

FOR INDEX OF SHEETS, SEE SHEET NO. 2
 FOR LIST OF HIGHWAY STANDARDS SEE SHEET NO. 2

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

03-03-2017 LETTING ITEM 105

| | | | | |
|----------------------|----------------|--------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 1 |
| FED. ROAD DIST. NO 1 | ILLINOIS | CONTRACT NO. 61D04 | | |

HIGHWAY CLASSIFICATION
 EAST NEW YORK STREET – MINOR ARTERIAL

TRAFFIC DATA
 EAST NEW YORK STREET
 2012 ADT = 19,800

POSTED SPEED LIMIT
 EAST NEW YORK STREET = 45 MPH

DESIGN SPEED LIMIT
 EAST NEW YORK STREET = 45 MPH

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 1522 (EAST NEW YORK STREET)
 FAU 2523 (COMMONS DRIVE) TO FAP 338 (IL RTE 59)

RESURFACING

SECTION: 16-00310-00-RS
 PROJECT NO.: M-4003(860)

CITY OF AURORA
 DUPAGE COUNTY

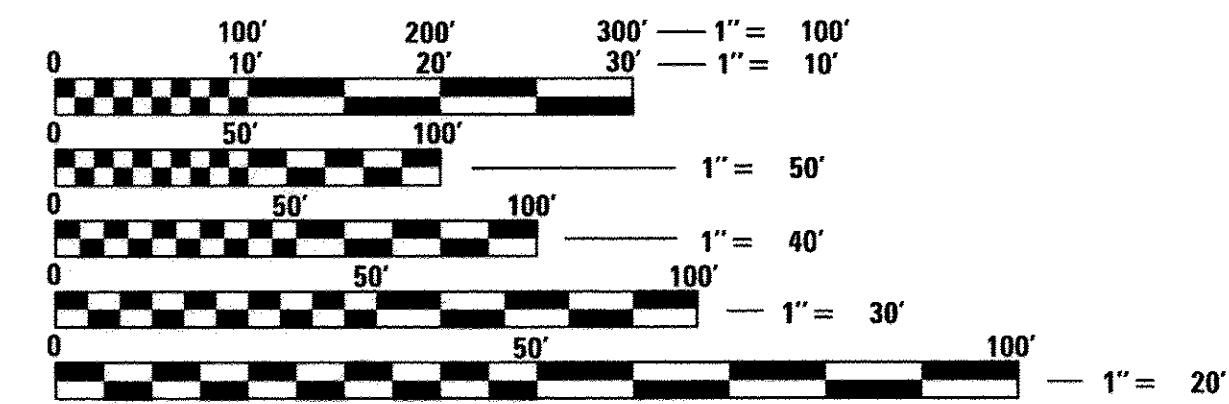
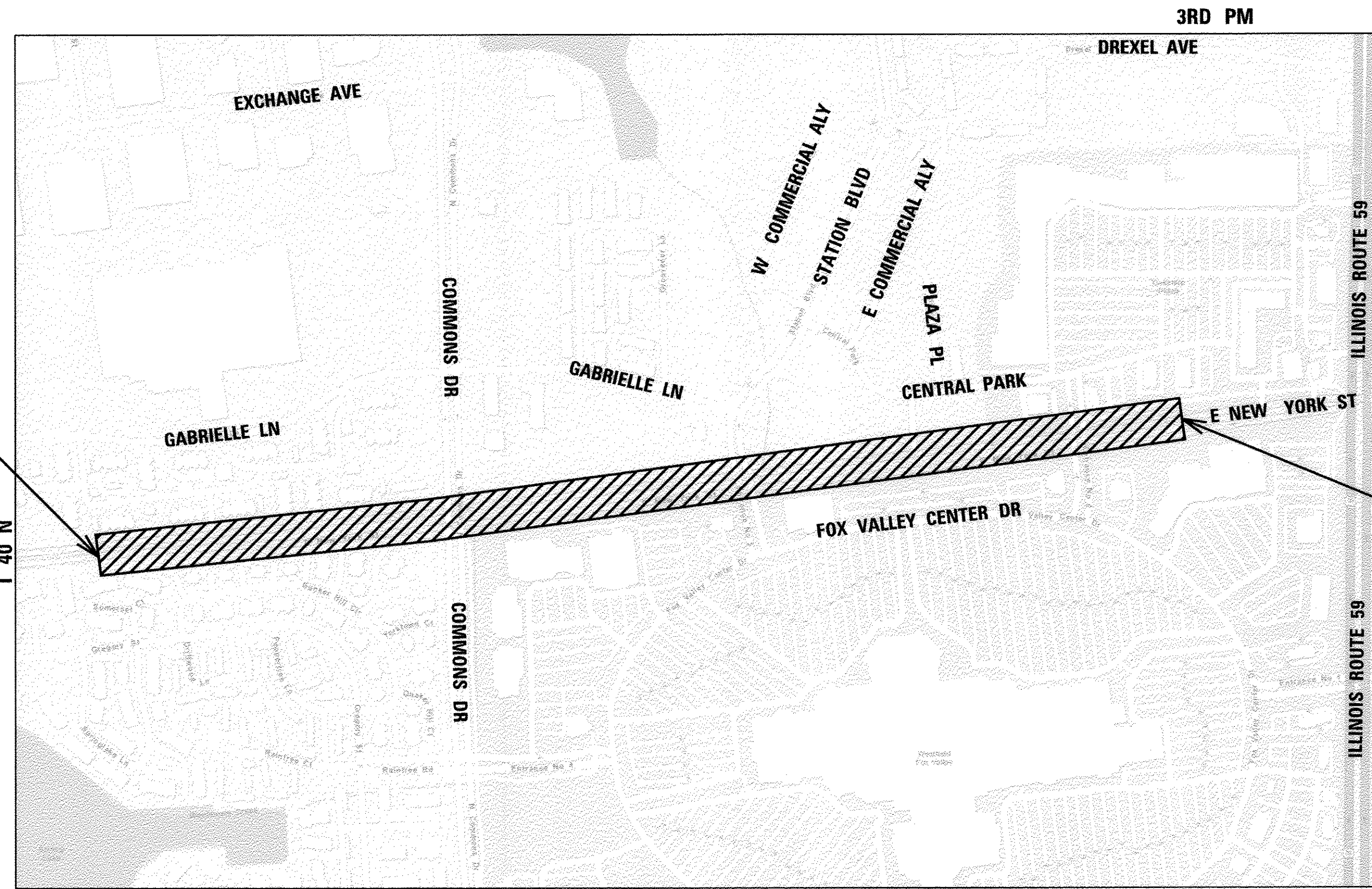
C-91-135-17

PROJECT LOCATION MAP

CITY OF AURORA
 N.T.S.



PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL



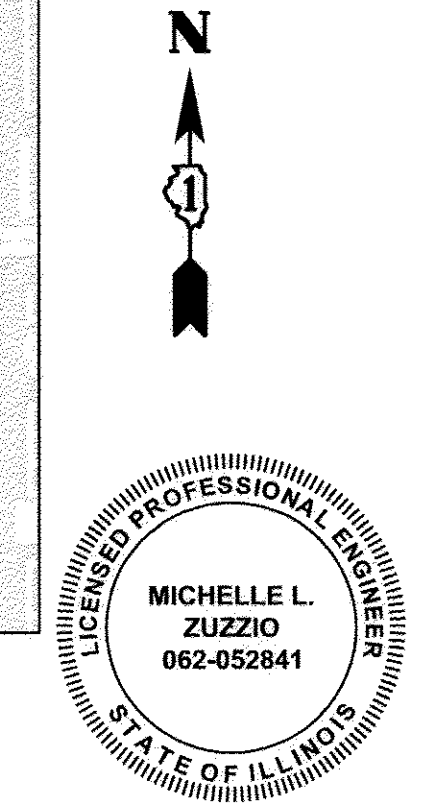
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

DESIGN ENGINEER: M. ZUZZIO
 PROJECT MANAGER: A. CHAUDHRY
 CONTRACT NO. 61D04

PROJECT LENGTH
 NET AND GROSS LENGTH OF PROJECT = 3,686 FT. = 0.70 MILE

PROJECT ENDS
 STA 140 + 62.44



Michelle Zuzzio
 MICHELLE L. ZUZZIO, P.E.
 EXPIRES: 11-30-17

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 11-29 2016
[Signature]
 CITY OF AURORA

RELEASING FOR BID
 BASED ON LIMITED
 REVIEW

DECEMBER 28 2016
[Signature]
 DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

December 28 2016
[Signature]
 REGIONAL ENGINEER

420 NORTH FRONT STREET, SUITE 100 | McHENRY, ILLINOIS 60050
 Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com
 ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

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 OF THE STATE OF ILLINOIS

INDEX OF SHEETS

| | |
|-------|---|
| 1 | COVER SHEET |
| 2 | INDEX OF SHEETS, STATE STANDARDS, AND DISTRICT ONE DETAILS |
| 3 | GENERAL NOTES |
| 4 | SUMMARY OF QUANTITIES |
| 5 | TYPICAL SECTIONS |
| 6 - 7 | RESURFACING PLANS |
| 8 | DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08) |
| 9 | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22) |
| 10 | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24) |
| 11 | BUTT JOINT AND HMA TAPER DETAILS (BD-32) |
| 12 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10) |
| 13 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLow RESISTANT) (TC-11) |
| 14 | DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) |
| 15 | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16) |
| 16 | ARTERIAL ROAD INFORMATION SIGN (TC-22) |
| 17 | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET 2 OF 7) |
| 18 | DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07) |

STATE STANDARDS

| <u>STANDARD NO.</u> | <u>LIST OF DESCRIPTION</u> |
|---------------------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 420001-08 | PAVEMENT JOINTS |
| 424001-09 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 424021-03 | DEPRESSED CORNER FOR SIDEWALKS |
| 424026-01 | ENTRANCE / ALLEY PEDESTRIAN CROSSINGS |
| 442201-03 | CLASS C AND D PATCHES |
| 604001-04 | FRAME AND LIDS, TYPE 1 |
| 606001-06 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 701101-05 | OFF-RD OPERATIONS, MULTILANE, 15'(4.5m) TO 24" (600mm) FROM PAVEMENT EDGE |
| 701426-09 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS >= 45 MPH |
| 701601-09 | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-06 | TRAFFIC CONTROL DEVICES |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |

DISTRICT ONE DETAILS

| <u>STANDARD NO.</u> | <u>LIST OF DESCRIPTION</u> |
|---------------------|--|
| BD-08 | DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING |
| BD-22 | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT |
| BD-24 | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT |
| BD-32 | BUTT JOINT AND HMA TAPER DETAILS |
| TC-10 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| TC-11 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLow RESISTANT) |
| TC-13 | DISTRICT ONE TYPICAL PAVEMENT MARKINGS |
| TC-16 | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING |
| TC-22 | ARTERIAL ROAD INFORMATION SIGN |
| TS-05 | DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (SHEET 2 OF 7) |
| TS-07 | DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING |

HRG PROJECT NO.: 86160031
 HRG CONTACT: 86160031-sht-gen.dgn
 FILE NAME: 86160031-sht-gen.dgn
 PLOT DRIVER: plot.dwt
 PEN TABLE: plot.tbl



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| FILE NAME = 86160031-sht-gen.dgn | DRAWN - WJH | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - AC | REVISED - |
| PLOT DATE = 1/4/2017 | DATE - 11/23/16 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS, DISTRICT ONE DETAILS
 AND GENERAL NOTES**

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A.J. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|----------------|--------|--------------|-----------|
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 2 |
| CONTRACT NO. | | | | 61D04 |
| FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT | | | | |

GENERAL NOTES

1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, APRIL 1, 2016. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
3. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY BASELINE AS SHOWN ON PLAN.
4. MATERIALS RESULTING FROM THE REMOVAL OF ASPHALT SURFACES, CONCRETE REMOVAL, UTILITY STRUCTURE ADJUSTMENTS, GRADING WORK, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGEMENT OF THE ENGINEER, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE ENGINEER WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR SHALL HAVE THE DOLLAR AMOUNT REDUCED FROM THE NEXT PAY ESTIMATE.
5. SIDEWALK REMOVAL AND REPLACEMENT AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AS SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES TO BE DETERMINED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION.
6. STORM SEWERS, WATER MAINS, AND UTILITIES
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
8. THE INDISCRIMINATE USE OF FIRE HYDRANTS OR EXISTING STREAMS, CREEKS, WETLANDS OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE ENGINEER PRIOR TO USE OF THE WATER.
9. ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY OF, AND BE DELIVERED TO, THE CITY OF AURORA AT 720 N. BROADWAY, (630)256-3200 AS APPLICABLE.
10. SIGNING AND STRIPING
SEE IDOT DISTRICT ONE DETAILS AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.
11. RLR NOTES
DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, CONTRACTOR SHALL NOTIFY THE CITY AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE CITY OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION
EAST NEW YORK STREET AT COMMONS DRIVE

| | |
|------------------|---------------------|
| CITY OF AURORA | RED SPEED |
| 720 N BROADWAY | 400 EISENHOWER LANE |
| AURORA, IL 60505 | LOMBARD, IL 60148 |
| (630) 256-3200 | (630) 317-5700 |

HRG PROJECT NO: 8660037
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 FILE NAME: 8660037-eh-000.c12.dgn
 PLOT DRIVER: il_rpt_dwg.plt
 PEN TABLE: plo.tbl



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Illinois Professional Design Firm
#184-001322

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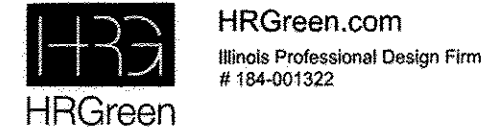
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---------------------|----------------|---------------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 3 |
| CONTRACT NO. | | | | 61D04 |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

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 PLOT DRIVER: IL_pof_bw.plt
 PEN TABLE: plottbl.tbl



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| PLOT DATE = 1/4/2017 | DATE - 11/23/16 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

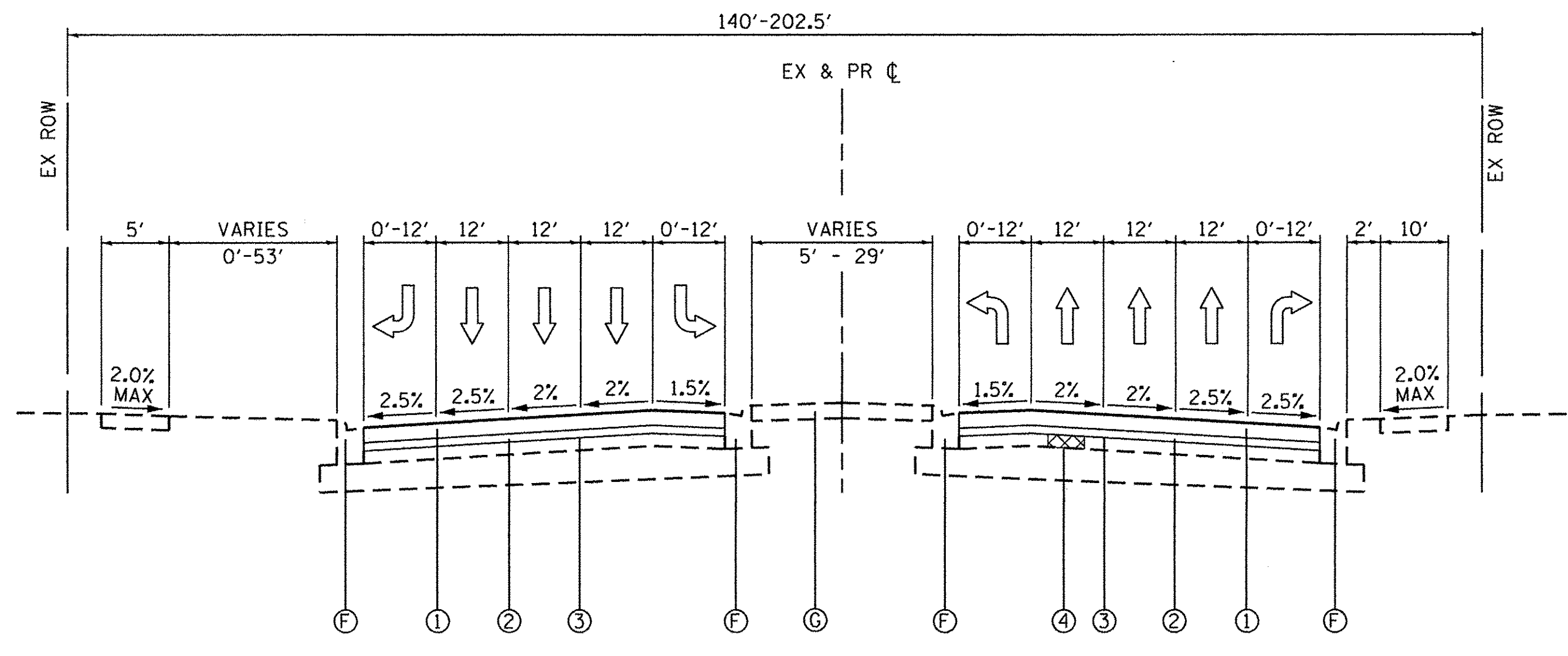
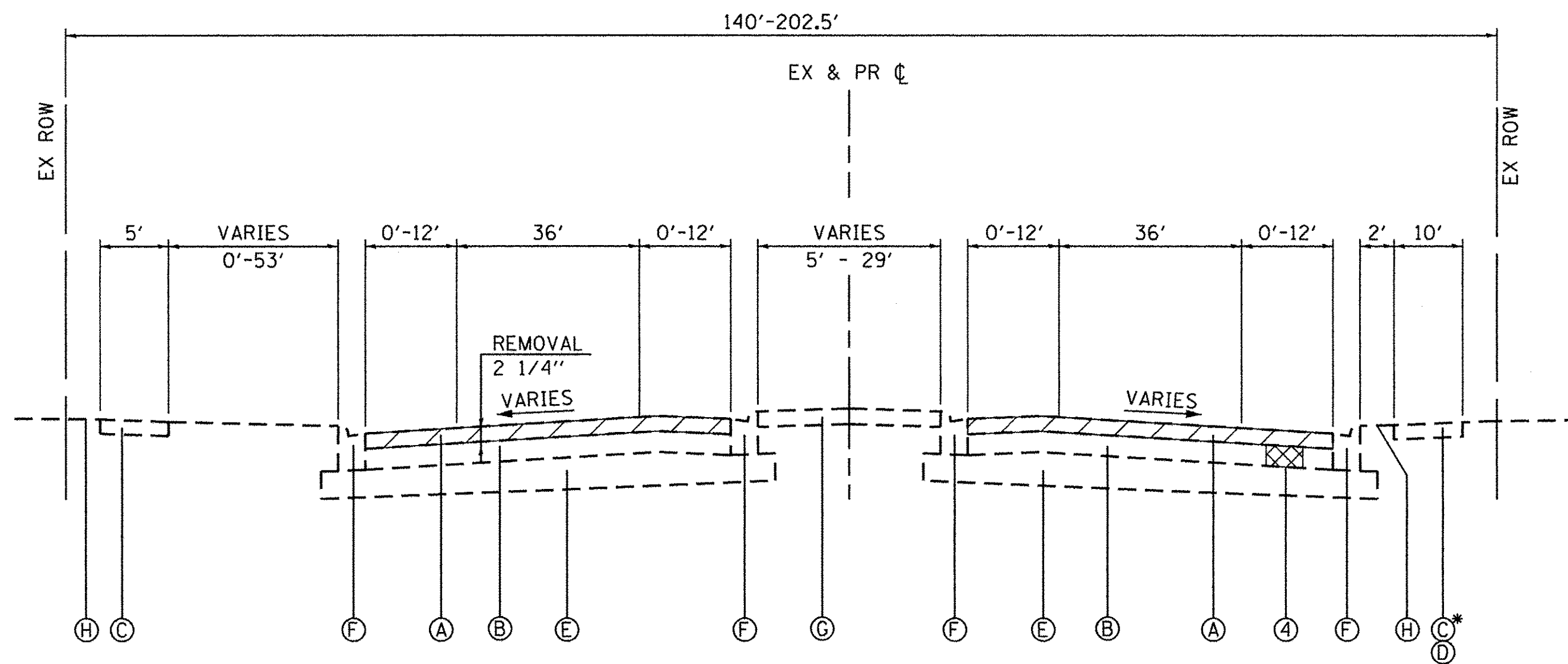
SUMMARY OF QUANTITIES



SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---------------------|----------------|---------------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 4 |
| CONTRACT NO. | | | 61004 | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

| CODE NUMBER | ITEM | UNIT | TOTAL | ROADWAY 75% FED 25% LOCAL 0005 |
|-------------|--|-------|--------|---|
| 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SO YD | 170 | 170 |
| 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 3 | 3.0 |
| 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 3 | 3.0 |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 3 | 3.0 |
| 25000110 | SEEDING, CLASS 1A | ACRE | 0.10 | 0.10 |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 25,324 | 25,324 |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 30 | 30 |
| 40600827 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON | 2,101 | 2,101 |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SO YD | 280 | 280 |
| 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON | 3,677 | 3,677 |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SO FT | 2,646 | 2,646 |
| 42400800 | DETECTABLE WARNINGS | SO FT | 60 | 60 |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SO YD | 37,517 | 37,517 |
| 44000600 | SIDEWALK REMOVAL | SO FT | 2,646 | 2,646 |
| 44201737 | CLASS D PATCHES, TYPE I, 8 INCH | SO YD | 50 | 50 |
| 44201741 | CLASS D PATCHES, TYPE II, 8 INCH | SO YD | 50 | 50 |
| 44201745 | CLASS D PATCHES, TYPE III, 8 INCH | SO YD | 50 | 50 |
| 44201747 | CLASS D PATCHES, TYPE IV, 8 INCH | SO YD | 50 | 50 |
| 67100100 | MOBILIZATION | LSUM | 1 | 1 |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | LSUM | 1 | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | LSUM | 1 | 1 |
| 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | LSUM | 1 | 1 |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 3,576 | 3,576 |
| 70300150 | SHORT TERM PAVEMENT MARKING REMOVAL | SO FT | 1,192 | 1,192 |
| † 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SO FT | 757 | 757 |
| † 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 14,596 | 14,596 |
| † 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 4,061 | 4,061 |
| † 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 61 | 61 |
| † 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 577 | 577 |
| † 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 410 | 410 |
| † 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 95 | 95 |
| * 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 1,688 | 1,688 |
| * X0320050 | CONSTRUCTION LAYOUT (SPECIAL) | LSUM | 1 | 1 |
| * X6030310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) | EACH | 5 | 5 |
| * Z0004562 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT | 600 | 600 |
| * Z0030850 | TEMPORARY INFORMATION SIGNING | SO FT | 52 | 52 |

* SPECIAL PROVISION
 † SPECIALTY ITEMS



 DENOTES AREA OF HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
 DENOTES AREA OF PATCHING

EXISTING TYPICAL SECTION
 EAST NEW YORK STREET
 WEST OF COMMONS AVE TO WEST OF IL RTE 59
 STA 103+71 TO STA 140+62

PROPOSED TYPICAL SECTION
 EAST NEW YORK STREET
 WEST OF COMMONS AVE TO WEST OF IL RTE 59
 STA 103+71 TO STA 140+62

EXISTING LEGEND

- Ⓐ HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- Ⓑ HOT-MIX ASPHALT PAVEMENT
- Ⓒ PORTLAND CEMENT CONCRETE SIDEWALK (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)
- Ⓓ HOT-MIX ASPHALT BIKE PATH
- Ⓔ AGGREGATE SUBBASE
- Ⓕ COMBINATION CONCRETE CURB & GUTTER, VARIES FROM TYPE B-6.12 TO B-6.06 (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)
- Ⓖ LANDSCAPED MEDIAN
- Ⓗ EXISTING GROUND
- * PATH TERMINATES AT COMMONS DRIVE

PROPOSED LEGEND

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70; 1 3/4"
- ② POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 1"
- ③ BITUMINOUS MATERIALS (TACK COAT)
- ④ CLASS D PATCHES

NOTE: THE PATCHING QUANTITIES HAVE BEEN ESTIMATED BASED ON FIELD OBSERVATIONS DURING DESIGN. ACTUAL QUANTITIES TO BE DETERMINED DURING CONSTRUCTION BY THE ENGINEER. PATCHING LOCATIONS TO BE DETERMINED BY THE ENGINEER AFTER MILLING OPERATIONS.

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS | |
|--|------------------|
| MIXTURE TYPE | AIR VOIDS @ Ndes |
| PAVEMENT RESURFACING | |
| HMA SURFACE COURSE, MIX "D", N70 (IL-9.5mm); 1 3/4" | 4% @ 70 GYR. |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 1" | 3.5% @ 50 GYR. |
| PAVEMENT PATCHING | |
| CLASS D PATCHES, (HMA BINDER, IL-19MM) | 4% @ 70 GR. |

- THE UNIT WEIGHT TO CALCULATE ALL HMA SURFACE MIXTURE QUATITIES IS 112 LBS/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.

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 PEN TABLE: plottable.tbl

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 #184-001322

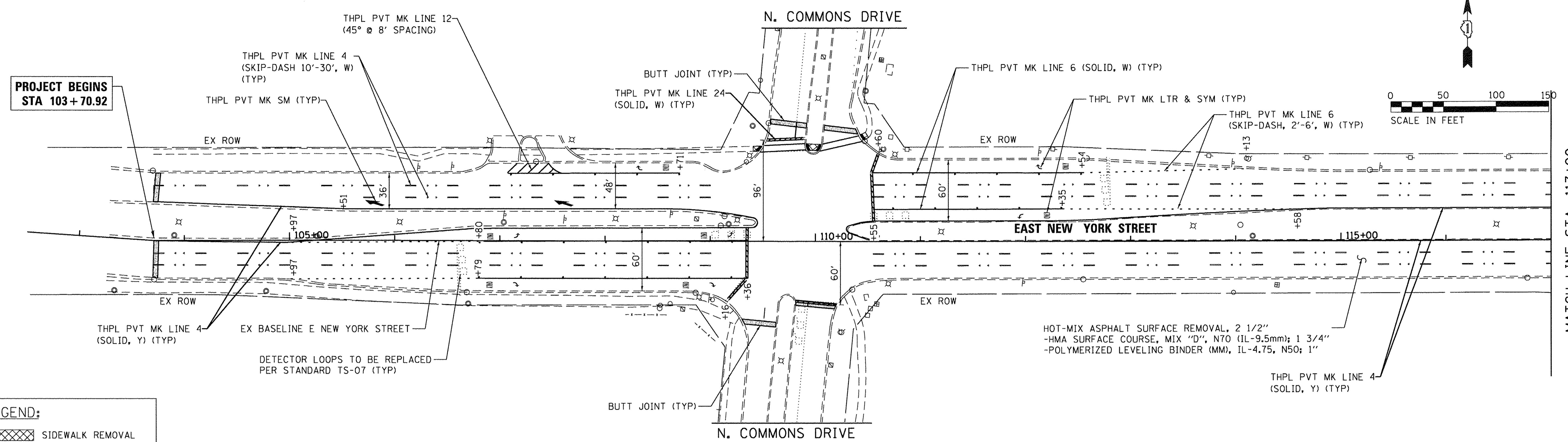
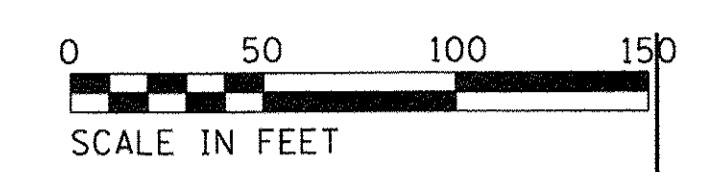
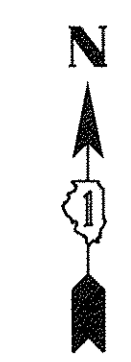
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| PLOT DATE = 1/4/2017 | DATE - 11/23/16 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
EAST NEW YORK STREET

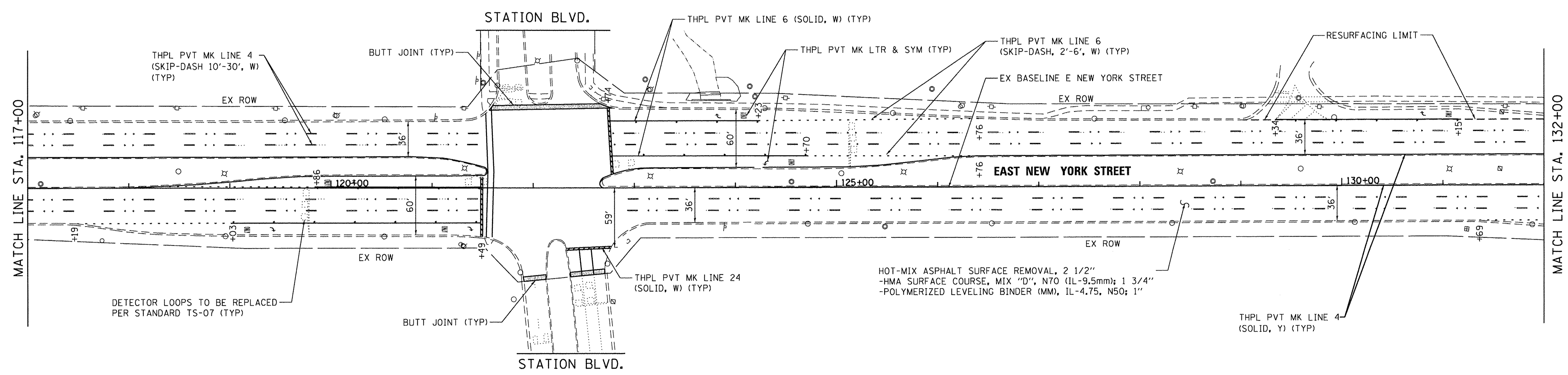
SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 5 |
| CONTRACT NO. | | | | 61004 |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT | | | | |



LEGEND:

SIDEWALK REMOVAL



HRG PROJECT NO.: 8660031
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 FILE NAME: 8660031-shr-resurf01.dgn
 PLOT DRIVER: ilc.pdf-bwplotr09
 PEN TABLE: plottbl01.dwg

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 HRGreen.com
 Illinois Professional Design Firm
 # 184-001522

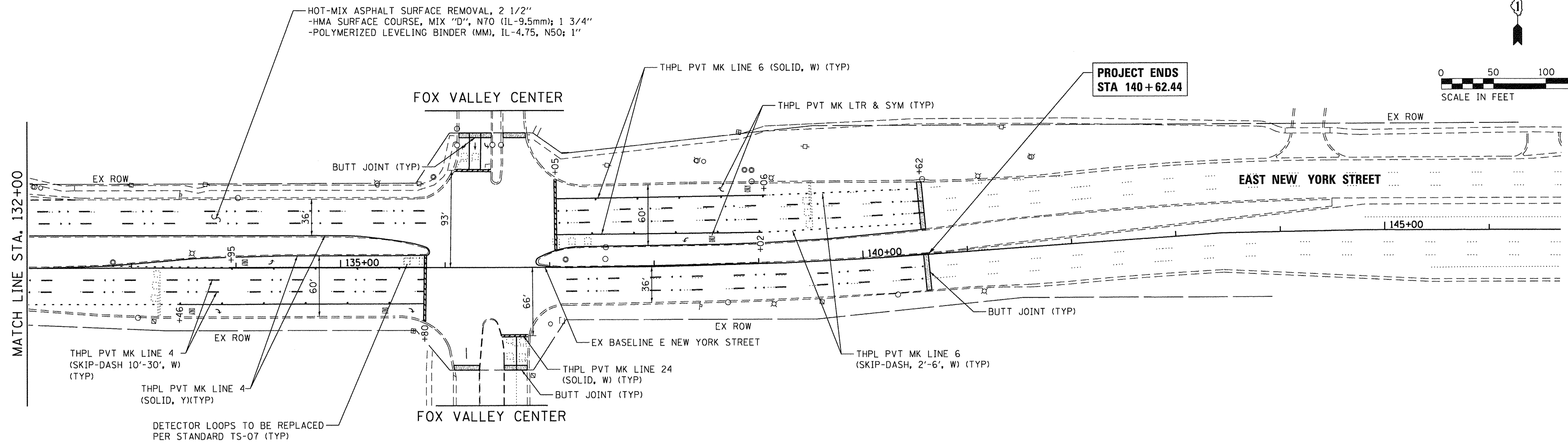
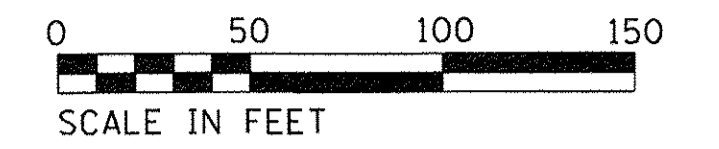
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| PLOT SCALE = 1" = 50' | CHECKED - AC | REVISED - |
| PLOT DATE = 1/4/2017 | DATE - 11/23/16 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**RESURFACING PLAN
 EAST NEW YORK STREET**

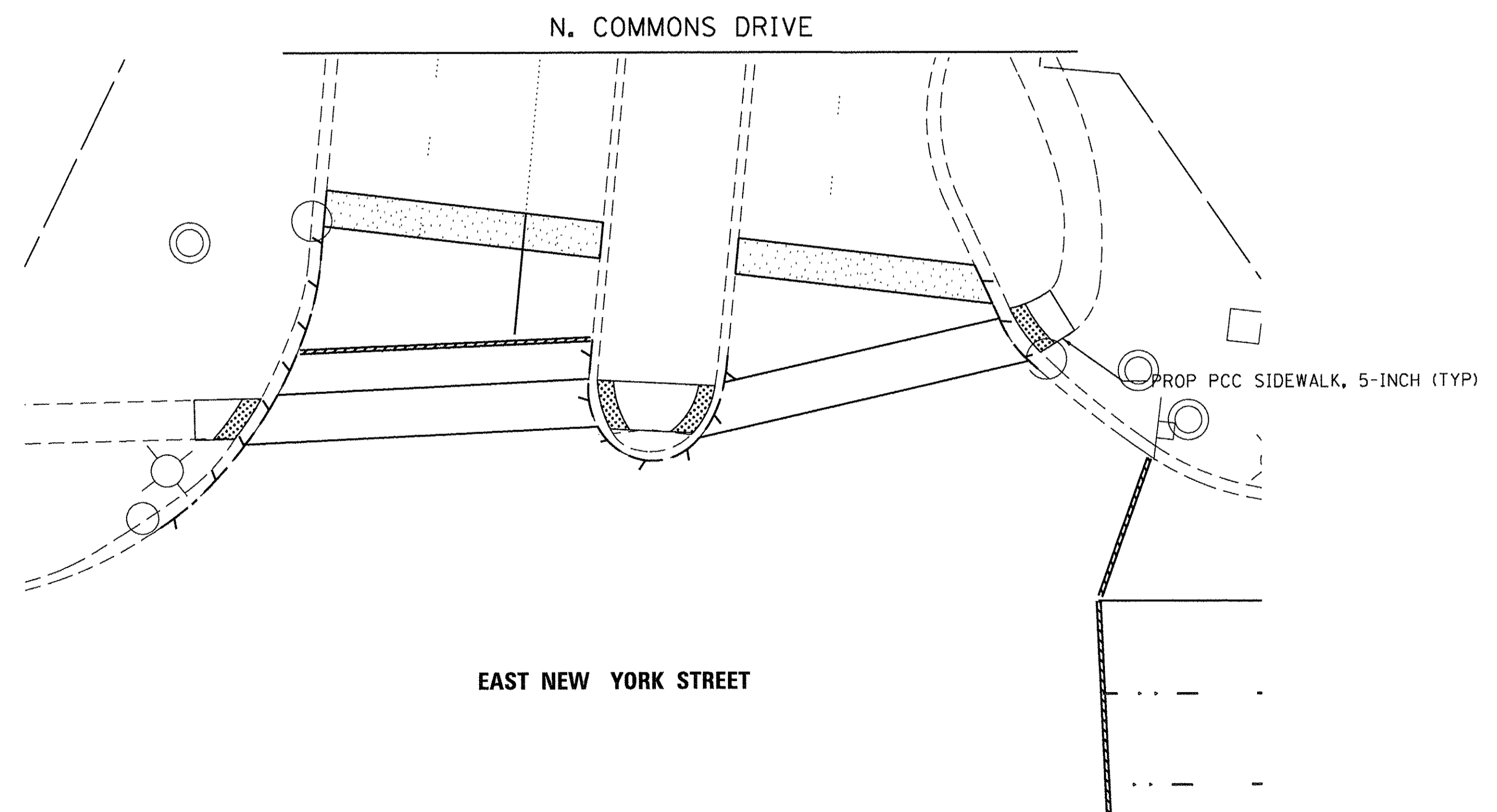
SCALE: 1" = 50' SHEET NO. 1 OF 2 SHEETS STA. 103+70.92 TO STA. 132+00

| | | | | |
|------------------------------|------------------------|------------------|-----------------|-------------|
| F.A. RTE. 1522 | SECTION 16-00310-00-RS | COUNTY DUPAGE | TOTAL SHEETS 18 | SHEET NO. 6 |
| CONTRACT NO. 61D04 | | | | |
| FED. ROAD DIST. NO. ILLINOIS | | FED. AID PROJECT | | |



**PROJECT ENDS
STA 140+62.44**

DETECTOR LOOPS TO BE REPLACED
PER STANDARD TS-07 (TYP)



LEGEND:
 CURB AND GUTTER REMOVAL

HRG PROJECT NO.: 8660031
 HRG PROJ. CONTACT: 8660031-shr-Resurf02.dgn
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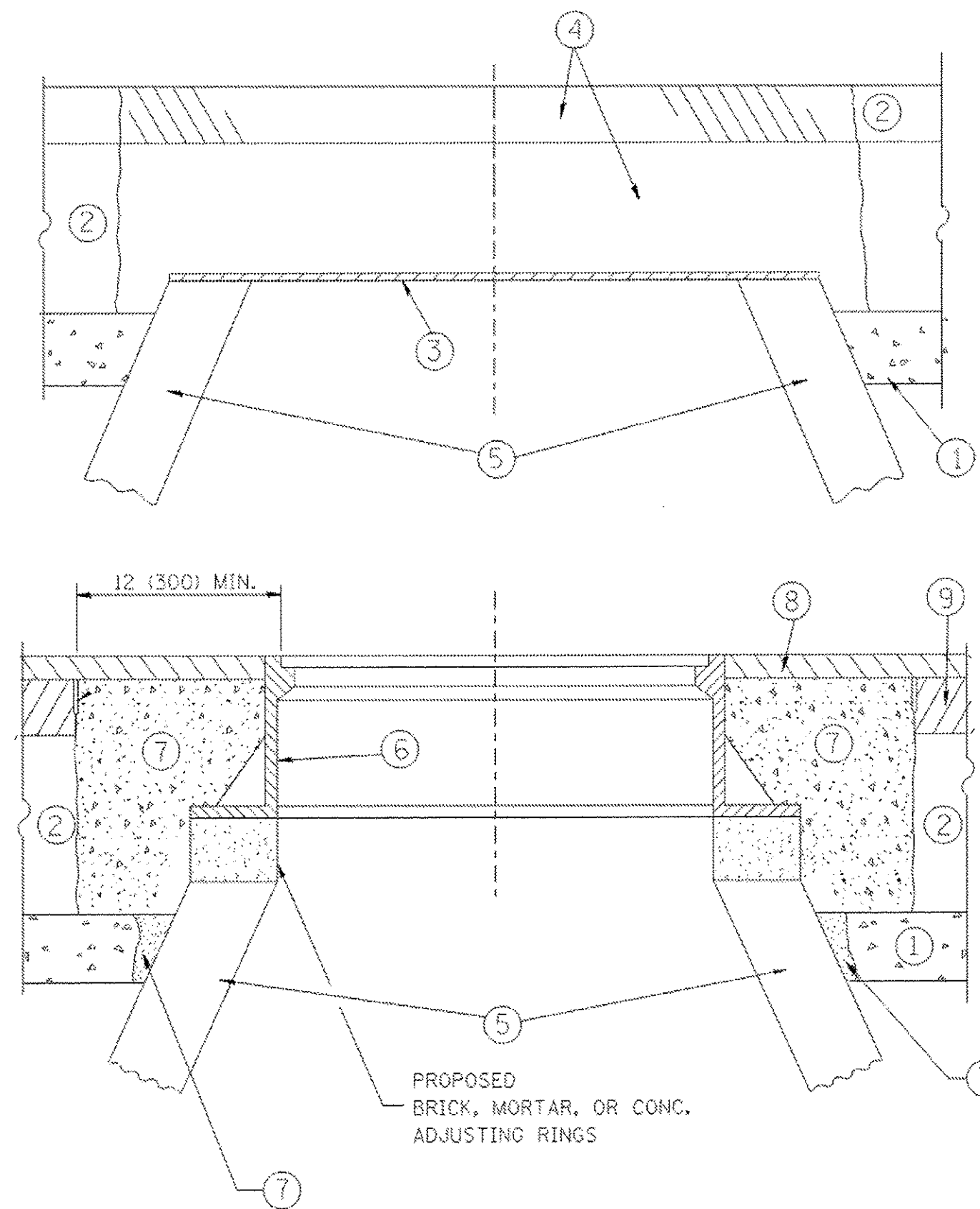


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|---------------------------------------|-----------------|-----------|
| USER NAME = mzuzzio | DESIGNED - MLZ | REVISED - |
| FILE NAME = 86160031-shr-Resurf02.dgn | DRAWN - WJH | REVISED - |
| PLOT SCALE = 1" = 50' | CHECKED - AC | REVISED - |
| PLOT DATE = 1/4/2017 | DATE - 11/23/16 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|--|-------------------------|
| RESURFACING PLAN EAST NEW YORK STREET | |
| SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS |
| STA. 132+00 | TO STA. 140+62.44 |

| | | | | |
|---|------------------------|---------------|--------------------|-------------|
| F.A. RTE. 1522 | SECTION 16-00310-00-RS | COUNTY DUPAGE | TOTAL SHEETS 18 | SHEET NO. 7 |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 61D04 | |



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 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

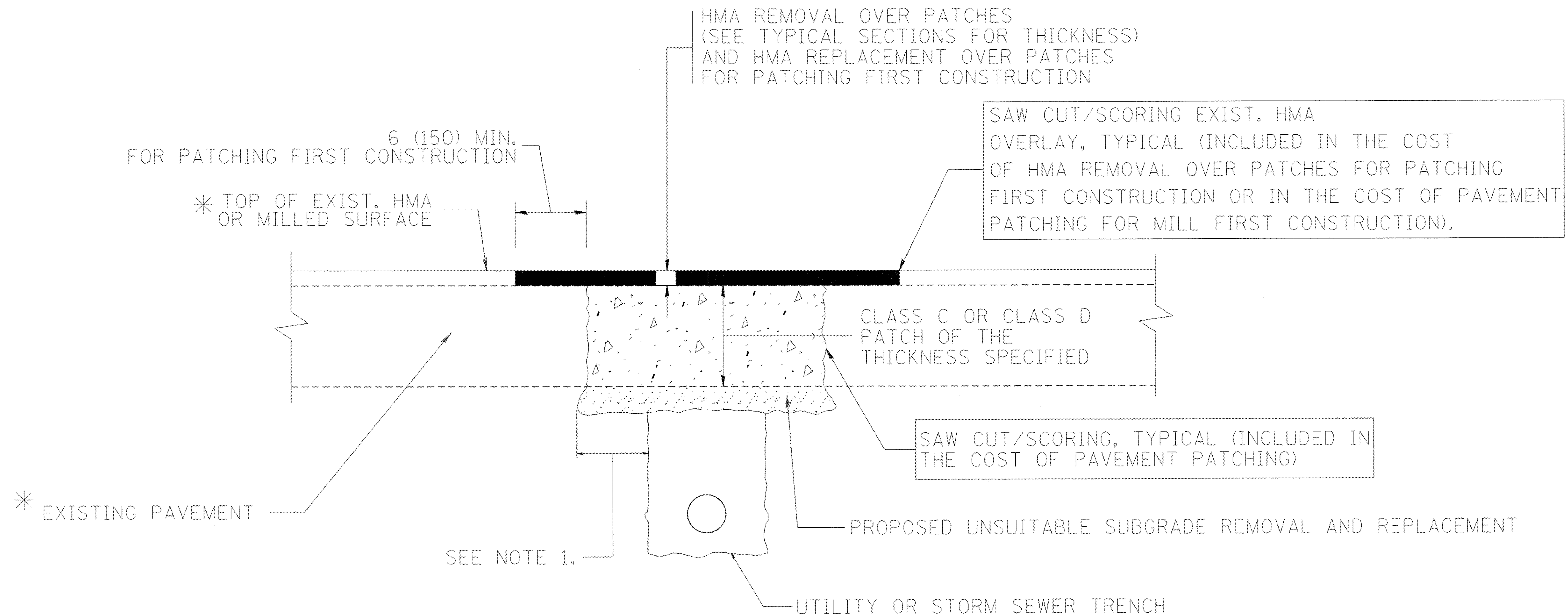
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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| | | DRAWN - | REVISED - R. BORO 01-01-07 |
| | | CHECKED - | REVISED - R. BORO 03-09-11 |
| | | DATE - 10-25-94 | REVISED - R. BORO 12-06-11 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | | | | |
|--|--|-------------------------|------------------------|---------------|--------------------|-------------|
| DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING | | F.A.U. RTE. 1522 | SECTION 16-00310-00-RS | COUNTY DUPAGE | TOTAL SHEETS 18 | SHEET NO. 8 |
| SCALE: NONE | | SHEET NO. 1 OF 1 SHEETS | | STA. TO STA. | CONTRACT NO. 61D04 | |
| 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.

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 HRC PROJ. CONTACT: 066003-shr-dst-bd22.dgn
 FILE NAME: C:\proj\projects\dst22\22x34\bd22.dgn
 PLOT DATE: 10/27/2008
 PEN TABLE:

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR
HMA SURFACED PAVEMENT**

| | | | |
|--|----------------------------|--------------------|-----------------------------|
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| | | DRAWN - | REVISED - R. BORO 01-01-07 |
| | PLOT SCALE = 50.000' / IN. | CHECKED - | REVISED - R. BORO 09-04-07 |
| | PLOT DATE = 10/27/2008 | DATE - 10-25-94 | REVISED - K. ENG 10-27-08 |

| | | | | | | | |
|---|-------------------------|--------------|------------------|------------------------|--------------------|-----------------|-------------|
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | F.A.U. RTE. 1522 | SECTION 16-00310-00-RS | COUNTY DUPAGE | TOTAL SHEETS 18 | SHEET NO. 9 |
| | | | BD400-04 (BD-22) | | CONTRACT NO. 61D04 | | |
| 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)

* 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.

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.)

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,

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.

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.

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

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

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).

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.

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".

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.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

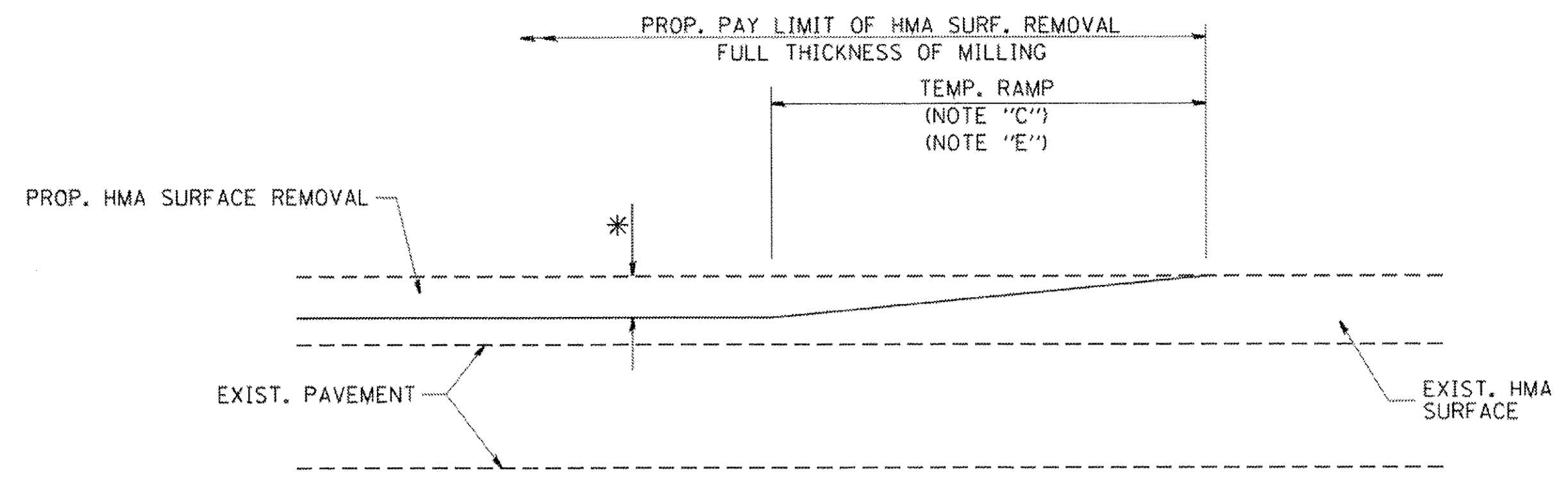
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT**

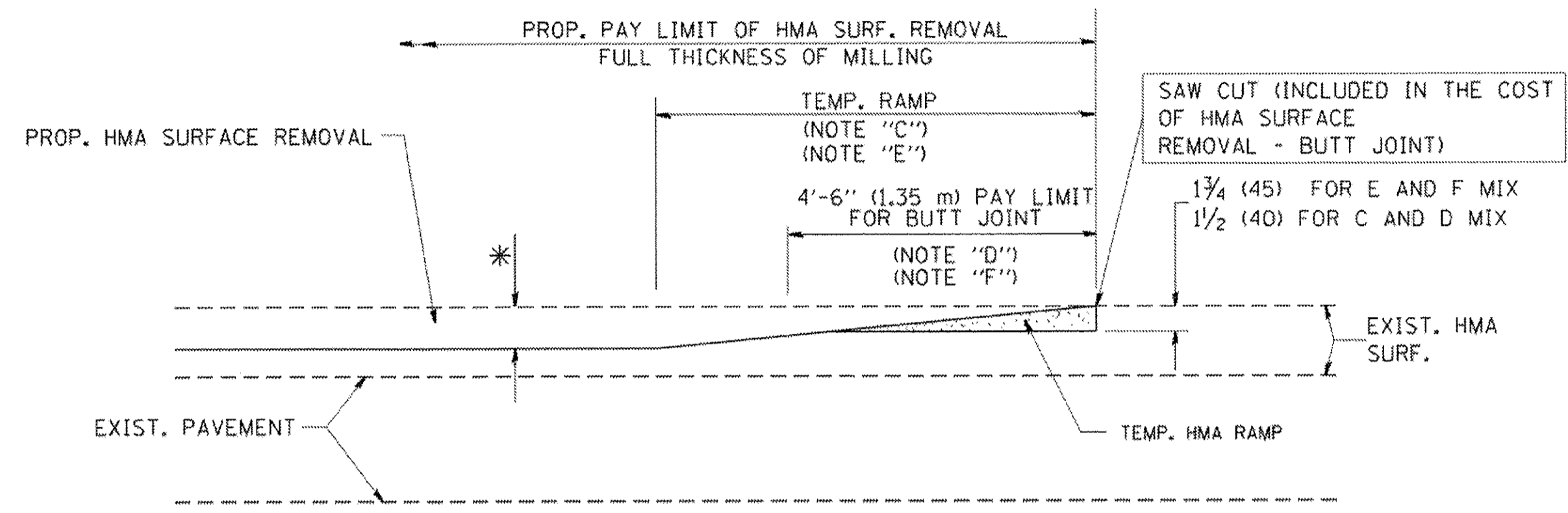
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| | PLOT DATE = 12/15/2009 | DATE - 03-11-94 | REVISED - R. BORO 12-15-09 |

| | | | | | | | |
|---|-------------------------|--------------|-------------------|-------------------------|--------------------|------------------|---------------|
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | F.A.U. RITE: 1522 | SECTION: 16-00310-00-RS | COUNTY: DUPAGE | TOTAL SHEETS: 18 | SHEET NO.: 10 |
| | | | BD600-06 (BD-24) | | CONTRACT NO. 61D04 | | |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT | | | | | | | |



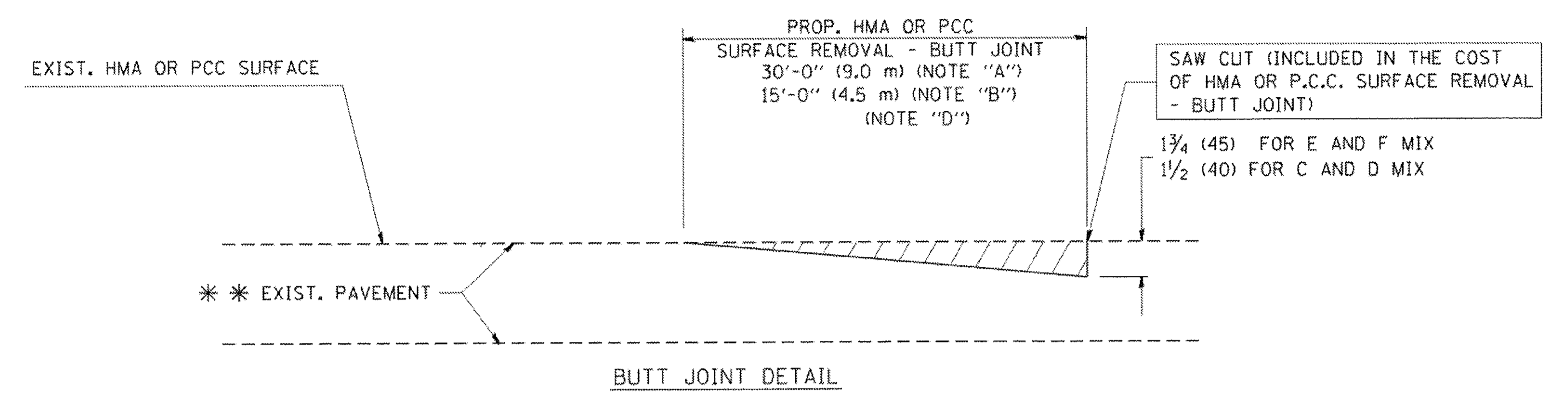
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

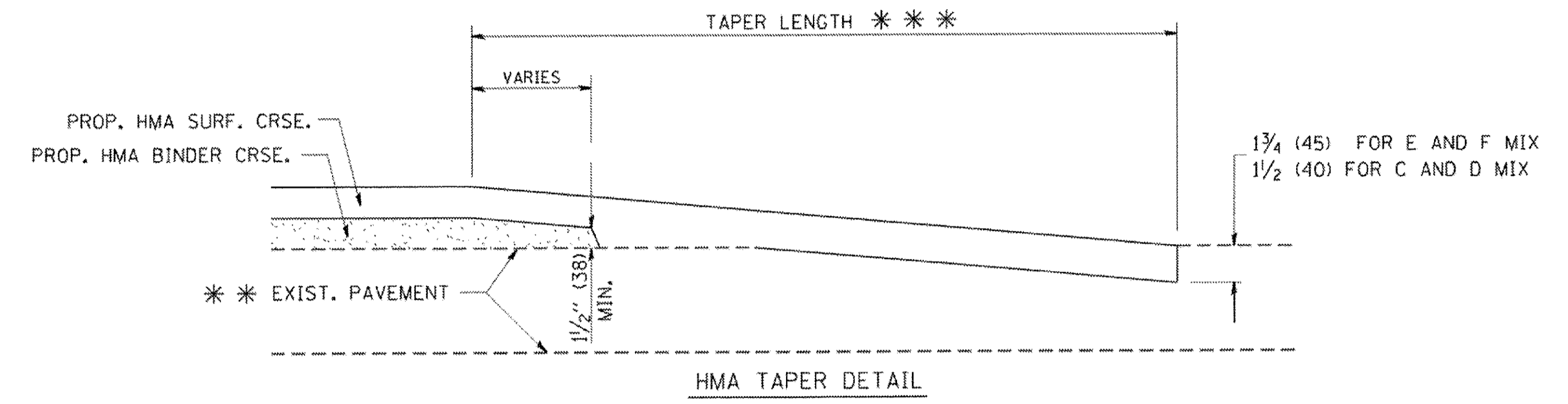


HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

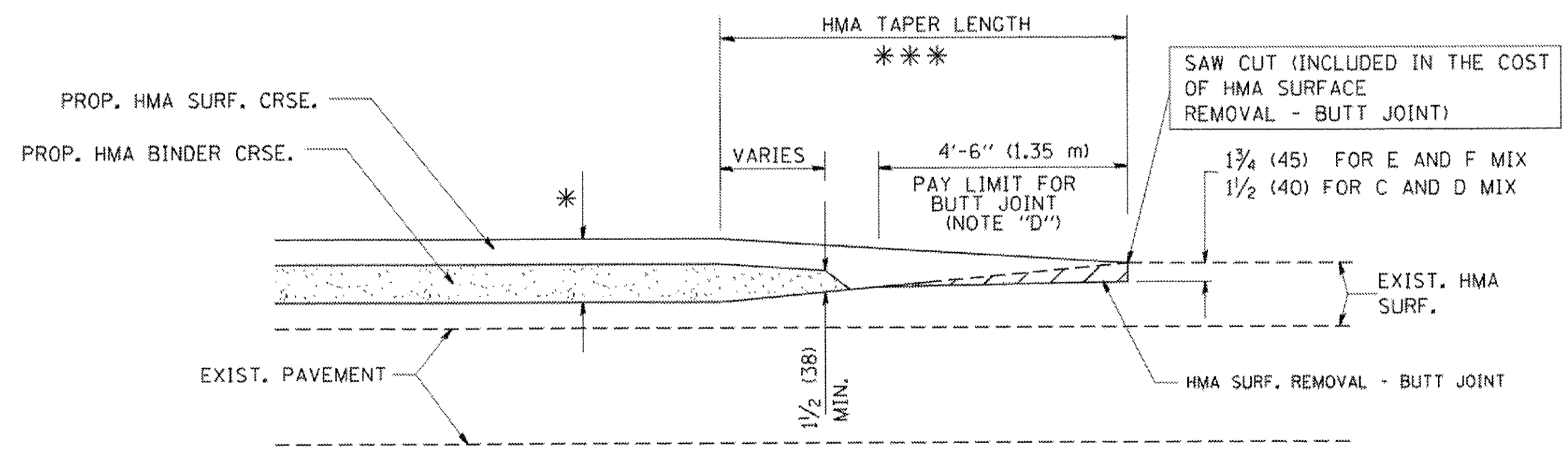
NOTES

- 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.



BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

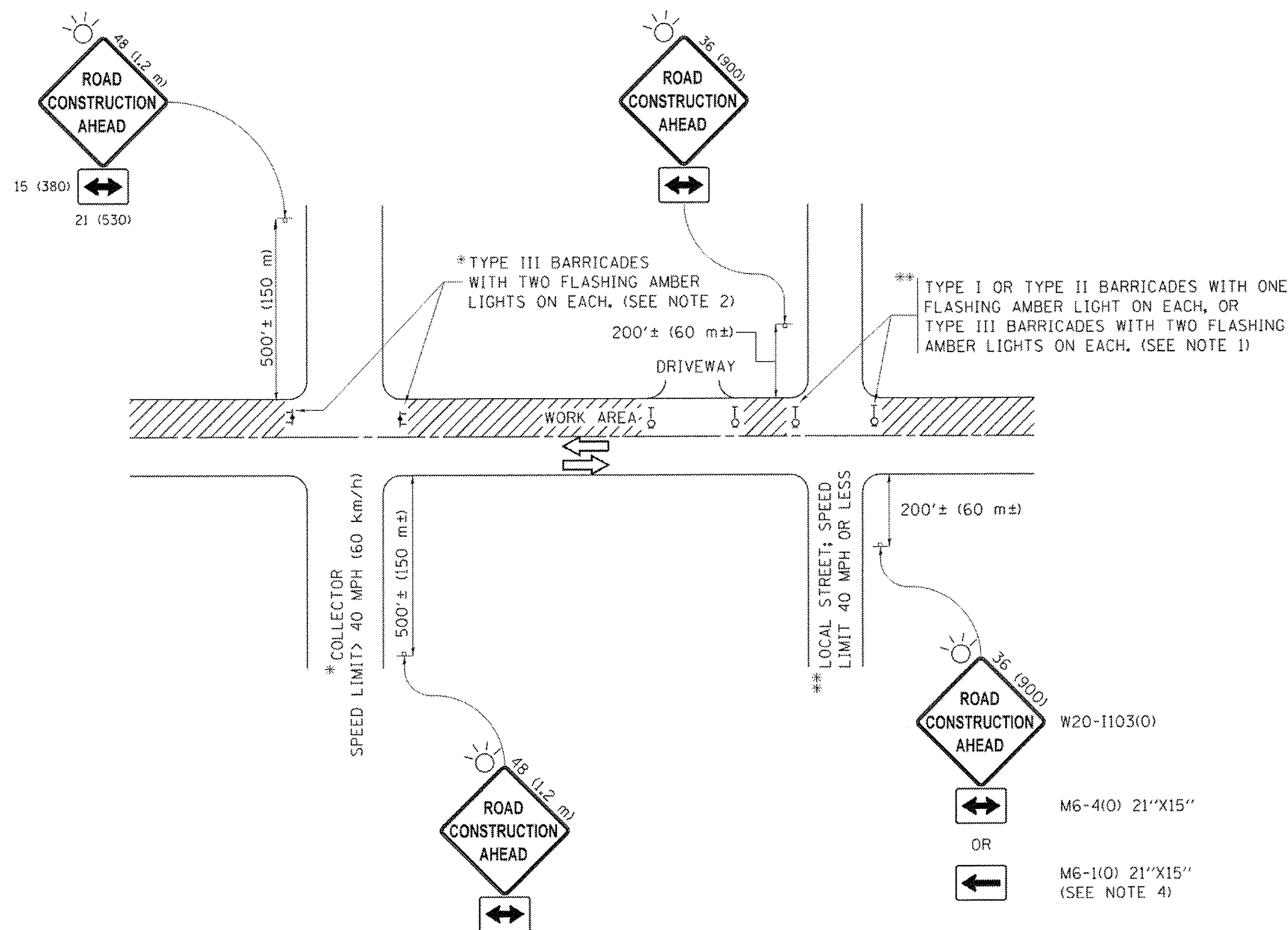
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| | | DRAWN - | REVISED - A. ABBAS 03-21-97 |
| PLOT SCALE = 30.0000' / IN. | | CHECKED - | REVISED - M. COMEZ 04-06-01 |
| PLOT DATE = 1/4/2008 | | DATE - 06-13-90 | REVISED - R. BORO 01-01-07 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

| | | | | |
|---|----------------|--------|--------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 11 |
| BD400-05 BD32 | | | CONTRACT NO. 61D04 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

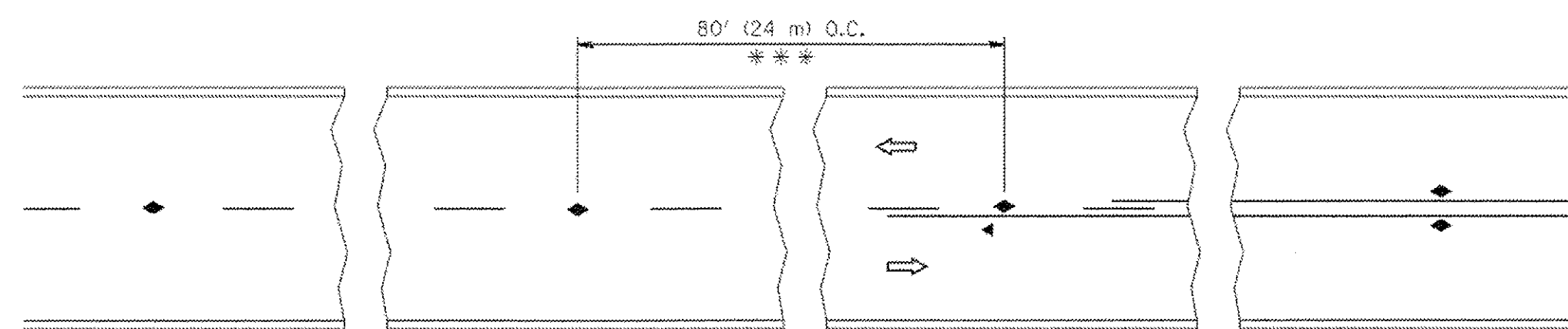
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

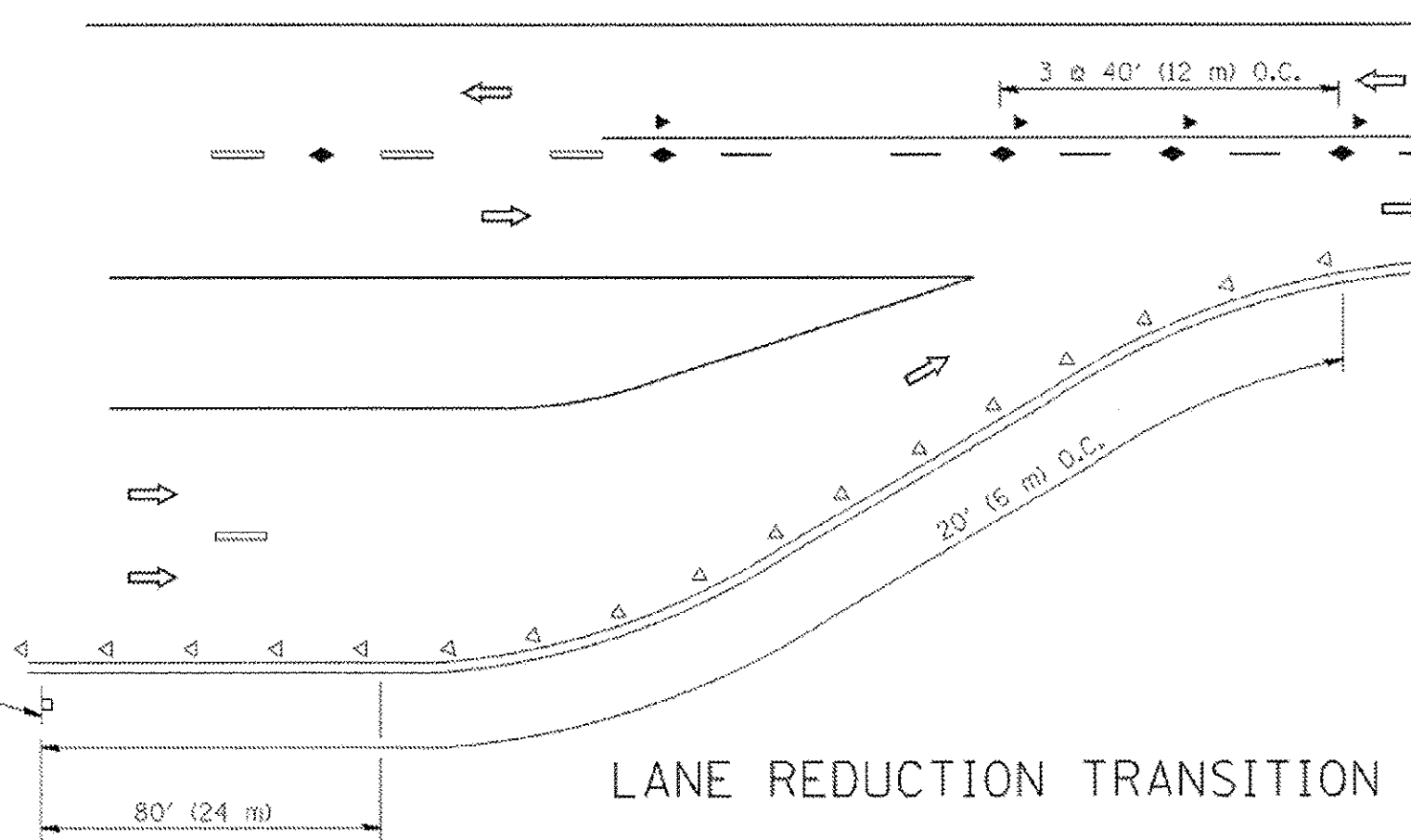
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| Default | PLOT SCALE = 50,000' / in. | CHECKED - | REVISED - A. SCHUETZE 07-01-13 |
| | PLOT DATE = 9/15/2016 | DATE - 06-89 | REVISED - A. SCHUETZE 09-15-16 |

| | | | | | | | | | | |
|---------------------------|---------|------|--------|------|---------|-------------|----------------|--------------|--------------|-----------|
| SCALE: NONE | SHEET 1 | OF 1 | SHEETS | STA. | TO STA. | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | | | | 1522 | 16-00310-00-RS | DUPAGE | 18 | 12 |
| TC-10 | | | | | | | | CONTRACT NO. | 61D04 | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | |

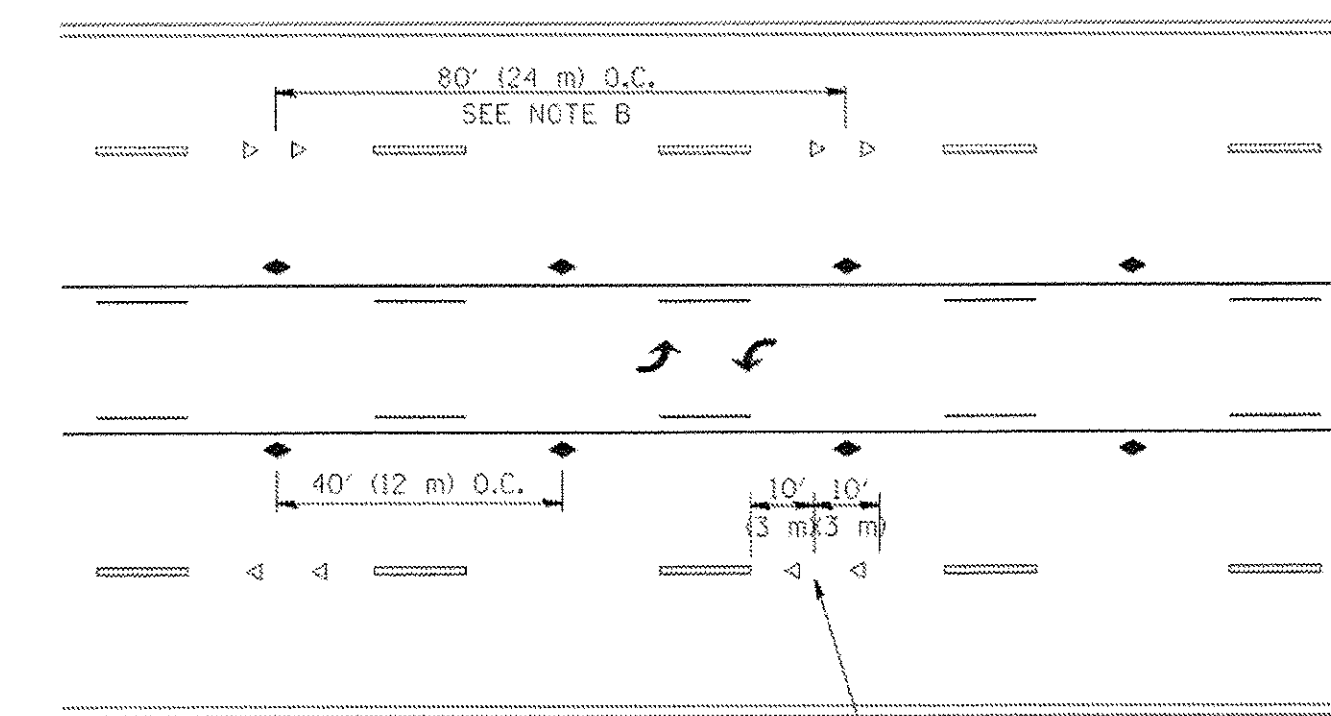


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

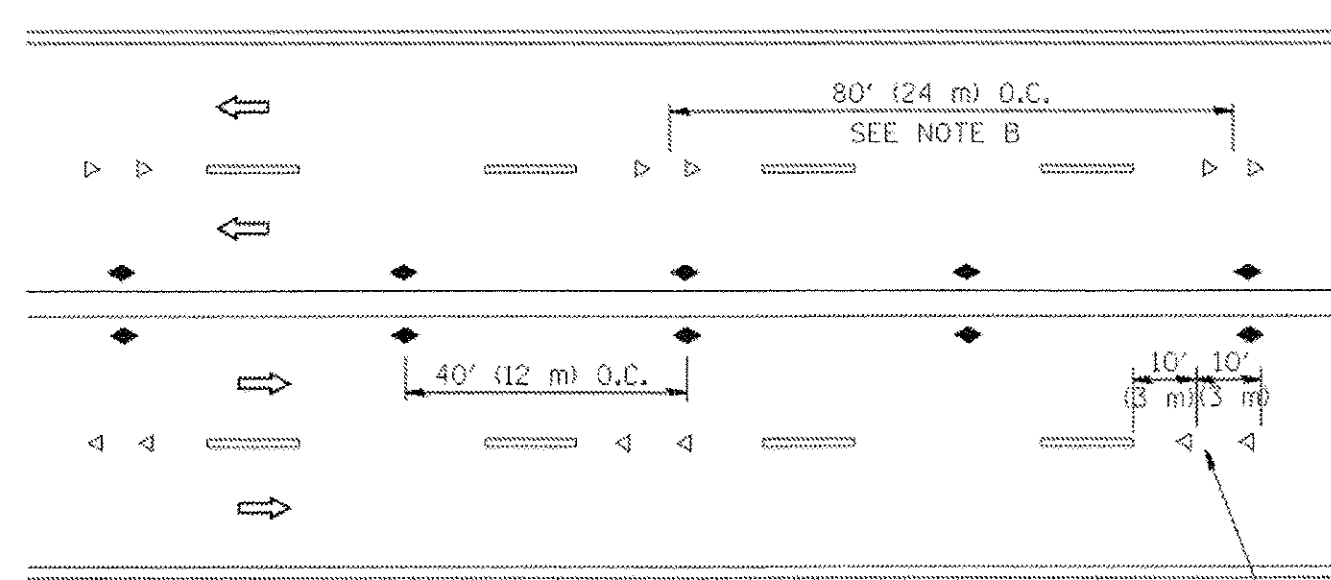
TWO-LANE/TWO-WAY



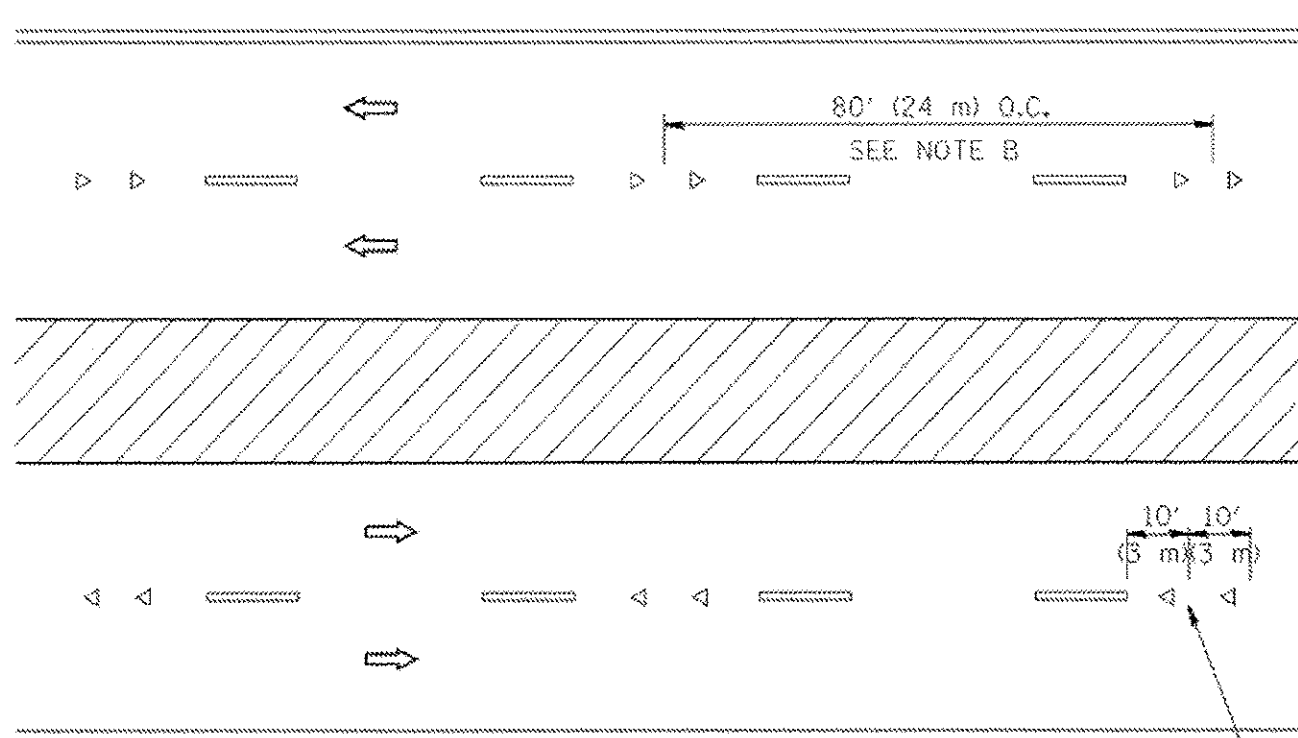
LANE REDUCTION TRANSITION



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.

SYMBOLS

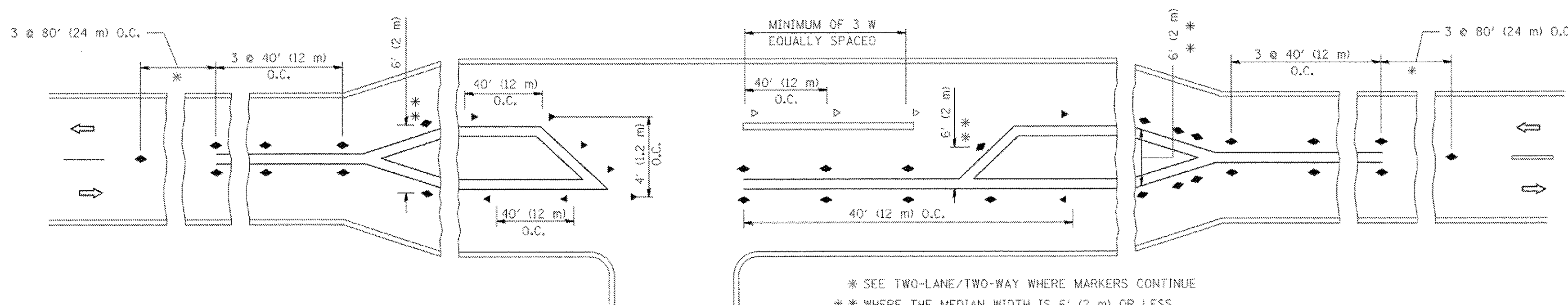
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

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.

HRC PROJECT NO.: 8660037
 HRC PROJ. CONTACT: 8660037-sht-des-rcldgn
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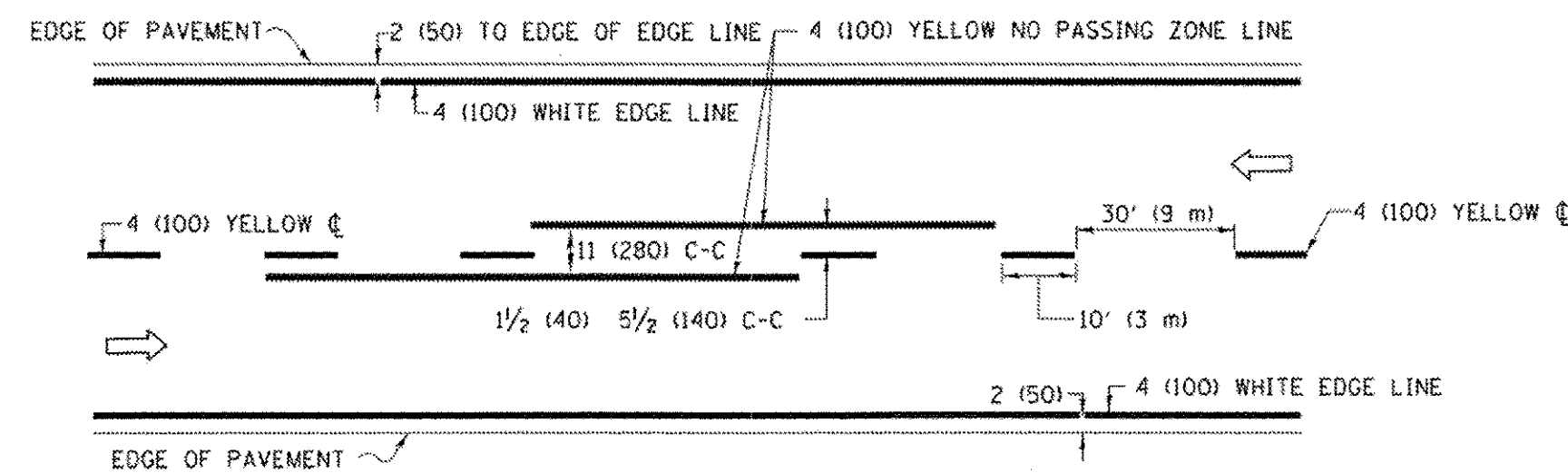
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| PLOT SCALE = 50.000 / IN. | CHECKED - | REVISED - T. RAMMACHER 01-06-00 | REVISED - C. JUCIUS 09-09-09 |
| PLOT DATE = 3/2/2011 | DATE - | | |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

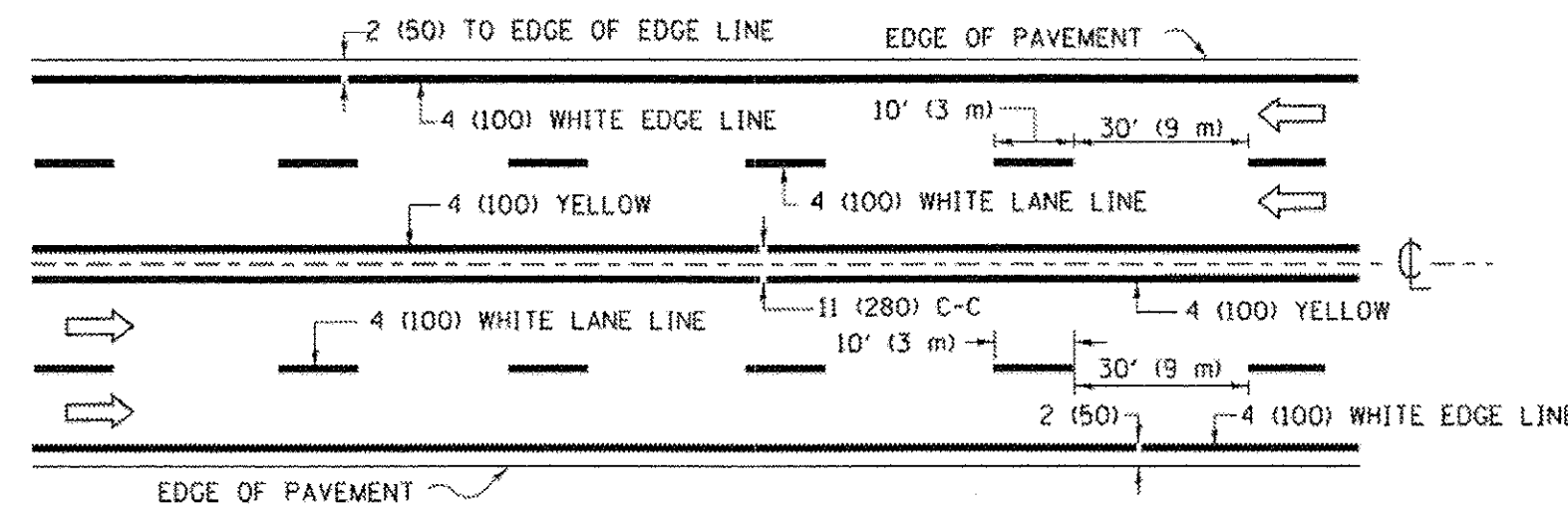
TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

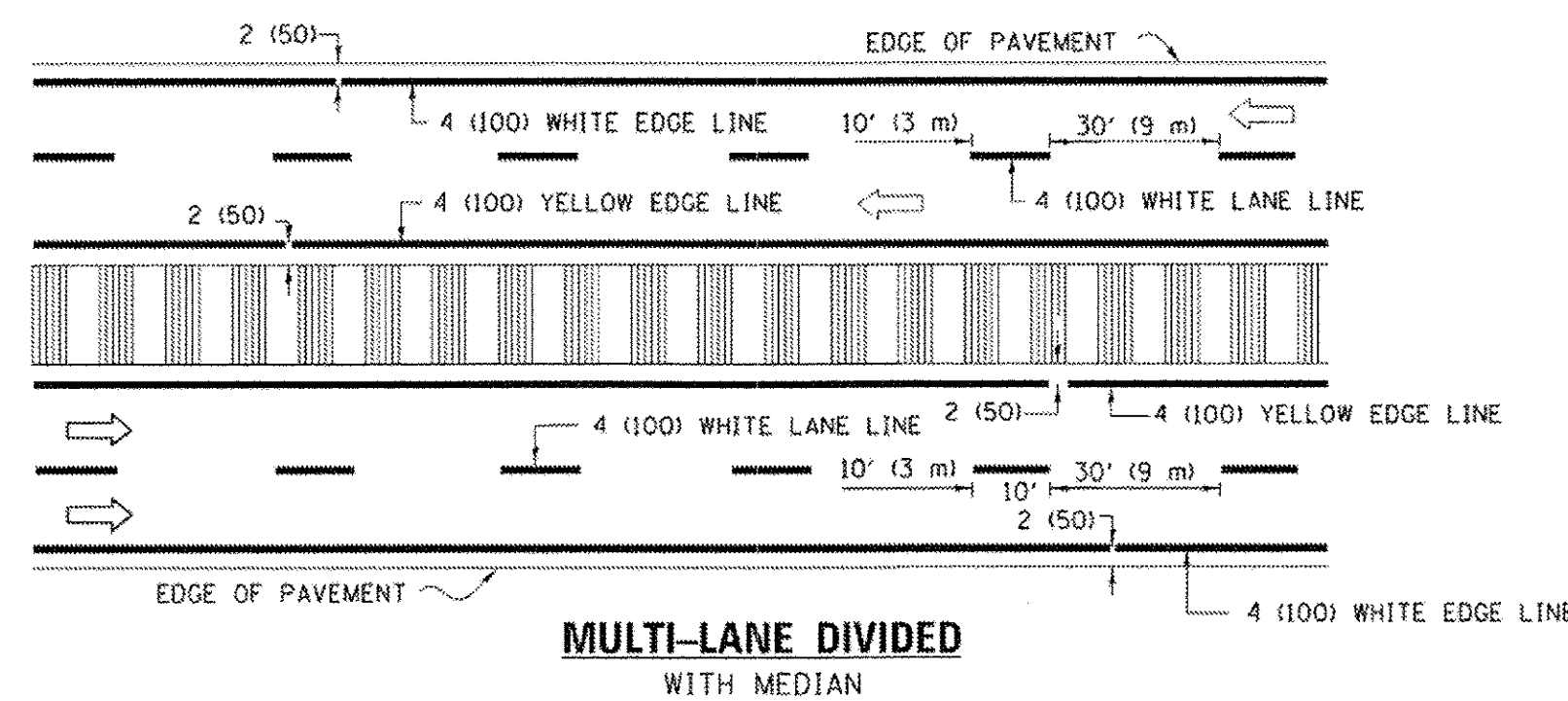
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| F.A.U. RTE. 1522 | SECTION 16-00310-00-RS | COUNTY DUPAGE | TOTAL SHEETS 18 | SHEET NO. 13 |
| TC-11 | | CONTRACT NO. 61D04 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



2-LANE ROADWAY

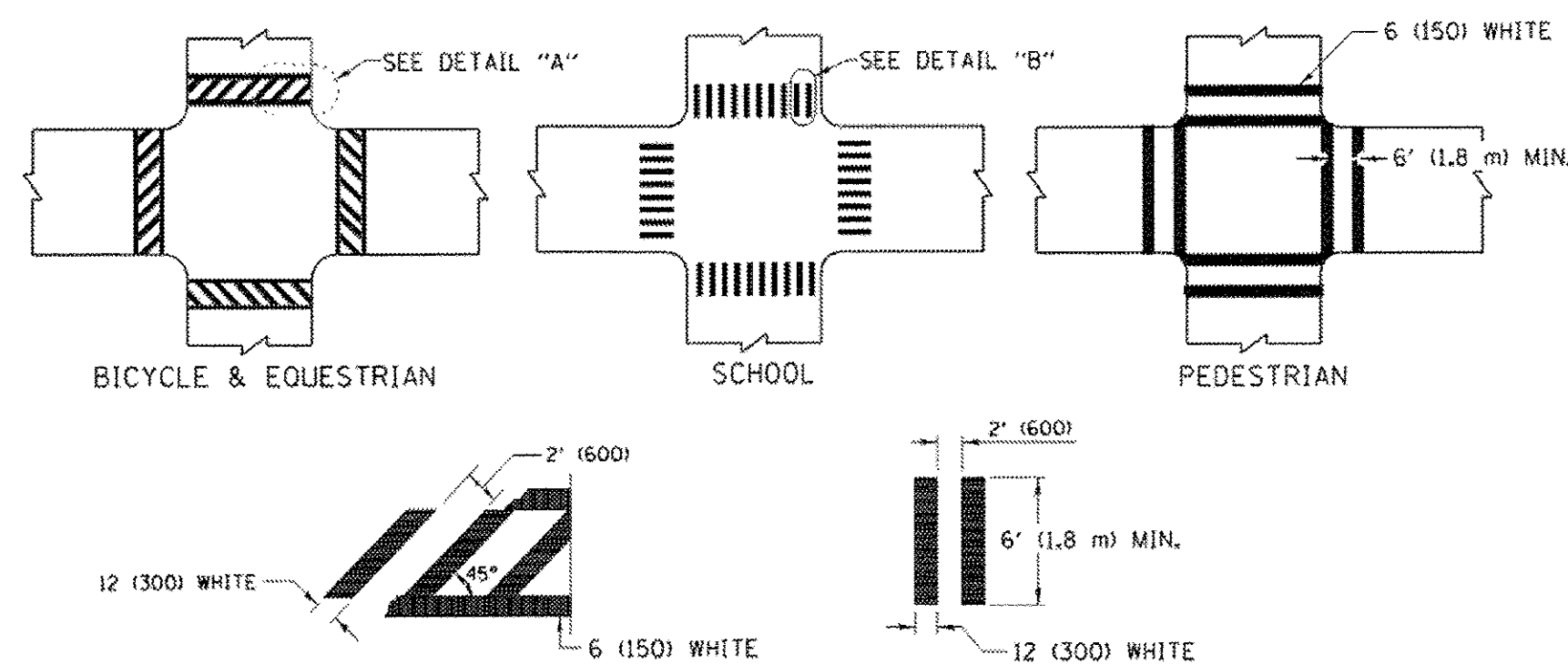


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

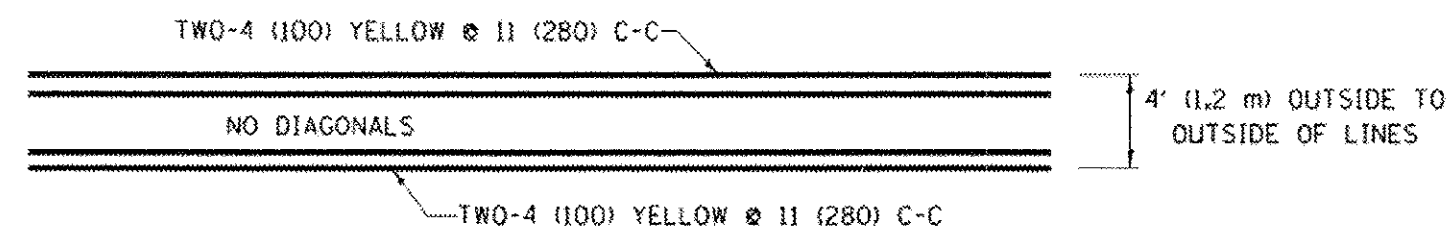


DETAIL "A"

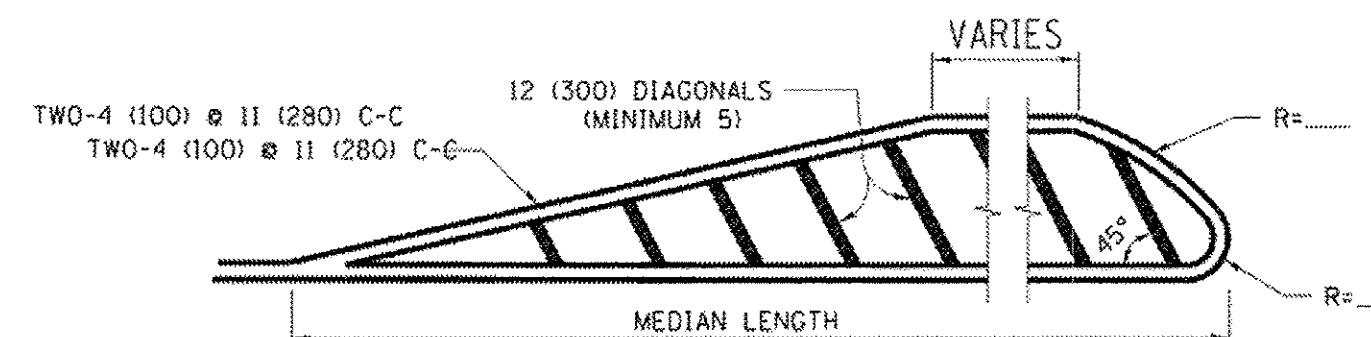
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

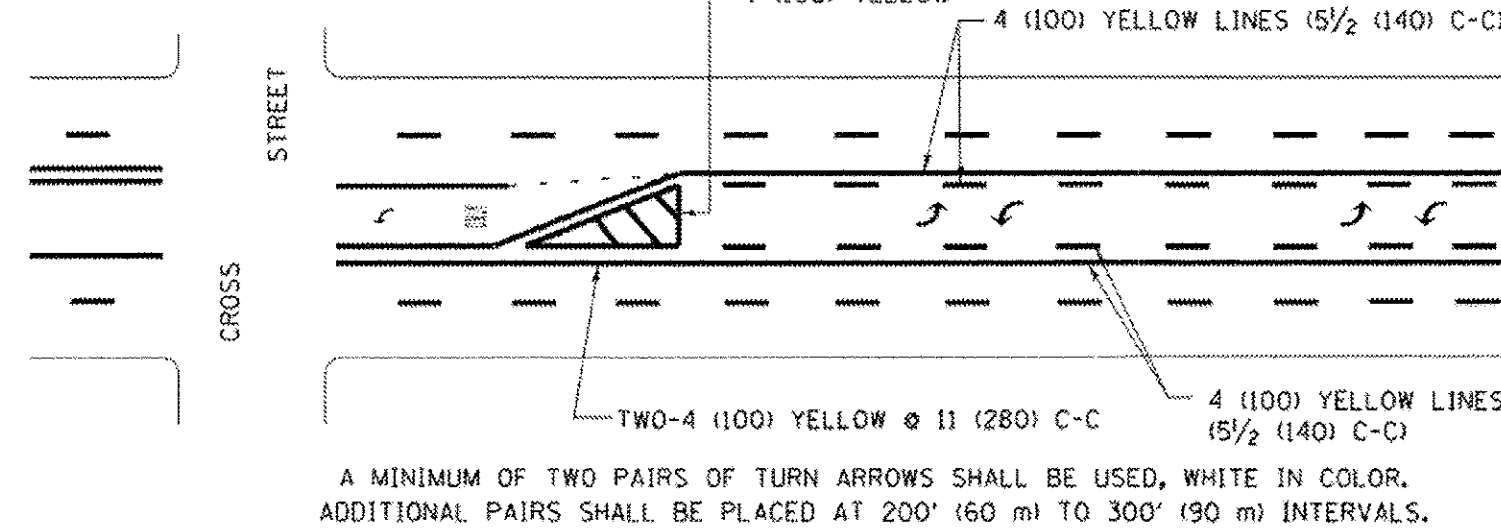


4' (1.2 m) WIDE MEDIANS ONLY

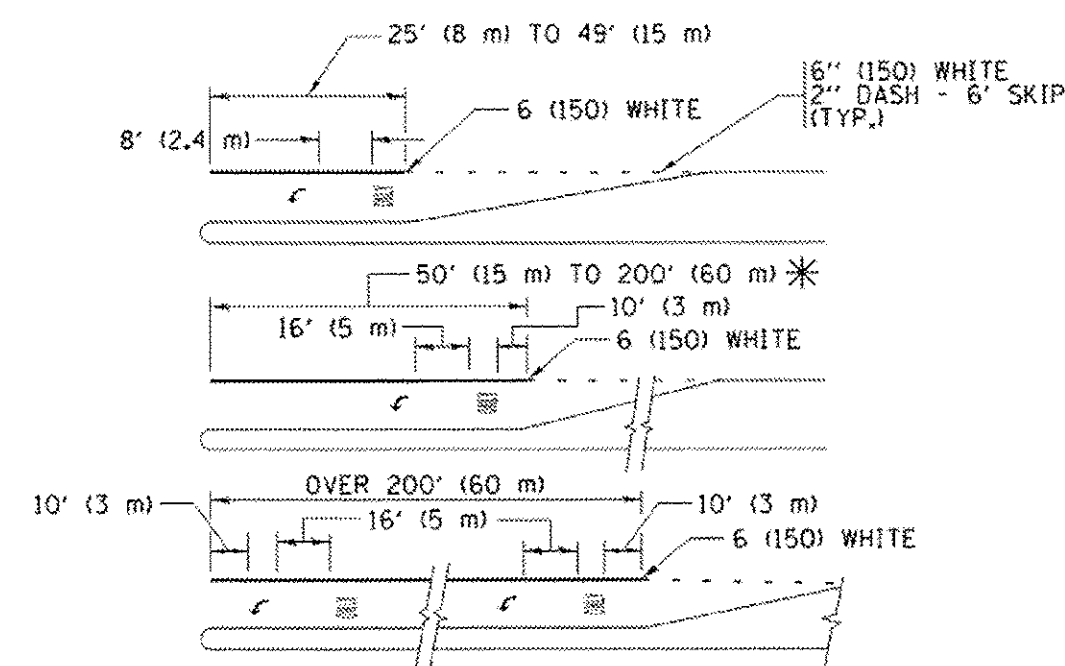


MEDIANS OVER 4' (1.2 m) WIDE

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))



**MEDIAN WITH TWO-WAY LEFT TURN LANE
TYPICAL PAINTED MEDIAN MARKING**

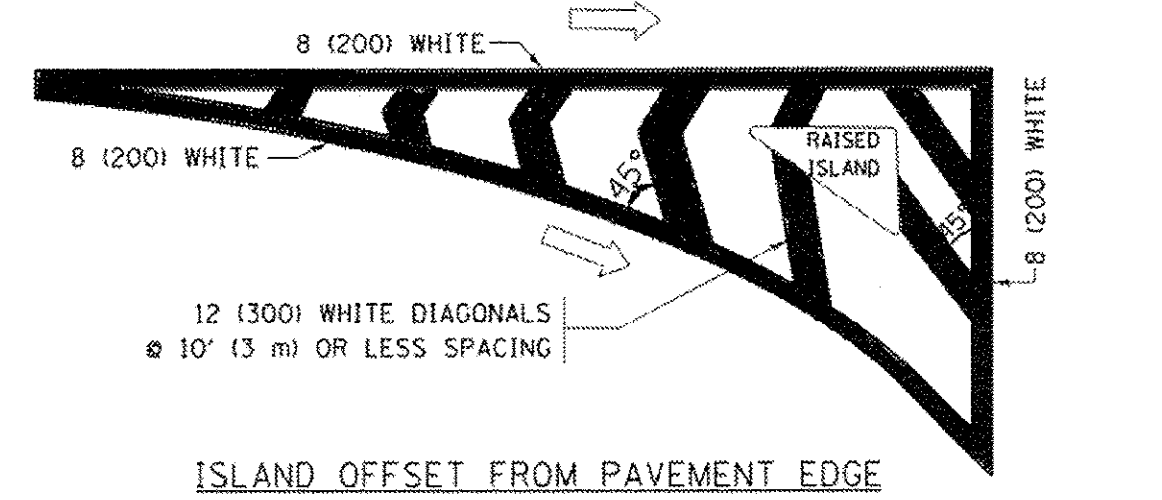


FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

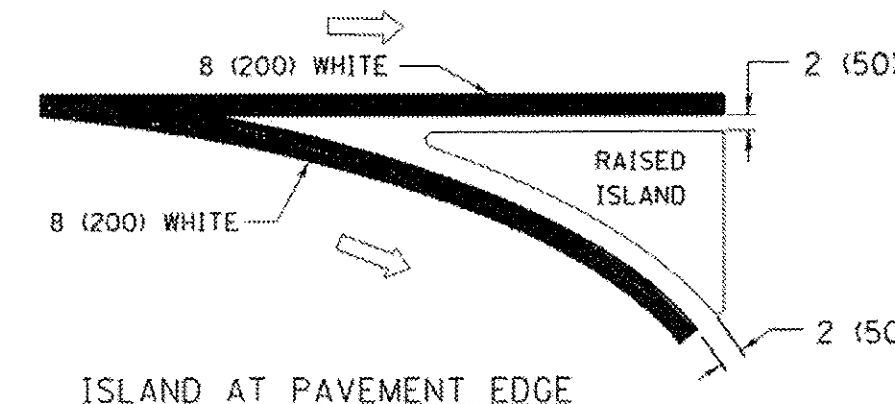
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

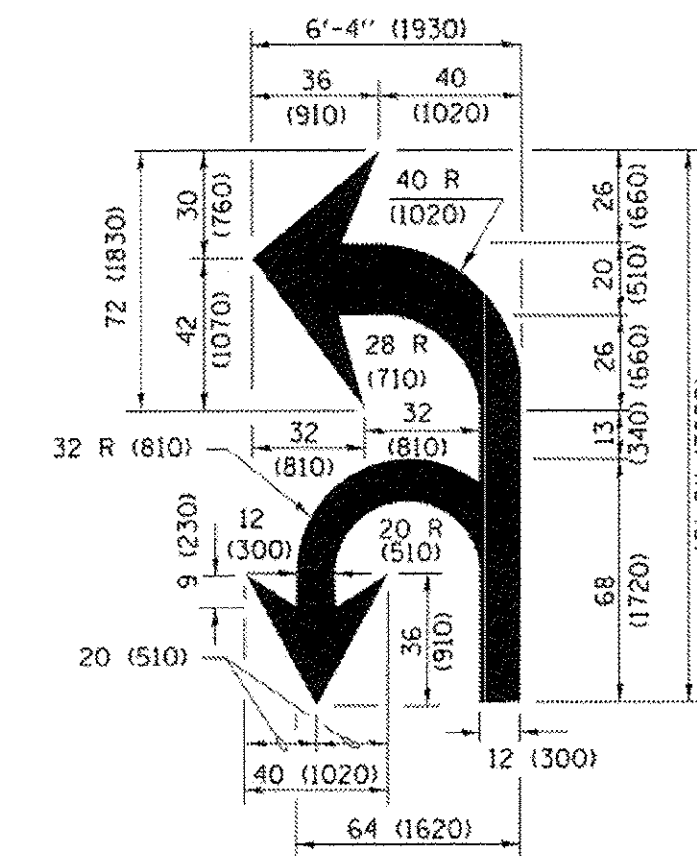


ISLAND OFFSET FROM PAVEMENT EDGE

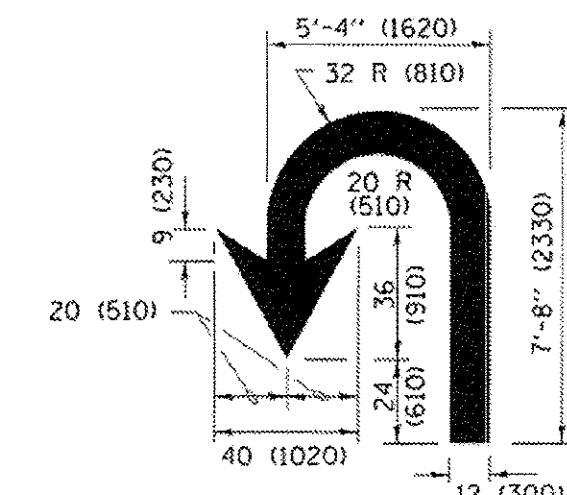


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

| D(FT) | SPEED LIMIT |
|-------|-------------|
| 345 | 30 |
| 425 | 35 |
| 500 | 40 |
| 580 | 45 |
| 665 | 50 |
| 750 | 55 |

| 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 FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5 1/2 (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 MEDIANS IN YELLOW |
| 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" IS 6' (1.8 m) 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) |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8') | 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)) |
| U TURN ARROW | SEE DETAIL | SOLID | WHITE | 16.3 SF |
| 2 ARROW COMBINATION LEFT AND U TURN | SEE DETAIL | SOLID | WHITE | 30.4 SF |

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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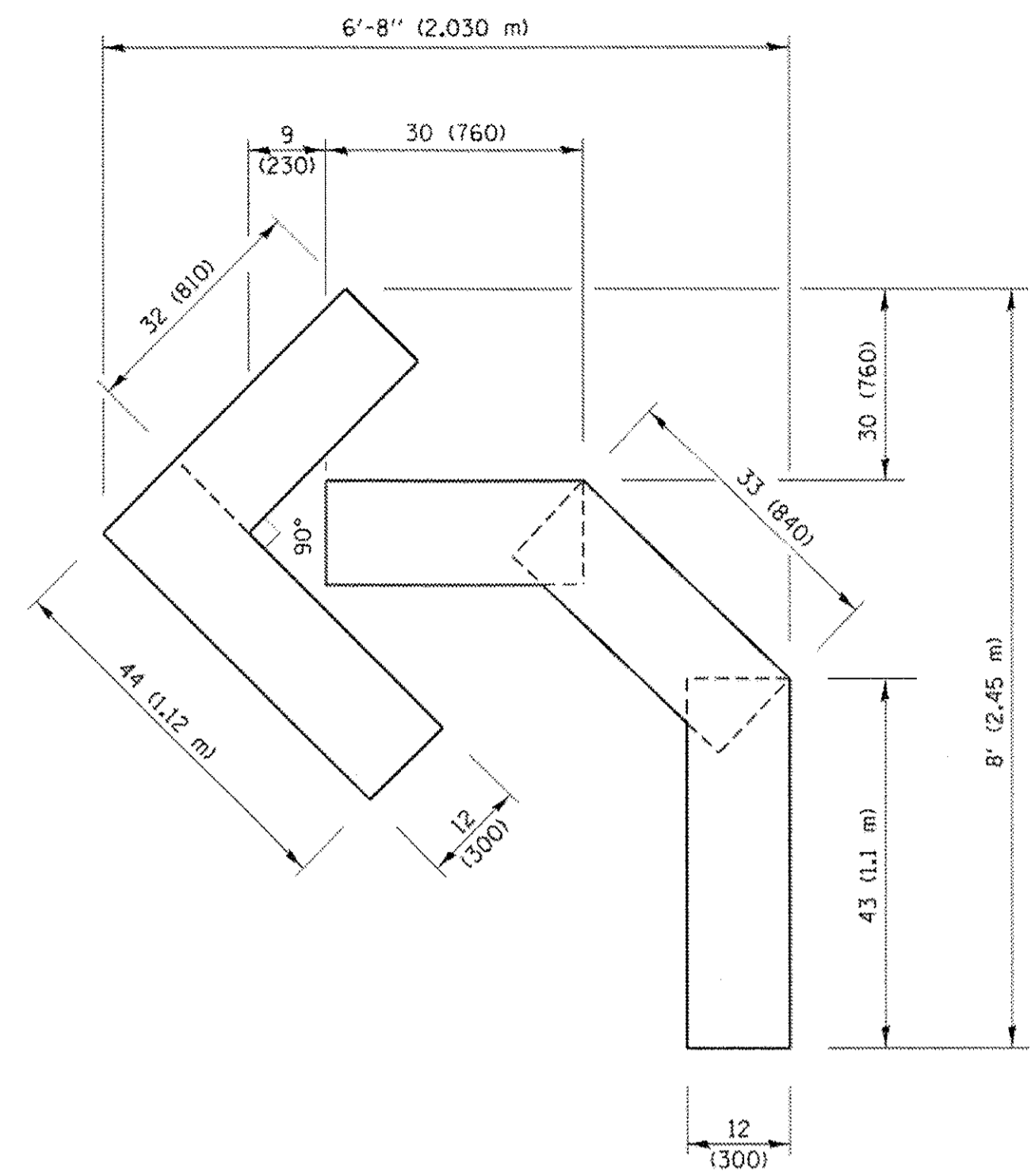
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| DATE = 4/13/2016 | DATE = 03-19-90 | DATE = 03-19-90 | REVISED - C. JUCIUS 12-21-15 |
| | | | REVISED - C. JUCIUS 04-12-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

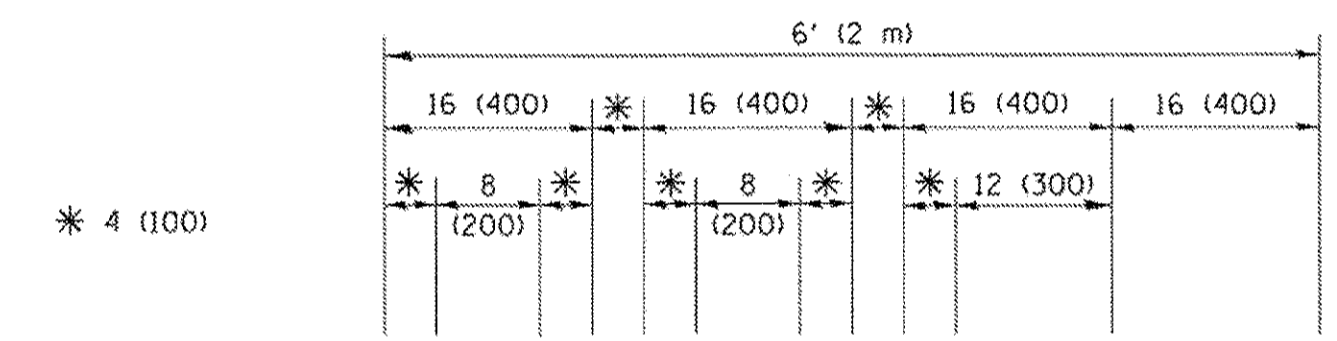
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 14 |
| TC-13 | | CONTRACT NO. 61D04 | | |
| ILLINOIS FED. AID PROJECT | | | | |

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.



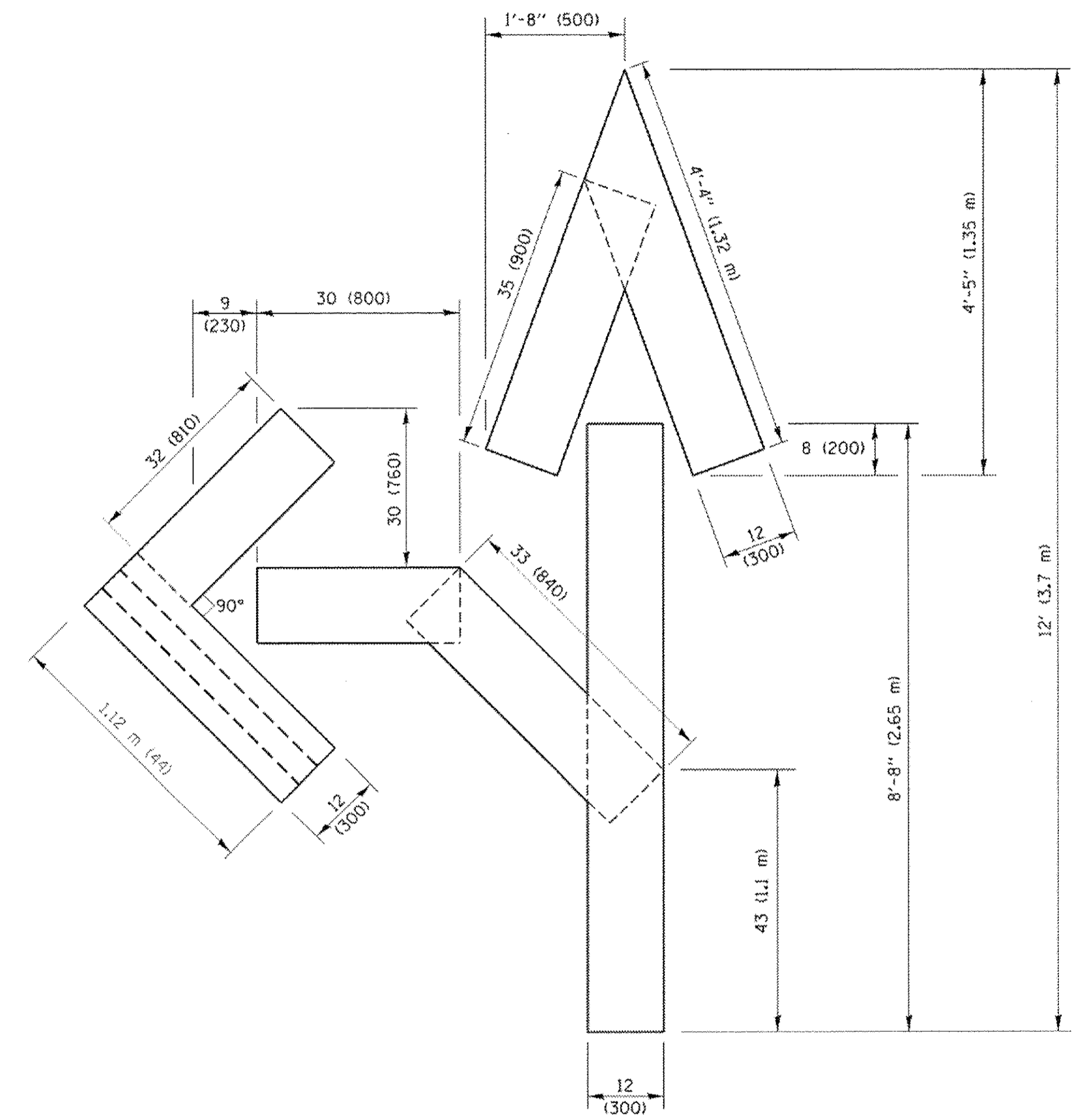
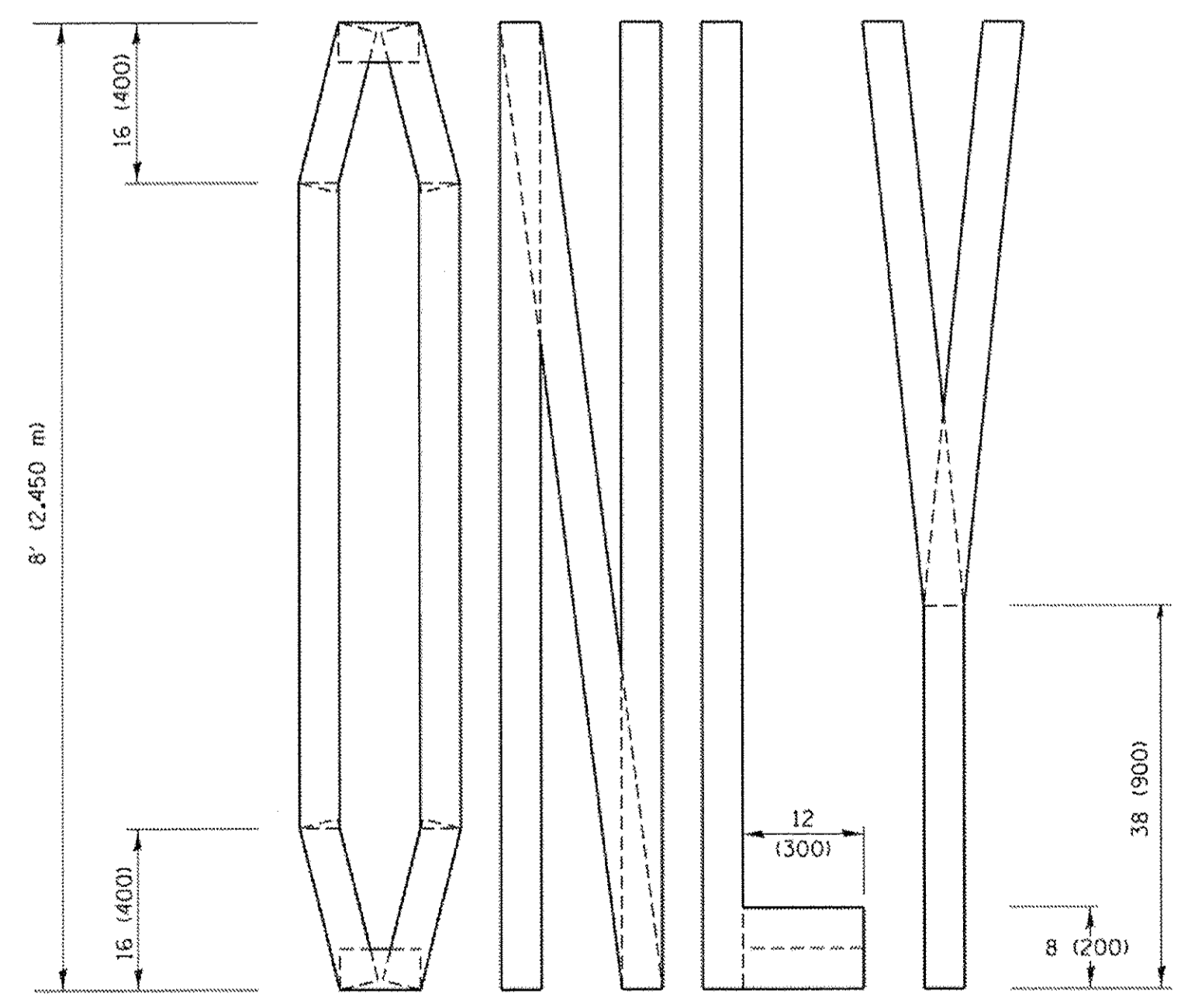
QUANTITY

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



QUANTITY

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

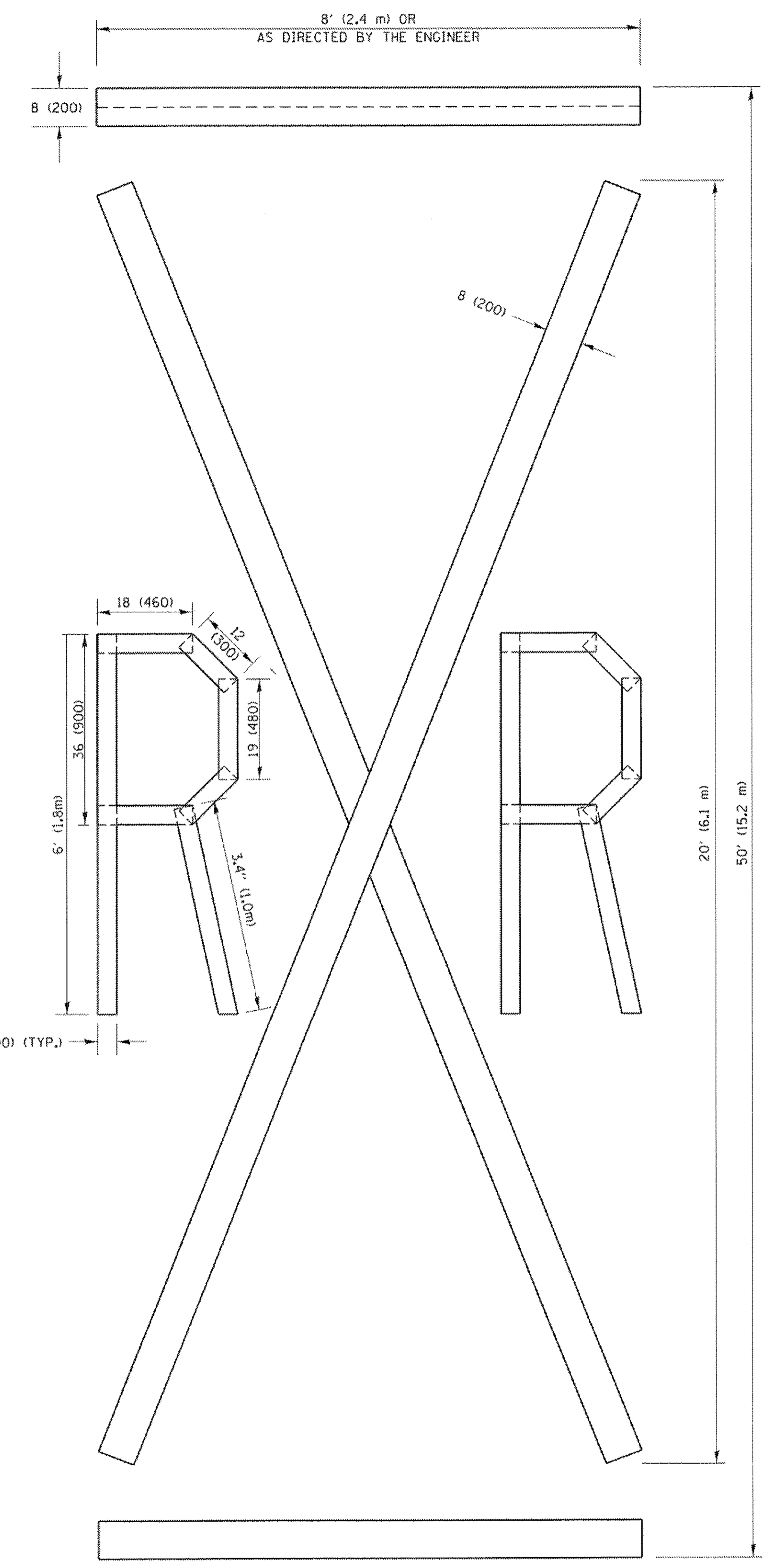


QUANTITY

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

NOTE:

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



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

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

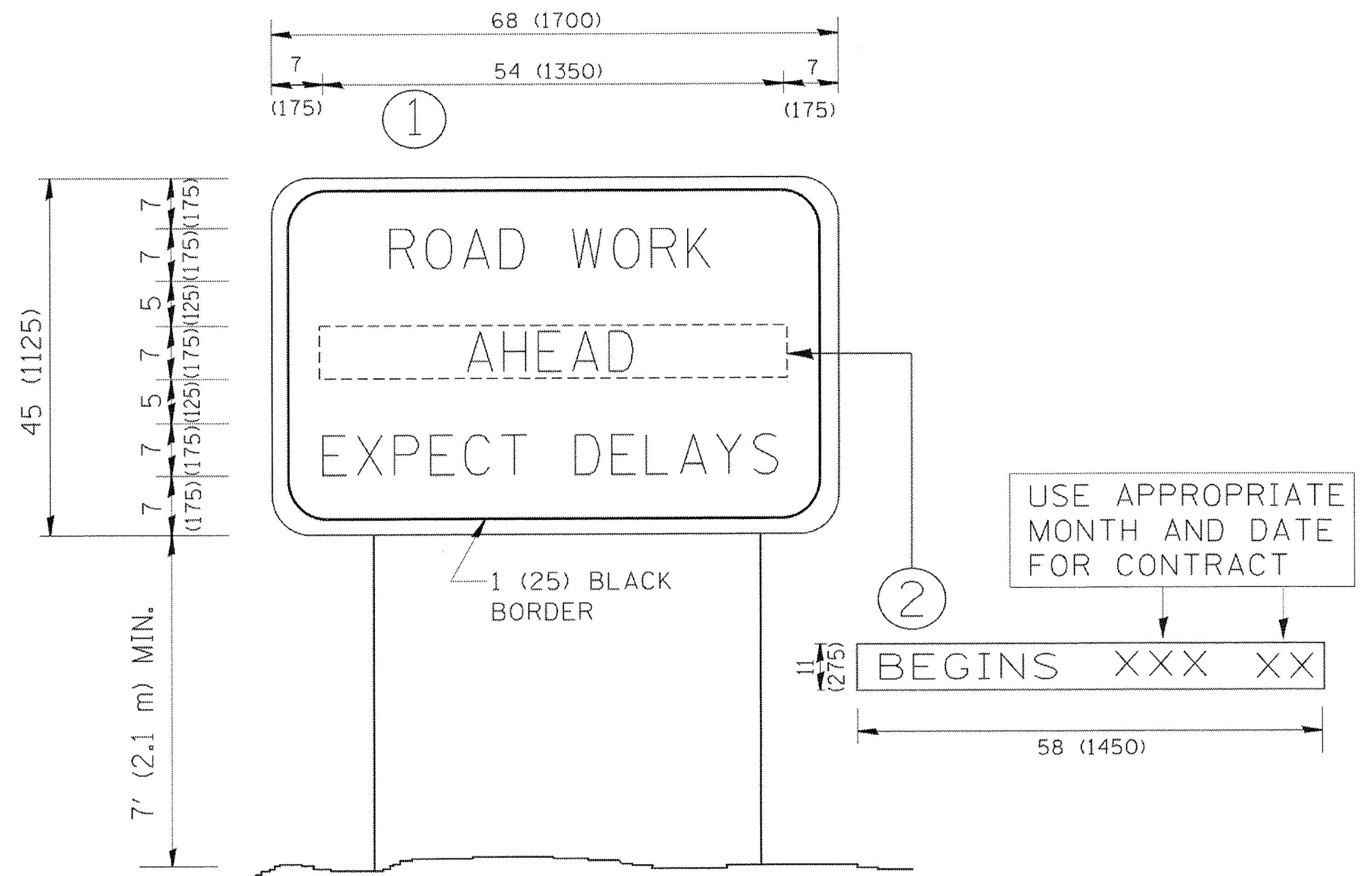
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| | PLOT SCALE = 50,0000' / in. | CHECKED - | REVISED - E. GOMEZ 08-28-00 |
| | PLOT DATE = 9/15/2016 | DATE = 09-18-94 | REVISED - A. SCHUETZE 09-15-16 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS | | | |
|---|-------------------------|------|---------|
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------------|--------------|-----------|
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 15 |
| TC-16 | | CONTRACT NO. | 61D04 | |
| 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.

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 HRG PROJ CONTACT: 866003-shr-der-1c22.dgn
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| | PLOT SCALE = 50.000 / / IN. | CHECKED - | REVISED - T. RAMMACHER 02-02-99 |
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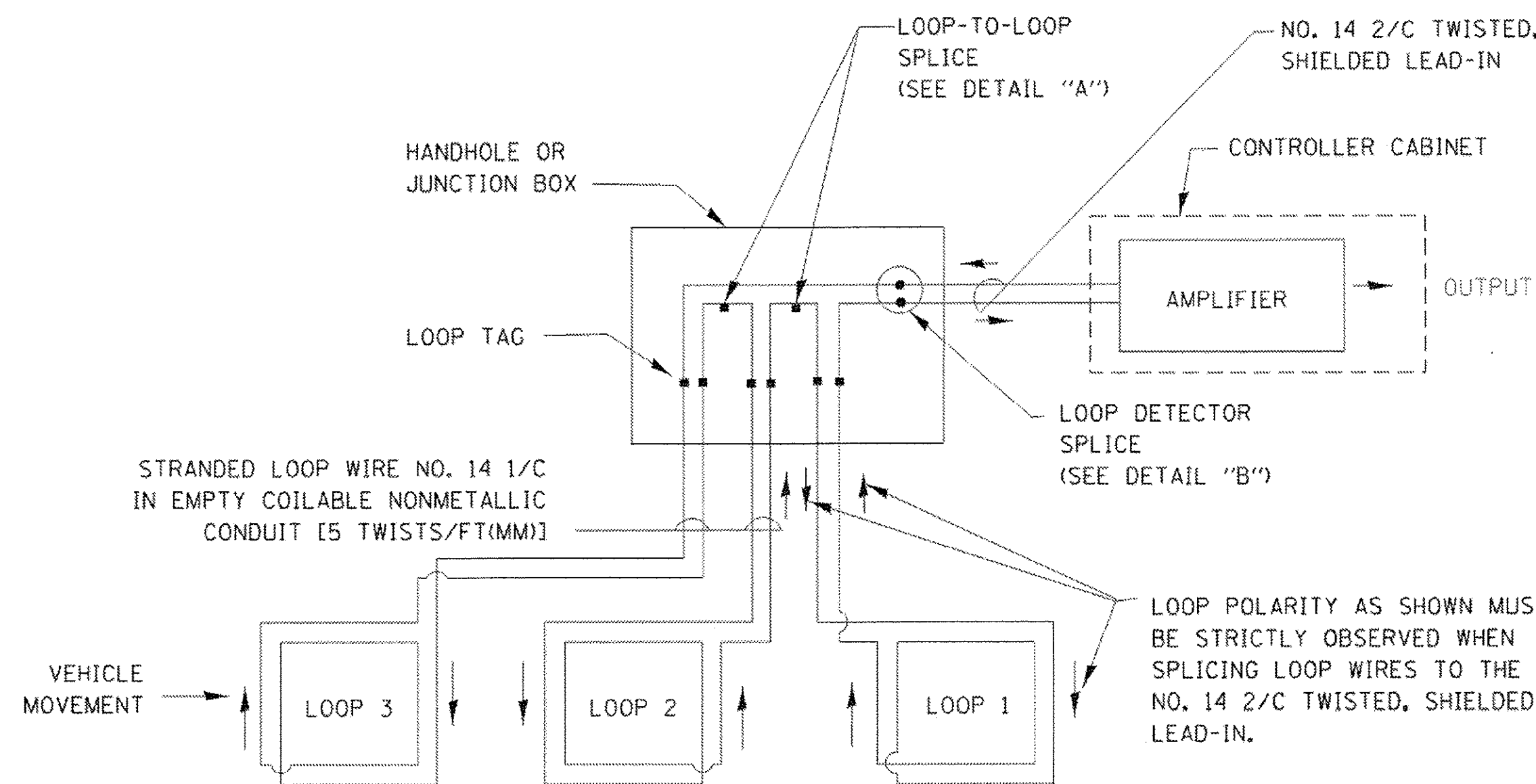
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|---|-------------------------|------|---------|
| ARTERIAL ROAD INFORMATION SIGN | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|----------------|---------------------------|--------------|-----------|
| F.A.D. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 16 |
| TC-22 | | CONTRACT NO. 61D04 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

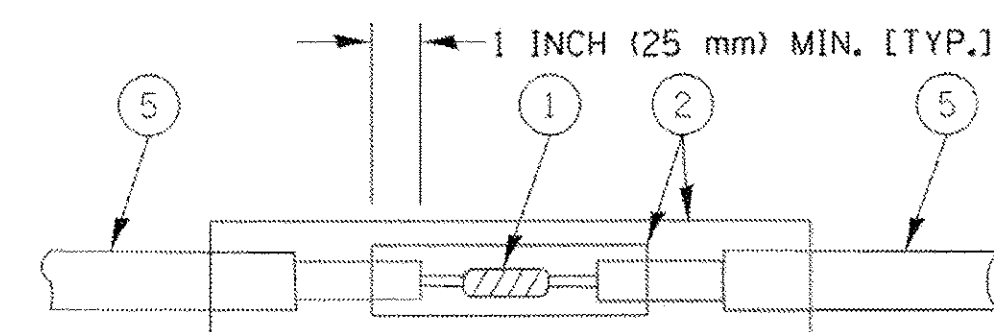
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR CABLE IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

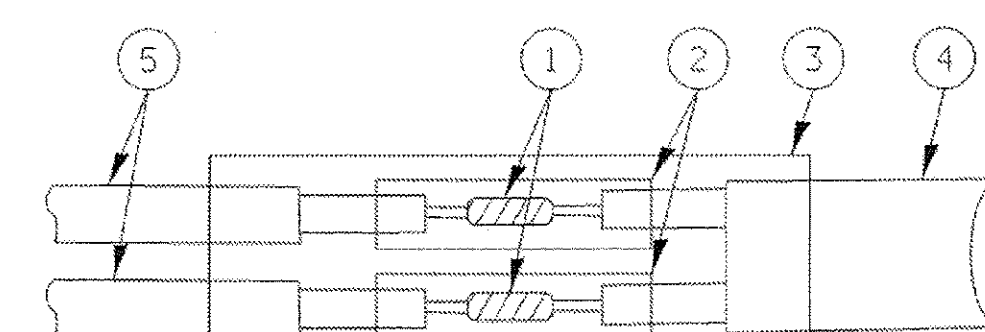


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

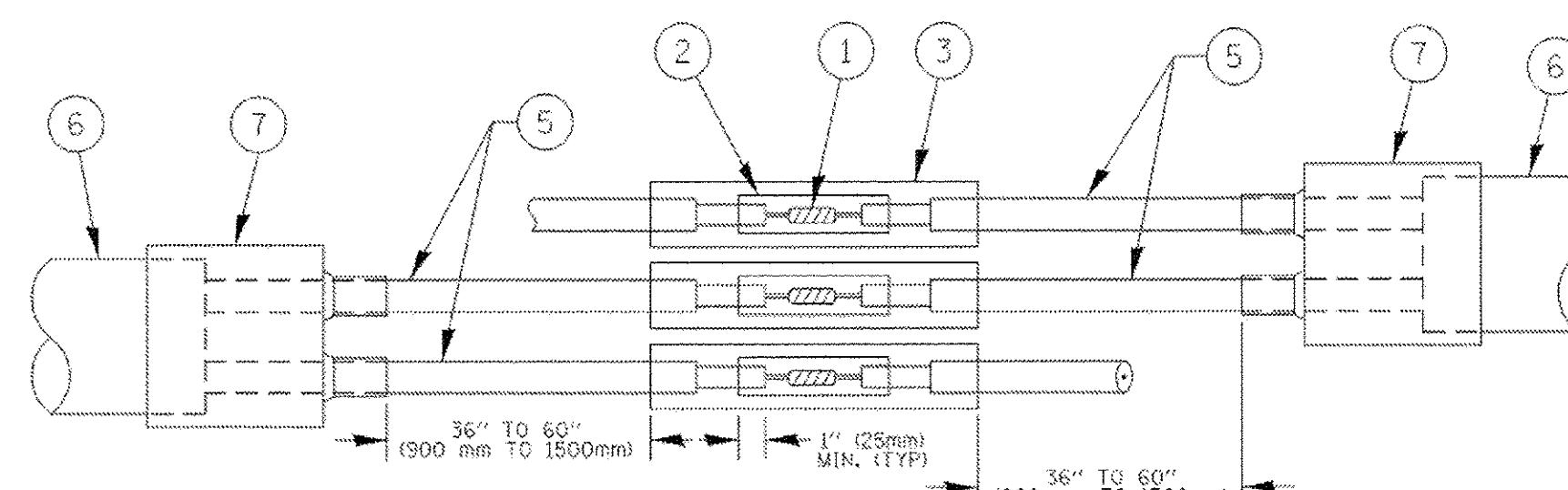


DETAIL "A"
LOOP-TO-LOOP SPLICE

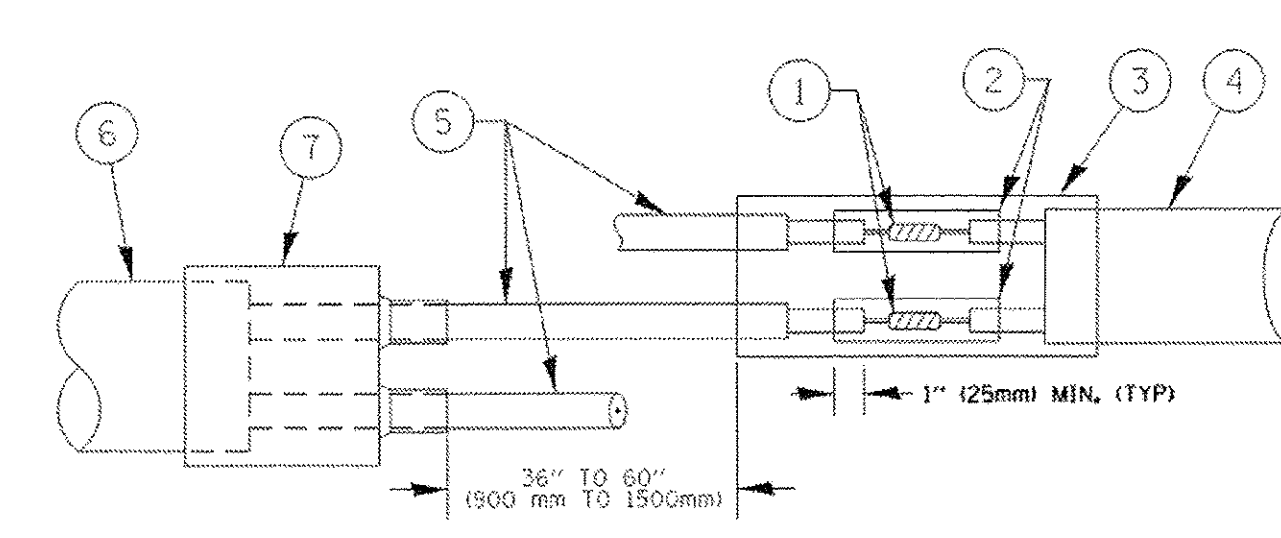


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



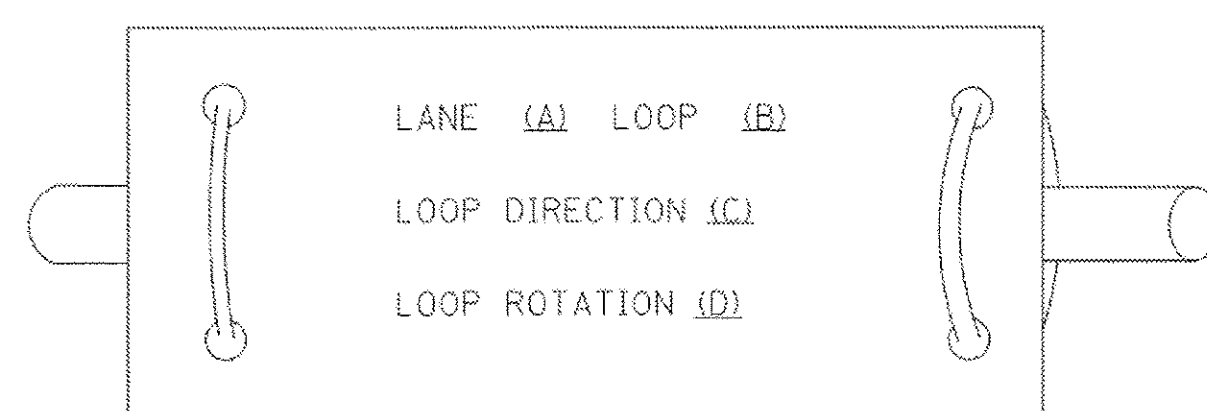
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

LOOP LEAD-IN CABLE TAG



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

HRG PROJECT NO.: 06160037
 HRG PROJ CONTACT: 06160037-shr-dpt-1s05b.dgn
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| | PLOT DATE = 1/13/2014 | DATE - 10-28-09 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

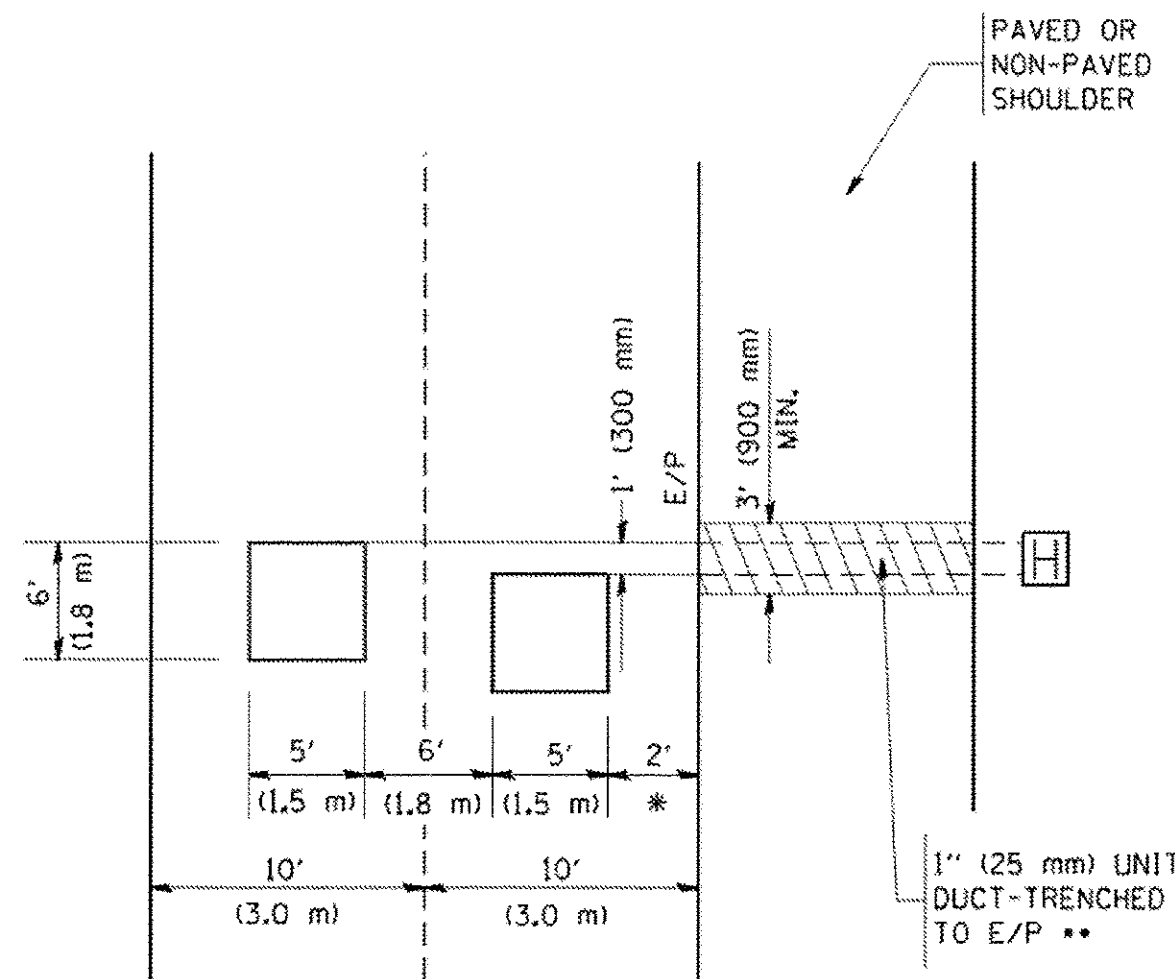
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.

| | | | | |
|---|-------------------------|----------------|------------------|---------------|
| F.A.U. RTE.: 1522 | SECTION: 16-00310-00-RS | COUNTY: DUPAGE | TOTAL SHEETS: 18 | SHEET NO.: 17 |
| TS-05 | | CONTRACT NO.: | 61D04 | |
| 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.

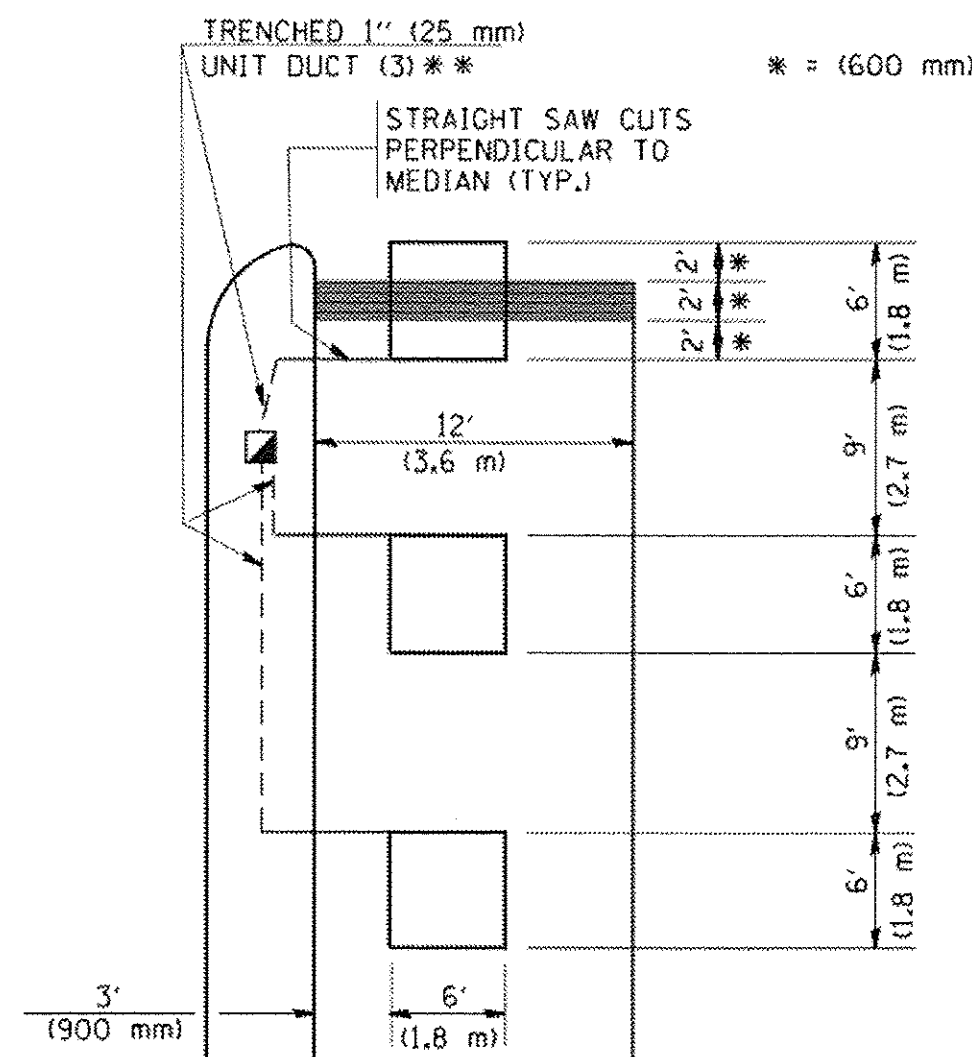


* = (600 mm)
 ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

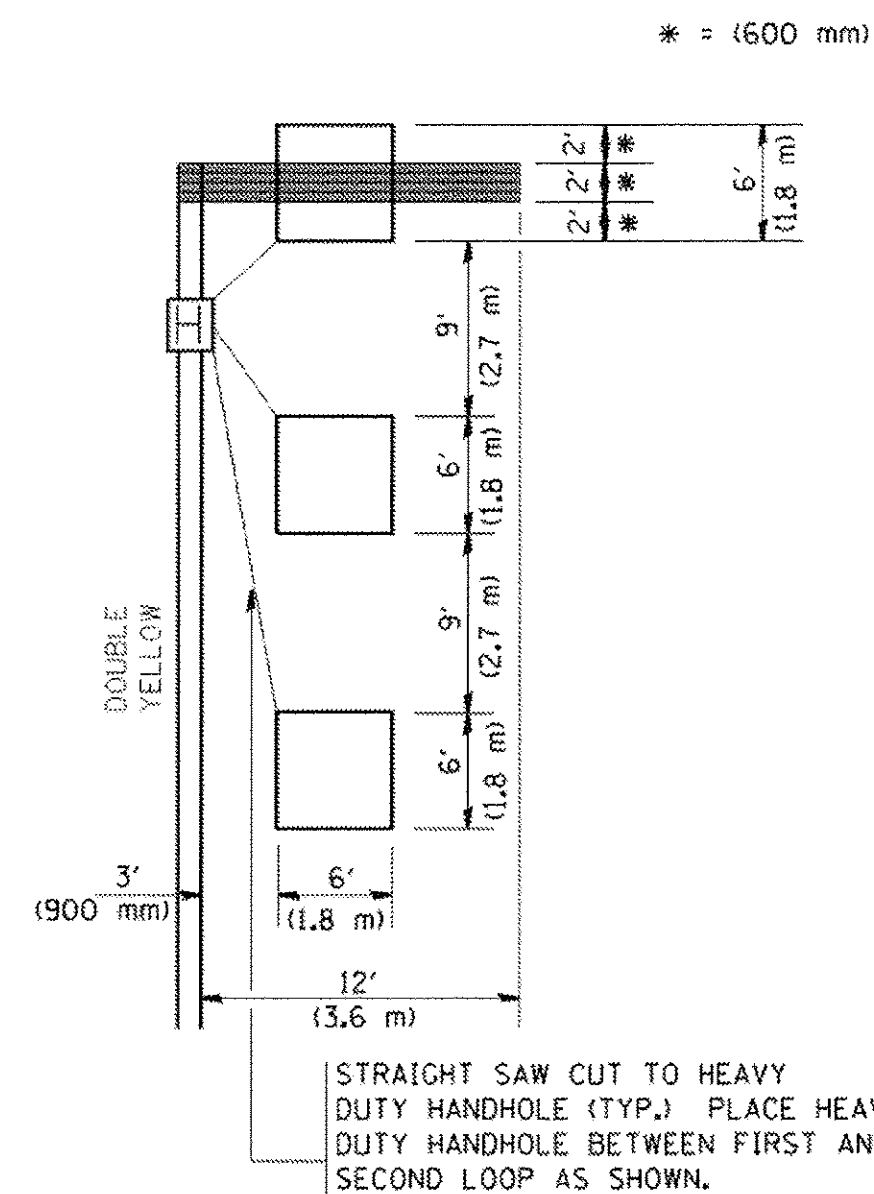
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** 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)



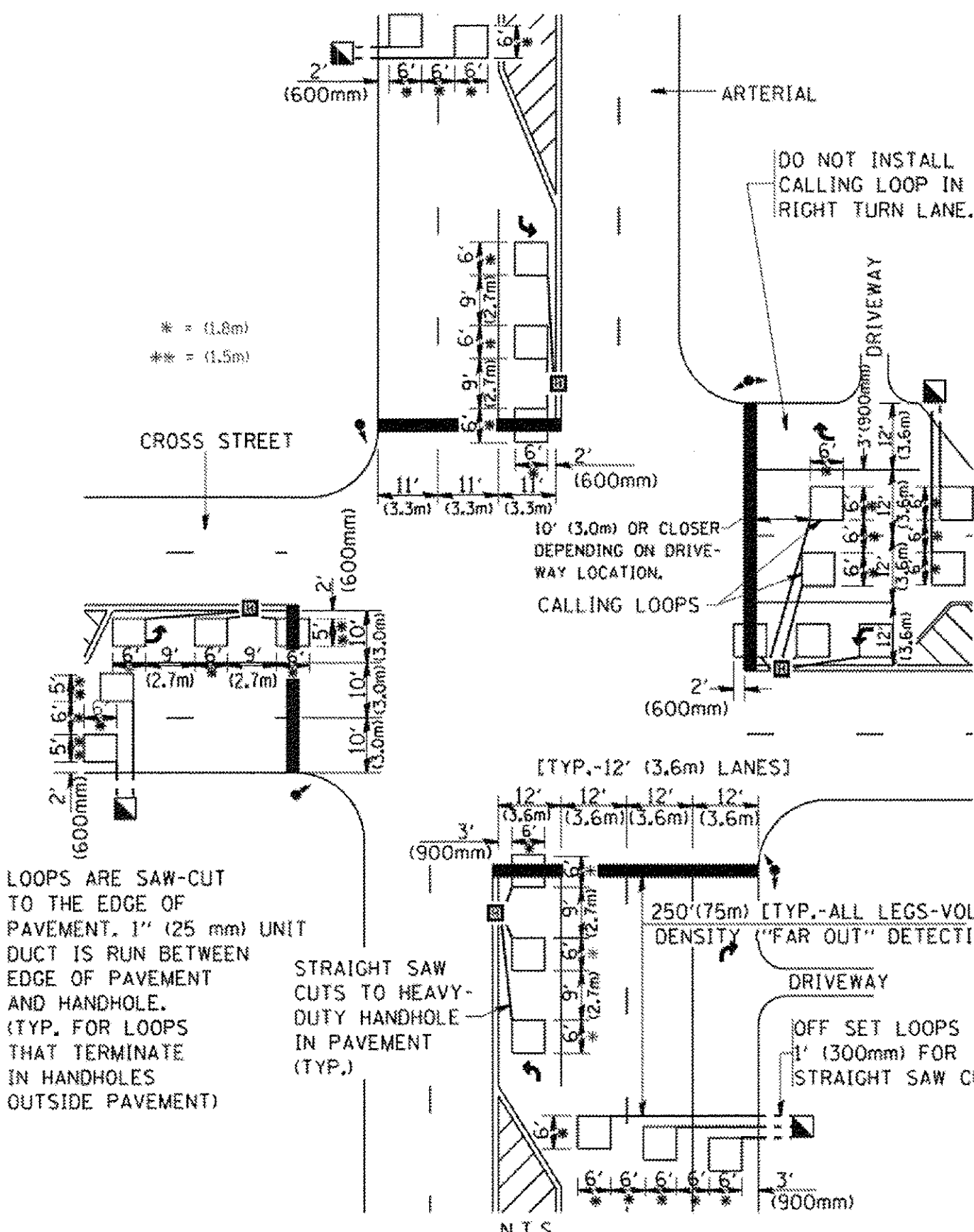
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)**

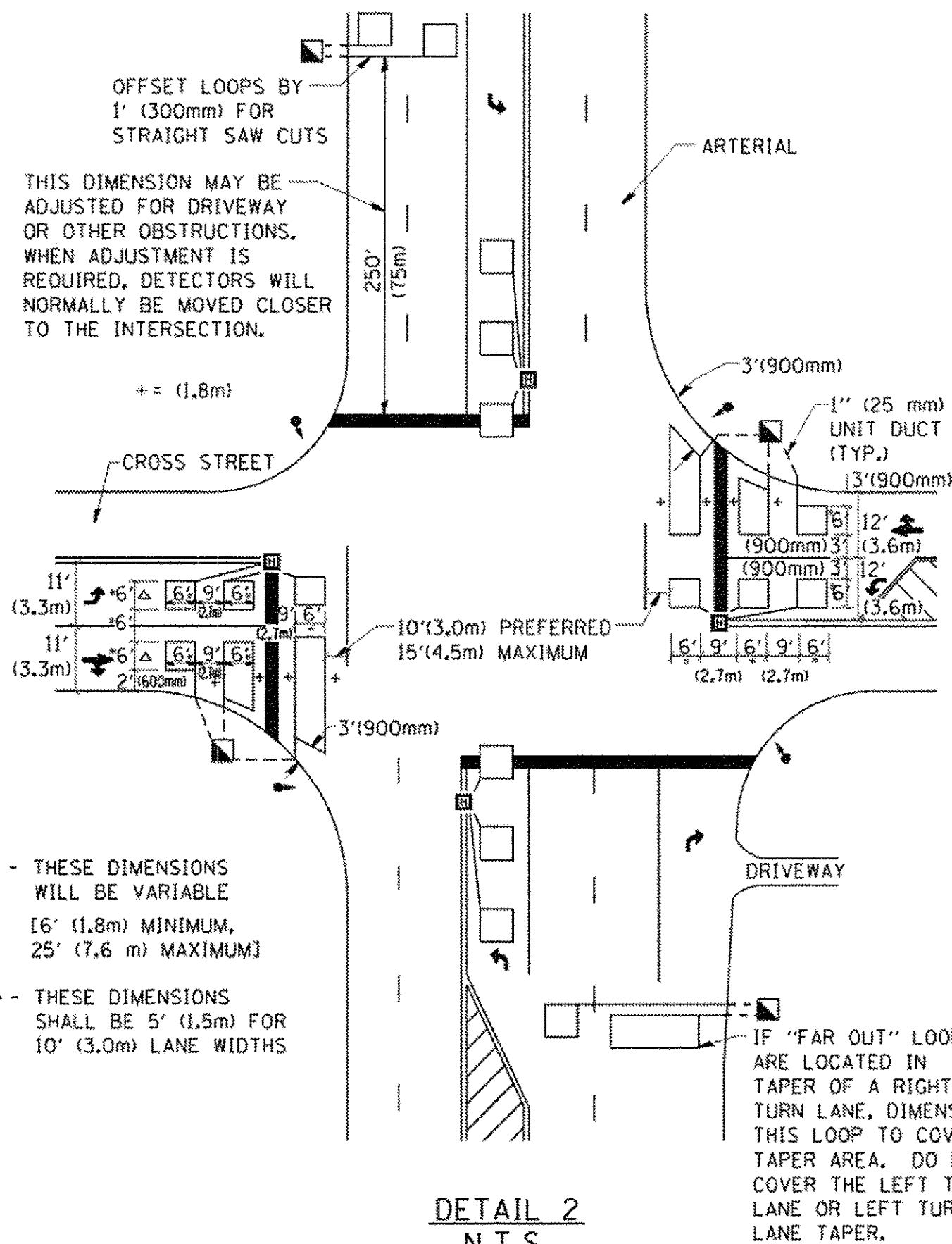


LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

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)**



OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS
 THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION.

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

HRG PROJECT NO.: 866003I
 HRG PROJ CONTACT: 866003I-sht-det-ts07.dgn
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 PLOT DRIVER: plottbl.tbl
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|---------------------------|------------------------|
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| W:\distatd\22x34\ts07.dgn | |

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| DESIGNED - | REVISD - |
| DRAWN - | REVISD - |
| CHECKED - R.K.F. | REVISD - |
| DATE - | REVISD - |

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|--------------|-------------------------|------|---------|
| SCALE = NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |
|--------------|-------------------------|------|---------|

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION
 DETAILS FOR ROADWAY RESURFACING**

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------------|-----------|
| 1522 | 16-00310-00-RS | DUPAGE | 18 | 18 |
| TS-07 | | | CONTRACT NO. 61D04 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |