STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 376: US 14 (CALDWELL AVE.)
RESURFACING (MAINTENANCE)
FROM ILL 43 (WAUKEGAN ROAD) TO TOUHY AVENUE
SECTION 2007-026 RS
COOK COUNTY

C-91-281-07

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS IMPROVEMENT IS LOCATED IN THE CITY OF NILES

TRAFFIC DATA

2005 ADT = 16,900 - 19,200 SPEED LIMIT = 40 MPH

100' 200' 300' 1" = 100'
0 10' 20' 30' 1" = 10'
0 50' 100'
0 1" = 50'
0 100' 1" = 40'
0 50' 100' 1" = 30'
0 50' 100' 1" = 20'
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD

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

J.U.L.I.E

PREPARATION ENGINEER: 5-4178

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

CONTRACT NO. 60C96

BRIDGE OMISSION: SN 016-0928
STA 58 + 20.56 TO
STA 59 + 42.68

T 41 N

IMPROVEMENT ENDS
STA 59 + 42.68

IMPROVEMENT BEGINS
STA. 107 + 28.2

GROSS LENGTH OF IMPROVEMENT: 10128.2 FEET = 1.92 MILE NET LENGTH OF IMPROVEMENT: 10006.08 FEET = 1.89 MILE

NILES TOWNSHIP

CONTRACT NO. 60C96

F.A.P. RTE. SECTION COUNTY TOTAL SHEET NO. 376 2007-026 RS COOK 2.2 1

D-91-281-07



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

AFRIC. 12 20 07

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11, 20 07

ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 20 07

Mitton R. Scell J. D.

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

| F.A.P. RTE. | SECTION | | COUNTY | TOTAL | SHEET NO. |
|----------------|-----------------|--------|-------------|---------|--------------|
| 376 | 2007-026 | RS | COOK | 22 | 2 |
| STA. | | T | O STA. | | |
| FED. R | DAD DIST. NO. 1 | ILLINO | IS FED. AIC | PROJECT | Г |

INDEX OF SHEETS

| SHEET NO. | DESCRIPTION |
|-----------|---|
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| 2 | INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES |
| 3 | SUMMARY OF QUANTITIES |
| 4 | TYPICAL SECTIONS |
| 5-8 | ROADWAY PLAN |
| 9-13 | DETECTOR LOOP REPLACEMENT PLANS |
| 14 | FRAMES AND LIDS ADJUSTMENT WITH MILLING |
| 15 | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT |
| 16 | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT |
| 17 | BUTT JOINT AND HMA TAPER DETAILS |
| 18 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS |
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| 20 | ARTERIAL ROAD INFORMATION SIGN |
| 21 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) |
| 22 | DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING |

LIST OF STATE STANDARDS

| STANDARD NO. | DESCRIPTION |
|---------------------------|---|
| 442201- 02 | CLASS C AND D PATCHES |
| 604001 -02 | FRAME AND LIDS TYPE 1 |
| 604091-01 | FRAME AND GRATE TYPE 24 |
| 606001- <i>0</i> 3 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 701301 -02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701606 -04 | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN |
| 701701 -04 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 702001 -06 | TRAFFIC CONTROL DEVICES |

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND CITY OF NILES

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCED 11/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OFTHE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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.

UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.

THE RESIDENT ENGINEER SHALL CONTACT WALLY CZARNY
AREA TRAFFIC FIELD ENGINEER AT (773) 685-4342 A MINIMUM OF 2
WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS), WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE REMOVAL OF ALL HOT-MIX ASPHALT IN THE GUTTER FLAG SHALL BE INCLUDED IN THE COST OF HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"

| LINOIS DEPARTMENT OF TRANSPORTA | | REVISIONS |
|---|------|-----------|
| LINOIS DEPARTMENT OF TRANSPORTA | DATE | NAME |
| US 14 (CALDWELL AVE.) INDEX OF SHEETS LIST OF STATE STANDARDS | | |
| PLAN NOTES | | |
| VERT. : NONE DRAWN BY: | | |
| CHECKED B | | |

4/12/2007 c:#projects#d128107#sh_rdwy.dgn

CONTRACT NO. 60C96

| F.A.P. | SECTION | | COUNT | Y | TOTAL SHEETS | SHEET NO. |
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| 376 | 2007-026 RS | | COO | (| 22 | 3 |
| FED. | ROAD DIST, NO. 1 | 31.1 | INOIS | HIG | HWAY PRO | JECT |

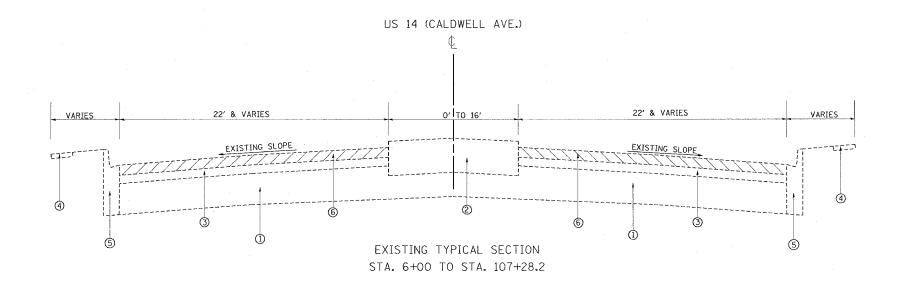
| 376 | 2007-026 RS | COOK | 2 | 2 | 3 |
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| FED. | ROAD DIST. NO. 1 IL | LINOIS | HIGHWAY | PRO | JECT |

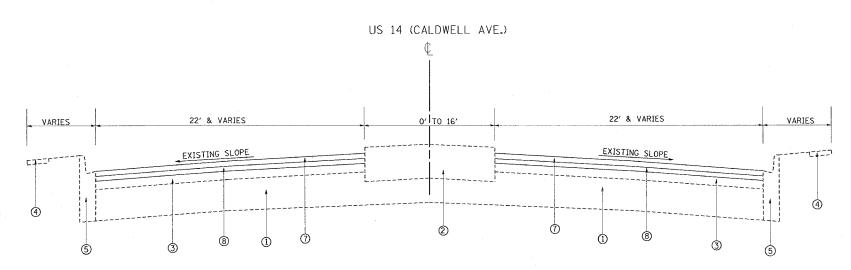
| | SUMMARY OF QUANTITIES | | | | CONSTRUCT | TION TYPE CO | DDE | | SUMMARY OF QUANTITIES | | | IABU STATE | I | CONSTRUCT | ION TYPE C | ODE | |
|---------|--|--------|------------------|--------------------|-----------|--------------|-------|-----------------------|--|-------|------------------------------|--------------|---|-----------|------------|-----|---|
| CODE NO | ITEM | UNIT | TOTAL QUANTITIES | 100% STATE 1000 | | | | CODE NO | ITEM | UNIT | URBAN TOTAL QUANTITIES | 100°/. STATE | | | | | |
| 0600200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 47 | 47 | | | | 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 11050 | 11050 | | | | | |
| 600300 | AGGREGATE (PRIME COAT) | TON | 238 | 238 | | | 4 | 70300210 | TEMPORARY PAVEMENT MARKING | SQ FT | 532. 8 | 532.8 | | | | | |
| 600400 | | TON | 55 | 55 | | | | 10300210 | - LETTERS AND SYMBOLS | 30 71 | 332.6 | 332.0 | | | | | |
| | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | | | | | | | 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 25590 | 25590 | | | | | |
| 600635 | LEVELING BINDER (MACHINE METHOD), N70 | TON | 3324 | 3324 | | | | 70300240 | TEMPORARY PAVEMENT MARKING | FOOT | 2410 | 2410 | , | | | | |
| 0600895 | CONSTRUCTING TEST STRIP | EACH | 1 | 1 | | | | | - LINE 6" | | | | | | | | |
| 0600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 509 | 509 | | | | 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 118 | 118 | | | | | |
| 0601005 | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES | TON | 623 | 623 | | | | 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24" | FOÓT | 486 | 486 | | | | | |
| 0603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON | 5011 | 5011 | | | - 100 | * 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 532.8 | 532.8 | | | | | |
| 2001300 | PROTECTIVE COAT | SQ YD | 642 | 642 | | | | X 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 25590 | 25590 | | | | | |
| 4000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SQ YD | 251 | 251 | - | | | ∦ 78000400 | THERMOPLASTIC PAVEMENT MARKING | FOOT | 2410 | 2410 | | | | | |
| 000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SQ YD | 59662 | 59662 | | | | ₹ 78000600 | - LINE 6" THERMOPLASTIC PAVEMENT MARKING | FOOT | 118 | 118 | | | | 1 | |
| 1001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT | 2025 | 2025 | | | | ¥ 78000650 | - LINE 12" THERMOPLASTIC PAVEMENT MARKING | FOOT | 486 | 486 | | | | | |
| 1002220 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, | SQ YD | 2214 | 2214 | | | | * 78100100 | - LINE 24" RAISED REFLECTIVE PAVEMENT MARKER | EACH | 930 | 930 | | | | | |
| 1201749 | CLASS D PATCHES, TYPE I, 9 INCH | SQ YD | 50 | 50 | | | | 78300200 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 875 | 875 | | | | | |
| 201753 | CLASS D PATCHES, TYPE II, 9 INCH | SQ YD | 1654 | 1654 | | | | | REMOVAL | | | | | | | | |
| 201757 | CLASS D PATCHES, TYPE III, 9 INCH | SQ YD | 235 | 235 | | | | * 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 1230 | 1230 | | | | | |
| 201759 | CLASS D PATCHES, TYPE IV, 9 INCH | SQ YD | 275 | 275 | | | | X0322256 | TEMPORARY INFORMATION SIGNING | SQ FT | 192 | 192 | | | | | |
| 300105 | FRAMES AND GRATES TO BE ADJUSTED | EACH | 45 | 45 | | | | | | | | | | | | | |
| 300310 | FRAMES AND LIDS TO BE ADJUSTED | EACH | 22 | 22 | | | | | | | | | | | , | | |
| 404950 | FRAMES AND GRATES, TYPE 24 | EACH | 7 | 7 | | | | | | | | | | | | | |
| 406000 | FRAMES AND LIDS, TYPE 1, OPEN LID | EACH | 5 | 5 | | | | | | | | | | | . [| | l |
| 406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID | EACH | 15 | 15 | | | | | | | | | | | | | |
| | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 6 | 6 | | | | | | | | | | | | | |
| | MOBILIZATION | L SUM | 1 | | | | | | | | | | | | | | |
| 102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | 1 | | | | | | | | | | | | | |
| 102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 | | | | | | | | | | | | | |

* SPECIALTY MEMS

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES REVISIONS DATE







PROPOSED TYPICAL SECTION STA. 6+00 TO STA. 107+28.2

| HMA MIXTURE REQUIREMENTS | | | | | | | |
|--|-------------|--------------|--|--|--|--|--|
| MIXTURE TYPE | AC TYPE | AIR VOIDS | | | | | |
| CLASS D PATCHES, (HMA BINDER IL-19mm, N70) | PG 64-22 ** | 4% @ 70 GYR | | | | | |
| HOT-MIX ASPHALT REPLACEMENT OVER PATCHES, (HMA BINDER IL-19mm) | PG 64-22** | 4% @ 70 GYR. | | | | | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 11/2" (IL 9.5mm) | PG 64-22 | 4% @ 70 GYR. | | | | | |
| LEVELING BINDER (MACHINE METHOD), N70, 1" (IL 9.5mm) | PG 64-22** | 4% @ 70 GYR. | | | | | |

NOTE: - THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD/IN ** WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

LEGEND

- 1 EXISTING P.C.C PAVEMENT
- 2 EXISTING PCC MEDIAN
- 3 EXISTING HMA. AFTER MILLING SURFACE 3"
- 4 EXISTING SIDEWALK
- (5) EXISTING COMBINATION CONCRETE CURB & GUTTER
- 6 PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- \bigcirc PROP. HMA SURFACE COURSE, MIX "D", N70, $1\frac{1}{2}$ "
- 8 PROP. LEVELING BINDER (MACHINE METHOD), N70, 1"
- * PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 11/2"

NOTE: * PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 11/2" @ BRIDGE APPROACH PAVEMENT'S (SN 016-0928)

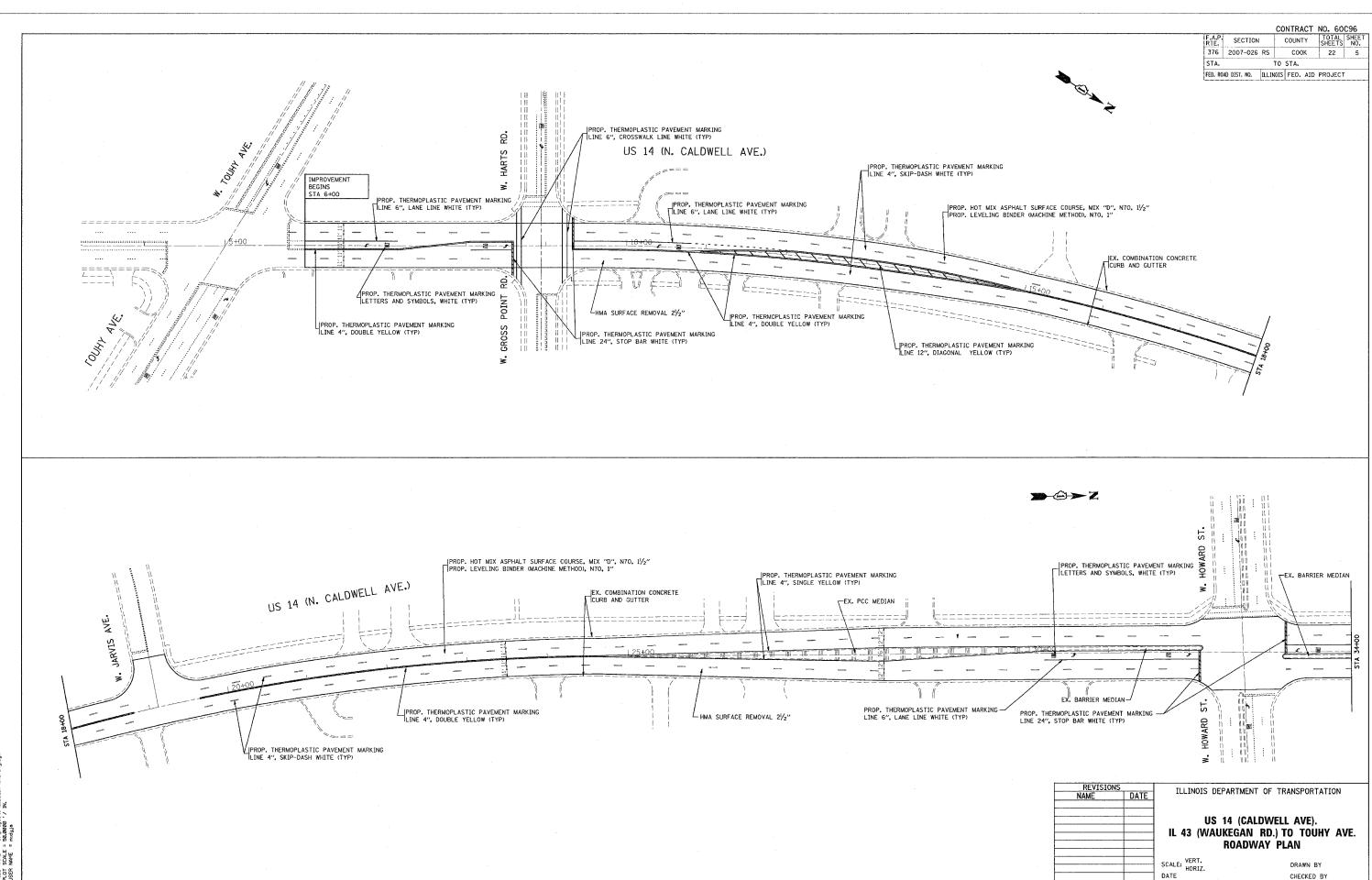
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ILLINOIS DEPARTMENT OF TRANSPORTATION

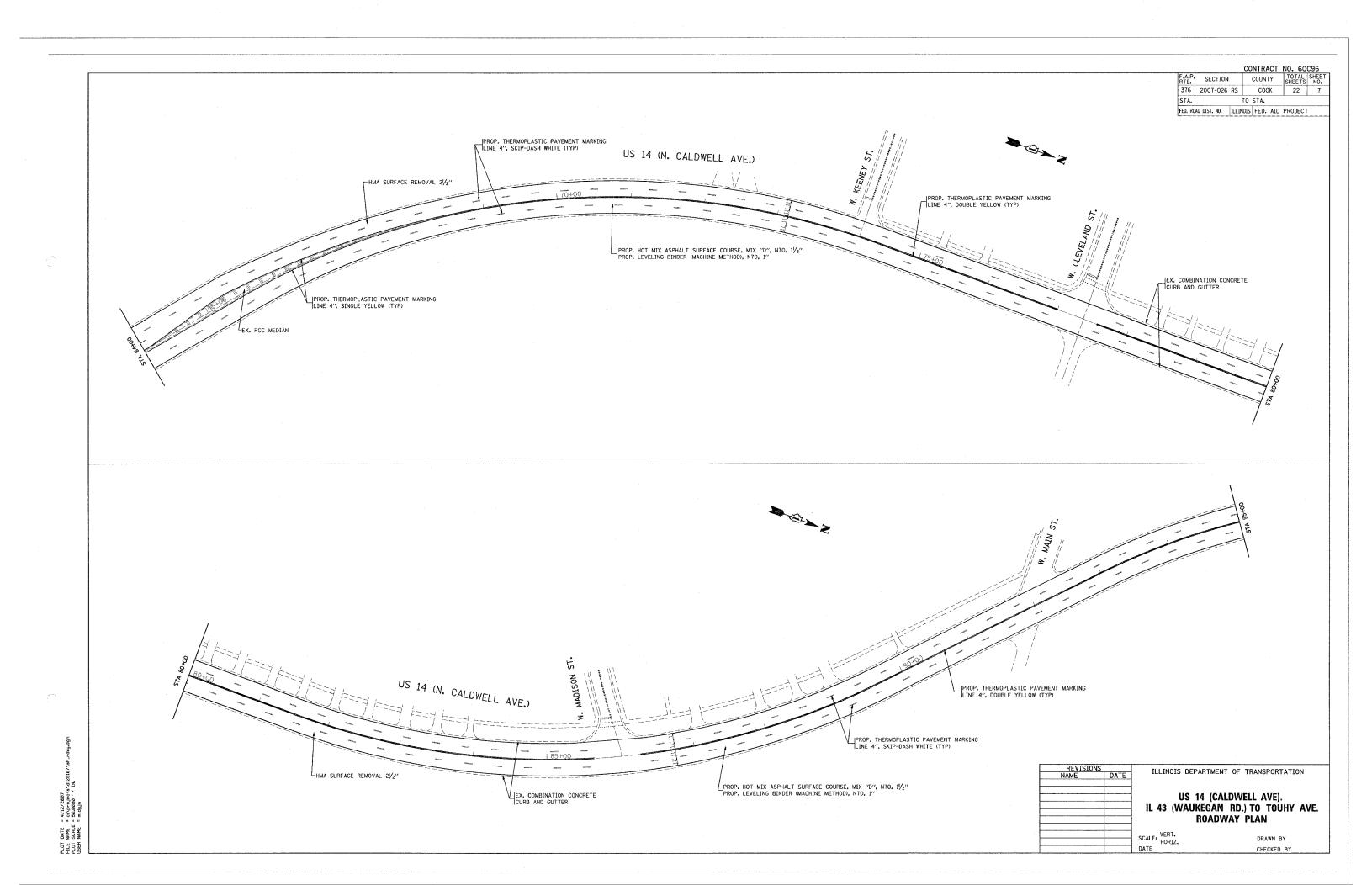
US 14 (CALDWELL AVE). 43 (WAUKEGAN RD.) TO TOUHY AVE. EXISTING AND PROPOSED TYPICAL SECTION

SCALE: VERYONE HORIZ.

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COUNTY TOTAL SHEET NO. SECTION 376 2007-026 RS COOK 22 6 TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT PROP. THERMOPLASTIC PAVEMENT MARKING LINE 6", LANE LINE WHITE (TYP) US 14 (N. CALDWELL AVE.) | PROP. HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70, $11\!/_2$ " | PROP. LEVELING BINDER (MACHINE METHOD), N70, 1" -EX. PCC MEDIAN , --HMA SURFACE REMOVAL 21/2″ LIEX. COMBINATION CONCRETE __PROP. THERMOPLASTIC PAVEMENT MARKING LINE 4", DOUBLE YELLOW (TYP) PROP. THERMOPLASTIC PAVEMENT MARKING LINE 4", SKIP-DASH WHITE (TYP) PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP) EX. PCC MEDIAN PROP. THERMOPLASTIC PAVEMENT MARKING LINE 6", CROSSWALK LINE WHITE (TYP) PROP. THERMOPLASTIC PAVEMENT MARKING PROP. THERMOPLASTIC PAVEMENT MARKING LINE 6". LANE LINE WHITE (TYP) THMA SURFACE REMOVAL 21/2" PROP. THERMOPLASTIC PAVEMENT MARKING LINE 4", SKIP-DASH WHITE (TYP) FX. BARRIER MEDIAN US 14 (N. CALDWELL AVE.) PROP. THERMOPLASTIC PAVEMENT MARKING LINE 24", STOP BAR WHITE (TYP) DES PLAINES RIVER — BRIDGE SN 016-0928 PROP. THERMOPLASTIC PAVEMENT MARKING-LINE 4", SINGLE YELLOW (TYP) PROP. THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS, WHITE (TYP) | PROP. HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70, 11/2" | PROP. LEVELING BINDER (MACHINE METHOD), N70, 1" ILLINOIS DEPARTMENT OF TRANSPORTATION DATE US 14 (CALDWELL AVE). * 20' BRIDGE APPROACH PAVEMENTS HMA SURFACE REMOVAL 11/2" PROP. HMA SURFACE COURSE, MIX "D", N70, 11/2" IL 43 (WAUKEGAN RD.) TO TOUHY AVE. **ROADWAY PLAN** SCALE: VERT. HORIZ. DRAWN BY CHECKED BY

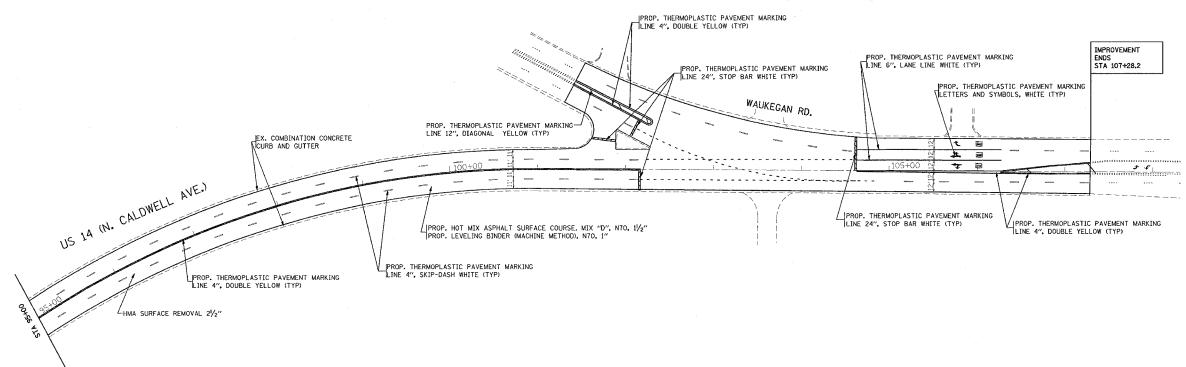


 CONTRACT
 NO. 60C96

 F.A.P. RTE.
 SECTION
 COUNTY
 TOTAL SHEET SHEETS NO.

 376
 2007-026 RS
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 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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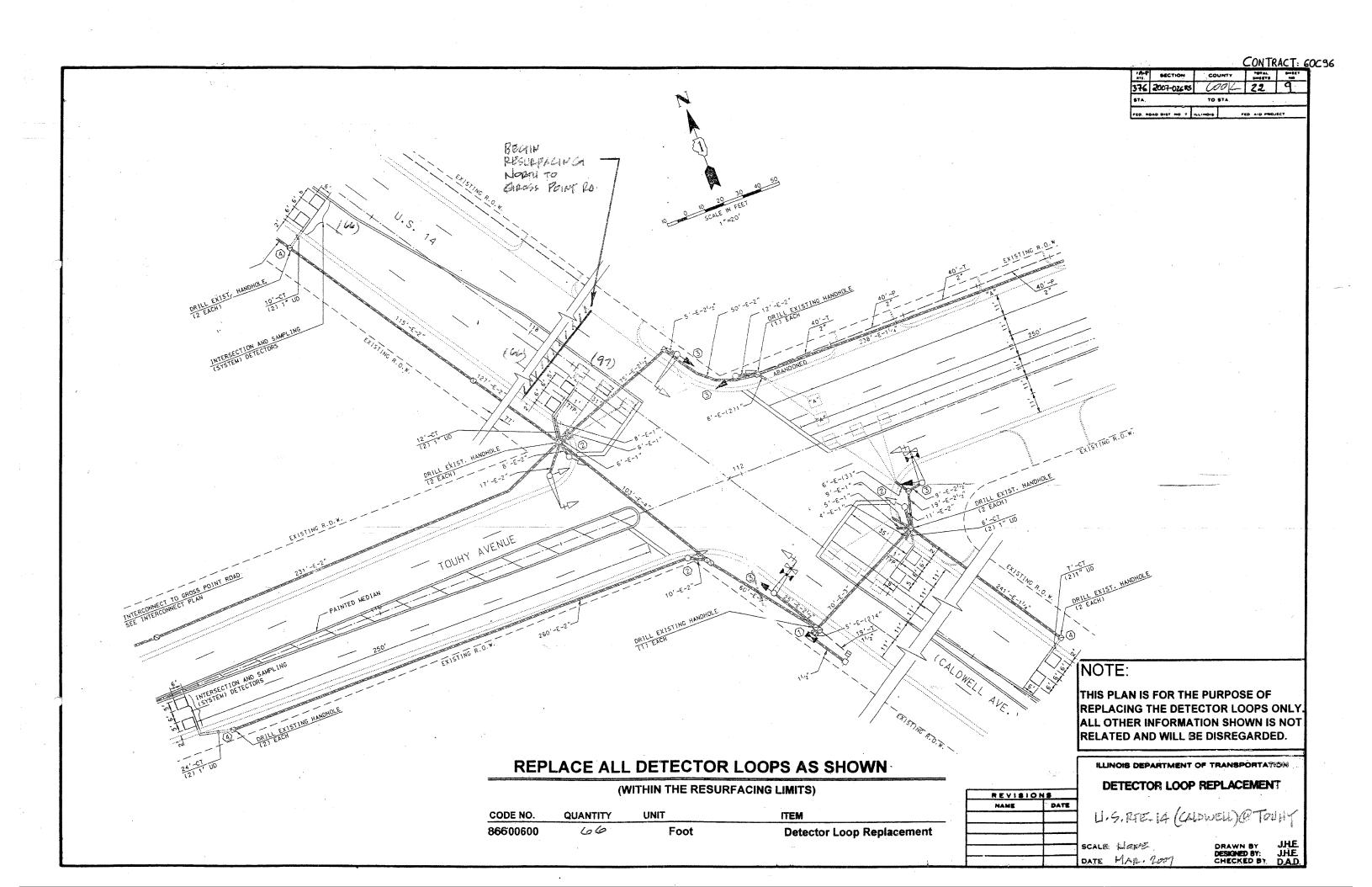
ILLINOIS DEPARTMENT OF TRANSPORTATION

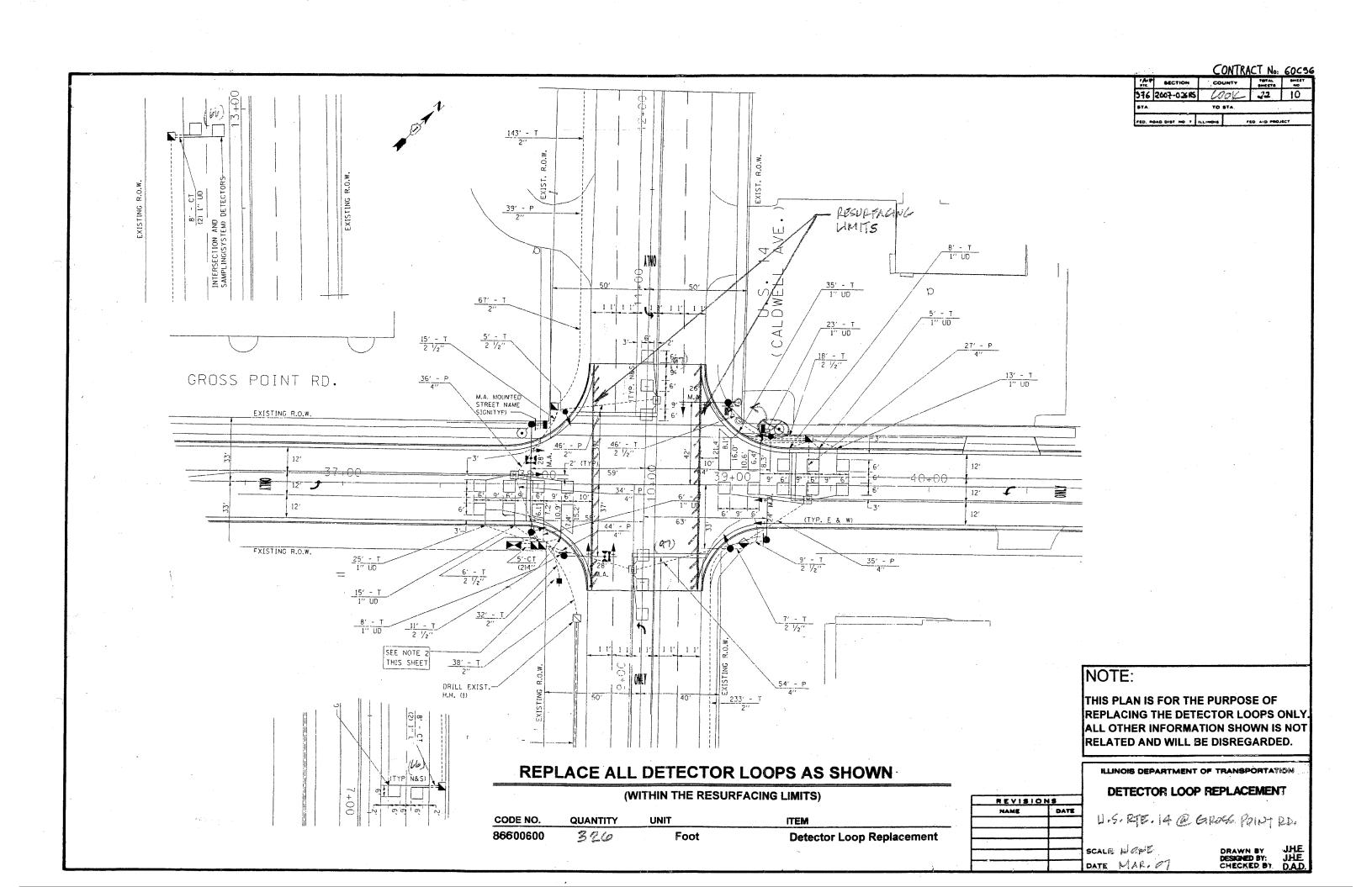
US 14 (CALDWELL AVE). IL 43 (WAUKEGAN RD.) TO TOUHY AVE. ROADWAY PLAN

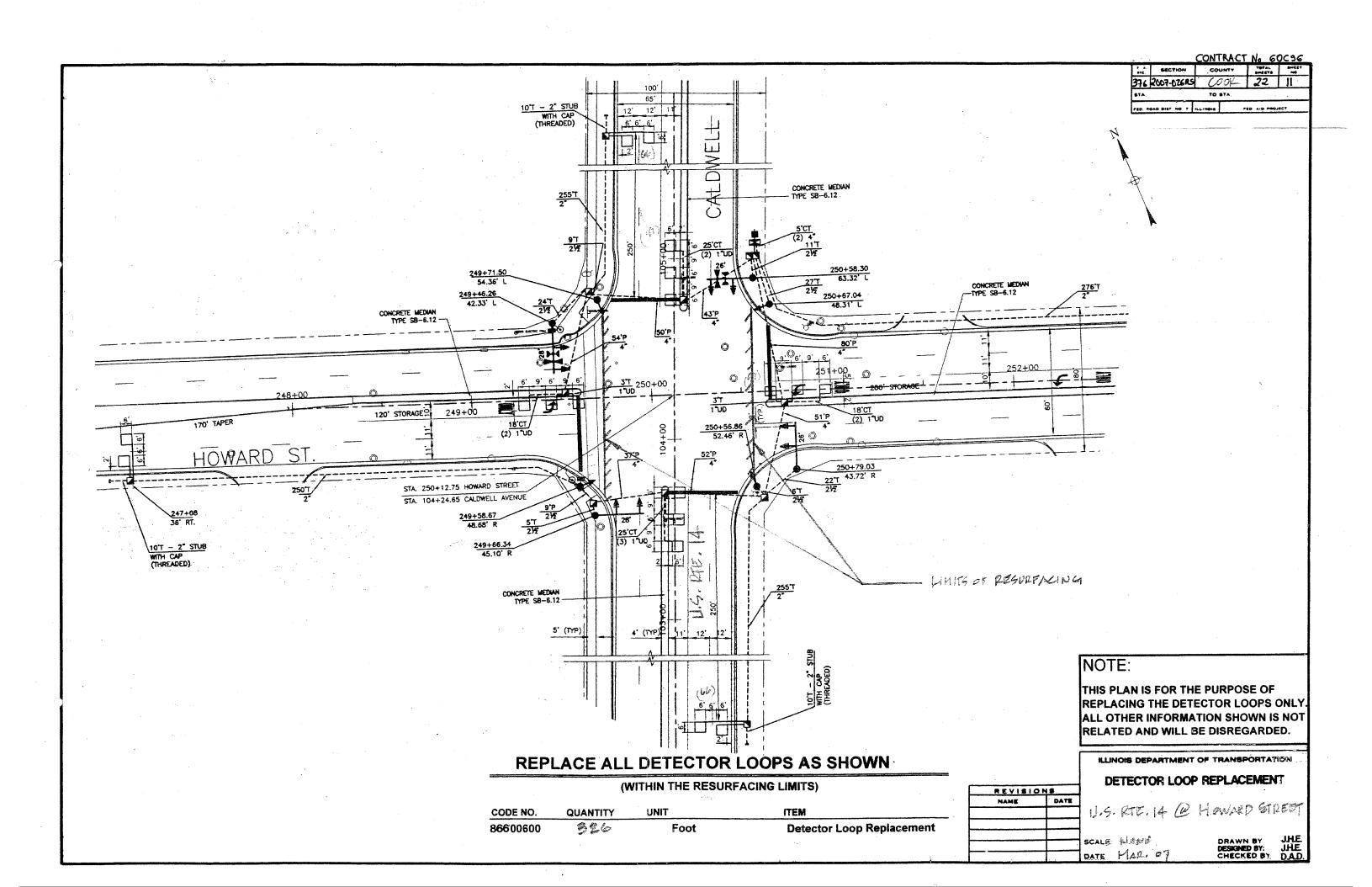
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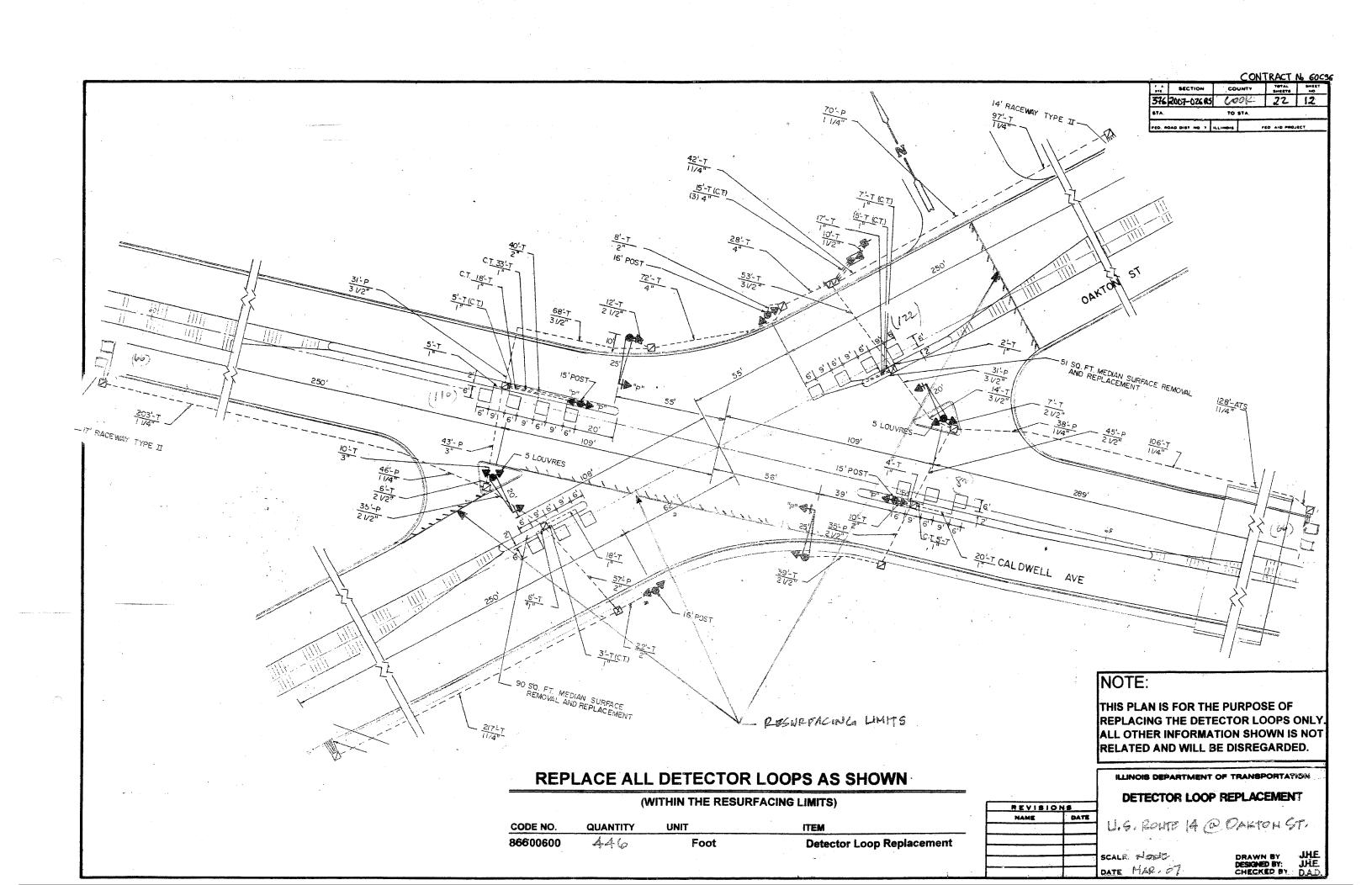
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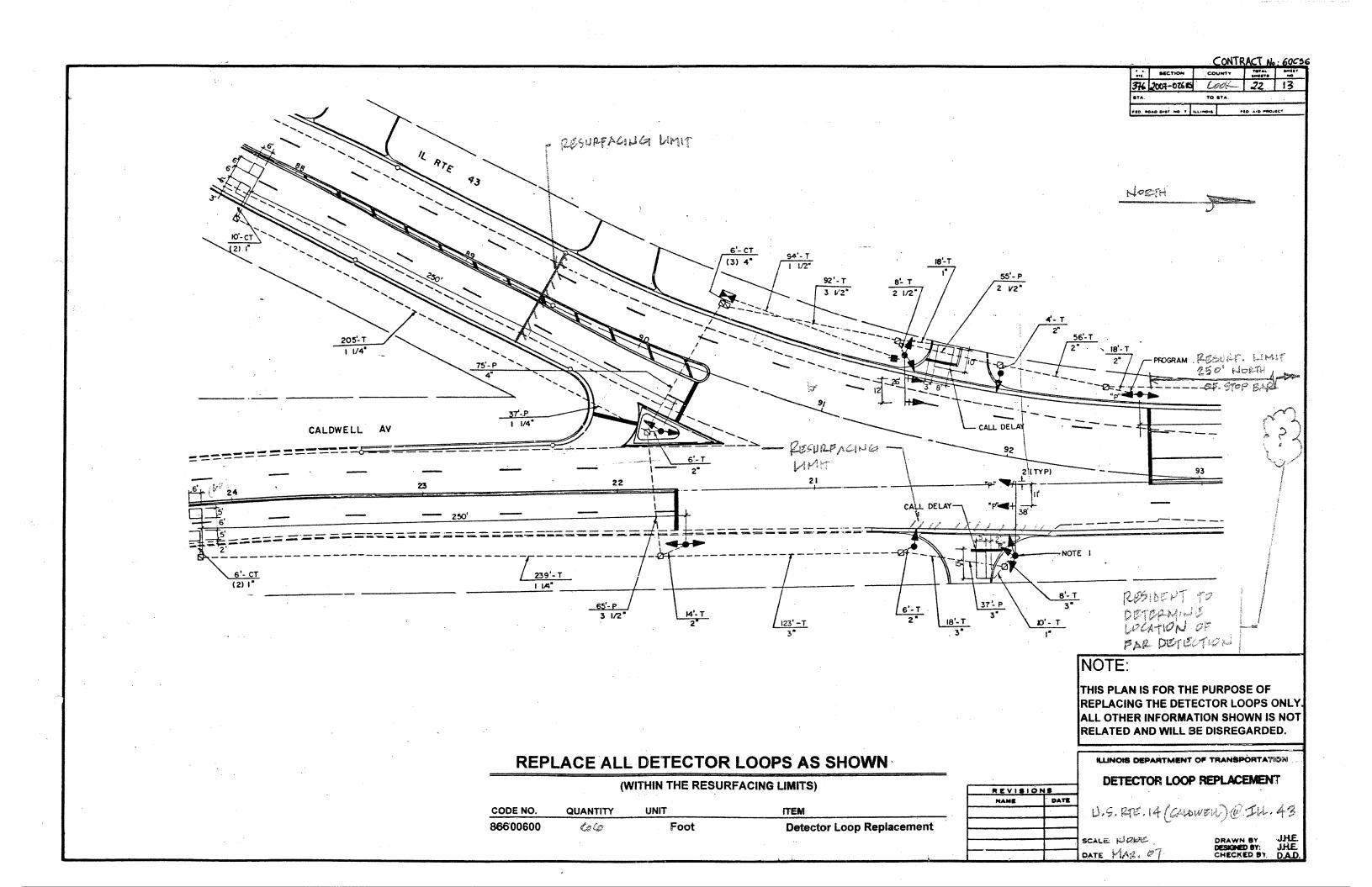
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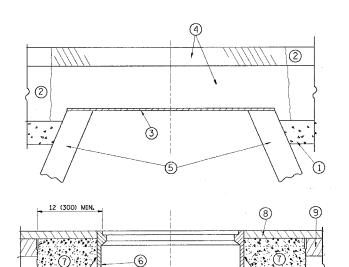








CONTRACT NO. 60C96 COUNTY TOTAL SHEET NO. RTE. SECTION соок 376 2007-026 RS 22 14 TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



PROPOSED

PROPOSED SAND FILL

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINER, 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 MOTIFY 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.

NOTES:

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- $\ensuremath{\mathsf{B}}\xspace$ REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM $1\!\!/_2$ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 5 EXISTING STRUCTURE
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 8 PROPOSED HMA SURFACE COURSE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

REVISIONS NAME ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS FOR . SHAH R. SHAH A. ABBAS R. WIEDEMAN FRAMES AND LIDS ADJUSTMENT WITH MILLING R. BORO

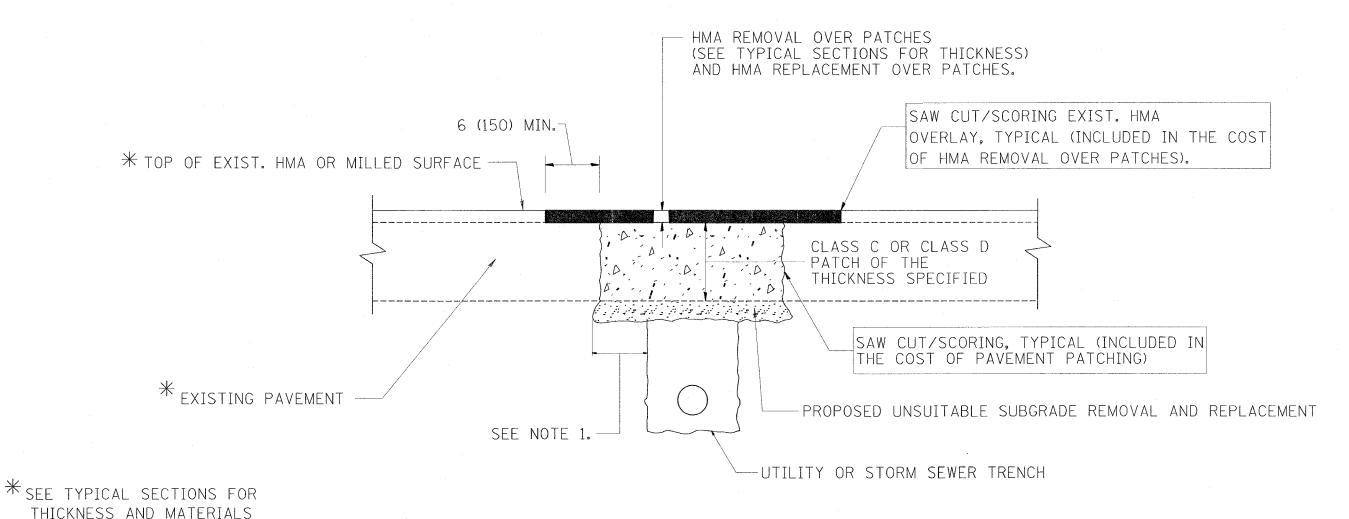
SCALE: VERT. NONE

DRAWN BY CHECKED BY

BD600-03 (BD-8)

DATE NAME SCALE NAME

F.A.P. SECTION COUNTY 376 2007-026 RS COOK TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. 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

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

| | OTHERWISE SHOWN. | | | | | | | |
|-----------|------------------|----------------------|------------------------|--|--|--|--|--|
| REVISIO | NS | THE THOSE DEPARTMENT | MENT OF TRANSPORTATION | | | | | |
| NAME | DATE | ILLINOIS DEPARTMEN | II OF TRANSFORTATION | | | | | |
| R. SHAH | 10/25/94 | | | | | | | |
| R. SHAH | 01/14/95 | | | | | | | |
| R. SHAH | 03/23/95 | PAVEMENT F | PATCHING FOR | | | | | |
| R. SHAH | 04/24/95 | LIMA C | URFACED | | | | | |
| A. HOUSEH | 03/15/96 | | | | | | | |
| A. ABBAS | 03/21/97 | PAVI | EMENT | | | | | |
| A. ABBAS | 01/20/98 | | | | | | | |
| ART ABBAS | 04/27/98 | SCALE: VERT. NONE | DRAWN BY | | | | | |
| R. BORO | 01/01/07 | HORIZ. NONE | DRAWN BT | | | | | |

DRAWN BY CHECKED BY BD400-04 (BD-22)

CONTRACT NO. 60C96 TOTAL SHEET COUNTY SECTION 376 2007-026 RS COOK 22 16 STA. TO STA. VARIABLE - TO MEET EXISTING FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT DIMENSIONS AND FIELD CONDITIONS (SEE NOTE (2)) PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE (2)) SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL SEE STATE STANDARD 606001 18" (450) MAX. EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE) 1/4" (5) * * EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND. PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE 1). EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT SUITABLE BACKFILL MATERIAL - 3" (75) MIN. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT) * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE. PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST * # IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.) WITH THE PAVEMENT. NOTE: (1) SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY. UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE. BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. (2) CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED. REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN (3) FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS. PAVEMENT DELETE EPOXY COATED TIE BARS. PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 4 | LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. BY THE ENGINEER. (SEE NOTE (3)). (5) THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT. BASIS OF PAYMENT: 6 THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT". BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS. $\ensuremath{\bigcirc}$ The locations of removal and replacement of existing curb or curb and gutter shall be determined by the resident engineer at the time of construction.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

| REVISION | S |
|-----------|----------|
| NAME | DATE |
| A. HOUSEH | 03/11/94 |
| R. SHAH | 02/24/95 |
| R. SHAH | 03/02/95 |
| R. SHAH | 08/19/96 |
| R. SHAH | 09/12/96 |
| R. SHAH | 09/19/96 |
| R. SHAH | 10/03/96 |
| A. ABBAS | 03/21/97 |
| M. GOMEZ | 01/22/01 |
| R. BORO | 01/01/07 |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE

DRAWN BY CHECKED BY

BD600-06 (BD-24)

PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING (NOTE "C") (NOTE "E") PROP. HMA SURFACE REMOVAL EXIST, HMA SURFACE EXIST. PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST OF HMA SURFACE PROP. HMA SURFACE REMOVAL REMOVAL - BUTT JOINT) (NOTE "E") 13/4 (45) FOR E AND F MIX $1\frac{1}{2}$ (40) FOR C AND D MIX EXIST. HMA SURF. EXIST. PAVEMENT HMA CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 2 TYPICAL TEMPORARY RAMP HMA TAPER LENGTH *** SAW CUT (INCLUDED IN THE COST OF HMA SURFACE PROP. HMA SURF. CRSE. REMOVAL - BUTT JOINT) PROP. HMA BINDER CRSE. VARIES_ 4'-6" (1.35 m) 13/4 (45) FOR E AND F MIX PAY LIMIT FOR BUTT JOINT (NOTE "D") 1/2 (40) FOR C AND D MIX EXIST. HMA SURF.

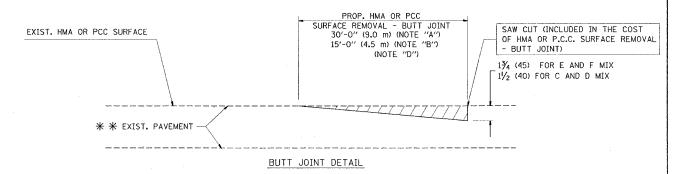
HMA SURF. REMOVAL - BUTT JOINT

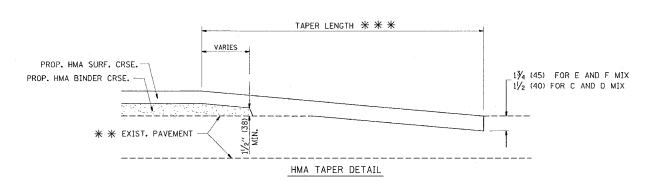
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

BUTT JOINT AND

HMA TAPER

CONTRACT NO. 60C96 F.A.P. SECTION COUNTY 376 2007-026 RS COOK 22 17 STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR 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") ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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".

| REVISIO |)NS | |
|------------|----------|----|
| NAME | DATE | |
| M. DE YONG | 6~13~90 | |
| M. DE YONG | 7-3-90 | |
| M. DE YONG | 3-27-92 | |
| R. SHAH | 09/09/94 | |
| R. SHAH | 10/25/94 | |
| A. ABBAS | 03/21/97 | |
| M. GOMEZ | 04/06/01 | |
| R. BORO | 01/01/07 | SC |
| | | 26 |
| | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE

DRAWN BY CHECKED BY

BD400-05 (VI=BD32)

DATE = 4/12/2007

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EXIST. PAVEMENT

COUNTY TOTAL SHEET SHEETS NO. F.A.P. SECTION 376 2007-026 RS COOK 22 18 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. AHEAD TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE III BARRICADES WITH TWO FLASHING 15 (380) 200'± (60 m±)-AMBER LIGHTS ON EACH. DRIVEWAY WORK AREA J 200'± (60 m±) 09) STREET; 40 MPH 0 COLLECTOR LIMIT> 40 MPH (LOCAL W20-1(0) ROAD SPEED CONSTRUCTION M6-4(0)-2115 AHEAD **(***)** M6-1(0)-2115

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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON 1T 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. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

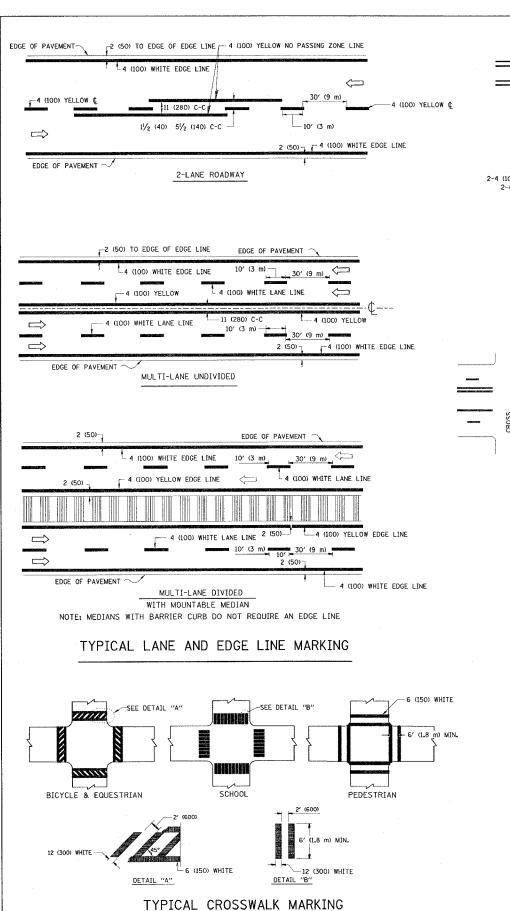
All dimensions are in millimeters (inches) unless otherwise shown.

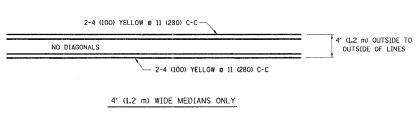
| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION | | |
|--------------|----------|---------------------------------------|------------------------|--|
| NAME | DATE | ILLINOIS DEI ARTI | MENT OF TRANSPORTATION | |
| LHA | 6/89 | TRAFFIC CONTR | ROL AND PROTECTION | |
| T. RAMMACHER | 09/08/94 | TRAFFIC CONTI | | |
| J. OBERLE | 10/18/95 | | FOR | |
| A. HOUSEH | 03/06/96 | CIDE BOADS | INTERSECTIONS. AND | |
| A. HOUSEH | 10/15/96 | | • | |
| T. RAMMACHER | 01/06/00 | DRIVEWAYS | | |
| | | | | |
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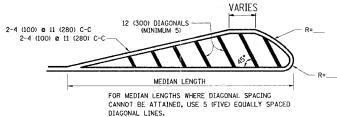
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CONTRACT NO. 60C96

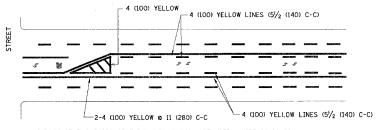




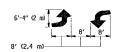


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

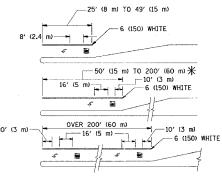


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED. WHITE IN COLOR.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

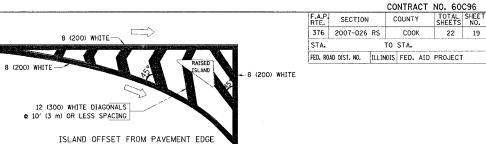


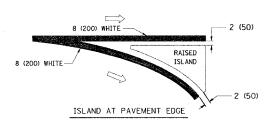
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SQ. FT. (1.5 m²) (11) AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING





TYPICAL ISLAND MARKING

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
|---|---|-------------------------|--------------------------------|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION | SKIP-DASH AND SOLID | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE |
| | 8' (2.4m) LEFT ARROW | IN PAIRS | WHITE | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS | SOLID | YELLOW: TWO WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE |
| | @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | | WHITE: ONE WAY TRAFFIC | SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m. LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²) |
| SHOULDER DIAGONALS | 12 (300) & 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h)) |

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

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

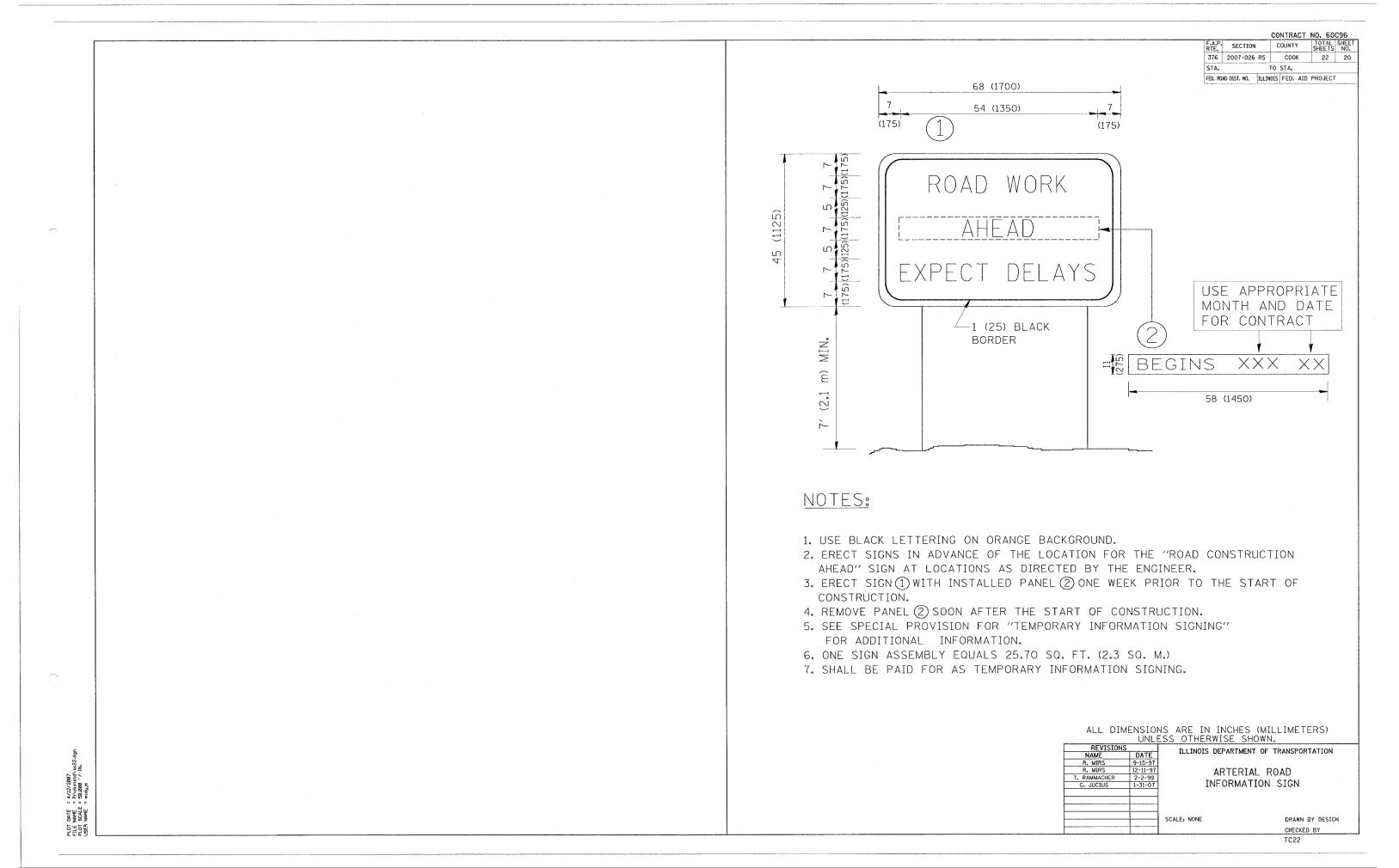
| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTA | | |
|--------------|----------|-----------------------------------|------------------------------|--|
| NAME | DATE | ILLINOIS | DELANTMENT OF TRANSPORTATION | |
| EVERS | 03-19-90 | | | |
| T. RAMMACHER | 10-27-94 | | DISTRICT ONE | |
| ALEX HOUSEH | 10-09-96 | 6 | | |
| ALEX HOUSEH | 10-17-96 | 1 | YPICAL PAVEMENT | |
| T. RAMMACHER | 01-06-00 | MADIATIOC | | |
| | | | MARKINGS | |
| | | | | |
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DATE NAME SCALE



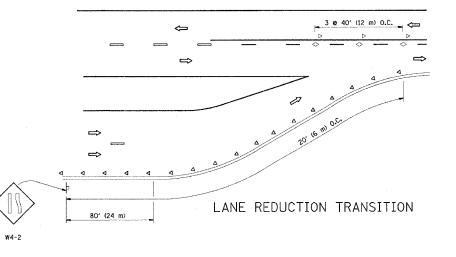
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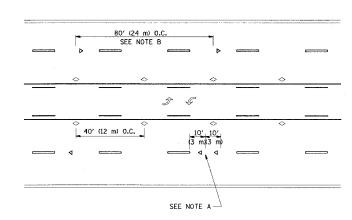
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| 376 | 2007-026 R\$ | COOK | 22 | 21 | |
| STA. TO STA. | | | | | |
| FFD RO | AD DIST, NO. TILLE | NOTS FED. ATD | PROJECT | - | |

80′ (24 m) 0.C. *** \leftarrow \Rightarrow

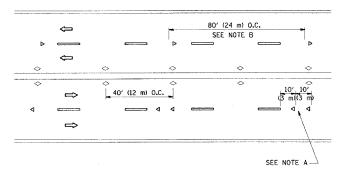
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

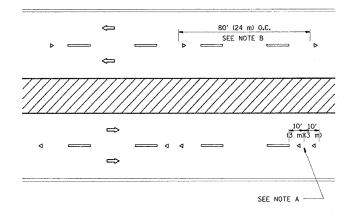




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

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

SYMBOLS

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

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

| . RAMMACHER | 09-19-94 |
|-------------|----------|
| | |
| . RAMMACHER | 03-12-99 |
| . RAMMACHER | 01-06-00 |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

DRAWN BY CADD CHECKED BY TC-11

| 3 @ 80' (24 m) O.C. | 3 0 40′ (12 m) 30 0 | MINIMUM OF 3 W EQUALLY SPACED | € ⊝ . 3 e 40′ (12 m) |
|---------------------|------------------------|--|-----------------------------------|
| * | 0.C. 40′ (12 m) 0.C. E | 40' (12 m) 0.c. E S W M M M M M M M M M | 0.c. * |
| | | ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ | |
| | | * SEE TWO-LANE/TWO-WAY WHERE MAF ** WHERE THE MEDIAN WIDTH IS 6' (2 USE TWO-WAY MARKERS. | |

LEFT TURN

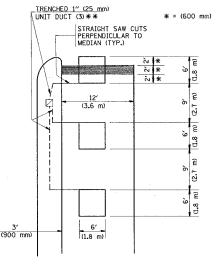
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LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m)(3.0 m) TO E/P ** * = (600 mm)BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
B14001 TO ENSURE THAT HANDHOLE
SITS IN MEDIAN



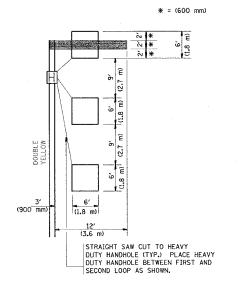
** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

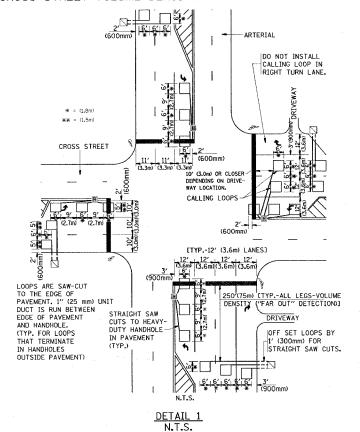
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

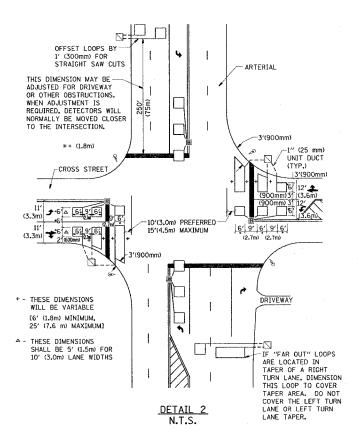


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)



CONTRACT NO. 60C96 COUNTY TOTAL SHEET SHEETS NO. SECTION COOK 376 2007-026 RS 22 22 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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
- * 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, <u>MORE</u>
 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

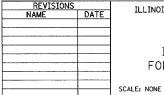
THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES, ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

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.

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.



ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

> DRAWN BY CADD CHECKED BY R.K.F.

DATE VAME SCALE NAME