

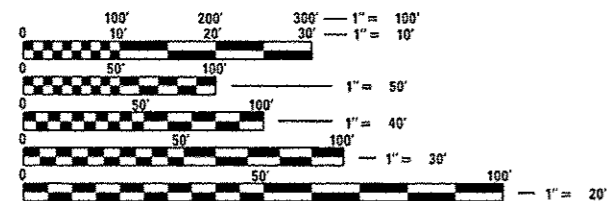
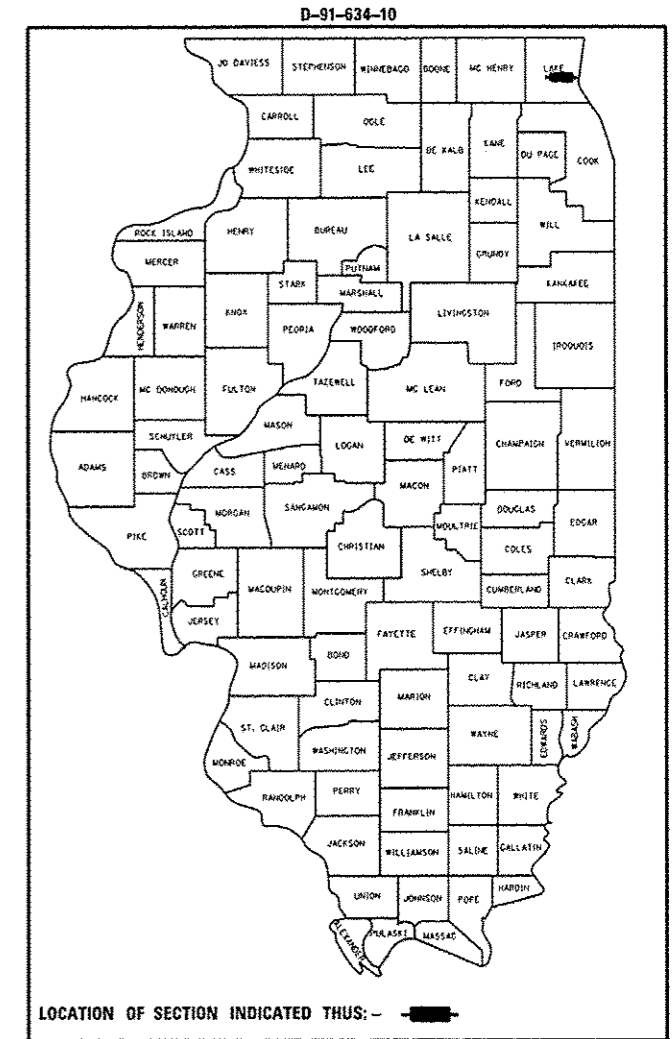
PROPOSED HIGHWAY PLANS

FAP ROUTE 352: ILLINOIS ROUTE 137
O'PLAINE ROAD TO ILL 21
SECTION: 56RS-3
RESURFACING (3P)
LAKE COUNTY
C-91-634-10

| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------|---------|--------|--------------------|-----------|
| 352 | 56RS-3 | LAKE | 21 | 1 |
| ILLINOIS | | | CONTRACT NO. 60L06 | |

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN
THE VILLAGE OF LIBERTYVILLE.



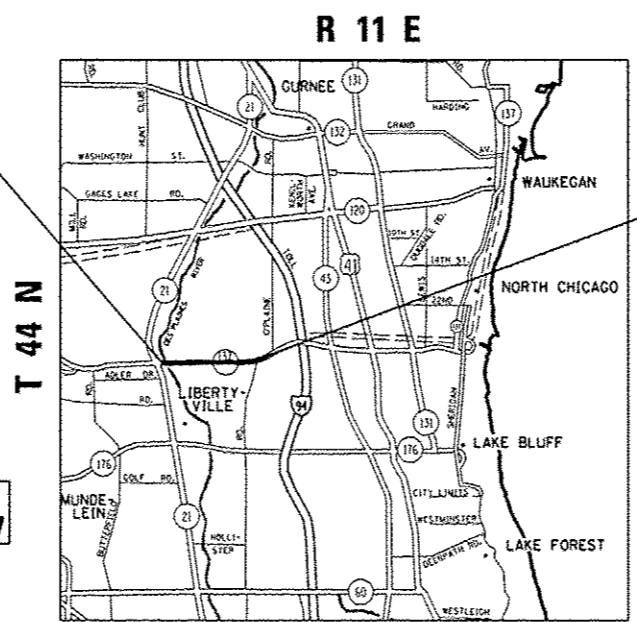
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

IMPROVEMENT BEGINS
STATION 50+14

IMPROVEMENT ENDS
STATION 163+82

RESURFACING OMISSION
STA. 52+86 TO STA. 54+37



LIBERTYVILLE TOWNSHIP

TRAFFIC DATA (ILL 137)
SPEED LIMIT = 45 MPH
2013 ADT = 25,600

PROJECT ENGINEER: DAN WILGREEN (847) 705-4240
PROJECT MANAGER: KEN ENG

GROSS LENGTH OF IMPROVEMENT = 11,368 LF = 2.15 MILES
NET LENGTH OF IMPROVEMENT = 11,217 LF = 2.12 MILES

CONTRACT NO. 60L06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 4 2014
John Pustomas
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 18 2014
John D. Baranzelli P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

July 18 2014
Omer Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.

DESCRIPTION

STATE STANDARDS

GENERAL NOTES:

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES
- 5-6 TYPICAL SECTIONS
- 7-11 ROADWAY & PAVEMENT MARKING PLANS
- 12-13 DETECTOR LOOP REPLACEMENT PLANS
- 14 DETAILS FOR FRAMES AND LIDS WITH MILLING (BD-08)
- 15 PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT (BD-22)
- 16 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
- 17 BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS (BD-32)
- 18 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
- 19 DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
- 20 ARTERIAL ROAD INFORMATION SIGNING (TC-22)
- 21 DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 424021-02 CLASS C AND D PATCHES
- 604001-03 FRAME AND LIDS TYPE 1
- 604091-02 FRAME AND GRATE TYPE 24
- 701101-04 OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600MM) FROM PAVEMENT EDGE
- 701426-06 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS > 45 MPH
- 701602-07 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
- 701606-09 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-03 TRAFFIC CONTROL DEVICES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 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 THE VILLAGE OF LIBERTYVILLE.

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

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80KM/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 OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

10 FEET (3 METER) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

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

ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.

TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.

THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATING PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FULFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF APPROVED MIX DESIGN, PLAN DIMENSIONS, AND DENSITY LIMITATIONS. MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURE.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

PATCHING LOCATIONS SHALL BE DETERMINED BY THE RESIDENT ENGINEER.

| | | | | | | | | | | | |
|---------------------------------------|-----------------------------|------------|-----------|---|--|--|---------|--------|--------------|-----------|--|
| FILE NAME : | USER NAME : larrivm | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ILL ROUTE 137 (O'PLAINE ROAD TO ILL 21) INDEX OF SHEETS STATE STANDARDS AND GENERAL NOTES | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| c:\pwwork\pwwork\larrivm\0379242\0163 | 10-shs-plan.dgn | DRAWN - | REVISED - | | | 352 | 56RS-3 | LAKE | 21 | 2 | |
| | PLOT SCALE = 100.0000' / 1" | CHECKED - | REVISED - | | | CONTRACT NO. 60L06 | | | | | |
| | PLOT DATE = 6/11/2014 | DATE - | REVISED - | | | SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | | |

URBAN

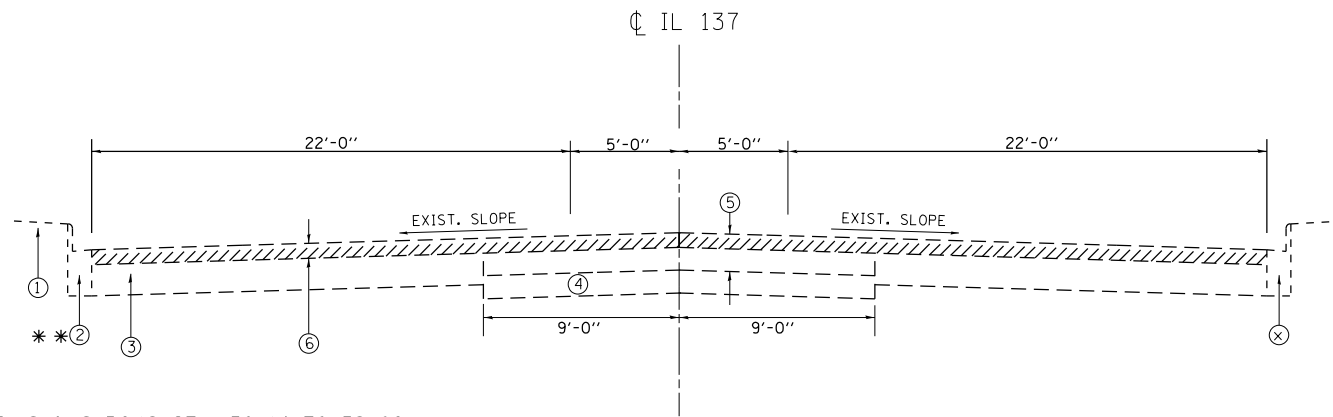
URBAN

| SUMMARY OF QUANTITIES | | | CONSTRUCTION TYPE CODE | | | | | |
|-----------------------|--|-------|------------------------|-----------------|--|--|--|--|
| CODE NO | ITEM | UNIT | TOTAL QUANTITIES | 0005 100% STATE | | | | |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SO YD | 443 | 443 | | | | |
| 25200110 | SODDING, SALT TOLERANT | SO YD | 443 | 443 | | | | |
| 25200200 | SUPPLEMENTAL WATERING | UNIT | 4.3 | 4.3 | | | | |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 105 | 105 | | | | |
| 40600827 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON | 2900 | 2900 | | | | |
| 40600895 | CONSTRUCTING TEST STRIP | EACH | 1 | 1 | | | | |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SO YD | 176 | 176 | | | | |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 | TON | 6891 | 6891 | | | | |
| 42001300 | PROTECTIVE COAT | SO YD | 574 | 574 | | | | |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SO YD | 70314 | 70314 | | | | |
| 44201789 | CLASS D PATCHES, TYPE II, 12 INCH | SO YD | 2806 | 2806 | | | | |
| 44201794 | CLASS D PATCHES, TYPE III, 12 INCH | SO YD | 149 | 149 | | | | |
| 44201796 | CLASS D PATCHES, TYPE IV, 12 INCH | SO YD | 125 | 125 | | | | |

| SUMMARY OF QUANTITIES | | | CONSTRUCTION TYPE CODE | | | | | |
|-----------------------|---|--------|------------------------|-----------------|--|--|--|--|
| CODE NO | ITEM | UNIT | TOTAL QUANTITIES | 0005 100% STATE | | | | |
| 48101500 | AGGREGATE SHOULDERS, TYPE B 6" | SO YD | 104 | 104 | | | | |
| 48203021 | HOT-MIX ASPHALT SHOULDERS, 6" | SO YD | 172 | 172 | | | | |
| 60250200 | CATCH BASINS TO BE ADJUSTED | EACH | 60 | 60 | | | | |
| 60252800 | CATCH BASINS TO BE RECONSTRUCTED | EACH | 13 | 13 | | | | |
| 60255500 | MANHOLES TO BE ADJUSTED | EACH | 24 | 24 | | | | |
| 60257900 | MANHOLES TO BE RECONSTRUCTED | EACH | 4 | 4 | | | | |
| 60260100 | INLETS TO BE ADJUSTED | EACH | 30 | 30 | | | | |
| 60262700 | INLETS TO BE RECONSTRUCTED | EACH | 6 | 6 | | | | |
| 60404950 | FRAMES AND GRATES, TYPE 24 | EACH | 82 | 82 | | | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 6 | 6 | | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | | | |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | 1 | | | | |
| 70102632 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701602 | L SUM | 1 | 1 | | | | |

* SPECIALTY ITEMS
 Δ NON-PARTICIPATING ITEMS

13



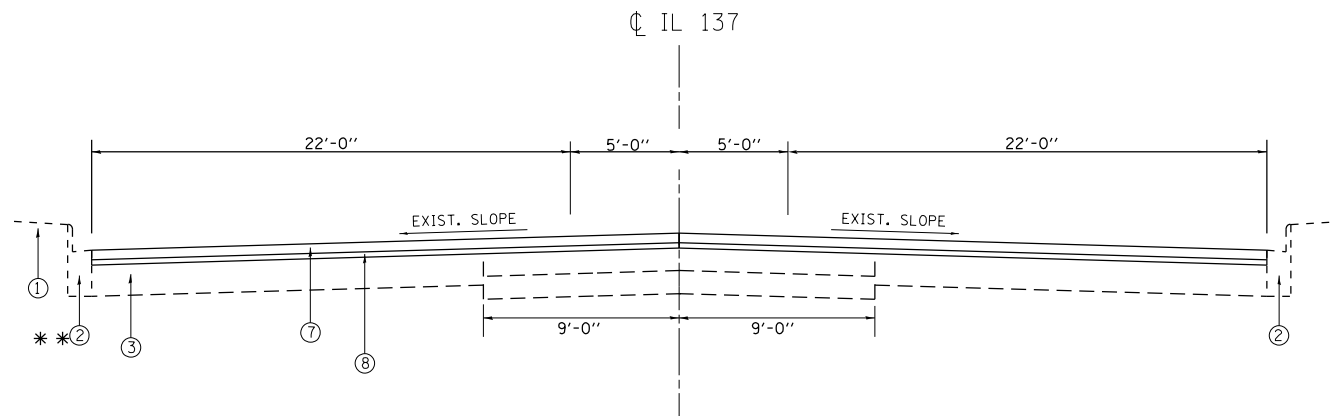
**COMB. C & G B6.12 STA. 50+14 TO 52+86
 COMB. C & G B6.24 STA. 54+37 TO STA. 163+82

EXISTING TYPICAL SECTION
 ILL (137) / BUCKLEY ROAD
 STA. 50+14 TO STA. 52+86
 STA. 54+37 TO STA. 135+00
 STA. 151+67 TO STA. 163+82
 CROWN CROSS SECTION

LEGEND

- ① GRASS PARKWAY
- ② EXIST COMB. CONC. CURB AND GUTTER**
- ③ EXIST HOT MIX ASPHALT 14 1/2" (±)
- ④ EXIST PCC 5 1/2" (±)
- ⑤ EXIST HOT-MIX ASPHALT 10" (±)
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2"
- ⑦ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE, MIX "F", N90, 1 3/4"
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

** NOTE: AT LOCATIONS OF CURB AND GUTTER REMOVAL AND REPLACEMENT AS DETERMINED BY THE ENGINEER, THE 18 INCHES BEHIND THE BACK OF CURB SHALL BE REPLACED IN KIND. ITEMS TO BE REPLACED INCLUDE TOPSOIL & SODDING, AGGREGATE SHOULDERS TYPE B AND HMA SHOULDERS. THE REMOVAL OF ALL ITEMS BEHIND THE BACK OF CURB SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.



PROPOSED TYPICAL SECTION
 ILL (137) / BUCKLEY ROAD
 STA. 50+14 TO STA. 52+86
 STA. 54+37 TO STA. 135+00
 STA. 151+67 TO STA. 163+82
 CROWN CROSS SECTION

* NOTE: CONTRACTOR SHALL MILL FIRST
 ACCORDING TO STANDARD DETAIL BD-22

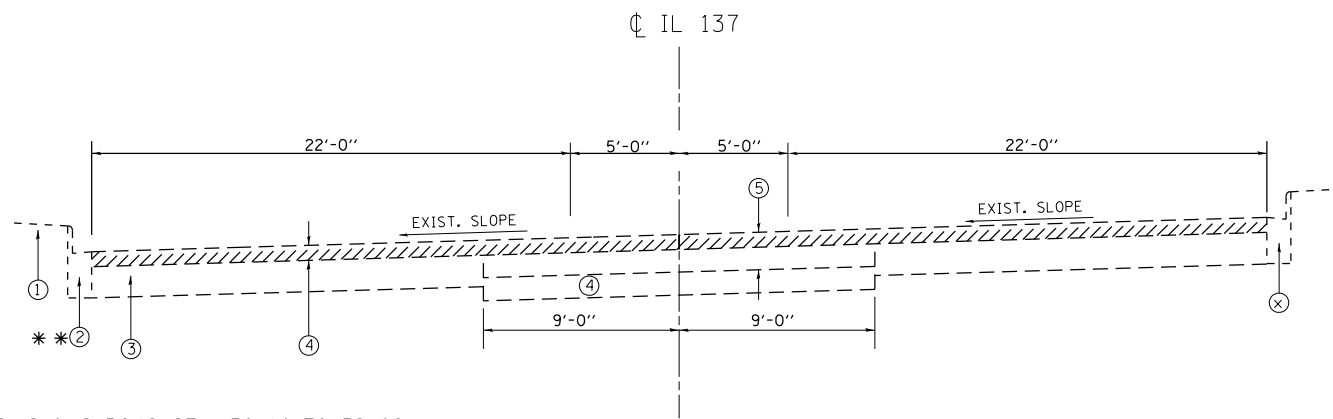
| HOT-MIX ASPHALT MIXTURE REQUIREMENTS | | |
|---|-------------------|----------------------------------|
| MIXTURE TYPE | AIR VOIDS @ N des | QUALITY MANAGEMENT PROGRAM (QMP) |
| RESURFACING | | |
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (IL-9.5mm), 1 3/4" | 4% @ 90 GYR | OCP |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" | 3.5% @ 50 GYR | OCP |
| PATCHING | | |
| CLASS D PATCHES (HMA BINDER IL-19 mm), 12" | 4% @ 70 GYR | QC/QA |
| HOT-MIX ASPHALT SHOULDERS | | |
| HMA BINDER IL-19 mm, 6" | 4% @ 70 GYR | QC/QA |
| QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (OCP) | | |

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD-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 USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

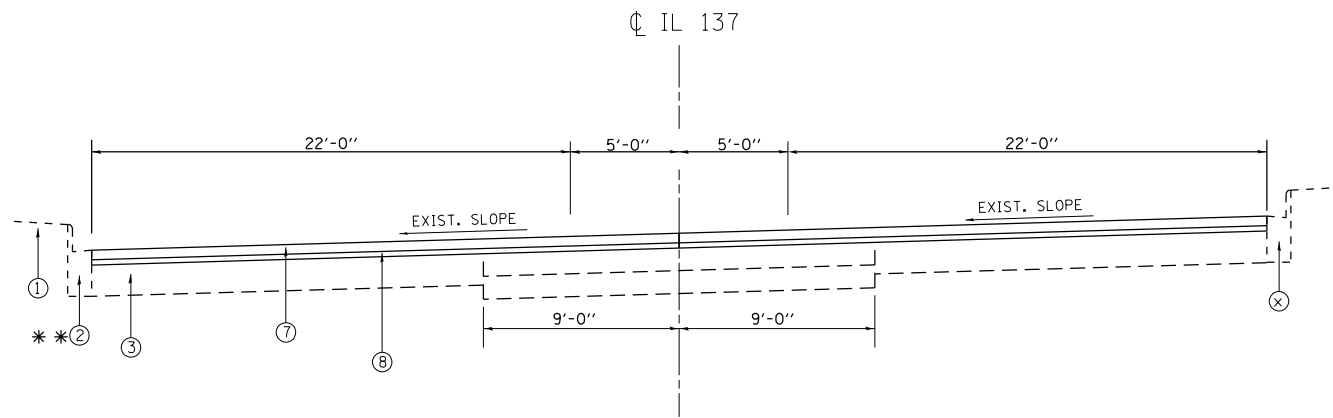


**COMB. C & G B6.12 STA. 50+14 TO 52+86
 COMB. C & G B6.24 STA. 54+37 TO STA. 163+82

EXISTING TYPICAL SECTION
 ILL (137) / BUCKLEY ROAD
 STA. 135+00 TO STA. 151+67
 SUPERELEVATED CROSS SECTION

LEGEND

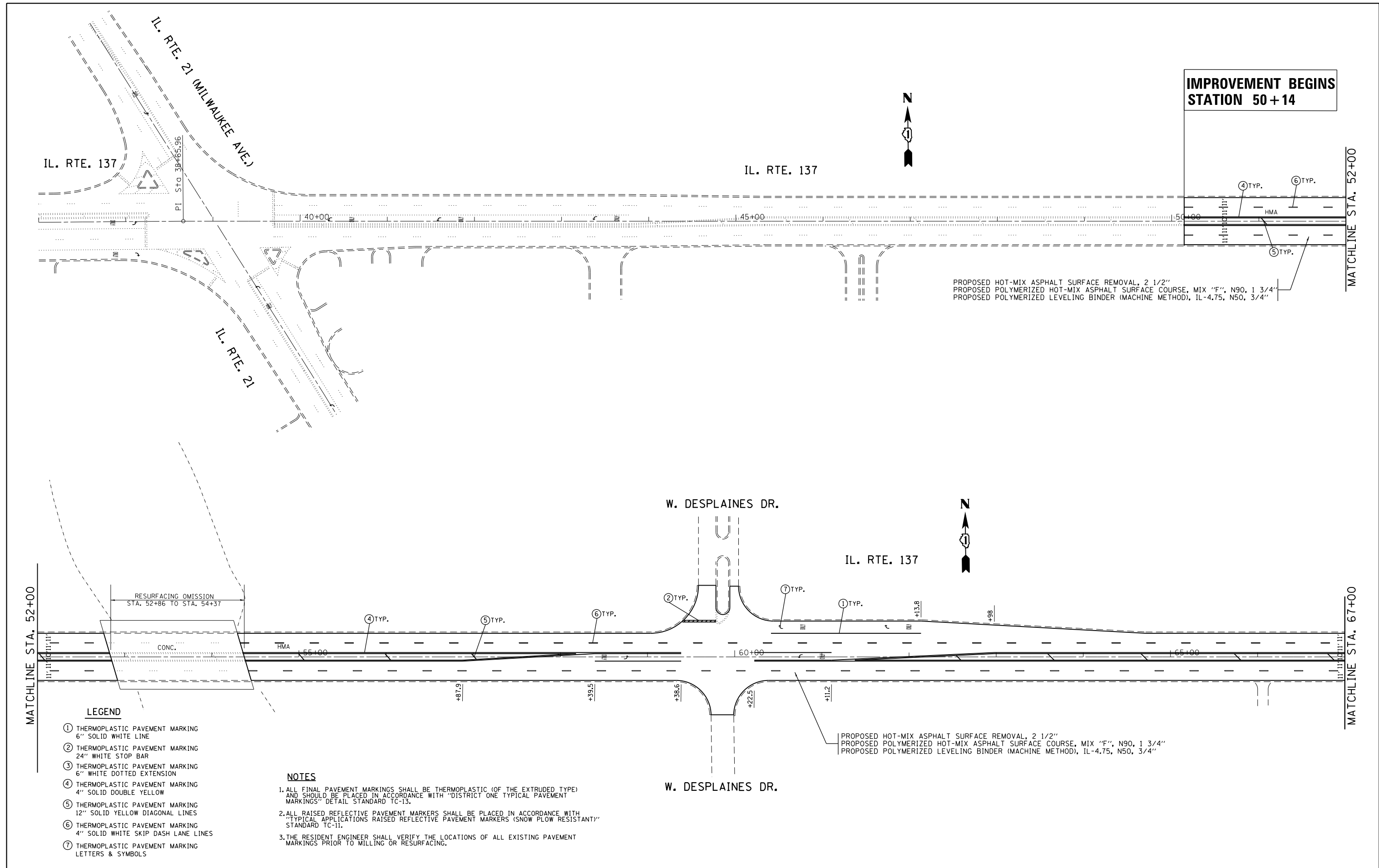
- ① GRASS PARKWAY
- ② EXIST COMB. CONC. CURB AND GUTTER**
- ③ EXIST HOT MIX ASPHALT 14 1/2" (±)
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- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2"
- ⑦ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE, MIX "F", N90, 1 3/4"
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"



PROPOSED TYPICAL SECTION
 ILL (137) / BUCKLEY ROAD
 STA. 135+00 TO STA. 151+67
 SUPERELEVATED CROSS SECTION

** NOTE: AT LOCATIONS OF CURB AND GUTTER REMOVAL AND REPLACEMENT AS DETERMINED BY THE ENGINEER, THE 18 INCHES BEHIND THE BACK OF CURB SHALL BE REPLACED IN KIND. ITEMS TO BE REPLACED INCLUDE TOPSOIL & SODDING, AGGREGATE SHOULDERS TYPE B AND HMA SHOULDERS. THE REMOVAL OF ALL ITEMS BEHIND THE BACK OF CURB SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.

| | | | | | | | | | | | | |
|---|------------------------------|------------|-----------|---|---|--|--|--------------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = Tariqf | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ILL ROUTE 137 (O'PLAINE ROAD TO ILL 21) TYPICAL SECTIONS | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| c:\pwwork\pwwork\Tariqf\0379242\016310-sh-t-plandgn | DRAWN - | REVISED - | 352 | | | | | 56RS-3 | LAKE | 21 | 6 | |
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| | PLOT DATE = 6/11/2014 | DATE - | REVISED - | | | | | SCALE: | SHEET | OF | SHEETS | STA. |

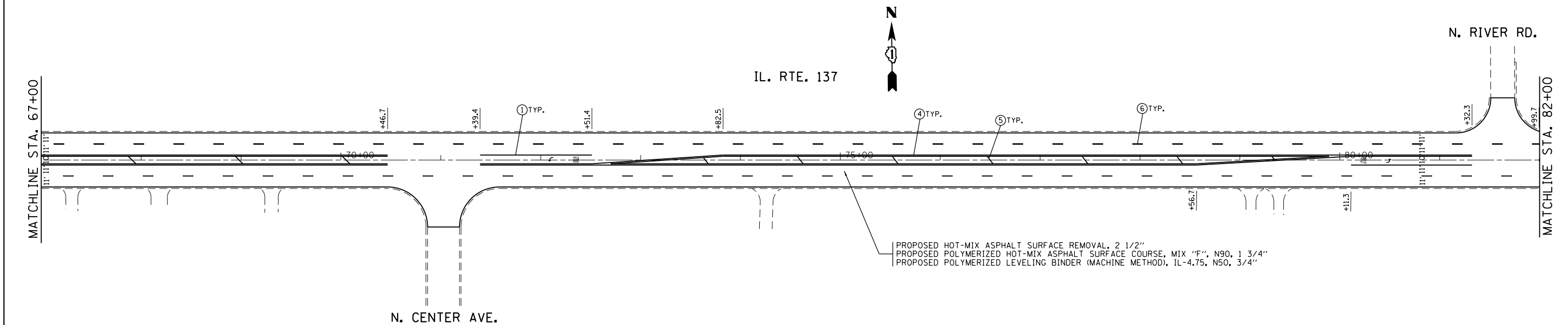


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| | PLOT DATE = 6/11/2014 | DATE - | REVISED - |

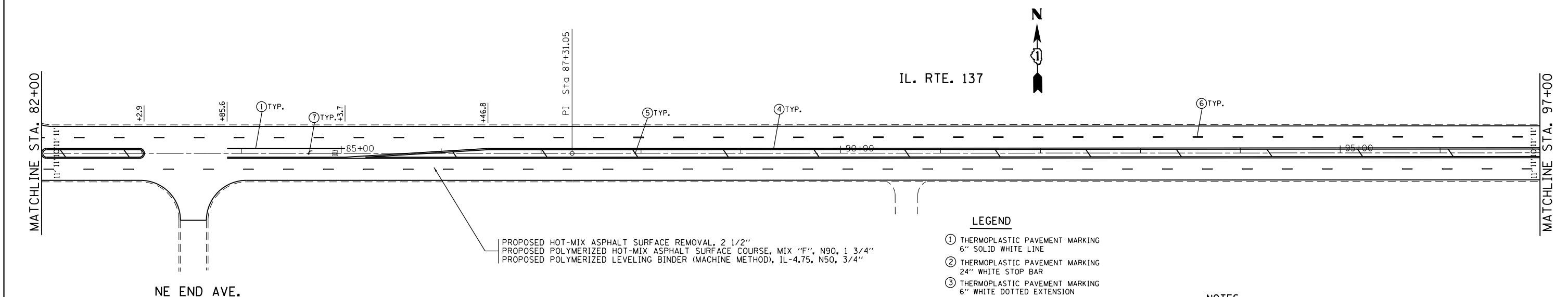
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-------|-----------|--------------|
| ROADWAY PLAN | | | |
| ILL. RTE. 137 O'PLAINE ROAD TO ILL 21 | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 56RS-3 | LAKE | 21 | 7 |
| CONTRACT NO. 60L06 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
6" SOLID WHITE LINE
- ② THERMOPLASTIC PAVEMENT MARKING
24" WHITE STOP BAR
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE DOTTED EXTENSION
- ④ THERMOPLASTIC PAVEMENT MARKING
4" SOLID DOUBLE YELLOW
- ⑤ THERMOPLASTIC PAVEMENT MARKING
12" SOLID YELLOW DIAGONAL LINES
- ⑥ THERMOPLASTIC PAVEMENT MARKING
4" SOLID WHITE SKIP DASH LANE LINES
- ⑦ THERMOPLASTIC PAVEMENT MARKING
LETTERS & SYMBOLS

NOTES

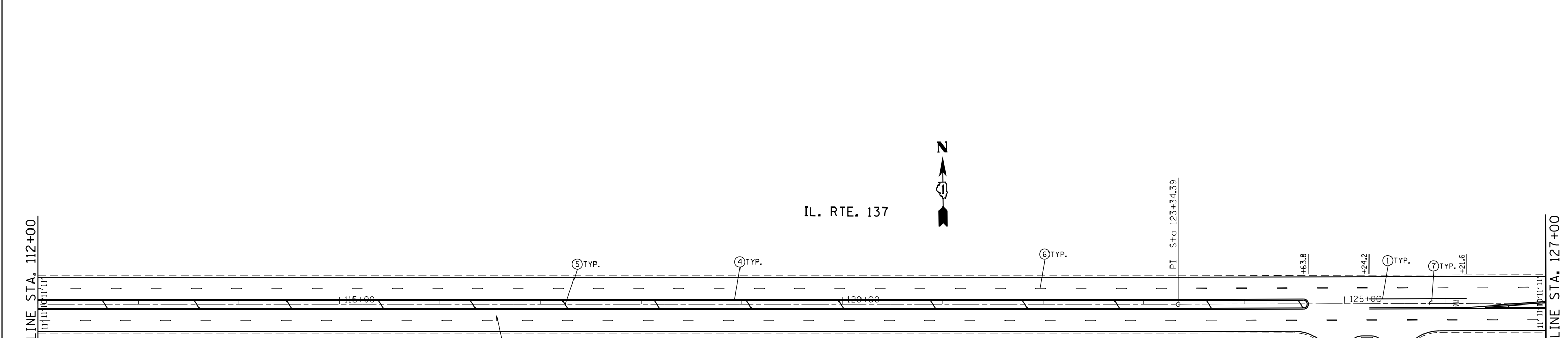
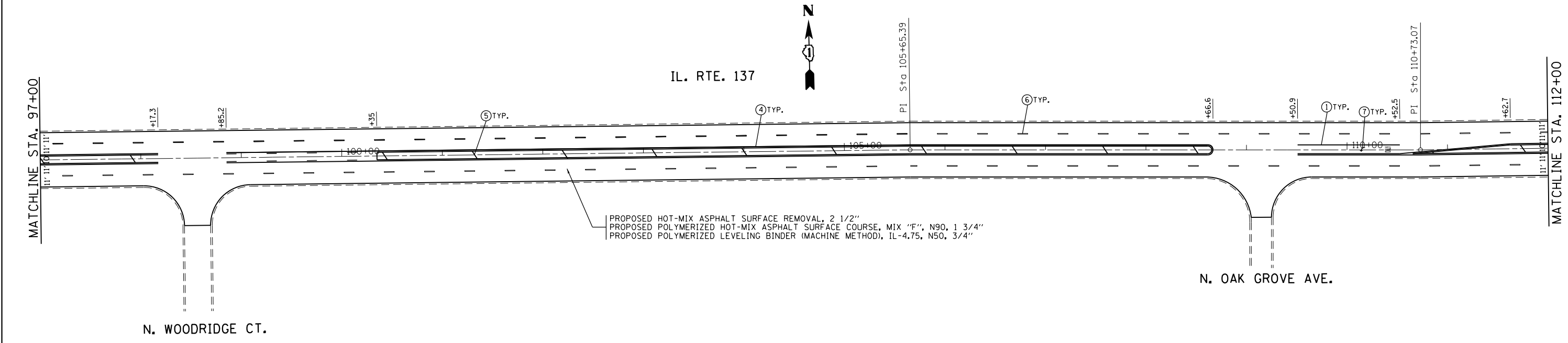
1. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL STANDARD TC-13.
2. ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)" STANDARD TC-11.
3. THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

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| Default | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 6/11/2014 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|---|-------|-----------|--------------|
| ROADWAY PLAN | | | |
| ILL RTE. 137 O'PLAINE ROAD TO ILL 21 | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 56RS-3 | LAKE | 21 | 8 |
| CONTRACT NO. 60L06 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
6" SOLID WHITE LINE
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24" WHITE STOP BAR
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE DOTTED EXTENSION
- ④ THERMOPLASTIC PAVEMENT MARKING
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LETTERS & SYMBOLS

NOTES

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

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| | PLOT DATE = 6/11/2014 | CHECKED - | REVISED - |
| | | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | | | |
|---|-------|-----------|--------------|
| ROADWAY PLAN | | | |
| ILL RTE. 137 O'PLAINE ROAD TO ILL 21 | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 56RS-3 | LAKE | 21 | 9 |
| CONTRACT NO. 60L06 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MATCHLINE STA. 127+00

MATCHLINE STA. 142+00

IL. RTE. 137



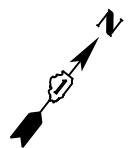
PC STA 136+89.54

PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

MATCHLINE STA. 142+00

MATCHLINE STA. 157+00

IL. RTE. 137



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

EXIST. CURVE E-IL137-1
PI STA. = 143+50.83
 $\Delta = 38^\circ 22' 49''$ (LT)
D = 3° 00' 56"
R = 1,900.00'
T = 661.28'
L = 1,272.74'
E = 111.79'
 $\theta =$
T.R. =
S.E. RUN =
P.C. STA. = 136+89.54
P.T. STA. = 149+62.28

ST. MARYS RD.

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
6" SOLID WHITE LINE
- ② THERMOPLASTIC PAVEMENT MARKING
24" WHITE STOP BAR
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE DOTTED EXTENSION
- ④ THERMOPLASTIC PAVEMENT MARKING
4" SOLID DOUBLE YELLOW
- ⑤ THERMOPLASTIC PAVEMENT MARKING
12" SOLID YELLOW DIAGONAL LINES
- ⑥ THERMOPLASTIC PAVEMENT MARKING
4" SOLID WHITE SKIP DASH LANE LINES
- ⑦ THERMOPLASTIC PAVEMENT MARKING
LETTERS & SYMBOLS

NOTES

1. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL STANDARD TC-13.
2. ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)" STANDARD TC-11.
3. THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

| | | | |
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| Default | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 6/11/2014 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

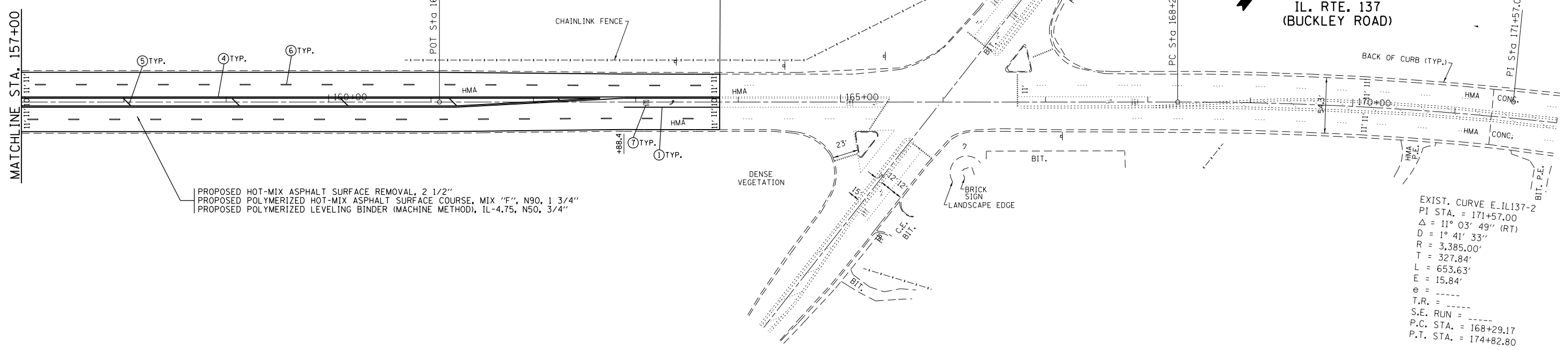
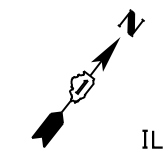
**ROADWAY PLAN
ILL RTE. 137 O'PLAINE ROAD TO ILL 21**

SCALE: SHEET OF SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|--------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 56RS-3 | LAKE | 21 | 10 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60L06 | |

**IMPROVEMENT ENDS
STATION 163+82**

IL. RTE. 137
(BUCKLEY ROAD)



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

EXIST. CURVE E. IL137-2
 PI STA. = 171+57.00
 $\Delta = 11^\circ 03' 49''$ (RT)
 $D = 1^\circ 41' 33''$
 $R = 3,385.00'$
 $T = 327.84'$
 $L = 653.63'$
 $E = 15.84'$
 $e =$
 $T.R. =$
 $S.E. RUN =$
 $P.C. STA. = 168+29.17$
 $P.T. STA. = 174+82.80$

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING
6" SOLID WHITE LINE
- ② THERMOPLASTIC PAVEMENT MARKING
24" WHITE STOP BAR
- ③ THERMOPLASTIC PAVEMENT MARKING
6" WHITE DOTTED EXTENSION
- ④ THERMOPLASTIC PAVEMENT MARKING
4" SOLID DOUBLE YELLOW
- ⑤ THERMOPLASTIC PAVEMENT MARKING
12" SOLID YELLOW DIAGONAL LINES
- ⑥ THERMOPLASTIC PAVEMENT MARKING
4" SOLID WHITE SKIP DASH LANE LINES
- ⑦ THERMOPLASTIC PAVEMENT MARKING
LETTERS & SYMBOLS

NOTES

1. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL STANDARD TC-13.
2. ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)" STANDARD TC-11.
3. THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

| | | | |
|-------------|------------------------------|------------|-----------|
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| | PLOT DATE = 6/11/2014 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

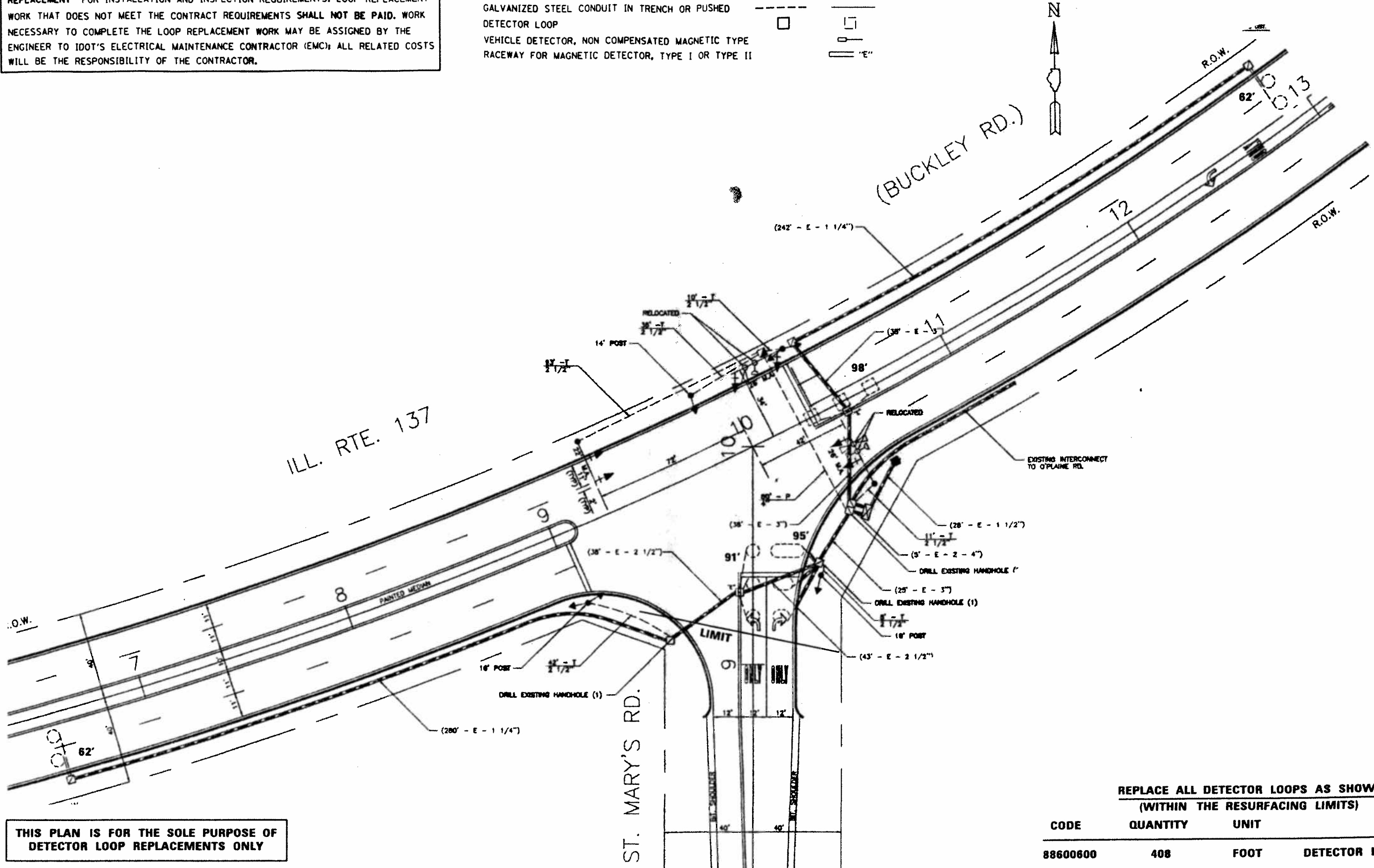
| | | | |
|---|-------|-----------|--------------|
| ROADWAY PLAN | | | |
| ILL RTE. 137 O'PLAINE ROAD TO ILL 21 | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 56RS-3 | LAKE | 21 | 11 |
| CONTRACT NO. 60L06 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

- | | | |
|--|----------|----------|
| | PROPOSED | EXISTING |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD | | |
| GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED | | |
| DETECTOR LOOP | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

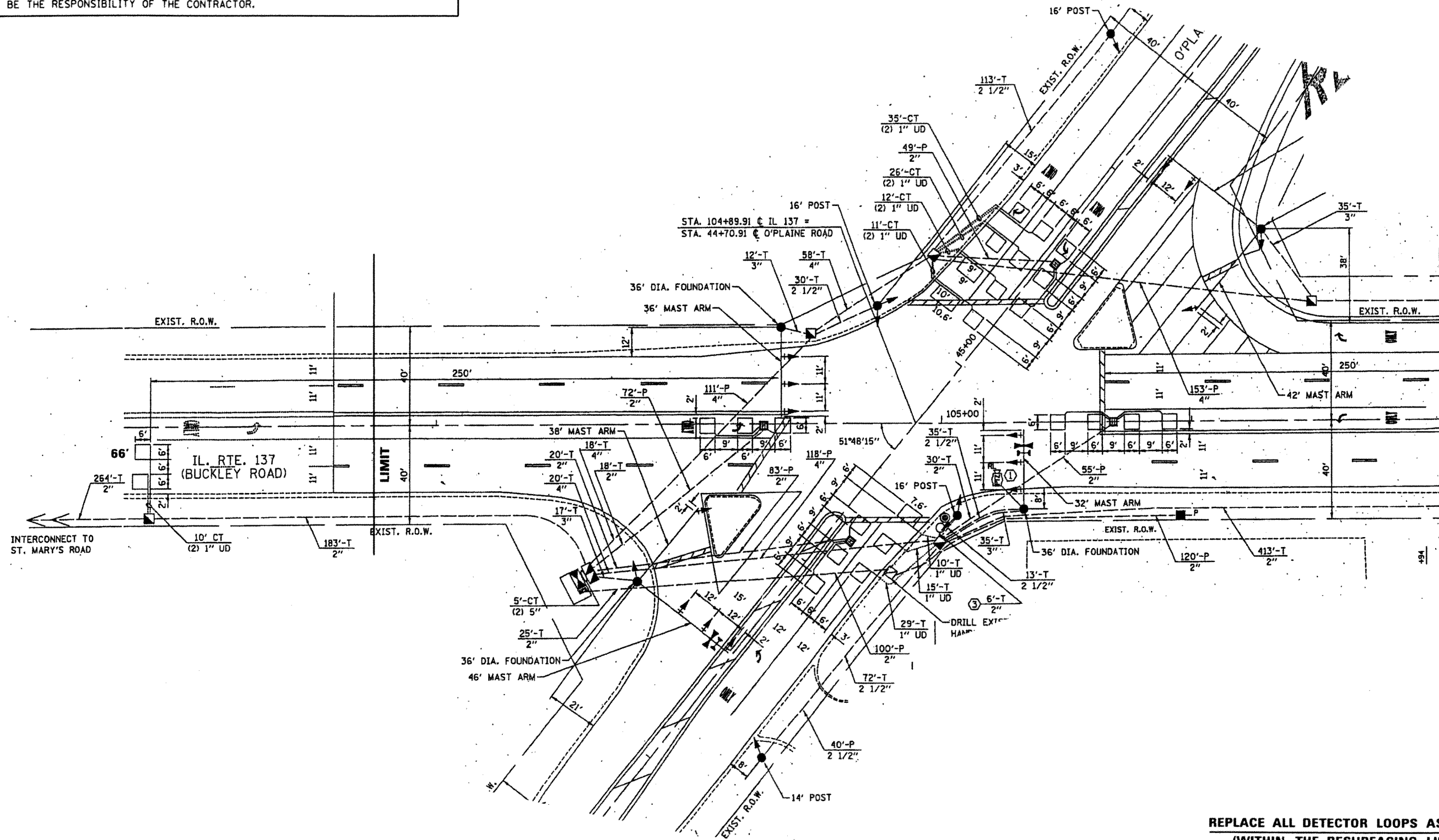
REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

| CODE | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 88600600 | 408 | FOOT | DETECTOR LOOP REPLACEMENT |

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

| | | |
|--|----------|----------|
| | PROPOSED | EXISTING |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD | | |
| GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED | | |
| DETECTOR LOOP | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |



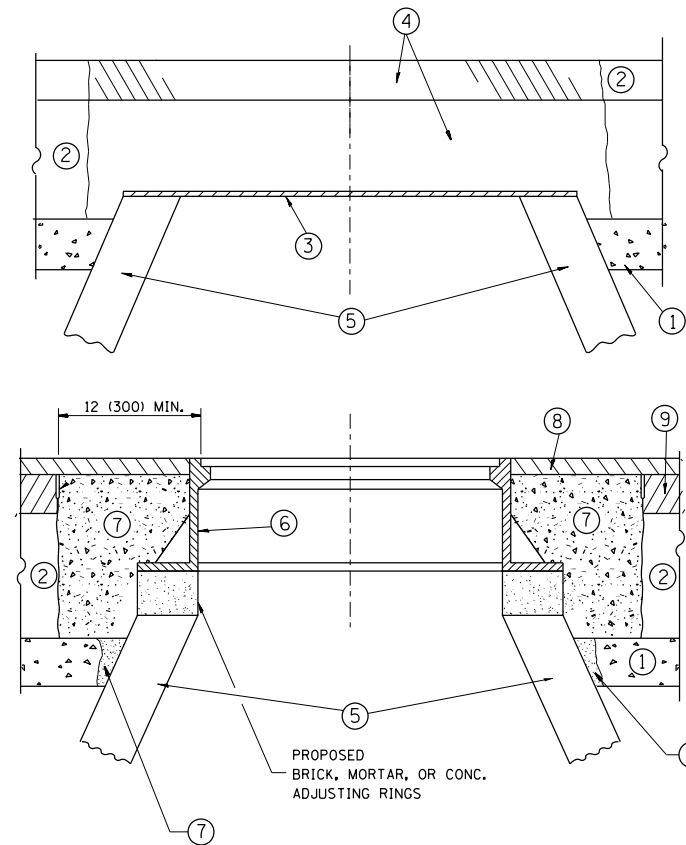
MATCH LINE SEE BELOW

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

| CODE | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 88600600 | 66 | FOOT | DETECTOR LOOP REPLACEMENT |

| | | | | | | | | | | | |
|--|---|------------------|-----------|---|--|-----------------|---------------------|--------------|---------------------|---------------------------|--------------------|
| FILE NAME = | USER NAME = nguyenam | DESIGNED - SN | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL.137 AND O'PLAINE ROAD | F.A.P. RTE. 352 | SECTION 56RS-3 | COUNTY LAKE | TOTAL SHEETS 21 | SHEET NO. 13 | |
| Design\SN\B. of Traffic - Resurfacing Project-Detector Loops Replacement\CLL | PROJECT - IE 137 Buckley Rd @ O'Plaine Rd | DRAWN - Loop.dgn | REVISED - | | | SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA. | FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | CONTRACT NO. 60206 |
| PLOT SCALE = 100.0001' / in. | CHECKED - | REVISED - | REVISED - | | | | | | | | |
| PLOT DATE = 3/12/2014 | DATE - 03-12-2014 | REVISED - | REVISED - | | | | | | | | |



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

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

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT:

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

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

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

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

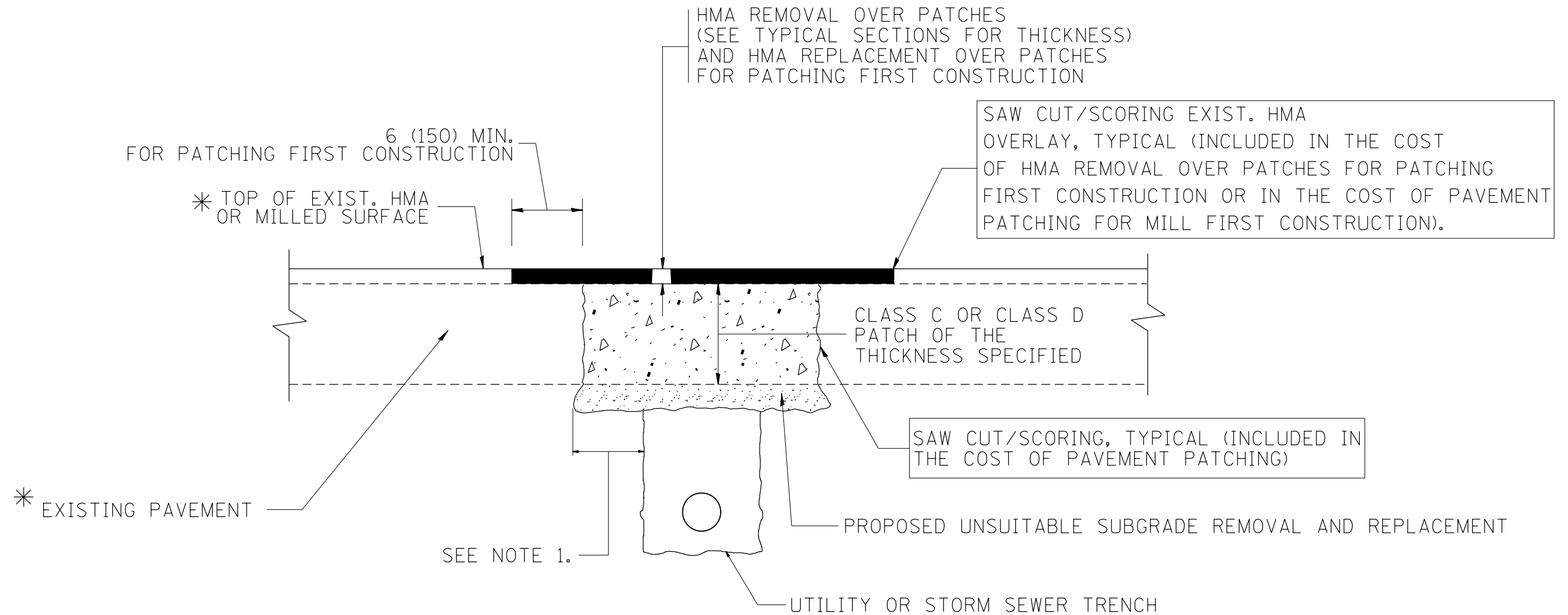
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| | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - R. BORO 03-09-11 |
| | PLOT DATE = 6/11/2014 | DATE - 10-25-94 | REVISED - R. BORO 12-06-11 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

| | | | | |
|---|---------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 352 | 56RS-3 | LAKE | 21 | 14 |
| BD600-03 (BD-8) | | CONTRACT NO. 60L06 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

| | | | | | | | | | | | | |
|--|-------------------------------|----------------------------|-----------------------------|---|--|-------------------------|--------------|---|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = TariqM | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| et:\pw\work\pwidot\tariqm\d0379242\Dist\td.dgn | DRAWN - | REVISED - R. BORO 01-01-07 | REVISED - R. BORO 09-04-07 | | | | | 352 | 56RS-3 | LAKE | 21 | 15 |
| | PLOT SCALE = 100.0000' / 1in. | CHECKED - | REVISED - K. ENG 10-27-08 | | BD400-04 (BD-22) | | | CONTRACT NO. 60L06 | | | | |
| | PLOT DATE = 6/11/2014 | DATE - 10-25-94 | | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

VARIABLE - TO MEET EXISTING 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 PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (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.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ 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.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

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

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
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".

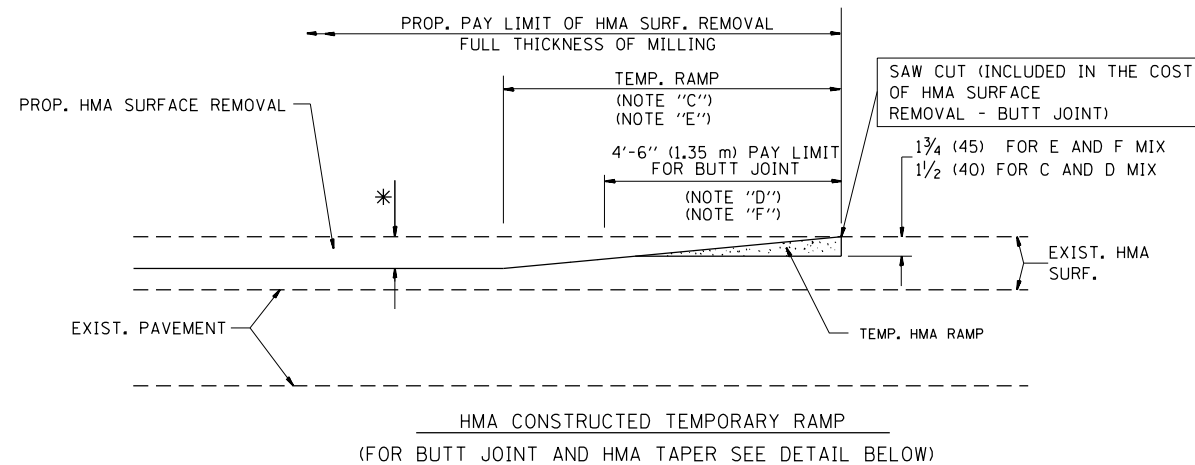
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

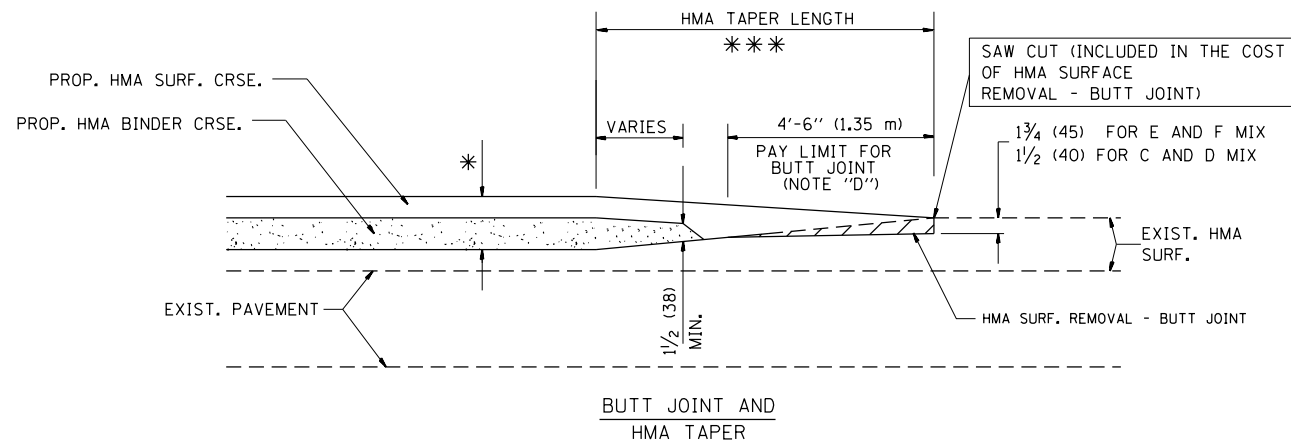
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| et:\pw\work\p\idot\tariqfm\d0379242\Dist\td.dgn | DRAWN - | REVISED - A. ABBAS 03-21-97 | REVISED - R. BORO 12-15-09 | | | | | 352 | 56RS-3 | LAKE | 21 | 16 |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - M. GOMEZ 01-22-01 | | | | | | BD600-06 (BD-24) | | CONTRACT NO. 60L06 | | |
| PLOT DATE = 6/11/2014 | DATE - 03-11-94 | | | | | | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | |



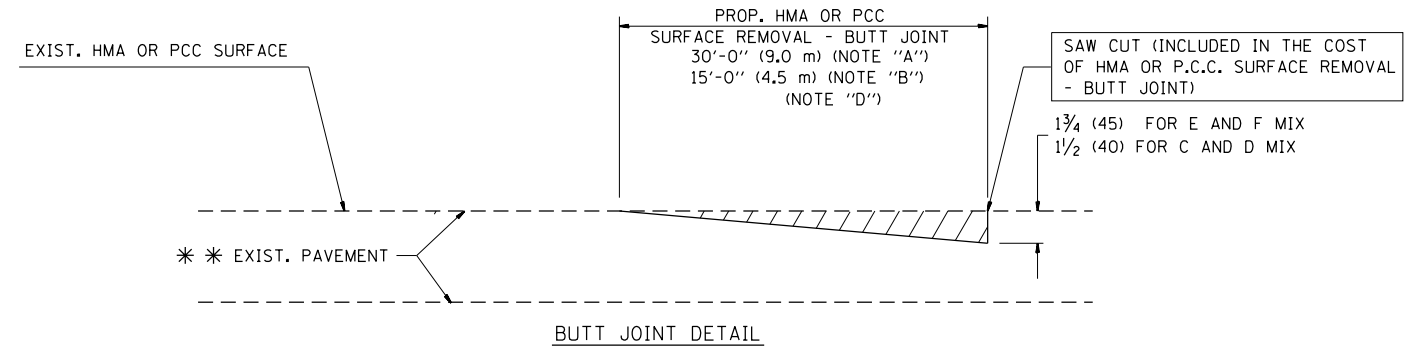
OPTION 1



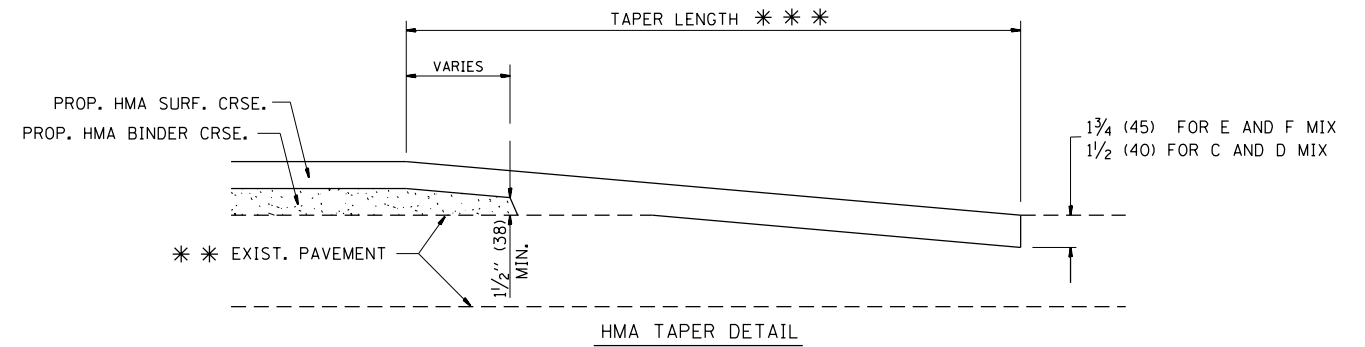
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

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

NOTES

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

BASIS OF PAYMENT:

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

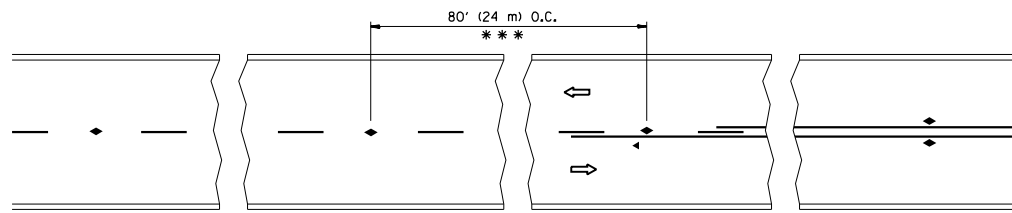
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| | | | |
|---|-----------------------------|-----------------------|-----------------------------|
| FILE NAME = | USER NAME = TariqM | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94 |
| ca:\pw\work\p\dot\tariqm\d0379242\Dist\td.dgn | | DRAWN - | REVISED - A. ABBAS 03-21-97 |
| | PLOT SCALE = 100.0000' / 1" | CHECKED - | REVISED - M. GOMEZ 04-06-01 |
| | PLOT DATE = 6/11/2014 | DATE - 06-13-90 | REVISED - R. BORO 01-01-07 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

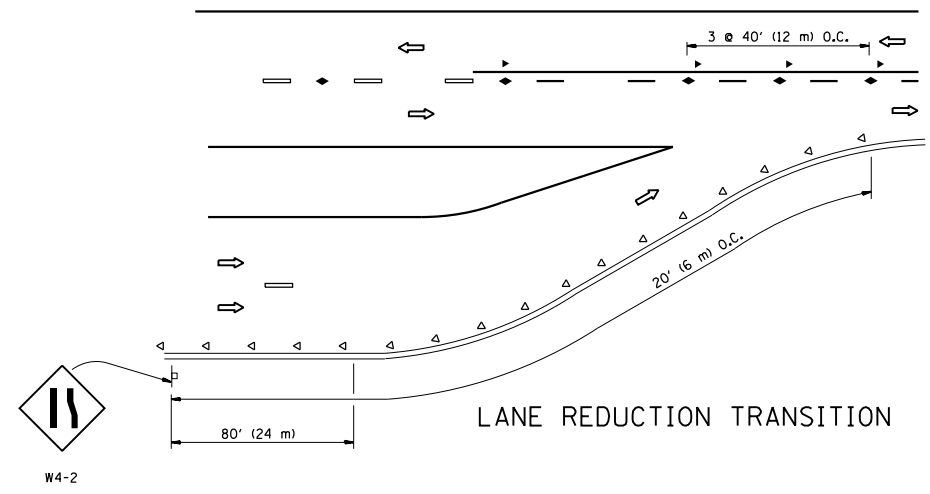
| | |
|---|-------------------------|
| BUTT JOINT AND HMA TAPER DETAILS | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS |
| STA. | TO STA. |

| | | | | |
|---|---------|---------------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 352 | 56RS-3 | LAKE | 21 | 17 |
| BD400-05 BD32 | | CONTRACT NO. 60L06 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

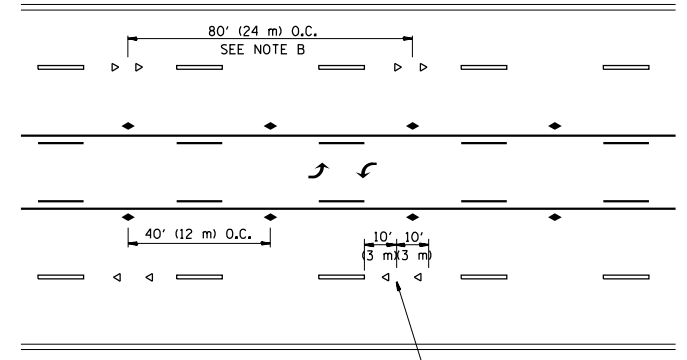


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

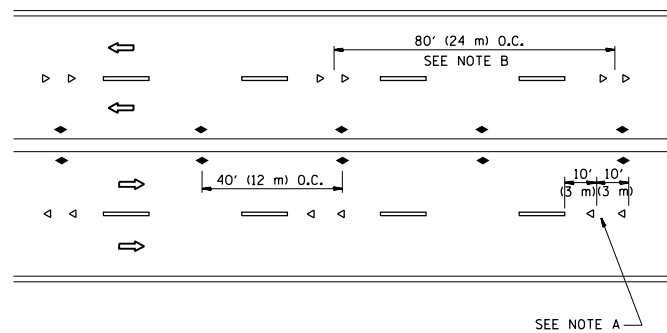
TWO-LANE/TWO-WAY



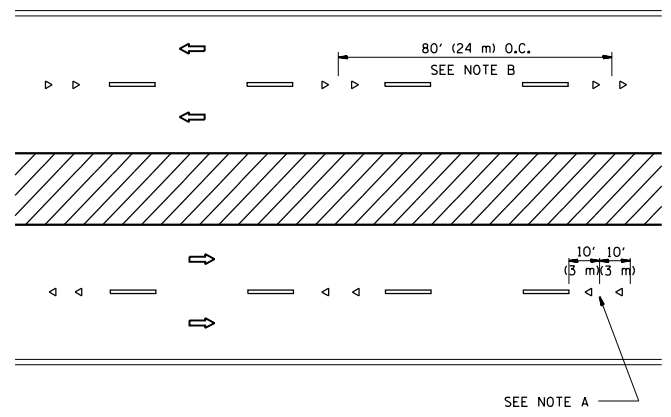
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

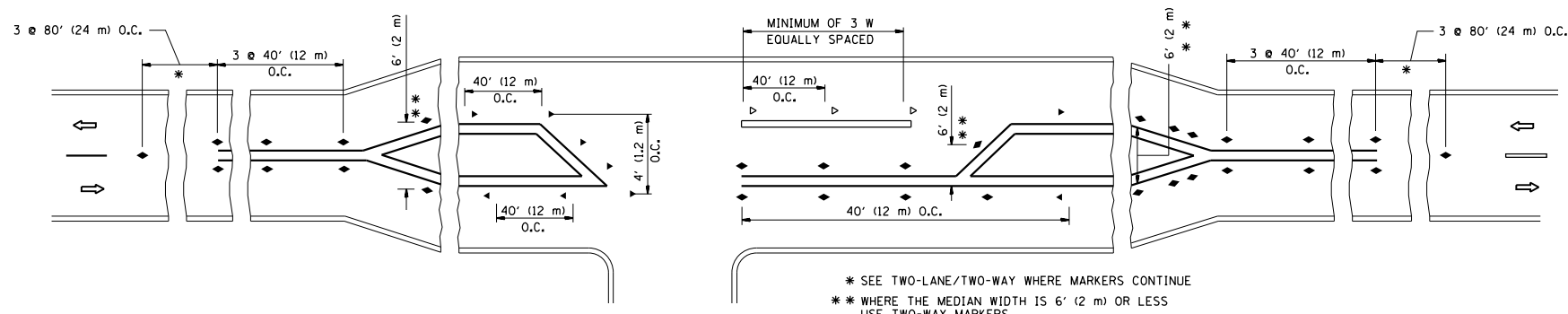
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

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 LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

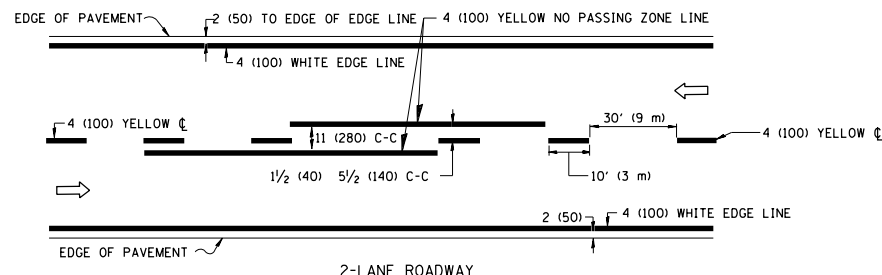


LEFT TURN

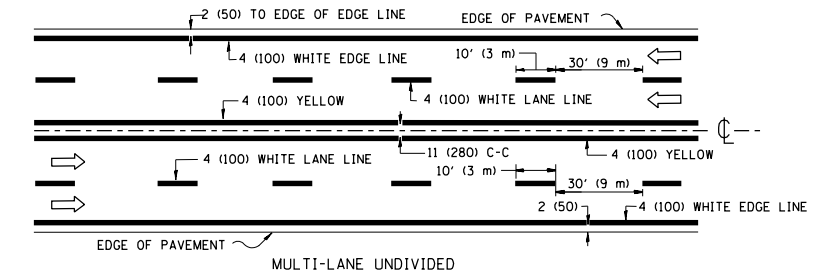
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

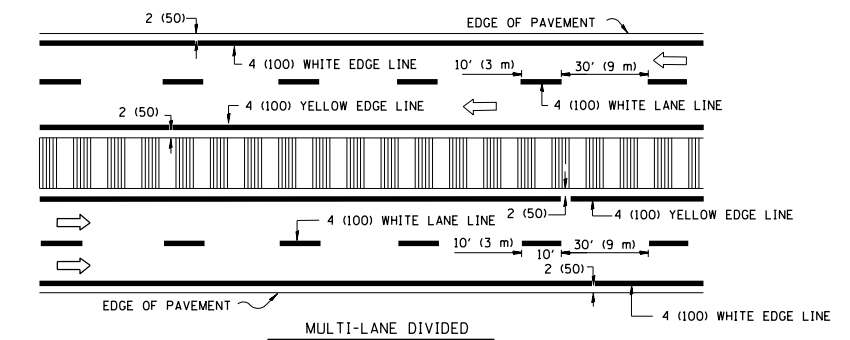
| | | | | | | | | | | | | |
|--|--------------------|---------------------------------|---------------------------------|---|--|------|--------------|---|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = Tariqf | DESIGNED - | REVISED - T. RAMMACHER 09-19-94 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| et:\pw\work\p\dot\tariqf\m\0379242\Dist\td.dgn | DRAWN - | REVISED - T. RAMMACHER 03-12-99 | 352 | | | | | 56RS-3 | LAKE | 21 | 18 | |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - T. RAMMACHER 01-06-00 | TC-11 | | | | CONTRACT NO. | 60L06 | | | | |
| PLOT DATE = 6/11/2014 | DATE - | REVISED - C. JUCIUS 09-09-09 | SCALE: NONE | | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



2-LANE ROADWAY



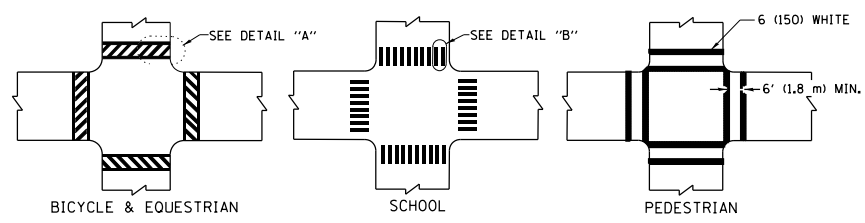
MULTI-LANE UNDIVIDED



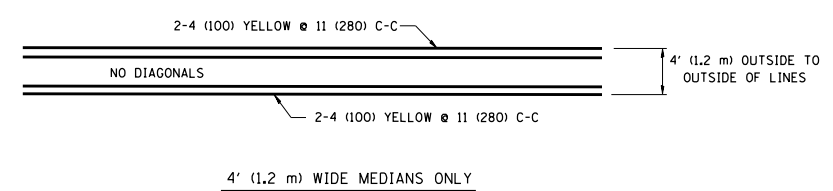
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

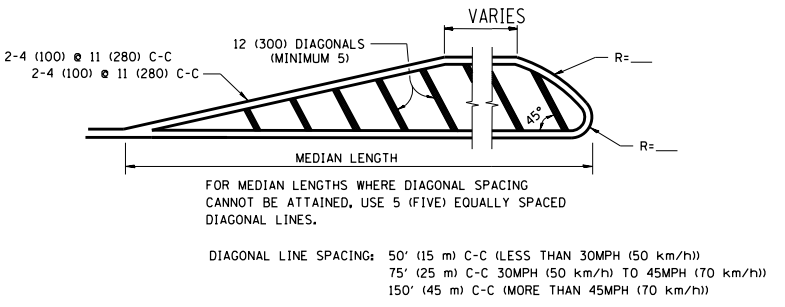
TYPICAL LANE AND EDGE LINE MARKING



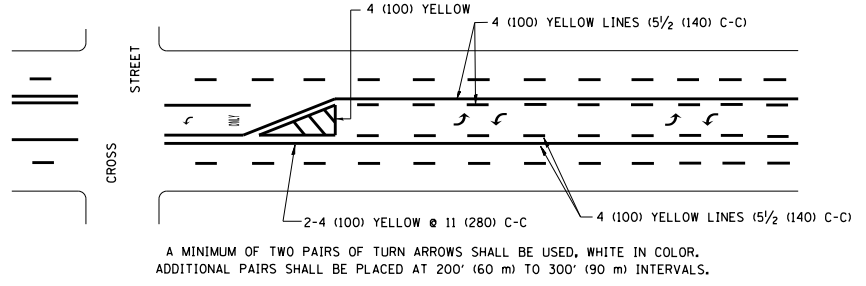
TYPICAL CROSSWALK MARKING



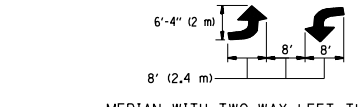
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE

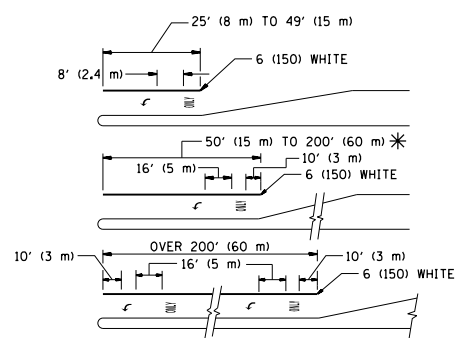


TYPICAL PAINTED MEDIAN MARKING



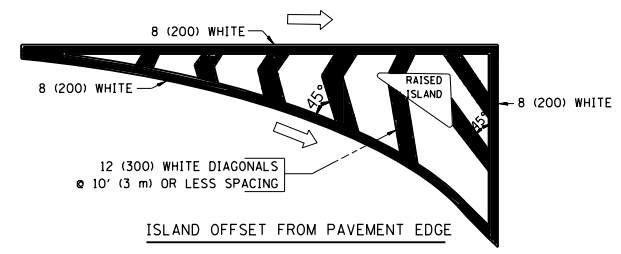
MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

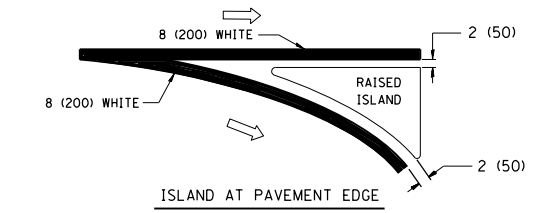


TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

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 UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION | 4 (100) | SOLID | YELLOW | 5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE |
| NO PASSING ZONE LINES: FOR BOTH DIRECTIONS | 2 @ 4 (100) | SOLID | YELLOW | 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 8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" 15' (4.5 m) MIN. LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m ²) EACH "X": 54.0 SQ. FT. (5.0 m ²) EACH |
| 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 (OVER 45MPH (70 km/h)) |

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

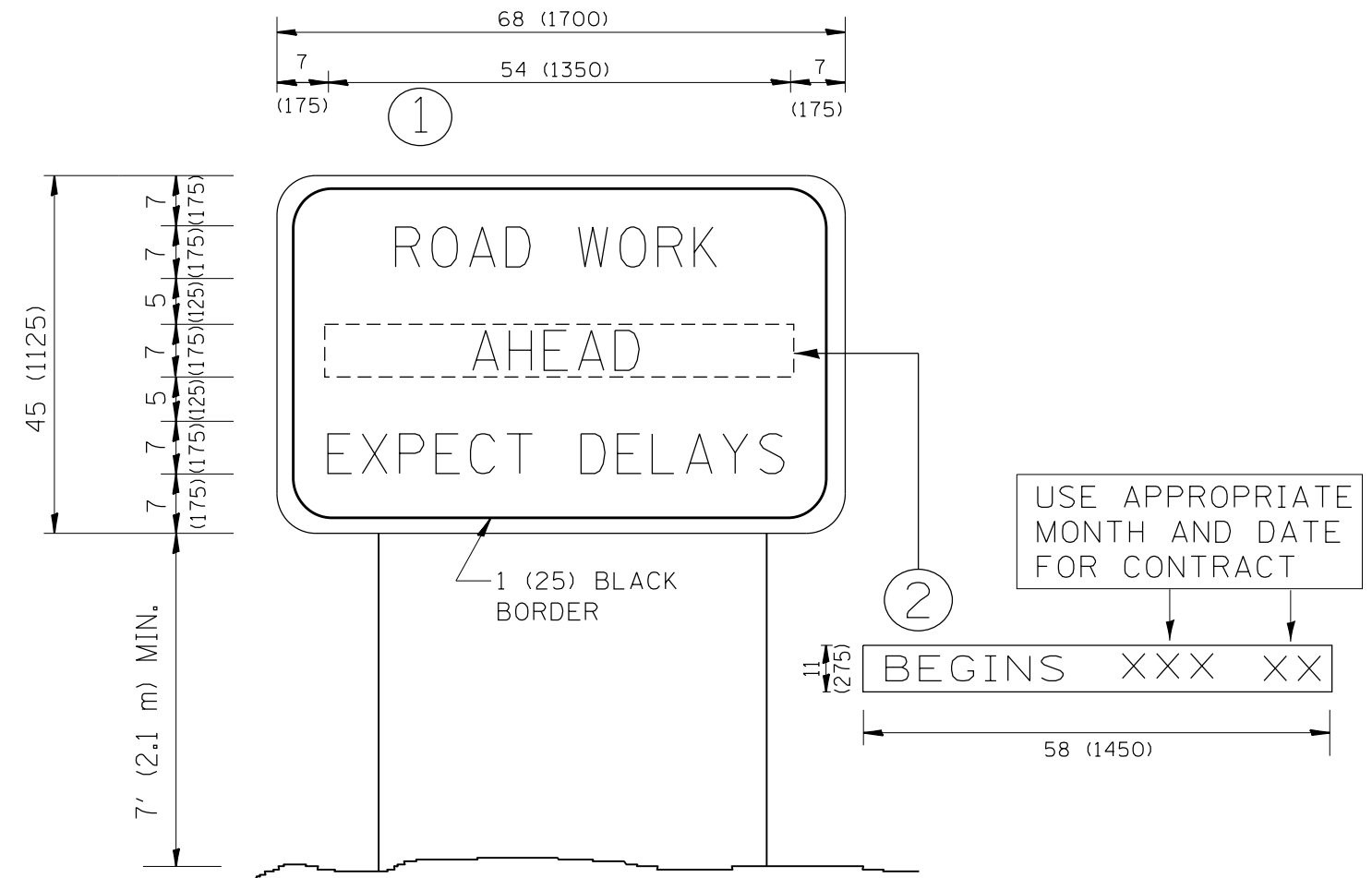
All dimensions are in inches (millimeters) unless otherwise shown.

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| FILE NAME = | USER NAME = Tariqfm | DESIGNED - EVERS | REVISED - T. RAMMACHER 10-27-94 |
| es:\pw\work\pwidot\tariqfm\d0379242\Dist\td.dgn | | DRAWN - | REVISED - C. JUCIUS 09-09-09 |
| | PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 6/11/2014 | DATE - 03-19-90 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|---------------------------|-------------------------|------|---------|
| DISTRICT ONE | | | |
| TYPICAL PAVEMENT MARKINGS | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|---------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 352 | 56RS-3 | LAKE | 21 | 19 |
| TC-13 | | CONTRACT NO. 60L06 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



NOTES:

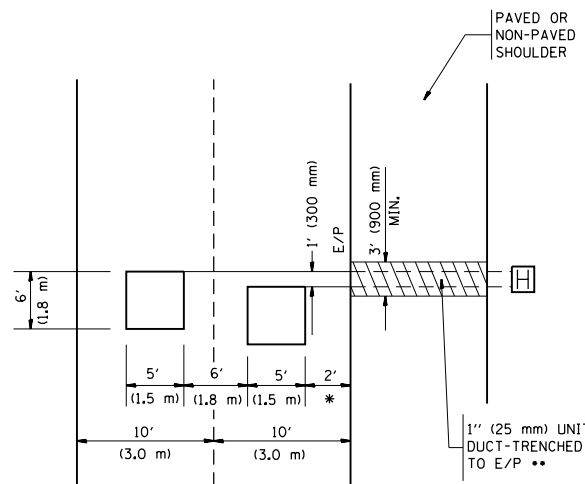
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.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

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

| | | | | | | | | | | |
|---|---------------------|---------------------------------|----------------------------|---|---|---------------------------|---------|---------|---|-----------|
| FILE NAME = | USER NAME = Tariqfm | DESIGNED - | REVISED - R. MIRS 09-15-97 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ARTERIAL ROAD INFORMATION SIGN | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| et:\pw\work\pwidot\tariqfm\d0379242\Dist\td.dgn | DRAWN - | REVISED - R. MIRS 12-11-97 | 352 | | | 56RS-3 | LAKE | 21 | 20 | |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - T. RAMMACHER 02-02-99 | TC-22 | | | CONTRACT NO. 60L06 | | | | |
| PLOT DATE = 6/11/2014 | 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. AID PROJECT | |

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



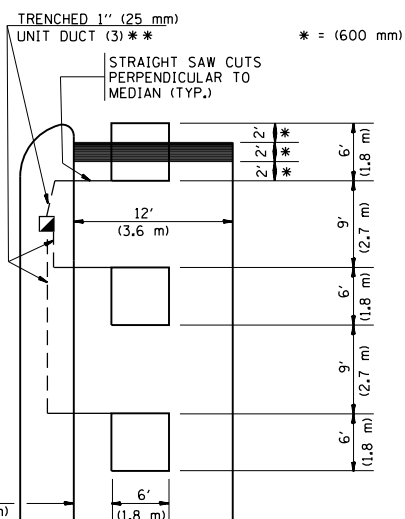
* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



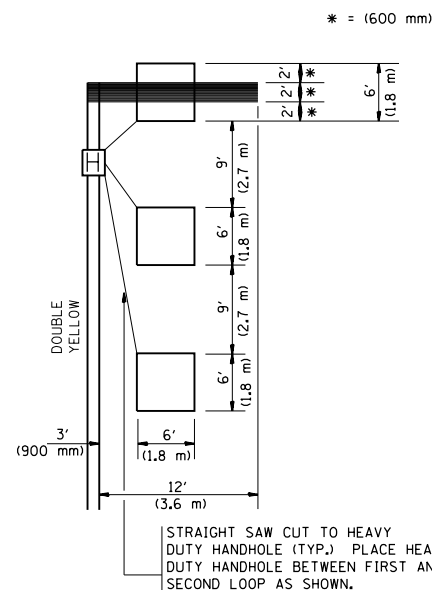
* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



* = (600 mm)

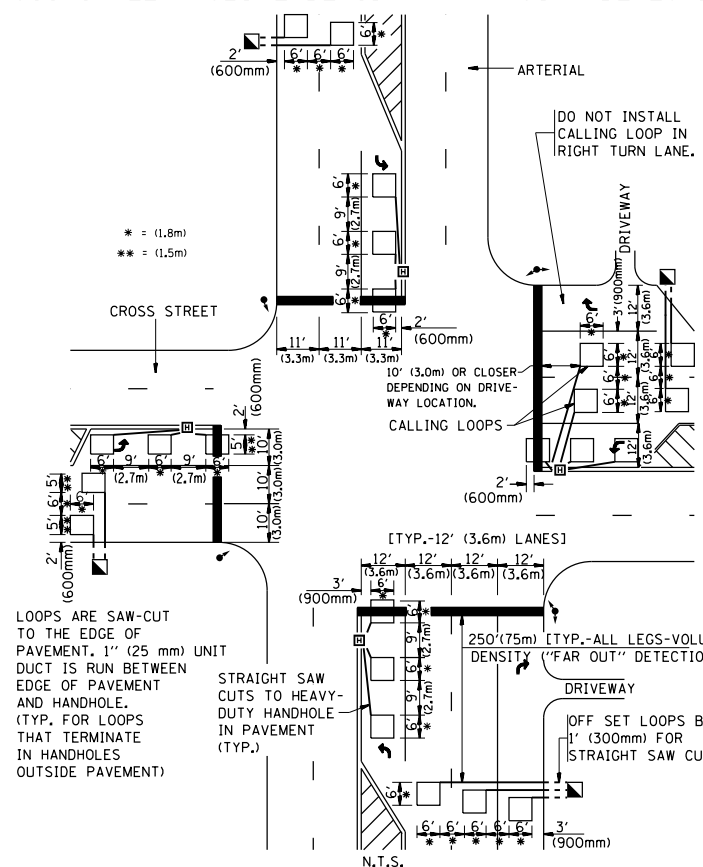
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 SEPARATELY. 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.

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

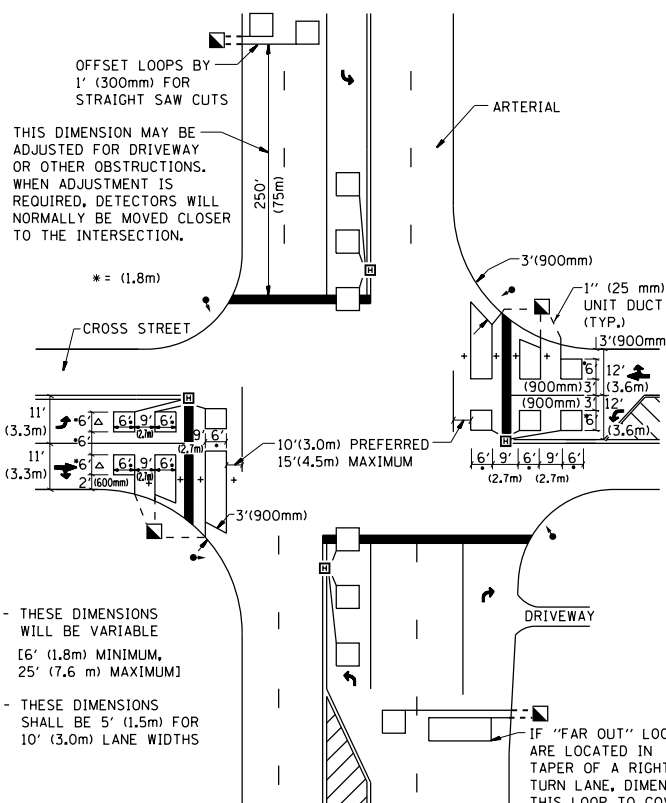


LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

STRAIGHT SAW CUTS TO HEAVY-DUTY HANDHOLE IN PAVEMENT (TYP.)

DETAIL 1
N.T.S.

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



+ - THESE DIMENSIONS WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM]

△ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS

IF "FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER.

DETAIL 2
N.T.S.

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

| | | | | | | | | | | |
|--|---------------------|------------------|-----------|---|--|--------------|-------------------------|---------------------------|---|-----------|
| FILE NAME = | USER NAME = Tariqfm | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ei:\pw_work\p\dot\tariqfm\d0379242\Dist1 | td.dgn | DRAWN - | REVISED - | | | 352 | 56RS-3 | LAKE | 21 | 21 |
| PLOT SCALE = 100.0000' / in. | | CHECKED - R.K.F. | REVISED - | | | TS-07 | | CONTRACT NO. 60L06 | | |
| PLOT DATE = 6/11/2014 | | DATE - | REVISED - | | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | |