OFFSET	SEEDING, CLASS 2A (ACRE)	SEEDING, CLASS 4 (ACRE)	TOPSOIL FURNISH AND PLACE, 4" (SQ YD)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHORUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)	EROSION CONTROL BLANKET (SQ YD)	TEMPORARY EROSION CONTROL SEEDING (POUND)	TEMPORARY EROSION CONTROL BLANKET (SQ YD)
CHICAGO HEIGHTS - GLENWOOD RD											
14+84	15+61	LT	0.06		105	2	2	2	105	11	105
16+15	17+13	LT	0.02		282	5	5	5	282	29	282
16+68	17+13	RT	0.01		44	1	1	1	44	5	44
36+31	44+57	LT	0.39		1,421	26	26	26	1,421	147	1,421
30+60	31+26	LT		0.07	361				361	37	361
30+62	31+55	RT		0.1	501				501	52	501
31+80	34+61	LT		0.06	294				294	30	294
32+18	34+55	RT		0.12	563				563	58	563
ROUNDED	TOTAL		0.5	0.5	3572	34	34	34	3572	369	3572

SIDEWALK SCHEDULE					
STATION	STATION	STATION	DETECTABLE WARNING (SQ FT)	PCC SIDEWALK, 5" (SQ FT)	SIDEWALK REMOVAL (SQ FT)
CHICAGO HEIGHTS - GLENWOOD ROAD					
30+41	30+98	RT		619	619
30+55	30+82	LT		265	265
32+28	34+50	RT		1225	1224
32+28	34+50	LT		1760	1459
41+95	42+04	LT		94	94
30+68		LT	23		
30+83		RT	12		
41+00		LT	23		
TOTAL			58	3963	3661

PAVEMENT MARKING SCHEDULE													
STATION	STATION	TYPE	THERMOPLASTIC PAVEMENT MARKING LINE 4" (FOOT)	THERMOPLASTIC PAVEMENT MARKING LINE 6" (FOOT)	THERMOPLASTIC PAVEMENT MARKING LINE 8" (FOOT)	THERMOPLASTIC PAVEMENT MARKING LINE 12" (FOOT)	THERMOPLASTIC PAVEMENT MARKING LINE 24" (FOOT)	THERMOPLASTIC PAVEMENT MARKING LETT & SYMB (SF)	MODIFIED URETHANE PAVEMENT MARKING LINE 4" (FOOT)	MODIFIED URETHANE PAVEMENT MARKING LINE 24" (FOOT)	MODIFIED URETHANE PAVEMENT MARKING LETT & SYMB (SF)	MODIFIED URETHANE PAVEMENT MARKING LINE 6" (FOOT)	
CHICAGO HEIGHTS - GLENWOOD ROAD													
10+85	12+20	WHITE DASH		34									
12+20	15+90	YELLOW		370									
15+00	15+43	YELLOW	43										
15+00	15+69	YELLOW	145										
15+00	30+97	DOOUBLE YELLOW	114										
15+14		RIGHT TURN ARROW											
15+56	15+97	WHITE			113								
15+56	30+69	WHITE		49									
15+59	15+90	WHITE				43							
15+64		WHITE STOP BAR					23						
15+69		WHITE STOP BAR					16						
16+48		WHITE STOP BAR	112				23						
16+49	17+03	WHITE		54									
30+38	30+69	WHITE		31									
30+75		WHITE		140									
30+80	17+02	WHITE	223										
30+91													
30+91	32+41	DOUBLE YELLOW							308	28			
30+91	32+41	WHITE										150	
32+30	34+49	WHITE	223										
32+34	33+36	WHITE		102									
32+39	35+50	DOUBLE YELLOW	622										
32+45	34+47	WHITE	202										
33+00		ARROW AND ONLY						36					
33+00		LEFT TURN ARROW						26					
33+00		LEFT TURN ARROW						26					
33+36		ONLY									36		
33+36		ONLY									26		
33+36	34+49	WHITE DASH		30									
38+33	38+43	DOUBLT WHITE	20										
40+39	40+49	DOUBLE WHITE	20										
41+00		STOP BAR					7						
41+00	34+48	WHITE	8										
TOTAL			1509	810	113	21	69	88	308	28	62	150	

SHORT TERM PAVEMENT MARKING		
TYPE	SHORT TERM PAVEMENT MARKING (FOOT)	SHORT TERM PAVEMENT MARKING REMOVAL (SQ FT)
CHICAGO HEIGHTS - GLENWOOD ROAD		
LANE LINES	381	63
TURN LANES	288	48
STOP BAR	582	97
LETTER AND SYMBOL	438	73
TOTAL	1689	282

TEMPORARY PAVEMENT		
STATION	TEMPORARY PAVEMENT (SQ YD)	TEMPORARY PAVEMENT VARIABLE DEPTH (SQ YD)
CHICAGO HEIGHTS - GLENWOOD ROAD		
NW OF BRIDGE	19	13
NE OF BRIDGE	204	15
SW OF BRIDGE	349	
TOTAL	572	27

RAISED REFLECTIVE PAVEMENT MARKERS						
STATION	STATION	OFFSET	RAISED REFLECTIVE PAVEMENT MARKER (EACH)	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER (EACH)	REPLACEMENT REFLECTOR (EACH)	RAISED REFLECTIVE PAVEMENT MARKER, REMOVAL (EACH)
187TH STREET						
15+00	15+56	RT	2			3
CHICAGO HEIGHTS - GLENWOOD ROAD						
30+80	35+48	LT		24		
30+80	35+48	LT		24		
30+90	35+48	LT		24		
32+45	33+36	LT	3			
32+45	35+48	CL	16			
35+50	35+48	CL			6	
TOTAL			21	72	6	3

TREE ROOT PRUNING		
STATION	OFFSET	TREE ROOT PRUNING (EACH)
CHICAGO HEIGHTS - GLENWOOD ROAD		
		1
		1
		1
		1
36+95	35' LT	1
37+58	33' LT	1
37+88	38' LT	1
38+07	34' LT	1
38+98	39' LT	1
39+82	39' LT	1
39+88	44' LT	1
40+23	34' LT	1
40+62	33' LT	1
42+95	33' LT	1
43+60	34' LT	1
TOTAL		15

TREE REMOVAL				
STATION	STATION	OFFSET	TREE REMOVAL (OVER 15 UNITS DIAMETER) (EACH)	TREE REMOVAL (ACRES)
CHICAGO HEIGHTS - GLENWOOD ROAD				
38+70		30' LT	36	
37+00	40+69	16' LT		0.2
TOTAL			36	0.2

FILE NAME = D:\Engineering\LiveProjects\13040_IDOT DUR HBM\Work D-der 12\CADD\CADD Sheets\C:\v1\DI60N21-sht-schedule.dgn



USER NAME = JENT	DESIGNED - JBT	REVISED -
PLOT SCALE = 2.0000' / 1"	CHECKED - JMT	REVISED -
PLOT DATE = 2/1/2019	DATE = 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULES OF QUANTITIES - I			
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	11
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

FILE NAME = D:\Engineering\LiveProjects\13040_IDOT DUR HBM\Work 0-der 12\CADD\CADD Sheets\C:\1\160N21-sht-schedule.dgn

PAVEMENT SCHEDULE													
STATION	STATION	OFFSET	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" (SQ YD)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (SQ YD)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (TON)	LEVELING BINDER (MACHINE METHOD) N70 (TON)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (TON)	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB (SQ YD)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (TON)	HOT-MIX ASPHALT BASE COURSE, 4" (SQ YD)	HOT-MIX ASPHALT BASE COURSE, 6" (SQ YD)	BITUMINOUS MATERIALS (TACK COAT) (POUND)	ISLAND PAVEMENT, 6" (SQ YD)
CHICAGO HEIGHTS - GLENWOOD RD													
PRE STAGE AND STAGE I													
15+00	17+03				107	107.2	179					574	
15+00		LT&RT	1197.3	20	2		104					335	
17+03		LT&RT		21			3					9	
32+55	34+48		711		1	62.6	3					9	
34+48		LT&RT		14	63		2					6	
40+96	41+03								1	12		3	
43+05	43+36								6		52	23	
30+69	30+90							128				58	
32+39	32+55						73					33	
SE ISLAND													
CLASS D PATCHES													
TOTAL			1908	56	174	170	291	201	7	12	52	1126	8

TEMPORARY FENCE SCHEDULE			
STATION	STATION	OFFSET (LT/RT)	TEMPORARY FENCE (FOOT)
CHICAGO HEIGHTS - GLENWOOD ROAD			
PRE STAGE AND STAGE I			
32+37	33+09	RT	79
STAGE II			
38+42	40+96	LT	258
41+03	43+08	LT	206
43+34	44+55	LT	122
TOTAL			665

COMBINATION CONCRETE CURB AND GUTTER SCHEDULE						
STATION	STATION	OFFSET	COMBINATION CONCRETE CURB AND GUTTER REMOVAL (FOOT)	COMBINATION CONCRETE CURB AND GUTTER TYPE B 6-12 (FOOT)	COMBINATION CONCRETE CURB AND GUTTER TYPE B 6-18 (MODIFIED) (FOOT)	CONCRETE CURB, TYPE B (FOOT)
CHICAGO HEIGHTS - GLENWOOD ROAD						
30+36	31+26	RT	121	23	121	
30+40	30+55	RT	46	46		
30+59	31+12	LT	60		60	
32+44	34+47	LT	230		230	
32+54	34+43	RT	194		194	
38+26	38+49	LT	23	23		
40+30	40+58	LT	28	28		
42+86	43+42	LT	64	28		36
43+91	44+49	LT	59	59		
TOTAL			825	184	605	36

REMOVAL SCHEDULE					
STATION	STATION	BIKE PATH REMOVAL (SQ YD)	PAVEMENT REMOVAL (SQ YD)	ISLAND PAVEMENT REMOVAL (SQ YD)	DRIVEWAY PAVEMENT REMOVAL (SQ YD)
CHICAGO HEIGHTS - GLENWOOD RD					
SE ISLAND					
30+69	31+20		282	10	52
32+08	32+55		219		
32+56	33+81		37		
40+90	41+05	7.4			
43+20					
TOTAL		7.4	538	10	52

INLET FILTERS		
STATION	OFFSET (LT/RT)	INLET FILTERS (EACH)
187TH STREET		
15+40	23' LT	1
15+70	3' LT	1
15+70	47' RT	1
CHICAGO HEIGHTS - GLENWOOD ROAD		
33+25	22' LT	1
33+25	8' RT	1
TOTAL		5

GUARDRAIL AND TRAFFIC BARRIER TERMINAL SCHEDULE						
LOCATION	GUARDRAIL REMOVAL (FOOT)	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (FOOT)	TERMINAL MARKER-DIRECT APPLIED (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL TANGENT (EACH)	GUARDRAIL REFLECTORS, TYPE A (EACH)
CHICAGO HEIGHTS - GLENWOOD ROAD						
NW SIDE OF THE BRIDGE	57					
NE SIDE OF THE BRIDGE	185	12.5	1		1	4
SW SIDE OF THE BRIDGE	55	12.5	1		1	4
SE SIDE OF THE BRIDGE	155					
TOTAL		452	25	2	2	8

TEMPORARY CONCRETE BARRIER SCHEDULE				
STATION	TEMPORARY CONCRETE BARRIER (FOOT)	RELOCATE TEMPORARY CONCRETE BARRIER (FOOT)	PINNING TEMPORARY CONCRETE BARRIER (EACH)	BARRIER WALL REFLECTORS, TYPE C (EACH)
CHICAGO HEIGHTS - GLENWOOD ROAD				
PRE-STAGE	300		66	24
STAGE I	300	300	138	36
STAGE II		600	66	24
STAGE III		225	12	9
TOTAL		600	282	93

CLASS D PATCHES			
STATION	TYPE II 12 INCH (SQ YD)	TYPE III 12 INCH (SQ YD)	TYPE IV 12 INCH (SQ YD)
CHICAGO HEIGHTS - GLENWOOD ROAD			
33+25	10		
38+30			37
40+50			43
43+00		19	
44+20			39
TOTAL		10	120

PAVEMENT MARKING REMOVAL - WATER BLASTING				
STATION	STATION	OFFSET	TYPE	PAVEMENT MARKING REMOVAL WATER BLASTING (SQ FT)
CHICAGO HEIGHTS - GLENWOOD ROAD				
30+65	34+47	RT	4"	127
30+35	30+70	RT	6"	54
30+93	32+07	LT	6"	57
30+93		LT	24"	54
30+93	31+20	LT	4"	18
31+62		LT	RT ARROW	16
61+32		LT	LT & THRU	26
31+86		LT	ONLY	21
32+00	35+50	LT	4"	233
32+13	34+48	LT	6"	26
32+60	33+60		4"	67
TOTAL				699

TEMPORARY IMPACT ATTENUATORS SCHEDULE			
STATION	TEMPORARY (NON REDIRECTIVE), TEST LEVEL 2 (EACH)	TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2 (EACH)	RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2 (EACH)
CHICAGO HEIGHTS - GLENWOOD ROAD			
PRE-STAGE		2	
STAGE I		2	1
STAGE II	2		1
STAGE III	1		1
TOTAL		3	3

PROTECTIVE COAT				
STATION	STATION	OFFSET	TYPE	PROTECTIVE COAT (SQ YD)
CHICAGO HEIGHTS - GLENWOOD ROAD				
30+36	31+26	RT	B-6.18 C&G	34
30+40	30+55	RT	B-6.12 C&G	10
30+41	30+98	LT	SIDEWALK	69
30+55	30+82	RT	SIDEWALK	29
30+59	31+12	LT	B-6.18 C&G	17
32+28	34+50	LT	SIDEWALK	136
32+28	34+50	RT	SIDEWALK	196
32+44	34+47	LT	B-6.18 C&G	64
32+54	34+43	RT	B-6.18 C&G	54
38+26	38+49	LT	B-6.12 C&G	5
40+30	40+58	LT	B-6.12 C&G	6
42+86	43+13	LT	B-6.12 C&G	6
42+86	43+42	LT	TYPE B CURB	4
41+95	42+04	LT	SIDEWALK	10
43+91	44+49	LT	B-6.12 C&G	13
TOTAL				653

TREE TRUNK PROTECTION		
STATION	OFFSET	TREE TRUNK PROTECTION (EACH)
CHICAGO HEIGHTS - GLENWOOD ROAD		
30+80	60' RT	1
31+22	35' RT	1
32+70	35' RT	1
TOTAL		3

SIGNAGE REMOVAL AND REPLACEMENT					
STATION	OFFSET	REMOVE SIGN PANEL - TYPE 2 (SQ FT)	RELOCATE SIGN PANEL ASSEMBLY - TYPE A (EACH)	RELOCATE SIGN PANEL ASSEMBLY - TYPE B (EACH)	RELOCATE SIGN PANEL - TYPE 1 (SQ FT)
CHICAGO HEIGHTS - GLENWOOD ROAD					
30+46	22' RT				9
31+03	28.7' RT				1.5
31+03	28.7' RT	15			
38+17	18.6' LT			16	
40+92	27' LT		7.75		
41+10	20' LT		8.25		
41+28	25' LT	20			
42+84	22.6' LT		8.25		
TOTAL		35	24	16	10.5

PERIMETER EROSION BARRIER SCHEDULE			
STATION	STATION	OFFSET (LT/RT)	PERIMETER EROSION BARRIER (FOOT)
187 ST: PRE STAGE AND STAGE I:			
15+07	15+92	RT	127
CHICAGO HEIGHTS : GLENWOOD RD PRE STAGE AND STAGE I			
32+31	34+48	RT	255
34+65	38+99	RT	455
34+68	43+01	LT	887
43+44	44+48	RT	141
187 ST: STAGE II			
16+47	17+18	RT	95
CHICAGO HEIGHTS : GLENWOOD RD STAGE II			
38+42	40+96	LT	259
41+03	43+08	LT	206
43+34	44+55	LT	122
TOTAL			2546

TEMPORARY PAVEMENT (VARIABLE DEPTH)		
STATION	TEMPORARY PAVEMENT VARIABLE DEPTH (TONS)	
CHICAGO HEIGHTS - GLENWOOD ROAD		
STAGE I	10.23	
STAGE II	9.68	
TOTAL		19.91

DITCH CHECKS		
STATION	OFFSET	TEMPORARY DITCH CHECKS (FOOT)
CHICAGO HEIGHTS - GLENWOOD ROAD		
37+69	22' LT	16
38+44	27' LT	16
TOTAL		32



USER NAME = JENT	DESIGNED - AB	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - IH	REVISED -
PLOT DATE = 2/1/2019	CHECKED - JMT	REVISED -
	DATE - 01/24/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES - II
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	12
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE (CHICAGO HEIGHTS - GLENWOOD RD)							
STATION	LENGTH (FOOT)	CUT (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)	FILL (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)
PRE-STAGE							
29+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
29+50.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
30+00.00		0.00			0.00		
	50.00		2.00	3.70		0.00	0.00
30+50.00		4.00			0.00		
	50.00		5.46	10.11		0.00	0.00
31+00.00		6.92			0.00		
	19.81		8.91	6.54		0.00	0.00
31+19.81		10.90			0.00		
	30.19		5.45	6.09		0.00	0.00
31+50.00		0.00			0.00		
	58.22		0.00	0.00		0.00	0.00
32+08.22		0.00			0.00		
	16.78		5.20	3.23		0.00	0.00
32+25.00		10.40			0.00		
	25.00		9.50	8.80		0.00	0.00
32+50.00		8.60			0.00		
	50.00		8.05	14.91		0.00	0.00
33+00.00		7.50			0.00		
	50.00		6.55	12.13		0.00	0.00
33+50.00		5.60			0.00		
	50.00		4.80	8.89		0.00	0.00
34+00.00		6.00			0.00		
	46.00		5.00	7.11		0.00	0.00
34+46.00		4.00			0.00		
				85			0

EARTHWORK SCHEDULE (CHICAGO HEIGHTS - GLENWOOD RD)							
STATION	LENGTH (FOOT)	CUT (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)	FILL (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)
STAGE II							
29+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
29+50.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
30+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
30+50.00		0.00			0.00		
	50.00		11.60	21.48		3.45	6.39
31+00.00		23.20			6.90		
	19.81		18.60	13.65		4.25	3.12
31+19.81		14.00			1.60		
	30.19		0.00	0.00		0.80	0.89
31+50.00		0.00			0.00		
	58.22		0.00	0.00		0.00	0.00
32+08.22		0.00			0.00		
	16.78		2.85	1.77		1.55	0.96
32+25.00		5.70			3.10		
	25.00		2.85	2.64		7.95	7.36
32+50.00		0.00			12.80		
	50.00		0.10	0.19		9.20	17.04
33+00.00		0.20			5.60		
	50.00		0.90	1.67		4.00	7.41
33+50.00		1.60			2.40		
	50.00		0.80	1.48		3.55	6.57
34+00.00		0.00			4.70		
	50.00		0.00	0.00		2.35	4.35
34+50.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
35+00.00		0.00			0.00		
	50.00						
				43			54

EARTHWORK SCHEDULE (CHICAGO HEIGHTS - GLENWOOD RD)							
STATION	LENGTH (FOOT)	CUT (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)	FILL (SQ FT)	AVERAGE END AREA (SQ FT)	TOTAL (CU YD)
STAGE I							
29+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
29+50.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
30+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
30+50.00		0.00			0.00		
	50.00		12.20	22.59		0.00	0.00
31+00.00		24.40			0.00		
	19.81		12.20	20.25		0.00	0.00
31+19.81		30.80			0.00		
	30.19		0.00	0.00		0.00	0.00
31+50.00		0.00			0.00		
	58.22		14.80	31.91		1.05	2.26
32+08.22		29.60			2.10		
	16.78		21.95	13.64		1.05	0.65
32+25.00		14.30			0.00		
	25.00		10.75	9.95		4.50	4.17
32+50.00		7.20			9.00		
	50.00		7.25	13.43		7.10	13.15
33+00.00		7.30			5.20		
	50.00		6.85	12.69		4.20	7.78
33+50.00		6.40			3.20		
	50.00		6.45	11.94		3.05	5.65
34+00.00		6.50			2.90		
	50.00		6.5	12.04		5.20	9.63
34+50.00		6.50			7.50		
	50.00		0.00	0.00		0.00	0.00
35+00.00		0.00			0.00		
	50.00		0.00	0.00		0.00	0.00
35+50.00		0.00			0.00		
	50.00		9.00	16.67		0.00	0.00
36+00.00		18.00			0.00		
	50.00		17.00	31.48		0.00	0.00
36+50.00		16.00			0.00		
	50.00		17.00	31.48		0.00	0.00
37+00.00		18.00			0.00		
	50.00		18.00	33.33		0.00	0.00
37+50.00		18.00			0.00		
	40.00		10.80	16.00		0.00	0.00
37+90.00		3.60			0.00		
	10.00		1.80	0.67		0.65	1.20
38+00.00		0.00			1.30		
	50.00		5.85	10.83		0.65	1.20
38+50.00		11.70			0.00		
	50.00		10.75	19.91		0.00	0.00
39+00.00		9.80			0.00		
	50.00		7.85	14.54		0.00	0.00
39+50.00		5.90			0.00		
	50.00		5.75	10.65		0.00	0.00
40+00.00		5.60			0.00		
	50.00		5.85	10.83		0.00	0.00
40+50.00		6.10			0.00		
	50.00		6.00	11.11		0.00	0.00
41+00.00		5.90			0.00		
	50.00		5.85	10.83		0.00	0.00
41+50.00		5.80			0.00		
	50.00		5.70	10.56		0.00	0.00
42+00.00		5.60			0.00		
	50.00		5.95	11.02		0.00	0.00
42+50.00		6.30			0.00		
	50.00		6.00	11.11		0.00	0.00
43+00.00		5.70			0.00		
	50.00		5.65	10.46		0.00	0.00
43+50.00		5.60			0.00		
	50.00		4.30	7.96		0.00	0.00
44+00.00		4.30			0.00		
	10.60		2.15	0.84		0.00	0.00
44+10.60		3.00			0.00		
				419			46

AGGREGATE SCHEDULE				
STATION	STATION	SUBBASE GRANULAR MATERIAL, TYPE B 6" (SQ YD)	AGGREGATE BASE COURSE, TYPE B 4" (SQ YD)	AGGREGATE BASE COURSE, TYPE B 6" (SQ YD)
CHICAGO HEIGHTS - GLENWOOD ROAD				
30+40	30+98		79	
30+58	30+82		33	
32+28	34+50		158	
32+28	3450		196	
40+98				8
41+95	42+04		11	
43+01				52
UNDER COMBINATION CURB AND GUTTER		506		
TOTAL		506	477	59

TEMPORARY PAVEMENT MARKING SCHEDULE					
STATION	STATION	TYPE	PAVEMENT MARKING TAPE, TYPE IV, 4" (FOOT)	PAVEMENT MARKING TAPE, TYPE IV, 24" (FOOT)	TEMPORARY PAVEMENT MARKING REMOVAL (SQ FT)
CHICAGO HEIGHTS - GLENWOOD ROAD					
PRE STAGE					
29+72	30+92	DOUBLE YELLOW	119		
30+56	33+82	SOLID WHITE	348	19	
30+92	35+48	DOUBLE YELLOW	459		
STAGE I					
29+73	30+80	2' DASH-6' SKIP YELLOW	105		
30+80	35+47	DOUBLE YELLOW	468	11	276
30+46	32+90	SOLID WHITE	263		
31+11	33+74	SOLID WHITE	343		
STAGE II					
12+06	15+72	SOLID WHITE	377		
29+79	30+78	2' DASH-6' SKIP YELLOW	105	29	238
30+78	35+48	DOUBLE YELLOW	474		
30+32	32+58	SOLID WHITE	249		
STAGE III					
15+21	15+97	SOLID WHITE	127		
30+91	35+49	DOUBLE YELLOW	458	41	453
30+41	35+48	SOLID WHITE	540		
TOTAL			6620	200	967

SUMMARY OF EARTH WORK SCHEDULE				
STAGE	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (15%)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE(-)
CHICAGO HEIGHTS - GLENWOOD RD				
PRE-STAGE	85	72	0	72
STAGE I	419	356	46	310
STAGE II	43	36	54	-18
ROUNDED TOTAL	547	464	100	364

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 DRAWN - IH
 CHECKED - JMT
 DATE - 01/24/2019

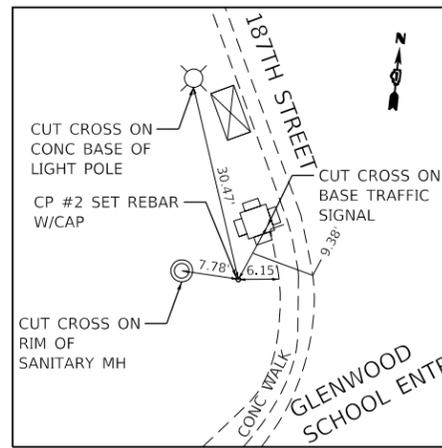
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

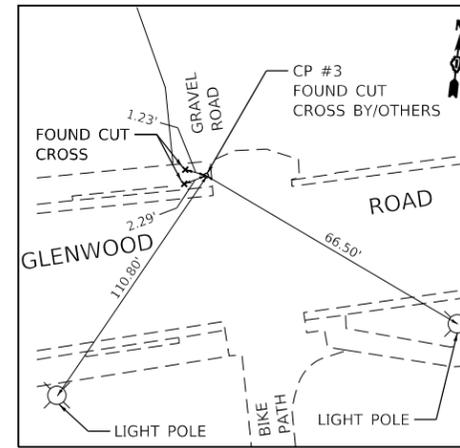
SCHEDULE OF QUANTITIES - III
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

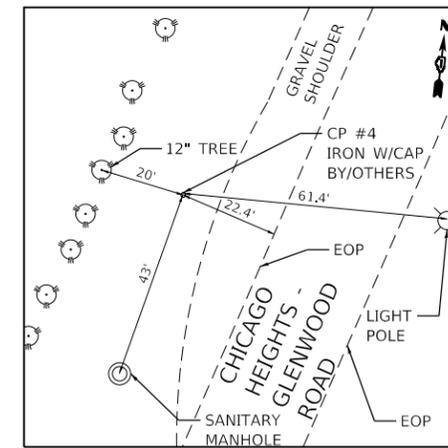
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	13
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



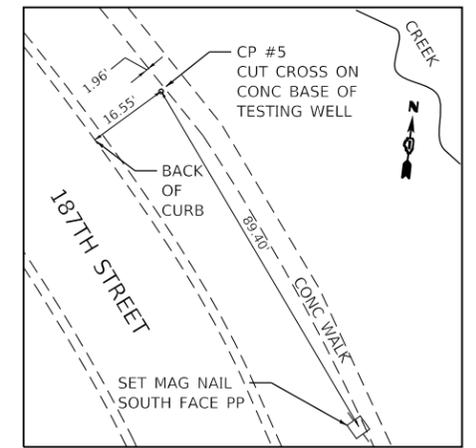
CONTROL POINT #2
 REBAR WITH CAP
 STA 16+41.48, 30.22' LT
 N 1,778,499.849
 E 1,177,904.636
 ELEV = 611.98



CONTROL POINT #3
 CUT CROSS
 STA 34+48.56, 19.56' LT
 N 1,778,607.523
 E 1,178,353.573
 ELEV = 614.41



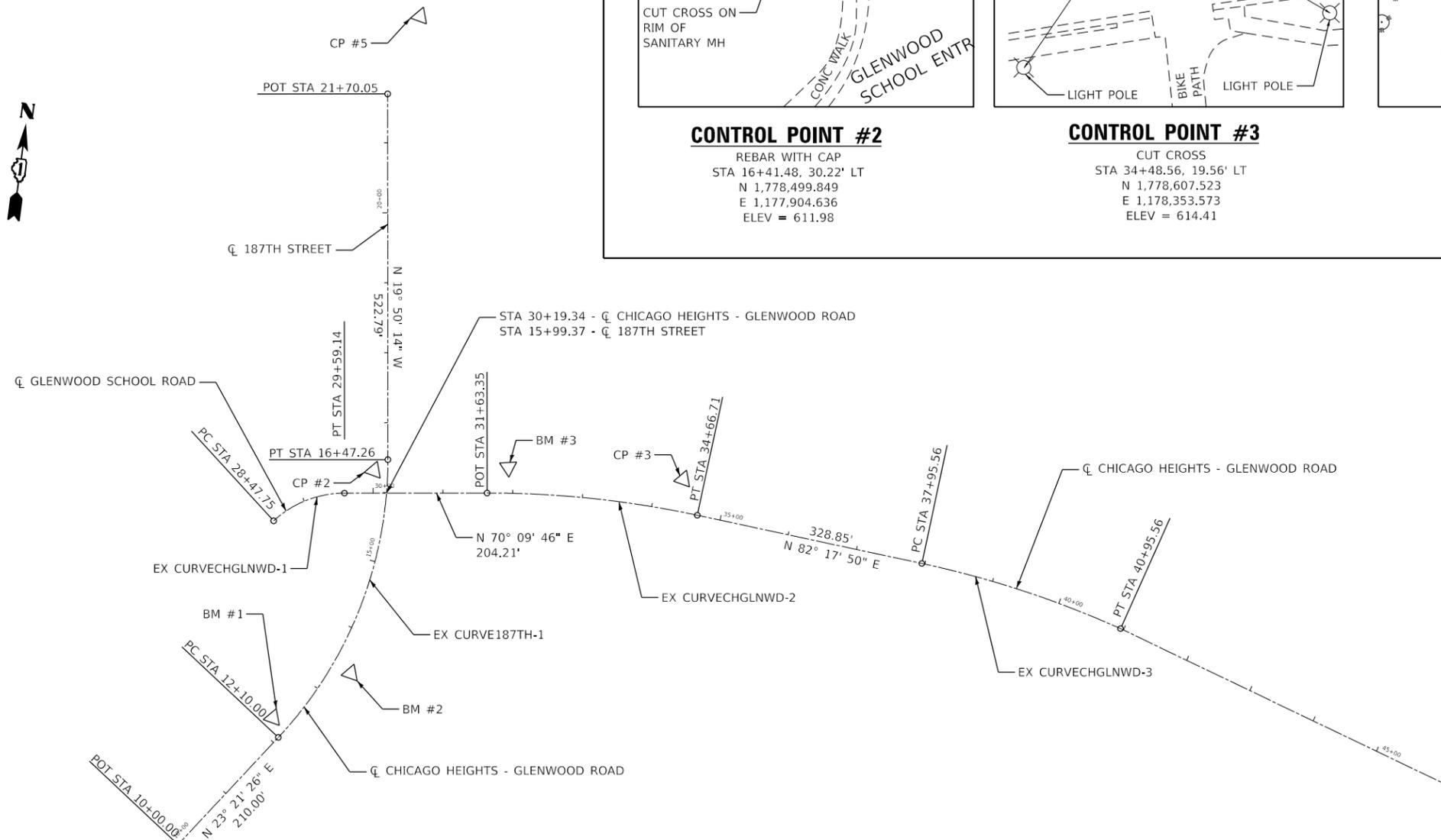
CONTROL POINT #4
 IRON WITH CAP
 STA 7+97.97, 37.00' LT
 N 1,777,724.855
 E 1,177,721.431
 ELEV = 610.81



CONTROL POINT #5
 CUT CROSS
 STA 22+95.19, 33.00' RT
 N 1,779,130.119
 E 1,177,725.350
 ELEV = 610.36

BENCHMARKS

BM #1 ELEV 611.77
 STA 12+25.55, 24.50' LT
 "BOX" ON E'LY LIGHT POLE FOUND
 3RD SW'LY OF INTERSECTION (A 21)
 BM #2 ELEV 612.93
 STA 13+42.30, 28.76' RT
 "X" ON HANDHOLE
 BM #3 ELEV 613.20
 STA 31+95.99, 37.44' LT
 "BOX" ON NE'LY CONC HEADWALL



EX CURVE187TH-1 PI STA = 14+39.61 $\Delta = 43^\circ 11' 40''$ (LT) $D = 9^\circ 52' 42''$ $R = 580.01'$ $T = 229.61'$ $L = 437.26'$ $E = 43.79'$ PC STA = 12+10.00 PT STA = 16+47.26	EX CURVECHGLNWD-1 PI STA = 29+06.15 $\Delta = 42^\circ 32' 52''$ (RT) $D = 38^\circ 11' 50''$ $R = 150.00'$ $T = 58.40'$ $L = 111.39'$ $E = 10.97'$ PC STA = 28+47.75 PT STA = 29+59.14	EX CURVECHGLNWD-2 PI STA = 33+15.60 $\Delta = 12^\circ 08' 04''$ (RT) $D = 4^\circ 00' 00''$ $R = 1,432.39'$ $T = 152.25'$ $L = 303.36'$ $E = 8.07'$ PC STA = 31+63.35 PT STA = 34+66.71	EX CURVECHGLNWD-3 PI STA = 39+46.11 $\Delta = 12^\circ 03' 02''$ (RT) $D = 4^\circ 01' 01''$ $R = 1,426.40'$ $T = 150.56'$ $L = 300.00'$ $E = 7.92'$ PC STA = 37+95.56 PT STA = 40+95.56
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ALIGNMENT DATA				
	STATIONING	NORTHING	EASTING	REMARKS
CHICAGO HEIGHTS - GLENWOOD ROAD				
P. C.	28+47.75	1,778,377.88	1,177,806.87	CURVE CHGLNWD-1
P. I.	29+06.15	1,778,429.63	1,177,833.94	
P. T.	29+59.14	1,778,449.45	1,177,888.88	
P. C.	31+63.35	1,778,518.75	1,178,080.97	CURVE CHGLNWD-2
P. I.	33+15.60	1,778,570.41	1,178,224.18	
P. T.	34+66.71	1,778,590.82	1,178,375.06	
P. C.	37+95.56	1,778,634.90	1,178,700.94	CURVE CHGLNWD-3
P. I.	39+46.11	1,778,655.08	1,178,850.13	
P. T.	40+95.56	1,778,643.66	1,179,000.26	
187TH STREET				
P. C.	12+10.00	1,778,088.77	1,177,918.01	CURVE 187TH-1
P. I.	14+39.61	1,778,299.56	1,178,009.05	
P. T.	16+47.26	1,778,515.55	1,177,931.13	
P. O. T.	21+70.55	1,779,007.31	1,177,753.72	

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CHECKED - JMT	REVISED -
DATE - 01/24/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

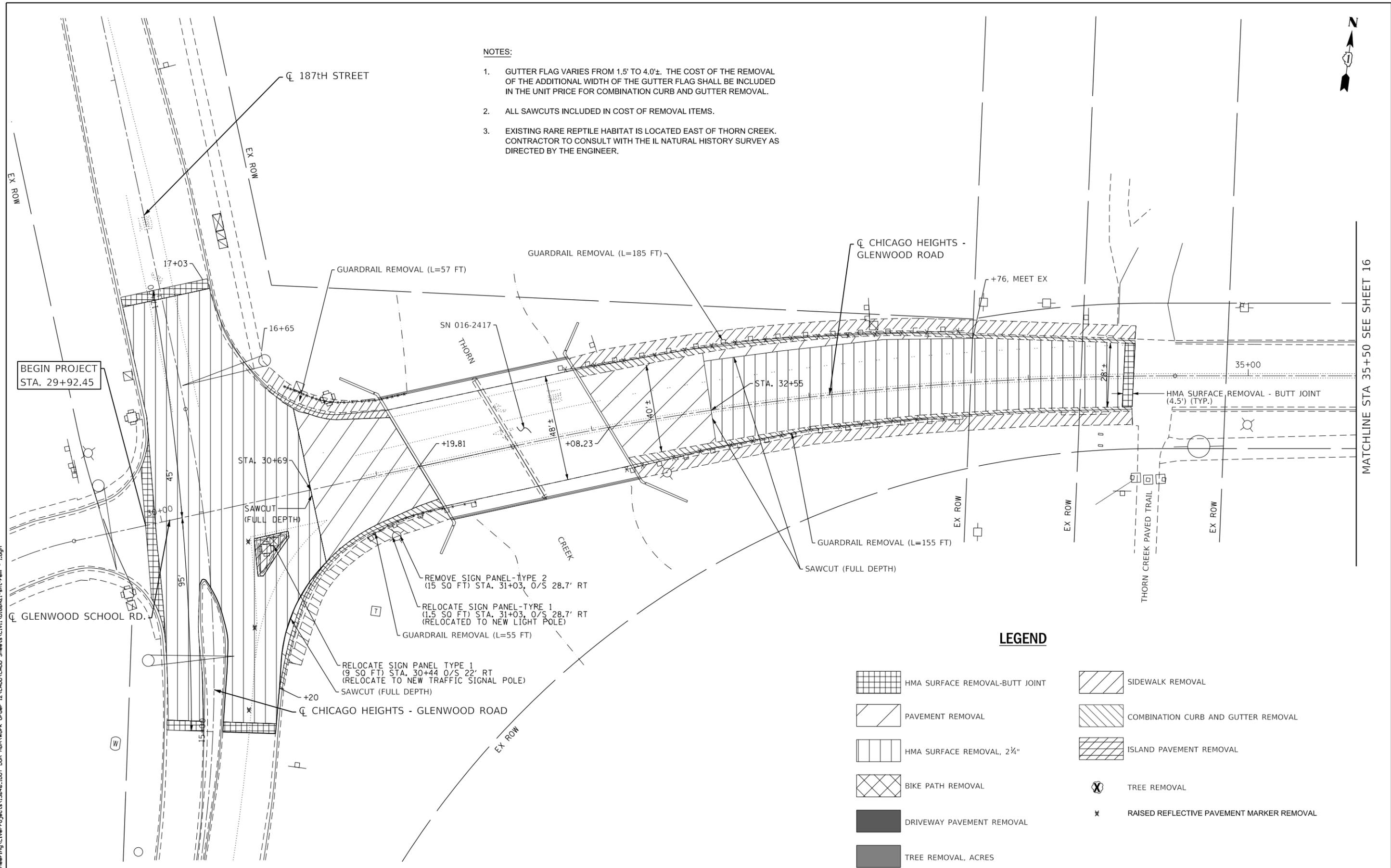
ALIGNMENT AND TIES
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	14
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



- NOTES:**
- GUTTER FLAG VARIES FROM 1.5' TO 4.0'. THE COST OF THE REMOVAL OF THE ADDITIONAL WIDTH OF THE GUTTER FLAG SHALL BE INCLUDED IN THE UNIT PRICE FOR COMBINATION CURB AND GUTTER REMOVAL.
 - ALL SAWCUTS INCLUDED IN COST OF REMOVAL ITEMS.
 - EXISTING RARE REPTILE HABITAT IS LOCATED EAST OF THORN CREEK. CONTRACTOR TO CONSULT WITH THE IL NATURAL HISTORY SURVEY AS DIRECTED BY THE ENGINEER.



BEGIN PROJECT
STA. 29+92.45

MATCHLINE STA 35+50 SEE SHEET 16

LEGEND

- | | | | |
|--|--------------------------------|--|---|
| | HMA SURFACE REMOVAL-BUTT JOINT | | SIDEWALK REMOVAL |
| | PAVEMENT REMOVAL | | COMBINATION CURB AND GUTTER REMOVAL |
| | HMA SURFACE REMOVAL, 2 1/4" | | ISLAND PAVEMENT REMOVAL |
| | BIKE PATH REMOVAL | | TREE REMOVAL |
| | DRIVEWAY PAVEMENT REMOVAL | | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL |
| | TREE REMOVAL, ACRES | | |

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USER NAME = JENT	DESIGNED - JMT	REVISED -
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PLOT DATE = 1/31/2019	CHECKED - JMT	REVISED -
	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING CONDITIONS AND REMOVAL PLAN - I
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	15
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

MATCHLINE STA 35+50 SEE SHEET 15

TREE REMOVAL, ACRES (0.2 ACRES)

REMOVE SIGN PANEL -TYPE 2
(20 SQ FT), STA. 41+28, O/S 25' LT

BOLLARDS TO BE RELOCATED (1 EA)
(STA. 40+98.42, 29.7' LT)

RELOCATE SIGN PANEL ASSEMBLY-TYPE A
(7.75 SQ FT), STA. 40+92, O/S 27' LT

RELOCATE SIGN PANEL ASSEMBLY-TYPE B
(16 SQ FT), STA. 38+17, O/S 18.6' LT

CLASS D PATCH, TYPE IV, 12"

CHICAGO HEIGHTS-
GLENWOOD ROAD

CLASS D PATCH, TYPE IV, 12"

NOTE:
ALL TREE ROOT PRUNING SHALL OCCUR WITHIN THE EXISTING IDOT ROW.

RELOCATE SIGN PANEL ASSEMBLY-TYPE A
(8.25 SQ FT), STA. 41+10, O/S 20' LT

MATCHLINE STA 41+50
SEE BELOW

MATCHLINE STA 41+50
SEE ABOVE

REMOVE AND RELOCATE SIGN
(BY COOK COUNTY FOREST PRESERVES)

RELOCATE SIGN PANEL ASSEMBLY-TYPE A
(8.25 SQ FT), STA. 42+84, O/S 22.6' LT

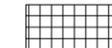
CHICAGO HEIGHTS-
GLENWOOD ROAD

CLASS D PATCH, TYPE III, 12"

CLASS D PATCH, TYPE IV, 12"

END PROJECT
STA. 44+57.00

LEGEND



HMA SURFACE REMOVAL-BUTT JOINT



PAVEMENT REMOVAL



HMA SURFACE REMOVAL, 2 1/2"



BIKE PATH REMOVAL



SIDEWALK REMOVAL



COMBINATION CURB AND GUTTER REMOVAL



ISLAND PAVEMENT REMOVAL



TREE REMOVAL



DRIVEWAY PAVEMENT REMOVAL



TREE REMOVAL, ACRES

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DRAWN - IH	REVISIONS -	
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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND REMOVAL PLAN - II
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

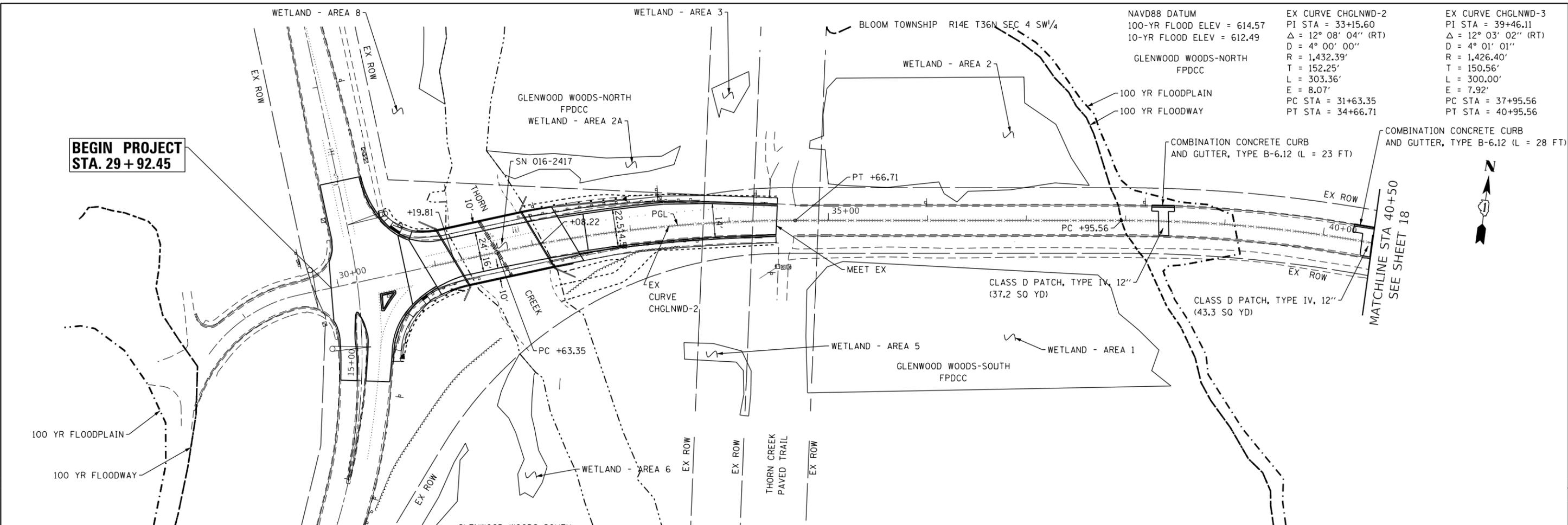
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	16
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO. CAD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO. CAD FILE NAME	

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NAVD88 DATUM
 100-YR FLOOD ELEV = 614.57
 10-YR FLOOD ELEV = 612.49

GLENWOOD WOODS-NORTH
 FPCC

EX CURVE CHGLNWD-2
 PI STA = 33+15.60
 $\Delta = 12^\circ 08' 04''$ (RT)
 D = 4° 00' 00"
 R = 1,432.39'
 T = 152.25'
 L = 303.36'
 E = 8.07'
 PC STA = 31+63.35
 PT STA = 34+66.71

EX CURVE CHGLNWD-3
 PI STA = 39+46.11
 $\Delta = 12^\circ 03' 02''$ (RT)
 D = 4° 01' 01"
 R = 1,426.40'
 T = 150.56'
 L = 300.00'
 E = 7.92'
 PC STA = 37+95.56
 PT STA = 40+95.56



COMBINATION CONCRETE CURB
 AND GUTTER, TYPE B-6.12 (L = 28 FT)

COMBINATION CONCRETE CURB
 AND GUTTER, TYPE B-6.12 (L = 23 FT)

100 YR FLOODPLAIN

100 YR FLOODWAY

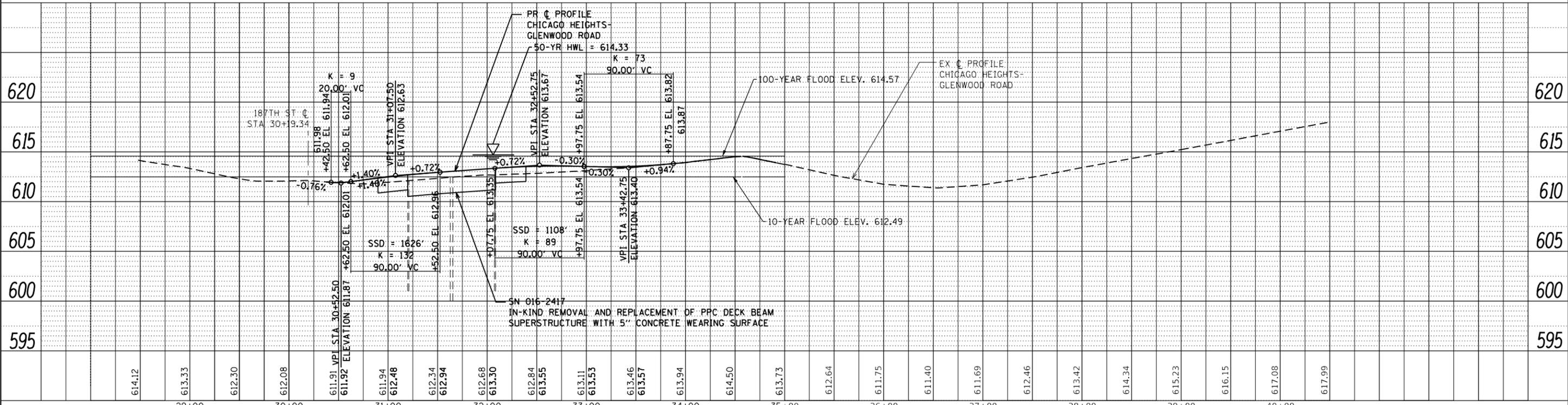
MEET EX

CLASS D PATCH, TYPE IV, 12"
 (37.2 SQ YD)

CLASS D PATCH, TYPE IV, 12"
 (43.3 SQ YD)

MATCHLINE STA 40+50
 SEE SHEET 18

NOTE:
 1. SEE INTERSECTION DETAILS AND
 ELEVATIONS SHEET
 FOR ADDITIONAL INFORMATION.



29+00	30+00	31+00	32+00	33+00	34+00	35+00	36+00	37+00	38+00	39+00	40+00													
614.12	613.33	612.30	612.08	611.91 611.92	611.94 612.48	612.34 612.94	612.68 613.30	612.84 613.55	613.11 613.53	613.46 613.57	613.94	614.50	613.73	612.64	611.75	611.40	611.69	612.46	613.42	614.34	615.23	616.15	617.08	617.99



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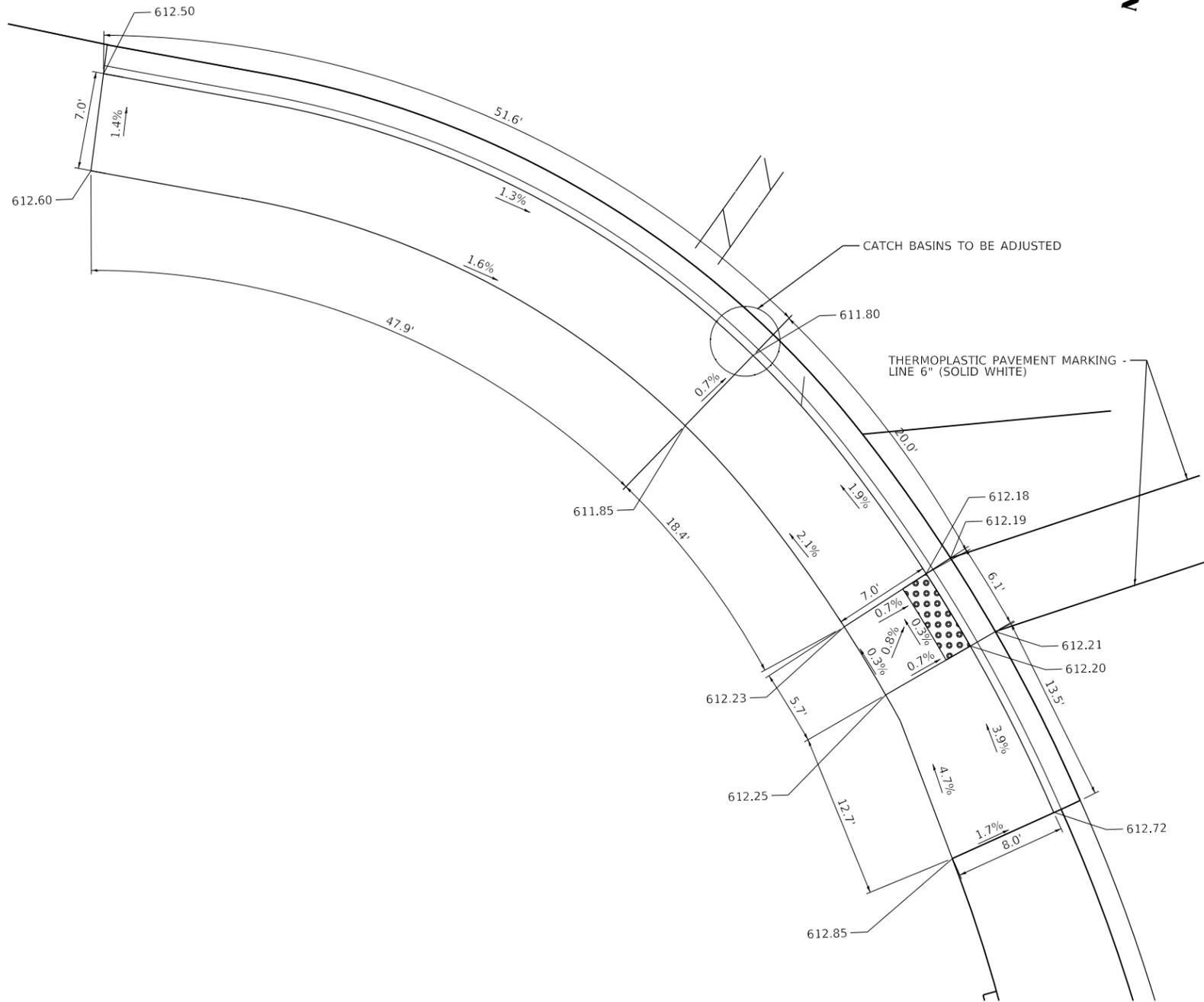
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED PLAN AND PROFILE - I
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

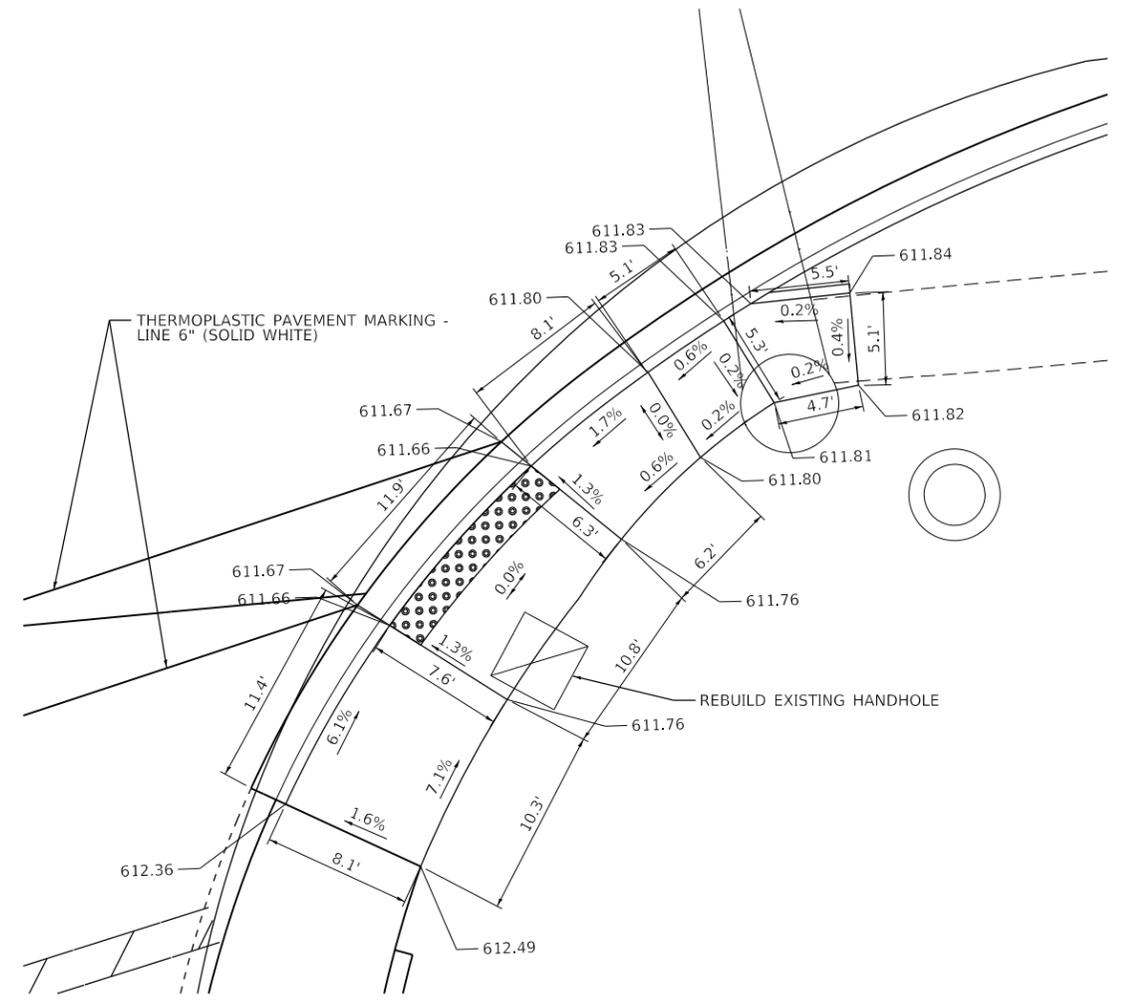
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F.A.U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	17
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

W 187TH ST



W 187TH ST



CHICAGO HEIGHTS - GLENWOOD RD

CHICAGO HEIGHTS - GLENWOOD RD

TBM #1:
CUT "SQUARE" ON EASTERLY BASE ON CONC. FOUNDATION OF THIRD LIGHT POLE SOUTHWEST OF INTERSECTION (187TH & CHICAGO HEIGHTS GLENWOOD RD) MARKED A21.

ELEV. 611.77

N: 1778112.3057
E: 1177901.2058

LEGEND
[Dashed Line] PROPOSED SIDEWALK

[Grid of Dots] DETECTABLE WARNINGS

TBM #1:
CUT "SQUARE" ON EASTERLY BASE ON CONC. FOUNDATION OF THIRD LIGHT POLE SOUTHWESTERLY OF INTERSECTION (187TH & CHICAGO HEIGHTS GLENWOOD RD) MARKED A21.

ELEV. 611.77

N: 1778112.3057
E: 1177901.2058



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	DRAWN - JN	REVISED -
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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1" = 5' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	20
CONTRACT NO.				60N21

ILLINOIS FED. AID PROJECT

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TRAFFIC CONTROL GENERAL NOTES

1. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
2. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
3. DRUMS OR TYPE II BARRICADES SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FEET CENTER TO CENTER IN TANGENTS, 20 FEET CENTER TO CENTER IN TAPERS, AND 10 FEET CENTER TO CENTER IN RADII IN THE CONSTRUCTION WORK ZONE.
4. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
6. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER 7 DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES FOR THE INITIAL PLACEMENT AND A ONE-TIME REPLACEMENT HAVE BEEN PROVIDED FOR EACH STAGE. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO 7 DAYS OF SERVICE OR REPLACEMENT AFTER THE INITIAL REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
8. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED, COVERED OR TURNED AWAY FROM THE TRAFFIC IMMEDIATELY WHEN THEY ARE NO LONGER NECESSARY. WHEN A SIGN IS COVERED, ITS POST SHALL HAVE A REFLECTIVE 3" x 6" DELINEATOR INSTALLED. COST OF THE DELINEATOR IS INCLUDED IN TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
9. WORK ZONE SPEED LIMIT SHALL BE 30 MPH ON CHICAGO HEIGHTS - GLENWOOD ROAD.
10. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
11. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
12. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL PHASES OF CONSTRUCTION.
13. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, CORY JUCIUS (CORY.JUCIUS@ILLINOIS.GOV), A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
14. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL AS SHOWN IN PLANS. THIS WORK SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL - WATER BLASTING.
15. TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE PLACED AS INDICATED IN THE PLANS. FURNISHING, AND INSTALLING TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE IN ACCORDANCE WITH IDOT SPECIAL PROVISIONS, IDOT HIGHWAY STANDARDS, STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER.
16. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, REMOVED, DAMAGED, OR OTHERWISE AFFECTED BY CONSTRUCTION.
17. TEMPORARY CONCRETE BARRIER WALL SHALL BE CONTINUOUSLY PINNED TO THE PAVEMENT IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WHERE A 3.5 FOOT CLEAR ZONE FREE FROM DROP-OFFS, FIXED OBJECTS, OR OTHER OBSTACLES CANNOT BE PROVIDED BEHIND THE WALL.
18. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV, UNLESS OTHERWISE NOTED.
19. REMOVAL OF TEMPORARY PAVEMENT MARKINGS SHALL BE PAID FOR AS TEMPORARY PAVEMENT MARKING REMOVAL.
20. A MONO-DIRECTIONAL FLASHING AMBER BEACON SHALL BE MOUNTED ON THE FIRST TWO WARNING SIGNS ON EACH APPROACH DURING HOURS OF DARKNESS.
21. THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
22. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
23. THE CONTRACTOR SHALL PLACE ONE (1) CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH APPROPRIATE INFORMATION SHALL BE PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR DAY, "CHANGEABLE MESSAGE SIGN".

SEQUENCE OF CONSTRUCTION AND MAINTENANCE OF TRAFFIC

THE FOLLOWING SEQUENCE OF CONSTRUCTION AND MAINTENANCE OF TRAFFIC IS SUGGESTED. VARIATIONS MAY BE MADE WITH THE APPROVAL OF THE ENGINEER.

PROVIDE TRAFFIC CONTROL AS SHOWN ON THE SUGGESTED MAINTENANCE OF TRAFFIC PLANS. COORDINATE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES WITH THE EXISTING TRAFFIC PATTERNS AT THE ENDS OF THE PROJECT.

PRE-STAGE - CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC SIGNALS. REMOVE TRAFFIC SIGNAL POST FROM SE ISLAND ON 187TH STREET, REMOVE FOUNDATION AND LOWER HANDHOLE. PLACE TEMPORARY PAVEMENT. INSTALL PROPOSED CATCH BASINS, STORM SEWERS.
2. ALONG EB LANE, REMOVE EXISTING SIDEWALK CURB AND GUTTER. REMOVE SOUTH BRIDGE SIDEWALK AND PARAPET.
3. PLACE REMAINDER OF PAVEMENT MARKING TAPE TYPE IV AND CONCRETE BARRIER AS SHOWN IN PRE-STAGE STAGING PLAN.

PRE-STAGE - MAINTENANCE OF TRAFFIC

1. USE DAILY LANE CLOSURE HIGHWAY STANDARD 701502 TO CLOSE OUTSIDE E.B. LANE.
2. USE HIGHWAY STANDARD 701801 TO PERMANENTLY CLOSE SIDEWALK. PLACE PAVEMENT MARKING TAPE, TYPE IV AND TEMPORARY CONCRETE BARRIER AS PER PRE-STAGE STAGING PLAN.
3. USE HIGHWAY STANDARD 701502 FOR LANE CLOSURES TO INSTALL PAVEMENT MARKING, TAPE, TYPE IV AND TEMPORARY CONCRETE BARRIER FOR STAGE I TRAFFIC.

STAGE I - CONSTRUCTION

1. INSTALL STORM SEWER AND PRECAST BOX CULVERT ON NORTH SIDE OF GLENWOOD RD.
2. PLACE CLASS D PATCHES.
3. ON NORTH SIDE OF BRIDGE, REMOVE 8 DECK BEAMS AND PLACE 7 NEW DECK BEAMS.
4. PLACE 5" CONCRETE OVERLAY.
5. CONSTRUCT NORTH PORTIONS OF APPROACH PAVEMENT AND FLEXIBLE CONNECTOR PAVEMENT.
6. REMOVE CURB AND GUTTER, SIDEWALK AND GUARDRAIL.
7. PLACE TEMPORARY PAVEMENT AND HMA RAMPS FOR STAGE II TRAFFIC.
8. AT THE END OF STAGE I, RELOCATE TEMPORARY CONCRETE BARRIER AND PAVEMENT MARKING TAPE, TYPE IV AS SHOWN IN STAGE II STAGING PLAN.

STAGE I - MAINTENANCE OF TRAFFIC

1. USE HIGHWAY STANDARD 701501 TO INSTALL CLASS D PATCHES.
1. MAINTAIN TRAFFIC AS SHOWN IN STAGE I SUGGESTED STAGING PLANS. PERMANENTLY CLOSE SIDEWALK ALONG WESTBOUND LANES.

STAGE II - CONSTRUCTION

1. ON SOUTH SIDE OF BRIDGE, REMOVE 7 DECK BEAMS AND PLACE 8 NEW DECK BEAMS.
2. PLACE 5" CONCRETE OVERLAY, SIDEWALK AND PARAPET ON BRIDGE.
3. CONSTRUCT CURB AND GUTTER, SIDEWALK AND GUARDRAIL.
4. REINSTALL ROADWAY LIGHTING.

STAGE II - MAINTENANCE OF TRAFFIC

1. MAINTAIN TRAFFIC AS SHOWN IN STAGE II SUGGESTED STAGING PLANS. CLOSE NB CHICAGO HEIGHTS - GLENWOOD ROAD RIGHT TURN LANE.

STAGE III - CONSTRUCTION

1. ALONG WB EDGE OF PAVEMENT, ON BRIDGE, PLACE SIDEWALK AND PARAPET. ALONG ROADWAY REMOVE TEMPORARY PAVEMENT AND PLACE CURB AND GUTTER, SIDEWALK AND GUARDRAIL.
2. REPLACE ISLAND IN S.E. QUADRANT, ADJUST HANDHOLE TO FINISH GRADE AND REINSTALL TRAFFIC SIGNAL POST.
3. RESURFACE PAVEMENT AND PLACE FINAL STRIPING AND SIGNAGE.

STAGE III - MAINTENANCE OF TRAFFIC

1. MAINTAIN TRAFFIC AS SHOWN IN STAGE III SUGGESTED STAGING PLANS.
2. USE STD. 701502 AND 701701 FOR DAILY LANE CLOSURES.

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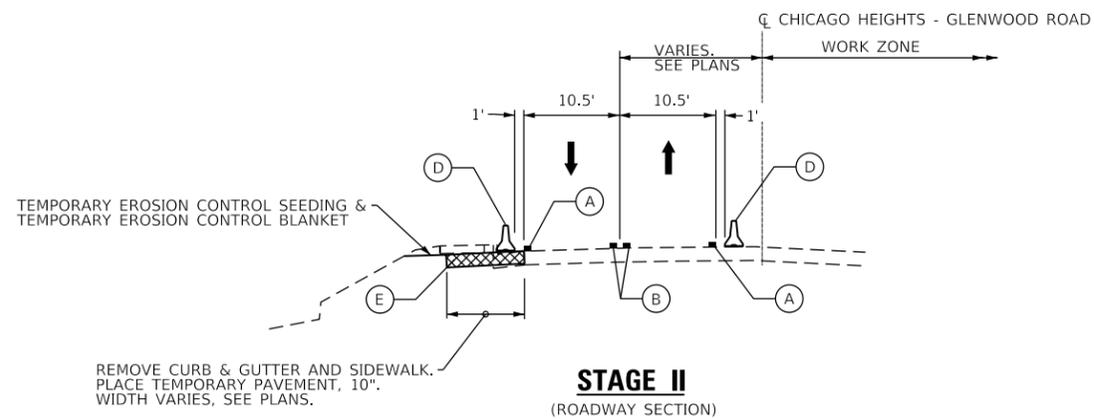
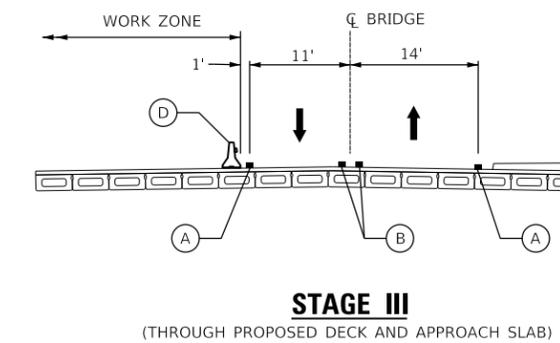
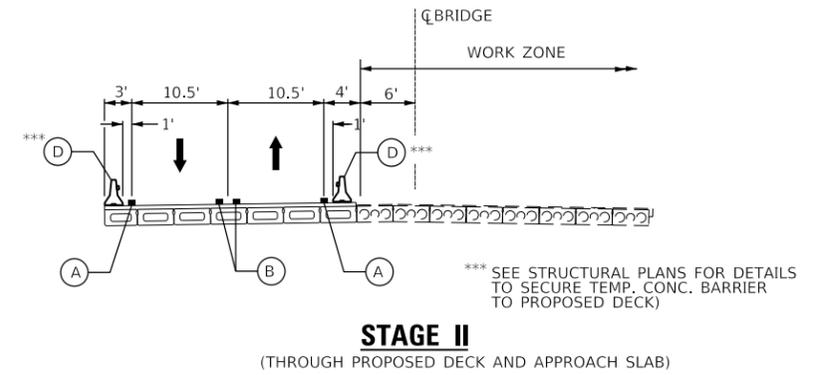
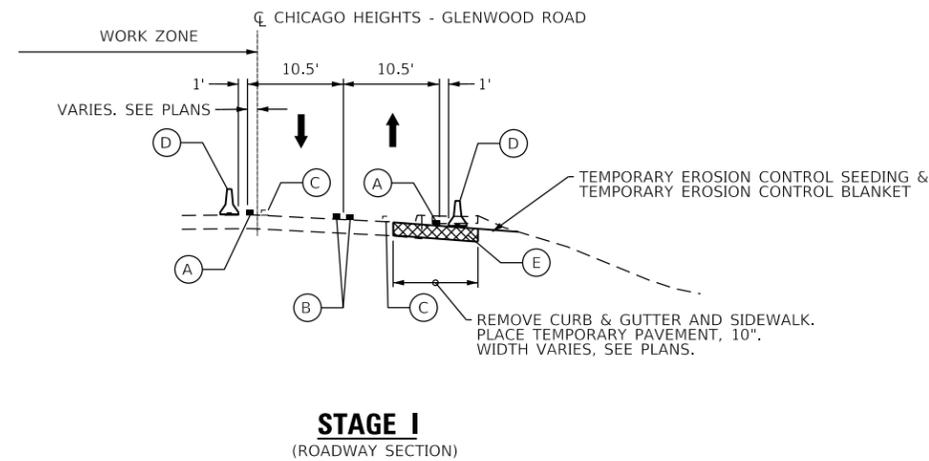
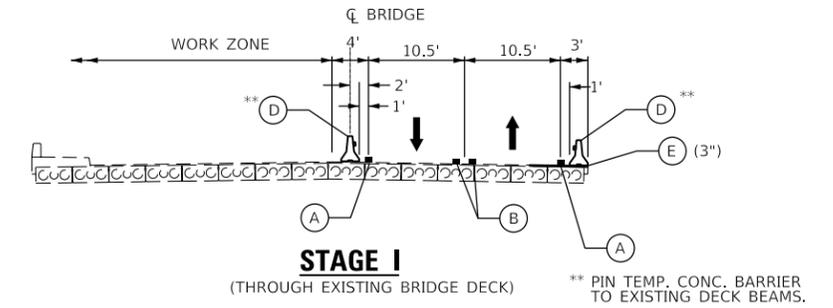
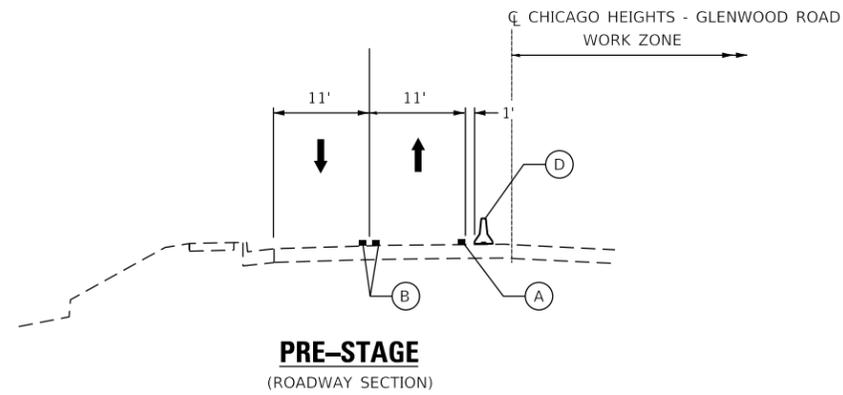
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**SUGGESTED TRAFFIC CONTROL AND PROTECTION
NOTES AND DETAILS
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SHEET OF SHEETS TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	21
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				



LEGEND

- (A) PAVEMENT MARKING TAPE, TYPE IV, 4" (WHITE)
- (B) PAVEMENT MARKING TAPE, TYPE IV, 4" (YELLOW) WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS @ 40' c-c. (PAVEMENT MARKING NOT ON BRIDGE)
- (C) PAVEMENT MARKING REMOVAL - WATER BLASTING
- (D) TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS, TYPE C
- (E) TEMPORARY PAVEMENT, 3" ON BRIDGE AND 10" ON ROADWAY

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

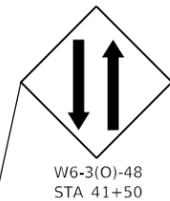
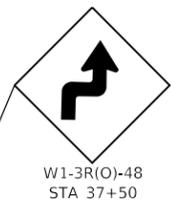
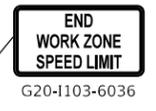
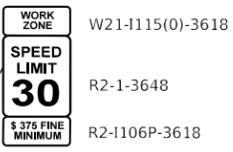
**SUGGESTED TRAFFIC CONTROL AND PROTECTION
TYPICAL SECTIONS
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

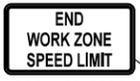
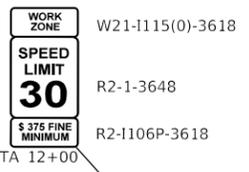
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3603	2010-141-B	COOK	114	22
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



*1 TEMPORARY CONCRETE BARRIER FROM STA 15+75 TO STA 33+53 CONTINUOUSLY PINNED TO PAVEMENT AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



PAVEMENT MARKING TAPE, TYPE IV, 4 INCH (DOUBLE YELLOW, 2' DASH - 6' SKIP)



IMPACT ATTENUATOR, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2
TEMPORARY PAVEMENT, 10" (194 SY) WIDTH VARIES 8' TO 10.5'

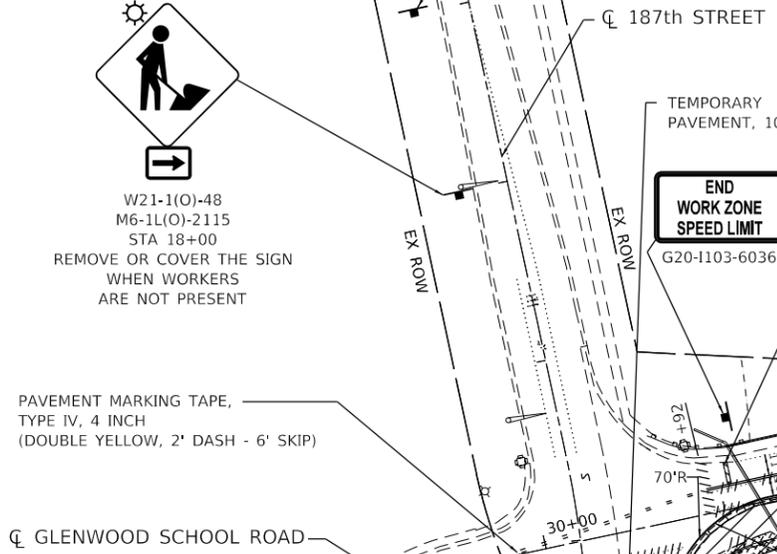
INSTALL STORM SEWER IN PRE-STAGE.
-CLASS D PATCH, TYPE III, 12" (WB) (16 SY) &
-CLASS D PATCH, TYPE II, 12" (EB) (10 SY)

TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER/RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
- TYPE III BARRICADES
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

NOTE

PLACE PLATE OVER THE TOP OF NEW CATCH BASINS AND INSTALL FRAMES AND GRATES IN STAGES II AND III. COST OF PLATE IS INCLUDED IN TRAFFIC CONTROL AND PROTECTION (SPECIAL).



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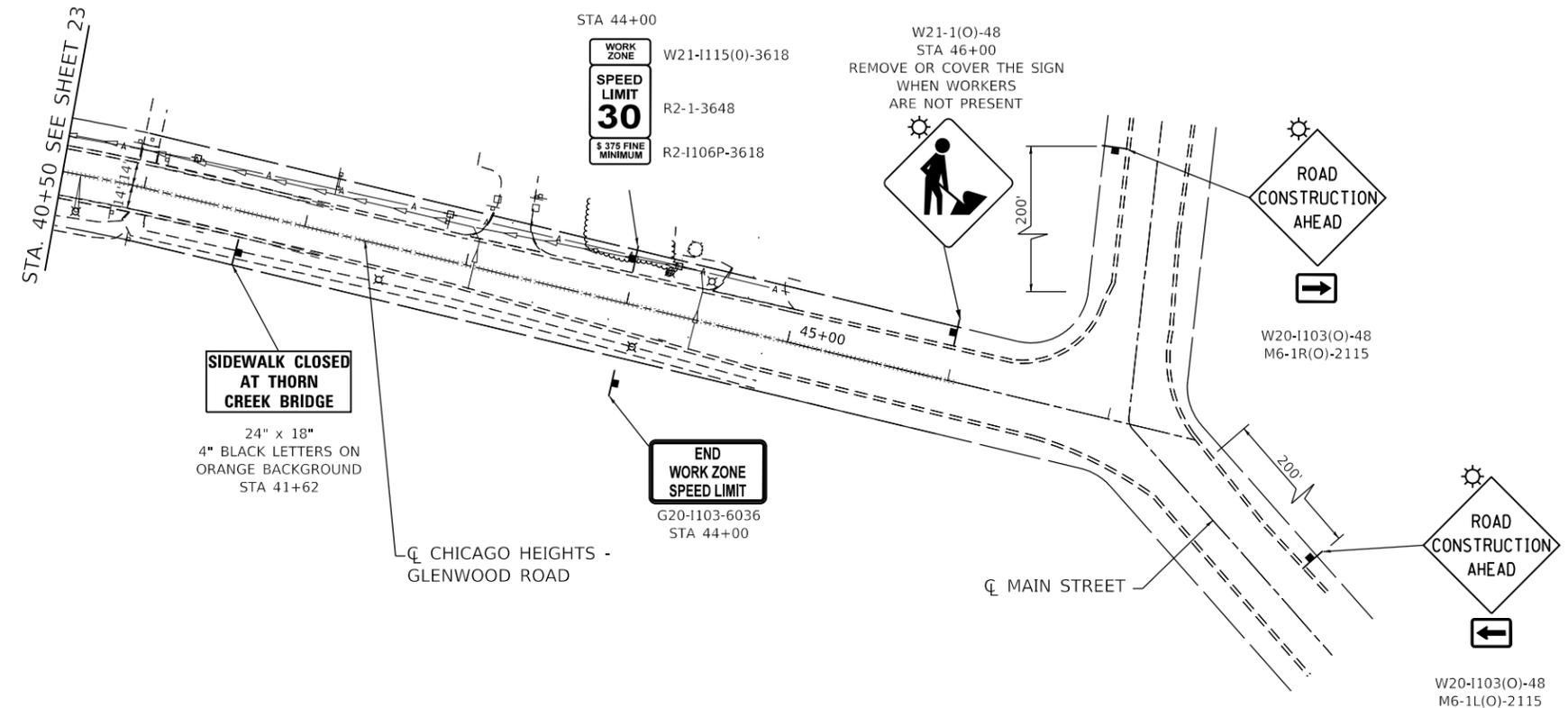
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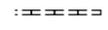
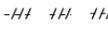
SUGGESTED TRAFFIC CONTROL AND PROTECTION PRE-STAGE - 1 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK			
SCALE: 1"=50'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	23
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

*1 TEMPORARY CONCRETE BARRIER FROM STA 15+75 TO STA 33+53 CONTINUOUSLY PINNED TO PAVEMENT AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER / RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

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DEPARTMENT OF TRANSPORTATION**

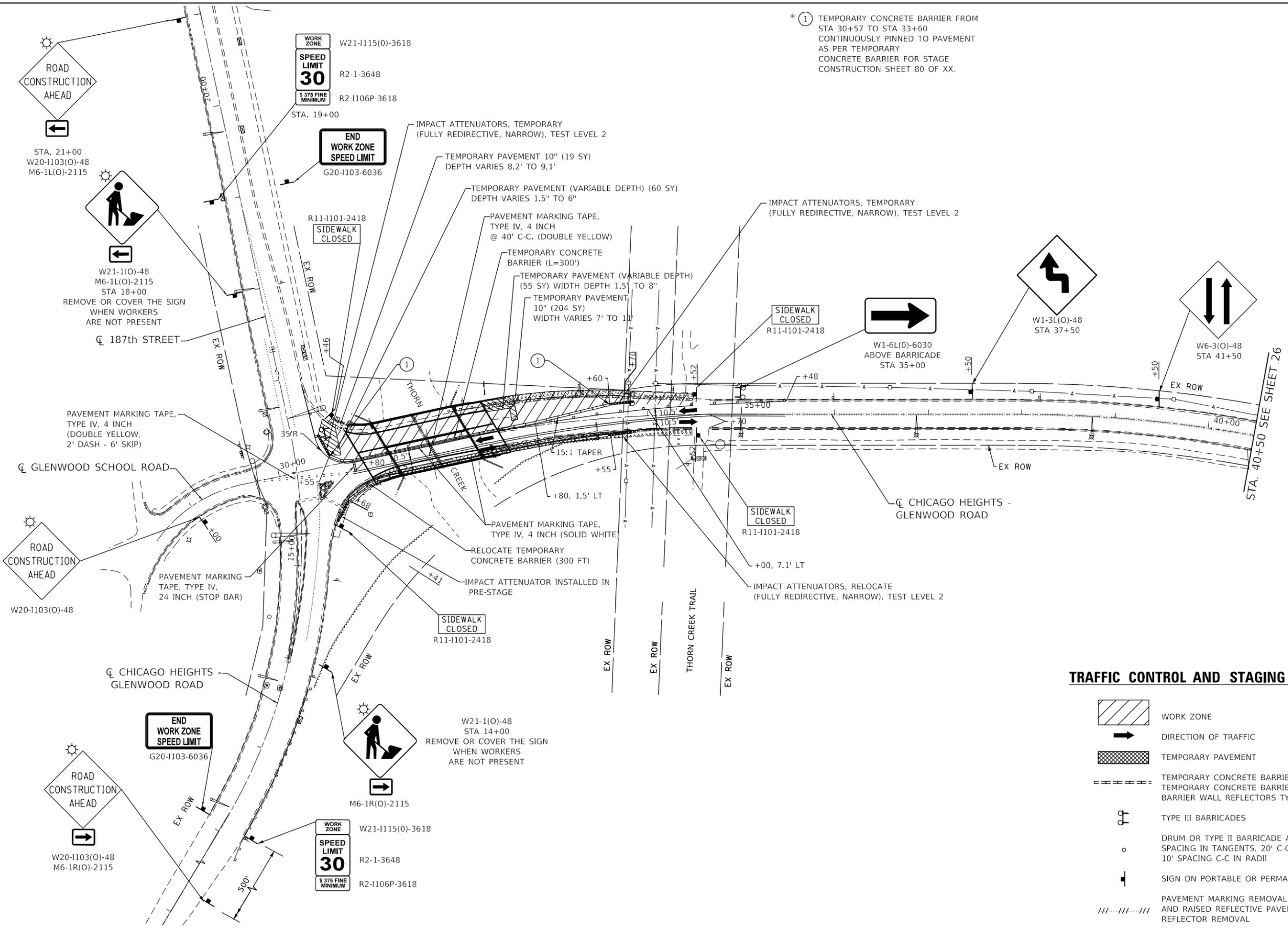
**SUGGESTED TRAFFIC CONTROL AND PROTECTION
PRE-STAGE - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

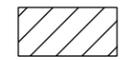
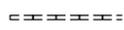
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3603	2010-141-B	COOK	114	24
CONTRACT NO.				60N21
ILLINOIS FED. AID PROJECT				



* ① TEMPORARY CONCRETE BARRIER FROM STA 30+57 TO STA 33+60 CONTINUOUSLY PINNED TO PAVEMENT AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER / RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

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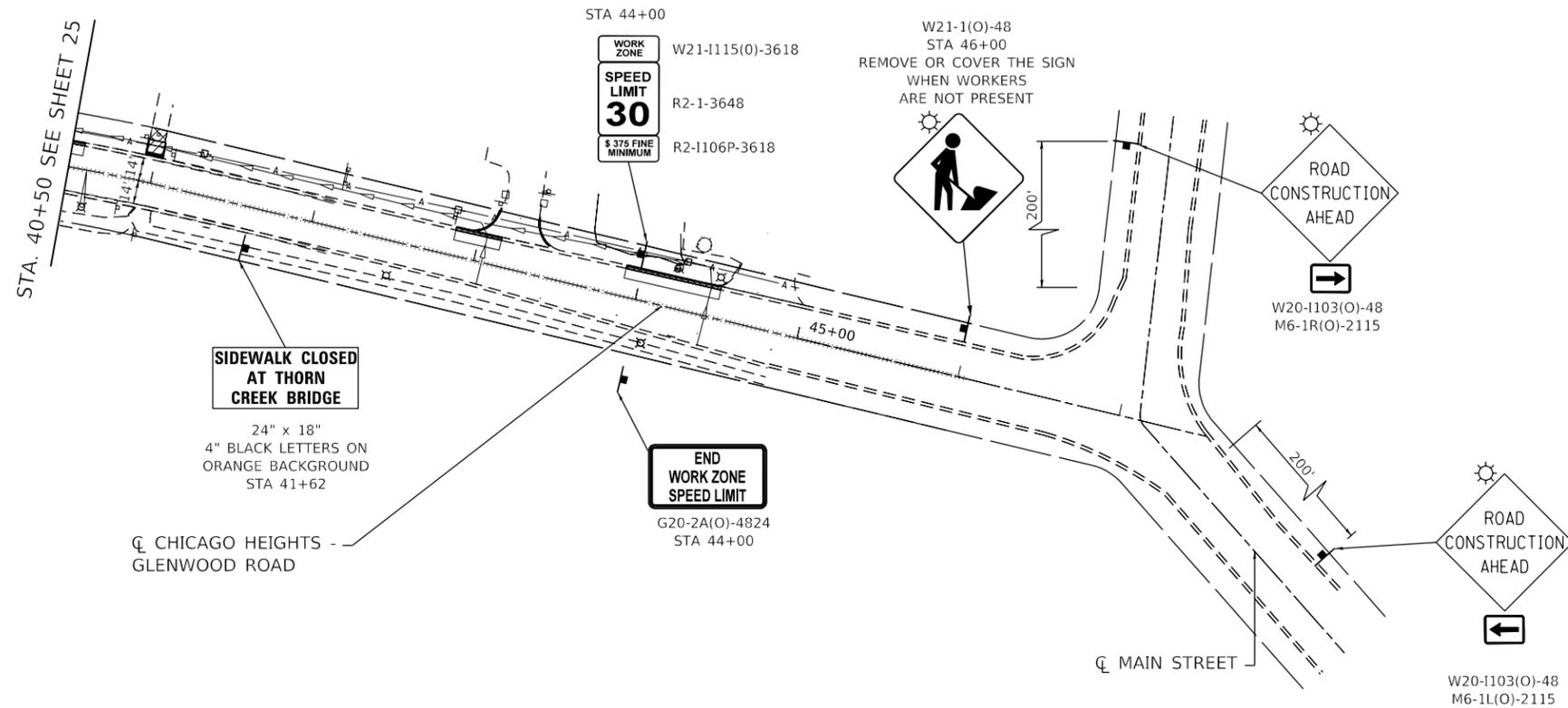
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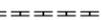
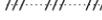
SUGGESTED TRAFFIC CONTROL AND PROTECTION			
STAGE I - 1			
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK			
SCALE: 1"=50'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	25
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

* ① TEMPORARY CONCRETE BARRIER FROM STA 30+57 TO STA 33+60 CONTINUOUSLY PINNED TO PAVEMENT AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER / RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

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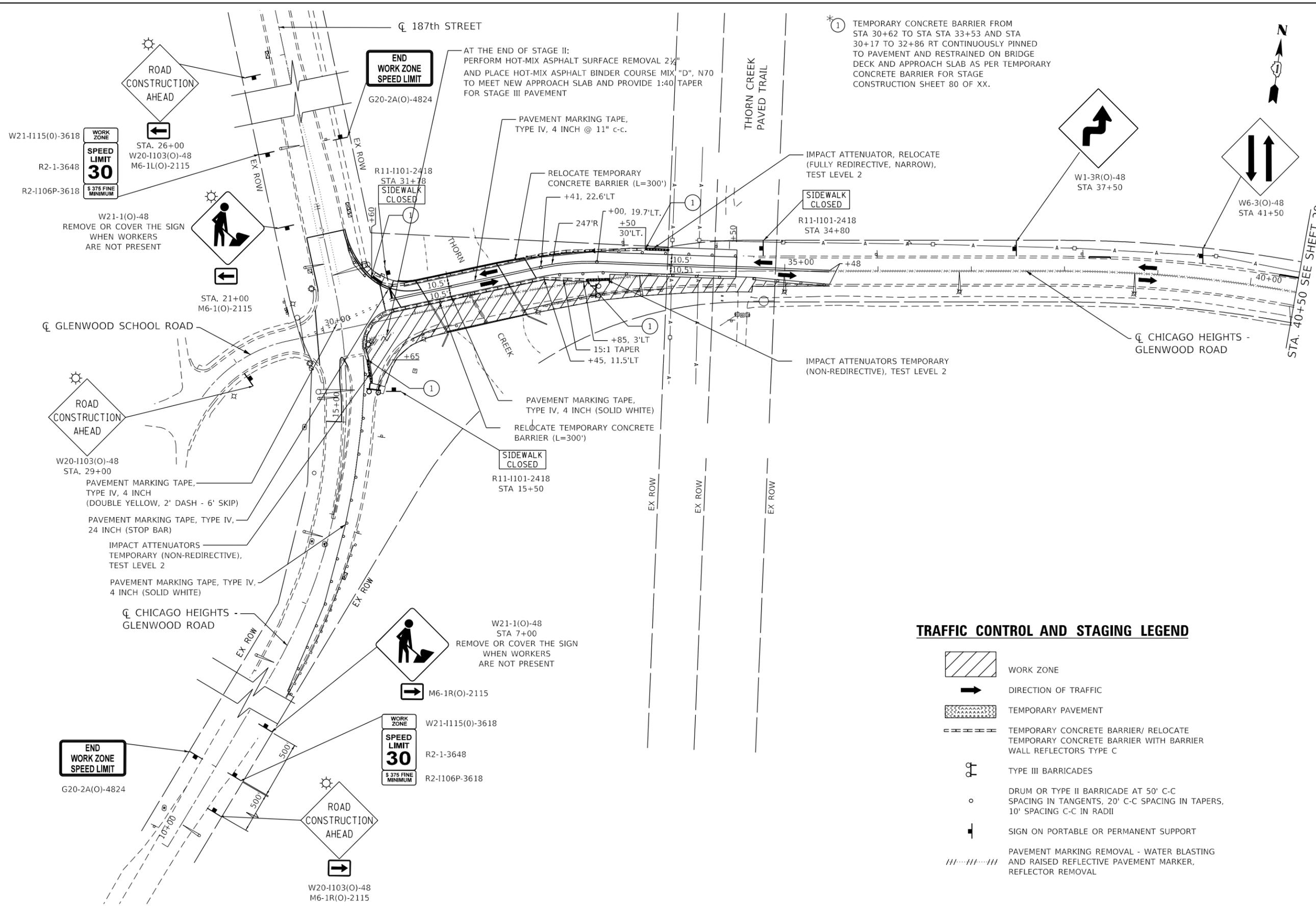
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DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION
STAGE I - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	26
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

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① TEMPORARY CONCRETE BARRIER FROM STA 30+62 TO STA STA 33+53 AND STA 30+17 TO 32+86 RT CONTINUOUSLY PINNED TO PAVEMENT AND RESTRAINED ON BRIDGE DECK AND APPROACH SLAB AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.

AT THE END OF STAGE II: PERFORM HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2" AND PLACE HOT-MIX ASPHALT BINDER COURSE MIX "D", N70 TO MEET NEW APPROACH SLAB AND PROVIDE 1:40 TAPER FOR STAGE III PAVEMENT

TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER/ RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL



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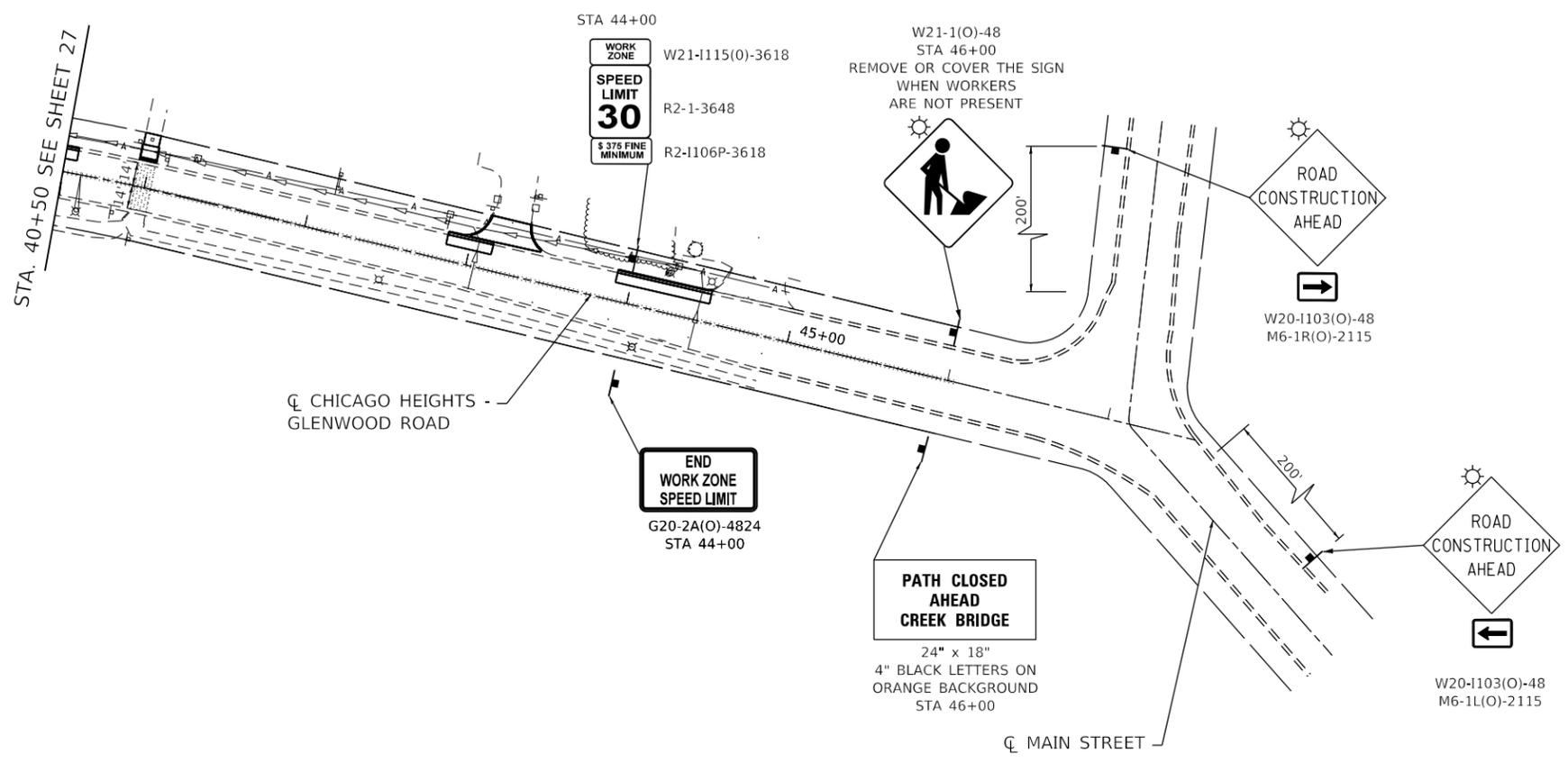
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DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION
STAGE II - 1
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	27
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

* ① TEMPORARY CONCRETE BARRIER FROM STA 30+62 TO STA 33+53 AND STA 30+17 TO STA 32+86 CONTINUOUSLY PINNED TO PAVEMENT AND RESTRAINED ON BRIDGE DECK AND APPROACH SLAB AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER / RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

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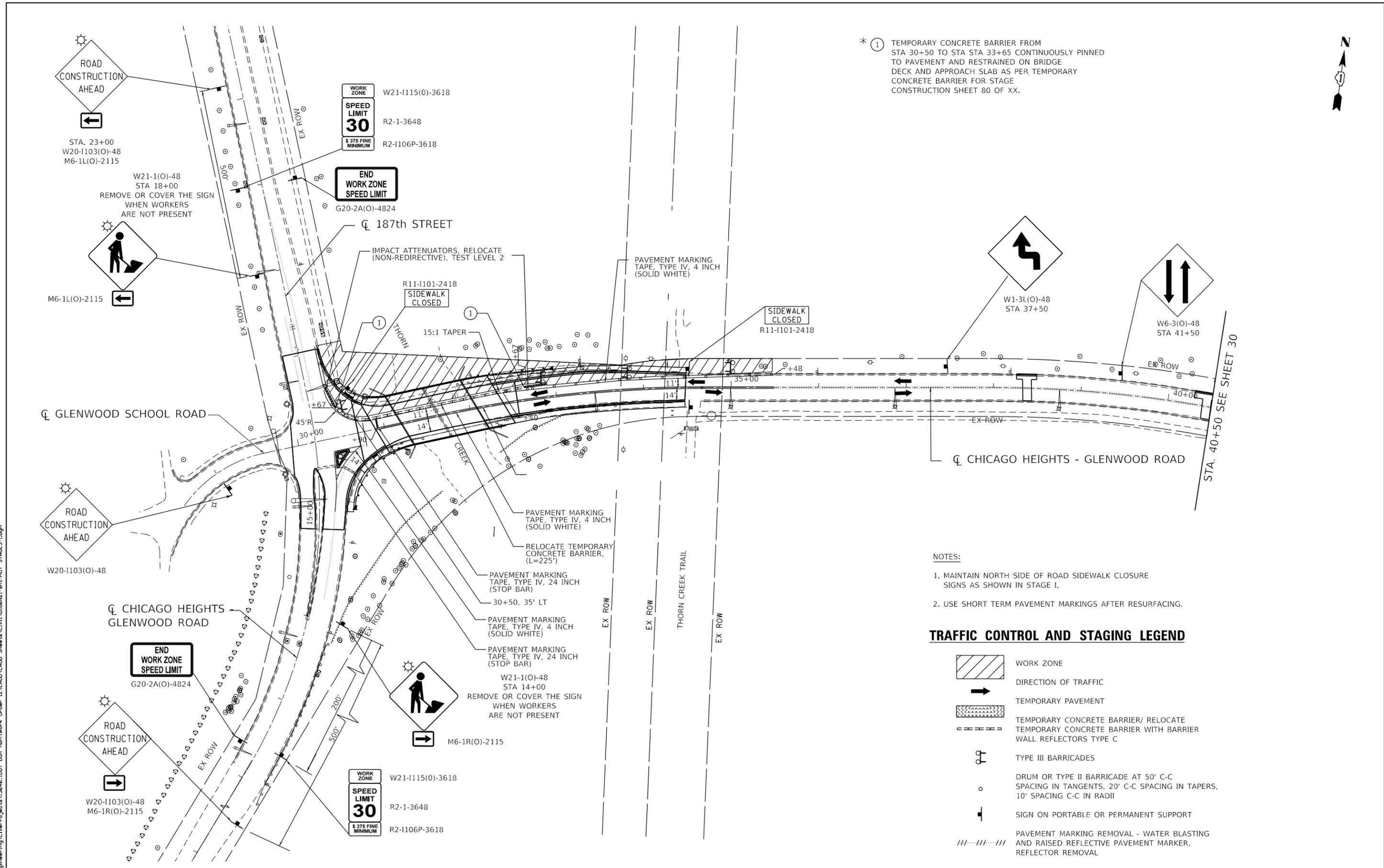
**SUGGESTED TRAFFIC CONTROL AND PROTECTION
STAGE II - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	28
CONTRACT NO.				60N21
ILLINOIS FED. AID PROJECT				



* ① TEMPORARY CONCRETE BARRIER FROM STA 30+50 TO STA STA 33+65 CONTINUOUSLY PINNED TO PAVEMENT AND RESTRAINED ON BRIDGE DECK AND APPROACH SLAB AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 80 OF XX.



NOTES:

1. MAINTAIN NORTH SIDE OF ROAD SIDEWALK CLOSURE SIGNS AS SHOWN IN STAGE I.
2. USE SHORT TERM PAVEMENT MARKINGS AFTER RESURFACING.

TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER/ RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
- TYPE III BARRICADES
- DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

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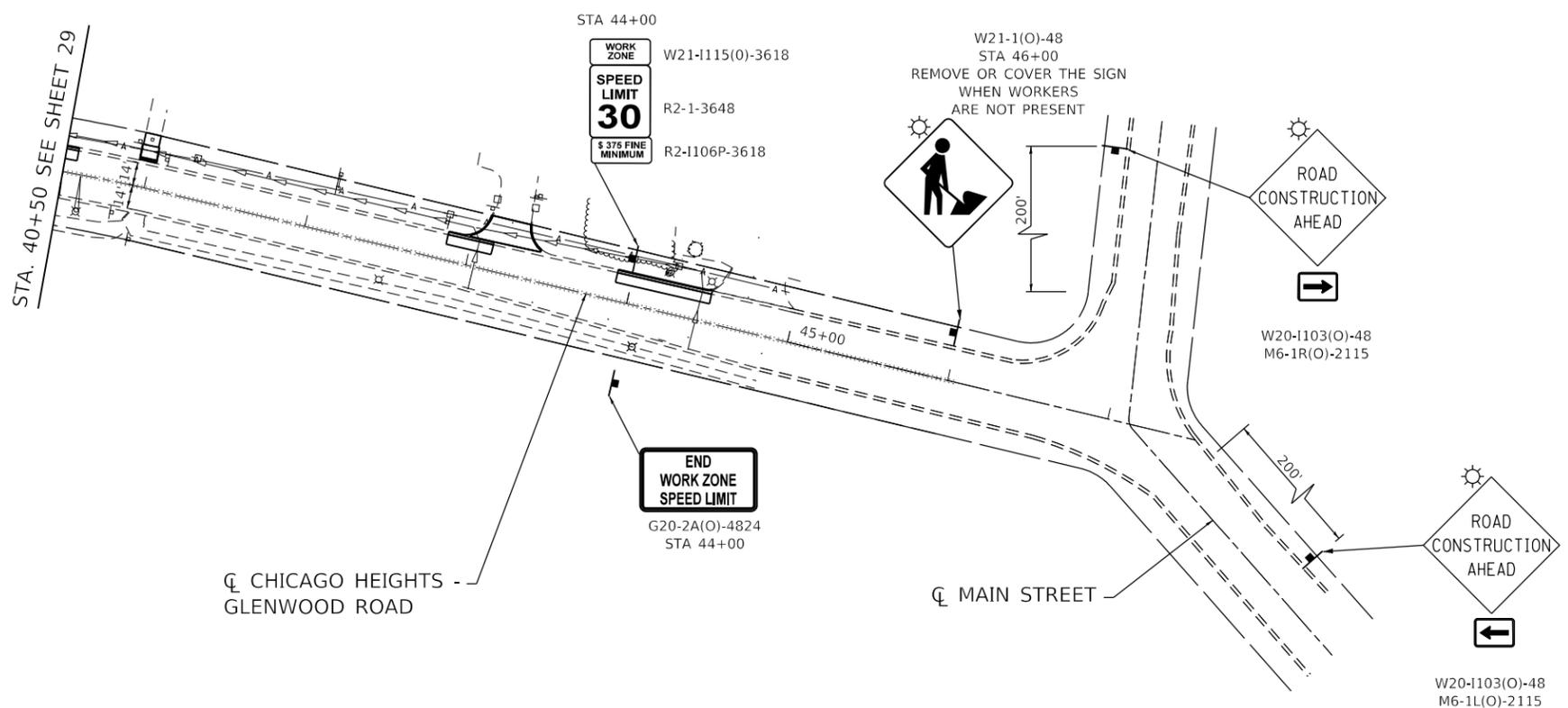
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION
STAGE III - 1
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

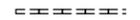
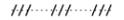
SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	29
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

*1 TEMPORARY CONCRETE BARRIER FROM STA 30+50 TO STA STA 33+65 CONTINUOUSLY PINNED TO PAVEMENT AND RESTRAINED ON BRIDGE DECK AND APPROACH SLAB AS PER TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SHEET 88 OF XX.



TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  TEMPORARY PAVEMENT
-  TEMPORARY CONCRETE BARRIER / RELOCATE TEMPORARY CONCRETE BARRIER WITH BARRIER WALL REFLECTORS TYPE C
-  TYPE III BARRICADES
-  DRUM OR TYPE II BARRICADE AT 50' C-C SPACING IN TANGENTS, 20' C-C SPACING IN TAPERS, 10' SPACING C-C IN RADII
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

FILE NAME = Q:\Engineering\LiveProjects\13040_IDOT DUR HBM\Work Order\12\CADD\CADD Sheets\C:\1\1\60N21-sht-MOT STAGE3-2.dgn



USER NAME = johnn	DESIGNED - AB	REVISED -
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PLOT SCALE = 100.0000' / in.	CHECKED - TGM	REVISED -
PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED TRAFFIC CONTROL AND PROTECTION
STAGE III - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	30
CONTRACT NO.				60N21
ILLINOIS FED. AID PROJECT				

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. 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).
2. 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.
3. 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.
4. ALL RUNOFF ORIGINATING ON DISTURBED AREAS ASSOCIATED WITH THIS PROJECT WILL PASS THROUGH ONE OR MORE MEASURES THAT WILL MINIMIZE THE OFF-SITE SEDIMENT IMPACTS OF THE CONSTRUCTION ACTIVITIES.
5. THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREA AS THE PROJECT PROGRESSES AND INSTALL EROSION PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE EARTHEN MATERIAL TO THE SATISFACTION OF THE ENGINEER OR AUTHORIZED IDOT PERSONNEL.
6. STABILIZATION OF CUT OR FILL SLOPES WITH TEMPORARY OR PERMANENT EROSION CONTROL MEASURES IS REQUIRED WHENEVER THE CUT OR FILL ACTIVITY REACHES 10-FT VERTICALLY OR THE FINISHED SLOPE EQUALS 30-FT, WHICHEVER IS MORE RESTRICTIVE. ONCE THE STABILIZATION MEASURES ARE INSTALLED, THE PLACEMENT OF FILL OR EXCAVATION ACTIVITIES ARE ALLOWED TO PROCEED.
7. 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.
8. 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:
 - A. DISTURBED AREAS OF THE PROJECT SITE THAT HAVE NOT BEEN FULLY STABILIZED.
 - B. STRUCTURAL CONTROL MEASURES (SUCH AS PERIMETER EROSION BARRIER, ETC.)
 - C. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE PROJECT SITE.
 - D. AN ADDITIONAL INSPECTION OF THE ITEMS LISTED ABOVE MUST BE MADE 24-HOURS AFTER A 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.
9. ALL THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED DURING THE CONSTRUCTION SEASON, AS WELL AS OVER THE WINTER SHUTDOWN PERIOD AND OTHER DAYS WHEN THE PROJECT IS CLOSED DOWN FOR A LONGER DURATION. ANY CONTROL MEASURES FILLED MORE THAN 75% MUST BE CLEANED AND RESET AND THESE SPOILS REMOVED TO AN APPROVED SITE.
10. SALVAGED TOPSOIL SHALL BE PLACED ON WELL DRAINED LAND AWAY FROM INTERMITTENT AND ACTIVE DRAINAGE PATHS WITH THE APPROPRIATE RUNOFF CONTROL AND SEDIMENT CONTROL MEASURES INSTALLED AROUND THE STORAGE SITE. IMMEDIATELY AFTER THE FINAL SHAPING OF THE STOCKPILE, THE TOPSOIL WILL BE STABILIZED IN ACCORDANCE WITH THE METHOD APPROVED BY IDOT. THE CONTRACTOR WILL PROVIDE ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE.
11. EXCAVATION TO BE USED FOR EMBANKMENTS SHALL NOT BE STOCKPILED UNLESS PERIMETER CONTROLS ARE UTILIZED. WHEN THIS MATERIAL IS STOCKPILED FOR THE CONVENIENCE OF THE CONTRACTOR, THE COST OF THE CONTROLS WILL BE BORNE BY THE CONTRACTOR. IF THE MATERIAL IS STOCKPILED AT THE DIRECTION OF THE ENGINEER, THE DEPARTMENT WILL ASSUME THE COST OF INSTALLING AND MAINTAINING THE CONTROLS.
12. 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:
 - A. ALL AREAS BEING STABILIZED ARE 1:3 SLOPES OR FLATTER
 - B. THE CONTRACTOR BEARS THE COST OF PREPARING THE SEED BED AND STABILIZING THE AREA WITH TEMPORARY STABILIZATION WITH MULCH METHOD 2.
 - C. ALL REQUIRED SEDIMENT CONTROL MEASURES FOR THE SECTION OF ROAD IN QUESTION HAVE BEEN INSTALLED AND ARE BEING MAINTAINED.
13. TOPSOIL PLACEMENT: TOPSOIL WILL BE PLACED ON FINAL SLOPES WHICH WILL NOT BE DISTURBED BY FUTURE CONSTRUCTION. TOPSOIL WILL NOT BE PLACED ON SURFACES WHICH WILL BE PAVED IN THE FUTURE NOR ON TEMPORARY STEEP SLOPES.
14. IN AREAS WHERE A PERMANENT VEGETATIVE COVER IS PRACTICABLE AND INCLUDED IN THE CONTRACT DOCUMENTS, A SPECIAL EFFORT SHOULD BE MADE TO ESTABLISH A COVER AS SOON AS A DISTURBED AREA IS BROUGHT TO FINAL GRADE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.
15. THE CONTRACTOR'S REPRESENTATIVE AND THE ENGINEER MUST KEEP A WRITTEN REPORT SUMMARIZING THE REQUIRED INSPECTIONS. THE REPORTS MUST BE KEPT AT THE SITE DURING CONSTRUCTION. THE REPORT MUST ALSO BE RETAINED FOR THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED.
16. ANY SEDIMENT LADEN DEWATERING DISCHARGE MUST BE DIRECTED TO AN APPROVED SEDIMENT TRAPPING CONTROL MEASURE PRIOR TO RELEASE FROM THE PROJECT SITE.
17. NO WORK IS ALLOWED BEYOND THE PERMITTED AREA. ANY WORK WITHIN A SWALE OR DITCH CAPABLE OF CONVEYING WATER MUST BE CONDUCTED IN THE DRY. PROVISIONS MUST BE MADE TO BYPASS PUMP OR DEWATER ANY AREAS IN WHICH WORK WILL BE CONDUCTED. IN HIGH FLOW CHANNELS WHERE DEWATERING IS NOT POSSIBLE OR PRACTICAL, SILT FENCE OR SEDIMENT CURTAINS MAY BE INSTALLED PARALLEL TO THE STREAM BANK. IN NO CASE WILL THE CURTAINS BE INSTALLED PERPENDICULAR TO THE FLOW. DEWATERING MUST BE DISCHARGED TO A STABLE, NON-ERODIBLE SURFACE AND IN-STREAM WORK BARRIERS MUST BE COMPOSED OF NON-ERODIBLE MATERIAL.
18. SEEDING USAGE

CLASS 2A:
USED ON FINAL DISTURBED CONSTRUCTION AREAS INDICATED ON THE PLANS.

CLASS 4:
USED ON FINAL DISTURBED CONSTRUCTION AREAS INDICATED ON THE PLANS.

TEMPORARY EROSION CONTROL SEEDING:
USED IN AREAS REQUIRING SHORT TERM TEMPORARY SEEDING DURING CONSTRUCTION.
19. THE CONTRACTOR MUST COOPERATE WITH THE ENGINEER AND HIS/HER REPRESENTATIVE WHO WILL MAKE SITE VISITS TO REVIEW THE COMPLIANCE OF THE PLANS IN THE FIELD AND AUDIT IF NECESSARY. THE CONTRACTOR MUST PREPARE THE LOGS AND RECORDS WHEN REQUIRED AND SUBMIT TO IDOT AND/OR APPROPRIATE AGENCIES.
20. THE INSTALLATION, MAINTENANCE, REMOVAL AND RESTORATION OF THE AREA DISTURBED BY THE PLACEMENT OF THE PERIMETER EROSION BARRIER ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER. AFTER ALL PERIMETER EROSION BARRIER IS REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION CONTROL BARRIER MUST BE RESTORED TO THEIR ORIGINAL CONDITION.
21. THE CONTRACTOR WILL PROVIDE THE ENGINEER A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THIS IS IMPORTANT WHERE NEW STORM SEWER CONNECTS TO EXISTING CULVERTS. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE ESPECIALLY WHEN RAIN IS FORECAST, SO THAT FLOW WILL NOT BE EROSION WILL REDUCE THE POTENTIAL FOR THE OFFSITE DISCHARGE OF SEDIMENT-BEARING WATERS. THE LACK OF AN APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN ESC DEFICIENCY DEDUCTION.
22. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

23. STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN ONE (1) DAY AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF FOURTEEN (14) OR MORE CALENDAR DAYS.
24. EROSION CONTROL ITEMS ARE CONSIDERED TO BE A HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER.
26. THE CONTRACTOR IS REQUIRED TO PROVIDE WASHOUT FACILITIES TO COMPLY WITH EROSION CONTROL PERMITS.
27. 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 PICK UP 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 NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER.

SOIL EROSION AND SEDIMENT CONTROL STRATEGY:

1. INSTALL TRAFFIC CONTROL DEVICES.
2. ERECT PERIMETER EROSION BARRIERS AND TEMPORARY FENCES AS SHOWN ON THE PLANS.
3. INSTALL INLET FILTERS AS SHOWN ON THE PLANS.
4. ESTABLISH STABILIZED CONSTRUCTION ENTRANCES.
5. REMOVE EXISTING PAVEMENTS, SIDEWALKS AND STRUCTURES AS SHOWN ON THE PLANS.
6. CONSTRUCT PROJECT IMPROVEMENTS AS SHOWN ON THE PLANS.
7. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION.
8. TEMPORARY STABILIZATION OF EACH STAGE SHOULD BE COMPLETED BEFORE WORK BEGINS ON SUBSEQUENT STAGES.
9. STABILIZE DISTURBED AREAS WITH TEMPORARY EROSION CONTROL MEASURES. USE THE PERMANENT SEEDING WITH EROSION CONTROL BLANKET AS SHOWN ON THE PLANS FOR PERMANENT STABILIZATION.
10. WHEN THE PERMANENT STABILIZATION IS ESTABLISHED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

HIGHWAY STANDARD

STD. NO.	TITLE
280001	TEMPORARY EROSION CONTROL SYSTEMS

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												→

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USER NAME = johnn	DESIGNED - MN	REVISED -
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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

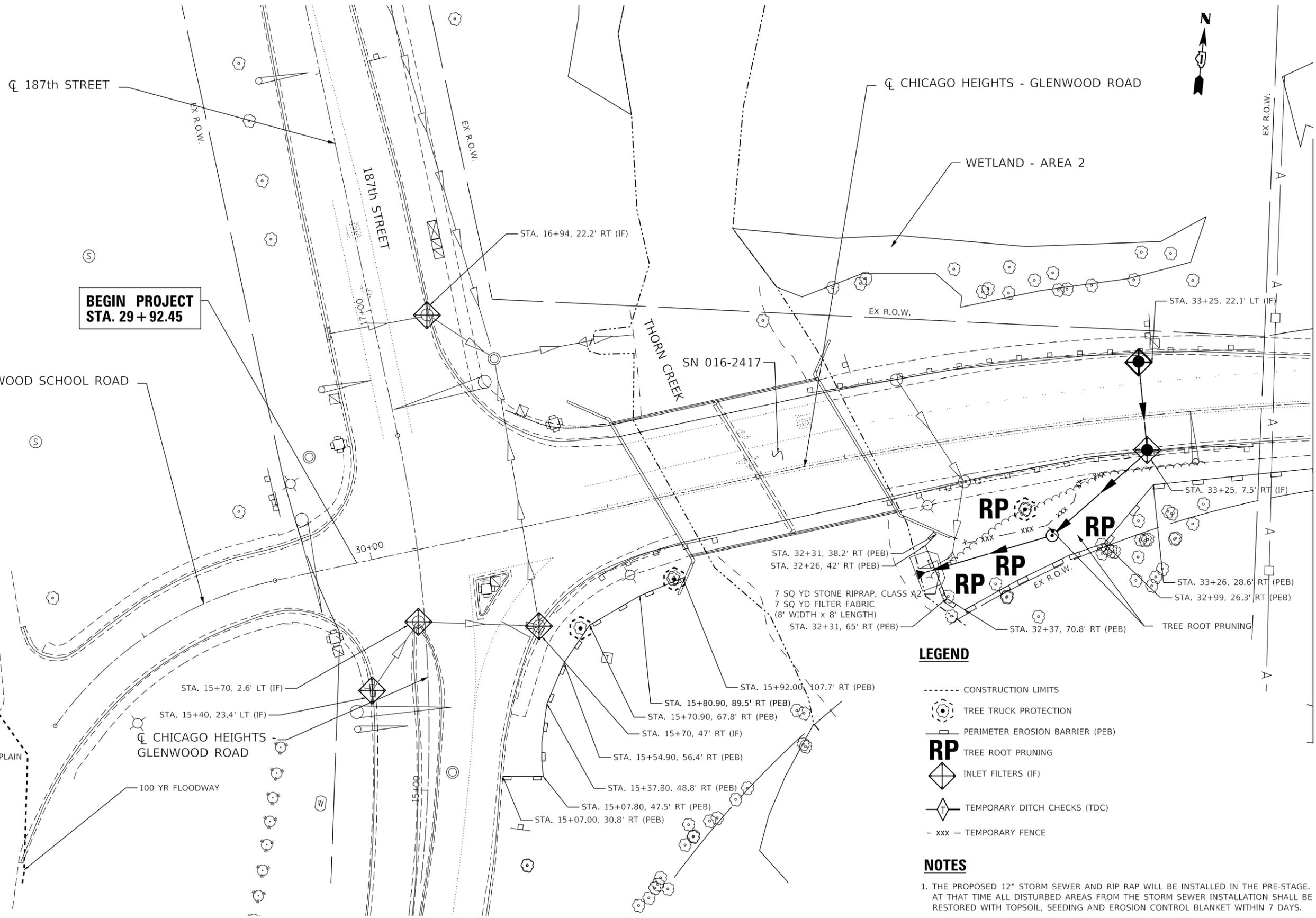
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL NOTES
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	31
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

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**BEGIN PROJECT
STA. 29 + 92.45**

LEGEND

- CONSTRUCTION LIMITS
- ⊗ TREE TRUCK PROTECTION
- ▭ PERIMETER EROSION BARRIER (PEB)
- RP** TREE ROOT PRUNING
- ◇ INLET FILTERS (IF)
- ⊓ TEMPORARY DITCH CHECKS (TDC)
- xxx - TEMPORARY FENCE

NOTES

1. THE PROPOSED 12" STORM SEWER AND RIP RAP WILL BE INSTALLED IN THE PRE-STAGE. AT THAT TIME ALL DISTURBED AREAS FROM THE STORM SEWER INSTALLATION SHALL BE RESTORED WITH TOPSOIL, SEEDING AND EROSION CONTROL BLANKET WITHIN 7 DAYS.
2. TREE ROOT PRUNING LIMITS SHALL BE VERIFIED DURING CONSTRUCTION BASED ON THE DRIP LINE.



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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

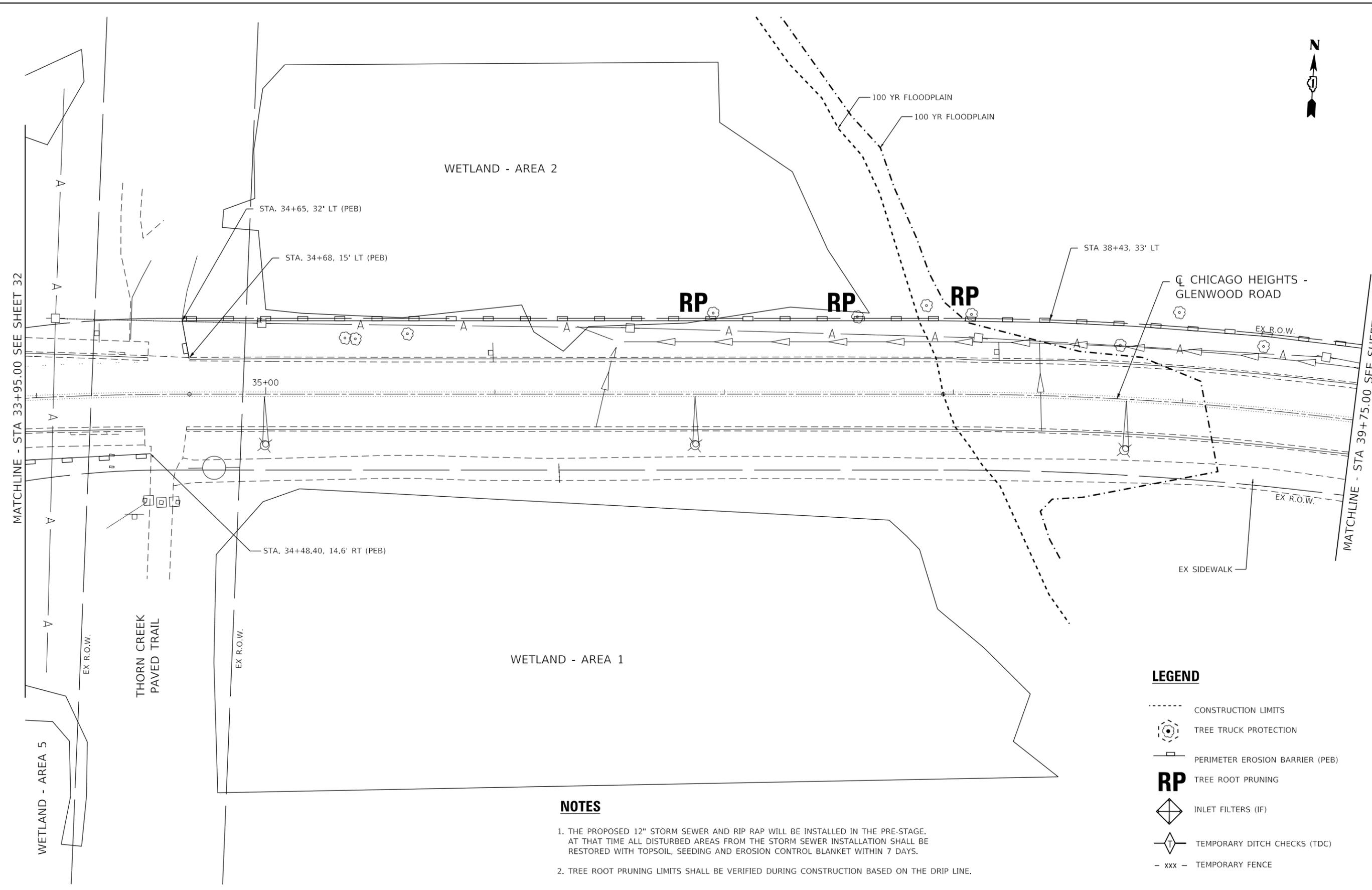
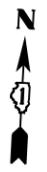
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS - PRE-STAGE - 1
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	32
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

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

MATCHLINE - STA 33+95.00 SEE SHEET 33



RP **RP** **RP**

WETLAND - AREA 2

WETLAND - AREA 1

MATCHLINE - STA 33+95.00 SEE SHEET 32

MATCHLINE - STA 39+75.00 SEE SHEET 34

NOTES

1. THE PROPOSED 12" STORM SEWER AND RIP RAP WILL BE INSTALLED IN THE PRE-STAGE. AT THAT TIME ALL DISTURBED AREAS FROM THE STORM SEWER INSTALLATION SHALL BE RESTORED WITH TOPSOIL, SEEDING AND EROSION CONTROL BLANKET WITHIN 7 DAYS.
2. TREE ROOT PRUNING LIMITS SHALL BE VERIFIED DURING CONSTRUCTION BASED ON THE DRIP LINE.

LEGEND

- CONSTRUCTION LIMITS
- TREE TRUCK PROTECTION
- PERIMETER EROSION BARRIER (PEB)
- RP** TREE ROOT PRUNING
- INLET FILTERS (IF)
- TEMPORARY DITCH CHECKS (TDC)
- xxx - TEMPORARY FENCE

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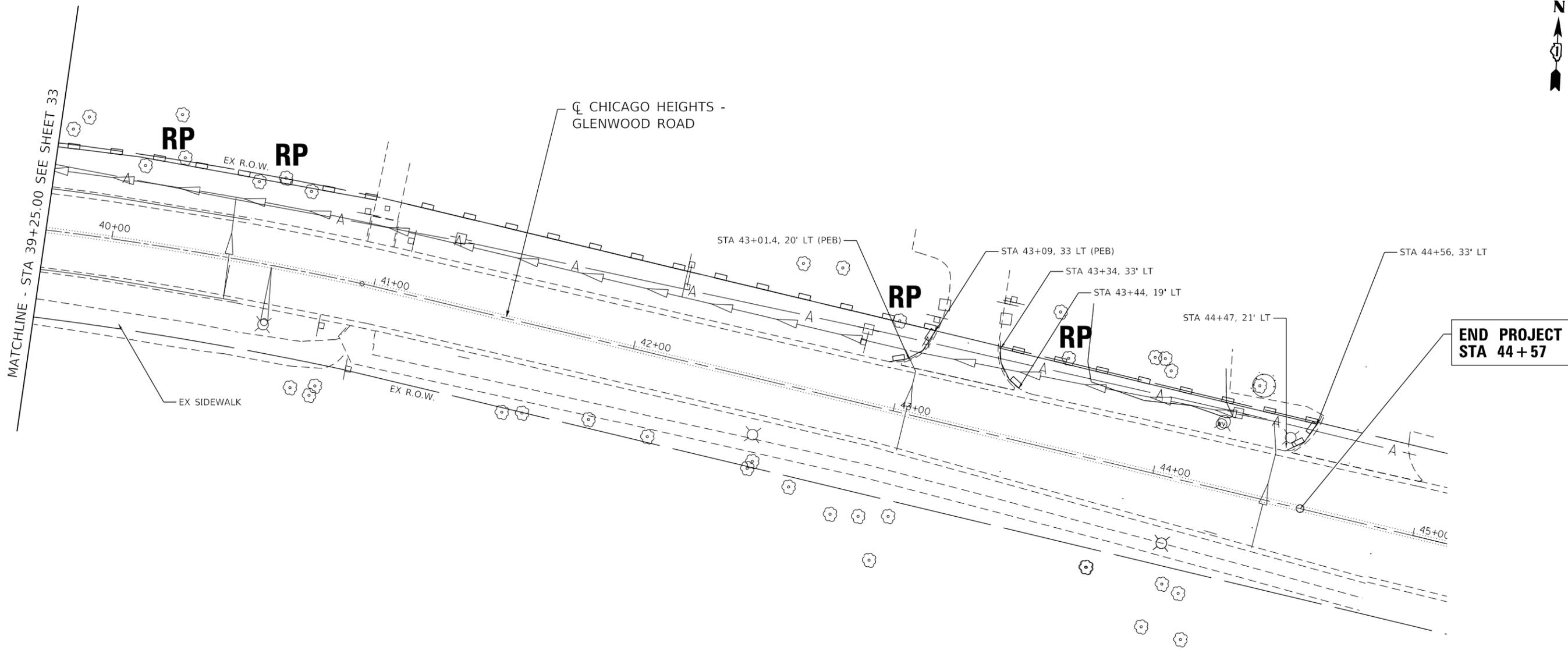
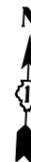
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	DRAWN - MN	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JMT	REVISED -
PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS - PRE-STAGE - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	33
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				



LEGEND

- CONSTRUCTION LIMITS
- ⊙ TREE TRUCK PROTECTION
- ▭ PERIMETER EROSION BARRIER (PEB)
- RP** TREE ROOT PRUNING
- ◇ INLET FILTERS (IF)
- ◇ T TEMPORARY DITCH CHECKS (TDC)
- xxx - TEMPORARY FENCE

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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISOR -

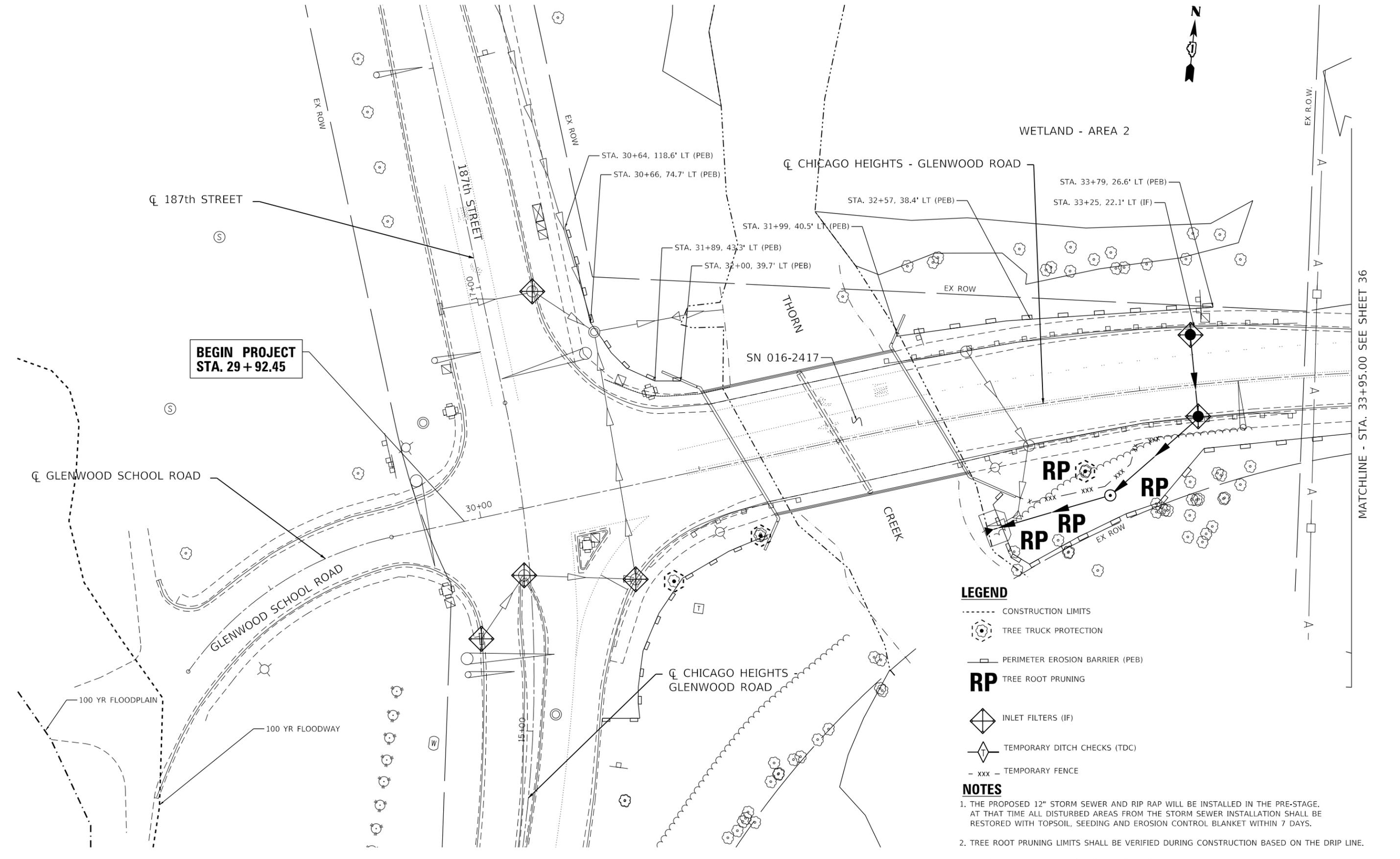
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS PRE-STAGE - 3
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	34
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

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**BEGIN PROJECT
STA. 29 + 92.45**

LEGEND

- CONSTRUCTION LIMITS
- (Symbol) TREE TRUCK PROTECTION
- PERIMETER EROSION BARRIER (PEB)
- RP** TREE ROOT PRUNING
- (Symbol) INLET FILTERS (IF)
- (Symbol) TEMPORARY DITCH CHECKS (TDC)
- xxx - TEMPORARY FENCE

NOTES

1. THE PROPOSED 12" STORM SEWER AND RIP RAP WILL BE INSTALLED IN THE PRE-STAGE. AT THAT TIME ALL DISTURBED AREAS FROM THE STORM SEWER INSTALLATION SHALL BE RESTORED WITH TOPSOIL, SEEDING AND EROSION CONTROL BLANKET WITHIN 7 DAYS.
2. TREE ROOT PRUNING LIMITS SHALL BE VERIFIED DURING CONSTRUCTION BASED ON THE DRIP LINE.
3. ALL PREVIOUSLY INSTALLED EROSION CONTROL ITEMS TO REMAIN.

MATCHLINE - STA. 33+95.00 SEE SHEET 36



USER NAME = johnn	DESIGNED - MN	REVISED -
	DRAWN - MN	REVISED -
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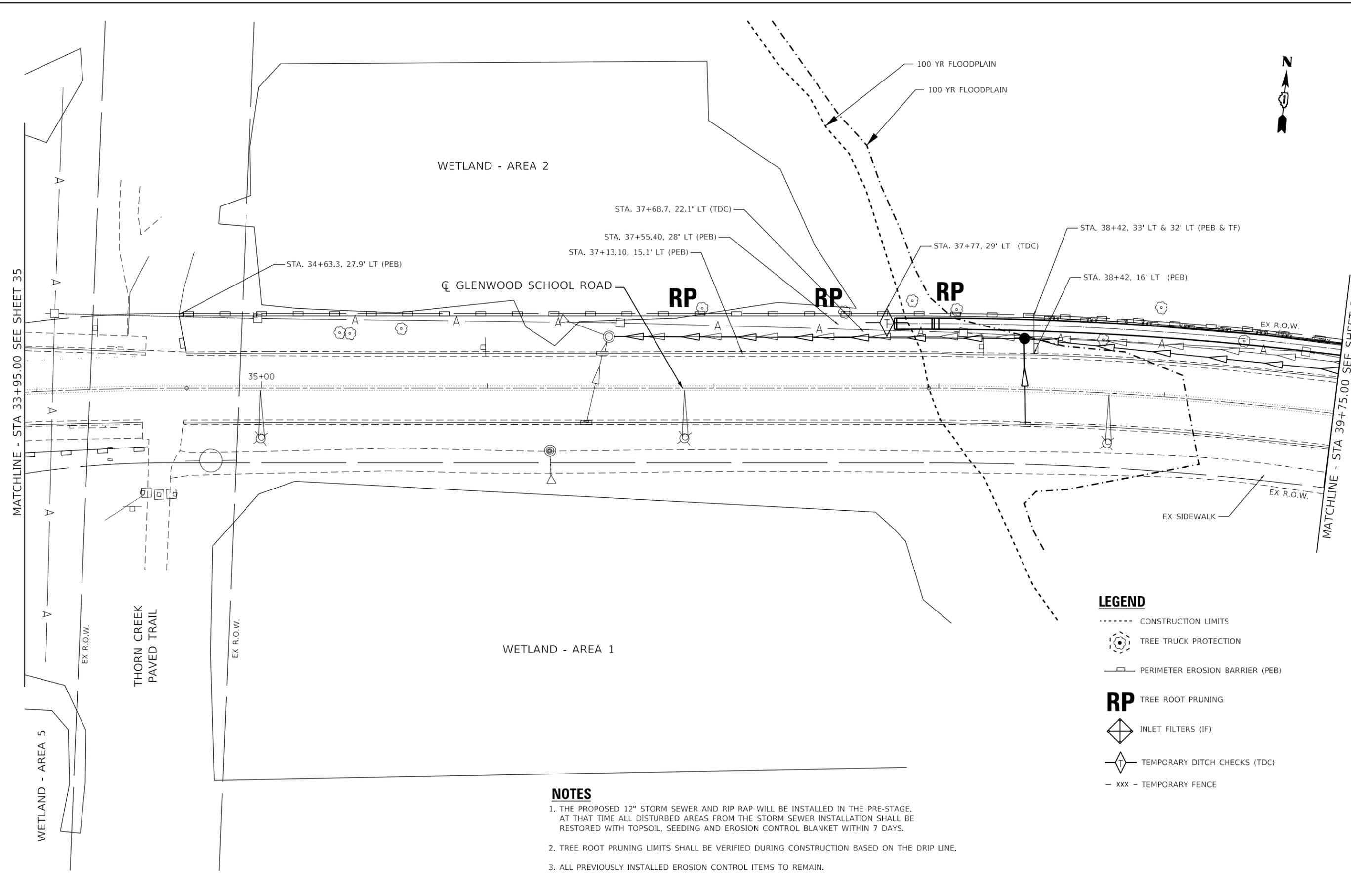
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS - STAGE I-1
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	35
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

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LEGEND

- CONSTRUCTION LIMITS
- ⊗ TREE TRUCK PROTECTION
- ▭ PERIMETER EROSION BARRIER (PEB)
- RP** TREE ROOT PRUNING
- ◇ INLET FILTERS (IF)
- △ TEMPORARY DITCH CHECKS (TDC)
- xxx - TEMPORARY FENCE

NOTES

1. THE PROPOSED 12" STORM SEWER AND RIP RAP WILL BE INSTALLED IN THE PRE-STAGE. AT THAT TIME ALL DISTURBED AREAS FROM THE STORM SEWER INSTALLATION SHALL BE RESTORED WITH TOPSOIL, SEEDING AND EROSION CONTROL BLANKET WITHIN 7 DAYS.
2. TREE ROOT PRUNING LIMITS SHALL BE VERIFIED DURING CONSTRUCTION BASED ON THE DRIP LINE.
3. ALL PREVIOUSLY INSTALLED EROSION CONTROL ITEMS TO REMAIN.



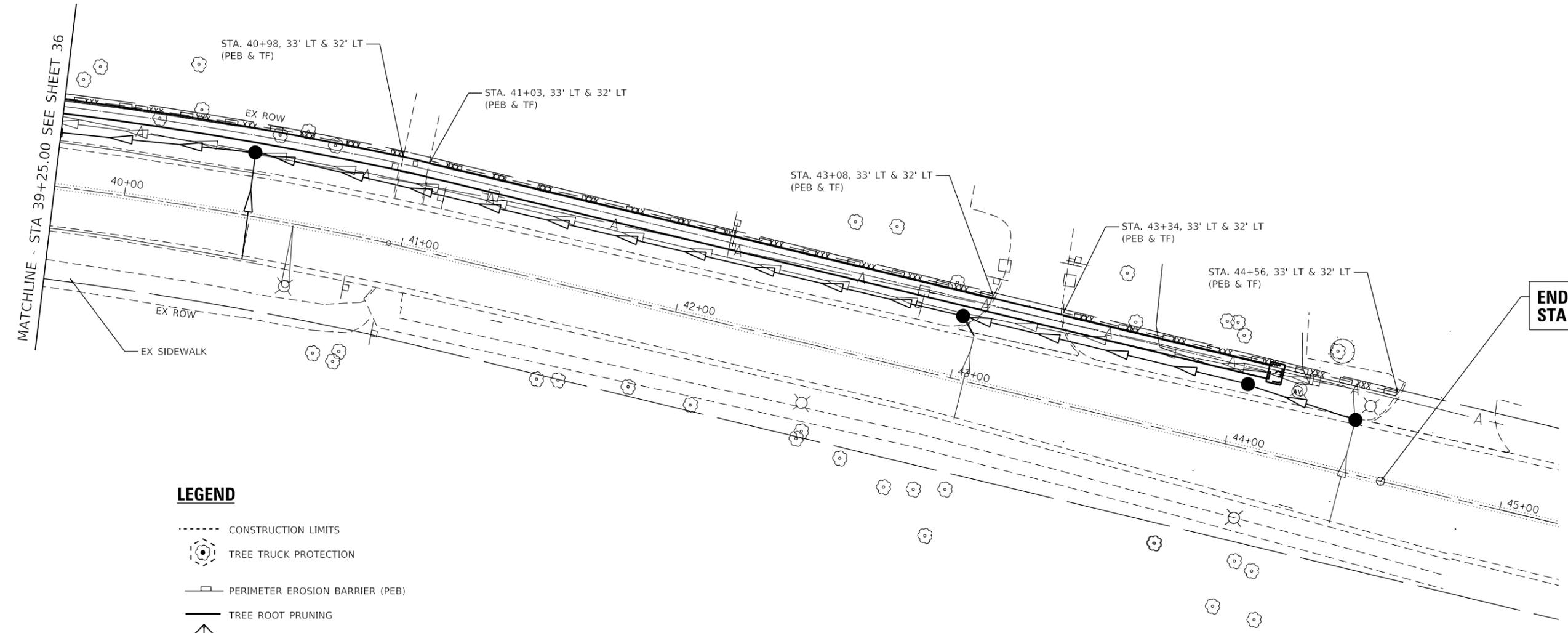
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS - STAGE I - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	36
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



LEGEND

- - - - - CONSTRUCTION LIMITS
- ⊗ TREE TRUCK PROTECTION
- ▭ PERIMETER EROSION BARRIER (PEB)
- TREE ROOT PRUNING
- ◇ INLET FILTERS (IF)
- ◇ T TEMPORARY DITCH CHECKS (TDC)
- XXX - TEMPORARY FENCE

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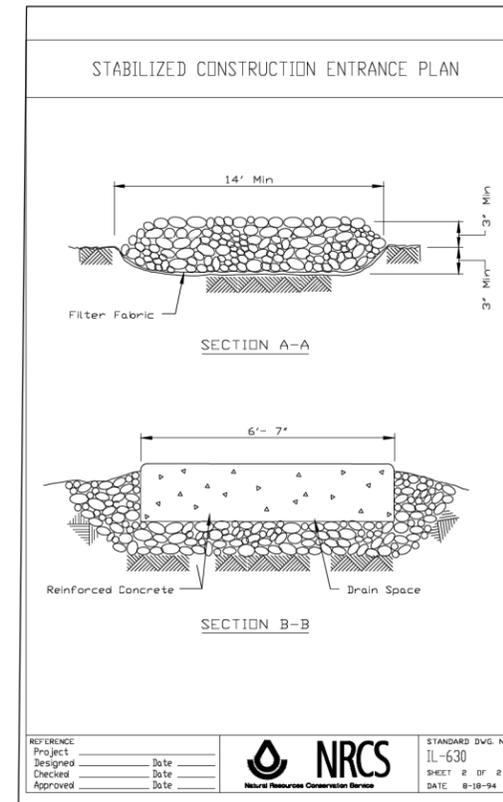
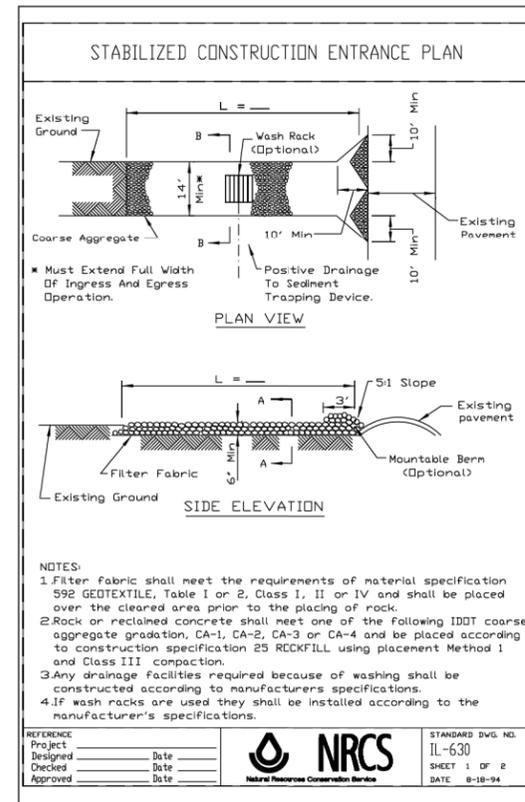
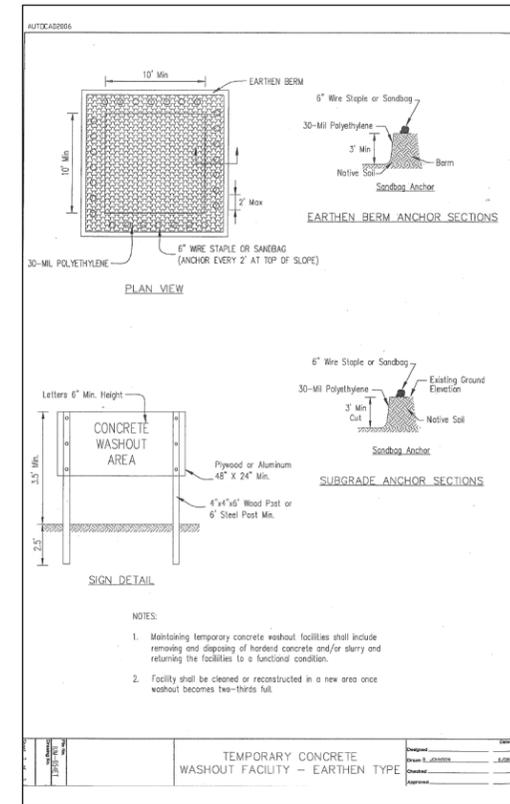
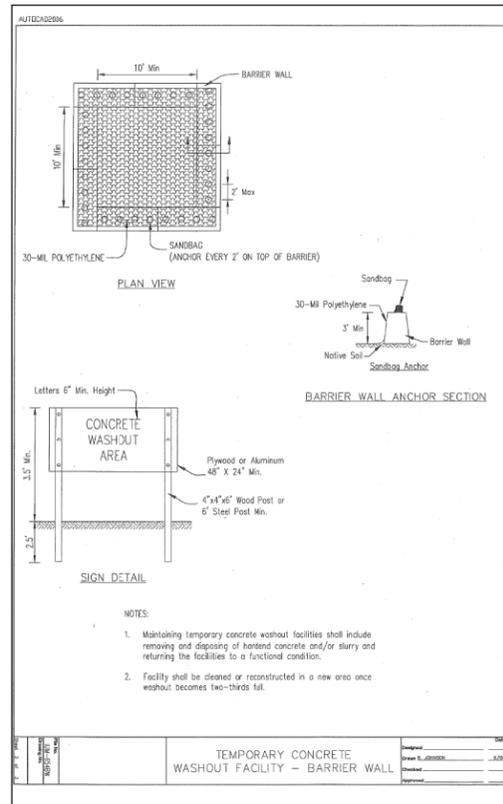
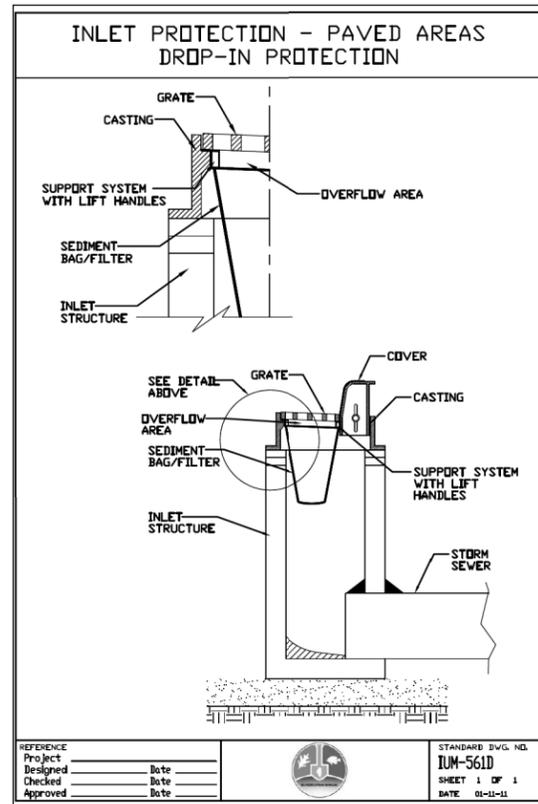
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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLANS - STAGE I - 3
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	37
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



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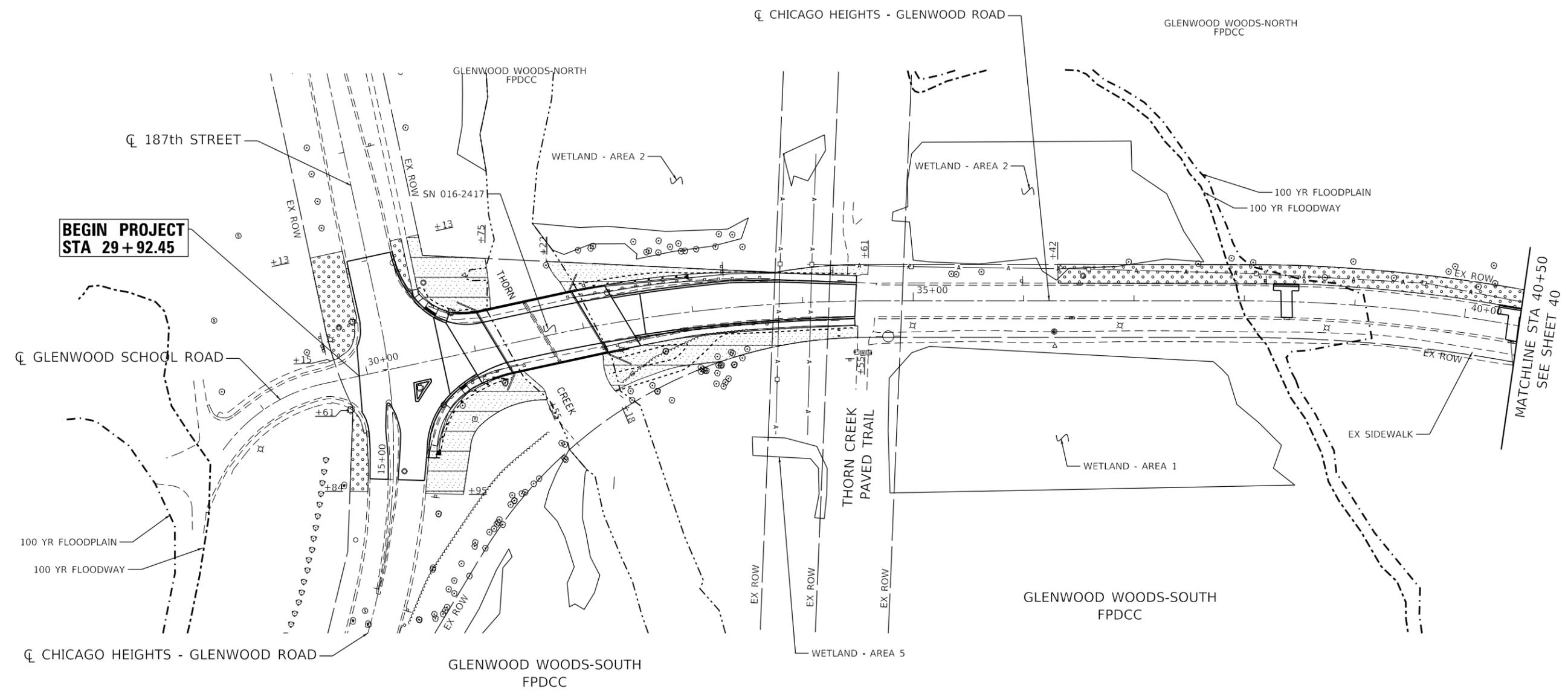
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	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

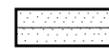
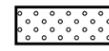
**EROSION CONTROL DETAILS
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	38
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



LANDSCAPING LEGEND

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

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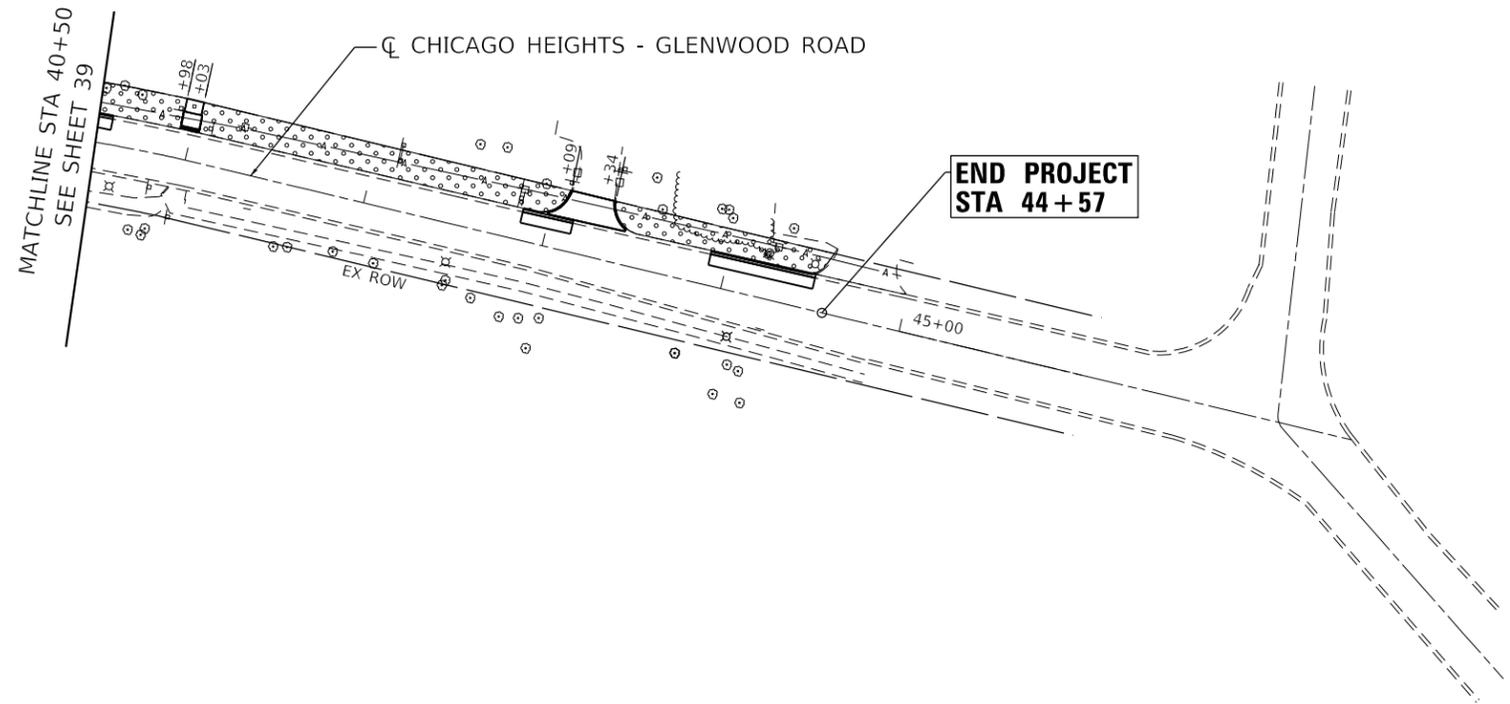
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

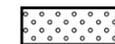
**LANDSCAPING PLAN - 1
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	39
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				



LANDSCAPING LEGEND

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

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PLOT DATE = 1/31/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING PLAN - 2
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

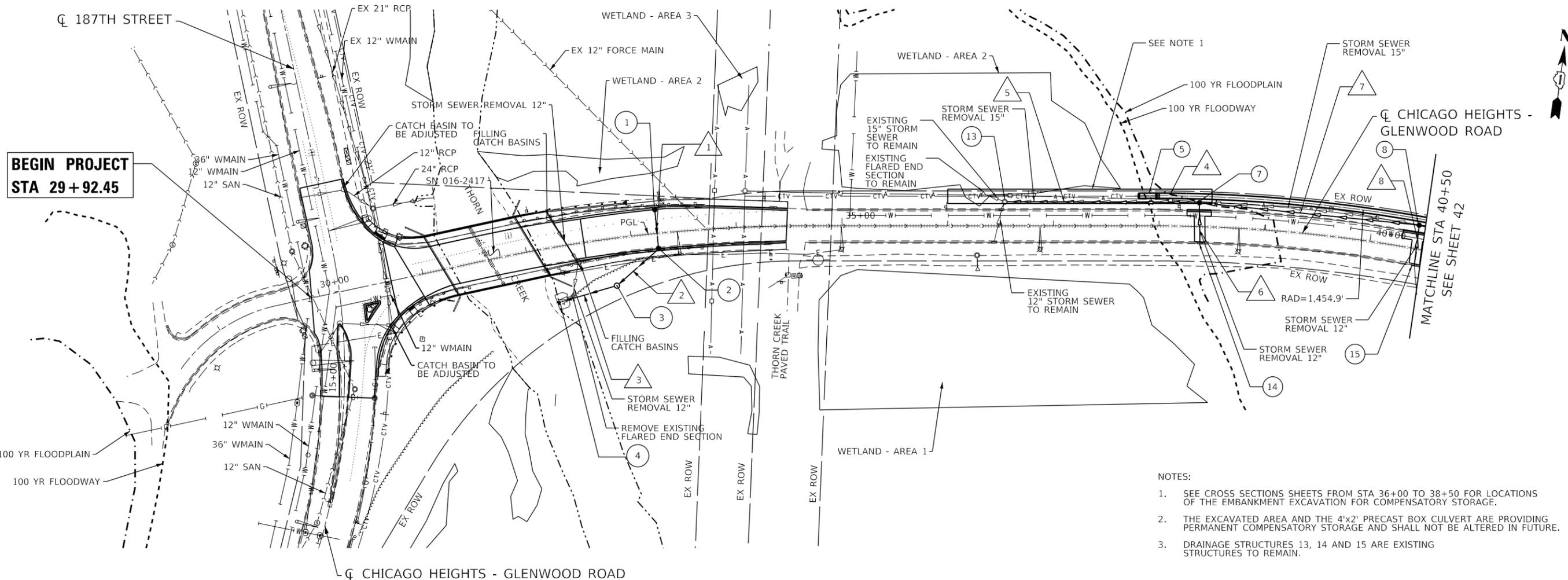
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	40
CONTRACT NO.			60N21	
ILLINOIS FED. AID PROJECT				

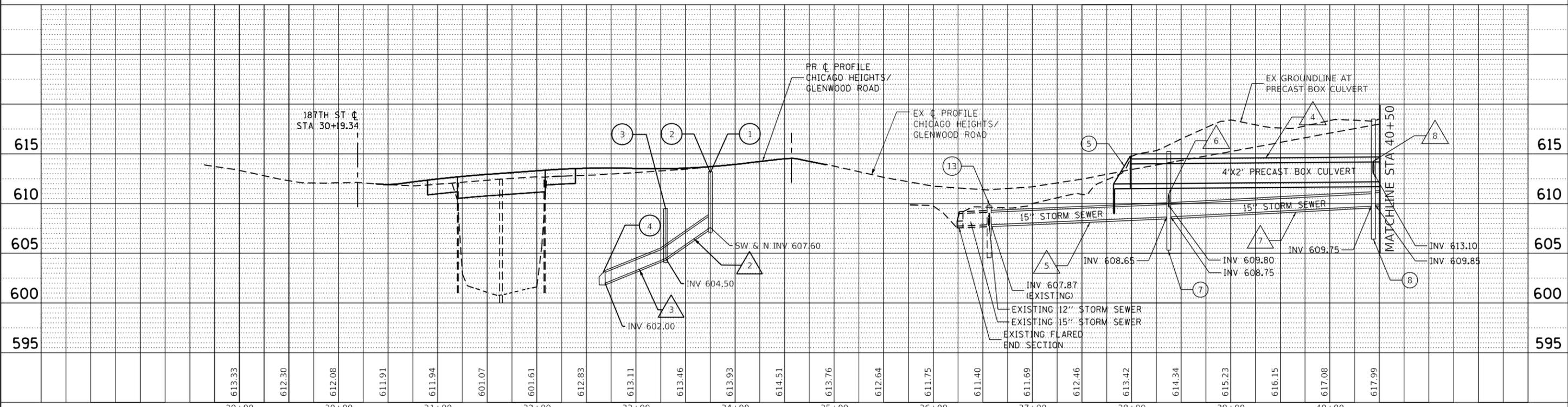
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	PLOTTED	
	ALIGNED	
	CHECKED	
	NO. _____	
	NOTE BOOK	
	NO. _____	
	CADD FILE NAME	

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

FILE NAME = G:\Engineering\13040_1001 DUR HBM\Work Order 12\CADD\CADD Sheets\13040_1001\12-drainage\12-drainage.dwg



- NOTES:
- SEE CROSS SECTIONS SHEETS FROM STA 36+00 TO 38+50 FOR LOCATIONS OF THE EMBANKMENT EXCAVATION FOR COMPENSATORY STORAGE.
 - THE EXCAVATED AREA AND THE 4'x2' PRECAST BOX CULVERT ARE PROVIDING PERMANENT COMPENSATORY STORAGE AND SHALL NOT BE ALTERED IN FUTURE.
 - DRAINAGE STRUCTURES 13, 14 AND 15 ARE EXISTING STRUCTURES TO REMAIN.

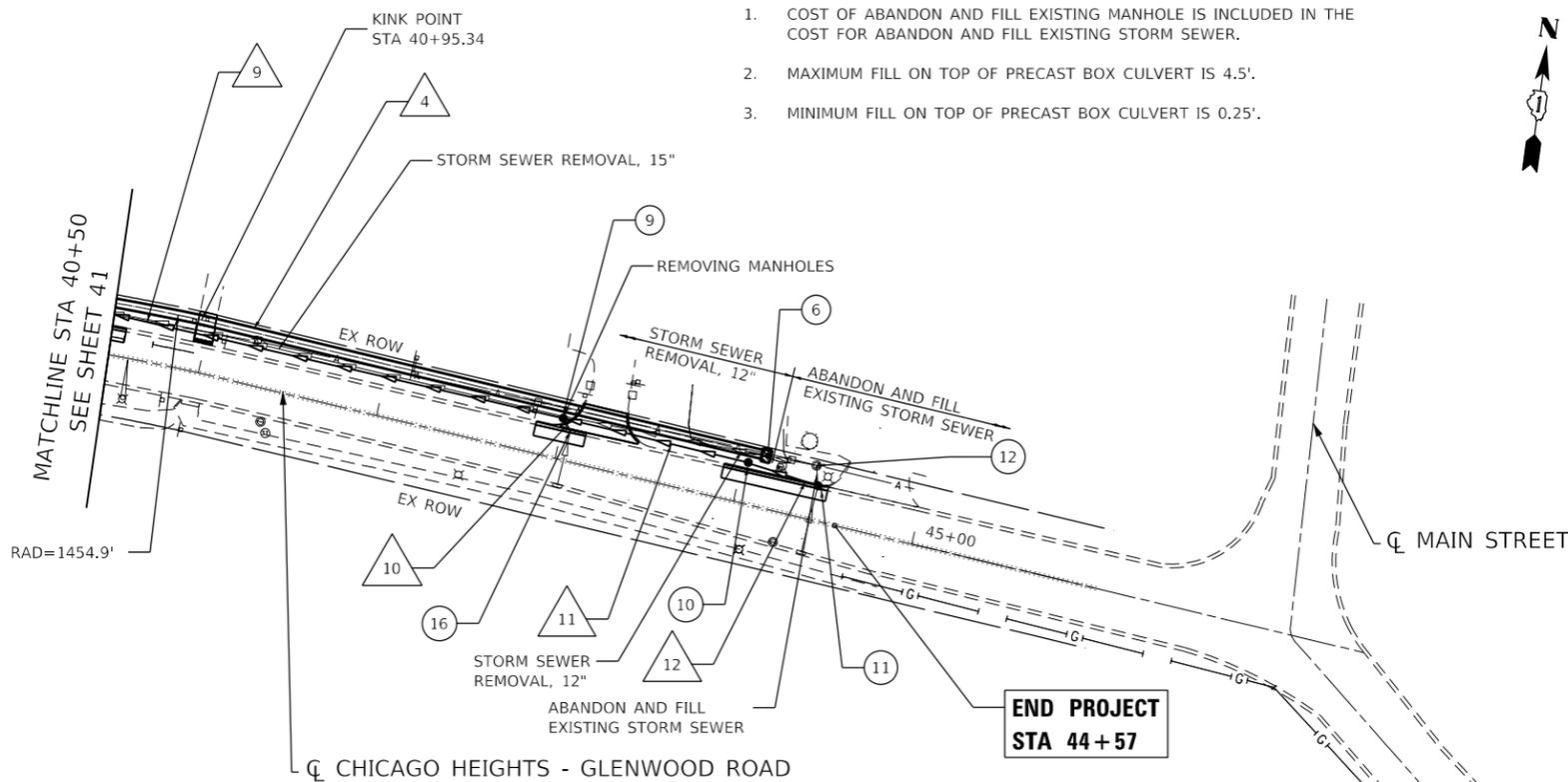


613.33	612.30	612.08	611.91	611.94	601.07	601.61	612.83	613.11	613.46	613.93	614.51	613.76	612.64	611.75	611.40	611.69	612.46	613.42	614.34	615.23	616.15	617.08	617.99	29+00	30+00	31+00	32+00	33+00	34+00	35+00	36+00	37+00	38+00	39+00	40+00																																							
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	PLOT DATE = 3/4/2019	DATE - 01/24/2019	REVISED -		ILLINOIS FED. AID PROJECT																																																																					

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	NO. CAD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHFD	
	NO. CAD FILE NAME	

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NOTES:

- COST OF ABANDON AND FILL EXISTING MANHOLE IS INCLUDED IN THE COST FOR ABANDON AND FILL EXISTING STORM SEWER.
- MAXIMUM FILL ON TOP OF PRECAST BOX CULVERT IS 4.5'.
- MINIMUM FILL ON TOP OF PRECAST BOX CULVERT IS 0.25'.



DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	STATION	OFFSET (FT)	STRUCTURE TYPE			FRAME & GRATE	INVERT ELEVATION	RIM ELEVATION
			MH	CB	OTHER			
1	33+25	22' LT		4'A		23	INV 608.00	613.10
2	33+25	14' RT		4'A		23	INV 607.60 (SW & N)	613.22
3	32+80	44' RT	4'A				INV 604.50	609.50
4	32+24	52' RT			FES 12"		INV 602.00	
5	37+80	28.5' LT			TAPERED END SECTION		INV 611.19	
6	44+12	28.5' LT			JUNCTION BOX CHAMBER	1 CL	INV 612.49	619.49
7	38+38	22.5' LT		4'A		1 CL	INV 608.65 (W) INV 608.75 (E) INV 609.80 (S)	615.25
8	40+44	22.5' LT		4'A		1 CL	INV 609.75 (W) INV 609.85 (E) INV 613.10 (SE)	618.50
9	43+00	22.5' LT		4'A		1 CL	INV 611.10 (W) INV 611.20 (E) INV 613.30 (S)	619.50
10	44+03	22.5' LT		4'A		1 OL	INV 614.90 (W) INV 615.10 (E)	619.49
11	44+43	19' LT			INLET TYPE B	11	INV 615.42 (W) INV 615.48 (S)	619.07
12	44+40	29.5' LT	4'A			1 CL	TO BE ABANDONED	

STORM SEWER PIPE SCHEDULE

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	DESCRIPTION	DIA (INCH)	LENGTH (FT)	SLOPE %	T.B.F. (CU YD)
1	1	2	SS TYPE 2 CLASS A RCP	12	36	6.5	8.1
2	2	3	SS TYPE 2 CLASS A RCP	12	48	5.2	3.5
3	3	4	SS TYPE 2 CLASS A RCP	12	52	4.3	0
4	5	6	PRECAST BOX CULVERT	2' X 4'	618	0.08	56.3*
5	7	13	SS TYPE 2 W.M. QUALITY	15	180	0.5	0
6	14	7	SS TYPE 2 W.M. QUALITY	12	37	0.7	7.9
7	8	7	SS TYPE 2 W.M. QUALITY	15	205	0.5	0
8	15	8	SS TYPE 2 W.M. QUALITY	12	37	0.8	9.9
9	9	8	SS TYPE 2 W.M. QUALITY	15	255	0.5	18.5
10	16	9	SS TYPE 2 W.M. QUALITY	12	6	1.0	1.5
11	10	9	SS TYPE 2 W.M. QUALITY	12	100	3.7	44.3
12	11	10	SS TYPE 2 W.M. QUALITY	12	37	1.0	5.4
TOTAL							155.4

* TRENCH BACKFILL FOR PRECAST BOX CULVERT REQUIRED UNDER THE BIKE PATH AND THE COOK COUNTY FOREST PRESERVE DRIVEWAY.

DRAINAGE STRUCTURE ADJUSTMENT SCHEDULE

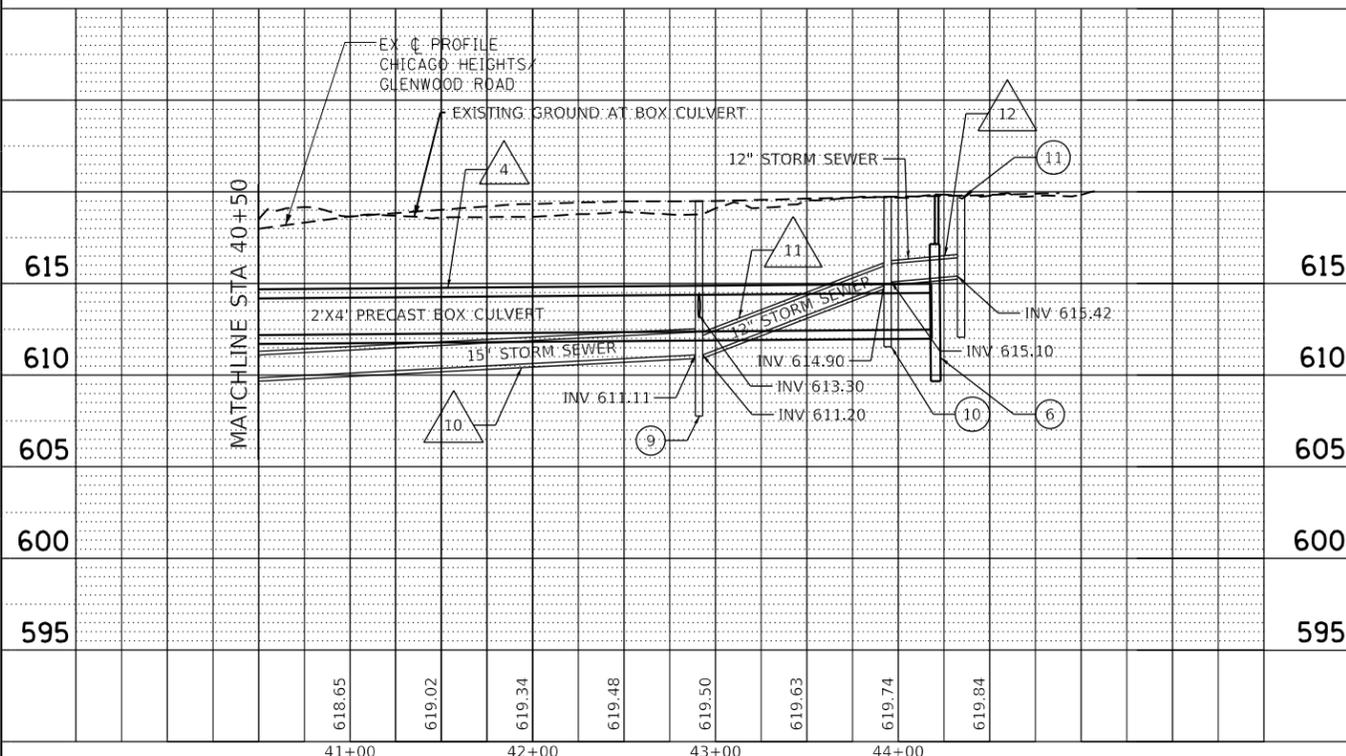
STATION	OFFSET (FT)	CATCH BASINS TO BE ADJUSTED	CATCH BASINS TO BE FILLED
15+70	47' RT	1	
16+95	22.3' RT	1	
32+47	17.6' RT		1
32+27	28.2' LT		1
44+40	29.5' LT		1
TOTAL		2	3

EXISTING DRAINAGE STRUCTURE TABLE - TO REMAIN

STRUCTURE NO.	STATION	OFFSET (FT)	STRUCTURE TYPE			INVERT ELEVATION	RIM ELEVATION
			MH	CB	INLET		
13	34+54	23' LT	EXIST			INV 607.87	611.87
14	38+38	16' RT			EXIST	INV 607.32	611.02
15	40+45	16' RT			EXIST	INV 610.06	613.36
16	32+24	52' RT			EXIST	INV 613.34	617.24

STORM SEWER REMOVAL SCHEDULE

STATION	STATION	LENGTH (FT)	DESCRIPTION
32+27	32+37	80	STORM SEWER REMOVAL 12"
44+99	44+16	117	STORM SEWER REMOVAL 12"
38+38	38+38	37	STORM SEWER REMOVAL 12"
40+44	40+44	37	STORM SEWER REMOVAL 12"
43+01	53+05	6	STORM SEWER REMOVAL 12"
36+54	42+99	647	STORM SEWER REMOVAL 15"



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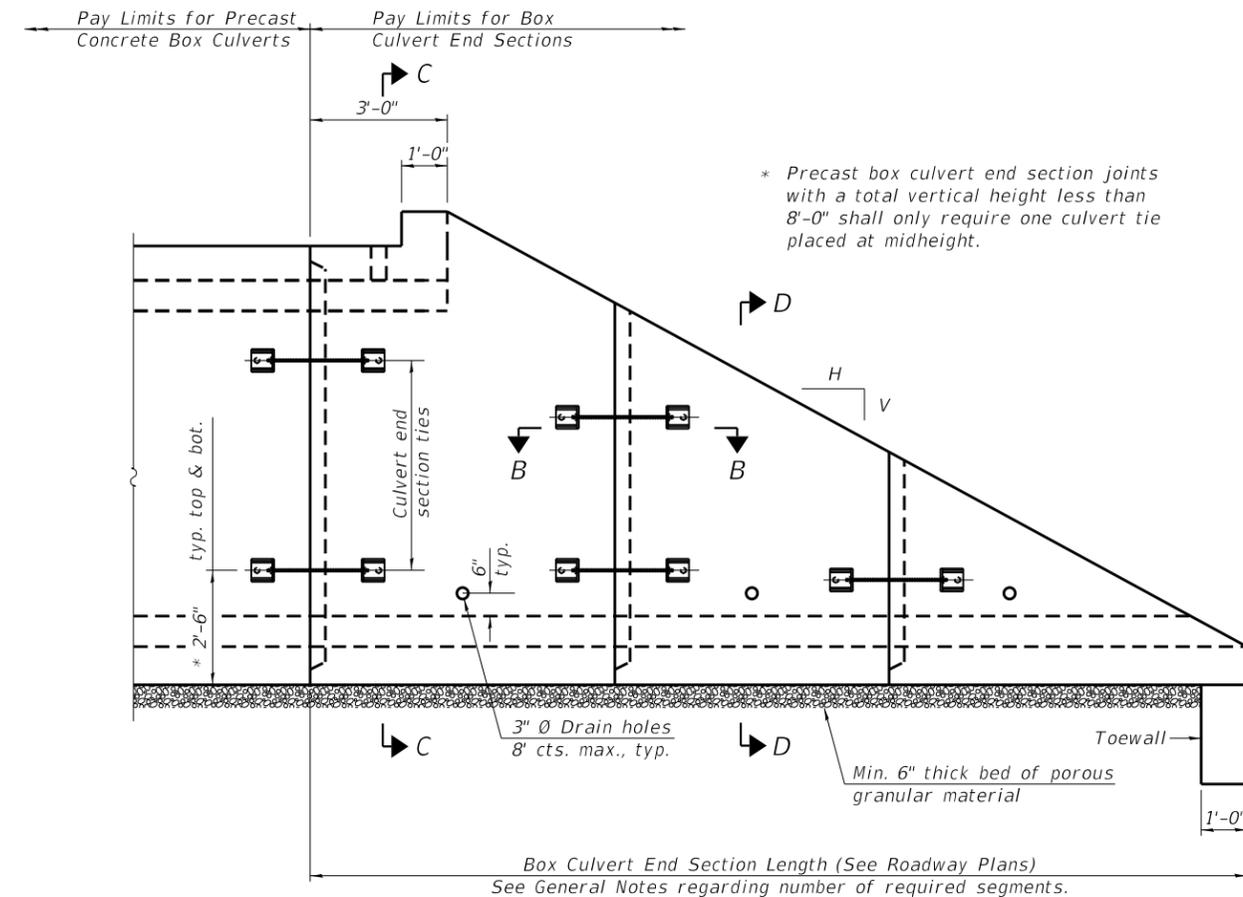
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DRAINAGE AND UTILITY PLAN - II
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

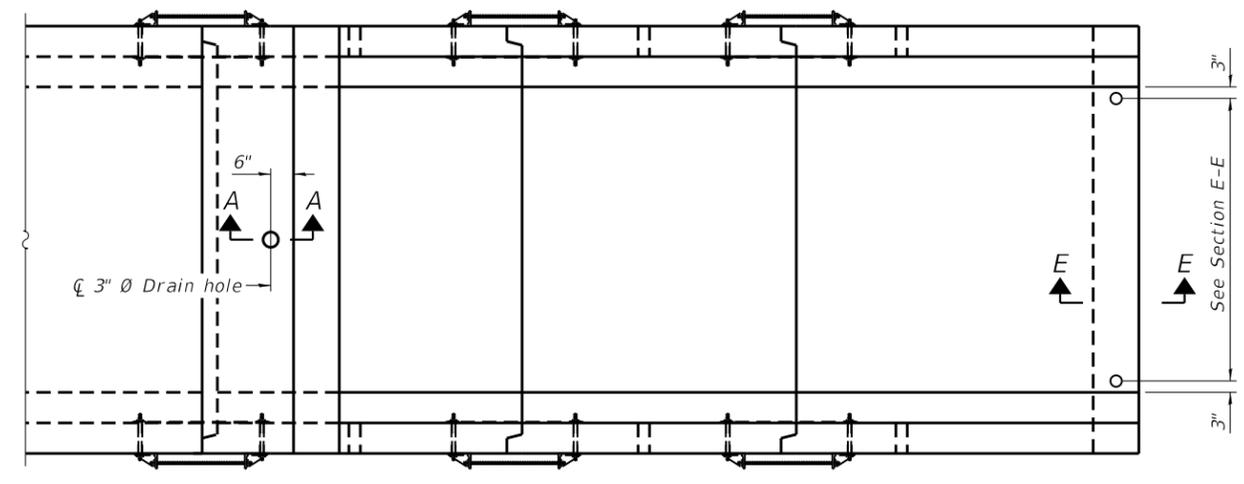
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F.A.U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	42
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

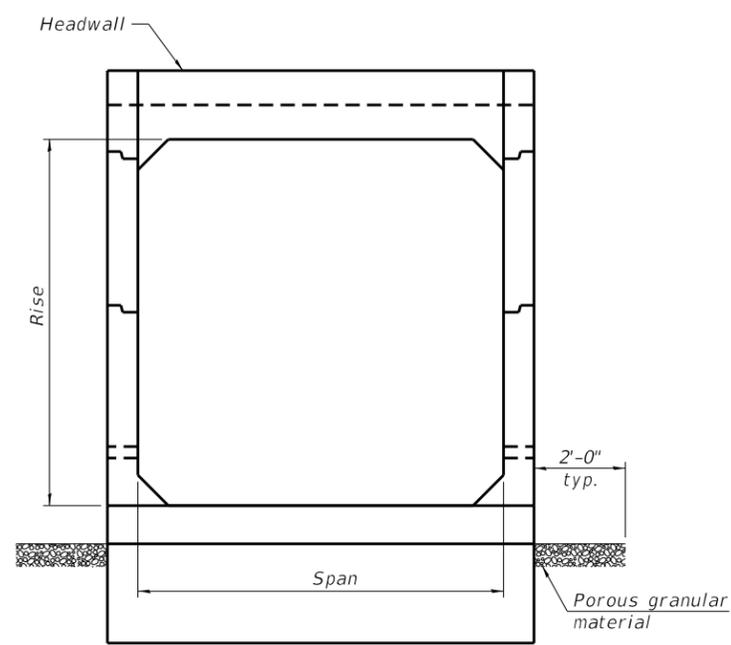
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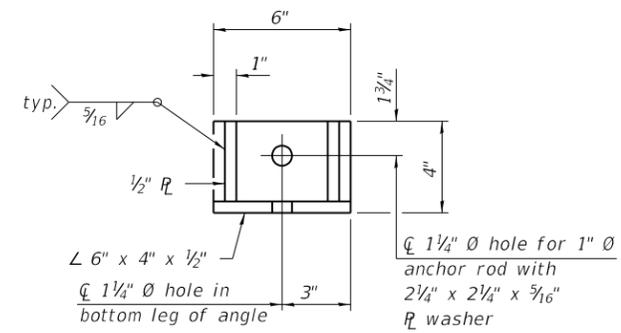
ELEVATION



PLAN



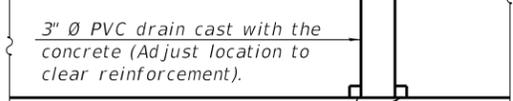
END VIEW



RESTRAINT ANGLE DETAIL

12" x 12" x 6" block of CA5, CA7, or CA11 coarse aggregate placed over drain opening. Block of aggregate shall be completely wrapped in nonwoven geotextile fabric.

Provide a double layer of 12" x 12" nonwoven geotextile fabric centered over the drain hole. Fabric shall be sealed to the concrete with mastic.



SECTION A-A

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.) (Sheet 1 of 2)

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. This work will be measured for payment as each, with each end of each culvert being one each. End sections will be paid for at the contract unit price per each for Box Culvert End Sections of the culvert number specified.

Typical box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements of ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

Number of segments shown in Elevation is for example only. Length and number of precast box sections required to construct Box Culvert End Sections shall be determined by the Contractor.

See roadway plans for embankment slope (V:H).

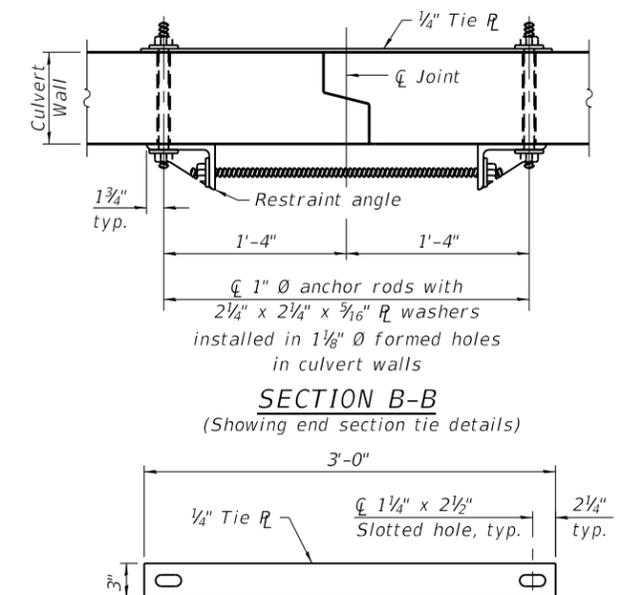
1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4" x 2 1/4" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the contract unit price for Box Culvert End Sections of the culvert number specified.

Drain holes shall conform to the requirements of Article 503.11 of the Standard Specifications unless noted otherwise.

Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01. The minimum weight of the fabric shall be 6 oz. / sq. yd..

For end sections with traversable pipe grate systems, see grate detail sheet for required modifications.



TIE PLATE DETAIL

SCB-TES

2-17-2017

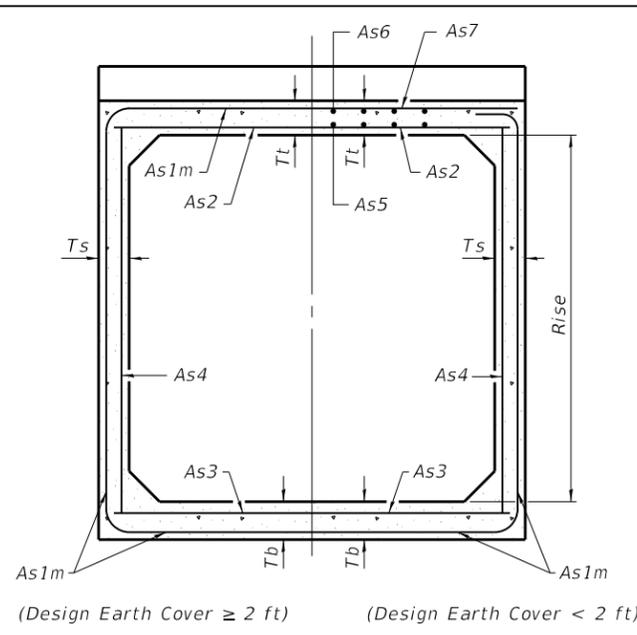
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	CHECKED - JMT	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SINGLE CELL PRECAST BOX CULVERT TAPERED END SECTIONS - I
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

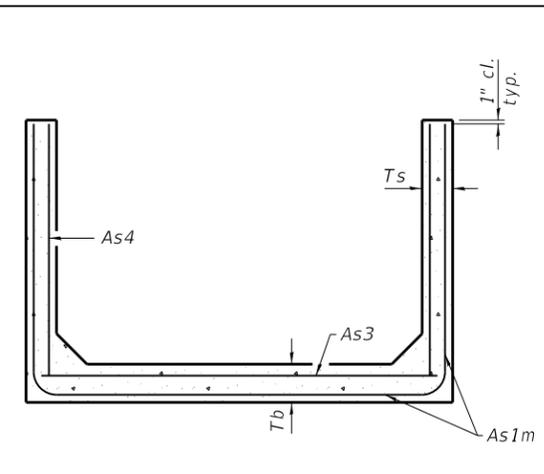
SHEET OF S-21 SHEETS

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 43
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

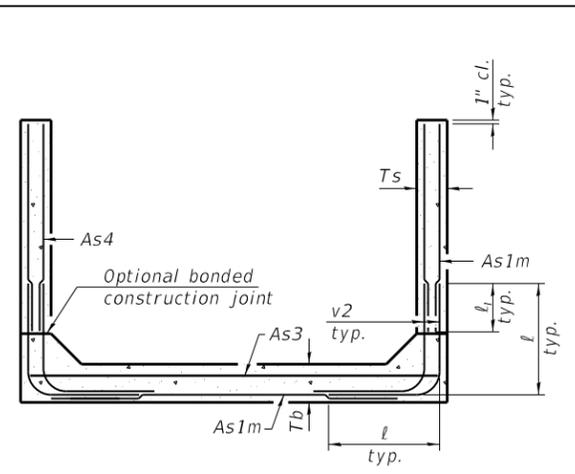


(Design Earth Cover \geq 2 ft) (Design Earth Cover < 2 ft)

SECTION C-C



SECTION D-D



ALTERNATE SECTION D-D

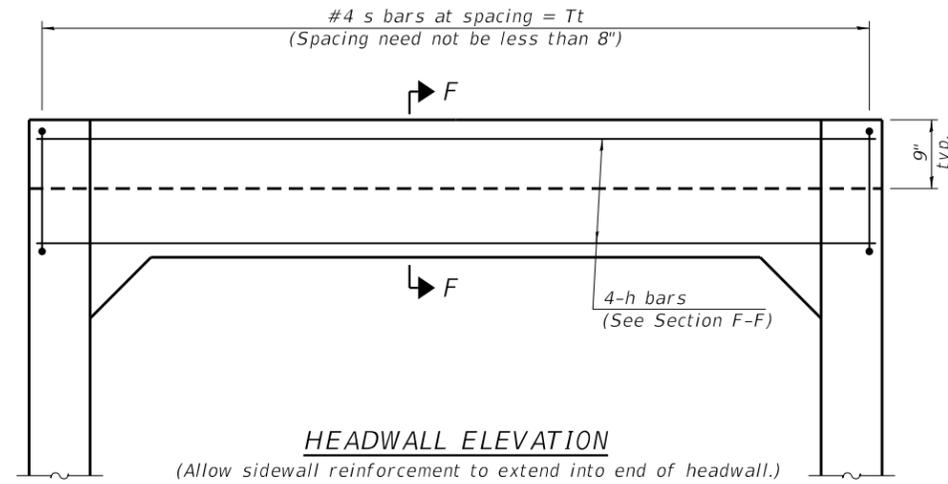
As1m REINFORCEMENT											
(in. ² /ft)											
Rise (ft)	2	3	4	5	6	7	8	9	10	11	12
4	0.19	0.17									
5	0.26	0.21	0.18								
6	0.22	0.26	0.23	0.22							
7	0.25	0.33	0.59	0.27	0.28						
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40				
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48			
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56		
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65	
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75

(As1m reinforcement based upon welded wire reinforcement conforming to AASHTO M 55 or M 221).

l₁ DIMENSION

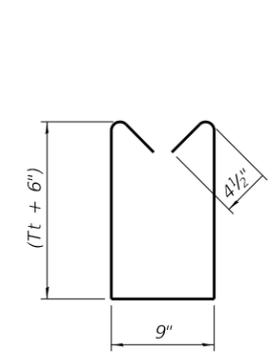
- #3 bar = 2'-0"
- #4 bar = 2'-8"
- #5 bar = 3'-4"
- #6 bar = 3'-11"

Notes:
 Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.
 The size and spacing of the v2 bars shall provide a minimum reinforcement area along each face of the walls (in.²/ft.) equal to 1.10*(As1m). v2 bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.
 Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

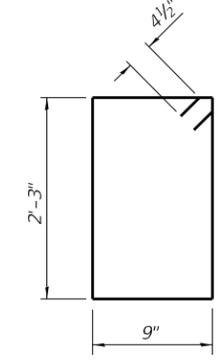


HEADWALL ELEVATION

(Allow sidewall reinforcement to extend into end of headwall.)



BAR s



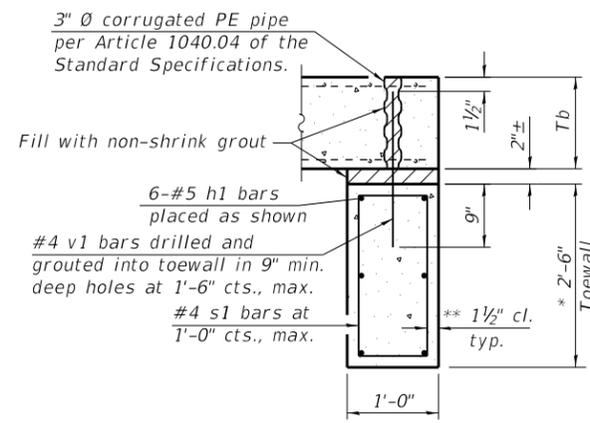
BAR s1

TOEWALL CONSTRUCTION SEQUENCE

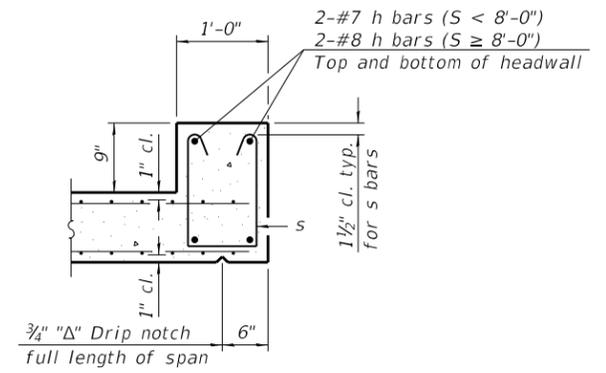
1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



SECTION E-E



SECTION F-F

SCB-TES 2-17-2017

(Sheet 2 of 2)

MODEL: Default
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PLOT SCALE =		CHECKED -	SPS	REVISED -	
PLOT DATE =	1/31/2019	DRAWN -	JN	REVISED -	
		CHECKED -	JMT	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SINGLE CELL PRECAST BOX CULVERT TAPERED END SECTIONS - II
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK

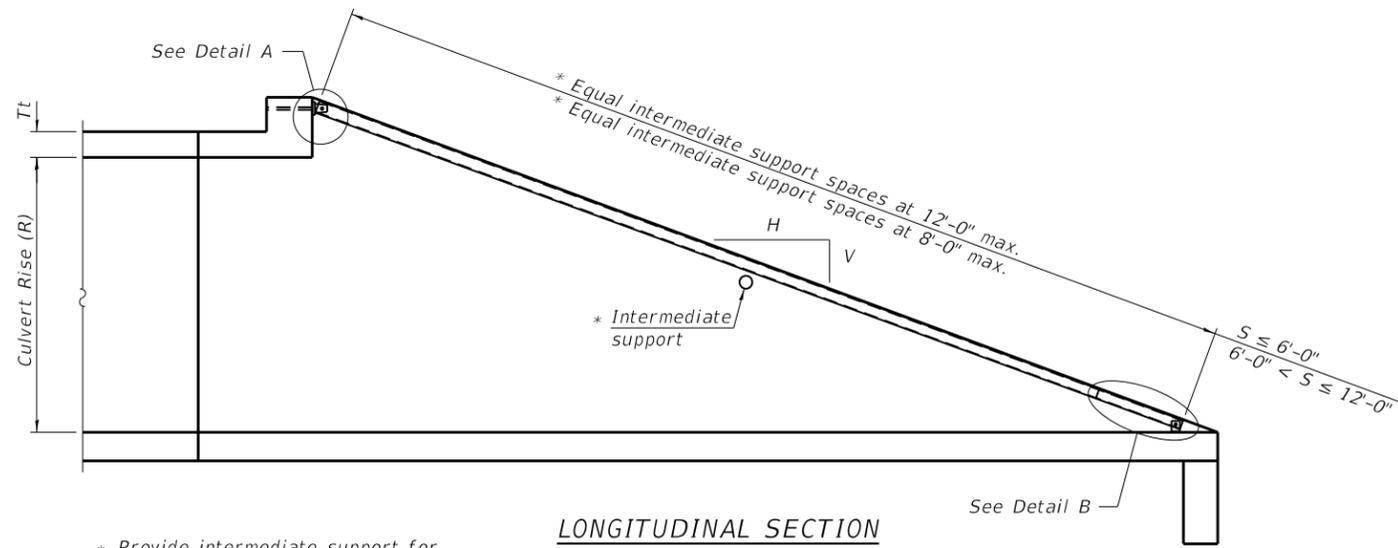
SHEET OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	44
CONTRACT NO. 60N21				

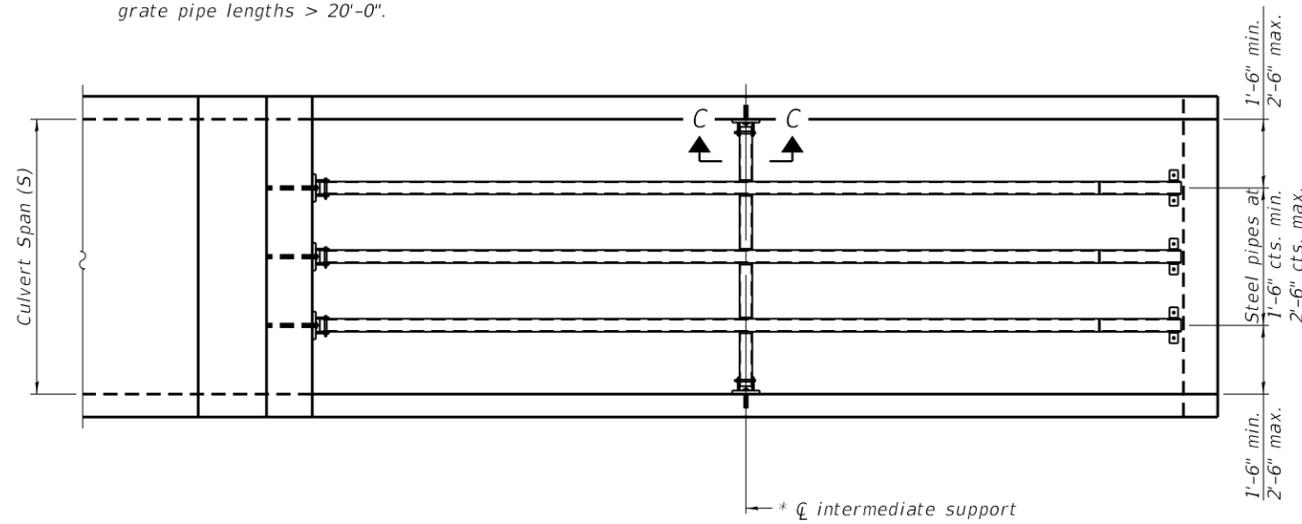
ILLINOIS FED. AID PROJECT

GENERAL NOTES

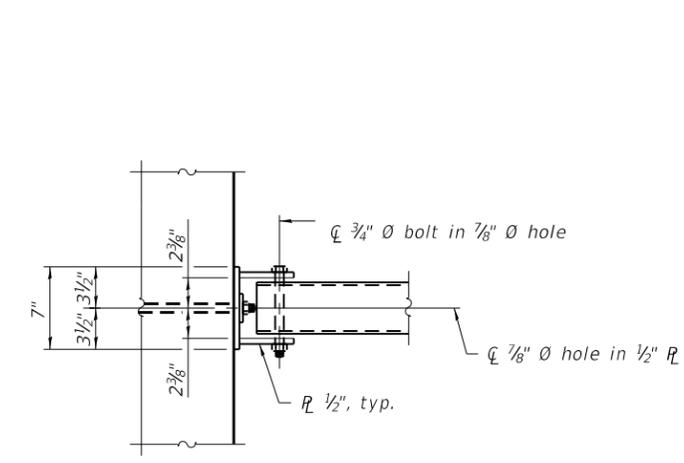
The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be 1½" unless noted otherwise.
 This standard shall only be used on concrete end sections not skewed more than ±15 degrees with roadway.
 The Contractor may install the thru bolts using drilling and grouting in lieu of providing a formed hole using steel pipe. Installation shall be in accordance with Article 509.06 using a method that results in the annulus surrounding the bolt being completely filled with adhesive. The method of drilling shall not result in spalled concrete at the exit face. Epoxy grouted thru bolts shall be snug tightened followed by an additional ½ turn on the interior nut at final installation. Cost included with Traversable Pipe Grate.



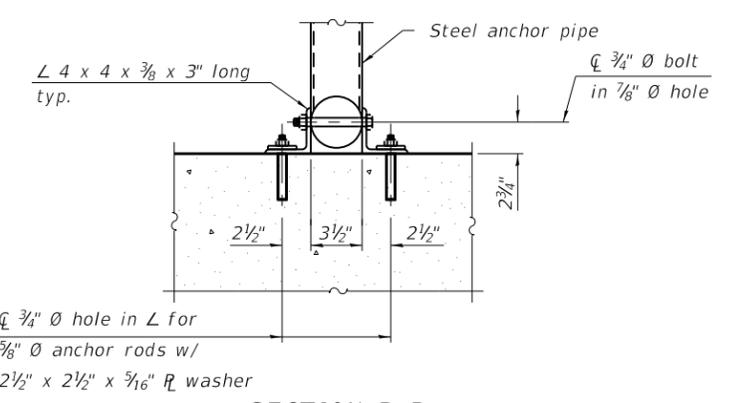
LONGITUDINAL SECTION



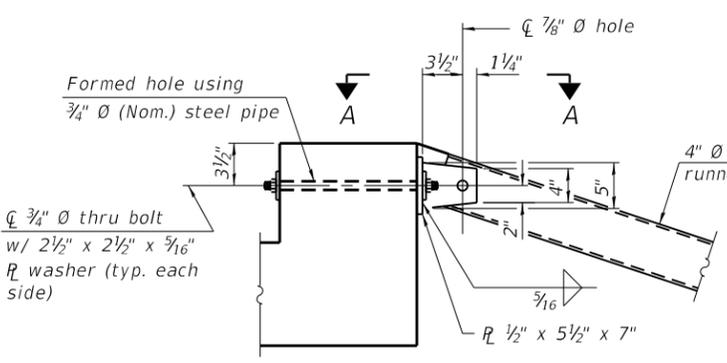
PLAN VIEW



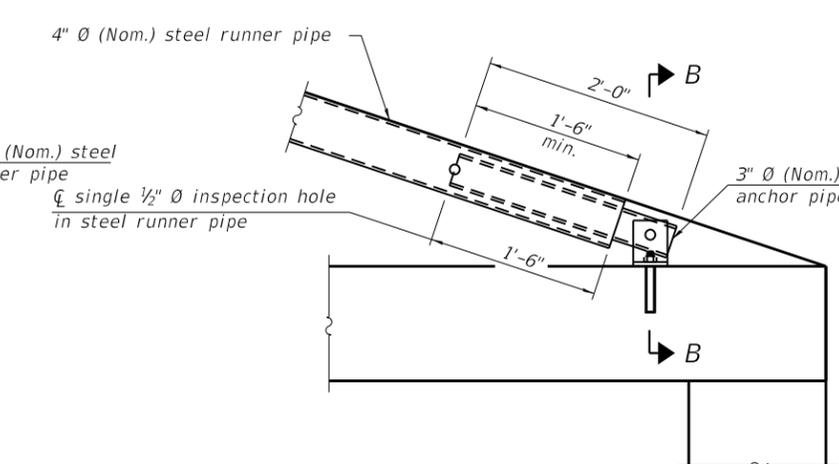
VIEW A-A



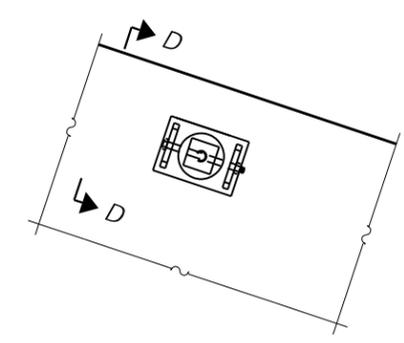
SECTION B-B



DETAIL A

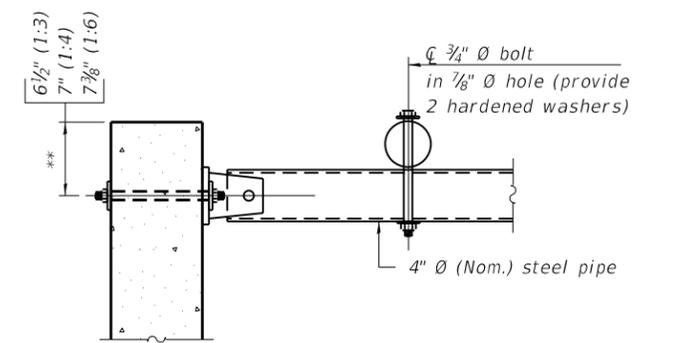


DETAIL B



VIEW C-C

(See Detail A for dimensions and details not shown.)



SECTION D-D

** Measured perpendicular to top of culvert wall. In addition, formed hole shall be located a minimum of 6" measured horizontally from any vertical joints necessary for construction of the culvert end section.

MODEL: Default
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TPGBC-ZS 2-17-2017



USER NAME = John	DESIGNED - SAT	REVISED -
PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE = 1/31/2019	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRAVERSABLE PIPE GRATE FOR BOX CULVERTS - I
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

(Sheet 1 of 2)

SHEET OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	45
CONTRACT NO. 60N21				

ILLINOIS FED. AID PROJECT

PIPE-GRATE SCHEDULE FOR BOX CULVERT END SECTIONS

Precast Box Culvert Dimensions			Slope of End Section								
			1:3			1:4			1:6		
S (ft)	R (ft)	Tt (in)	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe	Main Pipe No. / Length	Int. Support No. / Length	Total Length of Pipe
4	2	7.5	1 @ 8'-10"	N/A	8'-10"	1 @ 11'-7"	N/A	11'-7"	1 @ 17'-2"	N/A	17'-2"
4	2	5	1 @ 8'-2"	N/A	8'-2"	1 @ 10'-8"	N/A	10'-8"	1 @ 15'-11"	N/A	15'-11"
4	3	7.5	1 @ 12'-0"	N/A	12'-0"	1 @ 15'-8"	N/A	15'-8"	1 @ 23'-3"	1 @ 3'-7"	26'-10"
4	3	5	1 @ 11'-4"	N/A	11'-4"	1 @ 14'-10"	N/A	14'-10"	1 @ 22'-0"	1 @ 3'-7"	25'-7"
4	4	7.5	1 @ 15'-2"	N/A	15'-2"	1 @ 19'-10"	1 @ 3'-7"	23'-5"	1 @ 29'-4"	2 @ 3'-7"	36'-6"
4	4	5	1 @ 14'-6"	N/A	14'-6"	1 @ 18'-11"	N/A	18'-11"	1 @ 28'-1"	2 @ 3'-7"	35'-3"
5	2	8	1 @ 8'-11"	N/A	8'-11"	1 @ 11'-9"	N/A	11'-9"	1 @ 17'-5"	N/A	17'-5"
5	2	6	1 @ 8'-5"	N/A	8'-5"	1 @ 11'-1"	N/A	11'-1"	1 @ 16'-5"	N/A	16'-5"
5	3	8	1 @ 12'-1"	N/A	12'-1"	1 @ 15'-10"	N/A	15'-10"	1 @ 23'-6"	1 @ 4'-7"	28'-1"
5	3	6	1 @ 11'-7"	N/A	11'-7"	1 @ 15'-2"	N/A	15'-2"	1 @ 22'-6"	1 @ 4'-7"	27'-1"
5	4	8	1 @ 15'-3"	N/A	15'-3"	1 @ 20'-0"	1 @ 4'-7"	24'-7"	1 @ 29'-7"	2 @ 4'-7"	38'-9"
5	4	6	1 @ 14'-9"	N/A	14'-9"	1 @ 19'-3"	N/A	19'-3"	1 @ 28'-7"	2 @ 4'-7"	37'-9"
5	5	8	1 @ 18'-5"	N/A	18'-5"	1 @ 24'-1"	2 @ 4'-7"	33'-3"	1 @ 35'-8"	3 @ 4'-7"	49'-5"
5	5	6	1 @ 17'-11"	N/A	17'-11"	1 @ 23'-5"	1 @ 4'-7"	28'-0"	1 @ 34'-8"	2 @ 4'-7"	43'-10"
6	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
6	2	7	2 @ 8'-8"	N/A	17'-4"	2 @ 11'-5"	N/A	22'-10"	2 @ 16'-11"	N/A	33'-10"
6	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	1 @ 5'-7"	52'-7"
6	3	7	2 @ 11'-10"	N/A	23'-8"	2 @ 15'-6"	N/A	31'-0"	2 @ 23'-0"	1 @ 5'-7"	51'-7"
6	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	1 @ 5'-7"	45'-7"	2 @ 29'-7"	2 @ 5'-7"	70'-4"
6	4	7	2 @ 15'-0"	N/A	30'-0"	2 @ 19'-8"	1 @ 5'-7"	44'-11"	2 @ 29'-1"	2 @ 5'-7"	69'-4"
6	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	2 @ 5'-7"	59'-4"	2 @ 35'-8"	3 @ 5'-7"	88'-1"
6	5	7	2 @ 18'-2"	N/A	36'-4"	2 @ 23'-9"	2 @ 5'-7"	58'-8"	2 @ 35'-2"	2 @ 5'-7"	81'-6"
6	6	8	2 @ 21'-7"	1 @ 5'-7"	48'-9"	2 @ 28'-3"	2 @ 5'-7"	67'-8"	2 @ 41'-9"	3 @ 5'-7"	100'-3"
6	6	7	2 @ 21'-4"	1 @ 5'-7"	48'-3"	2 @ 27'-11"	2 @ 5'-7"	67'-0"	2 @ 41'-3"	3 @ 5'-7"	99'-3"
7	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
7	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	2 @ 6'-7"	60'-2"
7	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	2 @ 6'-7"	53'-2"	2 @ 29'-7"	3 @ 6'-7"	78'-11"
7	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	3 @ 6'-7"	67'-11"	2 @ 35'-8"	4 @ 6'-7"	97'-8"
7	6	8	2 @ 21'-7"	2 @ 6'-7"	56'-4"	2 @ 28'-3"	3 @ 6'-7"	76'-3"	2 @ 41'-9"	5 @ 6'-7"	116'-5"
7	7	8	2 @ 24'-9"	3 @ 6'-7"	69'-3"	2 @ 32'-4"	4 @ 6'-7"	91'-0"	2 @ 47'-10"	6 @ 6'-7"	135'-2"
8	2	8	3 @ 8'-11"	N/A	26'-9"	3 @ 11'-9"	N/A	35'-3"	3 @ 17'-5"	N/A	52'-3"
8	3	8	3 @ 12'-1"	N/A	36'-3"	3 @ 15'-10"	N/A	47'-6"	3 @ 23'-6"	2 @ 7'-7"	85'-8"
8	4	8	3 @ 15'-3"	N/A	45'-9"	3 @ 20'-0"	2 @ 7'-7"	75'-2"	3 @ 29'-7"	3 @ 7'-7"	111'-6"
8	5	8	3 @ 18'-5"	N/A	55'-3"	3 @ 24'-1"	3 @ 7'-7"	95'-0"	3 @ 35'-8"	4 @ 7'-7"	137'-4"
8	6	8	3 @ 21'-7"	2 @ 7'-7"	79'-11"	3 @ 28'-3"	3 @ 7'-7"	107'-6"	3 @ 41'-9"	5 @ 7'-7"	163'-2"
8	7	8	3 @ 24'-9"	3 @ 7'-7"	97'-0"	3 @ 32'-4"	4 @ 7'-7"	127'-4"	3 @ 47'-10"	6 @ 7'-7"	189'-0"
8	8	8	3 @ 27'-11"	3 @ 7'-7"	106'-6"	3 @ 36'-6"	4 @ 7'-7"	139'-10"	3 @ 53'-11"	6 @ 7'-7"	207'-3"
9	2	9	3 @ 9'-3"	N/A	27'-9"	3 @ 12'-1"	N/A	36'-3"	3 @ 17'-11"	N/A	53'-9"
9	3	9	3 @ 12'-4"	N/A	37'-0"	3 @ 16'-2"	N/A	48'-6"	3 @ 24'-0"	3 @ 8'-7"	97'-9"
9	4	9	3 @ 15'-6"	N/A	46'-6"	3 @ 20'-4"	2 @ 8'-7"	78'-2"	3 @ 30'-1"	3 @ 8'-7"	116'-0"
9	5	9	3 @ 18'-8"	N/A	56'-0"	3 @ 24'-5"	3 @ 8'-7"	99'-0"	3 @ 36'-2"	4 @ 8'-7"	142'-10"
9	6	9	3 @ 21'-10"	2 @ 8'-7"	82'-8"	3 @ 28'-7"	3 @ 8'-7"	111'-6"	3 @ 42'-3"	5 @ 8'-7"	169'-8"
9	7	9	3 @ 25'-0"	3 @ 8'-7"	100'-9"	3 @ 32'-8"	4 @ 8'-7"	132'-4"	3 @ 48'-4"	6 @ 8'-7"	196'-6"
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11	10	11	4 @ 35'-0"	4 @ 10'-7"	182'-4"	4 @ 45'-9"	5 @ 10'-7"	235'-11"	4 @ 67'-7"	8 @ 10'-7"	355'-0"
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12	8	12	4 @ 29'-0"	3 @ 11'-7"	150'-9"	4 @ 37'-10"	4 @ 11'-7"	197'-8"	4 @ 55'-11"	7 @ 11'-7"	304'-9"
12	10	12	4 @ 35'-4"	4 @ 11'-7"	187'-8"	4 @ 46'-1"	5 @ 11'-7"	242'-3"	4 @ 68'-1"	8 @ 11'-7"	365'-0"
12	12	12	4 @ 41'-8"	5 @ 11'-7"	224'-7"	4 @ 54'-4"	6 @ 11'-7"	286'-10"	4 @ 80'-3"	10 @ 11'-7"	436'-10"

(Sheet 2 of 2)

MODEL: Default
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TPGBC-ZS

2-17-2017



USER NAME =	Johnn	DESIGNED -	SAT	REVISED -	
CHECKED -	SPS	REVISED -			
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PLOT DATE =	1/31/2019	CHECKED -	JMT	REVISED -	

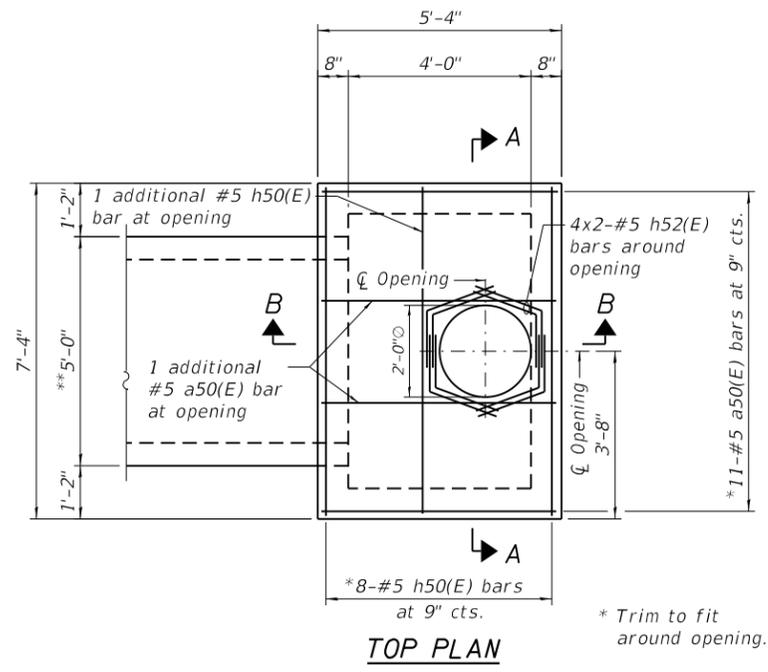
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAVERSABLE PIPE GRATE FOR BOX CULVERTS - II
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

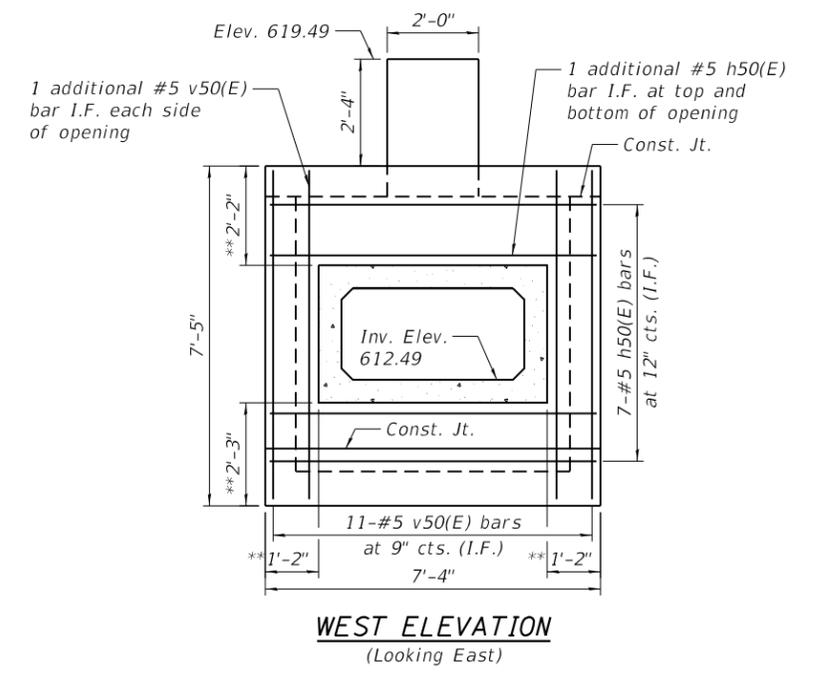
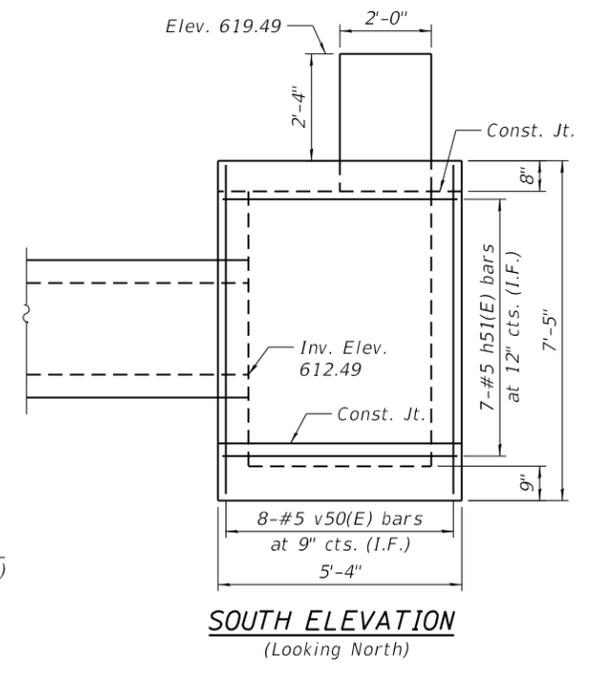
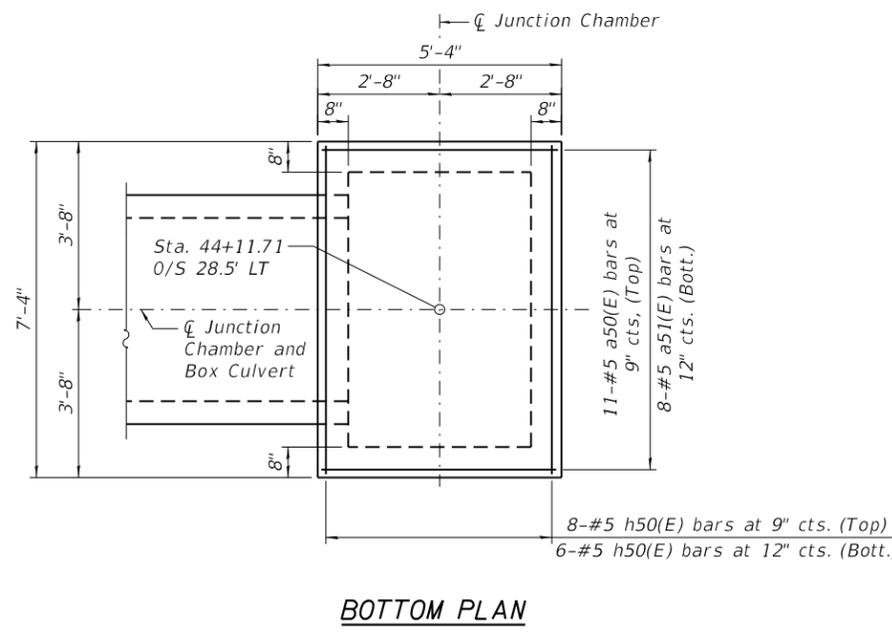
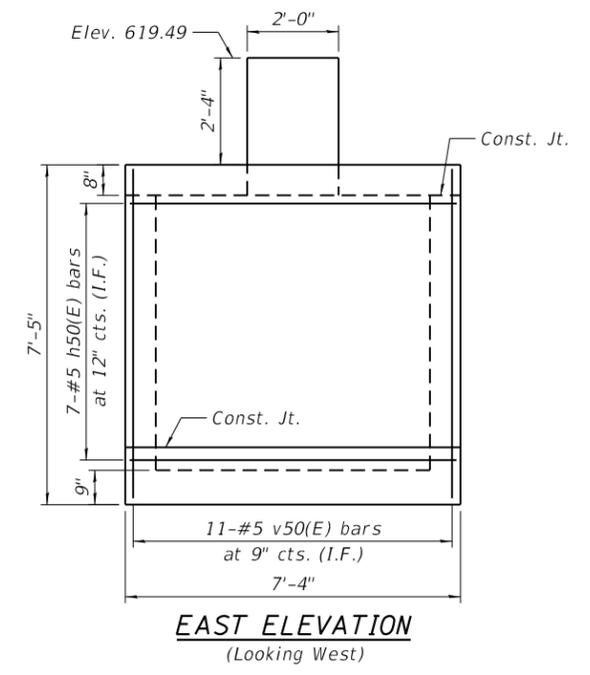
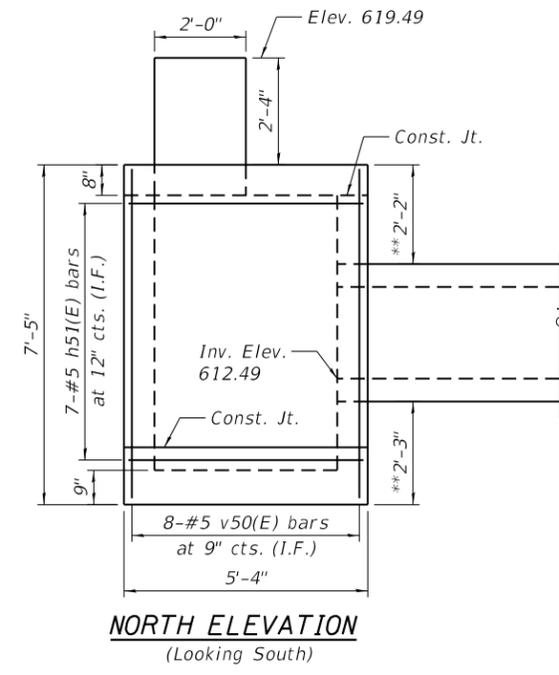
SHEET OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	46
CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		

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* Trim to fit around opening.



* Trim to fit around opening.

** Dimensions to be verified with the precast concrete box culvert manufacturer.

I.F. = Inside Face
 Bott. = Bottom

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**JUNCTION CHAMBER DETAILS - I
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SHEET OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	47
CONTRACT NO. 60N21				

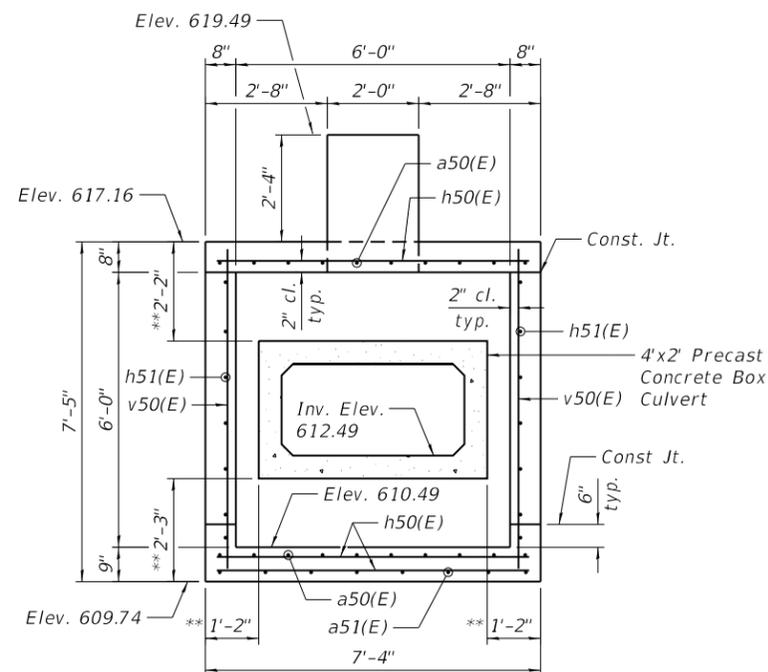
ILLINOIS FED. AID PROJECT



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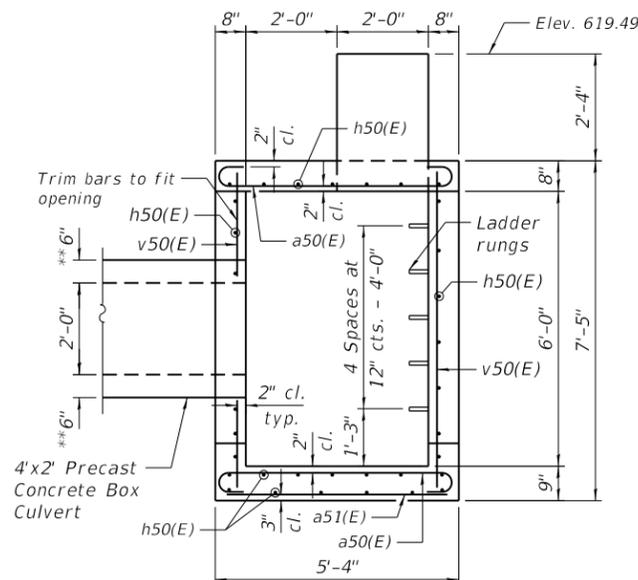
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a50(E)	24	#5	6'-2"	
a51(E)	8	#5	5'-0"	
h50(E)	37	#5	7'-0"	
h51(E)	16	#5	5'-0"	
h52(E)	8	#5	2'-9"	
v50(E)	34	#5	7'-1"	
Concrete Structures			Cu. Yd.	6.3
Reinforcement Bars, Epoxy Coated			Pound	830



SECTION A-A

** Dimensions to be verified with the precast concrete box culvert manufacturer.



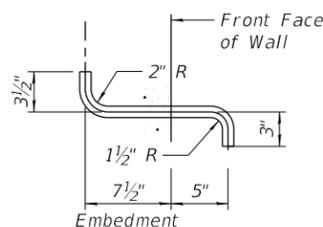
SECTION B-B

NOTES:

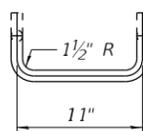
1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.
3. The ladder rungs shall be aluminum, conforming to ASTM B361-Alloy 6061-T6 or shall be ductile iron. Aluminum ladder rungs shall receive a heavy coat of bituminous paint or cold applied asphaltic mastic for the portion embedded in concrete. The coating must extend beyond the embedment at least two inches.
4. The contractor may submit an alternative ladder rung detail for the Engineer's approval.
5. All costs for compacted subbase or CLSM, ladder rungs, and all appurtenances required to complete this work shall be included in the cost of "Concrete Structures".

DESIGN STRESSES

$f'_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Reinforcement)}$

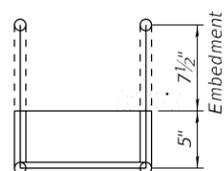


SIDE VIEW

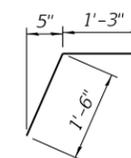


FRONT VIEW

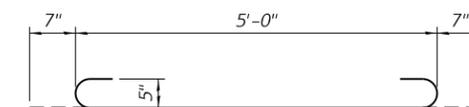
TYPE Z LADDER RUNG ELEVATIONS



TYPE Z LADDER RUNG PLAN



BAR h52(E)



BAR a51(E)

MODEL: Default
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 1/31/2019 7:26:01 PM



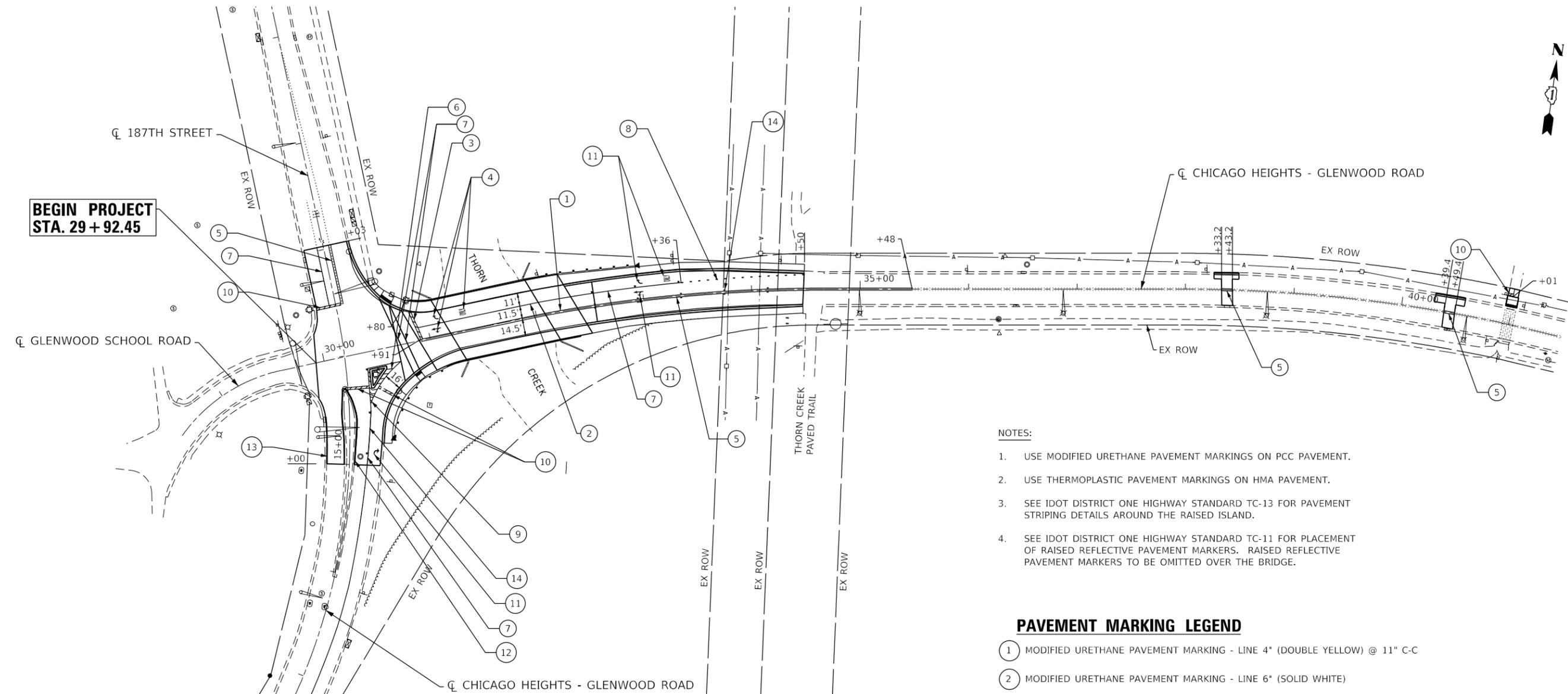
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PLOT DATE =	1/31/2019	CHECKED -	JMT	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**JUNCTION CHAMBER DETAILS - II
 CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK**

SHEET OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	48
CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		

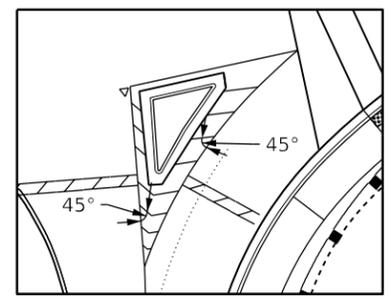


NOTES:

1. USE MODIFIED URETHANE PAVEMENT MARKINGS ON PCC PAVEMENT.
2. USE THERMOPLASTIC PAVEMENT MARKINGS ON HMA PAVEMENT.
3. SEE IDOT DISTRICT ONE HIGHWAY STANDARD TC-13 FOR PAVEMENT STRIPING DETAILS AROUND THE RAISED ISLAND.
4. SEE IDOT DISTRICT ONE HIGHWAY STANDARD TC-11 FOR PLACEMENT OF RAISED REFLECTIVE PAVEMENT MARKERS. RAISED REFLECTIVE PAVEMENT MARKERS TO BE OMITTED OVER THE BRIDGE.

PAVEMENT MARKING LEGEND

- ① MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) @ 11" C-C
- ② MODIFIED URETHANE PAVEMENT MARKING - LINE 6" (SOLID WHITE)
- ③ MODIFIED URETHANE PAVEMENT MARKING - 24" (SOLID WHITE)
- ④ MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) @ 11" C-C
- ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL @ 45°, 20' C-C SPACING) - 5' MINIMUM
- ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (SOLID WHITE)
- ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE - 2' LINE, 6' SPACE)
- ⑨ THERMOPLASTIC PAVEMENT MARKING - LINE 8" (SOLID WHITE)
- ⑩ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (SOLID WHITE)
- ⑪ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
- ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID YELLOW)
- ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SOLID WHITE)
- ⑭ REPLACEMENT REFLECTOR OR RAISED REFLECTIVE PAVEMENT MARKER



**PAVEMENT MARKING DETAILS
AT RAISED ISLAND**



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DRAWN - IH	REVISED -	
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PLOT DATE = 2/25/2019	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN			
CHICAGO HEIGHTS-GLENWOOD RD AT THORN CREEK			
SCALE: 1"=50'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	49
CONTRACT NO. 60N21				
<small>ILLINOIS FED. AID PROJECT</small>				

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

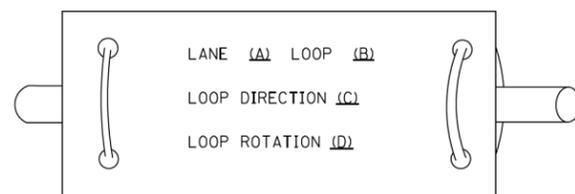
TS SHT NO. 1

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	PLOT DATE = 9/29/2016	DATE - 9/29/2016	REVISED -							

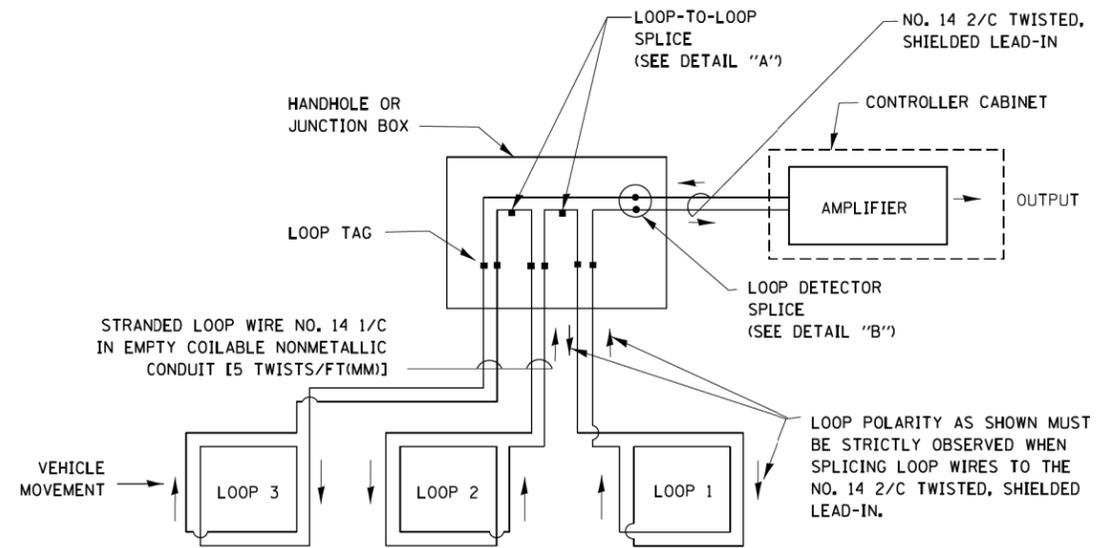
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

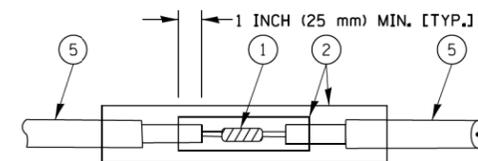


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

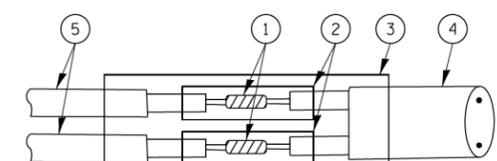


DETECTOR LOOP WIRING SCHEMATIC

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

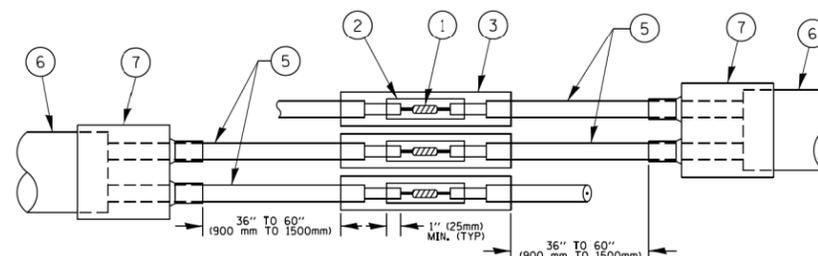


DETAIL "A"
LOOP-TO-LOOP SPLICE

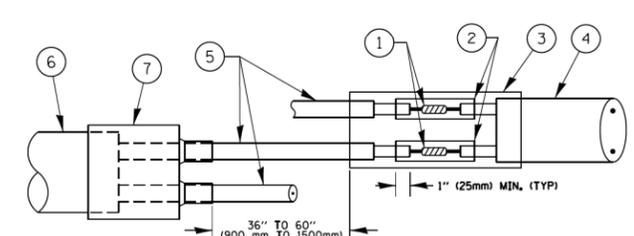


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

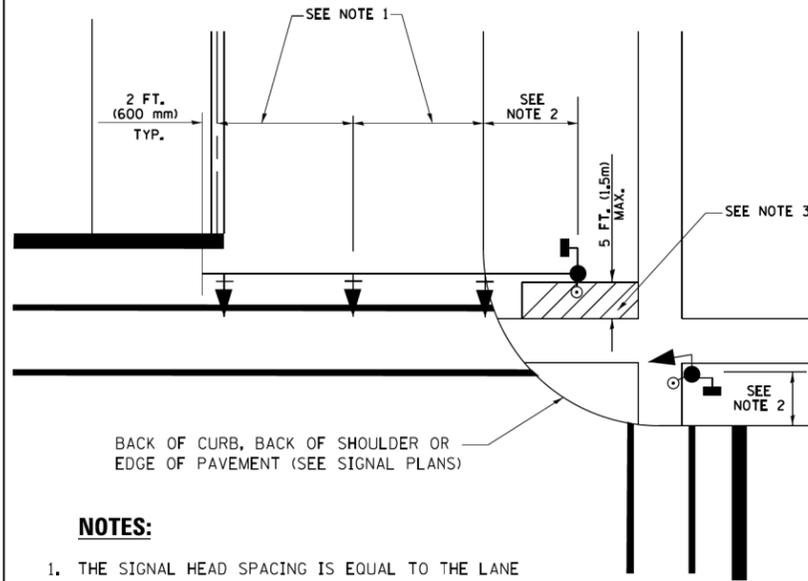
LOOP DETECTOR SPLICE

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

TS SHT NO. 2

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 51
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		DATE - 10-28-09	REVISED -									

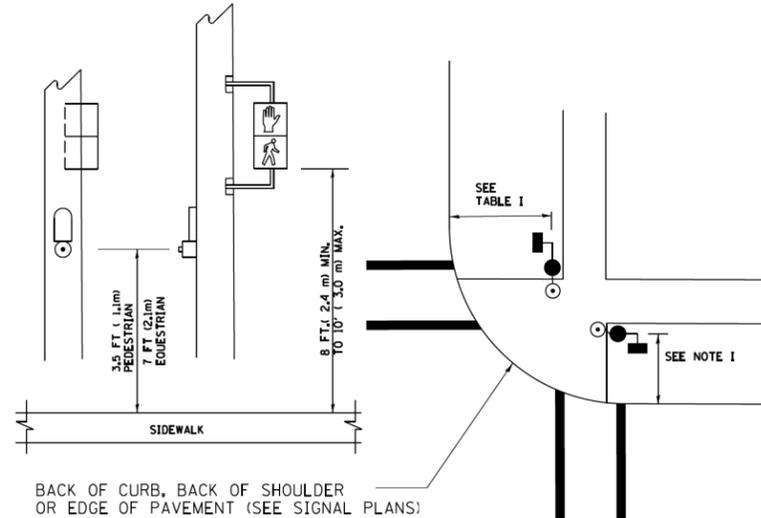
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

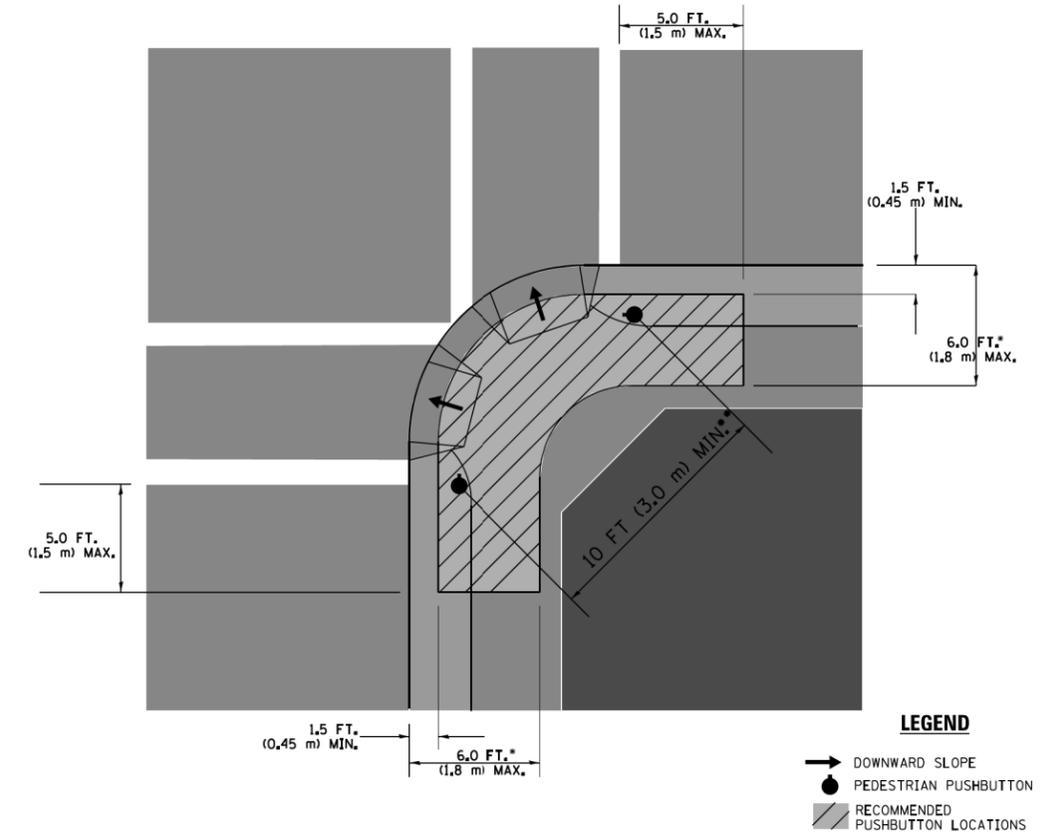
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

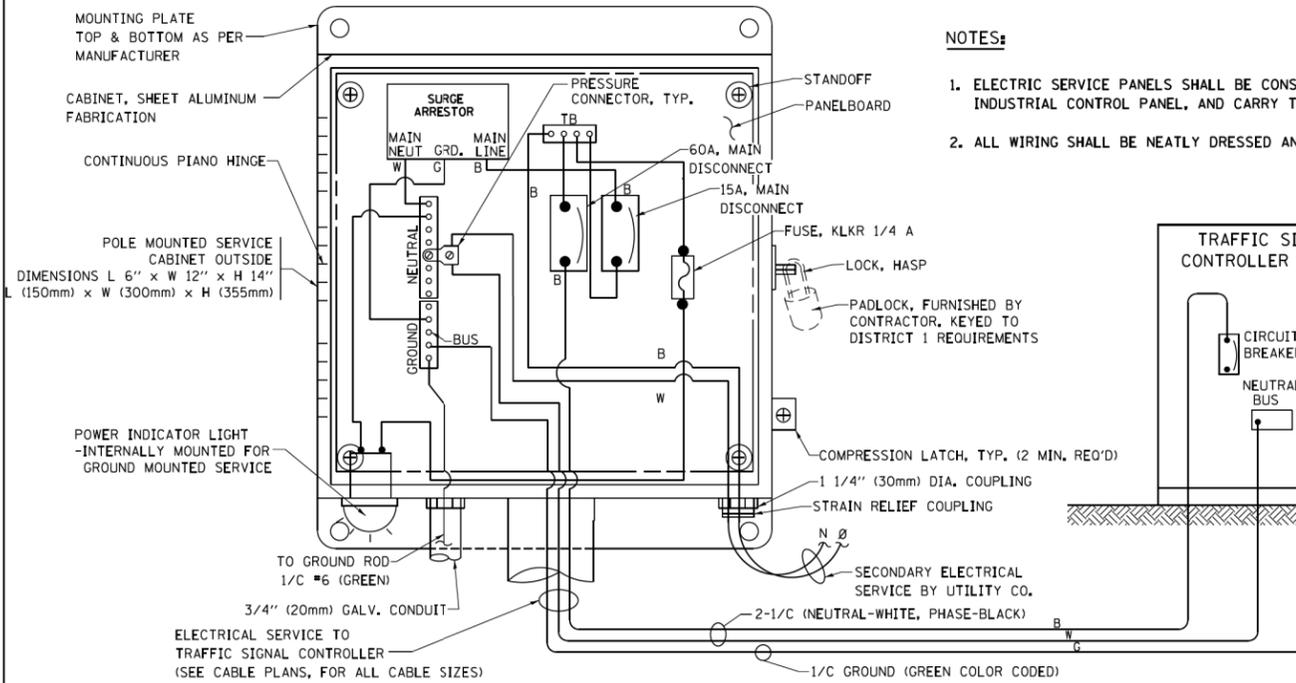
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

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

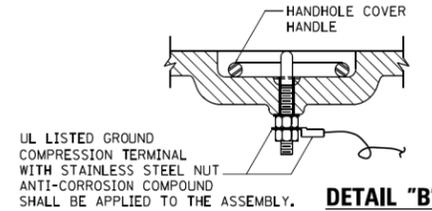
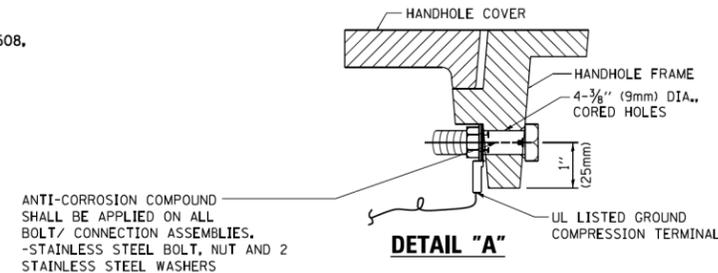
TS SHT NO. 3

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\p\work\p\dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -			3603	2010-141-B	COOK	114	52
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -			TS-05		CONTRACT NO. 60N21		
PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 3 OF 7 SHEETS	STA.	TO STA.			



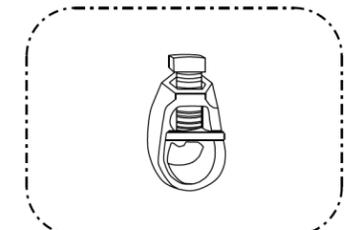
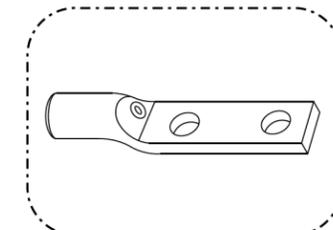
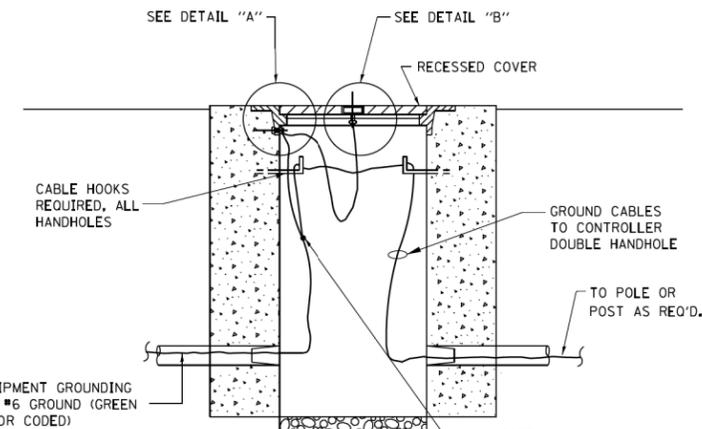
NOTES:

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



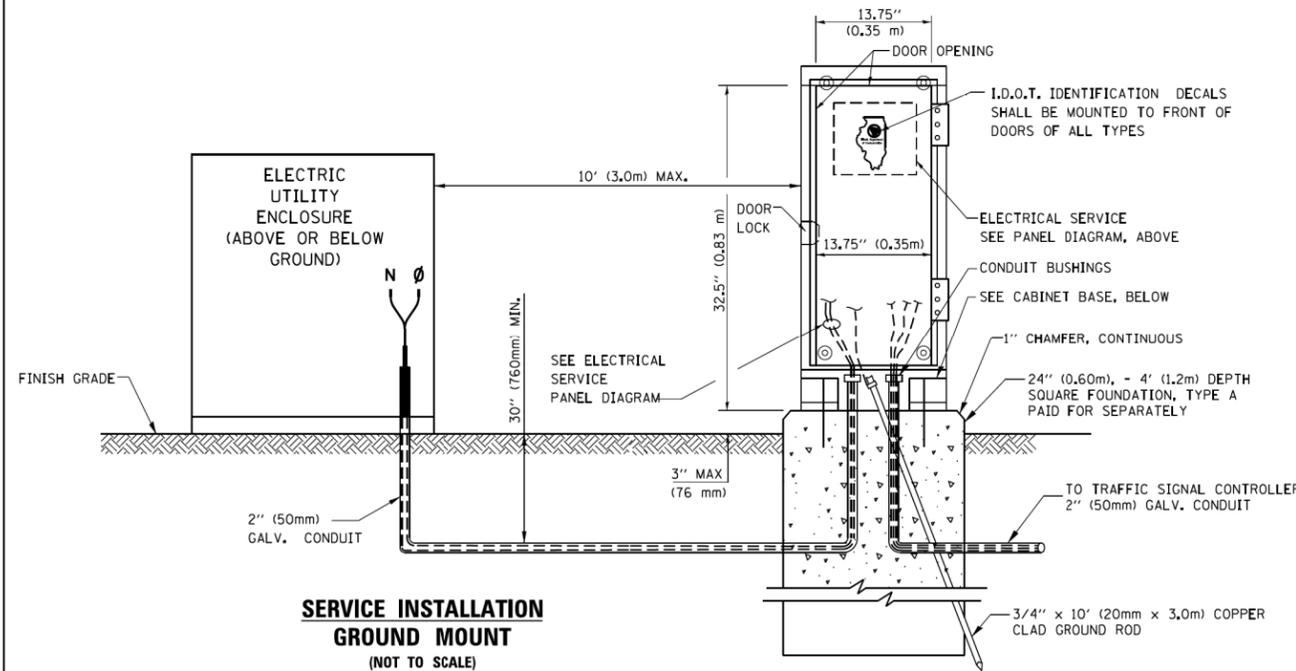
NOTES:
GROUNDING SYSTEM

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

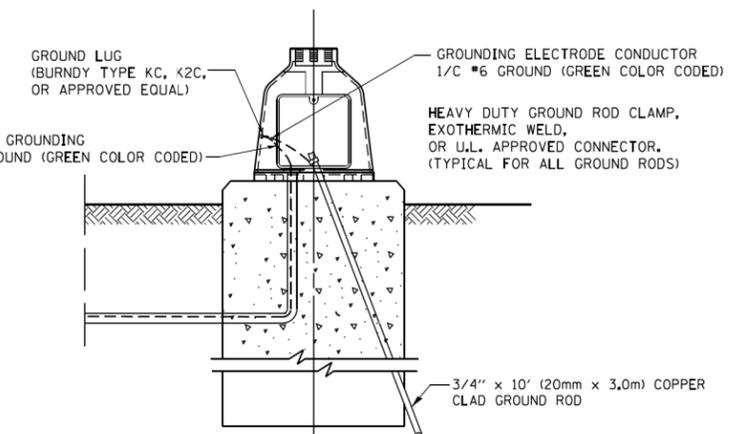
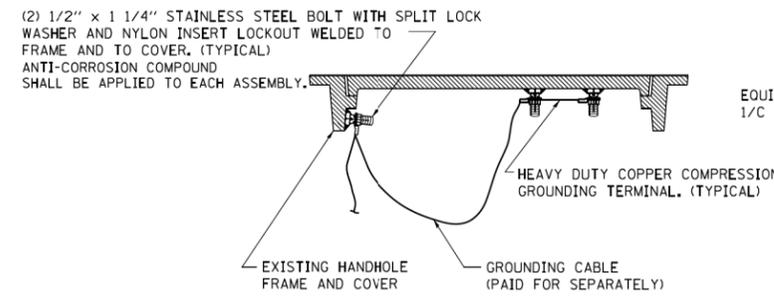


NOTES:

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

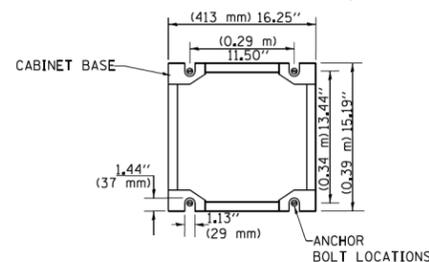


HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)



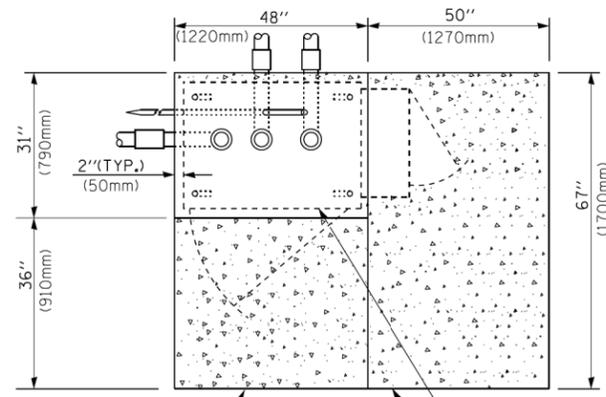
TS SHT NO. 4

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwork\pwork\footemj\00108315\ts05.dgn		DRAWN - BCK	REVISED -
		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

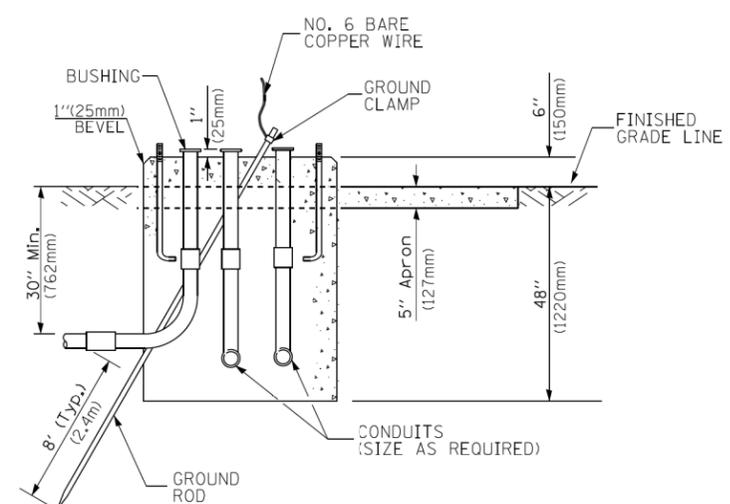
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	53
TS-05		CONTRACT NO.60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW



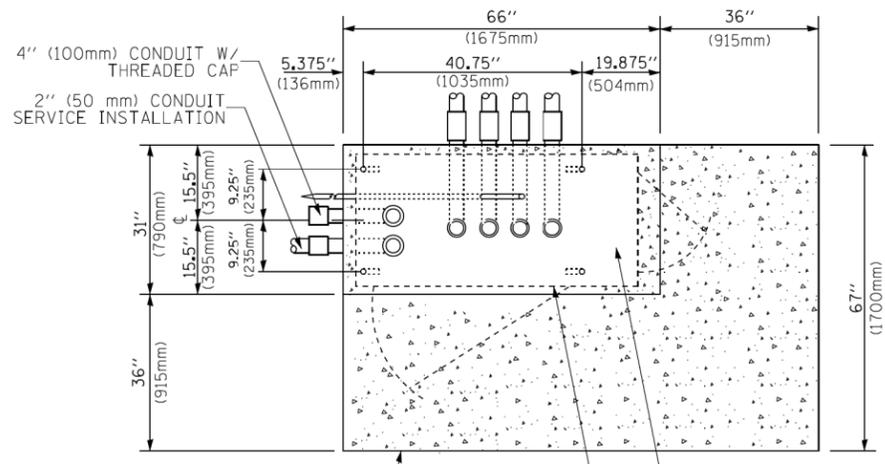
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

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

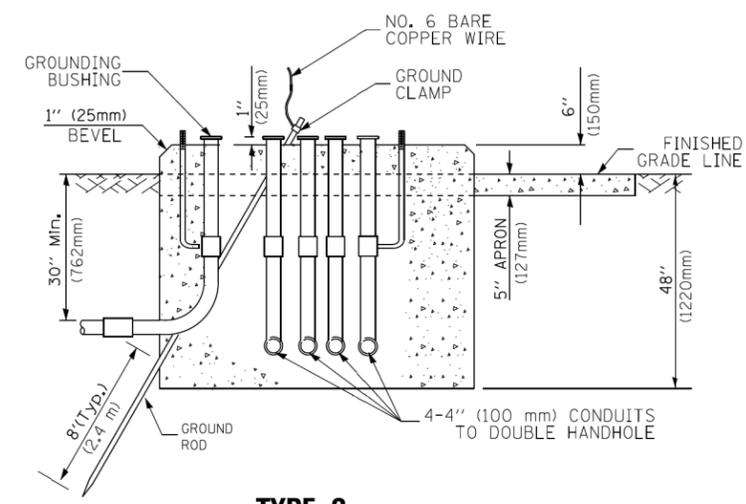
CABLE SLACK

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



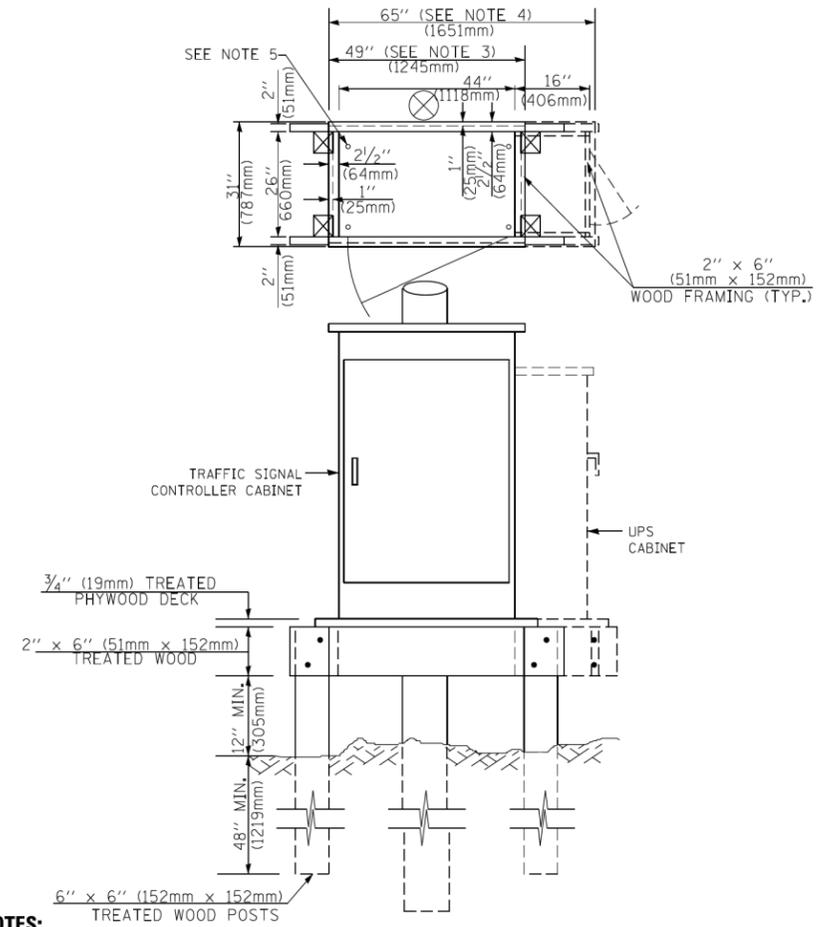
TOP VIEW



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

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



NOTES:

- 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.
- 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.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 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.
- FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

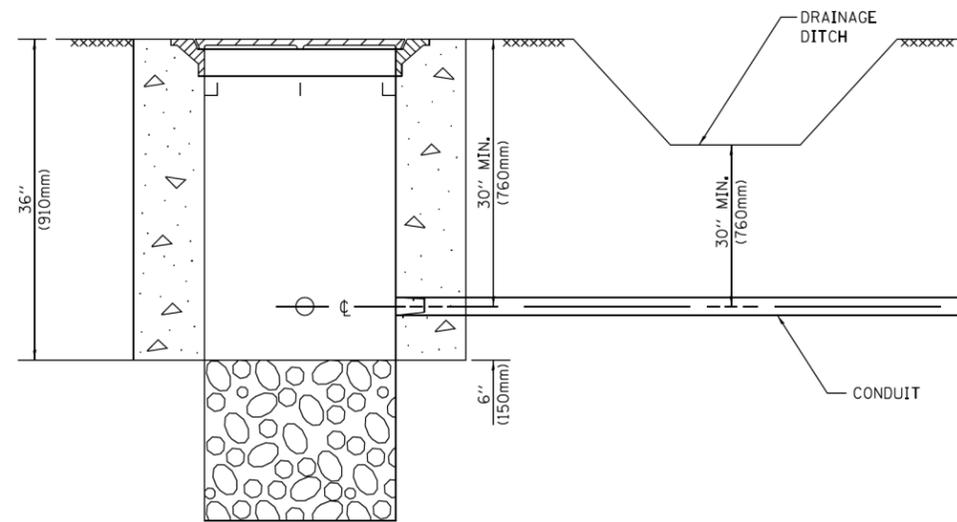
NOTES:

- 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.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TS SHT NO. 5

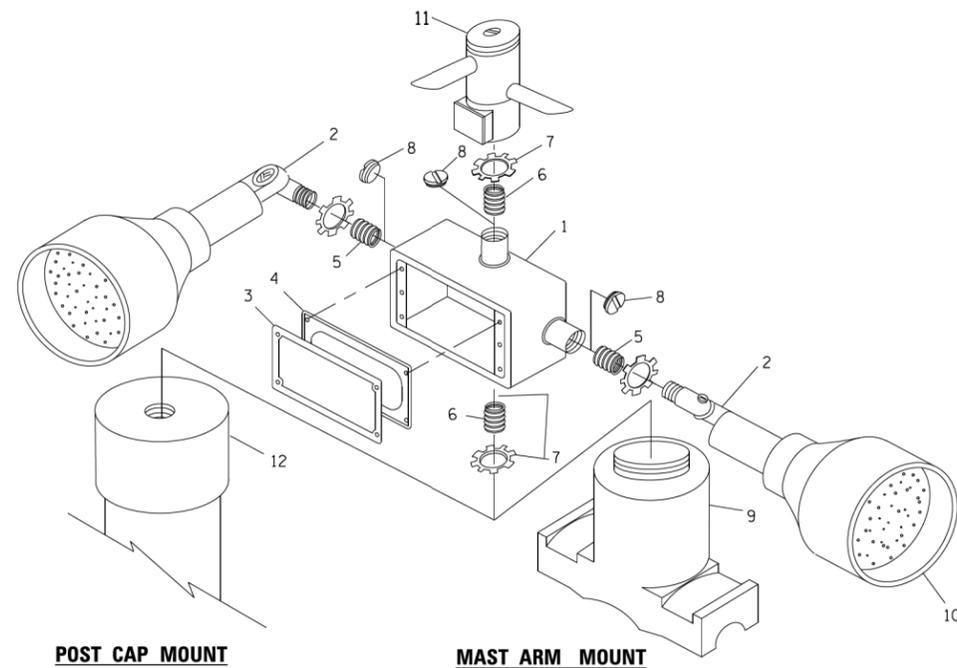
FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\p\work\p\dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -		STANDARD TRAFFIC SIGNAL DESIGN DETAILS		3603	2010-141-B	COOK	114	54
		CHECKED - DAD	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA.	TO STA.	TS-05		CONTRACT NO. 60N21
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



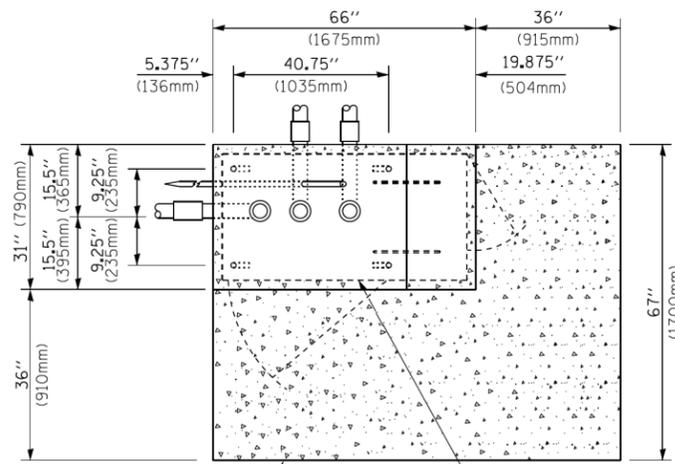
NOTES:

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.

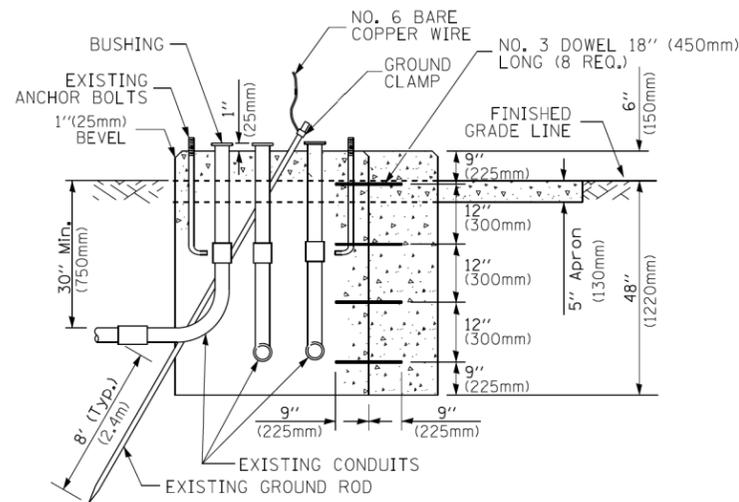
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

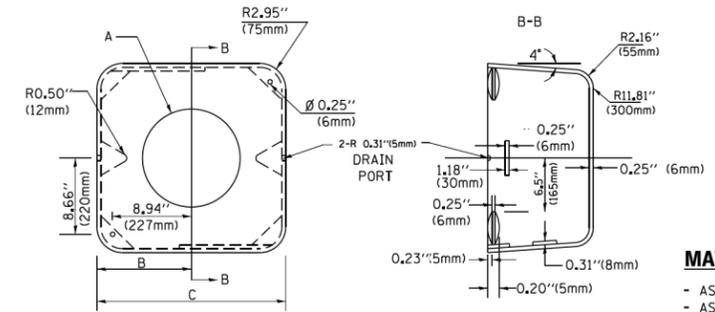


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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-O-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)

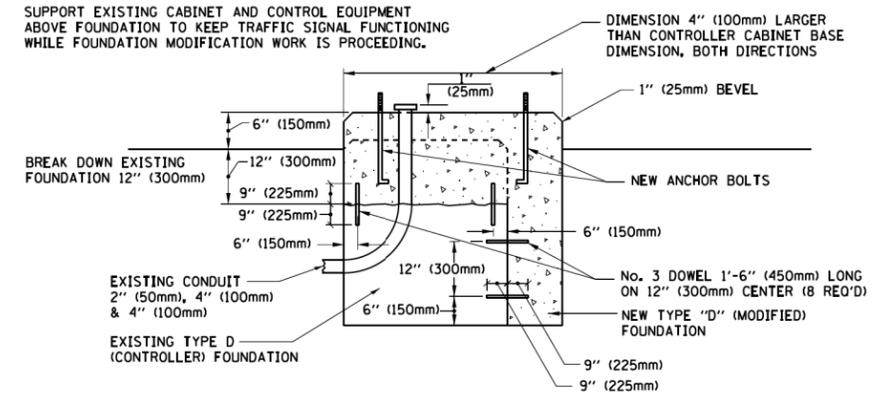
SHROUD

NOTES:

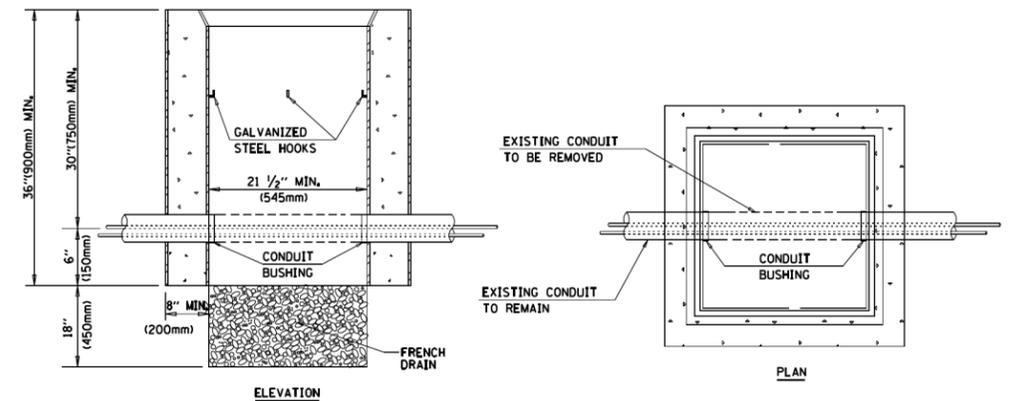
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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

TS SHT NO. 6

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	PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

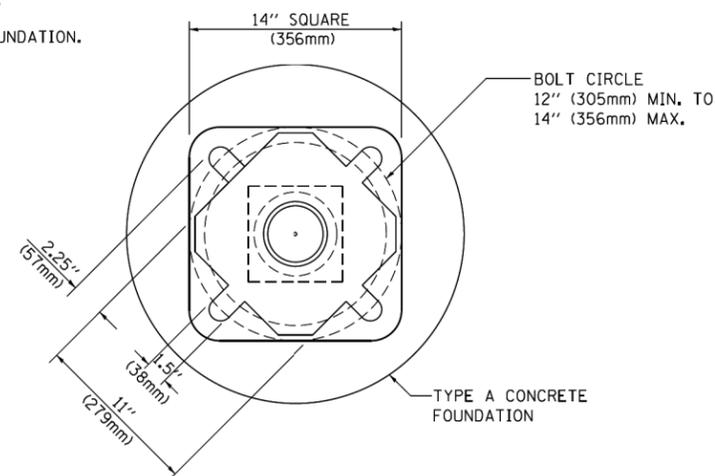
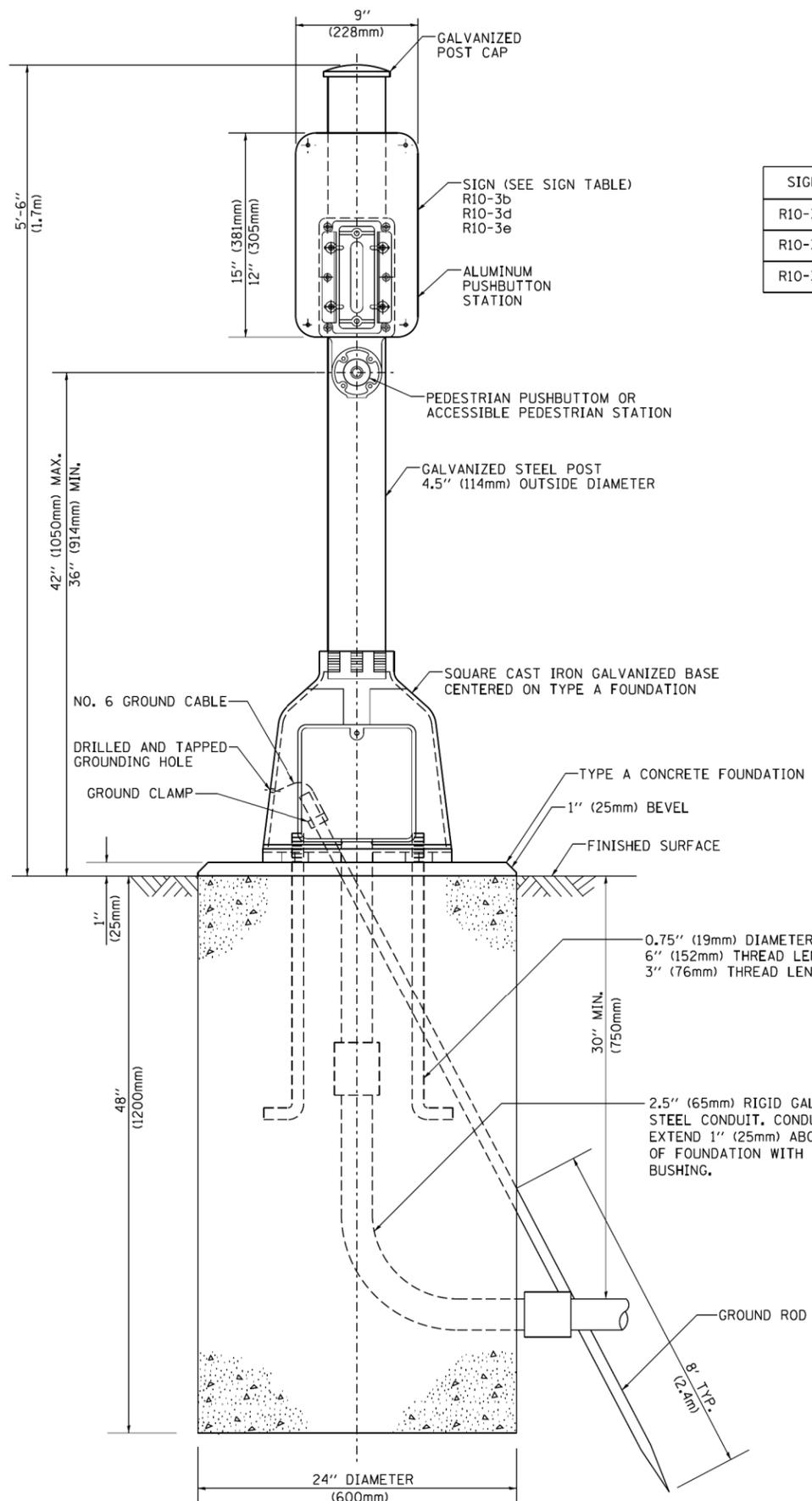
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	55
TS-05		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

TS SHT NO. 7

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
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PLOT DATE = 1/13/2014		DATE - 10/1/2012	REVISED -

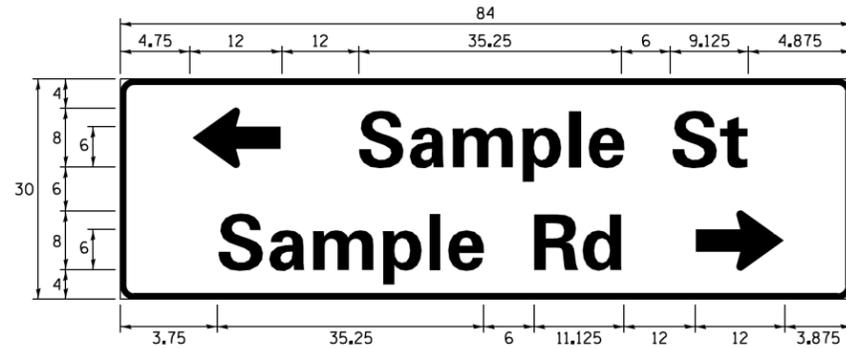
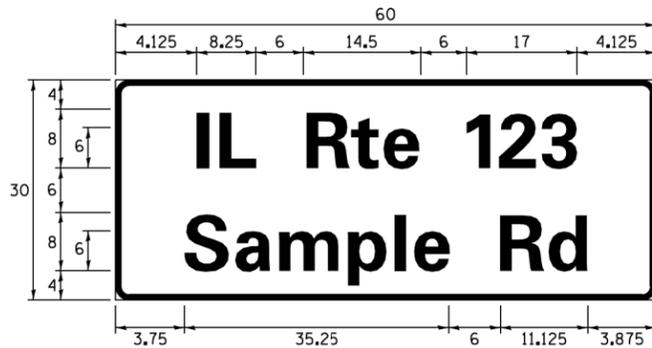
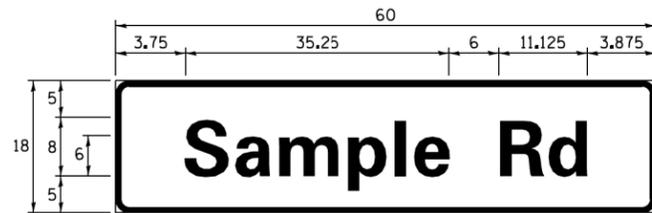
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	56
TS-05		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

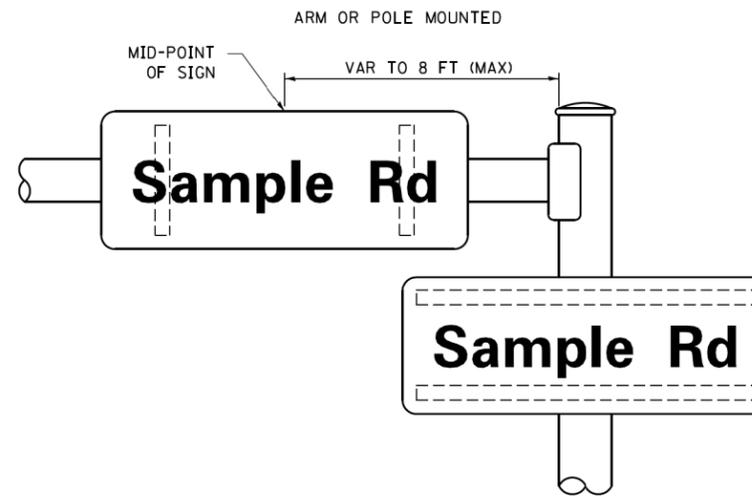
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

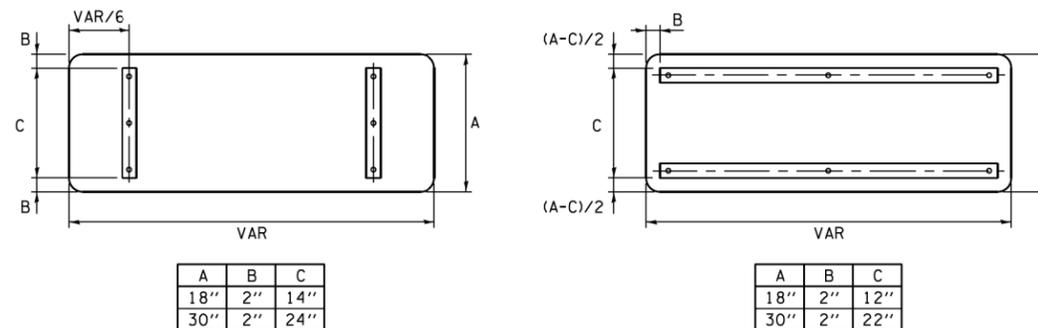
- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
- SIGN SCREWS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- BRACKETS

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

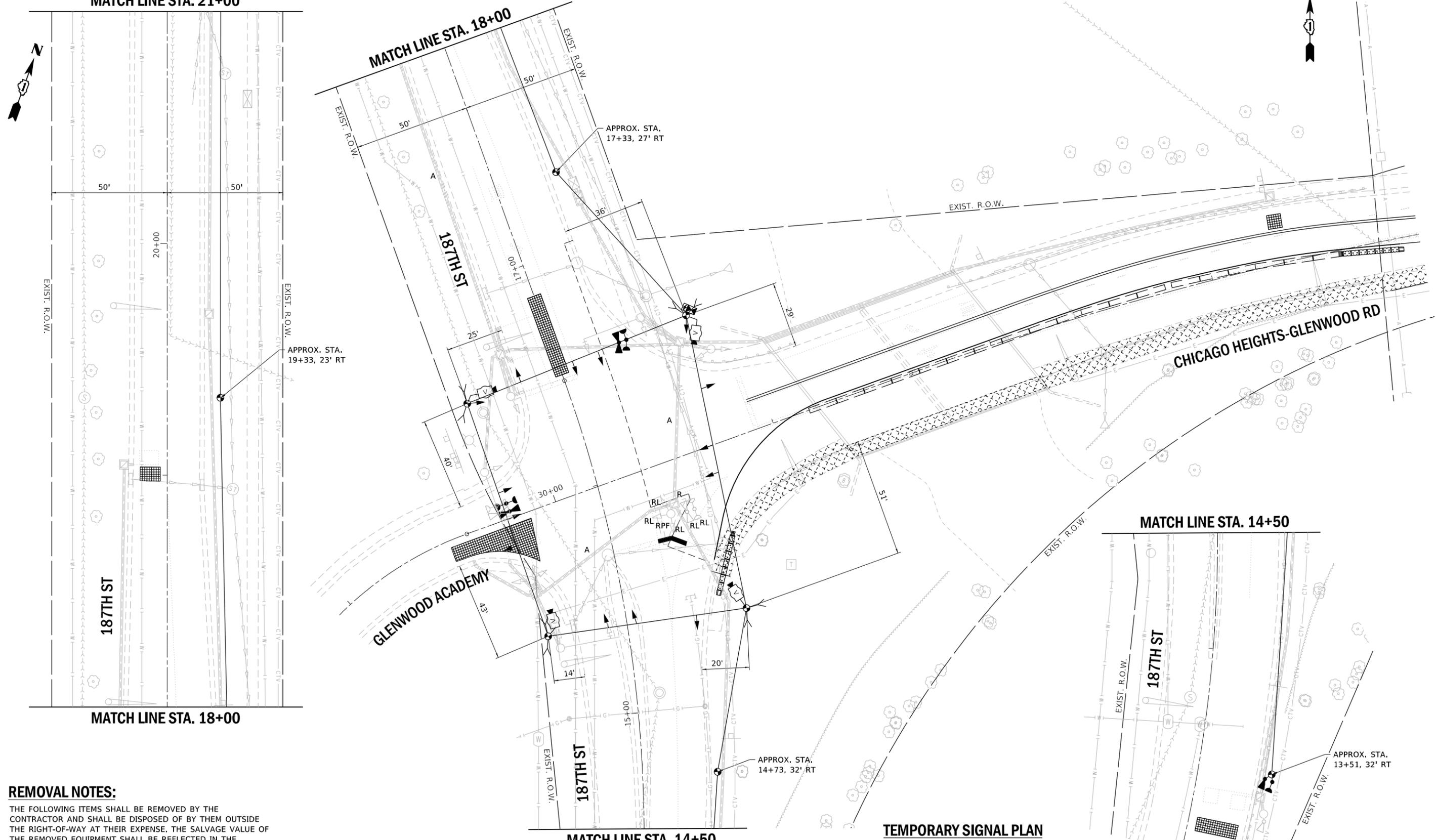
(8") UPPER CASE AND (6") LOWER CASE

CHARACTER	FHWA SERIES "C"			FHWA SERIES "D"			
	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO. 8

FILE NAME =	USER NAME = drivekosgn	DESIGNED - LP/IP	REVISED - LP 07/01/2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS				F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 57
Default	PLOT SCALE = 50,0000 / 1 in.	CHECKED - IP	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 7/31/2015	DATE - 10/01/2014	REVISED -		CONTRACT NO. 60N21								
					TS-02								

SEE TS SHT NO. 10
MATCH LINE STA. 21+00



REMOVAL NOTES:

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

- 1 EACH TRAFFIC SIGNAL POST

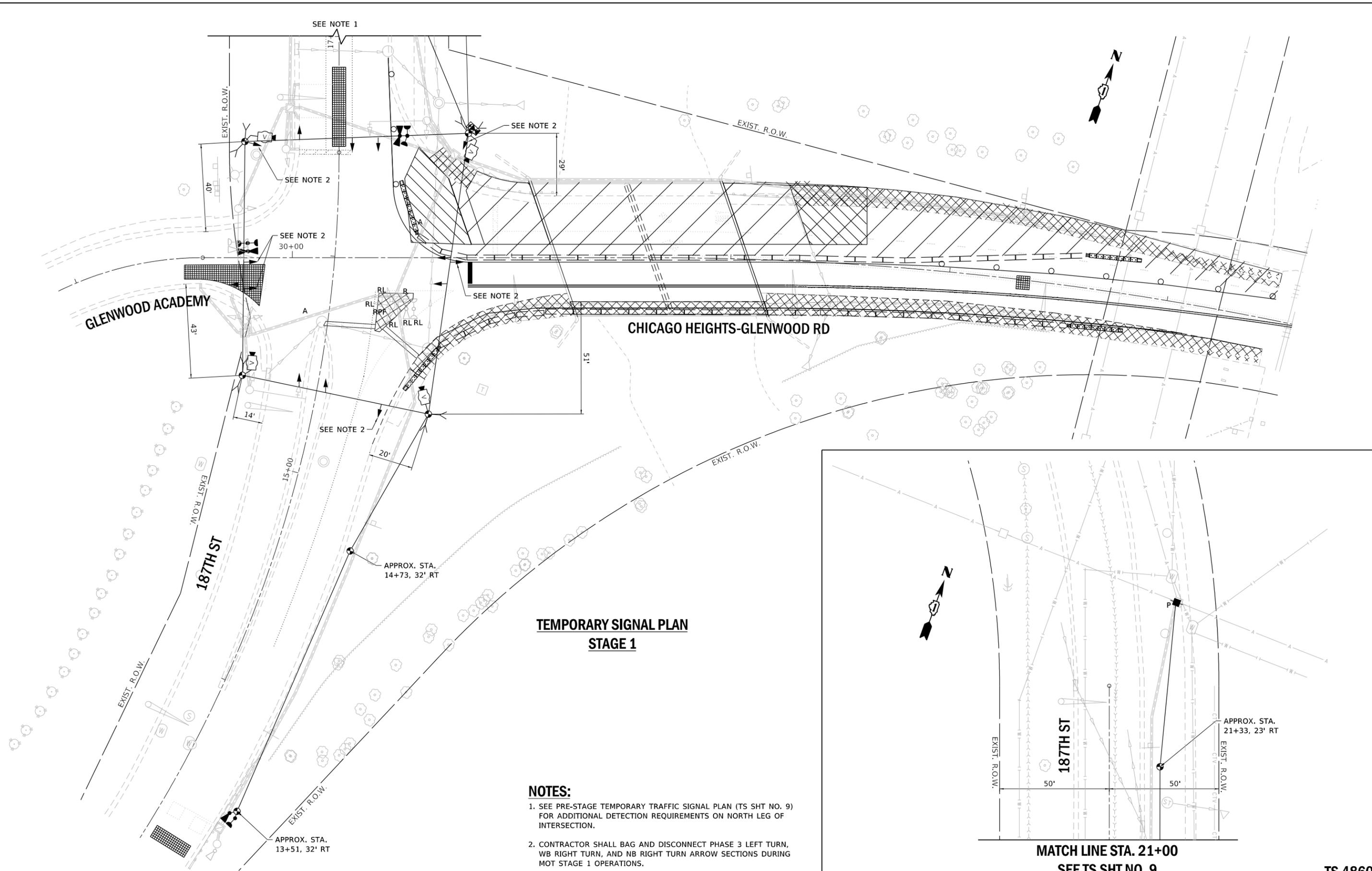
**TEMPORARY SIGNAL PLAN
PRE-STAGE**

TS SHT NO. 9

TS 4860

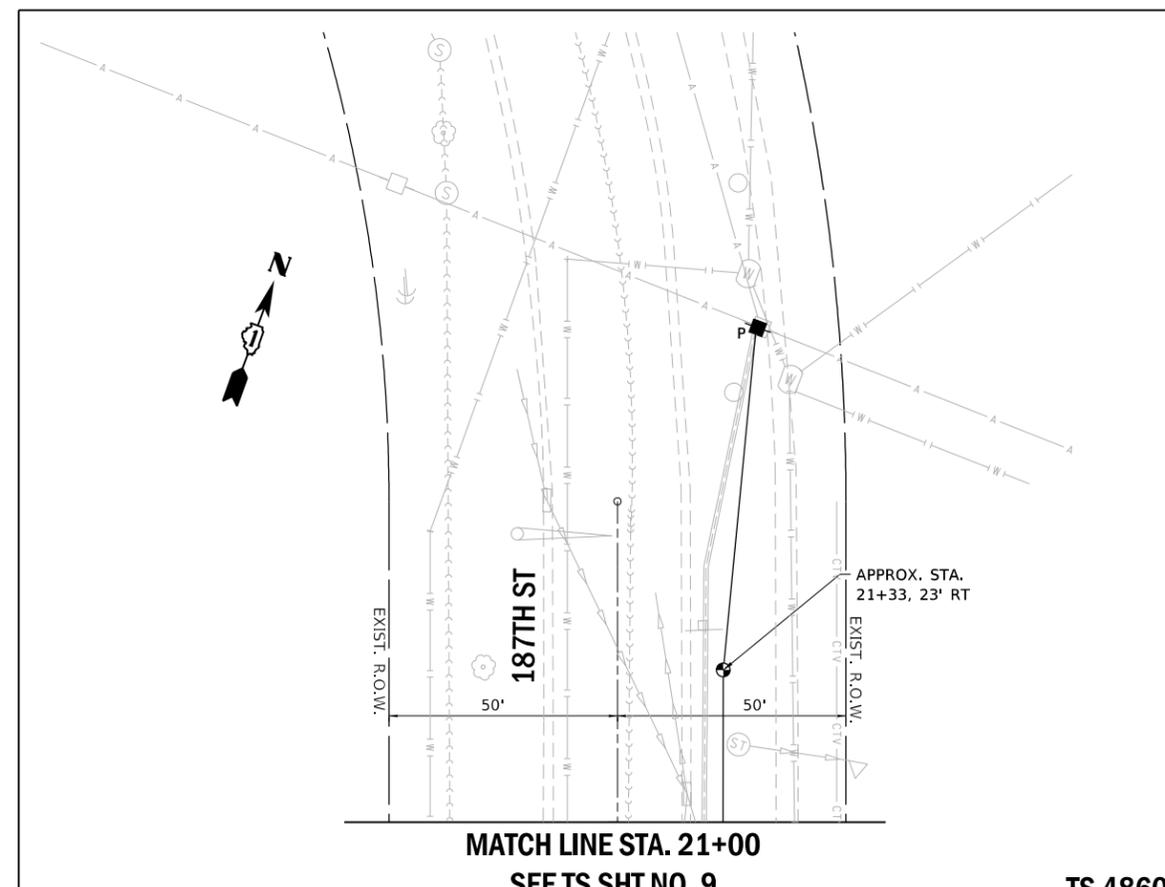
FILE NAME: D160N21-sht-ts-tempsignalplan-MOT- DESIGNED BY: bscifers	DESIGNED - BKS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - SVJ	REVISED -			3603	2010-141-B	COOK	114	58
PLOT SCALE = 40.0000' / in.	CHECKED - BKS	REVISED -	SCALE: 1"=20'	SHEET OF SHEETS STA. TO STA.	CONTRACT NO. 60N21				
PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -			ILLINOIS FED. AID PROJECT				

TS SHT NO. 10



**TEMPORARY SIGNAL PLAN
STAGE 1**

- NOTES:**
1. SEE PRE-STAGE TEMPORARY TRAFFIC SIGNAL PLAN (TS SHT NO. 9) FOR ADDITIONAL DETECTION REQUIREMENTS ON NORTH LEG OF INTERSECTION.
 2. CONTRACTOR SHALL BAG AND DISCONNECT PHASE 3 LEFT TURN, WB RIGHT TURN, AND NB RIGHT TURN ARROW SECTIONS DURING MOT STAGE 1 OPERATIONS.



TS 4860

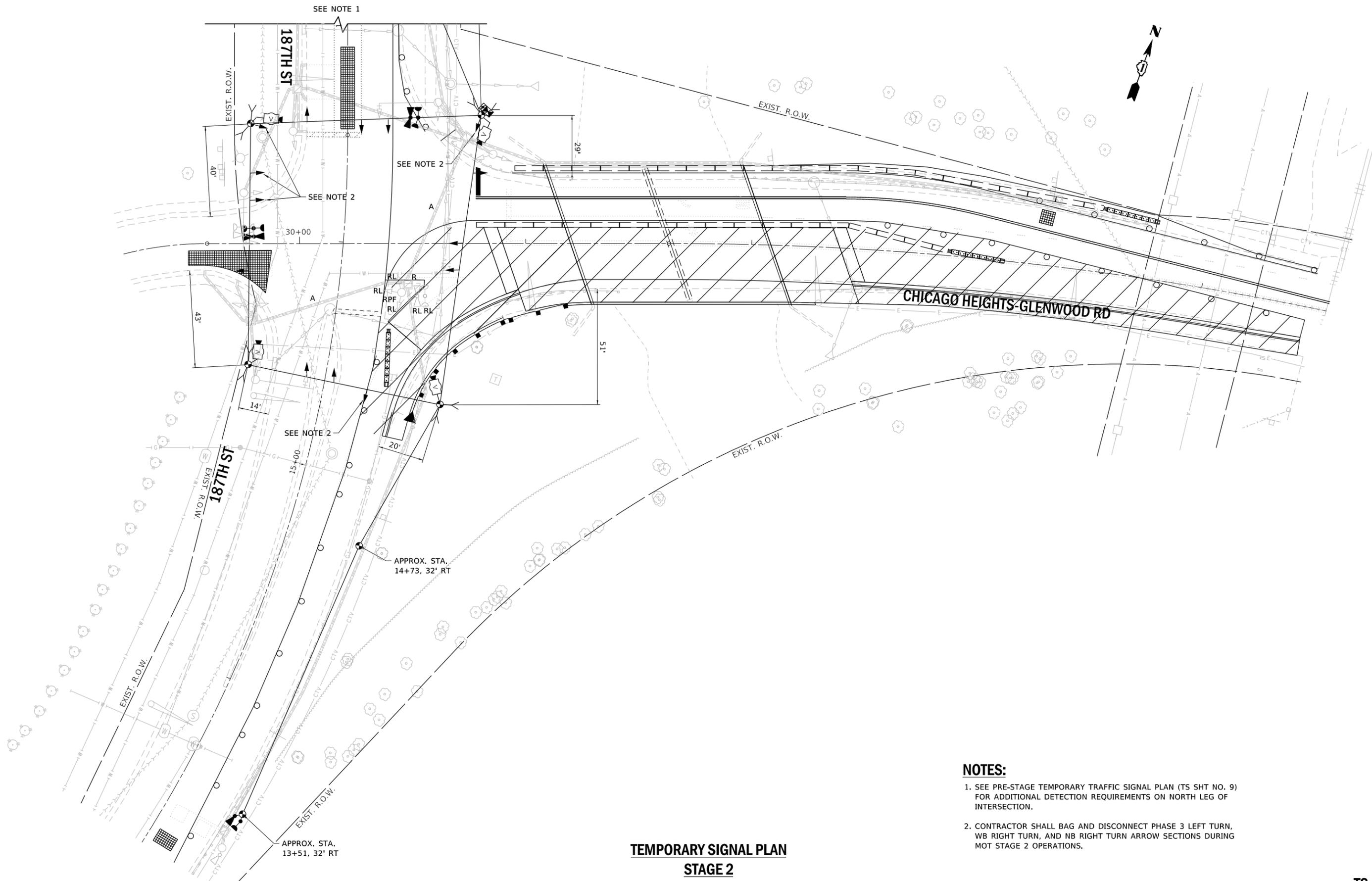
FILE NAME: D160N21-sht-ts-temp-signal-plan-MOT-4860.dwg	DESIGNED - BKS	REVISED -
USER: bscifers	DRAWN - SVJ	REVISED -
PLOT SCALE = 40.0000 "/td> <td>CHECKED - BKS</td> <td>REVISED -</td>	CHECKED - BKS	REVISED -
PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET	
SCALE: 1"=20'	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	59
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

TS SHT NO. 11



**TEMPORARY SIGNAL PLAN
STAGE 2**

NOTES:

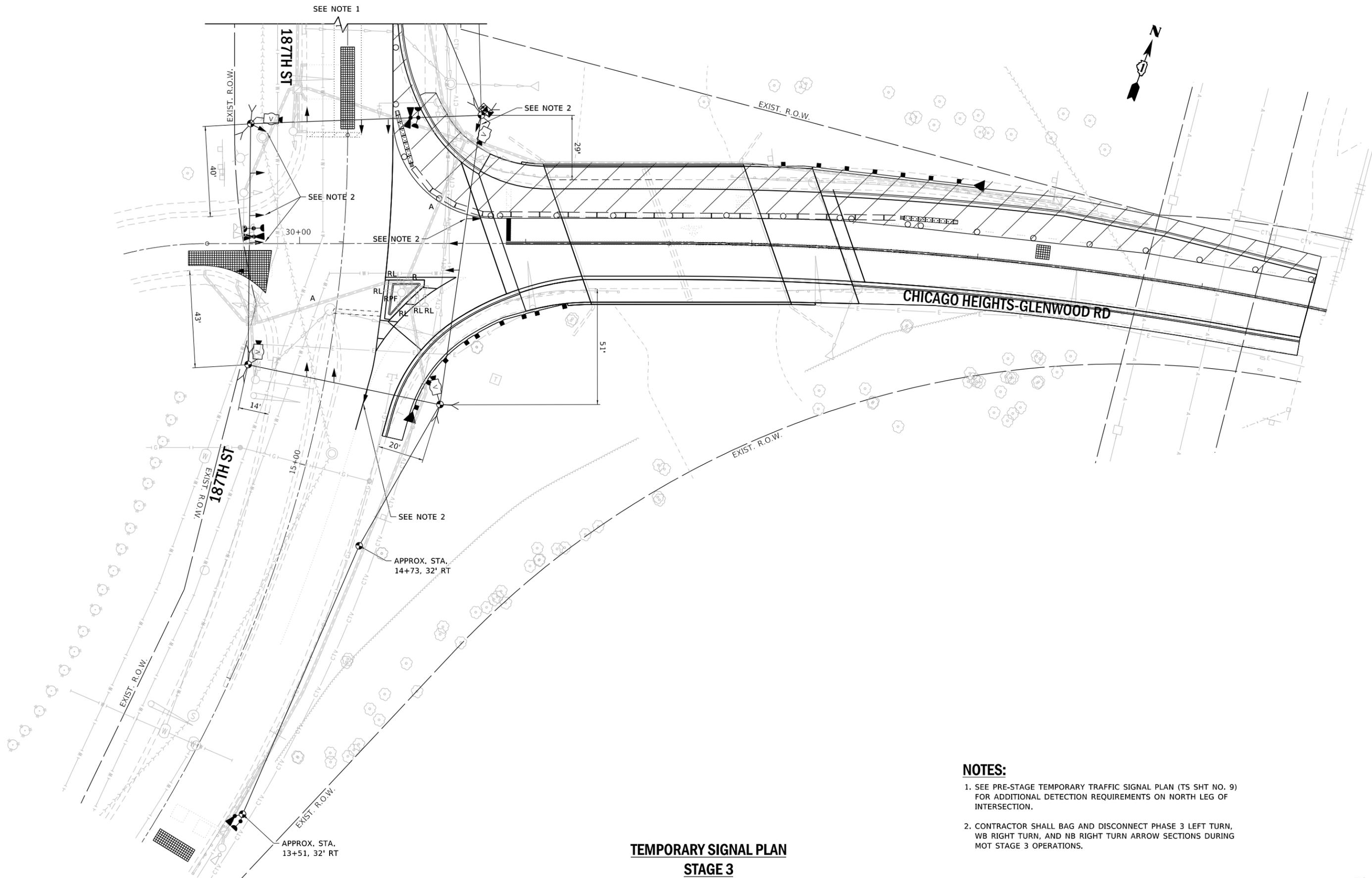
1. SEE PRE-STAGE TEMPORARY TRAFFIC SIGNAL PLAN (TS SHT NO. 9) FOR ADDITIONAL DETECTION REQUIREMENTS ON NORTH LEG OF INTERSECTION.
2. CONTRACTOR SHALL BAG AND DISCONNECT PHASE 3 LEFT TURN, WB RIGHT TURN, AND NB RIGHT TURN ARROW SECTIONS DURING MOT STAGE 2 OPERATIONS.

TS 4860

FILE NAME: D160N21-sht-ts-temporarysignalplan-MOT-4860.DWG DESIGNED - BKS DRAWN - SVJ CHECKED - BKS DATE - 12/13/2018	REVISIONS	DESIGNED - BKS	REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	REVISIONS	REVISIONS	3603			2010-141-B	COOK	114	60	
SCALE: 1"=20'						SHEET OF SHEETS		STA. TO STA.		ILLINOIS FED. AID PROJECT

CONTRACT NO. 60N21

TS SHT NO. 12



**TEMPORARY SIGNAL PLAN
STAGE 3**

NOTES:

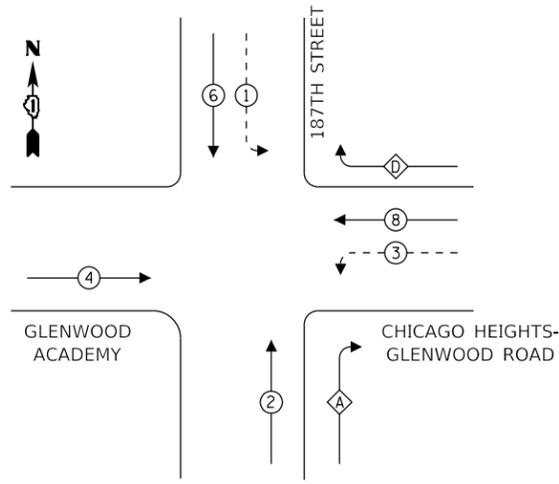
1. SEE PRE-STAGE TEMPORARY TRAFFIC SIGNAL PLAN (TS SHT NO. 9) FOR ADDITIONAL DETECTION REQUIREMENTS ON NORTH LEG OF INTERSECTION.
2. CONTRACTOR SHALL BAG AND DISCONNECT PHASE 3 LEFT TURN, WB RIGHT TURN, AND NB RIGHT TURN ARROW SECTIONS DURING MOT STAGE 3 OPERATIONS.

TS 4860

FILE NAME: D160N21-sht-ts-temporalplan-MOT-4860.dwg	DESIGNED - BKS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - SVJ	REVISED -	3603			2010-141-B	COOK	114	61	
PLOT SCALE = 40.0000 "/in.	CHECKED - BKS	REVISED -			CONTRACT NO. 60N21				
PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -	SCALE: 1"=20'			SHEET OF SHEETS		STA. TO STA.	
						ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE

PRESTAGE



LEGEND:

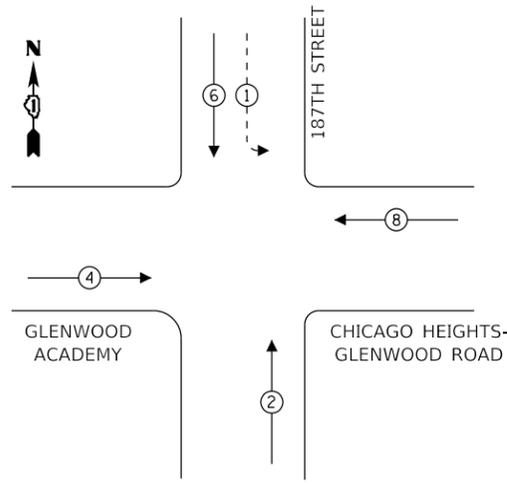
- ← ⊛ ← PROTECTED PHASE
- ← ⊛ - - PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ⊛ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

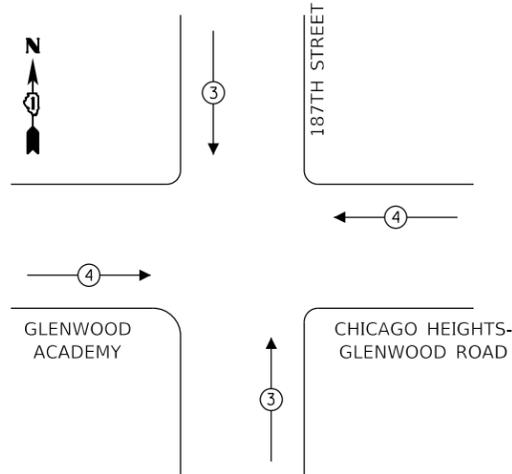
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

TEMPORARY CONTROLLER SEQUENCE

STAGES 1, 2 AND 3



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77
(YELLOW)	14	20	5	14
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	-	-	-
FLASHER	-	-	-	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
TOTAL =				457.6

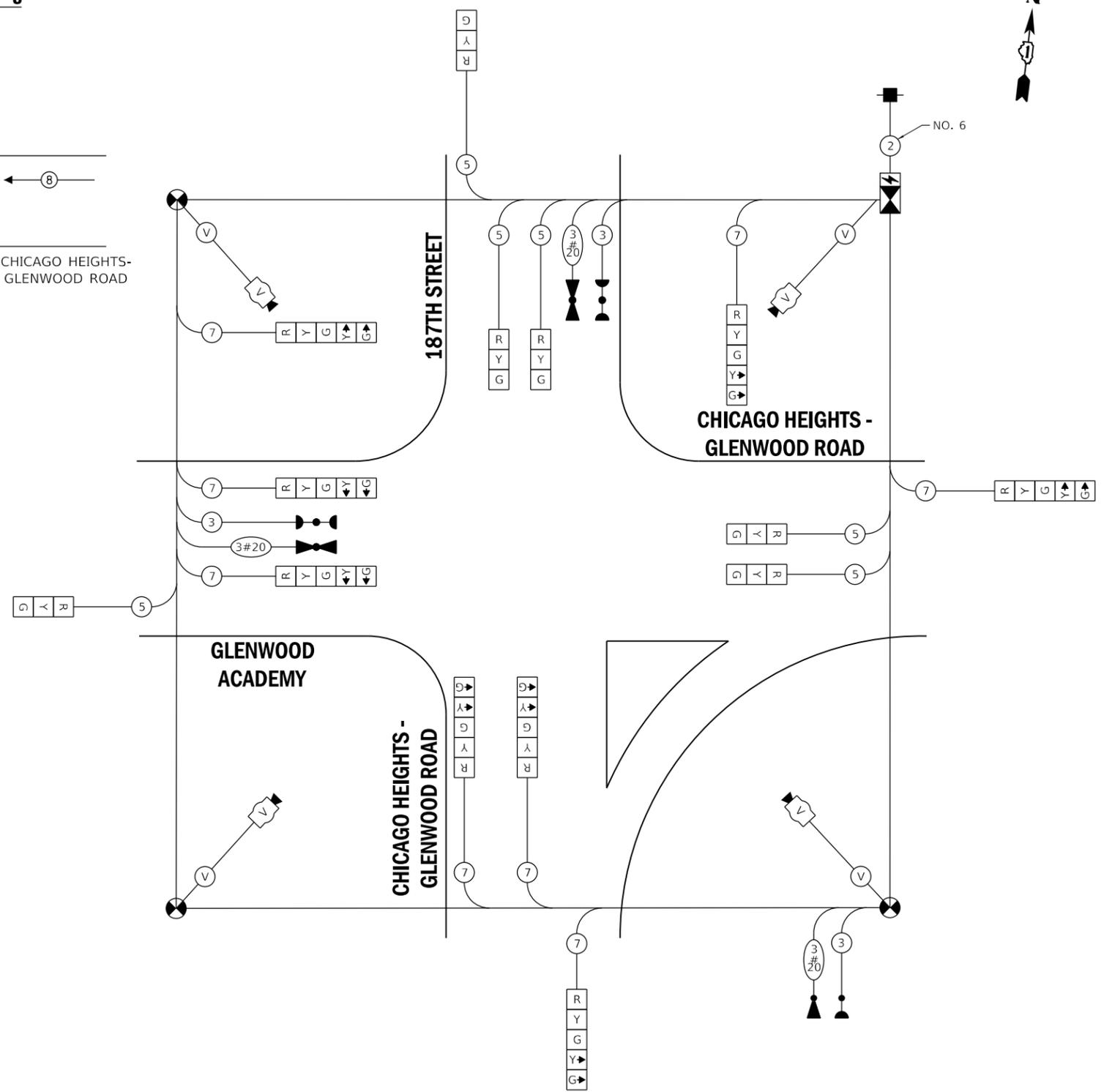
ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: VALERIE MURPHY
PHONE: (708) 235-2346
COMPANY: COMED
ACCOUNT NUMBER: ---

NOTE

- CONTRACTOR SHALL BAG AND DISCONNECT PHASE 3 AND RIGHT TURN OVERLAP SIGNAL SECTIONS WHEN SUBJECT PHASING NOT IN USE DURING MOT STAGE OPERATIONS.



TEMPORARY CABLE PLAN

(NOT TO SCALE)

TS SHT NO. 13

FILE NAME: D160N21-sht-ts-tempcableplan.dgn	USER NAME = bscifers	DESIGNED - BKS	REVISED -
		DRAWN - SVJ	REVISED -
	PLOT SCALE = 2.0000' / in.	CHECKED - BKS	REVISED -
	PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	62
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

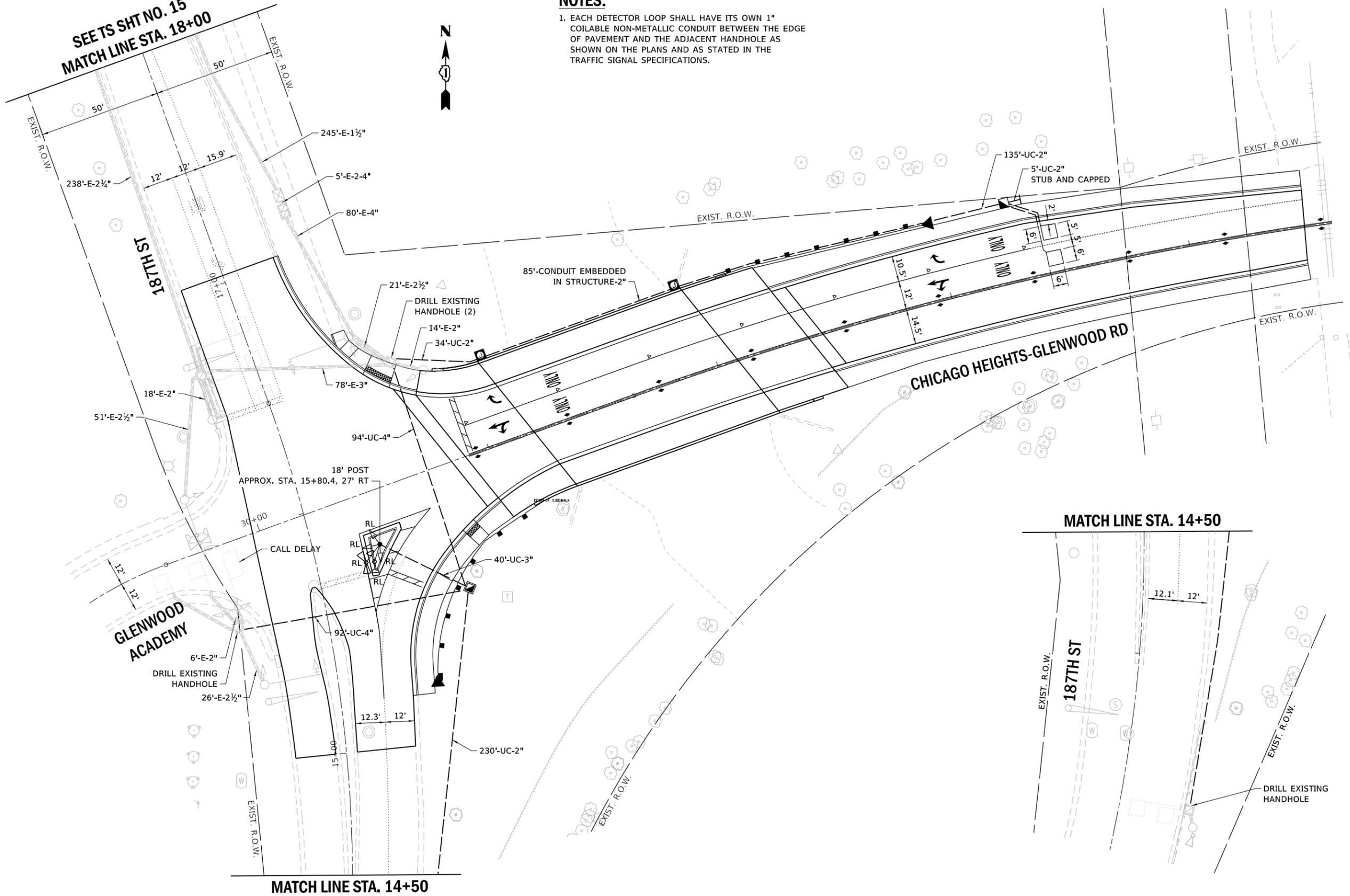
TS 4860

TS SHT NO. 14

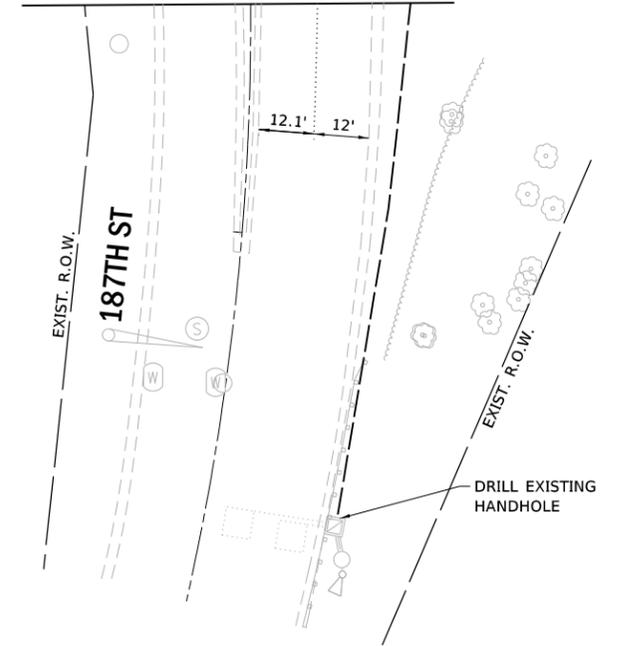
SEE TS SHT NO. 15
MATCH LINE STA. 18+00

NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



MATCH LINE STA. 14+50



MATCH LINE STA. 14+50

TS 4860

FILE NAME = D160N21-sht-ts-signalplan-01.dgn	USER NAME = sjohnson	DESIGNED - BKS	REVISED -
		DRAWN - SVJ	REVISED -
		CHECKED - BKS	REVISED -
		DATE - 1/18/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

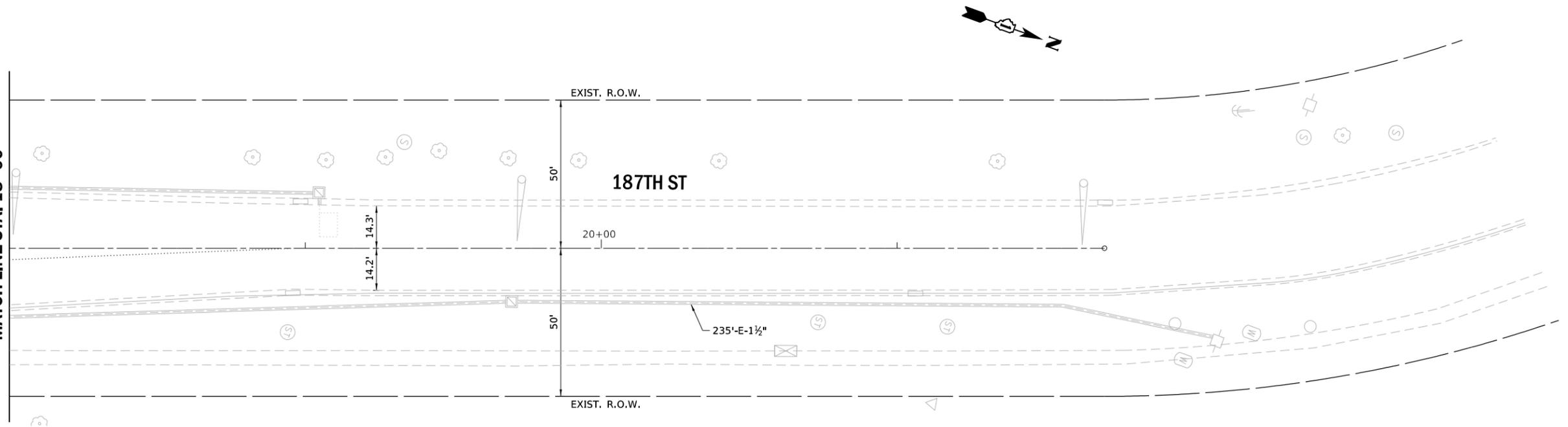
**TRAFFIC SIGNAL INSTALLATION PLAN (SHEET 1 OF 2)
CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	63
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

TS SHT NO. 15

SEE TS SHT NO. 14
MATCH LINE STA. 18+00



TS 4860

FILE NAME: D160N21-sht-ts-signalplan-02.dgn	USER NAME = bscifers	DESIGNED - BKS	REVISED -
		DRAWN - SVJ	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - BKS	REVISED -
	PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -

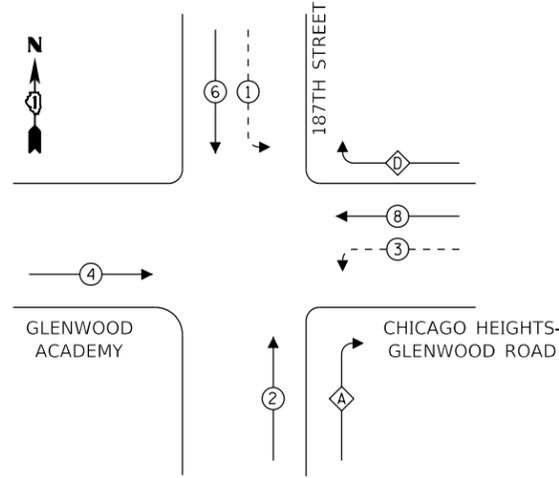
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN (SHEET 2 OF 2)
CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	64
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

PROPOSED CONTROLLER SEQUENCE



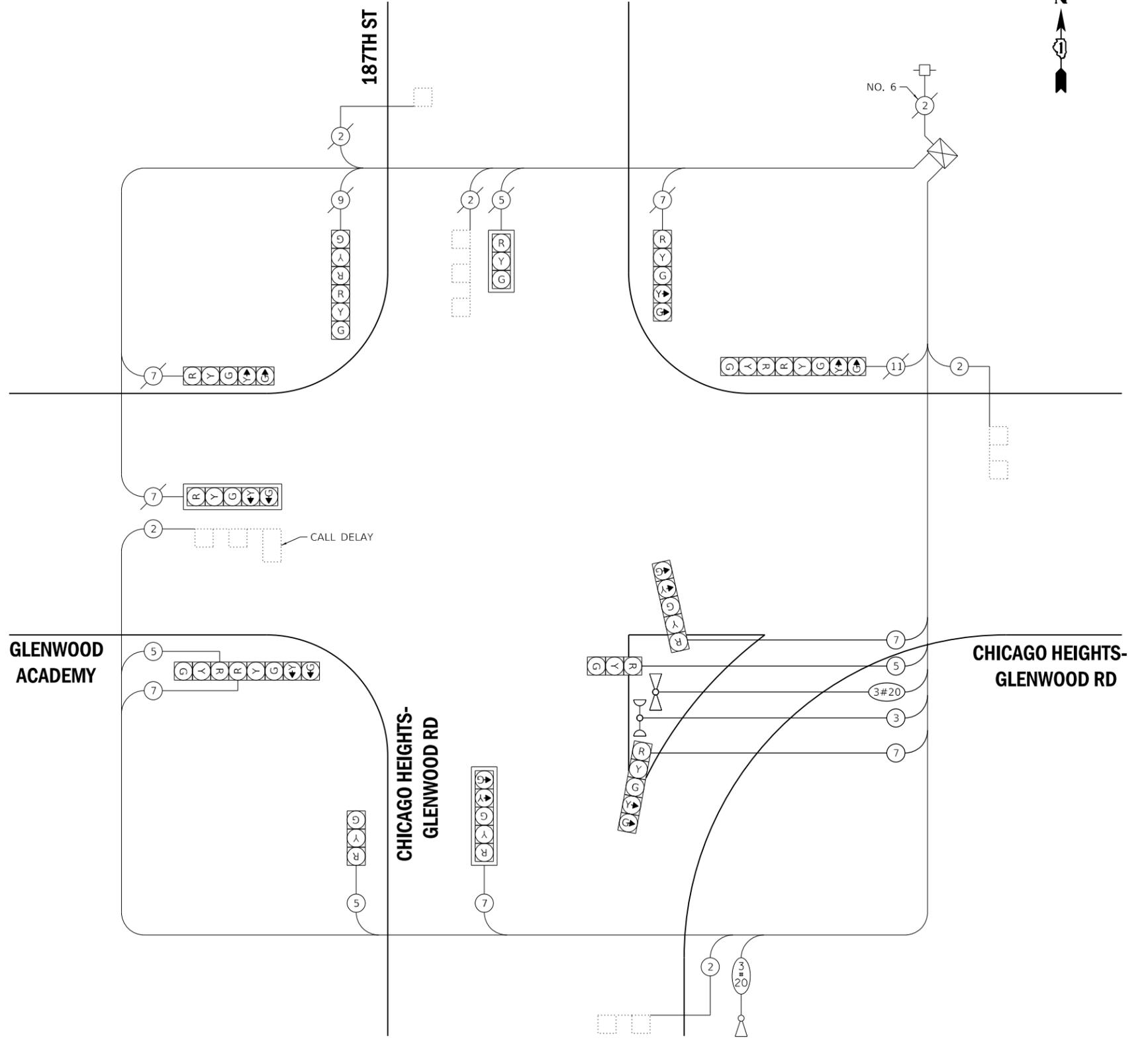
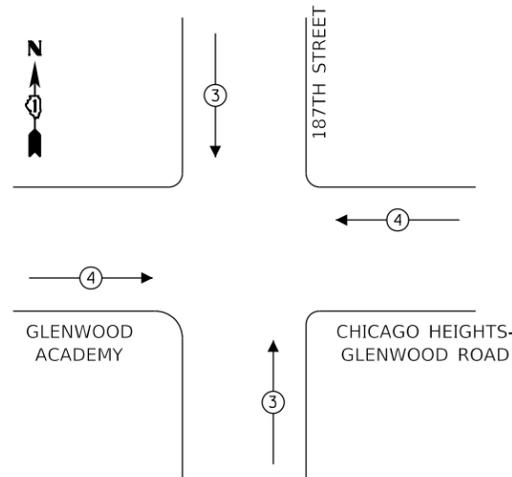
LEGEND:

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - - ⊛ → PROTECTED/PERMITTED PHASE
- ← ⊛ ⊛ → PEDESTRIAN PHASE
- ← ⊛ OL → OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 16

FILE NAME: D160N21-sht-ts-cableplan.dgn	USER NAME = bscifers	DESIGNED - BKS	REVISED -
		DRAWN - SVJ	REVISED -
	PLOT SCALE = 2,000' / in.	CHECKED - BKS	REVISED -
	PLOT DATE = 12/13/2018	DATE - 12/13/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	65
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

TS 4860

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	404
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	40
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	186
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	85
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8"	EACH	2
HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	290
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	980
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1280
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1150
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	4
DETECTOR LOOP, TYPE I	FOOT	62
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	3
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3275
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	775
ROD AND CLEAN EXISTING CONDUIT	FOOT	50
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

TS SHT NO. 17

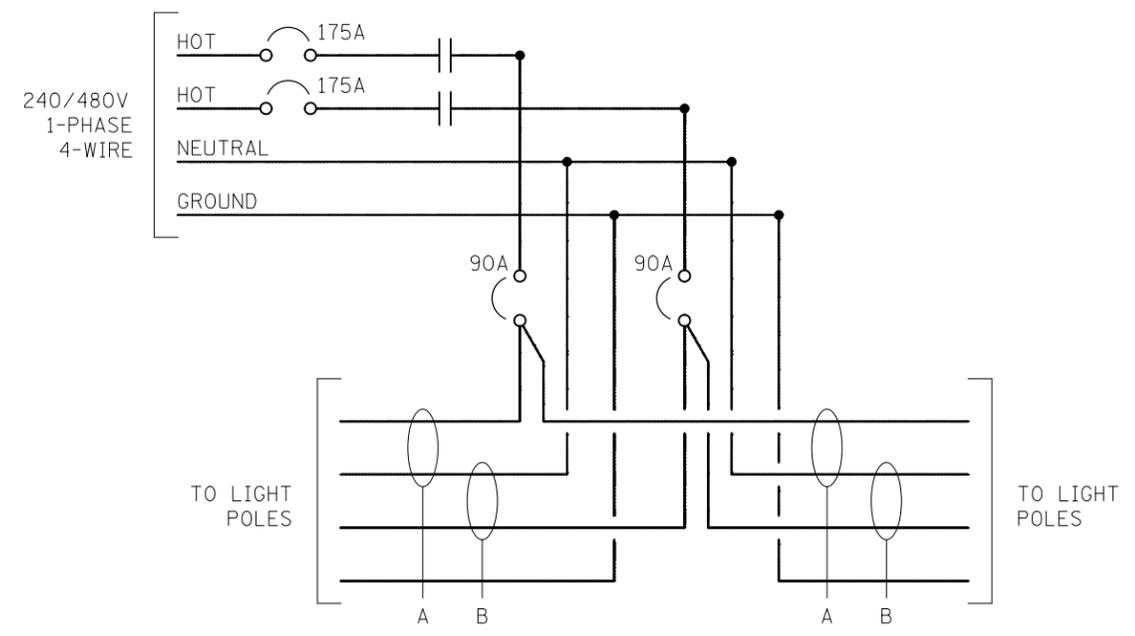
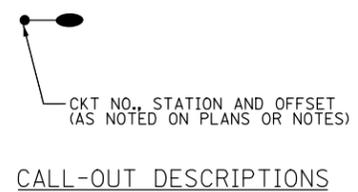
TS 4860

FILE NAME: D160N21-sht-ts-MAM_SQO.dgn	USER NAME = bscifers	DESIGNED - BKS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES CHICAGO HEIGHTS-GLENWOOD ROAD AND 187TH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - SVJ	REVISED -			3603	2010-141-B	COOK	114	66	
		CHECKED - BKS	REVISED -			CONTRACT NO. 60N21					
		DATE - 3/15/2019	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
						ILLINOIS FED. AID PROJECT					

SYMBOL LIST

-  EXISTING VILLAGE OF GLENWOOD LIGHT POLE TO REMAIN
-  EXISTING VILLAGE OF GLENWOOD 35 FOOT, 11.5 INCH BOLT CIRCLE LIGHT POLE RE-INSTALLED ON NEW FOUNDATION INCLUDED IN "REMOVE AND RE-ERECT EXISTING LIGHTING UNIT" PAY ITEM.
-  EXISTING VILLAGE OF GLENWOOD 35 FOOT, 11.5 INCH BOLT CIRCLE LIGHT POLE TO BE REMOVED AND RELOCATED ON NEW FOUNDATION INCLUDED IN "REMOVE AND RE-ERECT EXISTING LIGHTING UNIT" PAY ITEM.
-  LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15 FOOT MAST ARM AND TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT, 47.5' M.H., TYPE MCIII, UNLESS NOTED OTHERWISE
-  TEMPORARY WOOD POLE, 60 FEET, CLASS 4
-  PROPOSED LIGHTING JUNCTION BOX. TYPE AND SIZE AS NOTED
-  GROUND ROD
-  PROPOSED UNIT DUCT. NO. AND SIZE OF WIRES AS NOTED ON BILL OF MATERIALS
-  EXISTING UNIT DUCT TO REMAIN
-  EXISTING UNIT DUCT TO BE ABANDONED IN PLACE
-  WIRING IN CONDUIT EMBEDDED IN STRUCTURE AS NOTED ON PLANS
-  TEMPORARY AERIAL CABLE. NO. AND SIZE OF WIRES AS NOTED ON PLANS
-  PROPOSED RGS CONDUIT WITH UNIT DUCT. CONDUIT DIAMETER AND LENGTH AS SHOWN ON PLANS.

- ABBREVIATIONS**
- A AMPERES
 - AC AERIAL CABLE
 - AC ALTERNATING CURRENT
 - C CONDUCTOR
 - C CONDUIT
 - CKT CIRCUIT
 - DIA DIAMETER
 - E EXISTING LIGHTING UNIT TO REMAIN
 - FT FEET
 - FT FOOT
 - GND GROUND
 - HPS HIGH PRESSURE SODIUM
 - IDOT ILLINOIS DEPARTMENT OF TRANSPORTATION
 - IN INCHES
 - LT LEFT
 - MA MAST ARM
 - MH MOUNTING HEIGHT
 - NO NUMBER
 - P PUSHED
 - PC PHOTOCCELL CONTROL
 - PH PHASE
 - PVC POLYVINYL CHLORIDE
 - RGSC RIGID GALVANIZED STEEL CONDUIT
 - R TO BE REMOVED AND RELOCATED
 - RL TO BE REINSTALLED
 - ROW RIGHT OF WAY
 - RT RIGHT
 - SS STAINLESS STEEL
 - STA STATION
 - T TEMPORARY
 - TYP TYPICAL
 - UD UNIT DUCT
 - UNO UNLESS NOTED OTHERWISE
 - USE UNDERGROUND SERVICE ENTRANCE
 - V VOLTS
 - W WATTS
 - W WIRES
 - XLP CROSS-LINKED POLYETHYLENE



VILLAGE OF GLENWOOD LIGHTING CONTROLLER #1 WIRING DIAGRAM

BILL OF MATERIAL - LIGHTING

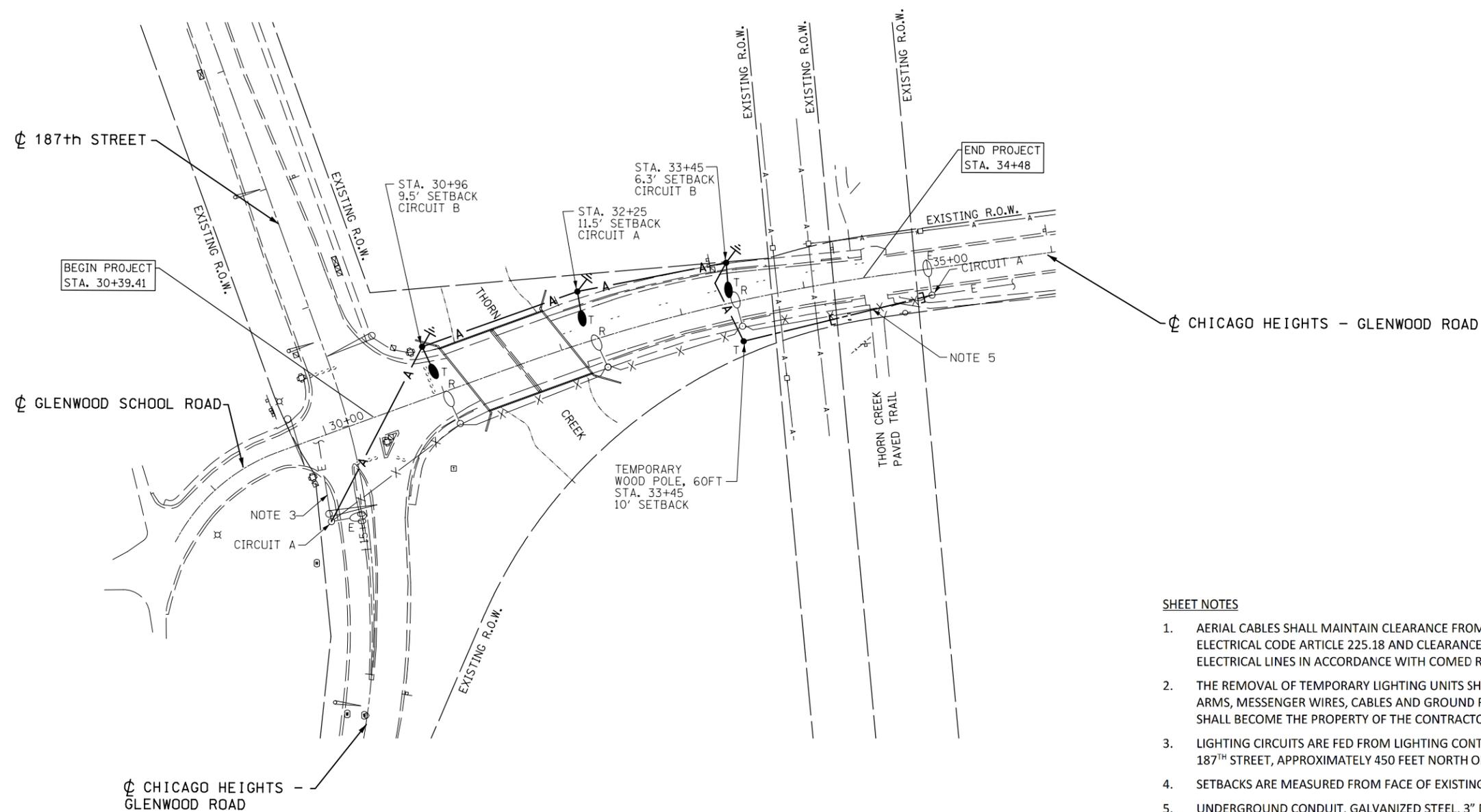
DESCRIPTION	UNIT	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	140
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	110
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	735
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	120
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	360
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	490
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	3
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	33
BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	3
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	3
REMOVAL OF POLE FOUNDATION	EACH	3
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	3
REMOVE TEMPORARY WOOD POLE	EACH	1
TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	3
TEMPORARY WOOD POLE, 60 FOOT, CLASS 4	EACH	1
UNDERGROUND CONDUIT, STAINLESS STEEL, 2" DIA.	FOOT	40
MAINTENANCE OF TEMPORARY LIGHTING SYSTEM	L SUM	1
REMOVE AND RE-ERECT EXISTING LIGHTING UNIT	EACH	3

GENERAL NOTES

1. THE MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH THE LATEST CODES, STANDARDS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION. ALL WORK SHOWN ON THE PLANS AND DESCRIBED ELSEWHERE SHALL CONFORM TO THE LATEST NATIONAL ELECTRICAL CODE.
2. TEMPORARY LIGHTING SHALL BE INSTALLED AND OPERATIONAL BEFORE THE START OF ROADWAY CONSTRUCTION.
3. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE ENGINEER.
4. CONTRACTOR TO CONFIRM WITH ENGINEER BEFORE STARTING WORK LOCATIONS FOR ALL TEMPORARY LIGHT POLES, LOCATIONS OF ALL LIGHT POLES TO BE RELOCATED AND PROPOSED LOCATIONS OF THE RELOCATED POLES.
5. CONTRACTOR TO ARRANGE WITH MUNICIPALITY TO HAVE TREES TRIMMED TO PROVIDE CLEARANCE FOR AERIAL CABLES, TEMPORARY POLES AND RELOCATED POLES.
6. LIGHTING CIRCUITS ARE FED FROM LIGHTING CONTROLLER #1 LOCATED ON THE EAST SIDE OF 187TH STREET, APPROXIMATELY 450 FEET NORTH OF CHICAGO HEIGHTS - GLENWOOD ROAD. CONTRACTOR SHALL CONTACT MR. DAN BUB WITH THE THE VILLAGE OF GLENWOOD PUBLIC WORKS DEPARTMENT, 708-753-2417, TO HAVE ROADWAY LIGHTING CIRCUIT TURNED OFF OR TURNED ON AT THE LIGHTING CONTROLLER AS NEEDED FOR CONSTRUCTION.
7. ROADWAY LIGHTING MUST REMAIN IN SERVICE DURING NIGHT TIME HOURS. THE CONTRACTOR SHALL COORDINATE WORK TO ENSURE THAT THE EXISTING LIGHTING REMAINS OPERATIONAL UNTIL THE TEMPORARY LIGHTING IS READY TO BE ACTIVATED. THE CONTRACTOR SHALL ALSO COORDINATE WORK TO KEEP THE TEMPORARY LIGHTING OPERATIONAL UNTIL THE RE-ERECTED LIGHTS ARE READY TO BE TURNED ON.

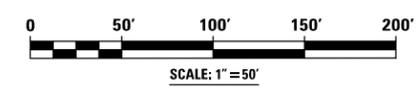
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	USER NAME = sdi02	DESIGNED - IB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING PLAN	F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 67
	PLOT SCALE = 1/8" = 100.00' / 1" / 1/4"	CHECKED - KEA	REVISED -			DATE 03/07/19	SCALE: -	SHEET NO. 1 OF 3 SHEETS	STA. TO STA.	LT-01 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



SHEET NOTES

1. AERIAL CABLES SHALL MAINTAIN CLEARANCE FROM GROUND IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE ARTICLE 225.18 AND CLEARANCE FROM EXISTING OVERHEAD UTILITY ELECTRICAL LINES IN ACCORDANCE WITH COMED REQUIREMENTS.
2. THE REMOVAL OF TEMPORARY LIGHTING UNITS SHALL INCLUDE ALL POLES, LUMINAIRES, MAST ARMS, MESSENGER WIRES, CABLES AND GROUND RODS. ALL TEMPORARY EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
3. LIGHTING CIRCUITS ARE FED FROM LIGHTING CONTROLLER #1 LOCATED ON THE EAST SIDE OF 187TH STREET, APPROXIMATELY 450 FEET NORTH OF CHICAGO HEIGHTS - GLENWOOD ROAD.
4. SETBACKS ARE MEASURED FROM FACE OF EXISTING CURB.
5. UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. AND UNIT DUCT.



FILE NAME = LT-2.studgn



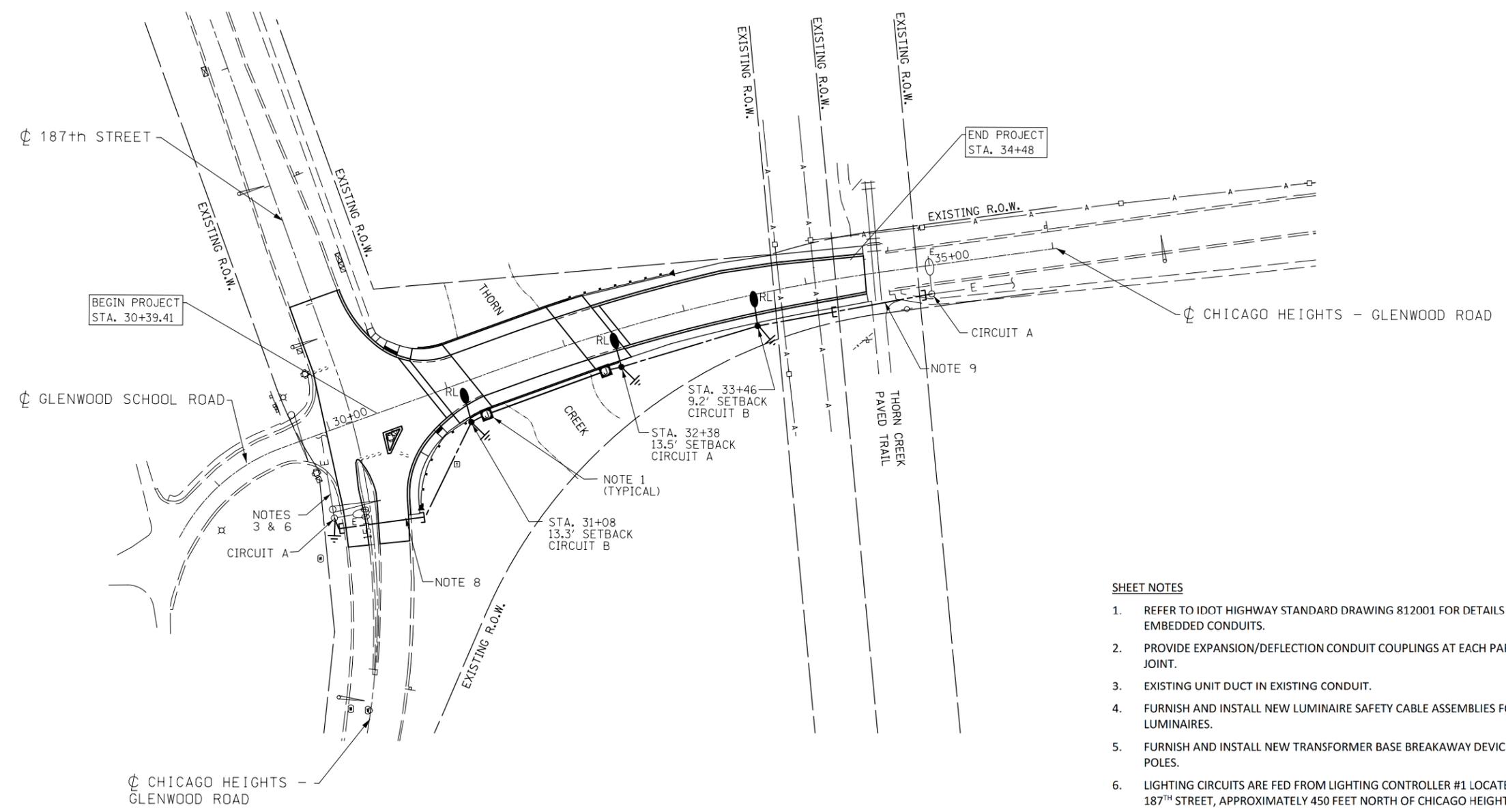
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PLOT DATE = 1/22/2019	DATE 01/24/19	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

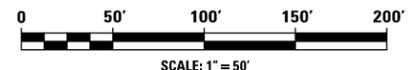
**REMOVAL AND TEMPORARY
LIGHTING PLAN**

SCALE: - SHEET NO. 2 OF 3 SHEETS STA. 30+39 TO STA. 34+48

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	68
LT-02			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



1. REFER TO IDOT HIGHWAY STANDARD DRAWING 812001 FOR DETAILS ON JUNCTION BOXES AND EMBEDDED CONDUITS.
2. PROVIDE EXPANSION/DEFLECTION CONDUIT COUPLINGS AT EACH PARAPET WALL EXPANSION JOINT.
3. EXISTING UNIT DUCT IN EXISTING CONDUIT.
4. FURNISH AND INSTALL NEW LUMINAIRE SAFETY CABLE ASSEMBLIES FOR ALL RELOCATED LUMINAIRES.
5. FURNISH AND INSTALL NEW TRANSFORMER BASE BREAKAWAY DEVICES FOR ALL RELOCATED POLES.
6. LIGHTING CIRCUITS ARE FED FROM LIGHTING CONTROLLER #1 LOCATED ON THE EAST SIDE OF 187TH STREET, APPROXIMATELY 450 FEET NORTH OF CHICAGO HEIGHTS - GLENWOOD ROAD.
7. SETBACKS ARE MEASURED FROM FACE OF PROPOSED CURB.
8. UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. AND UNIT DUCT.
9. 3" GALVANIZED STEEL CONDUIT PREVIOUSLY INSTALLED FOR TEMPORARY LIGHTING. REFER TO DRAWING LT-02.



FILE NAME = LT-3.studgn



USER NAME = sdaez	DESIGNED - IB	REVISED -
	DRAWN - IB	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

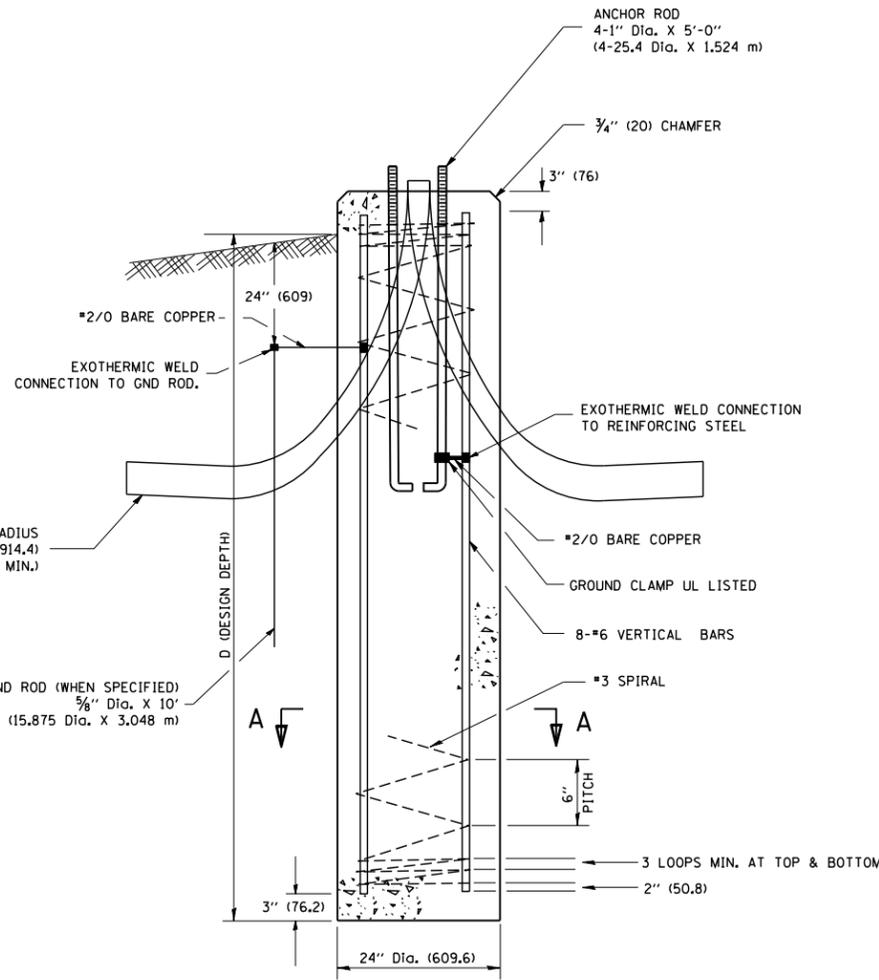
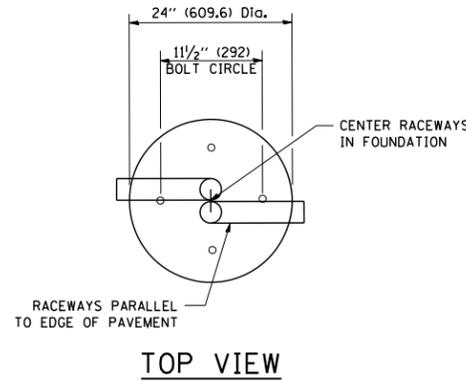
PROPOSED LIGHTING PLAN

SCALE: - SHEET NO. 3 OF 3 SHEETS STA. 30+39 TO STA. 34+48

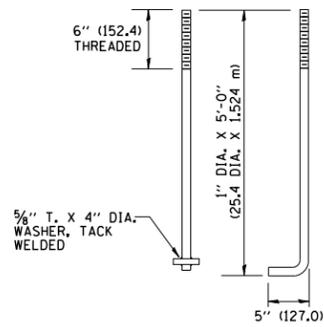
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3603	2010-141-B	COOK	114	69
LT-03			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

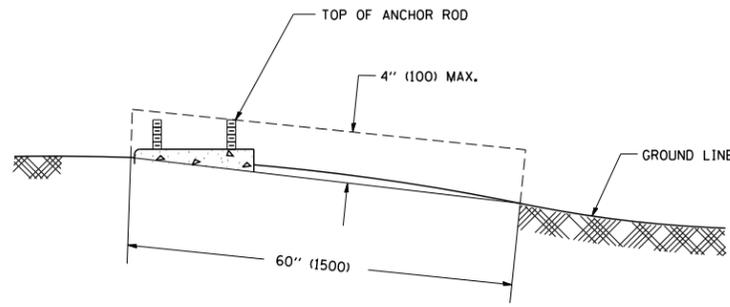
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O _u = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY O _u = 0.75 TON/SQ.FT	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY O _u = 1.50 TON/SO. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



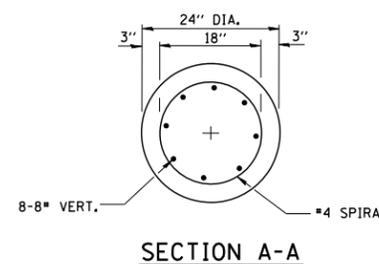
FOUNDATION DETAIL



ANCHOR BOLT DETAIL



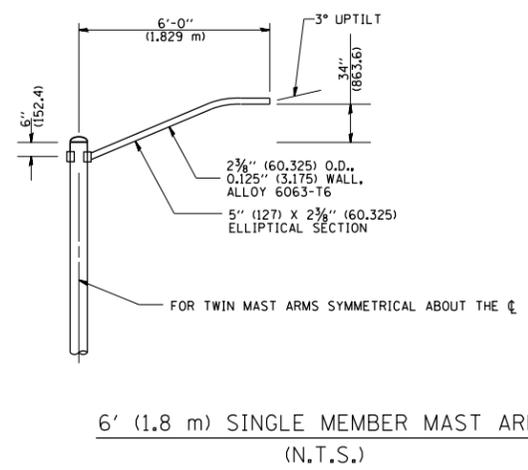
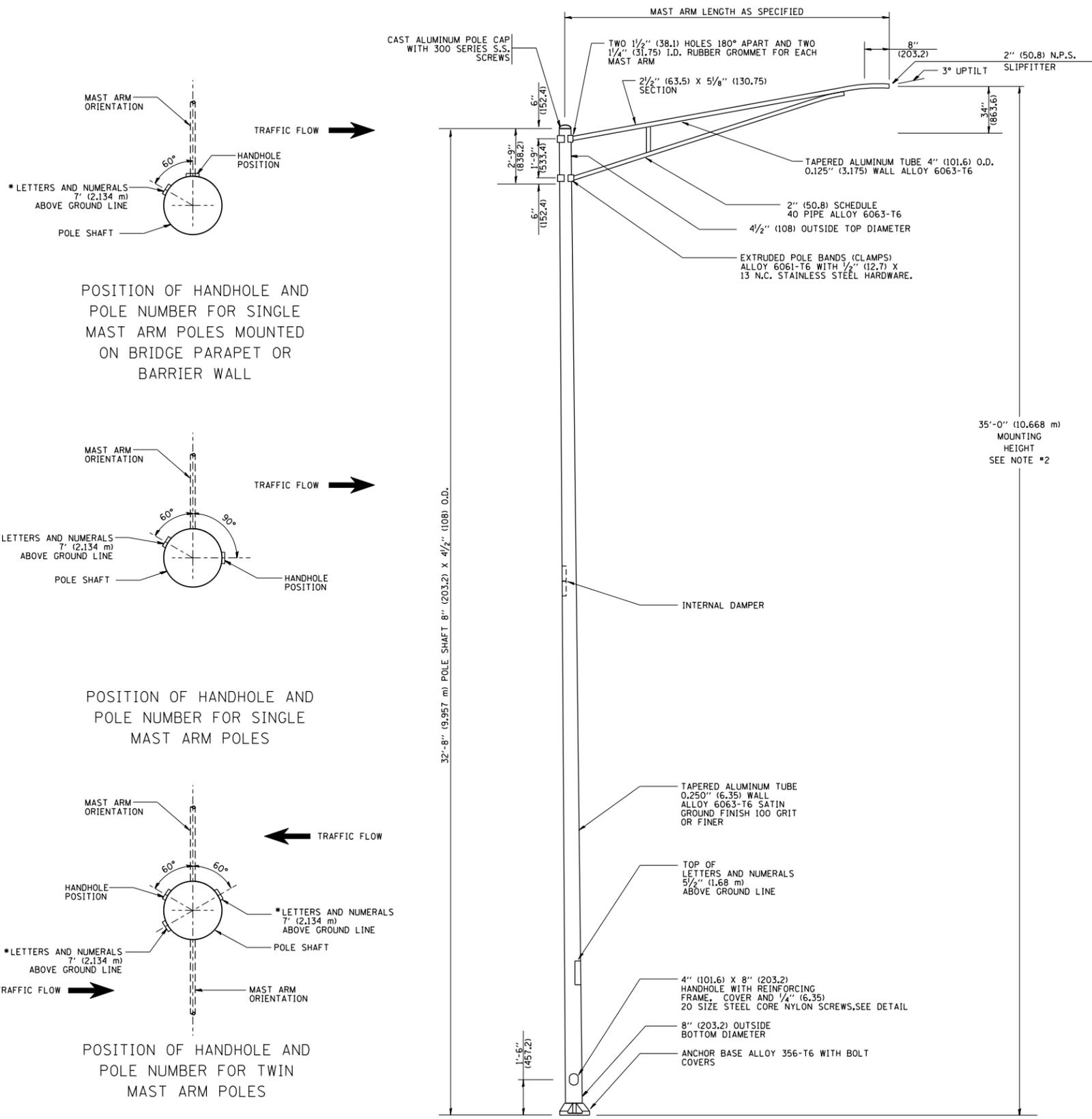
FOUNDATION EXTENSION DETAIL



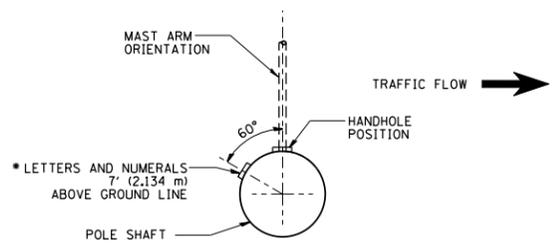
SECTION A-A

NOTES

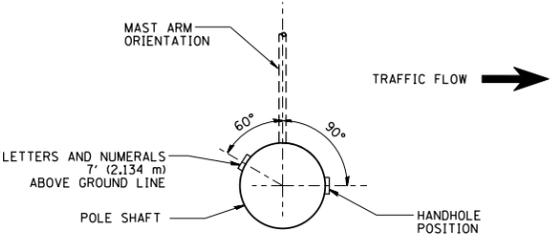
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS S1. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



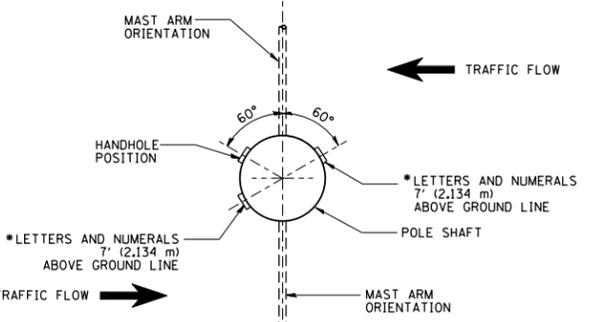
- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
 3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 4. THE INSTALLING CONTRACTOR WILL PROVIDE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



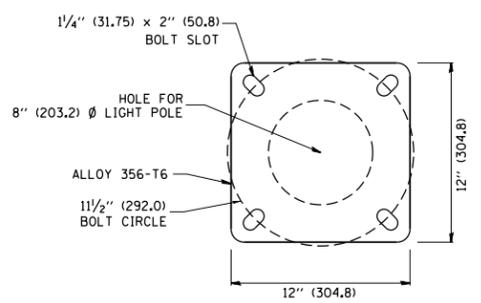
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



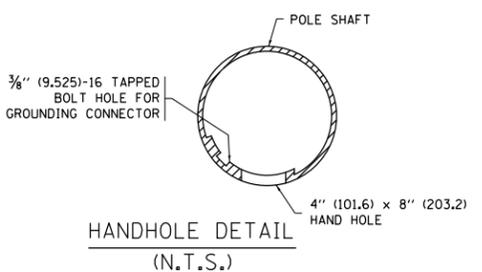
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



LIGHT POLE BASE PLATE DETAIL
1 1/2" (38.1 mm) BOLT CIRCLE



HANDHOLE DETAIL (N.T.S.)

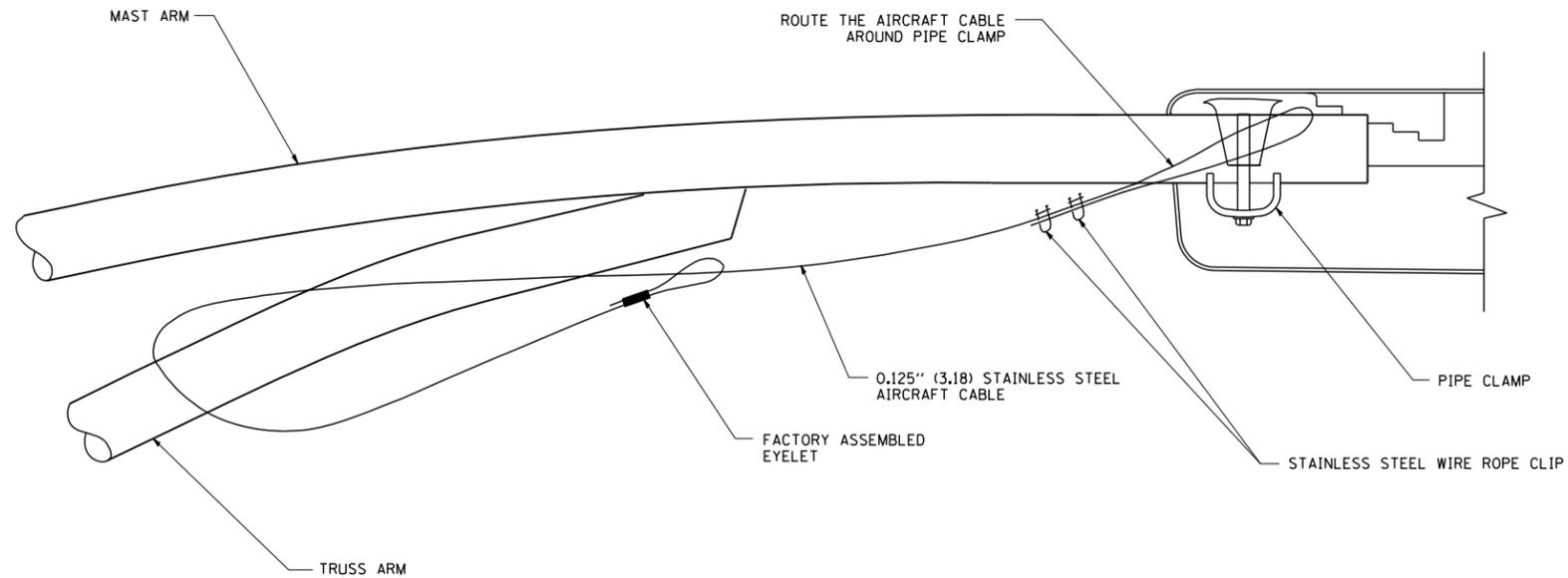
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	PLOT DATE = 9/26/2018		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

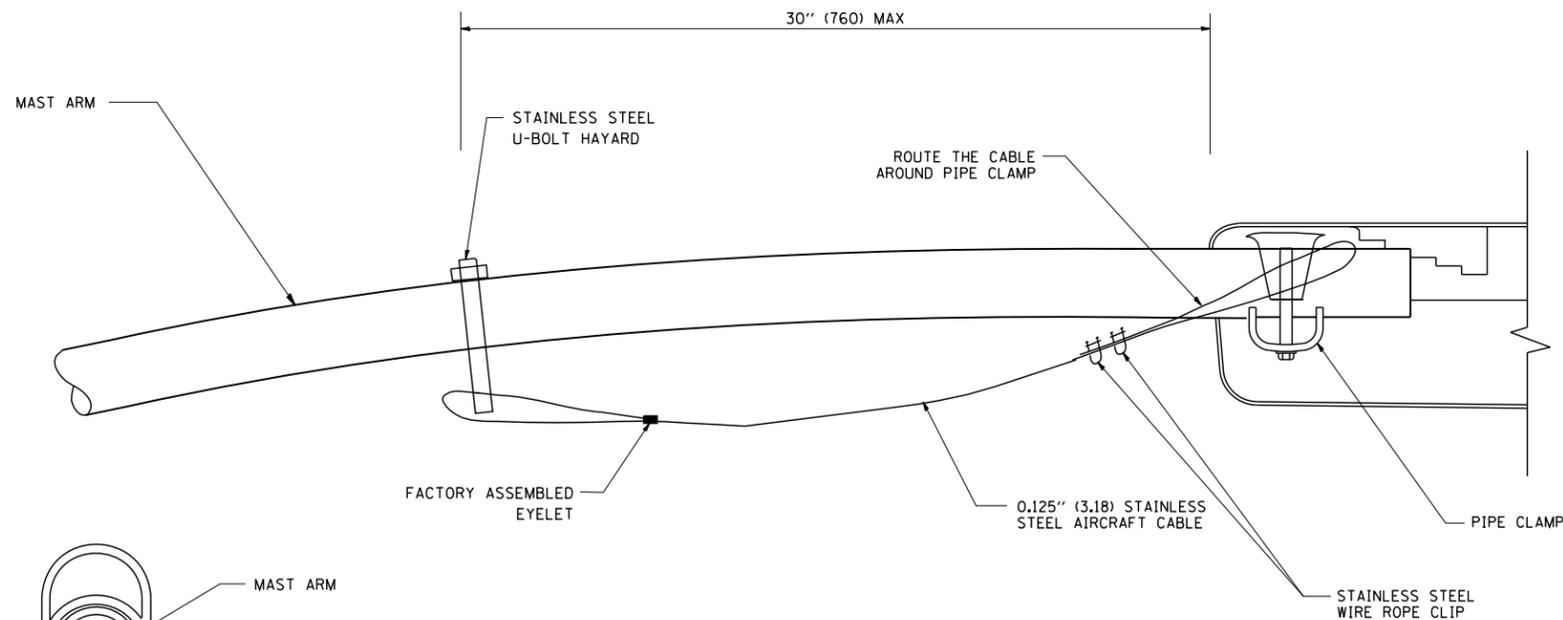
ALUMINUM LIGHT POLE			
35'-0" (10.668 m) MOUNTING HEIGHT			
SCALE:	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	71
BE-402		CONTRACT NO. 60N21		
ILLINOIS FED. AID PROJECT				

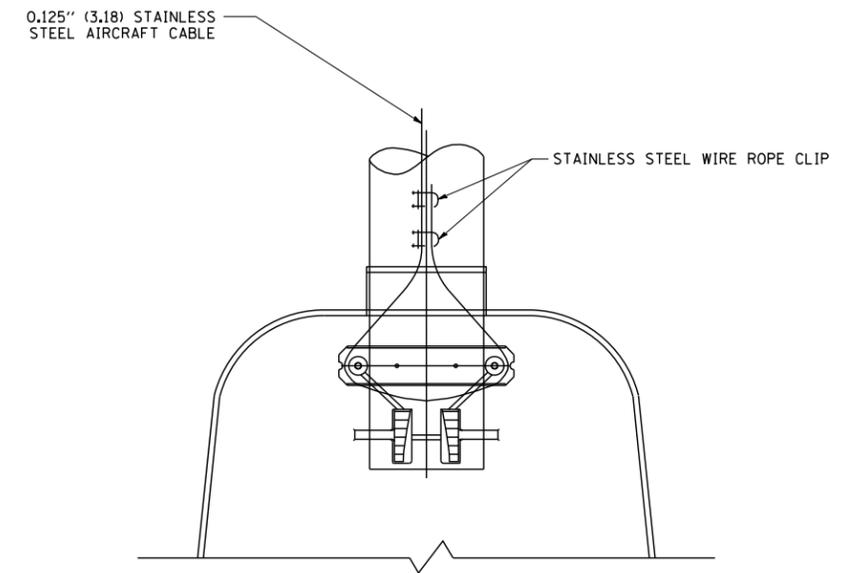
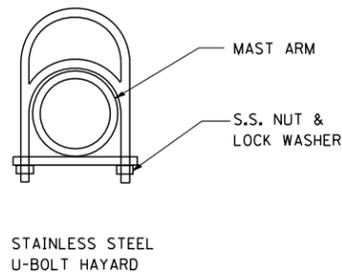
LT-05



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



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



BOTTOM VIEW
N.T.S.

NOTES:

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

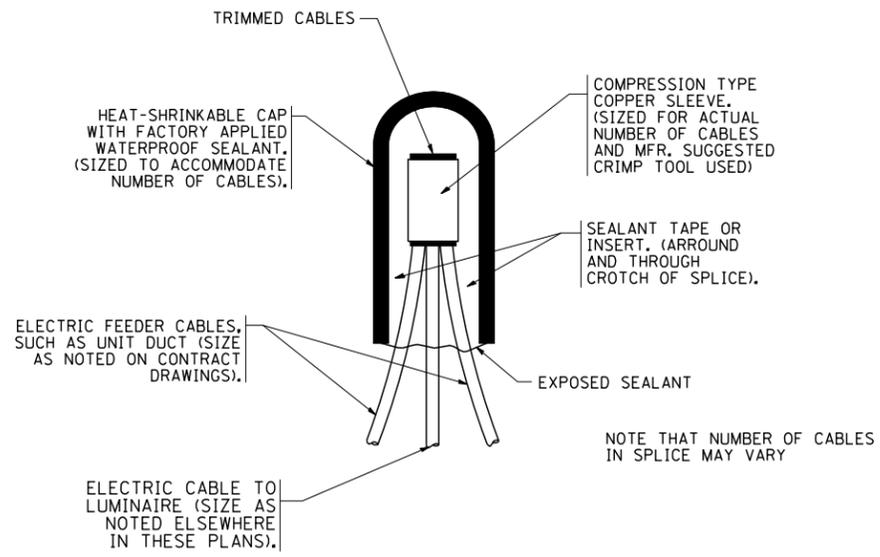
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	PLOT DATE = 1/4/2008	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LUMINAIRE SAFETY CABLE ASSEMBLY

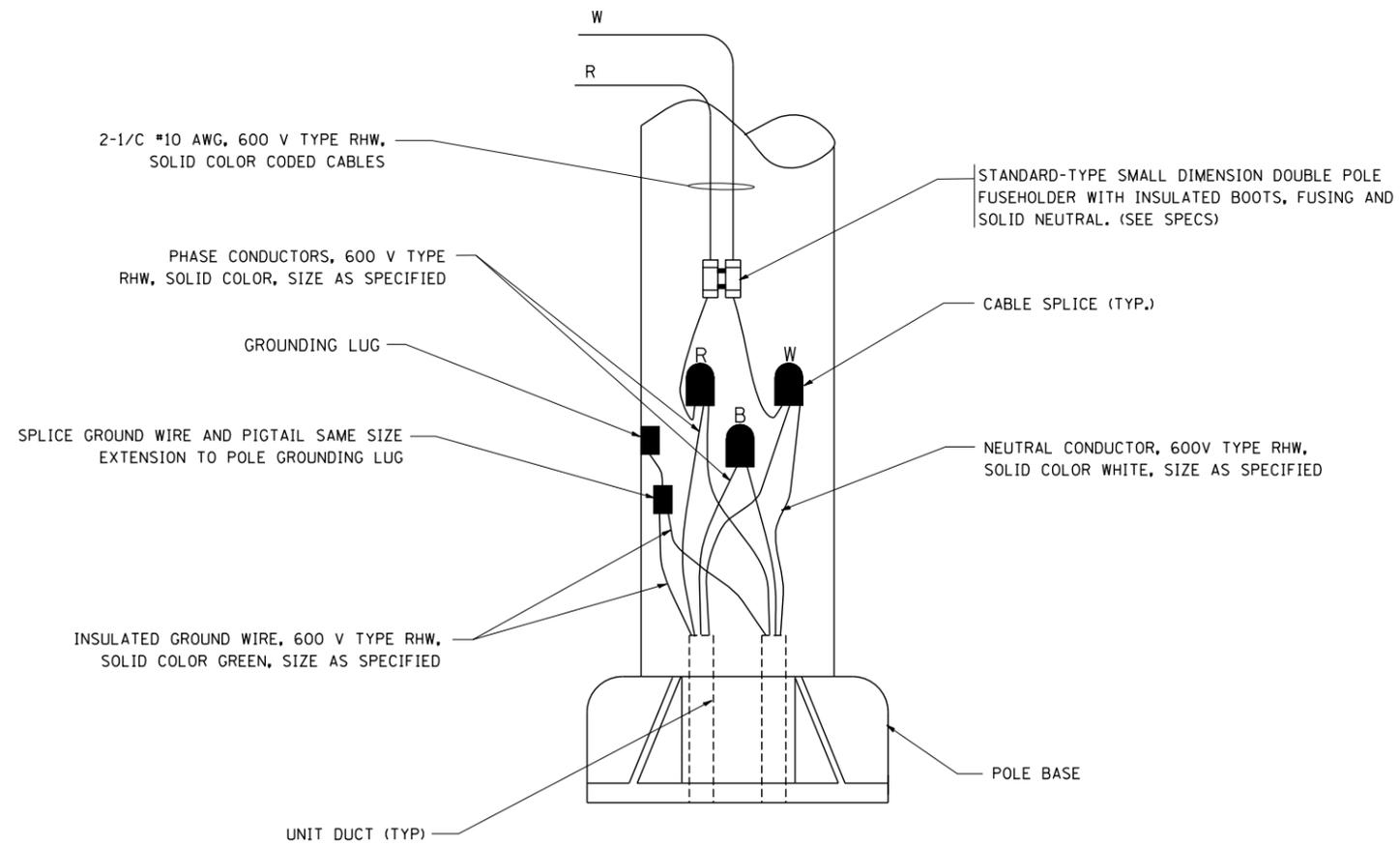
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	72
BE-701		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



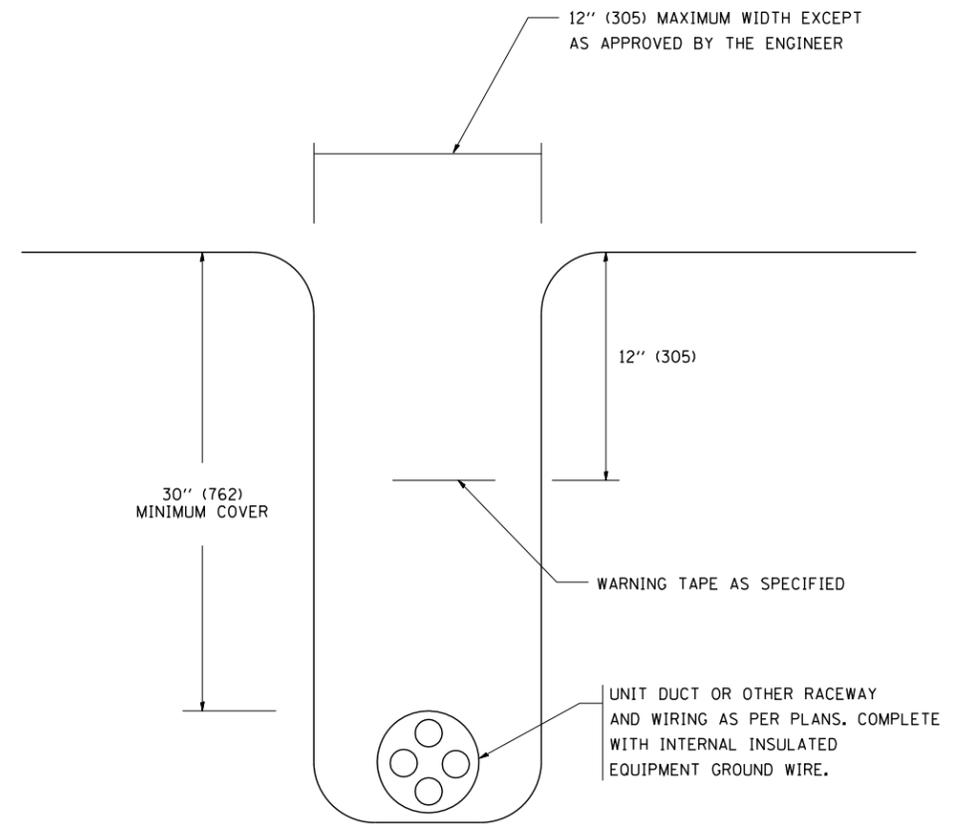
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

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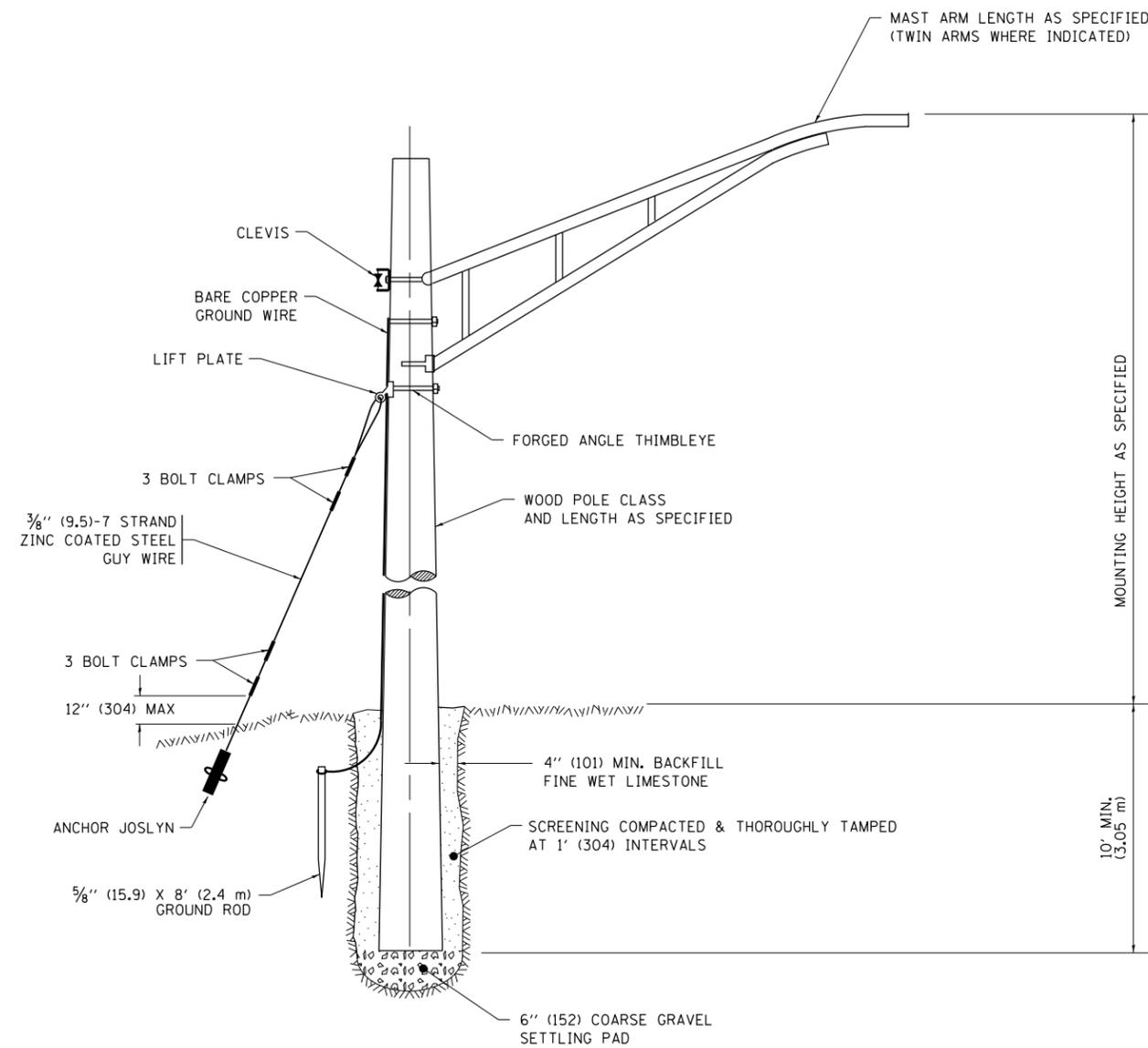
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	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

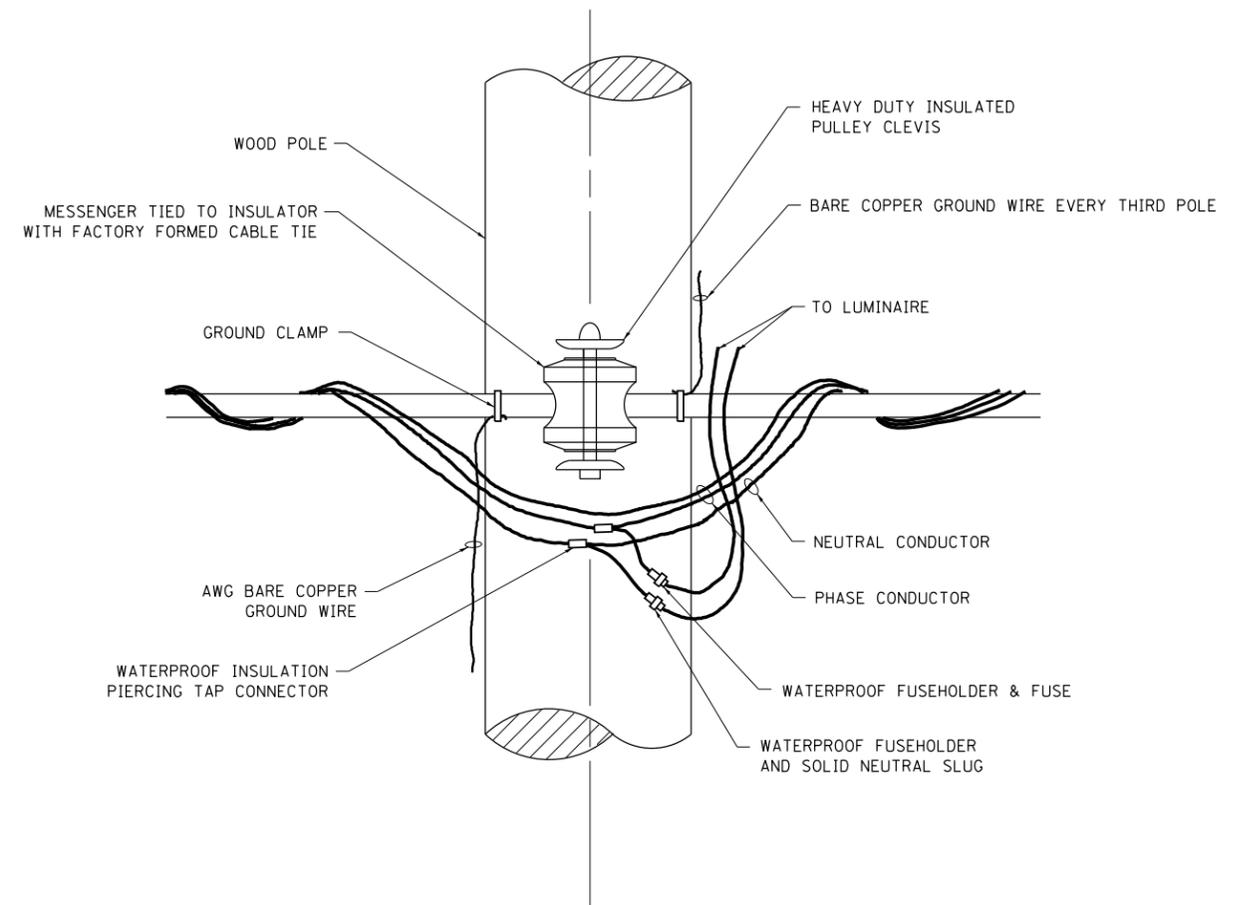
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	73
BE-702		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LT-07



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTE:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

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	PLOT DATE = 9/1/2016	DATE -	REVISED -

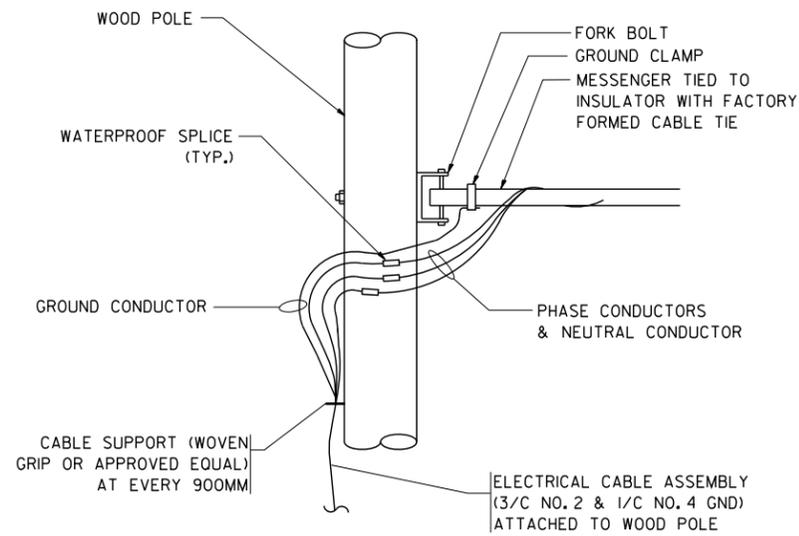
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY LIGHT POLE DETAILS

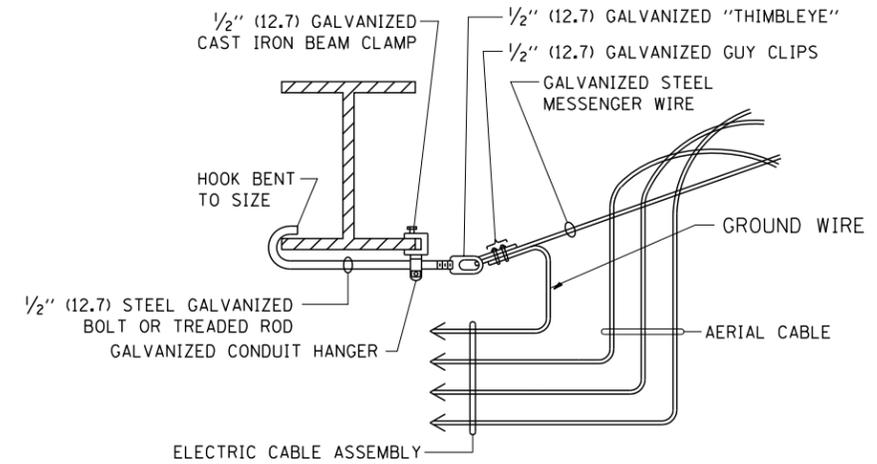
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	74
BE-800		CONTRACT NO. 60N21		
ILLINOIS FED. AID PROJECT				

LT-08



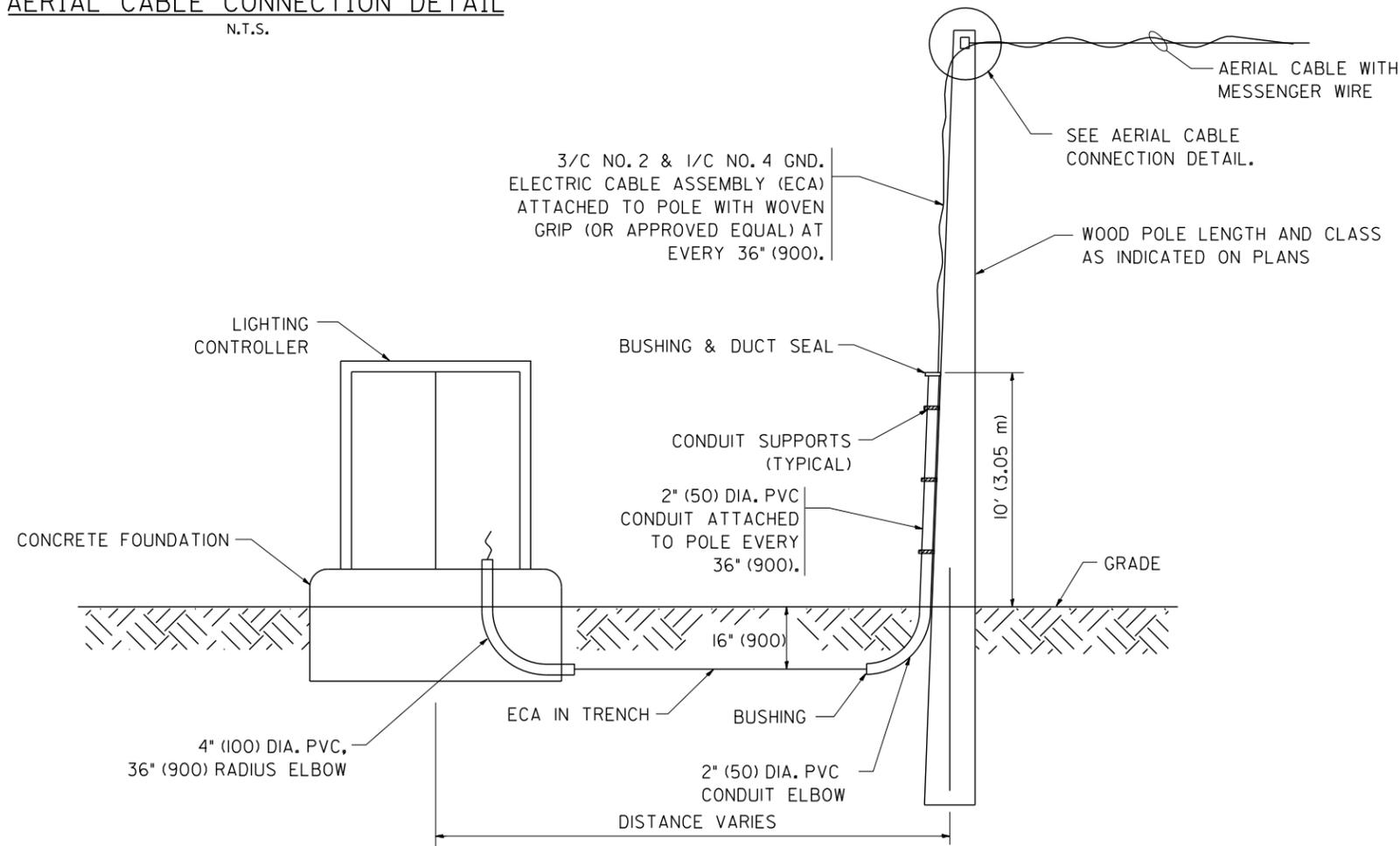
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

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



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

FILE NAME = W:\diststd\22x34\be001.dgn

USER NAME = gaglionobt
PLOT SCALE = 50.000' / IN.
PLOT DATE = 1/4/2008

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED - 08-08-03
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY AERIAL CABLE INSTALLATION

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

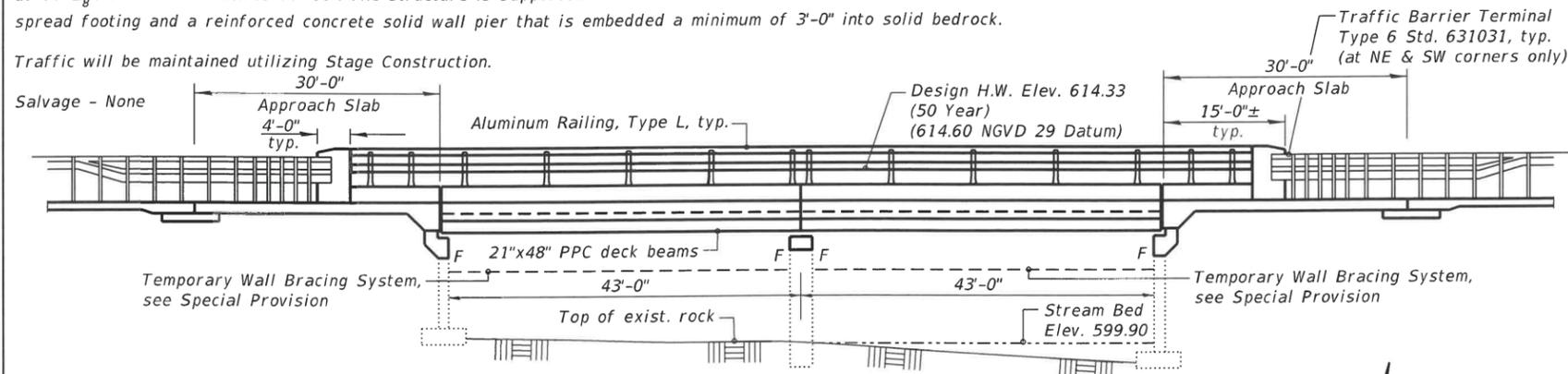
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	75
BE-001			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

Bench Mark:
TBM-3 cut \square on Northeast concrete headwall Glenwood Road Bridge over Thorn Creek, Elev. 613.20 (NAVD 88)

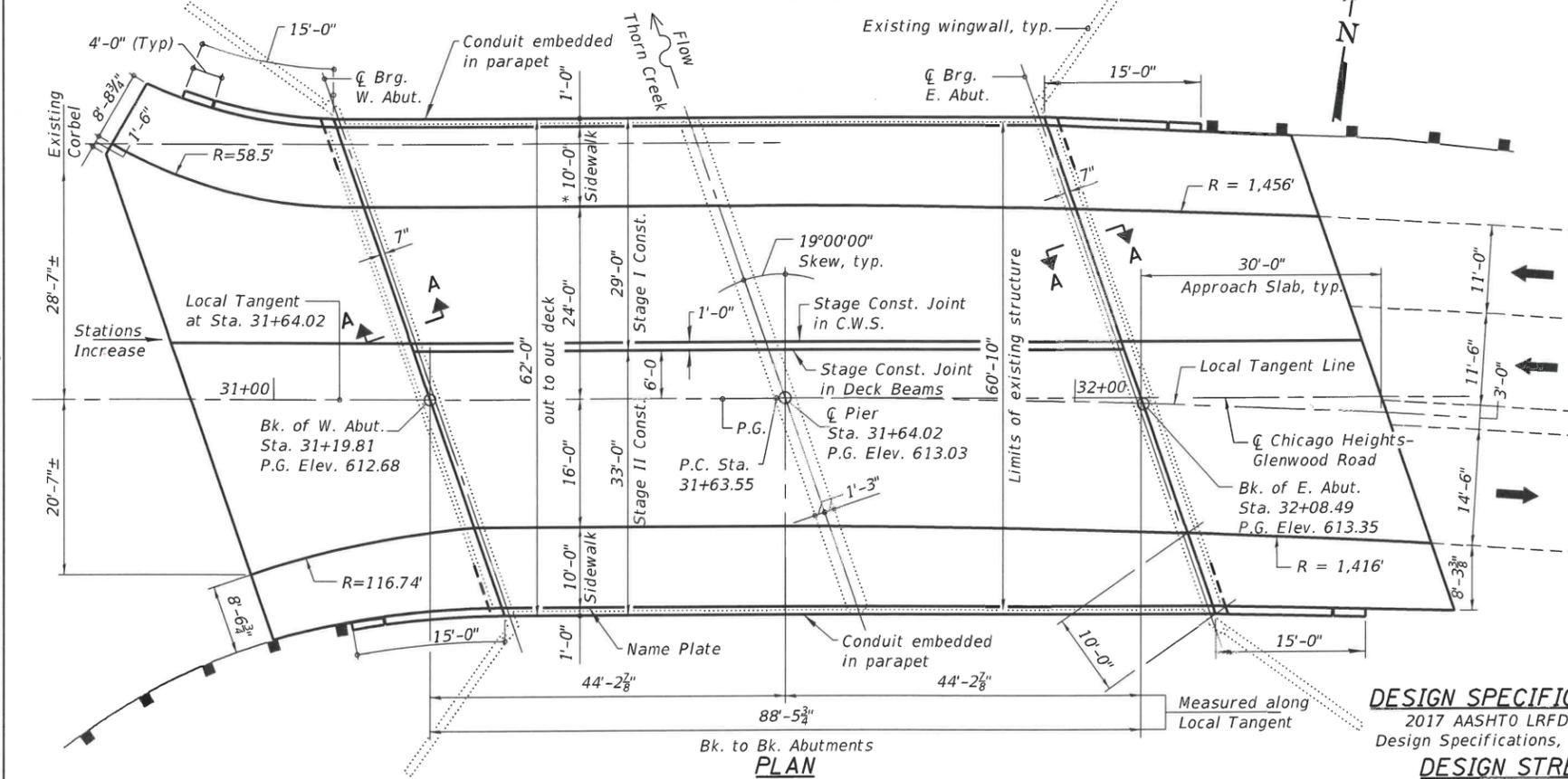
Existing Structure: S.N. 016-2417 carrying Chicago Heights-Glenwood Road over Thorn Creek was built in 1982 under Contract No. 37999 as a Construction Route F.A.U. 3603, Section 1977-330-N. The structure consists of two simple spans with Precast Prestressed Concrete (PPC) Deck Beams. Length is 88'-5 3/4" back to back of abutments, each span is measured at 44'-2 7/8". Out to out width is 60'-10". The structure is supported on Reinforced Concrete Closed Abutments founded on spread footing and a reinforced concrete solid wall pier that is embedded a minimum of 3'-0" into solid bedrock.

Traffic will be maintained utilizing Stage Construction.

Salvage - None



ELEVATION



PLAN

*Stage III Construction

Note:
See Sheet S-18 of S-21 for Section A-A

SEISMIC DATA

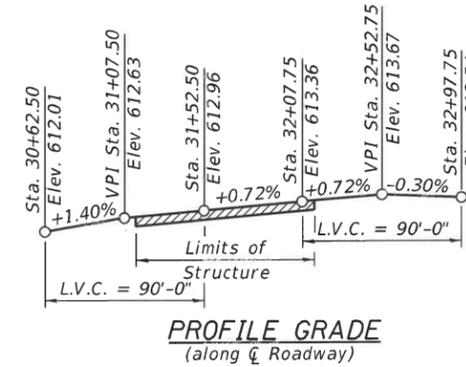
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.07g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.12g
Soil Site Class = C

LOADING HL-93

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

SCOPE OF WORK:

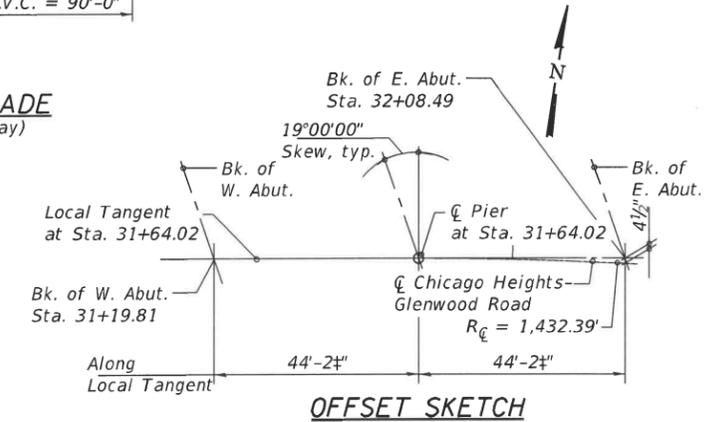
1. Remove existing 3" Bituminous Overlay & existing 21"x48" Precast Prestressed Concrete (PPC) Deck Beams.
2. Install new 21"x48" Precast Prestressed Concrete (PPC) Deck Beams.
3. Install 5" min. Concrete Wearing Surface.
4. Install sidewalks & parapets on North & South side of structure.
5. Perform repairs to both Abutments & the Pier.
6. Remove and replace West & East Approach Slabs.



PROFILE GRADE
(along \bar{C} Roadway)

CURVE DATA

P.I. Sta. = 33+15.60
 Δ = 12° 08' 04" Rt.
D = 4° 00' 00"
R = 1,432.39'
T = 152.25'
L = 303.36'
E = 8.07'
P.C. Sta. = 31+63.35
P.T. Sta. = 34+66.71



OFFSET SKETCH

STATION 31+64.02
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.U. RTE. 3603 SEC. 2010-141-B
LOADING HL-93
STRUCTURE NO. 016-2417

NAME PLATE

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



DATE SIGNED: 01/28/2019
EXP. DATE: 11/30/2020

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge
Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS (EXISTING CONSTRUCTION)

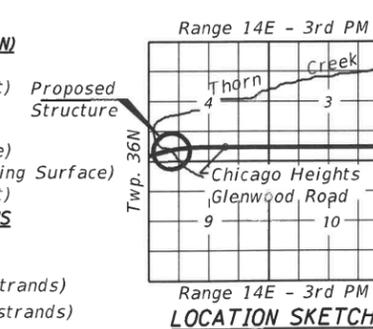
f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)

FIELD UNITS (NEW CONSTRUCTION)

f'_c = 3,500 psi
 f'_c = 4,000 psi (Superstructure)
 f'_c = 5,000 psi (Concrete Wearing Surface)
 f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED DECK BEAMS

f'_c = 6,000 psi
 f'_{ci} = 5,000 psi
 f_{pu} = 270,000 psi, (1/2" low lax strands)
 f_{pbt} = 201,960 psi, (1/2" low lax strands)



LOCATION SKETCH

GENERAL PLAN
CHICAGO HEIGHTS-GLENWOOD ROAD
OVER THORN CREEK
F.A.U. RTE. 3603
SEC. 2010-141-B
COOK COUNTY
STATION 31+64.02
STRUCTURE NO. 016-2417

MODEL: Model
FILE NAME: Q:\Engineering\LiveProjects\13040_IDOT DUR HBMM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-001-GPE.dgn



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PLOT SCALE =		CHECKED -	SPS	REVISED -	
PLOT DATE =	1/28/2019	DRAWN -	JN	REVISED -	
		CHECKED -	JMT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET S-1 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	76
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

INDEX OF SHEETS

- S-1 General Plan and Elevation
- S-2 General Notes, Index of Sheets & Total Bill of Material
- S-3 Construction Staging-I
- S-4 Construction Staging-II & III
- S-5 Temporary Concrete Barrier for Stage Construction
- S-6 Top of West Approach Slab Elevations
- S-7 Top of East Approach Slab Elevations
- S-8 Superstructure
- S-9 Superstructure Details
- S-10 Bridge Approach Slab Details - West
- S-11 Bridge Approach Slab Details - East
- S-12 Bridge Approach Slab Details
- S-13 Aluminum Railing, Type L
- S-14 21"x48" P.P.C. Deck Beam
- S-15 21"x48" P.P.C. Deck Beam Details
- S-16 West and East Abutment Repair
- S-17 West and East Abutment Removal
- S-18 West and East Abutment Details
- S-19 Pier Repairs
- S-20 Pier Removal and Construction
- S-21 Bar Splicer Assembly and Mechanical Spicer Details

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER.	SUB.	TOTAL
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu Yd	-	19.9	19.7
Structure Excavation	Cu Yd	-	32	32
Concrete Structures	Cu Yd	-	76.9	76.9
Concrete Superstructure	Cu Yd	104.4	-	104.4
Bridge Deck Grooving	Sq Yd	646	-	646
Protective Coat	Sq Yd	1,107	-	1,107
Concrete Superstructure (Approach Slab)	Cu Yd	171.7	-	171.7
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq Ft	5,309	-	5,309
Reinforcement Bars, Epoxy Coated	Pound	94,230	10,990	105,220
Bar Splicers	Each	303	98	401
Aluminum Railing, Type L	Foot	221	-	221
Name Plates	Each	1	-	1
Epoxy Crack Injection	Foot	-	143	143
Concrete Wearing Surface, 5"	Sq Yd	590	-	590
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq Ft	-	457	457
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq Ft	-	8	8
Temporary Wall Bracing System	L Sum	-	1	1

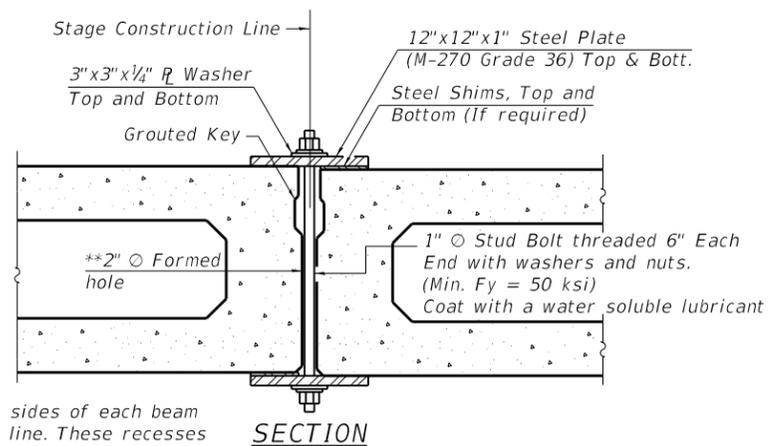
GENERAL NOTES:

1. 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.
2. Reinforcement Bars designated (E) shall be Epoxy Coated.
3. The minimum thickness of the Concrete Overlay shall be 5 inches and varies as required to adjust for the new Profile Grade and Beam Camber.
4. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing Construction Procedures for Removal and Replacement of the Superstructure.
5. If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the new deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads.
6. No in-stream work will be allowed on this project.
7. Slipforming of the parapets is not allowed.
8. Repair of the abutments & pier shall be completed prior to placement of the new deck beams.
9. Protective Coat will be applied to the top and inside face of parapets, sidewalk, curb and on top of concrete wearing surface including approach slabs.

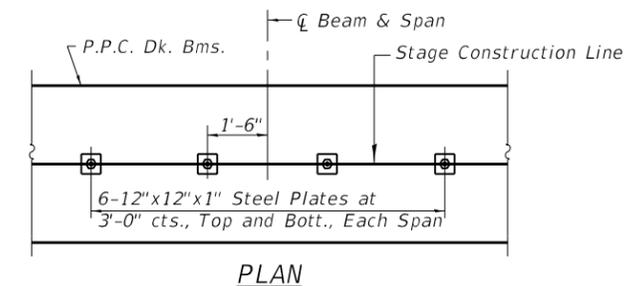
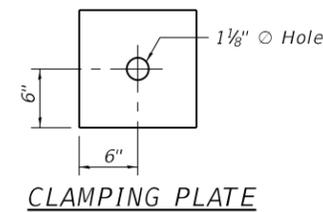
WATERWAY INFORMATION

Drainage Area = 51,008 Acres 79.7 Sq. Mi. Low Grade Elev. 611.36@Sta. 36+50

Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	3803	685	685.0	612.63	0.28	0.30	612.91	612.93
Design	50	5700	685	685.0	614.33	0.08	0.09	614.41	614.42
Base	100	6510	685	685.0	614.91	0.06	0.07	614.97	614.98
Overtopping	<10 Yr	3803	685	685.0	612.63	0.28	0.30	612.91	612.93
Max. Calc.	500	8800	685	685.0	617.28	0.03	0.03	617.31	617.31



**Cast semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts



Notes:
Cost is included with Precast Prestressed Concrete Deck Beams (21" Depth)

See Sheet S-3 & S-4 of S-21 for Staging details.

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. LINE

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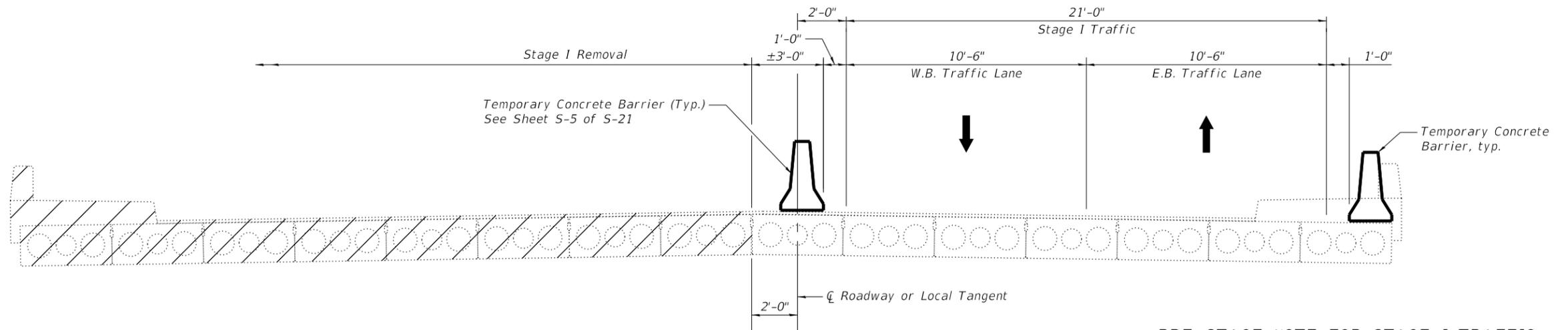
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PLOT DATE = 2/27/2019	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
SN 016-2417**

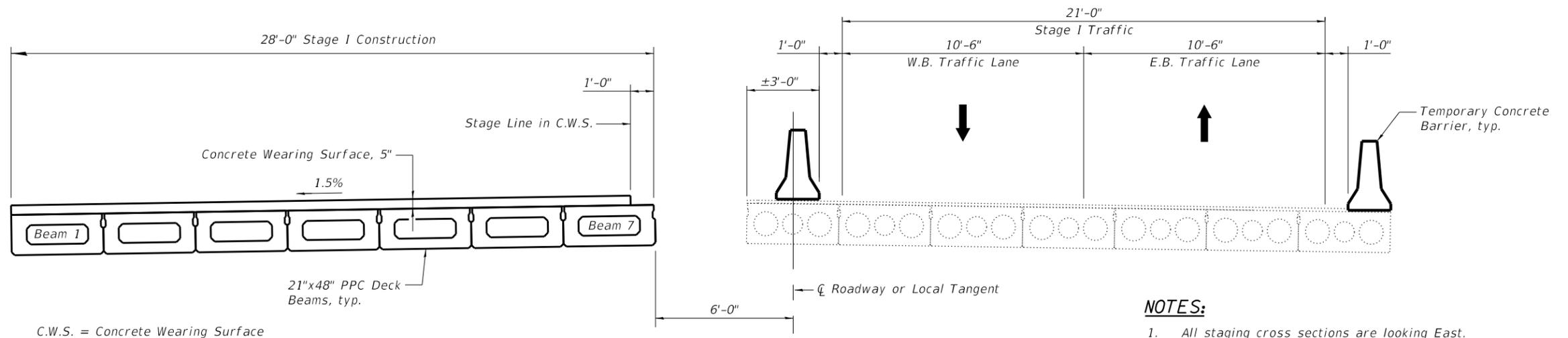
SHEET S-2 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	77
CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		



PRE-STAGE NOTE FOR STAGE I TRAFFIC
 Remove existing sidewalk & parapet on south side of structure and place 3" Hot-Mix Asphalt and temporary concrete barrier. Cost included with Removal of Existing Superstructure

STAGE I REMOVAL



STAGE I CONSTRUCTION

NOTES:

1. All staging cross sections are looking East.
2. For quantity of Temporary Concrete Barrier, see Roadway Plans. Hatched area indicates Removal of Existing Superstructure.
3. The Stage Construction Line and Stage Removal Line for superstructure and substructure is different. See Sheets S-17 and S-18 of S-21 for Details.

MODEL: Model
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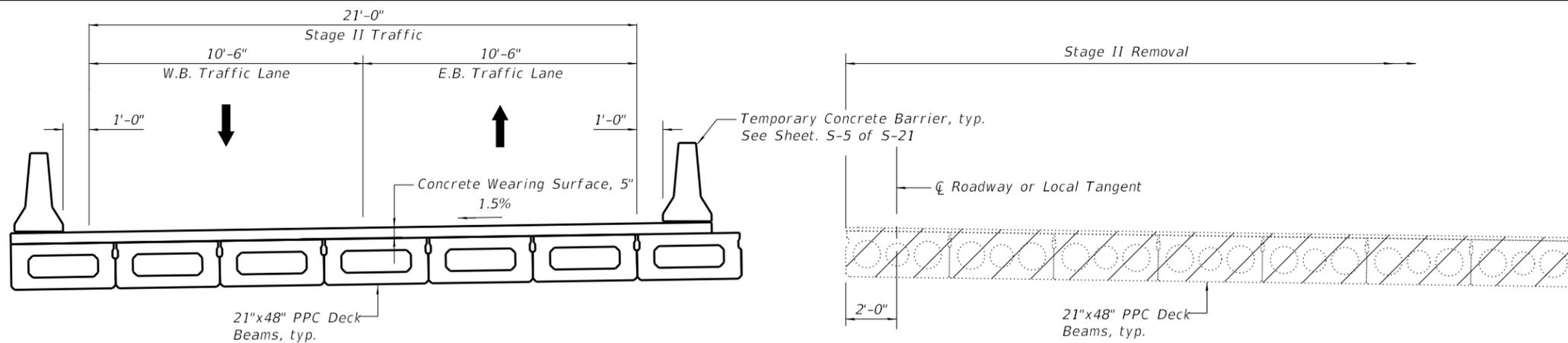
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CHECKED -	SPS	REVISED -			
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PLOT DATE =	1/28/2019	CHECKED -	JMT	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

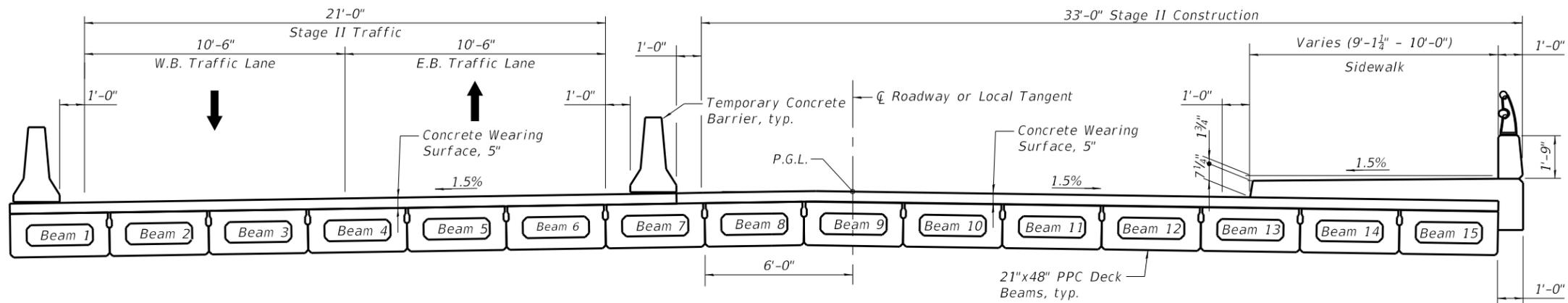
CONSTRUCTION STAGING - I
 SN 016-2417

SHEET S-3 OF S-21 SHEETS

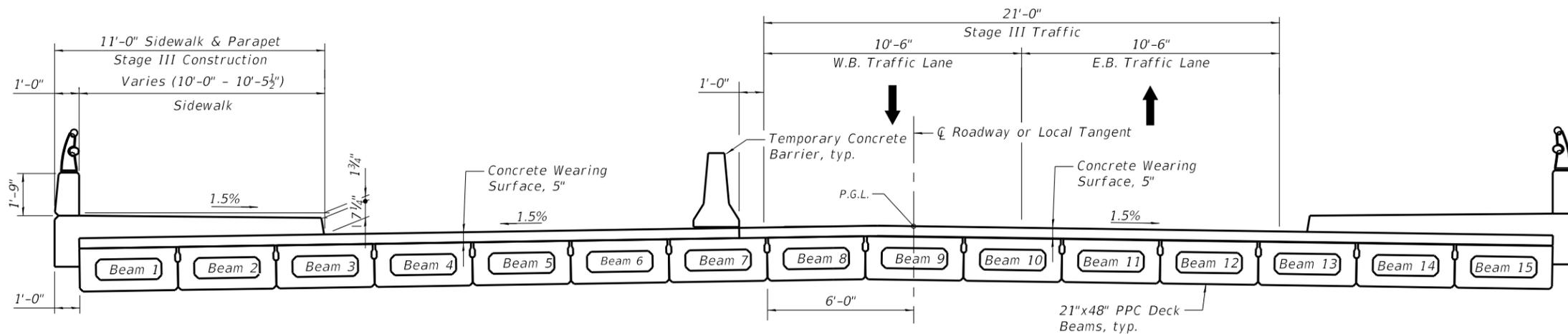
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	78
			CONTRACT NO. 60N21	
		ILLINOIS FED. AID PROJECT		



STAGE II REMOVAL



STAGE II CONSTRUCTION



STAGE III CONSTRUCTION

NOTES:

1. All staging cross sections are looking East.
2. For quantity of Temporary Concrete Barrier, see Roadway Plans. Hatched area indicates Removal of Existing Superstructure.
3. The Stage Construction Line and Stage Removal Line for superstructure and substructure is different. See Sheets S-17 and S-18 of S-21 for Details.

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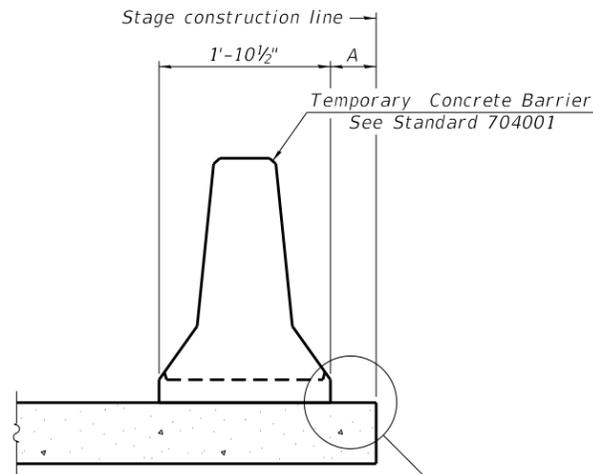
REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION STAGING - II & III
SN 016-2417**

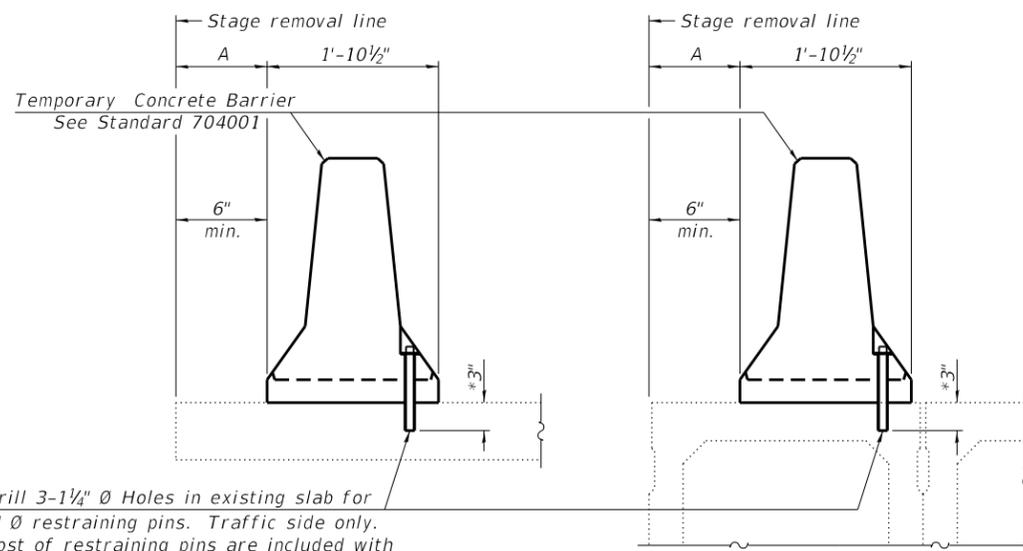
SHEET S-4 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	79
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

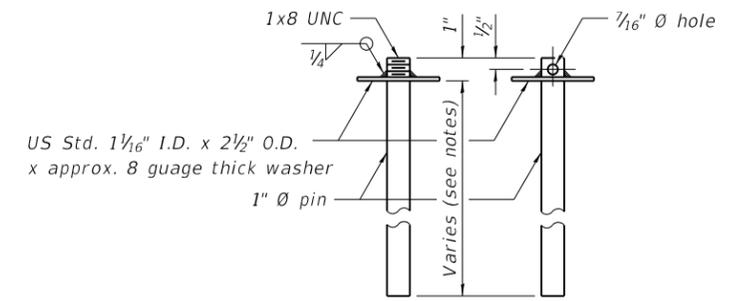


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

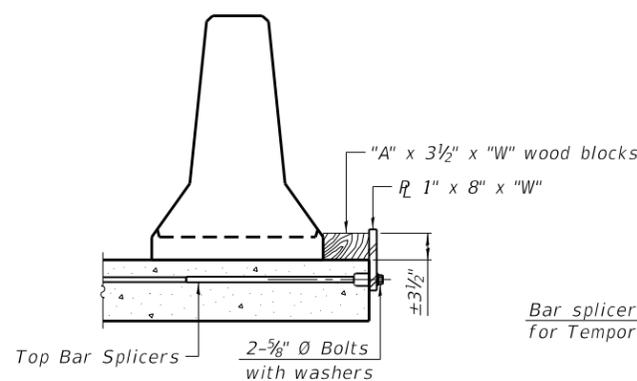
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

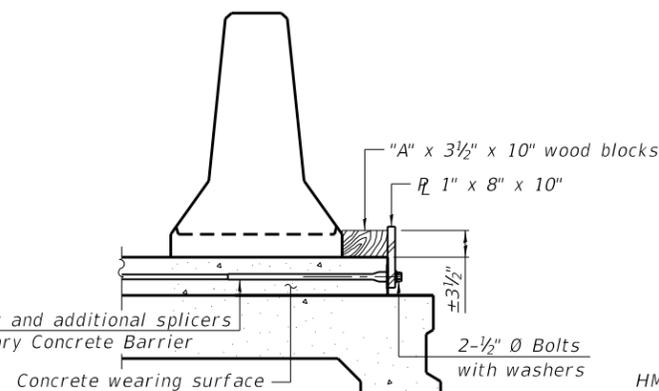


RESTRAINING PIN

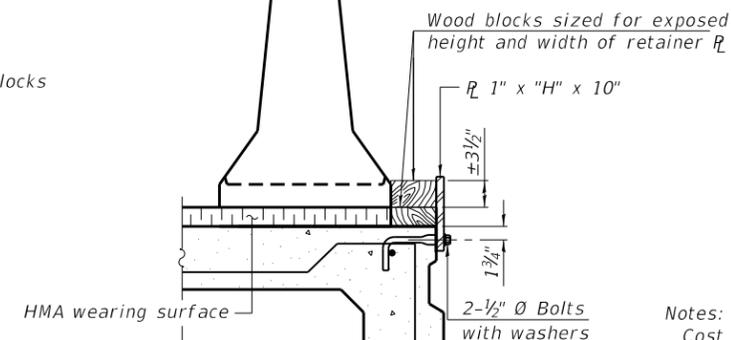
SECTIONS THRU SLAB OR DECK BEAM



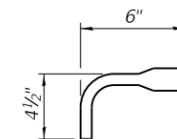
DETAIL I



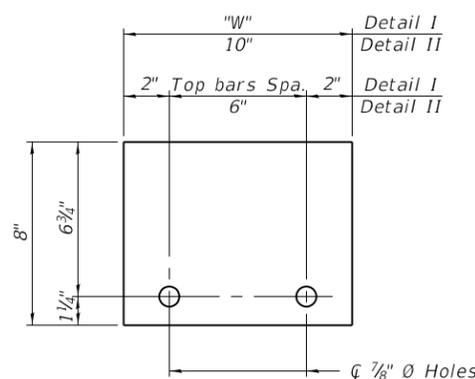
DETAIL II



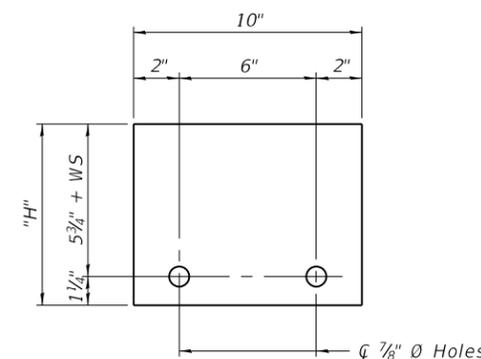
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{C} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

MODEL: Model
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R-27 8-11-2017



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CHECKED -	SPS	REVISIONS -			
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PLOT DATE =	1/28/2019	CHECKED -	JMT	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 SN 016-2417

SHEET S-5 OF S-21 SHEETS

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	80
CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		

NORTH SIDEWALK LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	-	-	-
A1	30+86.57	-38.47	611.74
A2	30+97.68	-35.07	611.92
East End of West Approach Pavement	31+08.05	-34.00	612.05

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	30+80.04	-31.85	611.76
A1	30+90.42	-27.14	611.96
A2	31+01.29	-24.55	612.12
East End of West Approach Pavement	31+11.55	-24.00	612.24

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	30+87.40	-7.00	612.23
A1	30+97.40	-7.00	612.34
A2	31+07.40	-7.00	612.45
East End of West Approach Pavement	31+17.40	-7.00	612.55

CHICAGO HEIGHTS-GLENWOOD ROAD, PGL & LOCAL TANGENT

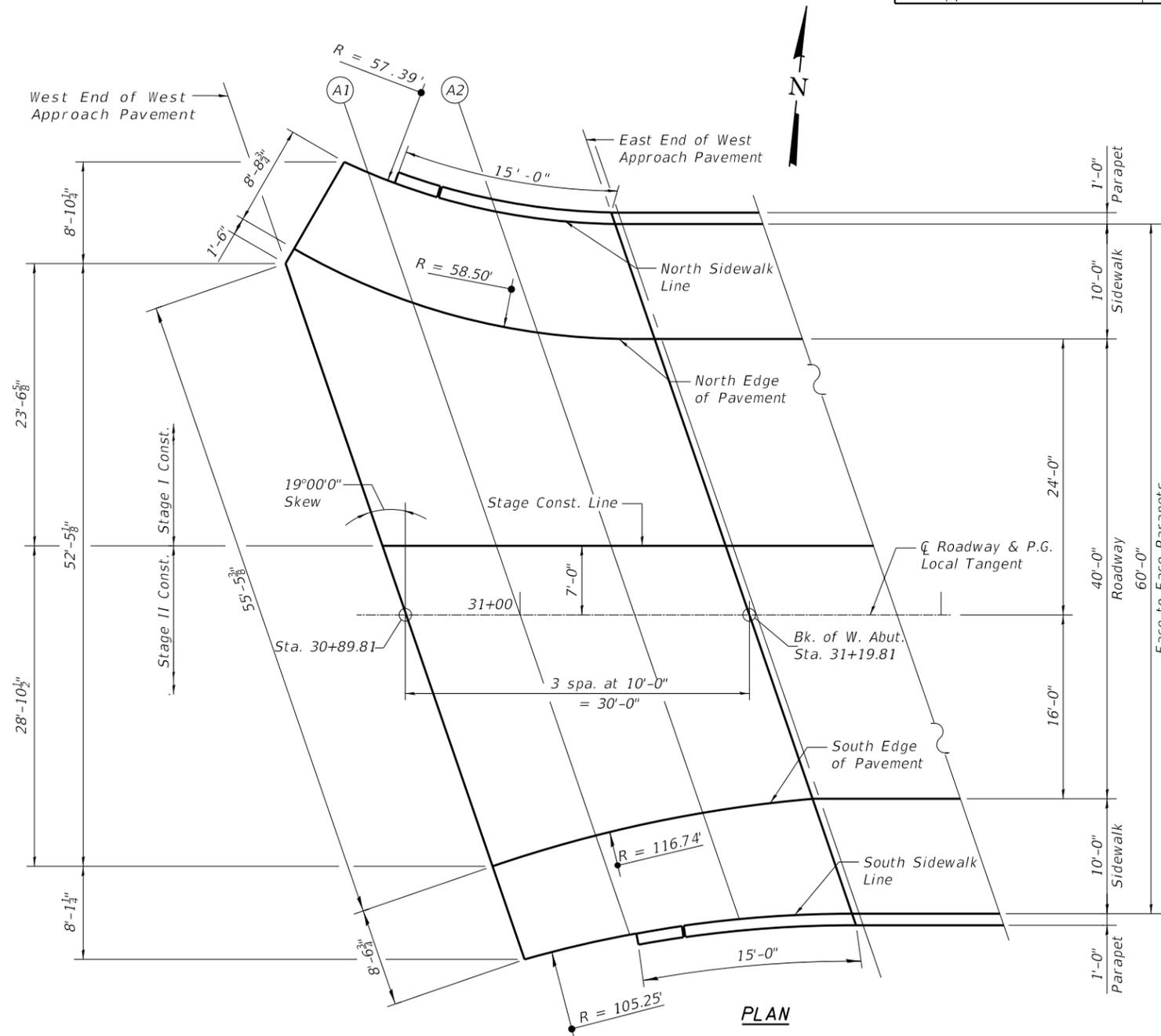
Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	30+89.81	0.00	612.36
A1	30+99.81	0.00	612.47
A2	31+09.81	0.00	612.58
East End of West Approach Pavement	31+19.81	0.00	612.68

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	30+97.34	21.87	612.12
A1	31+06.41	19.17	612.26
A2	31+15.74	17.21	612.38
East End of West Approach Pavement	31+25.32	16.00	612.49

SOUTH SIDEWALK LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of West Approach Pavement	31+00.13	29.97	612.03
A1	31+09.38	27.80	612.16
A2	31+18.92	26.46	612.28
East End of West Approach Pavement	31+28.76	26.00	612.38



MODEL: Model
FILE NAME: C:\Engineering\Live\Projects\13040_IDOT DUR HBM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-006-approach_west.dgn



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	CHECKED - SPS	REVISED -
PLOT SCALE =	DRAWN - JN	REVISED -
PLOT DATE = 3/12/2019	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
SN 016-2417

SHEET S-6 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	81
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

NORTH SIDEWALK LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	31+95.75	-34.38	612.75
A3	32+05.61	-34.35	612.82
A4	32+15.51	-34.32	612.89
East End of East Approach Pavement	32+25.43	-34.29	612.94

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	31+99.52	-24.00	612.93
A3	32+09.46	-24.00	613.00
A4	32+19.42	-24.00	613.07
East End of East Approach Pavement	32+29.42	-24.00	613.12

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	32+05.60	-7.63	613.22
A3	32+15.54	-7.96	613.28
A4	32+25.48	-8.35	613.33
East End of East Approach Pavement	32+35.41	-8.82	613.37

CHICAGO HEIGHTS - GLENWOOD ROAD & P.G.L.

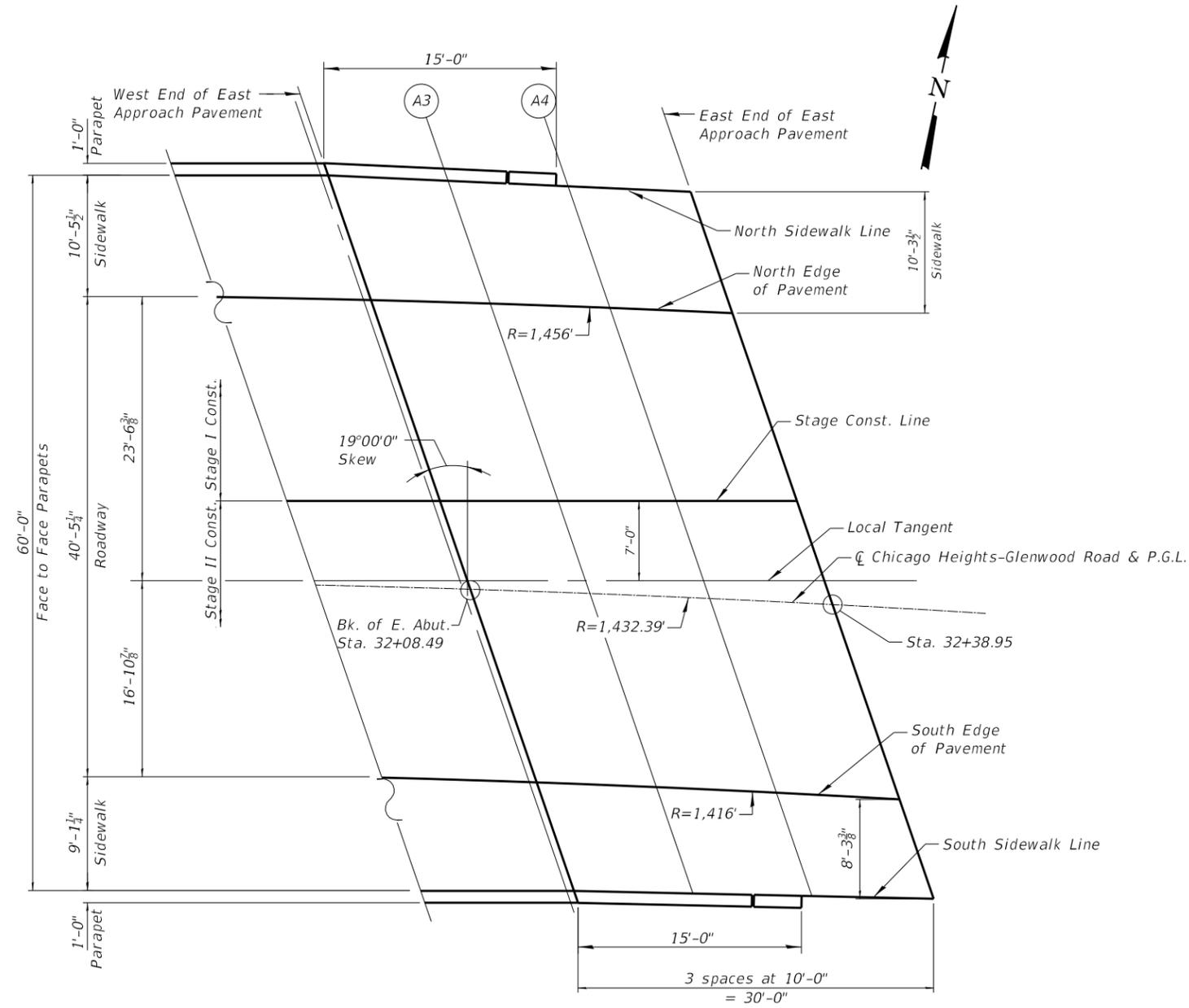
Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	32+08.49	0.00	613.36
A3	32+18.62	0.00	613.42
A4	32+28.77	0.00	613.47
East End of East Approach Pavement	32+38.95	0.00	613.52

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	32+14.64	16.00	613.16
A3	32+24.89	16.00	613.22
A4	32+35.19	16.00	613.26
East End of East Approach Pavement	32+45.50	16.00	613.26

SOUTH SIDEWALK LINE

Location	Station	Offset	Theoretical Grade Elevations
West End of East Approach Pavement	32+18.15	24.97	613.04
A3	32+28.41	24.77	613.10
A4	32+38.66	24.51	613.15
East End of East Approach Pavement	32+48.97	24.17	613.19



PLAN

MODEL: Model
FILE NAME: C:\Engineering\LiveProjects\13040_IDOT DUR HBM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-007-approach_east.dgn



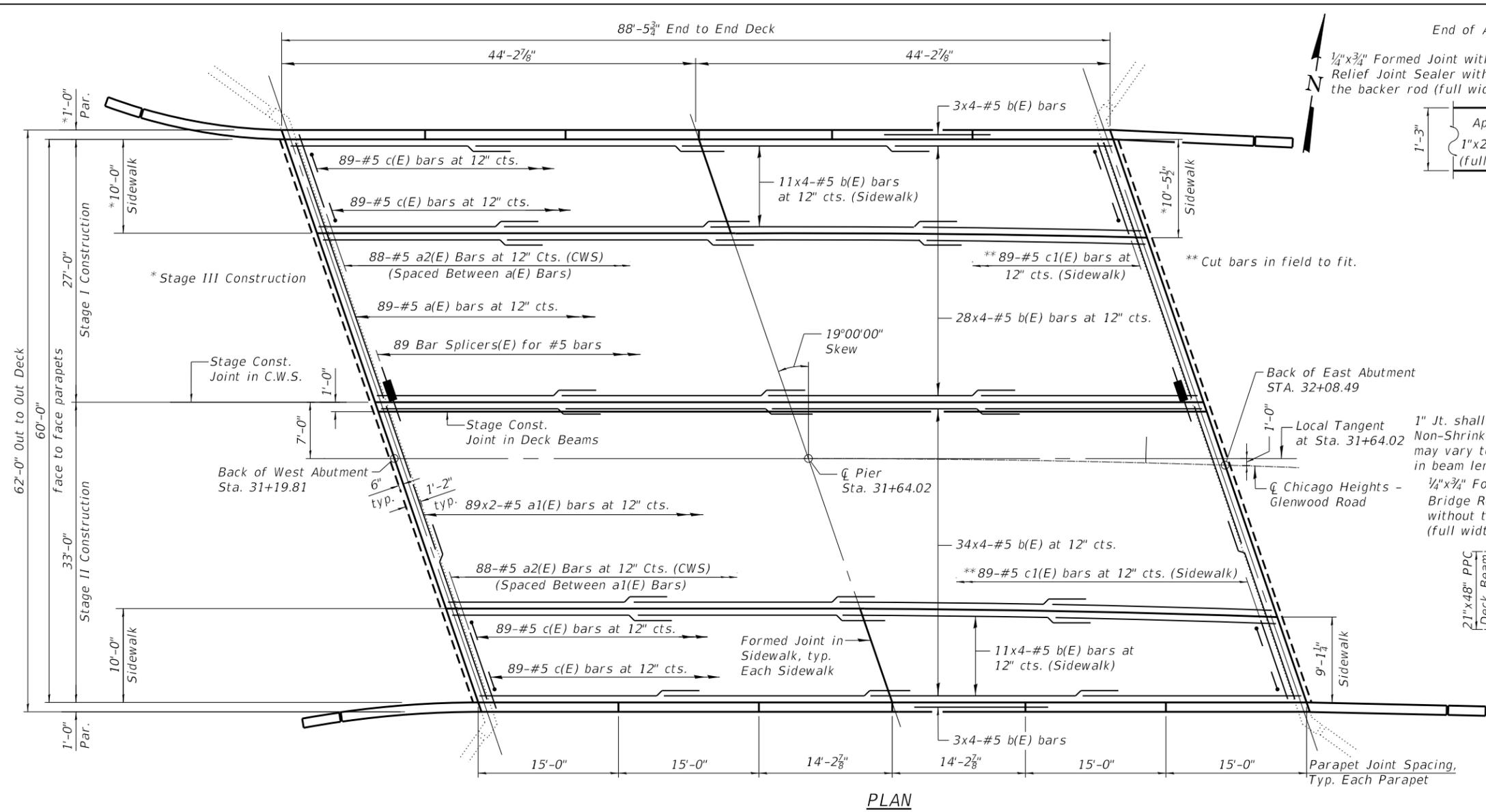
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CHECKED -	SPS	REVISED -			
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PLOT DATE =	3/12/2019	CHECKED -	JMT	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

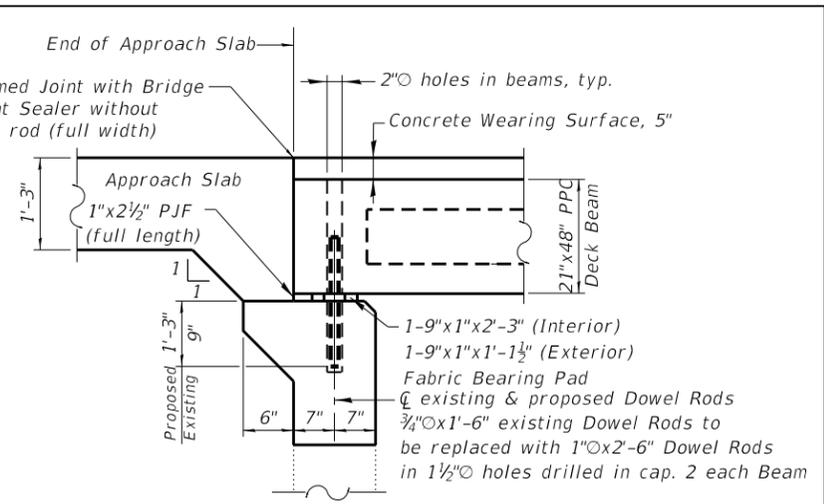
**TOP OF EAST APPROACH SLAB ELEVATIONS
SN 016-2417**

SHEET S-7 OF S-21 SHEETS

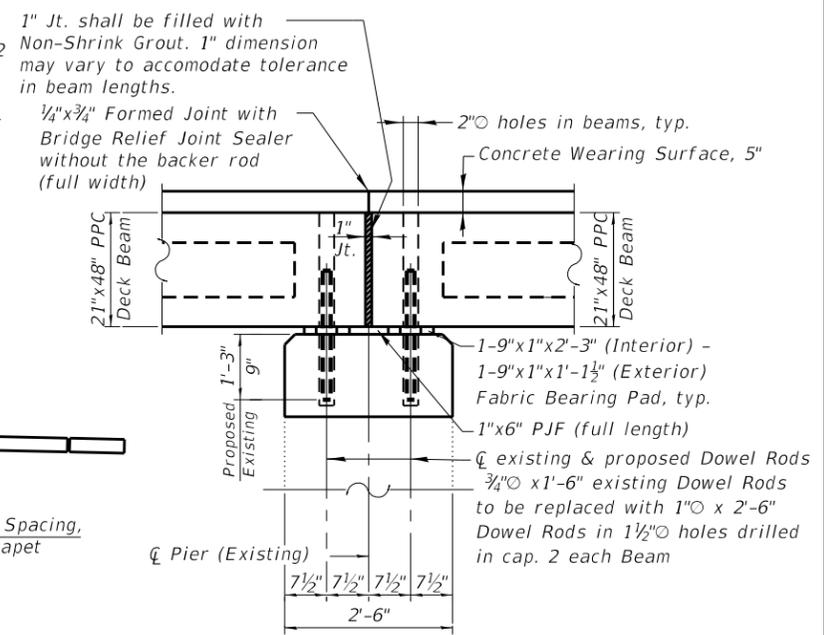
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CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



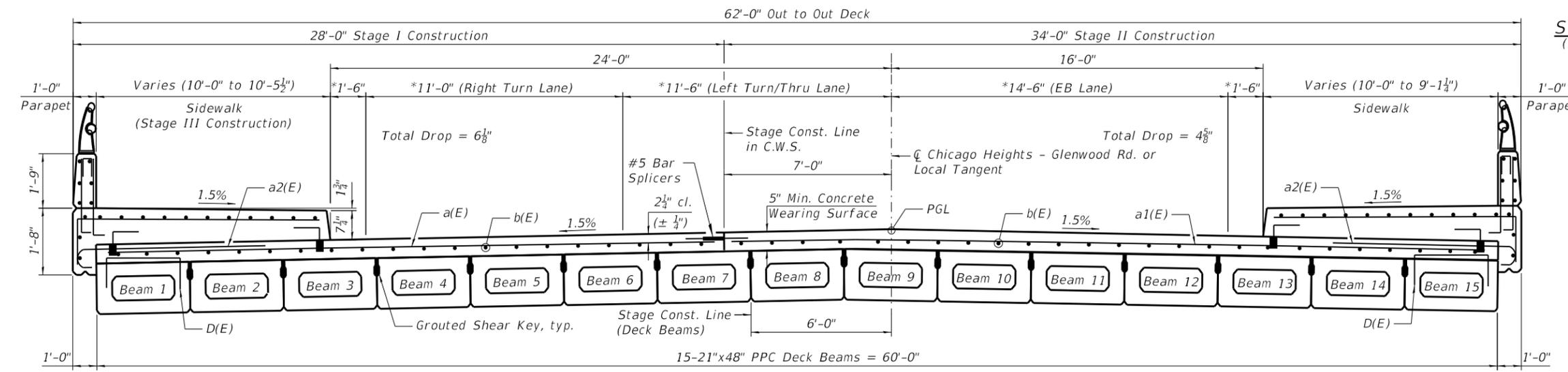
PLAN



SECTION THRU ABUTMENT
(Dimensions are at Rt. L's)



SECTION THRU PIER
(Dimensions are at Rt. L's)



DECK CROSS SECTION
(Looking East)

* Dimensions measured perpendicular to the roadway.
(All dimensions shown are measured perpendicular to the local tangent line)

MIN. BAR LAP:
#5 bars = 3'-0"

MODEL: Model
FILE NAME: Q:\Engineering\LiveProjects\13040_IDOT DUR HB\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-008-superstructure.dgn



USER NAME =	sapant	DESIGNED -	SAT	REVISED -	
CHECKED -	SPS	CHECKED -	SPS	REVISED -	
PLOT SCALE =		DRAWN -	JN	REVISED -	
PLOT DATE =	3/12/2019	CHECKED -	JMT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
SN 016-2417

SHEET S-8 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	83
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

MODEL: Model
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 DESIGNED - SAT
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 DRAWN - JN
 PLOT DATE = 1/31/2019
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS - WEST
 SN 016-2417

(Sheet 1 of 3)

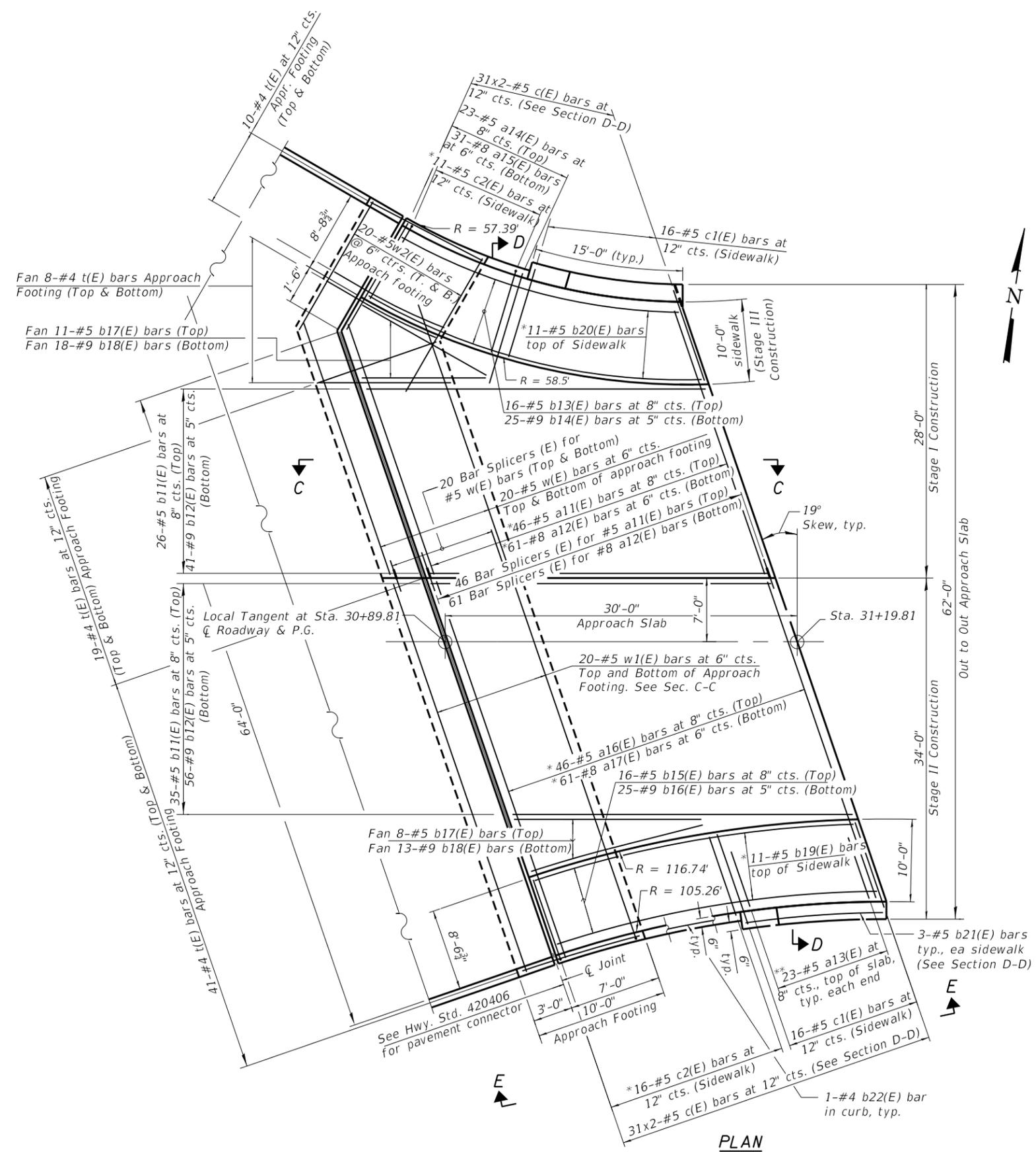
NOTES:

1. a11(E), a12(E), a16(E) and a17(E) bar spacings measured along \bar{C} Rdwy.
2. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distances 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 $1\frac{1}{2}$ " for installation purposes.
3. Parapet and Sidewalk concrete shall be paid for as Concrete Superstructure.
4. Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
5. Approach Footing concrete shall be paid for as Concrete Structures.
6. See Sheet S-12 of S-21 for section C-C, section D-D, view E-E and bar bending details.
7. Curved bars shall be bent in the field.
8. See Sheet S-18 of S-21 for v(E) bar bar details.

* Cut bars in field to fit.
 ** Lap a13(E) bars with a11(E) and a16(E) bars, typ. each parapet.

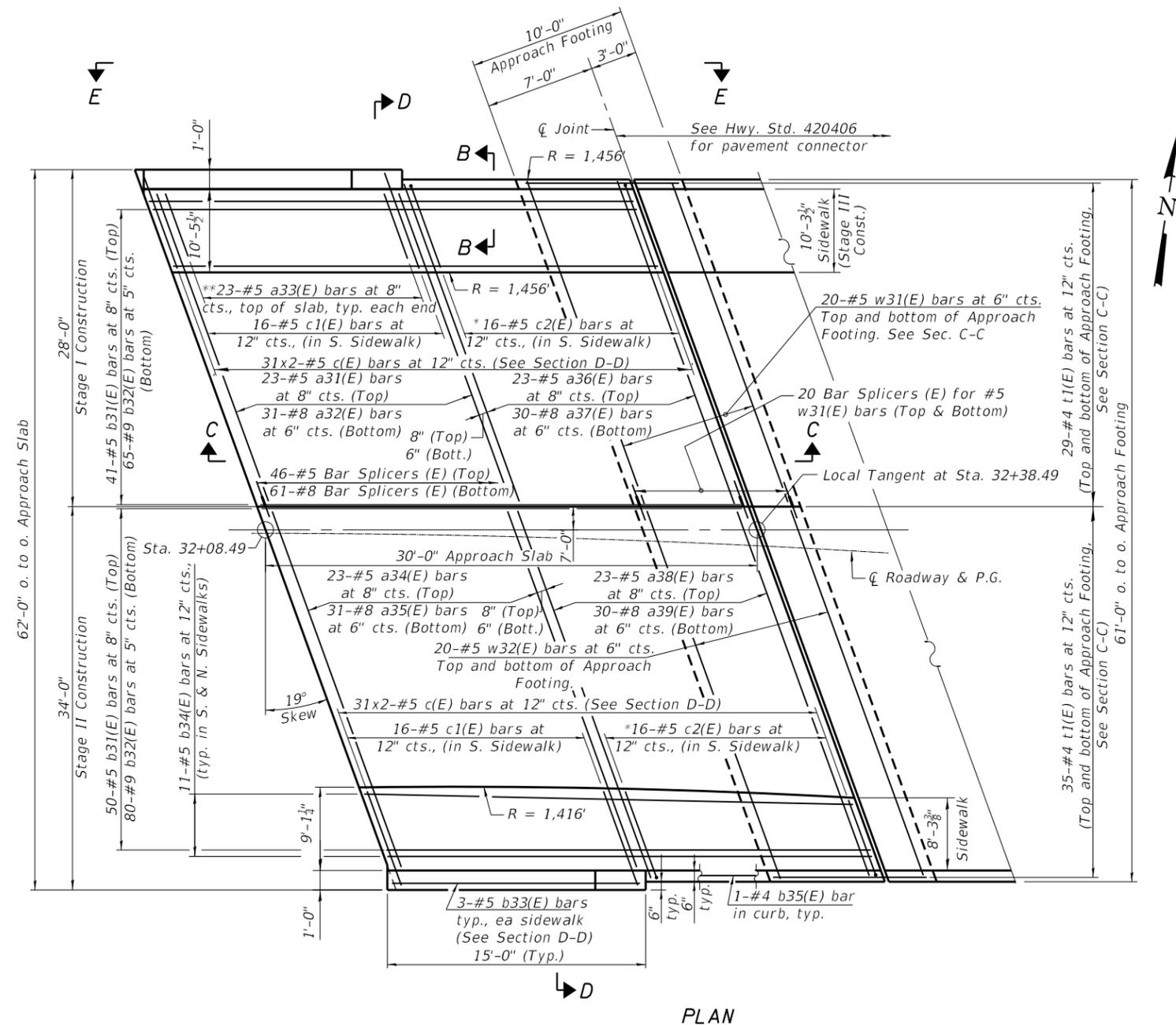
**WEST APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a11(E)	46	#5	34'-0"	—
a12(E)	61	#8	34'-0"	—
a13(E)	46	#5	7'-4"	┌
a14(E)	23	#5	10'-4"	—
a15(E)	31	#8	10'-4"	—
a16(E)	46	#5	39'-4"	—
a17(E)	61	#8	39'-4"	—
b11(E)	61	#5	29'-8"	—
b12(E)	97	#9	29'-8"	—
b13(E)	16	#5	32'-2"	—
b14(E)	25	#9	32'-2"	—
b15(E)	16	#5	28'-8"	—
b16(E)	25	#9	28'-8"	—
b17(E)	19	#5	15'-0"	—
b18(E)	31	#9	15'-0"	—
b19(E)	11	#5	28'-5"	—
b20(E)	11	#5	30'-8"	—
b21(E)	6	#5	14'-8"	—
b22(E)	2	#4	14'-2"	—
c(E)	124	#5	1'-10"	┌
c1(E)	32	#5	12'-7"	┌
c2(E)	27	#5	11'-3"	└
d(E)	8	#4	2'-0"	┌
d1(E)	26	#6	3'-0"	L
d2(E)	26	#4	2'-6"	L
d3(E)	20	#6	4'-10"	L
e11(E)	12	#4	13'-8"	—
e12(E)	20	#4	3'-8"	—
t(E)	156	#4	9'-8"	—
w(E)	40	#5	25'-0"	—
w1(E)	40	#5	39'-4"	—
w2(E)	40	#5	11'-9"	—
Reinforcement Bars, Epoxy Coated		Pound	42,600	
Concrete Superstructure		Cu Yd	18.4	
Concrete Superstructure (Approach Slab)		Cu Yd	87.8	
Concrete Structures		Cu Yd	27.4	
Bridge Deck Grooving		Sq Yd	143	
Protective Coat		Sq Yd	228	



PLAN

MODEL: Model
 FILE NAME: C:\Engineering\Live\Projects\13040_IDOT DUR HBM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-011-appro_slab-ldgn



PLAN

NOTES:

- a31(E), a32(E), a34(E) and a35(E) bar spacings measured along \bar{C} Rdwy.
- The joint opening shall be determined per Article 520.04 except that on jointless structures, the distances 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 $1\frac{1}{2}$ " 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.
- See Sheet S-12 of S-21 for section C-C, section D-D, view B-B, view E-E and bar bending details.
- Curved bars shall be bent in the field.
- See Sheet S-18 of S-21 for v(E) bar bar details.

* Cut bars in field.
 ** Lap a33(E) bars with a31(E) and a35(E) bars, typ. each parapet.

**EAST APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a31(E)	23	#5	28'-3"	—	
a32(E)	31	#8	28'-3"	—	
a33(E)	46	#5	7'-4"	└┘	
a34(E)	23	#5	34'-7"	—	
a35(E)	31	#8	34'-7"	—	
a36(E)	23	#5	28'-10"	—	
a37(E)	30	#8	28'-10"	—	
a38(E)	23	#5	35'-2"	—	
a39(E)	30	#8	35'-2"	—	
b31(E)	91	#5	29'-8"	—	
b32(E)	145	#9	29'-8"	—	
b33(E)	6	#5	14'-8"	—	
b34(E)	22	#5	29'-8"	—	
b35(E)	2	#4	14'-8"	—	
c(E)	124	#5	1'-10"	└┘	
c1(E)	32	#5	12'-7"	└┘	
c2(E)	32	#5	11'-3"	└┘	
d(E)	8	#4	2'-0"	└┘	
d1(E)	26	#6	3'-0"	L	
d2(E)	26	#4	2'-6"	L	
d3(E)	20	#6	4'-10"	L	
e11(E)	12	#4	13'-8"	—	
e12(E)	20	#4	3'-8"	—	
t1(E)	128	#4	10'-3"	—	
w31(E)	40	#5	28'-9"	—	
w32(E)	40	#5	35'-1"	—	
Reinforcement Bars, Epoxy Coated				Pound	37,010
Concrete Superstructure				Cu Yd	19.4
Concrete Superstructure (Approach Slab)				Cu Yd	83.9
Concrete Structures				Cu Yd	26.8
Bridge Deck Grooving				Sq Yd	129
Protective Coat				Sq Yd	220

(Sheet 2 of 3)



USER NAME =	sapant	DESIGNED -	SAT	REVISED -	
CHECKED -	SPS	REVISIONS -			
PLOT SCALE =		DRAWN -	JN	REVISED -	
PLOT DATE =	3/12/2019	CHECKED -	JMT	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS - EAST
 SN 016-2417**

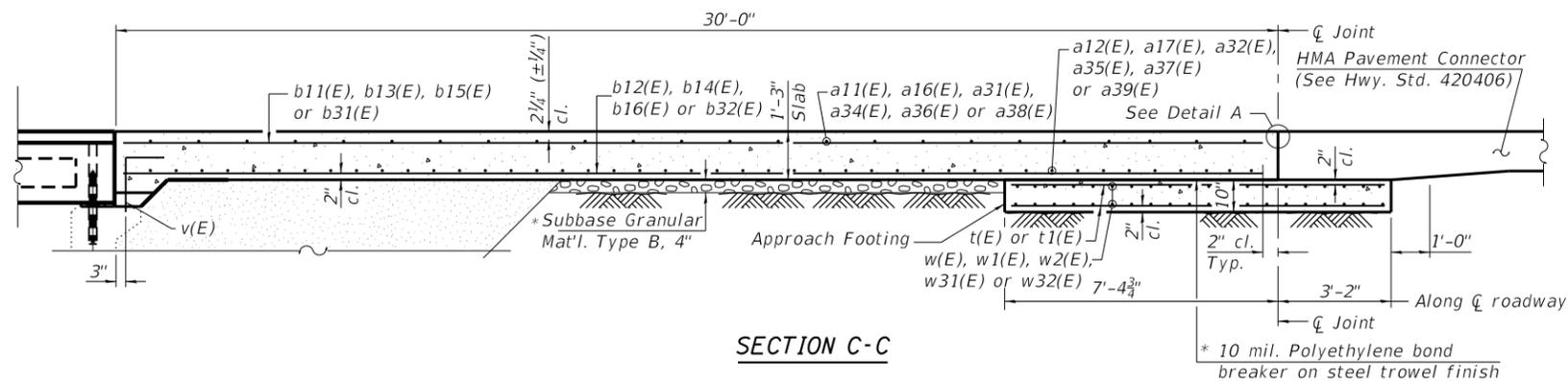
SHEET S-11 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

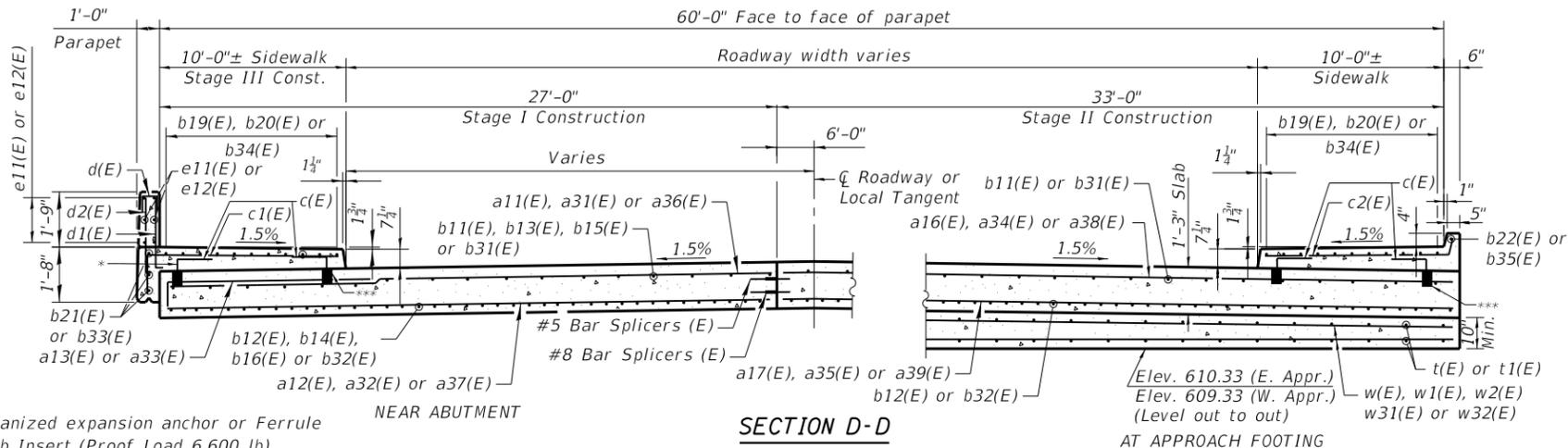
NOTES:

1. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distances 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 11#2" for installation purposes.
2. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
3. For bar splicer details, see sheet S-21 of S-21.
4. Parapet and Sidewalk concrete shall be paid for as Concrete Superstructure.
5. Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
6. Approach Footing concrete shall be paid for as Concrete Structures.
7. Cost of excavation for approach footing included with Concrete Structures.
8. For Aluminum Railing, Type L details, See Sheet S-13 of S-21.
9. See Sheet S-18 of S-21 for v(E) bar details.

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



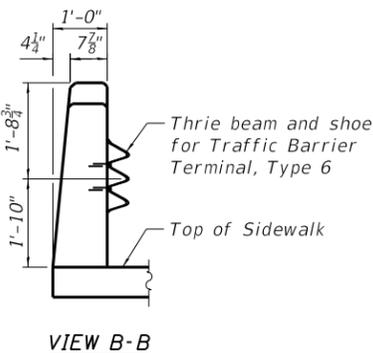
SECTION C-C



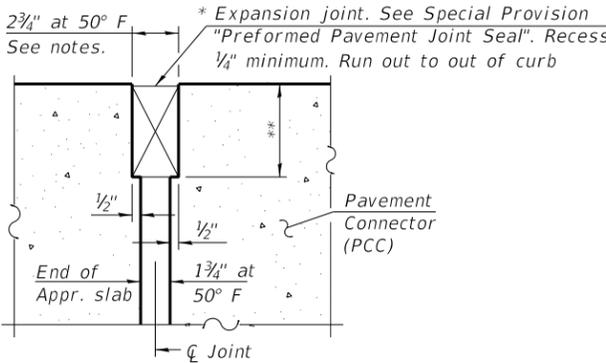
SECTION D-D

(See Plan for dimensions not shown)

*** 3/4"Ø galvanized expansion anchor or Ferrule Loop Slab Insert (Proof Load 6,600 lb). The cost of expansion anchors/inserts is included in the cost of Reinforcement Bars, Epoxy Coated.

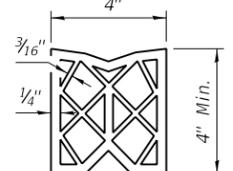


VIEW B-B

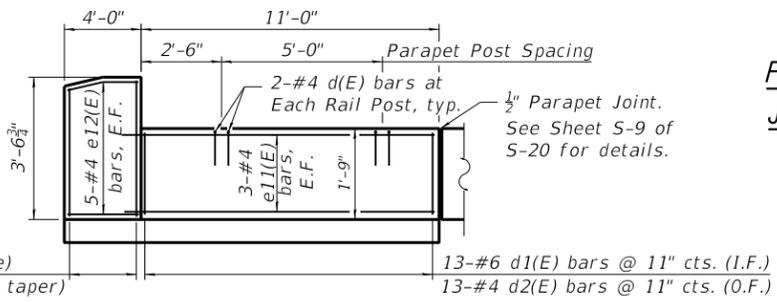


DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations

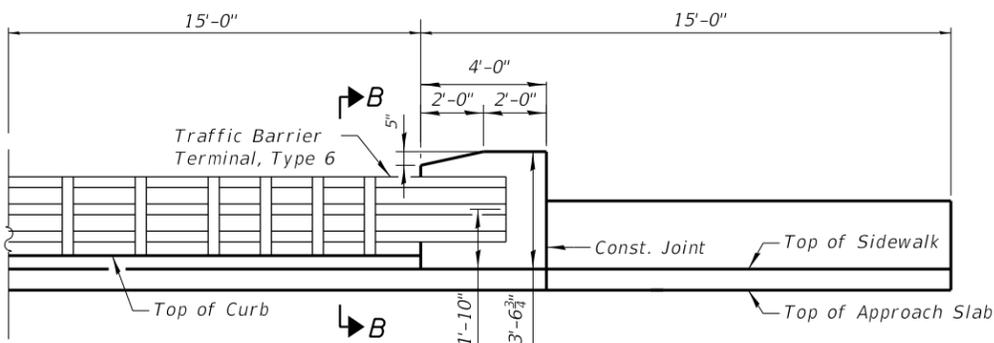


PREFORMED JOINT SEAL



VIEW E-E

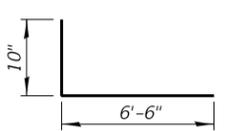
Note: Bend e11(E) & e12(E) bars in the field to fit.



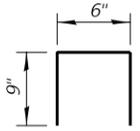
VIEW E-E

Note: Railing not shown for clarity.

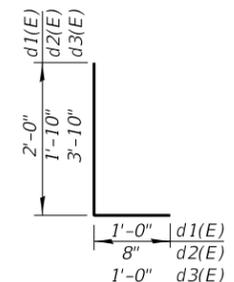
MIN. BAR LAP
#4 Bar = 2'-8"



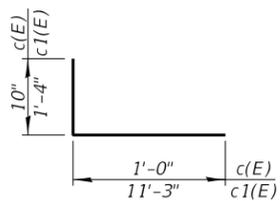
BAR a13(E) & a33(E)



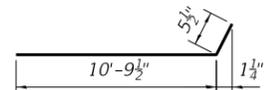
BAR d(E)



BAR d1(E), d2(E) & d3(E)



BAR c(E) & c1(E)



BAR c2(E)

(Sheet 3 of 3)

MODEL: Model
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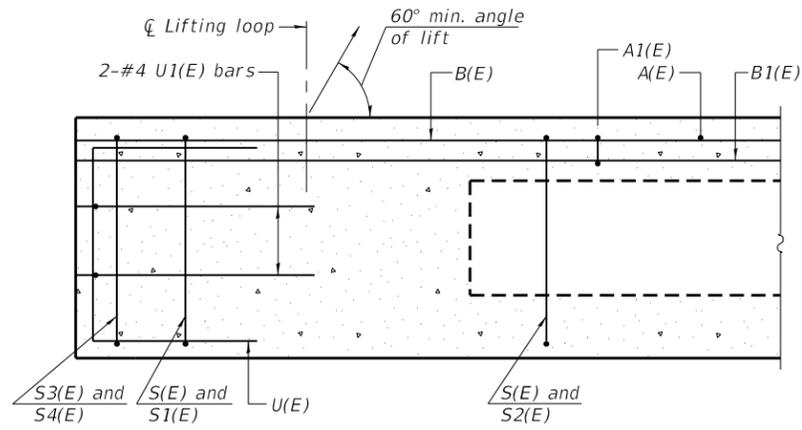
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
SN 016-2417**

SHEET S-12 OF S-21 SHEETS

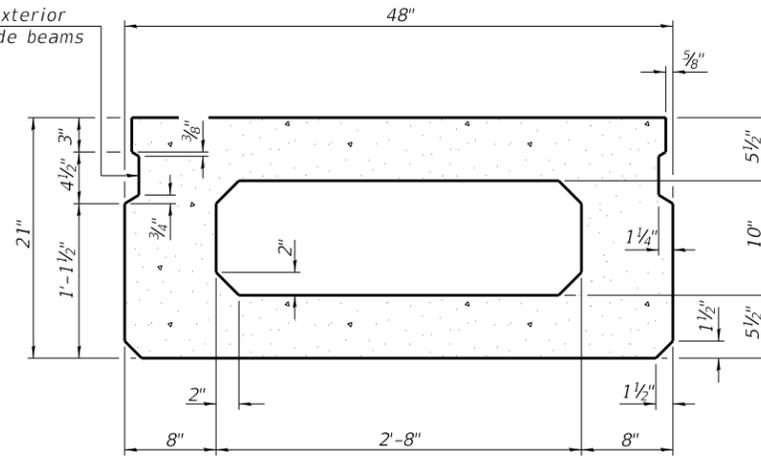
F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 87
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

MODEL: Model
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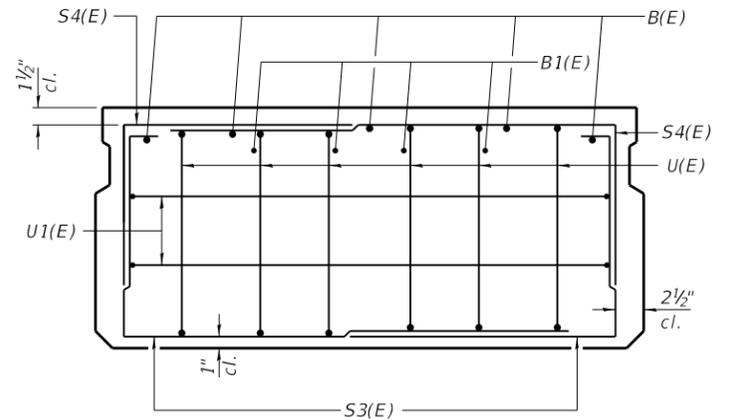


SECTION A-A

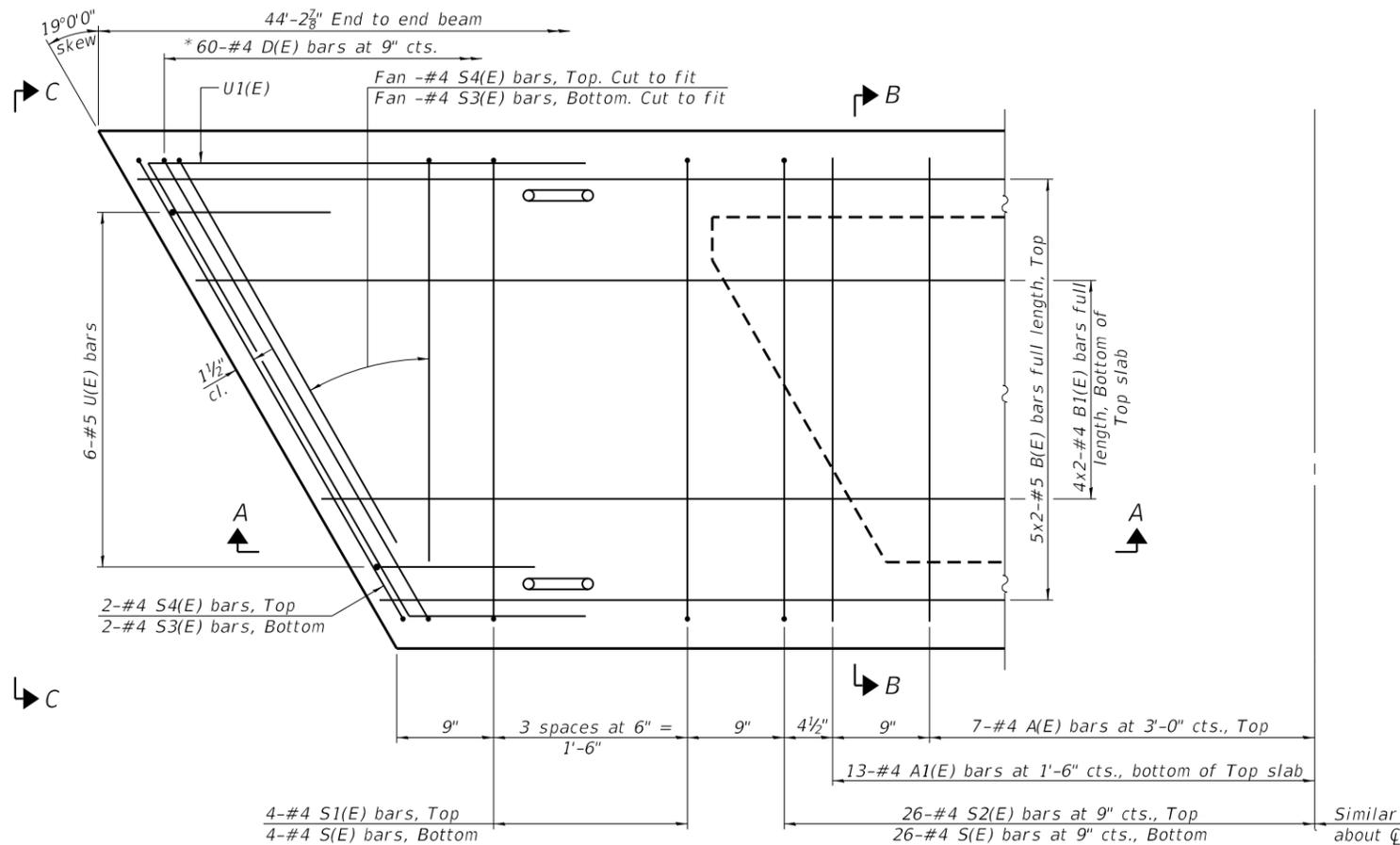
Omit key on exterior
Face of outside beams



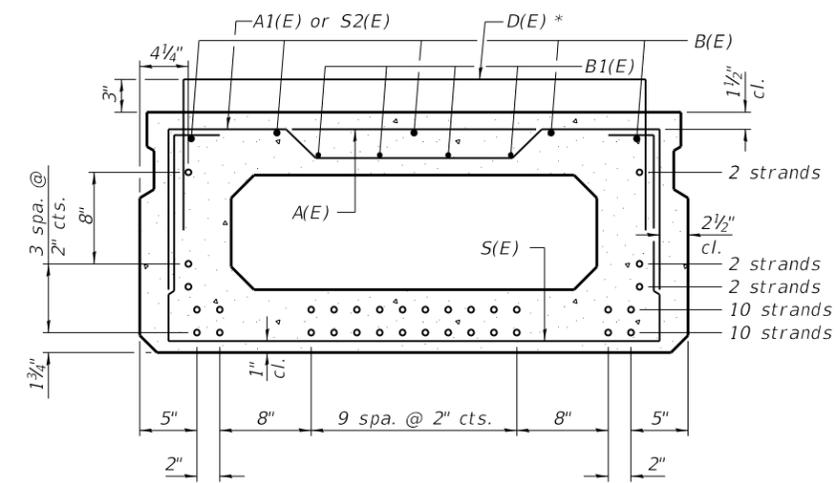
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



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)	13	#4	3'-7"	—
A1(E)	26	#4	3'-10"	~
B(E)	10	#5	23'-3"	—
B1(E)	8	#4	23'-0"	—
* D(E)	60	#4	6'-0"	┌
S(E)	60	#4	7'-5"	┌
S1(E)	8	#4	5'-11"	┌
S2(E)	52	#4	6'-2"	┌
S3(E)	12	#4	4'-10"	┌
S4(E)	12	#4	4'-1"	┌
U(E)	12	#5	4'-0"	┌
U1(E)	4	#4	7'-5"	┌

Note:
See sheet S-15 of S-21 for additional details and Bill of Material.

* Place #4 D(E) bars at 9" cts. (measured along centerline of beam) in fascia beam only. The D(E) bars shall be oriented along the skew. D(E) bars included in the cost of PPC Deck Beams.

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

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.

MINIMUM BAR LAP

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

PD-2148-R

2-17-2017



USER NAME =	Johnn
PLOT SCALE =	
PLOT DATE =	1/28/2019

DESIGNED -	SAT
CHECKED -	SPS
DRAWN -	JN
CHECKED -	JMT

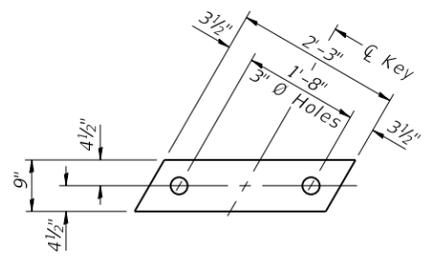
REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

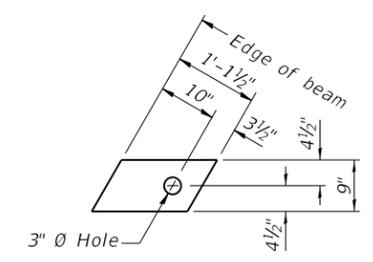
21"x48" P.P.C. DECK BEAM
SN 016-2417

SHEET S-14 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		

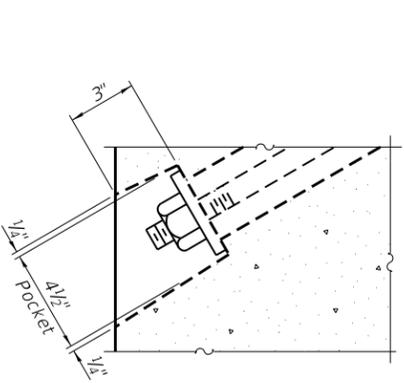


FABRIC BEARING PAD
(Interior - 52 required)

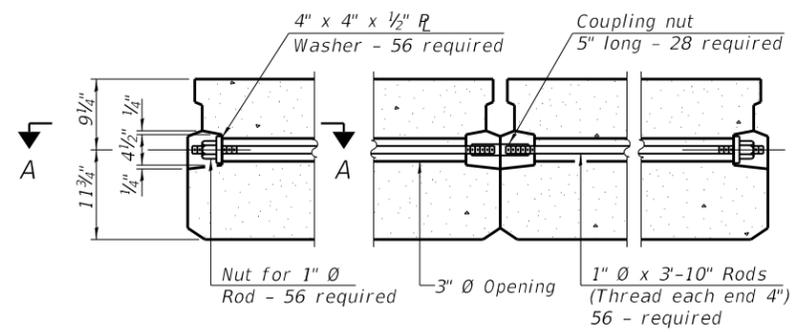


FABRIC BEARING PAD
(Exterior - 8 required)

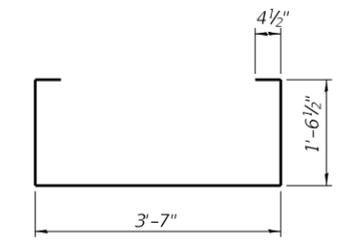
FIXED
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



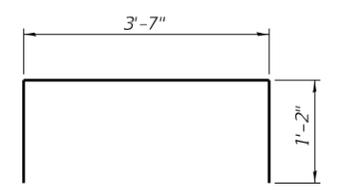
SECTION A-A



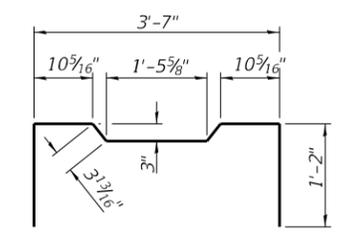
TYPICAL TRANSVERSE TIE ASSEMBLY



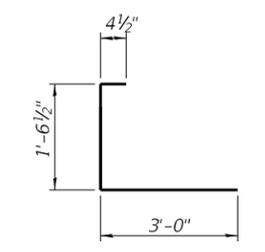
BAR S(E)



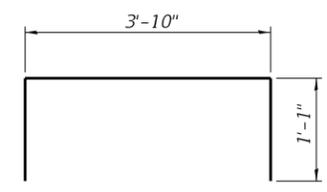
BAR S1(E)



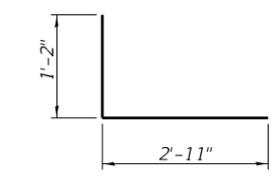
BAR S2(E)



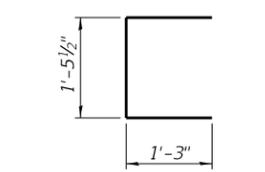
BAR S3(E)



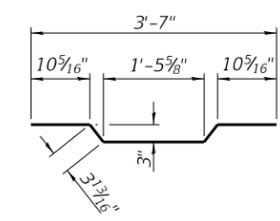
BAR D(E)



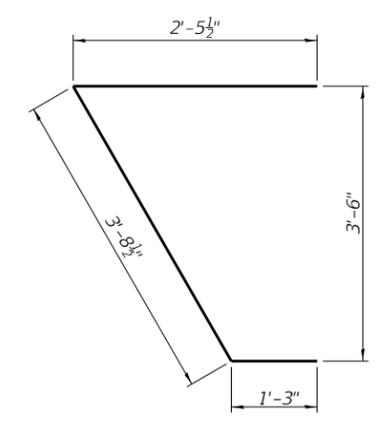
BAR S4(E)



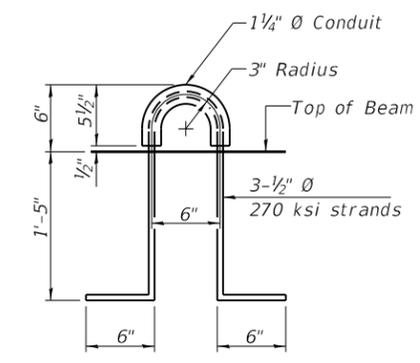
BAR U(E)



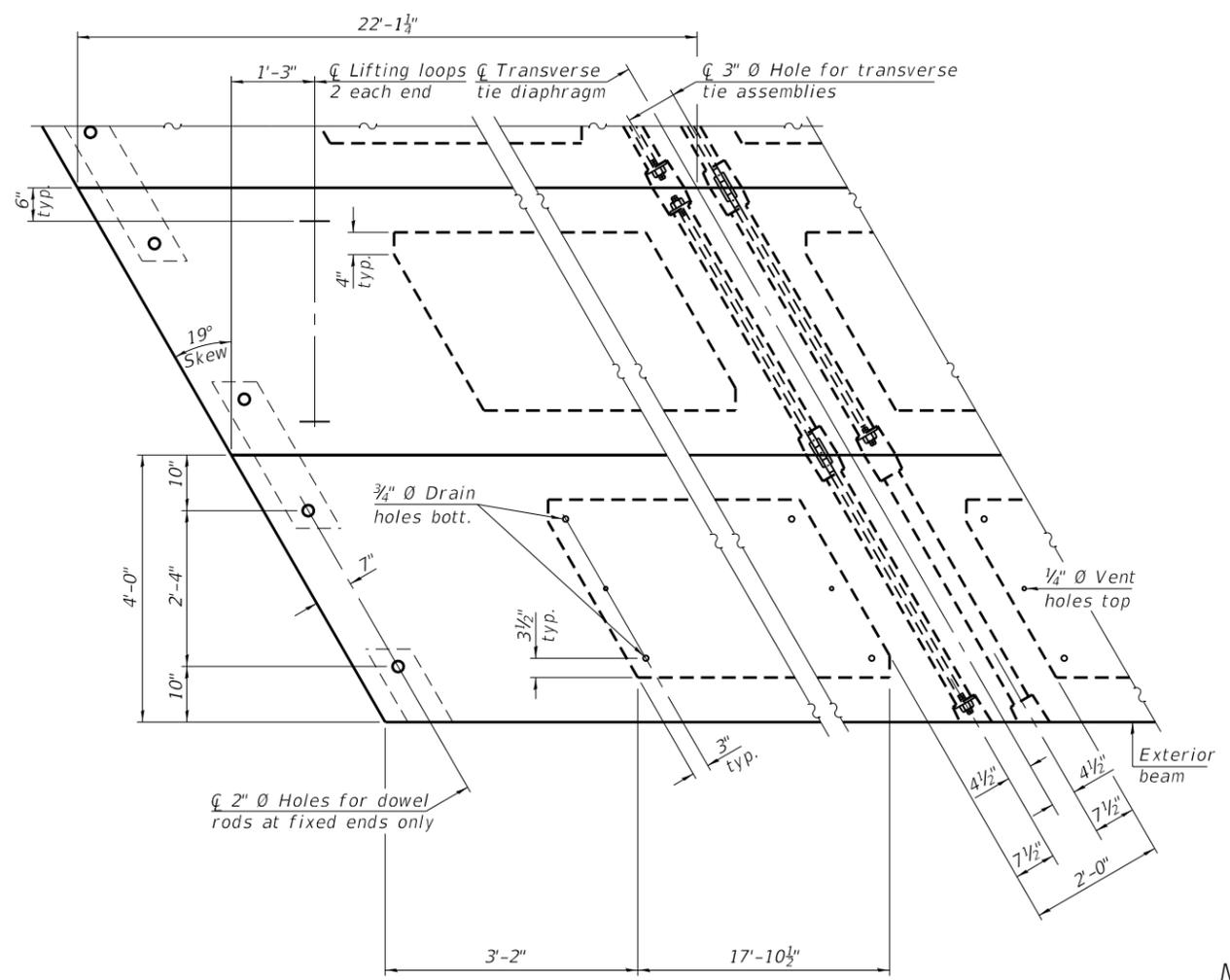
BAR A1(E)



BAR U1(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" Ø 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 1/2" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" Ø 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.

Note: Connect beams in pairs with the transverse tie configuration shown.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	5,309
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PD-2148-RD 2-17-2017



USER NAME = sapan	DESIGNED - SAT	REVISED -
PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE = 3/12/2019	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21"x48" P.P.C. DECK BEAM DETAILS
SN 016-2417

SHEET S-15 OF S-21 SHEETS

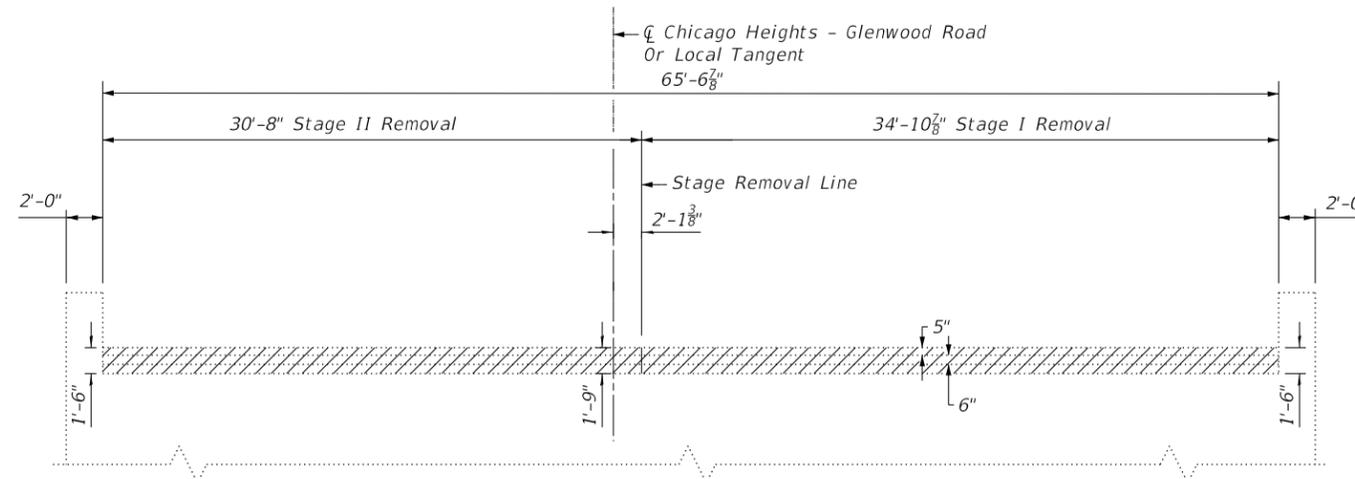
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	90
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

MODEL: Model
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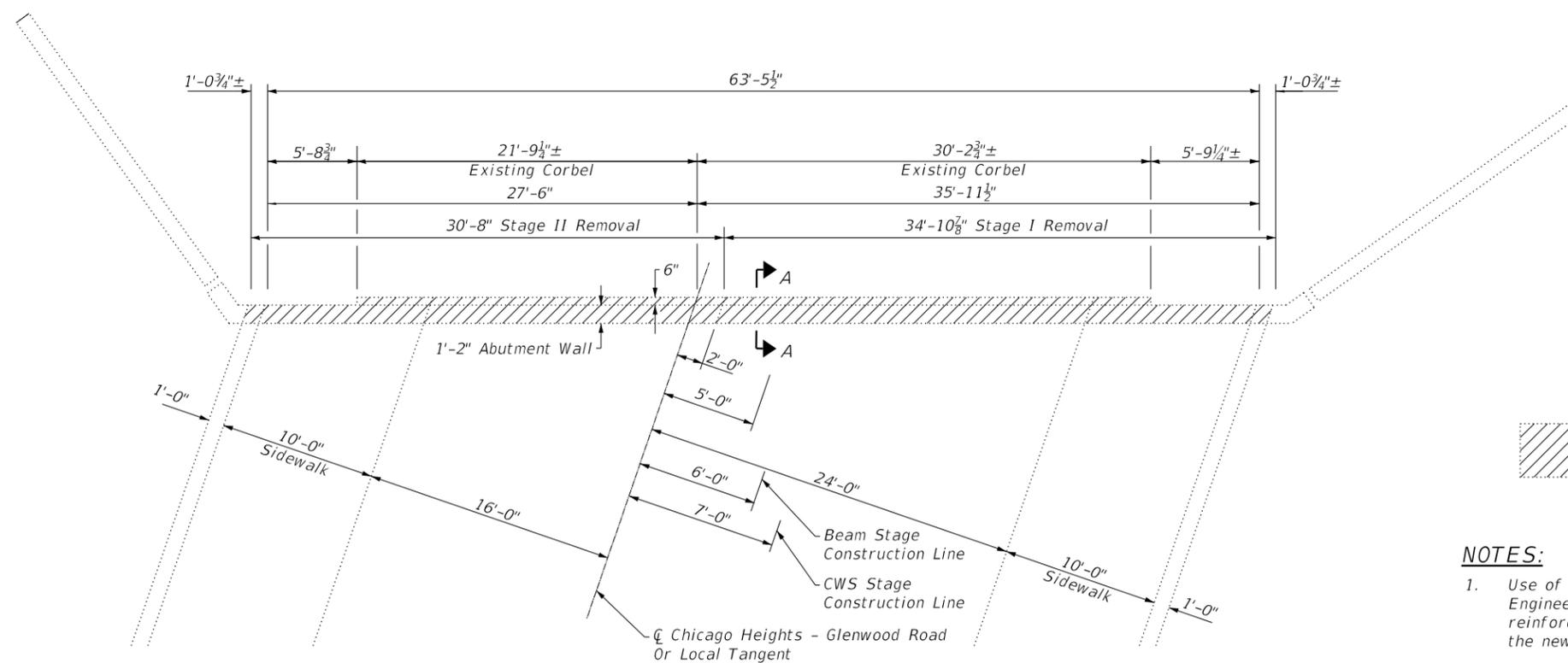
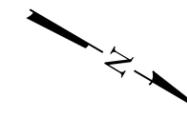
BILL OF MATERIAL

(West and East Abutments)

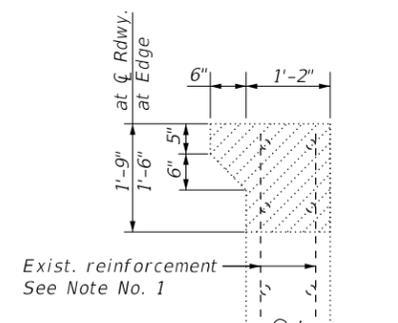
Item	Unit	Quantity
Concrete Removal	Cu Yd	10.2
Structure Excavation	Cu Yd	32



ELEVATION
WEST ABUTMENT
(Looking West)
(East Abutment Similar but Opposite Hand)



PLAN
WEST ABUTMENT
(East Abutment Similar but Opposite Hand)



EXISTING
(Concrete Removal)
SECTION A-A

NOTES:

- 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.
- Any reinforcement bars that are damaged during the concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

MODEL: Model
FILE NAME: C:\Engineering\Live\Projects\13040_IDOT_DUR_HBM\Work_Order_12\CADD\CADD_Sheets\Structural\0162417-60N21-017-W&E_abut_removal.dgn



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PLOT DATE = 1/28/2019	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

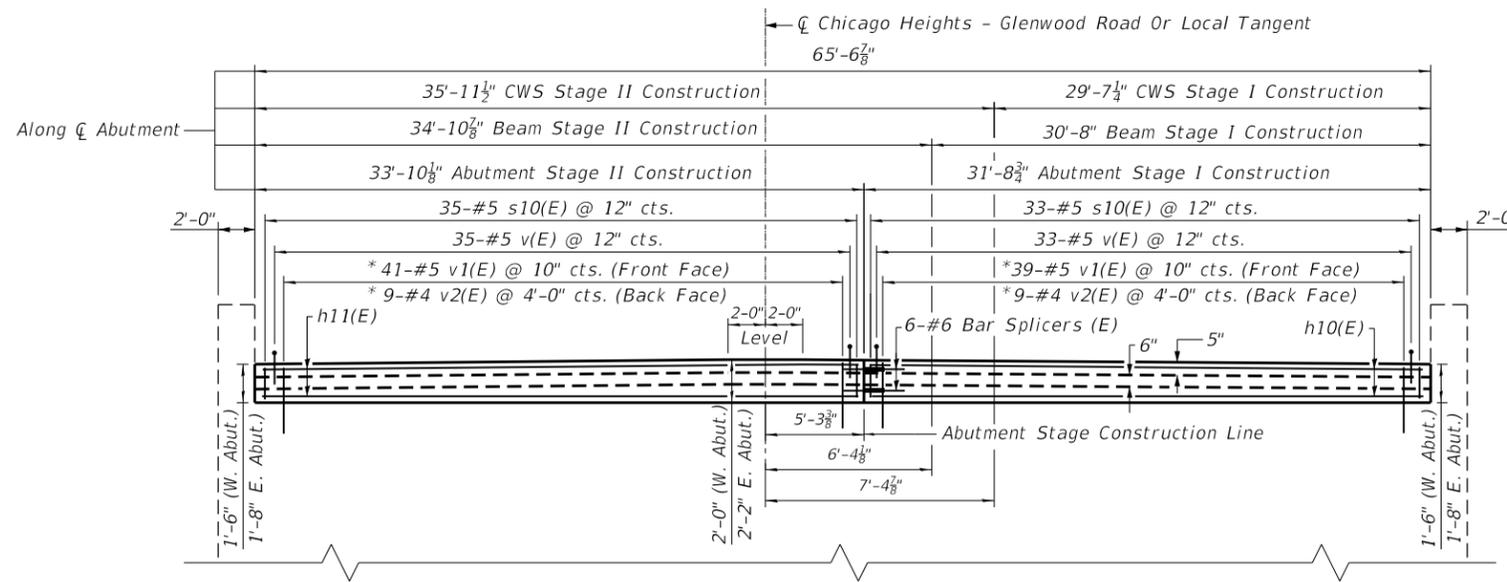
WEST & EAST ABUTMENT REMOVAL
SN 016-2417

SHEET S-17 OF S-21 SHEETS

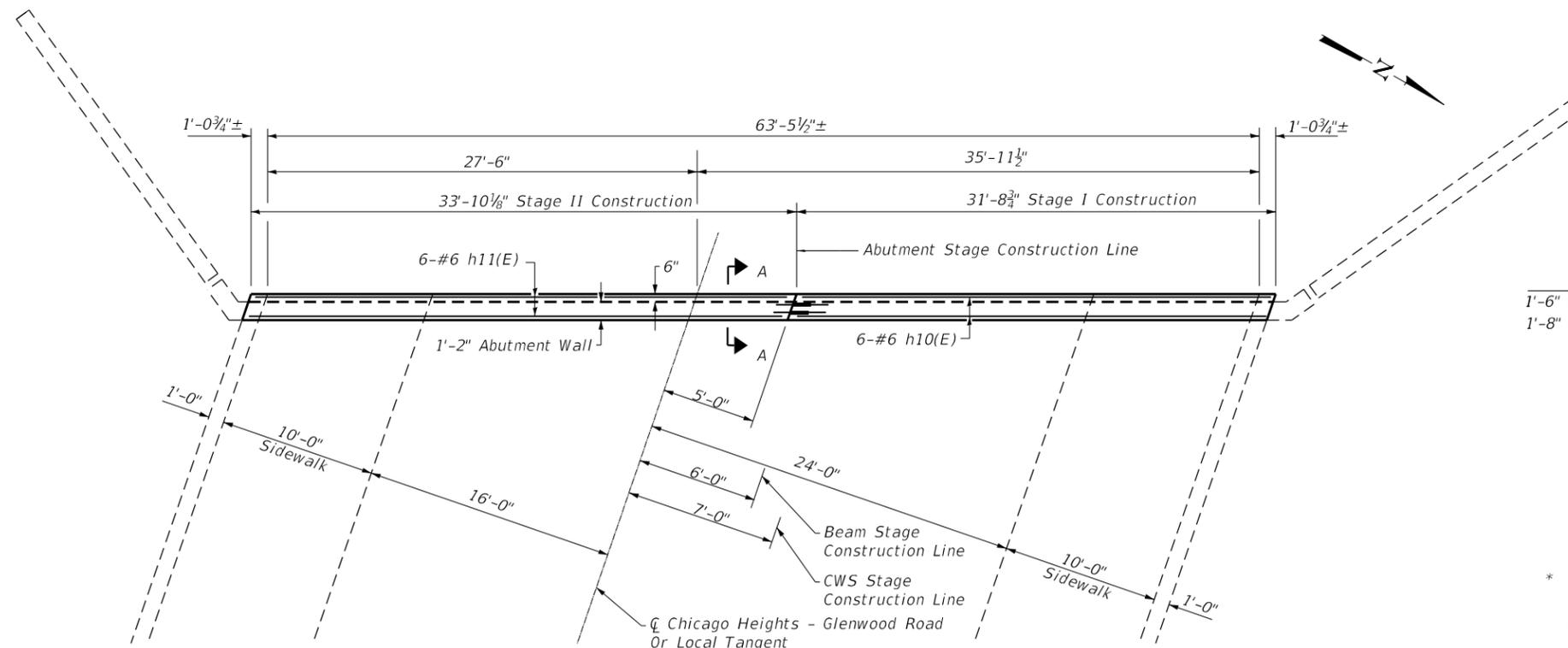
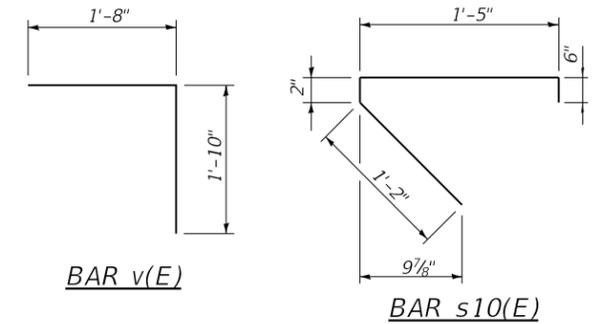
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	92
CONTRACT NO. 60N21				
ILLINOIS		FED. AID PROJECT		

BILL OF MATERIAL
(West and East Abutments)

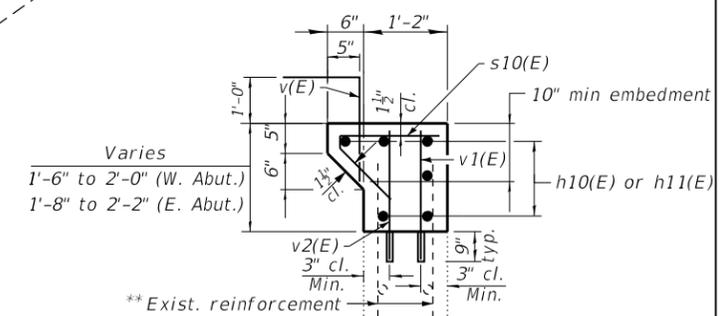
Bar	No.	Size	Length	Shape	
h10(E)	12	#6	31'-4"	—	
h11(E)	12	#6	33'-6"	—	
s10(E)	136	#5	3'-3"	└	
v(E)	136	#5	3'-6"	└	
v1(E)	160	#5	2'-9"	—	
v2(E)	36	#4	2'-9"	—	
Reinforcement Bars, Epoxy Coated				Pound	2,660
Concrete Structures				Cu Yd	12.5



ELEVATION
WEST ABUTMENT
(Looking West)
(East Abutment Similar but Opposite Hand)



PLAN
WEST ABUTMENT
(East Abutment Similar but Opposite Hand)



PROPOSED
(New Construction)
SECTION A-A

* Drill and grout v1(E) and v2(E) bars according to Section 584 of Standard Specifications. Cost included with the cost of Reinforcement Bars, Epoxy Coated. Cut in field to fit.

** 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.

MODEL: Model
FILE NAME: Q:\Engineering\Live\Projects\13040_IDOT DUR HBM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-018-W&E abut_rplcmt_reinf.dgn



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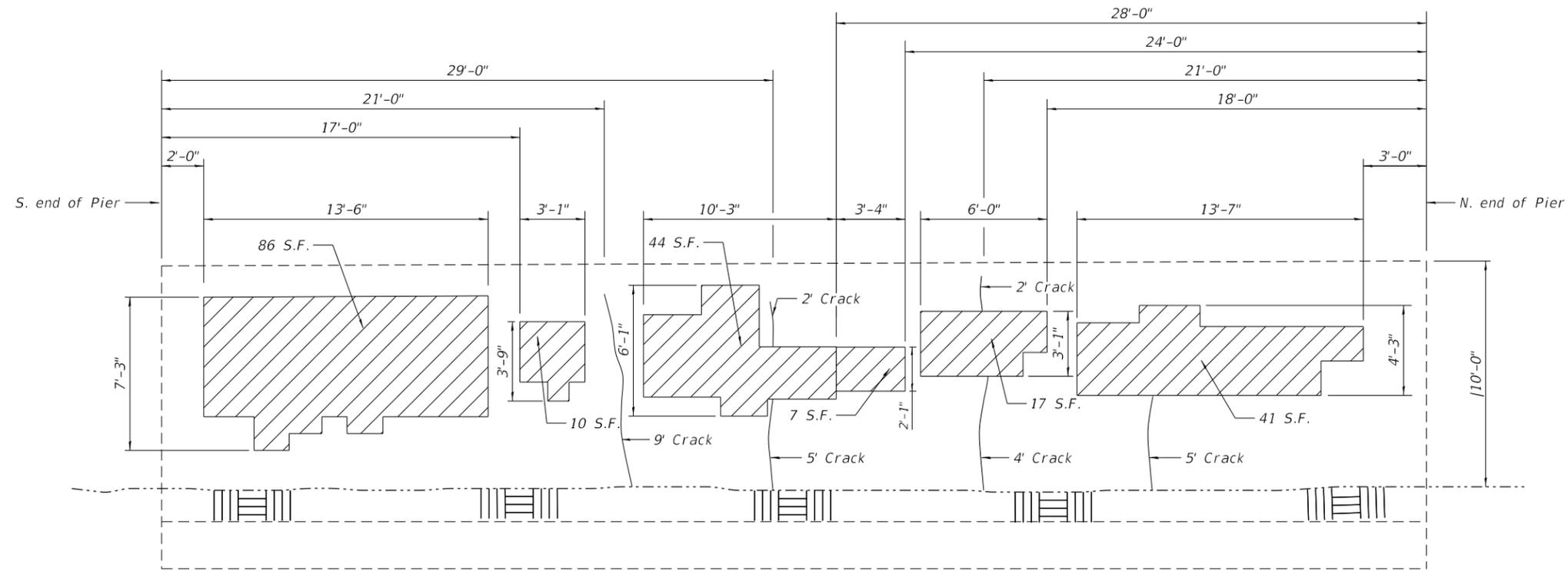
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST & EAST ABUTMENT DETAILS
SN 016-2417

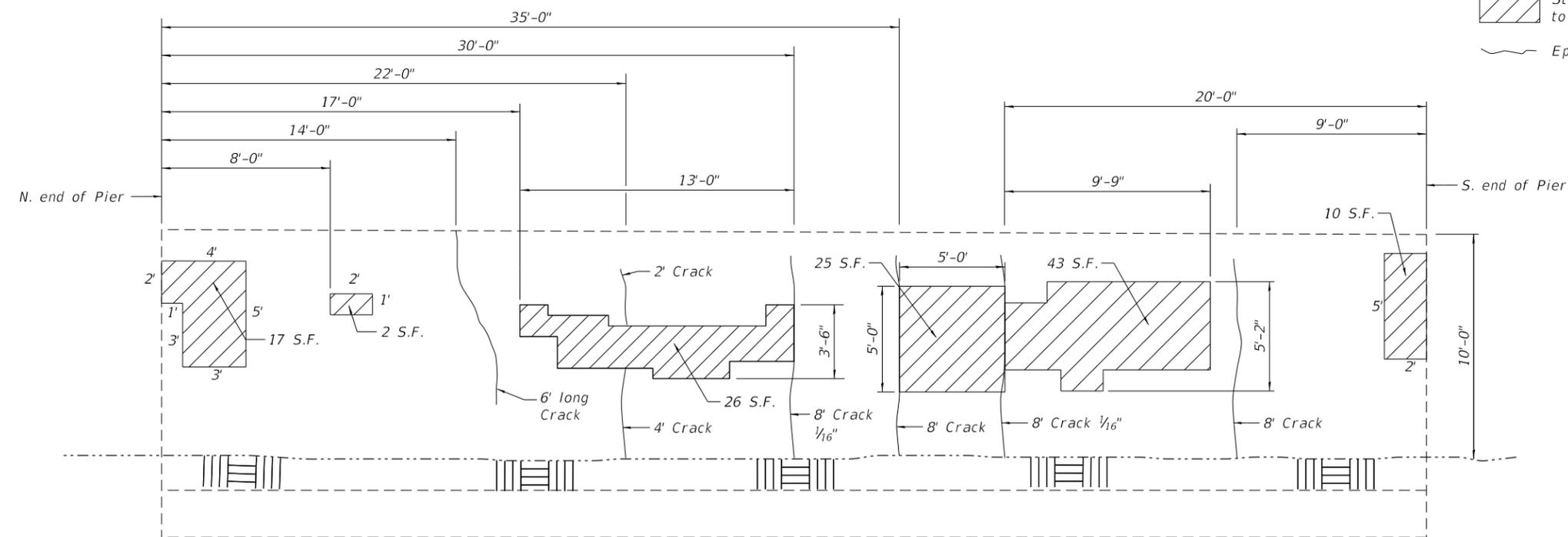
SHEET S18 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	93
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				

MODEL: Model
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ELEVATION - PIER (EAST FACE)
 (Looking West)



ELEVATION - PIER (WEST FACE)
 (Looking East)

LEGEND:

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

Note:
 Crack widths are less than 1/16" unless otherwise noted

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	328
Epoxy Crack Injection	Foot	55



USER NAME =	Johnn	DESIGNED -	SAT	REVISED -	
CHECKED -	SPS	REVISIONS -			
PLOT SCALE =		DRAWN -	JN	REVISED -	
PLOT DATE =	1/28/2019	CHECKED -	JMT	REVISED -	

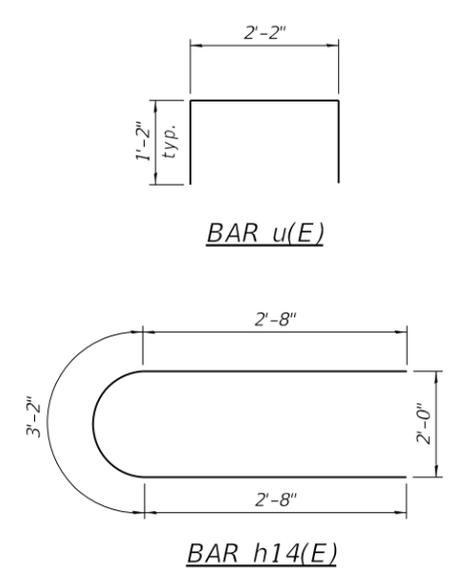
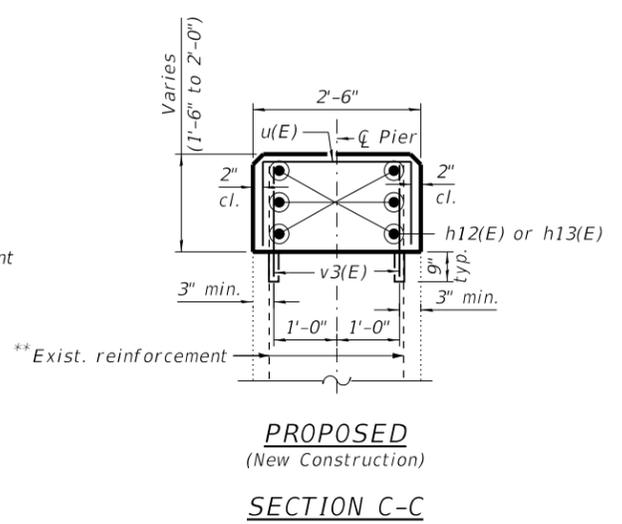
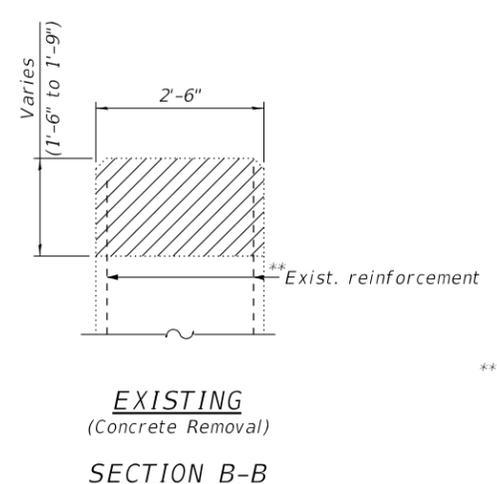
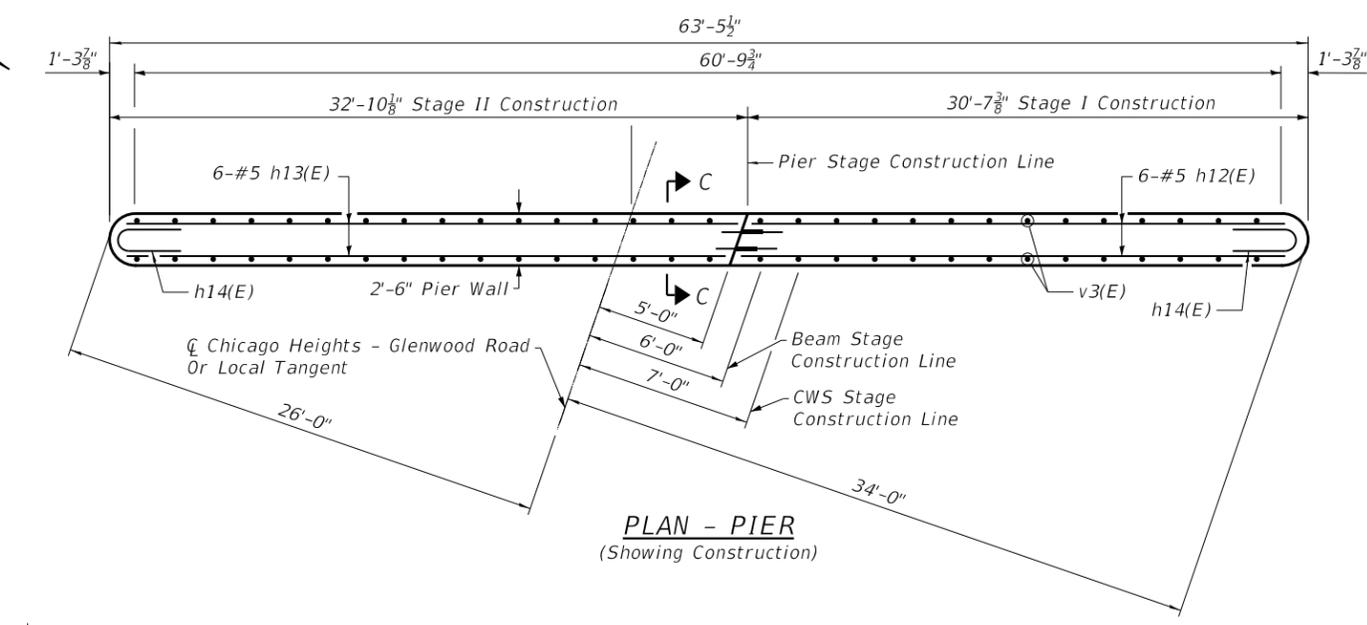
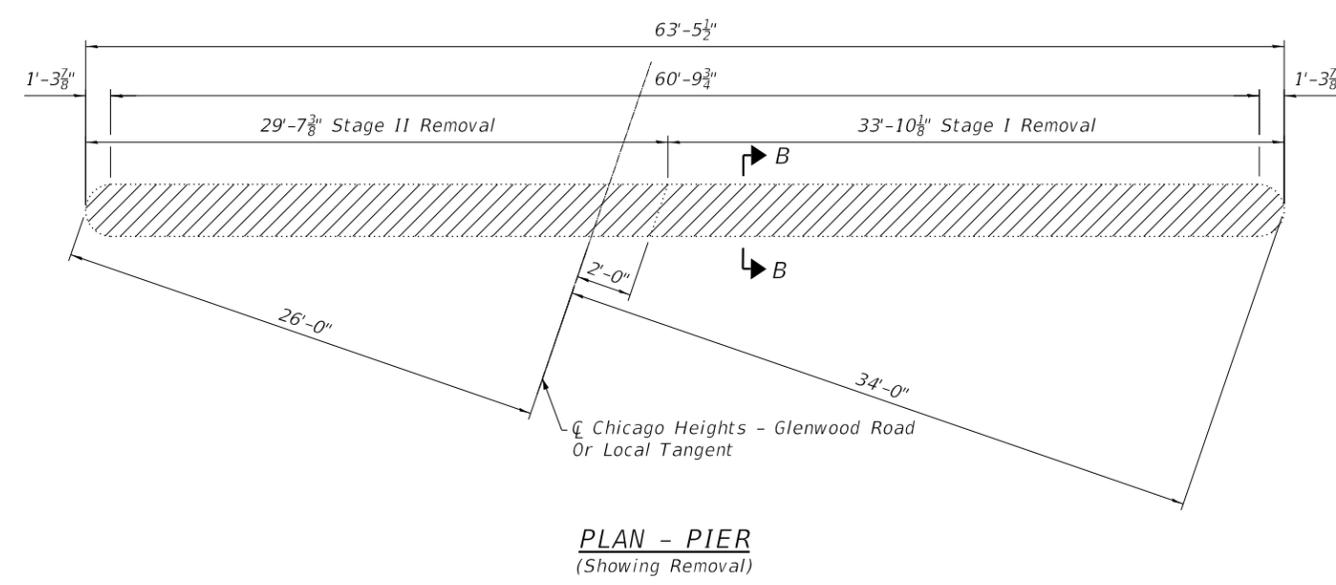
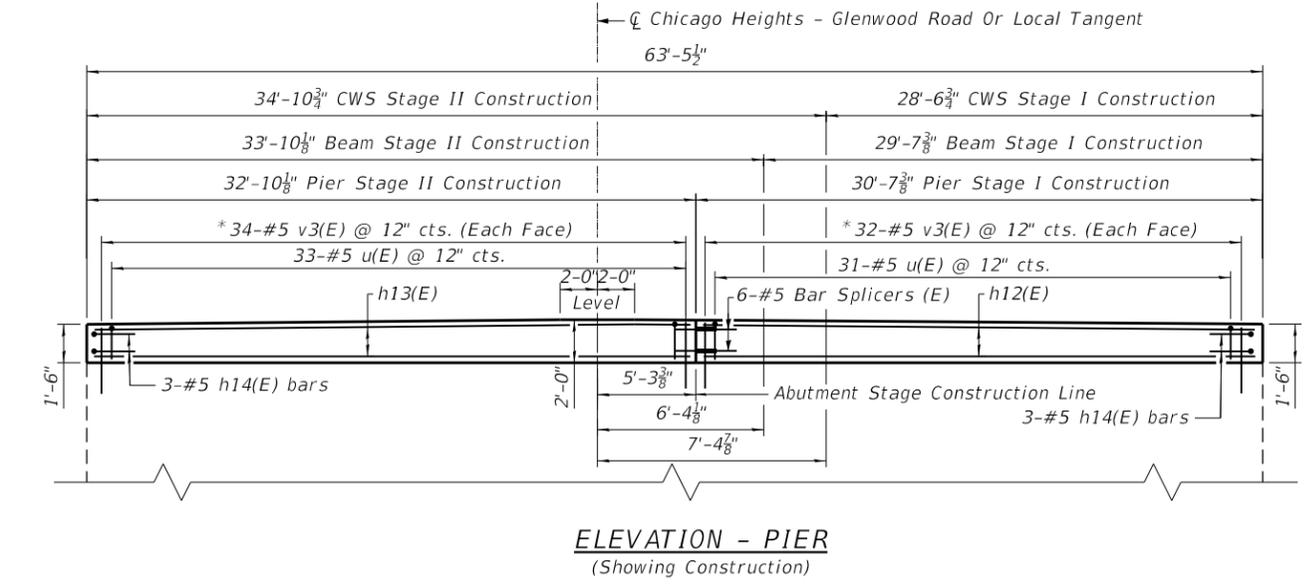
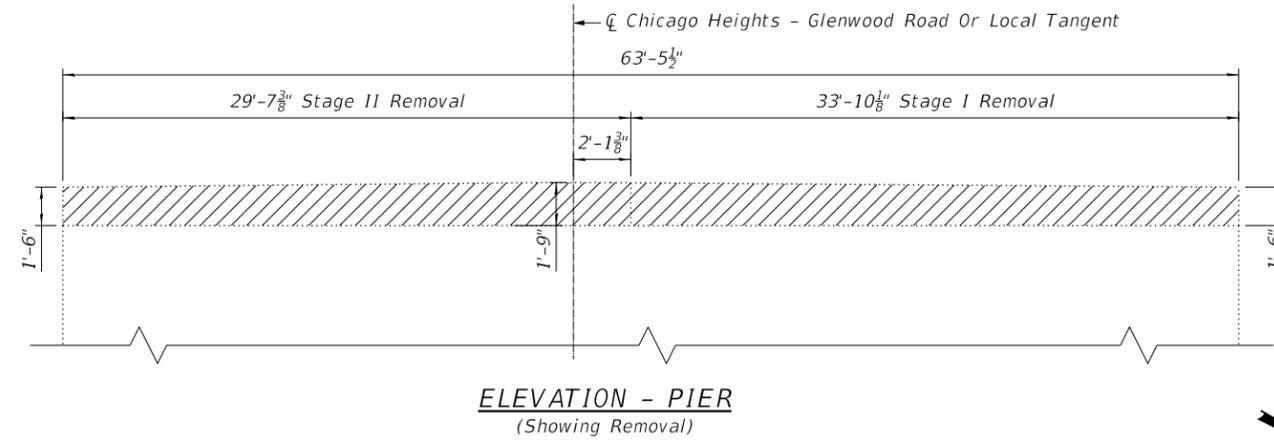
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIRS
SN 016-2417

SHEET S-19 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	94
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	

MODEL: Model
 FILE NAME: C:\Engineering\Live\Projects\13040_IDOT DUR HBM\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-020-Pier_removal_replacement_reinf.dgn



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h12(E)	6	#5	29'-3"	—
h13(E)	6	#5	31'-6"	—
h14(E)	6	#5	8'-6"	⌋
u(E)	64	#5	4'-6"	⌋
v3(E)	132	#5	2'-7"	—
Concrete Removal			Cu Yd	9.5
Reinforcement Bars, Epoxy Coated			Pound	1,090
Concrete Structures			Cu Yd	10.2

* Drill and grout v3(E) bars according to Section 584 of Standard Specifications. Cost included with the cost of Reinforcement Bars, Epoxy Coated. Cut in field to fit.

** 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.



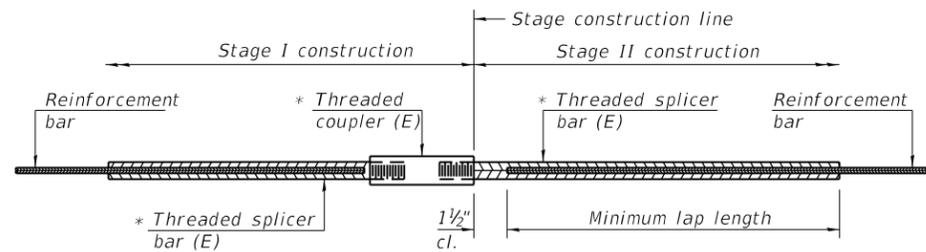
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PLOT DATE = 1/28/2019	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REMOVAL AND CONSTRUCTION
SN 016-2417

SHEET S-20 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	95
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

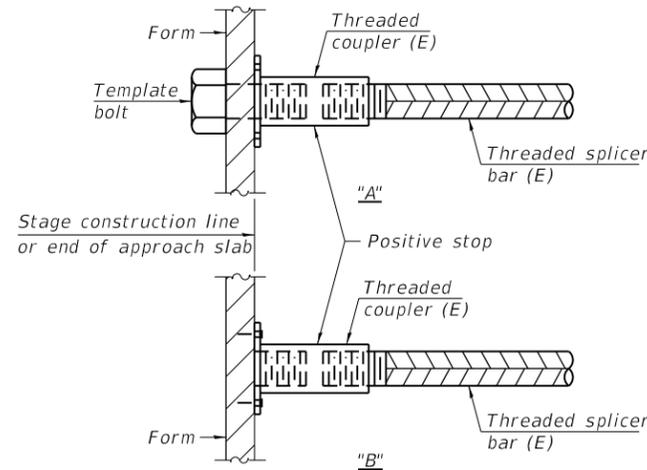


STANDARD BAR SPLICER ASSEMBLY

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

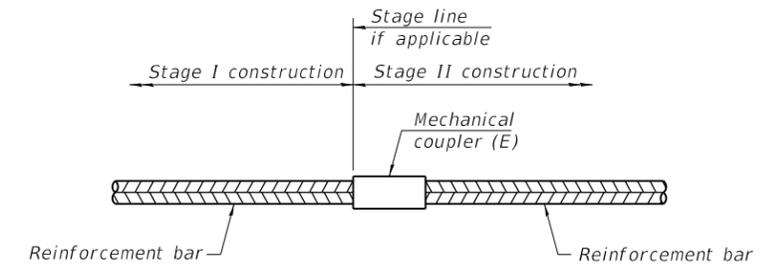
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Wearing Surface	#5	89	3'-0"
West Appr. Slab (Top Bars)	#5	46	3'-0"
West Appr. Slab (Bott. Bars)	#8	61	4'-9"
West Appr. Footing (Top & Bott. Bars)	#5	40	3'-0"
East Appr. Slab (Top Bars)	#5	46	3'-0"
East Appr. Slab (Bott. Bars)	#8	61	4'-9"
East Appr. Footing (Top & Bott. Bars)	#5	40	3'-0"
West Abutment	#6	6	4'-6"
East Abutment	#6	6	4'-6"
Pier	#5	6	3'-0"



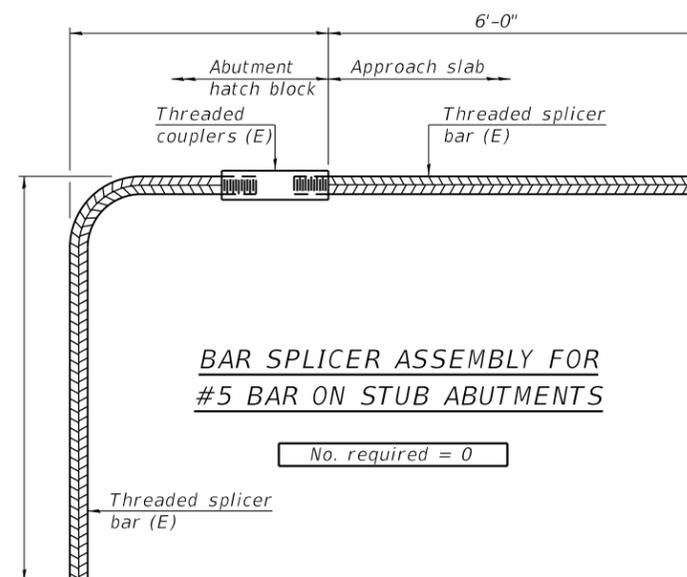
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

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

MODEL: Model
 FILE NAME: C:\Engineering\Live\Projects\13040_IDOT DUR HB\Work Order 12\CADD\CADD Sheets\Structural\0162417-60N21-021-bar-splicer.dgn

BSD-1 2-17-2017



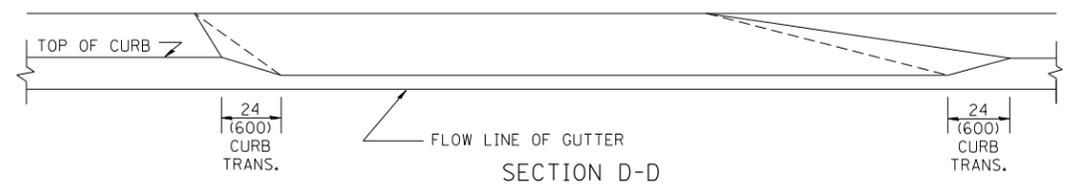
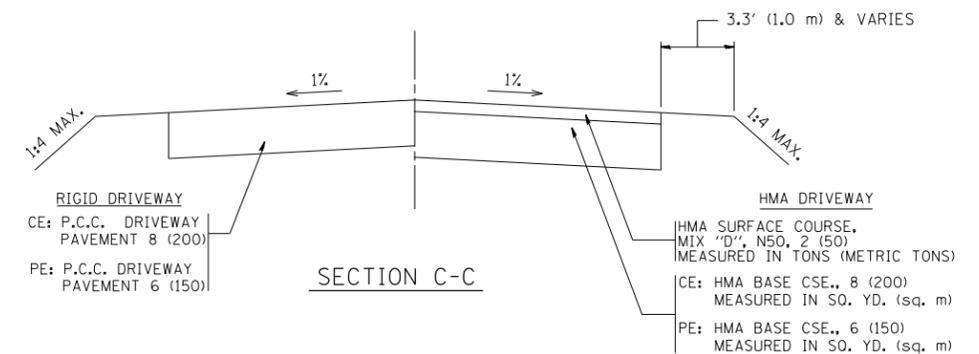
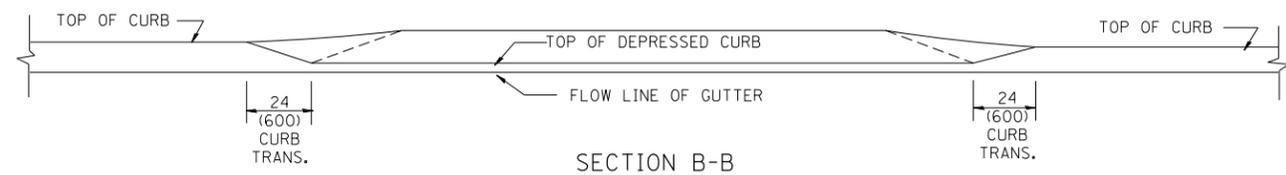
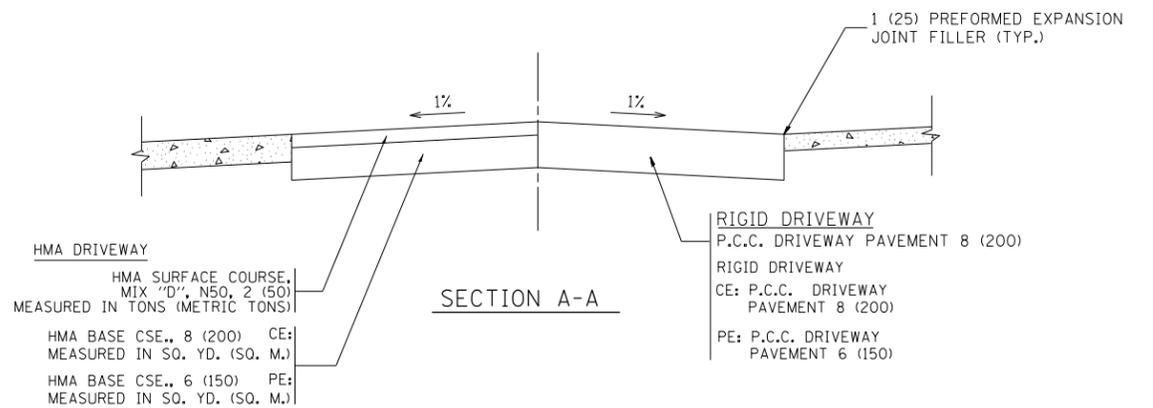
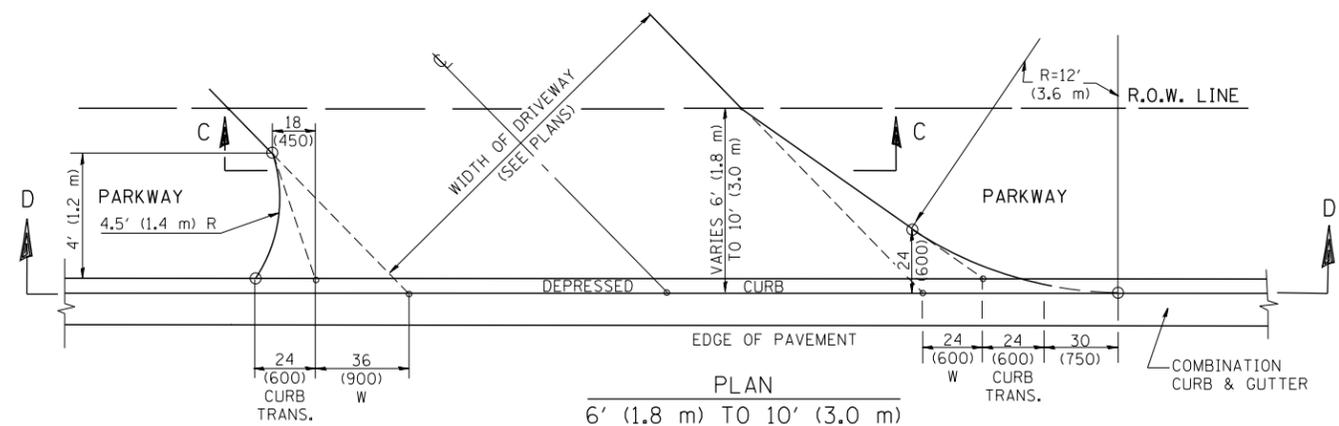
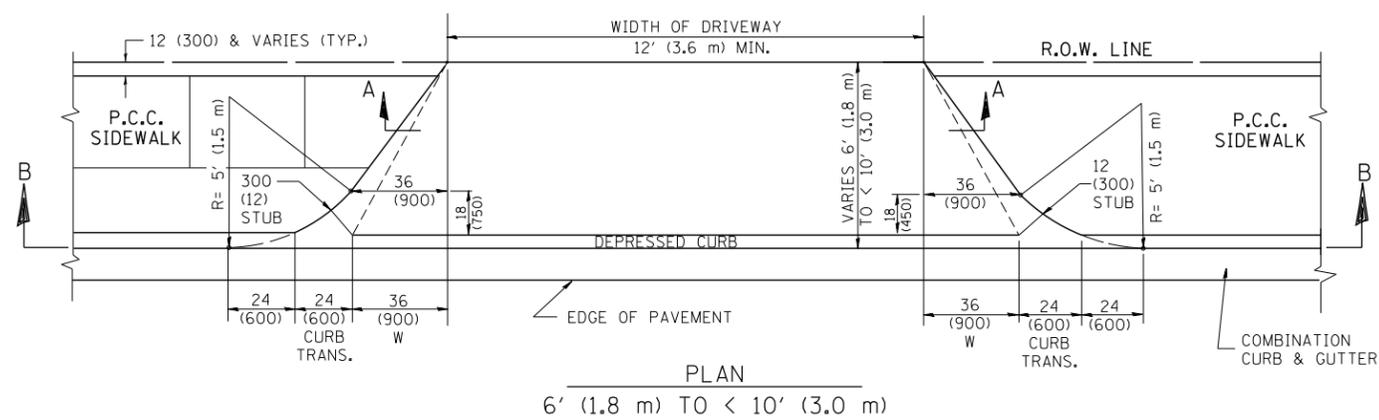
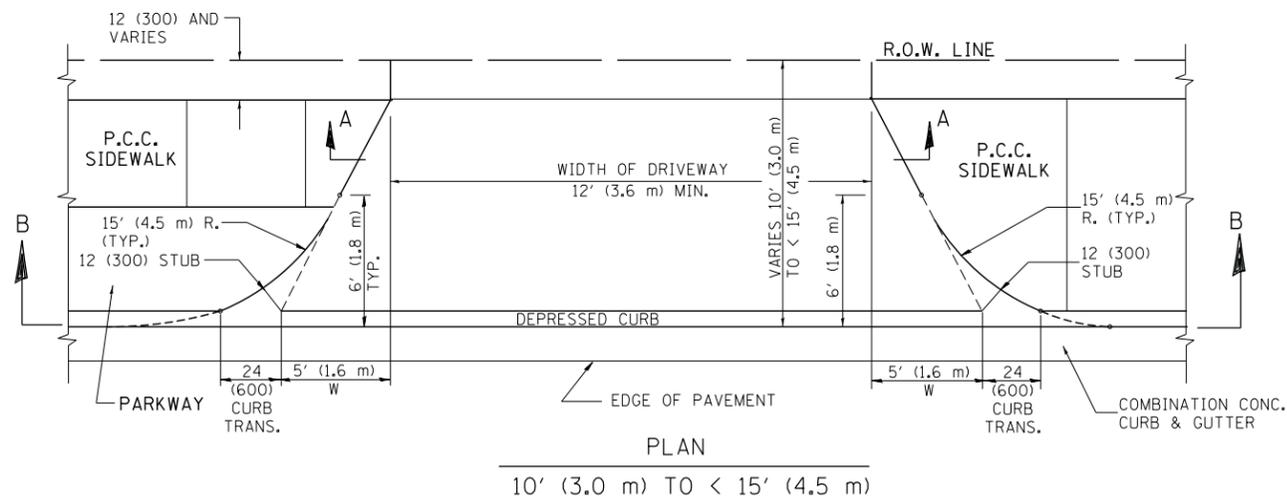
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PLOT SCALE =	CHECKED - SPS	REVISED -
PLOT DATE = 1/28/2019	DRAWN - JN	REVISED -
	CHECKED - JMT	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 SN 016-2417

SHEET S-21 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	96
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

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

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

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

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

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

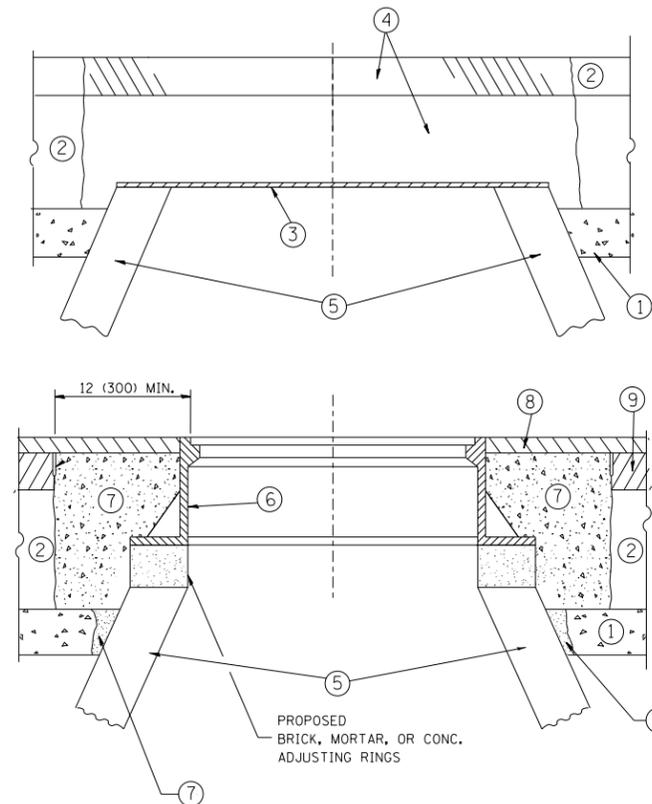
"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

FILE NAME =	USER NAME = l1eyso	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
ca:\pw\work\p1dot\1eyso\d0108315\bd02.dgn		DRAWN -	REVISED - P. LOFLEUR 04-15-03
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	PLOT DATE = 10/28/2011	DATE - 11-06-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)		3603	2010-141-B	COOK	114	97
SCALE: NONE		BD400-02 (BD-02)		CONTRACT NO. 60N21		
SHEET NO. 1 OF 1 SHEETS		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

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 IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

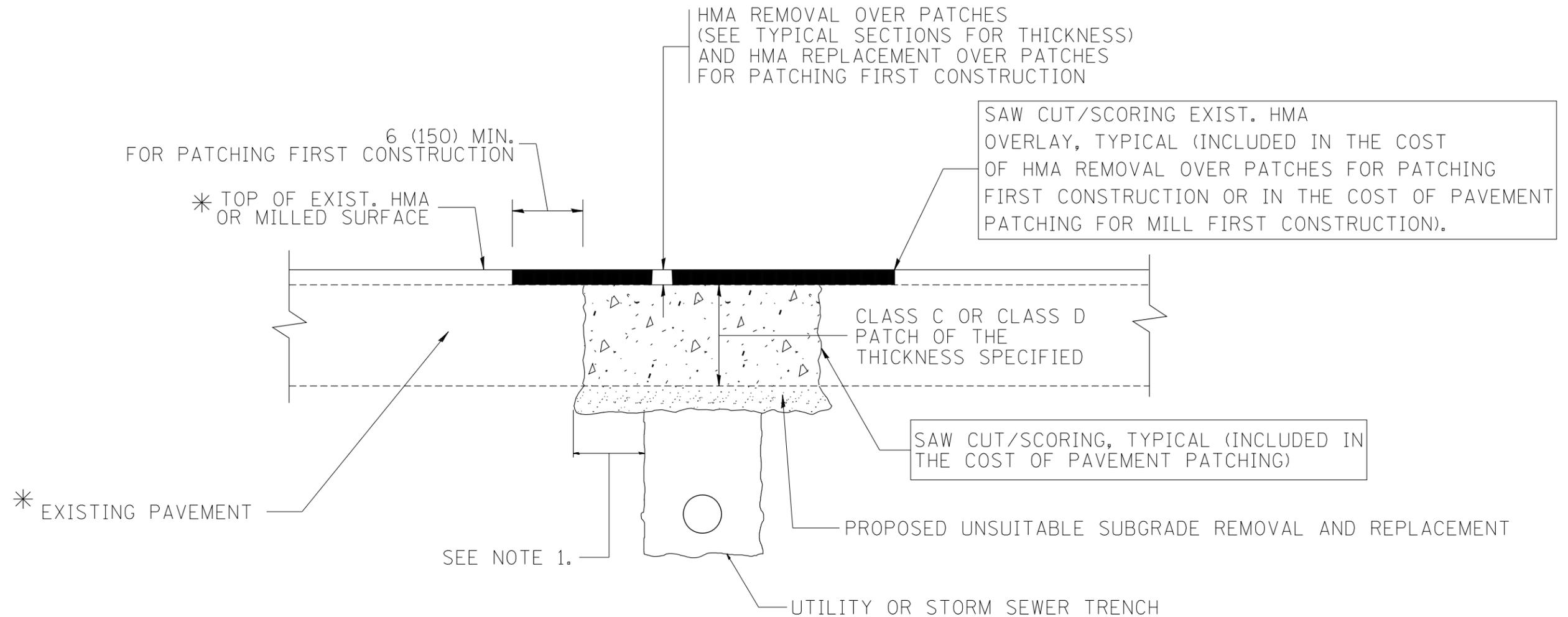
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
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	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	97A
BD600-03 (BD-8)		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

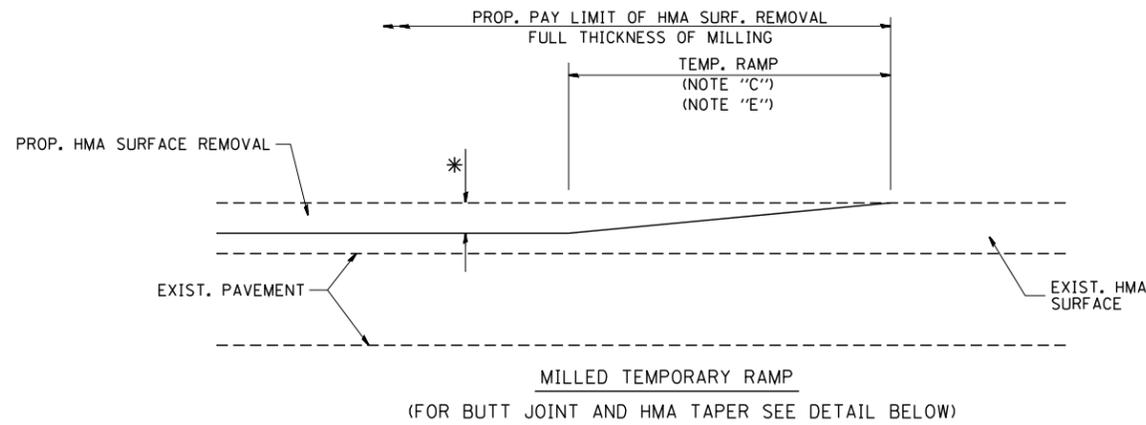
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN -	REVISED - R. BORO 01-01-07
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08

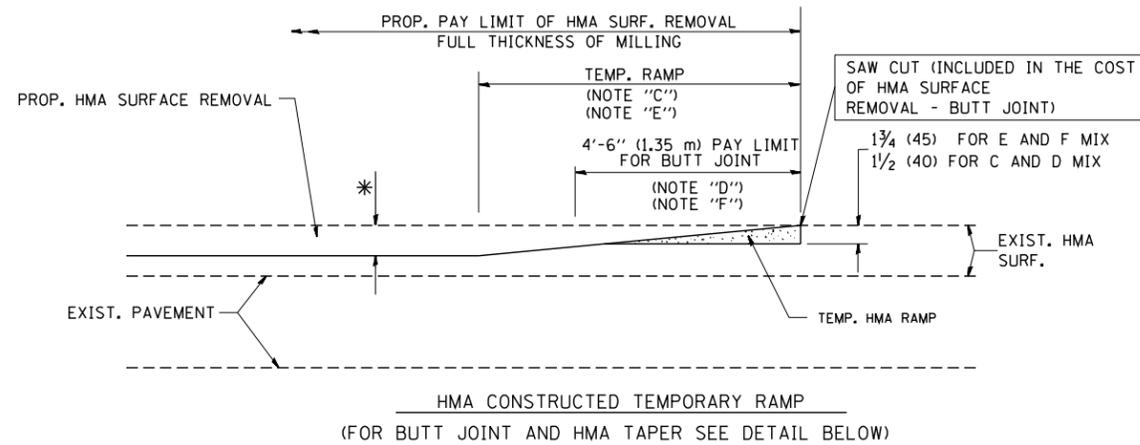
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 98
BD400-04 (BD-22)			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

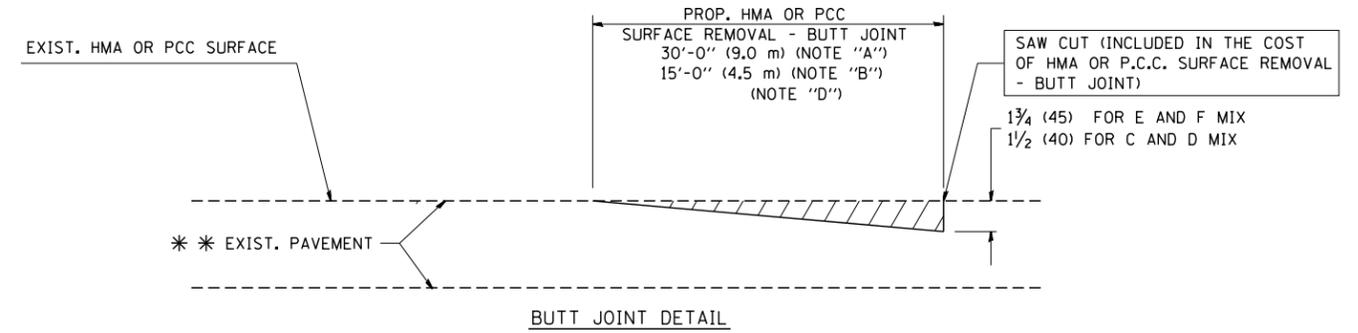


OPTION 1

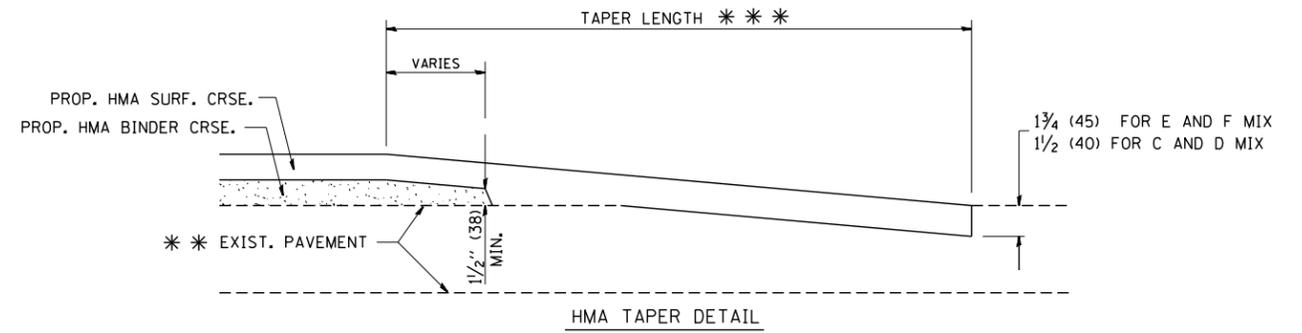


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

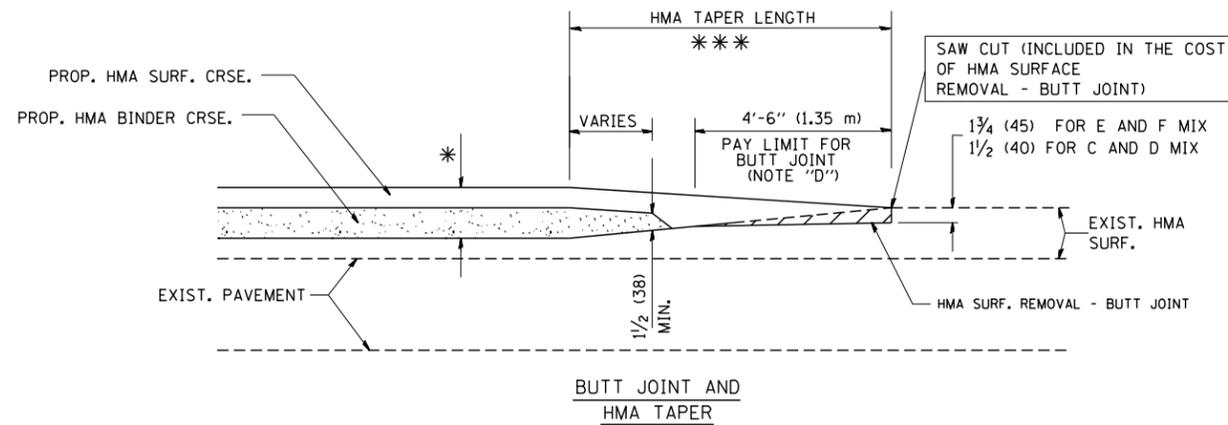
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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PLOT DATE = 1/4/2008

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

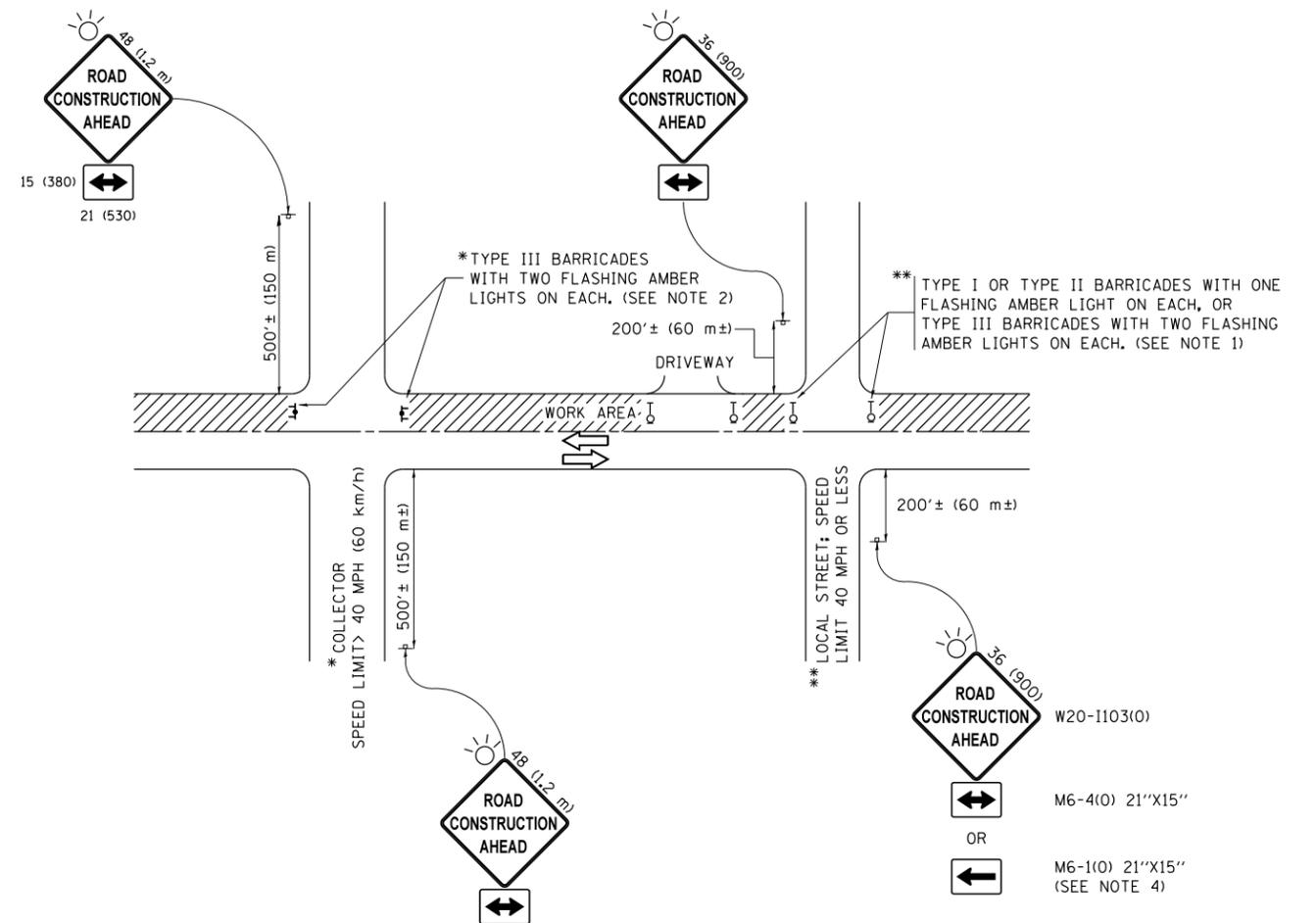
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REVISED - A. ABBAS 03-21-97
REVISED - M. GOMEZ 04-06-01
REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	99
BD400-05 BD32			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

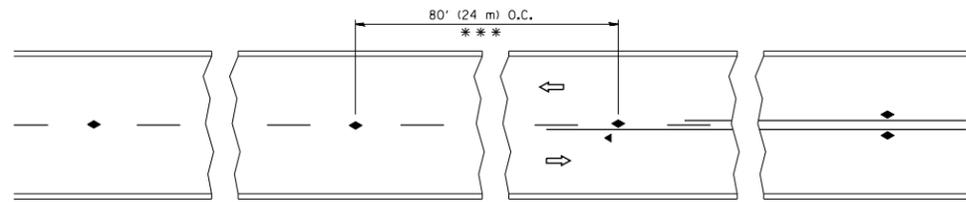
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	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

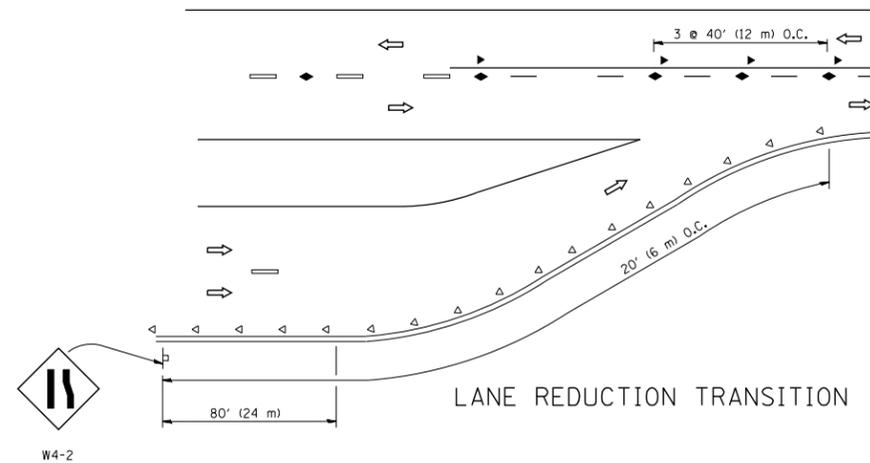
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 60N21	
ILLINOIS FED. AID PROJECT				

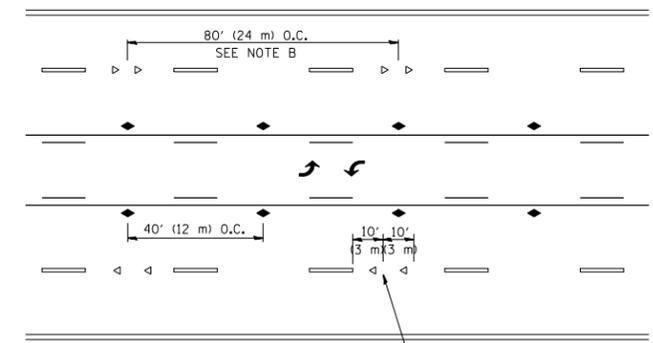


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

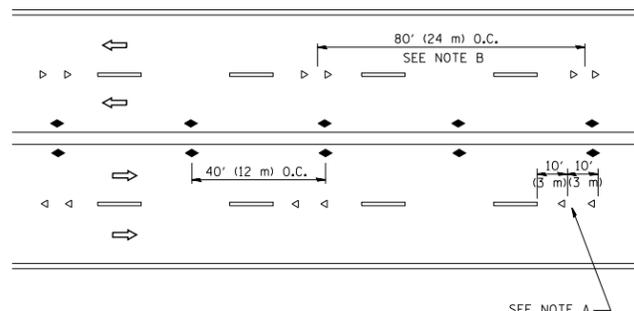
TWO-LANE/TWO-WAY



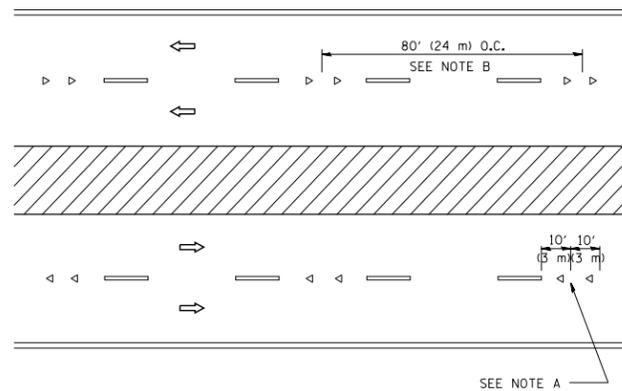
LANE REDUCTION TRANSITION



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

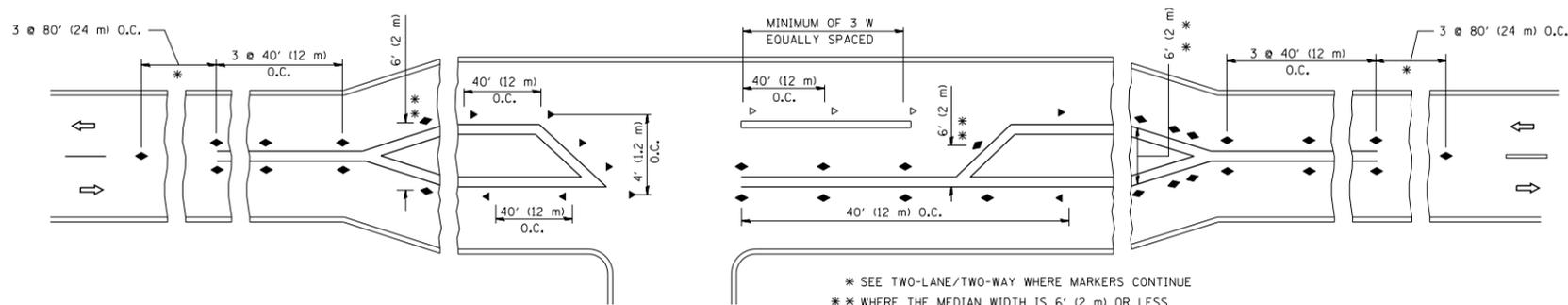
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



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

LEFT TURN

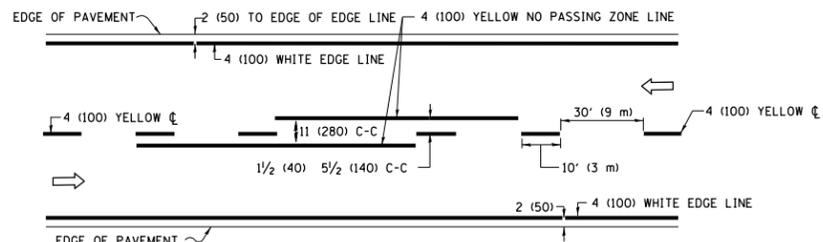
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

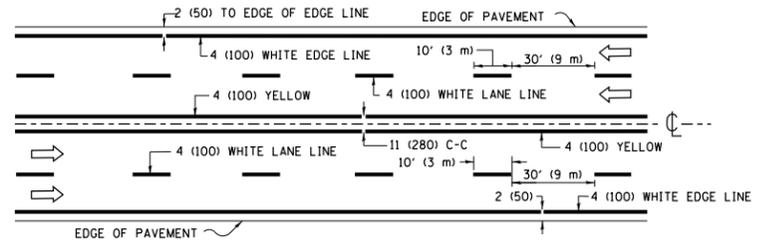
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

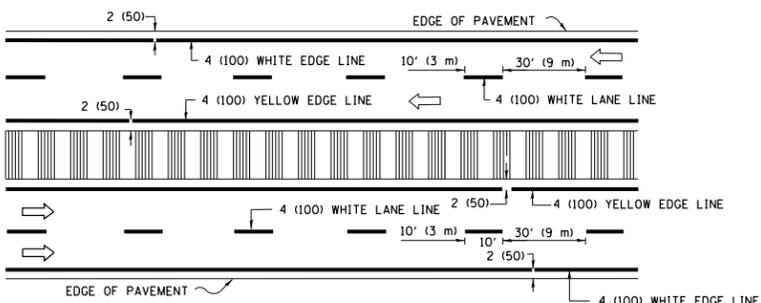
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	101
TC-11			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

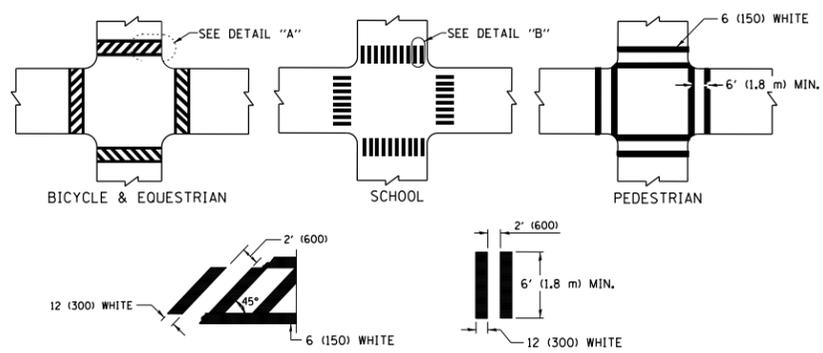


MULTI-LANE UNDIVIDED



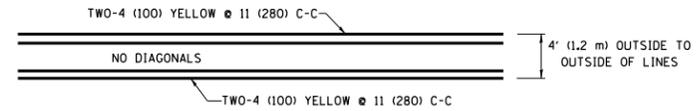
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

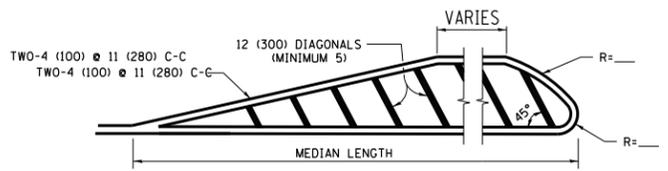


TYPICAL CROSSWALK MARKING

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

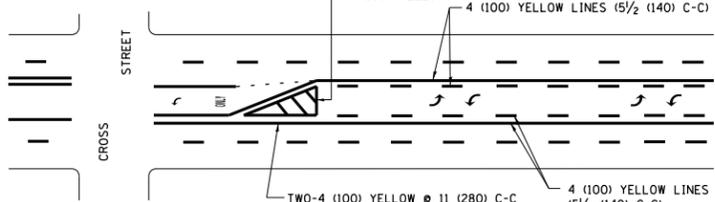


4' (1.2 m) WIDE MEDIANS ONLY



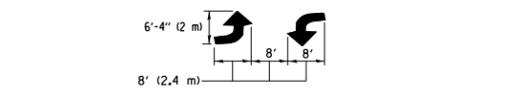
MEDIANS OVER 4' (1.2 m) WIDE

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

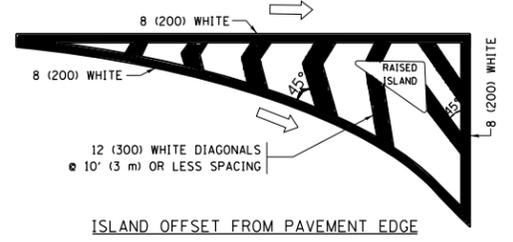
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



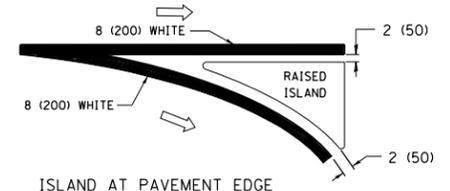
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

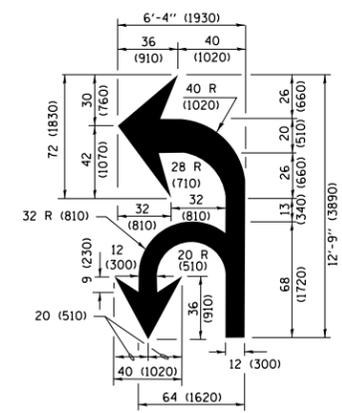
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



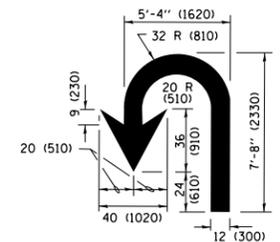
ISLAND OFFSET FROM PAVEMENT EDGE



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 1/2 (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 1/2 (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 ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
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.

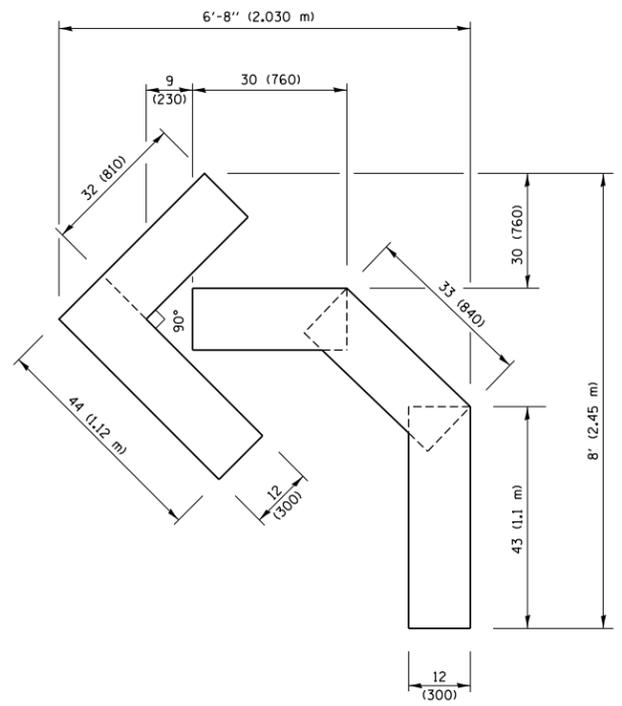
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	PLOT DATE = 6/23/2017	CHECKED -	REVISED - C. JUCIUS 12-21-15
		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

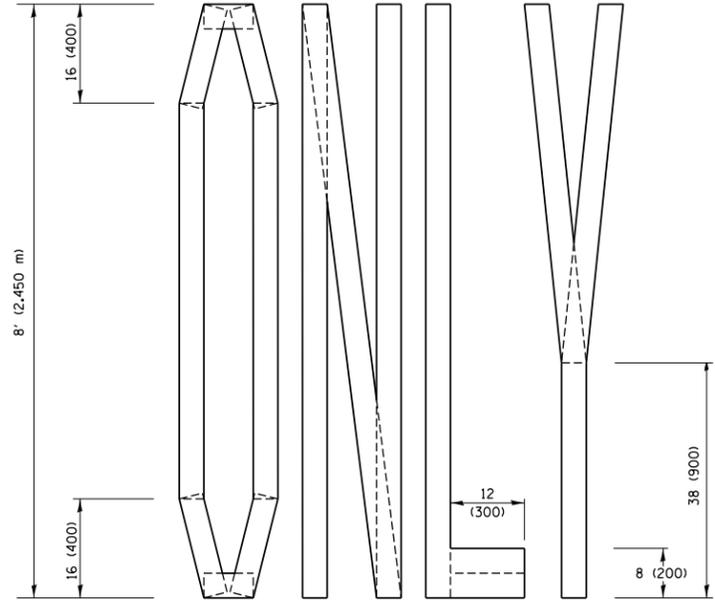
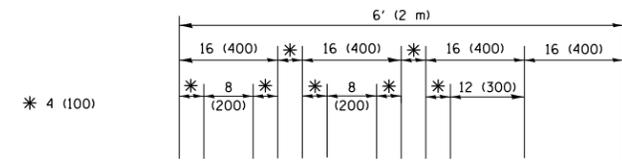
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.
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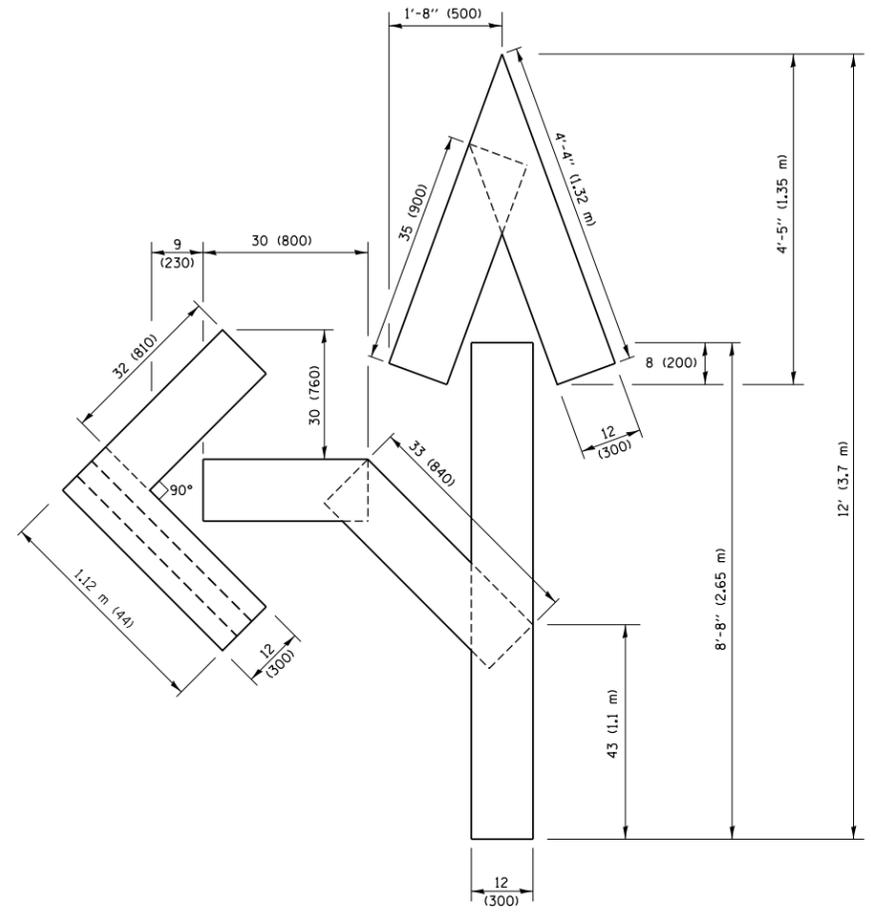
F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 102
TC-13		CONTRACT NO. 60N21	ILLINOIS FED. AID PROJECT	



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

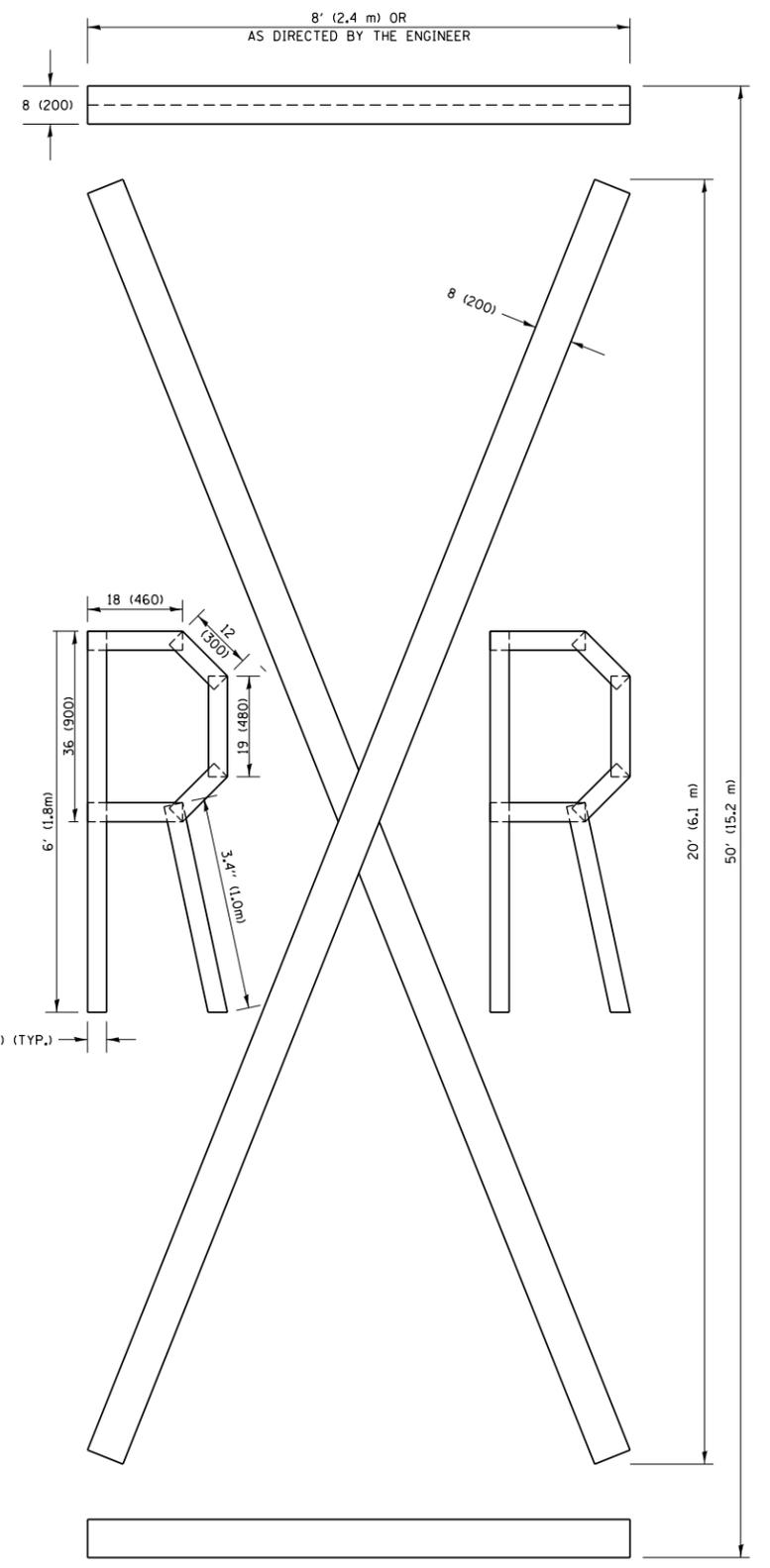


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED
 IN LINEAR FEET OF 4" LINES TO MATCH THE
 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS
 THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

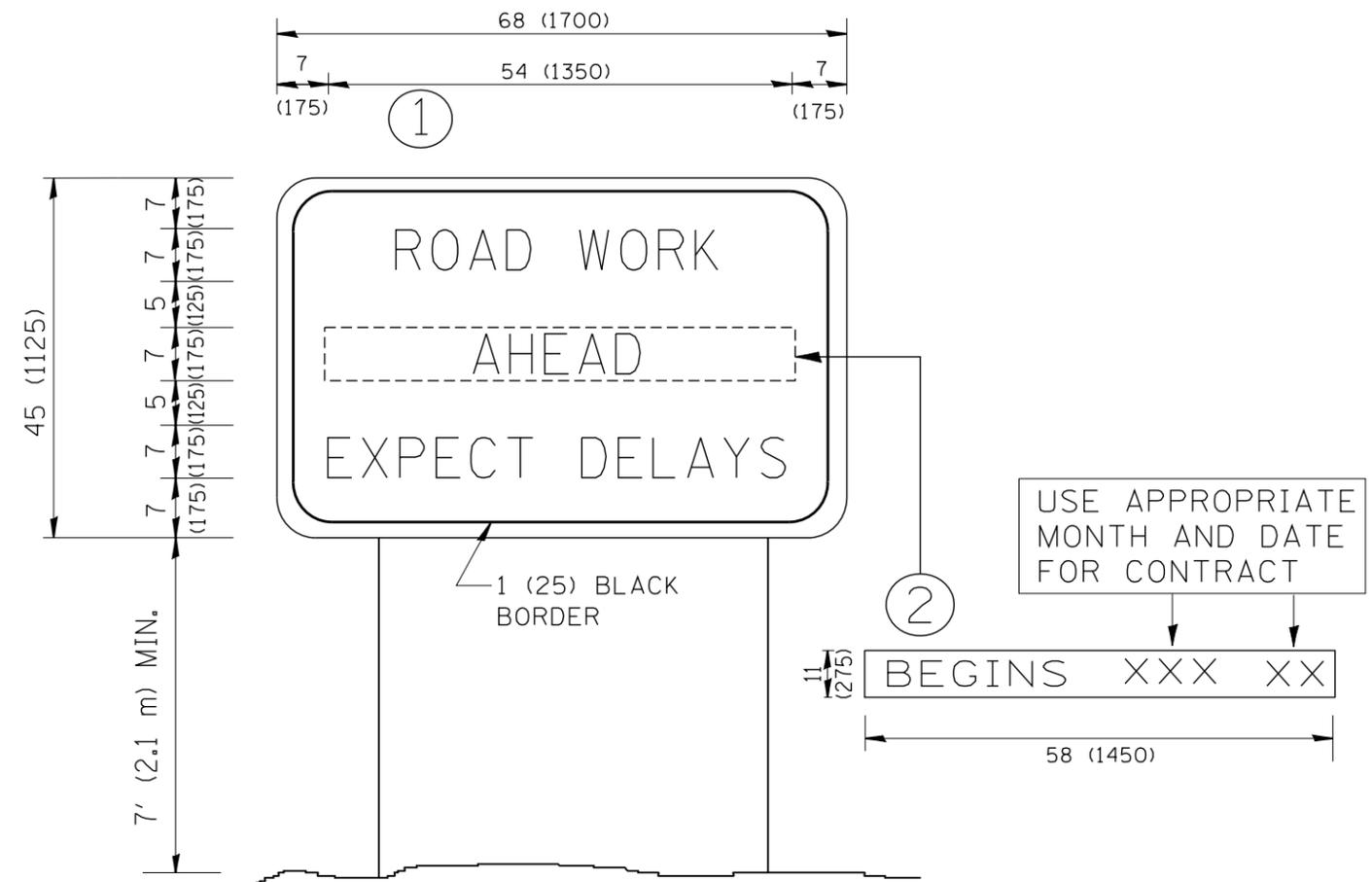
All dimensions are in inches (millimeters)
 unless otherwise shown.

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		DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	103
TC-16		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

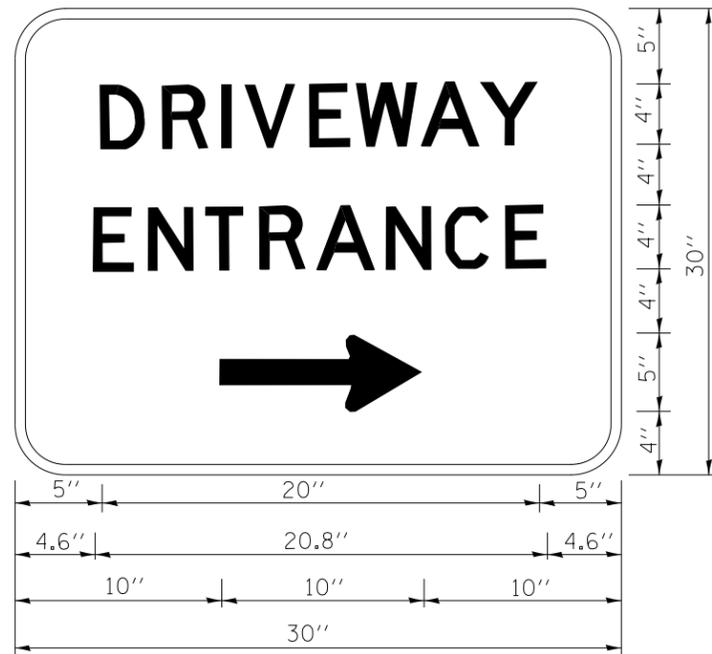
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		DESIGNED - CHECKED -	REVISED - REVISED -
		DESIGNED - DATE -	REVISED - REVISED -

**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. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 104
TC-22		CONTRACT NO. 60N21		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

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

FILE NAME =	USER NAME = gegl1enobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ct:\pwork\pwork\gagl1enobt\d0108315\to26.dgn		DRAWN -	REVISED -
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	PLOT DATE = 12/13/2012	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	105
TC-26			CONTRACT NO. 60N21	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

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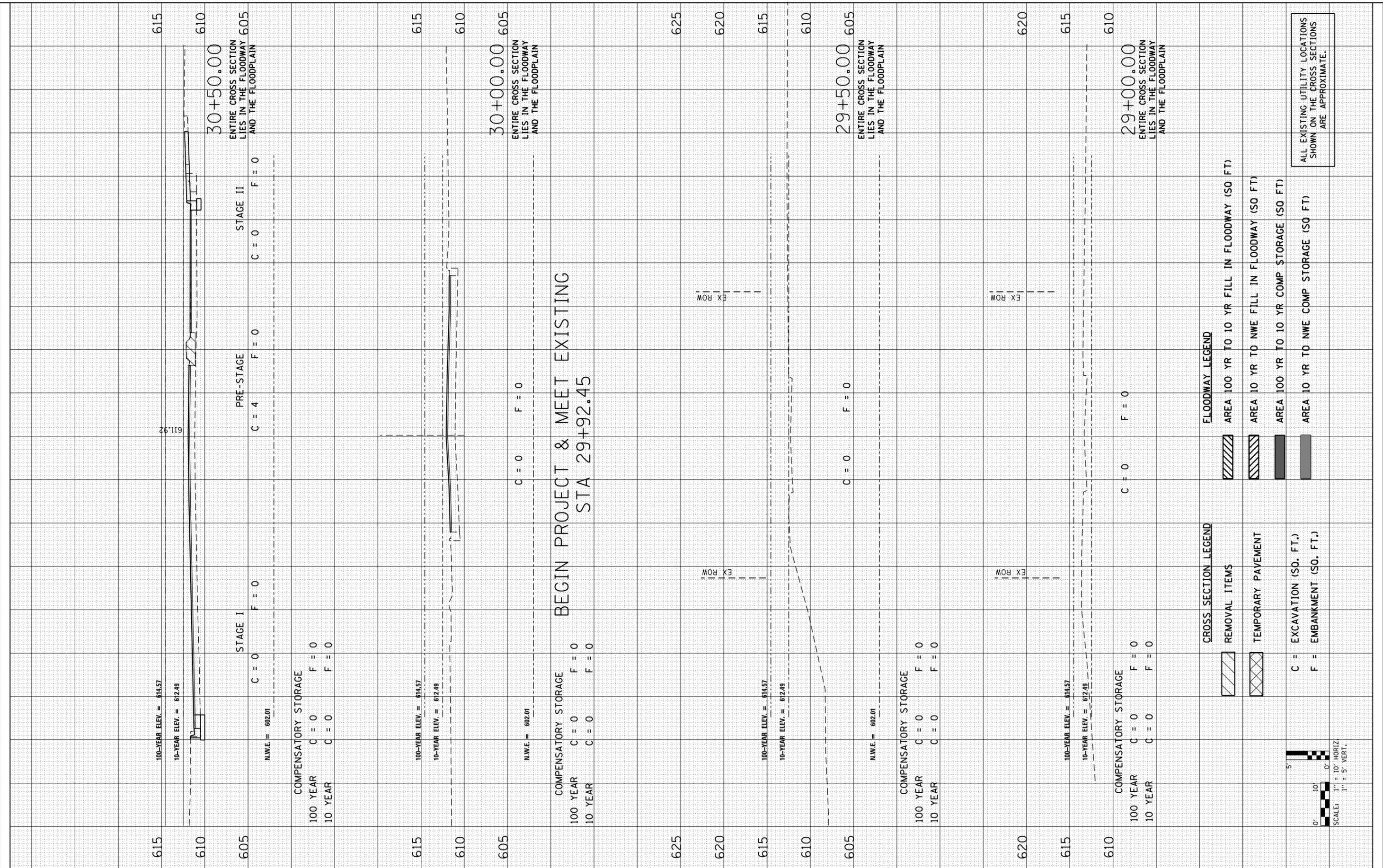
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PLOT DATE = 2/21/2019	CHECKED - JMT	REVISED -
	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - I
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK**

SCALE: 1"=10'H 1"=5'V SHEET 1 OF SHEETS STA. 29+00.00 TO STA. 30+50.00

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 106
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	



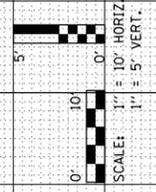
CROSS SECTION LEGEND

[Hatched Pattern]	REMOVAL ITEMS
[Cross-hatched Pattern]	TEMPORARY PAVEMENT
[White Box]	C = EXCAVATION (SQ. FT.)
[Black Box]	F = EMBANKMENT (SQ. FT.)

FLOODWAY LEGEND

[Diagonal Hatched Pattern]	AREA 100 YR TO 10 YR FILL IN FLOODWAY (SQ FT)
[Cross-hatched Pattern]	AREA 10 YR TO NWE FILL IN FLOODWAY (SQ FT)
[Black Box]	AREA 100 YR TO 10 YR COMP STORAGE (SQ FT)
[White Box]	AREA 10 YR TO NWE COMP STORAGE (SQ FT)

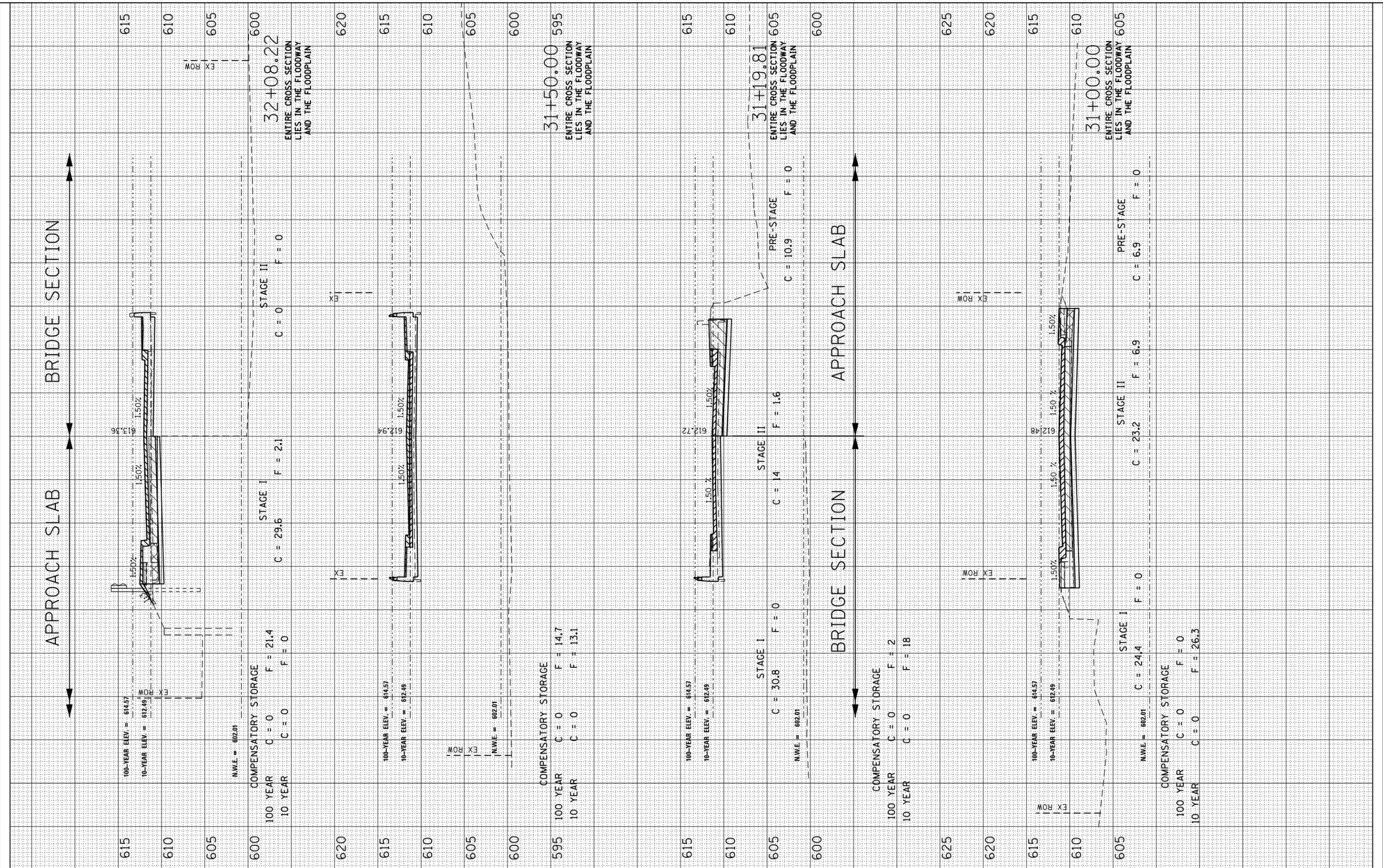
ALL EXISTING UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.



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

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

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PLOT SCALE = 20.0000' / in.	DRAWN - JN
PLOT DATE = 2/19/2019	CHECKED - JMT
	DATE - 01/24/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - II
 CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK

SCALE: 1"=10'H 1"=5'V SHEET 2 OF SHEETS STA. 31+00.00 TO STA. 32+08.22

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 107
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	

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

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

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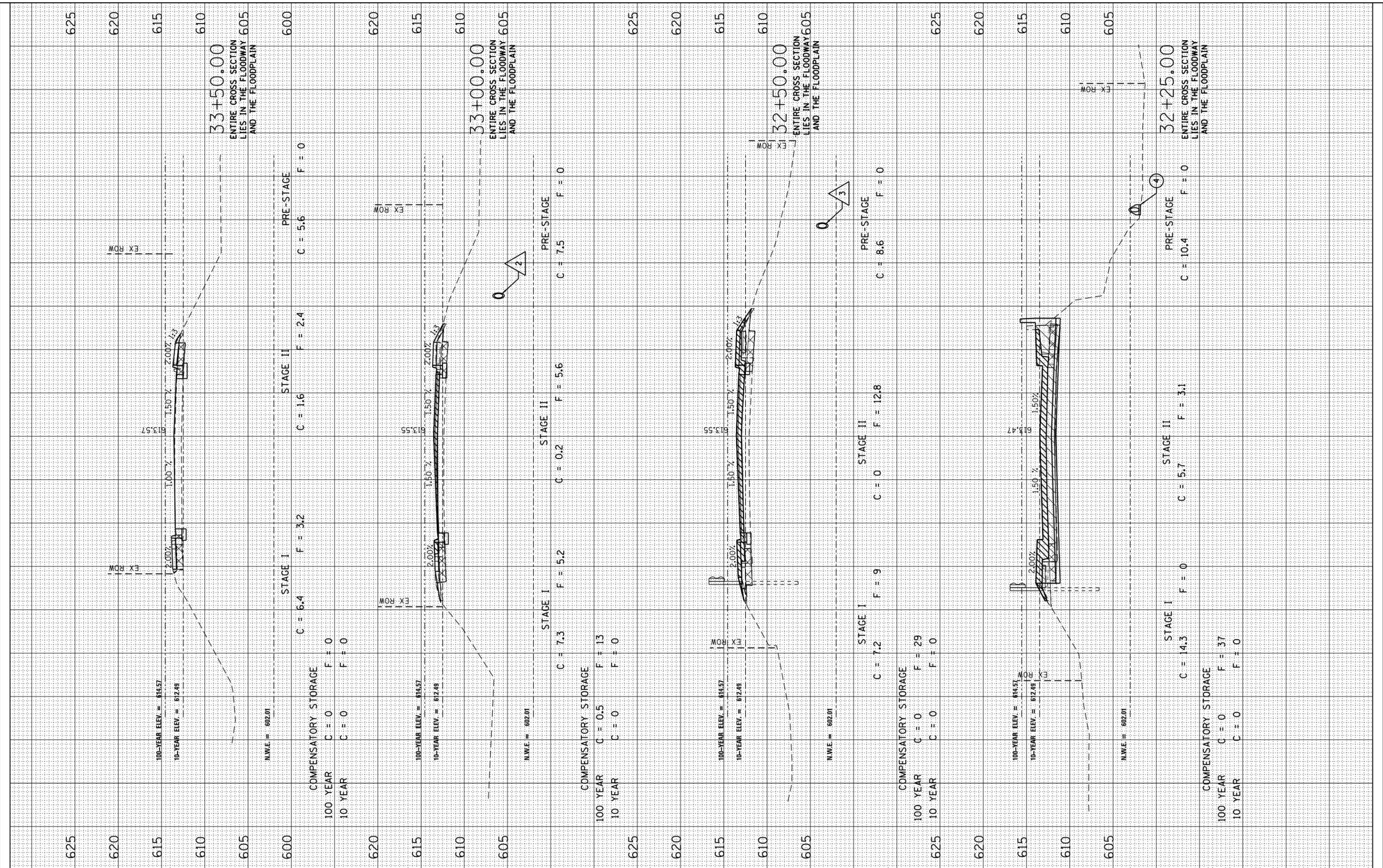


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	DATE - 01/24/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - III		
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK		
SCALE: 1"=10'H 1"=5'V	SHEET 3 OF	SHEETS
STA. 32+25.00	TO STA. 33+50.00	

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 109
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	



EX ROW

625
620
615
610
605
600

100-YEAR ELEV. = 614.57
 10-YEAR ELEV. = 612.48

N.W.E. = 602.01

STAGE I C = 6.4 F = 3.2
 STAGE II C = 1.6 F = 2.4
 PRE-STAGE C = 5.6 F = 0

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 0
 10 YEAR C = 0 F = 0

ENTIRE CROSS SECTION LIES IN THE FLOODWAY 605 AND THE FLOODPLAIN

625
620
615
610
605

100-YEAR ELEV. = 614.57
 10-YEAR ELEV. = 612.48

N.W.E. = 602.01

STAGE I C = 7.3 F = 5.2
 STAGE II C = 0.2 F = 5.6
 PRE-STAGE C = 7.5 F = 0

COMPENSATORY STORAGE
 100 YEAR C = 0.5 F = 13
 10 YEAR C = 0 F = 0

ENTIRE CROSS SECTION LIES IN THE FLOODWAY 605 AND THE FLOODPLAIN

625
620
615
610
605

100-YEAR ELEV. = 614.57
 10-YEAR ELEV. = 612.48

N.W.E. = 602.01

STAGE I C = 7.2 F = 9
 STAGE II C = 0 F = 12.8
 PRE-STAGE C = 8.6 F = 0

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 29
 10 YEAR C = 0 F = 0

ENTIRE CROSS SECTION LIES IN THE FLOODWAY 605 AND THE FLOODPLAIN

625
620
615
610
605

100-YEAR ELEV. = 614.57
 10-YEAR ELEV. = 612.48

N.W.E. = 602.01

STAGE I C = 14.3 F = 0
 STAGE II C = 5.7 F = 3.1
 PRE-STAGE C = 10.4 F = 0

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 37
 10 YEAR C = 0 F = 0

ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

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

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

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DESIGNED	- AB
DRAWN	- JN
CHECKED	- TGM
DATE	- 01/31/2019

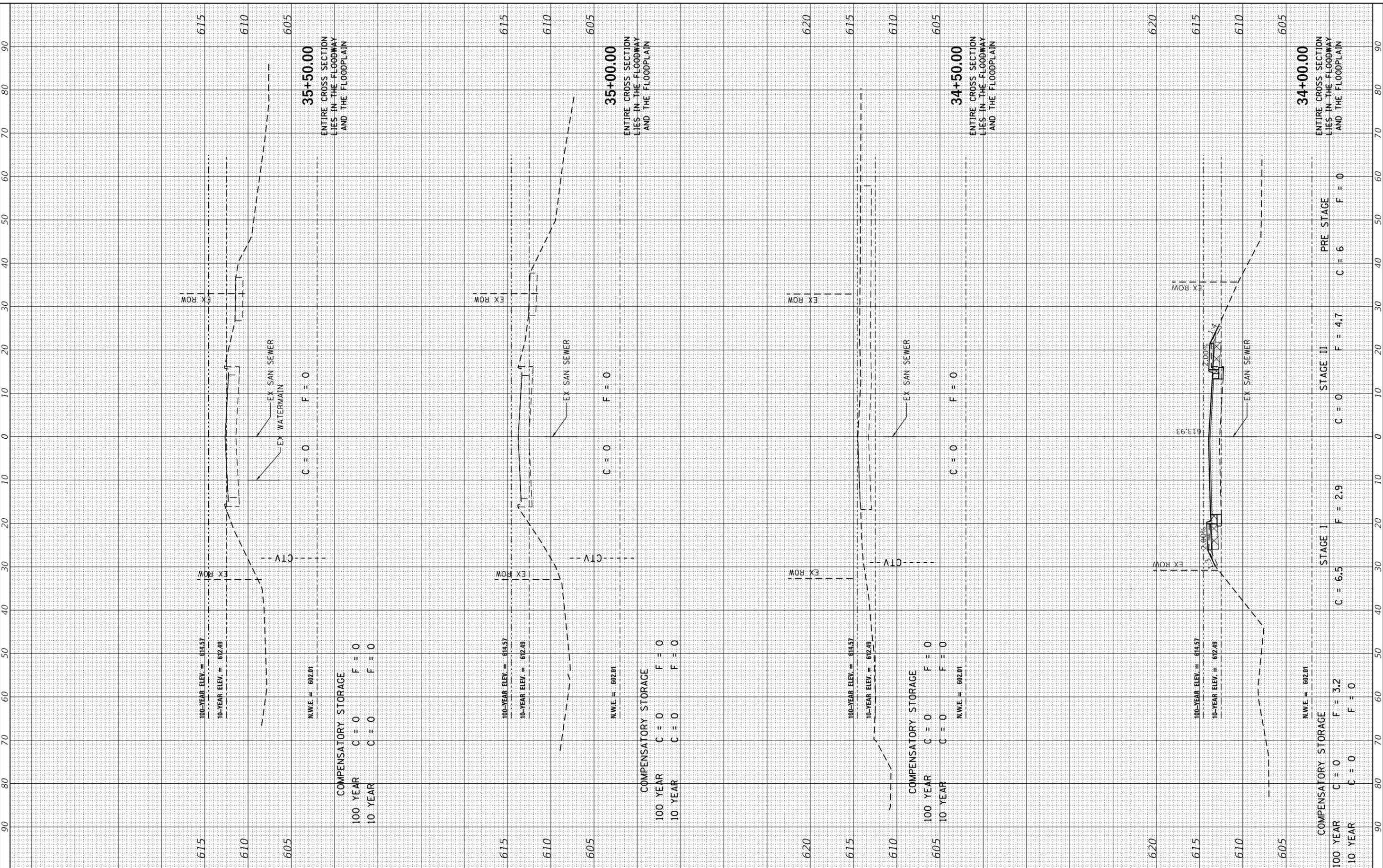
REVISION	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: 1"=10'H 1"=5'V		SHEET	OF	SHEETS	STA. 34+00.00	TO	STA. 35+50.00
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**CROSS SECTIONS - IV
 CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	109
CONTRACT NO. 60N21				
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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PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

COMPENSATORY STORAGE
 100 YEAR C = 0.1 F = 0
 10 YEAR C = 12.3 F = 0

STAGE I
 C = 18 F = 0

37+50.00

ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 0
 10 YEAR C = 12.5 F = 0

STAGE I
 C = 18 F = 0

37+00.00

ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 0
 10 YEAR C = 10 F = 0

STAGE I
 C = 16 F = 0

36+50.00

ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

COMPENSATORY STORAGE
 100 YEAR C = 0 F = 0
 10 YEAR C = 12 F = 0

STAGE I
 C = 18 F = 0

36+00.00

ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - V
 CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK

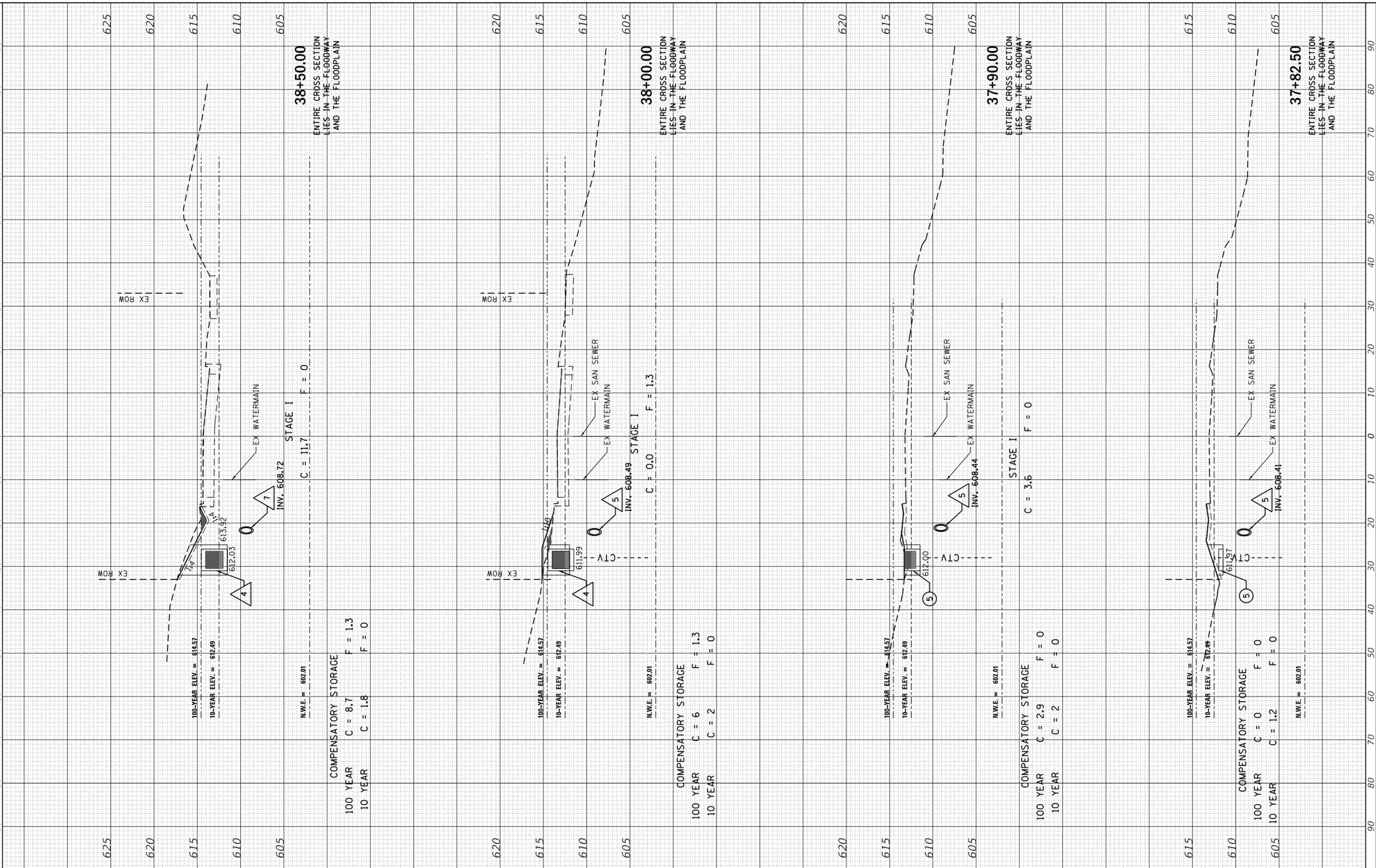
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F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 110
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N21	

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

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	DATE - 01/31/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - VI			
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK			
SCALE: 1"=10'H 1"=5'V	SHEET	OF SHEETS	STA. 37+82.50 TO STA. 38+50.00

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 111
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60N21

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

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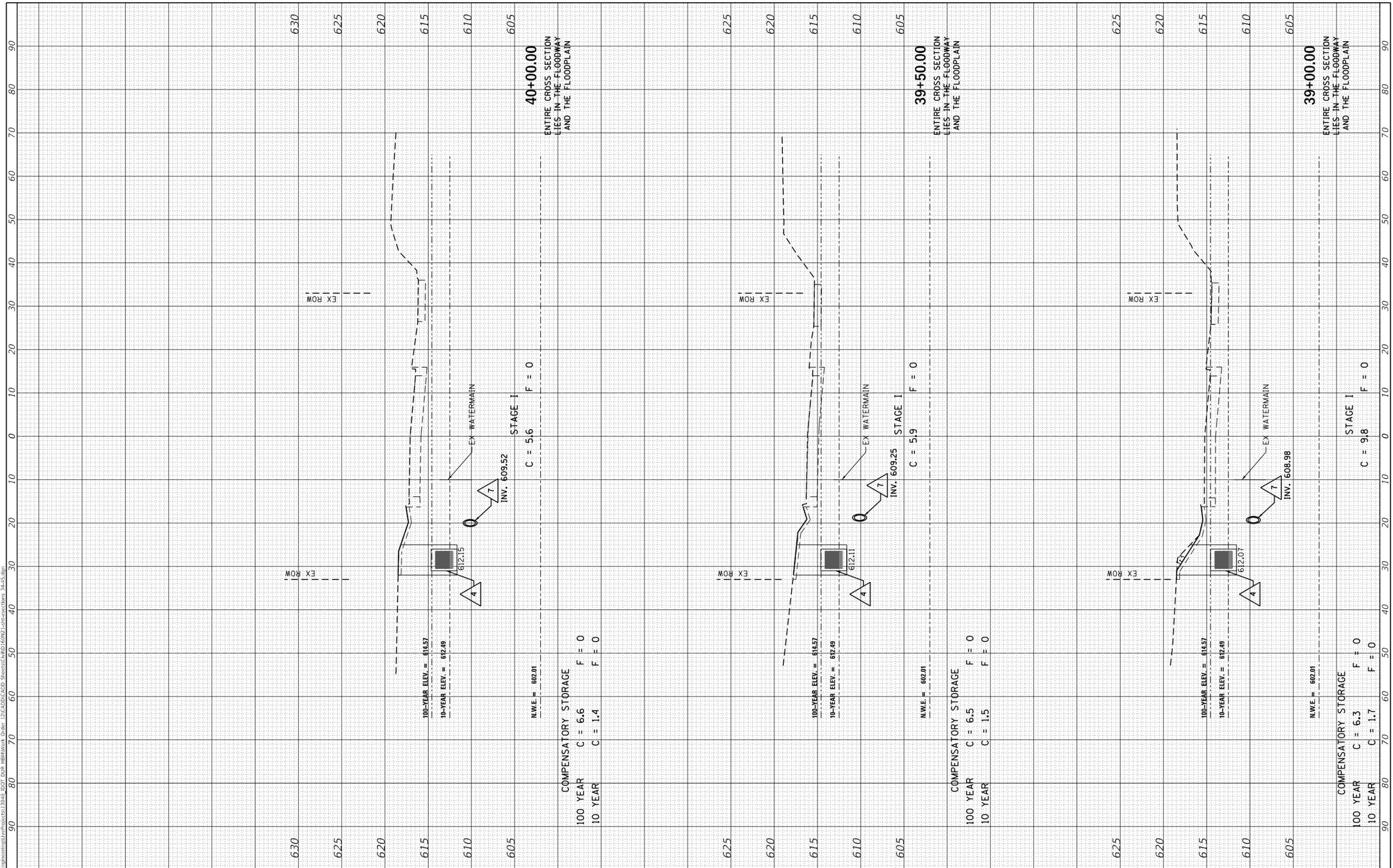
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PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

COMPENSATORY STORAGE
 100 YEAR C = 6.6 F = 0
 10 YEAR C = 1.4 F = 0

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - VII	
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK	
SCALE: 1"=10'H 1"=5'V	SHEET OF SHEETS
STA. 39+00.00	TO STA. 40+00.00

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 112
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	



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

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

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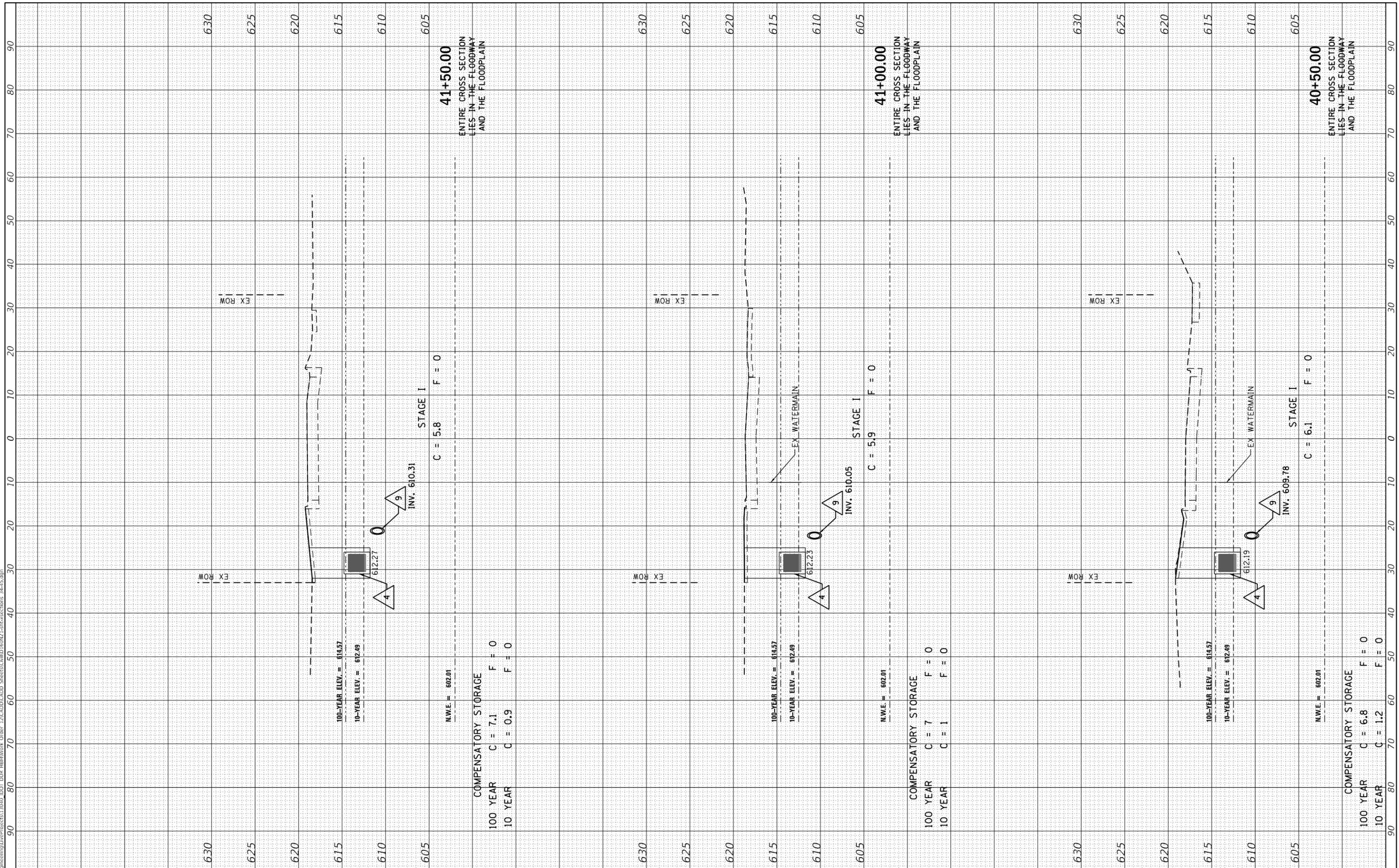


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PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - VIII
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK
 SCALE: 1"=10'H 1"=5'V SHEET OF SHEETS STA. 40+50.00 TO STA. 41+50.00

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 113
CONTRACT NO. 60N21			ILLINOIS FED. AID PROJECT	



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

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

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PLOT SCALE = 20.0000' / in.	DRAWN - JN	REVISED -
PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

100 YEAR C = 1.4 F = 0
 10 YEAR C = 6.6 F = 0

N.W.E. = 602.01

COMPENSATORY STORAGE

43+00.00
 ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

STAGE I
 C = 5.7 F = 0

100-YEAR ELEV. = 614.57

10-YEAR ELEV. = 612.49

612.39

9

INV. 611.11

EX ROW

EX ROW

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - IX
 CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK
 SCALE: 1"=10'H 1"=5'V SHEET OF SHEETS STA. 42+00.00 TO STA. 43+00.00

EX ROW

100-YEAR ELEV. = 614.57

10-YEAR ELEV. = 612.49

612.36

9

INV. 610.84

STAGE I
 C = 6.3 F = 0

N.W.E. = 602.01

COMPENSATORY STORAGE

42+50.00
 ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

100 YEAR C = 7.5 F = 0

10 YEAR C = 0.5 F = 0

EX ROW

EX ROW

100-YEAR ELEV. = 614.57

10-YEAR ELEV. = 612.49

612.31

9

INV. 610.57

STAGE I
 C = 5.6 F = 0

N.W.E. = 602.01

COMPENSATORY STORAGE

42+00.00
 ENTIRE CROSS SECTION LIES IN THE FLOODWAY AND THE FLOODPLAIN

100 YEAR C = 7.3 F = 0

10 YEAR C = 0.7 F = 0

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3603	2010-141-B	COOK	114	114
CONTRACT NO. 60N21				
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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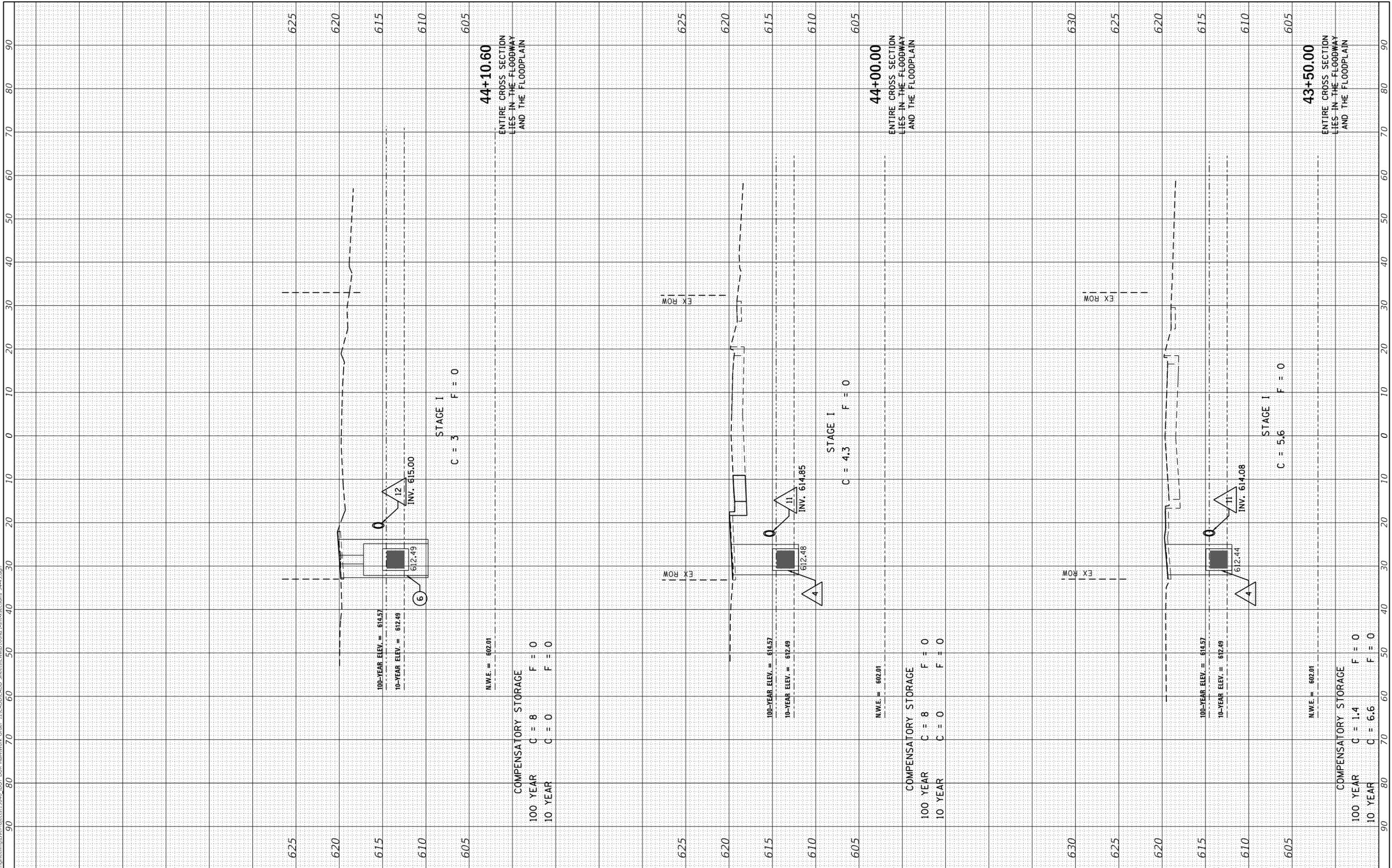


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PLOT SCALE = 20.0000 ' / in.	DRAWN - JN	REVISED -
PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - X			
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK			
SCALE: 1"=10'H 1"=5'V	SHEET	OF	SHEETS
STA. 43+50.00	TO STA. 44+10.60		

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 114A
CONTRACT NO. 60N21				ILLINOIS FED. AID PROJECT



44+10.60
ENTIRE CROSS SECTION
LIES IN THE FLOODWAY
AND THE FLOODPLAIN

44+00.00
ENTIRE CROSS SECTION
LIES IN THE FLOODWAY
AND THE FLOODPLAIN

43+50.00
ENTIRE CROSS SECTION
LIES IN THE FLOODWAY
AND THE FLOODPLAIN

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

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

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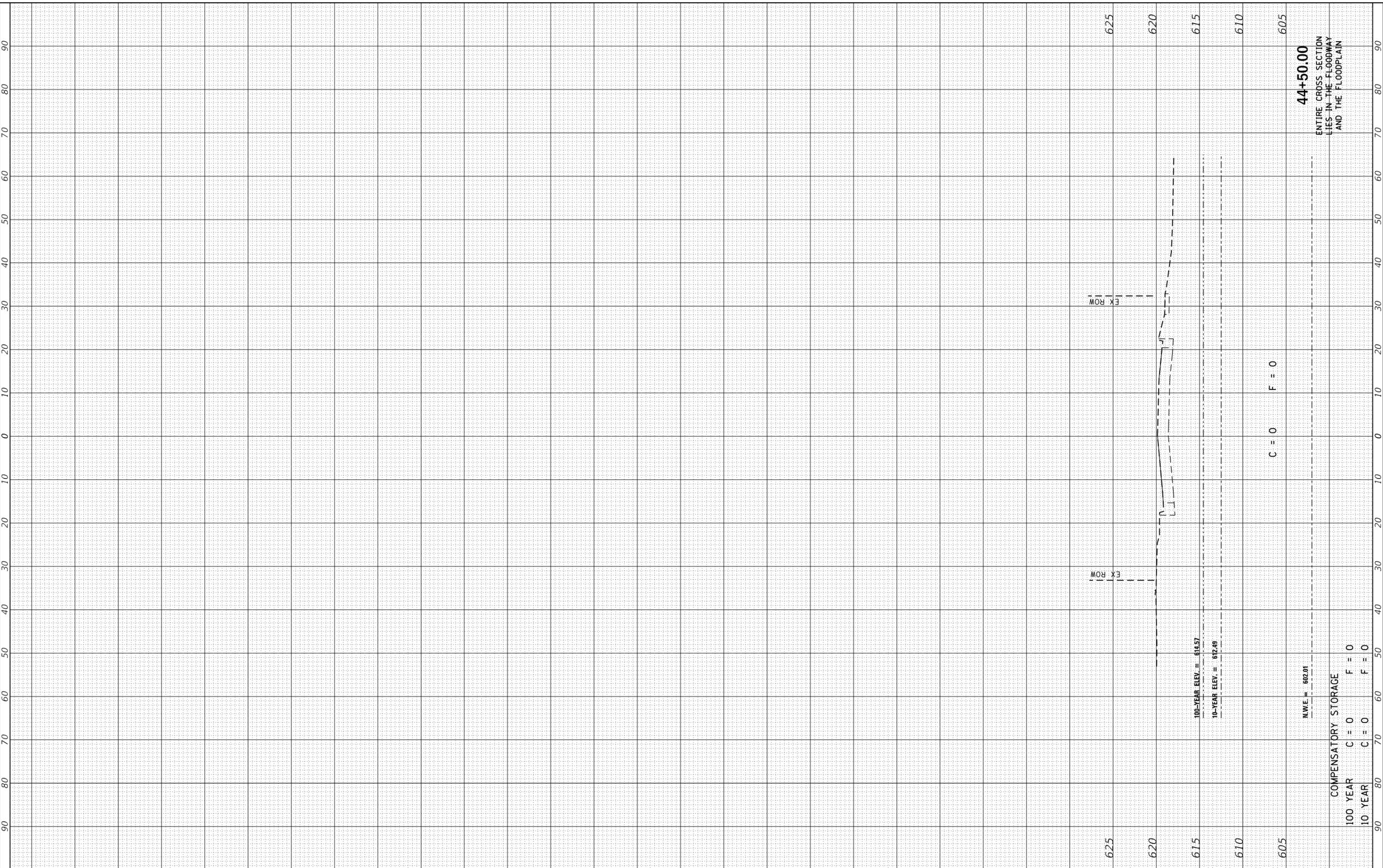


USER NAME = johnn	DESIGNED - AB	REVISED -
PLOT SCALE = 20.0000 ' / in.	DRAWN - JN	REVISED -
PLOT DATE = 2/19/2019	CHECKED - TGM	REVISED -
	DATE - 01/31/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - XI			
CHICAGO HEIGHTS - GLENWOOD RD AT THORN CREEK			
SCALE: 1"=10'H 1"=5'V	SHEET	OF	SHEETS
STA. 44+50.00			TO STA. 44+50.00

F.A.U. RTE. 3603	SECTION 2010-141-B	COUNTY COOK	TOTAL SHEETS 114	SHEET NO. 114B
CONTRACT NO. 60N21				
ILLINOIS FED. AID PROJECT				



44+50.00
 ENTIRE CROSS SECTION
 LIES IN THE FLOODWAY
 AND THE FLOODPLAIN

C = 0 F = 0

100 YEAR C = 0 F = 0
 10 YEAR C = 0 F = 0

MWE = 602.01

COMPENSATORY STORAGE