STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

1487 16-00109-00-RS DU PAGE 19 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 1487 (MAPLE AVENUE) FAU 1504 (55TH STREET) TO FAU 2615 (MAIN STREET)

RESURFACING

DU PAGE COUNTY C-91-180-17

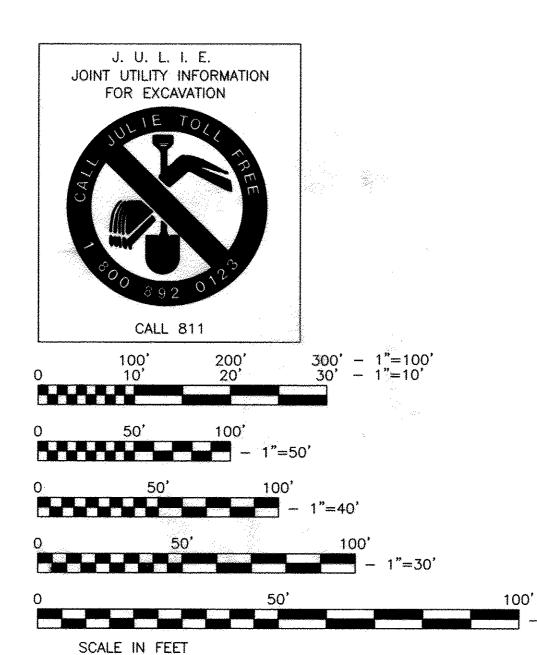
SECTION: 16-00109-00-RS PROJECT: M-4003(890) **VILLAGE OF DOWNERS GROVE**

R 11 E

MAPLE AVENUE DESIGN DESIGNATION MAJOR COLLECTOR DESIGN SPEED: 30 MPH ADT: 9,000

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

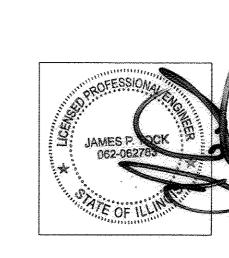


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZE PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES CAN BE USED

Contract No. 61D90

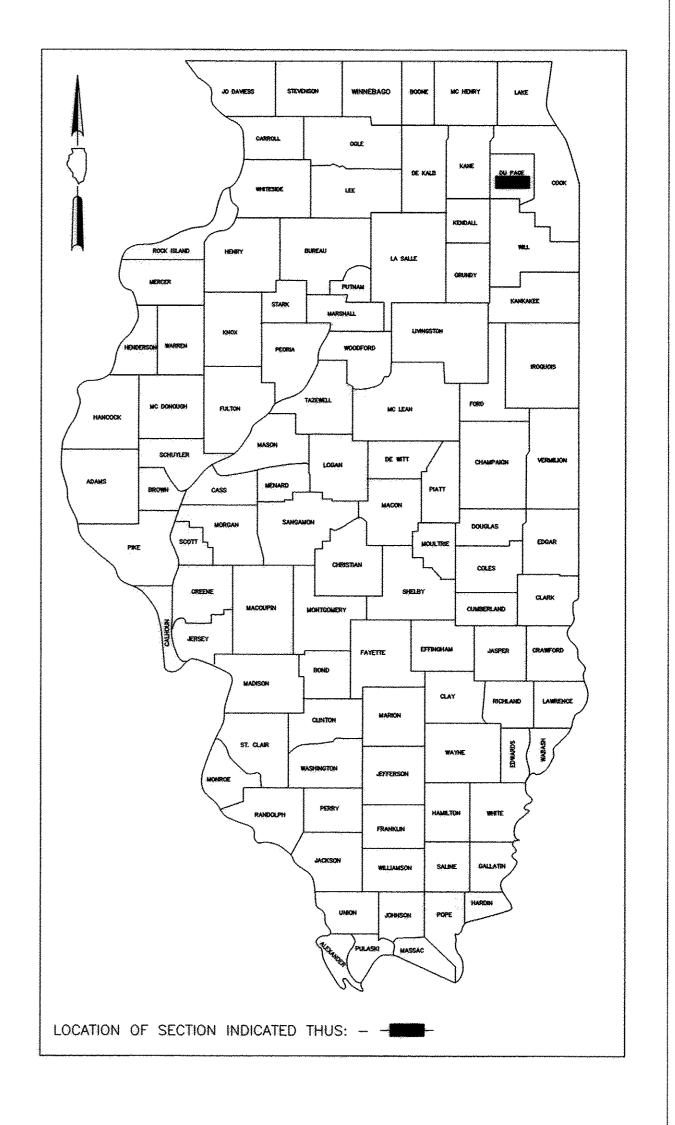
LOCATION MAP (NOT TO SCALE) DOWNERS GROVE TOWNSHIP

> GROSS LENGTH: 2,759 FT = 0.52 MILE NET LENGTH: 2,759 FT = 0.52 MILE



3rd P. M.

James P. Tock, P.E. #062-062783 My License Expires 11/30/17



DEPARTMENT OF TRANSPORTATION			
APPROVED March 16 20.17 Paring New Compiler Fublic Works, VILLAGE OF DOWNERS GROVE PASSED MARCH 29 2017 CHAISTRIHER HOLT			
PASSED MARCH 29 2017			
REGIONAL ENGINEER			

STATE OF ILLINOIS

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- 1. ALL REFERENCES TO THE 'VILLAGE' IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE VILLAGE OF DOWNERS GROVE.
- 2. ALL REFERENCES TO THE 'STANDARD SPECIFICATIONS' IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION' ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) ON APRIL 1, 2016, ALONG WITH SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS AS ADOPTED JANUARY 1, 2017.
- 3. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE VILLAGE, DEPARTMENT, AND THE ENGINEERS DO NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING THE CONSTRUCTION OPERATION SO AS NOT TO DAMAGE THEM. IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 107.20 OF THE 'STANDARD SPECIFICATIONS' THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS.
- 4. THOSE EXISTING TRAFFIC SIGNS WHICH ARE SO DESIGNATED BY THE ENGINEER SHALL BE REMOVED, STORED AND SUBSEQUENTLY RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.25. ANY SIGNS WHICH ARE DAMAGED BY THE CONTRACTOR AS DETERMINED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AND TO THE SATISFACTION OF THE ENGINEER.
- 5. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND IDOT STANDARDS FOR TRAFFIC CONTROL AND PROTECTION.
- 6. SAW CUTTING OF PAVEMENTS, SIDEWALK, ETC. SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING.
- 7. SPECIAL ATTENTION IS CALLED TO ARTICLE 107.15 OF THE STANDARD SPECIFICATIONS. WHERE THE CONTRACTOR'S EQUIPMENT IS OPERATED ON ANY PORTION OF THE PAVEMENT OR STRUCTURES USED BY TRAFFIC ON OR ADJACENT TO THE SECTION UNDER CONSTRUCTION, THE CONTRACTOR SHALL CLEAN THE PAVEMENT OF ALL DIRT AND DEBRIS AT THE END OF EACH DAY'S OPERATIONS, AND AT OTHER TIMES AS DIRECTED BY THE ENGINEER.
- 8. 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.
- 9. 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 DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS.
- 10. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE VILLAGE WATER DEPARTMENT.
- 11. QUANTITIES FOR PATCHING SHALL NOT EXCEED THOSE PROVIDED IN THE SUMMARY OF QUANTITIES UNLESS APPROVED BY THE ENGINEER. THE ENGINEER WILL VERIFY FINAL PATCH LOCATIONS IN THE FIELD PRIOR TO REMOVAL.
- 12. HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 13. THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NORMAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASE ON WHICH THEY ARE PLACED. PLAN THICKNESS SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.

- 14. MAILBOXES WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED, TEMPORARILY RELOCATED, AND REPLACED UPON COMPLETION OF THE PROPOSED IMPROVEMENTS IN ACCORDANCE WITH ARTICLE 107.20 AND AS DIRECTED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL NOT PLACE SOD UNTIL THE TEMPERATURE IS 80 DEGREES OR LESS AND THE FORECAST FOR THE NEXT 7 DAYS SHOWS TEMPERATURES OF 80 DEGREES 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.
- 16. SPECIAL ATTENTION IS CALLED TO ARTICLE 107.30 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEFACEMENT OF ANY CONCRETE POURS BEFORE THEY HAVE SET UP. CONCRETE SIDEWALK, DRIVEWAY, CURB, AND CURB AND GUTTER THAT HAVE BEEN DEFACED, IN THE OPINION OF THE ENGINEER, SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR.
- 17. FOR WORK OUTSIDE 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 AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

DUPAGE COUNTY DIVISION OF TRANSPORTATION GENERAL NOTES AND SPECIFICATIONS

- 1. ALL CONSTRUCTION WITHIN THE COUNTY'S RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO IDOT'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" (LATEST EDITION).
- 2. DAILY LANE CLOSURES ARE PERMITTED BETWEEN 9:00 A.M. AND 4:00 P.M. ONLY. TRAFFIC CONTROL SHALL CONFORM TO IDOT'S HIGHWAY STANDARDS THE FHWA'S MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES' AND IDOT'S SUPPLEMENT TO THE MUTCD AT ALL TIMES DURING CONSTRUCTION.
- 3. LANE CLOSURES ARE NOT PERMITTED ON COUNTY ROADWAYS DURING SNOWFALL OR WITHIN 2 HOURS PRIOR TO PREDICTED SNOWFALL OR PRECIPITATION CONDITIONS BETWEEN NOVEMBER 15 AND APRIL 15 FOR MAINTENANCE OF THE ROADWAY PAVEMENT BY COUNTY HIGHWAY MAINTENANCE DEPARTMENT STAFF AND EQUIPMENT.
- 4. DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE DRESSED WITH A MINIMUM OF 6" TOPSOIL AND CLASS 2A SALT TOLERANT SEED (WITH EROSION CONTROL BLANKET) OR SOD (SALT TOLERANT AND STAKED IN PLACE).
- 5. THE DUPAGE COUNTY DIVISION OF TRANSPORTATION OPERATES/MAINTAINS TRAFFIC SIGNALS AND RELATED EQUIPMENT WITHIN THE VICINITY OF THE PROJECT. CONTACT THE DIVISION OF TRANSPORTATION A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION WITHIN THE COUNTY'S RIGHT OF WAY AND WITHIN 300' OF ANY COUNTY MAINTAINED SIGNAL TO LOCATE SAID EQUIPMENT. TRAFFIC SIGNALS AND RELATED EQUIPMENT ARE NOT ON THE J.U.L.I.E. SYSTEM.
- 6. EROSION CONTROL MEASURES SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF THE DUPAGE COUNTY STORMWATER AND FLOODPLAIN ORDINANCE SPECIFICATIONS AT ALL TIMES.
- 7. EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE COUNTY'S RIGHT-OF-WAY AT ANY TIME WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE COUNTY ENGINEER, OR HIS DULY AUTHORIZED ASSIGN.
- 8. PAVEMENT, CURB/GUTTER AND STORM STRUCTURES WITHIN THE COUNTY'S RIGHT-OF-WAY SHALL BE MAINTAINED FREE OF MUD/DEBRIS AT ALL TIMES AND SHALL BE CLEANED AS IS REQUIRED AND/OR AS DIRECTED BY DUPAGE COUNTY.
- 9. CONTACT DUPAGE COUNTY (630/407-6900) A MINIMUM OF <u>48 HOURS</u> PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR INSPECTIONS OF AND AT THE COMPLETION OF THE DESCRIBED WORK WITHIN THE COUNTY'S RIGHT-OF-WAY.
- 10. TRENCH BACKFILL FOR NON-PAVED AREAS SHALL BE INSTALLED WITHIN THE COUNTY'S RIGHT-OF-WAY PER DUPAGE COUNTY'S STANDARD.
- 11. TRENCH BACKFILL BELOW EXISTING OR PROPOSED PAVEMENT, CURB/GUTTER AND/OR SIDEWALK SHALL BE INSTALLED WITHIN THE COUNTY'S RIGHT OF WAY PER DUPAGE COUNTY'S STANDARD.

<u>IDOT STANDARDS</u>

000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

280001-07 √ TEMPORARY EROSION CONTROL SYSTEMS

424001-09 ✓ PERPENDICULAR CURB RAMPS FOR SIDEWALKS

424011-03 CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-03 MID-BLOCK CURB RAMPS FOR SIDEWALKS

442201-03 CLASS C & D PATCHES

606001-06

CONCRETE CURB TYPE B & COMBINATION CONCRETE CURB AND GUTTER

701006-05 √ OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE

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

701311-03 / LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY

701501-06 √ URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701701-10

✓ URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-06

✓ SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-06

TRAFFIC CONTROL DEVICES

780001-05

TYPICAL PAVEMENT MARKINGS

886001-01

DETECTOR LOOP INSTALLATIONS

FILE NAME = USER NAME - USER DESIGNED - NRH REVISED

FILE NAME = DRAWN - NRH REVISED

PLOT SCALE - CHECKED - JPT REVISED

PLOT DATE - 03/17/17 DATE - 03/17/17 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

MAPLE AVENUE IMPROVEMENTS GENERAL NOTES AND INDEX OF STANDARDS

SHEET NO. 1 OF 1 SHEETS

NOT TO SCALE

F. A. U. SECTION COUNTY TOTAL SHEET NO 1487 16-00109-00-RS DU PAGE 19 2

CONTRACT NO. 61D90

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

	MAPLE AVENUE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE 0005
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	350	350
25200110	SODDING, SALT TOLERANT	SQ YD	350	350
25200200	SUPPLEMENTAL WATERING	UNIT	5	5
28000510	INLET FILTERS	UNIT QUANTITY 0005 SQ YD 350 350 SQ YD 350 350 UNIT 5 5 EACH 14 14 SQ YD 15 15 POUND 8,010 8,010 TON 13 13 S, NS0 TON 385 385 SQ YD 150 150 TON 775 775		
36101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	15	15
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	8,010	8,010
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	13	13
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	385	385
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	150	150
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	775	775
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6 INCH	SQ YD	105	105
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,865	1,865
42400800	DETECTABLE WARNINGS	SQ FT	190	190
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	8,760	8,760
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	150	150
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	760	760
44000600	SIDEWALK REMOVAL	SQ FT	2,110	2,110
44201690	CLASS D PATCHES, TYPE I, 4 INCH	SQ YD	70	70
44201692	CLASS D PATCHES, TYPE II, 4 INCH	SQ YD	105	105
44201694	CLASS D PATCHES, TYPE III, 4 INCH	SQ YD	315	315
44201696	CLASS D PATCHES, TYPE IV, 4 INCH	SQ YD	210	210
60266600	VALVE BOXES TO BE ADJUSTED	EACH	3	3
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	15	15
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1	1
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	1	1
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	710	710
	SER NAME — USER DESIGNED — NRH REVISED		·	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE 0005
60609200	COMBINATION CONCRETE CURB & GUTTER, TYPE M-6.12	TITEM UNIT QUANTITY TYPE OF COOST CURB & GUTTER, TYPE M - G.12 FOOT 50 50 LSUM 1 1 PROTECTION, STANDARD 701501 LSUM 1 1 PROTECTION, STANDARD 701701 LSUM 1 1 PROTECTION, STANDARD 701801 LSUM 1 1 MARKING FOOT 4,835 4.835 MARKING REMOVAL SQ FT 4.455 4.859 MARKING LETTERS AND SYMBOLS SQ FT 220 220 NI MARKING - LETTERS AND SYMBOLS SQ FT 73 73 NT MARKING - LINE 4' FOOT 5,000 5,000 NT MARKING - LINE 6' FOOT 710 710 NT MARKING - LINE 12' FOOT 175 175 EMENT FOOT 175 175 EMENT FOOT 175 175 EMENT FOOT 175 175 EMENT FOOT 175 175 EACH 14 14 E ADJUSTED (SPECIAL) EACH 15 15 NT, 3' SQ YD 45 45	50	
67100100	MOBILIZATION	LSUM	1	1
CODE NO. ITEM 60609200 COMBINATION CONCRETE CURB & GUTTER, TYPE M-6.12	LSUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4,235	4,235
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	4,455	4,455
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	220	220
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	73
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5,000	5,000
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	710	710
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	160	160
60609200 COMBINATION CONCRETE CURB & GUTTER, TYPE M-6.12 67100100 MGBILIZATION 70102620 TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 70102635 TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 70102640 TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 70300100 SHORT TERM PAVEMENT MARKING 70300150 SHORT TERM PAVEMENT MARKING REMOVAL 70300101 TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS 78000100 THERMOPLASTIC PAVEMENT MARKING - LINE 4* 78000200 THERMOPLASTIC PAVEMENT MARKING - LINE 4* 78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6* 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 6* 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 12* 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 24* 886600600 DETECTOR LUIDP REPLACEMENT X0320050 CONSTRUCTION LAYOUT (SPECIAL) X2800510 INLET FILTER CLEANING X6030310 FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	FOOT	175	175	
88600600	DETECTOR LOOP REPLACEMENT	FOOT	200	200
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	LSUM	1	1
X2800510	INLET FILTER CLEANING	EACH	14	14
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	15	15
Z0004510	HMA DRIVEWAY PAVEMENT, 3"	SQ YD	45	45
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52

* DENOTES SPECIALTY ITEM

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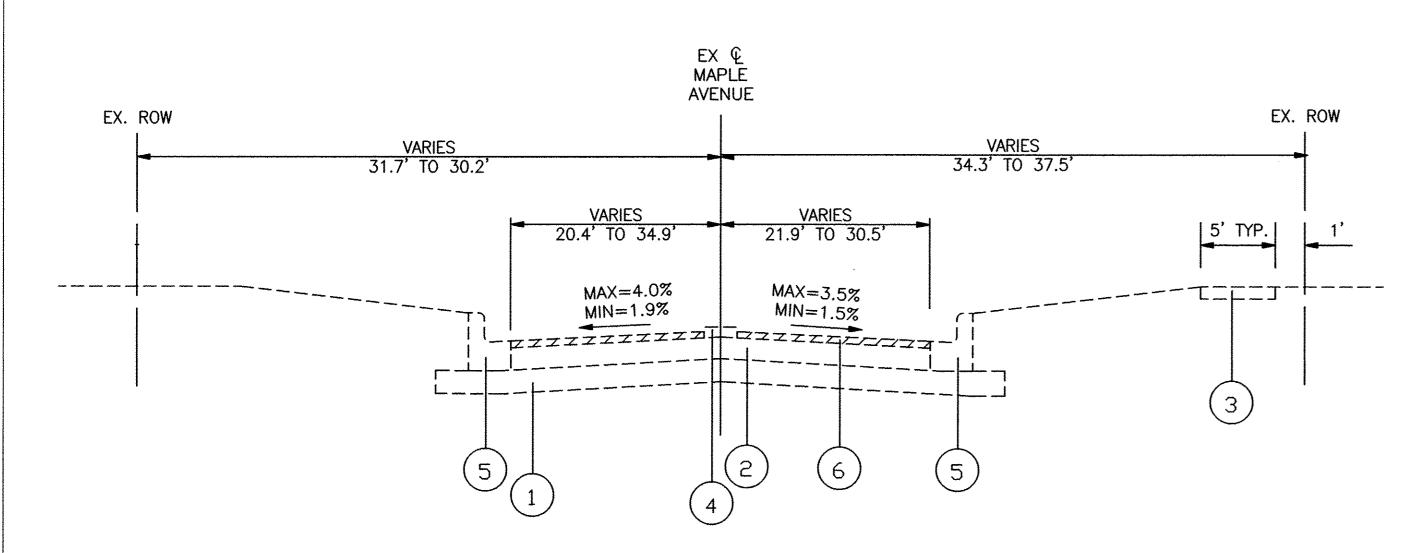
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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	MAPLE AVENUE IMPROVEMENTS SUMMARY OF QUANTITES	1
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F. A. U. SECTION COUNTY SHEETS SHEET NO 1487 16-00109-00-RS DU PAGE 19 3

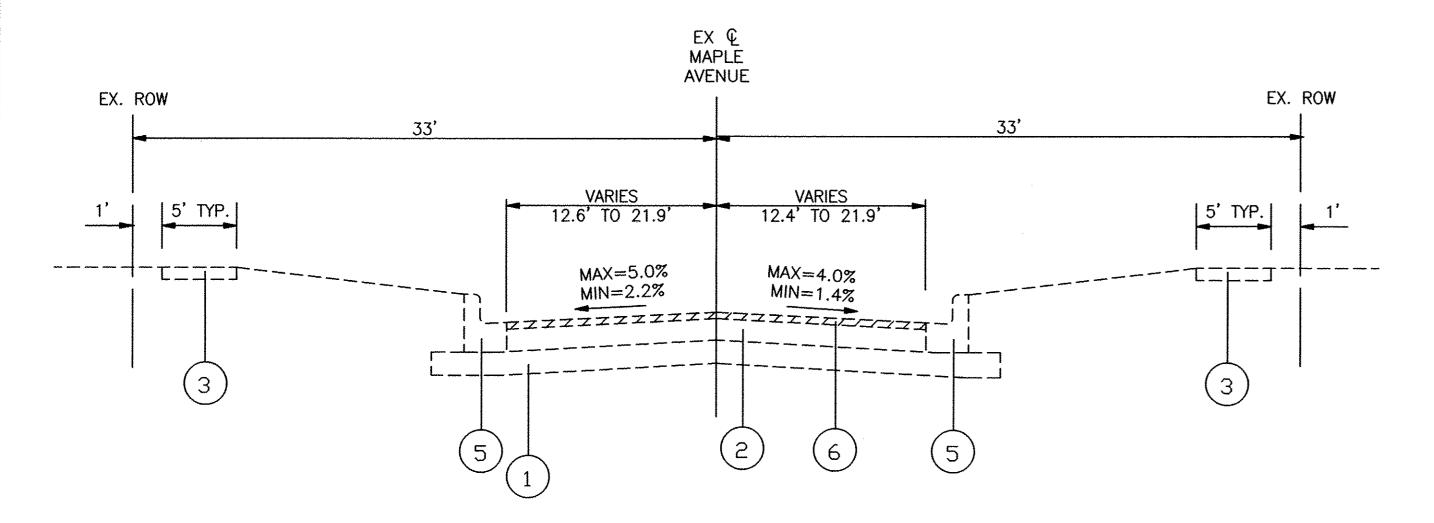
CONTRACT NO. 61D90

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



EXISTING TYPICAL SECTION

STA. 0+25 TO STA. 1+67, MAPLE AVENUE

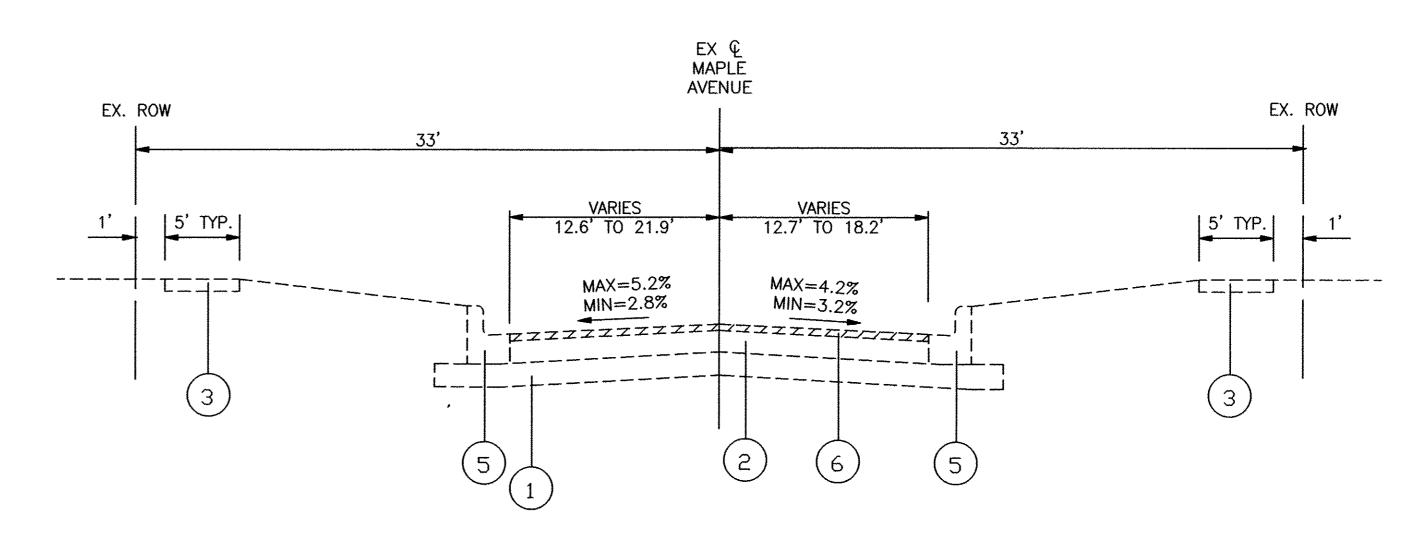


EXISTING TYPICAL SECTION

STA. 1+67 TO STA. 2+67, MAPLE AVENUE TAPER SECTION STA. 2+67 TO STA. 25+07, MAPLE AVENUE

HATCH LEGEND

FILE NAME = FILE NAME = REMOVAL ITEMS (WHERE SHOWN ON PLANS)



EXISTING TYPICAL SECTION

STA. 25+07 TO STA. 26+89, MAPLE AVENUE TAPER SECTION STA. 26+89 TO STA. 27+84.10, MAPLE AVENUE

LEGEND

- (1) EXISTING SUBGRADE
- 2 EXISTING BITUMINOUS PAVEMENT, 3" 7", VARIES
- 3 EXISTING PORTLAND CEMENT CONCRETE SIDEWALK
- 4 EXISTING CONCRETE MEDIAN
- (5) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12 REMOVAL WHERE SHOWN ON PLANS
- 6 PROPOSED HMA SURFACE REMOVAL, 2"

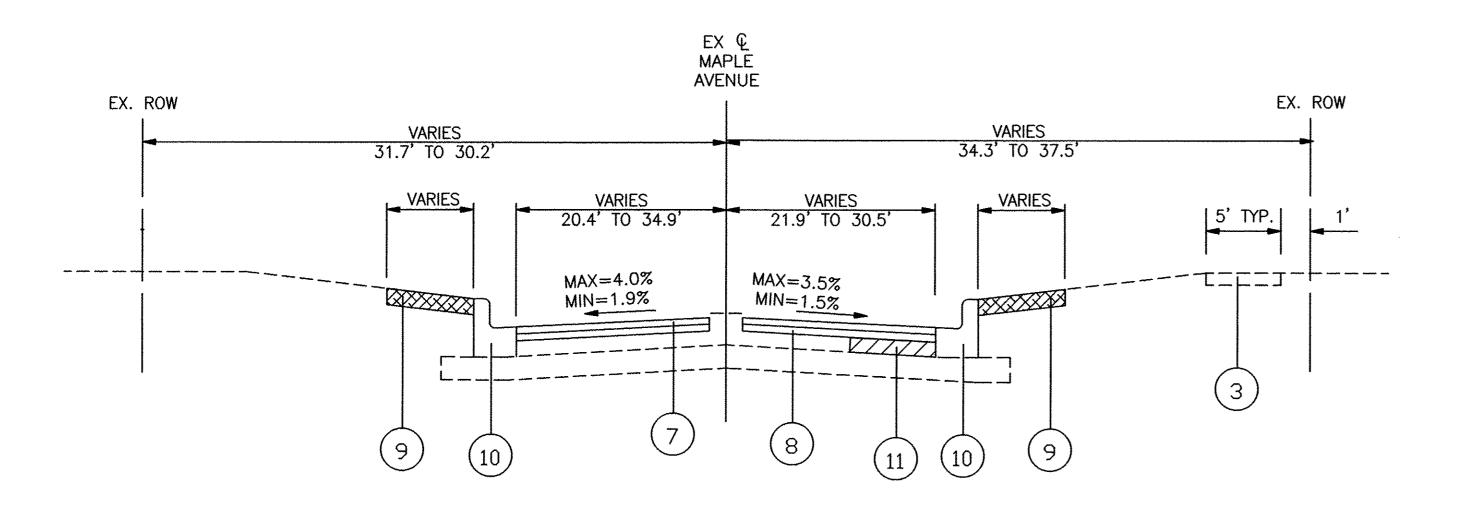
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STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

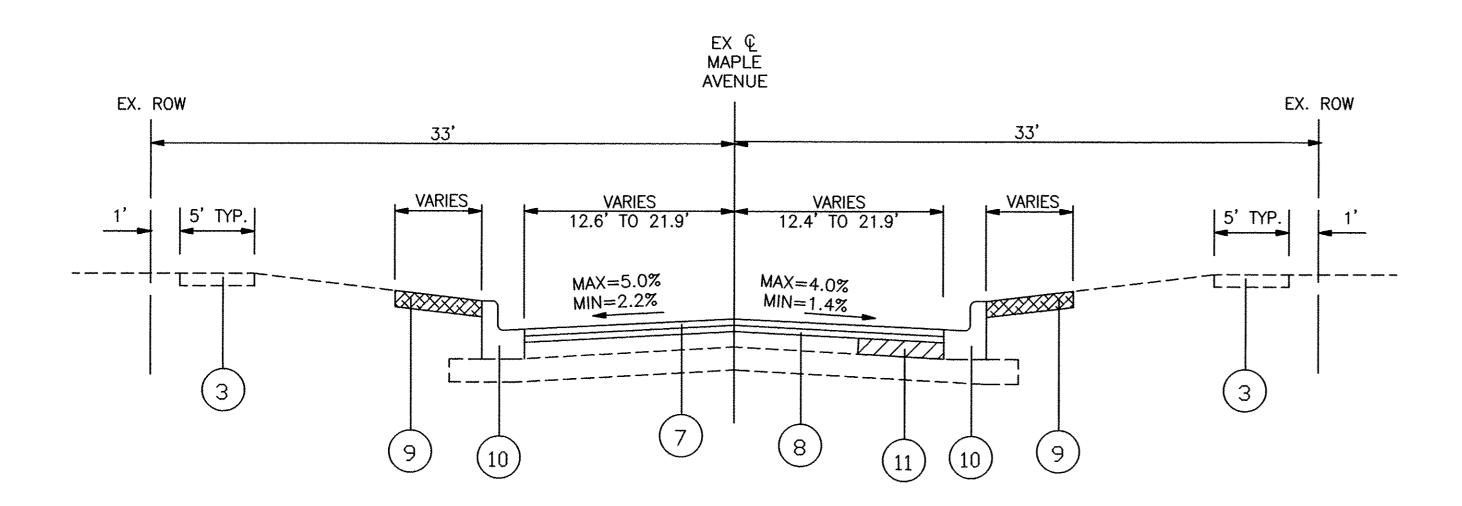
MAPLE AVENUE IMPR EXISTING TYPICAL .		
SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

	F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
	1487	16-00109-00-RS	DU PAGE	19	4
			CONTRA	CT NO. 6	1D90
-	FED.	ROAD DIST. NO. 1	ILLINOIS	FED. AID	PROJECT



PROPOSED TYPICAL SECTION

STA. 0+25 TO STA. 1+67, MAPLE AVENUE

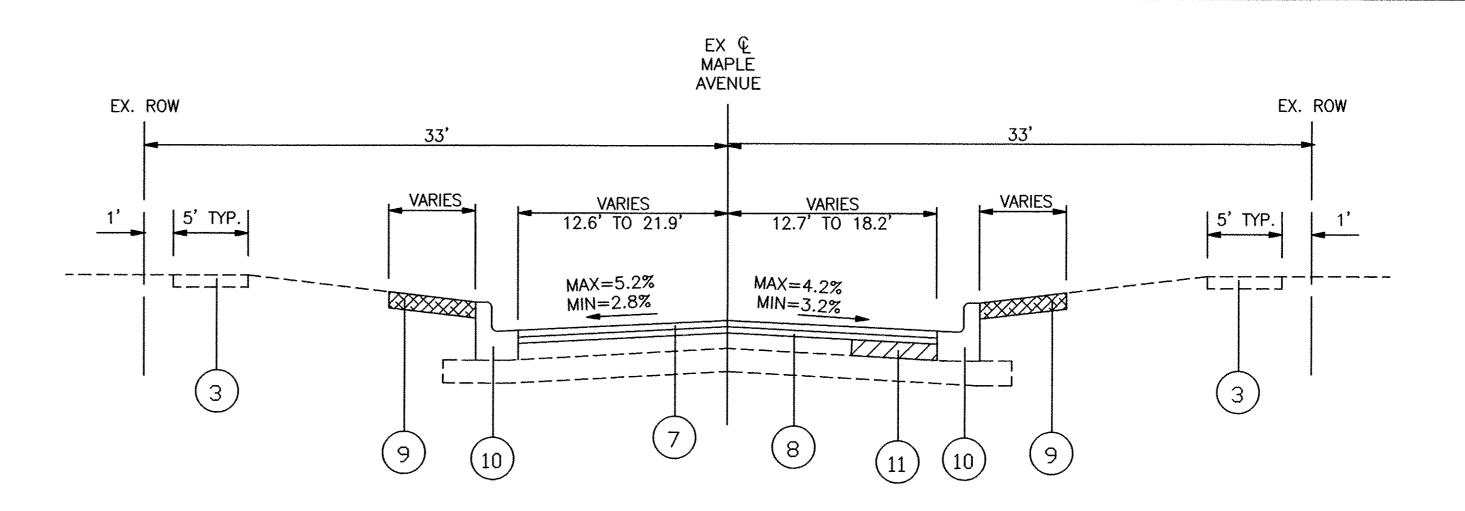


PROPOSED TYPICAL SECTION

STA. 1+67 TO STA. 2+67, MAPLE AVENUE TAPER SECTION STA. 2+67 TO STA. 25+07, MAPLE AVENUE

LEGEND

- (7) PROPOSED HMA SURFACE COURSE, MIX "D", N50, 1 1/2"
- (8) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 9 PROPOSED SODDING, SALT TOLERANT & TOP SOIL FURNISH AND PLACE, 4" (LOCATIONS DETERMINED BY ENGINEER)
- PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B6.12 REPLACEMENT WHERE SHOWN ON PLANS
- ① CLASS D PATCH (LOCATION AND DIMENSIONS DETERMINED BY ENGINEER), 4"



PROPOSED TYPICAL SECTION

STA. 25+07 TO STA. 26+89, MAPLE AVENUE TAPER SECTION STA. 26+89 TO STA. 27+84.10, MAPLE AVENUE

CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

NOT TO SCALE

HOT-MIX ASPHALT MIXTURE REQUIR	REMENTS
MIXTURE TYPE	AIR VOIDS @ Ndes
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 1 1/2	' 4% @ 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	3.5% @ 50 GYR
DRIVEWAY: HOT MIX ASPHALT SURFACE COURSE, MIX "D" N50 - 3"	4% @ 50 GYR
CLASS D PATCHES, (HMA BINDER) IL-19mm, N70, 4" (IN 2 LIFTS)	4% @ 70 GYR

-THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN.

-THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 - 22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 - 22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

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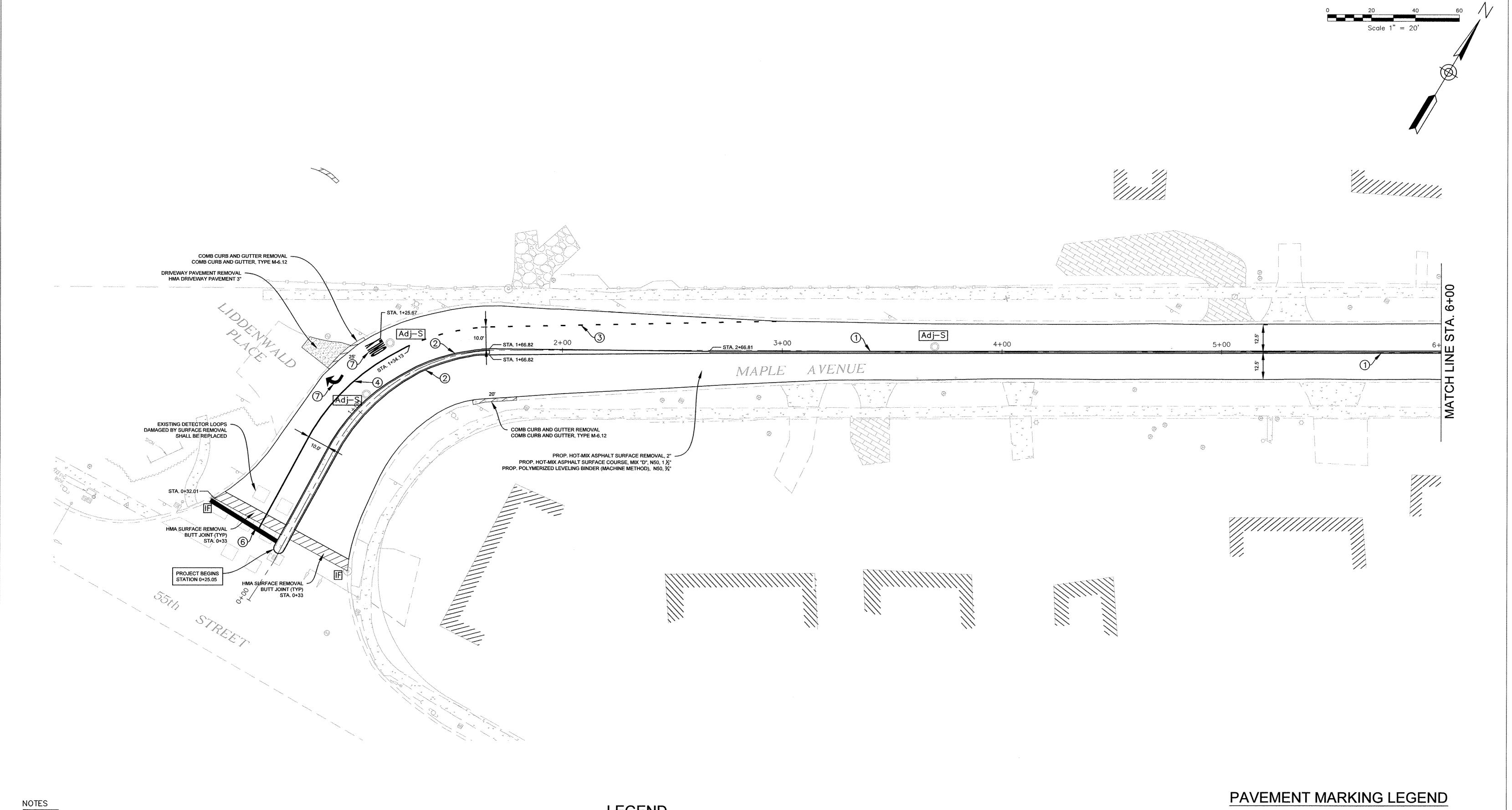
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION MAPLE AVENUE IMPROVEMENTS
PROPOSED TYPICAL SECTIONS

F. A. U. SECTION COUNTY SHEETS SHEET NO. 1 0F 1 SHEETS STA. TO STA.

F. A. U. SECTION COUNTY SHEETS SHEETS NO. 1 16-00109-00-RS DU PAGE 19 5

CONTRACT NO. 61D90

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



- 1. CLASS D PATCHES, 4" AS DIRECTED BY THE ENGINEER.
- 2. ALL EXISTING DRAINAGE STRUCTURES WHICH ARE TO BE ADJUSTED SHALL BE CLEANED IN ACCORDANCE WITH ARTICLE 602.15 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE ADJUSTMENT ITEM.
- 3. TOPSOIL, SODDING LOCATION/PLACEMENT AS DIRECTED BY THE ENGINEER.
- 4. ALL CURB AND GUTTER TO MATCH EXISTING EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

# LEGEND

DRAINAGE & UTILITY
STRUCTURES TO BE ADJUSTED

Adj-S SANITARY STRUCTURE TO BE ADJUSTED SEE DETAIL ON SHEET 12

F INLET FILTERS

REMOVE AND REPLACE EXISTING CURB AND GUTTER

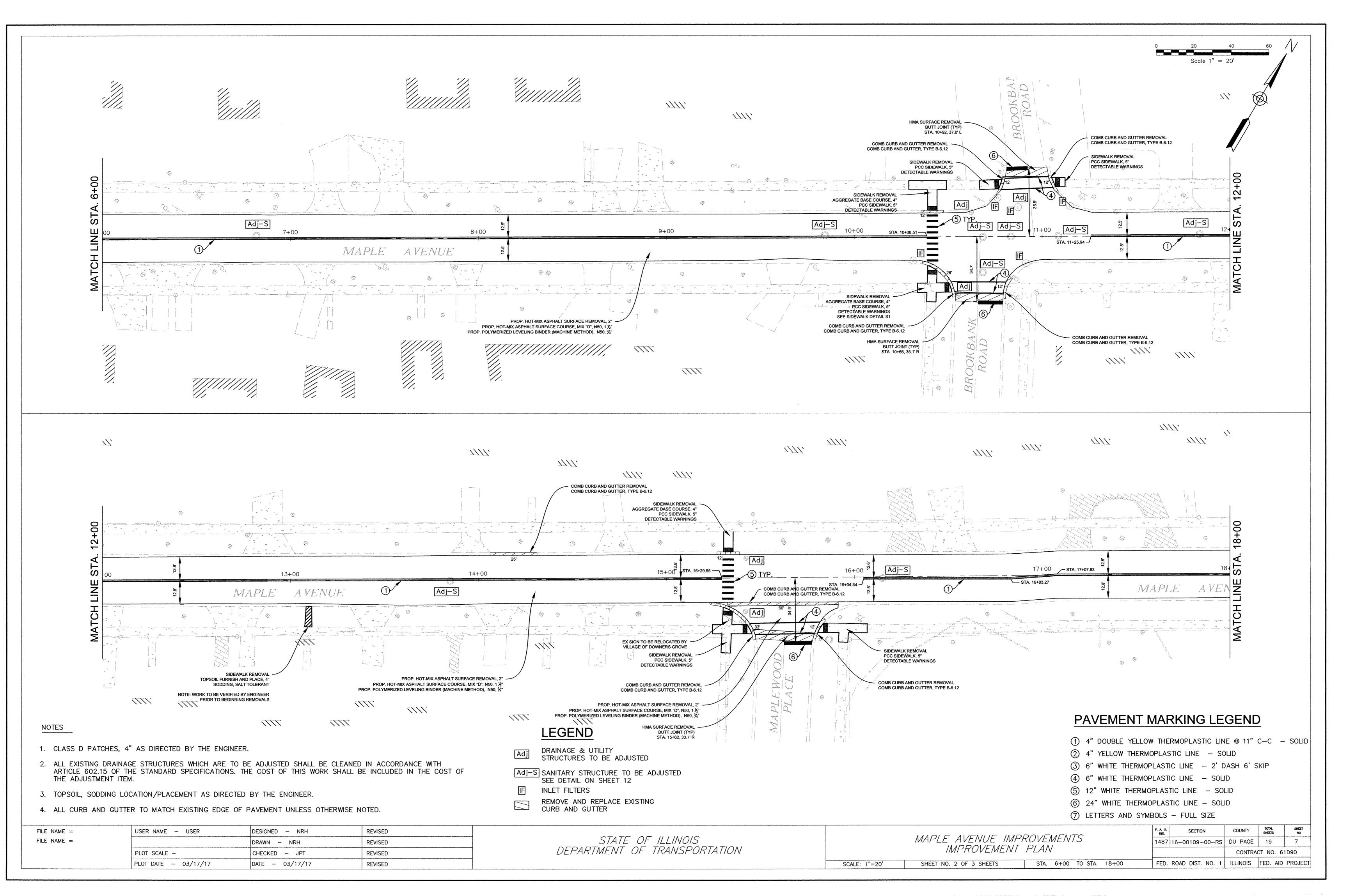
- 1 4" DOUBLE YELLOW THERMOPLASTIC LINE @ 11" C-C SOLID
- 2 4" YELLOW THERMOPLASTIC LINE SOLID
- 3 6" WHITE THERMOPLASTIC LINE 2' DASH 6' SKIP
- 4 6" WHITE THERMOPLASTIC LINE SOLID
- (5) 12" WHITE THERMOPLASTIC LINE SOLID
- 6 24" WHITE THERMOPLASTIC LINE SOLID
- 7 LETTERS AND SYMBOLS FULL SIZE

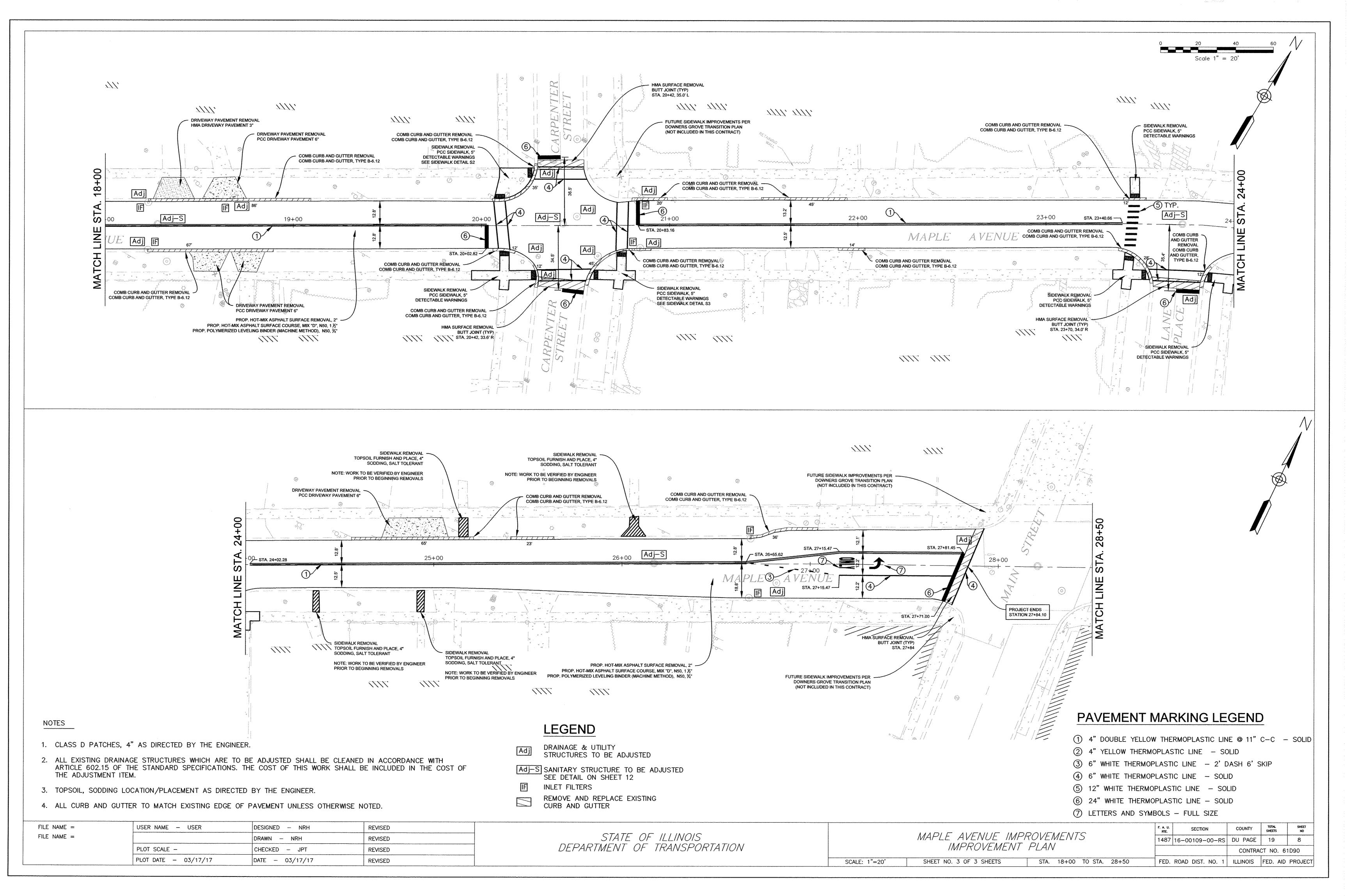
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	PLOT SCALE -	CHECKED - JPT	REVISED	DEPA
	PLOT DATE - 03/17/17	DATE - 03/17/17	REVISED	

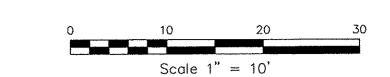
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'

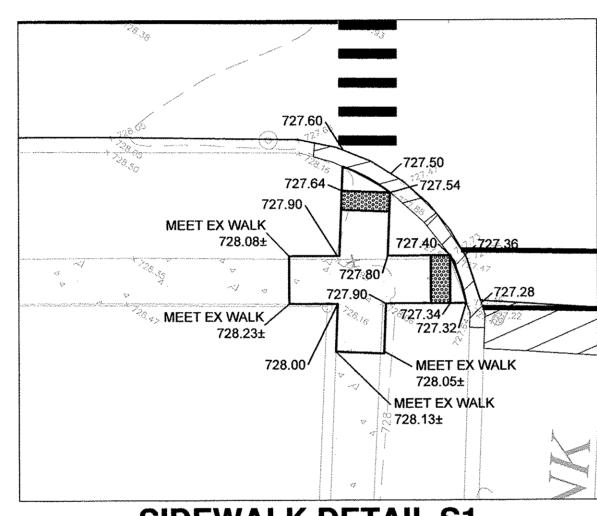
1110 C 11/C1/1C 1110001/C11C1/C1/C	ar all the	F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
MAPLE AVENUE IMPROVEMENTS	1	1487	16-00109-00-RS	DU PAGE	19	6
IMPROVEMENT PLAN				CONTRAC	CT NO. 6	1D90
SHEET NO. 1 OF 3 SHEETS STA. 0+00 TO	STA. 6+00	FED.	ROAD DIST. NO. 1	ILLINOIS	FED. AID	PROJEC*



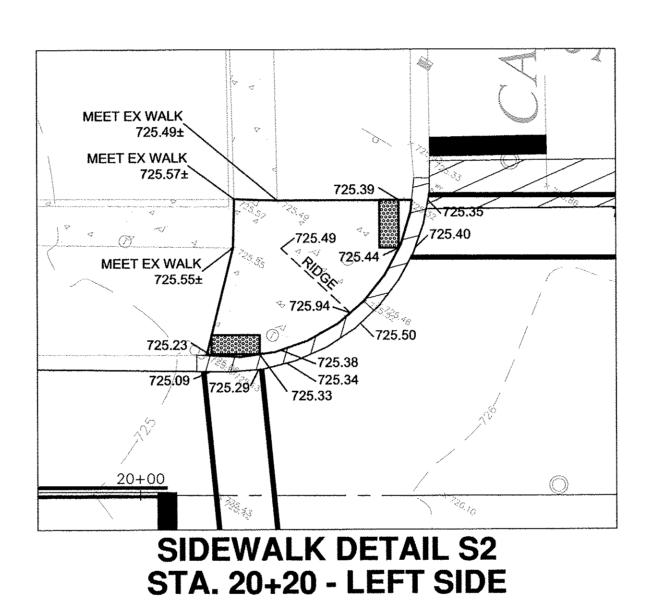


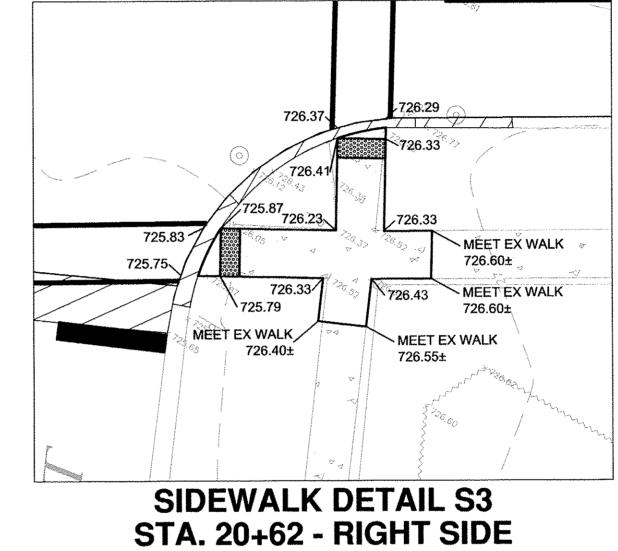






SIDEWALK DETAIL S1 STA. 10+50 - RIGHT SIDE





FILE NAME = USER NAME - USER DESIGNED - NRH REVISED

FILE NAME = DRAWN - NRH REVISED

PLOT SCALE - CHECKED - JPT REVISED

PLOT DATE - 03/17/17 DATE - 03/17/17 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION MAPLE AVENUE IMPROVEMENTS
SIDEWALK DETAILS

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

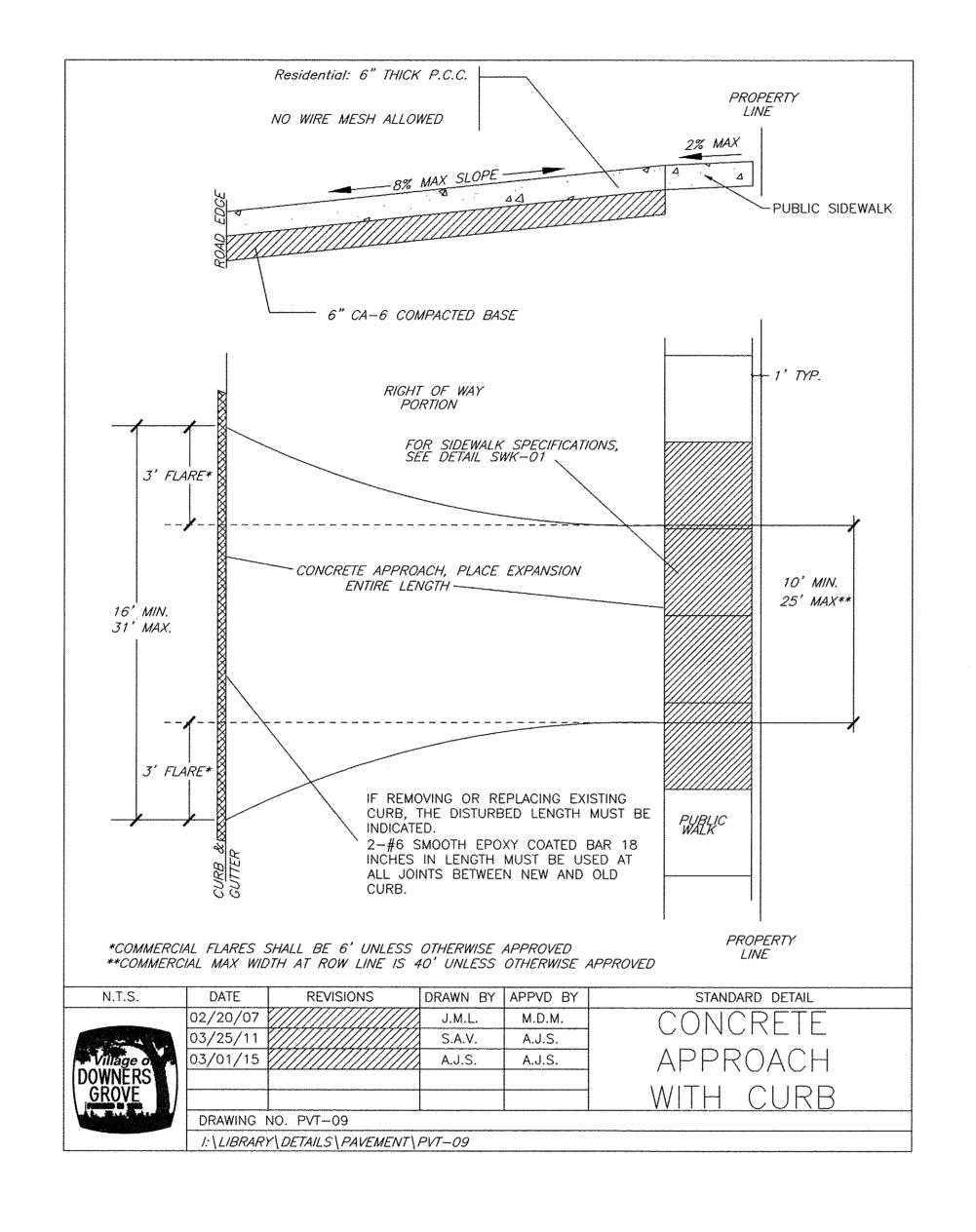
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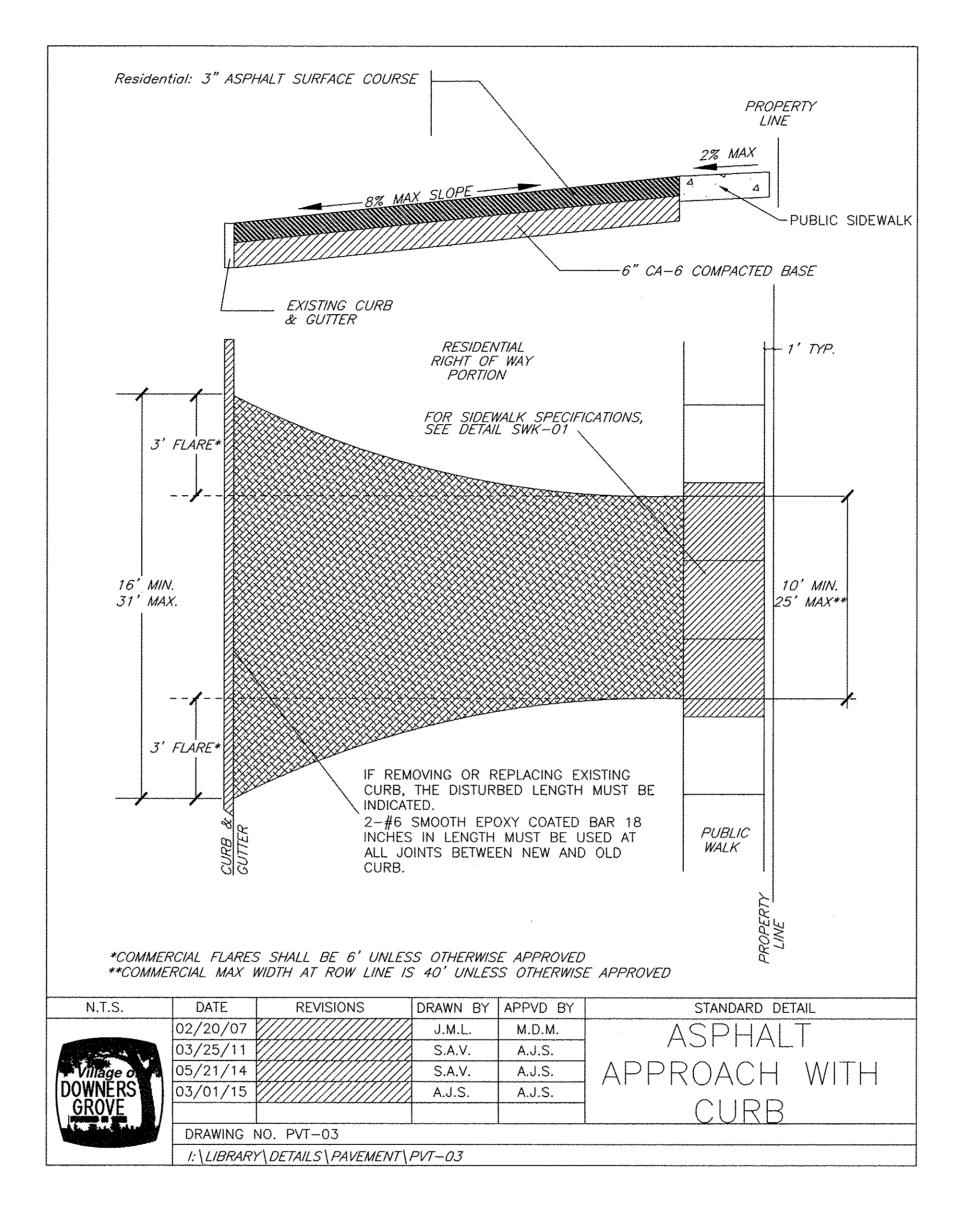
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 SECTION
 COUNTY
 TOTAL SHEET NO

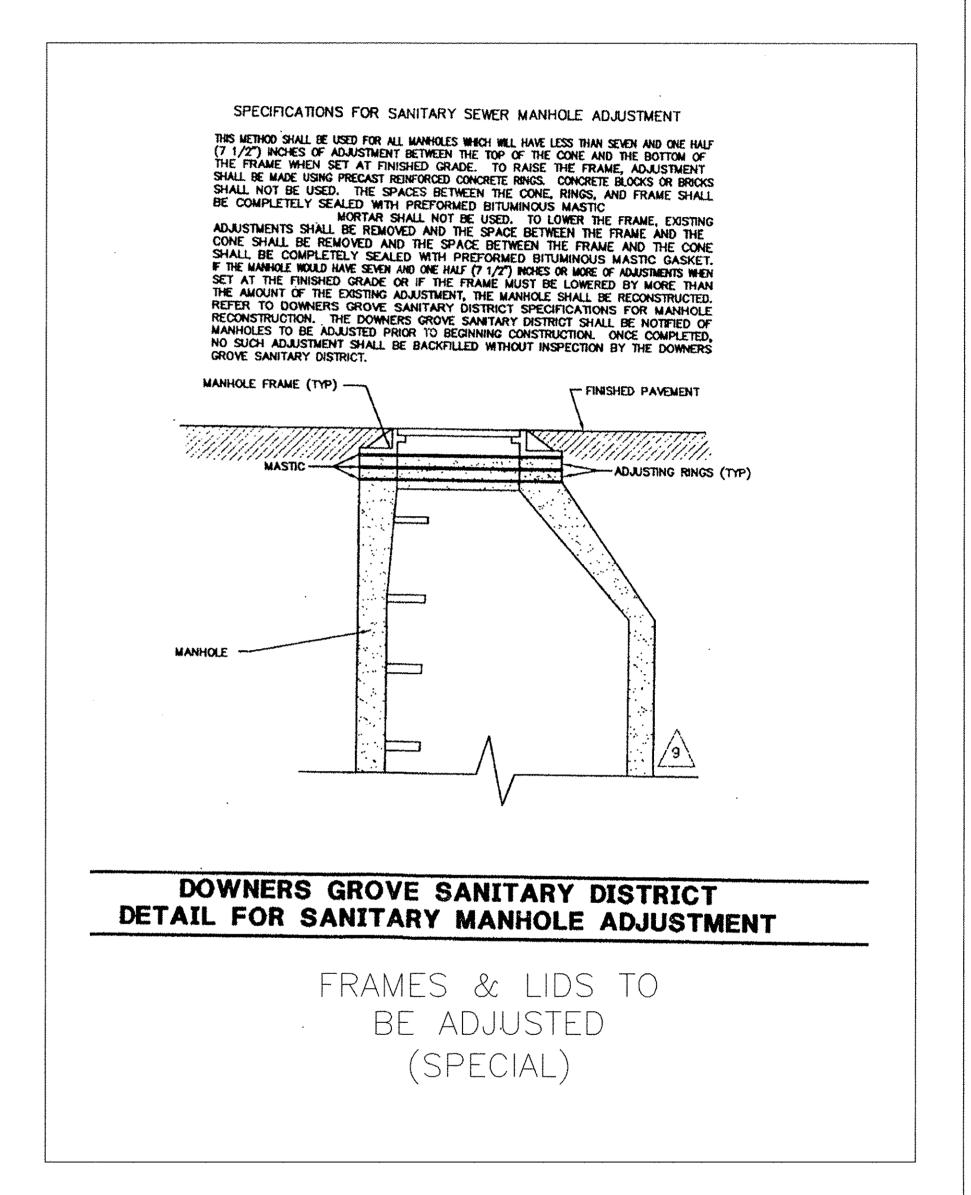
 1487
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 CONTRACT NO. 61D90

 FED. ROAD DIST. NO. 1
 ILLINOIS
 FED. AID PROJECT







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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

MAPLE AVENUE IMPROVEMENTS VILLAGE DETAILS
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STA.

TO STA.

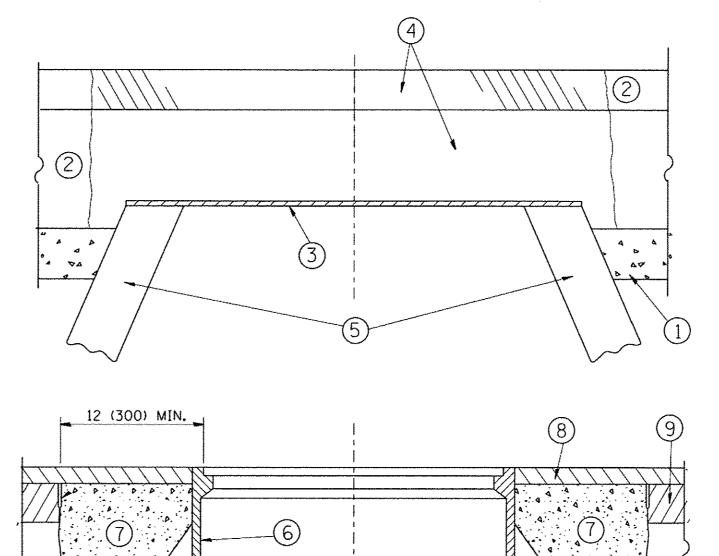
SHEET NO. 1 OF 1 SHEETS

NOT TO SCALE

F. A. U. SECTION COUNTY TOTAL SHEET NO 1487 16-00109-00-RS DU PAGE 19 10

CONTRACT NO. 61D90

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



# 12 (300) MIN. (300) MIN. (300) MIN. (300) MIN. (300) MIN. (300) MIN. (400) MIN. (500) MIN. (700) MIN. (800) MIN. (800) MIN. (90) MIN. (100) MIN. (100

# 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.

### 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 11/2 (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)."

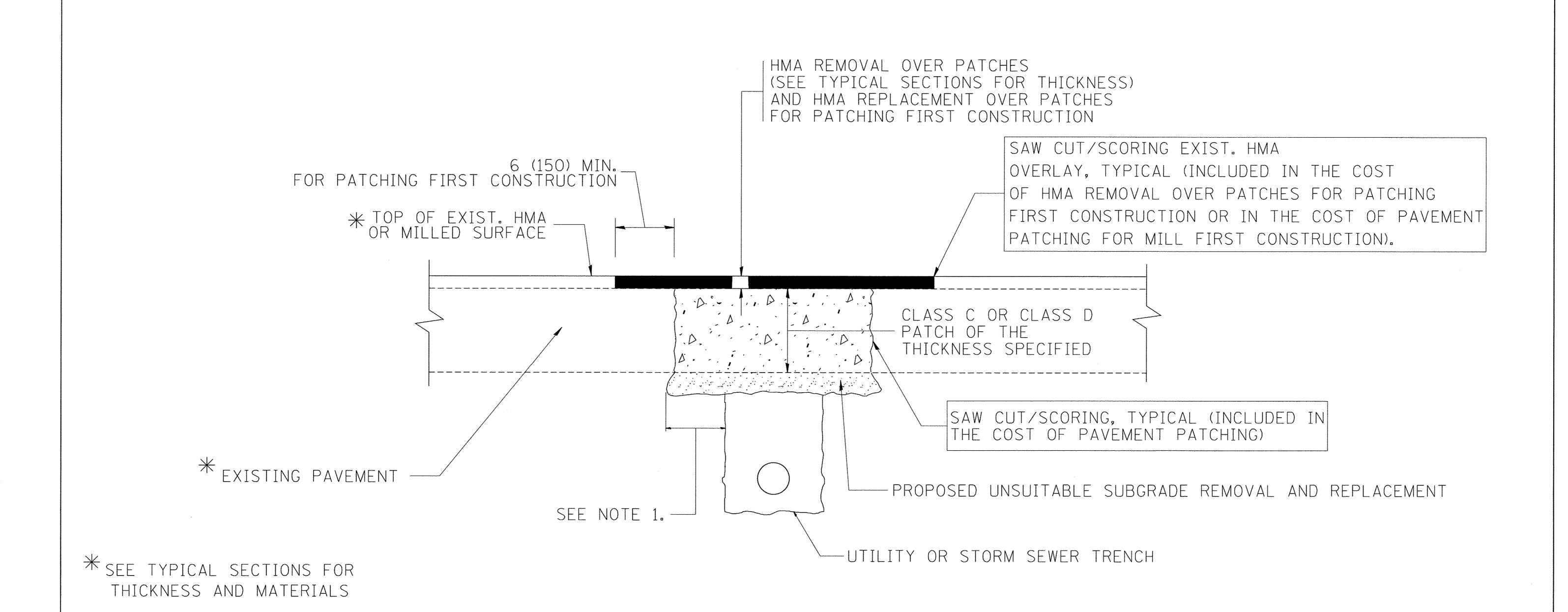
THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04	<del></del>	DETAILS FOR	F.A.U. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\bauerdl\d0108315\	bd08.dgn PLOT SCALE = 1968.5000 '/ m	DRAWN - CHECKED -	REVISED - R. BORO 01-01-07  REVISED - R. BORO 03-09-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMES AND LIDS ADJUSTMENT WITH MILLING	1487 16-00109-00-RS	DU PAGE 19 11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11	DEPARTMENT OF TRANSPORTATION	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	CONTRACT NO. 61D90  D. AID PROJECT



# NOTES:

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

# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

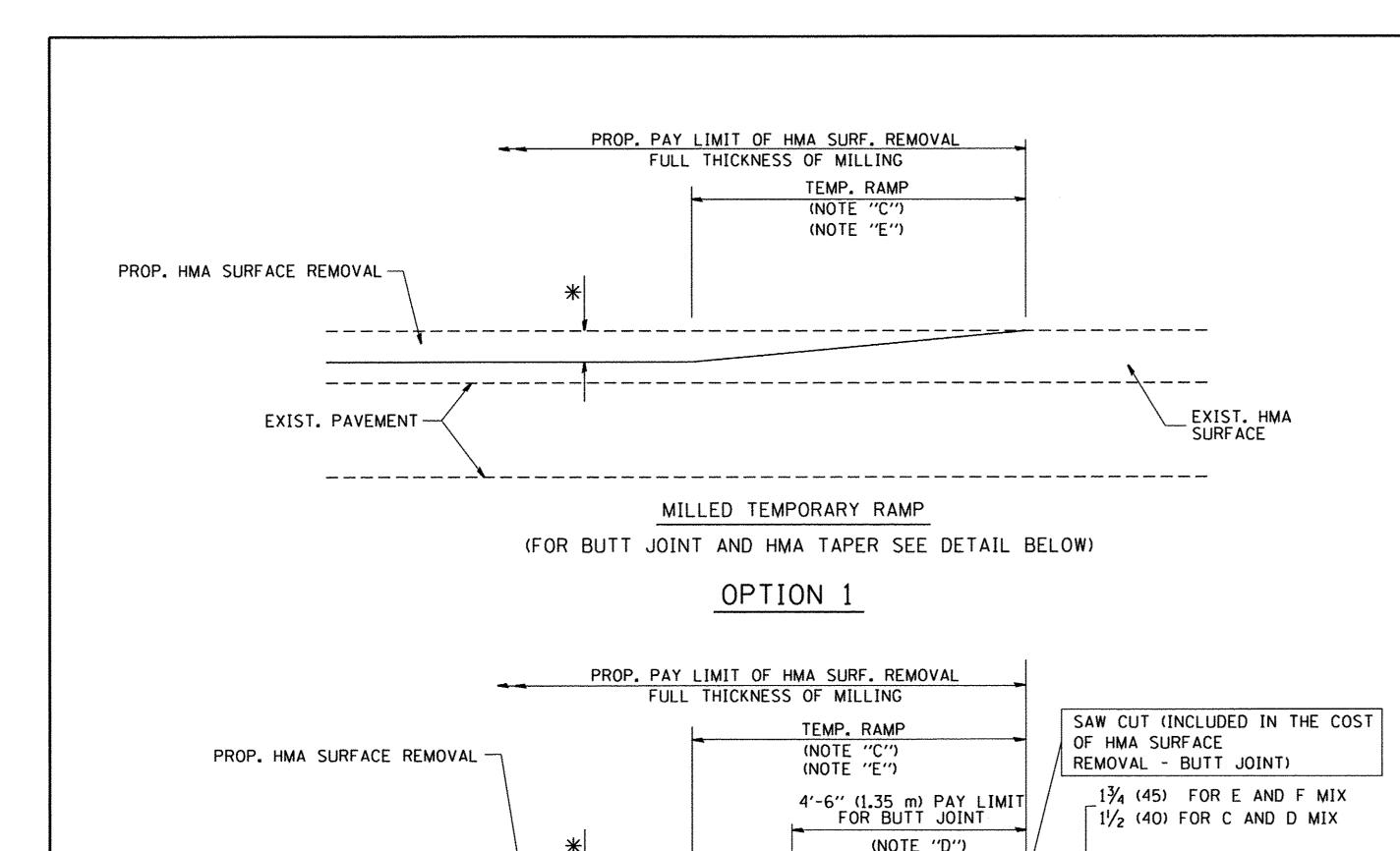
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 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.

FILE NAME =	USER NAME = bouerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		DAVEMENT DATOURS FOR	F.A.U. SECTION	COUNTY TOTAL SHEET
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	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 61D90
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	



EXIST. PAVEMENT

HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

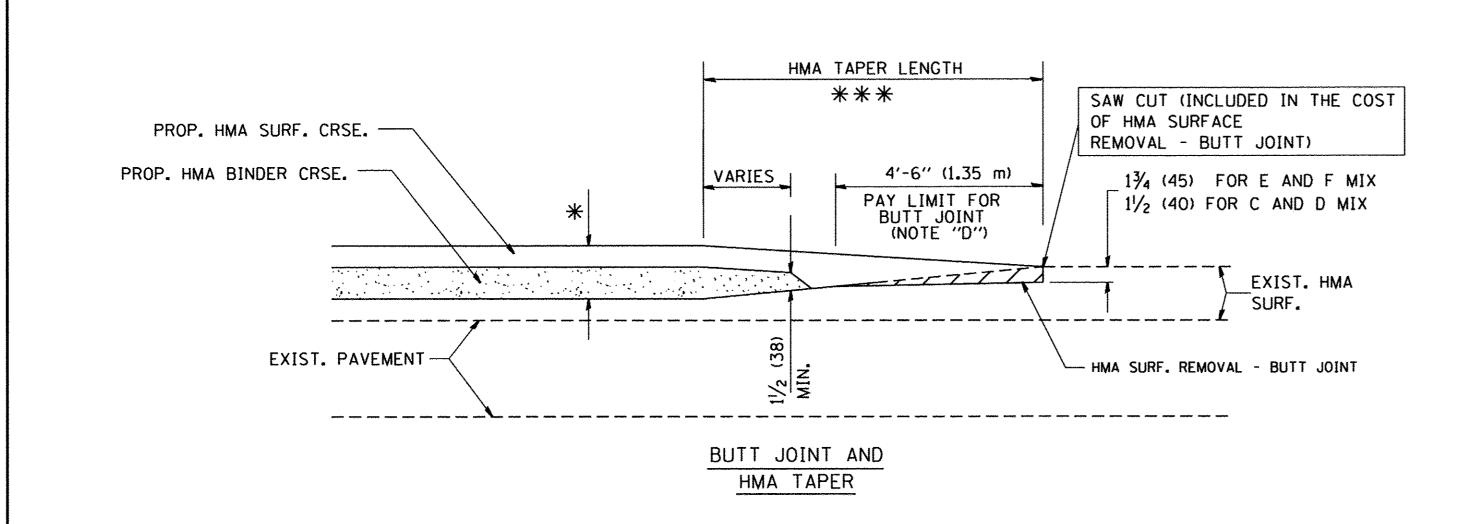
(NOTE "F")

EXIST. HMA

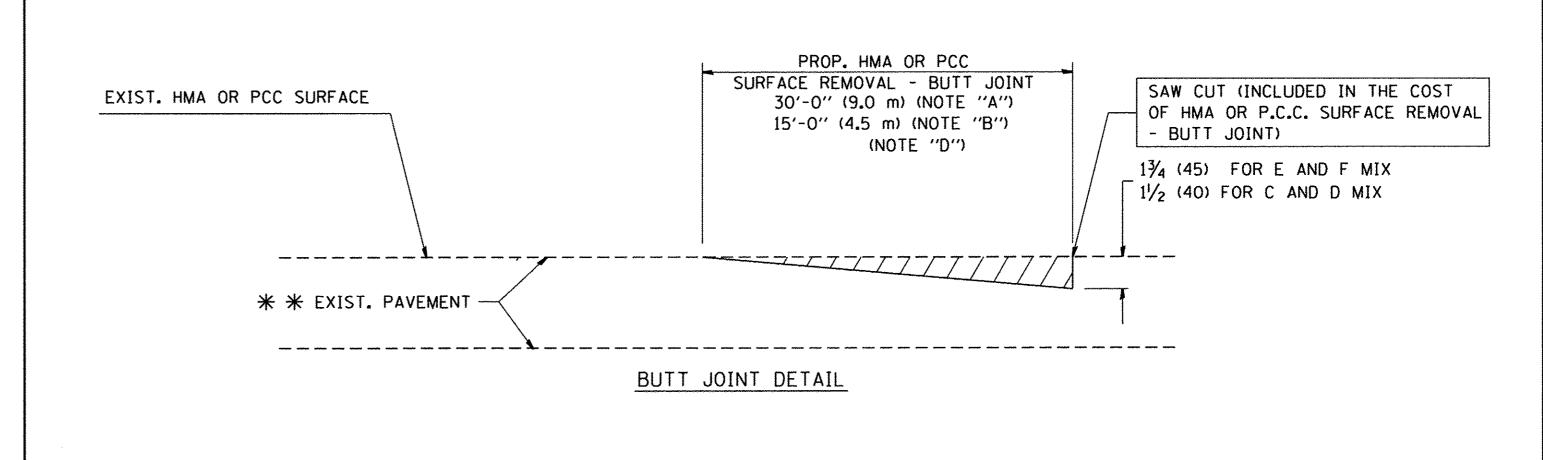
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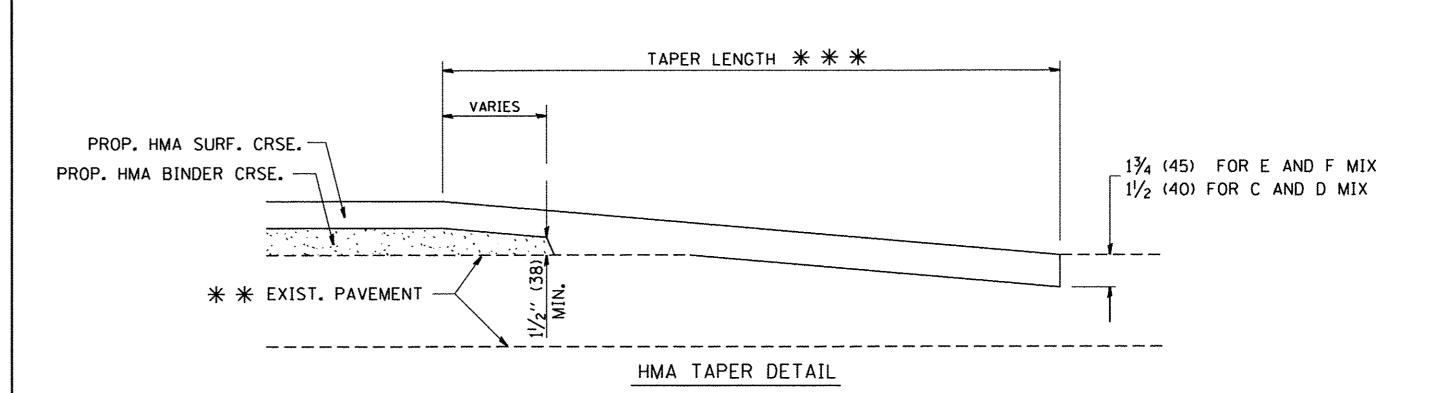
OPTION 2

# 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

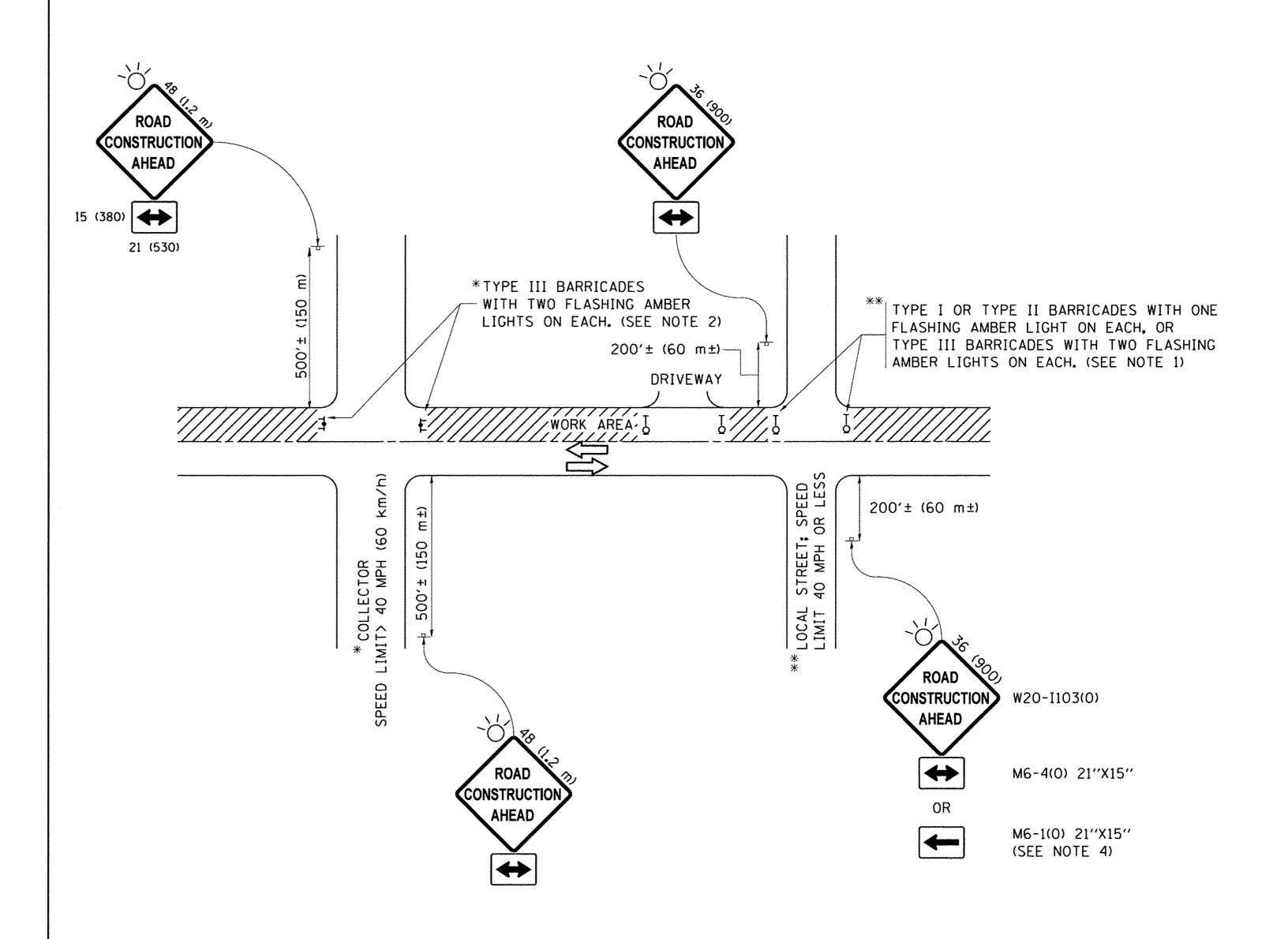
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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 =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94			BUTT JOINT AND		F.A.U. SECTION	COUNTY TOTAL SHEET SHEETS NO.
W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		HMA TAPER DETAILS		1487 16-00109-00-RS	DU PAGE 19 13
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01		NNA IAPER DEIAILS			BD400-05 BD32	CONTRACT NO. 61D90
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED ~ R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED.	. AID PROJECT



# NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - 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.

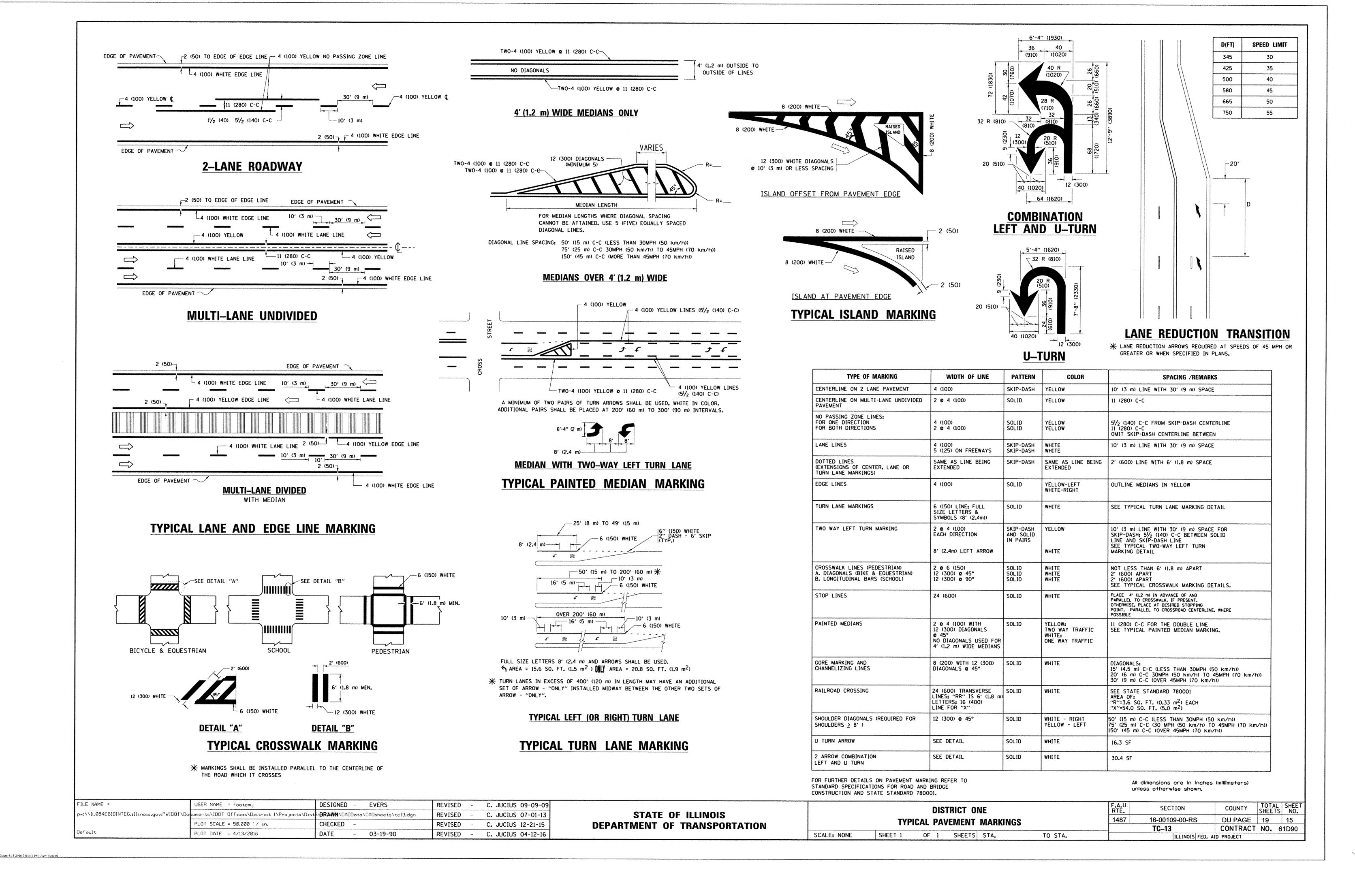
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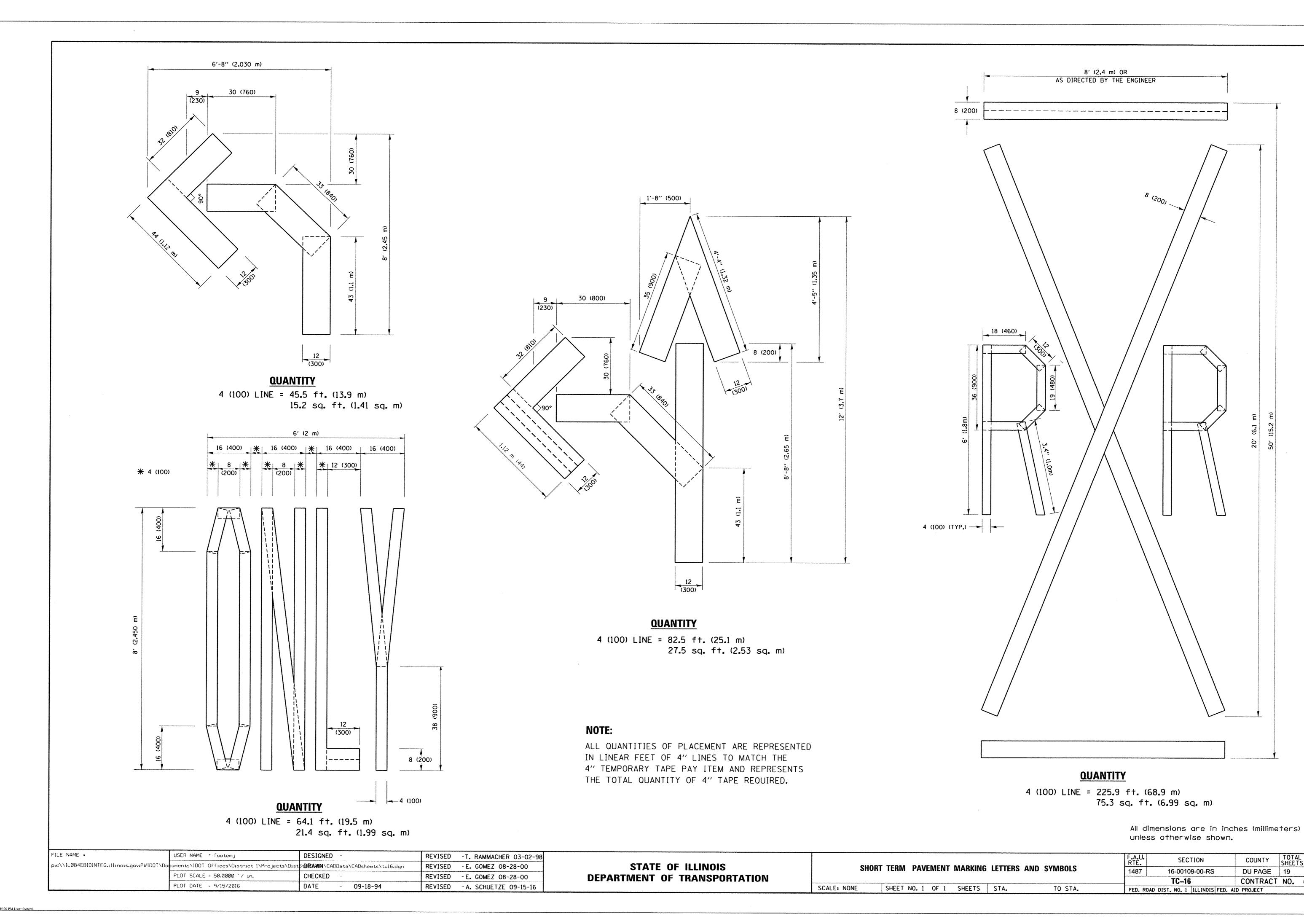
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	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	TRAFFIC	CONTR	OL AND I	PROTEC	TION FOR
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$\rfloor$		TC-10	CONTRACT	NO. 6	1D90
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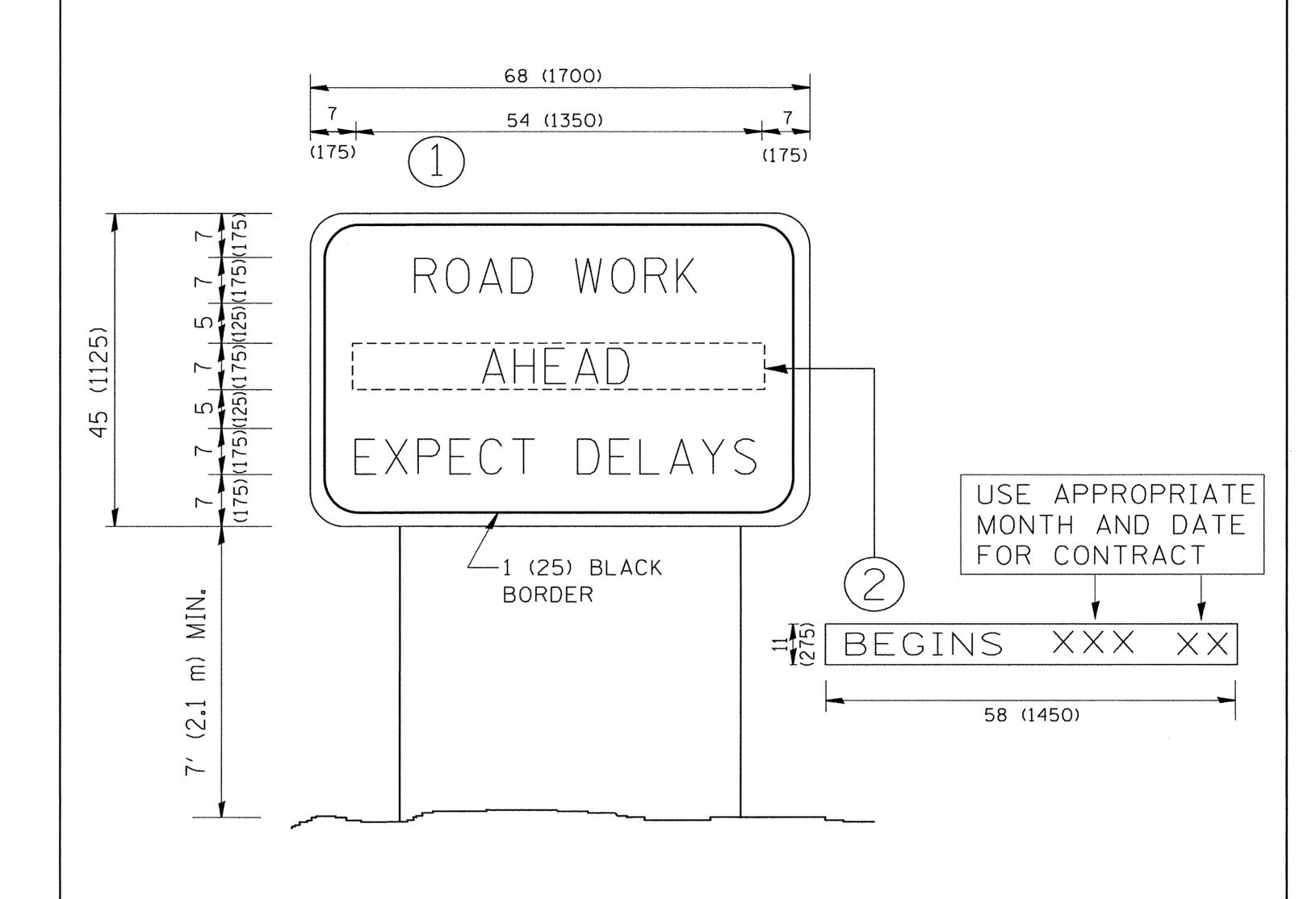




COUNTY TOTAL SHEET SHEET NO.

DU PAGE 19 16

CONTRACT NO. 61D90



# NOTES:

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

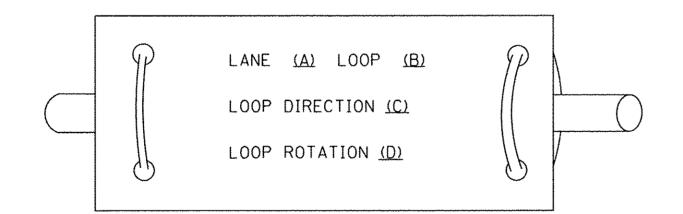
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

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W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	INFORMATION SIGN		1487 16-00109-00-RS	DU PAGE 19 17	
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFURMATION SIGN		TC-22	CONTRACT NO. 61D90
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT

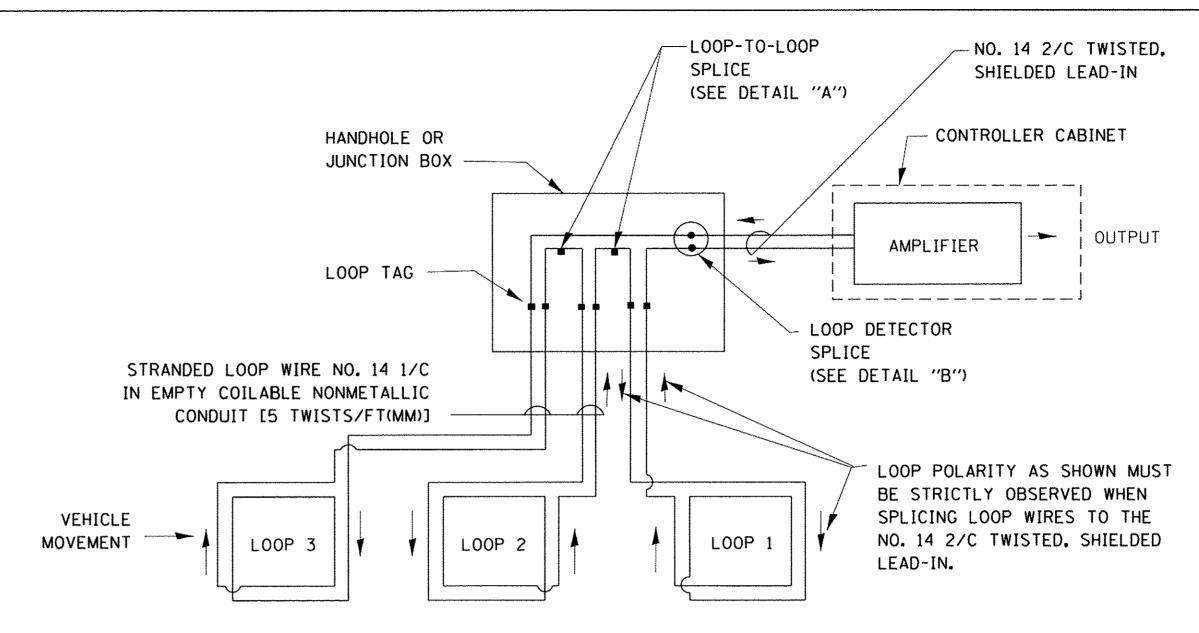
### LOOP DETECTOR NOTES

- 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

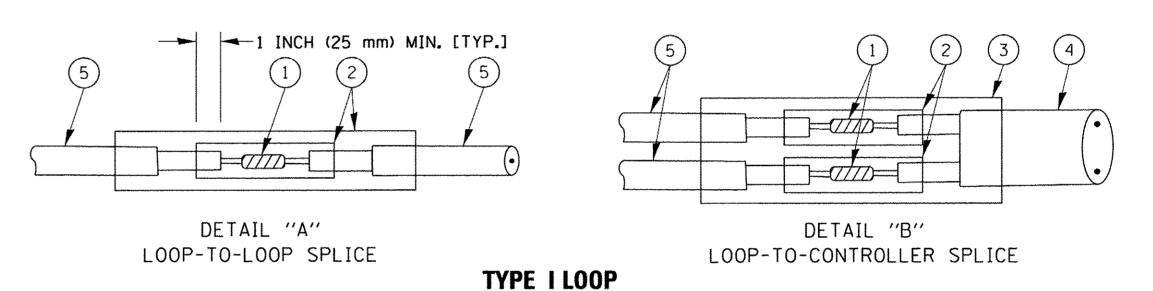


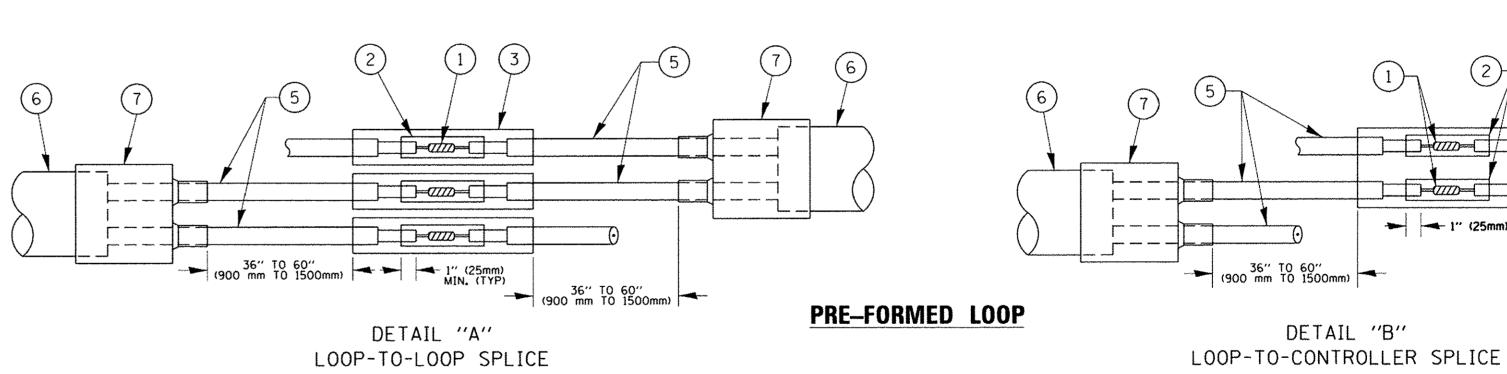
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



# 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.



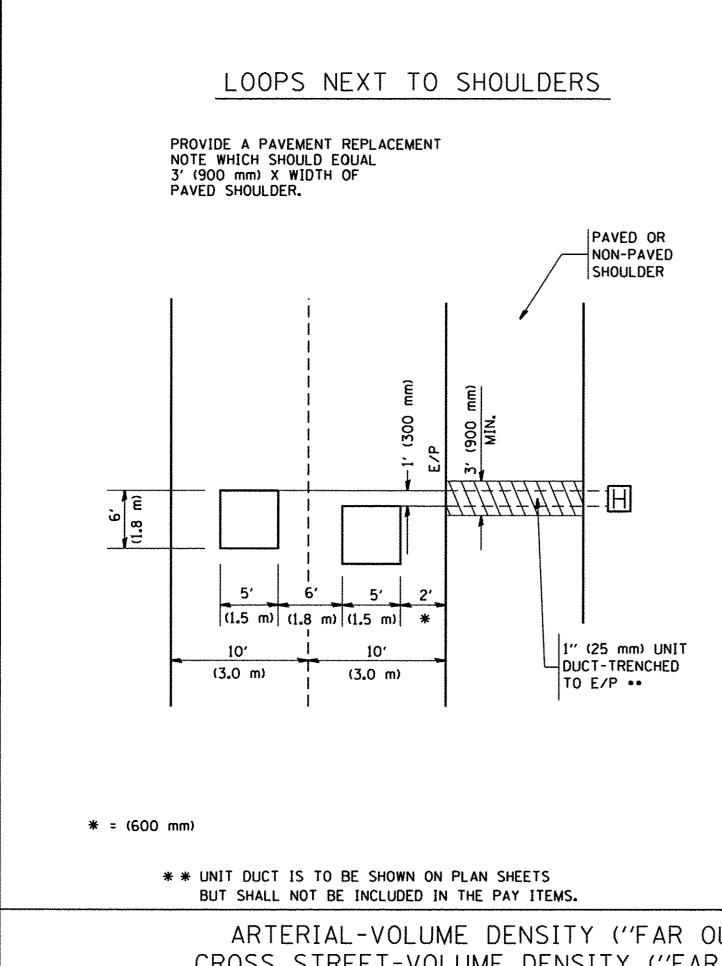


# LOOP DETECTOR SPLICE

- 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.

1" (25mm) MIN. (TYP)

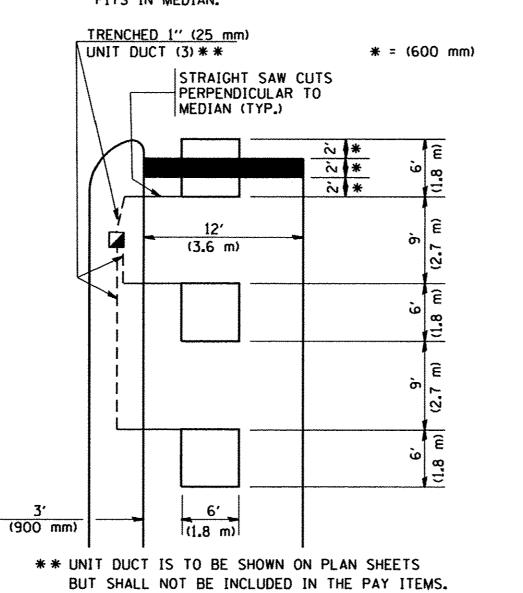
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL
- TOTAL SHEET SHEETS NO. DAG 1-1-14 DESIGNED DAD REVISED SECTION FILE NAME = USER NAME = footemy DISTRICT ONE STATE OF ILLINOIS REVISED DRAWN BCK c:\pw_work\pwidot\footemj\d0108315\ts05.dgr 16-00109-00-RS DU PAGE 19 18 STANDARD TRAFFIC SIGNAL DESIGN DETAILS DEPARTMENT OF TRANSPORTATION PLOT SCALE = 50.0000 ' / 10. REVISED CHECKED DAD CONTRACT NO. 61D90 TS-05 TO STA. SHEET NO. 2 OF 7 SHEETS STA. REVISED SCALE: NONE FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT PLOT DATE = 1/13/2014 DATE 10-28-09



# 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

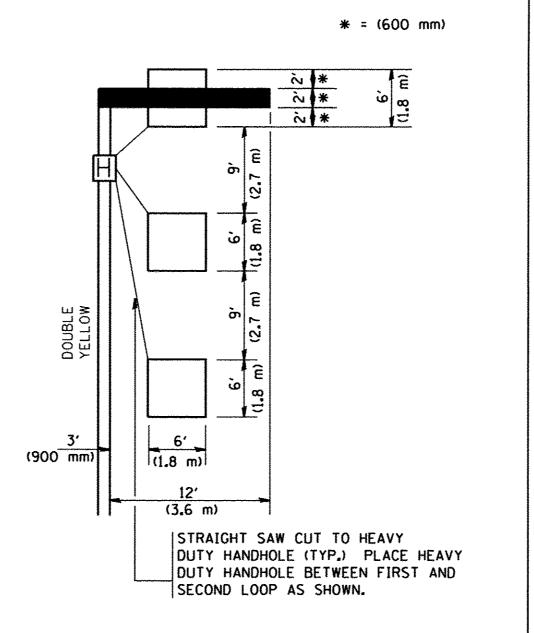


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

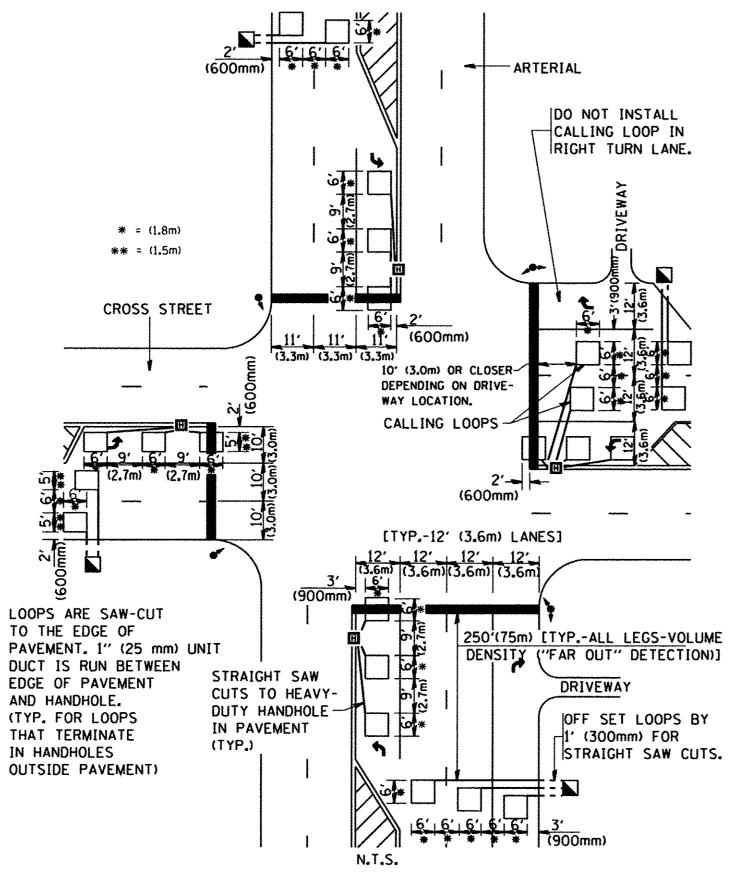


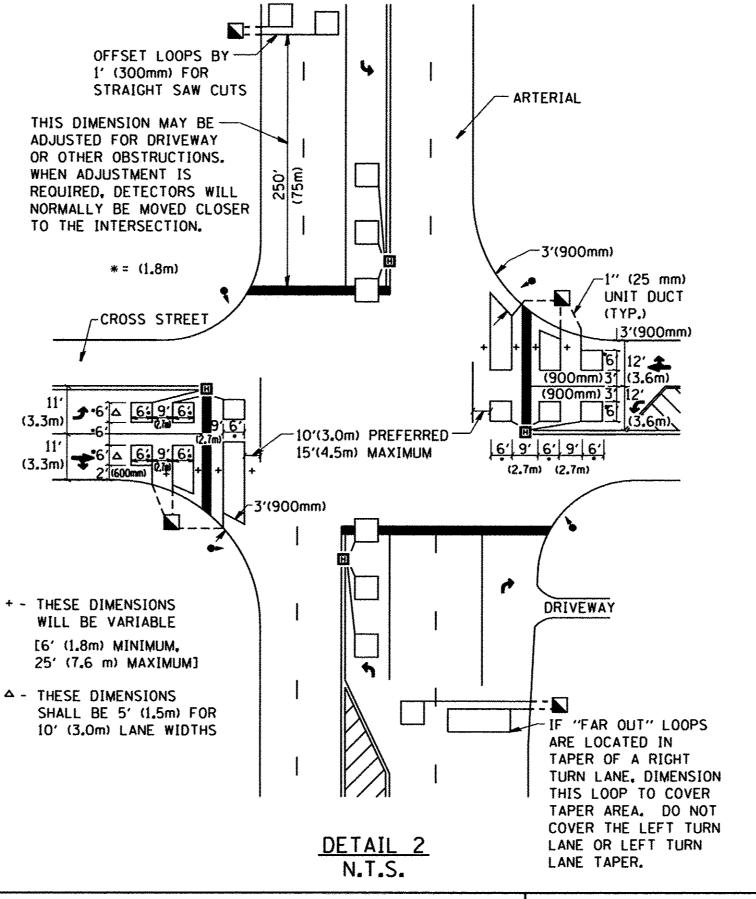
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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.

N.T.S.							
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -				
W:\diststd\22x34\ts07.dgn		DRAWN -	REVISED -				
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - R.K.F.	REVISED -				
	PLOT DATE = 1/4/2008	DATE -	REVISED -				

DETAIL 1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION  DETAILS FOR ROADWAY RESURFACING		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		1487	16-00109-00-RS	DU PAGE	19	19	
		TS-07		CONTRAC	CONTRACT NO. 61D90		
SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROA	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				