STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

# PROPOSED HIGHWAY PLANS

F.A.P. 370 / WESTERN AVENUE SECTION: 0103 RS-2 119th STREET TO 127th STREET RESURFACING (3P)

> COOK COUNTY C-91-849-09

LYONS TOWNSHIP
R. 12 E.

119th St W 119th St

120th Pt

123rd St

GROSS LENGTH OF PROJECT = 5,543 FEET = 1.050 MILES

NET LENGTH OF PROJECT = 5.543 FEET = 1.050 MILES

PROJECT ENDS

STA. 69 + 13

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.

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION:** 

**SPEED LIMIT**: 30 M.P.H. 2006 ADT = 20,700

PROJECT LOCATED IN THE CITY OF BLUE ISLAND AND THE

CITY OF CHICAGO

 $\circ$ 

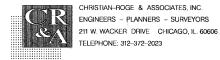
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J.U.L.I.E. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS 1-800-892-0123

DISTRICT ONE - PLAN PREP ENGINEER: KEN ENG (847) 705-4247

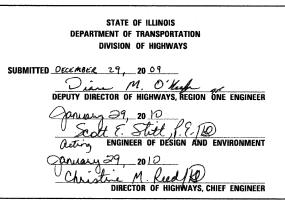
CONTRACT NO. 60109



A 22+2-24

## D-91-849-09







Birinder S. Sachdera
BIRINDER S. SACHDEVA, P.E.
EXPIRES: 11-30-2011

12-28-03

DATE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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|                    | LIST OF STATE STANDARDS                                       |
|--------------------|---|
| STANDARD NO.       | DESCRIPTION   |
| 000001-05          | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                  |
| 442201 <i>- 03</i> | CLASS C AND D PATCHES   |
| 604001 <i>-03</i>  | FRAME AND LIDS, TYPE 1  |
| 604091 <i>-02</i>  | FRAME AND GRATE TYPE 24                                       |
| 606001 - 04        | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 701606-00          | URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN       |
| 701701 <i>- 06</i> | URBAN LANE CLOSURE, MULTILANE INTERSECTION                    |
| 701901 -01         | TRAFFIC CONTROL DEVICES                                       |
| 780001- <i>0</i> 2 | TYPICAL PAVEMENT MARKINGS                                     |
|                    |   |

### GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 AND CHICAGO UTILITY ALERT NETWORK AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC. TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, VILLAGE OF BLUE ISLAND AND THE CITY OF CHICAGO.
- 4. 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
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY FIEMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT
- 9. WHEN MILLED PAVEMENT IS OFEN TO TRAFFIC. THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 11/2 INCHES (40mm) WHERE THE SPEED LIMIT IS 40 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 IS SLOPED A MINIMUM 1:3 (V:H).
- 10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- 11. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE TYPE III SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS.
- 12. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 13. THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, THE AREA TRAFFIC FIELD TECHNICIAN, AT (708) 597-9800 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT
- 14. 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" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
- 16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 17. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED \* SHALL ONLY BE LITTLIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS OR CATCH BASINS AND THE MAIN SEWER.

### PLAN NOTES - CITY OF CHICAGO

- 1. ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWERS' STANDARDS.
- 2. SEWER SIZES 525 MM (21") DIAMETER OR SMALLER MUST BE EXTRA STRENGTH VITRIFIED CLAY PIPE C-700 OR DUCTILE IRON PIPE WITH PUSH-ON OR MECHANICAL JOINTS. SEWER SIZES 600 MM (24") DIAMETER OR LARGER MUST BE REINFORCED CONCRETE PIPE TYPE C-76, CLASS III, WALL "B" WITH "O-RING" JOINTS.
- 3. PERMITS FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR ALL WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS' PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION. THE LICENSED SEWER CONTRACTOR / SUBCONTRACTOR MUST SUBMIT TWO SETS OF PLANS APPROVED BY THE DEPARTMENT OF SEWERS FOR THE ISSUE OF THE SEWER PERMIT TO SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. INSPECTION WILL BE PROVIDED BY THE DEPARTMENT OF SEWERS.
- 4. IF THE SEWER PIPE COVER IS REDUCED TO LESS THAT 1 METER (3 FT.). CONCRETE ENCASEMENT OF THE SEWER OR REPLACEMENT OF THE SEWER WITH CLASS 52 DUCTILE IRON PIPE WILL BE REQUIRED.
- IN CASE OF DAMAGE TO CITY OF CHICAGO SEWERS, PRIVATE AND PUBLIC DRAINS, SEWER STRUCTURES AND / OR BENCH MONUMENTS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DEPARTMENT OF SEWERS AT (312) 747-7892 OR (312) 747-7893.
- 6. PERFORATED LIDS SHALL BE PLACED ON ALL MANHOLES AND CATCH BASINS.
- BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF SEWERS AT SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.
- 8. SIDEWALK ACCESSIBILITY RAMPS SHALL NOT BE CONSTRUCTED DIRECTLY OVER EXISTING OR PROPOSED DRAINAGE STRUCTURES.
- 9. ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND GRATES OR LIDS ON SEWER STRUCTURES SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES AND GRATES OR LIDS. OLD FRAMES AND GRATES OR LIDS SHALL BE DELIVERED TO THE DEPARTMENT OF SEWERS AT 39TH STREET AND ASHLAND AVENUE.
- 10. CITY OF CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES SHALL NOT BE CLOSED, COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO DEPARTMENT OF WATER AND / OR DEPARTMENT OF SEWERS.
- 11. CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 75 MM (3").
- 12. BACKFILL MATERIAL UNDER SIDEWALKS SHALL BE FA-2.
- 13. PAVEMENT REPLACEMENT AROUND FRAMES AND GRATES OR LIDS WHERE DRAINAGE, WATER MAIN OR ELECTRICAL STRUCTURES ARE ADJUSTED OR RECONSTRUCTED, SHALL BE WITH CLASS SI CONCRETE.

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

|          | SUMMARY OF QUANTITIES  | DO D | 100% STATE       | CONSTRUCTION<br>TYPE CODE |
|----------|--|--|------------------|---------------------------|
| CODE NO  | ITEM   | TOTAL<br>QUANTITIES                      | IOOO-2A<br>URBAN |                           |
| 21101615 | TOPSOIL FURNISH AND PLACE, 4"                                | SQ YD                                    | 25               | 25                        |
| 25200110 | SODDING, SALT TOLERANT                                       | SQ YD                                    | 25               | 25                        |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT)                            | TON                                      | 34               | 34                        |
| 40600300 | AGGREGATE (PRIME COAT)                                       | TON                                      | 168              | 168                       |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON                                      | 63               | 63                        |
| 40600895 | CONSTRUCTING TEST STRIP                                      | EACH                                     | 2                | 2                         |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT                 | SQ YD                                    | 864              | 864                       |
| 40601005 | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES                     | TON                                      | 937              | 937                       |
| 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70                 | TON                                      | 3,526            | 3,526                     |
| 42001300 | PROTECTIVE COAT  | SQ YD                                    | 379              | 379                       |
| 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH                     | SQ FT                                    | 1,000            | 1,000                     |
| 44000158 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"                      | SQ YD                                    | 41,975           | 41,975                    |
| 44000600 | SIDEWALK REMOVAL   | SQ FT                                    | 1,000            | 1,000                     |
| 44001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT                                     | 624              | 624                       |
| 44002216 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"                     | SQ YD                                    | 4,183            | 4,183                     |
| 44201749 | CLASS D PATCHES, TYPE I, 9 INCH                              | SQ YD                                    | 50               | 50                        |
| 44201753 | CLASS D PATCHES, TYPE II, 9 INCH                             | SQ YD                                    | 2,600            | 2,600                     |
| 44201757 | CLASS D PATCHES, TYPE III, 9 INCH                            | SQ YD                                    | 300              | 300                       |
| 44201759 | CLASS D PATCHES, TYPE IV, 9 INCH                             | SQ YD                                    | 250              | 250                       |
| 55039700 | STORM SEWERS TO BE CLEANED                                   | FOOT                                     | 3,612            | 3,612                     |
| 60252800 | CATCH BASINS TO BE RECONSTRUCTED                             | EACH                                     | 2                | 2                         |
| 60257900 | MANHOLES TO BE RECONSTRUCTED                                 | EACH                                     | 2                | 2                         |
| 60300305 | FRAMES AND LIDS TO BE ADJUSTED                               | EACH                                     | 8                | 8                         |
| 60300310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                     | EACH                                     | 109              | 109                       |
| 60404950 | FRAMES AND GRATES, TYPE 24                                   | EACH                                     | 2                | 2                         |
| 60406000 | FRAMES AND LIDS, TYPE 1, OPEN LID                            | EACH                                     | 2                | 2                         |
| 35501308 | HOT-MIX ASPHALT BASE COURSE, 6"                              | 50 40                                    | 60               | 60                        |

|   |          | SUMMARY OF QUANTITIES                                      |        | IOO'I STATE         | CONSTRUCTION<br>TYPE CODE |
|---|----------|--|--------|---------------------|---------------------------|
|   | CODE NO  | ITEM   | UNIT   | TOTAL<br>QUANTITIES | I000-2A<br>URBAN          |
|   | 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID                        | EACH   | 2                   | 2                         |
|   | 60406520 | FRAMES AND LIDS, OPEN LID (CITY OF CHICAGO)                | EACH   | 1                   | 1                         |
|   | 60406530 | FRAMES AND LIDS, CLOSED LID (CITY OF CHICAGO)              | EACH   | 1                   | 1                         |
|   | 67000400 | ENGINEER'S FIELD OFFICE, TYPE A                            | CAL MO | 6                   | 6                         |
|   | 67100100 | MOBILIZATION   | LSUM   | 1                   | 1                         |
|   | 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606            | L SUM  | 1                   | 1                         |
|   | 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701            | L SUM  | 1                   | . 1                       |
|   | 70300100 | SHORT-TERM PAVEMENT MARKING                                | FOOT   | 23,000              | 23,000                    |
|   | 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS           | 1,113  | 1,113               |                           |
|   | 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4"                       | 17,350 | 17,350              |                           |
|   | 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6"                       | FOOT   | 4,250               | 4,250                     |
|   | 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12"                      | FOOT   | 4,050               | 4,050                     |
|   | 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24"                      | FOOT   | 600                 | 600                       |
|   | 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL                         | SQ FT  | 3,600               | 3,600                     |
| * | 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS       | SQ FT  | 1,113               | 1,113                     |
| * | 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                   | FOOT   | 17,350              | 17,350                    |
| * | 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                   | FOOT   | 4,250               | 4,250                     |
| * | 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                  | FOOT   | 4,050               | 4,050                     |
| * | 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                  | FOOT   | 600                 | 600                       |
| * | 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                          | EACH   | 500                 | 500                       |
|   | 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                  | EACH   | 130                 | 130                       |
| * | 88600600 | DETECTOR LOOP REPLACEMENT                                  | FOOT   | 1,640               | 1,640                     |
|   | X0322256 | TEMPORARY INFORMATION SIGNING                              | SQ FT  | 52                  | 52                        |
|   | 44000200 | DRIVEWAY PAVEMENT REMOVAL                                  | SQ YD  | 60                  | 60                        |
|   | 40600826 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON    | 1,763               | 1,763                     |
|   | Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED                          | EACH   | 129                 | 129                       |
| , |          |  |        |                     |                           |

\* SPECIALTY ITEM

SCALE: NONE

FILE NAME = D160109-sht-S00.dgn PLOT DATE = 12/28/2009

42300400 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH

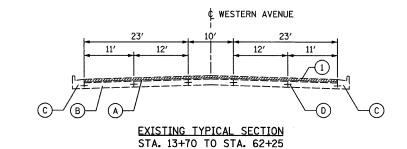
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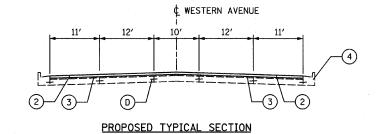
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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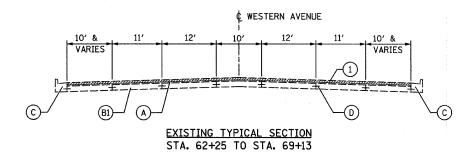
| SUMMARY OF QUANTITIES  | F.A.P.<br>RTE. | SECTION              |  |  |
|--|----------------|----------------------|--|--|
|  | 370            | 0103 RS-2            |  |  |
| SUMMARY OF QUANTITIES  ESTERN AVE — 127TH ST TO 119TH ST  SECTION  370 0103 RS-2 |                |                      |  |  |
| SHEET NO 1 OF 1 SHEETS STA TO STA  | FED BOAD       | DICT NO 1 THINDS CED |  |  |

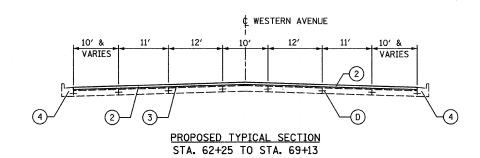
CONTRACT NO. 60109





STA. 13+70 TO STA. 62+25





## EXISTING CONDITIONS:

- A HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 4" & VARIES
- B CONCRETE BASE COURSE, 8" OR HMA BASE COURSE, 8"
- B1 P.C.C. BASE COURSE 9"
- © COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- D TIE BARS
- E DOWEL BAR

## PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- 2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- (AT LOCATIONS AS DETERMINED BY THE ENGINEER)

NOTE: THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING. SEE DISTRICT ONE DETAIL.

| ROADWAY NAME | HOT-MIX ASPHALT MIXTURE REQUIREMENTS  |    |    |       |      |  |
|--------------|---|----|----|-------|------|--|
| ROADWAT NAME | MIXTURE TYPE  | A  | IR | VOIDS |      |  |
|              | HOT-MIX ASPHALT<br>SURFACE COURSE, MIX "D", N70 (IL-9.5mm)                  | 4% | 0  | 70    | GYR  |  |
|              | POLYMERIZED LEVELING BINDER<br>(MACHINE METHOD), IL-4.75, N50               | 4% | 0  | 50    | GYR  |  |
| WESTERN AVE  | CLASS D PATCHES (HMA BINDER, IL-19mm)                                       | 4% | 0  | 70    | GYR. |  |
| WESTERN AVE  | HMA REPLACEMENT OVER PATCHES<br>(HMA BINDER, IL-19mm)                       | 4% | Q  | 70    | GYR. |  |
|              | DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT<br>HOT-MIX ASPHALT SURFACE COURSE |    |    |       |      |  |
|              | MIX "C", N50, (2" MIN.)<br>HOT-MIX ASPHALT BASE COURSE                      | 4% | Ø  | 50    | GYR. |  |
|              | (HMA BINDER, IL-19 mm), (2 1/4" MIN.)                                       | 4% | Ø  | 70    | GYR. |  |

THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. FOR "AC TYPE" AND "PERCENT RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

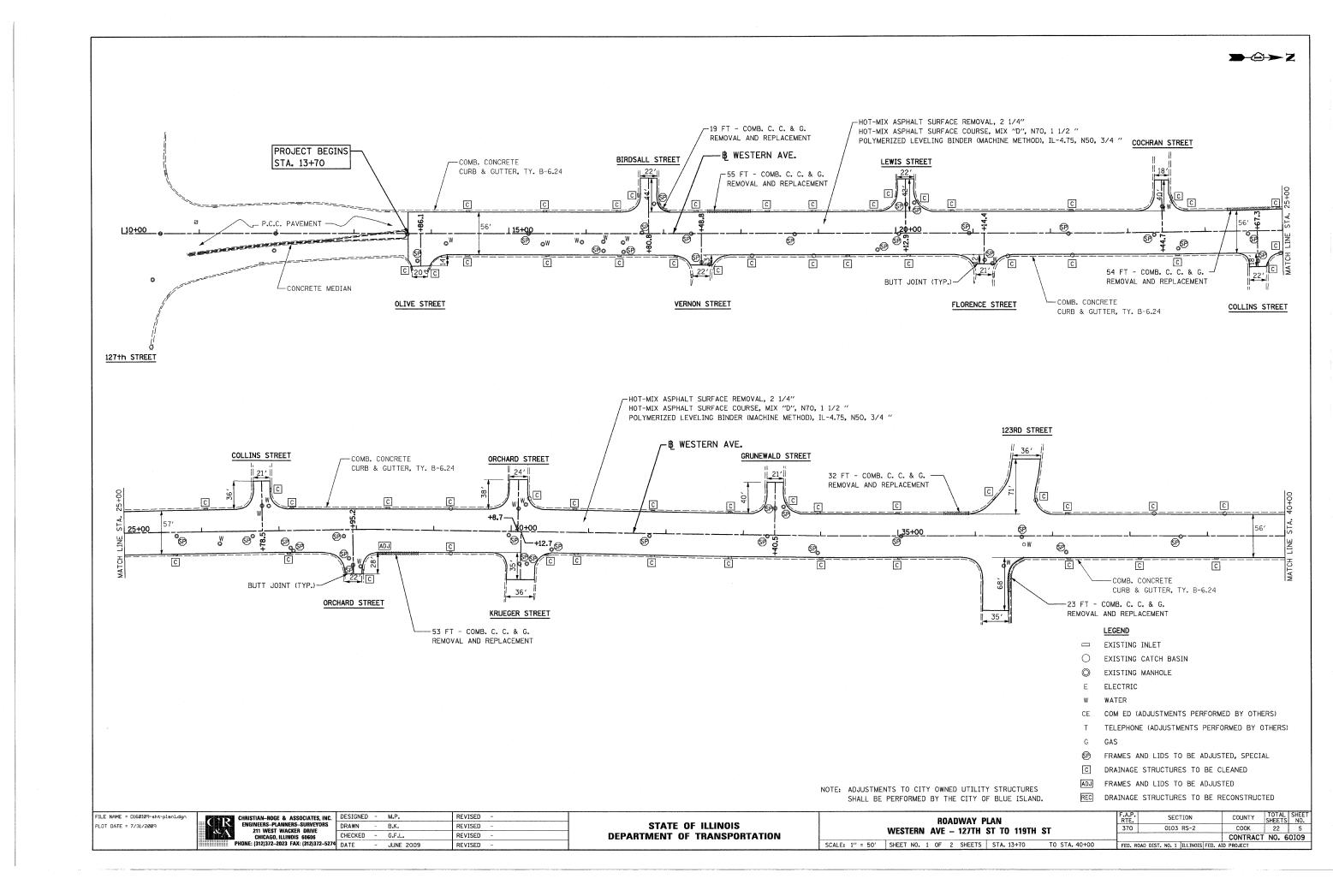
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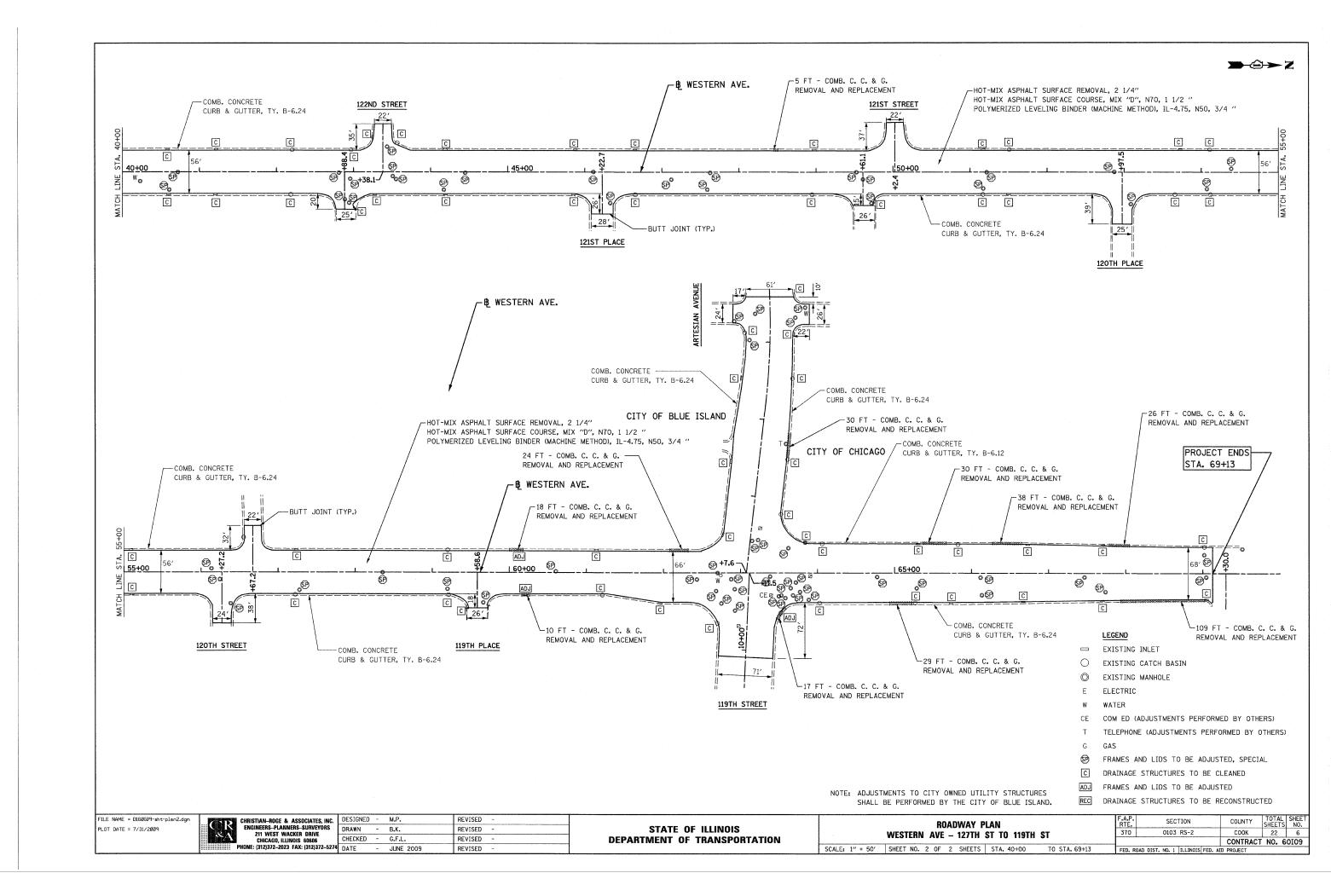


| NC.  | DESIGNED | - | G.F.L.    | REVISED - |
|------|----------|---|-----------|-----------|
| IS   | DRAWN    | - | B.K.      | REVISED - |
|      | CHECKED  | - | M.P.      | REVISED - |
| 5274 | DATE     | - | JUNE 2009 | REVISED - |
|      |          |   |           |           |

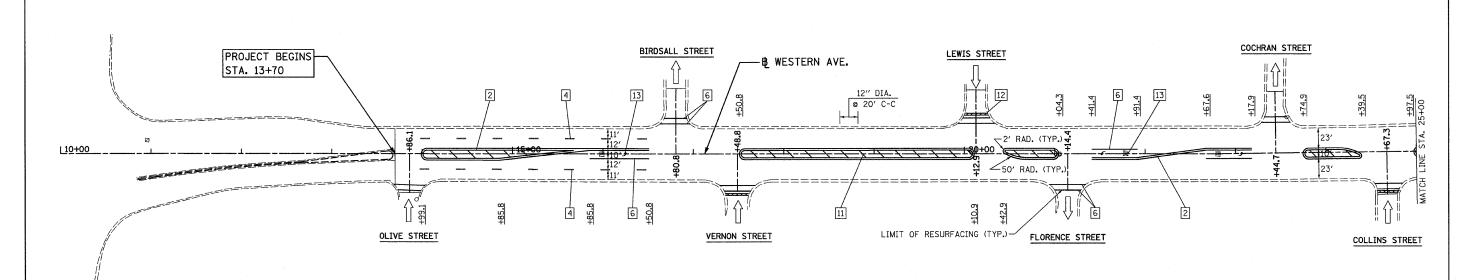
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

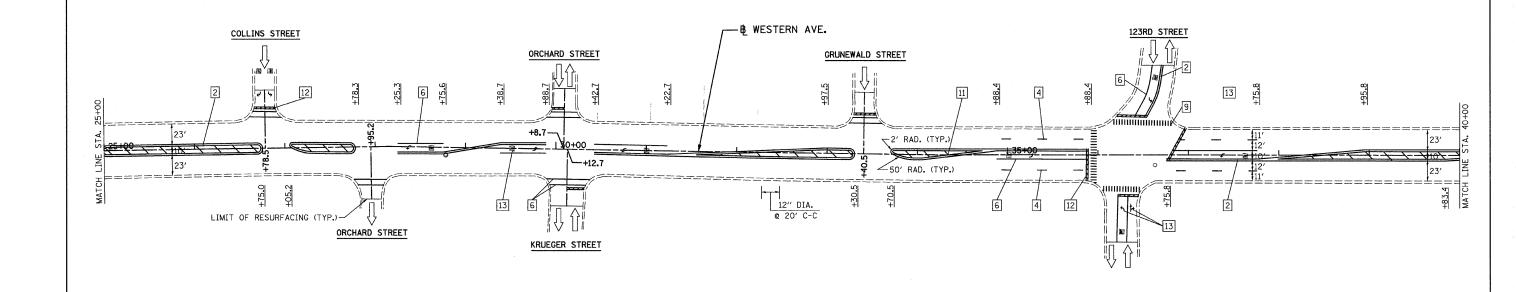
| TYPICAL SECTIONS                                     | F.A.P.<br>RTE. | SECTION                          | COUNTY     | TOTAL<br>SHEETS |      |
|--|----------------|----------------------------------|------------|-----------------|------|
| WESTERN AVE – 127TH ST TO 119TH ST                   | 370            | 0103 RS-2                        | COOK       | 22              | 4    |
|  |                |                                  | CONTRACT   | NO. 6           | 0109 |
| SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA. | FED. RO.       | AD DIST. NO. 1   ILLINOIS FED. A | ID PROJECT |                 |      |











| LEGEND   |  | 9 LINE 12" (WHITE SOLID LINE)      | NOTES:  | LEGEND         |
|--|--|------------------------------------|---|----------------|
| 1 LINE 4" (YELLOW SOLID LINE)                    | 5 LINE 4" (WHITE SOLID LINE)                   | 10 LINE 12" (WHITE DIAGONAL LINE)  | 1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED. | = TRAFFIC FLOW |
| 2 LINE 4" (DOUBLE YELLOW SOLID LINES)            | 6 LINE 6" (WHITE SOLID LINE)                   | 11 LINE 12" (YELLOW DIAGONAL LINE) | 2. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE USED THROUGHOUT THE          | *              |
| 3 LINE 4" (YELLOW - 10' DASH, 30' SKIP)          | 7 LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 12 LINE 24" (WHITE STOP BAR)       | PROJECT LIMITS. SEE DISTRICT DETAIL TC-11.                                  |                |
| 4 LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP) | 8 LINE 8" (WHITE SOLID LINE)                   | 13 LETTERS AND SYMBOLS (TYP.)      |   |                |

FILE NAME = D160109-sht-pm1.dgn

PLOT DATE = 7/31/2009

127th STREET

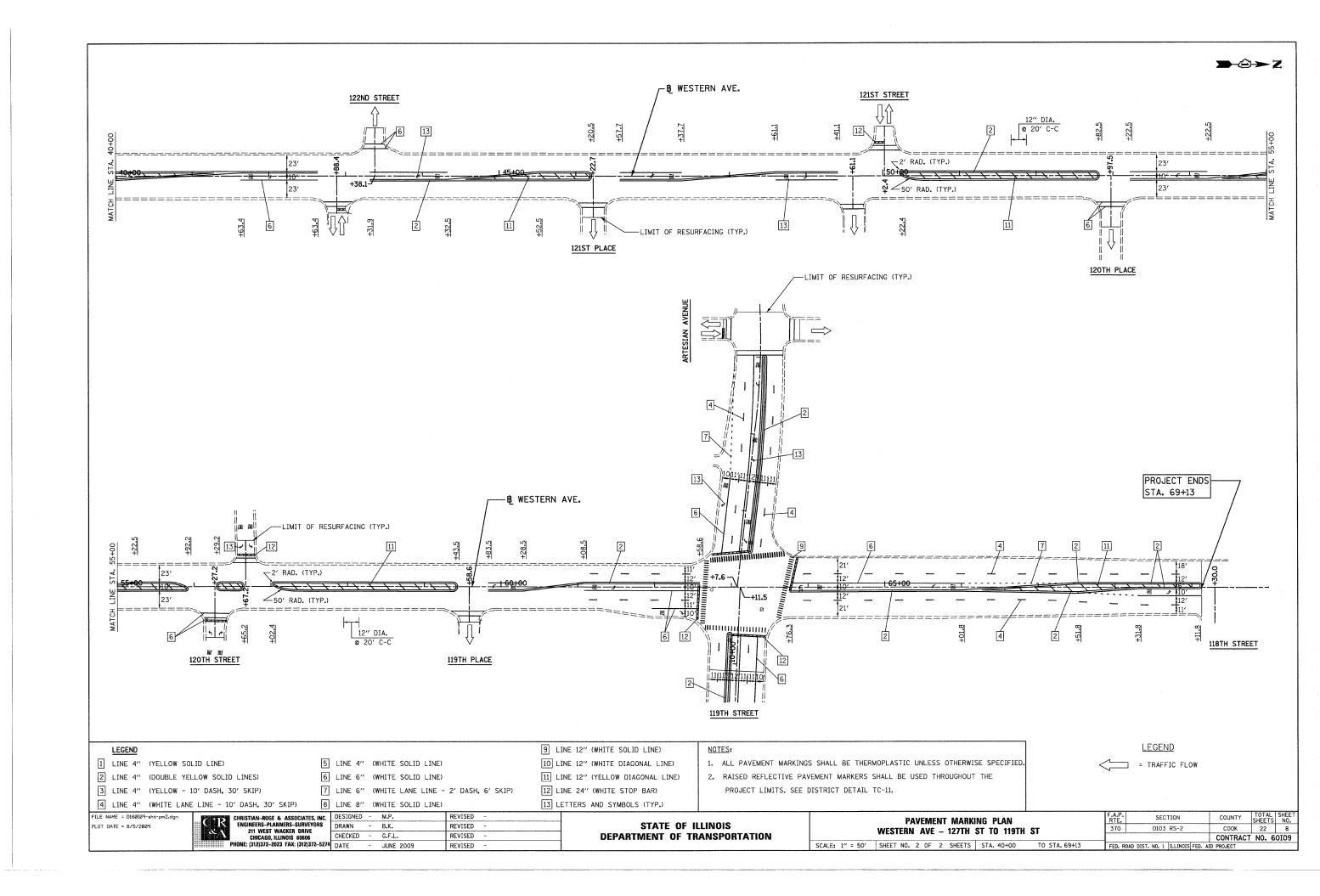
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-527

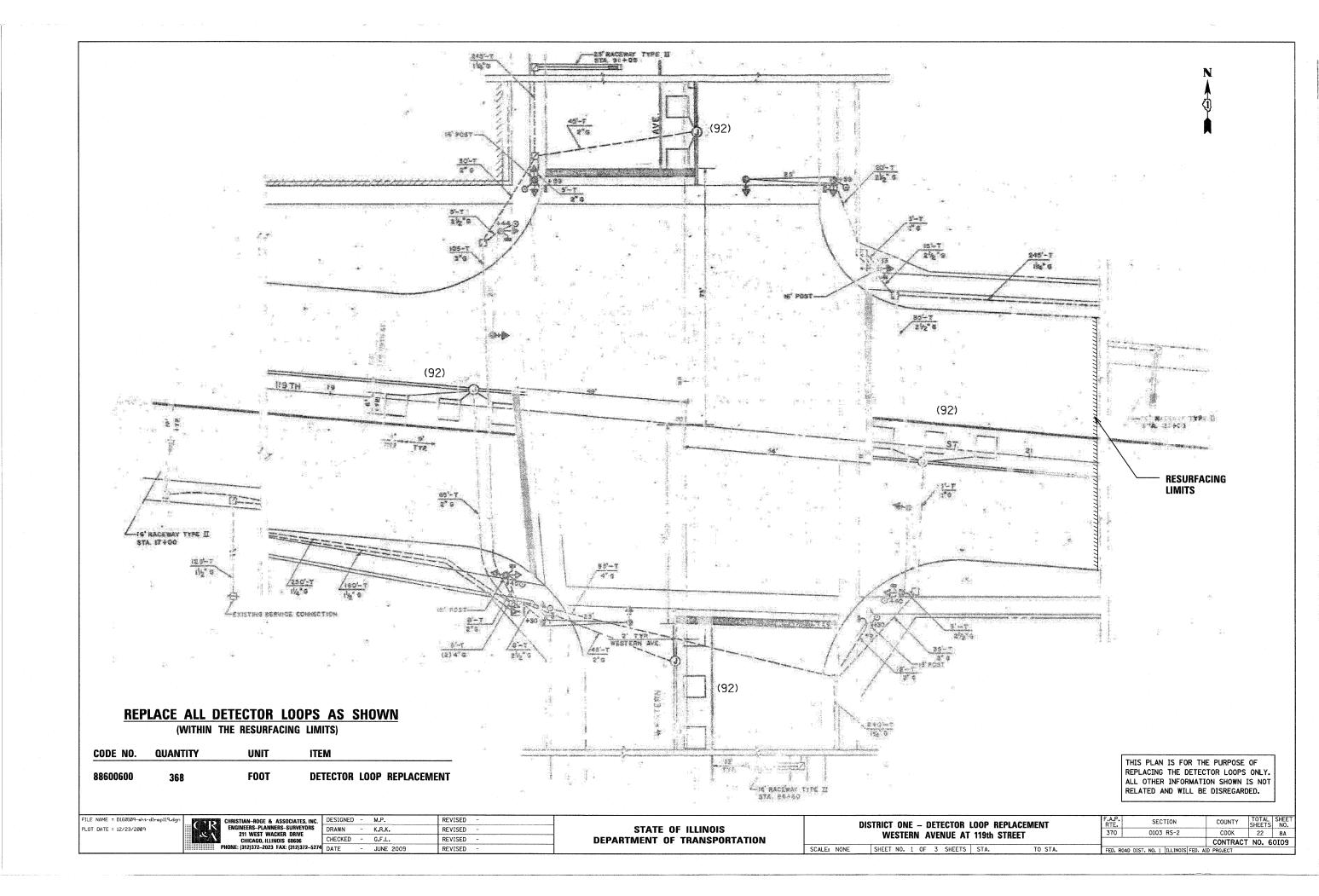
| NC.  | DESIGNED | - | M.P.      | REVISED - |
|------|----------|---|-----------|-----------|
| S    | DRAWN    | - | B.K.      | REVISED ~ |
|      | CHECKED  | - | G.F.L.    | REVISED - |
| 5274 | DATE     | - | JUNE 2009 | REVISED - |

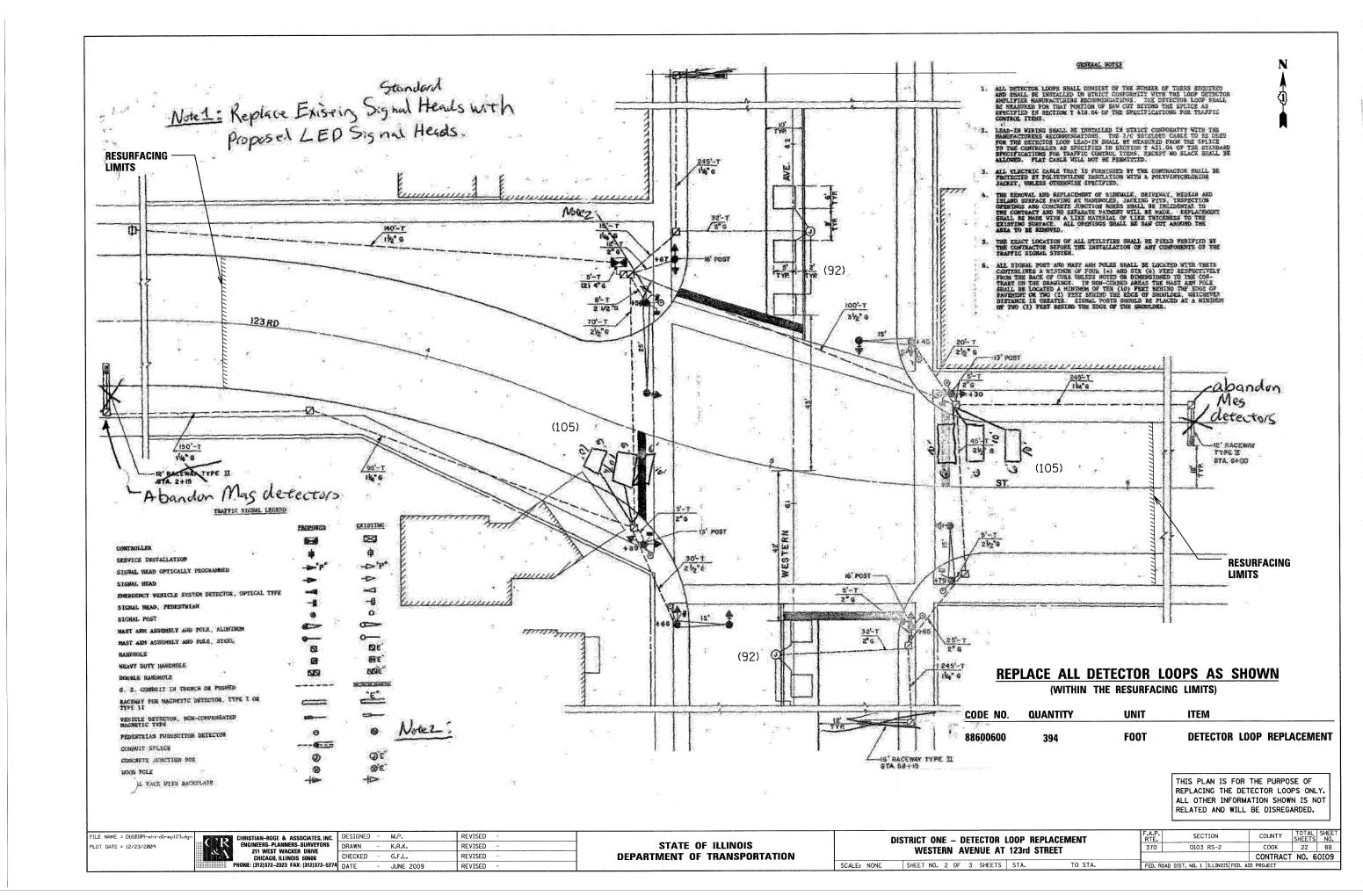
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

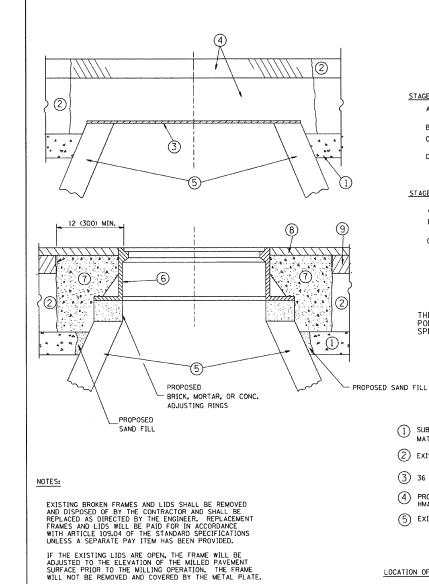
|                 | PAVEM<br>WESTERN AV | ENT MARK<br>E – 127TH |            | ST            |
|-----------------|---------------------|-----------------------|------------|---------------|
| SCALE: 1" = 50' | SHEET NO. 1 OF      | 2 SHEETS              | STA. 13+70 | TO STA. 40+00 |

| F.A.P.<br>RTE. |      |       | SE  | C | TION     |      |     | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |
|----------------|------|-------|-----|---|----------|------|-----|----------|-----------------|--------------|
| 370            | Ι    |       | 010 | 3 | RS-2     |      | Т   | соок     | 22              | 7            |
|                |      |       |     |   |          |      |     | CONTRACT | NO. 6           | 0109         |
| FED. F         | ROAD | DIST. | NO. | 1 | ILLINOIS | FED. | AID | PROJECT  |                 |              |









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 METAL PLATE.
- 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 SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

- 1 SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 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 PAYEMENT. 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.

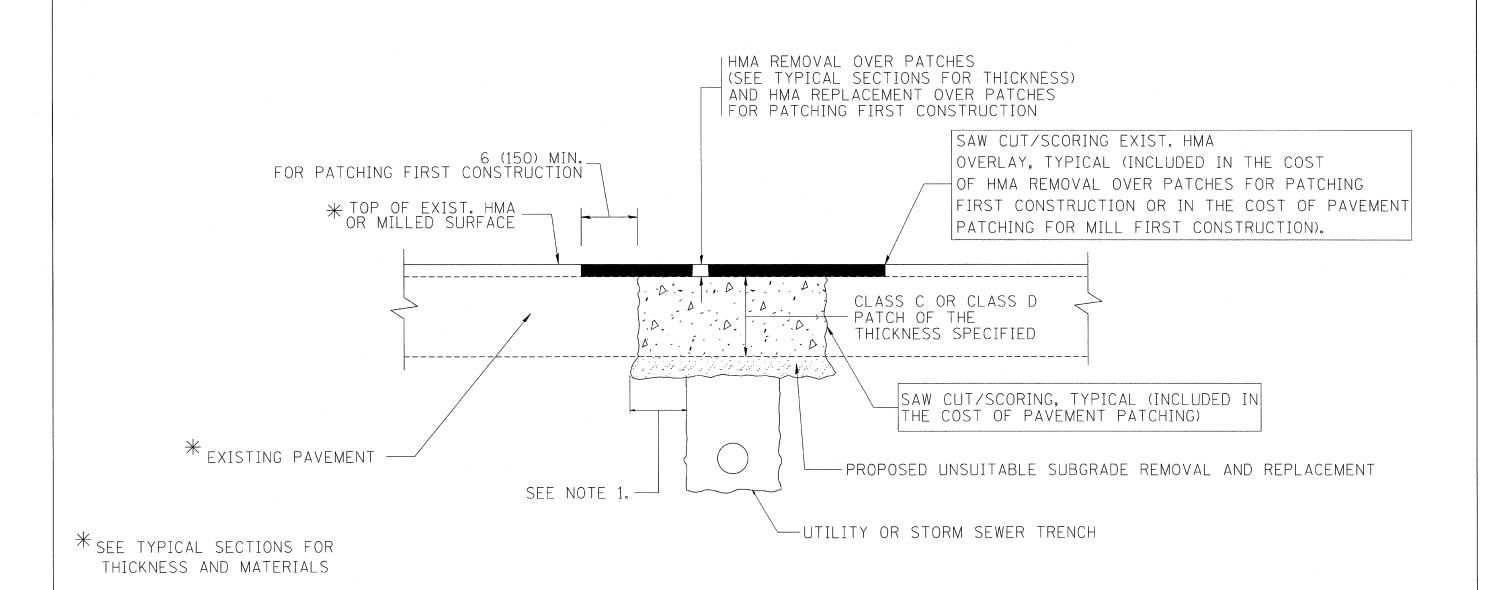
## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 FILE NAME = JSER NAME = gaglianobt REVISED - A. ABBAS 03-21-97 \diststd\22x34\bd08.dgr DRAWN PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED ~ R. WIEDEMAN 05-14-04 PLOT DATE = 1/4/2008 DATE - 10-25-94

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

COUNTY TOTAL SHEET NO. SECTION DETAILS FOR соок FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600-03 (BD-8) CONTRACT NO. 60109 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.



## 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)

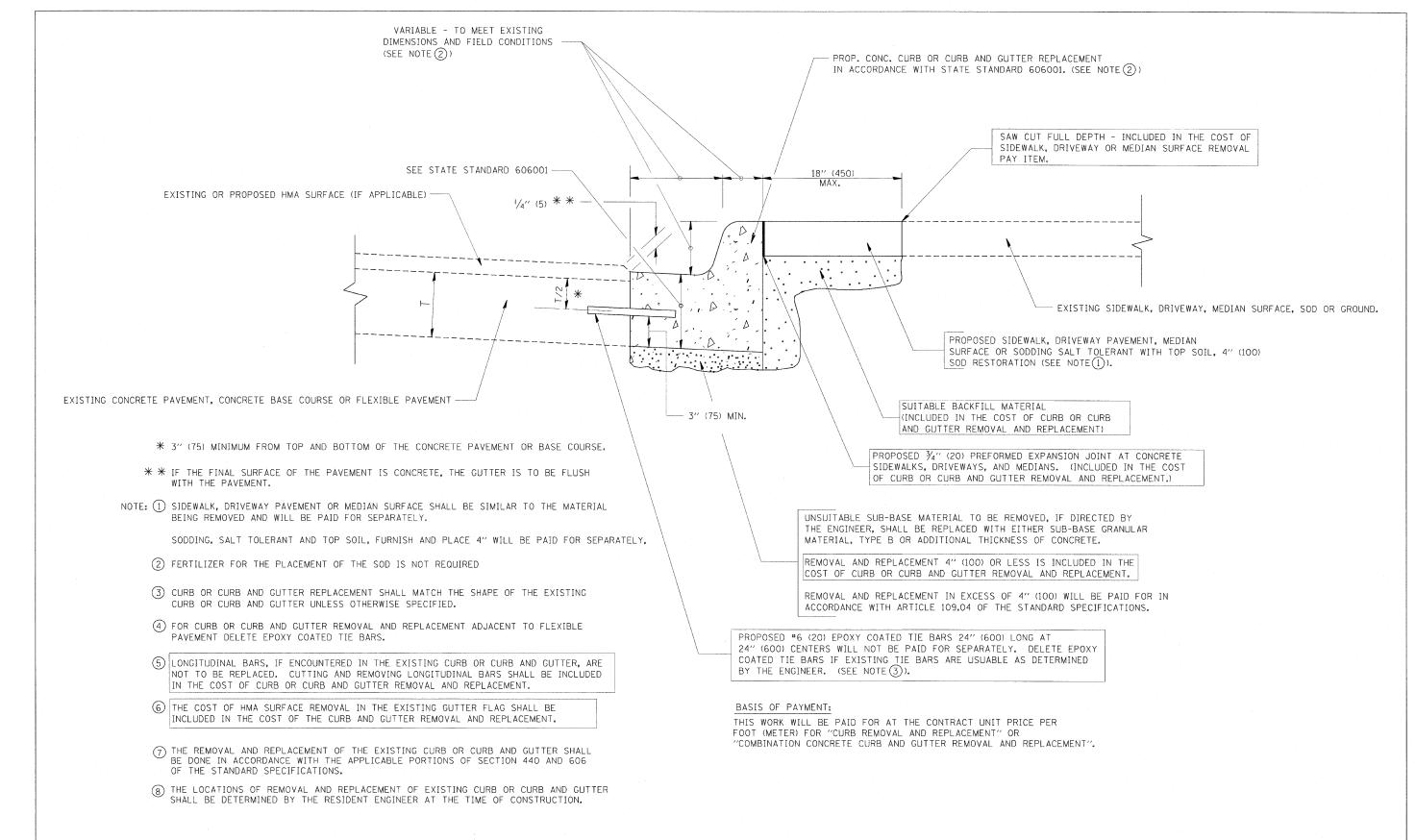
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

## 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.

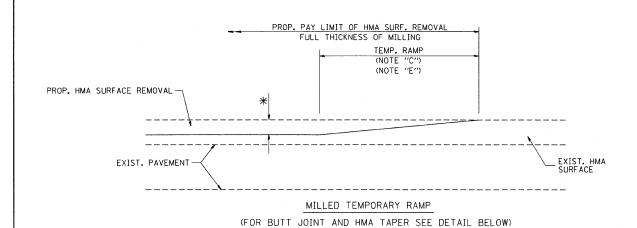
| FILE  | NAME =                       | USER NAME = bauerdl        | DESIGNED - | R. SHAH  | REVISED - | A. ABBAS 04-27-98 |                              |                       | PΛ          | VEMEN | T PATCH | ING FOR        |         | F.A.U.      | SECTION                     | COUNTY      | TOTAL SHEET<br>SHEETS NO. |
|-------|------------------------------|----------------------------|------------|----------|-----------|-------------------|------------------------------|-----------------------|-------------|-------|---------|----------------|---------|-------------|-----------------------------|-------------|---------------------------|
| c:\pr | ojectə/dıststd22x34/bd22.dgn |                            | DRAWN -    |          | REVISED - | R. BORO 01-01-07  | STATE OF ILLINOIS            | PAVEMENT PATCHING FOR |             |       |         |                | 370     | 0103 RS-2   | соок                        | 22 10       |                           |
|       | [                            | PLOT SCALE = 50.000 '/ IN. | CHECKED -  |          | REVISED - | R, BORO 09-04-07  | DEPARTMENT OF TRANSPORTATION | HMA SURFACED PAVEMENT | AVEIVIENI   |       | BD      | 400-04 (BD-22) | CONTRAC | T NO. 60109 |                             |             |                           |
|       |                              | PLOT DATE = 10/27/2008     | DATE -     | 10-25-94 | REVISED - | K. ENG 10-27-08   | SCALE                        | SCALE: NONE           | SHEET NO. 1 | OF 1  | SHEETS  | STA.           | TO STA. | FED. ROAD   | DIST. NO. 1   ILLINOIS FED. | AID PROJECT |                           |



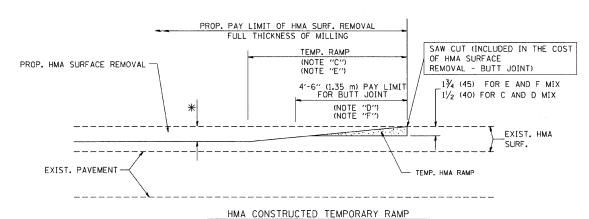
## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

| FIL | E NAME = L                              | JSER NAME = drivakosgn     | DESIGNED - A. HOUSEH | REVISED - | R. SHAH 10-03-96  |                              |             | CURB OR CURB AND GUTTER         | F    | A. SECTION       | COUNTY         | TOTAL SHEET  |
|-----|---|----------------------------|----------------------|-----------|-------------------|------------------------------|-------------|---------------------------------|------|------------------|----------------|--------------|
| cı/ | ow_work\pwidot\drivakosgn\d01083!5\bd24 | -dgn                       | DRAWN -              | REVISED - | A. ABBAS 03-21-97 | STATE OF ILLINOIS            |             |                                 | ·    | 370 0103 RS-2    | соок           | 22 11        |
|     | ŗ                                       | PLOT SCALE = 50.000 '/ IN. | CHECKED -            | REVISED - | M. GOMEZ 01-22-01 | DEPARTMENT OF TRANSPORTATION |             | REMOVAL AND REPLACEMENT         | **** | BD600-06 (BD-24) |                | CT NO. 60109 |
|     | F                                       | PLOT DATE = 12/15/2009     | DATE - 03-11-94      | REVISED - | R. BORO 12-15-09  |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO | STA. |                  | D. AID PROJECT |              |



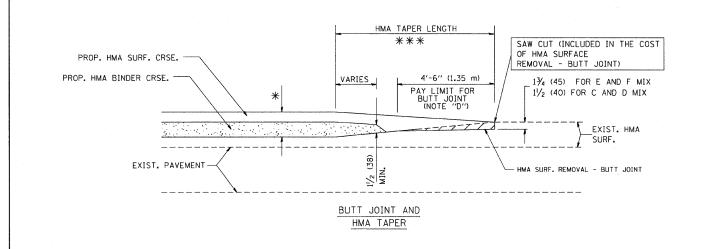
## OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

## OPTION 2

## TYPICAL TEMPORARY RAMP



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

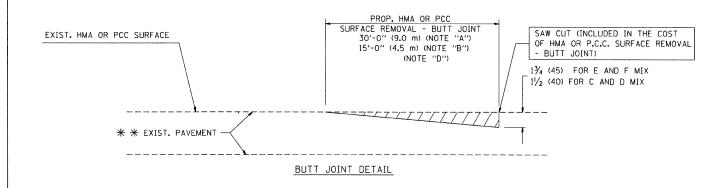
FILE NAME = USER NAME = geglanobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94

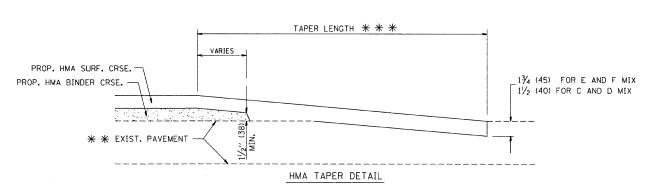
WARD - REVISED - A. ABBAS 03-21-97

PLOT SCALE = 50.0000 '/ IN. CHECKED - REVISED - M. COMEZ 04-06-01

PLOT DATE = 1/4/2008 DATE - 06-13-90 REVISED - R. BORO 01-01-07

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





## TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

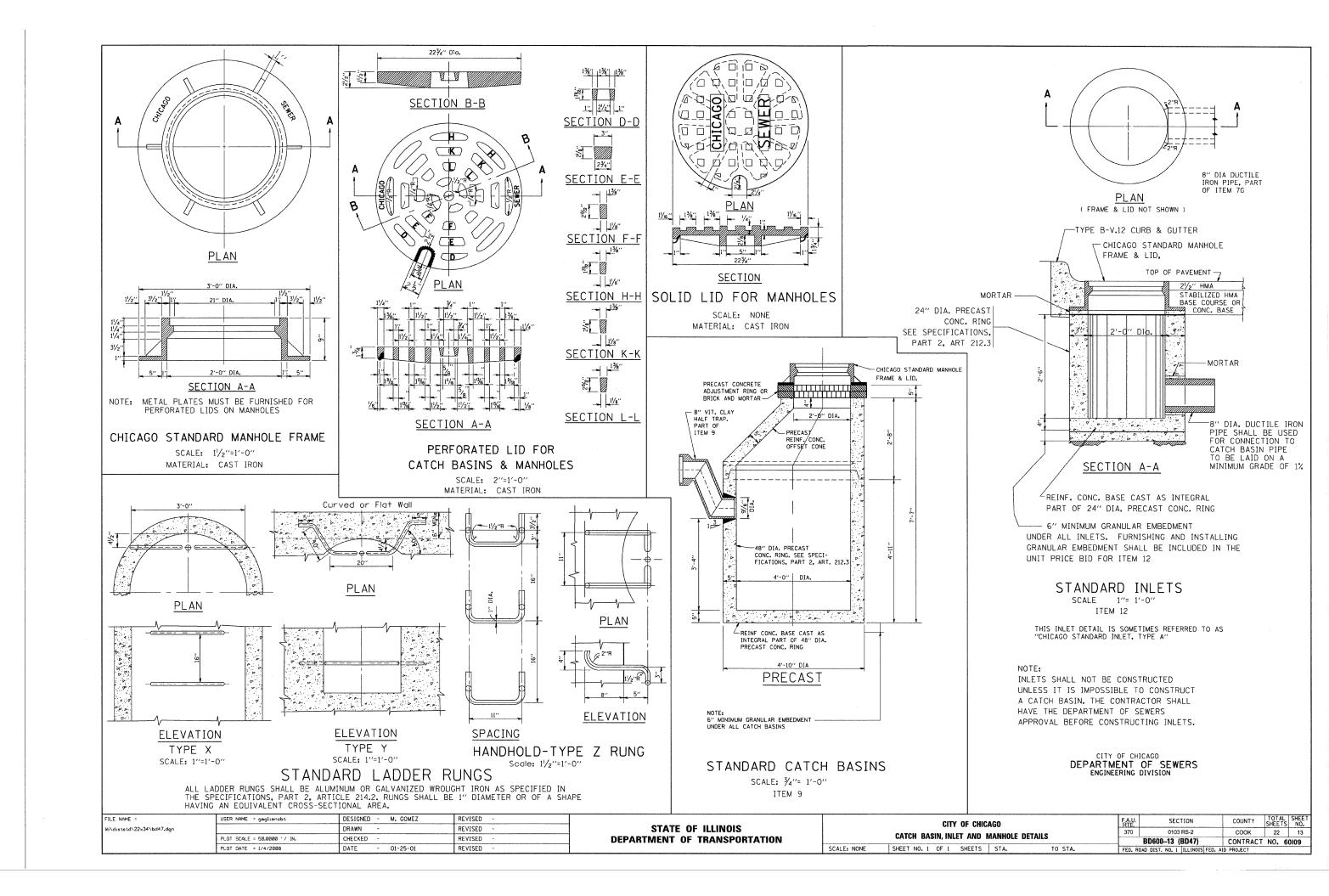
## NOTES

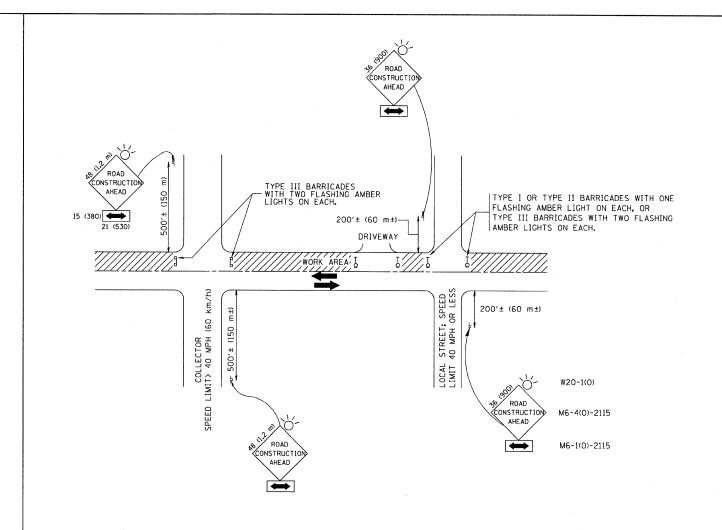
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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 SOUARE YARD (SOUARE 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.





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

## NOTES:

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

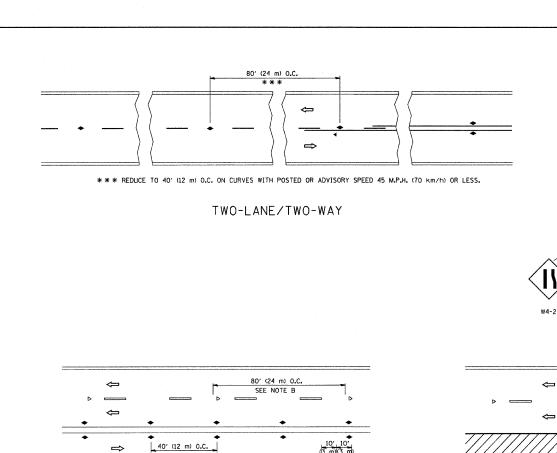
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = USER NAME = geglanobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Wi\distat\22x34\to18.dgn - DRAWN - REVISED - A. HOUSEH 03-06-96
PLOT SCALE = 58.000 '/ 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     | CONTRO   | OL AND P | ROTECT | TION FOR  | F |   |
|------------|-------------|----------|----------|--------|-----------|---|---|
|            | SIDE ROAD   | S, INTER | SECTIONS | , AND  | DRIVEWAYS | L | - |
| CALE: NONE | SHEET NO. 1 | OF 1     | SHEETS   | STA.   | TO STA.   | ╁ | Ī |

AU SECTION COUNTY TOTAL SHEET NO. 1770 0103 RS-2 COOK 22 14 TC-10 CONTRACT NO. 60109



SEE NOTE A

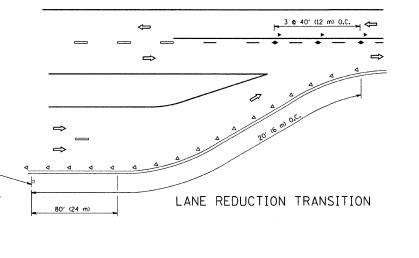
MULTI-LANE/UNDIVIDED



80' (24 m) O.C.

SEE NOTE B

SEE NOTE A



## GENERAL NOTES

- 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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

## LANE MARKER NOTES

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

## SYMBOLS

---- YELLOW STRIPE

SEE NOTE A

TWO-WAY LEFT TURN

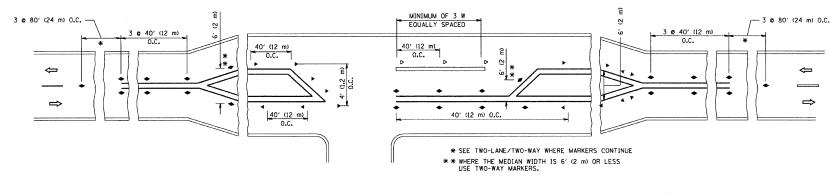
J 5

40' (12 m) O.C.

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

## DESIGN NOTES

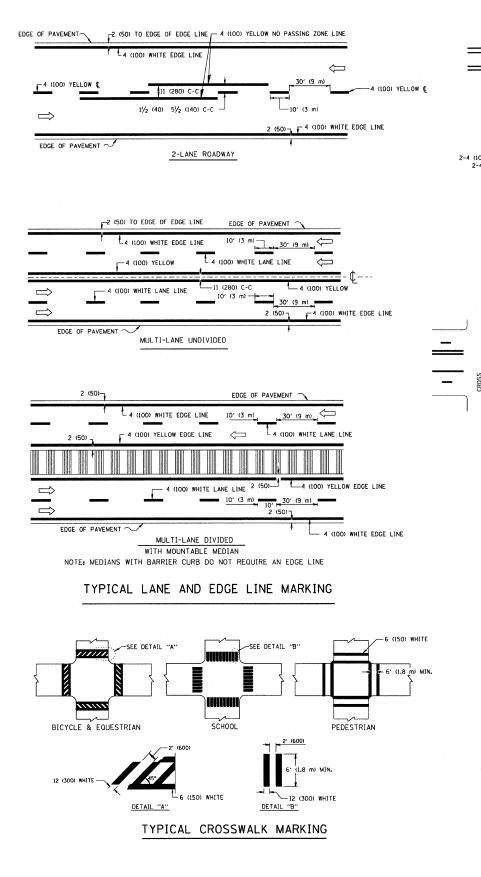
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINFS.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS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

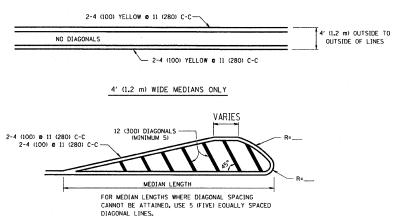


LEFT TURN

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

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - T. RAMMACHER 09-19-94 |                              | · }         | TYPICAL APPLICATIONS                              | F.A.U. | SECTION                        | COUNTY SHEET | L SHEET |
|---------------------------|----------------------------|------------|---------------------------------|------------------------------|-------------|---|--------|--------------------------------|--------------|---------|
| W:\diststd\22x34\tc11.dgn |                            | DRAWN -    | REVISED - T. RAMMACHER 03-12-99 | STATE OF ILLINOIS            |             |   | 370    | 0103 RS-2                      | COOK 22      | 15      |
|                           | PLOT SCALE = 50,000 '/ IN. | CHECKED -  | REVISED -T. RAMMACHER 01-06-00  | DEPARTMENT OF TRANSPORTATION | RAISED R    | REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) | 1      | TC-11                          | CONTRACT NO. | 60109   |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED -                       |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO STA.              | FED. R | ROAD DIST. NO. 1 ILLINOIS FED. | AID PROJECT  |         |

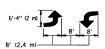




DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

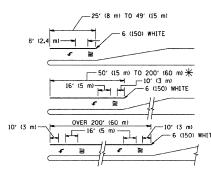
# MEDIANS OVER 4' (1.2 m) WIDE - 4 (100) YELLOW LINES (51/2 (140) C-C) 4 (100) YELLOW LINES (51/2 (140) C-C) -2-4 (100) YELLOW @ 11 (280) C-C

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

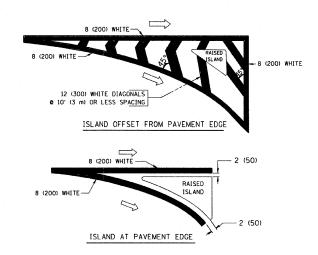


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup>) (ML) AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

\* 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

|   | T   | r                       |                                |  |
|---|---|-------------------------|--------------------------------|--|
| TYPE OF MARKING   | WIDTH OF LINE   | PATTERN                 | COLOR                          | SPACING / REMARKS  |
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)   | SKIP-DASH               | YELLOW                         | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT   | 2 0 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               | 5/2 (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN   |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH  | WHITE<br>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<br>EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)   | SOLID                   | YELLOW-LEFT<br>WHITE-RIGHT     | OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT 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 DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100)<br>EACH DIRECTION   | SKIP-DASH<br>AND SOLID  | YELLOW                         | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE   |
|   | 8' (2.4m) LEFT ARROW  | IN PAIRS                | WHITE                          | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL   |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>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 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<br>12 (300) DIAGONALS  | SOLID                   | YELLOW:<br>TWO WAY TRAFFIC     | 11 (280) C-C FOR THE DOUBLE LINE   |
|   | 0 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS                                   |                         | WHITE:<br>ONE WAY TRAFFIC      | SEE TYPICAL PAINTED MEDIAN MARKING.  |
| 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 (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 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 SO. FT. (0.33 m <sup>2</sup> ) EACH<br>"X"=54.0 SO. FT. (5.0 m <sup>2</sup> )                                     |
| SHOULDER DIAGONALS  | 12 (300) <b>©</b> 45°   | SOLID                   | WHITE - RIGHT<br>YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (0VER 45MPH (70 km/h))                       |

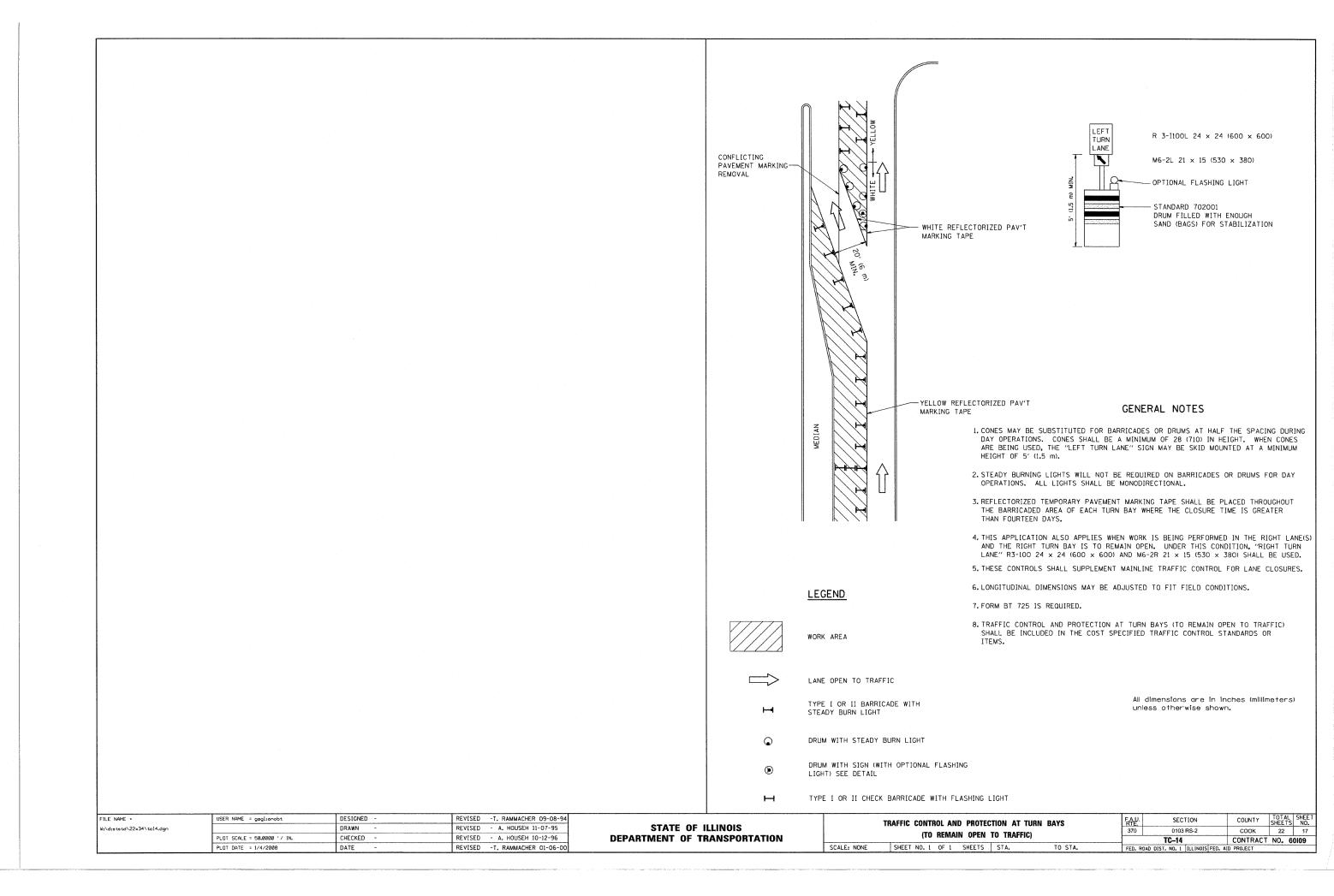
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

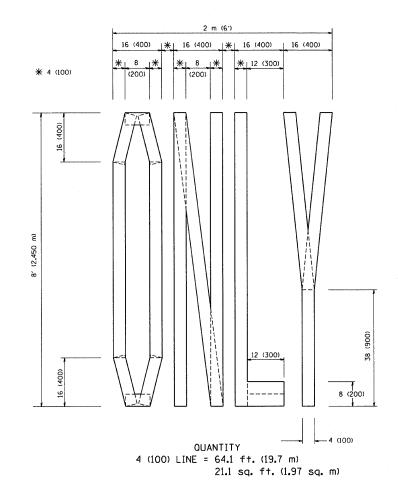
All dimensions are in inches (millimeters) unless otherwise shown.

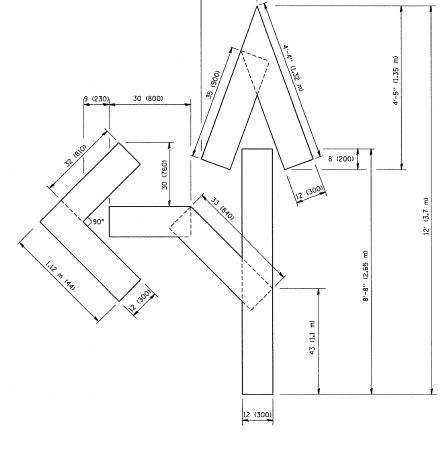
| TILE NAME =               | USER NAME = gaglianobt     | DESIGNED - EVERS | REVISED | -T. RAMMACHER 10-27-94 |
|---------------------------|----------------------------|------------------|---------|------------------------|
| #s\diststd\22x34\tc13.dgn |                            | DRAWN -          | REVISED | -A. HOUSEH 10-09-96    |
|                           | PLOT SCALE = 50.000 '/ [N. | CHECKED -        | REVISED | -A. HOUSEH 10-17-96    |
|                           | PLOT DATE = 1/4/2008       | DATE - 03-19-90  | REVISED | -T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

| DISTI                             | RICT ONE     |         |         | F.A.U.<br>RTE. | SECTION                            | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|-----------------------------------|--------------|---------|---------|----------------|------------------------------------|-----------|-----------------|--------------|
| TYPICAL PAVE                      | NACNT NA     | ADVINGE |         | 370            | 0103 RS-2                          | COOK      | 22              | 16           |
| TITIOAL PAVE                      | -141F341 1A1 | MUNINGS |         |                | TC-13                              | CONTRACT  | NO. 60          | 109          |
| SCALE: NONE   SHEET NO. 1 OF 1 SI | HEETS :      | STA.    | TO STA. | FED. RO        | DAD DIST. NO. 1   ILLINOIS FED. AI | D PROJECT |                 |              |

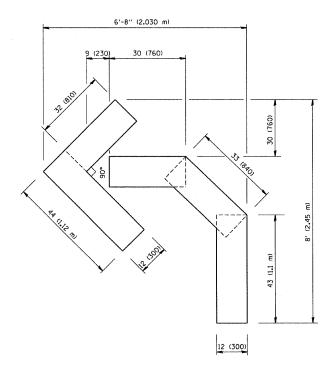






1'-8" (500)

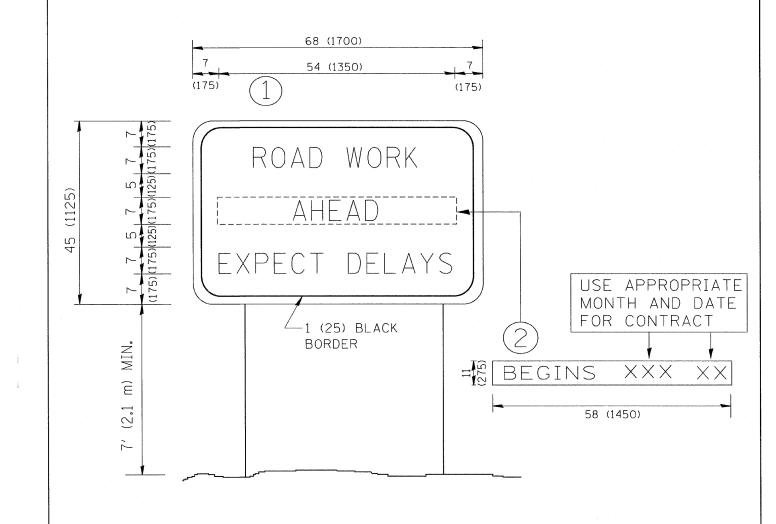
OUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



OUANTITY 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.

| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -      | REVISED -T. RAMMACHER 06-05-96 |                              |  | PAVEMENT MARKING LETTERS | S AND SYMBOLS | FAU.     | SECTION                          | COUNTY     | TOTAL SHEF  |
|---------------------------|-----------------------------|-----------------|--------------------------------|------------------------------|--|--------------------------|---------------|----------|----------------------------------|------------|-------------|
| W:\diststd\22x34\tc16.dgn |                             | DRAWN -         | REVISED -T. RAMMACHER 11-04-97 | STATE OF ILLINOIS            | PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING  SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | 370                      | 0103 RS-2     | соок     | 22 1F                            |            |             |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 | DEPARTMENT OF TRANSPORTATION |  | FOR TRAFFIC STA          | GING          |          | TC-16                            | CONTRACT   | T NO. 60109 |
|                           | PLOT DATE = 1/4/2008        | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00     |                              | SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS  | STA. TO STA.  | FED. ROA | AD DIST. NO. 1   ILLINOIS FED. A | ID PROJECT |             |



## NOTES:

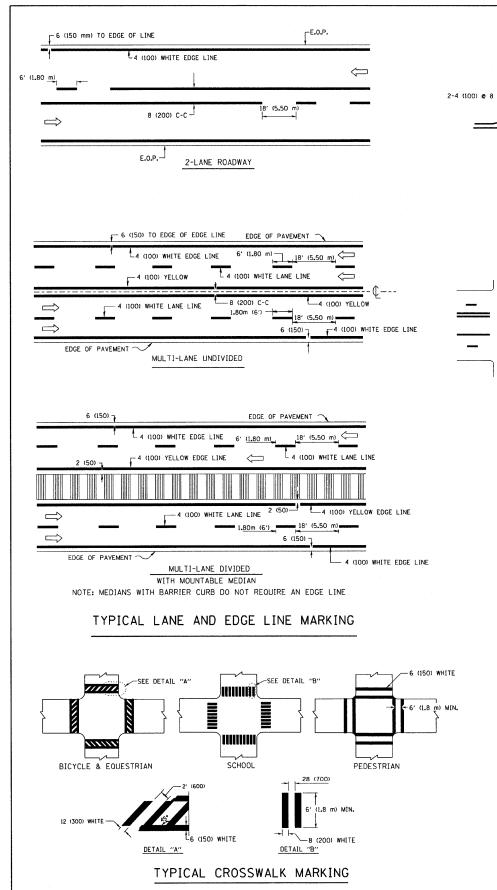
- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START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

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

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED | - R. MIRS 09-15-97     |         |
|---------------------------|----------------------------|------------|---------|------------------------|---------|
| W:\diststd\22x34\tc22.dgn |                            | DRAWN -    | REVISED | - R. MIRS 12-11-97     | S       |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED | -T. RAMMACHER 02-02-99 | DEPARTM |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED | - C. JUCIUS 01-31-07   |         |

| STATE      | : OF | ILLINOIS       |
|------------|------|----------------|
| DEPARTMENT | OF   | TRANSPORTATION |

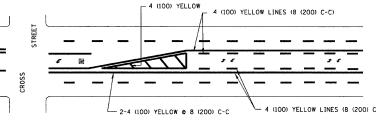
| _ |             |             | ART  | ERIAL RO    | AD   |         | FAU.   | SECTION                           | COUNTY     | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|-------------|-------------|------|-------------|------|---------|--------|-----------------------------------|------------|-----------------|--------------|
|   |             |             |      | RMATION     |      |         | 370    | 0103 RS-2                         | COOK       | 22              | 19           |
|   |             |             | HALO | NIVIA I IUN | SIGN |         |        | TC-22                             | CONTRACT   | NO. 6           | 0109         |
|   | SCALE: NONE | SHEET NO. 1 | OF 1 | SHEETS      | STA. | TO STA. | FED. R | DAD DIST. NO. 1   ILLINOIS FED. A | ID PROJECT |                 |              |



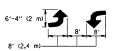


- \* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
- \* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

## PAINTED MEDIANS

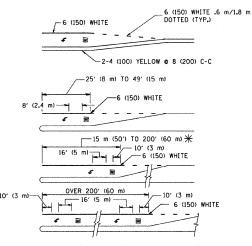


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

## TYPICAL PAINTED MEDIAN MARKING

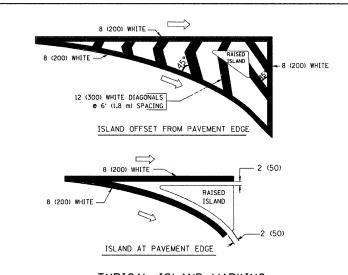


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.8 SO. FT. (1.47 m<sup>2</sup>)  $\P$  AREA = 22.9 SO. FT. (2.13 m<sup>2</sup>)

\* 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

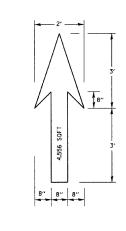
| TYPE OF MARKING   | WIDTH OF LINE   | PATTERN                 | COLOR   | SPACING / REMARKS  |
|---|---|-------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)   | SKIP-DASH               | YELLOW  | 6' (1.80 m) LINE WITH 18' (5.50 m) SPACE   |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT   | 2 @ 4 (100)   | SOLID                   | YELLOW  | 8 (200) 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  | 8 (200) C-C  |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH  | WHITE<br>WHITE  | 6' (1.80 m) LINE WITH 18' (5.50 m) SPACE   |
| 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) 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' (2,4 m))                          | SOLID                   | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 & 4 (100)<br>EACH DIRECTION   | SKIP-DASH<br>AND SOLID  | YELLOW  | 6' (1,8 m) LINE WITH 18' (5,50 m) SPACE FOR<br>SKIP-DASH; 8 (200) C-C BETWEEN SOLID<br>LINE AND SKIP-DASH LINE   |
|   | 8' (2.4 m) LEFT ARROW   | IN PAIRS                | WHITE   | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL   |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150)<br>12 (300) @ 45°<br>8 (200) @ 90°  | SOLID<br>SOLID<br>SOLID | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (500) APART<br>2-4" (700) APART<br>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<br>12 (300) DIAGONALS<br>@ 45°                                       | SOLID                   | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 8 (200) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.   |
| GORE MARKING AND<br>CHANNELIZING LINES  | 8 (200) WITH 12 (300)<br>DIAGONALS & 45°  | SOLID                   | WHITE   | DIAGONALS:<br>20' (6.1 m) (LESS THAN 30 MPH (50 km/h))   |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE<br>LINES; "RR" IS 6'<br>(1.8 m) LETTERS; 16 (400)<br>LINE FOR "X" | SOLID                   | WHITE   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"23.6 SO, FT. (0.33m <sup>2</sup> ) EACH<br>"X"254.0 SO, FT. (5.0 m <sup>2</sup> )                                      |

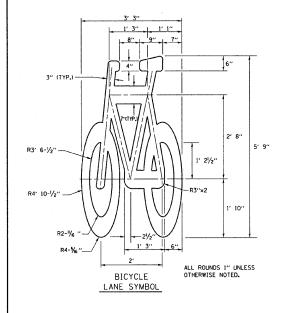
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

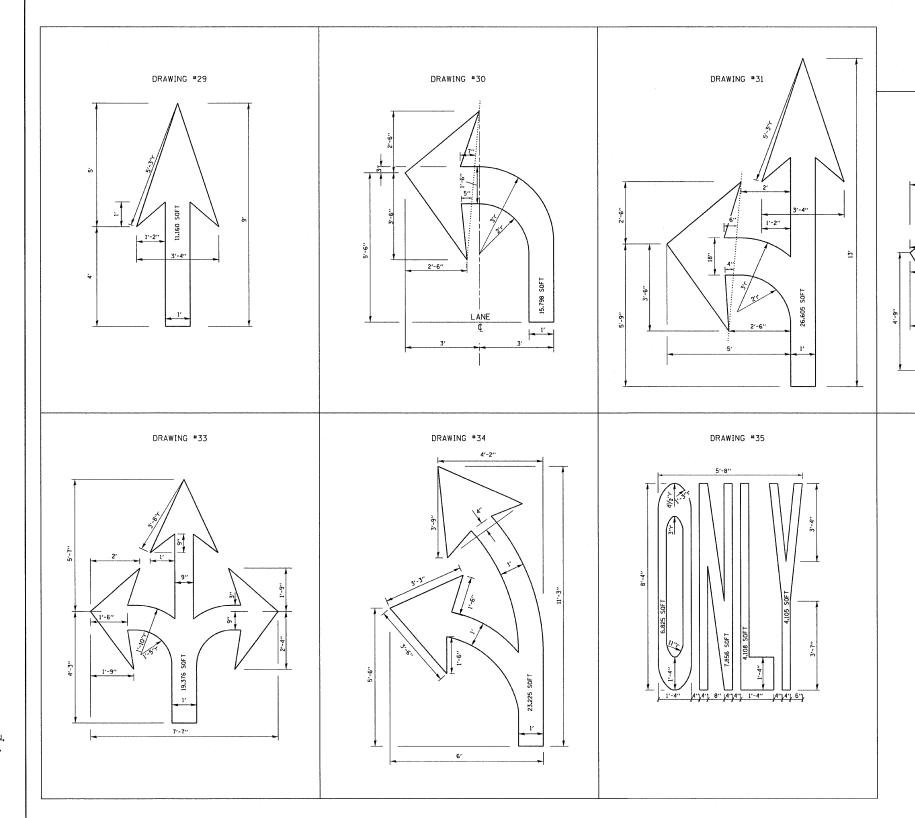
|             | CITY OF CHI             | CAGO |           | FAU.     | SECTION                         | COUNTY    | TOTAL<br>SHEETS                         | SHEET<br>NO. |
|-------------|-------------------------|------|-----------|----------|---------------------------------|-----------|---|--------------|
|             | TYPICAL PAVEMENT        | 370  | 0103 RS-2 | COOK     | 22                              | 20        |   |              |
|             | TITIOAL PAVLINENT       |      | TC-24     | CONTRACT | NO. 6                           | 0109      |   |              |
| SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.   | FED. RO  | DAD DIST. NO. 1 ILLINOIS FED. A | D PROJECT | *************************************** |              |





- NOTE:
  1.) FOR BIKE LANE SYMBOLS ONLY,
   USE PRE-FORMED THERMOPLASTIC
   WITH A MINIMUM THICKNESS OF 90 MILS,
   MINIMUM SKID RESISTANCE VALUE OF 60 BPN.
  & A MINIMUM INDEX OF REFRACTION OF 1.50.
- 2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

## TYPICAL BIKE LANE SYMBOLS DRAWING #28

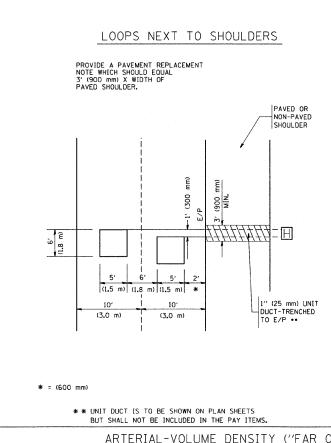


DRAWING #32

NOTE:

ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

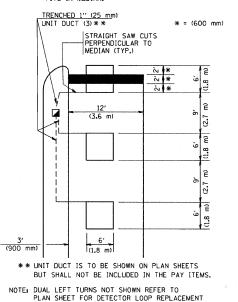
| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED -T. RAMMACHER 12-07-00 |                              |   | CITY OF CHICAGO |         | F.A.U.      | SECTION                       | COUNTY                         | TOTAL | SHEET<br>NO. |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|---|-----------------|---------|-------------|-------------------------------|--------------------------------|-------|--------------|
| Wi\diststd\22x34\to24.dgn |                            | DRAWN -    | REVISED -                      | STATE OF ILLINOIS            | TYPICAL PAVEMENT MARKINGS  SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA. |                 |         | 370         | 0103 RS-2                     | соок                           | 22    | 21           |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED -                      | DEPARTMENT OF TRANSPORTATION |   |                 |         |             | TC-24                         | CONTRAC                        | T NO. | 30109        |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED -                      |                              |   |                 | TO STA. | FED. ROAD D | DIST. NO. 1   ILLINOIS FED. A | O. 1 ILLINOIS FED. AID PROJECT |       |              |



## <u>LEFT TURN LANES WITH MEDIANS</u> VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

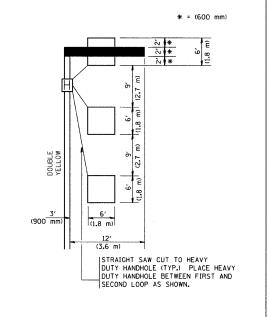
## (PROTECTED / PERMITTED LEFT TURN PHASING)

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.



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

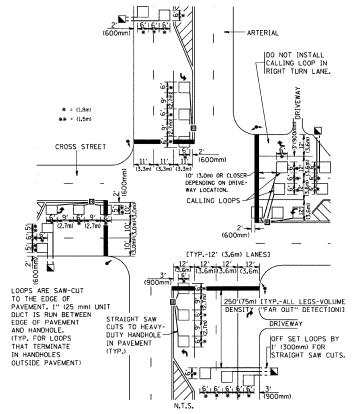
(PROTECTED / PERMITTED LEFT TURN PHASING)

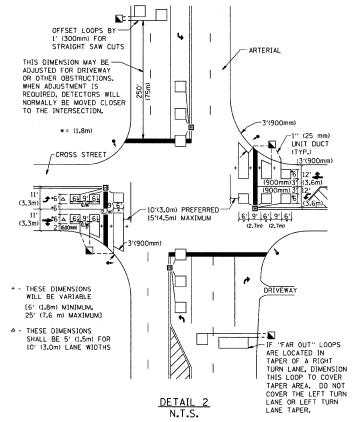


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





### 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 <u>ALL</u> 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.

## NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE 1.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.

|                           | N.1.5.                      |                  |           |  |  |  |  |  |
|---------------------------|-----------------------------|------------------|-----------|--|--|--|--|--|
| FILE NAME =               | USER NAME = gaglianobt      | DESIGNED -       | REVISED ~ |  |  |  |  |  |
| W:\diststd\22x34\ts07.dgn |                             | DRAWN -          | REVISED - |  |  |  |  |  |
|                           | PLOT SCALE = 50.0000 '/ IN. | CHECKED - R.K.F. | REVISED - |  |  |  |  |  |
|                           | PLOT DATE = 1/4/2008        | DATE -           | REVISED - |  |  |  |  |  |

DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|             | DISTRICT 1 – DETECTOR LOOP INSTALLATION |           |         | FAU.  | SECTION   | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
|-------------|---|-----------|---------|---|-----------|--------|-----------------|--------------|
|             | DETAILS FOR ROADWAY RESURFACING         |           |         |   | 0103 RS-2 | соок   | 22              | 22           |
|             |   |           |         | TS-07   | CONTRACT  | NO. 6  | 0109            |              |
| SCALE: NONE | SHEET NO. 1 OF 1 SHI                    | EETS STA. | TO STA. | FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |           |        |                 |              |