

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. 347 (ROOSEVELT ROAD)
SECTION: 2009-035 RS
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
RESURFACING

COOK COUNTY
C-91-398-09

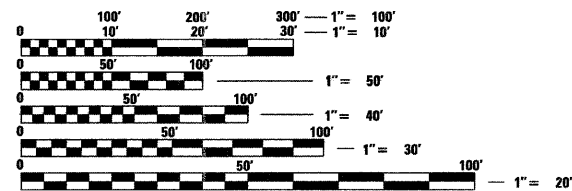
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|-----------------------|-------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 347 | 2009-035 RS | COOK | 27 | 1 |
| FED. ROAD DIST. NO. 1 | ILLINOIS | CONTRACT NO. 60G36 | | |

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THESE IMPROVEMENTS ARE LOCATED
WITHIN THE VILLAGES OF FOREST PARK AND OAK PARK,
THE TOWN OF CICERO, AND THE CITY OF BERWYN

TRAFFIC DATA

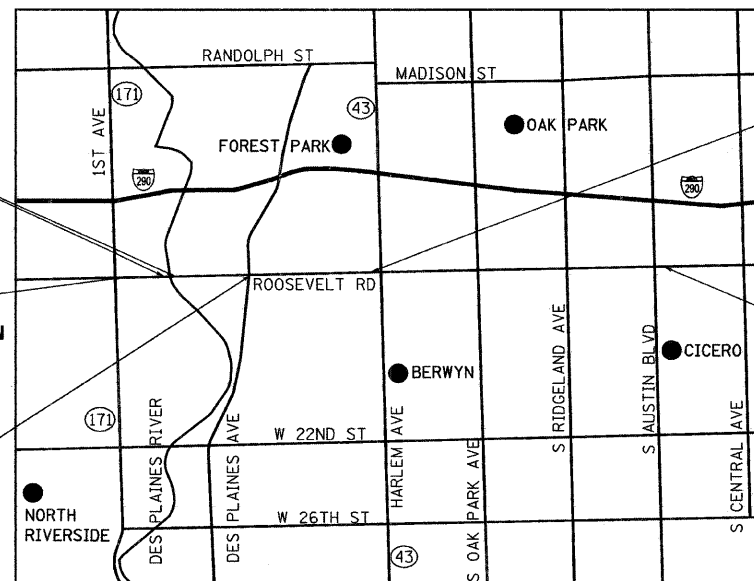
2006 ADT - 26,600
POSTED SPEED LIMIT - 35 MPH



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

Ciorba Group, Inc.
DESIGN FIRM
REGISTRATION NUMBER
184-001016
CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE
CHICAGO, ILLINOIS 60656 ☎ (773) 775-4009



STA. 29 + 59
OMISSION
STA. 31 + 79

BEGIN PROJECT
STA. 18 + 14

BEGIN OMISSION
STA. 54 + 60

END OMISSION
STA. 90 + 22

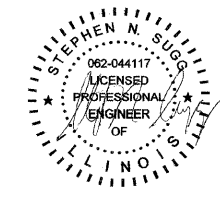
END PROJECT
STA. 177 + 94

R 12E | R 13E

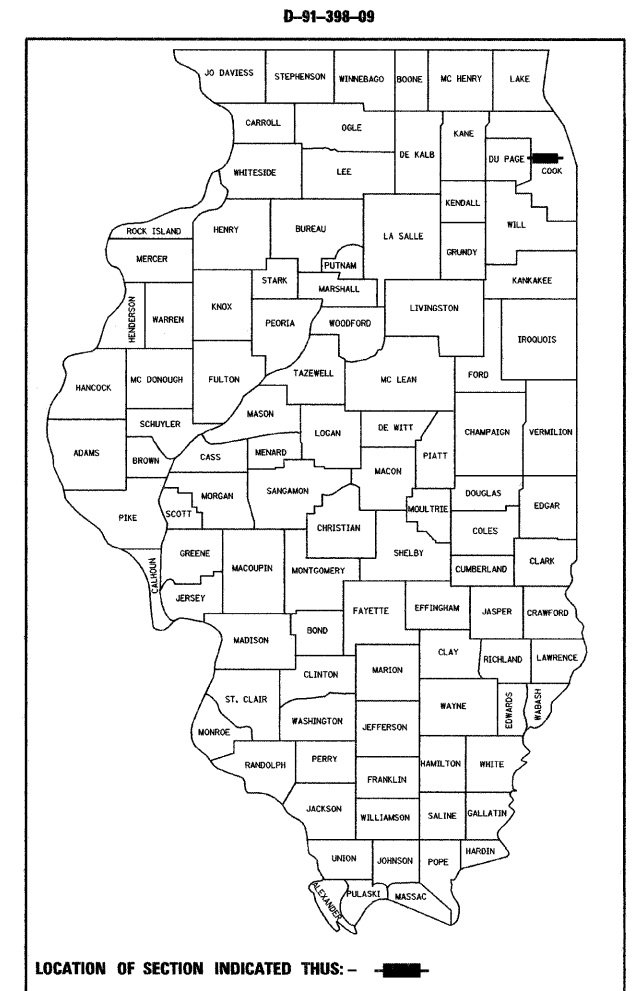
PROVISO, BERWYN, OAK PARK,
AND CICERO TOWNSHIPS

LOCATION MAP
1" = 2500'

GROSS LENGTH OF PROJECT = 15,980 FT = 3.03 MI.
NET LENGTH OF PROJECT = 12,198 FT = 2.31 MI.



DATE: 4/2/2009
SEAL EXPIRES: 11/30/2009



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED APRIL 6, 2009
Diana M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 1, 2009
Charles J. Ingersoll ENGINEER OF DESIGN AND ENVIRONMENT
May 1, 2009
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: K. ENG (847)705-4247

CONTRACT NO. 60G36

INDEX OF SHEETS

SHEET NO DESCRIPTION

| | |
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| 27 | DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07) |

STATE STANDARDS

| | |
|-----------|---|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS |
| 442201-03 | CLASS C AND D PATCHES |
| 604001-03 | FRAME AND LIDS, TYPE 1 |
| 606001-04 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 701502-03 | URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE |
| 701606-06 | URBAN LANE CLOSURE, MULTI LANE, 2W WITH MOUNTABLE MEDIAN |
| 701701-06 | URBAN LANE CLOSURE, MULTI LANE INTERSECTION |
| 701801-04 | LANE CLOSURE MULTILANE 1W, 2W, CROSSWALK OR SIDEWALK CLOSURE |
| 701901-01 | TRAFFIC CONTROL DEVICES |
| 780001-02 | TYPICAL PAVEMENT MARKINGS |
| 886001-01 | DETECTOR LOOP INSTALLATIONS |
| 886006-01 | TYPICAL LAYOUTS FOR DETECTION LOOPS |

GENERAL NOTES

- 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)
- 10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIANS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

| | |
|--|--------------------|
| BITUMINOUS MATERIALS (PRIME COAT) | 0.0004 TONS/SQ YD |
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE | 112 LBS/SQ YD/INCH |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD) | 105 LBS/SQ YD/INCH |
- THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.
- TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER, AT (708) 597-9800.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1" (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" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
- BUTT JOINTS WILL BE INSTALLED AT THE END 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.
- FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
- MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS.
- ALL PATCHES OPENED ON A PARTICULAR DAY MUST BE FILLED THAT DAY TO THE TOP OF THE MILLED PAVEMENT SURFACE.

- IDOT TRAFFIC SIGNAL AND SYSTEM DETECTION LOOPS ARE PRESENT AT IL 171, DES PLAINES AVENUE, HARLEM AVENUE, OAK PARK AVENUE, EAST AVENUE, RIDGELAND AVENUE, AND AUSTIN BOULEVARD. THE CONTRACTOR MUST NOTIFY THE IDOT AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER AT (847) 705-4139 AND THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO BEGINNING WORK, AT WHICH TIME ARRANGEMENTS WILL BE MADE TO ADJUST THE TRAFFIC CONTROLLER TIMING TO COMPENSATE FOR THE ABSENCE OF DETECTION. REPLACEMENT OF LOOPS DOES NOT REQUIRE MAINTENANCE TRANSFER, BUT DOES REQUIRE NOTIFICATION OF WORK AND INSPECTION. COORDINATION WITH THE DISTRICT IS CONSIDERED INCIDENTAL TO THIS CONTRACT.
- CONTINGENCY QUANTITIES HAVE BEEN INCLUDED FOR THE FOLLOWING ITEMS TO BE USED AT THE DIRECTION OF THE ENGINEER:

60406000 FRAMES AND LIDS, TYPE 1, OPEN LID - 5 EACH
 60406100 FRAMES AND LIDS, TYPE 1, CLOSED LID - 5 EACH

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 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

| | | |
|-------------------------------|---------------|-----------|
| USER NAME = alau | DESIGNED AL | REVISED - |
| | DRAWN RJR | REVISED - |
| PLOT SCALE = 1.0000' / 1" IN. | CHECKED WBL | REVISED - |
| PLOT DATE = 4/8/2009 | DATE 03/27/09 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | |
|---|---------------------------------------|
| ROOSEVELT ROAD | |
| IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD | |
| INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES | |
| SCALE: | SHEET NO. 2 OF 27 SHEETS STA. TO STA. |

| | | | | |
|---|-------------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 347 | 2009-035 RS | COOK | 27 | 2 |
| FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT | | | CONTRACT NO. 60636 | |

| SUMMARY OF QUANTITIES | | | URBAN 100% STATE | CONSTRUCTION TYPE CODE |
|-----------------------|--|--------|---------------------|---------------------------|
| CODE NO. | DESCRIPTION | UNIT | TOTAL QUANTITY | ROADWAY 1000 |
| 35501316 | HOT-MIX ASPHALT BASE COURSE, 8" | SQ YD | 35 | 35 |
| 40201000 | AGGREGATE FOR TEMPORARY ACCESS | TON | 25 | 25 |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 56 | 56 |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 290 | 290 |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 72 | 72 |
| 40600535 | LEVELING BINDER (HAND METHOD), N70 | TON | 30 | 30 |
| 40600895 | CONSTRUCTING TEST STRIP | EACH | 4 | 4 |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 1,280 | 1,280 |
| 40603310 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 | TON | 3 | 3 |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 | TON | 7,300 | 7,300 |
| 42400300 | PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH | SQ FT | 2,800 | 2,800 |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SQ YD | 71,900 | 71,900 |
| 44000200 | DRIVEWAY PAVEMENT REMOVAL | SQ YD | 40 | 40 |
| 44000600 | SIDEWALK REMOVAL | SQ FT | 2,800 | 2,800 |
| 44001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT | 1,300 | 1,300 |
| 44201798 | CLASS D PATCHES, TYPE I, 13 INCH | SQ YD | 100 | 100 |
| 44201803 | CLASS D PATCHES, TYPE II, 13 INCH | SQ YD | 860 | 860 |
| 44201807 | CLASS D PATCHES, TYPE III, 13 INCH | SQ YD | 470 | 470 |
| 44201809 | CLASS D PATCHES, TYPE IV, 13 INCH | SQ YD | 300 | 300 |
| 55039700 | STORM SEWERS TO BE CLEANED | FOOT | 3,700 | 3,700 |
| 60300305 | FRAMES AND LIDS TO BE ADJUSTED | EACH | 15 | 15 |
| 60300310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) | EACH | 225 | 225 |
| 60406000 | FRAMES AND LIDS, TYPE 1, OPEN LID | EACH | 5 | 5 |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID | EACH | 5 | 5 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 3 | 3 |

• DENOTES SPECIALTY ITEM

| SUMMARY OF QUANTITIES | | | URBAN 100% STATE | CONSTRUCTION TYPE CODE |
|-----------------------|--|-------|---------------------|---------------------------|
| CODE NO. | DESCRIPTION | UNIT | TOTAL QUANTITY | ROADWAY 1000 |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 |
| 70102622 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502 | L SUM | 1 | 1 |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 |
| 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | L SUM | 1 | 1 |
| 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 4,880 | 4,880 |
| 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 6,300 | 6,300 |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 88,200 | 88,200 |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6" | FOOT | 24,900 | 24,900 |
| 70300250 | TEMPORARY PAVEMENT MARKING - LINE 8" | FOOT | 1,100 | 1,100 |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 3,300 | 3,300 |
| 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24" | FOOT | 3,300 | 3,300 |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 19,600 | 19,600 |
| • 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 2,100 | 2,100 |
| • 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 29,400 | 29,400 |
| • 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 8,300 | 8,300 |
| • 78000500 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" | FOOT | 350 | 350 |
| • 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 1,100 | 1,100 |
| • 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 1,100 | 1,100 |
| • 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 960 | 960 |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 920 | 920 |
| • 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 3,200 | 3,200 |
| X0322256 | TEMPORARY INFORMATION SIGNING | SQ FT | 103 | 103 |
| X4067107 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON | 3,900 | 3,900 |
| Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED | EACH | 200 | 200 |

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Ciorba Group, Inc.
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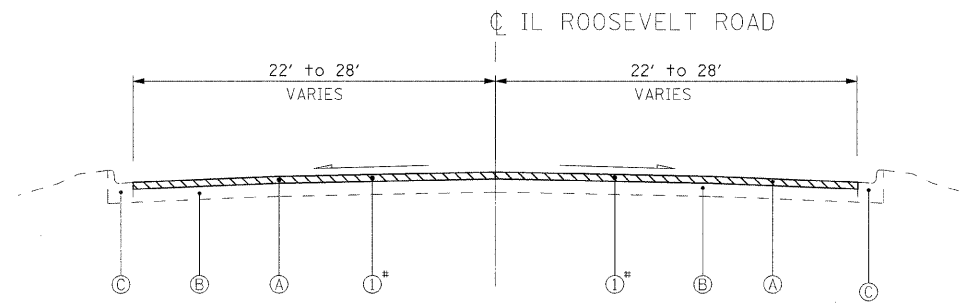
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| PLOT SCALE = 1:8000' / IN. | CHECKED WBL | REVISED - |
| PLOT DATE = 4/8/2009 | DATE 03/27/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

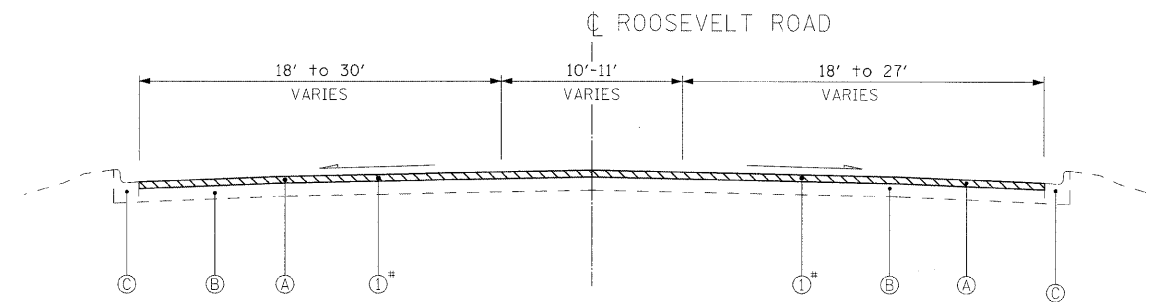
ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
SUMMARY OF QUANTITIES

SCALE: SHEET NO. 3 OF 27 SHEETS STA. TO STA.

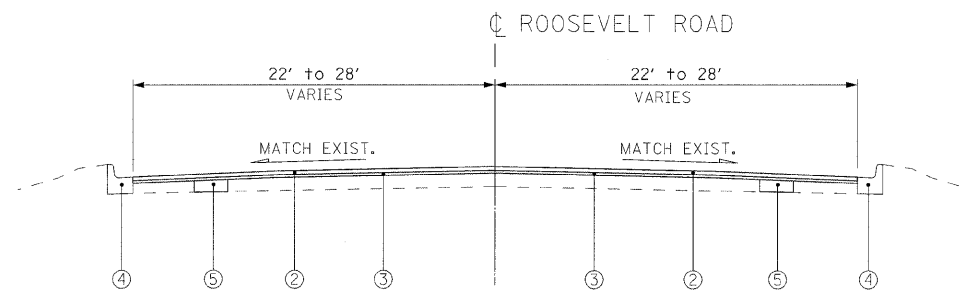
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 347 | 2009-035 RS | COOK | 27 | 3 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



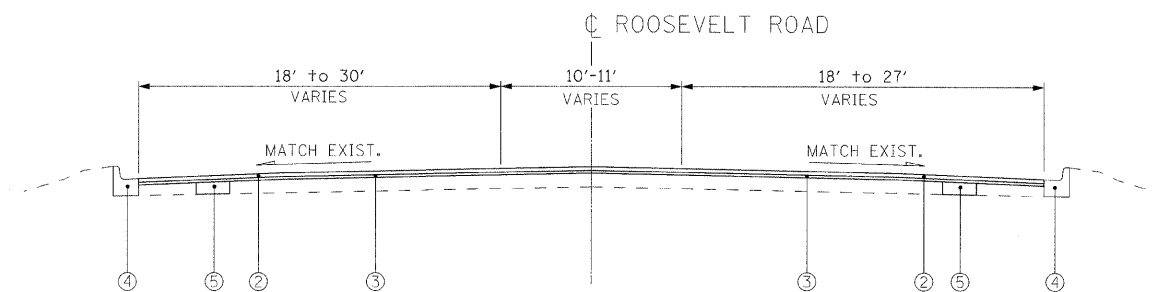
EXISTING TYPICAL SECTION
 STA. 18+14 TO STA. 29+59
 STA. 31+79 TO STA. 54+60



EXISTING TYPICAL SECTION
 STA. 90+22 TO STA. 177+94



PROPOSED TYPICAL SECTION
 STA. 18+14 TO STA. 29+59
 STA. 31+79 TO STA. 54+60



PROPOSED TYPICAL SECTION
 STA. STA. 90+22 TO STA. 177+94

EXISTING CONDITIONS:

- Ⓐ HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 6" AND VARIES
- Ⓑ PORTLAND CEMENT CONCRETE BASE COURSE, 10"
- Ⓒ COMBINATION CONCRETE CURB AND GUTTER

PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- ② POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
- ③ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ④ COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DIRECTED BY ENGINEER)
- ⑤ CLASS D PATCHES, 13" (DETERMINED BY ENGINEER IN FIELD)

* THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

PCC SIDEWALK, 6" SHALL BE PROVIDED THROUGHOUT THE PROJECT AS NECESSARY. LOCATIONS WILL BE APPROVED AND/OR DESIGNATED BY THE RESIDENT ENGINEER.

A QUANTITY FOR LEVELING BINDER (HAND METHOD) HAS BEEN PROVIDED FOR USE AT PRIVATE ENTRANCES, AROUND HAND HOLES, PRIVATE UTILITY STRUCTURE FRAMES, AND ANY OTHER STRUCTURE FRAMES THAT ARE NOT ABLE TO BE LOWERED UNDER THE ITEM "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)" AFTER GRINDING OF EXISTING PAVEMENT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART

| OPERATIONS | MIXTURE TYPE | AC TYPE | PERCENT AIR VOIDS |
|------------------------|---|----------------------|-------------------|
| ROADWAY RESURFACING | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5MM) | SBS/SBR PG 70-22 | 4% @ 90 GYR |
| | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | SBS/SBR PG 76-28/-22 | 4% @ 50 GYR |
| MAINTENANCE OF TRAFFIC | LEVELING BINDER (HAND METHOD), N70 (IL-9.5MM) | PG 64-22 * | 4% @ 70 GYR |
| PAVEMENT PATCHING | CLASS D PATCHES, 13" (HMA BINDER IL-19 MM) | PG 64-22 * | 4% @ 70 GYR |
| DRIVES BEHIND CURB | HOT-MIX ASPHALT SURFACE COURSE MIX "C", N50, 2" (IL-9.5MM) | PG 64-22 * | 4% @ 50 GYR |
| | HOT-MIX ASPHALT BASE COURSE, 8" (HMA BINDER IL-19 MM) | PG 64-22/58-22 | 4% @ 50 GYR |

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

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

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Ciorba Group, Inc.
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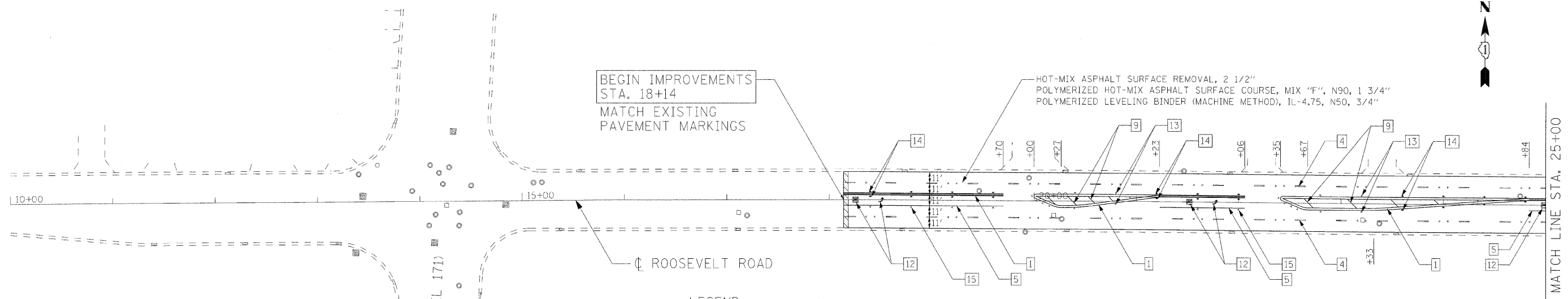
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| PLOT SCALE = 5,0000' / IN. | DRAWN RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 TYPICAL SECTIONS**

SCALE: N.T.S. SHEET NO. 4 OF 27 SHEETS STA. TO STA.

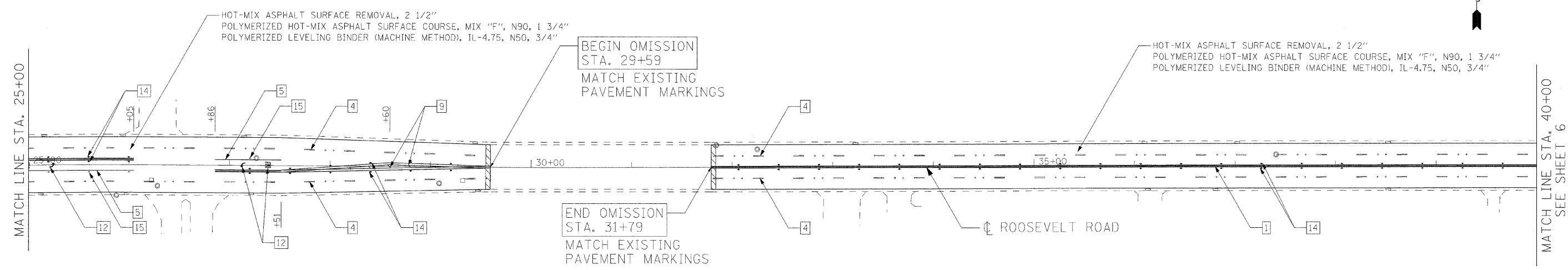
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| F.A.P. RTEL. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 347 | 2009-035 RS | COOK | 27 | 4 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
 TEMPORARY RAMP

LEGEND:

- | | | | |
|---|--|----|---|
| 1 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C) | 8 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) |
| 2 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) | 9 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 3 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP) | 10 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
| 4 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (2 ONE-WAY CRYSTAL MARKER) (60' C-C) | 11 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE) |
| 5 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) | 12 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) |
| 6 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 13 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) |
| 7 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 14 | RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) |
| | | 15 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C) |



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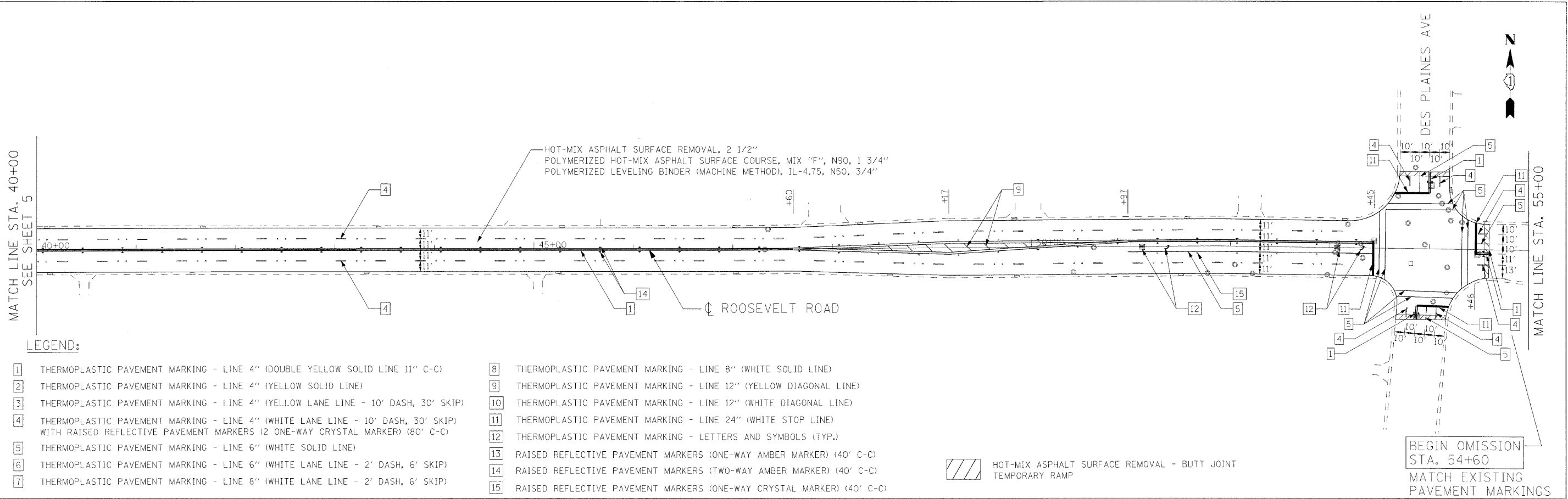
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| USER NAME = alou | DESIGNED - AL | REVISED - |
| | DRAWN - RJR | REVISED - |
| PLOT SCALE = 50.0000 "/> | | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 5 OF 27 SHEETS STA. STA 10+00 TO STA. STA 40+00

| | | | | |
|---|---------------------|-------------|-----------------|-------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 5 |
| CONTRACT NO. 60G36 | | | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

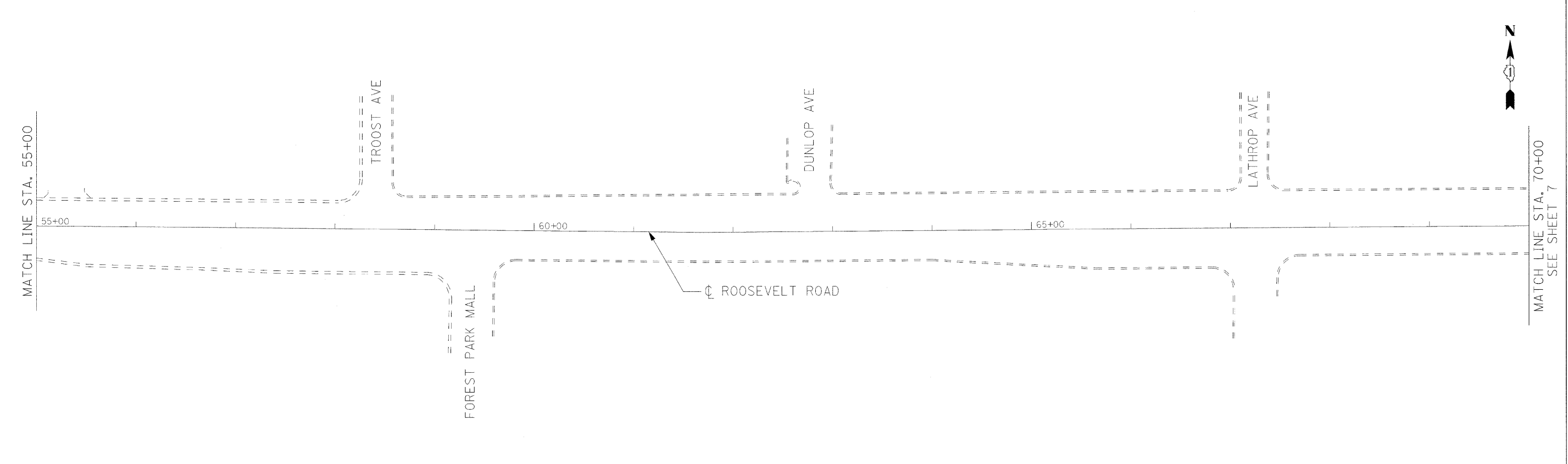


LEGEND:

- | | |
|--|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C) | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) | 9 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP) | 10 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (2 ONE-WAY CRYSTAL MARKER) (80' C-C) | 11 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE) |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) | 12 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) |
| 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 13 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) |
| 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 14 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) |
| | 15 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C) |

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP

BEGIN OMISSION STA. 54+60
MATCH EXISTING PAVEMENT MARKINGS



Ciorba Group, Inc.
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8507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

| | | |
|-----------------------------|-----------------|-----------|
| USER NAME = alou | DESIGNED - AL | REVISED - |
| PLOT SCALE = 50.0000' / IN. | DRAWN - RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED - SNS | REVISED - |
| | DATE - 03/27/09 | REVISED - |

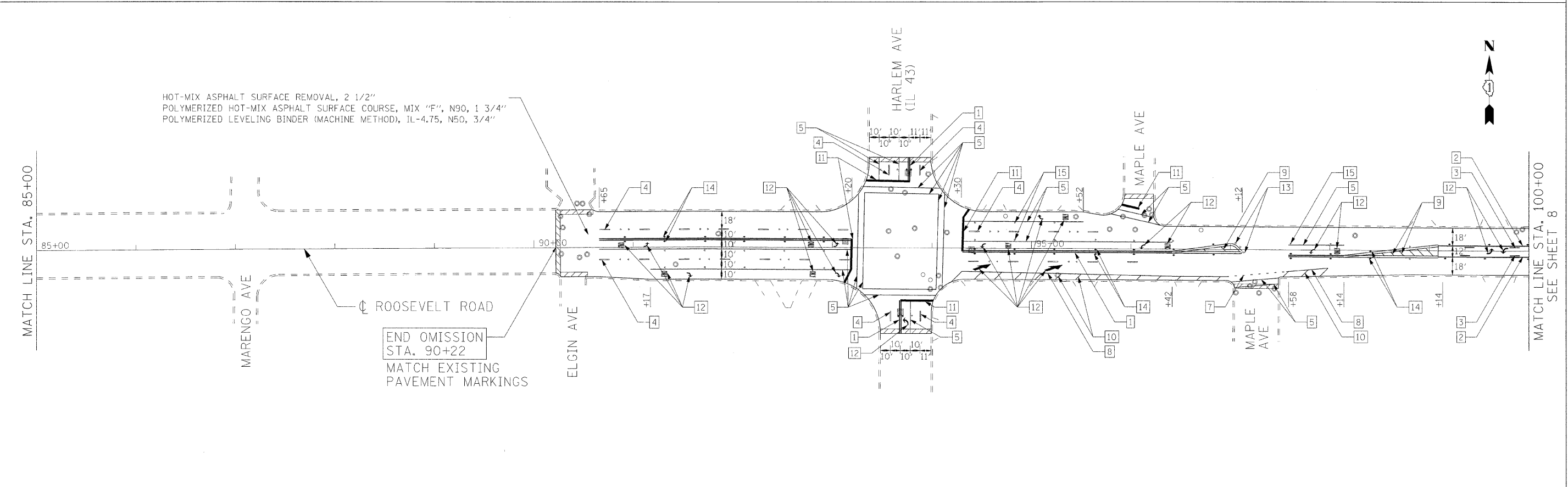
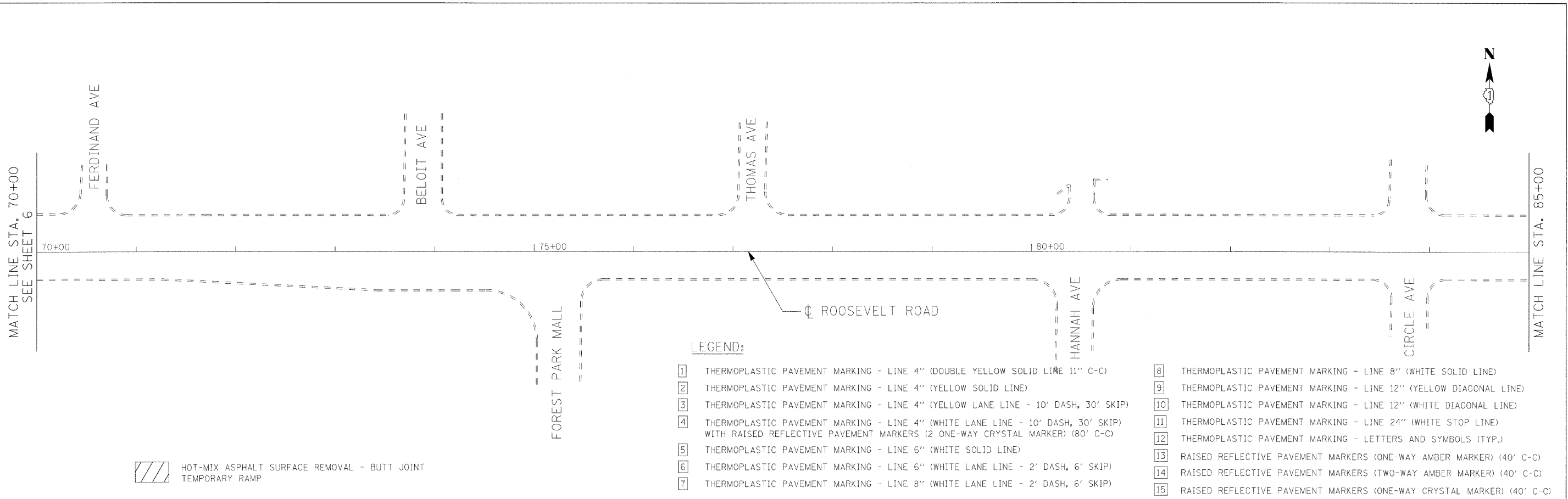
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 6 OF 27 SHEETS STA. STA 40+00 TO STA. STA 70+00

| | | | | |
|---|---------------------|-------------|--------------------|-------------|
| F.A.P. R.T.E. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 6 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |

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 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60659
 Tel. 773.775.4009 Fax 773.775.4014

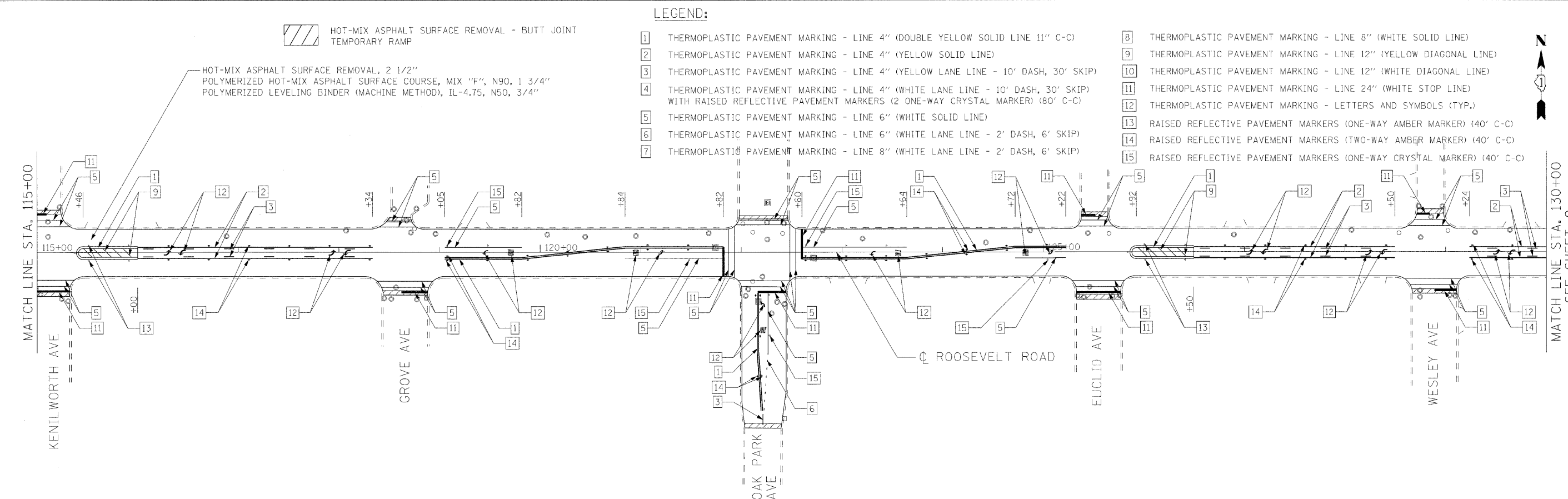
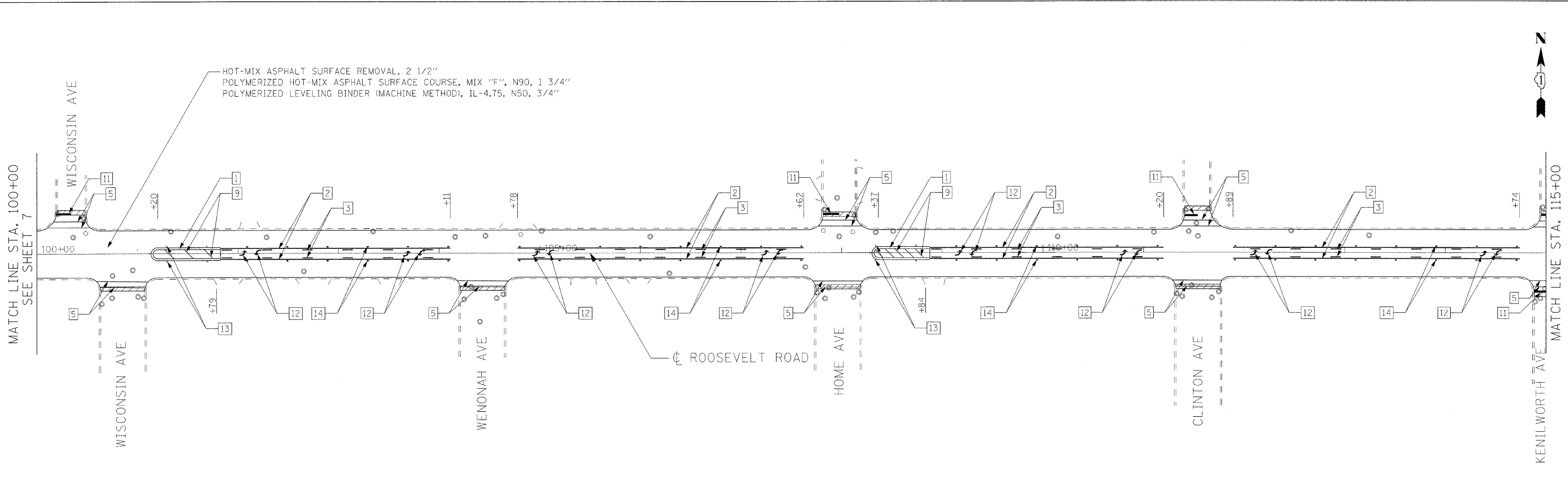
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| USER NAME = alou | DESIGNED - AL | REVISED - |
| PLOT SCALE = 50.0000 "/> | | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 7 OF 27 SHEETS STA. STA 70+00 TO STA. STA 100+00

| | | | | |
|---|---------------------|-------------|-----------------|-------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 7 |
| CONTRACT NO. 60G36 | | | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



LEGEND:

- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C)
- 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
- 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP)
- 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (2 ONE-WAY CRYSTAL MARKER) (80' C-C)
- 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
- 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 8 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)
- 9 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE)
- 10 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE)
- 11 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)
- 12 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)
- 13 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C)
- 14 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C)
- 15 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C)

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 CONSULTING ENGINEERS
 6507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

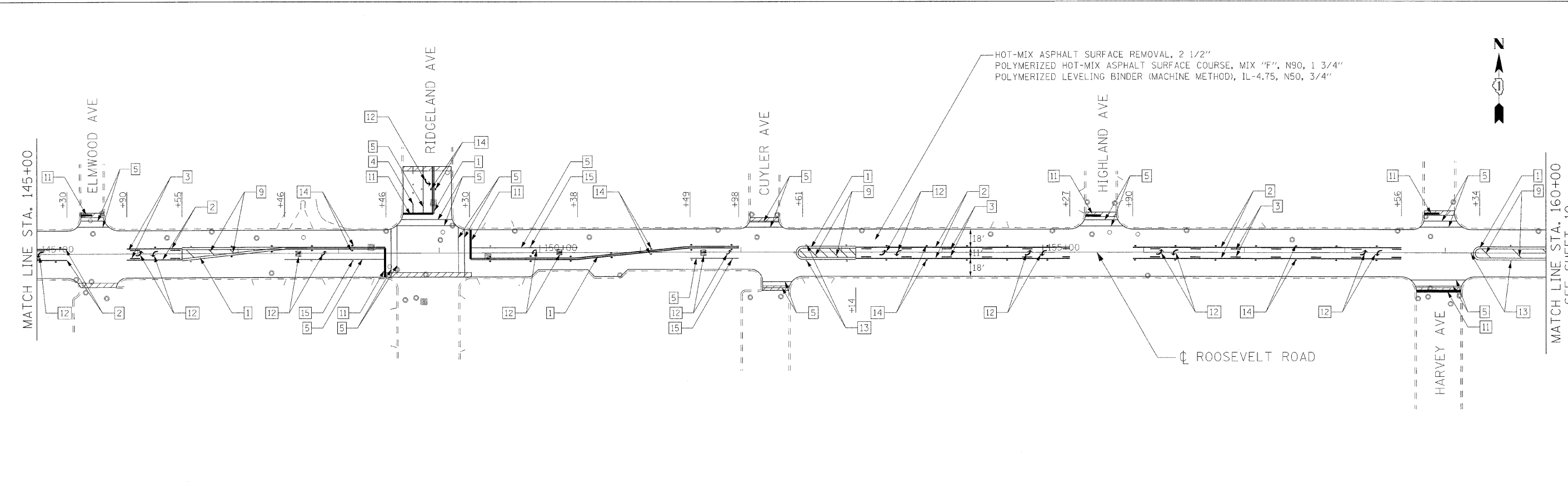
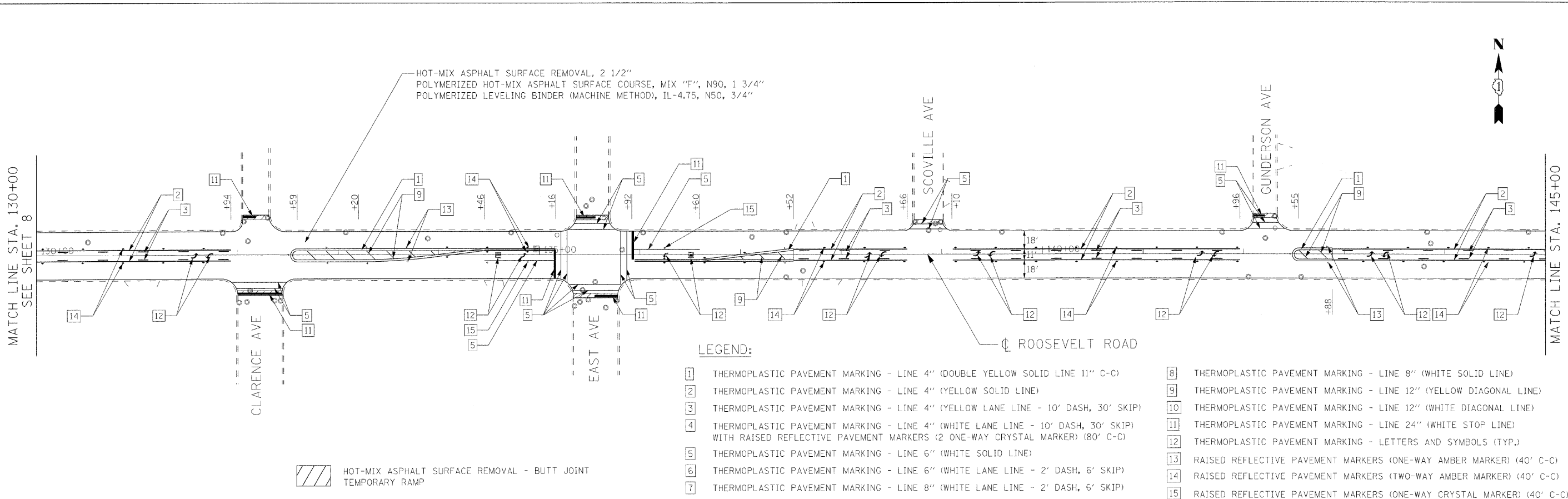
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| PLOT SCALE = 50.0000' / IN. | DRAWN - RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED - SNS | REVISED - |
| | DATE - 03/27/09 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

| | | | | |
|---|---------------------|-------------|--------------------|-------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 8 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |

SCALE: 1"=50' SHEET NO. 8 OF 27 SHEETS STA. STA 100+00 TO STA. STA 130+00



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 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

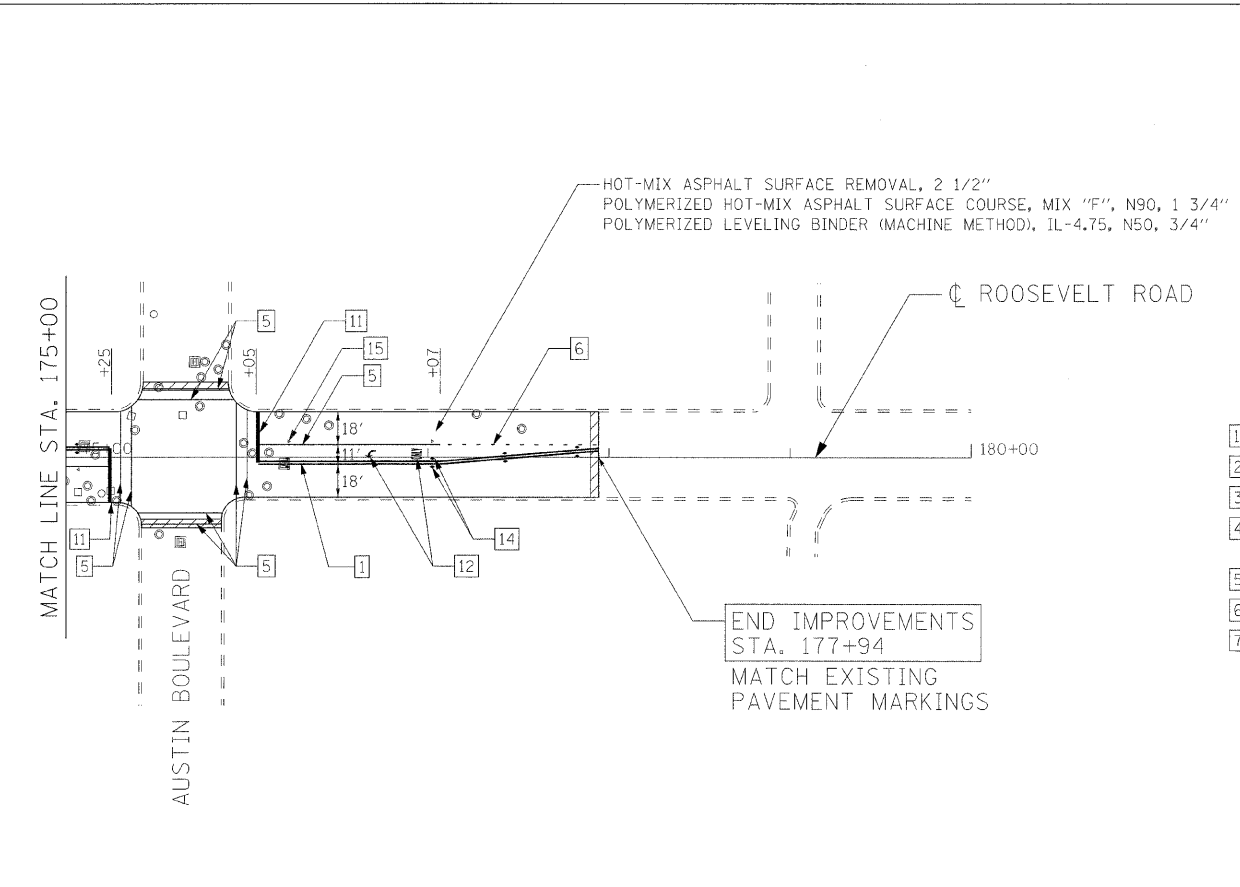
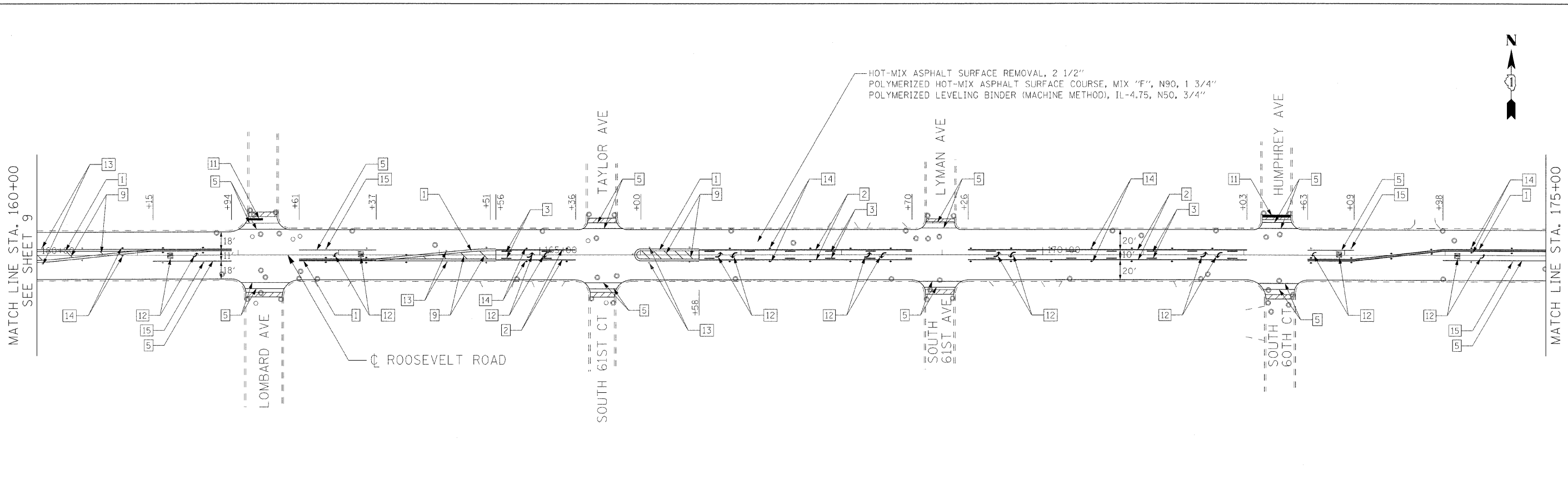
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| USER NAME = alaw | DESIGNED - AL | REVISED - |
| PLOT SCALE = 50.0000" / IN. | DRAWN - RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED - SNS | REVISED - |
| | DATE - 03/27/09 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 9 OF 27 SHEETS STA. STA 130+00 TO STA. STA 160+00

| | | | | |
|---|---------------------|-------------|--------------------|-------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 9 |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



LEGEND:

- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C)
- 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
- 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP)
- 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (2 ONE-WAY CRYSTAL MARKER) (80' C-C)
- 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
- 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE LANE LINE - 2' DASH, 6' SKIP)
- 8 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)
- 9 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE)
- 10 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE)
- 11 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)
- 12 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)
- 13 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C)
- 14 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C)
- 15 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C)

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
 TEMPORARY RAMP

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CG
Corba Group, Inc.
 CONSULTING ENGINEERS
 6507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60659
 Tel. 773.775.4009 Fax 773.775.4014

| | | |
|----------------------------|-----------------|-----------|
| USER NAME = alaw | DESIGNED - AL | REVISED - |
| PLOT SCALE = 50.0000' / 1" | DRAWN - RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED - SNS | REVISED - |
| | DATE - 03/27/09 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
 IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 10 OF 27 SHEETS STA. STA 160+00 TO STA. STA 180+00

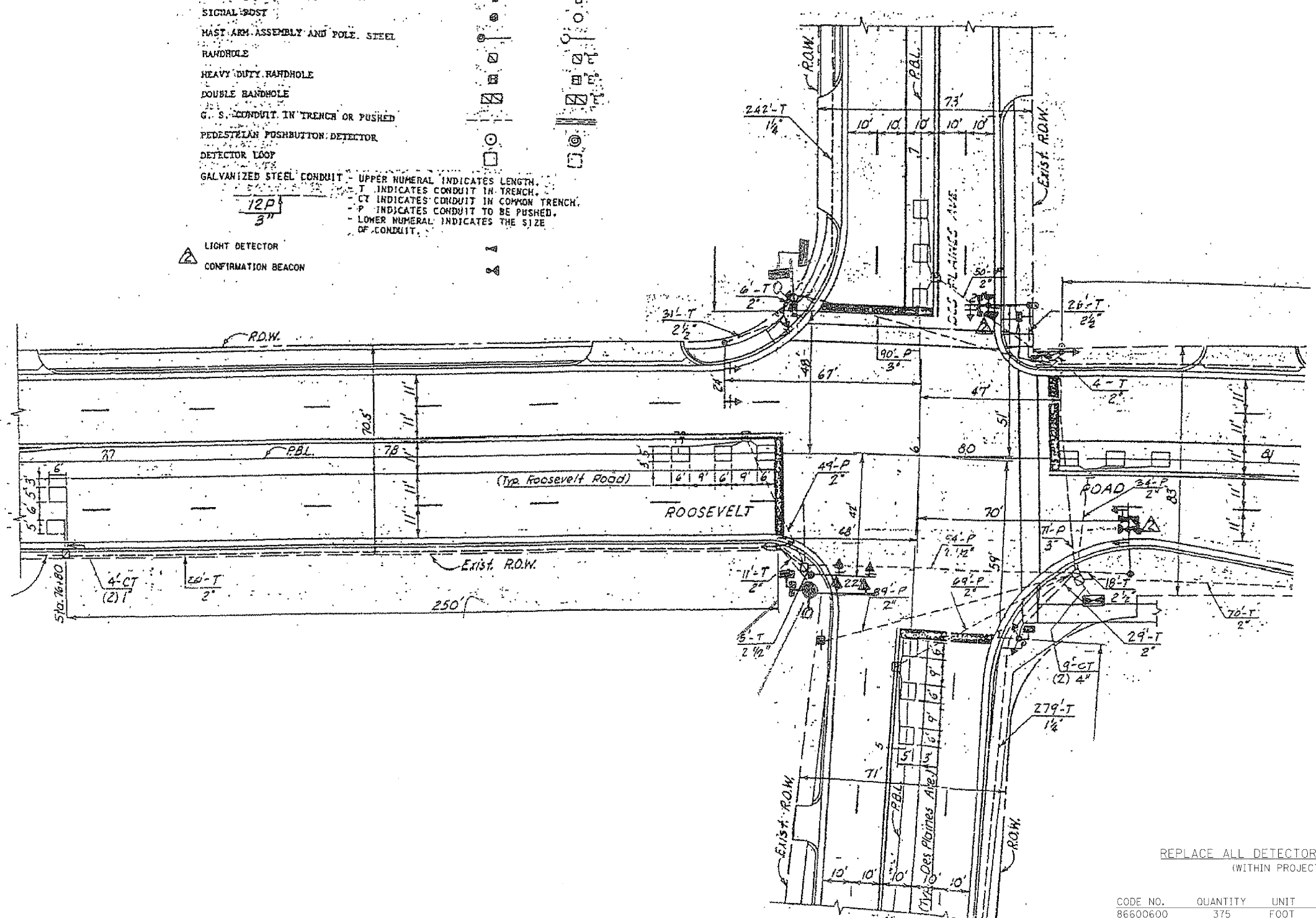
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| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 10 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



TRAFFIC SIGNAL LEGEND

- | | | |
|---|--|--|
| CONTROLLER | | |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE STEEL | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G. S. CONDUIT IN TRENCH OR PUSHED | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| GALVANIZED STEEL CONDUIT - UPPER NUMERAL INDICATES LENGTH, T INDICATES CONDUIT IN TRENCH, CT INDICATES CONDUIT IN COMMON TRENCH, P INDICATES CONDUIT TO BE PUSHED, LOWER NUMERAL INDICATES THE SIZE OF CONDUIT. | | |

- LIGHT DETECTOR
- CONFIRMATION BEACON



| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 375 | FOOT | DETECTOR LOOP REPLACEMENT |

REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

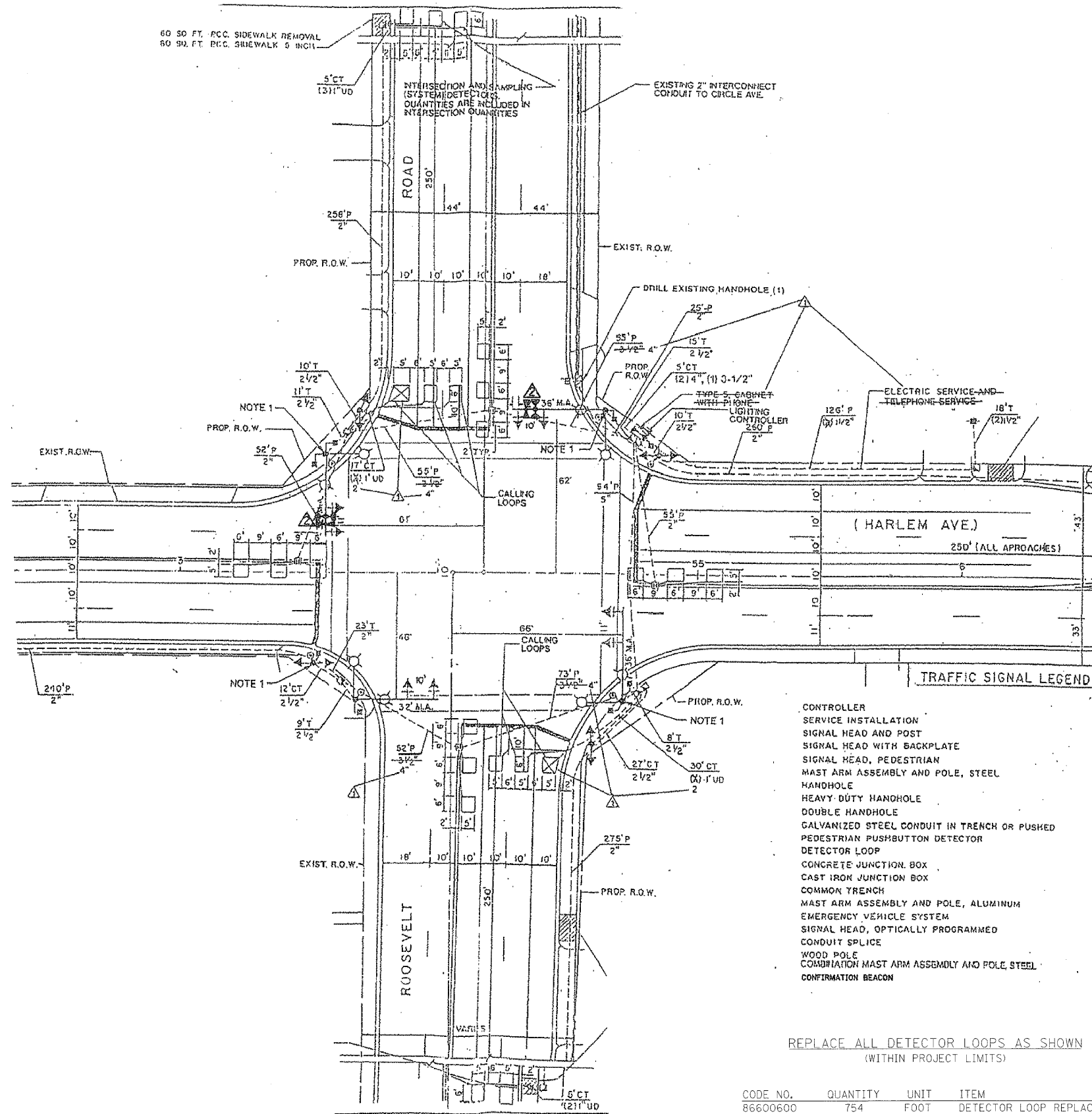
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| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
DETECTOR LOOP REPLACEMENT PLAN

SCALE: N.T.S. SHEET NO. 11 OF 27 SHEETS STA. TO STA.

| | | | | |
|--------------------------------|---------------------|-------------|--------------------|--------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 11 |
| FED. ROAD DIST. NO. 1 ILLINOIS | | | CONTRACT NO. 60G36 | |



| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 754 | FOOT | DETECTOR LOOP REPLACEMENT |

REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

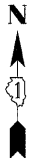
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| USER NAME = c:\ow | DESIGNED AL | REVISED - |
| PLOT SCALE = 1/8" = 1' IN. | DRAWN RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
DETECTOR LOOP REPLACEMENT PLAN**

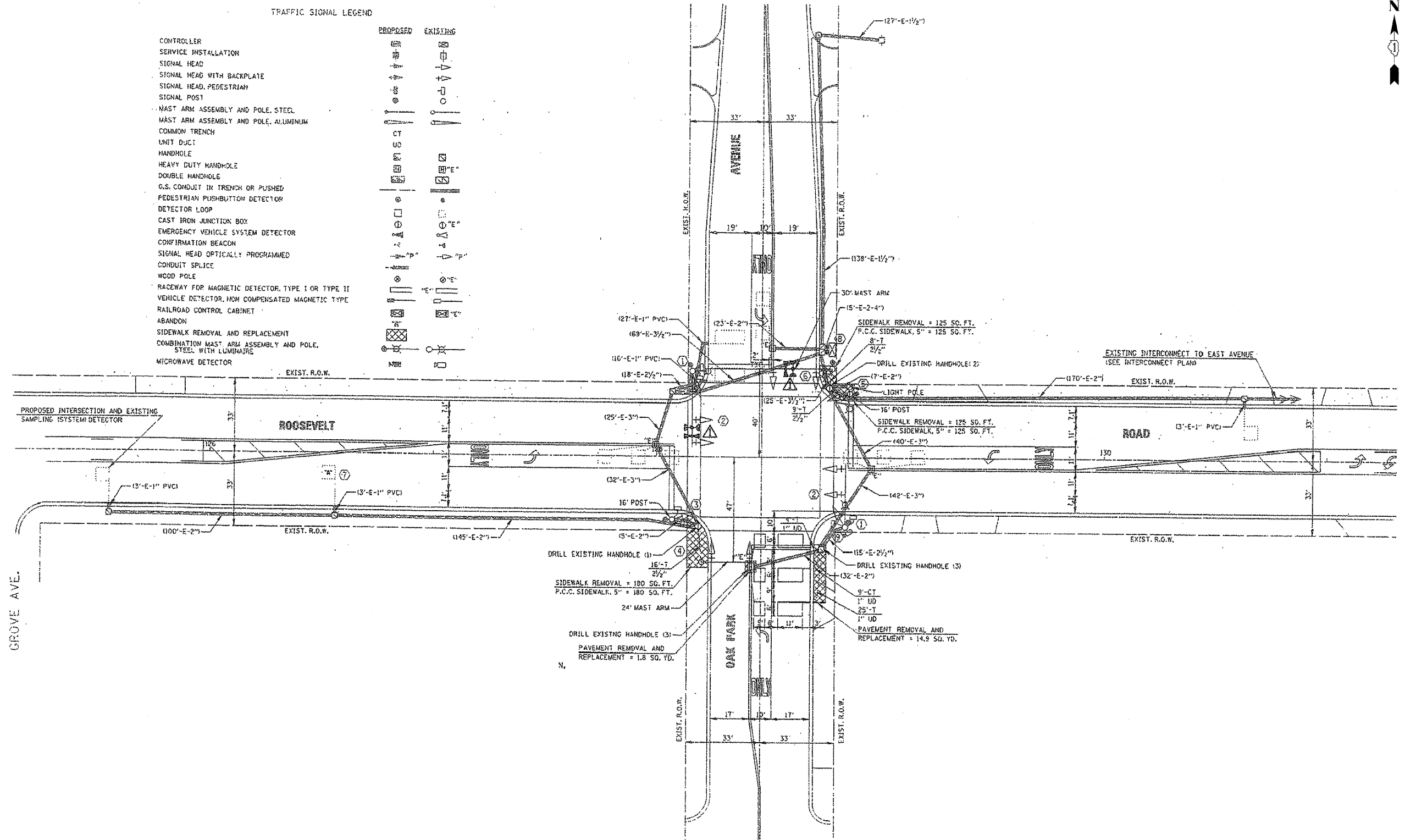
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| | | | | |
|---|---------------------|-------------|--------------------|--------------|
| F.A.P. R.T.E. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 12 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



TRAFFIC SIGNAL LEGEND

| | PROPOSED | EXISTING |
|--|----------|----------|
| CONTROLLER | | |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE, STEEL | | |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | | |
| COMMON TRENCH | | |
| LANE DUCT | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G.S. CONDUIT IN TRENCH OR PUSHED | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| CAST IRON JUNCTION BOX | | |
| EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| CONFIRMATION BEACON | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | | |
| CONDUIT SPLICE | | |
| WOOD POLE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RAILROAD CONTROL CABINET | | |
| ABANDON | | |
| SIDEWALK REMOVAL AND REPLACEMENT | | |
| COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE | | |
| MICROWAVE DETECTOR | | |



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 548 | FOOT | DETECTOR LOOP REPLACEMENT |

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5507 North Cumberland Avenue, Suite 402
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| | | |
|----------------------------|---------------|-----------|
| USER NAME = alaw | DESIGNED AL | REVISED - |
| PLOT SCALE = 1/8" = 1' IN. | DRAWN RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
DETECTOR LOOP REPLACEMENT PLAN**

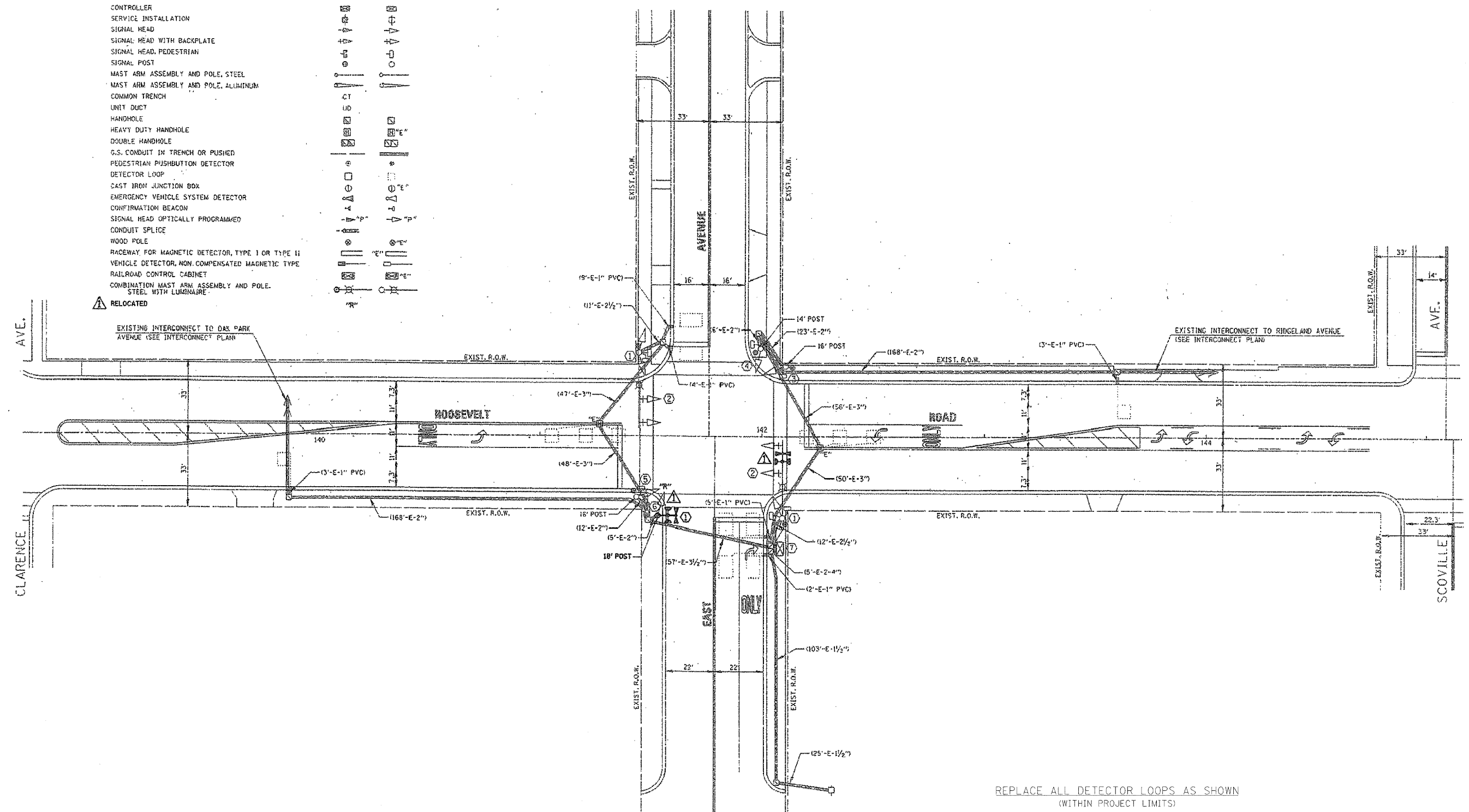
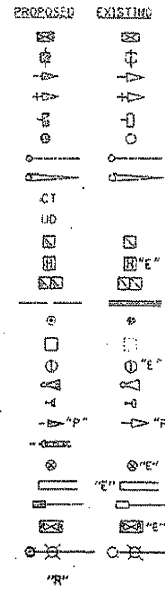
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
| 347 | 2009-035 R5 | COOK | 27 | 13 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60636 | |



TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 366 | FOOT | DETECTOR LOOP REPLACEMENT |

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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

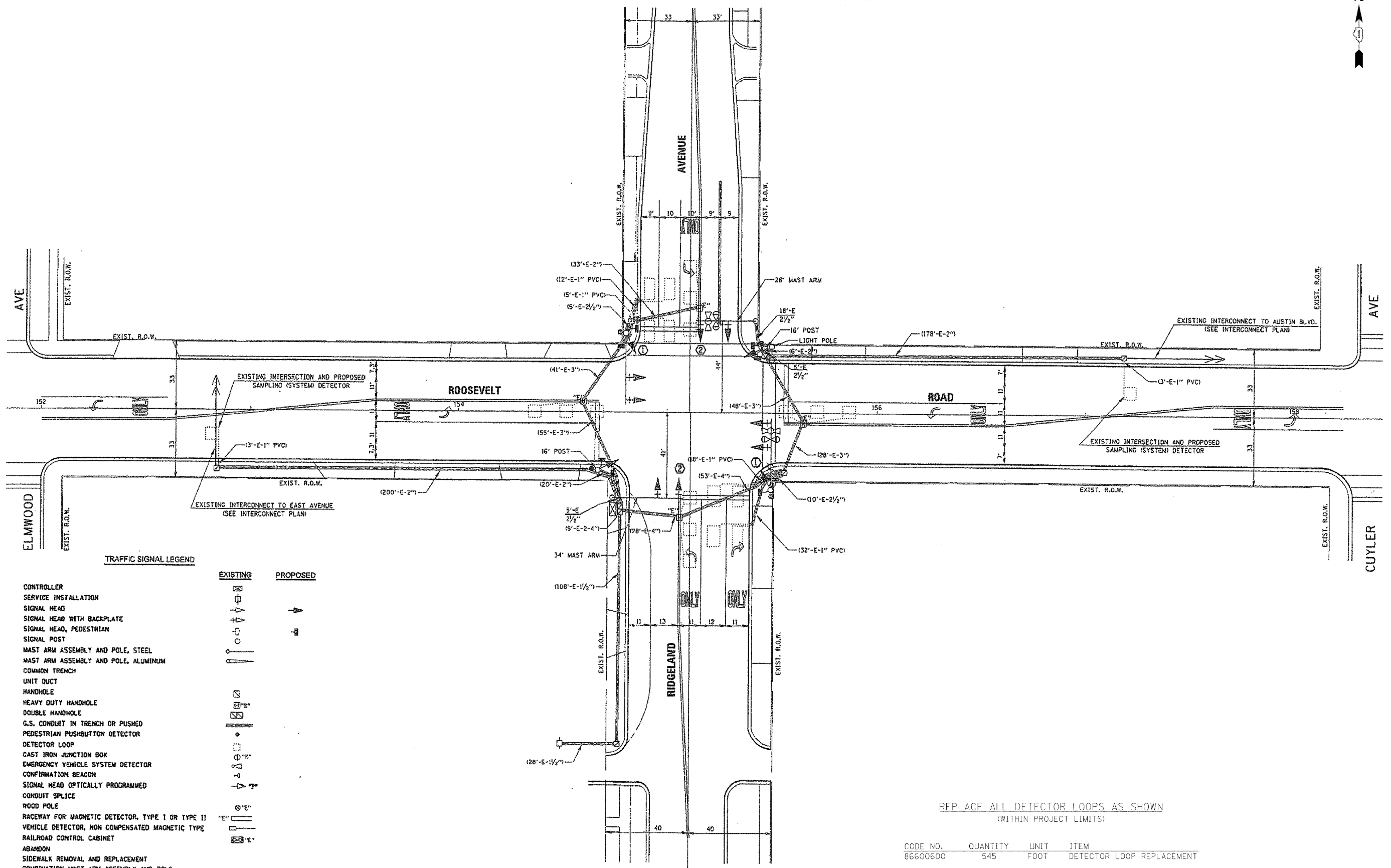
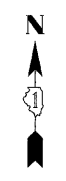
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| PLOT SCALE = 1/8" = 1' IN. | DRAWN RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
DETECTOR LOOP REPLACEMENT PLAN

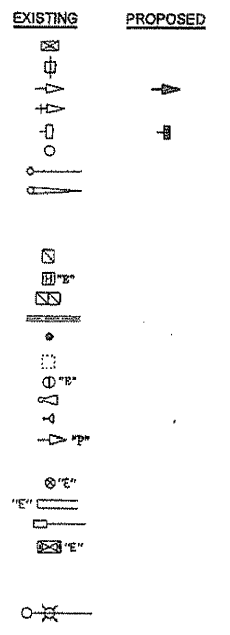
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 14 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- C.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- ASARCON
- SIDEWALK REMOVAL AND REPLACEMENT
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 545 | FOOT | DETECTOR LOOP REPLACEMENT |

FILE NAME = c:\p\proj\3366\3366_11\det\sig\Signal\3366_11\copied05.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60658
Tel. 773.775.4009 Fax 773.775.4014

| | | |
|----------------------------|---------------|-----------|
| USER NAME = alow | DESIGNED AL | REVISED - |
| PLOT SCALE = 1/8" = 1' IN. | DRAWN RJR | REVISED - |
| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

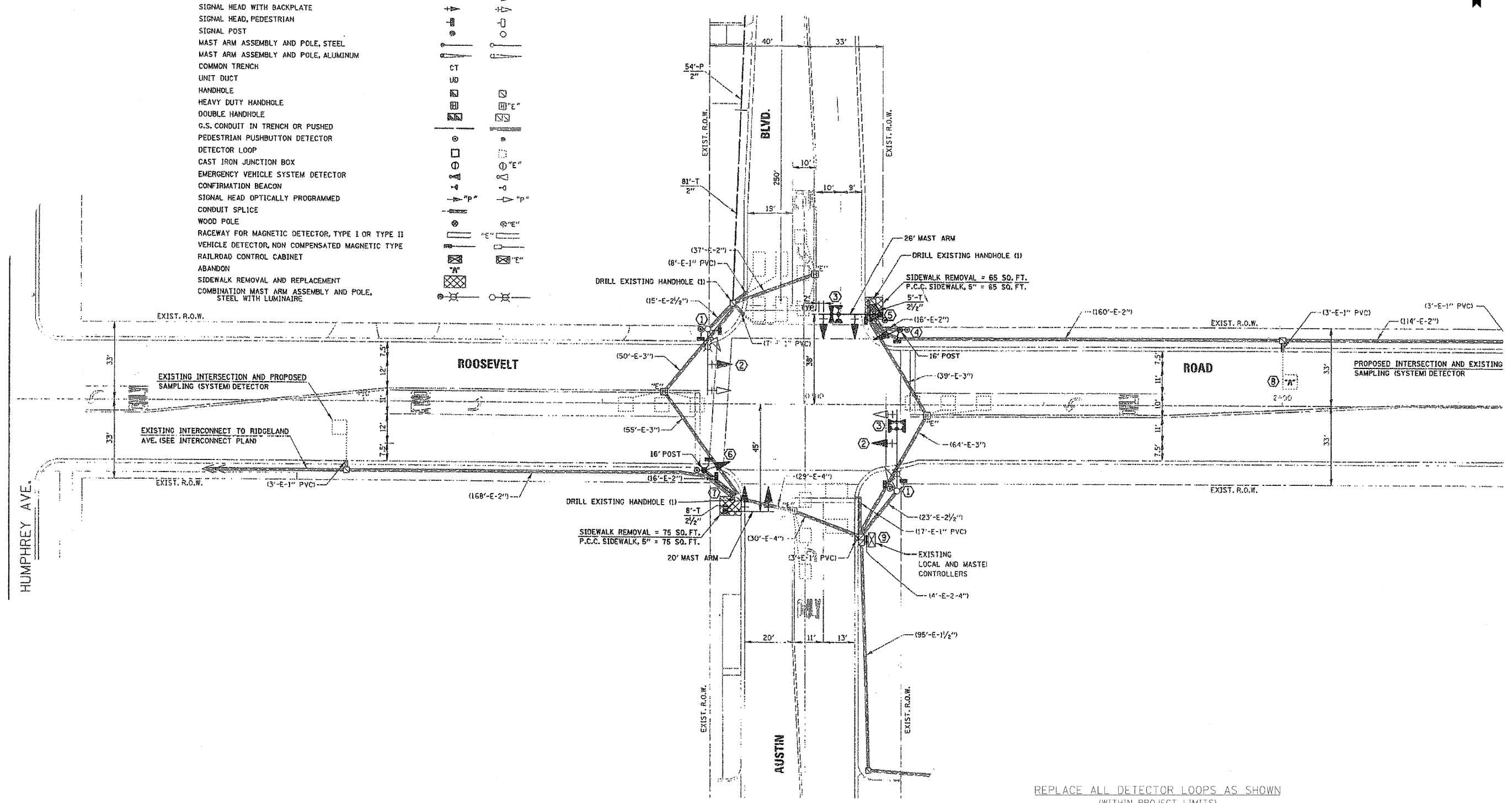
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|--|--------------|
| ROOSEVELT ROAD IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD DETECTOR LOOP REPLACEMENT PLAN | |
| SCALE: N.T.S. | STA. TO STA. |
| SHEET NO. 15 OF 27 SHEETS | |

| | | | | |
|---|---------------------|-------------|--------------------|--------------|
| F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 15 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60G36 | |



TRAFFIC SIGNAL LEGEND

| | PROPOSED | EXISTING |
|--|----------|----------|
| CONTROLLER | | |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE, STEEL | | |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | | |
| COMMON TRENCH | | |
| UNIT DUCT | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G.S. CONDUIT IN TRENCH OR PUSHED | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| CAST IRON JUNCTION BOX | | |
| EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| CONFIRMATION BEACON | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | | |
| CONDUIT SPLICE | | |
| WOOD POLE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RAILROAD CONTROL CABINET | | |
| ABANDON | | |
| SIDEWALK REMOVAL AND REPLACEMENT | | |
| COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE | | |



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 429 | FOOT | DETECTOR LOOP REPLACEMENT |

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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

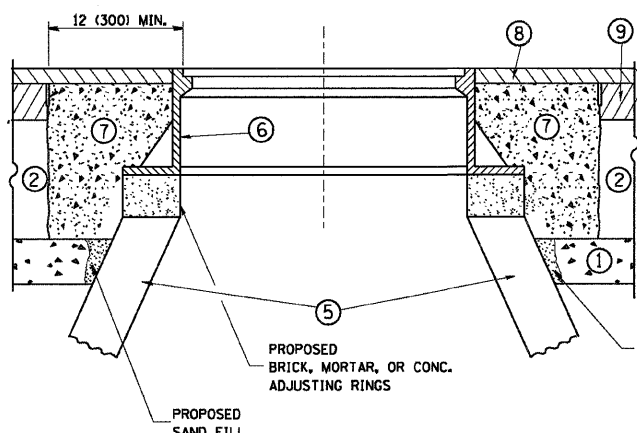
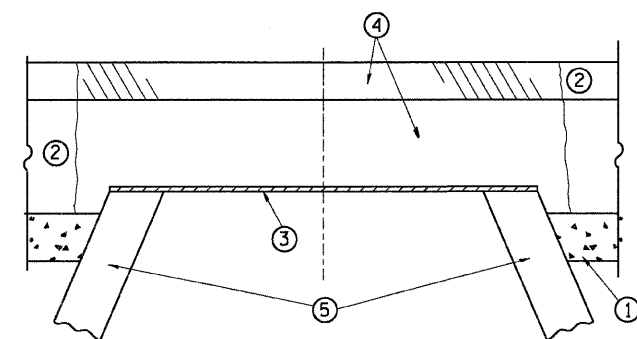
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| PLOT DATE = 4/8/2009 | CHECKED WBL | REVISED - |
| | DATE 03/27/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROOSEVELT ROAD
IL 171 (1ST AVENUE) TO AUSTIN BOULEVARD
DETECTOR LOOP REPLACEMENT PLAN

SCALE: N.T.S. SHEET NO. 16 OF 27 SHEETS STA. TO STA.

| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 16 |
| CONTRACT NO. 60G36 | | | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



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 S1 CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- 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 S1 CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

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.

LOCATION OF STRUCTURES:

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

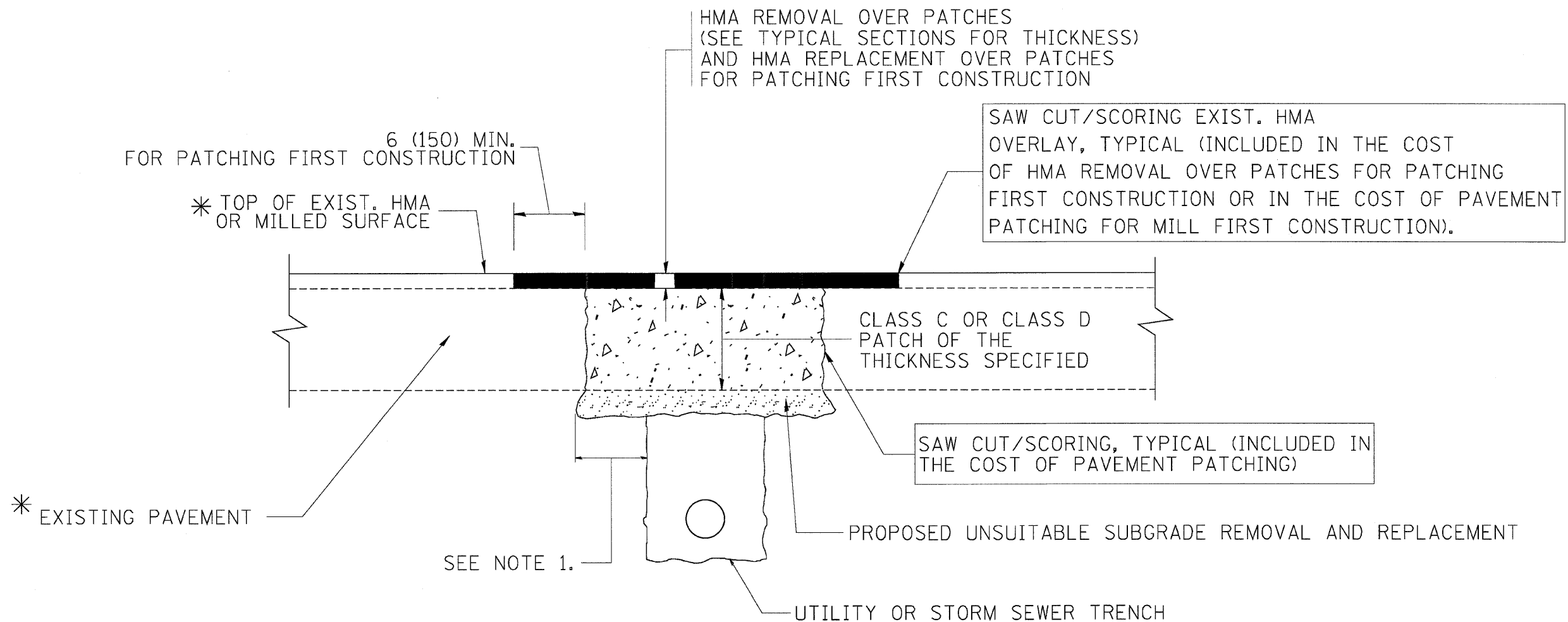
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

| | | | | | | | | | | | |
|--|-----------------------------|--------------------|--------------------------------|---|--|-------------------------|--------------------|------------------------|----------------|-----------------------|--------------------|
| FILE NAME = W:\distata\22x34\bd08.dgn | USER NAME = geglnoht | DESIGNED - R. SHAH | REVISED - R. SHAH 03-10-95 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING | | F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 17 |
| | PLOT SCALE = 50.0000' / IN. | DRAWN - | REVISED - A. ABBAS 03-21-97 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | BD600-03 (BD-8) | | CONTRACT NO. 60636 | |
| | PLOT DATE = 1/4/2008 | CHECKED - | REVISED - R. WIEDEMAN 05-14-04 | | | | | | | | |
| | | DATE - 10-25-94 | REVISED - R. BORO 01-01-07 | | | | | | | | |



* 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)

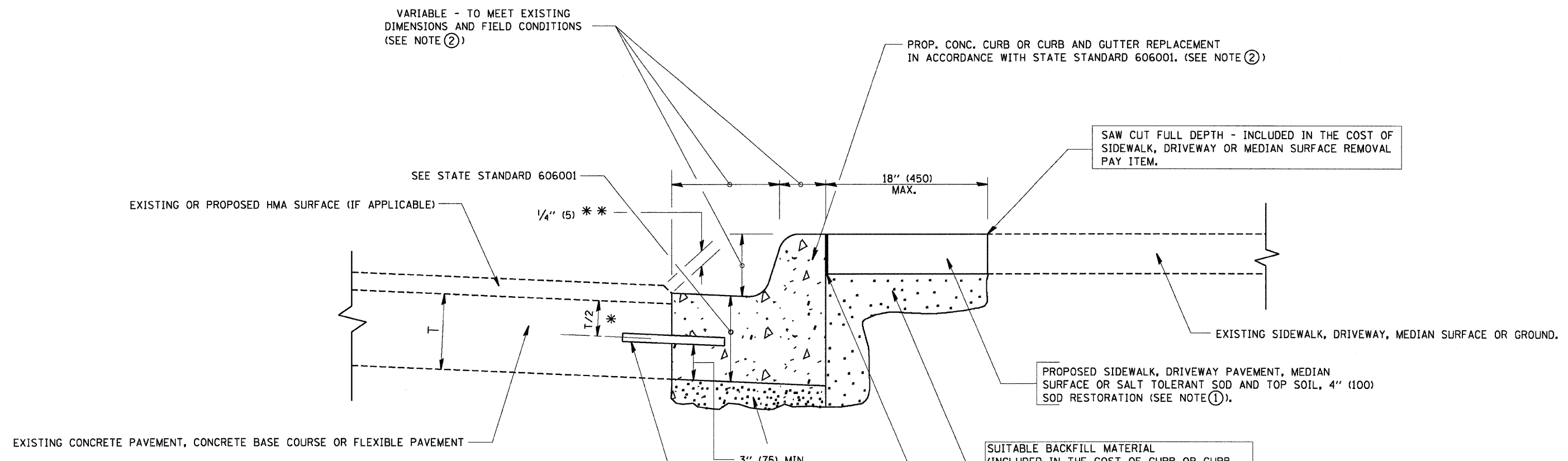
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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 = c:\projects\distd22x34\bd22.dgn | USER NAME = beuerdl | 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. |
| | | DRAWN - | REVISED - R. BORO 01-01-07 | | 347 | 2009-035 RS | COOK | 27 | 18 | | | |
| | | CHECKED - | REVISED - R. BORO 09-04-07 | | BD400-04 (BD-22) | | | CONTRACT NO. 60G36 | | | | |
| | | DATE - 10-25-94 | REVISED - K. ENG 10-27-08 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT | | | | |



- * 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.
- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
- SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
 - ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
 - ④ 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.
 - ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑥ 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.
 - ⑦ 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.

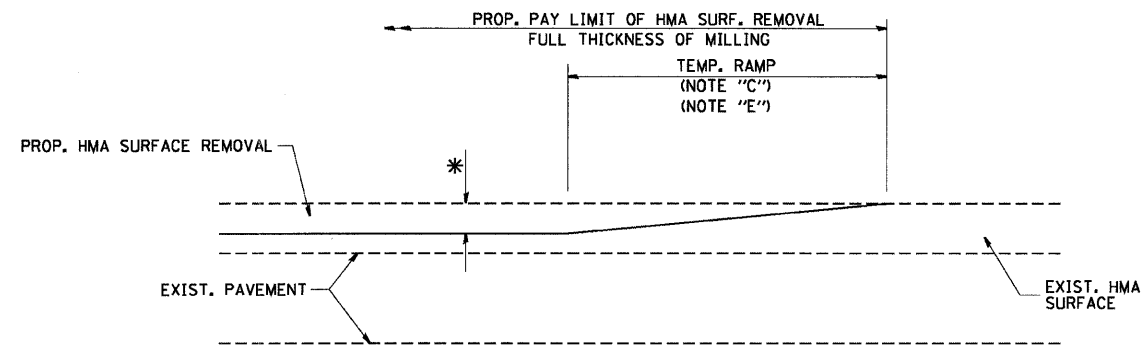
- SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)
- PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)
- UNSUITABLE SUB-BASE MATERIAL 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.
- 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

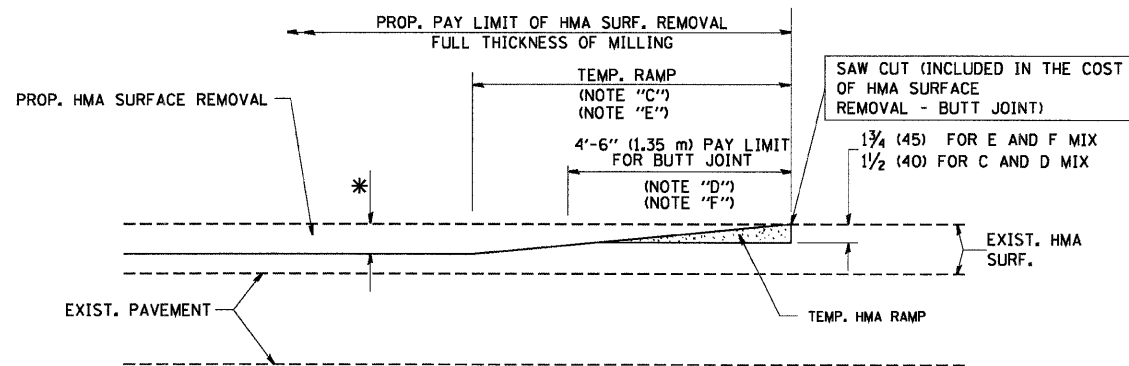
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| | | | | | | | | | | |
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| FILE NAME = W:\diststd\22x34\bd24.dgn | USER NAME = gaglunobt | DESIGNED - A. HOUSEH | REVISED - R. SHAH 10-03-96 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT | F.A.P. RTE. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 19 |
| | PLOT SCALE = 50.000' / IN. | CHECKED - | REVISED - M. GOMEZ 01-22-01 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | | CONTRACT NO. 60636 | | |
| | PLOT DATE = 1/4/2008 | DATE - 03-11-94 | REVISED - R. BORO 01-01-07 | | STA. | TO STA. | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | |



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

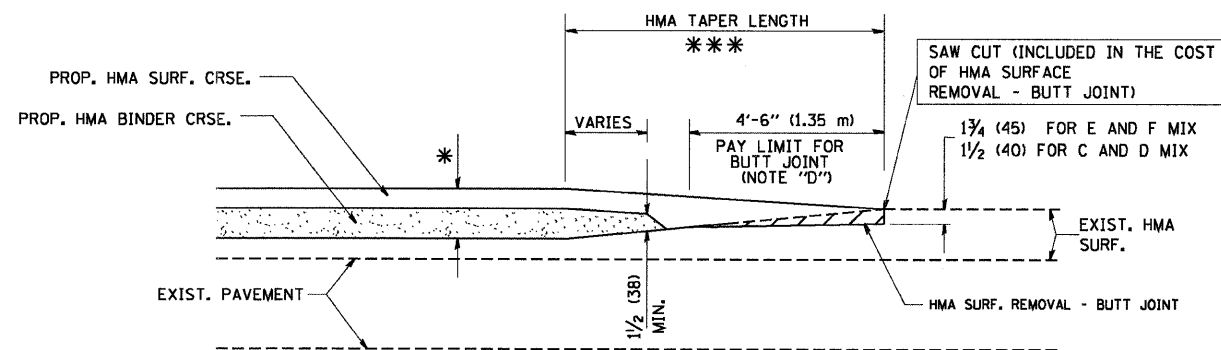
OPTION 1



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

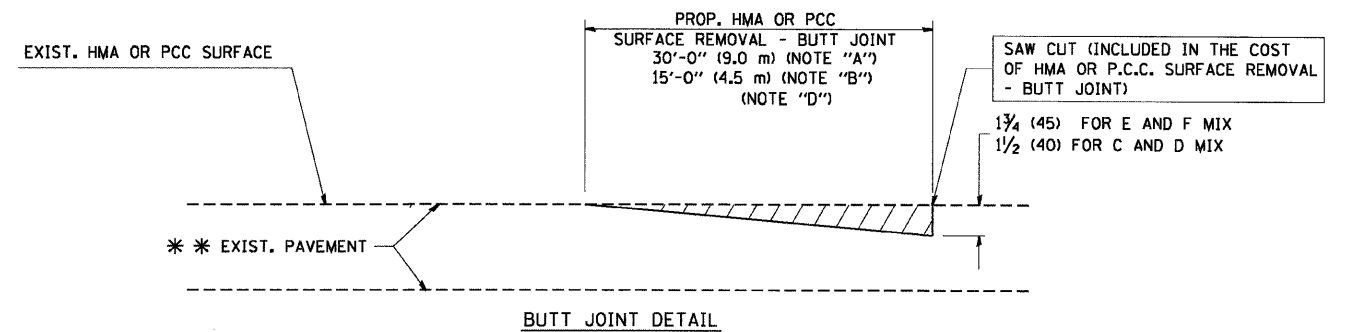
OPTION 2

TYPICAL TEMPORARY RAMP

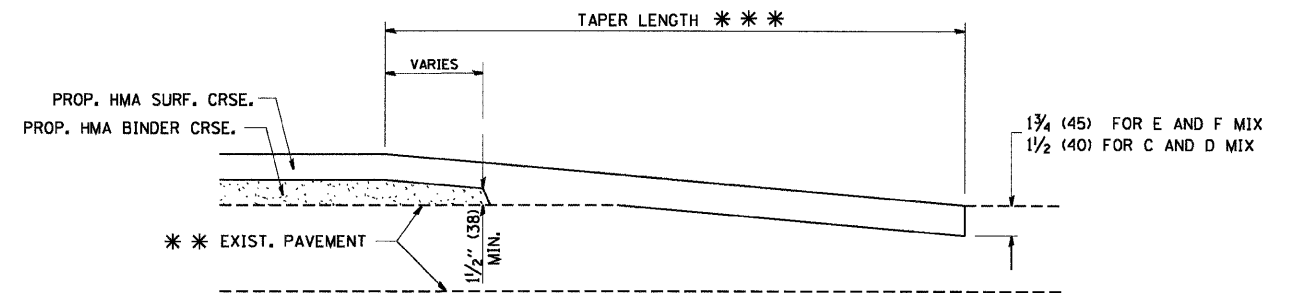


BUTT JOINT AND
HMA TAPER

**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".

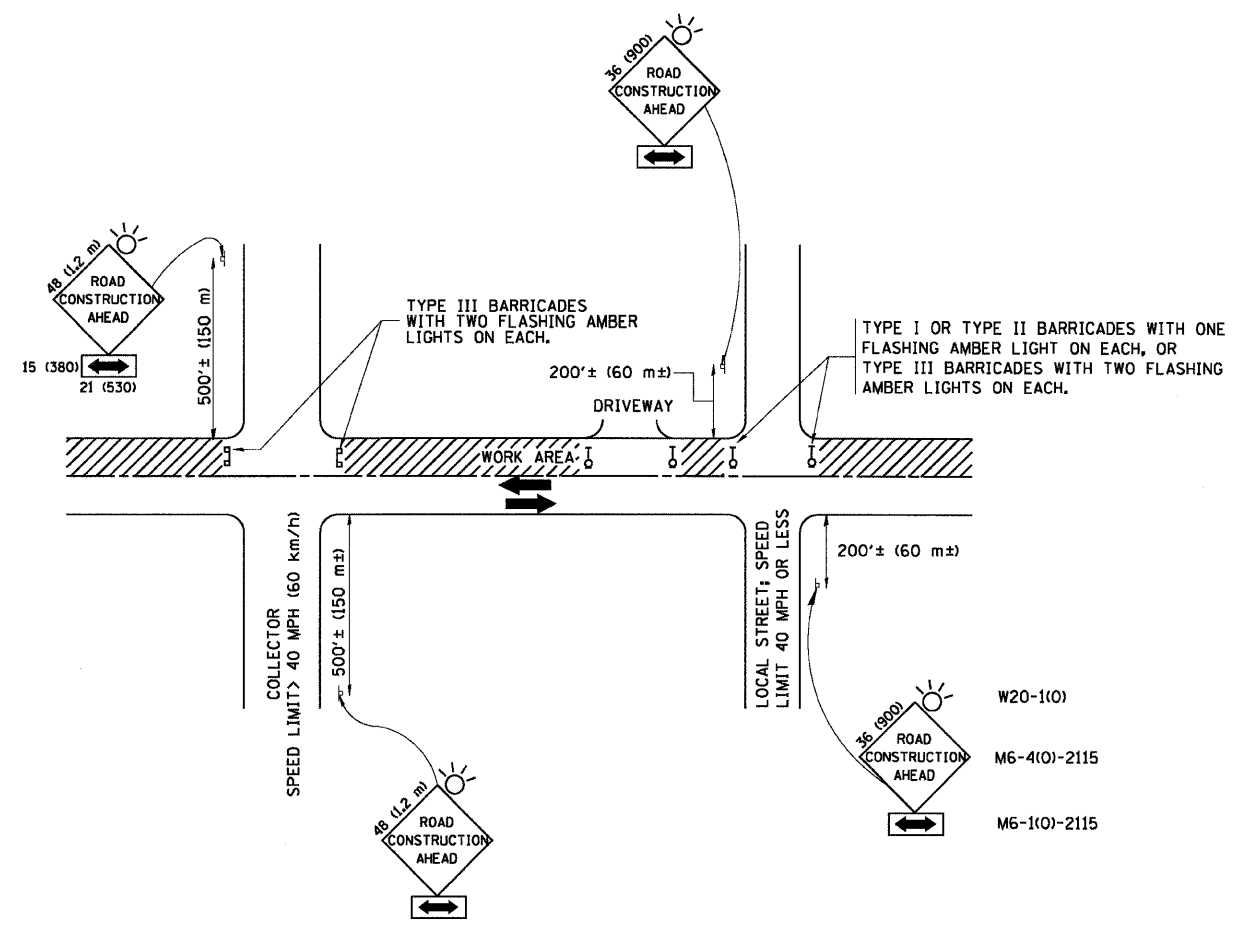
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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| | | DRAWN - | REVISED - A. ABBAS 03-21-97 |
| | PLOT SCALE = 5/8"=1' - 0" | CHECKED - | REVISED - M. GOMEZ 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.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|---------------------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 20 |
| BD400-05 BD32 | | | CONTRACT NO. 60636 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 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. 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).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

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

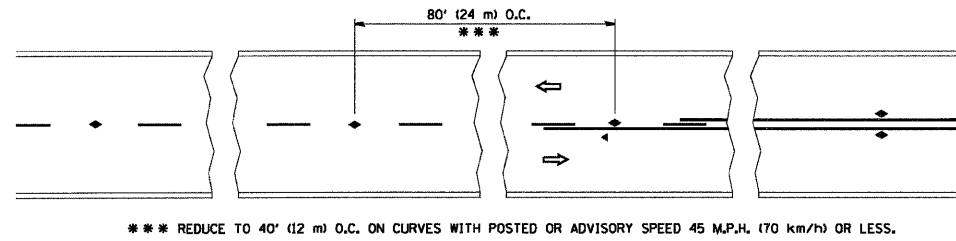
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| | | DRAWN - | REVISED - A. HOUSEH 03-06-96 |
| | PLOT SCALE = 50.000 / IN. | CHECKED - | REVISED - A. HOUSEH 10-15-96 |
| | PLOT DATE = 1/4/2008 | DATE - 06-89 | REVISED - T. RAMMACHER 01-06-00 |

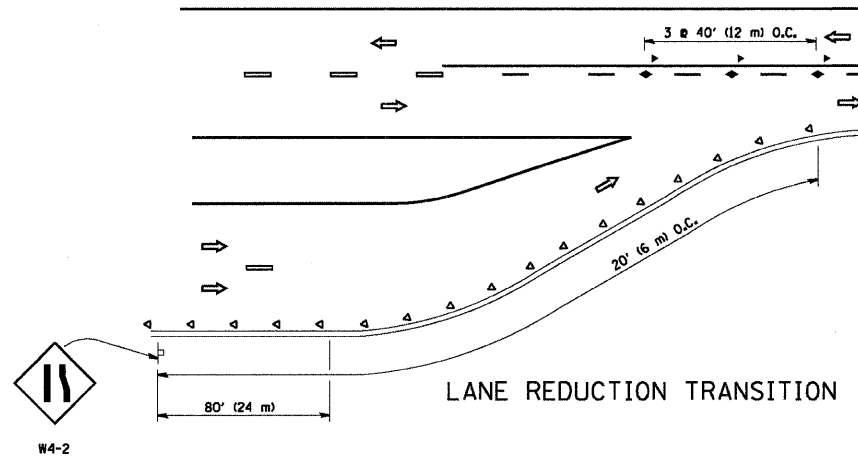
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|--|-------------------------|------|---------|
| TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

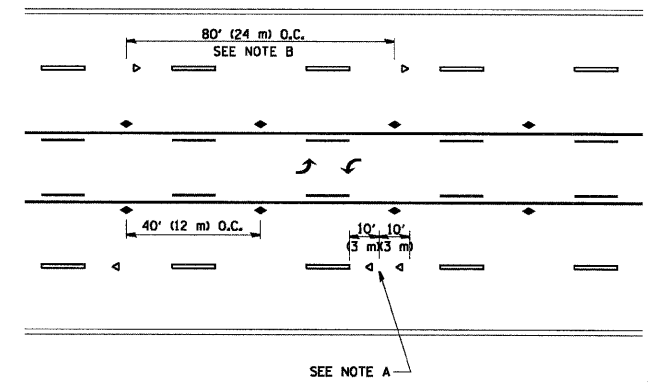
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|---|-------------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 347 | 2009-035 RS | COOK | 27 | 21 |
| TC-10 | | | CONTRACT NO. 60636 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



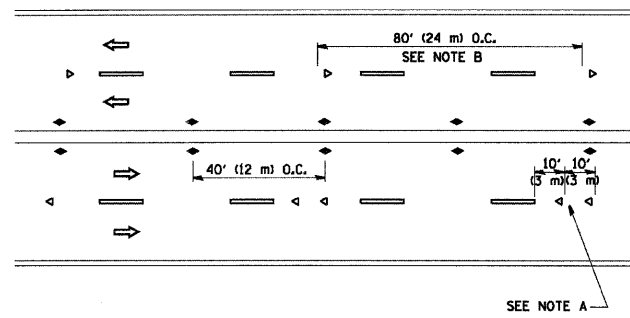
TWO-LANE/TWO-WAY



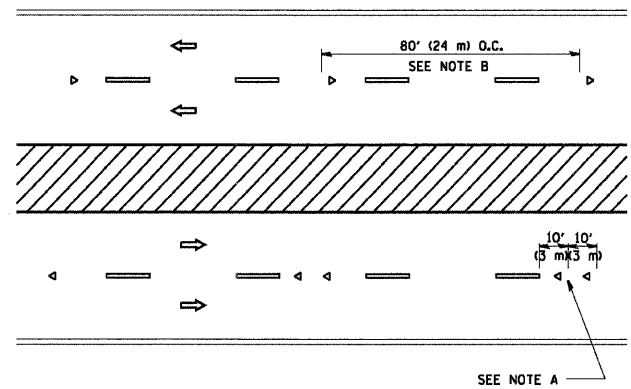
LANE REDUCTION TRANSITION



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

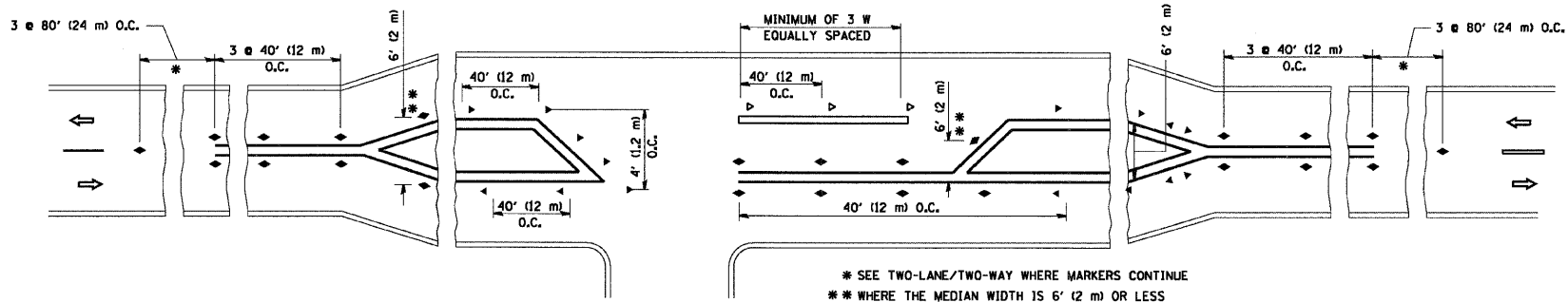
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◀ TWO-WAY AMBER MARKER

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 SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

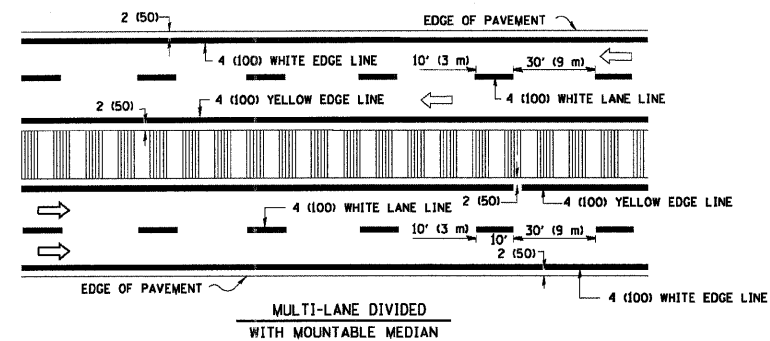
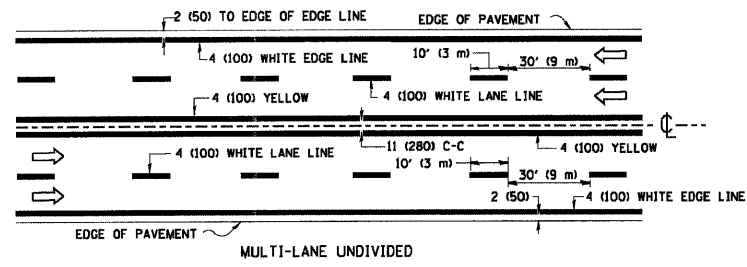
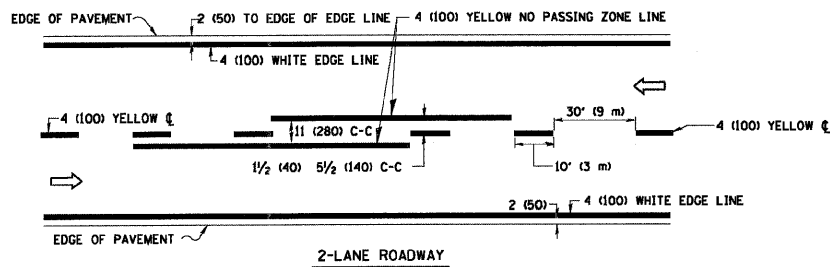


LEFT TURN

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

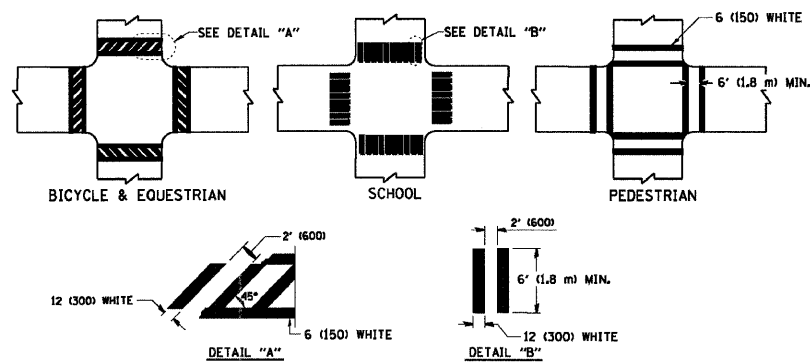
All dimensions are in inches (millimeters) unless otherwise shown.

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| FILE NAME = W:\distate\22x34\to11.dgn | USER NAME = goglionobt | 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. 347 | SECTION 2009-035 RS | COUNTY COOK | TOTAL SHEETS 27 | SHEET NO. 22 |
| | PLOT SCALE = 50.000' / IN. | DRAWN - | REVISED - T. RAMMACHER 03-12-99 | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | TC-11 | | CONTRACT NO. 60G36 | | |
| | PLOT DATE = 1/4/2008 | CHECKED - | REVISED - T. RAMMACHER 01-06-00 | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | | | | | |
| | | DATE - | REVISED - | | | | | | | | | | |
| | | | | | | | | | | | | | |

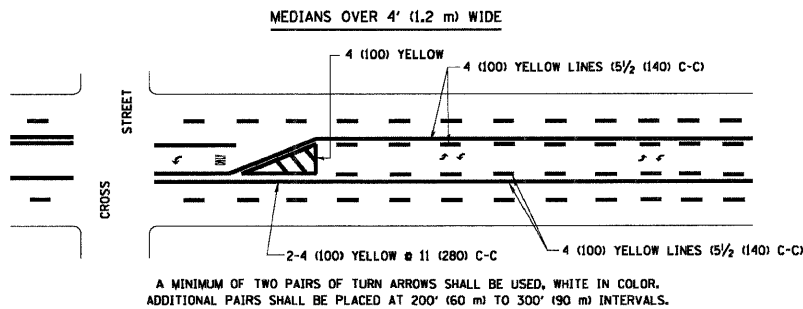
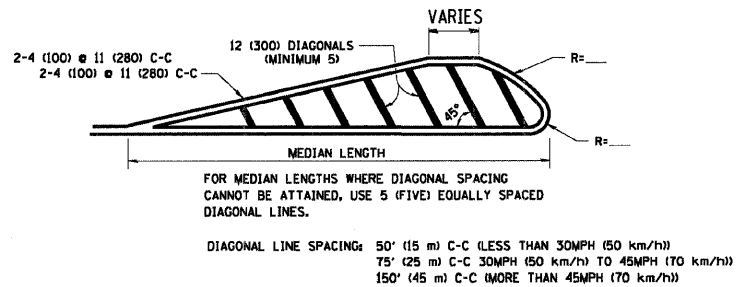
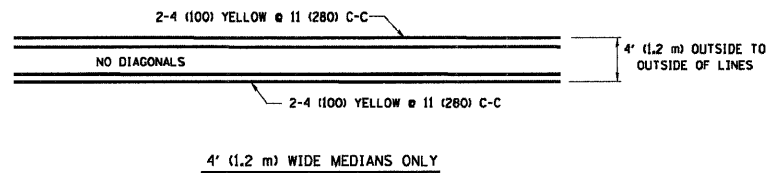


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

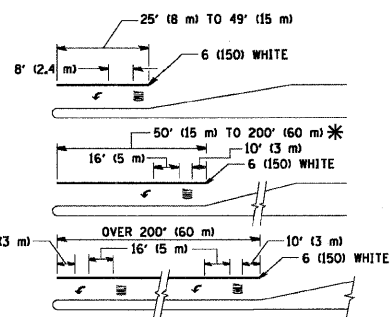
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



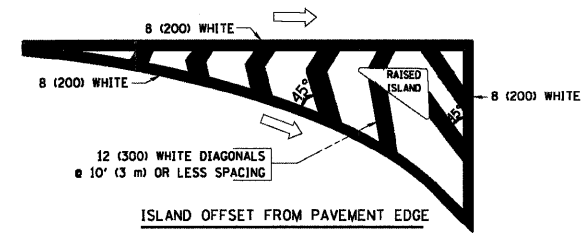
TYPICAL PAINTED MEDIAN MARKING



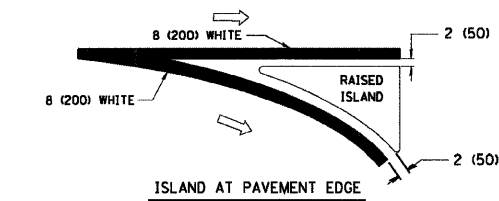
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



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 FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5/2 (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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 18' (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; 5/2 (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 5' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD T80001 AREA OF: "RR"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD T80001.

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

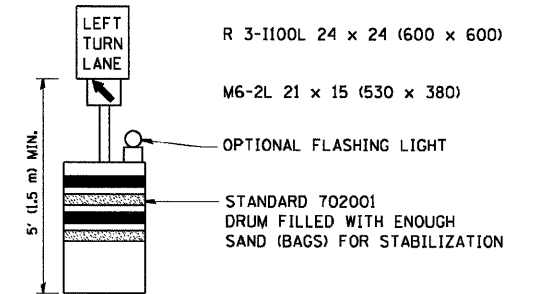
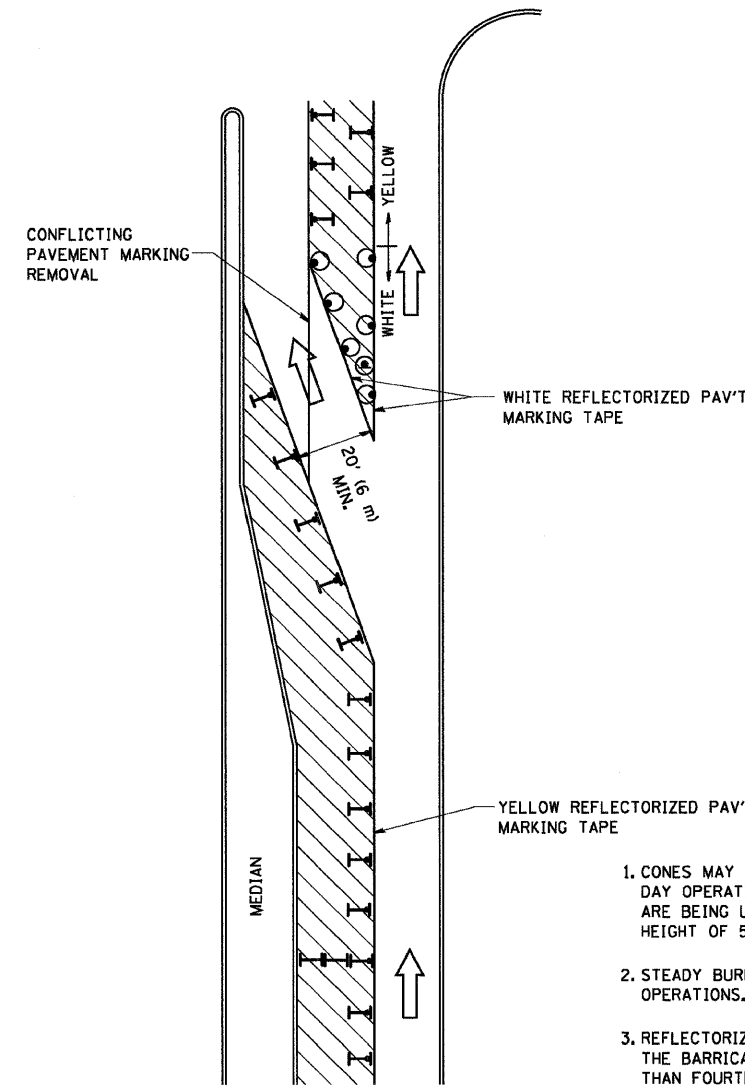
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 PLOT DATE = 1/4/2008

DESIGNED - EVERS
 DRAWN -
 CHECKED -
 DATE - 03-19-90
 REVISED - T. RAMMACHER 10-27-94
 REVISED - A. HOUSEH 10-09-96
 REVISED - A. HOUSEH 10-17-96
 REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

| DISTRICT ONE | | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--|--|--|--------------------------------|-------------|------------------|--------------|-----------|
| TYPICAL PAVEMENT MARKINGS | | | | 347 | 2009-035 RS | COOK | 27 | 23 |
| SCALE: NONE | | | | TC-13 | | CONTRACT NO. | | 60G36 |
| SHEET NO. 1 OF 1 SHEETS | | | | FED. ROAD DIST. NO. 1 ILLINOIS | | FED. AID PROJECT | | |



GENERAL NOTES

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

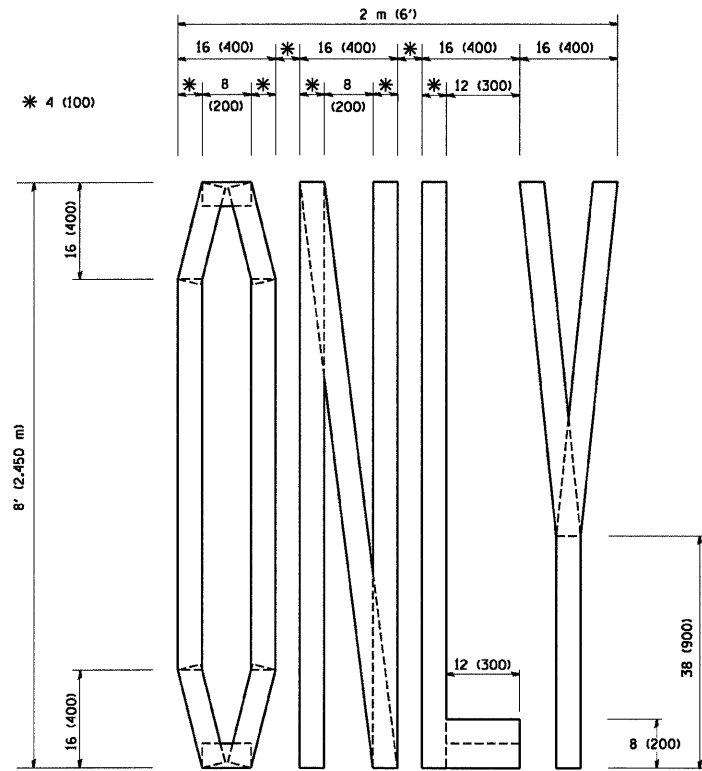
LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

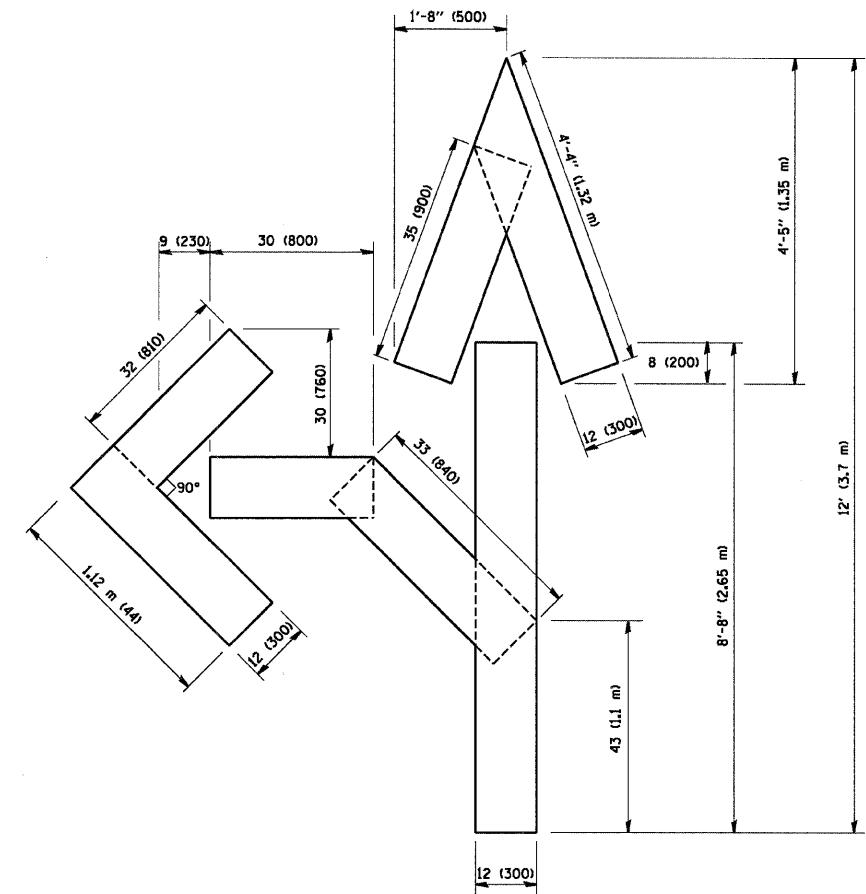
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| | | DRAWN - | REVISED - A. HOUSEH 11-07-95 |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - | REVISED - A. HOUSEH 10-12-96 |
| | PLOT DATE = 1/4/2008 | DATE - | REVISED - T. RAMMACHER 01-06-00 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

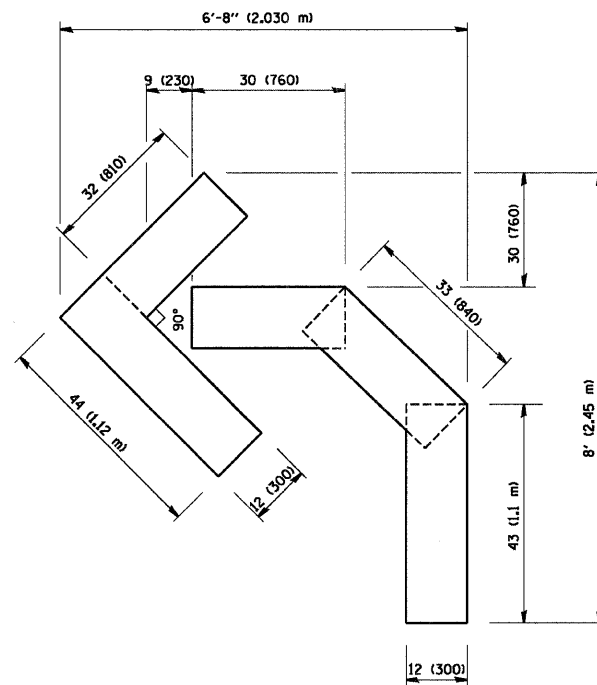
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|--|--|--|--|---|-------------|---------------------|-----------------|--------------|
| TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) | | | | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| SCALE: NONE | | | | 347 | 2009-035 RS | COOK | 27 | 24 |
| SHEET NO. 1 OF 1 SHEETS | | | | TC-14 | | CONTRACT NO. | 60636 | |
| STA. TO STA. | | | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

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

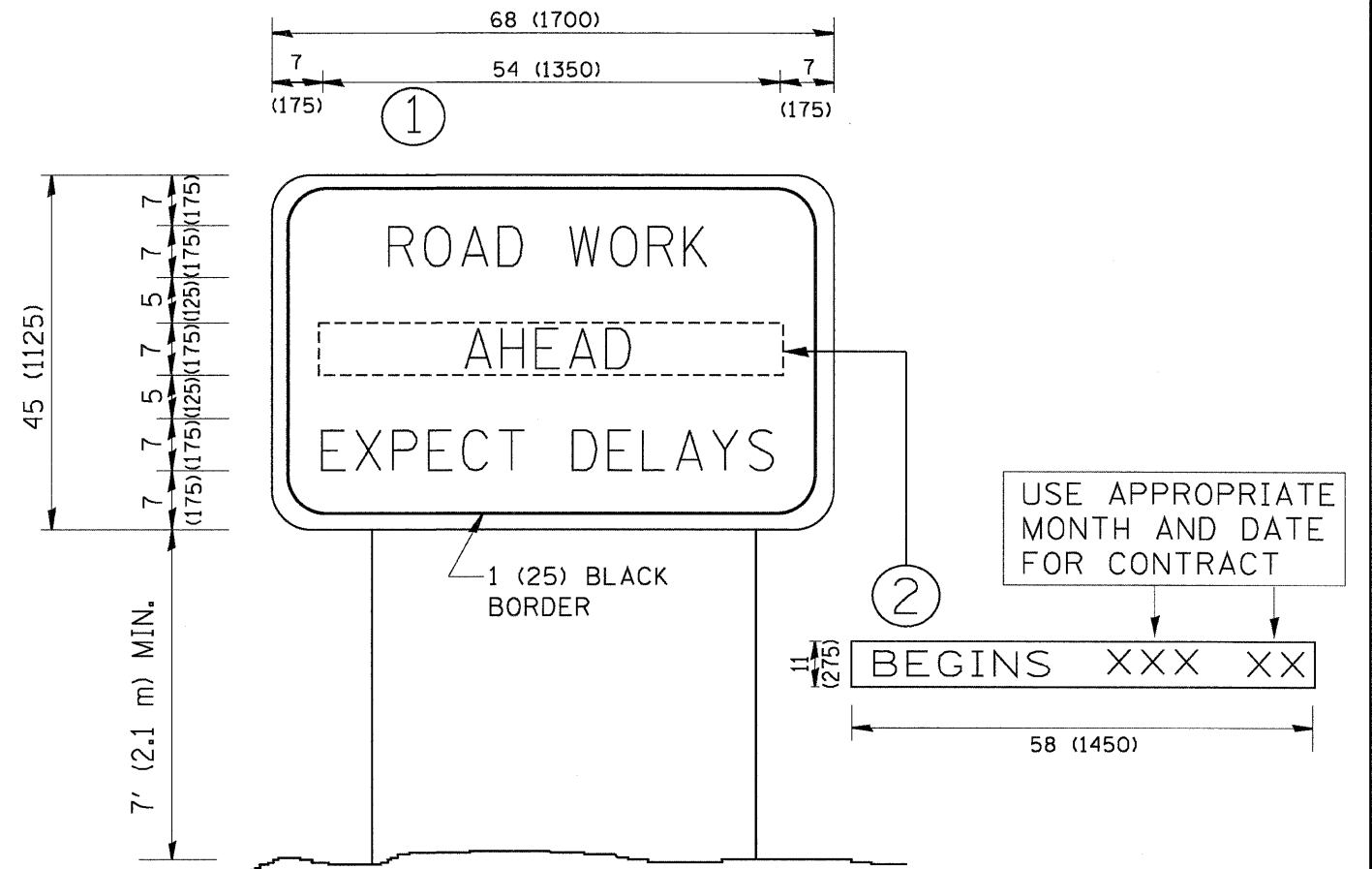
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| | | DRAWN - | REVISED - T. RAMMACHER 11-04-97 |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - | REVISED - T. RAMMACHER 03-02-98 |
| | PLOT DATE = 1/4/2008 | DATE - 09-18-94 | REVISED - E. GOMEZ 08-28-00 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
FOR TRAFFIC STAGING

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 25 |
| TC-16 | | | CONTRACT NO. 60636 | |
| 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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| | PLOT SCALE = 50.000 / IN. | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2008 | DATE - | REVISED - |

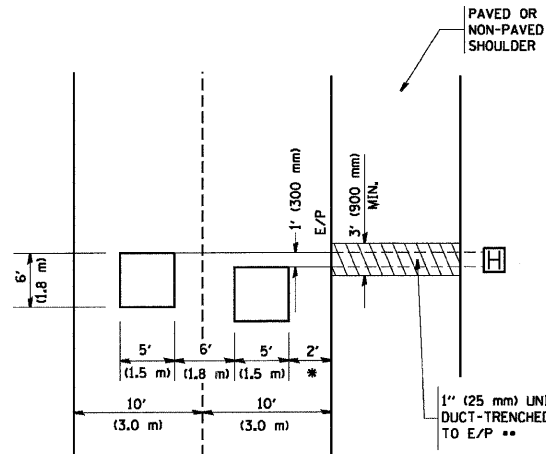
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 26 |
| TC-22 | | | CONTRACT NO. 60636 | |
| 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.

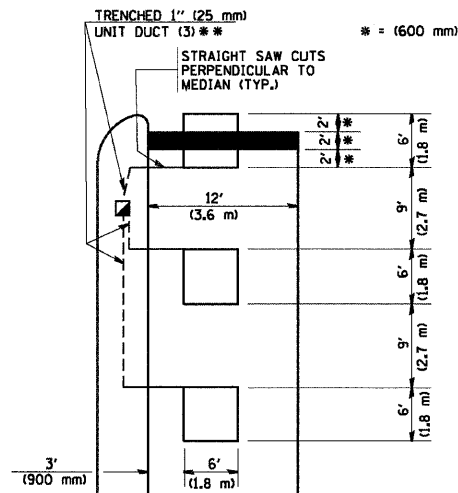


* = (600 mm)

** 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)**

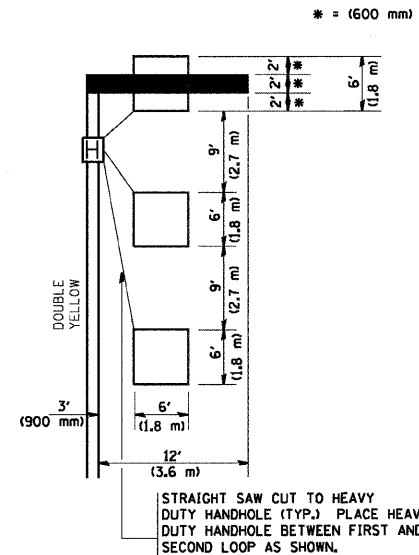
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

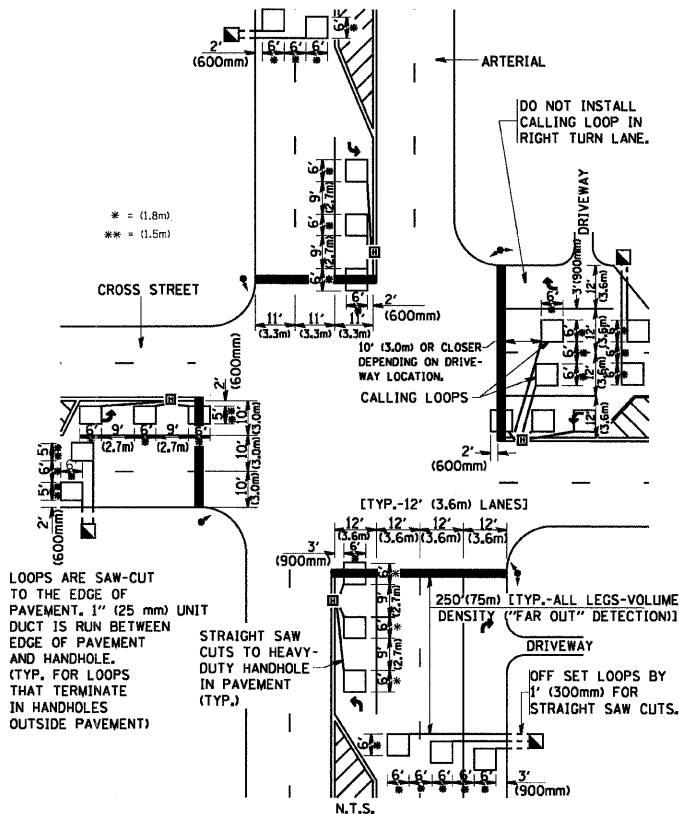
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



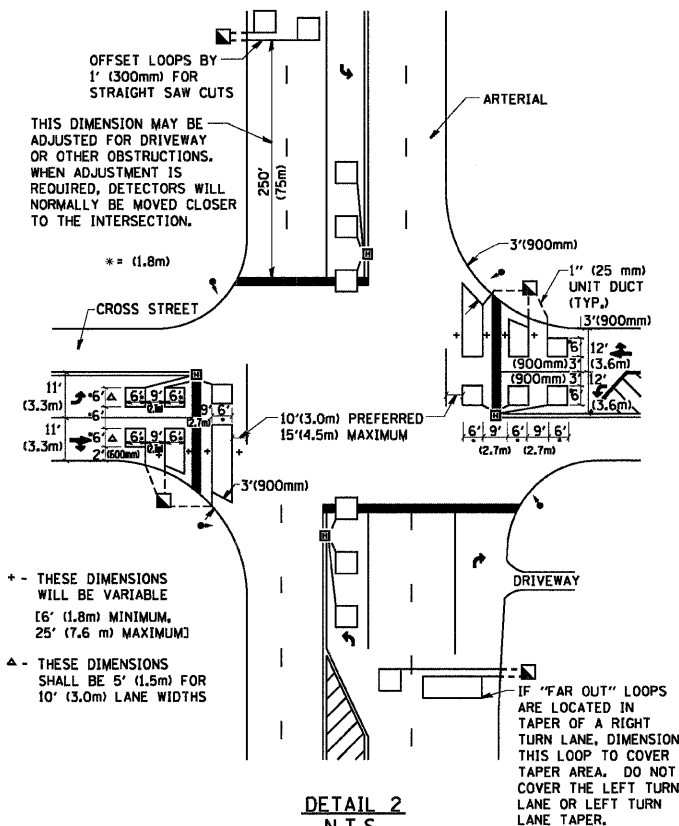
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1
N.T.S.**

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



**DETAIL 2
N.T.S.**

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.

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.

NOTES:

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 =
W:\dststd\22x34\ts07.dgn

| | | |
|-----------------------------|------------------|-----------|
| USER NAME = geglennob | DESIGNED - | REVISED - |
| PLOT SCALE = 50.0000' / IN. | DRAWN - | REVISED - |
| PLOT DATE = 1/4/2008 | CHECKED - R.K.F. | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|--------|--------------------|-----------|
| 347 | 2009-035 RS | COOK | 27 | 27 |
| TS-07 | | | CONTRACT NO. 60636 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |