04-26-2019 LETTING ITEM 108

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.U. 2539 (ROY AVENUE)

NORTH AVENUE (F.A.U. 307) TO WINTERS DRIVE (F.A.U. 2910)

RESURFACING

Section No.: 18-00093-00-RS

Project No. 18H2(332)

CITY OF NORTHLAKE COOK COUNTY

JOB NO.: C-91-233-19

DESIGN DESIGNATION DESIGN SPEED = 25 M.P.H. POSTED SPEED = 25 M.P.H.

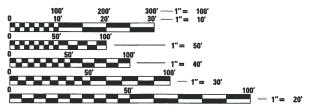
TRAFFIC DATA:

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ADT =

<u>2014</u> 1,225



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1–800–892–0123

OR 811

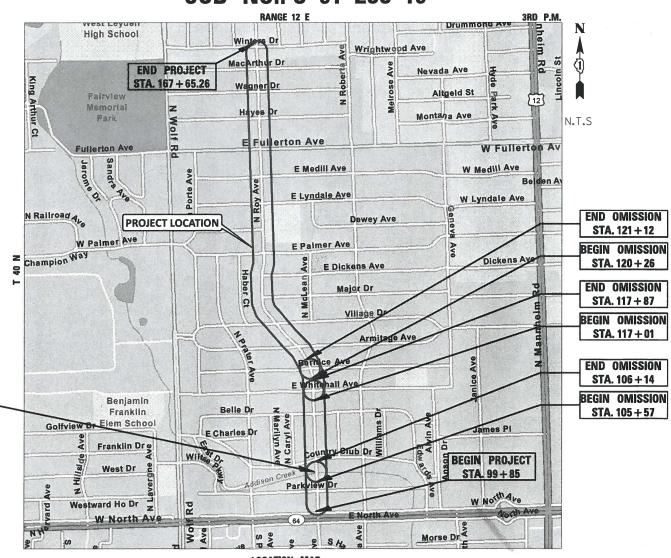
SN 016-92539

LEYDEN TOWNSHIP

CHRISTOPHER B. BURKE ENGINEERING, LTD. 9575 W. Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500

EXPIRATION DATE: APRIL 30, 2018

CONTRACT NO. 61F46



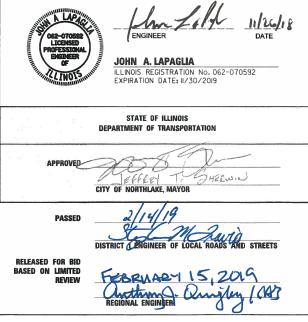
GROSS LENGTH OF PROJECT = 6,985 LINEAL FEET (1,32 ML)

NET LENGTH OF PROJECT = 6,756 LINEAL FEET (1.28 MI.)

LOCATION OF SECTION INDICATED THUS: -

18-00093-00-RS

RS COOK 22 1
ILLINOIS CONTRACT NO. 61F46



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

EDERAL AID PROGRAM

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SCHAUMBURG, IL

INDEX OF SHEETS

PA	4GE	TITLE
	4	OOVER CHEET
	1	COVER SHEET
	2	GENERAL NOTES, INDEX OF SHEETS, INDEX OF STANDARD
	3	SUMMARY OF QUANTITIES
	4	TYPICAL SECTIONS
	5-10	ROADWAY PLANS
	11-12	CONSTRUCTION DETAILS
	13-22	DISTRICT 1 DETAILS

HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-11	PERPENDICULAR CURB RAMPS
424026-03	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
442201-03	CLASS C & D PATCHES
604001-04	FRAME AND LIDS TYPE 1
606001-07	CONC. CURB TYPE B AND COMB. CONC CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURES, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2019; 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" JUNE 2014 SEVENTH EDITION; THE "ILLINOIS URBAN MANUAL "AND THE "ILLINOIS URBAN MANUAL FIELD MANUAL FOR INSPECTION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES"; THE "AMERICANS WITH DISABILITIES ACT OF 1990 ACCESSIBILITY GUIDELINES"; THE "DRAFT" REHABILITATION ACT OF 1973 (SECTION 504); THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES; THE "DETAILS" IN THE PLANS; AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

CODES OF THE IEPA TITLE 35, AND O.S.H.A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADHERENCE TO THESE (NOT THE CITY OF NORTHLAKE OR CHRISTOPHER B. BURKE ENGINEERING).

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE CITY DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE CITY.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATION IS REQUIRED.)

WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS.

ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR.

THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS. CONTACT WATER DEPARTMENT FOR THEM TO TURN VALVES OR OPERATE HYDRANTS. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE ENGINEER, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT.

MISCELLANEOUS

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

ALL SAWCUTTING SHALL BE INCLUDED IN REMOVAL ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

AGGREGATE BASE REPAIR, CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND WILL NOT EXCEED THE PLAN QUANTITY.

THE THICKNESS OF EXISTING PAVEMENT TO BE REMOVED HAS BEEN ESTIMATED FROM PAVEMENT CORES. THE PAVEMENT CORING GEOTECHNICAL REPORT IS ATTACHED TO THE PROJECT SPECIFICATIONS. THE CITY DOES NOT GUARANTEE ITS ACCURACY. NO ADJUSTMENTS TO PLAN QUANTITIES SHALL BE MADE FOR VARIATIONS IN PAVEMENT THICKNESS.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENTIAL DRIVEWAYS AT ALL TIMES.
THIS WORK SHALL BE COMPLETED AND PAID FOR IN ACCORDANCE WITH THE SPECIAL PROVISION
FOR "AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS". AGGREGATE RAMPS SHALL BE
CONSTRUCTED FROM THE EXISTING ROADWAY AGGREGATE BASE TO THE EXISTING CURB AND
GUTTER. THE GRADE OF THE AGGREGATE RAMPS SHALL NOT EXCEED 12%.

RELOCATING EXISTING SIGNS: EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". STOP SIGNS, SPEED LIMIT SIGNS, AND STREET NAME SIGNS SHALL BE UP AND VISIBLE AT ALL TIMES.

CURB AND GUTTER TO BE REMOVED AT DRIVEWAYS SHALL BE REPLACED WITH DEPRESSED CURB AND GUTTER.

PAVING

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.

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. THE THICKNESSES SHOWN ON THE PLANS ARE THE MINIMUM ACCEPTABLE THICKNESSES.

LANDSCAPING

CONTRACTOR SHALL NOT PLACE SOD UNTIL THE TEMPERATURE IS 80° OR LESS AND THE FORECAST FOR THE NEXT 7 DAYS SHOWS TEMPERATURES OF 80° OR LESS. IF ALL OTHER PAY ITEMS ARE COMPLETED, THE CONTRACTOR WILL NOT BE CHARGED WORKING DAYS FOR DELAYS IN PARKWAY RESTORATION DUE TO TEMPERATURE.

WHEN DIRECTED BY THE ENGINEER, SUPPLEMENTAL WATERING SHALL BE APPLIED TO ALL SODDED AREAS PRIOR TO FINAL ACCEPTANCE AT A RATE SPECIFIED BY THE ENGINEER.

THE CONTRACTOR SHALL ADHERE TO LIMITS OF RESTORATION SHOWN. AREAS OUTSIDE THESE LIMITS THAT ARE DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR.

SECTION

18-00093-00-RS

COUNTY

COOK

ILLINOIS FED. AID PROJECT

22 2

CONTRACT NO. 61F46

CONTRACTOR SHALL BE CAUTIOUS NOT TO DISTURB ANY PARKWAY TREES DURING CONSTRUCTION. ANY TREES THAT ARE DAMAGED OR DISTURBED DURING THE CONSTRUCTION SHALL BE REPLACED IN KINDS BY THE CONTRACTOR.

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -		CITY OF NORTHLAKE	F.A.U.
\Cıvıl\GEN_1_940032HR286.sht		DRAWN - ES	REVISED -	STATE OF ILLINOIS	ROY AVENUE	2539
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	2000
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE: NONE SHEET NO. OF 1 SHEETS STA. TO STA.	

			STP - LAFO 80% FED. 20% LOCAL
	SUMMARY OF QUANTITIES		ROY AVENUE CONSTRUCTION TYPE CODE
CODE NO). ITEM	UNIT	TOTAL QUANTITY
20101200	TREE ROOT PRUNING	EACH	5
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	675
28000510	INLET FILTERS	EACH	51
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	525
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	15,600
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	3,300
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1,980
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	14,600
42400400	PORTLAND CEMENT CONCRETE SIDEWALK 7 INCH	SQ FT	1,700
* 42400800	DETECTABLE WARNINGS	SQ FT	1,000
44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	23,000
44000600	SIDEWALK REMOVAL	SQ FT	16,300
44201701	CLASS D PATCHES, TYPE I, 5 INCH	SQ YD	1,437
44201705	CLASS D PATCHES, TYPE II, 5 INCH	SQ YD	1,437
	CLASS D PATCHES, TYPE III, 5 INCH	SQ YD	1,437
	CLASS D PATCHES, TYPE IV, 5 INCH	SQ YD	1,437
	AREA REFLECTIVE CRACK CONTROL TREATMENT	SQ YD	23,000
	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	8
	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1
	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1
	MOBILIZATION	L SUM	1
	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
	SHORT TERM PAVEMENT MARKING	FOOT	5,200
	SHORT TERM PAVEMENT MARKING SHORT TERM PAVEMENT MARKING REMOVAL		,
		SQ FT	2,600
	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3,700
	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	600
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	900
	DETECTOR LOOP REPLACEMENT	FOOT	125
	STRUCTURES TO BE ADJUSTED	EACH	68
	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	70
	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	47
2 480	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1
	TEMPORARY INFORMATION SIGNING	SQ FT	200
* Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	3,200
* XX003435	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	130
	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT ES SPECIAL PROVISION	SQ YD	150

^{**} INDICATES SPECIALTY ITEM

FILE NAME =	USER NAME = jdefrenza	DESIGNED -	VMR	REVISED -
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	PLOT SCALE = 20'	CHECKED -	JGS	REVISED -
	PLOT DATE = 12/26/2018	DATE -	06/22/07	REVISED -

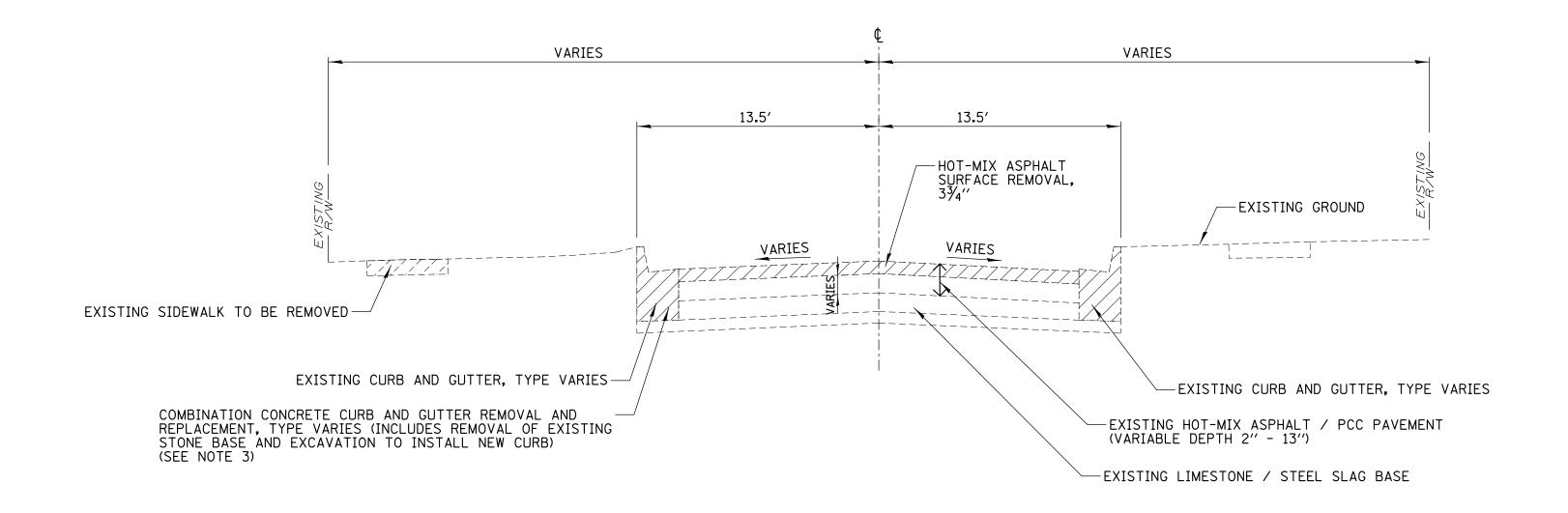
STATI	E OI	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	C		NORTH			F.A.U. RTE.	SECTION	COUNTY
		ROY				2539	18-00093-00-RS	СООК
	SUN	MARY	OF QUA	ANTITIES				CONTRAC
SCALE: NONE	SHEET NO.	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	ID PROJECT

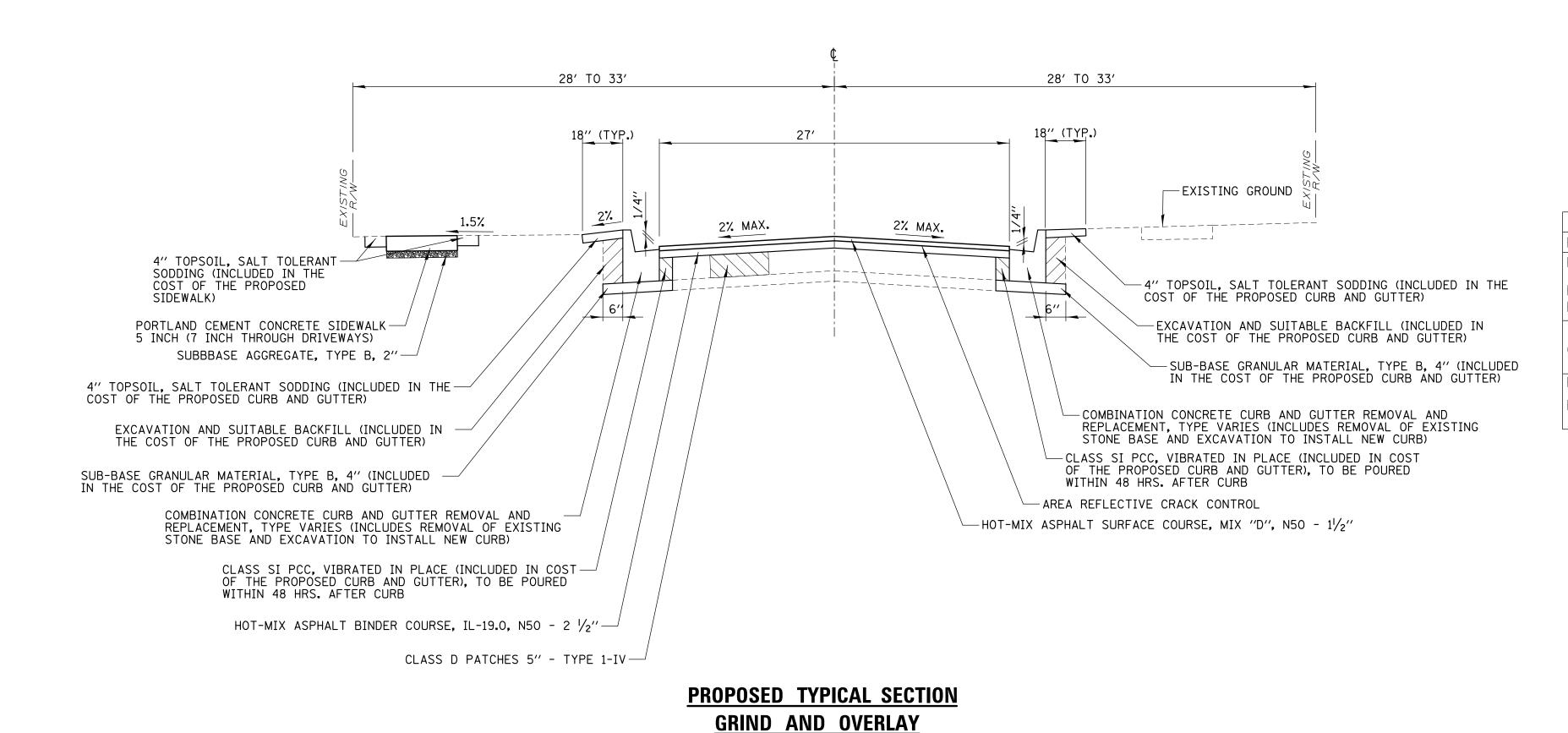
COUNTY TOTAL SHEET NO.

COOK 22 3

CONTRACT NO. 61F46



EXISTING TYPICAL SECTION STA. 100 + 38.60 TO STA. 167 + 65.25, ROY AVENUE



STA. 100 + 38.60 TO STA. 167 + 65.25, ROY AVENUE **OMISSION: STA. 120 + 26-STA. 121 + 12, ROY AVENUE OMISSION: STA. 117 + 01-STA. 117 + 87, ROY AVENUE OMISSION: STA. 105 + 57-STA. 106 + 14, ROY AVENUE**

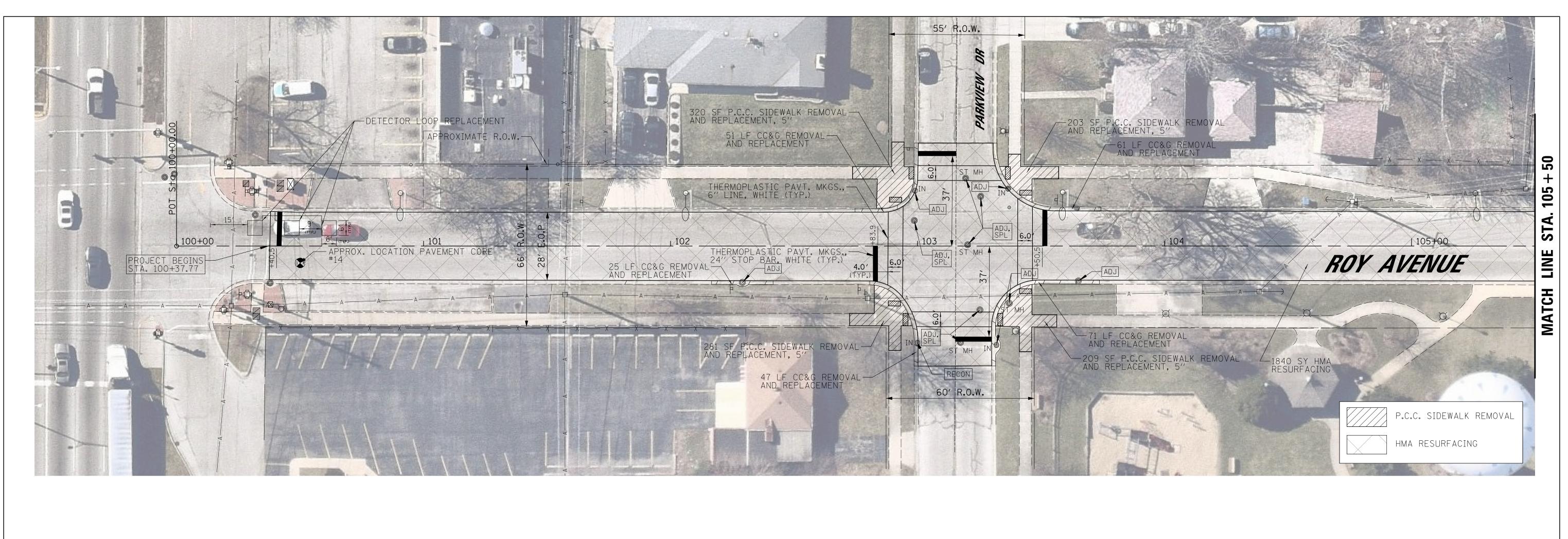
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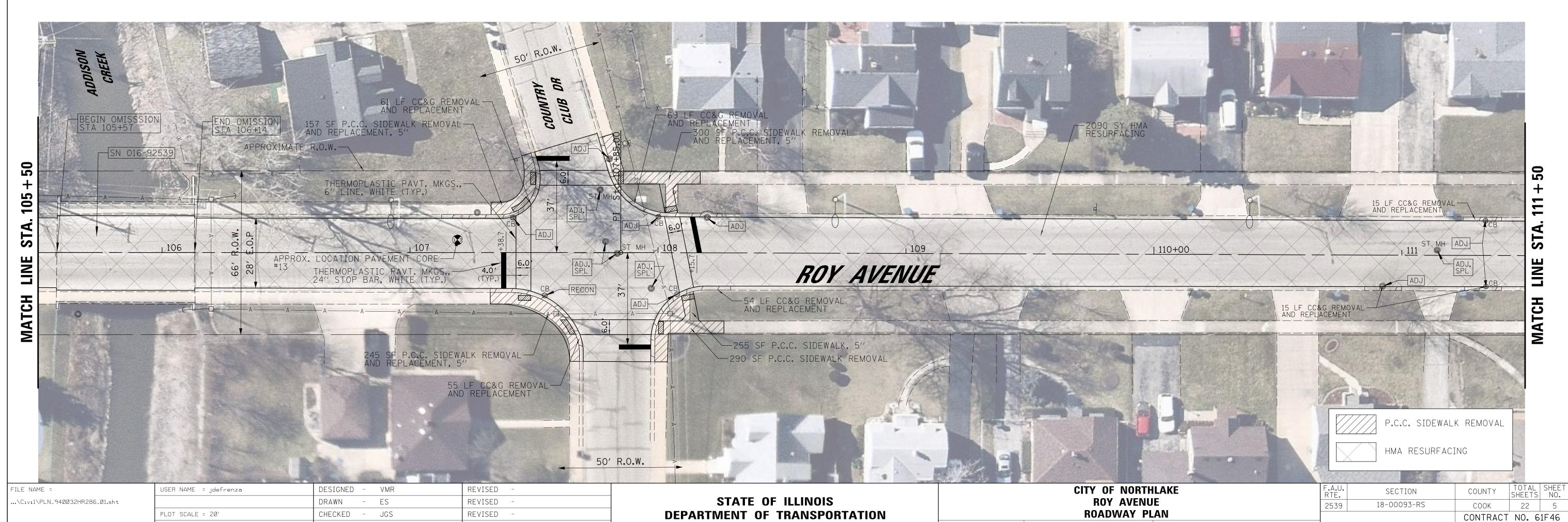
- 1. ADDITIONAL STONE BACK FILLING SHALL BE INCLUDED IN THE COST FOR COMBINATION CONCRETE CURB AND GUTTER.
- 2. CONTRACTOR SHALL SAWCUT PAVEMENT PRIOR TO REMOVING THE CURB.
- 3. PAVEMENT REMOVAL ADJACENT TO PROPOSED CURB AND GUTTER (INCLUDED IN THE COST OF THE PROPOSED CURB AND GUTTER).
- 4. ALL WORK INCLUDING LANDSCAPE RESTORATION MUST BE COMPLETED AND APPROVED BY ENGINEER PRIOR TO FINAL PAYOUT.
- 5. CONTRACTOR SHALL MILL PRIOR TO PATCHING.
- 6. NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED FOR PETROMAT (FABRIC) ENCOUNTER DURING GRINDING OPERATIONS. REMOVAL OF PETROMAT SHALL BE CONSIDERED INCIDENTAL TO HOT-MIX ASPHALT SURFACE REMOVAL.
- 7. ALL LANDSCAPE RESTORATION (4" TOPSOIL, SALT TOLERANT SODDING) REQUIRED SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
- 8. TOTAL HOT-MIX ASPHALT TO BE REMOVED (3 $\frac{3}{4}$ ") & REPLACED (4").

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ROADWAY ITEM	AIR VOIDS @Ndes
RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', N50 (IL-9.5mm) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	4% @ 50 GYR. 4% @ 50 GYR.
CLASS D PATCH (HMA BINDER IL-19mm)	4% @ 50 GYR.
HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm)	4% @ 50 GYR.

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.
- 2. FOR USE OF RECYCLED MATERIAL SEE SPECIAL PROVISIONS.
- 3. FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- 4. PAVEMENT PATCHING TO BE PERFORMED AFTER ROADWAY IS MILLED.

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -		CITY OF NORTHLAKE	F.A.U.	SECTION	COUNTY	TOTAL SHEET
\C ₁ v ₁ 1\TYP_940032HR286_Ph1.sht		DRAWN - ES	REVISED -	STATE OF ILLINOIS	ROY AVENUE	2539	 18-00093-RS	COOK	22 4
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	2333		CONTRACT	NO- 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED). AID PROJECT	





PLOT DATE = 12/26/2018

DATE

06/22/07

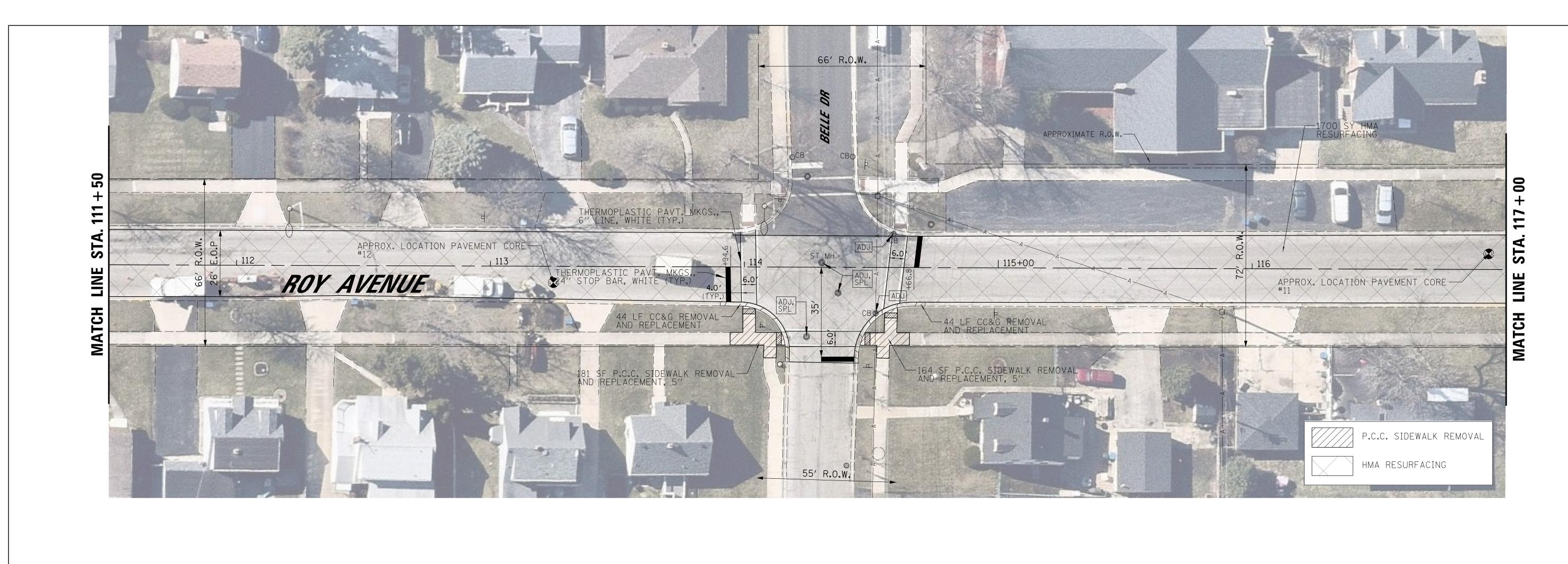
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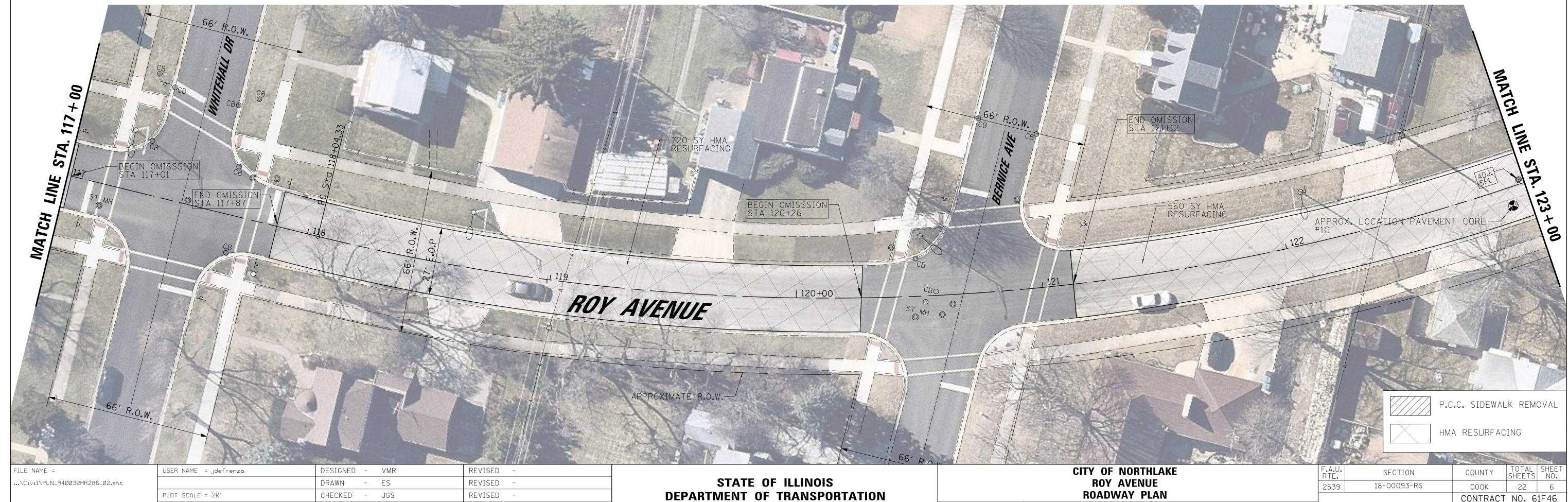
SHEET NO. OF SHEETS STA.

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ILLINOIS FED. AID PROJECT

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SHEET NO. OF SHEETS STA.

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TO STA.

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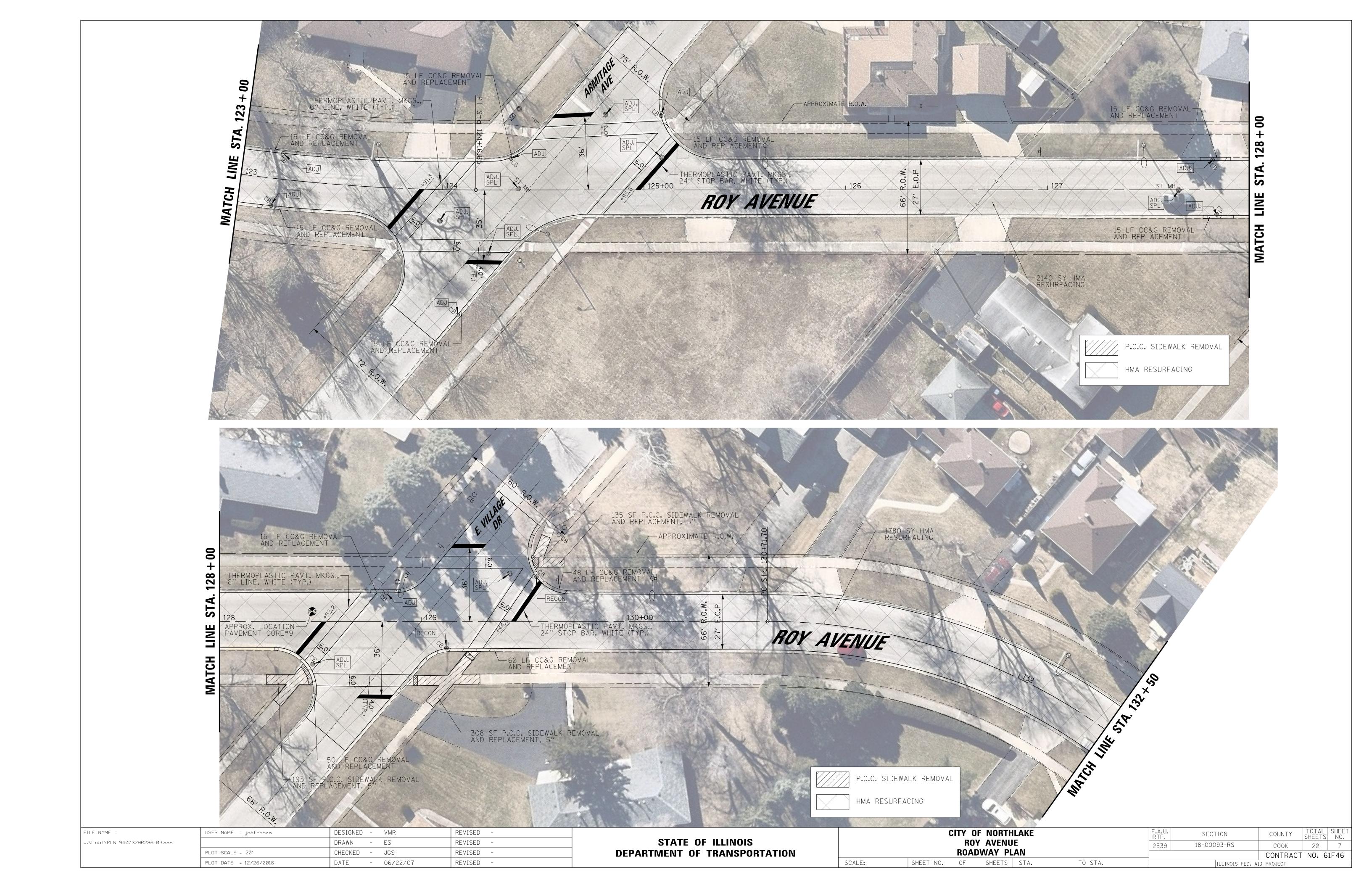
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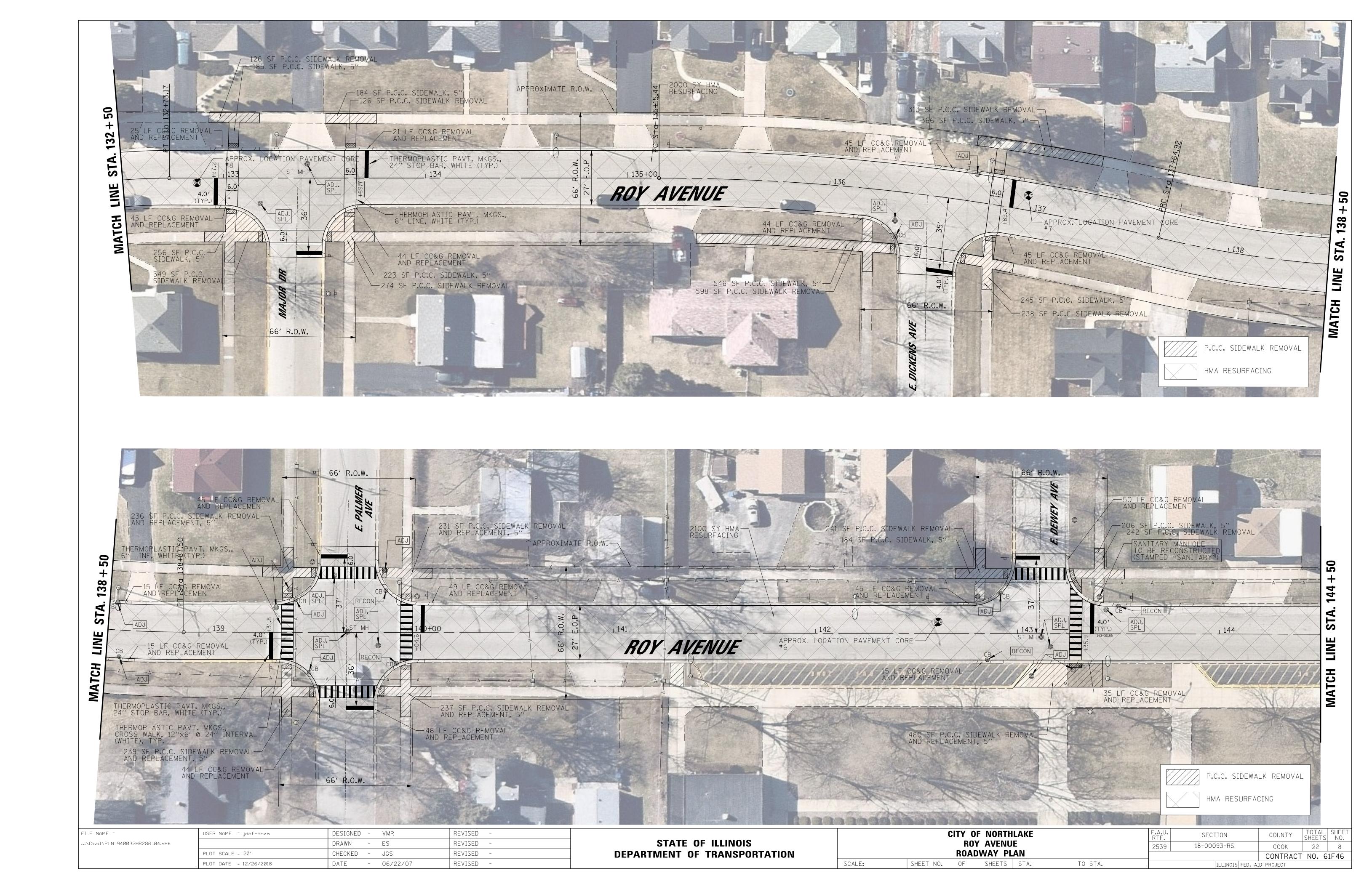
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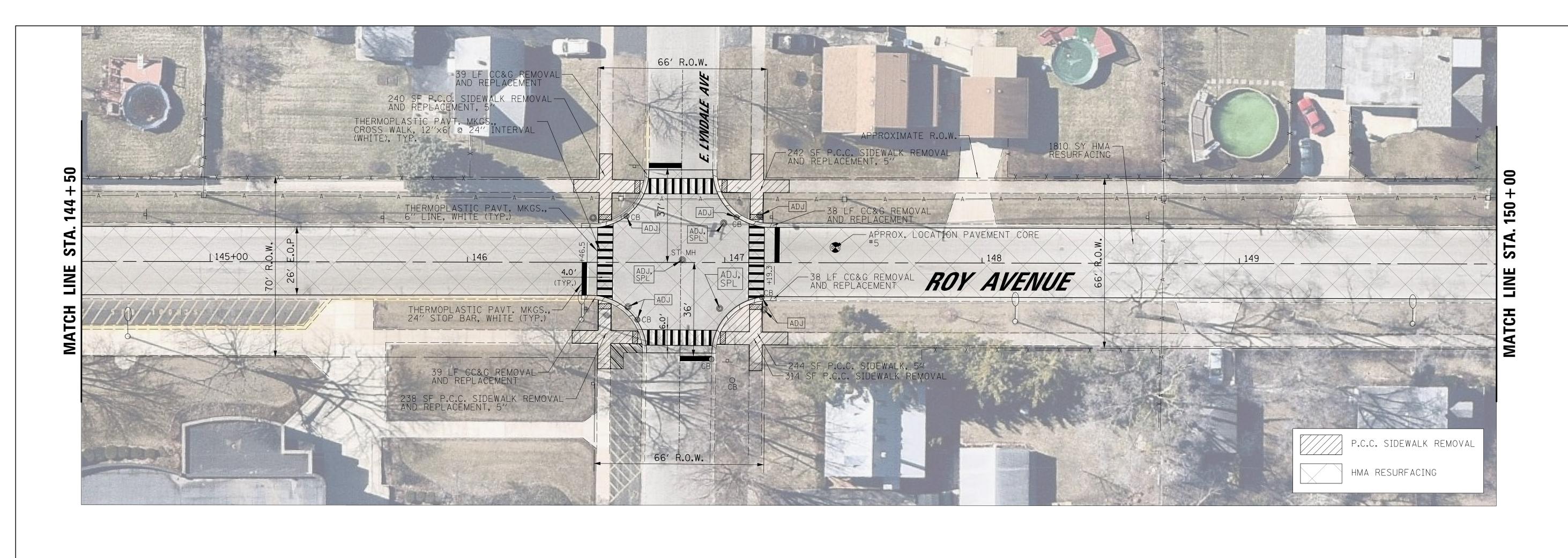
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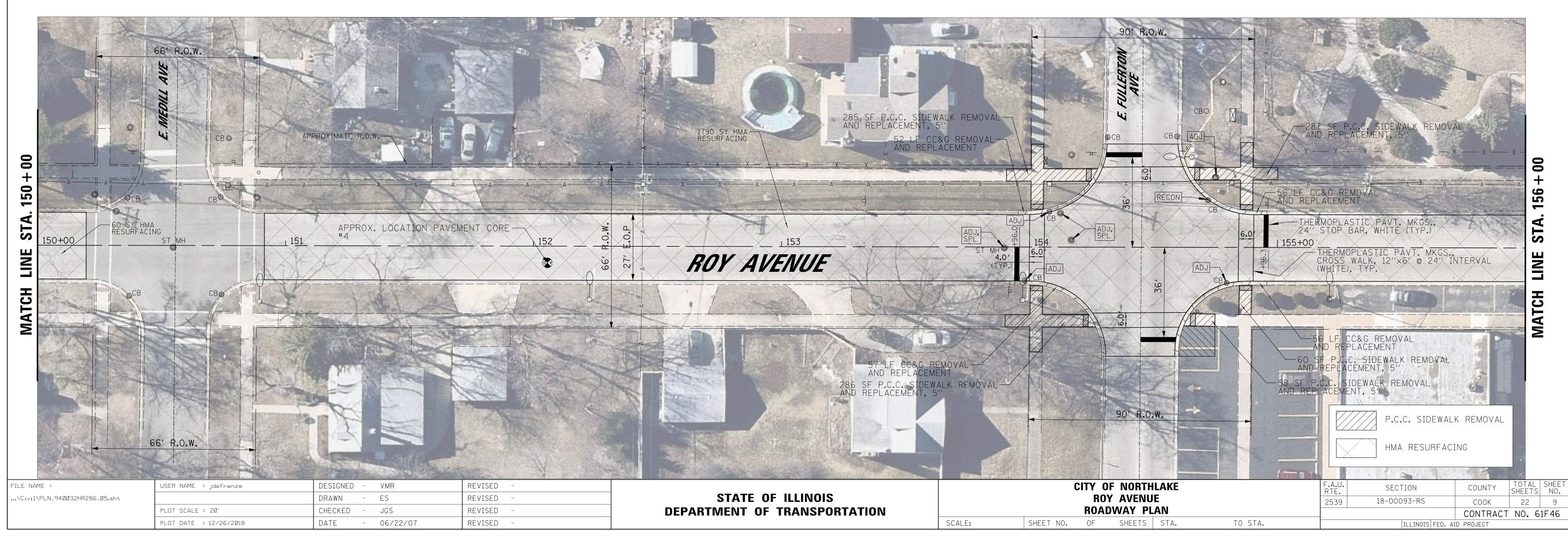
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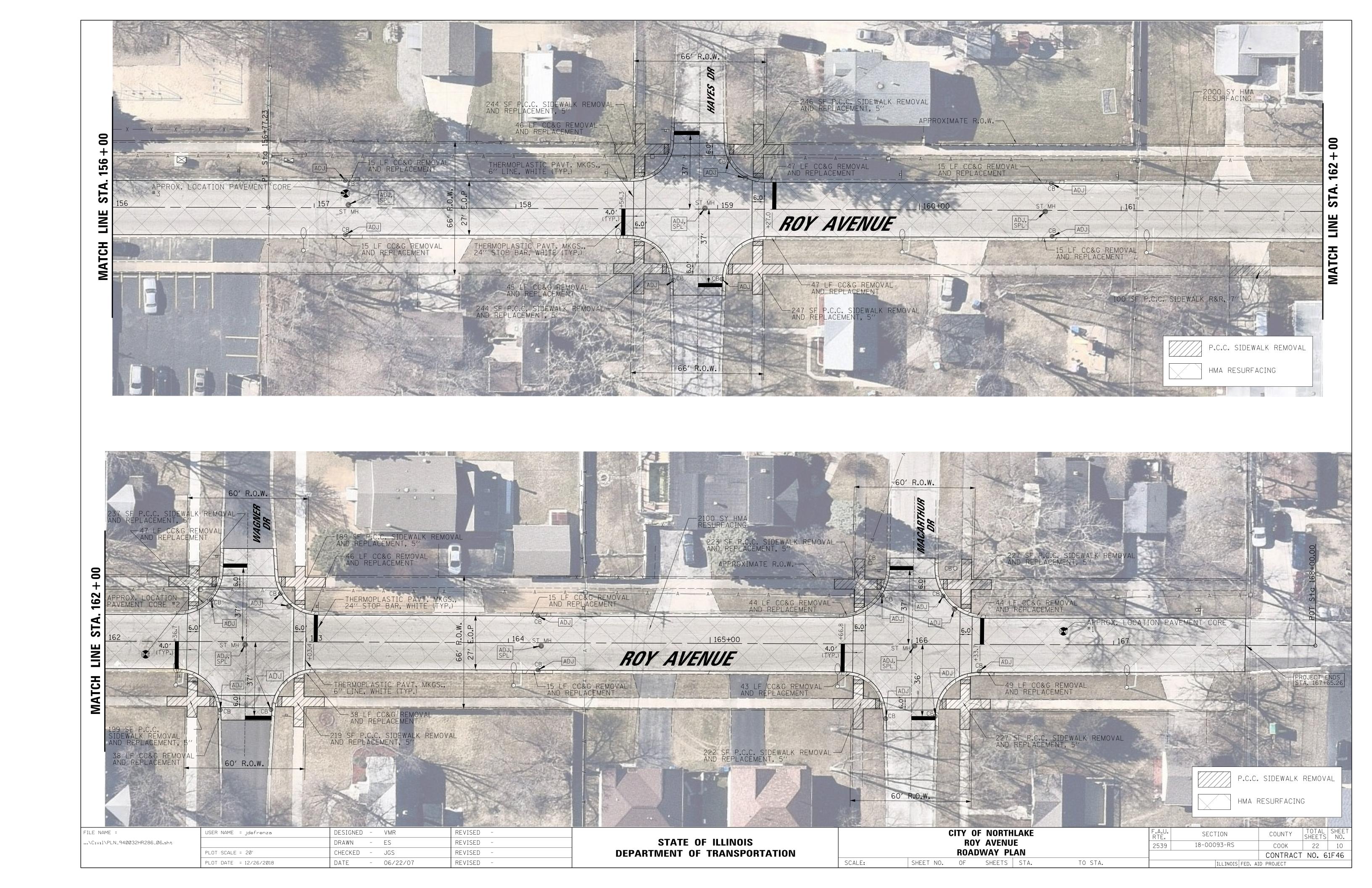
ILLINOIS FED. AID PROJECT

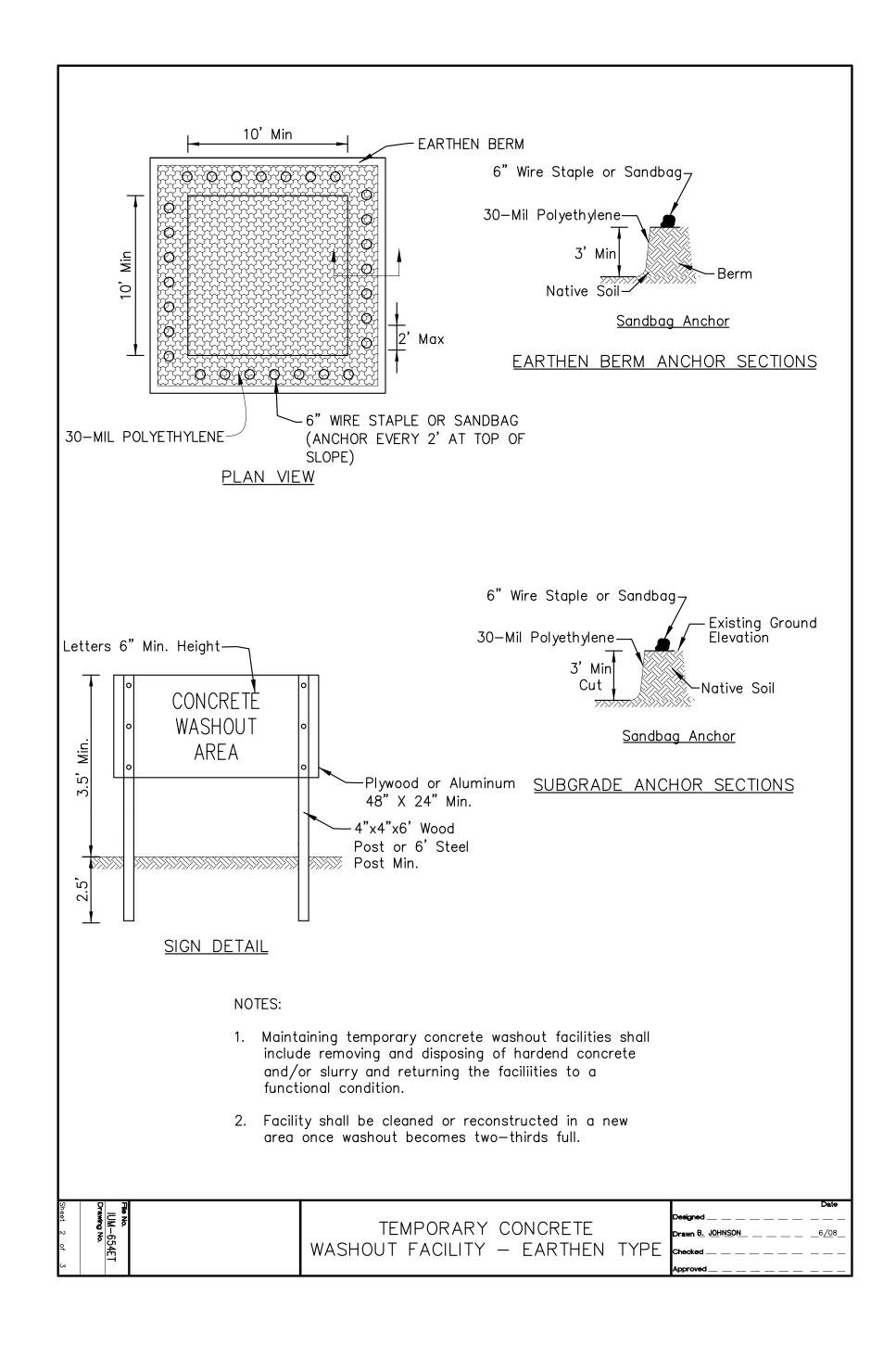




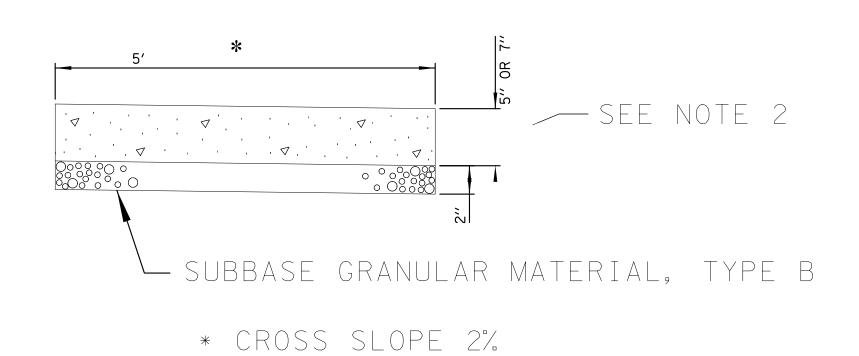






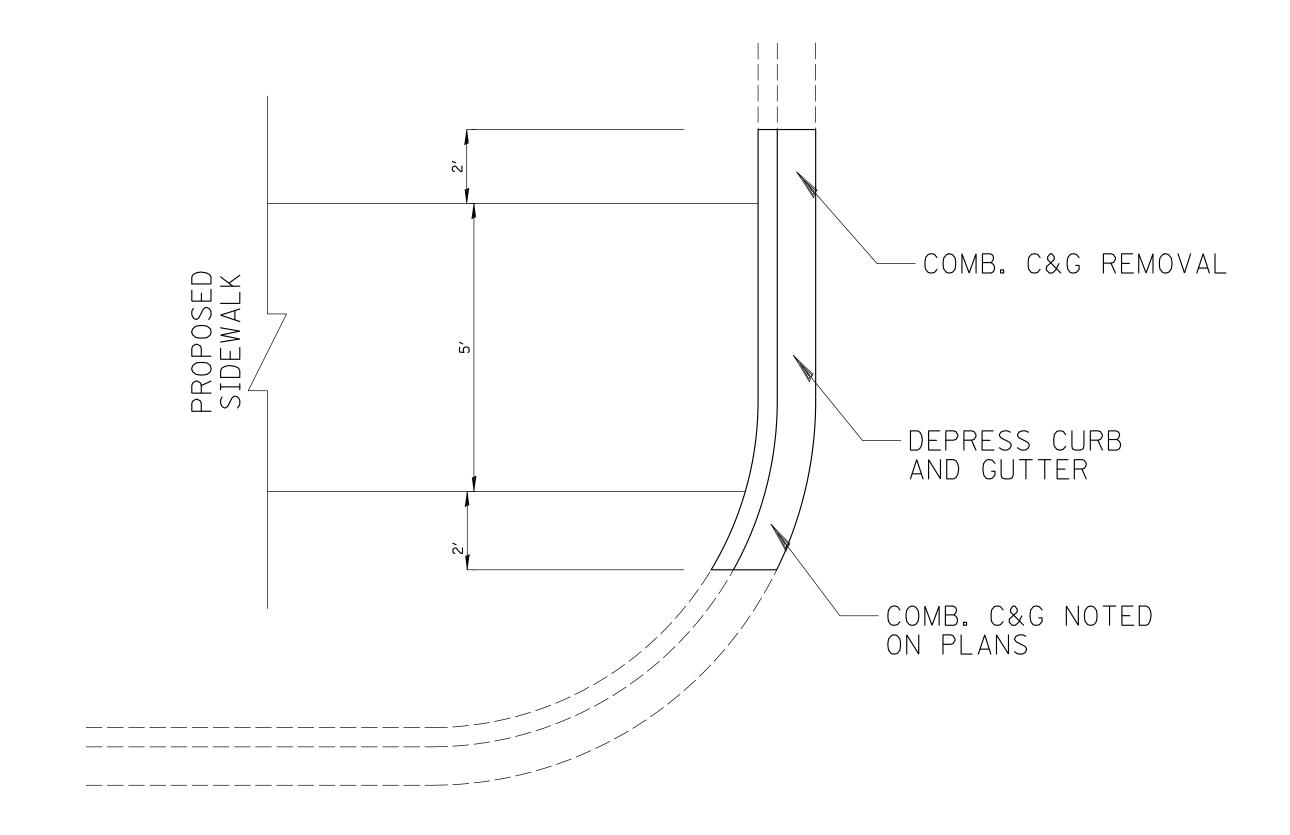


FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -			CITY OF NORTHLA	KE	F.A.U.	SECTION	COUNTY TOTAL SHEET NO.
\C1v11\DET_1_940032HR286.sht		DRAWN - ES	REVISED -	STATE OF ILLINOIS		ROY AVENUE		2539	18-00093-00-RS	COOK 22 11
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION		CONSTRUCTION DET	AILS			CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE:	SHEET NO. OF SHEETS S	TA. TO STA.		ILLINOIS FED.	AID PROJECT



- 1. WHEN FORMS ARE REMOVED FROM THE SIDEWALK EITHER THE SIDEWALK SHALL BE BARRICADED OR BACKFILLED WITHIN 24 HOURS.
- 2. ALL LANDSCAPE RESTORATION (4" TOPSOIL, SALT TOLERANT SODDING) SHALL BE INCLUDED IN COST FOR P.C.C. SIDEWALK.

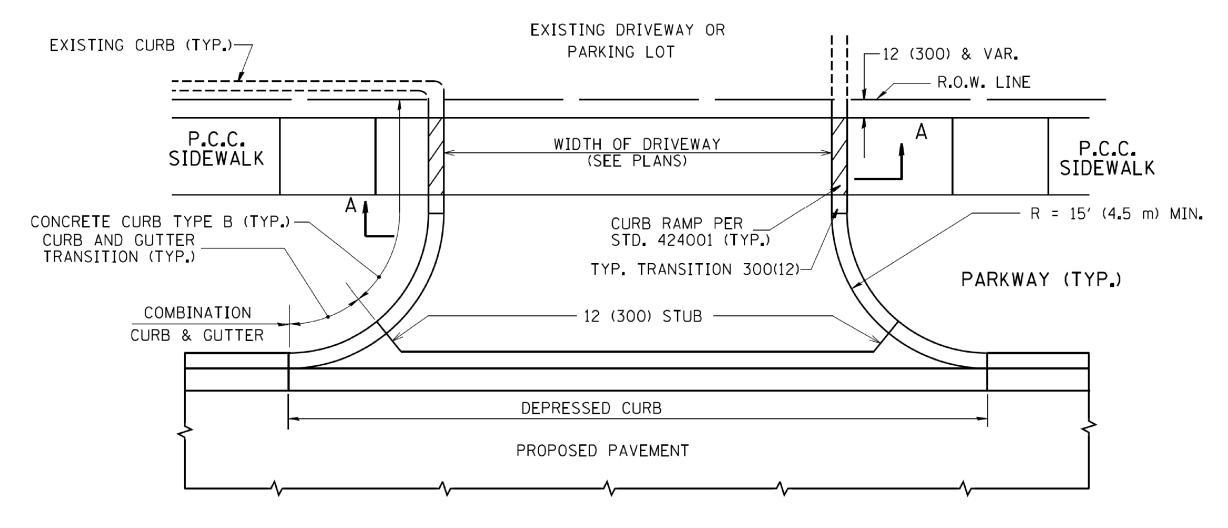
P.C.C. SIDEWALK DETAIL



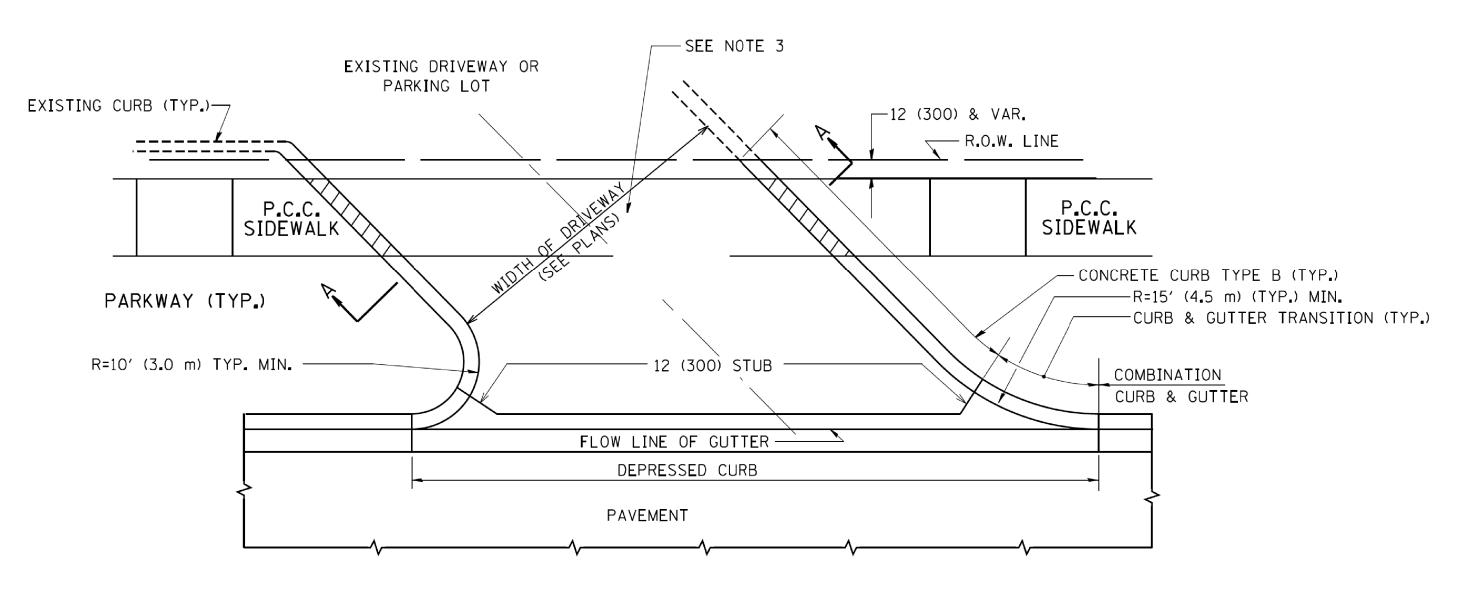
PROPOSED DEPRESSED CURB & GUTTER EXISTING CURB & GUTTER NOT DEPRESSED NOT TO SCALE

<u>P.C.C. SIDEWALK DETAIL</u>

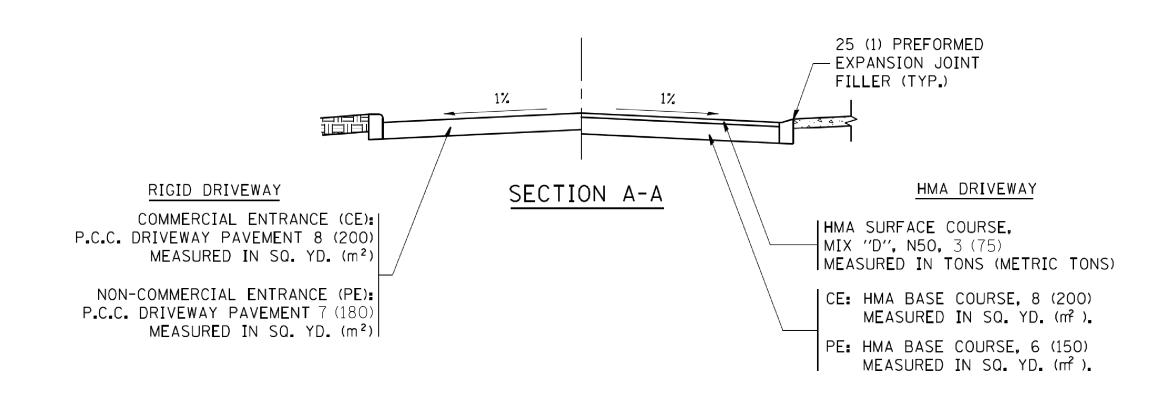
FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -				F.A.U.	SECTION	COUNTY TOTAL SHEET
\C ₁ v ₁ 1\DET_12_940032HR286.SHT		DRAWN - ES	REVISED -	STATE OF ILLINOIS		CONSTRUCTION DETAILS	2539	18-00093-00-RS	COOK 22 12
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO. 61F46
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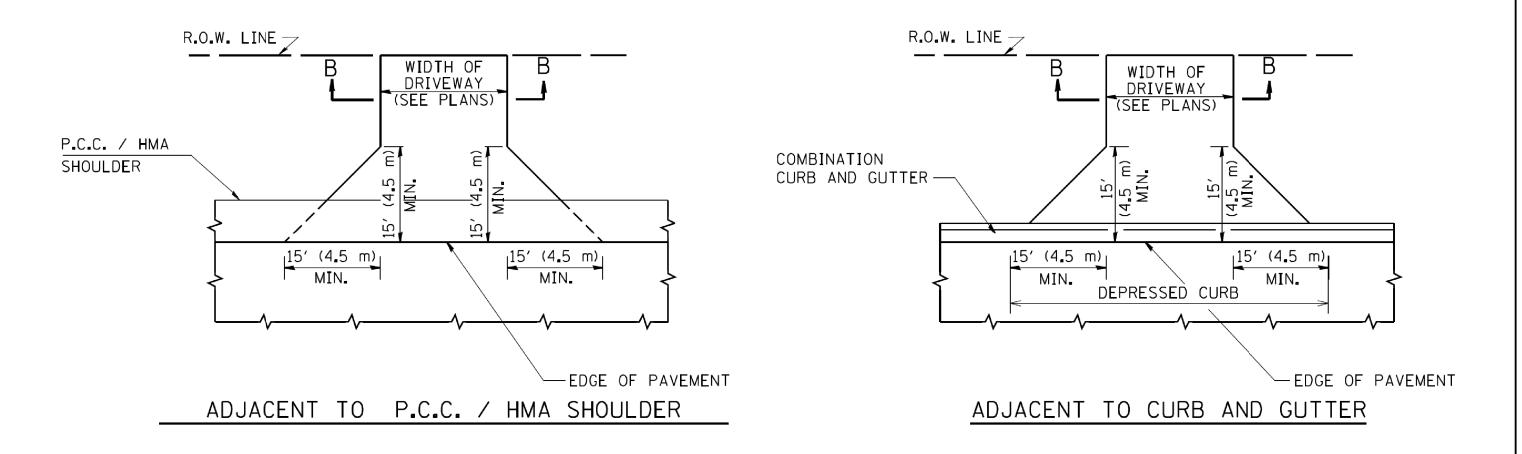


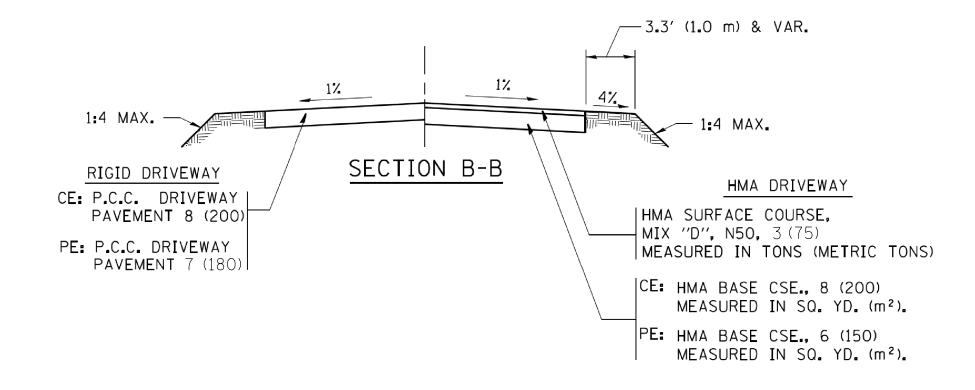
WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B







RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

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

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

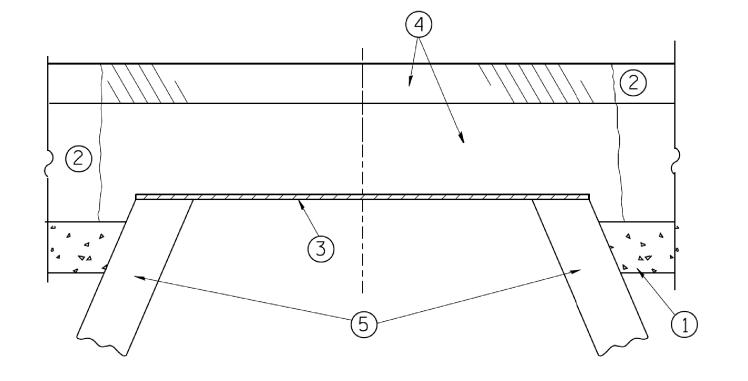
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

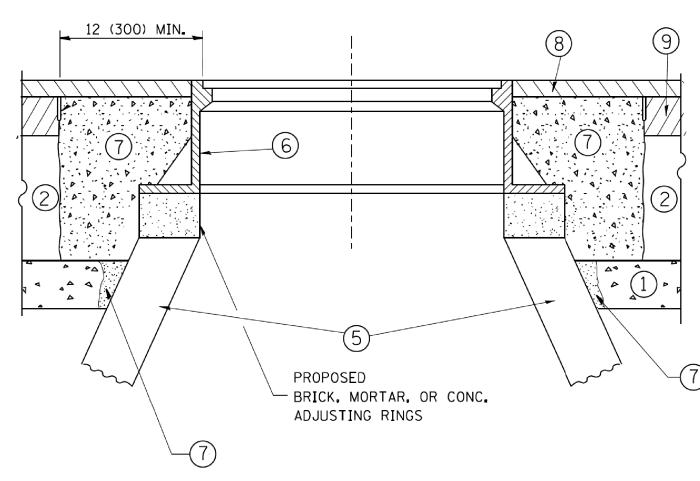
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

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

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

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -		CITY OF NORTHLAKE — ROY AVENUE	F.A.U. SECTION	COUNTY TOTAL SHEET
\C ₁ v ₁ l\DET_5_940032HR286.SHT		DRAWN - ES	REVISED -	STATE OF ILLINOIS	DRIVEWAY DETAILS — DISTANCE BETWEEN R.O.W.	2539 18-00093-00-RS	COOK 22 13
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	AND FACE OF CURB & EDGE OF SHOULDER $>$ = 15'(4.5m)	BD0156-07 (BD-01)	CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED.	AID PROJECT





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.

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

(5) EXISTING STRUCTURE

- 7 CLASS PP-1* CONCRETE
- 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 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)."

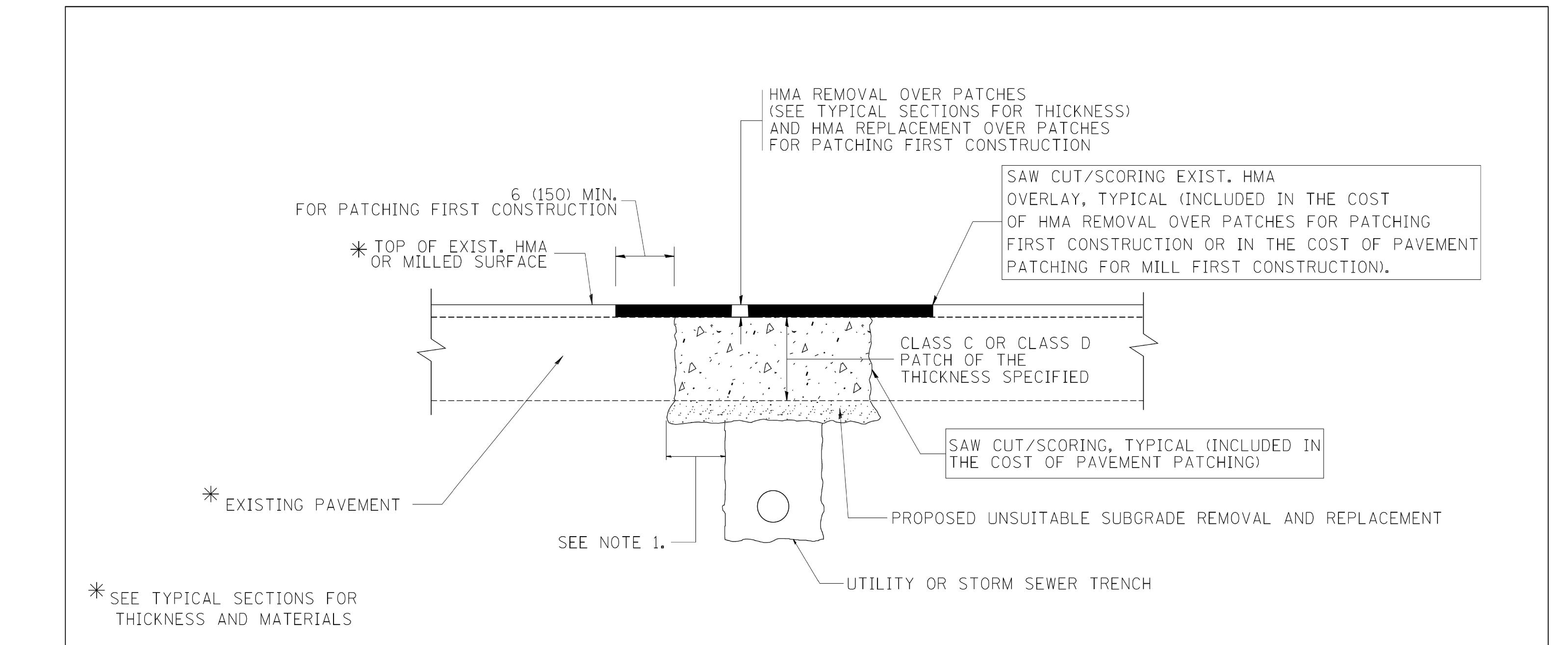
THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -		DETAILS FOR		F.A.U. SECTION	COUNTY TOTAL SHEET
\C ₁ v ₁ 1\DET_7_940032HR286.SHT		DRAWN - ES	REVISED -	STATE OF ILLINOIS	FRAMES AND LIDS ADJUSTMENT WITH MILLIN	2	2539 18-00093-00-RS	COOK 22 14
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	THANES AND EIDS ADSCOTNERS WITH WILLIAM	•	BD600-03 (BD-8)	CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO	TA.	ILLINOIS FED.	AID PROJECT



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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

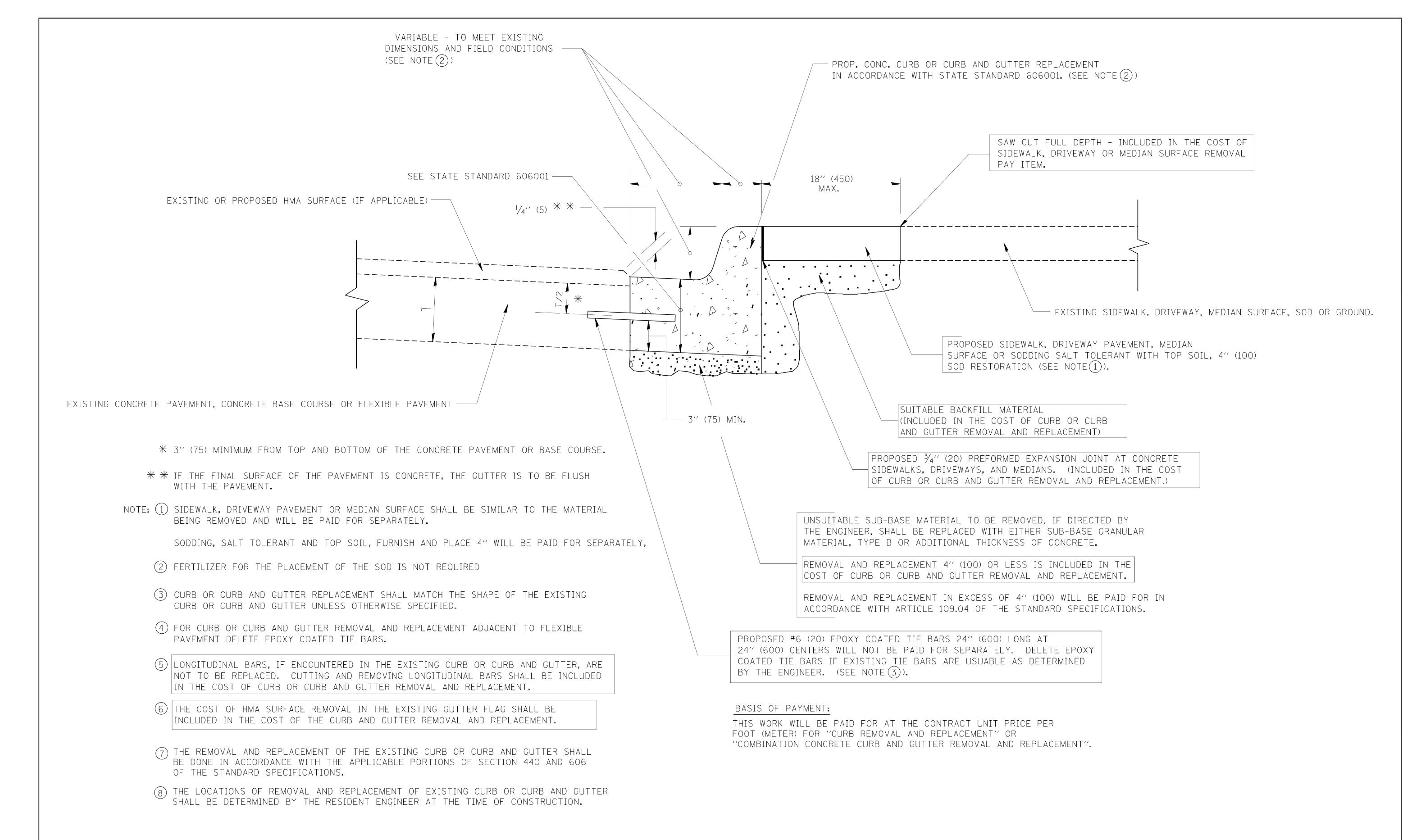
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

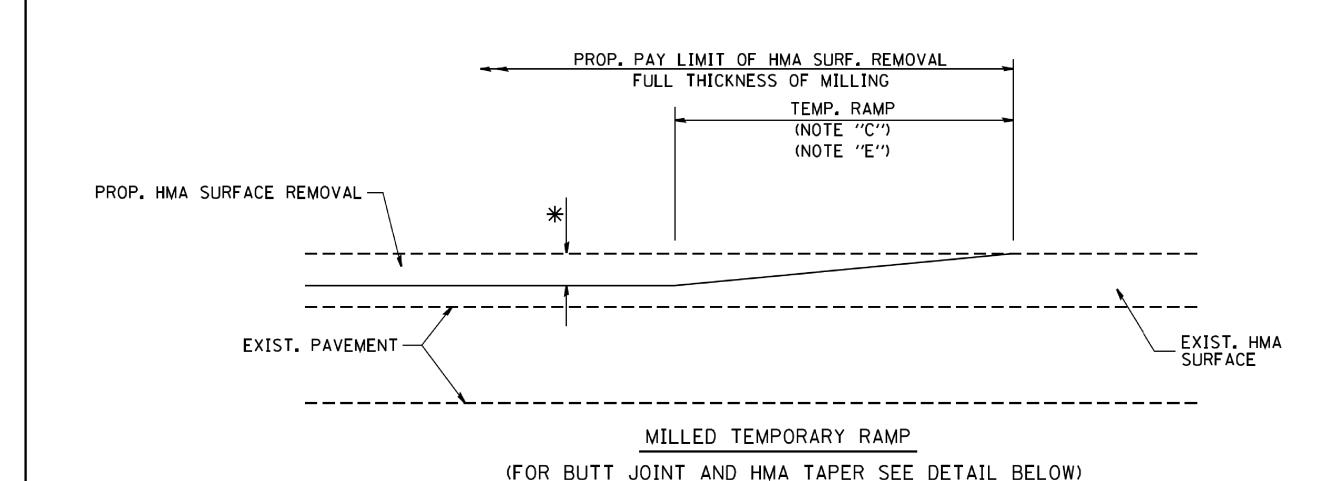
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	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION		HIVIA SURFACED PAVEIVIENT	2000	BD400-04 (BD-22)	CONTRAC	T NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED. A	AID PROJECT	



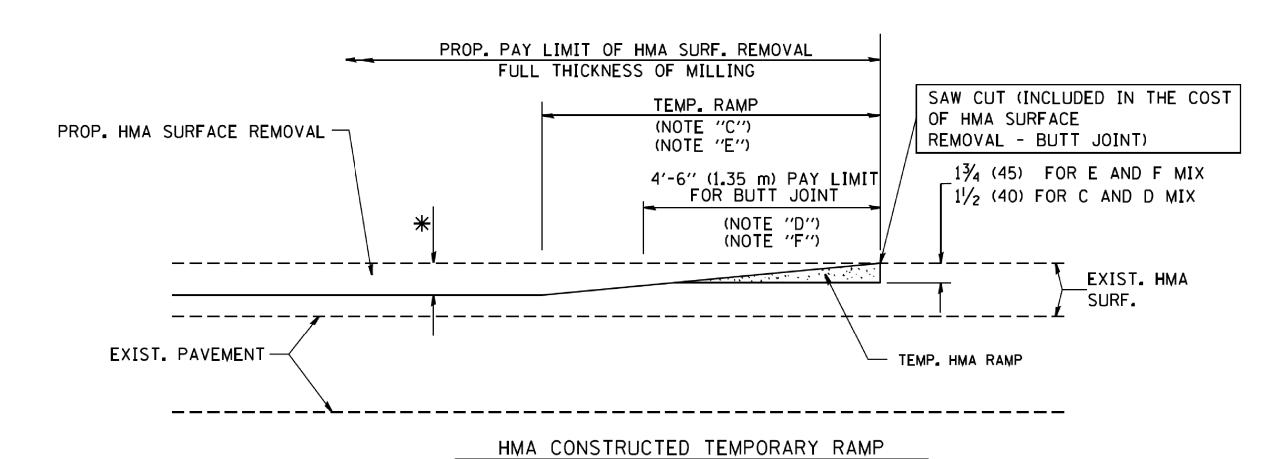
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =\C1v1\\DET_6_940032HR286.SHT	USER NAME = jdefrenza	DESIGNED - VMR DRAWN - ES	REVISED - REVISED -	STATE OF ILLINOIS		CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT		F.A.U. RTE. SECTION 2539 18-00093-00-RS	COUNTY TOTAL SHEET NO. COOK 22 16
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION		HEINIOVAE AND HEI EAGENEIN		BD600-06 (BD-24)	CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO	STA.	ILLINOIS FEI	D. AID PROJECT

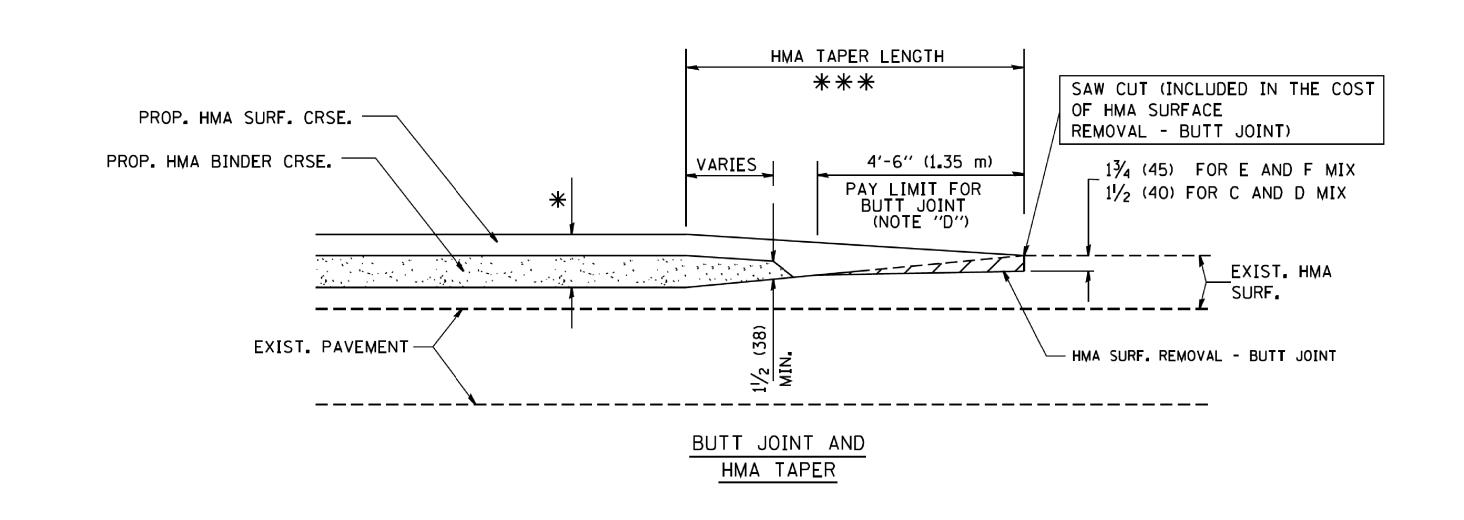


OPTION 1

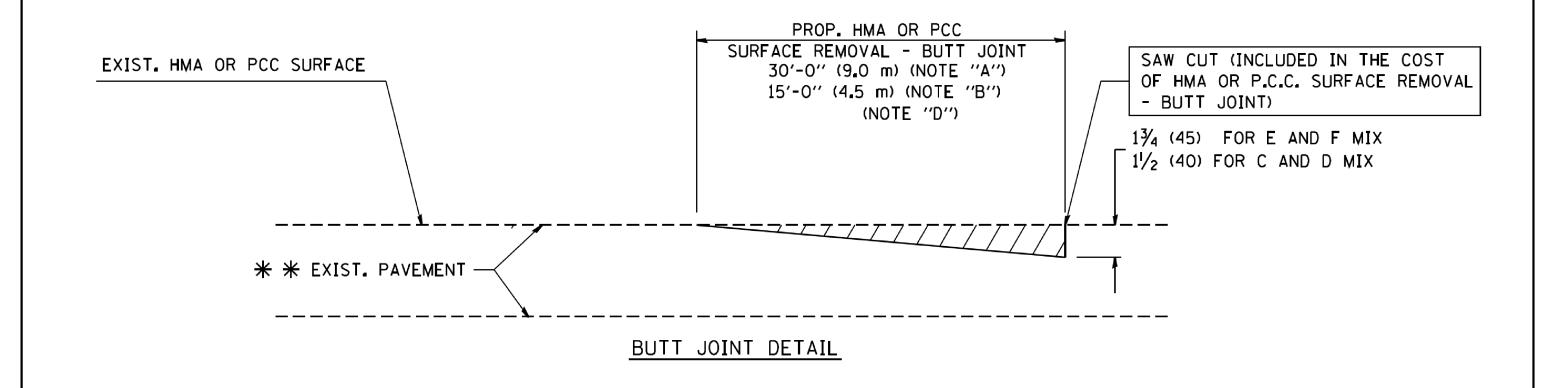


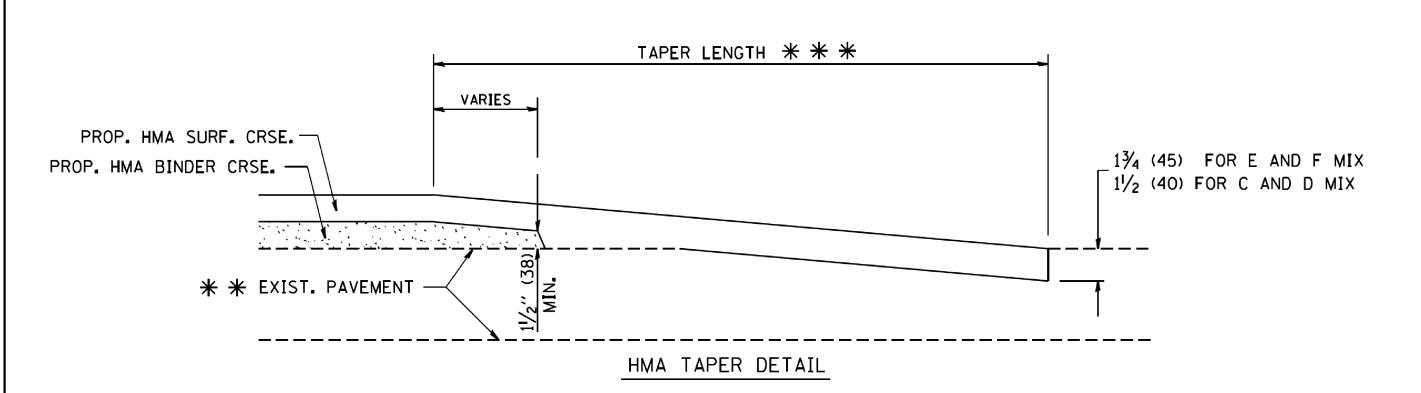
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 2

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.

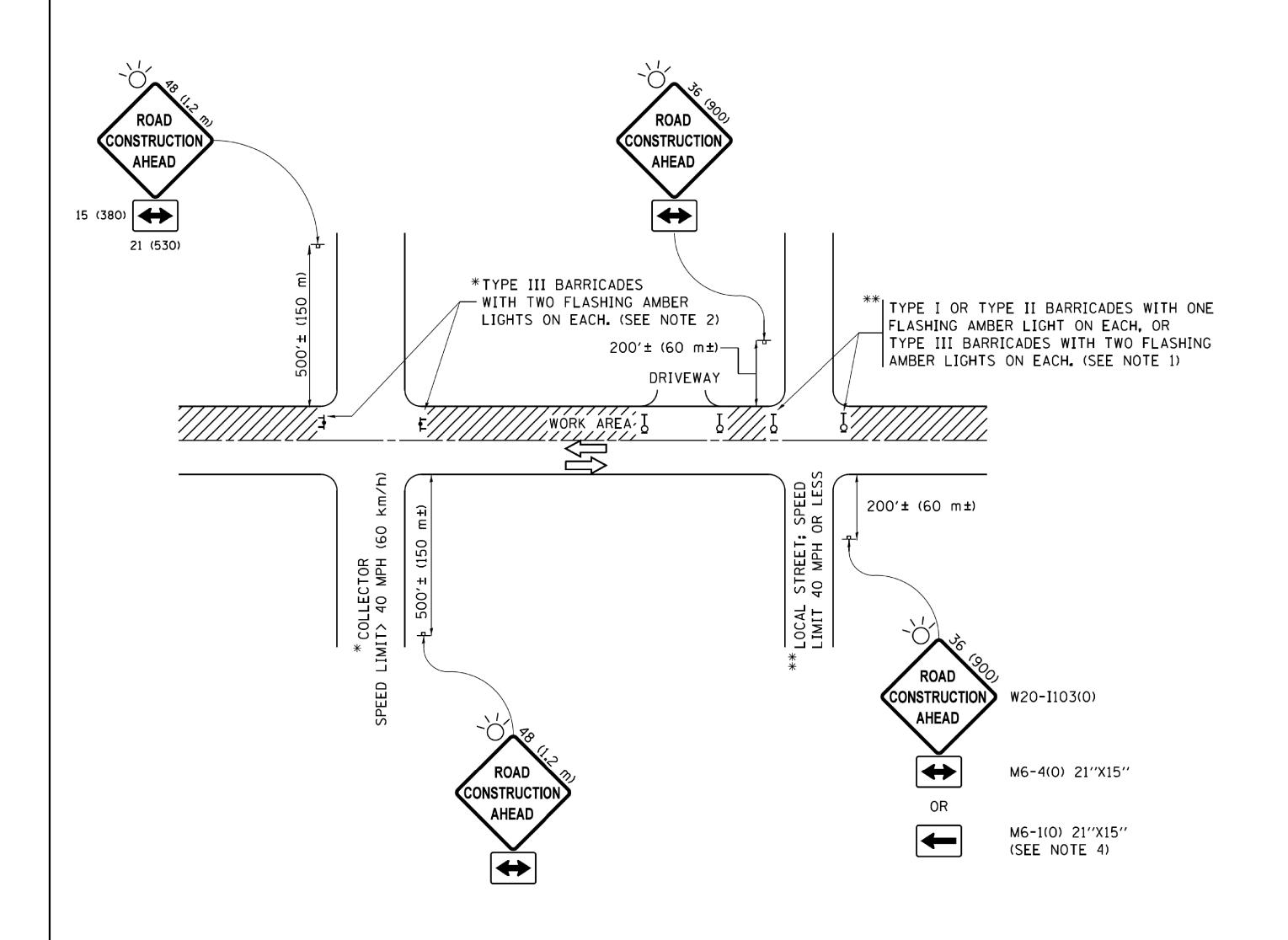
** ** ** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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".

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

FILE NAME =\C1v1\DET_9_940032HR286.SHT	USER NAME = jdefrenza PLOT SCALE = 20'	DESIGNED - VMR DRAWN - ES CHECKED - JGS	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		BUTT JOINTS AND HMA TAPER DETAILS		F.A.U. SECTION 2539 18-00093-00-RS BD400-05 (BD-32)	COUNTY TOTAL SHEET NO. COOK 22 17 CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE:	SHEET NO. OF SHEETS STA.	TO STA.	ILLINOIS FED. A	ID PROJECT

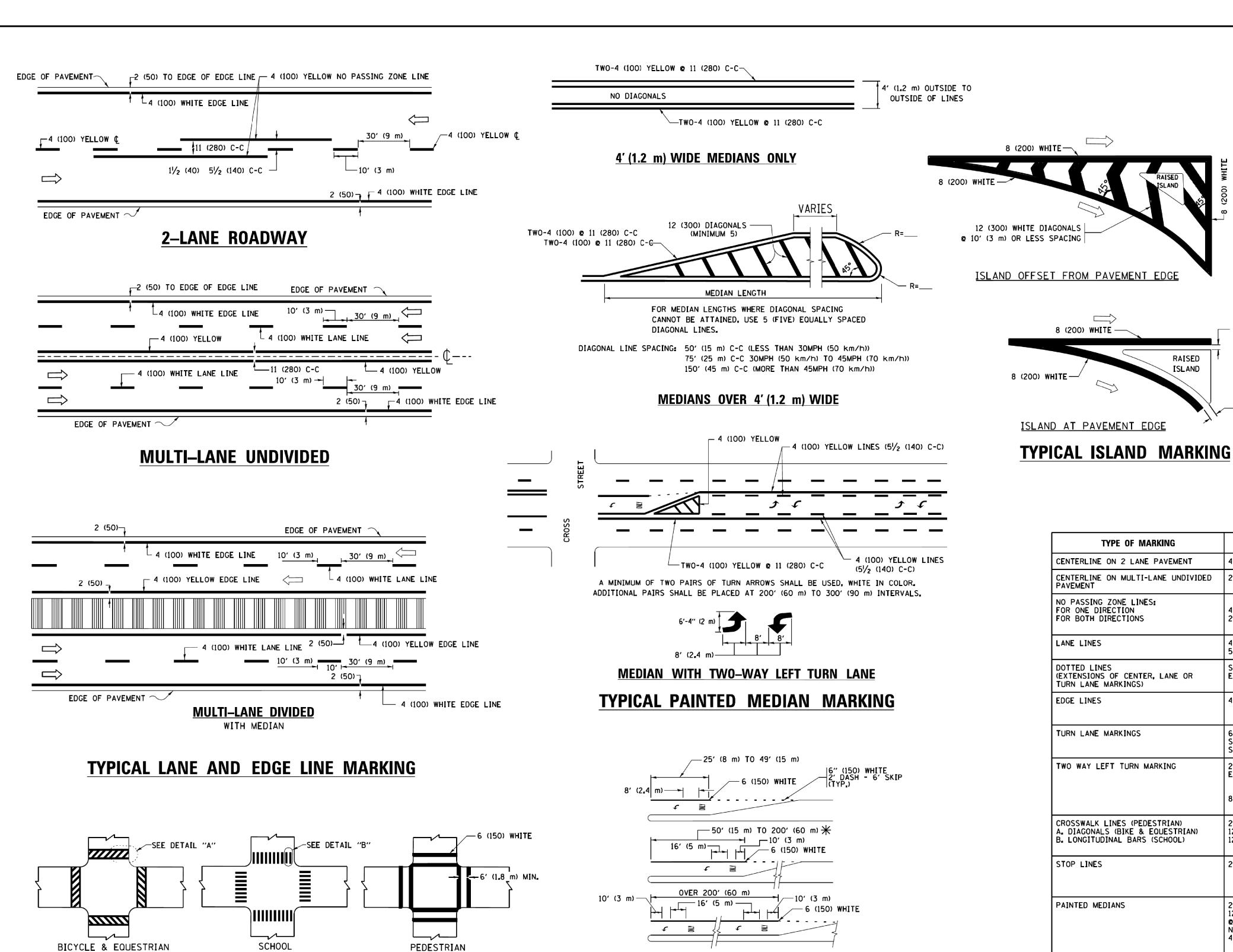


- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500" (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -			TRAFFIC CONTROL AND PROTECTION FOR	F.A.U.	SECTION	COUNTY TOTAL SHEET
\C ₁ v ₁ l\DET_2_940032HR286.sht		DRAWN - ES	REVISED -	STATE OF ILLINOIS		SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	2539	18-00093-00-RS	COOK 22 18
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION		OIDE HOADS, HATEHOESHONS, AND DINVENATO		TC-10	CONTRACT NO. 61F46
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U-TURN WIDTH OF LINE PATTERN COLOR TYPE OF MARKING SPACING / REMARKS CENTERLINE ON 2 LANE PAVEMENT SKIP-DASH YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT 2 @ 4 (100) SOLID YELLOW 11 (280) C-C NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS SOLID SOLID 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C 4 (100) 2 **©** 4 (100) YELLOW YELLOW OMIT SKIP-DASH CENTERLINE BETWEEN SKIP-DASH SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE LANE LINES 5 (125) ON FREEWAYS SAME AS LINE BEING EXTENDED DOTTED LINES (EXTENSIONS OF CENTER, LANE OR SAME AS LINE BEING EXTENDED SKIP-DASH 2' (600) LINE WITH 6' (1.8 m) SPACE TURN LANE MARKINGS) YELLOW-LEFT WHITE-RIGHT 4 (100) SOLID OUTLINE MEDIANS IN YELLOW EDGE LINES 6 (150) LINE; FULL SIZE LETTERS & TURN LANE MARKINGS SOLID WHITE SEE TYPICAL TURN LANE MARKING DETAIL SYMBOLS (8' (2.4m)) TWO WAY LEFT TURN MARKING 2 **@** 4 (100) SKIP-DASH YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH: 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL AND SOLID IN PAIRS EACH DIRECTION 8' (2.4m) LEFT ARROW WHITE CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) NOT LESS THAN 6' (1.8 m) APART 2 @ 6 (150) 12 (300) **©** 45° 12 (300) **©** 90° SOLID SOLID 2' (600) APART 2' (600) APART WHITE SEE TYPICAL CROSSWALK MARKING DETAILS. PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE STOP LINES 24 (600) SOLID WHITE 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. 2 @ 4 (100) WITH 12 (300) DIAGONALS YELLOW: TWO WAY TRAFFIC PAINTED MEDIANS SOLID WHITE: ONE WAY TRAFFIC NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS 8 (200) WITH 12 (300) GORE MARKING AND SOLID WHITE 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) CHANNELIZING LINES DIAGONALS @ 45° 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) RAILROAD CROSSING 24 (600) TRANSVERSE SOLID SEE STATE STANDARD 780001 LINES; "RR" IS 6' (1.8 m AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²) LETTERS; 16 (400) LINE FOR "X" SHOULDER DIAGONALS (REQUIRED FOR SOLID WHITE - RIGHT 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 12 (300) **@** 45° YELLOW - LEFT 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) SHOULDERS > 8') 150' (45 m) C-C (OVER 45MPH (70 km/h)) U TURN ARROW WHITE SEE DETAIL SOLID 16.3 SF 2 ARROW COMBINATION SOLID WHITE SEE DETAIL 30.4 SF LEFT AND U TURN

(910)

COMBINATION

LEFT AND U-TURN

5'-4" (1620)

- 32 R (810)

40 (1020) [°]

20 (510)

___ 2 (50)

8 (200) WHITE —

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

SCALE:

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

D(FT)

425

500

580

665

750

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR

GREATER OR WHEN SPECIFIED IN PLANS.

SPEED LIMIT

30

35

40

45

50

55

FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -
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	PLOT SCALE = 20'	CHECKED - JGS	REVISED -
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

-6 (150) WHITE

THE ROAD WHICH IT CROSSES

DETAIL "A"

6' (1.8 m) MIN.

12 (300) WHITE

DETAIL "B"

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.

ARROW - "ONLY".

 \uparrow AREA = 15.6 SQ. FT. (1.5 m²) (11) AREA = 20.8 SQ. FT. (1.9 m²)

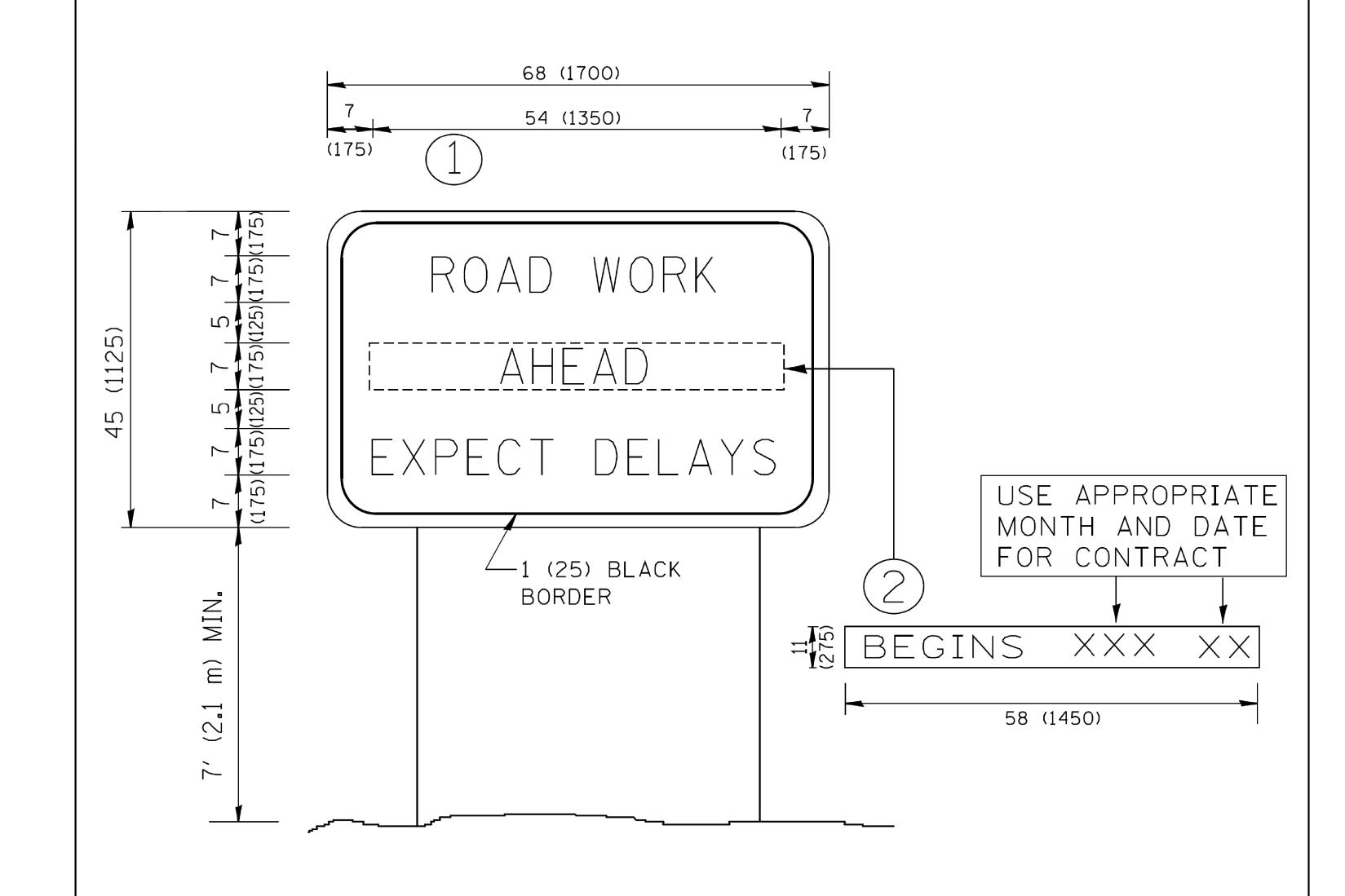
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

	DI	STRICT OF	JE		F.A.U. RTE.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.		
TYPICAL PAVEMENT DETAILS				2539	18-0009	COOK	22	19			
						TC-13		CONTRACT	NO. 6	1F46	
NO. OF SHEETS STA.				TO STA.		ILLINOIS FED. AID PROJECT					



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

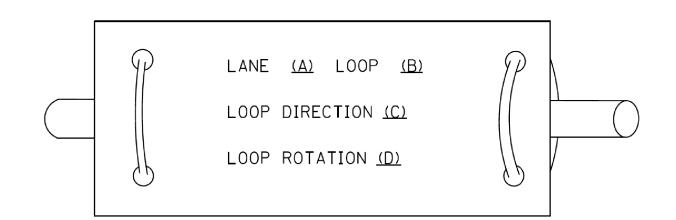
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

PLOT SCALE = 20' CHECKED - JGS REVISED - DEPARTMENT OF TRANSPORTATION SCALE = 12/26/2018 DATE - 06/22/07 REVISED - SCALE = 12/26/2018 DATE - 06/22/07 REVISED - SCALE = 12/26/2018 DEPARTMENT OF TRANSPORTATION	F	FILE NAME =\C1v1\DET_10_940032HR286.SHT	USER NAME = jdefrenza	DESIGNED - VMR DRAWN - ES	REVISED -	STATE OF ILLINOIS		ARTERIAL ROAD INFORMATION SIGN		2539	SECTION 18-00093-00-RS	COUNTY SHEETS NO. COOK 22 20
			PLOT SCALE = 20' PLOT DATE = 12/26/2018	CHECKED - JGS DATE - 06/22/07	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE:	SHEET NO. OF SHEETS STA.	TO STA.		11 //	CONTRACT NO. 61F46

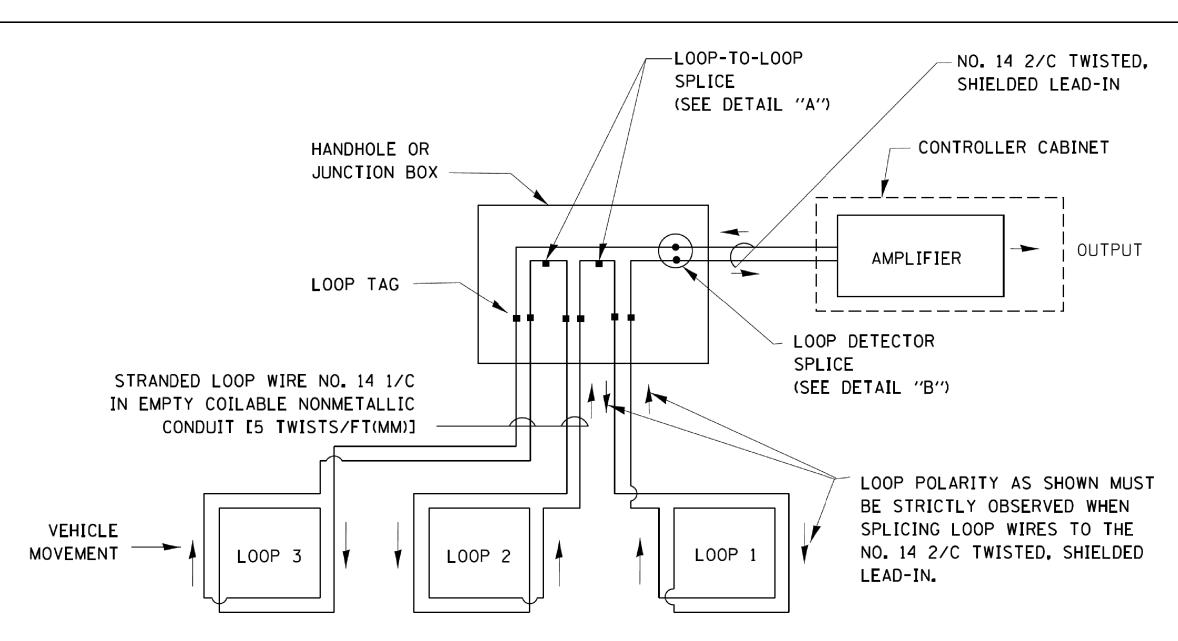
LOOP DETECTOR NOTES

- 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

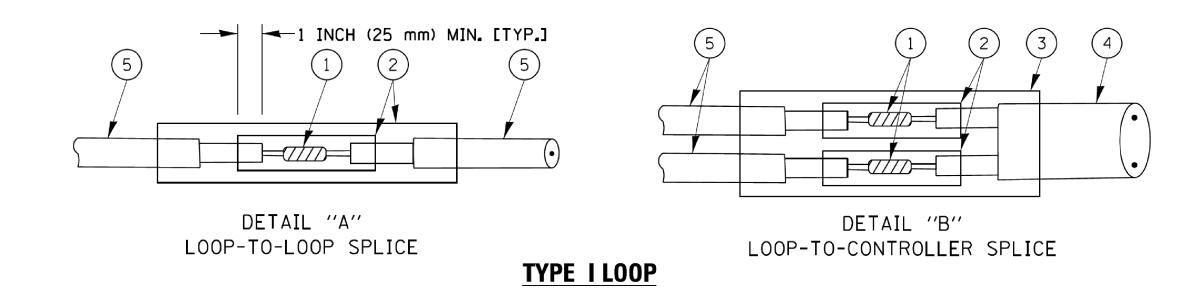


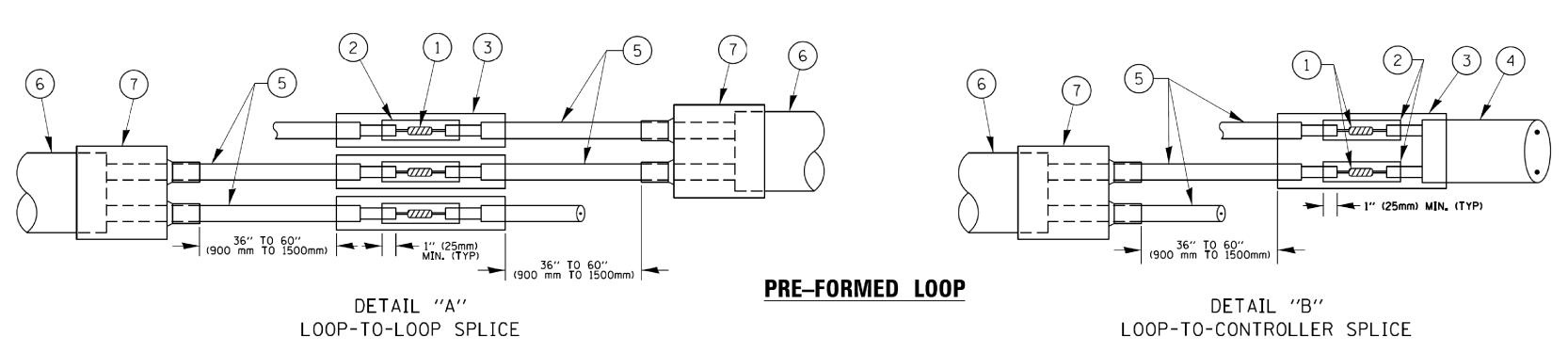
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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.



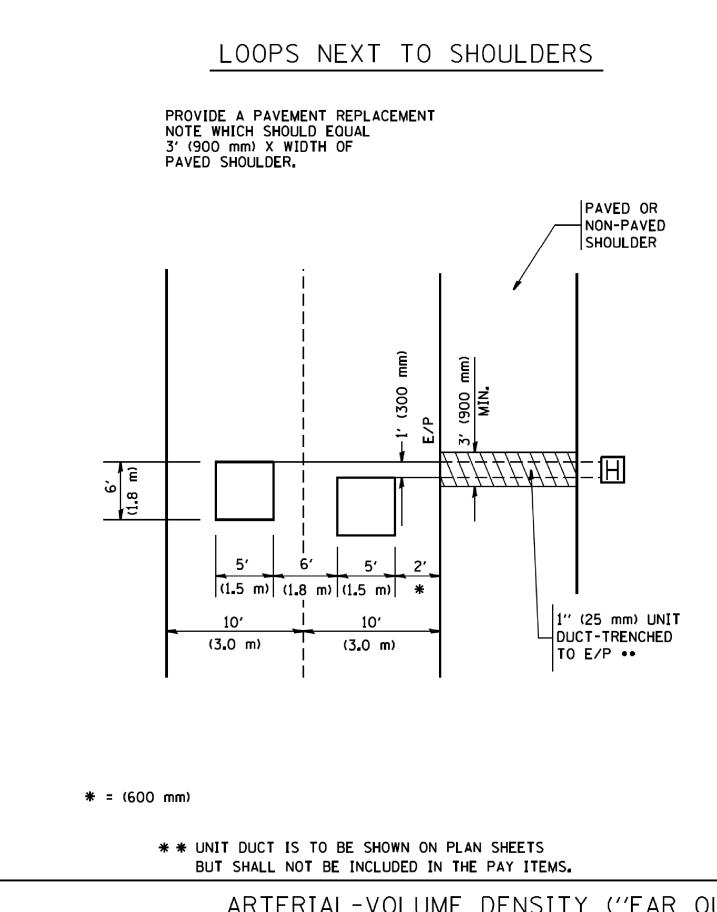


LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM 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
- XL POLYOLEFIN 2 CONDUCTOR
 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

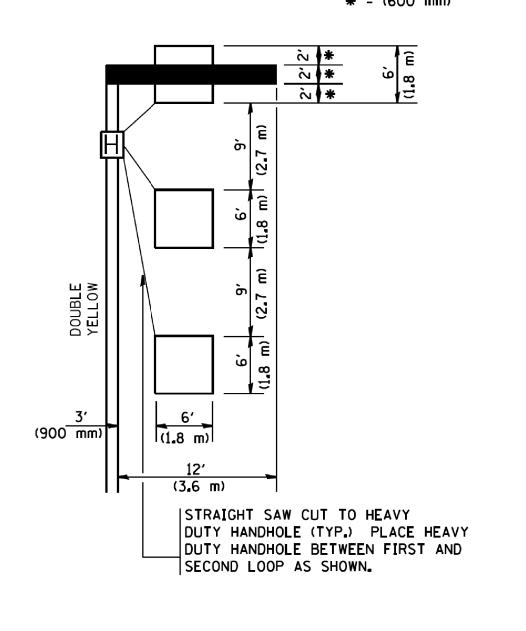
FILE NAME =	USER NAME = jdefrenza	DESIGNED - VMR	REVISED -		DISTRICT 4 STANDARD TRAFFIC SIGNAL	F.A.U.	SECTION	COUNTY TOTAL SHEET
\C1v1\DET_11B_940032HR286.SHT		DRAWN - ES	REVISED -	STATE OF ILLINOIS	DISTRICT 1 — STANDARD TRAFFIC SIGNAL DESIGN DETAILS	2539	18-00093-00-RS	COOK 22 21
	PLOT SCALE = 20'	CHECKED - JGS	REVISED -	DEPARTMENT OF TRANSPORTATION	DESIGN DETAILS	2333	TS-05	CONTRACT NO. 61F46
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED.	. AID PROJECT



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.) * 5 (3,6 m) (900 mm) ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) * = (600 mm)

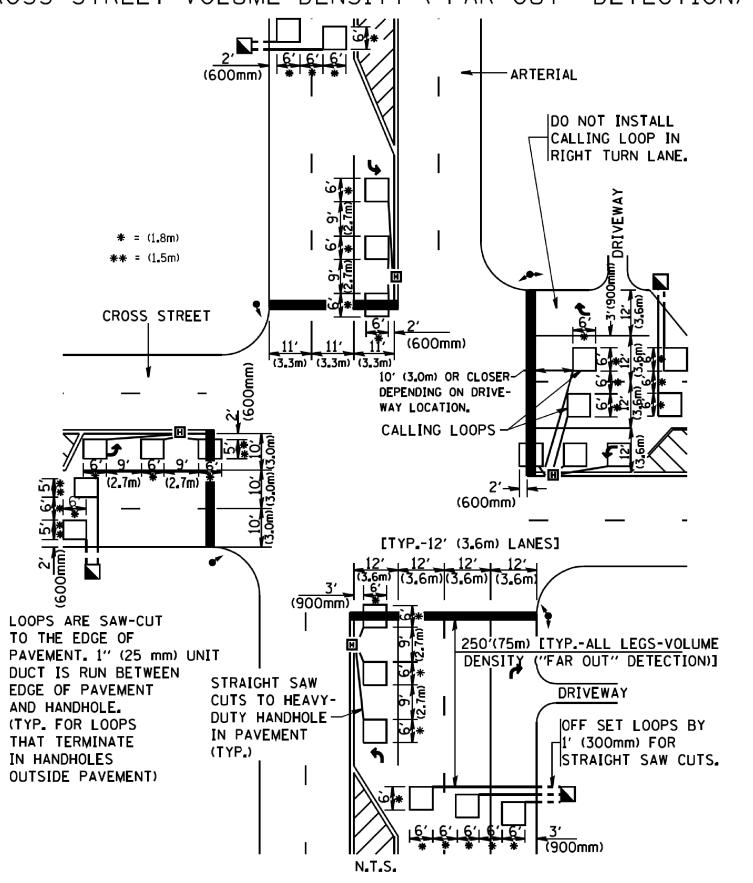


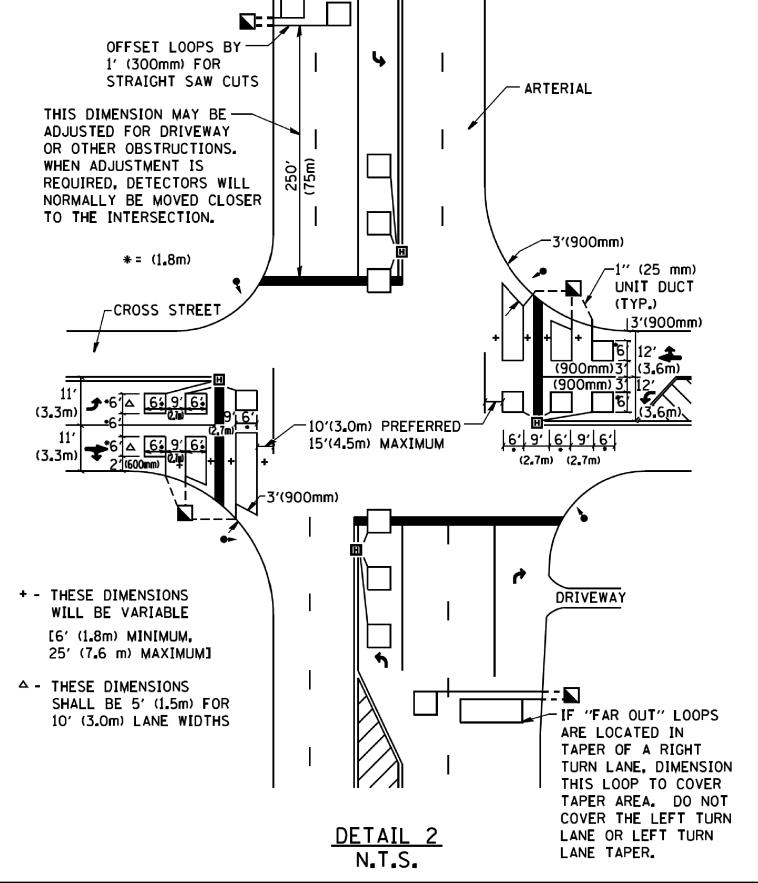
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE:

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)





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.

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	PLOT SCALE = 20'	CHECKED - JGS	REVISED -
	PLOT DATE = 12/26/2018	DATE - 06/22/07	REVISED -

DETAIL 1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DISTRICT 1 – DETECTOR LOOP INSTALLATION** 18-00093-00-RS COOK 2539 DETAILS FOR ROADWAY RESURFACING TS-07 CONTRACT NO. 61F46 SHEET NO. OF SHEETS STA. TO STA.