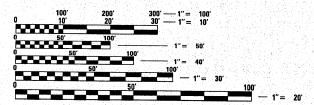
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGE OF TINLEY PARK



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

PROJECT ENGINEER JENPAI CHANG 847-705-4432 PROJECT MANAGER KEN ENG

CONTRACT NO. 60M38

 $\circ$ 

#### STATE OF ILLINOIS

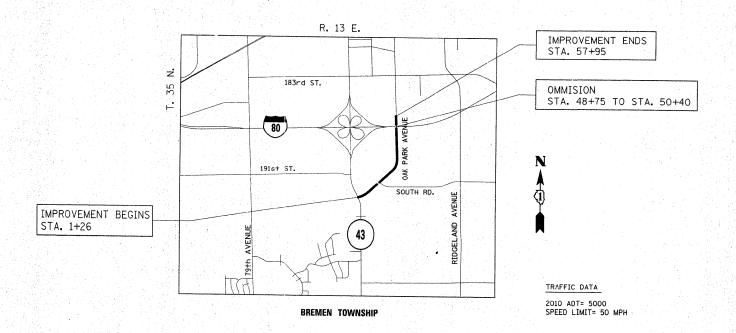
# DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

F.A.U. ROUTE 2774 (OAK PARK AVENUE) I-80 TO IL. ROUTE 43 (HARLEM AVENUE) SECTION 2010-110-RS RESURFACING (3P)

**COOK COUNTY** 

C-91-105-11

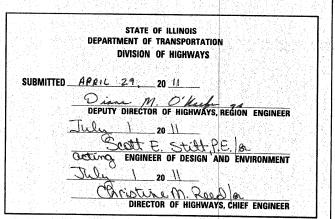


#### **LOCATION MAP**

GROSS LENGTH = 5,669 FT. = 1.07 MILE NET LENGTH = 5,454 FT. = 1.03 MILE

#### D-91-105-11





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

| SHEET NO. | DESCRIPTION   |
|-----------|---|
| 1         | COVER SHEET   |
| 2         | INDEX OF SHEETS, LIST OF STATE STANDARDS, AND PLAN NOTES                    |
| 3         | SUMMARY OF QUANTITIES   |
| 4-6       | TYPICAL CROSS SECTIONS  |
| 7-8       | EXISTING AND PROPOSED ROADWAY AND PAVEMENT MARKING PLANS                    |
| 9         | DETAILS FOR FRAMES & LIDS ADJUSTMENT WITH MILLING                           |
| 10        | PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT                                 |
| 11        | BUTT JOINT AND HMA TAPER DETAIL   |
| 12        | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |
| 13        | TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT |
| 14        | DISTRICT ONE TYPICAL PAVEMENT MARKINGS                                      |
| 15        | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING                    |
| 16        | ARTERIAL ROAD INFORMATION SIGN  |
| 17        | DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING                  |

#### **STANDARDS**

| STD. NO.           | DESCRIPTION  |
|--------------------|--|
| 000001-06          | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                 |
| 442201-03          | CLASS C & D PATCHES  |
| 606001-04          | CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER       |
| 701201- <b>04</b>  | LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEED > 45 MPH            |
| 701336-05          | LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES FOR SPEED >45 MPH |
| 701501- <i>06</i>  | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED.                       |
| 701606- <i>0</i> 7 | URBAN LANE CLOSURE, MULTILANE, 2W, WITH MOUNTABLE MEDIAN.    |
| 701901-01          | TRAFFIC CONTROL DEVICES                                      |
|                    |  |

#### PLAN NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGE OF TINLEY PARK

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

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

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

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

THE RESIDENT ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER AT (847) 597-9800 A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL OVERHEAD, SURFACE, AND UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS WHETHER OR NOT THE UTILITES ARE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

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

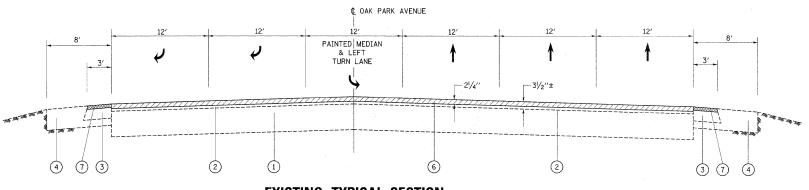
BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE. ALL EXISTING PAVEMENT MARKINGS LINES ( AND RAISED REFLECTIVE MARKINGS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

| LE NAME ≈           | USER NAME = bauerdl         | DESIGNED - | REVISED - |
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|                     | PLOT SCALE = 50.0000 '/ in. | CHECKED -  | REVISED - |
|                     | PLOT DATE = 6/27/2011       | DATE -     | REVISED - |

STATE OF ILLINOIS

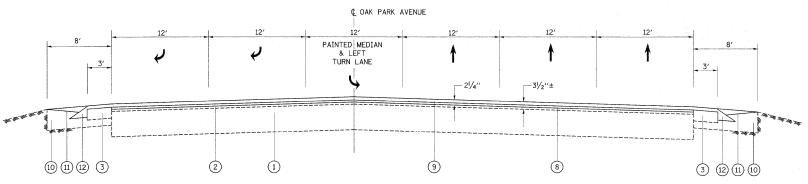
DEPARTMENT OF TRANSPORTATION

|            | SUMMARY OF QUANTITIES                              |         | 1007.STATE<br>URBAN |                 | CO | NSTRUCT | ION TYPE | CODE | T                   |   | SUMMA   | RY OF QUANTITIES   |               | 100%. STATE      |            | T              | CONSTRUCT       | TION TYPE        | CODE                  |           |
|------------|--|---------|---------------------|-----------------|----|---------|----------|------|---------------------|---|---|--|---------------|------------------|------------|----------------|-----------------|------------------|-----------------------|-----------|
| CODE NO    | ITEM   | UNIT    | TOTAL               |                 |    |         |          |      |                     | CODE NO                                 |   | ITEM   | UNIT          | TOTAL QUANTITIES |            |                |                 |                  |                       |           |
| 40600215   | POLYMERIZED BITUMINOUS MATERIALS                   | TON     | 31                  | 31              |    |         |          |      |                     | 70301000                                | WORK JONE D   | VEMENT MARKING REMOVAL                                       | SQ FT         | 496              | 0005       |                |                 |                  |                       |           |
|            | (PRIME COAT)                                       |         |                     |                 |    |         |          |      |                     | × 78000100                              |   | C PAVEMENT MARKING   | SQ FT         | 510              | 496<br>510 |                |                 |                  |                       |           |
| 40600300   | AGGREGATE (PRIME COAT)                             | TON     | 152                 | 152             |    |         |          |      |                     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | - LETTERS AN  |  | Suri          | 310              | 510        |                |                 |                  |                       |           |
| 40600400   | MIXTURE FOR CRACKS, JOINTS,<br>AND FLANGEWAYS      | TON     | 57                  | 57              |    |         |          |      |                     | <b>*</b> 78000200                       | THERMOPLASTI  | C PAVEMENT MARKING   | FOOT          | 30900            | 30900      |                |                 |                  |                       | 1 22 A    |
| 40600895   | CONSTRUCTING TEST STRIP                            | EACH    | 1                   | 1               |    |         |          | ,    |                     | <b>*</b> 78000400                       | THERMOPLASTI  | C PAVEMENT MARKING   | FOOT          | 1520             | 1520       |                |                 |                  |                       |           |
| 40600982   | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT<br>JOINT    | SQ YD   | 1898                | 1898            |    |         |          |      |                     | <b>*</b> 78000500                       |   | C PAVEMENT MARKING   | FOOT          | 200              | 200        |                |                 |                  |                       |           |
| 40601005   | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES           | TON     | 19                  | 19              |    |         |          |      |                     | <del>*</del> 78000600                   | - LINE 8"   | C PAVEMENT MARKING   | FOOT          | 800              | 800        |                |                 |                  |                       |           |
| 40603340   | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70       | TON     | 3173                | 3173            |    |         |          |      |                     | * 78000650                              | - LINE 12"  | C PAVEMENT MARKING   | FOOT          | 60               |            |                |                 |                  |                       |           |
| 44000155   | HOT-MIX ASPHALT SURFACE REMOVAL, 1-1/1             | SQ YD   | 2686                | 2686            |    |         | -        |      |                     | * 78100100                              | - LINE 24"  |  |               | 60               | 60         |                |                 |                  |                       |           |
| 44000158   | HOT-MIX ASPHALT SURFACE REMOVAL, 2-1/4"            | SQ YD   | 35083               | 35083           |    |         |          |      |                     | 78300200                                |   | CTIVE PAVEMENT MARKER CTIVE PAVEMENT MARKER                  | EACH<br>EACH  | 514<br>514       | 514<br>514 |                |                 |                  |                       |           |
| 44002214   | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 1/2"       | SQ YD   | 92                  | 92              |    |         |          |      |                     | <b>★</b> 88600600                       | S   | P REPLACEMENT  | FOOT          | 150              | 150        |                |                 |                  |                       |           |
| 44201765   | CLASS D PATCHES, TYPE II, 10 INCH                  | SQ YD   | 80                  | 80              |    |         |          |      |                     | X2020110                                | GRADING AND   | SHAPING SHOULDERS  | UNIT          | 110              | 110        |                |                 |                  |                       |           |
| 44201769   | CLASS D PATCHES, TYPE III, 10 INCH                 | SQ YD   | 16                  | 16              |    |         |          |      |                     | X4060826                                | POLYMERIZED<br>METHOD), IL-   | LEVELING BINDER (MACHINE                                     | TON           | 1448             | 1448       | 4 .            |                 |                  |                       |           |
| 44201771   | CLASS D PATCHES, TYPE IV, 10 INCH                  | SQ YD   | 27                  | 27              |    |         |          |      |                     | X6030310                                |   | IDS TO BE ADJUSTED   | EACH          | 8                | 8          |                |                 |                  |                       |           |
| 48102100   | AGGREGATE WEDGE SHOULDER, TYPE B                   | TON     | 5                   | 5               |    |         |          |      |                     | price de la                             | (SPECIAL)   | ini<br>Na kababatan kabangan mengalah binangan               |               |                  |            |                |                 |                  |                       |           |
| 67000400   | ENGINEER'S FIELD OFFICE, TYPE A                    | CAL MO  | 6                   | ۵               |    |         |          |      |                     | Z0030850                                | TEMPORARY IN  | FORMATION SIGNING  | SQ FT         | 52               | 52         |                |                 |                  |                       |           |
| 67100100   | MOBILIZATION                                       | L SUM   | 1                   | 1               |    |         |          | N    |                     | Tar for reliance.                       |   |  |               |                  |            |                |                 |                  |                       |           |
| 70100450   | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701201 | L SUM   | 1                   | 1               |    |         |          |      |                     |   |   | in terma e susastini<br>Literature e susastini<br>Literature |               |                  |            |                |                 |                  |                       |           |
| 70100600   | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701336 | L SUM   | 1                   | 1               |    |         |          |      |                     |   | eli eli sensi sensi s<br>Sensi sensi se |  |               |                  |            |                |                 |                  |                       |           |
| 70102620   | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701501 | L SUM   | 1                   | 1               |    |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
| 70102625   | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701606 | L SUM   | 1                   | 1               | -  |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
| 70300100   | SHORT TERM PAVEMENT MARKING                        | FOOT    | 1488                | 1488            |    |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
| 70300210   | TEMPORARY PAVEMENT MARKING<br>LETTERS AND SYMBOLS  | SQ FT   | 510                 | 510             |    |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
| 70300220   | TEMPORARY PAVEMENT MARKING - LINE 4"               | FOOT    | 30900               | 30900           |    |         |          |      |                     |   |   |  |               |                  |            |                | :               |                  |                       |           |
| 70300240   | TEMPORARY PAVEMENT MARKING - LINE 6"               | FOOT    | 1520                | 1520            |    |         |          |      |                     |   | ARTHUR ARTS   |  |               |                  |            |                |                 |                  |                       |           |
| 70300250   | TEMPORARY PAVEMENT MARKING - LINE 8"               | FOOT    | 200                 | 200             |    |         |          |      |                     |   | * Specially   |  |               |                  |            |                |                 |                  |                       |           |
| 70300260   | TEMPORARY PAVEMENT MARKING - LINE 12"              | FOOT    | 800                 | 800             |    |         |          |      |                     |   | TO SEE SEEN SEEN  |  |               |                  |            |                |                 |                  |                       |           |
| 70300280   | TEMPORARY PAVEMENT MARKING - LINE 24"              | FOOT    | 60                  | 60              |    |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
|            |  |         |                     |                 |    |         |          |      |                     |   |   |  |               |                  |            |                |                 |                  |                       |           |
| ILE NAME = | USER NAME = Downdl DES                             | IGNED - |                     | REVISED         |    |         |          |      | FATE AT             | III IN COO                              |   | OAK PARK AVENUE (I–80  | TO II ROUTE A | 3 (HARIERS       | AVENHEN    | F.A.U.<br>RTE. | SEC             | TION             | COUNTY                | TOTAL SHE |
| postadyti  | PLOT SCALE = 50.0000 1/ IN. CHE                    | CKED -  |                     | REVISED REVISED | *  |         | r        |      | TATE OF<br>ENT OF T | ILLINOIS<br>RANSPORTAT                  | TION  |  | RY OF QUANTI  |                  | AVCINUE))  | 2774           |                 | 110-RS           | СООК                  | 17 3      |
|            | PLOT DATE = 5/12/2011 DAT                          | E       |                     | REVISED         | -  |         |          |      | - • •               |   |   | SCALE: NONE SHEET NO. OF                                     | SHEETS STA.   |                  | STA.       | FED. R         | OAD DIST, NO. 1 | ILLINOIS FED. AI | CONTRACT<br>D PROJECT | NO. 60M   |



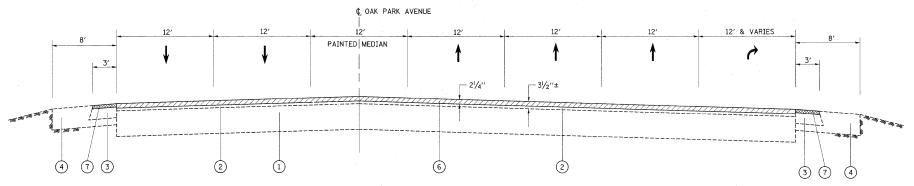
#### **EXISTING TYPICAL SECTION**

STA. 1+26 TO STA. 5+00



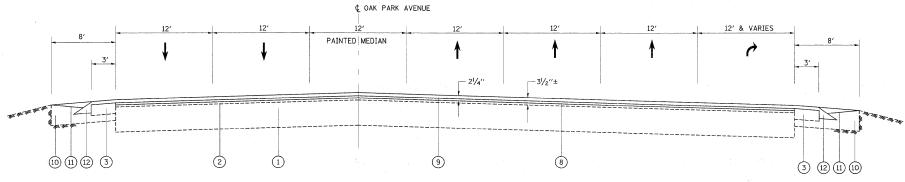
#### PROPOSED TYPICAL SECTION

STA. 1+26 TO STA. 5+00



#### **EXISTING TYPICAL SECTION**

STA. 5+00 TO STA. 8+00



#### PROPOSED TYPICAL SECTION

STA. 5+00 TO STA. 8+00

|                      |                             |            | 2.3       |   |
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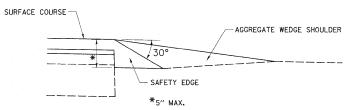
#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

#### OAK PARK AVENUE (IL. ROUTE 43 (HARLEM AVENUE) TO NORTH OF I-80) RTE. соок TYPICAL CROSS SECTIONS CONTRACT NO. 60M38 SHEET NO. OF SHEETS STA. 1+26 TO STA. 8+00 SCALE: NONE

#### LEGEND

- 1 EXISTING HMA PAVEMENT, 10"
- EXISTING HMA SURFACE, 3.8"±
- EXISTING HMA SHOULDER, 6"
- <u>(4)</u> EXISTING AGGREGATE SHOULDER, 8"
- (5) EXISTING CONCRETE TYPE B-6.24 CURB & GUTTER
- 6 PROPOSED HMA SURFACE REMOVAL, 21/4"
- (7) PROPOSED HMA SURFACE REMOVAL, 11/2"
- 8) PROPOSED POLYMERIZED LEVELING BINDER (MM), IL.-4.75, N50, 3/4"
- 9 PROPOSED HMA SURFACE COURSE, MIX 'D', N50, IL.-9.5 MM,  $1\frac{1}{2}$ "
- (10) PROPOSED GRATING AND SHAPING THE EXISTING AGGREGATE SHOULDER
- (1) PROPOSED AGGREGATE WEDGE SHOULDER, 21/4"
- 12 PROPOSED SAFETY EDGE

NOTE FOR SAFETY EDGE: 5" MAXIMUM DEPTH AT 30° ANGLE.



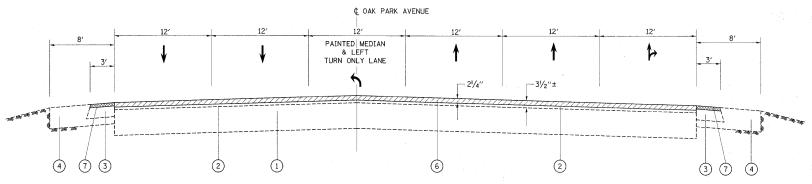
#### SAFETY EDGE DETAIL

#### NOTE: CONTACTOR SHALL PATCH FIRST, BEFORE MILLING

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS   |                  |  |  |  |  |  |  |  |
|--|------------------|--|--|--|--|--|--|--|
| MIXTURE USES   | DESIGN AIR VOIDS |  |  |  |  |  |  |  |
| RESURFACING:<br>HMA SURFACE COURSE, MIX "D",<br>N70 (IL9.5 mm), $1\frac{1}{2}$ " | 4% AT 70 GYR     |  |  |  |  |  |  |  |
| POLYMERIZED, LEVELING BINDER (mm), IL-475, N50, 3/4"                             | 4% AT 50 GYR     |  |  |  |  |  |  |  |
| PATCHING:<br>CLASS D PATCHES, (HMA BINDER IL19.0 mm)                             | 4% AT 70 GYR     |  |  |  |  |  |  |  |
| HMA REPLACEMENT OVER PATCHES   | 4% AT N70        |  |  |  |  |  |  |  |

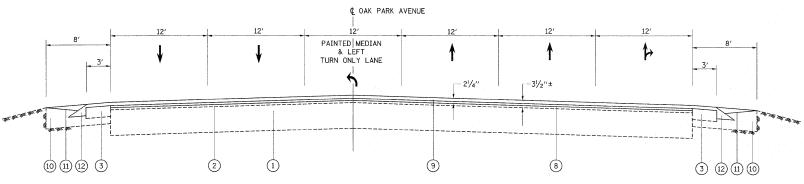
NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS./ SQ YD./IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



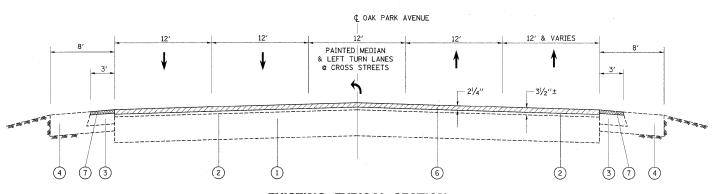
#### **EXISTING TYPICAL SECTION**

STA. 8+00 TO STA. 15+00



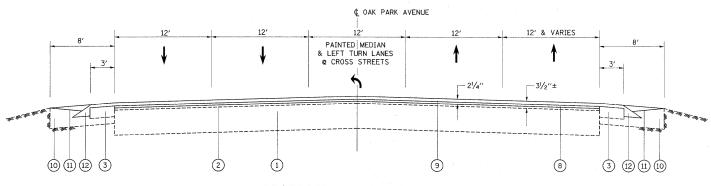
#### PROPOSED TYPICAL SECTION

STA. 8+00 TO STA. 15+00



#### **EXISTING TYPICAL SECTION**

STA. 15+00 TO STA. 35+00



#### PROPOSED TYPICAL SECTION

STA. 15+00 TO STA. 35+00

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|                      | PLOT DATE = 5/12/2011       | DATE -     | REVISED ~ | Ĺ |

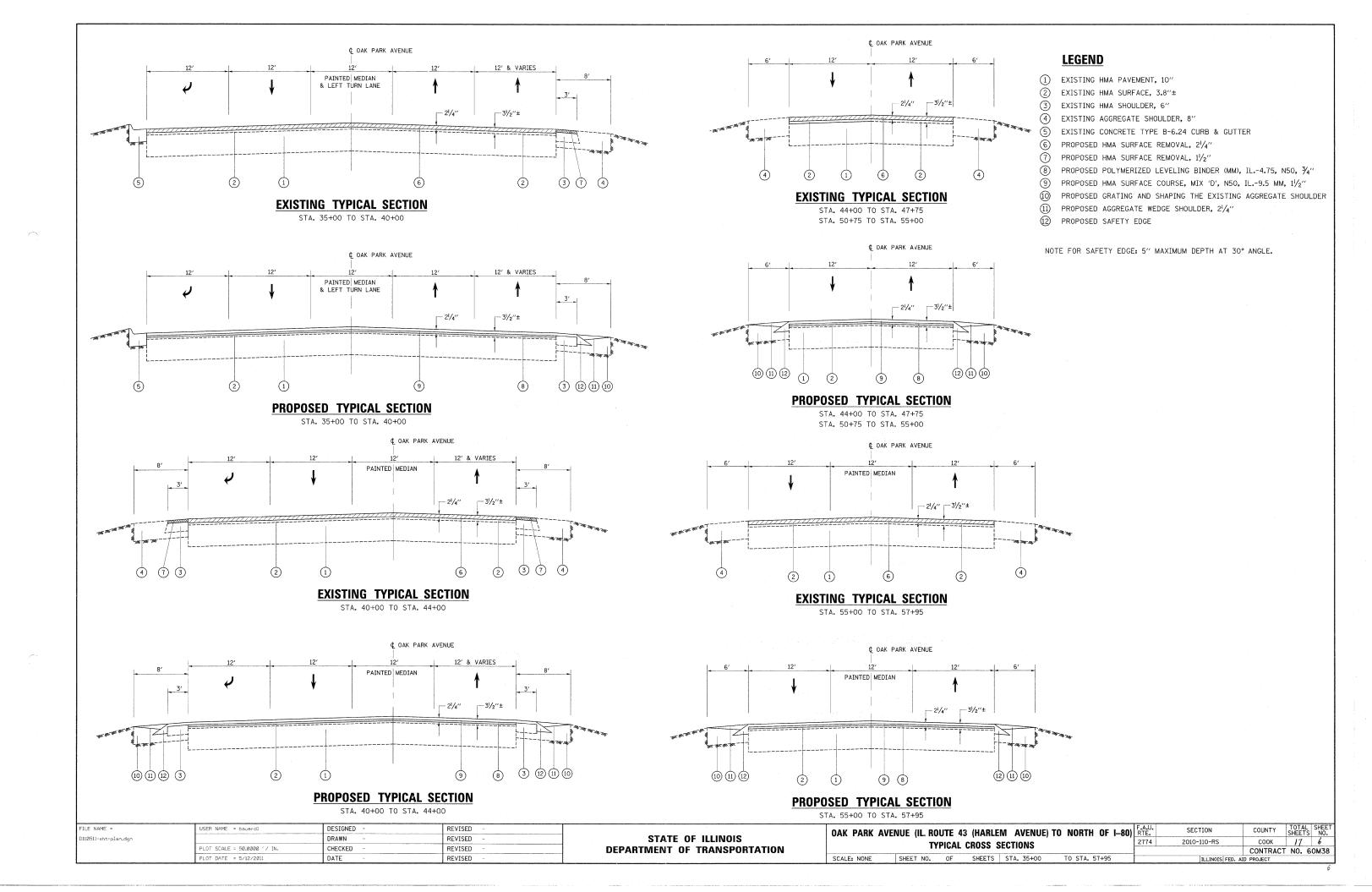
#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

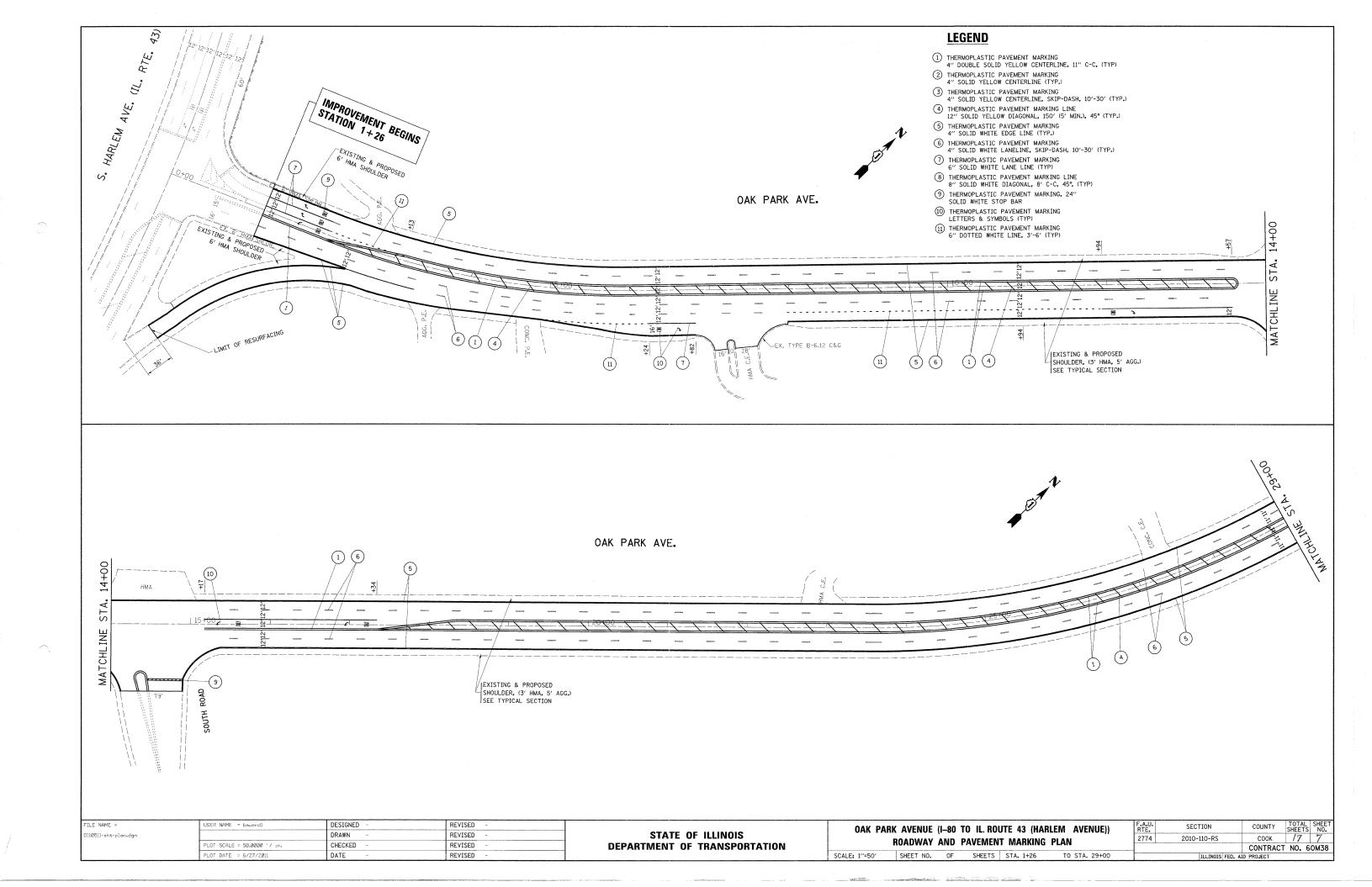
| OAK PARK AVE | DAK PARK AVENUE (IL. ROUTE 43 (HARLEM AVENUE) TO NORTH OF I–80) |       |          |           |               |          | SECTION         | COUNTY     | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------------|---|-------|----------|-----------|---------------|----------|-----------------|------------|-----------------|--------------|
|              | ` <b>T</b> V  | DICAL | CROSS S  | 2774      | 2010-110-RS   | соок     | 17              | 5          |                 |              |
|              |   | IIVAL | 011000 0 |           |               | CONTRACT | NO. 6           | 0м38       |                 |              |
| SCALE: NONE  | SHEET NO.   | 0F    | SHEETS   | STA. 8+00 | TO STA. 35+00 |          | ILLINOIS FED. A | ID PROJECT |                 |              |

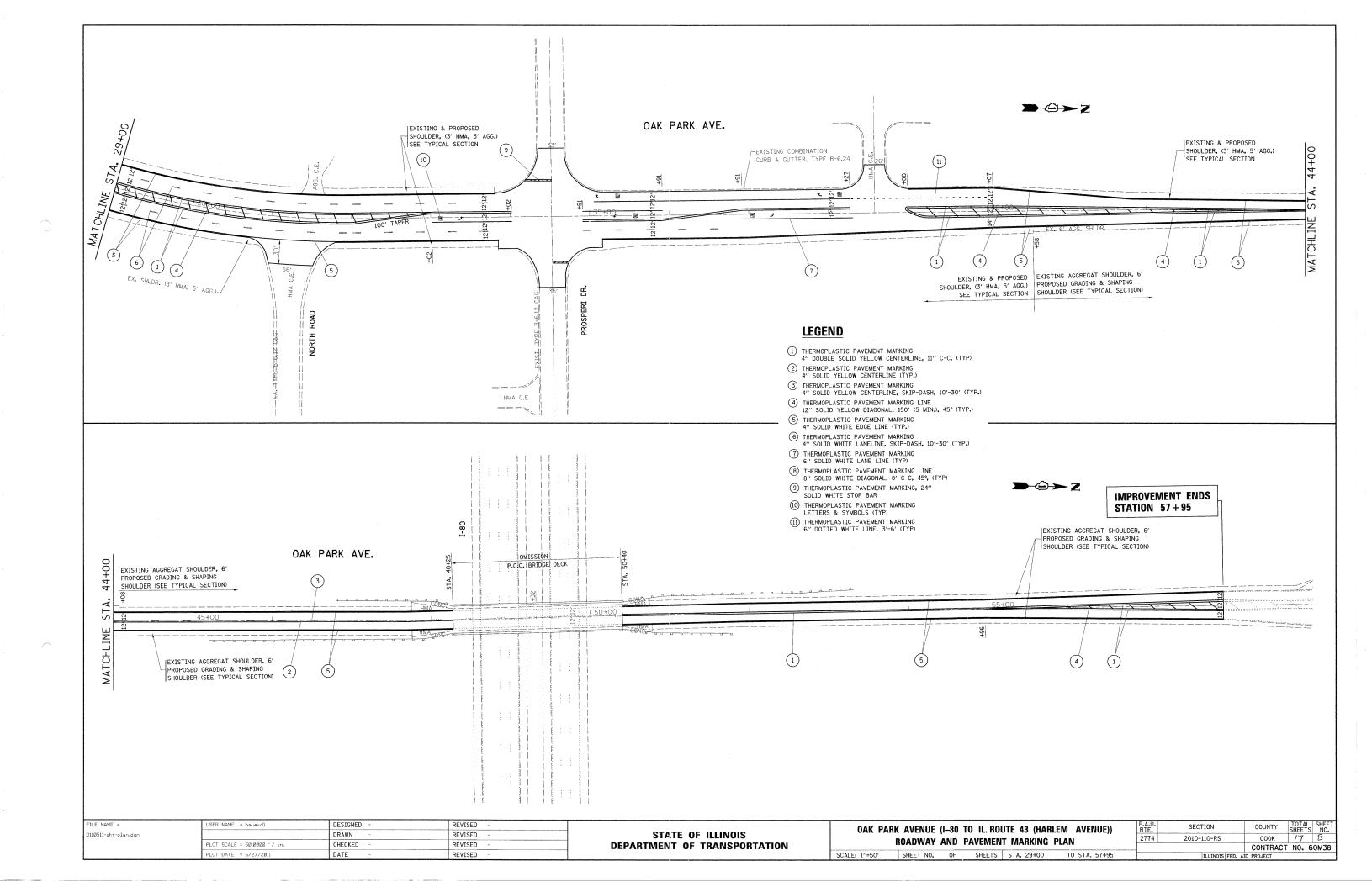
#### LEGEND

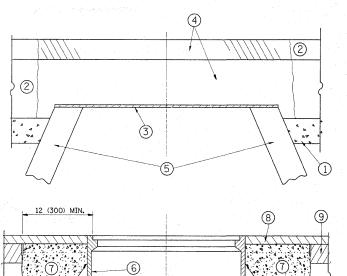
- 1 EXISTING HMA PAVEMENT, 10"
- 2 EXISTING HMA SURFACE, 3.8"±
- 3 EXISTING HMA SHOULDER, 6"
- (4) EXISTING AGGREGATE SHOULDER, 8"
- (5) EXISTING CONCRETE TYPE B-6.24 CURB & GUTTER
- 6 PROPOSED HMA SURFACE REMOVAL, 21/4"
- (7) PROPOSED HMA SURFACE REMOVAL, 11/2"
- 8 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL.-4.75, N50, 3/4"
- 9 PROPOSED HMA SURFACE COURSE, MIX 'D', N50, IL.-9.5 MM, 11/2"
- 10 PROPOSED GRATING AND SHAPING THE EXISTING AGGREGATE SHOULDER
- 11) PROPOSED AGGREGATE WEDGE SHOULDER, 21/4"
- 12 PROPOSED SAFETY EDGE

NOTE FOR SAFETY EDGE: 5" MAXIMUM DEPTH AT 30° ANGLE.









# 12 (300) MIN, (300) MIN, (6) (7) (6) (7) (7) (8) (9) (7) (9) (10)

#### NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM
- AROUND THE STRUCTURE.

  B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

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

#### LEGEND

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

#### LOCATION OF STRUCTURES:

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

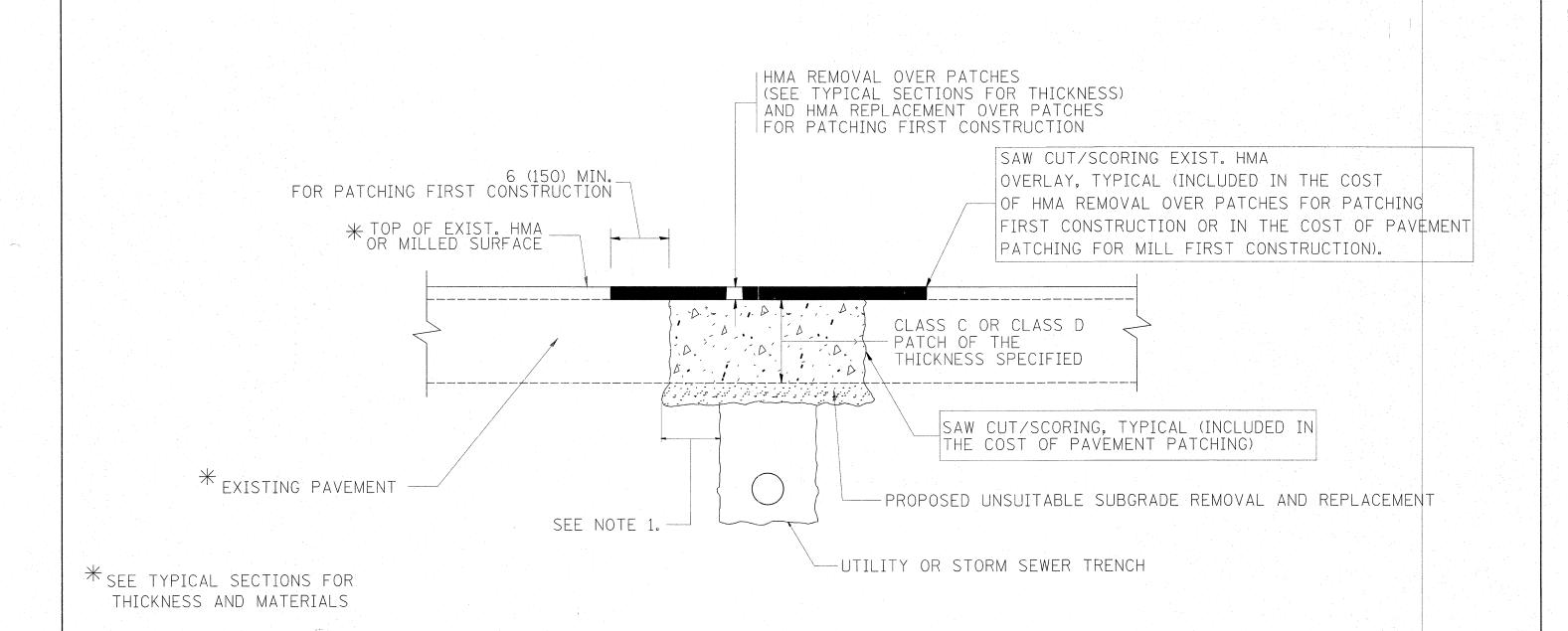
BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT
THE CONTRACT UNIT PRICE PER EACH FOR
"FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"
NEW FRAMES AND LIDS, WHEN SPECIFIED,
BE PAID FOR SEPARATELY.

### DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

|     |  |                             |                    | ···                            |                              |                 |                                      | · · · · · · · · · · · · · · · · · · ·          |
|-----|--|-----------------------------|--------------------|--------------------------------|------------------------------|-----------------|--------------------------------------|--|
|     | FILE NAME =                              | USER NAME = gaglianobt      | DESIGNED - R. SHAH | REVISED - A. ABBAS 03-21-97    |                              |                 | PETALLO POP                          | A.U. SECTION COUNTY C                          |
|     | c:\pw_work\pwidot\gaglianobt\d0248106\Di | stStd.dgn                   | DRAWN -            | REVISED - R. WIEDEMAN 05-14-04 | STATE OF ILLINOIS            |                 | DETAILS FOR                          | (IE. SI  |
| - 1 |  | PLOT SCALE = 50.0000 '/ IN. | CHECKED -          | REVISED - R. BORO 01-01-07     | DEPARTMENT OF TRANSPORTATION | FRA             | MES AND LIDS ADJUSTMENT WITH MILLING | BD600-03 (BD-8) CONTRACT N                     |
| L   |  | PLOT DATE = 4/21/2011       | DATE - 10-25-94    | REVISED - R. BORO 03-09-11     | Si                           | SCALE: NONE SHE | ET NO. 1 OF 1 SHEETS STA. TO STA. F  | ED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |

NO. 60M38



#### NOTES:

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

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

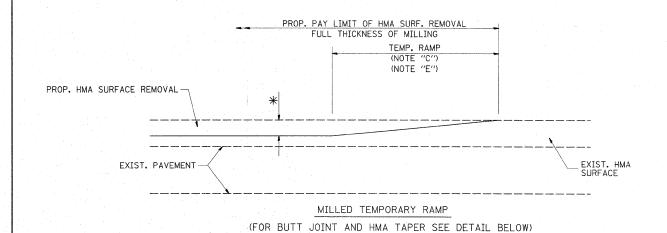
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

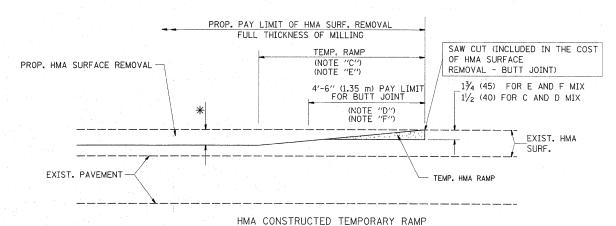
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

| FILE NAME =                              | USER NAME = gaglianobt      | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 |                              | PAVEMENT PATCHING FOR                    |         | F.A.U. SECTION                      | COUNTY TOTAL SHEET |
|--|-----------------------------|--------------------|-----------------------------|------------------------------|--|---------|-------------------------------------|--------------------|
| c:\pw_work\pwidot\gaglianobt\d0248106\Di | stStd.dgn                   | DRAWN -            | REVISED - R. BORO 01-01-07  | STATE OF ILLINOIS            | HMA SURFACED PAVEMENT                    |         | 2774 2010-110-RS                    | COOK 17 10         |
|  | PLOT SCALE = 50.0000 '/ IN. | CHECKED -          | REVISED R. BORO 09-04-07    | DEPARTMENT OF TRANSPORTATION | NIVIA SUNFACED PAVEIVIENT                |         | BD400-04 (BD-22)                    | CONTRACT NO. 60M38 |
|  | PLOT DATE = 4/21/2011       | 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        |



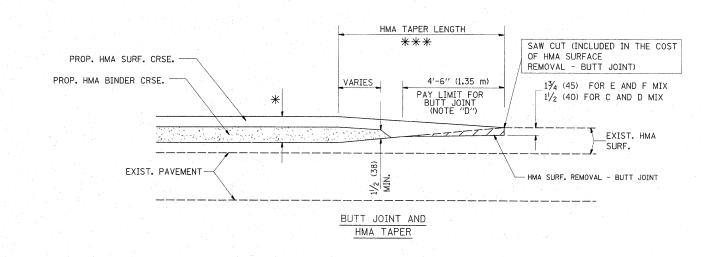
#### OPTION 1



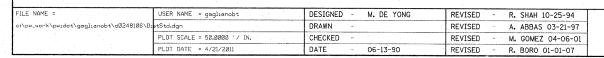
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 2

#### TYPICAL TEMPORARY RAMP



## TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE 30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 13/4 (45) FOR E AND F MIX 1/2 (40) FOR C AND D MIX \* \* EXIST. PAVEMENT BUTT JOINT DETAIL TAPER LENGTH \* \* VARIES PROP. HMA SURF. CRSE. 13/4 (45) FOR E AND F MIX PROP. HMA BINDER CRSE. 1/2 (40) FOR C AND D MIX

## TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

HMA TAPER DETAIL

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

\* \* EXIST. 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 RAT OF 3'-O" (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".

SCALE: NONE

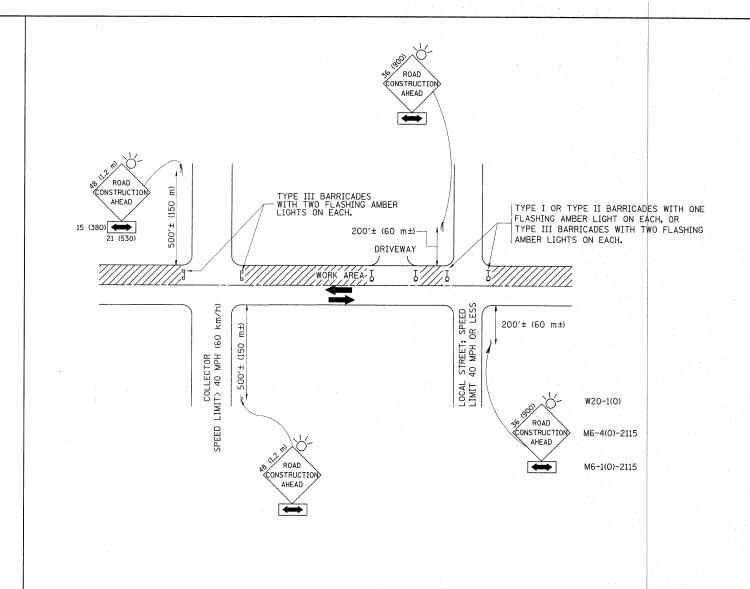
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

COUNTY

соок /7

CONTRACT NO. 60M38

TOTAL SHEET NO.



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 × 36 (900×900) 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN  $48 \times 48$  (1.2 m  $\times$  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.

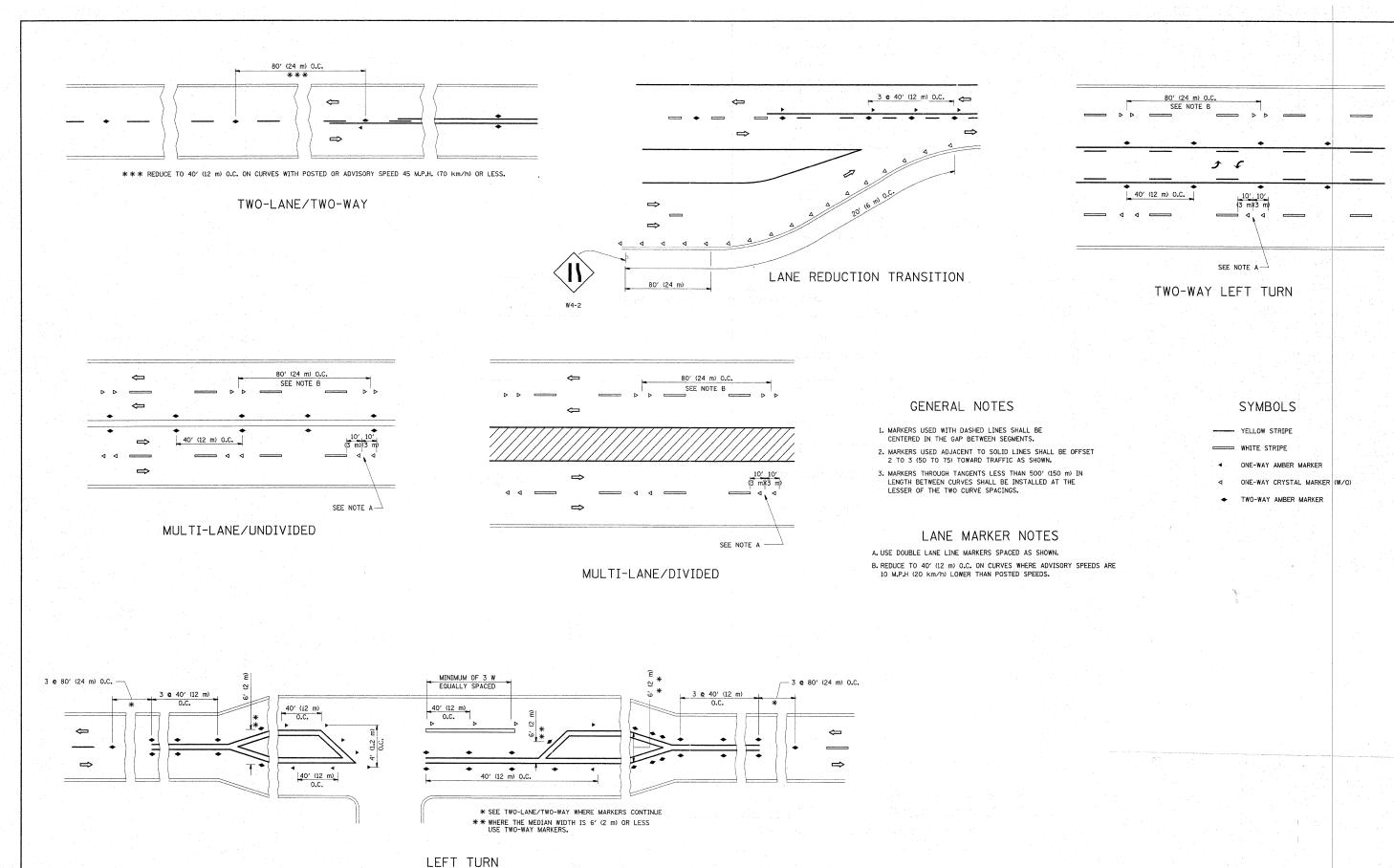
All dimensions are in millimeters (inches) unless otherwise shown.

| FILE-NAME =                              | USER NAME = gaglianobt      | DESIGNED - | LHA   | REVISED | - J. OBERLE 10-18-95   |
|--|-----------------------------|------------|-------|---------|------------------------|
| c:\pw_work\pwidot\gaglianobt\d0248106\Di | stStd.dgn                   | DRAWN -    | •     | REVISED | ~ A. HOUSEH 03-06-96   |
|  | PLOT SCALE = 50.0000 '/ IN. | CHECKED -  |       | REVISED | - A. HOUSEH 10-15-96   |
|  | PLOT DATE = 4/21/2011       | DATE -     | 06-89 | REVISED | -T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

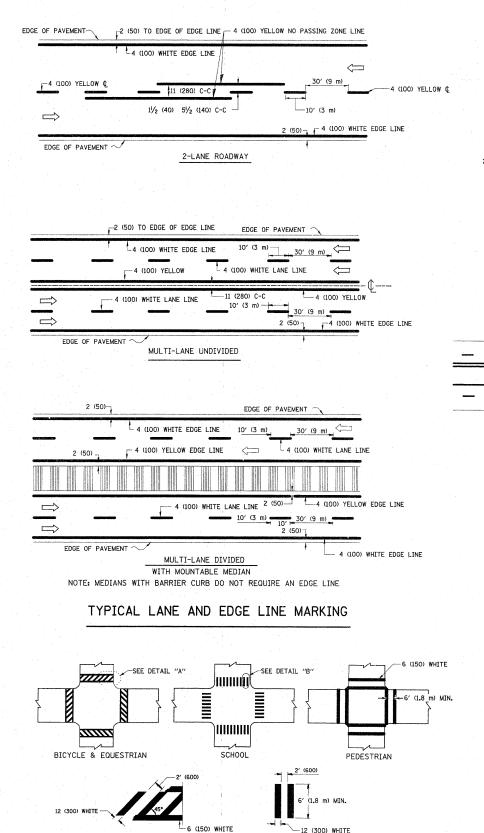
| F.A.U.<br>RTE. | SECTION                      |       | COUNTY   | TO | TAL | SHEET<br>NO. |  |
|----------------|------------------------------|-------|----------|----|-----|--------------|--|
| 2774           | 2010-110-RS                  |       | COOK     | 1  | 7   | 12           |  |
|                | TC-10                        |       | CONTRACT | NĆ | . 6 | ОМ38         |  |
| FED. R         | OAD DIST. NO. 1 ILLINOIS FED | . AID | PROJECT  | -  |     |              |  |



unless otherwise shown. FILE NAME = USER NAME = gaglianobt DESIGNED REVISED -T. RAMMACHER 09-19-94 COUNTY TOTAL SHEETS SECTION TYPICAL APPLICATIONS DRAWN REVISED -T. RAMMACHER 03-12-99 STATE OF ILLINOIS :\pw\_work\pwidot\gaglianobt\dØ2481Ø6\ istStd.dgn 2774 COOK 2010-110-RS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) CHECKED PLOT SCALE = 50.0000 '/ IN. REVISED -T. RAMMACHER 01-06-00 **DEPARTMENT OF TRANSPORTATION** TC-11 CONTRACT NO. 60M38 PLOT DATE = 4/21/2011 DATE REVISED - C. JUCIUS 09-09-09 SHEET NO. 1 OF 1 SHEETS STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

10

All dimensions are in inches (millimeters)



# DETAIL "A" DETAIL "B" TYPICAL CROSSWALK MARKING

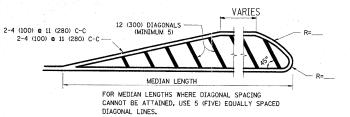
2-4 (100) YELLOW • 11 (280) C-C

NO DIAGONALS

4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES

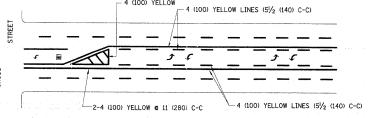
2-4 (100) YELLOW • 11 (280) C-C

#### 4' (1.2 m) WIDE MEDIANS ONLY

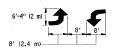


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

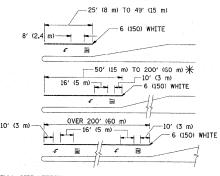


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

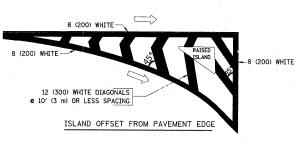


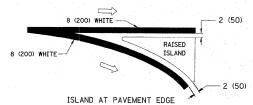
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>)  $\P$  AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\*\* 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





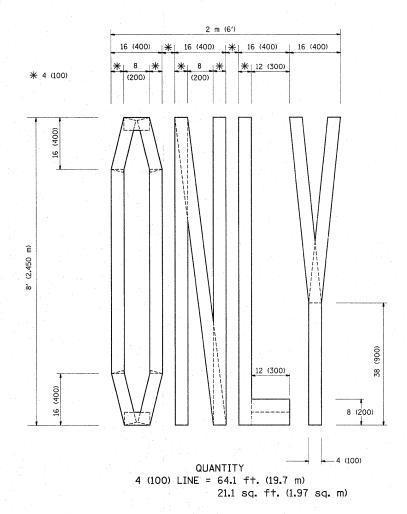
#### TYPICAL ISLAND MARKING

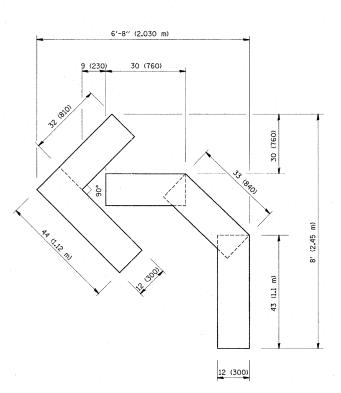
| <u></u>   | <del></del>   | T                                  | T   |  |                    |
|---|---|------------------------------------|---|--|--------------------|
| TYPE OF MARKING   | WIDTH OF LINE   | PATTERN                            | COLOR   | SPACING / REMA   | RKS                |
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)   | SKIP-DASH                          | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPAC   | E                  |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT   | 2 & 4 (100)   | SOLID                              | YELLOW  | 11 (280) C-C   |                    |
| NO PASSING ZONE LINES:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                          | 4 (100)<br>2 @ 4 (100)  | SOLID<br>SOLID                     | YELLOW<br>YELLOW  | 51/2 (140) C-C FROM SKIP-DASH CENT<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEE   |                    |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH             | WHITE WHITE   | 10' (3 m) LINE WITH 30' (9 m) SPAC   | E                  |
| DOTTED LINES<br>(EXTENSIONS OF CENTER, LANE OR<br>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<br>WHITE-RIGHT                              | OUTLINE MOUNTABLE MEDIANS IN<br>YELLOW; EDGE LINES ARE NOT<br>USED NEXT TO BARRIER CURB  |                    |
| TURN LANE MARKINGS  | 6 (150) LINE; FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2,4m))   | SOLID                              | WHITE   | SEE TYPICAL TURN LANE MARKING D  | ETAIL              |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100)<br>EACH DIRECTION<br>8' (2.4m) LEFT ARROW   | SKIP-DASH<br>AND SOLID<br>IN PAIRS | WHITE   | 10' (3 m) LINE WITH 30' (9 m) SPAC<br>SKIP-DASH; 5½ (140) C-C BETWEEN S<br>LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN<br>MARKING DETAIL                  | E FOR<br>SOLID     |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 & 6 (150)<br>12 (300) & 45°<br>12 (300) & 90°   | SOLID<br>SOLID<br>SOLID            | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING D  | ETAILS.            |
| STOP LINES  | 24 (600)  | SOLID                              | WHITE   | PLACE 4' (1.2 m) IN ADVANCE OF AND<br>PARALLEL TO CROSSWALK, IF PRESENT.<br>OTHERWISE, PLACE AT DESIRED STOPPING<br>POINT. PARALLEL TO CROSSROAD CENTERLIN<br>POSSIBLE | E, WHERE           |
| PAINTED MEDIANS   | 2 & 4 (100) WITH<br>12 (300) DIAGONALS<br>& 45°<br>NO DIAGONALS USED FOR<br>4' (1.2 m) WIDE MEDIANS | SOLID                              | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKI   | NG.                |
| GORE MARKING AND<br>CHANNELIZING LINES  | 8 (200) WITH 12 (300)<br>DIAGONALS @ 45°  | SOLID                              | WHITE   | DIAGONALS:<br>15' (4.5 m) C-C (LESS THAN 30MPH (<br>20' (6 m) C-C 30MPH (50 km/h) TO<br>30' (9 m) C-C (OVER 45MPH (70 km/  | 45MPH (70 km/h))   |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE<br>LINES; "RR" IS 6' (1.8 m)<br>LETTERS; 16 (400)<br>LINE FOR "X"               | SOLID                              | WHITE   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3.6 SQ. FT. (0.33 m²) EACH<br>"X"=54.0 SQ. FT. (5.0 m²)   |                    |
| SHOULDER DIAGONALS  | 12 (300) <b>a</b> 45°   | SOLID                              | WHITE - RIGHT<br>YELLOW - LEFT                          | 50' (15 m) C-C (LESS THAN 30MPH (5<br>75' (25 m) C-C (30 MPH (50 km/h) T<br>150' (45 m) C-C (OVER 45MPH (70 km   | 0 45MPH (70 km/h)) |

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

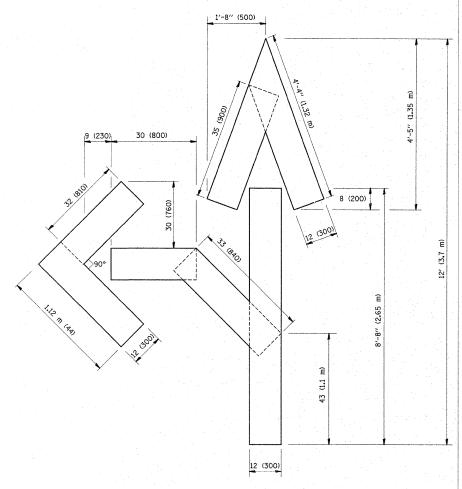
All dimensions are in inches (millimeters) unless otherwise shown.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





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

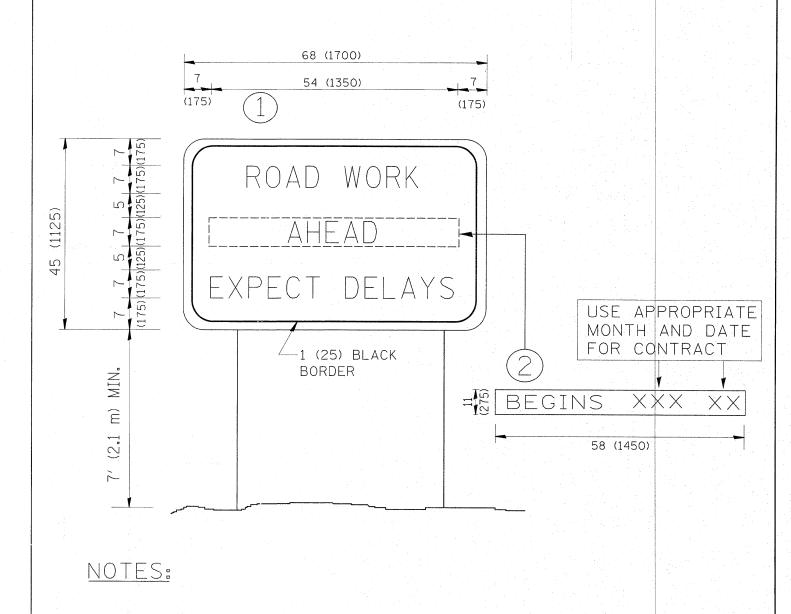


QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

| FILE NAME =                              | USER NAME = gaglianobt      | DESIGNED -      | REVISED -T. RAMMACHER 06-05-96 | 3                            |             |
|--|-----------------------------|-----------------|--------------------------------|------------------------------|-------------|
| c:\pw_work\pwidot\gaglianobt\dØ248106\Di | stStd.dgn                   | DRAWN -         | REVISED -T. RAMMACHER 11-04-97 | STATE OF ILLINOIS            |             |
|  | PLOT SCALE = 50.0000 '/ IN. | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 | DEPARTMENT OF TRANSPORTATION |             |
|  | PLOT DATE = 4/21/2011       | DATE - 09-18-94 | REVISED - E. GOMEZ 08-28-00    |                              | SCALE: NONE |

| PAVEMENT    | MARK  | NG LETTE  | RS AND | SYMBOLS | 1 2                                     | F.A.U.<br>RTE. | SECTION                     |      | COUNTY    | TOTA<br>SHEET | IL SHEET |
|-------------|-------|-----------|--------|---------|---|----------------|-----------------------------|------|-----------|---------------|----------|
|             | EOD T | RAFFIC ST | ACING  |         |   | 2774           | 2010-110-RS                 |      | COOK      | 17            | 15       |
| <br>        | FUN I | NAFFIG 31 | AGING  |         | - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                | TC-16                       | П    | CONTRACT  | NO.           | 60M38    |
| SHEET NO. 1 | OF 1  | SHEETS    | STA.   | T0      | STA.                                    | FED. RC        | AD DIST. NO. 1 ILLINOIS FED | . AI | D PROJECT |               |          |



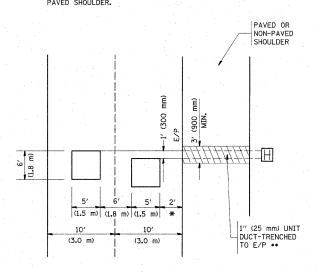
- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START 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.

| - 1 |  |                             |            |                              |                        |                         |                  |         |   |                    |
|-----|--|-----------------------------|------------|------------------------------|------------------------|-------------------------|------------------|---------|---|--------------------|
| .   | FILE NAME =                              | USER NAME = gaglianobt      | DESIGNED - | REVISED - R. MIRS 09-15-97   |                        |                         |                  |         | SECTION                                   | COUNTY TOTAL SHEET |
|     | c:\pw_work\pwidot\gaglianobt\d0248106\Di | tStd.dgn                    | DRAWN      | REVISED - R. MIRS 12-11-97   | STATE OF ILLINOIS      |                         | ARTERIAL ROAD    |         | NIE.                                      | JOHEET 3 INU.      |
| -   |  | PLOT SCALE = 50.0000 '/ IN. | CHECKED -  | REVISED -T. RAMMACHER 02-02- | <b>-</b>               |                         | INFORMATION SIGN |         | 2774 2010-110-RS                          | COOK /7 /6         |
|     |  | PLOT DATE = 4/21/2011       | DATE -     | REVISED - C. JUCIUS 01-31-0  | 22. A. HAROLO GITATION | SCALE: NONE SHEET NO. 1 | OF 1 SHEETS STA. | TO STA. | TC-22 FED. ROAD DIST. NO. 1 ILLINOIS FED. | CONTRACT NO. 60M38 |

#### LOOPS NEXT TO SHOULDERS

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



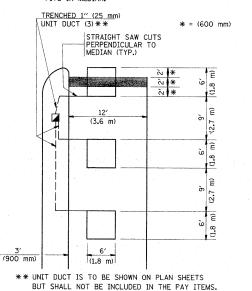
\* = (600 mm)

\* \* 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)

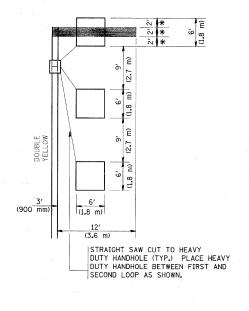
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



\* = (600 mm)

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

SCALE: NONE

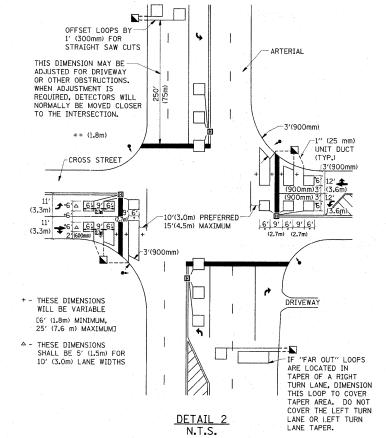
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL DO NOT INSTALL CALLING LOOP IN RIGHT TURN LANE. \* = (1.8m) CROSS STREET. 10' (3.0m) OR CLOSER DEPENDING ON DRIVE-WAY LOCATION. CALLING LOOPS [TYP.-12' (3.6m) LANES] (9000 LOOPS ARE SAW-CUT TO THE EDGE OF ETYP.-ALL LEGS-VOLUME
("FAR OUT" DETECTION)] PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT ST STRAIGHT SAW CUTS TO HEAVY-DRIVEWAY AND HANDHOLE. (TYP. FOR LOOPS DUTY HANDHOLE IOFF SET LOOPS BY IN PAVEMENT THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT) STRAIGHT SAW CUTS

> DETAIL N.T.S.

ILE NAME = JSER NAME = gaglianobt DESIGNED REVISED REVISED CHECKED LOT SCALE = 50.0000 '/ IN R.K.F. REVISED PLOT DATE = 4/21/2011 DATE REVISED

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



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED. SHIELDED
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED A\$ SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

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

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

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

#### NOTE:

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

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

| DISTRICT 1 - DETECTOR LOOP INSTALLATION | F.A.U.<br>RTE. | SECTION                     |    | COUNTY     |
|---|----------------|-----------------------------|----|------------|
| DETAILS FOR ROADWAY RESURFACING         | 2774           | 2010-110-RS                 |    | COOK       |
|   | -              | TS-07                       |    | CONTRACT   |
| SHEET NO. 1 OF 1 SHEETS STA. TO STA.    | ECD D          | OAD DICT NO 1 THE INOTE EED | AT | D DDO ICCT |

NO. 60M38