01-20-2017 LETTING ITEM 061

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

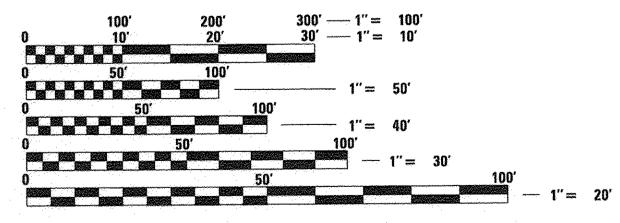
F.A.U. ROUTE 1700 (LIVELY BOULEVARD) LANDMEIER ROAD TO HIGGINS ROAD RESURFACING, TRAFFIC SIGNALS SECTION 15-00064-00-RS PROJECT M-4003(828) VILLAGE OF ELK GROVE VILLAGE COOK COUNTY C-91-035-17

DESIGN SPEED

POSTED SPEED LIVELY BOULEVARD - 30 MPH

LIVELY BOULEVARD - 35 MPH

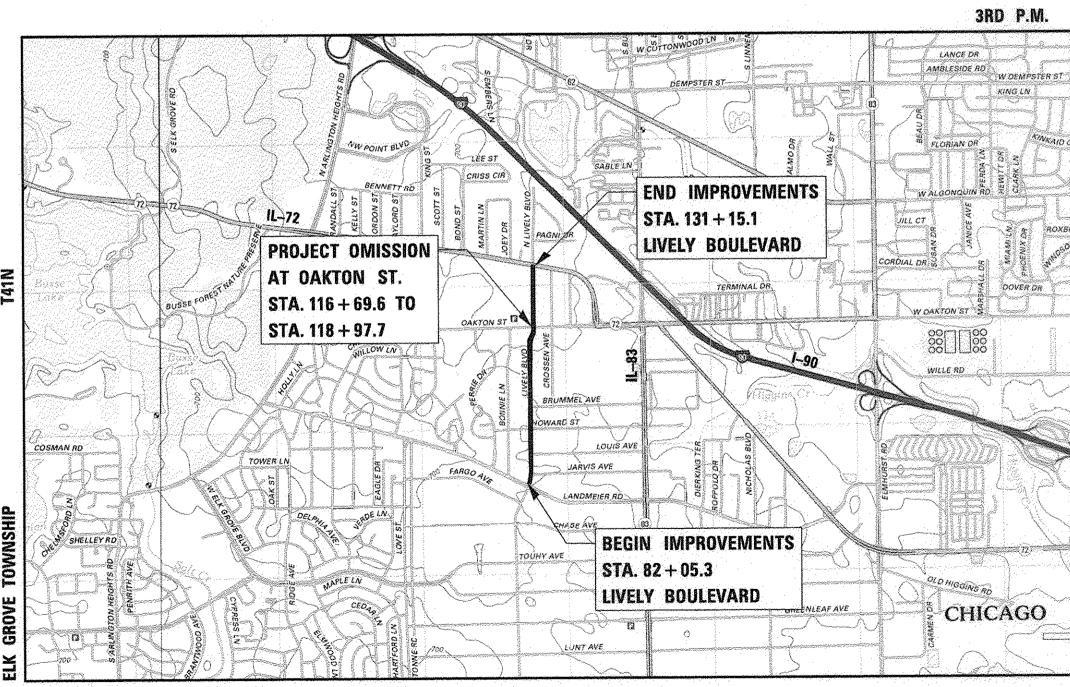
**FUNCTIONAL CLASSIFICATION** LIVELY BOULEVARD - MAJOR COLLECTOR (2016 ADT = 7,000)



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

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

CONTRACT NO. 61D35



LOCATION MAP (NOT TO SCALE)

PROJECT LENGTH

GROSS LENGTH = 4909.8 FT. (0.930 MILES)

**NET LENGTH = 4681.7 FT. (0.887 MILES)** 

REGISTERED P.E., STATE OF ILLINOIS **EXPIRES 11-30-2017** FOR DRAWINGS 1 TO 21 AND 33 TO 44

> LICENSED PROFESSIONAL

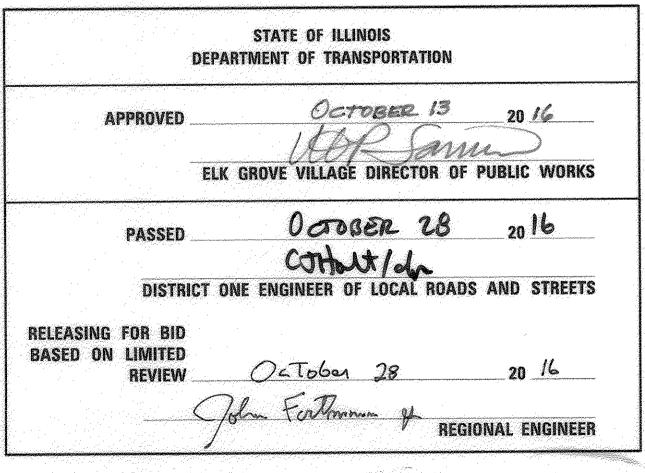
EXPIRES 11-30-2017 FOR DRAWINGS 22 TO 32





15-00064-00-RS

ILLINOIS CONTRACT NO. 61D35



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PLANS PREPARED BY:

Tel: 630,773,3900 - Fax: 630,773,3975

CHARLES MREEGER,

PROGRAM AND OFFICE CONSULTANT ENGINEER:

705-4406 SCHAUMBURG, NEERING, INC.

#### INDEX OF DRAWINGS SHEET NO. DESCRIPTION COVER SHEET 2 - 3 INDEX, GENERAL NOTES, AND STANDARDS

TYPICAL SECTIONS

4 - 5 SUMMARY OF QUANTITIES

MAINTENANCE OF TRAFFIC GENERAL NOTES

9 - 14 RESURFACING PLAN

6 - 7

15 - 16 SIGNING AND STRIPING PLAN

ADA GRADING PLAN 17 - 21 22 - 32 TRAFFIC SIGNAL PLANS

33 - 44 CONSTRUCTION DETAILS AND DISTRICT ONE DETAILS

#### **IDOT HIGHWAY STANDARDS**

STANDARD NO. DESCRIPTION 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 424001-09 PERPENDICULAR CURB RAMPS FOR SIDEWALKS CORNER PARALLEL CURB RAMPS FOR SIDEWALK 424011-03 442201-03 CLASS C AND D PATCHES 602001-02 CATCH BASIN TYPE A 602301-04 INLET - TYPE A

602601-04 PRECAST REINFORCED CONCRETE FLAT SLAB TOP

604051-04 FRAME AND GRATE TYPE 11

606001-06 CONCRETE CURB TYPE B & COMBINATION CONCRETE CURB & GUTTER 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE

701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM EDGE OF PAVEMENT

LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS 701301-04

701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED URBAN LANE CLOSURE, MULTILANE INTERSECTION 701701-10

701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE 701901-06 TRAFFIC CONTROL DEVICES

780001-05 TYPICAL PAVEMENT MARKINGS 878001-10 CONCRETE FOUNDATION DETAILS TRAFFIC SIGNAL MOUNTING DETAILS 880006-01

IDOT DISTRICT ONE STANDARDS

DESCRIPTION

886001-01 DETECTOR LOOP INSTALLATIONS 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

#### SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ("STANDARD SPECIFICATIONS"), ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2017; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (IMUTCD): "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" 2014, 7TH EDITION, THE DETAILS IN THE PLANS. AND THE SPECIAL PROVISIONS AND IDOT STANDARD DRAWINGS INCLUDED IN THE CONTRACT DOCUMENTS.
- 2. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET AND APPROPRIATE PERMITS HAVE BEEN OBTAINED.
- 3. THE ENGINEER AND ALL UTILITY COMPANIES, SCHOOL DISTRICTS, AND LOCAL POLICE AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- WHEN REMOVING CURB AND GUTTER, PAVEMENT OR ANY OTHER STRUCTURE, THE CONTRACTOR SHALL TAKE PRECAUTIONS NECESSARY TO AVOID DAMAGE TO UNDERGROUND PUBLIC OR PRIVATE UTILITIES IN ACCORDANCE WITH ARTICLES 105.07, 107.20, AND 107.31. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL CONCRETE BREAKER BE ALLOWED.
- THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE PROJECT LIMITS. ALL EXCESS OR WASTE MATERIAL SHALL BE EITHER HAULED AWAY FROM THE PROJECT SITE BY THE CONTRACTOR AND DEPOSITED AT LOCATIONS PROVIDED BY HIM, OR DISPOSED OF WITHIN THE RIGHT-OF-WAY IN A MANNER OTHER THAN BURNING. SUBJECT TO THE APPROVAL OF THE ENGINEER. NO EXTRA COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR ANY EXPENSE INCURRED BY COMPLYING WITH THE REQUIREMENTS OF THIS NOTE.

#### LANDSCAPING

- LANDSCAPE RESTORATION ALONG SIDEWALK, DRIVEWAYS, AND CURB AND GUTTER THAT ARE REMOVED AND REPLACED SHALL CONSIST OF SODDING AND TOPSOIL FURNISH AND PLACE, 4". THE MAXIMUM WIDTH ALLOWED FOR PAYMENT SHALL BE 18".
- 2. THE CONTRACTOR SHALL PROVIDE SPADE EDGES FOR THE SODDED AREA ABUTTING EXISTING TREES, LEAVING A 5' DIAMETER RING AROUND THE EXISTING TREES.

#### **WISCELLANEOUS**

- THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO ARTICLE 201.01(A) OF THE STANDARD SPECIFICATIONS. REMOVAL OF ALL OBSTRUCTIONS IN THE RIGHT-OF-WAY, THAT ARE NOT INCLUDED IN A SPECIFIC REMOVAL ITEM SHALL BE CONSIDERED CLEARING AND INCLUDED IN THE COST OF THE CONTRACT. THIS SHALL INCLUDE. BUT NOT BE LIMITED TO, FENCES, WALLS, FOUNDATIONS, BUILDINGS, WOODEN POWER POLES, WOODEN PLANTERS, GATES, AND ALL VEGETATION, TREES, SHRUBS, ETC. LESS THAN 6" IN DIAMETER.
- 2. THE CONTRACTOR SHALL NOT CROSS COMPLETED BINDER COURSE, OR EXISTING PAVEMENT NOT SCHEDULED TO BE REMOVED, WITH CONSTRUCTION EQUIPMENT WHICH MAY DAMAGE THE PAVEMENT.
- 3. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

#### CCDD REPORTS

CONTRACTORS THAT WANT TO VIEW THE FULL CCDD REPORT SHOULD CONTACT THE OWNER OF RECORD. TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION, PLEASE CONTACT:

MR. BRIAN LOVERING CHIEF INFRASTRUCTURE ENGINEER VILLAGE OF ELK GROVE VILLAGE (847) 734-8044

#### BUTT JOINT AND HMA TAPER DETAILS

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, TC-10

STANDARD NO.

BD-07

BD-08

BD-32

TC-13

AND DRIVEWAYS DISTRICT ONE TYPICAL PAVEMENT MARKINGS

TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS

(TO REMAIN OPEN TO TRAFFIC)

TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

TC-26 DRIVEWAY ENTRANCE SIGN

TS-07 DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR

ROADWAY RESURFACING

#### STAKING

- ALIGNMENT, TIES AND BENCHMARKS ARE NOT PROVIDED IN THE PLANS DUE TO THE SCOPE OF THE WORK SHOWN ON THE PLANS. EXISTING TOPOGRAPHY IS SHOWN BASED ON AERIAL IMAGERY.
- 2. AN EXISTING CENTERLINE HAS BEEN SHOWN FOR ALL ROADWAYS. IN GENERAL, THE CENTERLINE REPRESENTS THE CENTER OF ROADWAY. THE EXISTING CENTERLINE IS ONLY A BEST-FIT APPROXIMATION BASED ON AERIAL IMAGERY AND RECORD PLANS. ITS PURPOSE IS ONLY TO PROVIDE A GENERAL LENGTH OF ROADWAY IMPROVEMENTS.
- 3. ALL DIMENSIONS SHOWN ON THE PLANS ARE APPROXIMATE BASED ON FIELD INVESTIGATIONS. FINAL LENGTHS AND AREAS OF PROPOSED WORK WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

#### PAVING, CURB & GUTTER AND SIDEWALK

- 1. THE PAVEMENT PATCHING AND CURB AND GUTTER REMOVAL AND REPLACEMENT LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATIONS BASED ON FIELD INVESTIGATIONS. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION ON THE LOCATION OF PAVEMENT PATCHES AND CURB AND GUTTER REMOVAL AND REPLACEMENT IN THE FIELD.
- 2. HOT-MIX ASPHALT BINDER COURSE SHALL NOT BE PLACED ADJACENT TO CURB AND GUTTER UNTIL THE CURB AND GUTTER HAS BEEN PROPERLY CURED AND BACKFILLED TO THE SATISFACTION OF THE ENGINEER.
- 3. HOT-MIX ASPHALT SURFACE COURSE SHALL NOT BE PLACED UNTIL ALL EARTH EXCAVATION, TOPSOIL PLACEMENT, AND HOT-MIX ASPHALT BINDER COURSE HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.
- 4. THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE, BINDER, OR BASE UPON WHICH THE HOT-MIX ASPHALT MATERIALS ARE PLACED.
- 5. 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, CURB, GUTTER, COMBINATION CURB AND GUTTER, MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EXPOXY COATED, UNLESS NOTED ON THE PLAN.

FILE NAME =	USER NAME = djk	DESIGNED - KDC	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\3003_Notes_01.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	INDEX, GENERAL NOTES, AND STANDARDS	1700	15-00064-00-RS	СООК	44	2
	PLOT SCALE = 20.0000 '/ 1m.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION	manery original racinal variantima			CONTRAC	T NO. F	1D35
\$MODELNAME\$	PLOT DATE = 10/28/2016	DATE - 10/13/2016	REVISED -		SHEET 1 OF 2 SHEETS		ILLINOIS FED.	AID PROJECT M-40	J03(828)	CANCEL CONTRACTOR CONT

#### UTILITIES

- 1. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 2. COORDINATION OF ANY UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.
- 3. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, PETROLEUM, SEWER AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ABOVE AND BELOW GROUND UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AS COORDINATED WITH THE UTILITY OWNER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS OF HIS/HER CONSTRUCTION SCHEDULE AND SHALL COORDINATE CONSTRUCTION OPERATIONS WITH THE UTILITY OWNERS SO THAT THE RELOCATION OF UTILITY LINES AND STRUCTURES MAY PROCEED IN AN ORDERLY MANNER. NOTIFICATION SHALL BE IN WRITING, WITH COPIES TRANSMITTED TO THE ENGINEER.
- 5. ANY EXISTING OR PROPOSED SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO COST.
- 6. THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR CONSTRUCTION STAGING NECESSARY TO ACCOMMODATE UTILITY RELOCATION OR ADJUSTMENT AND/OR FOR DELAYS CAUSED BY UTILITY RELOCATION OR ADJUSTMENT.
- 7. STRUCTURE ADJUSTMENTS AND RECONSTRUCTIONS HAVE BEEN SHOWN BASED ON FIELD INVESTIGATIONS. THE FINAL DETERMINATION FOR WHETHER THE WORK TO BE PERFORMED IS AN ADJUSTMENT OR RECONSTRUCTION WILL BE MADE BY THE ENGINEER IN THE FIELD.
- 8. THE MAXIMUM HEIGHT OF ADJUSTING RINGS ON UTILITY STRUCTURES SHALL BE 8". CONCRETE ADJUSTMENT RINGS LESS THAN 4 INCHES SHALL NOT BE ALLOWED. HIGH DENSITY POLYETHYLENE (HDPE) PLASTIC RINGS AND RING WEDGES SHALL BE USED FOR ALL ADJUSTMENTS LESS THAN 4" OR IN COMBINATION WITH 4 INCH MINIMUM CONCRETE ADJUSTMENT RINGS. BRICKS SHALL NOT BE ALLOWED.

#### STORM & SANITARY SEWER

1. UNLESS OTHERWISE NOTED ON THE PLANS, THE EXISTING DRAINAGE FACILITIES SHALL REMAIN IN USE DURING THE PERIOD OF CONSTRUCTION. LOCATIONS OF EXISTING DRAINAGE STRUCTURES AND SEWERS AS SHOWN ON THE PLANS ARE APPROXIMATE. PRIOR TO COMMENCING WORK THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL DETERMINE THE EXACT LOCATIONS OF EXISTING STRUCTURES WHICH ARE WITHIN THE PROPOSED CONSTRUCTION LIMITS.

DURING CONSTRUCTION, IF THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS, UNDERDRAINS OR FIELD DRAINS WITHIN THE RIGHT-OF-WAY OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL SO INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF THE NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE. SHOULD THE ENGINEER HAVE DIRECTED THE REPLACEMENT OF A FACILITY, THE NECESSARY WORK AND PAYMENT SHALL BE IN ACCORDANCE WITH SECTIONS 550 AND 601, AND ARTICLE 104.02 OF THE STANDARD SPECIFICATIONS.

2. ONLY METHOD 1 UNDER SECTION 550.07 OF THE STANDARD SPECIFICATIONS SHALL BE ALLOWED FOR THE PLACEMENT OF TRENCH BACKFILL.

#### USER NAME = djk DESIGNED KDC REVISED FILE NAME = KDC REVISED .\3003\_Notes\_02.dgn DRAWN DJK REVISED CHECKED PLOT SCALE = 20.0000 '/ in. REVISED PLOT DATE = 10/28/2016 10/13/2016 \*MODELNAME\*

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# LIVELY BOULEVARD RESURFACING INDEX, GENERAL NOTES, AND STANDARDS SHEET 2 OF 2 SHEETS F.A.U. SECTION COUNTY TOTAL SHEET NO. 1700 15-00064-00-RS CONTRACT NO. 61D35

#### EROSION CONTROL

- 1. ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL" AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.
- 2. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- 3. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF SAID MEASURES SHALL BE MADE IMMEDIATELY.
- 4. ALL STORM SEWER FACILITIES THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. MUD AND SEDIMENT DEPOSITS SHALL BE REMOVED FROM THE ROADWAY AT THE END OF EACH WORK DAY BY SHOVELING AND/OR SWEEPING.
- 5. ALL SLOPES SHALL BE COVERED WITH SOD AS GRADING AND PLACEMENT OF TOPSOIL HAS BEEN COMPLETED. THE LIMITS OF THE SOD SHALL BE THE LIMITS OF GRADING.
- 6. INLET FILTERS SHALL BE PLACED ON ALL CATCH BASINS, INLETS, AND MANHOLES WITH OPEN GRATES IN THE CURB AND GUTTER AND SHOULDERS.
- 7. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER.
- 9. THE SURFACE OF ALL STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION WITH THE USE OF TEMPORARY EROSION CONTROL SEEDING. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.

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FROVISION	LLEX	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	
VTECIAL FRO	SPECIALTY					ROADWAY RESURFACING	NON- PARTICIPAT
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	And the second s	20101000	TEMPORARY FENCE	FOOT	400	400	
X		20101200	TREE ROOT PRUNING	EACH	10	10	
Χ.		20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	10	10	
***************************************		20200100	EARTH EXCAVATION	CU YD	532	532	
		20800150	TRENCH BACKFILL	CU YD	7	7	
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	484	484	
		25200100	SODDING	SQ YD	484	484	
,		25200200	SUPPLEMENTAL WATERING	UNIT	7	7	
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	30	30	
		28000510	INLET FILTERS	EACH	47	47	
		31101180	SUBBASE GRANULAR MATERIAL, TYPE B 2"	SQ YD	9.92	992	
		31101600	SUBBASE GRANULAR MATERIAL, TYPE B 8"	SQ YD	169	169	
		40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	10910	10910	
		40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	33	33	
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	SQ YD TON	191 2454	2454	
		42001300	PROTECTIVE COAT	SQ YD	1406	1406	
		44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	21912	21912	
		44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	165	165	
		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1777	1777	
		44000600	SIDEWALK REMOVAL	SQ FT	8960	8960	
en primara de participa de la constitución de la co	-	44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	164	164	

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ĵ							
		44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	483	483	
		44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	383	383	
		44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	564	564	
		550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	13	13	
		55100500	STORM SEWER REMOVAL 12"	FOOT	50	50	
		60108104	PIPE UNDERDRAINS, TYPE 1, 4"	FOOT	50	50	
		60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	1	1	
		60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	2	2	
		602666.00	VALVE BOXES TO BE ADJUSTED	EACH	7	7	
		60500060	REMOVING INLETS	EACH	3	3	
	and the second s	territoria de la companya de la comp De la companya de la					
		60604100	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED)	FOOT	1023	1023	
	and the second seco	67100100	MOBILIZATION	LSUM	1	1	·
	77- 749	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1	
		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1	
		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1	
		70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6	and the same of th
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	5737	5737	
	ethology primary ang anisa	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	3238	3238	
	X	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	218	218	
	Х	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8541	8541	
	X	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	F00T	4852	4852	
	Х	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	178	178	

FILE NAME =	USER NAME = djk	DESIGNED - KDC	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. SECTION	ON COUNTY TOTAL SHEET
\3003_Sumquant_01.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES	1700 15-00064-	00-RS COOK 44 4
AAA	PLOT SCALE = 20.0000 // 10.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 61D35
\$MODELNAME\$	PLOT DATE = 10/28/2016	DATE - 10/13/2016	REVISED -		SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.	IL'	LINOIS FED. AID PROJECT M-4003(828)

PROVISION	ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	
SPECIAL PROV	SPECIALTY					ROADWAY RESURFACING	NON- PARTICIPATING
Andrew Control of the							
	X	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	12	12	
negovinen ejenken pjelennegovinen e	X	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	24	24	
	Χ	78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	665	665	
	X	78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	79	79	
X	X	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	11	11	
X	X	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
X	X	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	666	666	
				FOOT	11	11	
	X	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C		11	11	
X	X	87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH		1	
X	X	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	8	
	Х	87900200	DRILL EXISTING HANDHOLE	EACH	2	2	
X	Χ	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8	8	
X	Χ	88600100	DETECTOR LOOP, TYPE I	FOOT	115	115	
X	X	88600600	DETECTOR LOOP REPLACEMENT	FOOT	154	154	
X	X	88800100	PEDESTRIAN PUSH-BUTTON	EACH	8	8	
	X	89502200	MODIFY EXISTING CONTROLLER	EACH	1	1	
	X	89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	61	61	
X	X	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	
X		Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
X		Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	18	18	

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PROVISION _TY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	
CIAL					ROADWAY RESURFACING	NON- PARTICIPATING
SPEC						
X	Z0017700	DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED	EACH	5	5	
X	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	1038	1038	
X	Z0056608	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	37	37	
X	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100	
X	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	4	4	
X	X4230800	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH, SPECIAL	SQ YD	165	165	
X	X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SO FT	2728	2728	
X	X4240460	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH, SPECIAL	SQ FT	6197	6197	
X	X4240800	DETECTABLE WARNINGS (SPECIAL)	SQ FT	287	287	
X	X4405030	LONGITUDINAL PARTIAL DEPTH REMOVAL 3"	FOOT	4000	4000	
X	X4420900	LONGITUDINAL PARTIAL DEPTH PATCHING	TON	149	149	
X	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	3	3	
X	X6064200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	100	100	
XX	XX006826	REMOVE AND RELOCATE LAWN SPRINKLER SYSTEM	FOOT	200	200	

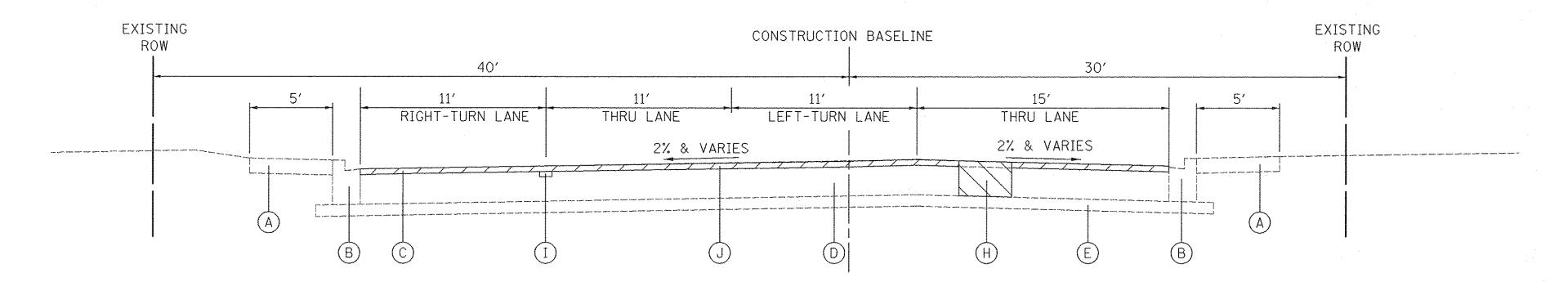
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sendane	PLOT SCALE = 20,0000 '/ 10.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION		
**************************************	PLOT DATE = 10/28/2016	DATE - 10/13/2016	REVISED -		SCALE:	SHEET 2 OF 2 SHEETS STA.

CONSTRUCTION CODE

		ILLINOIS FED. AT	D PROJECT M-400	)3(828)	
and the second s			CONTRACT	. NO. 1	61D <b>3</b> 5
	1700	15-00064-00-RS	COOK	44	5
	E.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE'

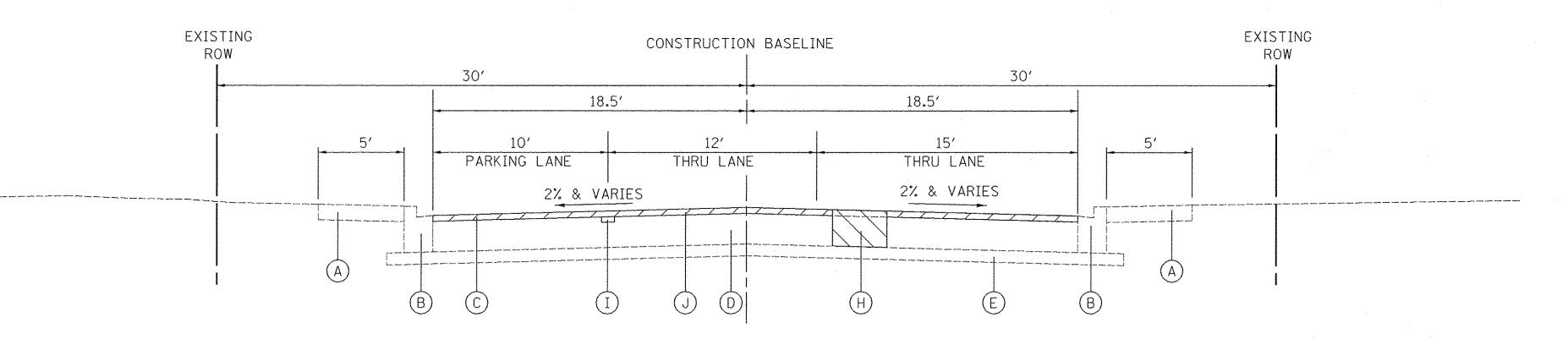
TO STA.

CONSTRUCTION CODE



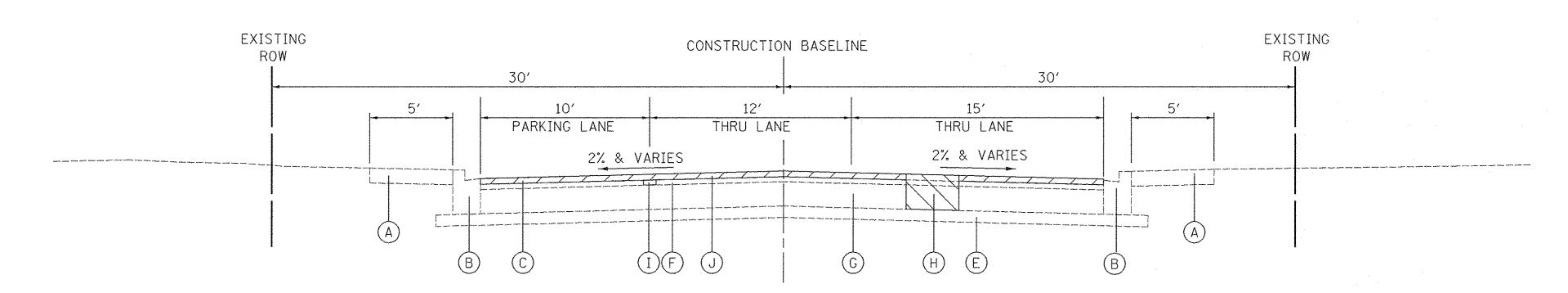
#### PROPOSED TYPICAL SECTION

LIVELY BOULEVARD STA. 82+05.3 TO STA. 84+58.5



#### PROPOSED TYPICAL SECTION

LIVELY BOULEVARD STA, 84+58,5 TO STA. 94+35.0



#### PROPOSED TYPICAL SECTION

LIVELY BOULEVARD STA. 94+35.0 TO STA. 115+38.7 STA. 119+59.1 TO STA. 129+01.4

#### USER NAME = djk DESIGNED REVISED FILE NAME = KDC KDC ...\03-Typicals\3003\_Typ\_01.dgn REVISED DRAWN REVISED DJK PLOT SCALE = 50.0000 '/ in. CHECKED REVISED PLOT DATE = 10/13/2016 10/13/2016 \$MODELNAME\$

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: NTS

	LIVELY BOULEVARD RESURFACING						F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS
TYPICAL SECTIONS							1700	15-00064-00-RS	СООК	44
									CONTRAC	T NO.
SHEET	1	OF	2	SHEETS	STA.	TO STA.	· · · · · · · · · · · · · · · · · · ·	ILLINOIS FED.	AID PROJECT M-40	003(828)

#### LEGEND

- (A) EXISTING CONCRETE SIDEWALK
- B EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- © EXISTING HOT-MIX ASPHALT SURFACE COURSE, 2"
- D EXISTING HOT MIX ASPHALT BINDER COURSE, 101/4"
- E EXISTING GRANULAR SUBBASE, 4"
- (F) EXISTING HOT-MIX ASPHALT BINDER COURSE, 21/4"
- (G) EXISTING HOT-MIX ASPHALT BASE COURSE, 8"
- H PROPOSED CLASS D PATCH, 12"
  (LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER)
- PROPOSED LONGITUDINAL PARTIAL DEPTH PATCH (3") (LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER)
- J PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"



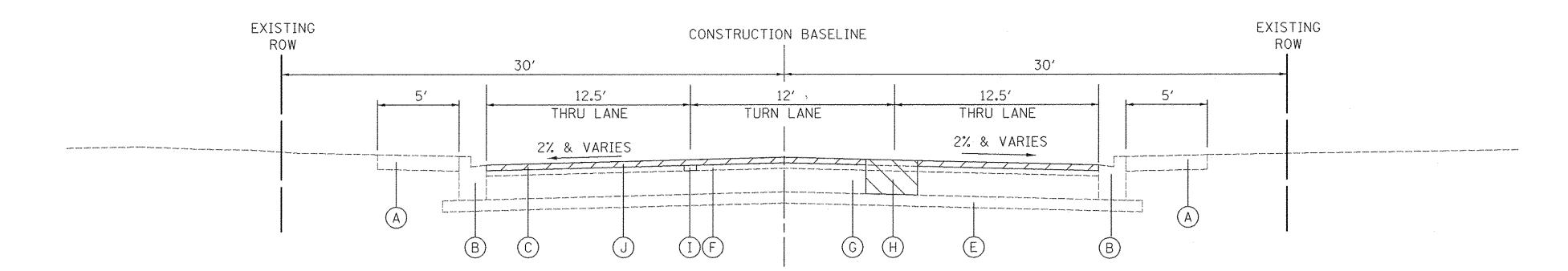
HOT-MIX ASPHALT SURFACE REMOVAL, 2"



CLASS D PATCHES (THICKNESS AS SPECIFIED)

44 6

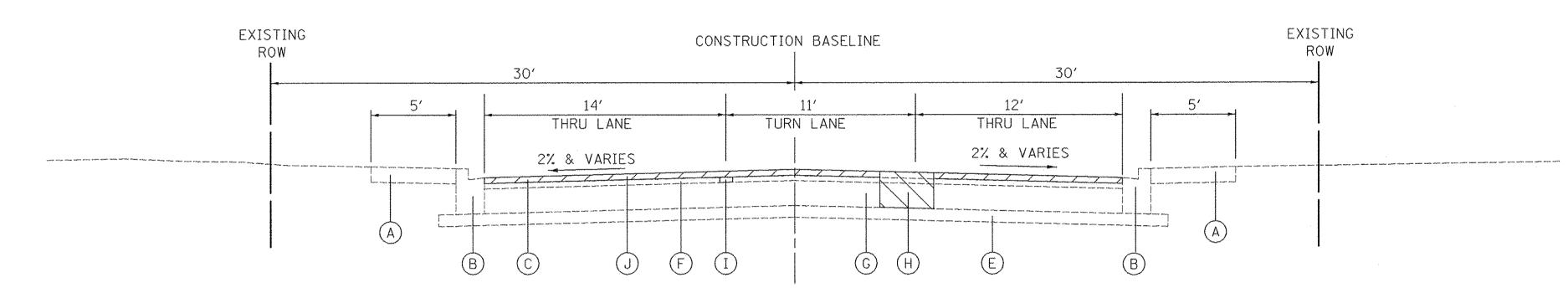
CONTRACT NO. 61D35



#### PROPOSED TYPICAL SECTION

LIVELY BOULEVARD STA. 115+38.7 TO STA. 116+69.6 STA. 118+97.7 TO STA. 119+59.1

PROJECT OMISSION STA. 116+69.6 TO STA. 118+97.7



#### PROPOSED TYPICAL SECTION

LIVELY BOULEVARD STA. 129+01.4 TO STA. 131+15.1

#### LEGEND

- (A) EXISTING CONCRETE SIDEWALK
- B EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C) EXISTING HOT-MIX ASPHALT SURFACE COURSE, 2"
- (D) EXISTING HOT MIX ASPHALT BINDER COURSE, 101/4"
- (E) EXISTING GRANULAR SUBBASE, 4"
- (F) EXISTING HOT-MIX ASPHALT BINDER COURSE, 21/4"
- (G) EXISTING HOT-MIX ASPHALT BASE COURSE, 8"
- PROPOSED CLASS D PATCH, 10"
  (LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER)
- PROPOSED LONGITUDINAL PARTIAL DEPTH PATCH (3")
  (LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER)
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"

HOT-MIX ASPHALT SURFACE REMOVAL, 2"

CLASS D PATCHES (THICKNESS AS SPECIFIED)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 2"	4% @ 50 GYR.
LONGITUDINAL PARTIAL DEPTH PATCHING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 3"	4% @ 50 GYR.
CLASS D PATCH, 12"	
CLASS D PATCH (HMA BINDER IL-19MM); 12" (3 LIFTS)	4% @ 70 GYR.

1. THE UNIT WEIGHT TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LB/SY-IN.

2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

FILE NAME =	USER NAME = djk	DESIGNED - KDC	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. RTE.	SECTION COUNTY TOTAL SHEET NO.
\03-Typicals\3003_Typ_02.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	TYPICAL SECTIONS	1700 15	-00064-00-RS COOK 44 7
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION	STE SOME OF ORDER		CONTRACT NO. 61D35
\$MODELNAME\$	PLOT DATE = 10/28/2016	DATE - 10/13/2016	REVISED -		SCALE: NTS SHEET 2 OF 2 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT M-4003(828)

#### MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 2. TRAFFIC CONTROL DEPICTED IN THESE PLANS AND THE APPLICABLE IDOT DETAILS AND STANDARDS ARE THE MINIMUM REQUIREMENTS. OTHER WORK OR SIGNING MAY BE REQUIRED BY THE ENGINEER. TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, DIVISION 700; APPLICABLE GUIDELINES IN THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; AND APPLICABLE HIGHWAY STANDARDS FOR TRAFFIC CONTROL, UNLESS HEREIN REVISED.
- 3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 4. ALL CONSTRUCTION WARNING SIGNS SHALL HAVE FLUORESCENT ORANGE BACKGROUNDS.
- 6. ALL SIGNS SHALL BE MOUNTED ON METAL POSTS, 7 FEET ABOVE THE EXISTING GROUND AND DRIVEN A MINIMUM OF 3 FEET INTO THE GROUND, UNLESS OTHERWISE NOTED. A J.U.L.I.E. LOCATE SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF THE POSTS.
- 6. DRUMS WILL BE REQUIRED ADJACENT TO PAVEMENT EDGES WHERE WIDENING, CURB AND GUTTER OR OVERLAYING WORK IS BEING DONE, AS SPECIFIED IN SECTION 701 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT THE BARRICADES SHALL BE DRUMS, NON-METALLIC WITH MONO-DIRECTIONAL STEADY-BURN LIGHTS. SPACING SHALL BE AS SHOWN ON THE HIGHWAY STANDARDS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. BARRICADES THAT MUST BE PLACED IN EXCAVATED AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOPS OF THE BARRICADES ARE IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STANDARD 701901.
- 7. DRUMS EQUIPPED WITH ONE-WAY FLASHING LIGHTS WILL BE REQUIRED AT ALL OPEN TRENCHES, EXCAVATIONS, OPEN OR EXPOSED SEWER STRUCTURES, AND AT ANY OTHER LOCATIONS DESIGNATED BY THE ENGINEER OR LAW ENFORCEMENT AGENCIES. BARRICADES SHALL BE PLACED AT 50' CENTERS ALONG TANGENTS, 20' CENTERS ALONG TAPERS, AND 10' CENTERS IN CURVES AND RADII.
- 8. DRUMS AND BARRICADES SHALL MEET THE REQUIREMENTS OF THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 AND THE STANDARD SPECIFICATIONS.
- 9. TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZED BY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT.
- 10. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY STAGE CHANGE AT LEAST TWO WEEKS IN ADVANCE OF THE CHANGE.
- 11. EXISTING TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE REMOVED OR RELOCATED BY THE CONTRACTOR AFTER THE TRAFFIC CONTROL REQUIREMENTS ARE MET OR AS AUTHORIZED BY THE ENGINEER; ANY SIGNS OR DEVICES LEFT IN PLACE ARE TO BE PROTECTED FROM DAMAGE AND MAINTAINED. ANY DAMAGE CAUSED BY THIS WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND AT THE EXPENSE OF THE CONTRACTOR.
- 12. THE FIRST WARNING SIGNS IN EACH DIRECTION OF TRAVEL SHALL BE EQUIPPED WITH MONO-DIRECTIONAL AMBER FLASHING LIGHTS DURING HOURS OF DARKNESS. FLAGS ARE OPTIONAL.
- 13. EXISTING TRAFFIC CONTROL DEVICES ARE TO BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE CAUSED BY HIS WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- 14. ALL ROADS SHALL BE KEPT OPEN TO TRAFFIC DURING THE ENTIRE CONSTRUCTION PERIOD. THE CONTRACTOR MAY CLOSE ONE LANE OF TRAFFIC (DUE TO CONSTRUCTION) ONLY BETWEEN THE HOURS OF 9:00 AM AND 3:00 PM.
- 15. W21-1 "WORKERS" SIGNS SHALL ONLY BE ERECTED WHEN WORKERS ARE PRESENT. SIGN MUST BE COVERED OR REMOVED WHEN NO WORKERS ARE PRESENT.
- 16. "FRESH OIL" SIGNS (W21-2-4848) WITH DATE SIGNS SHALL BE ERECTED 48 HOURS PRIOR TO PRIMING. THE COST OF THESE SIGNS SHALL BE INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION PAY ITEM BEING USED AT THE TIME THE SIGNS ARE REQUIRED.
- 17. FLASHING ARROW BOARDS WILL BE REQUIRED WHEN IMPLEMENTING ALL LANE CLOSURES, AND SHALL BE INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION PAY ITEM BEING USED AT THE TIME THE ARROW BOARDS ARE REQUIRED.
- 18. THE COST OF SUPPLYING, ERECTING, AND MAINTAINING BARRICADES, DRUMS, WARNING LIGHTS, AND SIGNS SHALL BE INCLUDED IN THE COST OF THE VARIOUS TRAFFIC CONTROL AND PROTECTION PAY ITEMS INCLUDED IN THE CONTRACT.

#### SIDEWALK MAINTENANCE NOTE

1. THE SIDEWALK ON ONE SIDE OF THE STREET MUST REMAIN OPEN AND ACCESSIBLE AT ALL TIMES. CONSTRUCTION STAGING SHALL BE COORDINATED WITH THE ENGINEER AND CONTRACTOR TO ENSURE ONE SIDEWALK REMAINS OPEN. SIGNING DIRECTING PEDESTRIANS TO THE OPEN SIDEWALK SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 701801-05. THE WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION, STANDARD 701801".

#### CONSTRUCTION REQUIREMENTS

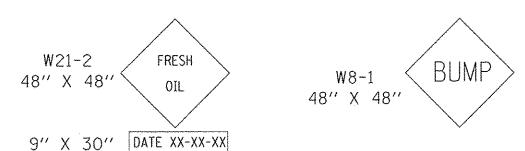
- 1. ALL WORK SHALL BE IN ACCORDANCE WITH IDOT'S SAFETY ENGINEERING POLICY MEMORANDUM, SAFETY 4-15, INCLUDING THE REQUIREMENT FOR USE OF TEMPORARY OR MILLED SLOPE EDGES (MIN OF 1:3). THIS MAY REQUIRE ADDITIONAL PASSES OF THE MILLING MACHINE OR THE USE OF A SECONDARY, SMALLER MILLING MACHINE TO CREATE THE REQUIRED EDGE. THE COST TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE COST OF "HOT-MIX ASPHALT SURFACE REMOVAL" OF THE THICKNESS SPECIFIED.
- 2. "UNEVEN LANE" SIGNS (W8-1-4848) SHALL BE PLACED AT THE INTERVALS REQUIRED BY THE ENGINEER WHEN TRAFFIC IS ADJACENT TO THE MILLED SURFACE. THE COST OF THESE SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEM BEING USED AT THE TIME THE SIGNS ARE REQUIRED.

#### CONSTRUCTION SEQUENCE

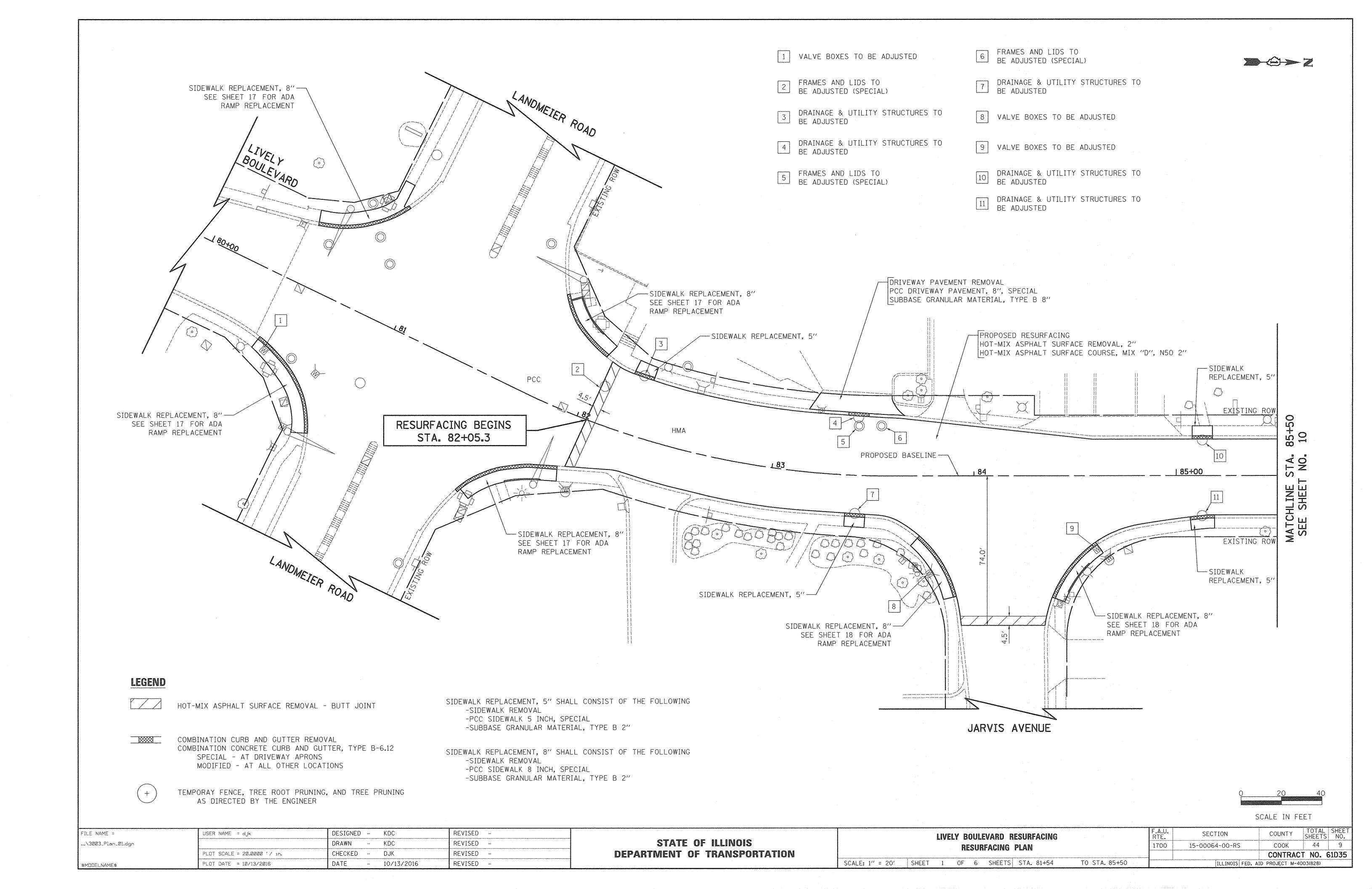
THIS CONSTRUCTION SEQUENCE WAS DEVELOPED TO MINIMIZE IMPACTS TO PROPERTY OWNERS AND TO PROVIDE AN ADEQUATE METHOD OF INSPECTING THE CONDITION OF THE PAVEMENT BASE AND CURB AND GUTTER. THIS CONSTRUCTION SEQUENCE SHALL BE FOLLOWED UNLESS AN ALTERNATE SEQUENCE IS APPROVED BY THE ENGINEER.

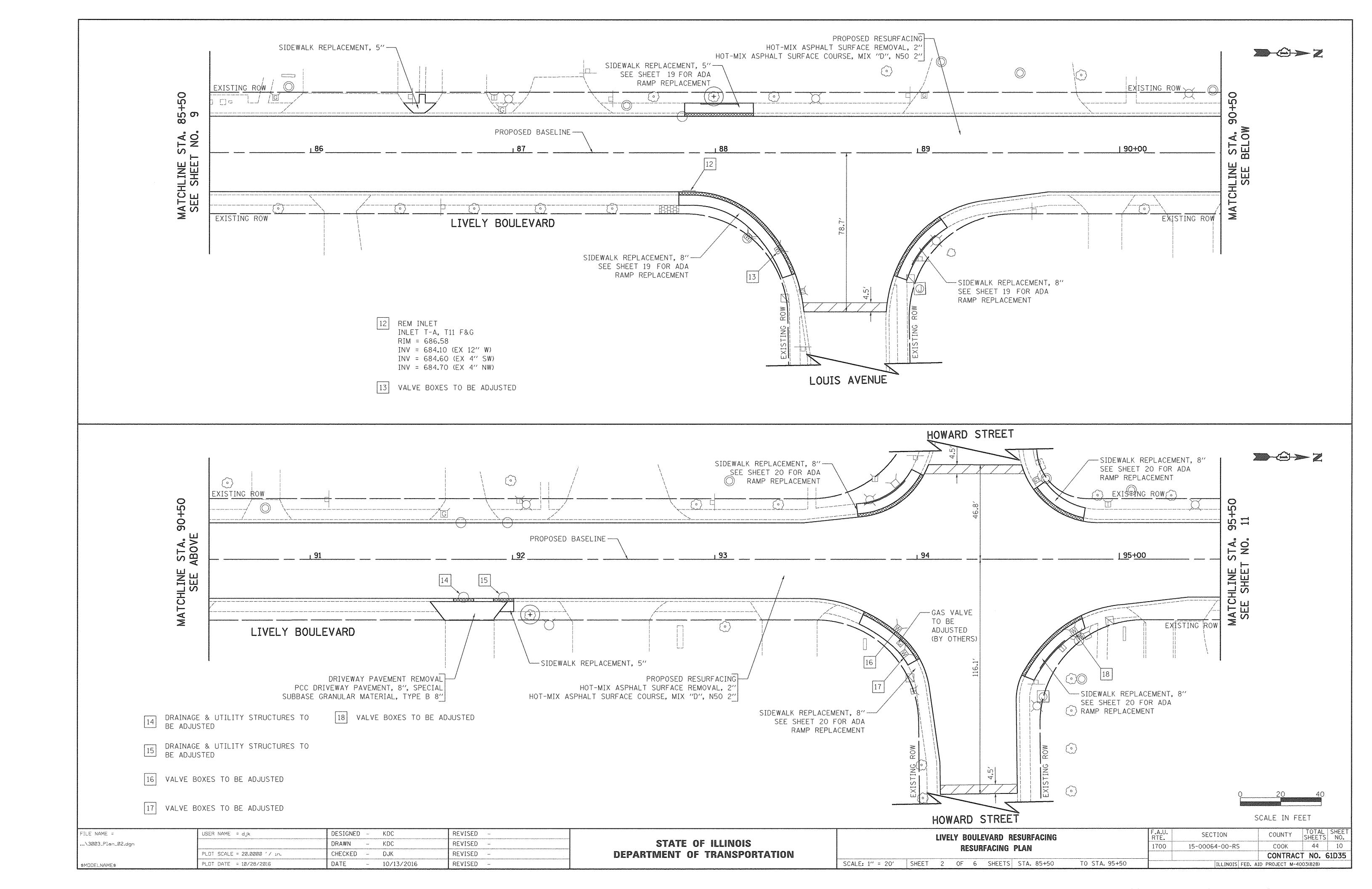
- 1. SET UP APPLICABLE TRAFFIC CONTROL MEASURES USING IDOT HIGHWAY STANDARDS AND DISTRICT ONE DETAILS PROVIDED IN THE PLANS. DAILY LANE CLOSURES SHALL BE USED FOR ALL WORK DEPICTED IN THESE PLANS. PERMANENT LANE CLOSURES SHALL NOT BE ALLOWED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. SET UP EROSION AND SEDIMENT CONTROL MEASURES / TREE PRUNING.
- 3. CONSTRUCT STORM SEWER STRUCTURES AND LATERALS.
- 4. REMOVE AND REPLACE CURB AND GUTTER AND ADJUST STRUCTURES AS DETERMINED BY THE ENGINEER.
- 5. INSTALL SIDEWALK AND DETECTABLE WARNINGS.
- 6. LANDSCAPE RESTORATION.
- 7. CONSTRUCT FULL-DEPTH PATCHES. THE ENGINEER SHALL INSPECT THE CONDITION OF THE PAVEMENT AND MARK THE AREAS REQUIRING PAVEMENT PATCHING. UNDER NO CONDITION SHALL THE CONTRACTOR PROCEED WITH THIS WORK WITHOUT PRIOR CONSENT FROM THE ENGINEER.
- 8. REMOVE HOT-MIX ASPHALT PAVEMENT SURFACE.
- 9. CONSTRUCT LONGITUDINAL PARTIAL DEPTH PATCHING.
- 10. INSTALL HMA SURFACE.
- 11. INSTALL PERMANENT PAVEMENT MARKINGS.
- 12. REMOVE EROSION CONTROL AND TRAFFIC CONTROL.

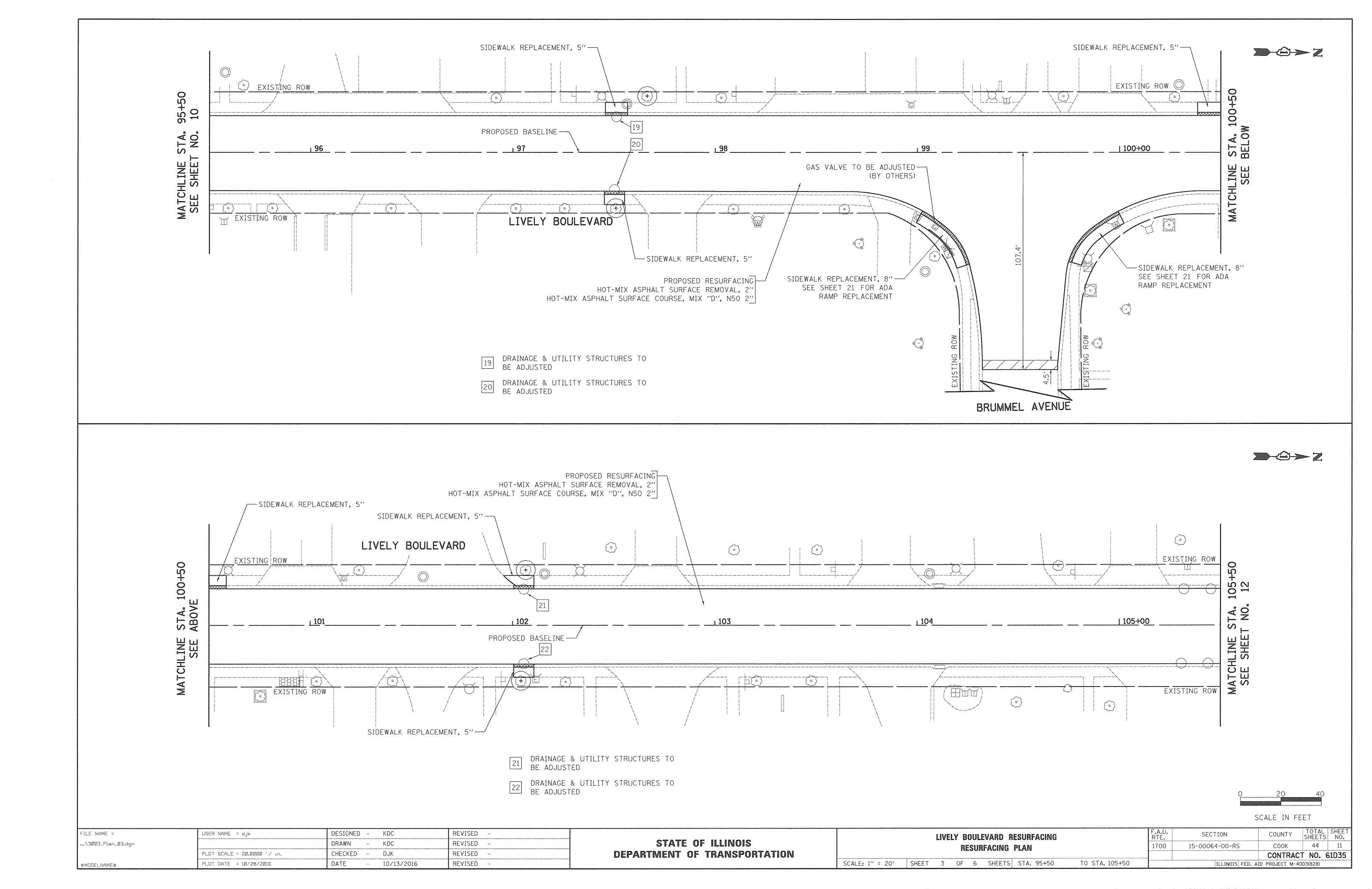
#### CONSTRUCTION SIGNS

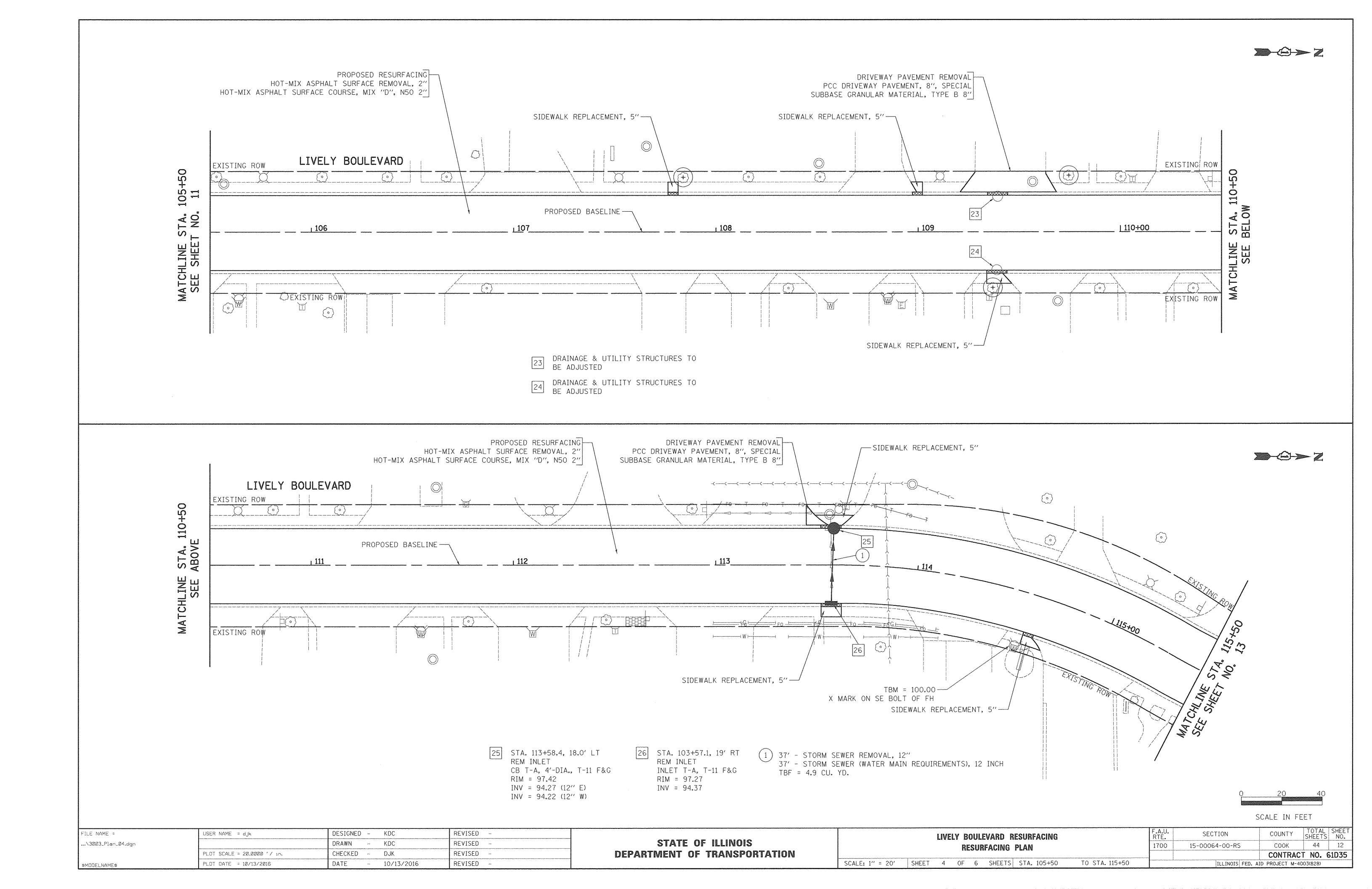


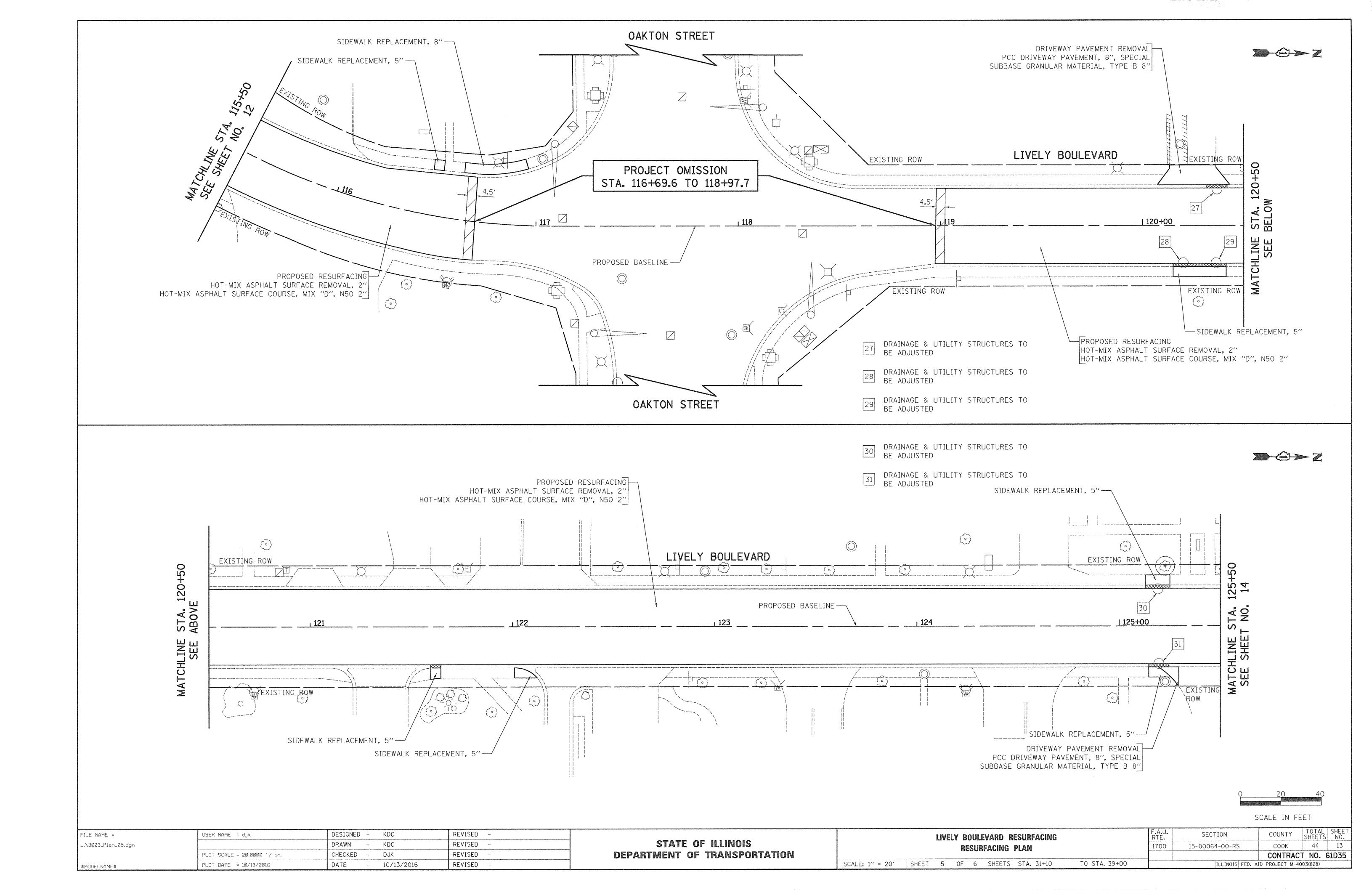
THESE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE COST SHALL BE INCLUDED IN THE COST OF THE VARIOUS TRAFFIC CONTROL AND PROTECTION PAY ITEMS INCLUDED IN THE CONTRACT.

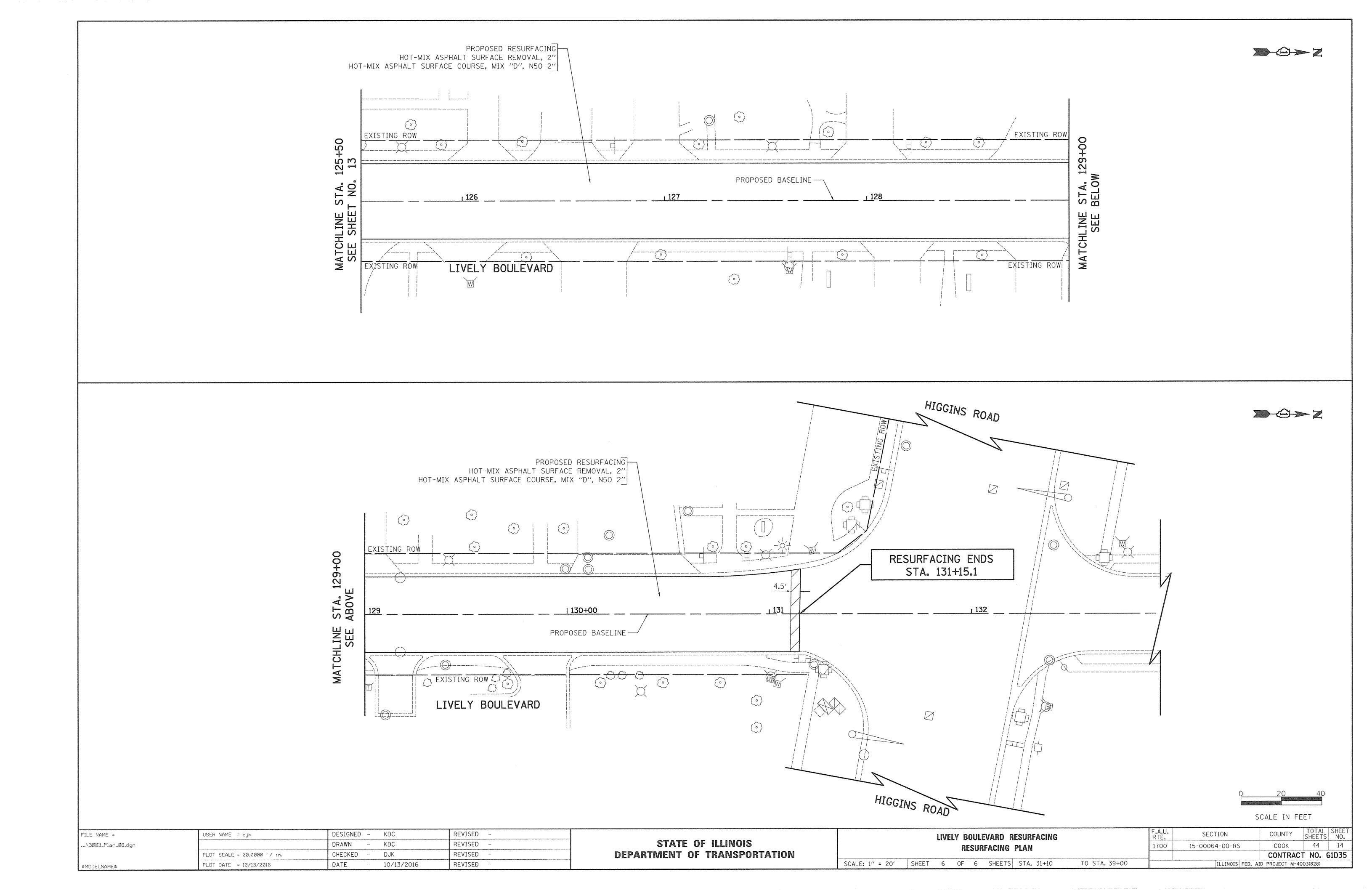


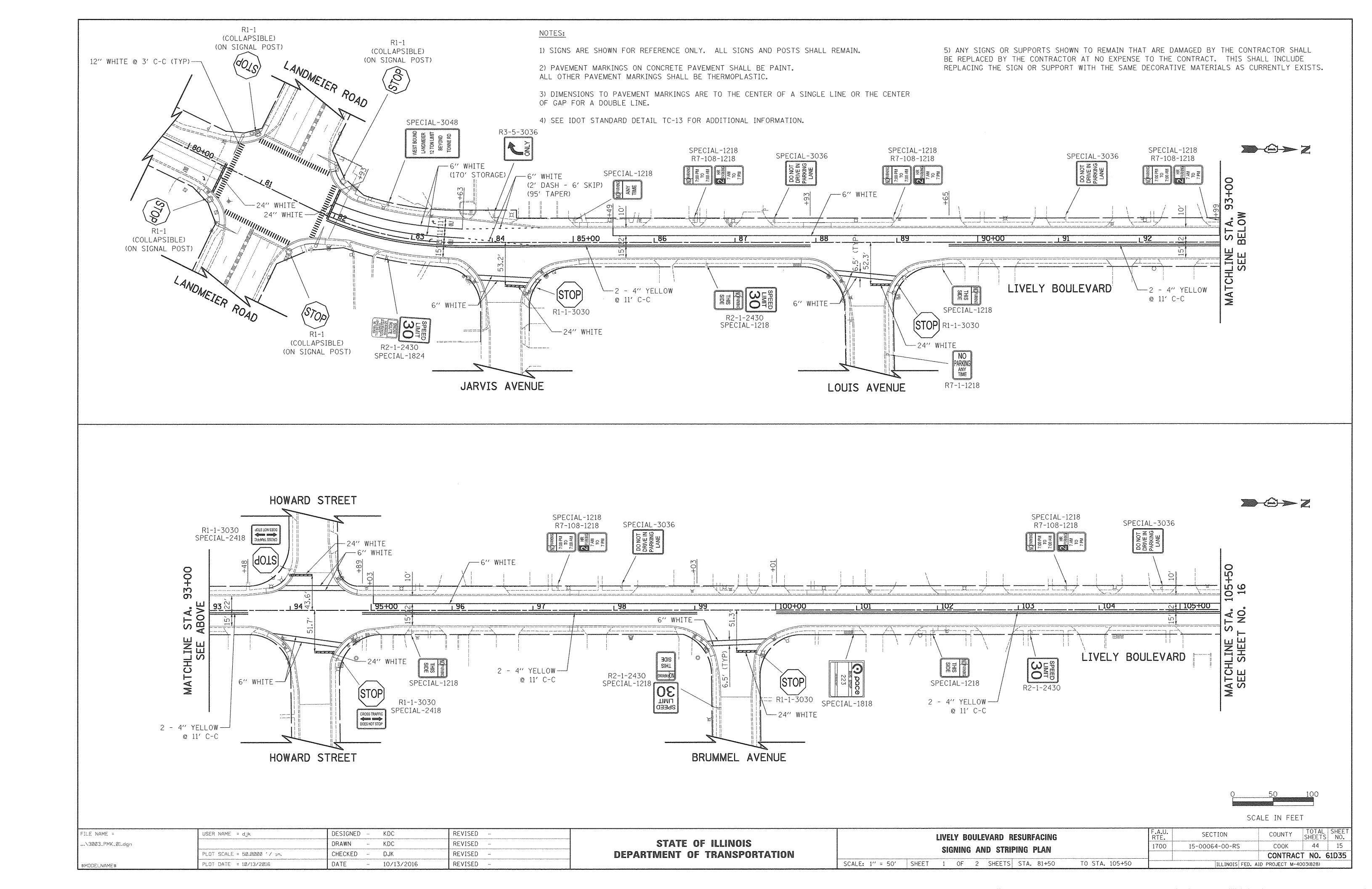














(ON SIGNAL POST)

1700

TO STA. 131+00

SIGNING AND STRIPING PLAN

SCALE: 1" = 50' | SHEET 2 OF 2 SHEETS | STA. 105+50

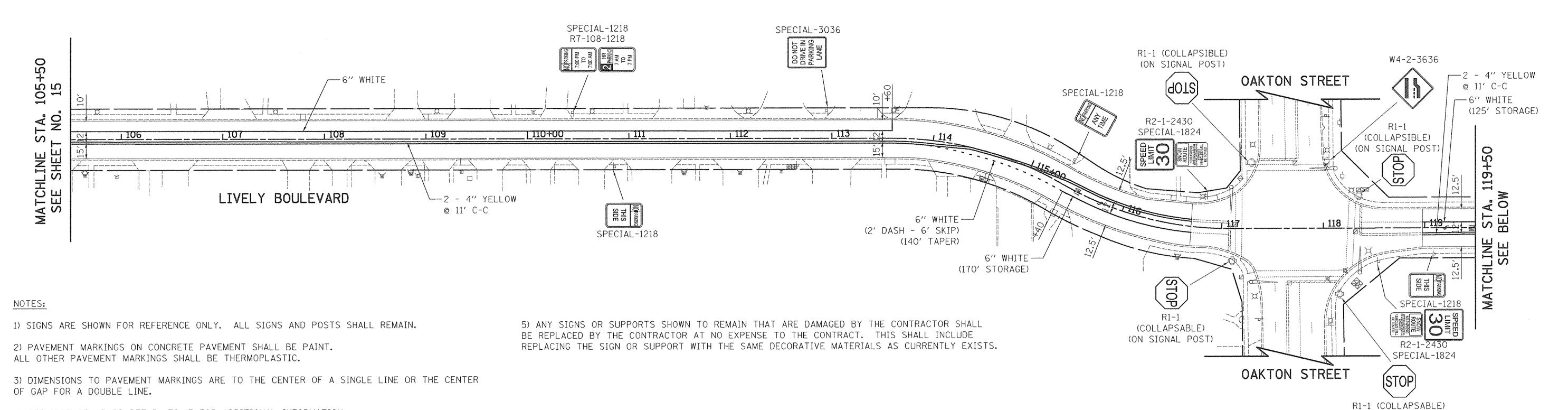
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44 16

CONTRACT NO. 61D35

COOK

ILLINOIS FED. AID PROJECT M-4003(828)



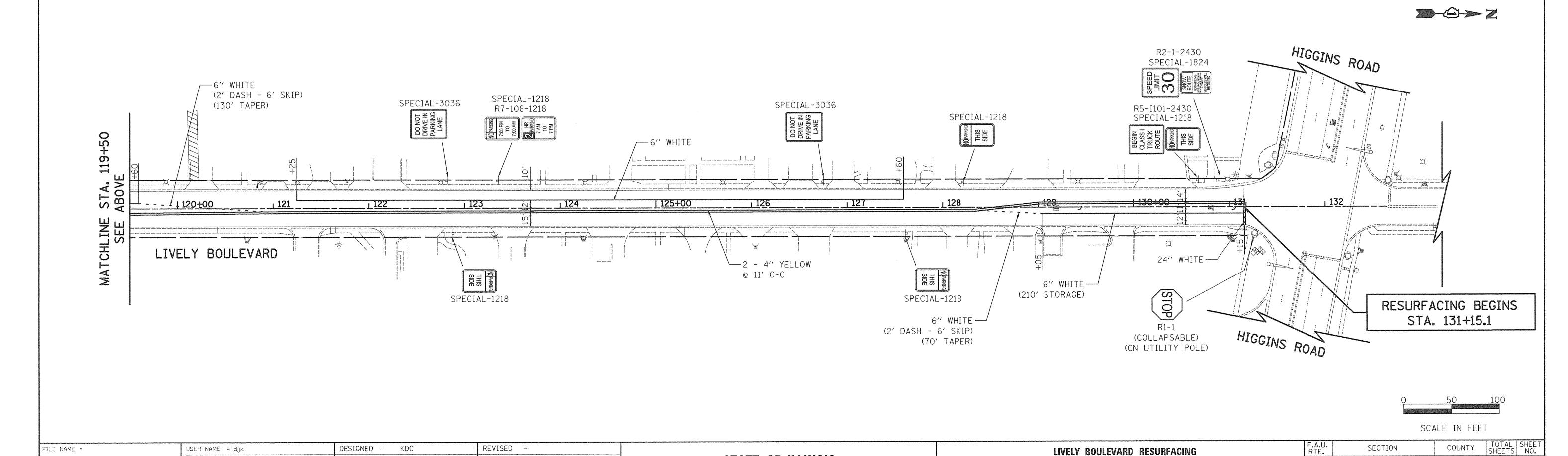
4) SEE IDOT STANDARD DETAIL TC-13 FOR ADDITIONAL INFORMATION.

PLOT SCALE = 50.0000 '/ 10.

PLOT DATE = 10/13/2016

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\$MODELNAME\$



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

REVISED

REVISED

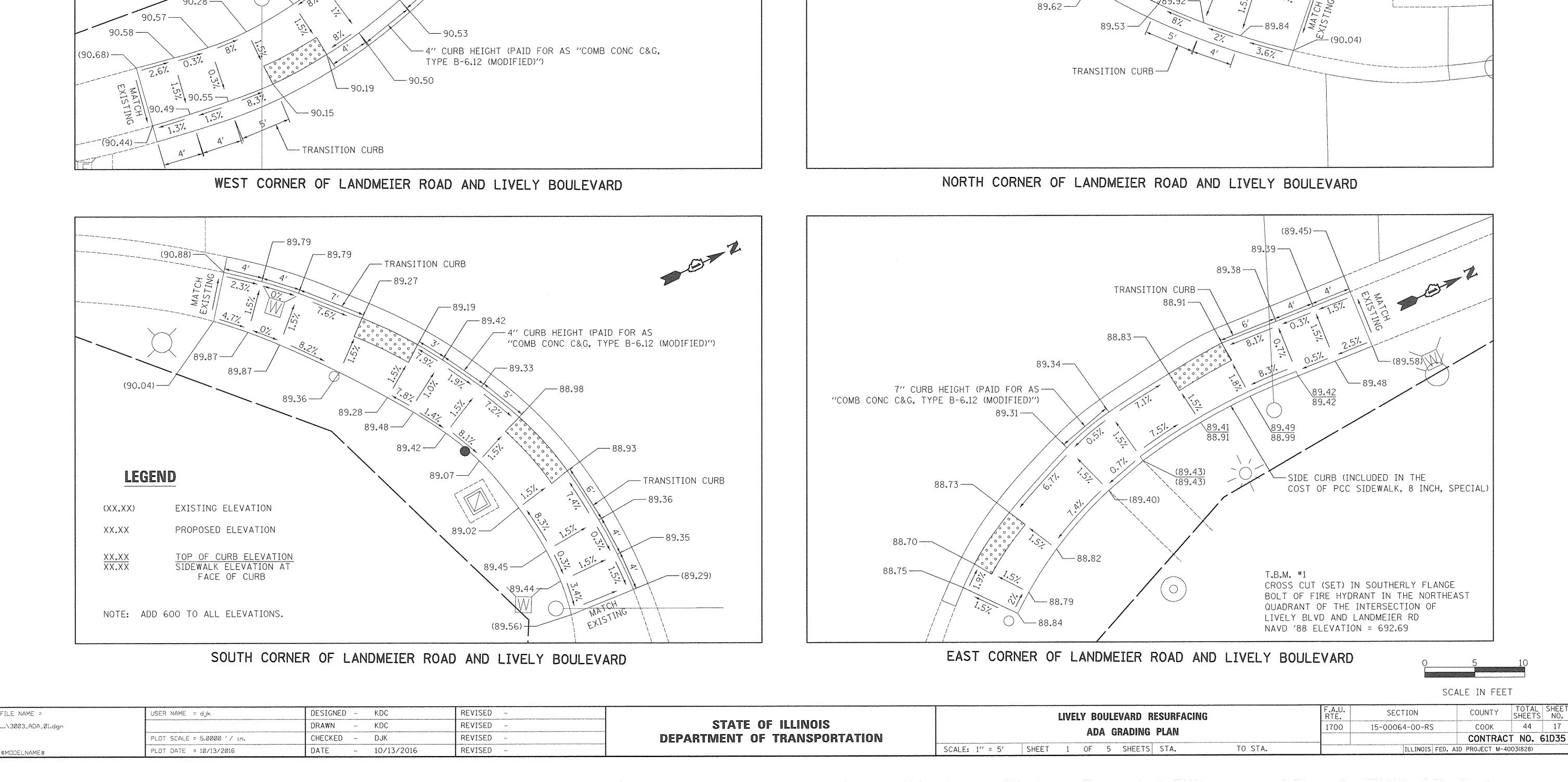
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KDC

10/13/2016

DRAWN

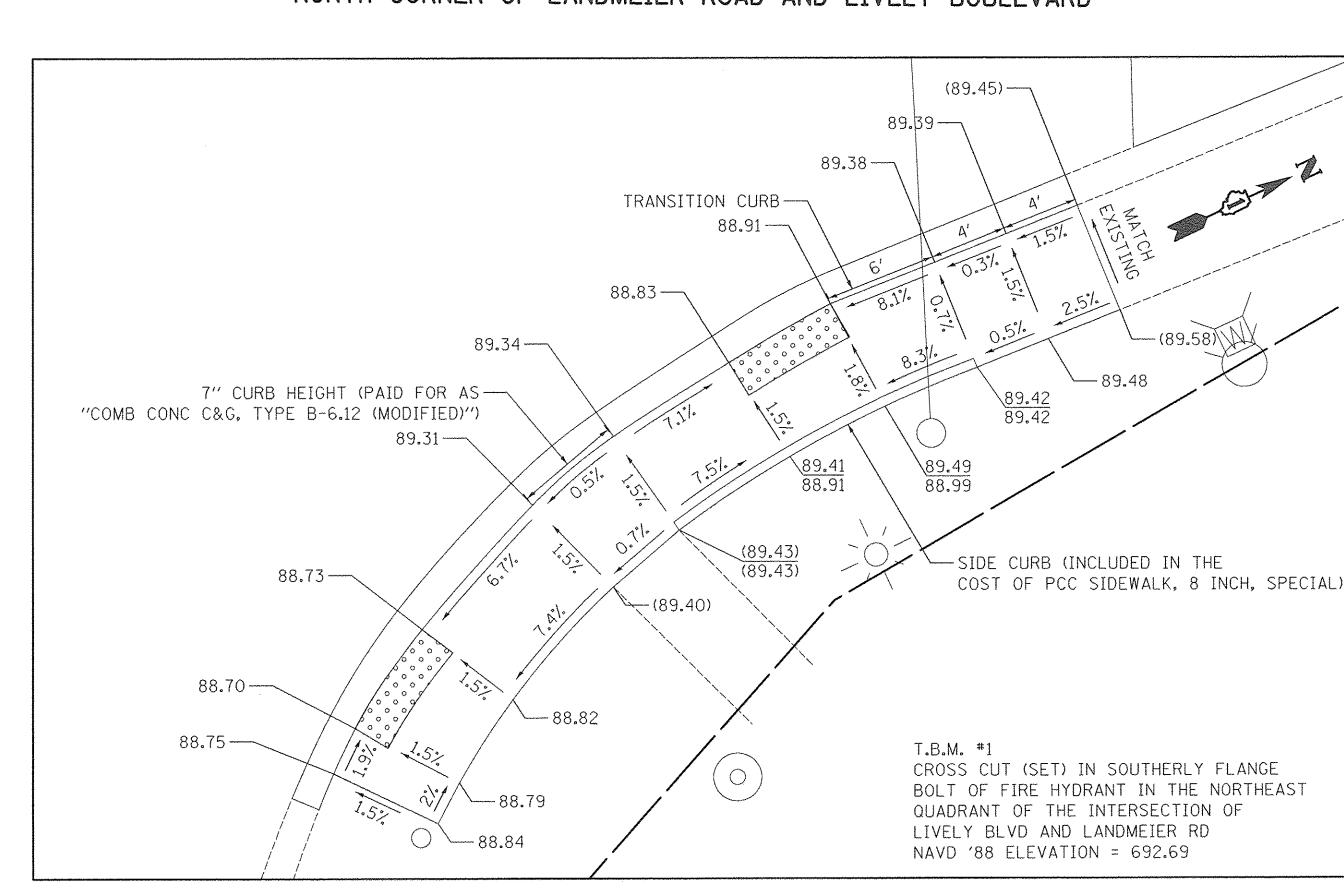
CHECKED - DJK



90.62-90.56-90.28-

MATCH

90.44



SIDE CURB (INCLUDED IN THE COST OF PCC SIDEWALK, 8 INCH,

89.98 /89.98

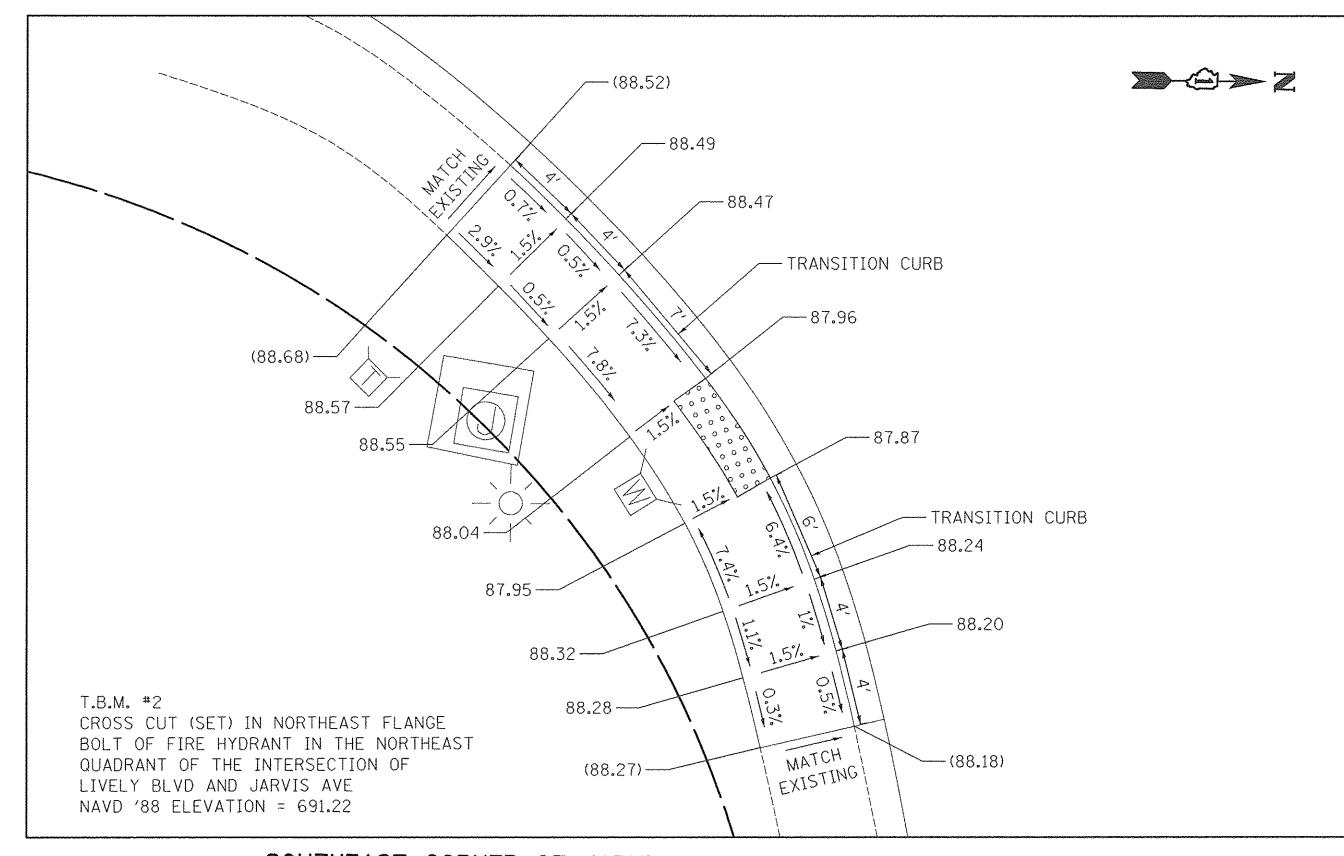
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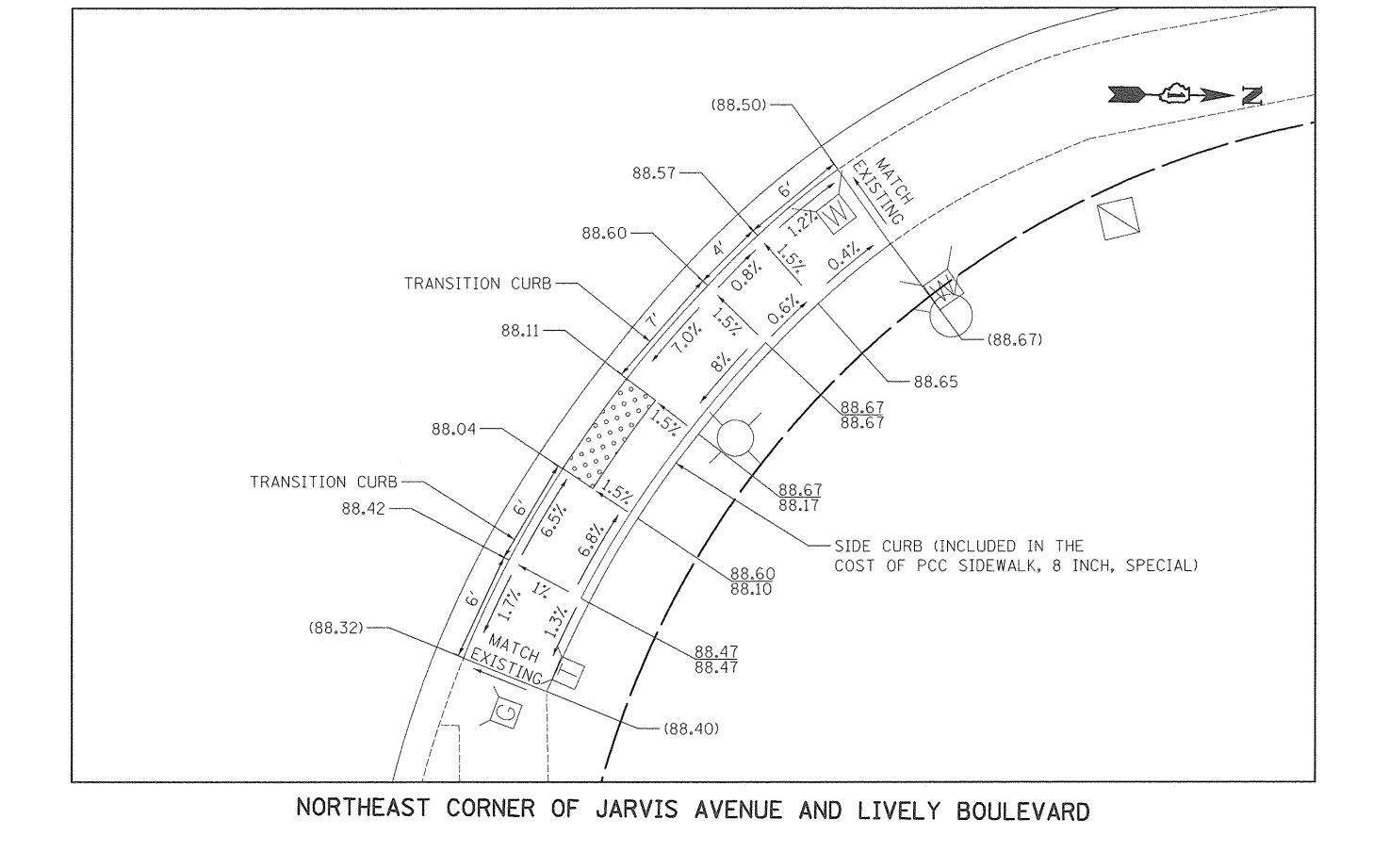
TOTAL SHEET SHEETS NO.

44 17

SPECIAL)

89.69 —





SOUTHEAST CORNER OF JARVIS AVENUE AND LIVELY BOULEVARD

#### LEGEND

(XX.XX) EXISTING ELEVATION

XX.XX PROPOSED ELEVATION

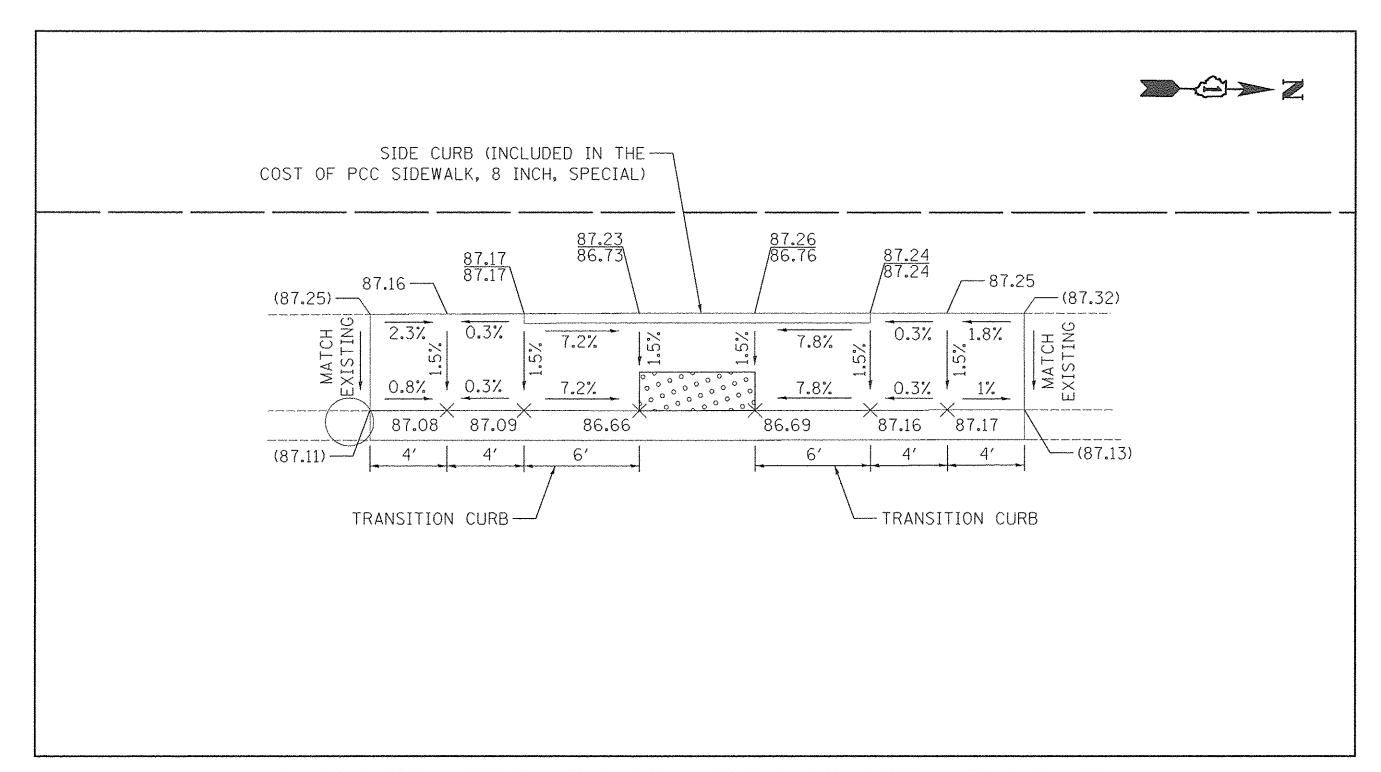
XX.XX
TOP OF CURB ELEVATION
SIDEWALK ELEVATION AT
FACE OF CURB

NOTE: ADD 600 TO ALL ELEVATIONS.

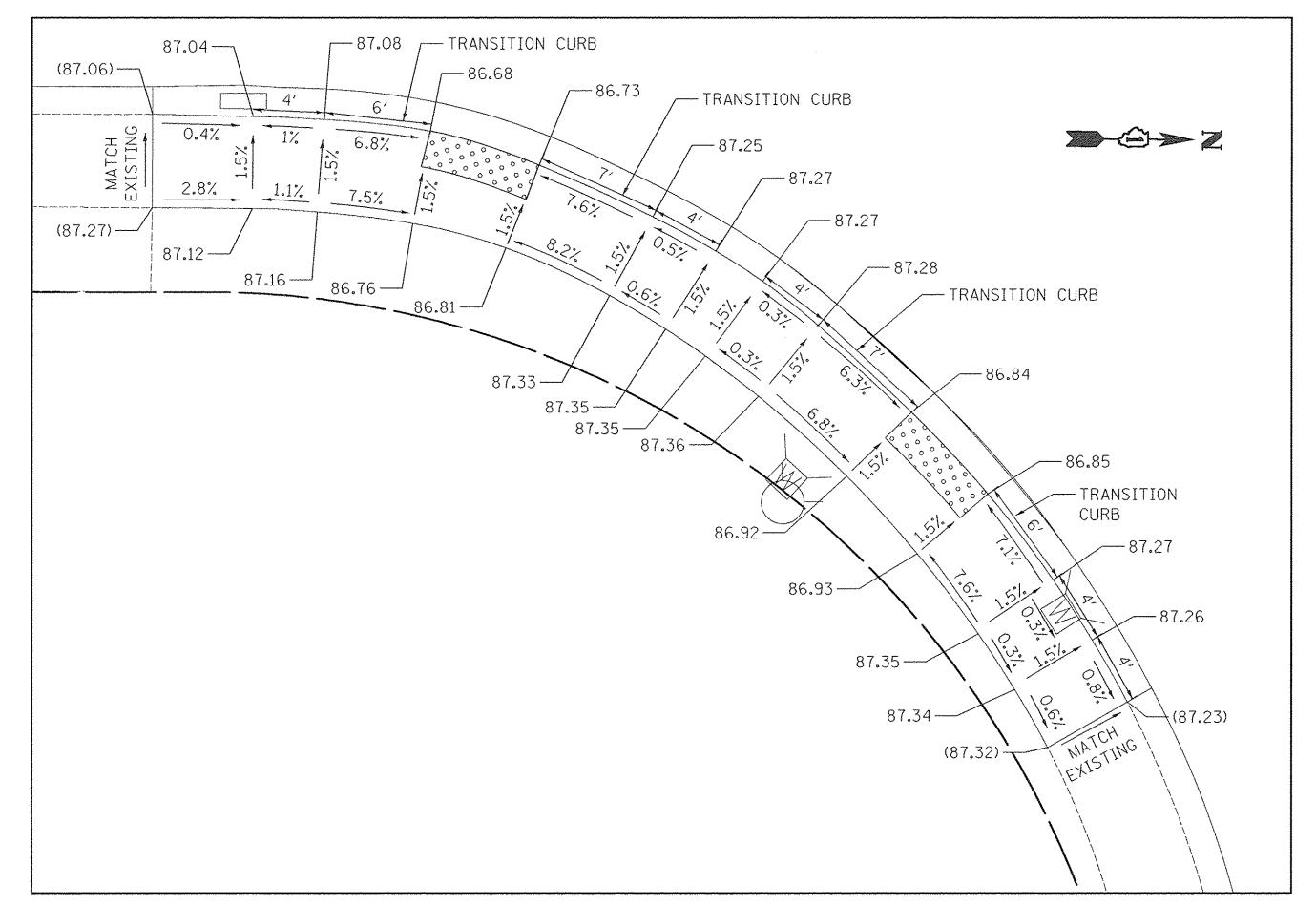


SCALE	IN	FEET

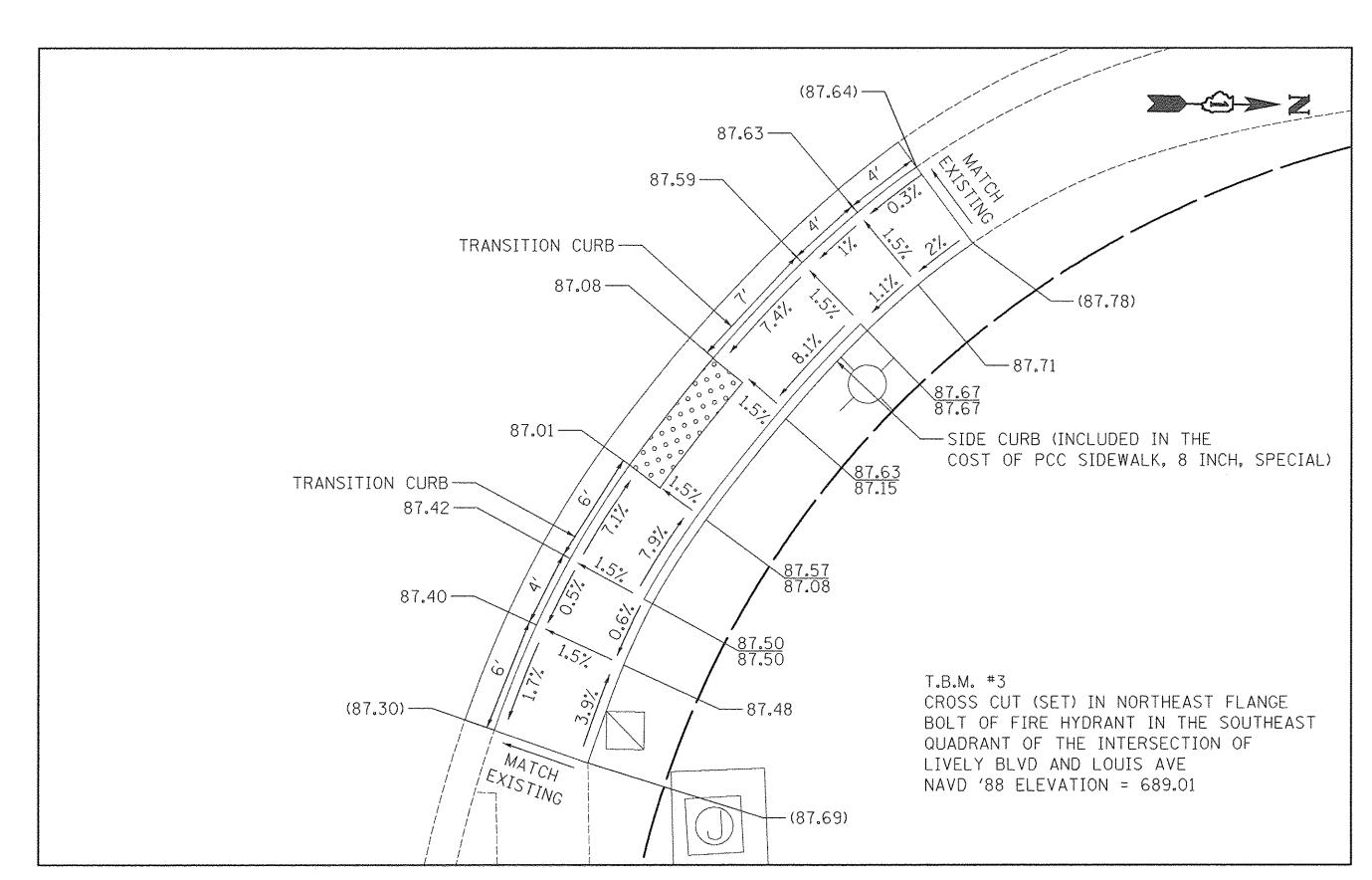
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\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: 1" = 5' SHEET 2 OF 5 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT M-400	03(828)



#### SOUTHWEST CORNER OF LOUIS AVENUE AND LIVELY BOULEVARD



SOUTHEAST CORNER OF LOUIS AVENUE AND LIVELY BOULEVARD



NORTHEAST CORNER OF LOUIS AVENUE AND LIVELY BOULEVARD



SCALE IN FEET

LEGEND

(XX.XX)

XX.XX

XX.XX XX.XX EXISTING ELEVATION

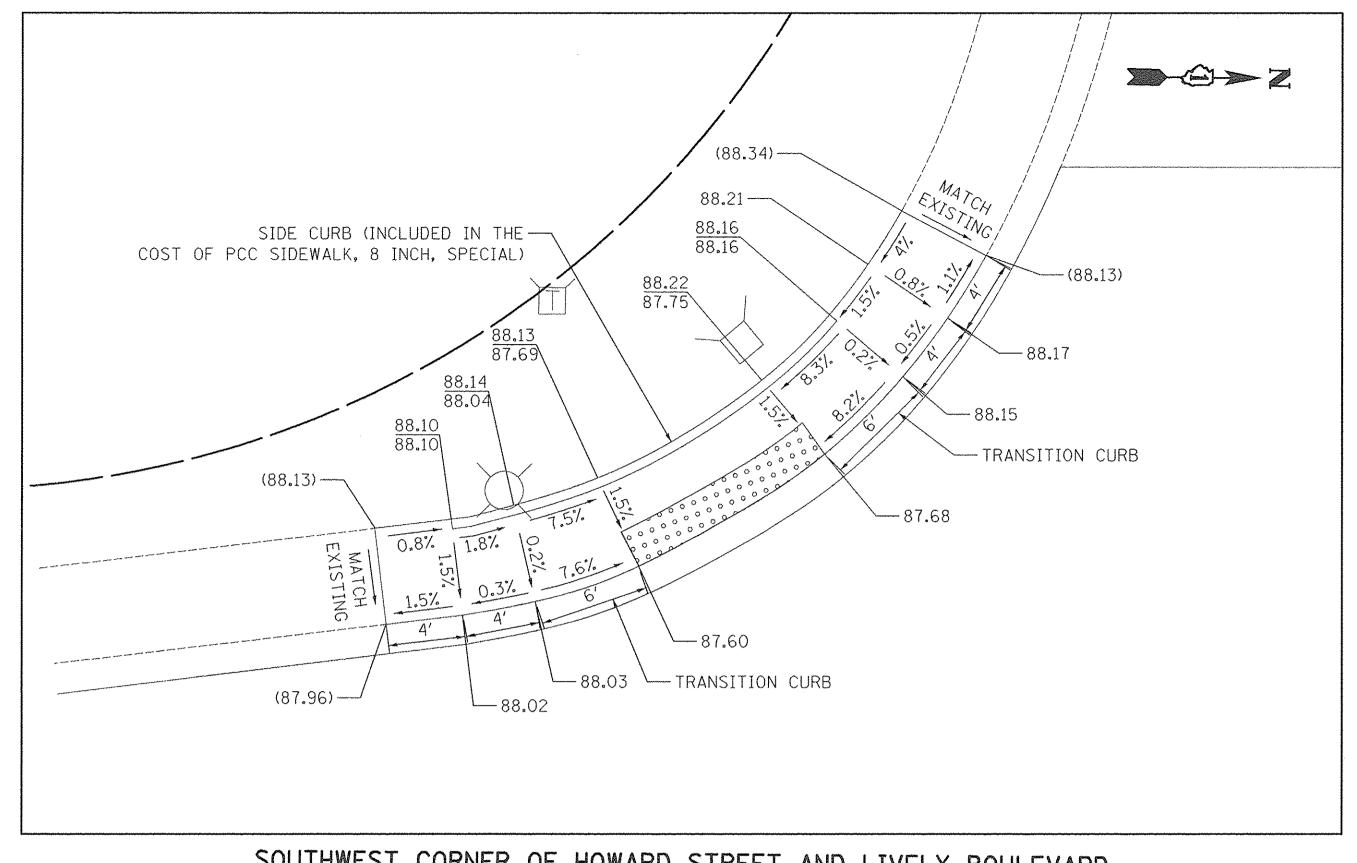
PROPOSED ELEVATION

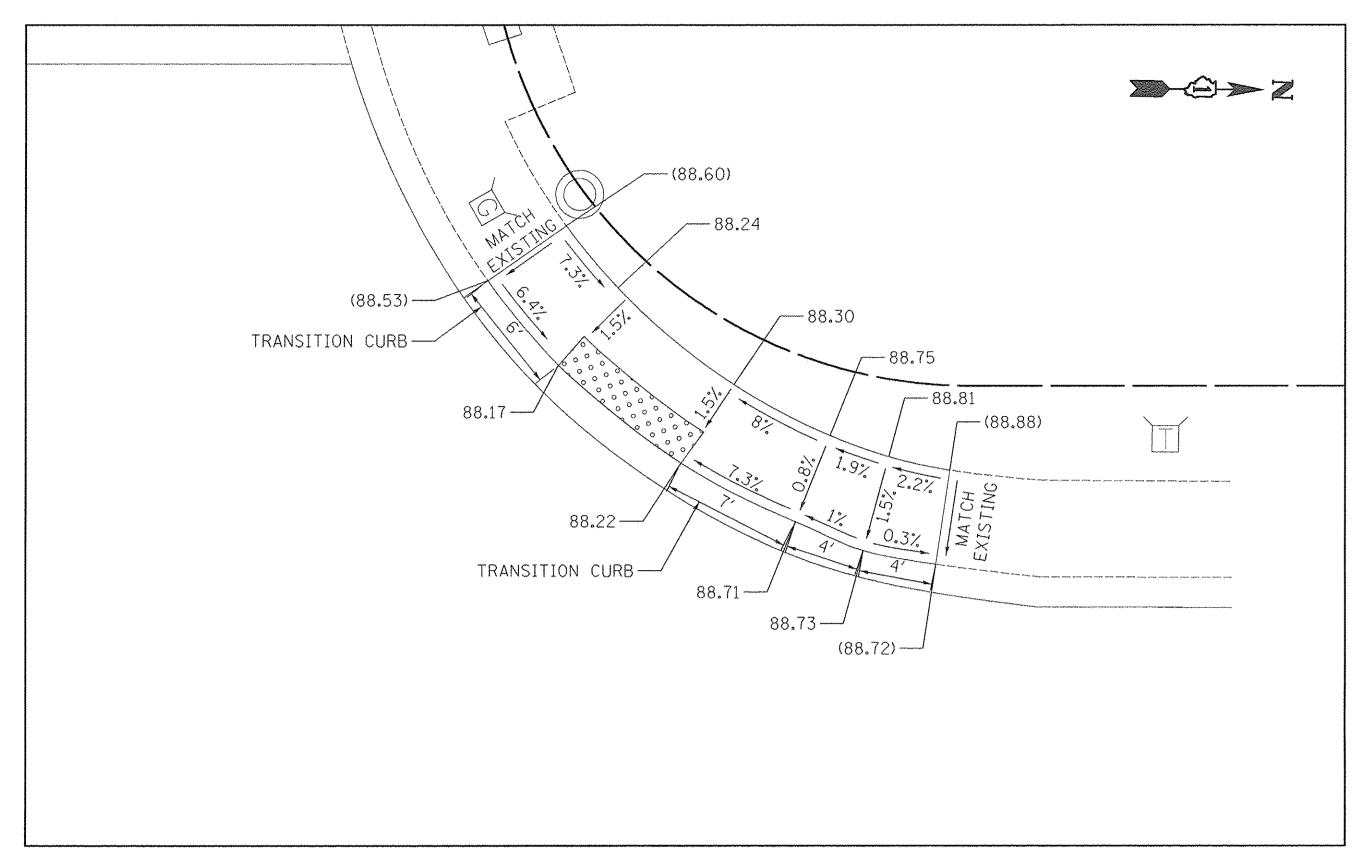
TOP OF CURB ELEVATION SIDEWALK ELEVATION AT

FACE OF CURB

NOTE: ADD 600 TO ALL ELEVATIONS.

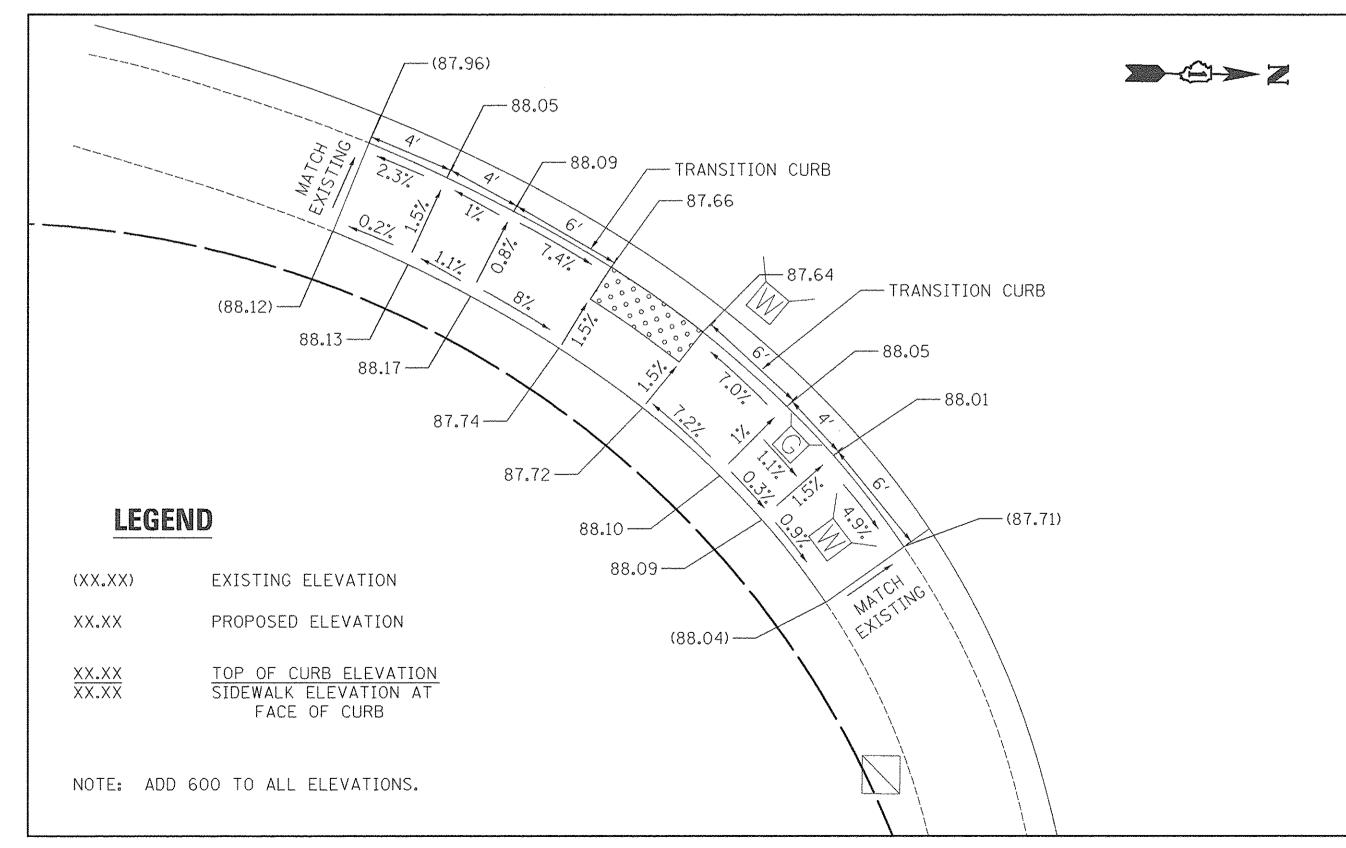
FILE NAME =	USER NAME = djk	DESIGNED - KDC	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHE SHEETS NO	ĒŤ ).
\3003_ADA_02A.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	ADA GRADING PLAN		15-00064-00-RS	соок	44 1	,
	PLOT SCALE = 5.0000 '/ in.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRAC	CT NO. 61D3	5
\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE ~ 10/13/2016	REVISED -		SCALE: 1" = 5' SHEET 3 OF 5 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT M-	4003(828)	



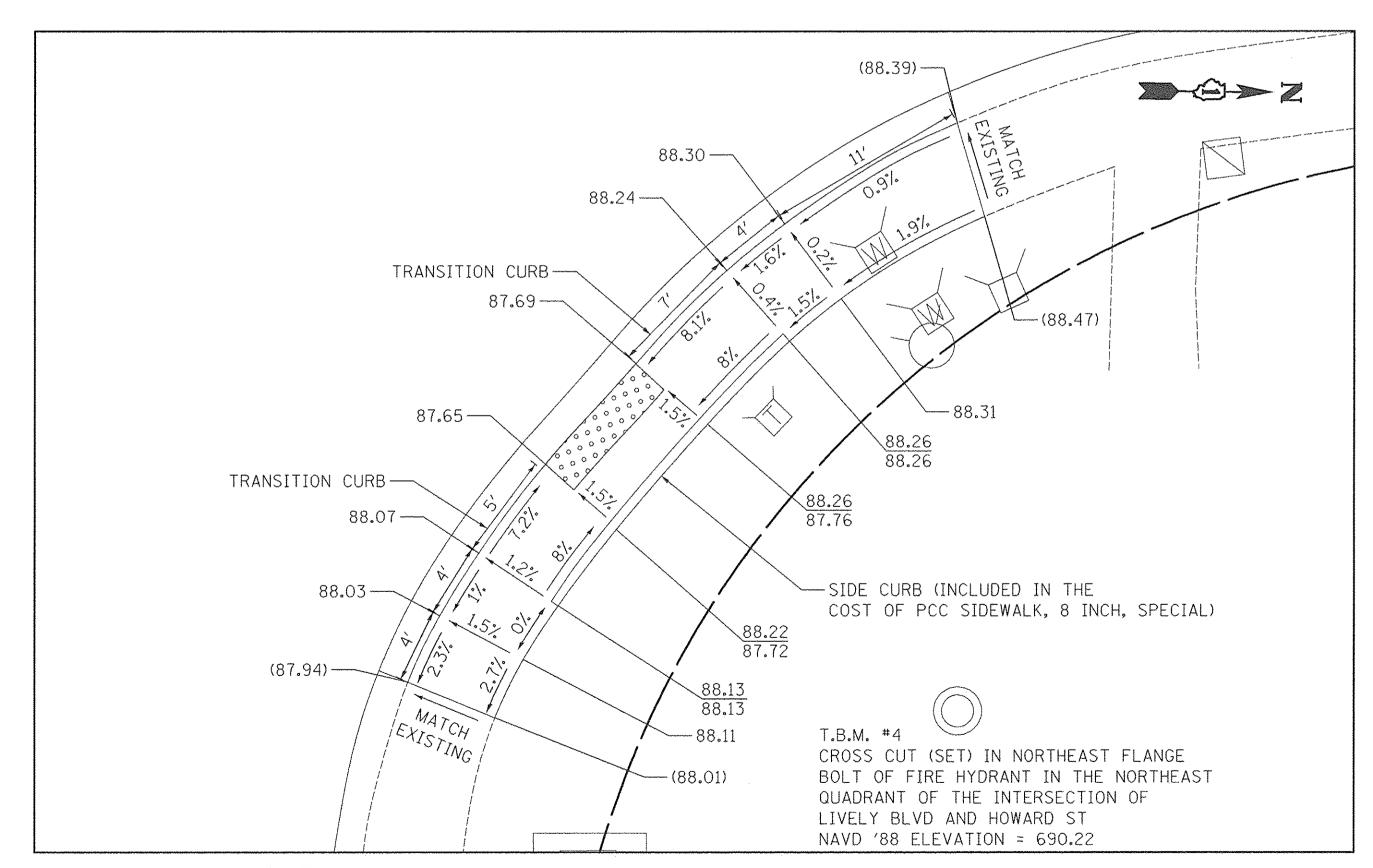


SOUTHWEST CORNER OF HOWARD STREET AND LIVELY BOULEVARD

NORTHWEST CORNER OF HOWARD STREET AND LIVELY BOULEVARD



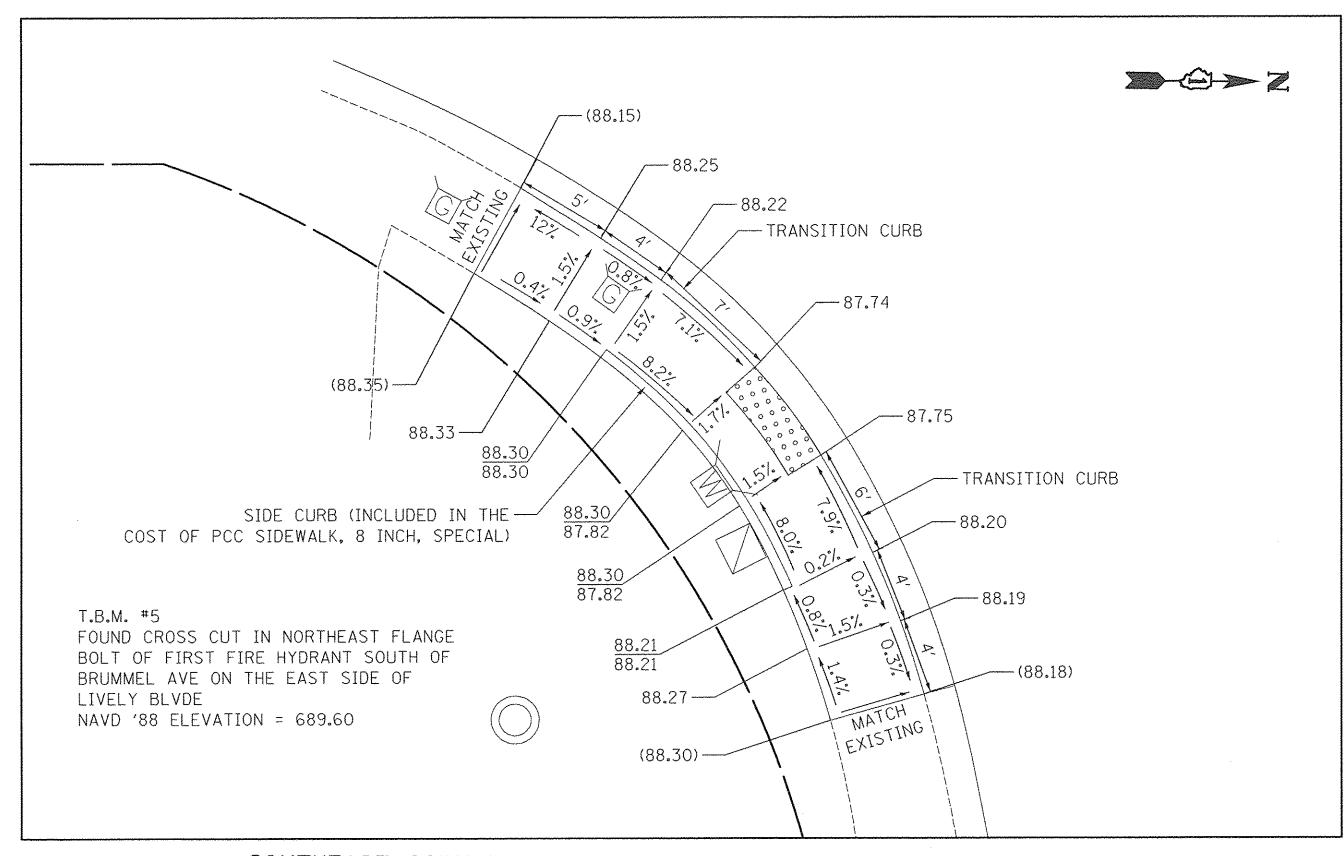
SOUTHEAST CORNER OF HOWARD STREET AND LIVELY BOULEVARD

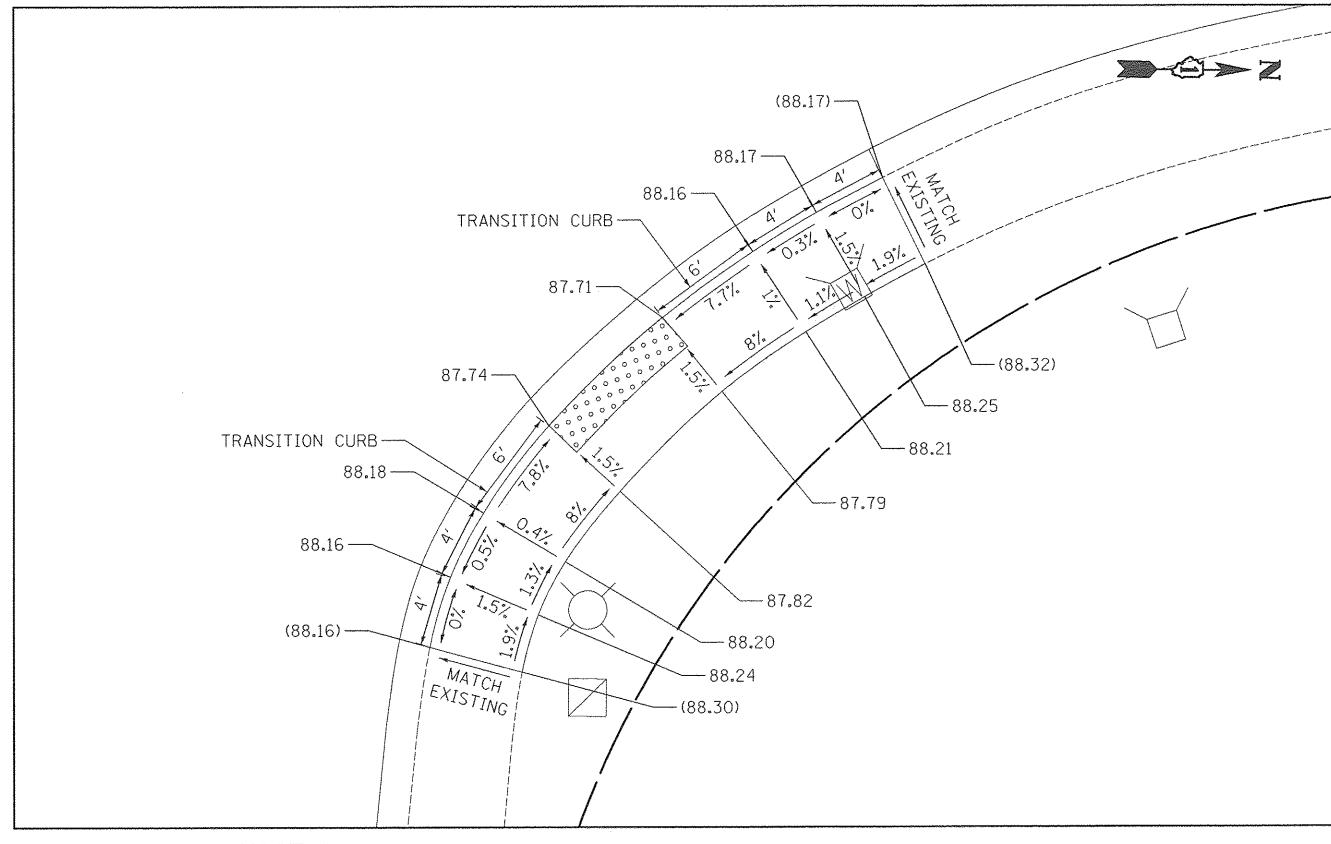


NORTHEAST CORNER OF HOWARD STREET AND LIVELY BOULEVARD

SCALE IN FEET

FILE NAME =\3003_ADA_03.dgn	USER NAME = djk	DESIGNED - KDC DRAWN - KDC	REVISED - REVISED -	STATE OF ILLINOIS	LIVELY BOULEVARD RESURFACING	F.A.U. RTE.	SECTION 15-00064-00-RS	COUNTY	TOTAL SI SHEETS	HEET NO. 20
	PLOT SCALE = 5.0000 '/ in.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION	ADA GRADING PLAN			CONTRAC	T NO. 610	)35
\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: 1" = 5' SHEET 4 OF 5 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT M-40	JO3(828)	Arrament literatural bareline





SOUTHEAST CORNER OF BRUMMEL AVENUE AND LIVELY BOULEVARD

NORTHEAST CORNER OF BRUMMEL AVENUE AND LIVELY BOULEVARD

#### LEGEND

(XX.XX) EXISTING ELEVATION

XX.XX PROPOSED ELEVATION

XX.XX
TOP OF CURB ELEVATION
XX.XX
SIDEWALK ELEVATION AT
FACE OF CURB

NOTE: ADD 600 TO ALL ELEVATIONS.



SCALE IN FEET

FILE NAME =	USER NAME = djk	DESIGNED - KDC	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. SECTION	COUNTY TOTAL SHEET SHEETS NO.
\3003_ADA_04.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	ADA GRADING PLAN	1700 15-00064-00-RS	COOK 44 21
	PLOT SCALE = 5.0000 '/ in.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION	AUA UNADING FLAN		CONTRACT NO. 61D35
\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: 1" = 5' SHEET 5 OF 5 SHEETS STA. TO STA.	ILLINOIS FED.	AID PROJECT M-4003(828)

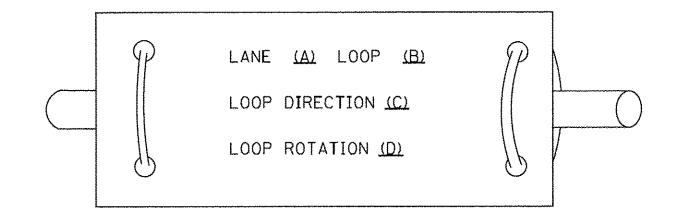
# TRAFFIC SIGNAL LEGEND

<u>ITEM</u>	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	<u>ITEM</u>	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R			EMERGENCY VEHICLE LIGHT DETECTOR	R≪	$\bowtie$	<b>~</b>	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	
RAILROAD CONTROL CABINET				CONFIRMATION BEACON	$R_{o-0}$	0—()	e{			$\sim$	
COMMUNICATIONS CABINET	C C	ECC	CC	HANDHOLE	R			COAXIAL CABLE		—(c)—	— <u>c</u> —
MASTER CONTROLLER		EMC	MC		D		<del></del>	VENDOR CABLE FOR CAMERA			
MASTER MASTER CONTROLLER	R	EMMC	MMC	HEAVY DUTY HANDHOLE	TH R	H	H			(v)	
UNINTERRUPTABLE POWER SUPPLY	<u>UPS</u>	EUPS	UPS	DOUBLE HANDHOLE	*\ R			COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	<del>6</del>
SERVICE INSTALLATION,  (P) POLE OR (G) GROUND MOUNT	-□ <sup>R</sup>	-LP	- <b>P</b>	JUNCTION BOX  UNDERGROUND CONDUIT.			9	FIBER OPTIC CABLE		—(12F)—	
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R	P	P	GALVANIZED STEEL (UC)			named Manda Andres Andres And	NO. 62.5/125, MM12F  FIBER OPTIC CABLE		—(24F)—	(24F)
STEEL MAST ARM ASSEMBLY AND POLE	R	0		TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		<del></del>	NO. 62.5/125, MM12F SM12F			
ALUMINUM MAST ARM ASSEMBLY AND POLE	R			COMMON TRENCH			СТ	FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F		—(36F)—	—(36F)—
STEEL COMBINATION MAST ARM	R ○-¤	O-X	• <del>×</del>	COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC			<b>,</b>	
	D X		-	SYSTEM ITEM		S	S	GROUND ROD AT (C) CONTROLLER,  (H) HANDHOLE, (P) POST, (M) MAST ARM,		C.	CC
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	PIZI	PTZ]]	PTZ	INTERSECTION ITEM		I	IΡ	OR (S) SERVICE		-1	•
SIGNAL POST	R O	0	•	REMOVE ITEM	R			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R ⊗	$\otimes$		RELOCATE ITEM	RL			STEEL MAST ARM POLE AND	RMF		
GUY WIRE	R	>	<b>&gt;</b>	ABANDON ITEM  12" (300mm) TRAFFIC SIGNAL SECTION	А	R	R	FOUNDATION TO BE REMOVED			
SIGNAL HEAD	R 							ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL HEAD CONSTRUCTION STAGES	7		_ 2	12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				STEEL COMBINATION MAST ARM ASSEMBLY			
(NUMBERS INDICATE THE CONSTRUCTION STAGE)							R	AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF O→X		
SIGNAL HEAD WITH BACKPLATE	+P	+	+-			(Y)	<del>     </del>				
SIGNAL HEAD OPTICALLY PROGRAMMED	R -□''P''	<b>−</b> >′′p′′	- <b>&gt;</b> "P"	SIGNAL FACE		G	G	SIGNAL POST AND FOUNDATION TO BE REMOVED	RPF O		
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R O- <b>⊳</b> ′′F′′	O-□>''F''	<b>← * * * * * * * * * *</b>			<b>4</b> -G	<b>4</b> G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR		[IS]	IS
PEDESTRIAN SIGNAL HEAD	R -	-[]				R	R	SAMPLING (SYSTEM) DETECTOR		[5]	S
PEDESTRIAN PUSHBUTTON DETECTOR	R	<b>©</b>	<b>©</b>	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		(C)	G	QUEUE DETECTOR			Q
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R	<pre> @APS</pre>	APS	"RB" INDICATES REFLECTIVE BACKPLATE		( <b>4 Y</b> ) ( <b>4 G</b> )	<b>←</b> Y <b>←</b> G	DDEEODMED OUELE DETECTOD			ÎPQÎ
ILLUMINATED SIGN "NO LEFT TURN"	R R		•			ι <del>ν ν</del>	ηρη.	PREFORMED QUEUE DETECTOR		ÎPQÎ	<u> Fu </u>
	D			12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W		PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
ILLUMINATED SIGN "NO RIGHT TURN"				12" (300mm) PEDESTRIAN SIGNAL HEAD				PREFORMED SAMPLING (SYSTEM) DETECTOR		ÎPSÎ	PS
DETECTOR LOOP, TYPE I				INTERNATIONAL SYMBOL, OUTLINED						<b>bb</b>	<b></b>
PREFORMED DETECTOR LOOP		%- <b></b> ÷	P	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			*	RAILROAD	SYMRO	210	
	R	↓P ↓					<del></del>		VIIVILU		
MICROWAVE VEHICLE SENSOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		© D	C AD			EXISTING	PROPOSED
VIDEO DETECTION CAMERA	<sup>R</sup> (√)	[V]1	<b>\(\sigma\)</b>	RADIO INTERCONNECT	<del>                                       </del>	##+		RAILROAD CONTROL CABINET			R
VIDEO DETECTION ZONE				RADIO REPEATER	R ERR	ERR	RR	RAILROAD CANTILEVER MAST ARM	Σ	XOX X	Xex
PAN, TILT, ZOOM CAMERA	R [PTZ]:	[ <del>P</del> TZ]1	PTZ <b>I</b>	DENOTES NUMBER OF CONDUCTORS, ELECTRIC		LENN		FLASHING SIGNAL		$\times \Theta \times$	<b>X</b> -X
	-			CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSING GATE		<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>	XOX
WIRELESS DETECTOR SENSOR	RW	(W)	(W)	GROUND CABLE IN CONDUIT		~		CROSSBUCK		<b>7</b>	
WIRELESS ACCESS POINT				NO. 6 SOLID COPPER (GREEN)		1	(1)			land	_
FILE NAME = USER NAME = footemj c:\pw_work\pwidot\footemj\d0108315\ts05.dgn	· · · · · · · · · · · · · · · · · · ·	DESIGNED - DAG/BCK DRAWN - BCK	REVISED -	DAG 1-1-14 STAT	E OF ILLINOI	S		DISTRICT ONE	F.A.U. RTE.	SECTION 15-00064-00-RS	COUNTY TOTAL SHEET NO.  COOK 44 22
PLOT SCALE = 50.0000 '/	ın.	CHECKED - DAD	REVISED -	DEPARTMENT			COALE: NO	STANDARD TRAFFIC SIGNAL DESIGN DETAILS  IE SHEET NO. 1 OF 7 SHEETS STA. TO STA	1100	TS-05	CONTRACT NO. 61D35
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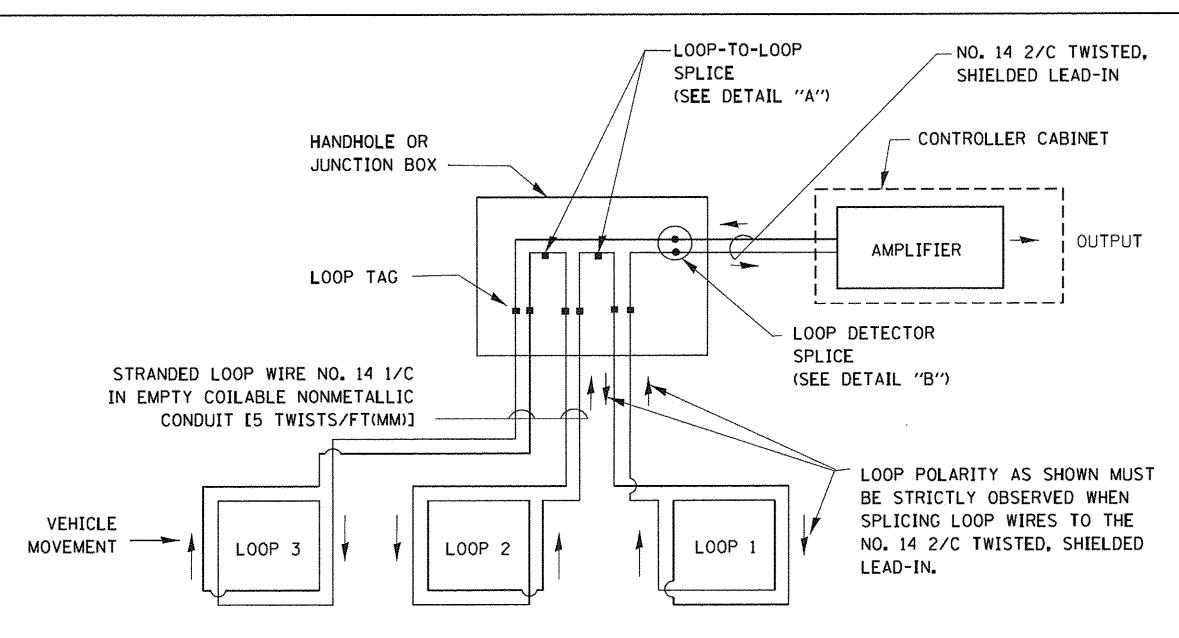
#### **LOOP DETECTOR NOTES**

- 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



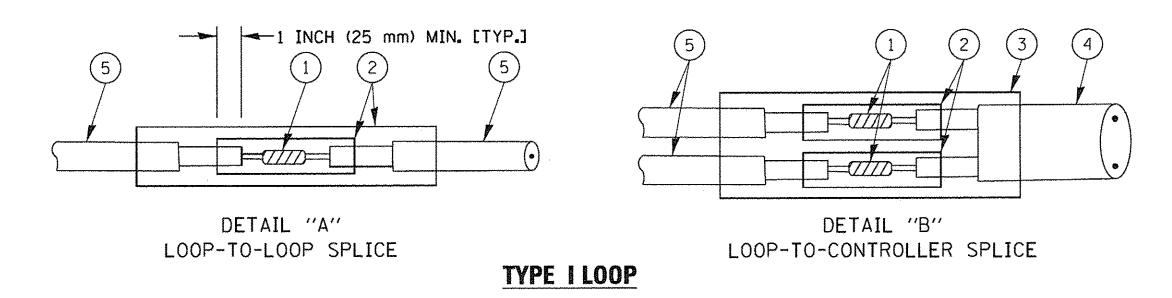
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

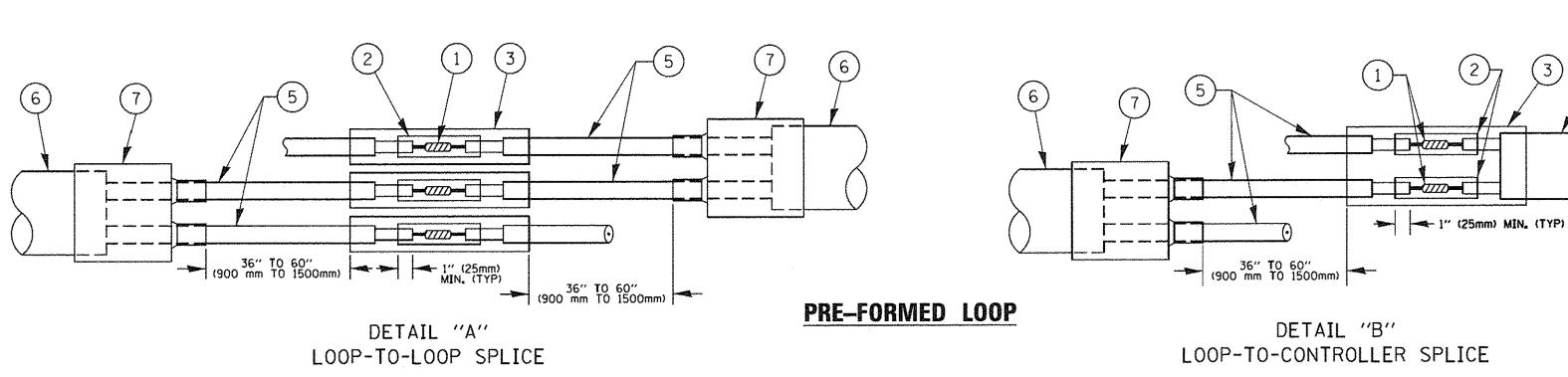


#### **DETECTOR LOOP WIRING SCHEMATIC**

- 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.





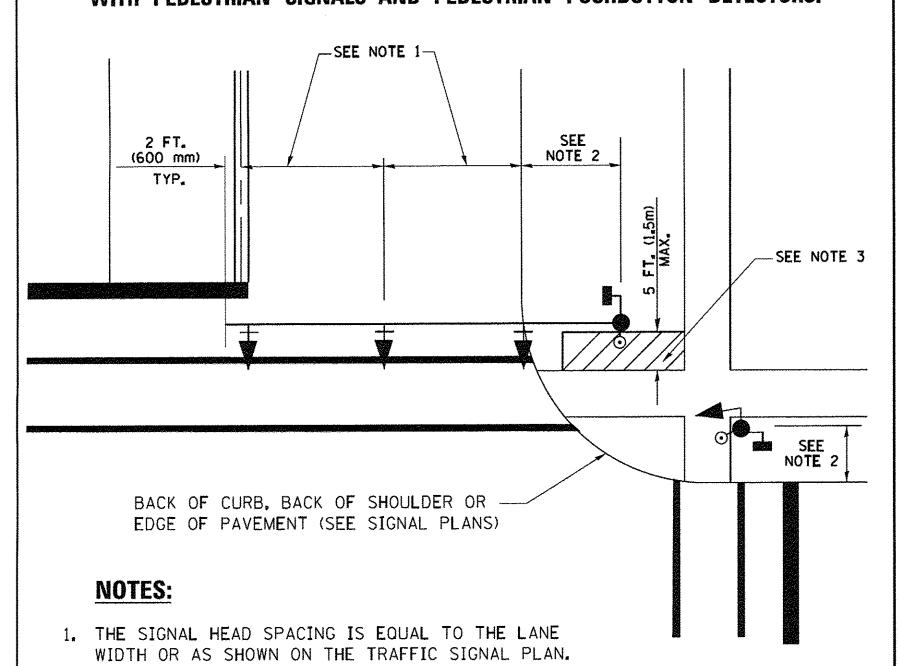
#### LOOP DETECTOR SPLICE

- 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 LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- The state of the s

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	PLOT SCALE = 50.0000 '/ 10.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		TS-05 CONTRACT NO. 61D35
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(828)

# 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.

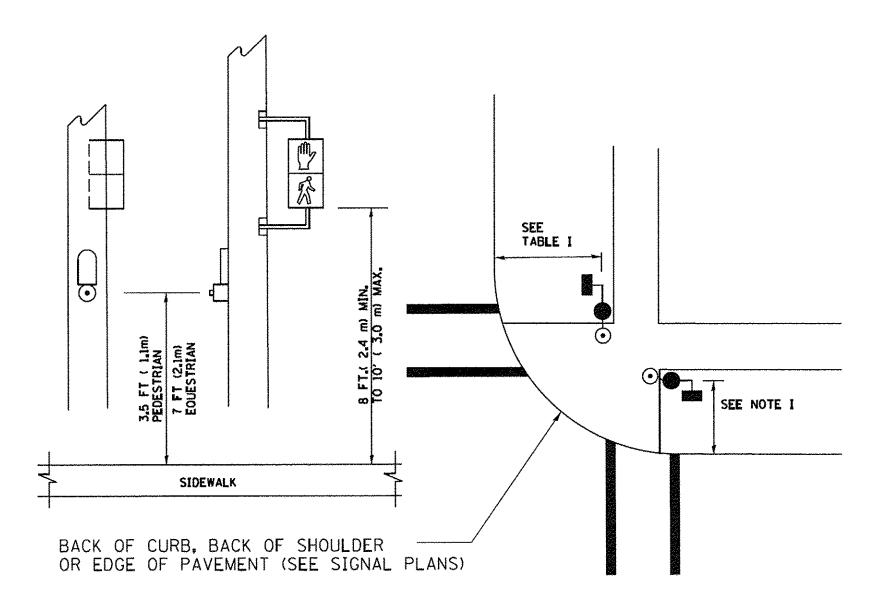


- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO 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."

# 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.

# 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."

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- \* 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.

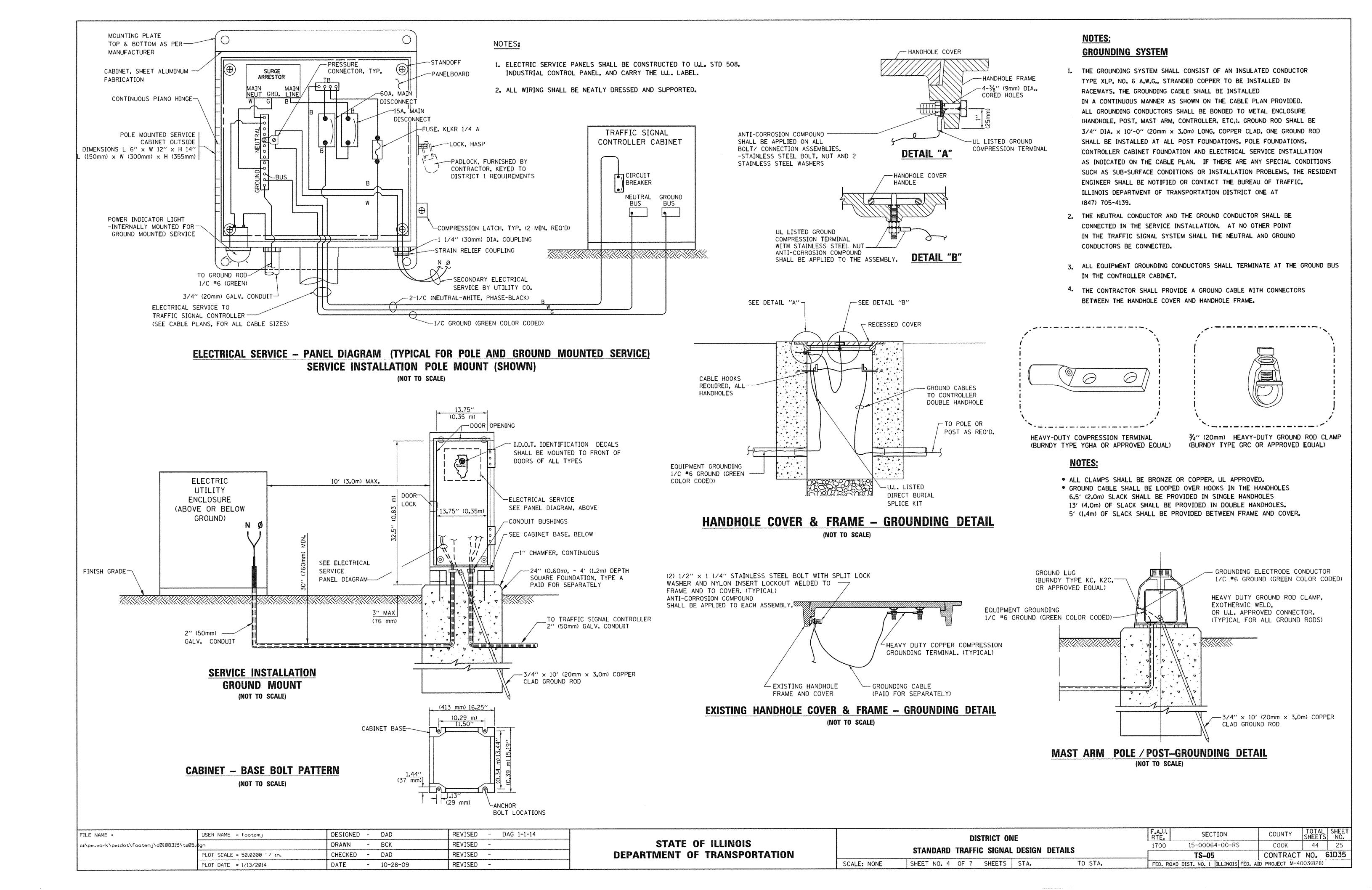
#### TRAFFIC SIGNAL FOUIPMENT OFFSET

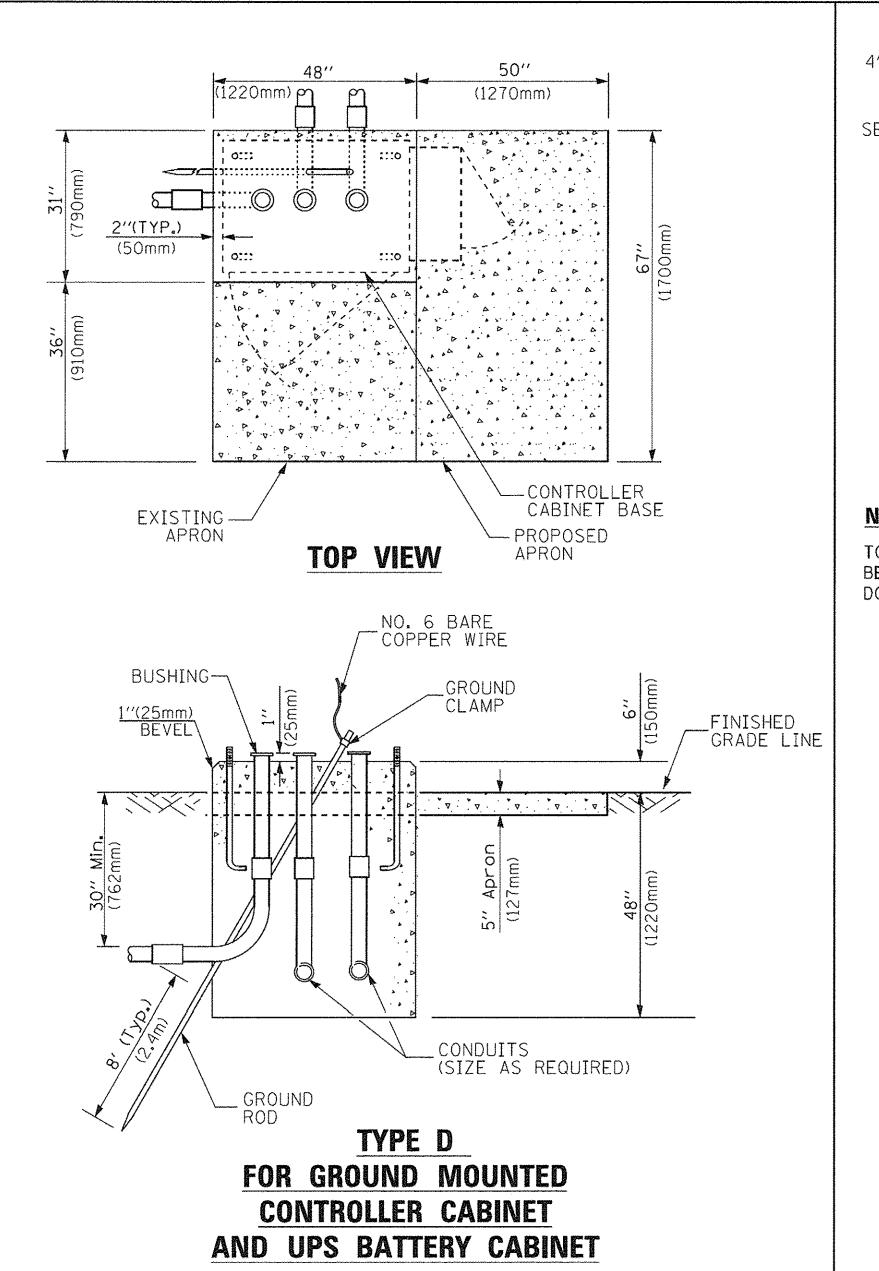
	TIVALLE STONAL LOOP WENT OF SET								
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)							
TRAFFIC SIGNAL MAST ARM POLE	6 FT (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.							

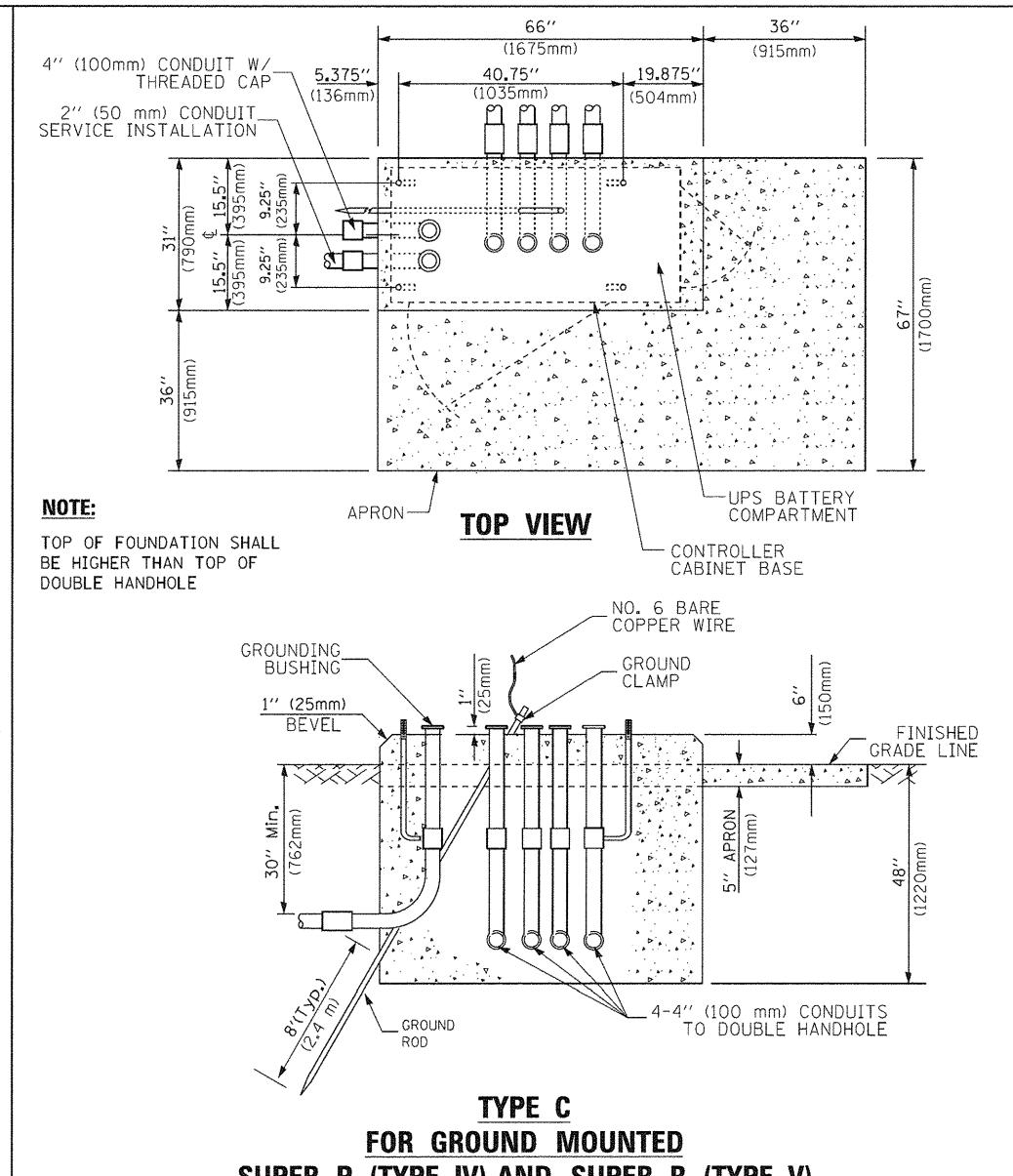
#### **NOTES:**

- 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 TOTHE 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.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14		DISTRICT ONE	F.A.U. SECTION C	COUNTY TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\footemj\d0108315\ts05	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	1700 15-00064-00-RS	COOK 44 24
	PLOT SCALE = 50.0000 '/ 10.  PLOT DATE = 1/13/2014	CHECKED - DAD     DATE - 10-28-09	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: NONE SHEET NO. 3 OF 7 SHEETS STA. TO STA.		CONTRACT NO. 61D35 PROJECT M-4003(828)







SUPER P (TYPE IV) AND SUPER R (TYPE V) **CONTROLLER CABINETS** 

65" (SEE NOTE 4) (1651mm) 49" (SEE NOTE 3) (1245mm) (1245mm) (1118mm) (406mm) (64mm) 1" (25mm) (25mm)	
(S1mm)	2" × 6" (51mm × 152mm) WOOD FRAMING (TYP.)
TRAFFIC SIGNAL CONTROLLER CABINET	
7/4" (19mm) TREATED PHYWOOD DECK	- UPS CABINET
2" x 6" (51mm x 152mm) TREATED WOOD (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm) (305mm)	
NOTES:   6" × 6" (152mm × 152mm)  TREATED WOOD POSTS	

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

#### TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1,5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0,5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2,0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4,1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

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

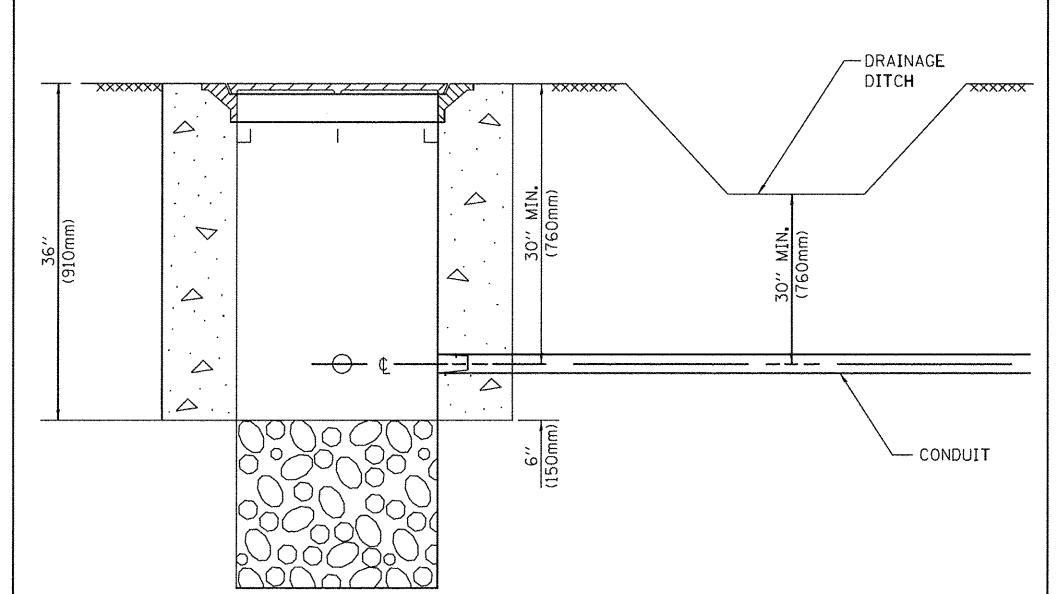
#### **DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'~6" (4 <sub>#</sub> 1 m)	30'' (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4 <sub>*</sub> 0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 <b>.</b> 6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6,4 m)	42'' (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7 <b>.</b> 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

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

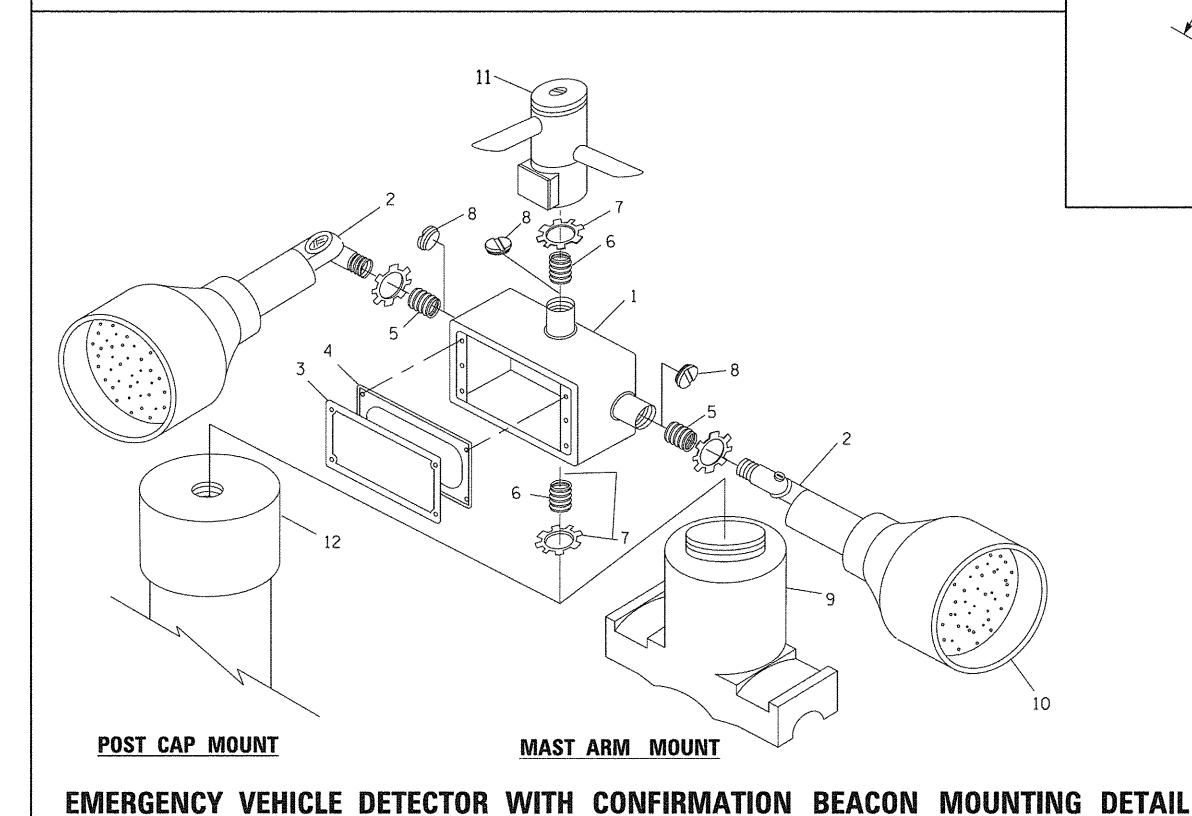
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ci\pw.work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		1700 15-00064-00-RS	COOK 44 26
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRACT NO. 61D35
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED	D. AID PROJECT M-4003(828)

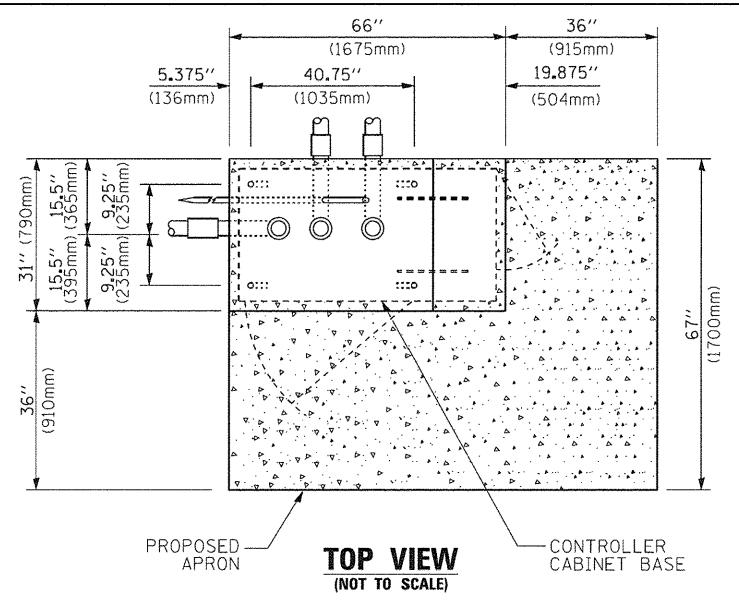


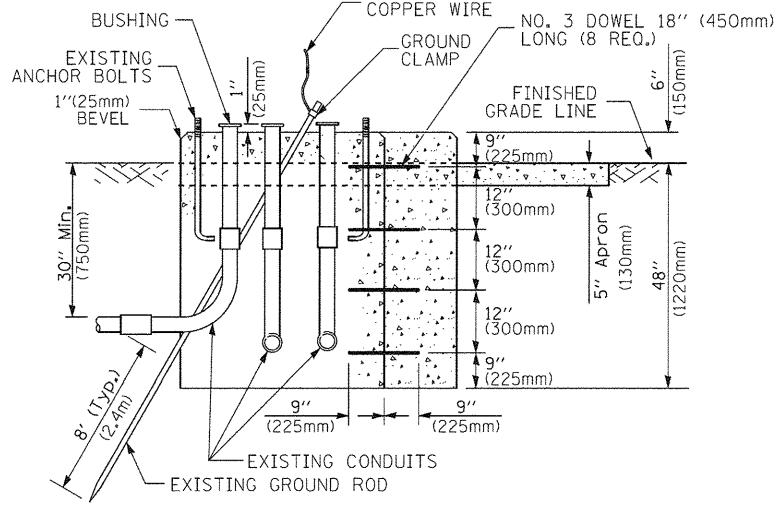
#### **NOTES:**

- 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)







NO. 6 BARE

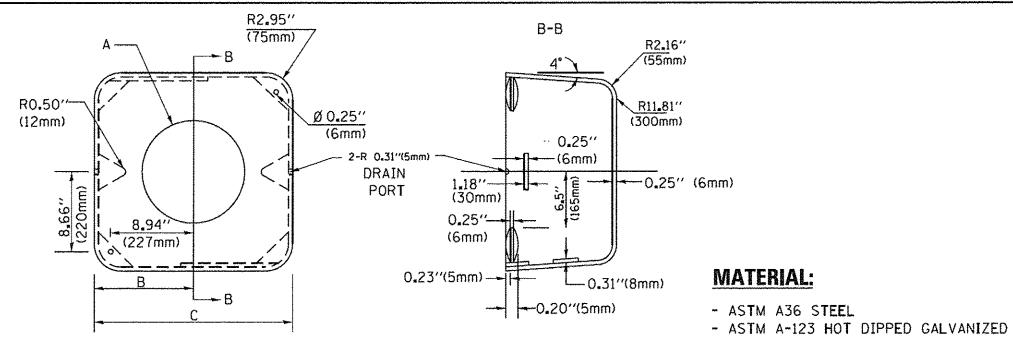
# MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(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.

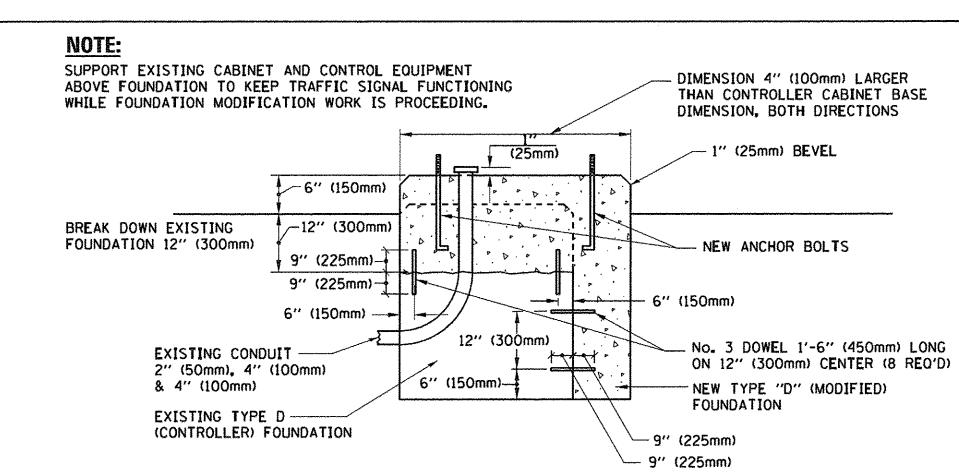


A	В	B C HEIGHT		WEIGHT
VARIES	9 <b>.</b> 5''(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75′′(273mm)	21 <b>.</b> 5′′(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13 <b>.</b> 0′′(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18 <b>.</b> 5''(470mm)	37''(940mm)	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 VERIFIED 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.



MODIFY EXISTING TYPE "D" FOUNDATION

# CALVANIZED STEEL HOOKS 21 ½ MIN, (545mm) CONDUIT BUSHING EXISTING CONDUIT TO BE REMOVED CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN PLAN ELEVATION

#### NOTES:

SCALE: NONE

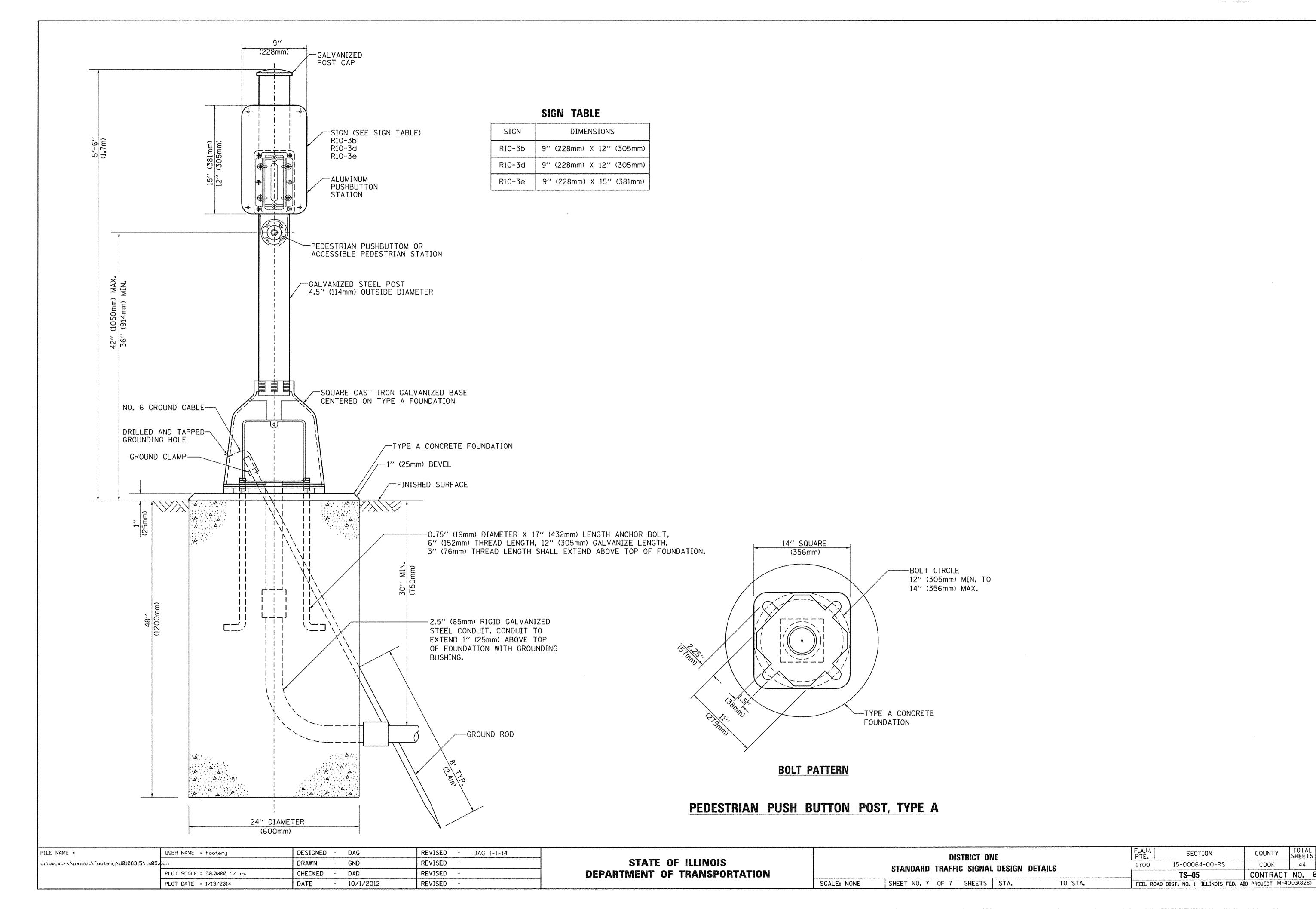
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	· · · · · · · · · · · · · · · · · · ·	F.A.U. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHE
	·	1700	15-00064-00-RS	COOK	44	27
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		T\$-05		CONTRACT NO.		61D3
SHEET NO. 6 OF 7 SHEETS STA. TO S	STA.	FED. ROAD	DIST. NO. 1 HILINOIS FED.	AID PROJECT M-4(	03(828)	



SECTION

15-00064-00-RS

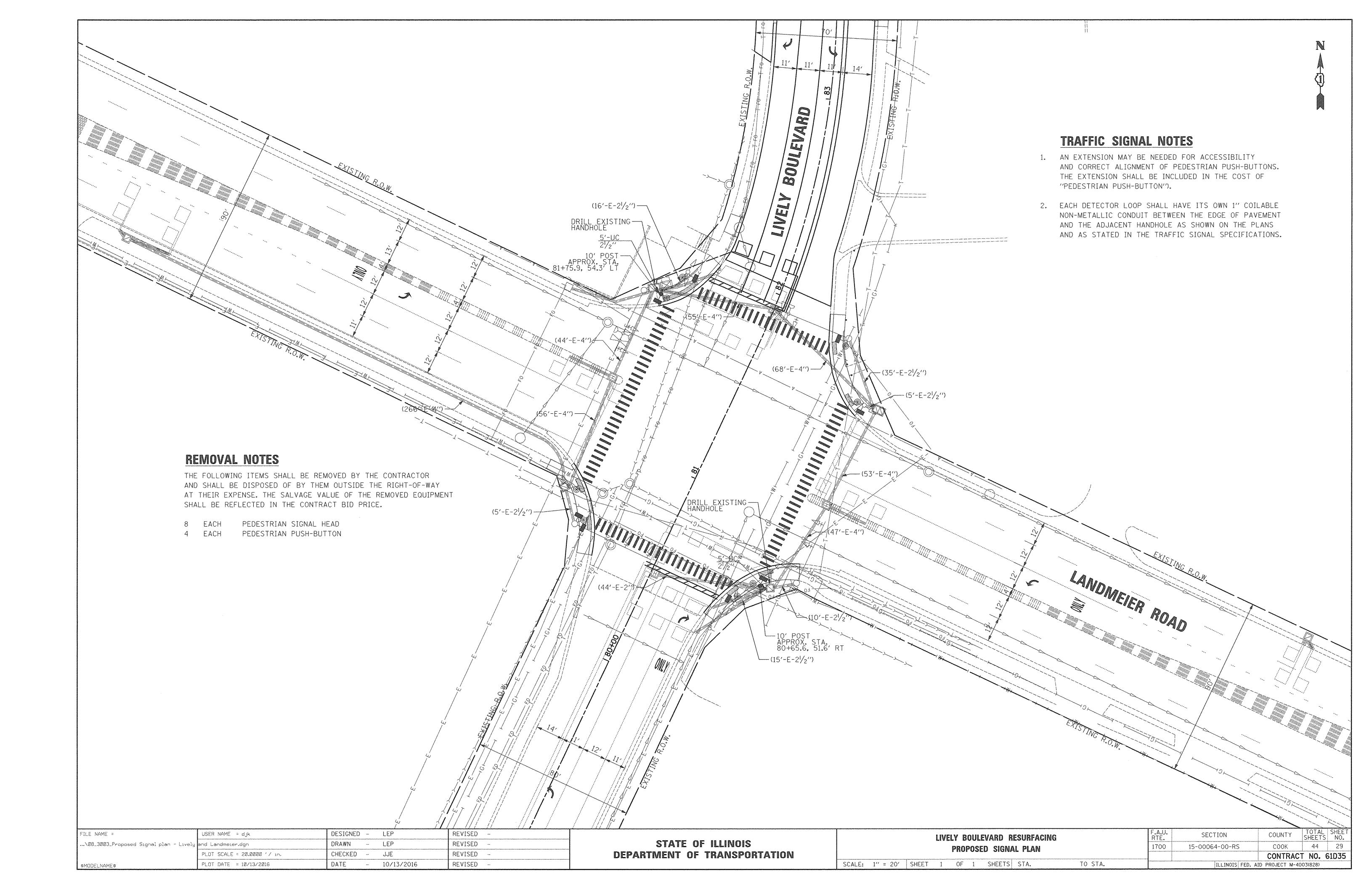
TS-05

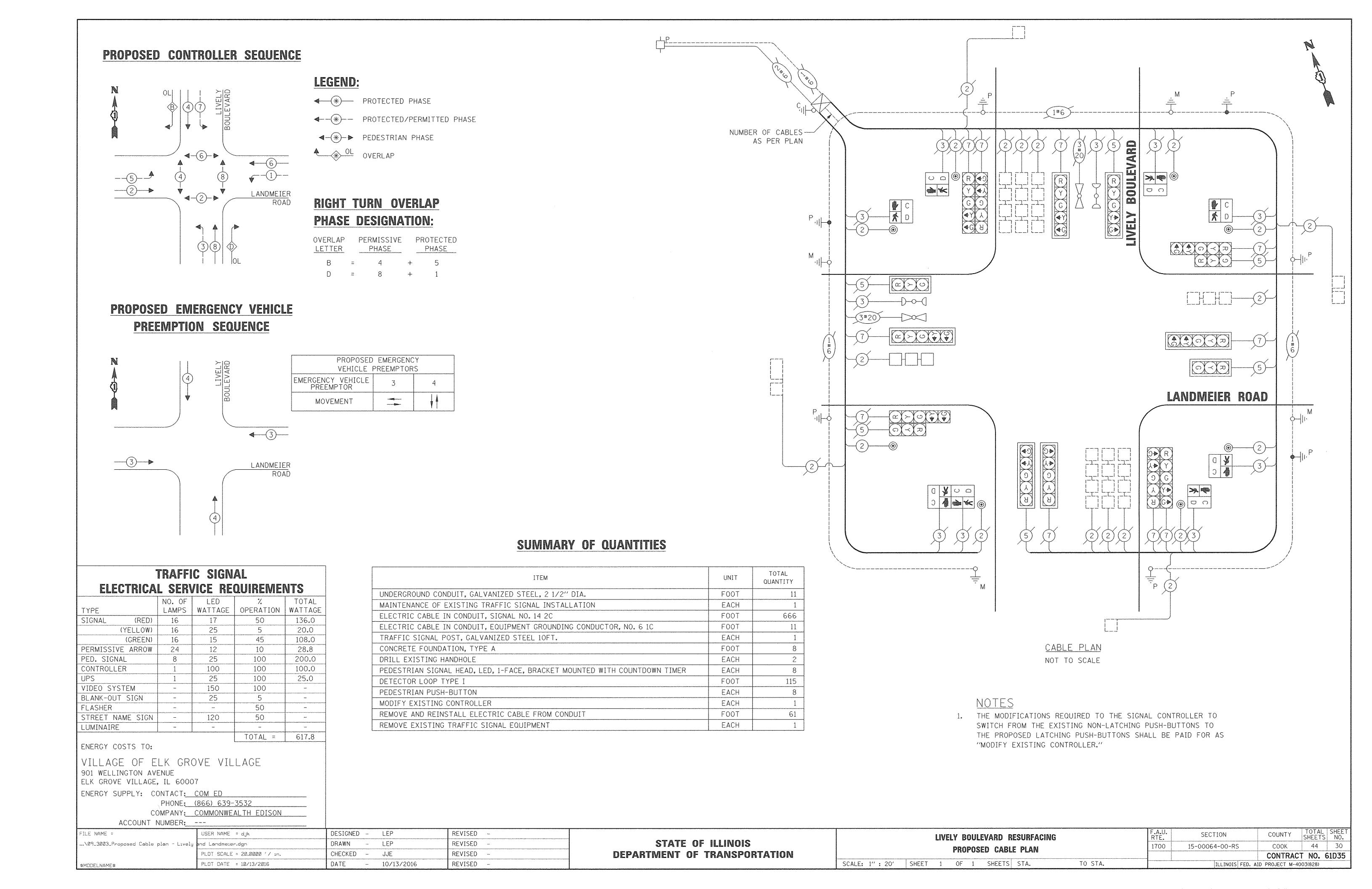
COUNTY

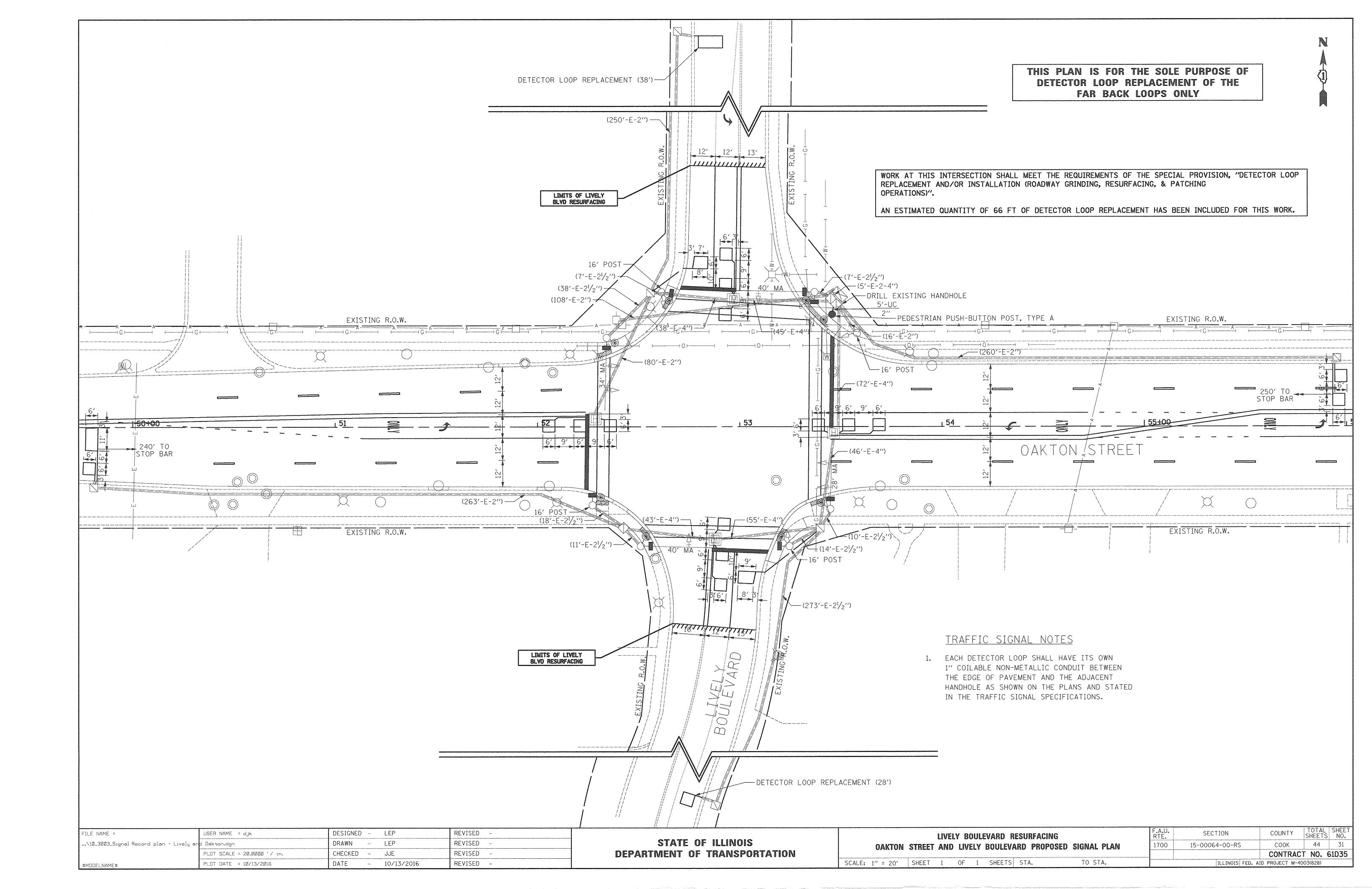
COOK

44 28

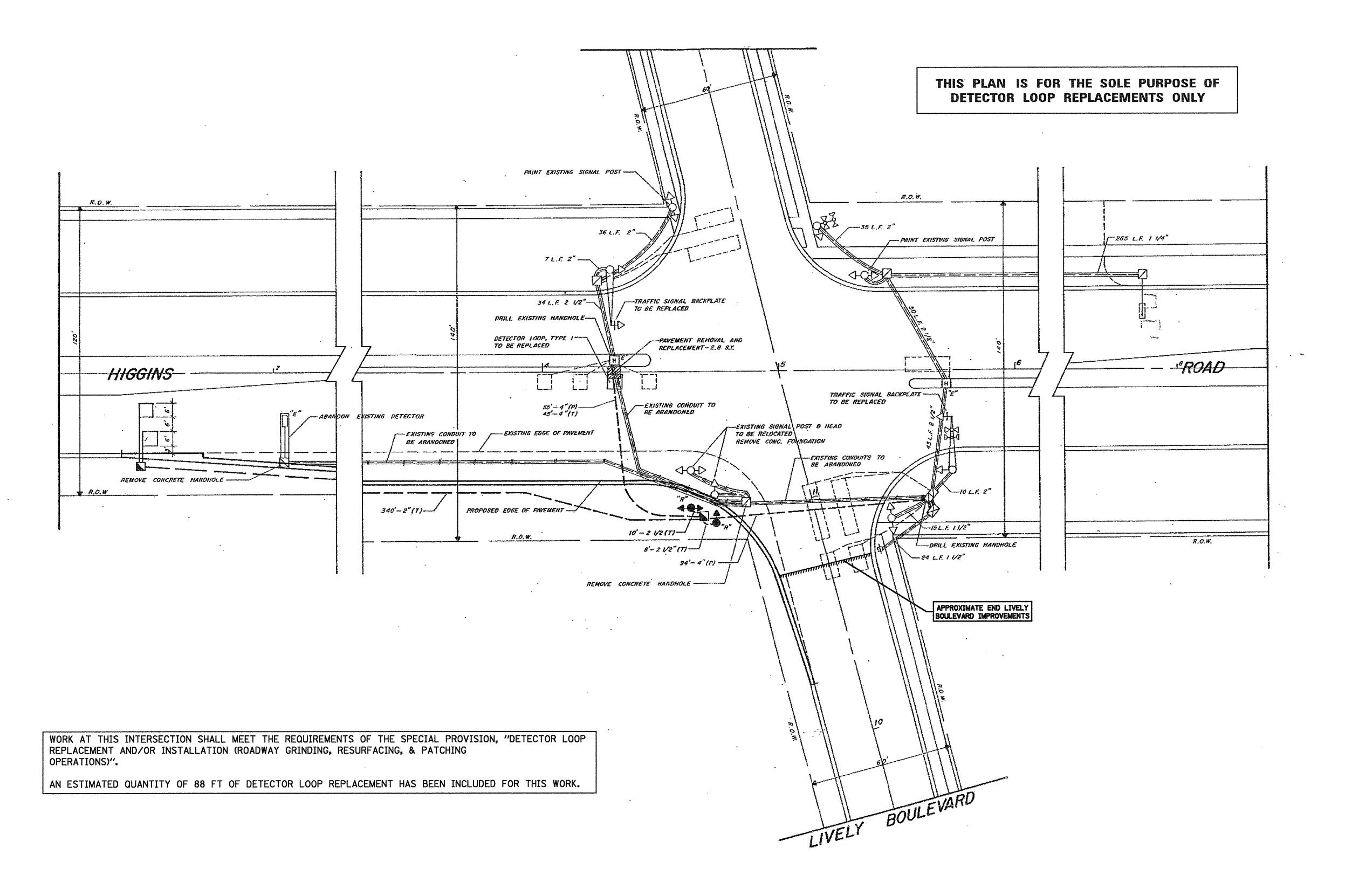
CONTRACT NO. 61D35



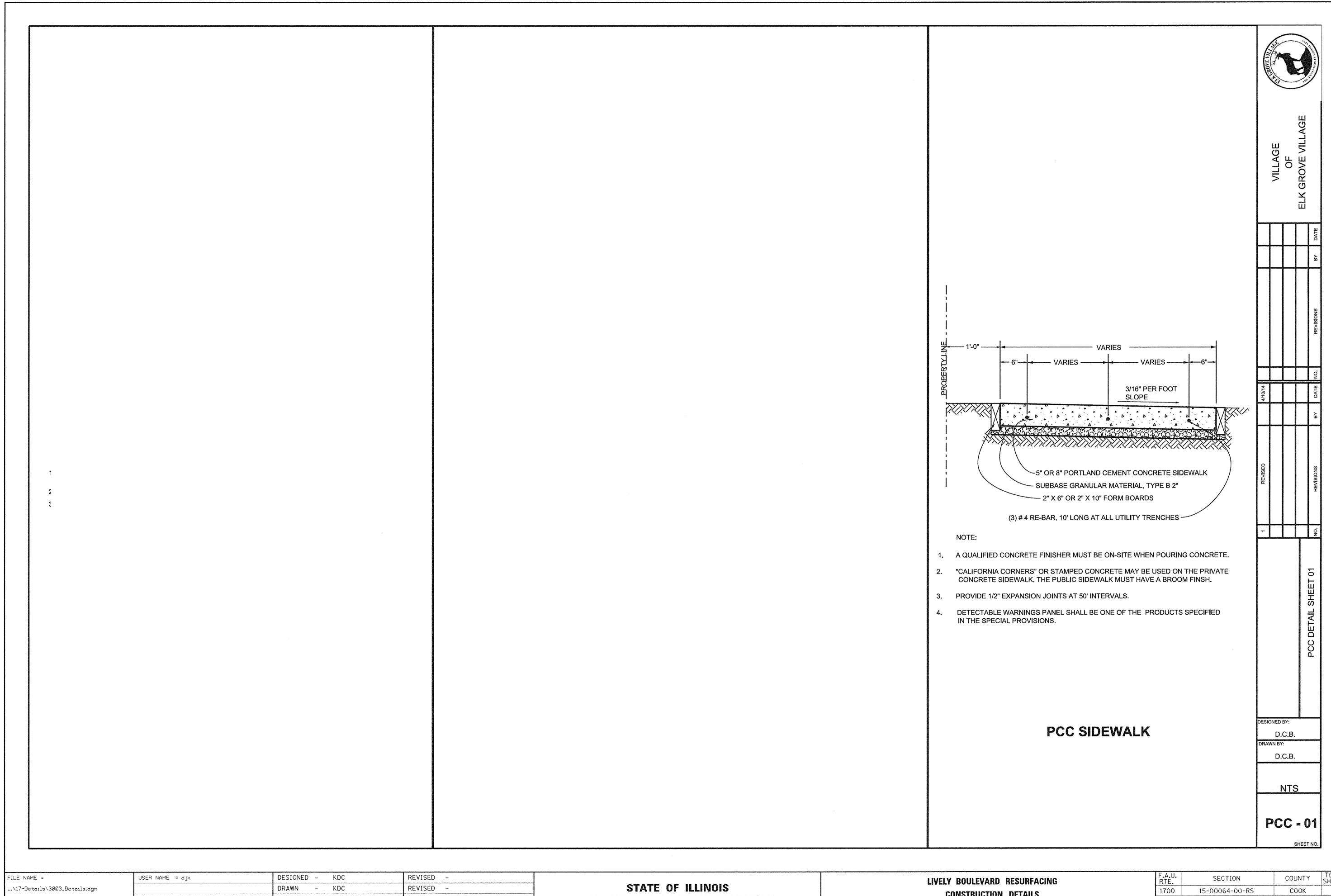




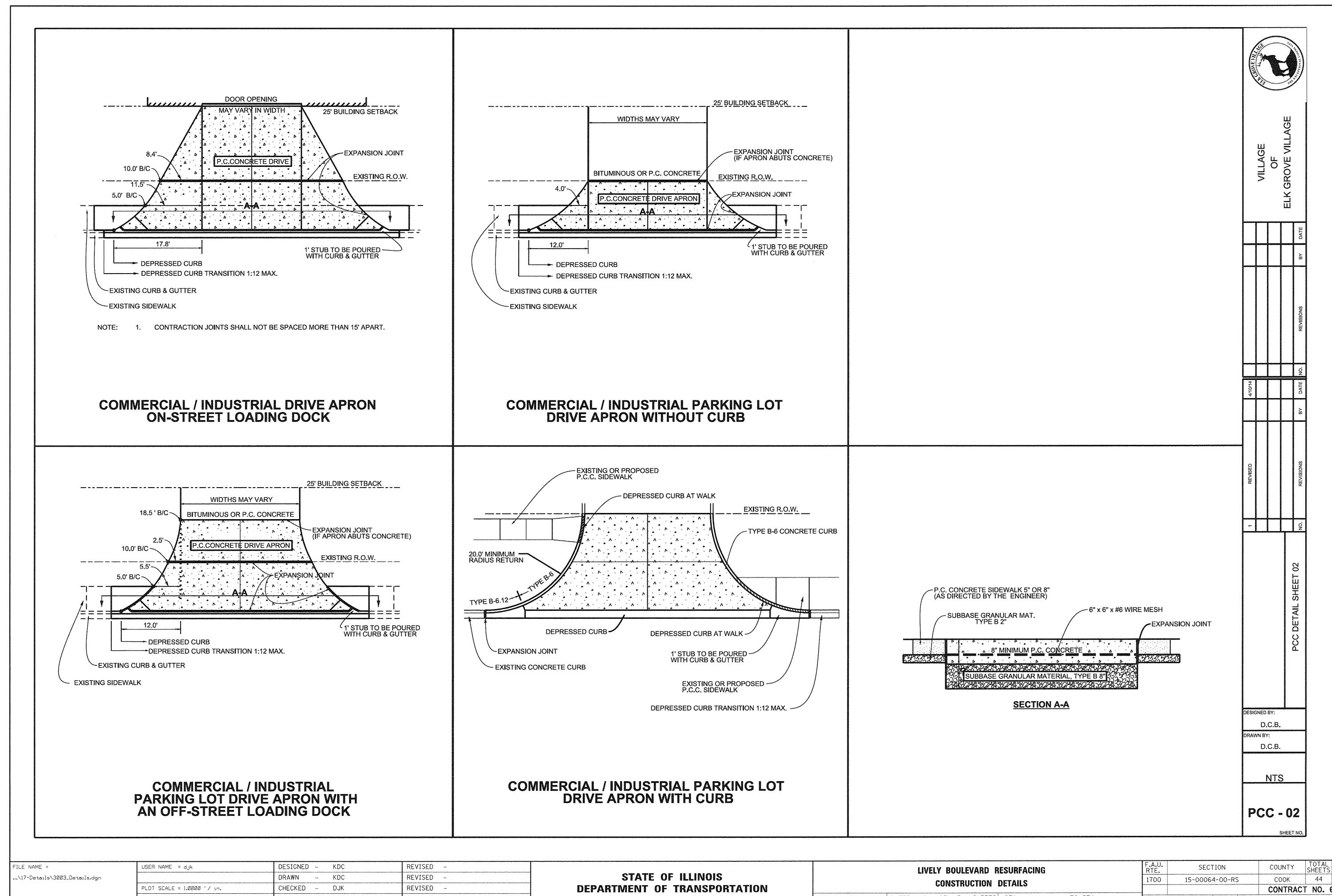
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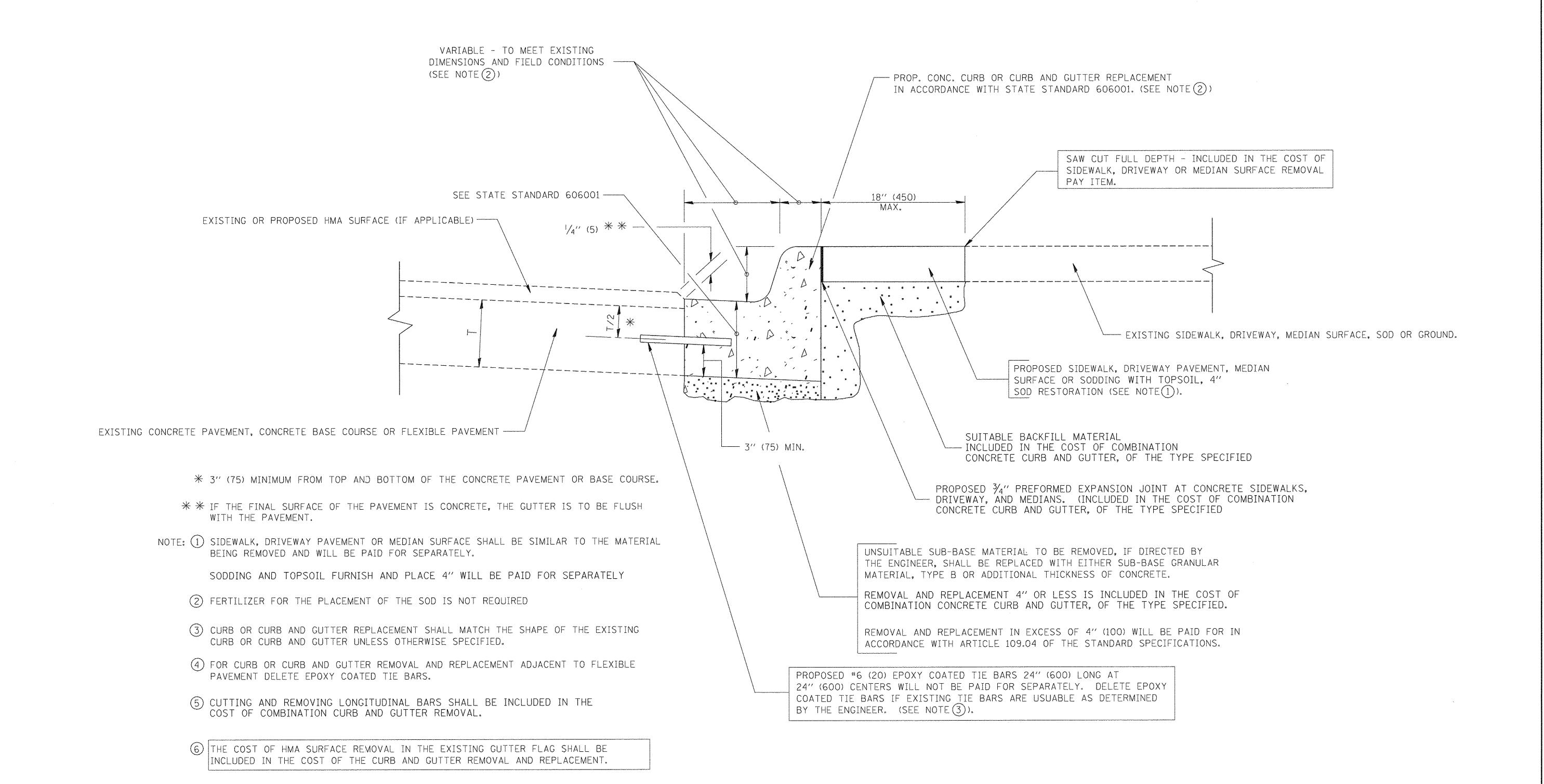
FILE NAME =	USER NAME = dJk	DESIGNED - LEP	REVISED -		LIVELY BOULEVARD RESURFACING	F.A.U. RTE.	SECTION	COUNTY	SHEETS NO.
\11_3003_Signal Record plan	n ~ Lively and Higgins.dgn	DRAWN - LEP	REVISED -	STATE OF ILLINOIS	DETECTOR LOOP REPLACEMENT PLAN - LIVELY BLVD AND IL RTE 72 (HIGGINS RD)	1700	15-00064-00-RS	соок	44 32
	PLOT SCALE = 1.0000 '/ in.	CHECKED - JJE	REVISED -	DEPARTMENT OF TRANSPORTATION	DEIEGIOII FOOI HEI FAOFINEISI I FAIA - FIAFFI DEAD MAD 15 HIF 15 (111201140 HD)	<u>'</u>		CONTRACT	NO. 61D35
\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT M-400	)3(828)



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\17-Details\3003_Details.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	CONSTRUCTION DETAILS	1700 15-00064-00-RS	COOK 44 33
	PLOT SCALE = 1.0000 '/ in.	CHECKED - DJK	REVISED -	DEPARTMENT OF TRANSPORTATION	CONSTITUTION DETAILS		CONTRACT NO. 61D35
\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: NTS SHEET 1 OF 3 SHEETS STA. TO STA.	ILLINOIS F	ED. AID PROJECT M-4003(828)



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\17-Details\3003_Details.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS	CONSTRUCTION DETAILS	1700 15-00064-00-RS	COOK 44 34
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\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED ~		SCALE: NTS SHEET 2 OF 3 SHEETS STA. TO STA.	ILLINOIS	FED. AID PROJECT M-4003(828)



CURB AND GUTTER REMOVAL AND REPLACEMENT DETAIL

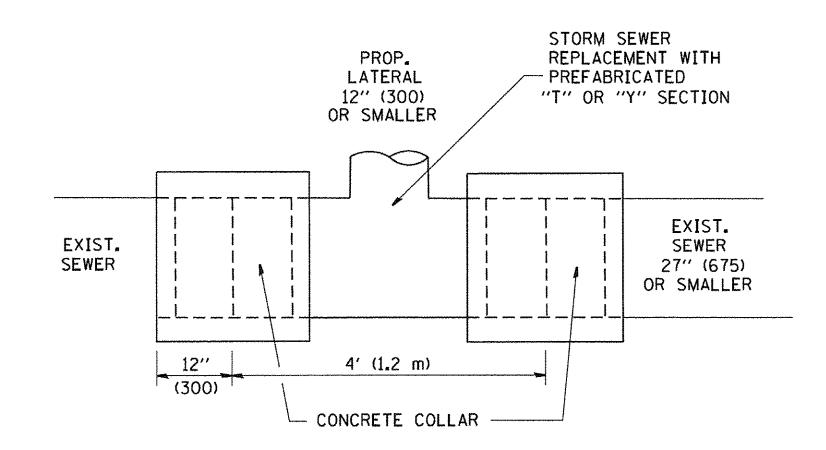
THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606

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

OF THE STANDARD SPECIFICATIONS.

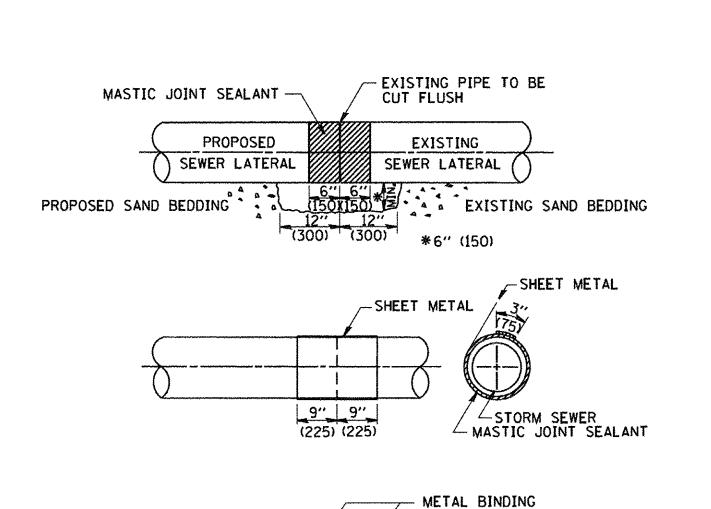
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN,

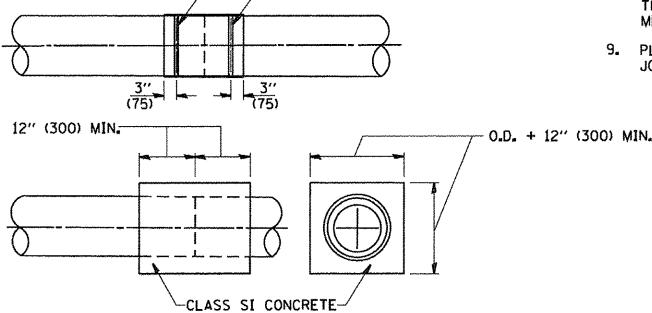
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\17-Details\3003_Details.dgn		DRAWN - KDC	REVISED -	STATE OF ILLINOIS			15-00064-00-RS	COOK 44 35
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\$MODELNAME\$	PLOT DATE = 10/13/2016	DATE - 10/13/2016	REVISED -		SCALE: NTS SHEET 3 OF 3 SHEETS STA. TO STA.		ILLINOIS FED.	. AID PROJECT M-4003(828)



#### DETAIL "A"

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

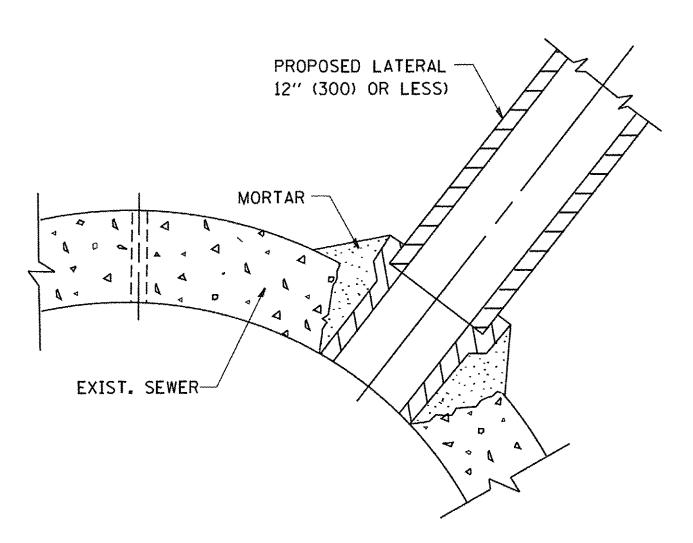




<u>DETAIL "B"</u> CLASS SI CONCRETE COLLAR

#### CONSTRUCTION SEQUENCE

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



DETAIL "C"

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

#### <u>NOTES</u>

#### MATERIAL

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

#### CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

  A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE

  DETAIL "A" AND "B".
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

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

#### GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER.

ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST

BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

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

#### BASIS OF PAYMENT

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

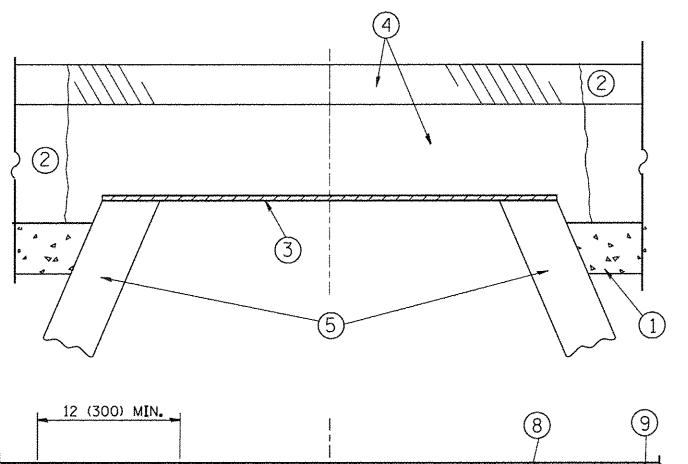
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

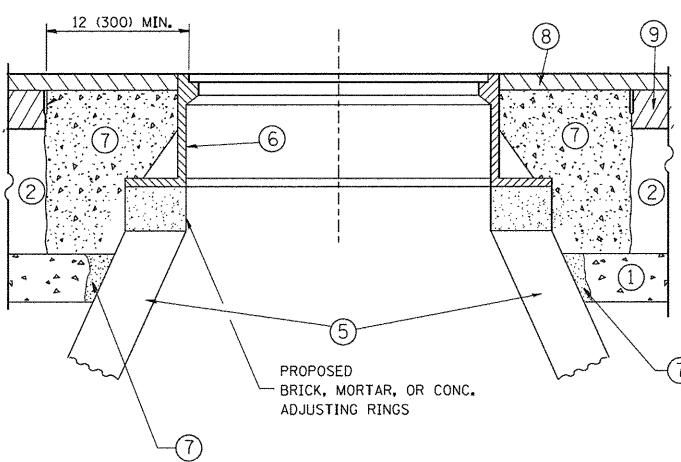
TRENCH BACKFILL. EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

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

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92		DETAIL OF STORM SEWER	F_A_U_ RTE. SECTION	COUNTY TOTAL SHEET SHEETS NO.
W:\diststd\22x34\bd07.dgn		DRAWN -	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS	CONNECTION TO EXISTING SEWER	1700 15-00064-00-RS	COOK 44 36
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. SHAH 10-25-94	DEPARTMENT OF TRANSPORTATION	Continuorita to militaria continu	BD50001 (BD-7)	CONTRACT NO. 61D35
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FE	D. AID PROJECT M-4003(828)





#### 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.

SCALE: NONE

#### 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  $1\frac{1}{2}$  (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
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX

  (5) EXISTING STRUCTURE
- 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.

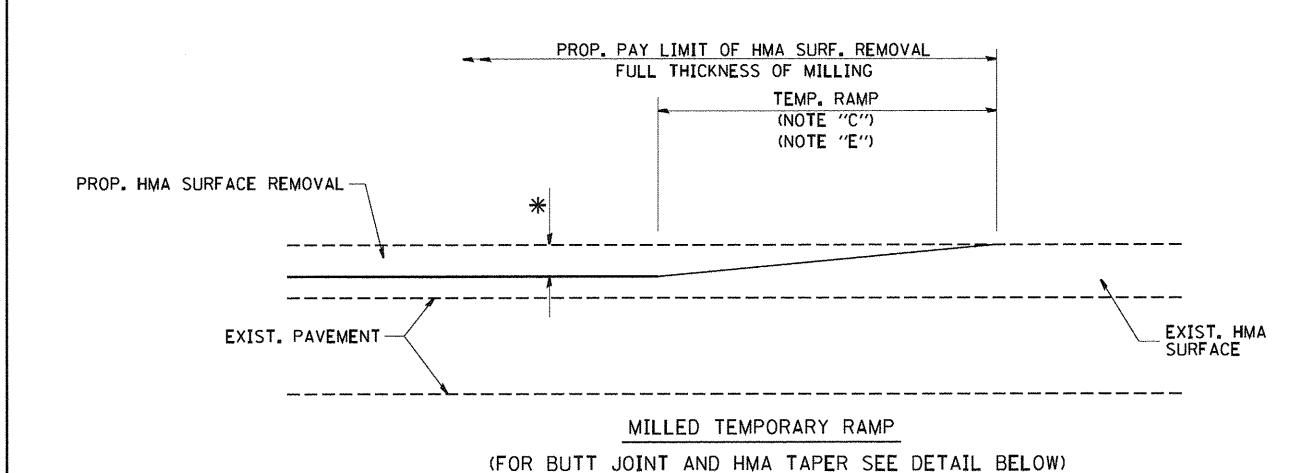
# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

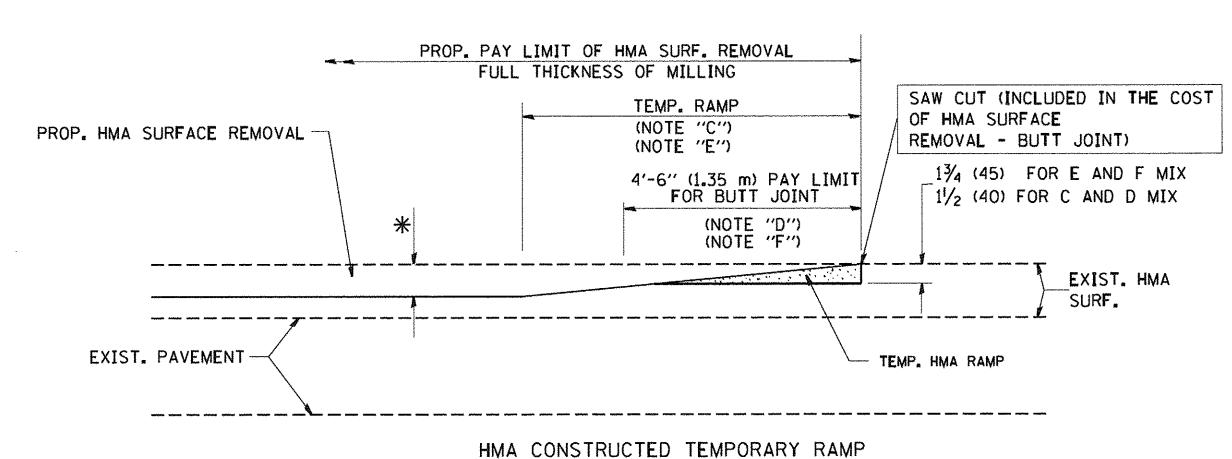
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	PLOT SCALE = 1968.5000 '/ m	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE N(
FRAMES AND LIDS ADJUSTMENT WITH MILLING	1700	15-00064-00-RS	COOK	44	3
LUWINES WAD FINS WOODSTAILING MILL MILL MAILE		BD600-03 (BD-8)	CONTRACT	NO. 61	D35
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	OAD DIST, NO. 1 HILINOIS FED. AL	n PROJECT M-40	03(828)	



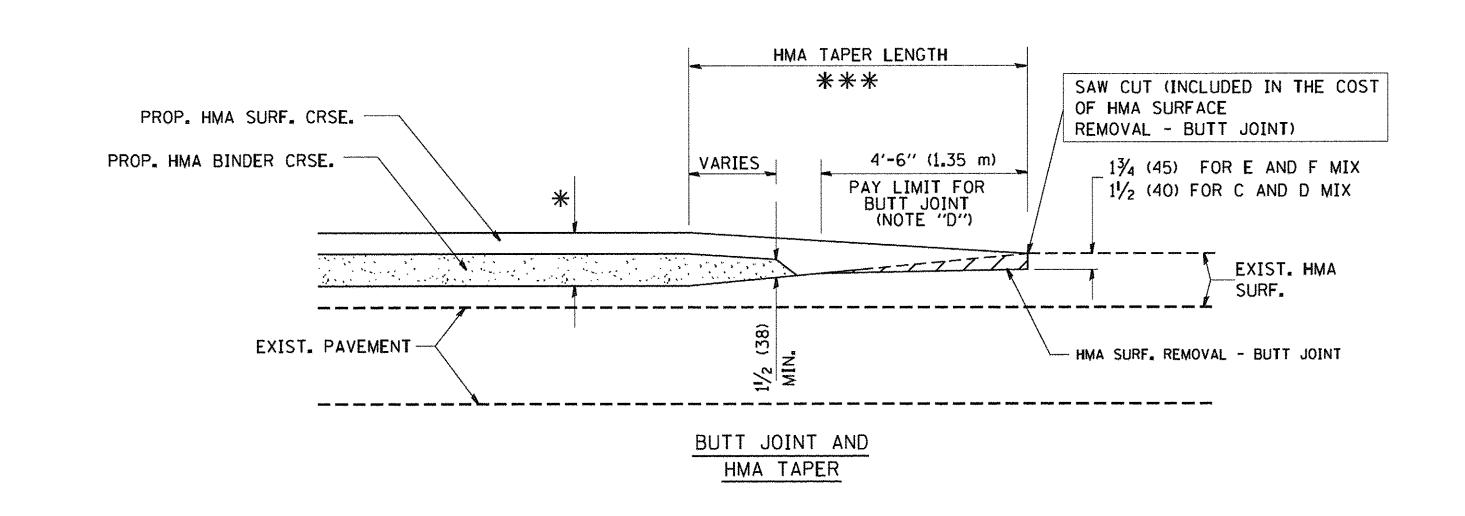
# OPTION 1



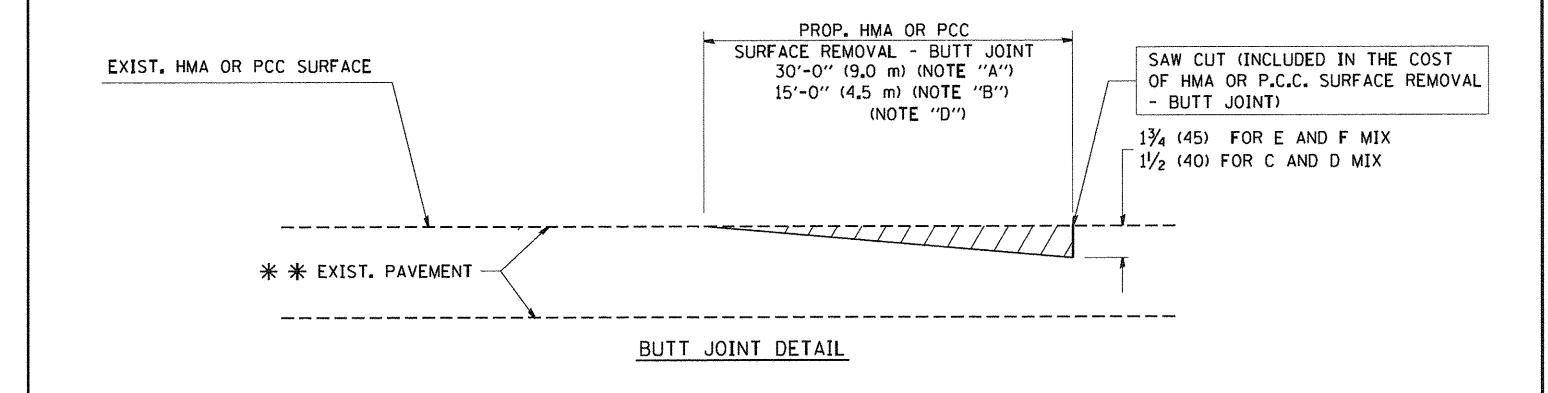
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

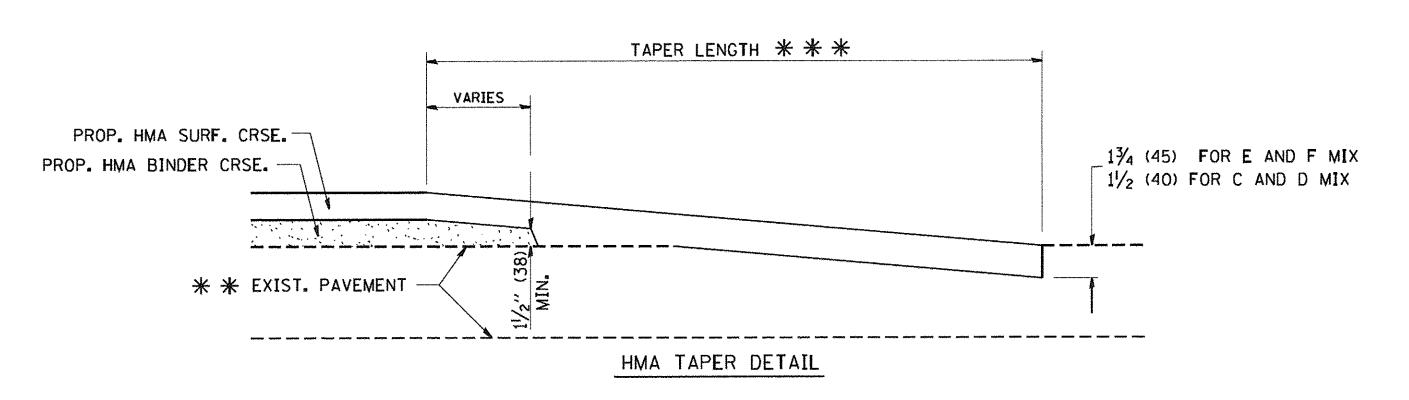
#### OPTION 2

#### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# 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".

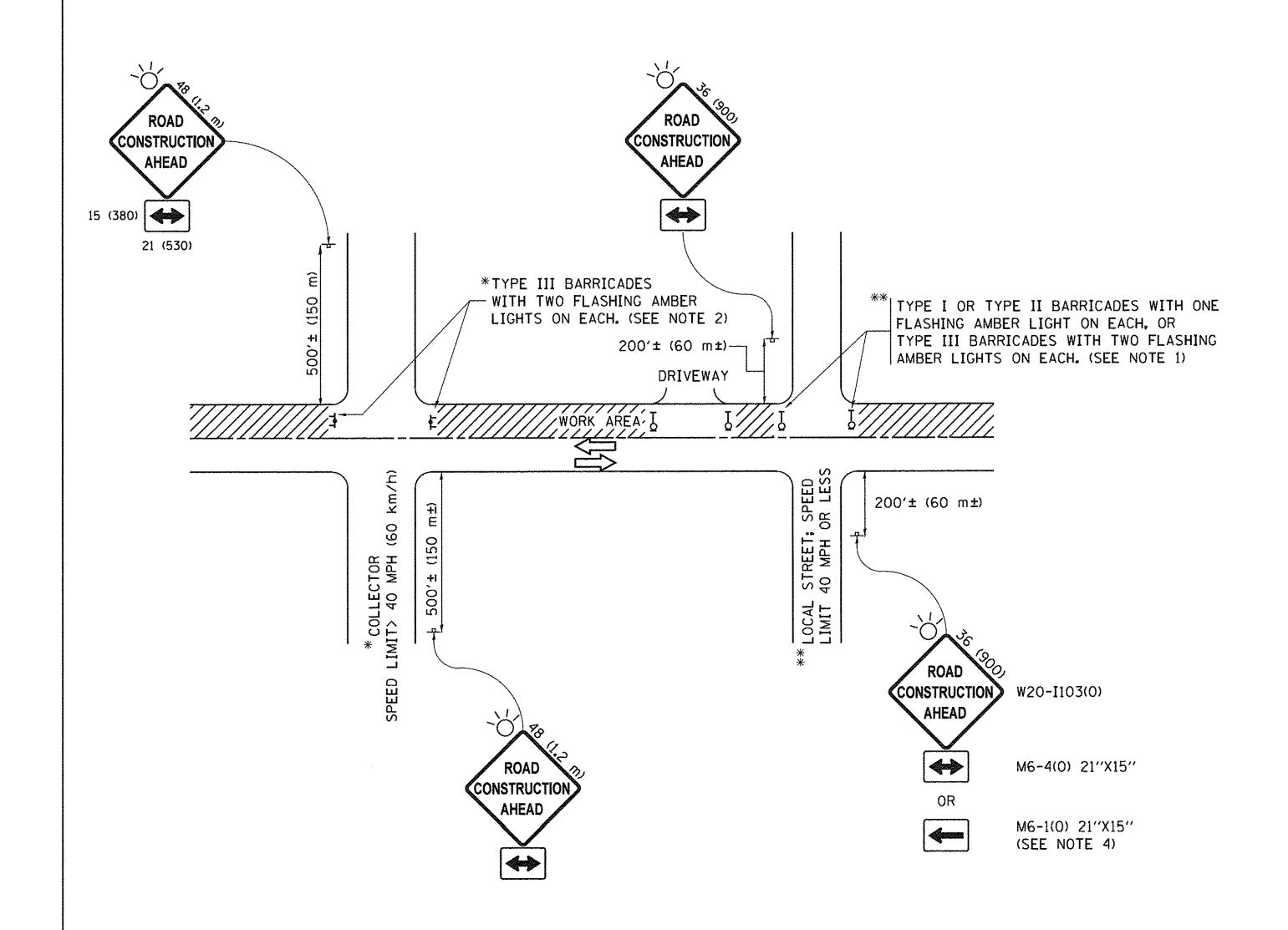
SCALE: NONE

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
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	PLOT SCALE = 50.0000 '/ IN.	CHECKED ~	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND		F.A.U. RTE.	SECTION	COUNTY	SHEETS	SHEE NO.
The state of the s		1700	15-00064-00-RS	СООК	44	38
HMA TAPER DETAILS			BD400-05 BD32	CONTRACT	NO. 61	D35
SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT M-4	003(828)	



#### 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:
  - O) 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:
  - O) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 × 48 (1.2 m × 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).

SCALE: NONE

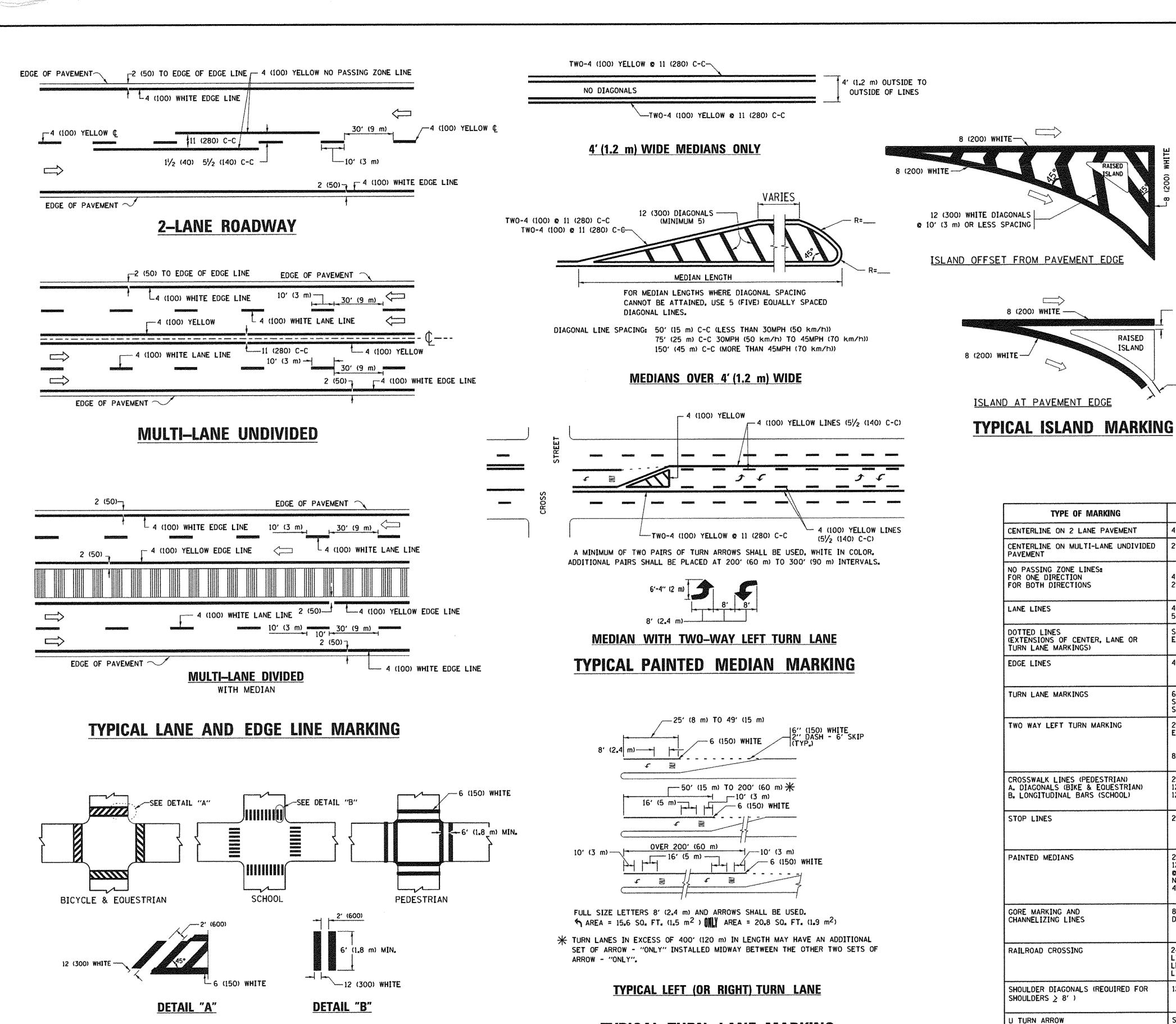
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED 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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TR	AFFIC	CONTR	OL P	AND F	PROTEC	TION	FOR	
SIDE	ROAD	S, INTE	RSEC	CONT	S, AND	DRIV	<b>YEWAYS</b>	
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F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	ILLINOIS FED. A	ID PROJECT M-40	03(828)	



500 40 45 665 50 750 55 32 R (810) -12 (300) **COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) LANE REDUCTION TRANSITION 12 (300) \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS. U-TURN COLOR WIDTH OF LINE **PATTERN** SPACING / REMARKS 10' (3 m) LINE WITH 30' (9 m) SPACE YELLOW SKIP-DASH 11 (280) C-C 2 @ 4 (100) YELLOW 51/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C SOLID SOLID YELLOW 4 (100) 2 **c** 4 (100) OMIT SKIP-DASH CENTERLINE BETWEEN 4 (100) 5 (125) ON FREEWAYS SKIP-DASH SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE SAME AS LINE BEING EXTENDED SAME AS LINE BEING EXTENDED 2' (600) LINE WITH 6' (1.8 m) SPACE SKIP-DASH YELLOW-LEFT WHITE-RIGHT OUTLINE MEDIANS IN YELLOW SOLID

(910)

(1020)

SPEED LIMIT

35

425

#### TYPICAL TURN LANE MARKING

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

2 ARROW COMBINATION

LEFT AND U TURN

SCALE:

RAISED

4 (100)

6 (150) LINE; FULL SIZE LETTERS &

SYMBOLS (8' (2.4m))

8' (2,4m) LEFT ARROW

2 2 4 (100)

EACH DIRECTION

2 **e** 6 (150) 12 (300) **e** 45° 12 (300) **e** 90°

2 @ 4 (100) WITH

12 (300) DIAGONALS

NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS

8 (200) WITH 12 (300)

24 (600) TRANSVERSE

LINES: "RR" IS 6' (1.8

LETTERS: 16 (400) LINE FOR "X"

12 (300) & 45°

SEE DETAIL

SEE DETAIL

DIAGONALS @ 45°

24 (600)

SOLID

SKIP-DASH

AND SOLID IN PAIRS

SOLID SOLID

SOLID

SOLID

SOLID

SOLID

SOL ID

SOLID

SOLID

YELLOW

WHITE

WHITE

WHITE

WHITE

YELLOW:

WHITE

WHITE

WHITE

WHITE

WHITE

TWO WAY TRAFFIC

ONE WAY TRAFFIC

WHITE - RIGHT YELLOW - LEFT

TYPE OF MARKING

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

SEE TYPICAL TURN LANE MARKING DETAIL

10' (3 m) LINE WITH 30' (9 m) SPACE FOR

SKIP-DASH: 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN

SEE TYPICAL CROSSWALK MARKING DETAILS.

PARALLEL TO CROSSWALK, IF PRESENT.
OTHERWISE, PLACE AT DESIRED STOPPING
POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE

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))

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 (0VER 45MPH (70 km/h))

11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.

NOT LESS THAN 6' (1.8 m) APART 2' (600) APART

PLACE 4' (1.2 m) IN ADVANCE OF AND

SEE STATE STANDARD 780001

"R"=3.6 SO. FT. (0.33 m<sup>2</sup>) EACH
"X"=54.0 SO. FT. (5.0 m<sup>2</sup>)

AREA OF

16.3 SF

30.4 SF

MARKING DETAIL

2' (600) APART

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TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

THE ROAD WHICH IT CROSSES

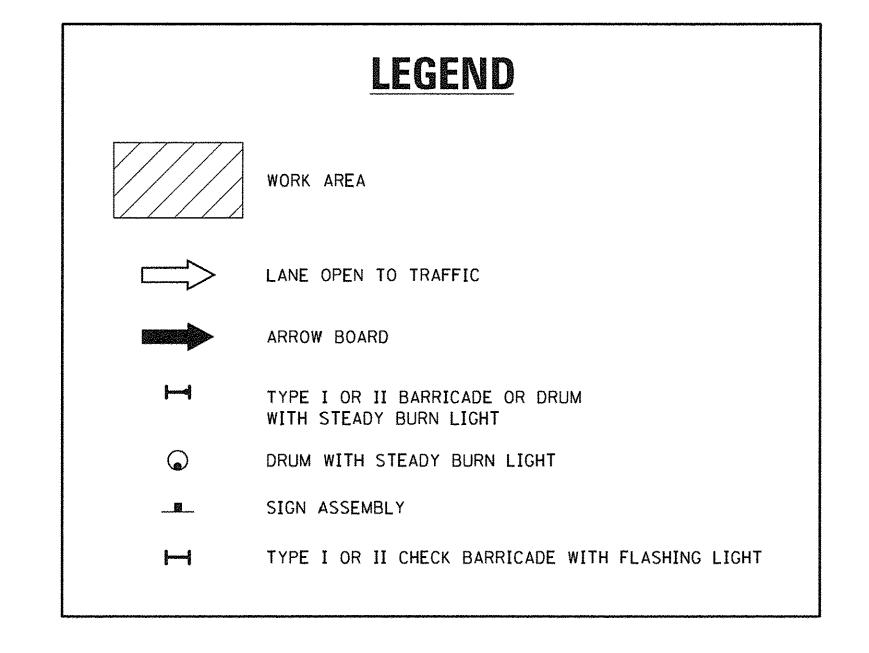
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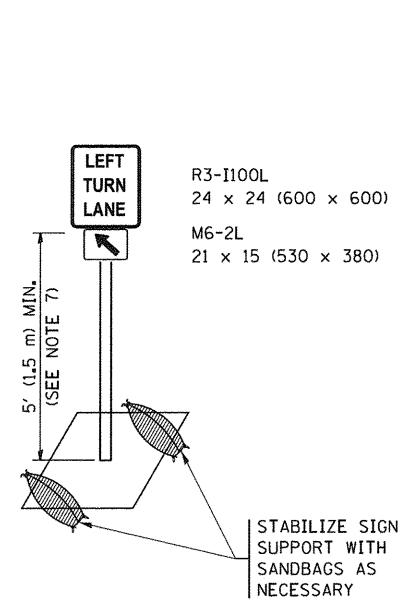
# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

# R4-7a 24"X30" 4" YELLOW REFLECTIVE PAVEMENT MARKING TAPE (REMOVE CONFLICTING WHITE SKIP-DASH LINES FIRST.) NOTES: - ARROW BOARD SEE DETAIL "A" -

## FIGURE 1



- 1. A) WHEN "L" IS < THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
  - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. 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.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN, UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



TURN BAY ENTRANCE WITHIN A LANE CLOSURE

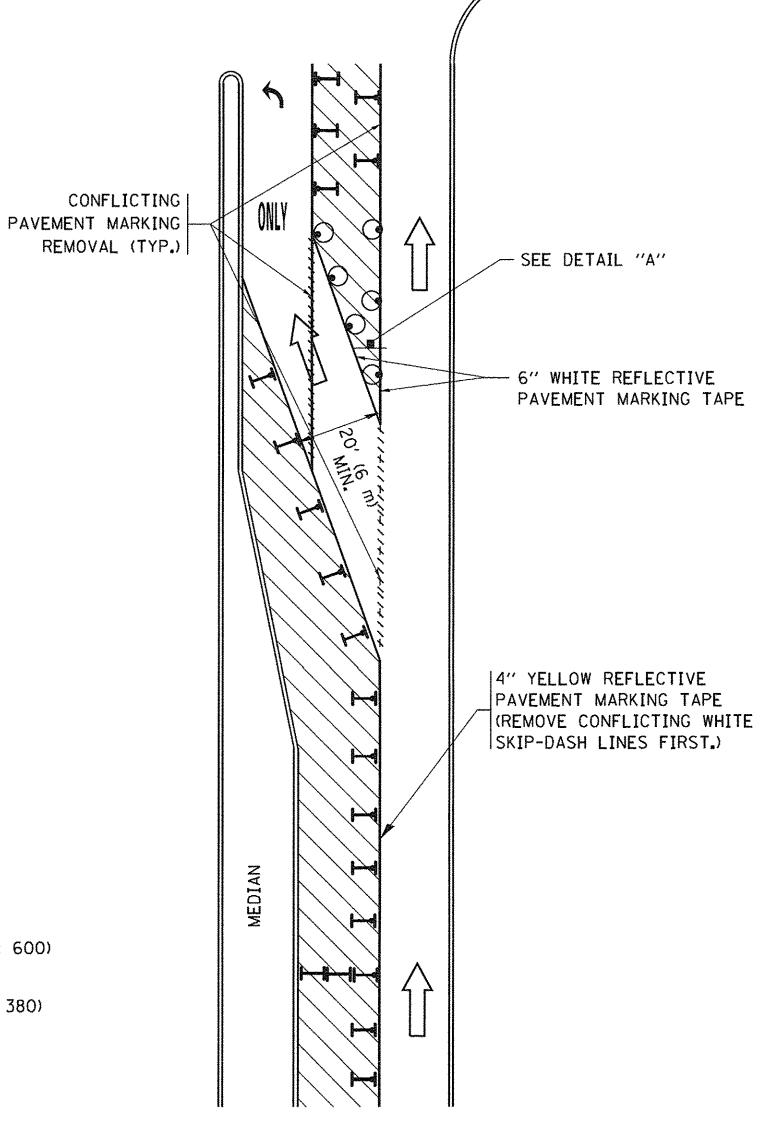
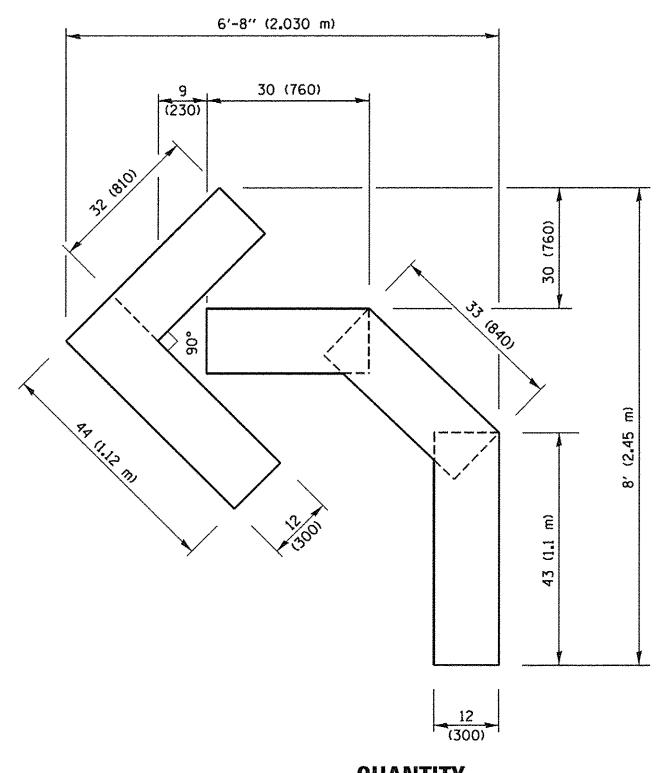


FIGURE 2

#### DETAIL A

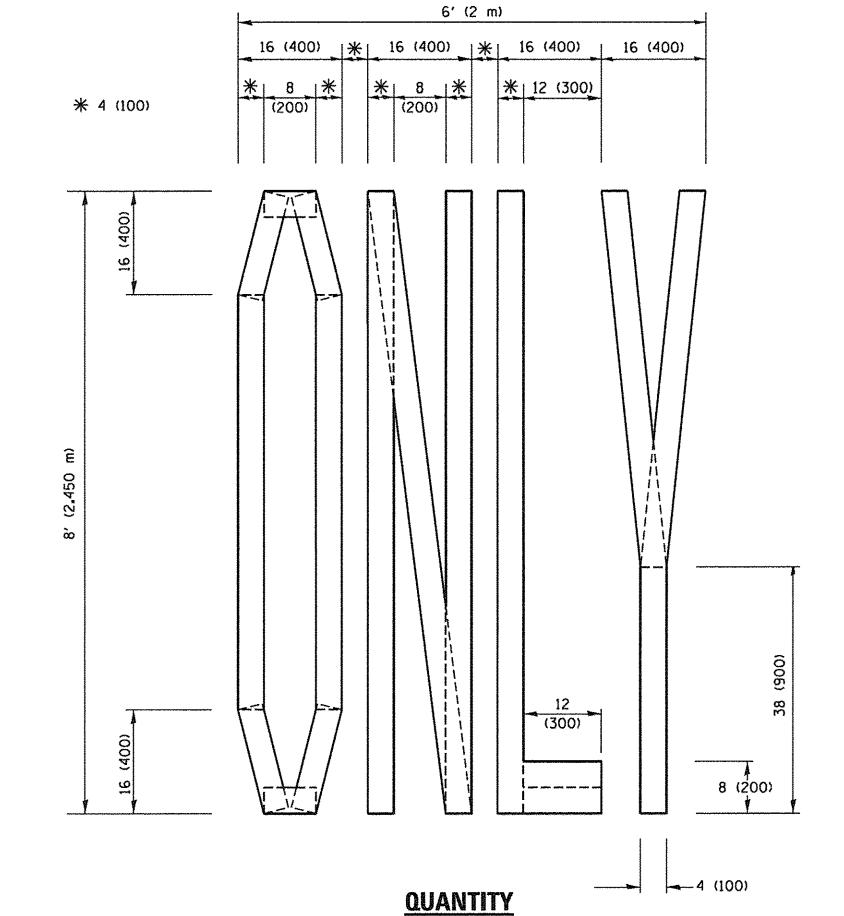
All dimensions are in inches (millimeters) unless otherwise shown.

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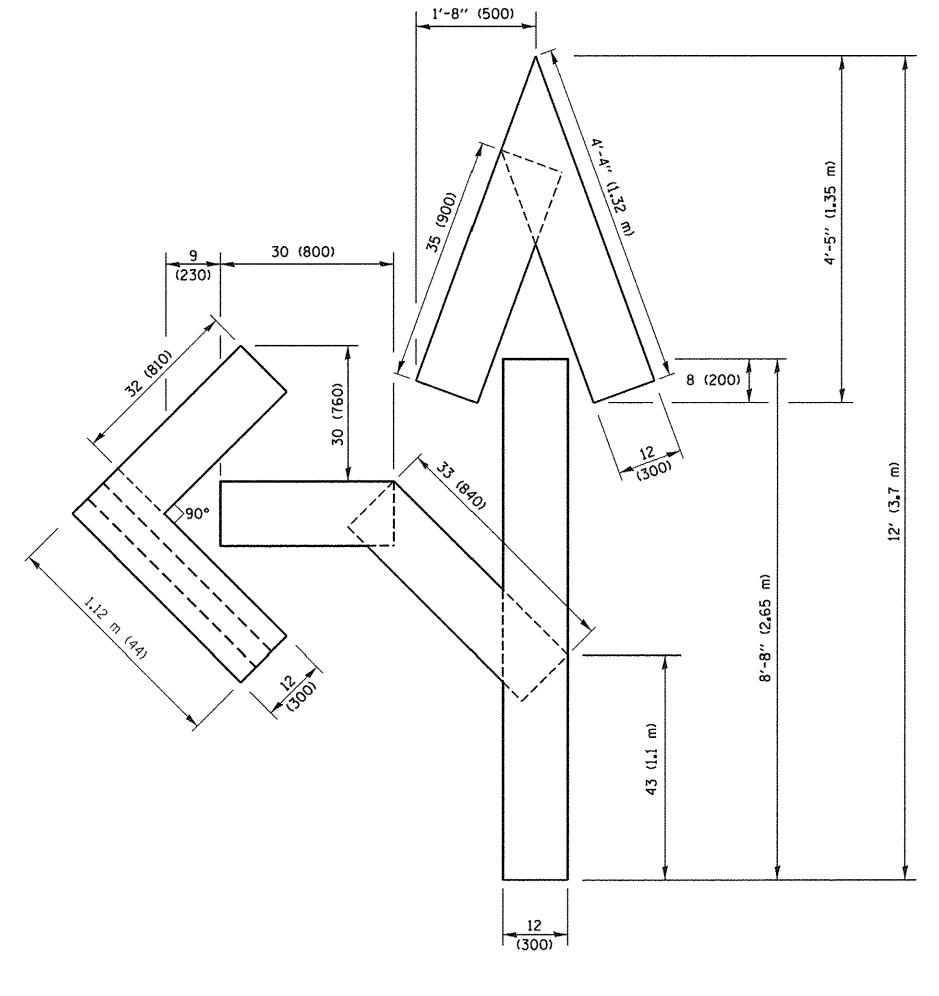


#### QUANTITY

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



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

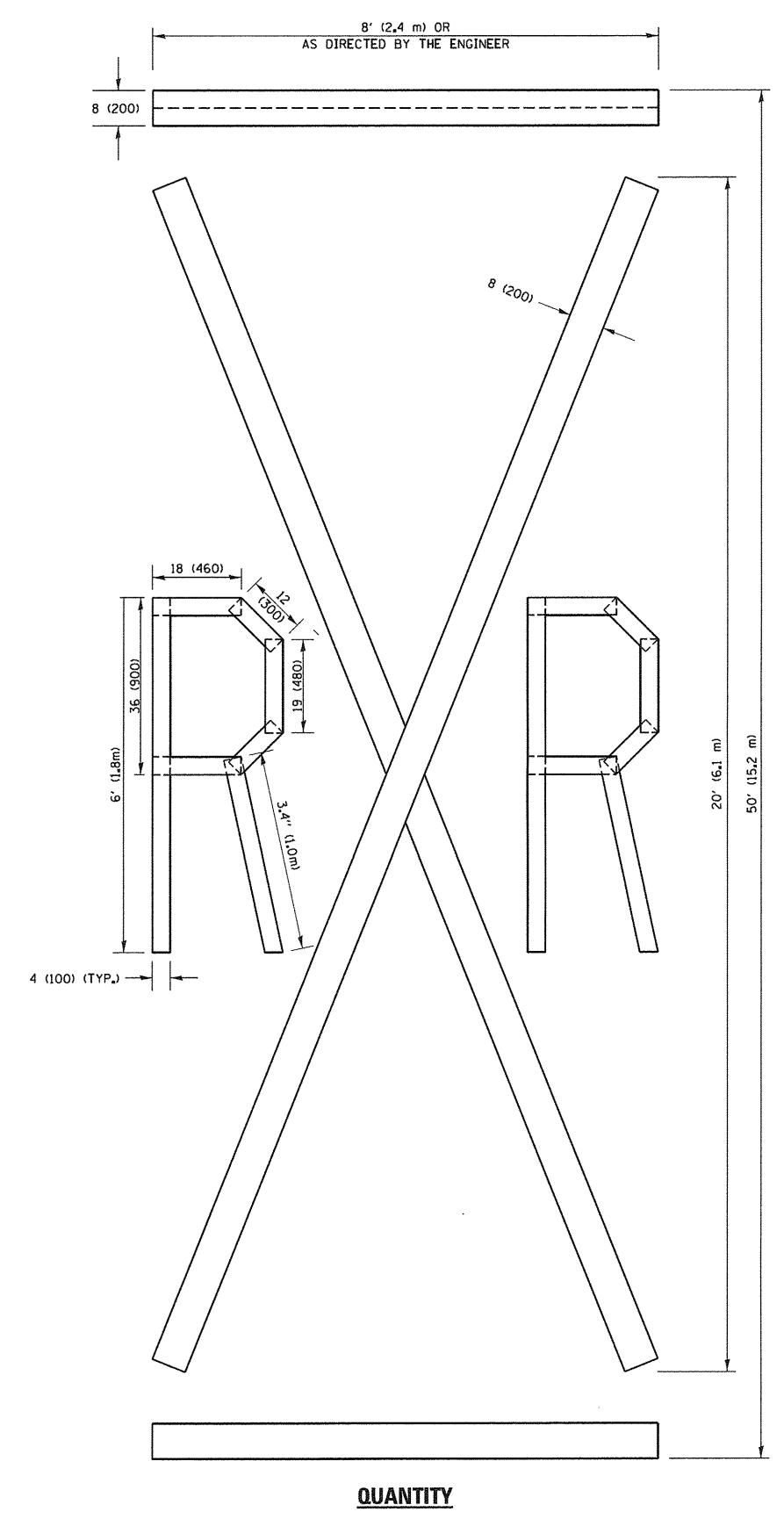


#### **QUANTITY**

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

#### NOTE:

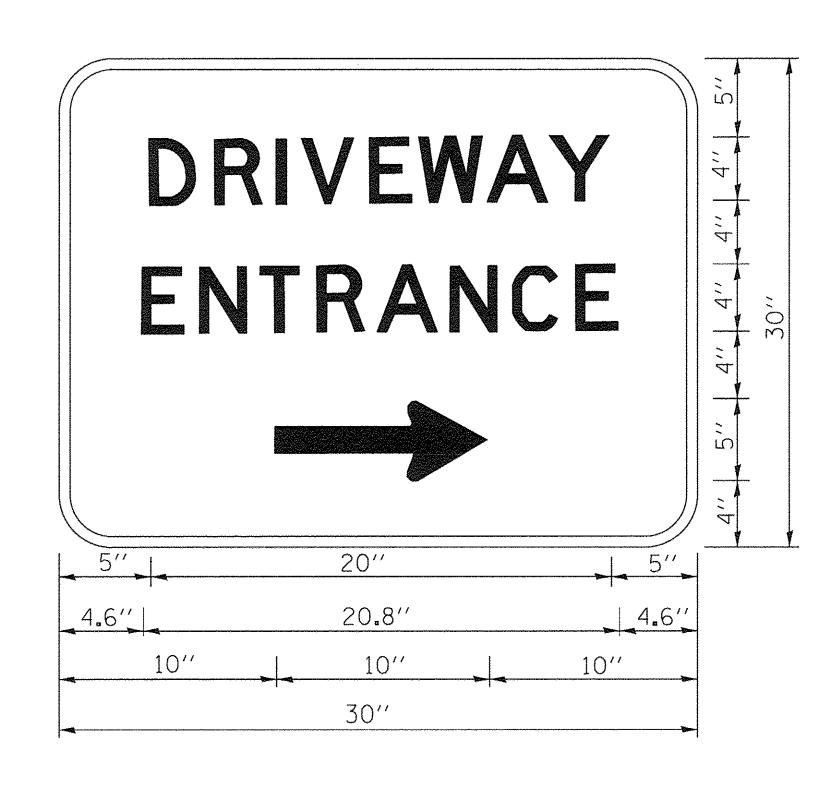
ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



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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	PLOT SCALE = 50.0000 '/ 10.	CHECKED -	REVISED -E. GOMEZ 08-28-00	DEPARTMENT OF TRANSPORTATION			TC-16	CONTRACT	NO. 611	35
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.	AID PROJECT M-40	(003(828)	



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" × 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 = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07			DRIVEWAY ENTRANCE SIGNING		F_A_U. RTF.	SECTION	COUNTY	TOTAL SHEE	.T
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## LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED **SHOULDER** (1.5 m) (1.8 m) (1.5 m) \* 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m)(3.0 m)TO E/P .. (900 mm) \* = (600 mm)NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS PLAN SHEET FOR DETECTOR LOOP REPLACEMENT BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

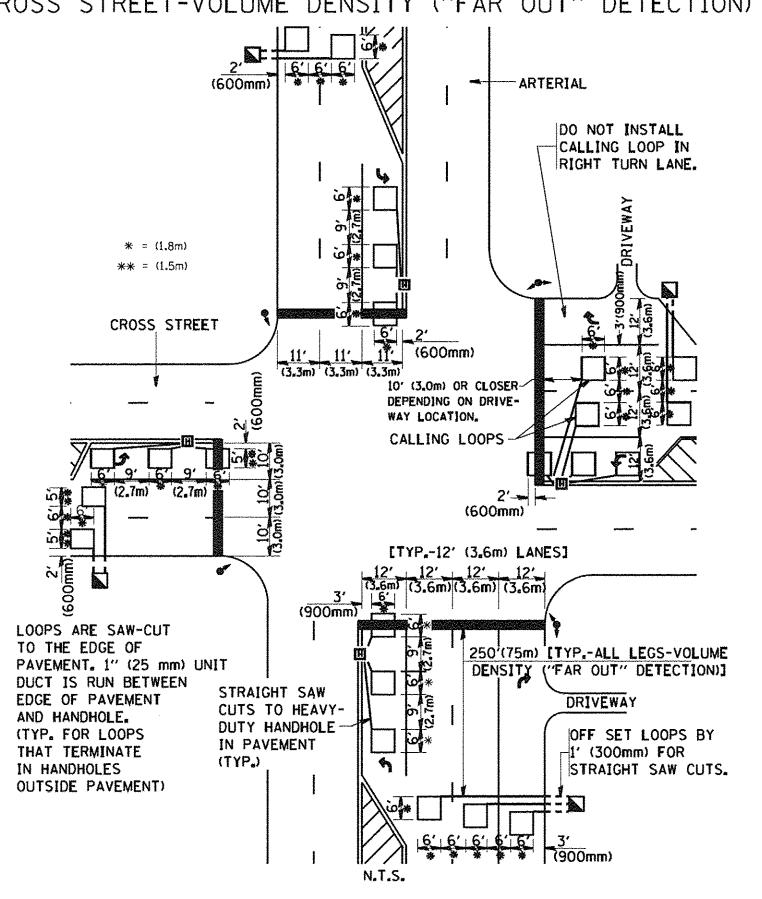
#### LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN. TRENCHED 1" (25 mm) UNIT DUCT (3) \* \* \* = (600 mm)STRAIGHT SAW CUTS PERPENDICULAR TO MEDIAN (TYP.) \*\* 15 (3.6 m)\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) \* = (600 mm)(900 mm) (3,6 m)STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

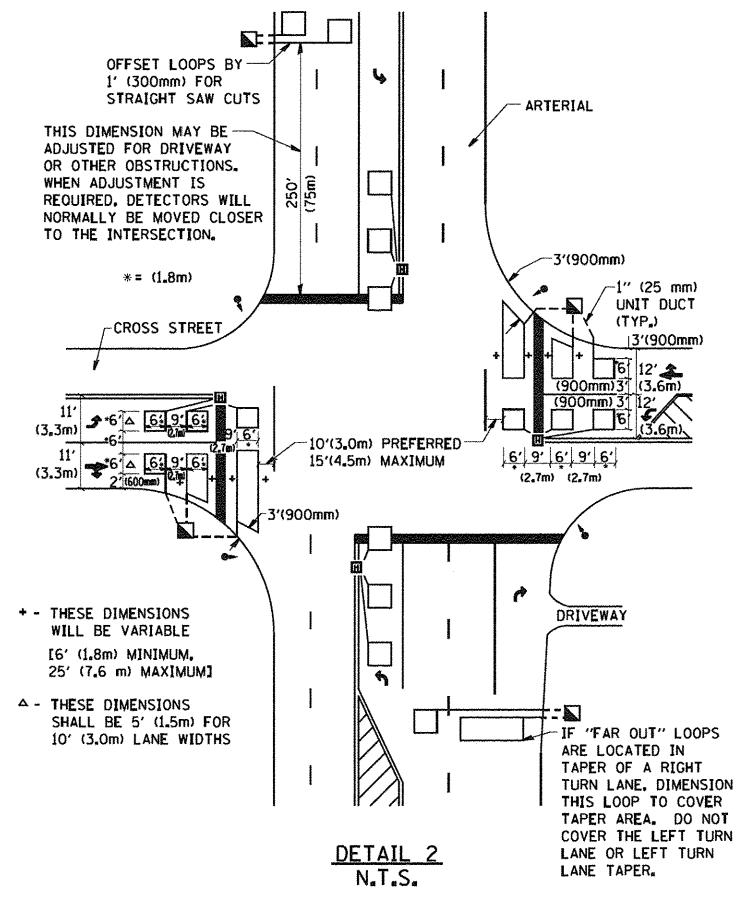
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DETAIL 1



#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION. THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION. THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES. RIGHT TURN LANES. AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED ~			DISTRICT 1 – DETECTOR LOOP INSTALLATION	F.A.U.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
W:\diststd\22x34\ts07.dgn		DRAWN ~	REVISED -	STATE OF ILLINOIS			1700	15-00064-00-RS	СООК	44 44
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -	DEPARTMENT OF TRANSPORTATION		DETAILS FOR ROADWAY RESURFACING		TS07	CONTRACT	T NO. 61D35
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA	DIST. NO. 1 ILLINOIS FED.	. AID PROJECT M-40	4003(828)