INDEX OF SHEETS 06-12-2015 LETTING ITEM 027 STATE OF ILLINOIS

BEGIN IMPROVEMENTS

TOWNSHIP

COVER SHEET, INDEX OF SHEETS & STATE STANDARDS

SUMMARY OF QUANTITIES & GENERAL NOTES 2.

3. TYPICAL SECTIONS

PAVEMENT PLAN 4.-7. PAVEMENT MARKING PLAN 8.-11.

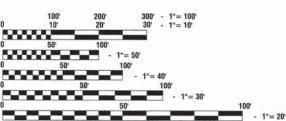
IDOT DISTRICT 1 STANDARD DETAILS

HIGHWAY STANDARDS

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 424001-08 PERPENDICULAR CURB RAMPS 442201-03 **CLASS C AND D PATCHES** 606001-06 **CONCRETE CURB TYPE B AND COMBINATION** CONCRETE CURB AND GUTTER 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM **PAVEMENT EDGE** 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY 701427-03 LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPER., FOR SPEEDS < 40 MPH 701502-06 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL **LEFT TURN LANE** URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH **NONTRAVERSABLE MEDIAN** 701602-07 **URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE** 701701-09 **URBAN LANE CLOSURE, MULTILANE INTERSECTION** 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE 701901-04 TRAFFIC CONTROL DEVICES TYPICAL PAVEMENT MARKINGS 780001-05 DETECTOR LOOP INSTALLATIONS 886001-01 886006-01 TYPICAL LAYOUTS FOR DETECTOR LOOPS

10.800 2040 ADT -POSTED SPEED LIMIT -30 mph 20 YEARS DESIGN SPEED LIMIT -30 mph STREET CLASSIFICATION -MAJOR COLLECTOR

PROFILE HORIZ. - 1"=50" PROFILE VERT. - 1"=5" CROSS SECTIONS - 1"=10"



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1 - 800 - 892 - 0123 or 811

CONTRACT NO. 61B63

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

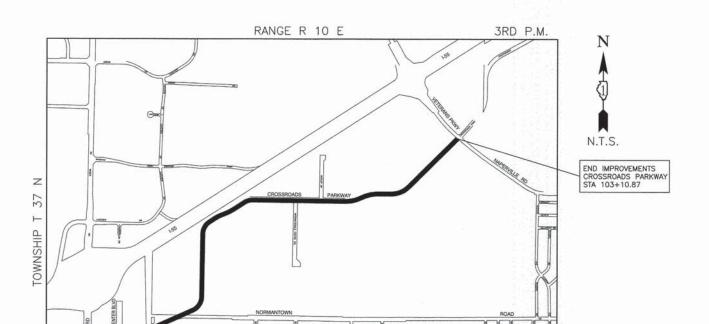
FAU281 (CROSSROADS PARKWAY) NORTH CENTER BOULEVARD TO FAU 351 (VETERANS PARKWAY) **ROADWAY RESURFACING** SECTION NO.: 15-00062-00-RS PROJECT NO.: M-4003 (487) VILLAGE of ROMEOVILLE WILL COUNTY

JOB NO.: C-91-219-15

LOCATION MAP

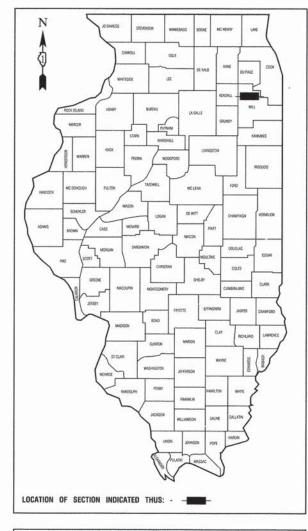
GROSS LENGTH= 9,106 FEET= 1.725 MILES

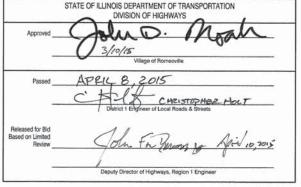
NET LENGTH= 9,106 FEET= 1.725 MILES



429 15-00062-00-RS FED. ROAD DIST. NO. 1 ILLINOIS FED. AD PROJECT M-4003 (487)

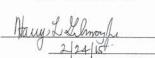
CONTRACT #61B63





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE





14611-COVB-01 - IDOT CO

FAWAD

ENGINEER:

DESIGN

AID

| _ | | SUMMARY OF QUANTITIES | | | | | | | |
|-----|----------|---|--------|-------------------|----------------|--|--|--|--|
| .1. | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | ROADWA 0005 | | | | |
| * | 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 400 | 400 | | | | |
| | 40600275 | BITUMINOUS MATERIALS (PRIME COAT) | POUNDS | 31470 | 31470 | | | | |
| - | 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 10 | 10 | | | | |
| | 40600827 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON | 1980 | 1980 | | | | |
| | 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 400 | 400 | | | | |
| | 40603153 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, N80 | TON | 5376 | 5376 | | | | |
| | 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 895 | 895 | | | | |
| | 42400800 | DETECTABLE WARNINGS | SQ FT | 216 | 216 | | | | |
| | 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SQ YD | 46625 | 4662 | | | | |
| | 44000200 | DRIVEWAY PAVEMENT REMOVAL | SQ YD | 79 | 79 | | | | |
| | 44000600 | SIDEWALK REMOVAL | SQ FT | 635 | 635 | | | | |
| | 44201761 | CLASS D PATCHES, TYPE I, 10 INCH | SQ YD | 20 | 20 | | | | |
| | 44201765 | CLASS D PATCHES, TYPE II, 10 INCH | SQ YD | 31 | 31 | | | | |
| | 44201769 | CLASS D PATCHES, TYPE III, 10 INCH | SQ YD | 45 | 45 | | | | |
| | 44201771 | CLASS D PATCHES, TYPE IV, 10 INCH | SQ YD | 160 | 160 | | | | |
| | 60250200 | CATCH BASINS TO BE ADJUSTED | EACH | 70 | 70 | | | | |
| | 60252800 | CATCH BASINS TO BE RECONSTRUCTED | EACH | 1 | 1 | | | | |
| 1 | 60255500 | MANHOLES TO BE ADJUSTED | EACH | 1 | 1 | | | | |
| | 60266600 | VALVE BOXES TO BE ADJUSTED | EACH | 1 | 1 | | | | |
| | 67100100 | MOBILIZATION | L SUM | 1 | 1 | | | | |
| | 70102622 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502 | L SUM | 1 | 1 | | | | |
| | 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 1 | 1 | | | | |
| | 70102632 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701602 | L SUM | 1 | 1 | | | | |

| | | SUMMARY OF QUANTITIES | | | CONSTRUCTION TYPE CODE |
|------|----------|--|-------|-------------------|---------------------------|
| S.I. | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | |
| | 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 |
| | 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | L SUM | 1 | 1 |
| . 4 | 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 6000 | 6000 |
| | 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 1000 | 1000 |
| * | 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 970 | 970 |
| * | 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 26320 | 26320 |
| * | 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 3045 | 3045 |
| * | 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 1725 | 1725 |
| * | 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 365 | 365 |
| * | 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 2000 | 2000 |
| | Z0004562 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT | 1460 | 1460 |
| | Z0030850 | TEMPORARY INFORMATION SIGNING | SQ FT | 75 | 75 |
| | X6030310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) | EACH | 6 | 6 |
| | Z0004538 | HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 10" | SQ YD | 62 | 62 |
| | XX006343 | SEEDING (COMPLETE) | SQ YD | 400 | 400 |

GENERAL NOTES

* - INDICATES SPECIALTY ITEMS

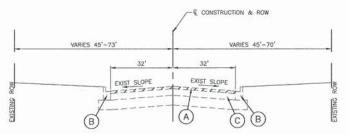
- 1. THE ROBINSON ENGINEERING, LTD. FIELD OFFICE (708-331-6700), ERIC BJORK AT THE VILLAGE OF ROMEOVILLE (815-886-1870). AND TOM PAWLOWICZ AT THE VILLAGE OF BOLINGBROOK (630-226-8850) ALL SHALL BE NOTIFIED TWO (2) WORKING DAYS BEFORE CONSTRUCTION BEGINS.
- BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 AND (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION REQUIRED)
- 3. UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTOR'S USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITY INFORMATION.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. THE THICKNESS OF HMA MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA SURFACE IS PLACED.
- 6. ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES BY LIMITING CURB AND GUTTER REPAIR TO ONE—HALF THE DRIVEWAY WIDTH AT ONE TIME AS WELL AS TEMPORARY AGGREGATE. ANY TEMPORARY AGGREGATE REQUIRED SHALL BE CONSIDERED INCLUDED IN THE COST OF THE RELATED PAY ITEM IT IS NEEDED FOR WHEN DIRECTED BY THE ENGINEER.
- 7. THE REMOVAL AND/OR REPLACEMENT OF ANY DRIVEWAYS, PAVEMENT, CURB, SIDEWALK, ETC. SHALL BE ACCOMPLISHED BY MEANS OF A SAW CUT JOINT, AT THE DIRECTION OF THE ENGINEER. SAW CUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR THE VARIOUS REMOVAL ITEMS.
- 8. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SHALL BE REMOVED BY THE END OF EACH DAY BY THE CONTRACTOR AT THEIR EXPENSE.
- 9. THE CONTRACTOR SHALL LEAVE ANY CLEAN EXCESS ORGANIC FILL EXCAVATED DURING THE CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT OPERATIONS ON SITE. ANY EXCESS MATERIAL SHALL BE SPREAD OR PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR THE VARIOUS REMOVAL AND REPLACEMENT ITEMS. RESTORATION OF AREAS WHERE EXCESS MATERIALS IS PLACED SHALL BE PAID FOR AS SEEDING (COMPLETE).
- 10. CLASS D PATCHING QUANTITIES FOR THIS CONTRACT SHALL BE PERFORMED AT THE DIRECTION OF THE ENGINEER AFTER PAVEMENT MILLING.

SCALE: NONE

| | | | * - INDICATES SPECIAL | TY ITEMS |
|--|----------------------|----------------|-----------------------|----------|
| FILE NAME = 14611-QUAN-01 - IDOT P01 | USER NAME = | DESIGNED - TAG | REVISED — | |
| | | CHECKED — HLG | REVISED | |
| | PLOT SCALE = | DRAWN — RG | REVISED — | DEPAR |
| Little service in challenge in the basis | PLOT DATE = 02-24-15 | CHECKED — AG | REVISED — | |

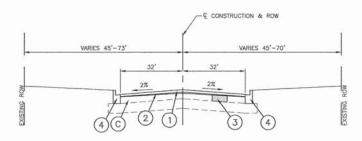
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| FAU 429 (CROSSROAD | F.A.U. RTE. | SEC | TION | COUNTY | TOTAL SHEETS | SHEET NO. | |
|--------------------------|----------------|-------------|------------|------------|--------------------|--------------|--|
| ROADWAY RESUR | 429 | 15-0006 | 2-00-RS | WILL | 23 | 2 | |
| SUMMARY OF QUANTITIES 8 | | | 0 | CONTRAC | T NO. 61B | 63 | |
| SHEET NO. 2 OF 23 SHEETS | STA. TO STA. | FED. ROAD D | IST. NO. 1 | ILLINOIS F | ED. AID PROJECT M- | 1003 (487) | |



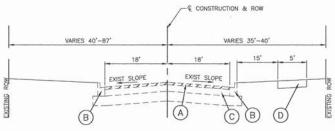
EXISTING TYPICAL SECTION

CROSSROADS PARKWAY/NORMANTOWN ROAD NORTH CENTER BOULEVARD TO NORMANTOWN ROAD STA 12+05.30 TO STA 27+00.00



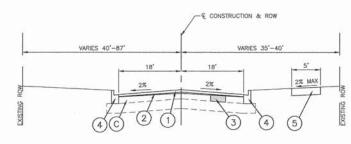
PROPOSED TYPICAL SECTION

CROSSROADS PARKWAY/NORMANTOWN ROAD
NORTH CENTER BOULEVARD TO NORMANTOWN ROAD
NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING
STA 12+05.30 TO STA 27+00.00



EXISTING TYPICAL SECTION

CROSSROADS PARKWAY NORMANTOWN ROAD TO VETERANS PARKWAY STA 27+00 TO STA 103+10.87



PROPOSED TYPICAL SECTION

CROSSROADS PARKWAY
NORMANTOWN ROAD TO VETERANS PARKWAY
NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING
STA 27+00 TO STA 103+10.87

EXISTING LEGEND

- (A) HOT MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- B EXISTING CURB & GUTTER TO BE REMOVED AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER
- (C) EXISTING HOT-MIX ASPHALT PAVEMENT (VARIES 10" TO 15")
- EXISTING PCC SIDEWALK TO BE REMOVED AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER

PROPOSED LEGEND

- 1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, N80, IL-9.5mm 2"
- 2) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 3) CLASS D PATCH, 10" AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER
- PROPOSED CURB AND GUTTER TO BE INSTALLED AT LOCATIONS SHOWN ON PLAN OR DIRECTED BY ENGINEER (IN KIND)
- 5 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (REPLACEMENT AT LOCATIONS DIRECTED BY THE ENGINEER)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

(CONTRACTOR SHALL MILL BEFORE PATCHING)

| MIXTURE TYPE | AIR VOIDS @ Ndes |
|---|------------------|
| RESURFACING | |
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, N80, IL-9.5MM, 2" | 3.5% @ 80 Gyr. |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" | 3.5% @ 50 Gyr. |
| PATCHING | |
| CLASS D PATCHES, TYPE I, II, III, IV, (HMA BINDER IL-19.0mm): 10" (IN 3 LIFTS) | 4% Ø 70 Gyr. |
| DRIVEWAYS | |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL 9.5 MM) | 4% @ 50 Gyr. |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm); CE-8* | 4% Ø 50 Gyr. |

MOTES.

SCALE: NONE

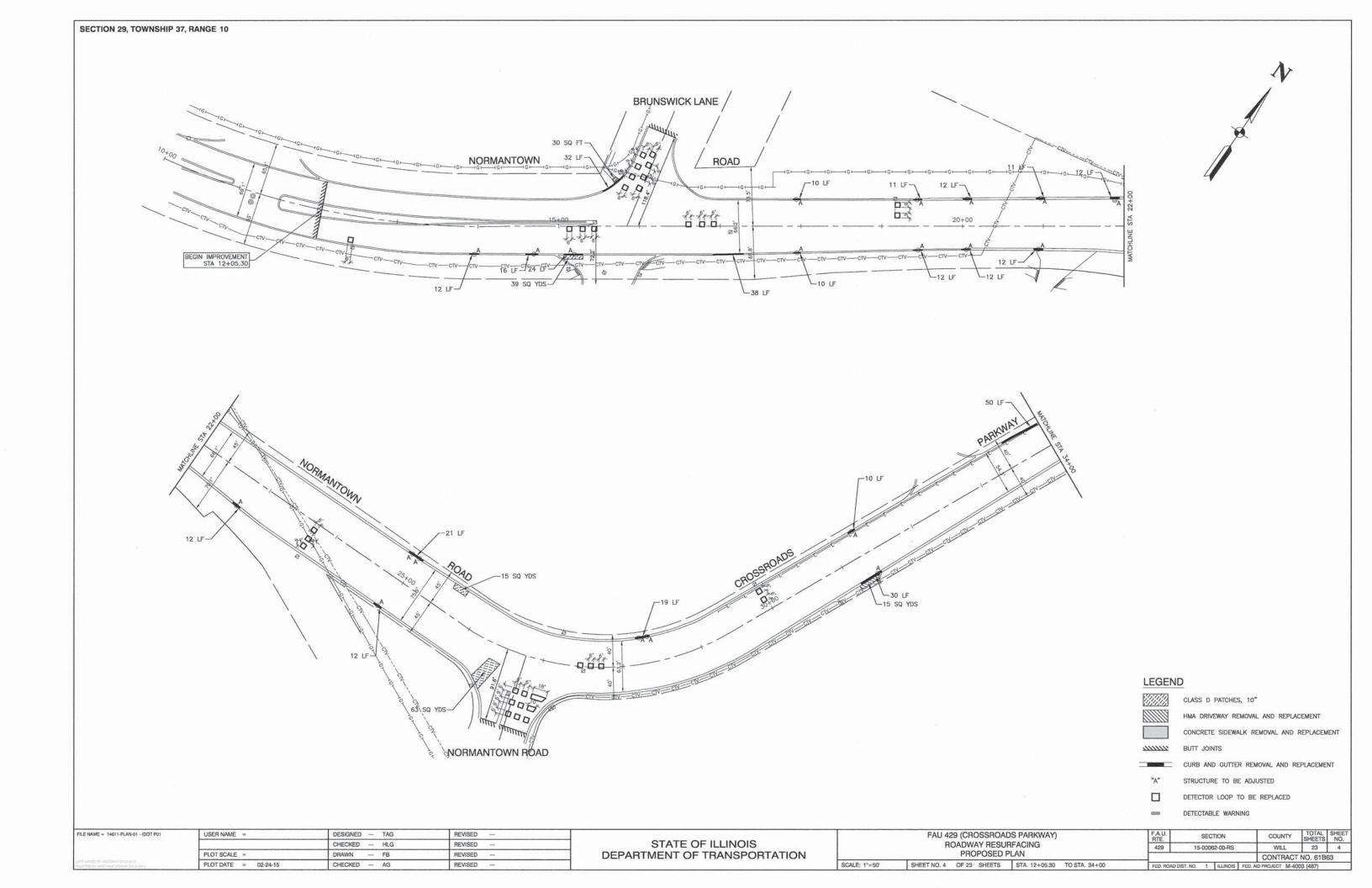
- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. FOR "AC TYPE" AND "PERCENT RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

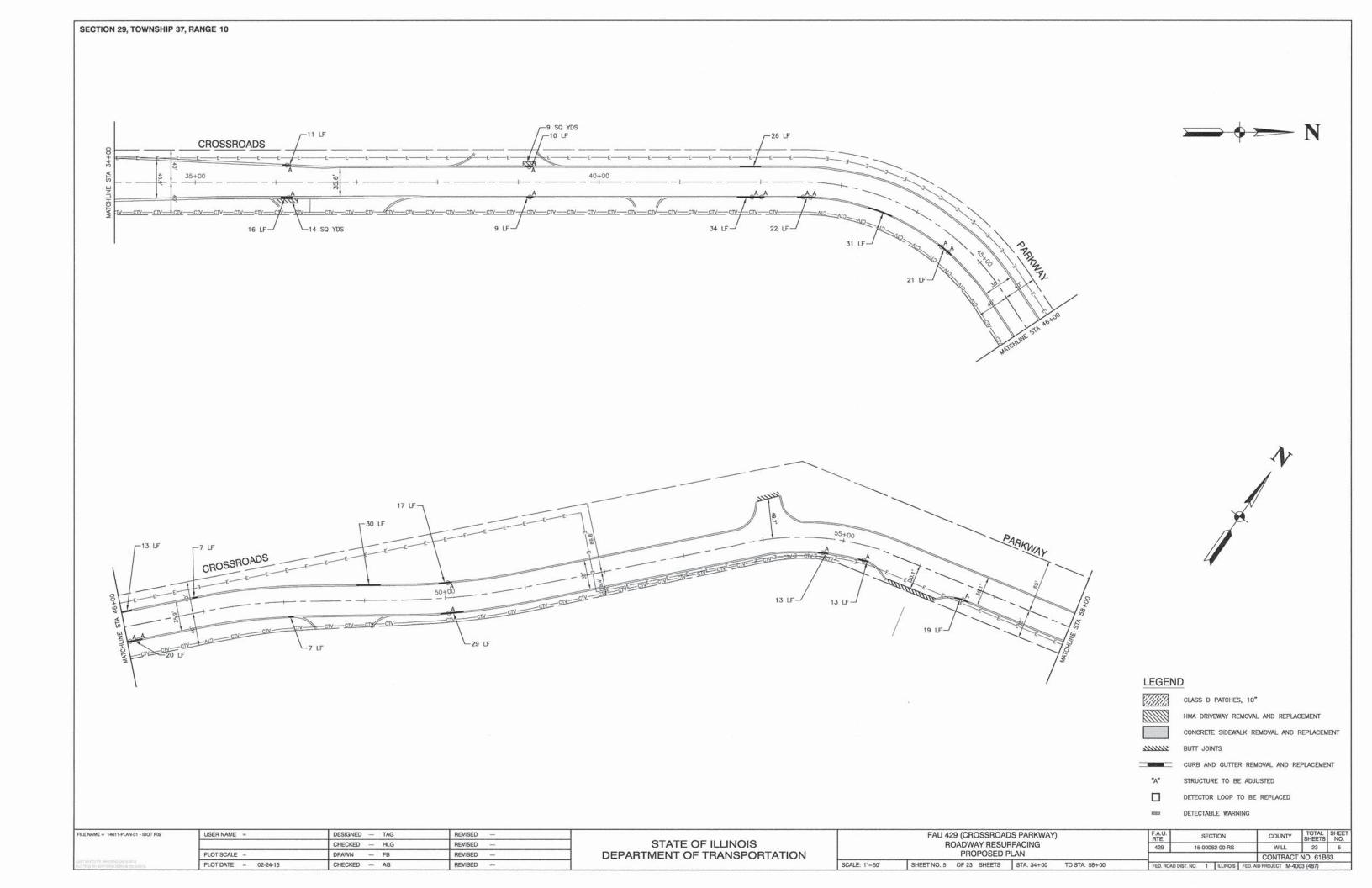
 $\frac{\text{NOTE:}}{\text{CLASS D PATCHES, TYPE I, II, III & IV AT APPROXIMATE STATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.$

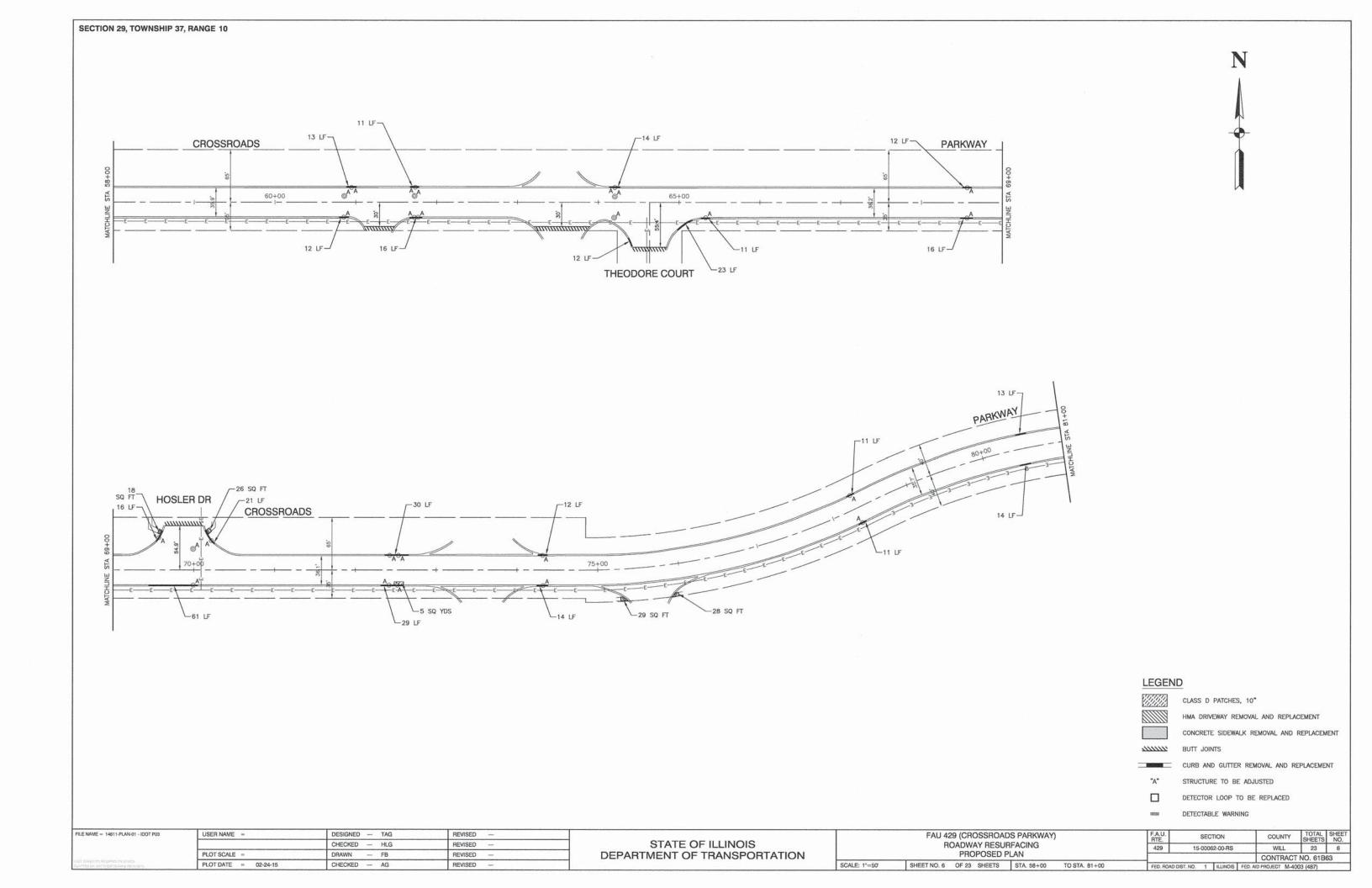
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|---|----------------------|----------------|-----------|--|
| | | CHECKED — HLG | REVISED — | |
| | PLOT SCALE = | DRAWN — RG | REVISED — | |
| EAST BAYON DV. SOUTHWAY STATE HEYE MILLION DV. MILLION DOWNER DV STONE | PLOT DATE = 02-24-15 | CHECKED — AG | REVISED — | |

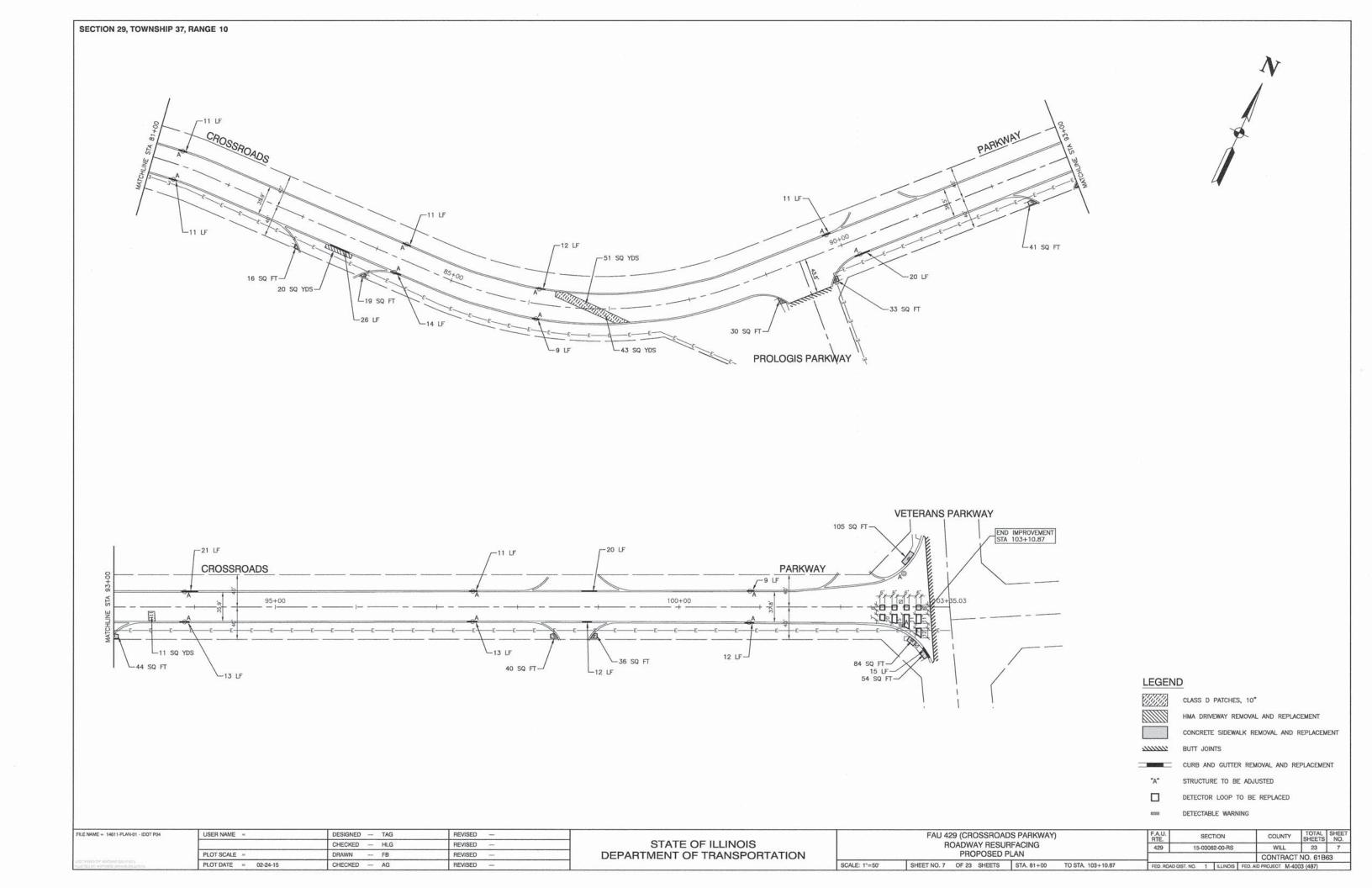
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

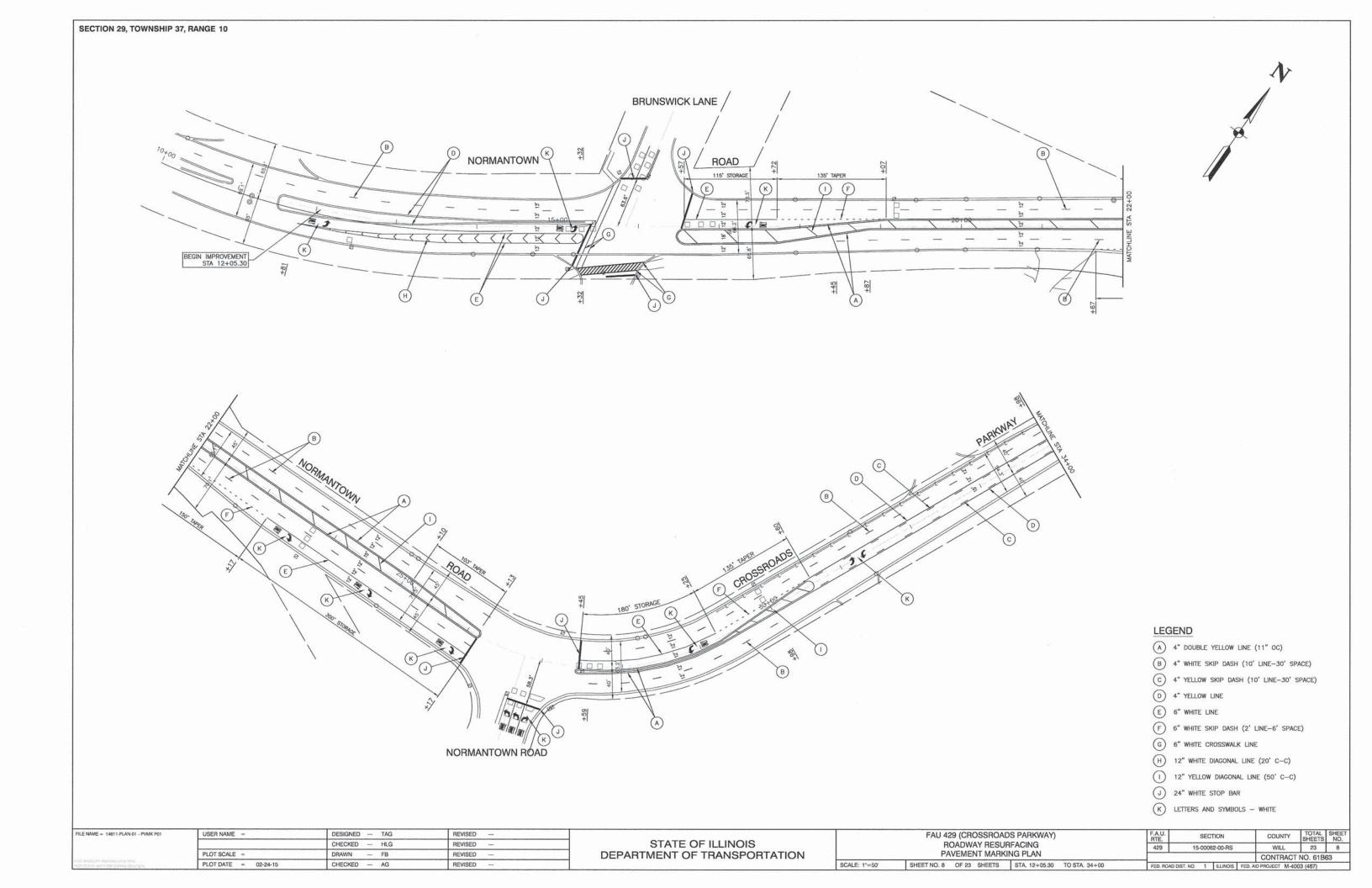
| FALL 400 (ODOCCOOLDO DADIOWAYO | TEAU I | | | TOTAL | SHEET |
|---------------------------------------|----------------|----------------------|-----------------|-----------|-------|
| FAU 429 (CROSSROADS PARKWAY) | F.A.U. RTE. | SECTION | COUNTY | SHEETS | NO. |
| ROADWAY RESURFACING | 429 | 15-00062-00-RS | WILL | 23 | 3 |
| TYPICAL SECTIONS | | | CONTRACT | T NO. 61B | 63 |
| SHEET NO. 3 OF 23 SHEETS STA. TO STA. | SED BOAD D | NET NO 1 THUNOIS FEE | AID SPOJECT M.A | 002 (497) | |

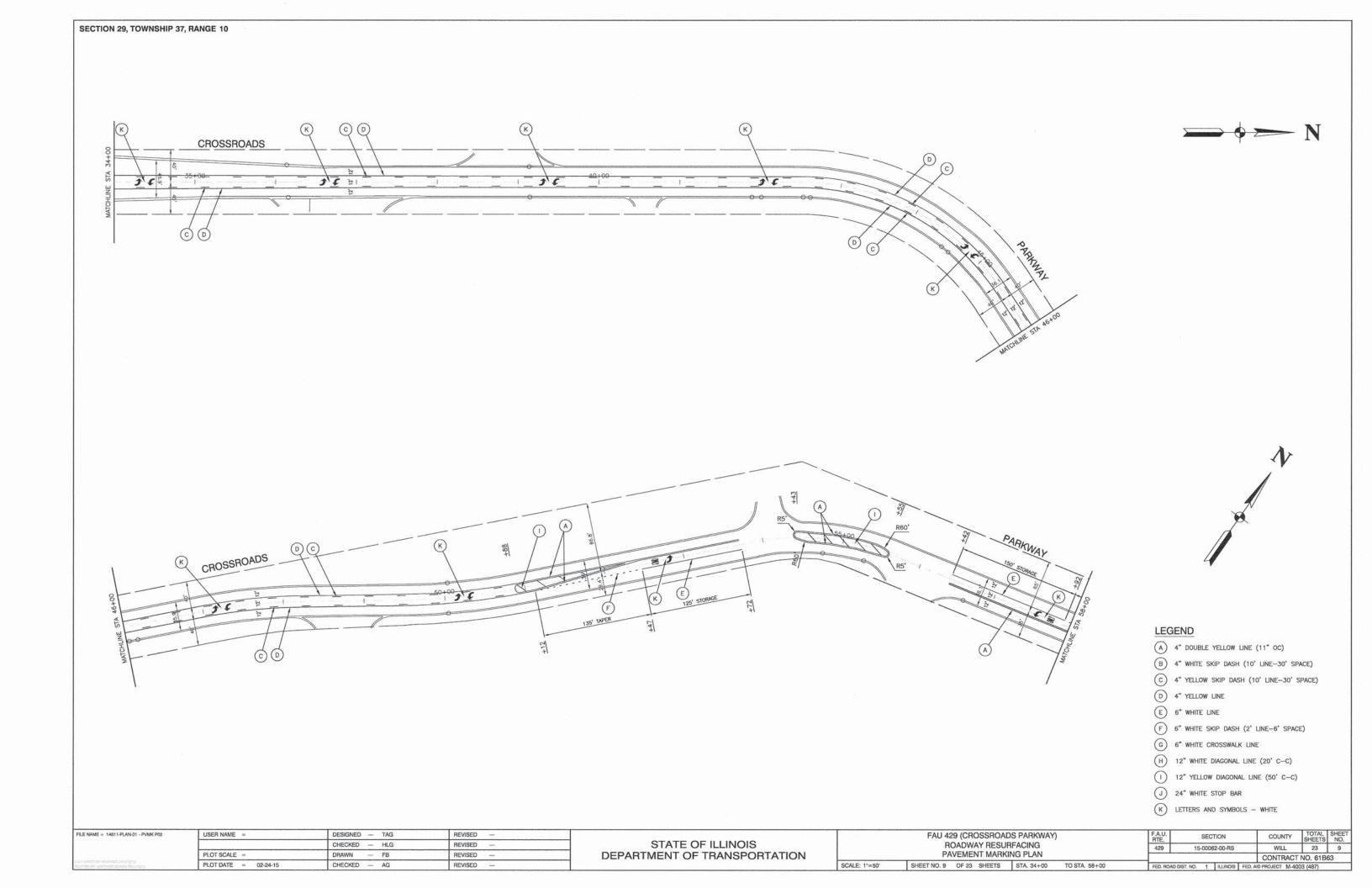


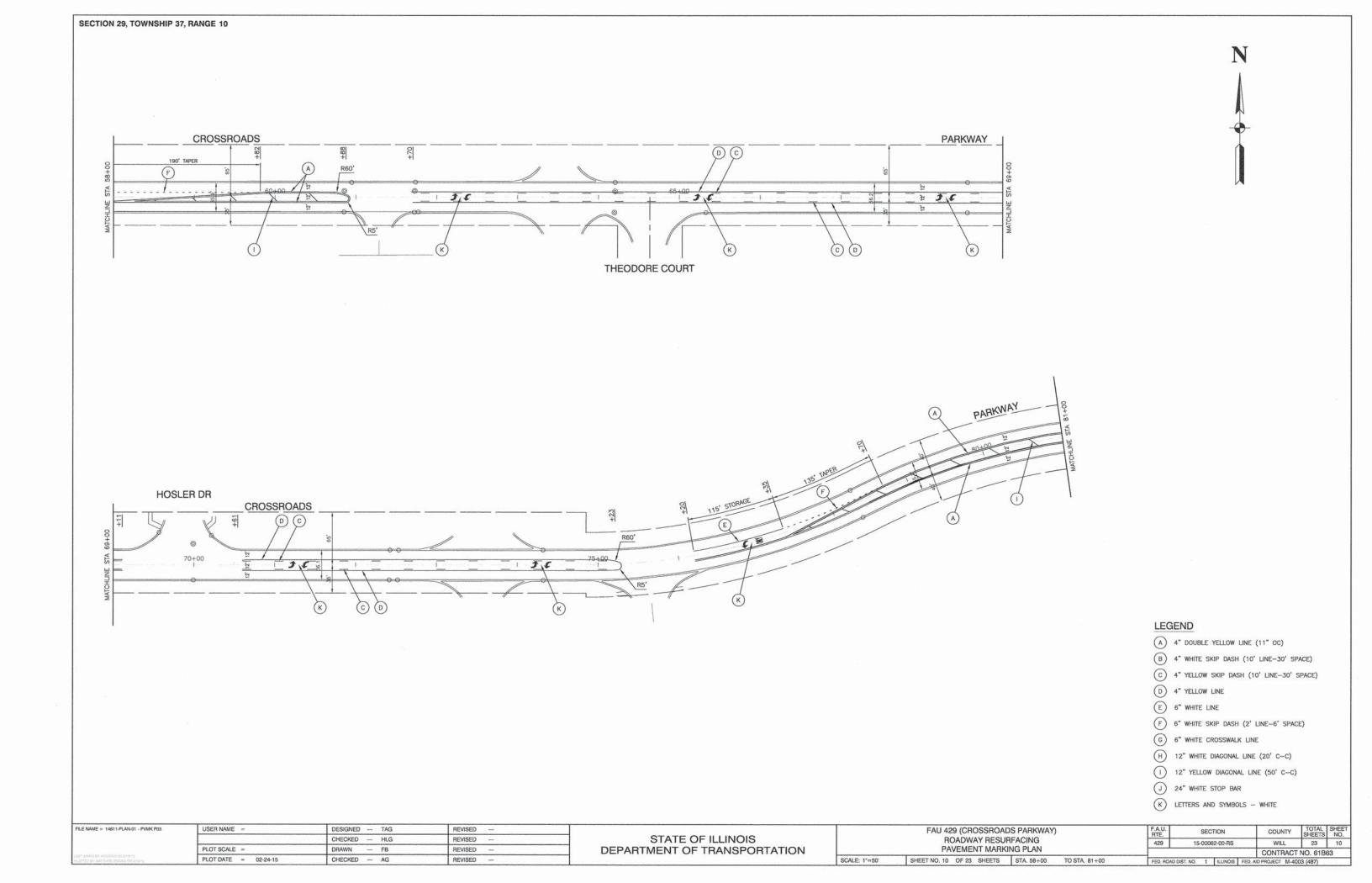


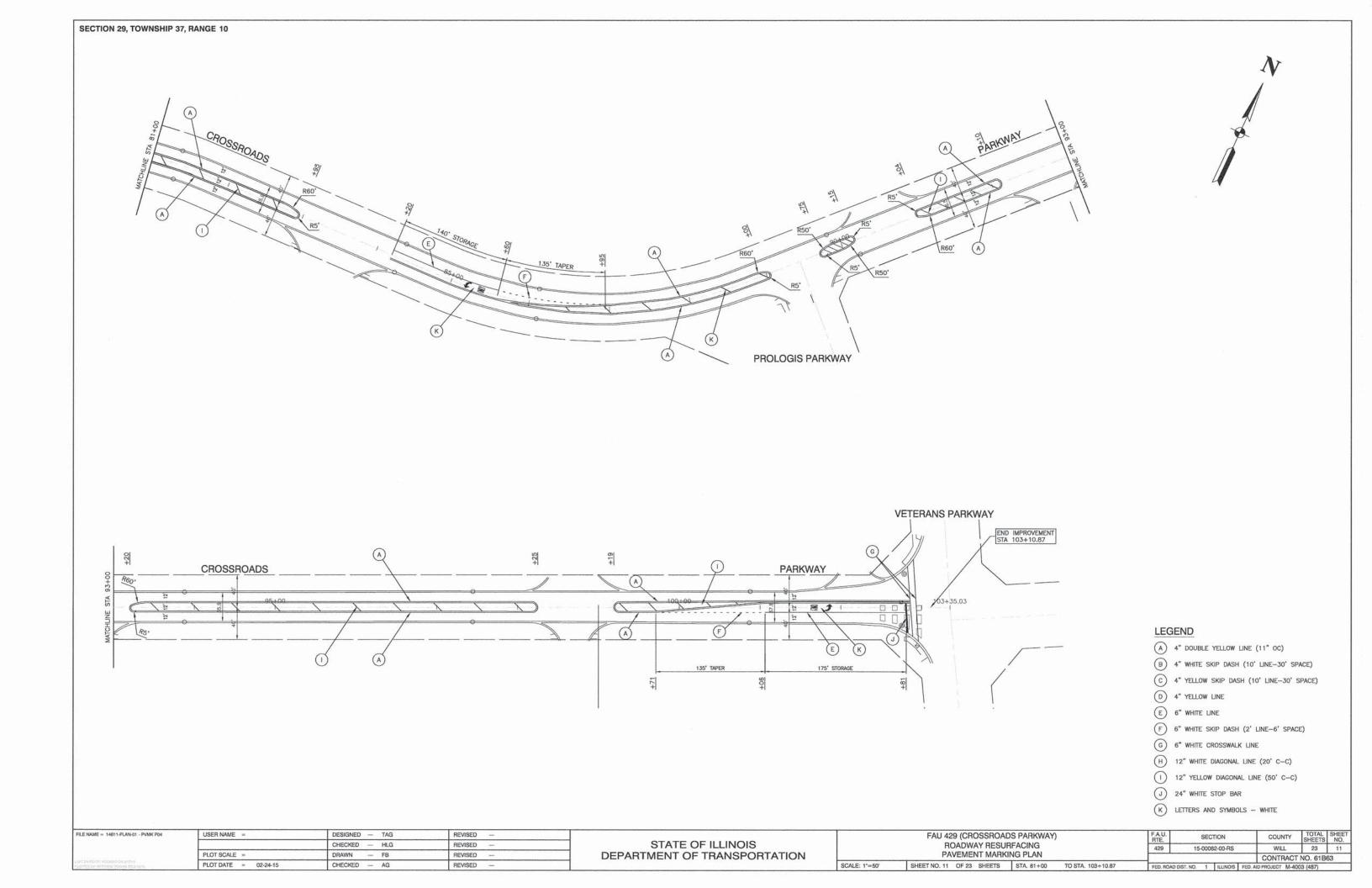


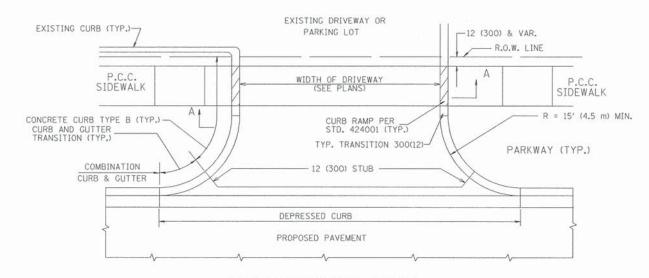




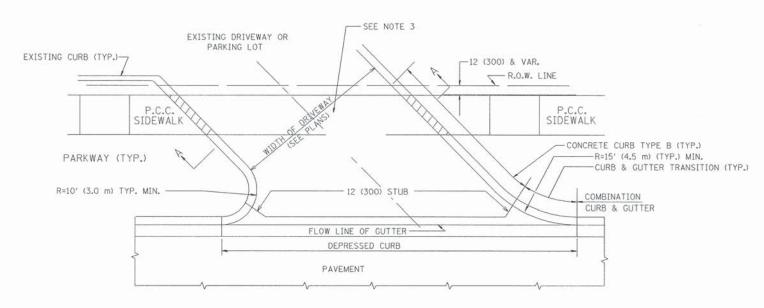




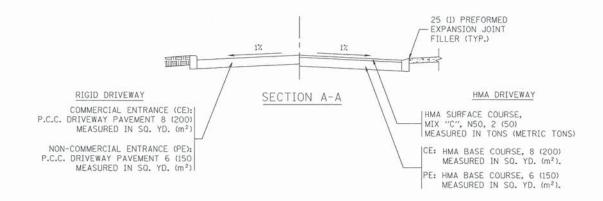


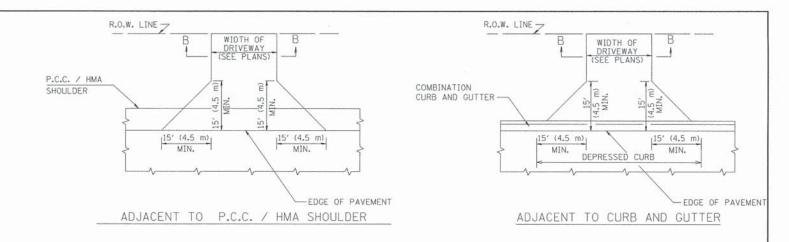


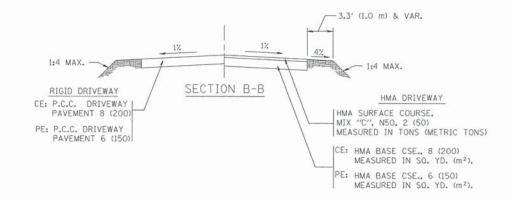
WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B







RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE. MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SO. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND. UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK,

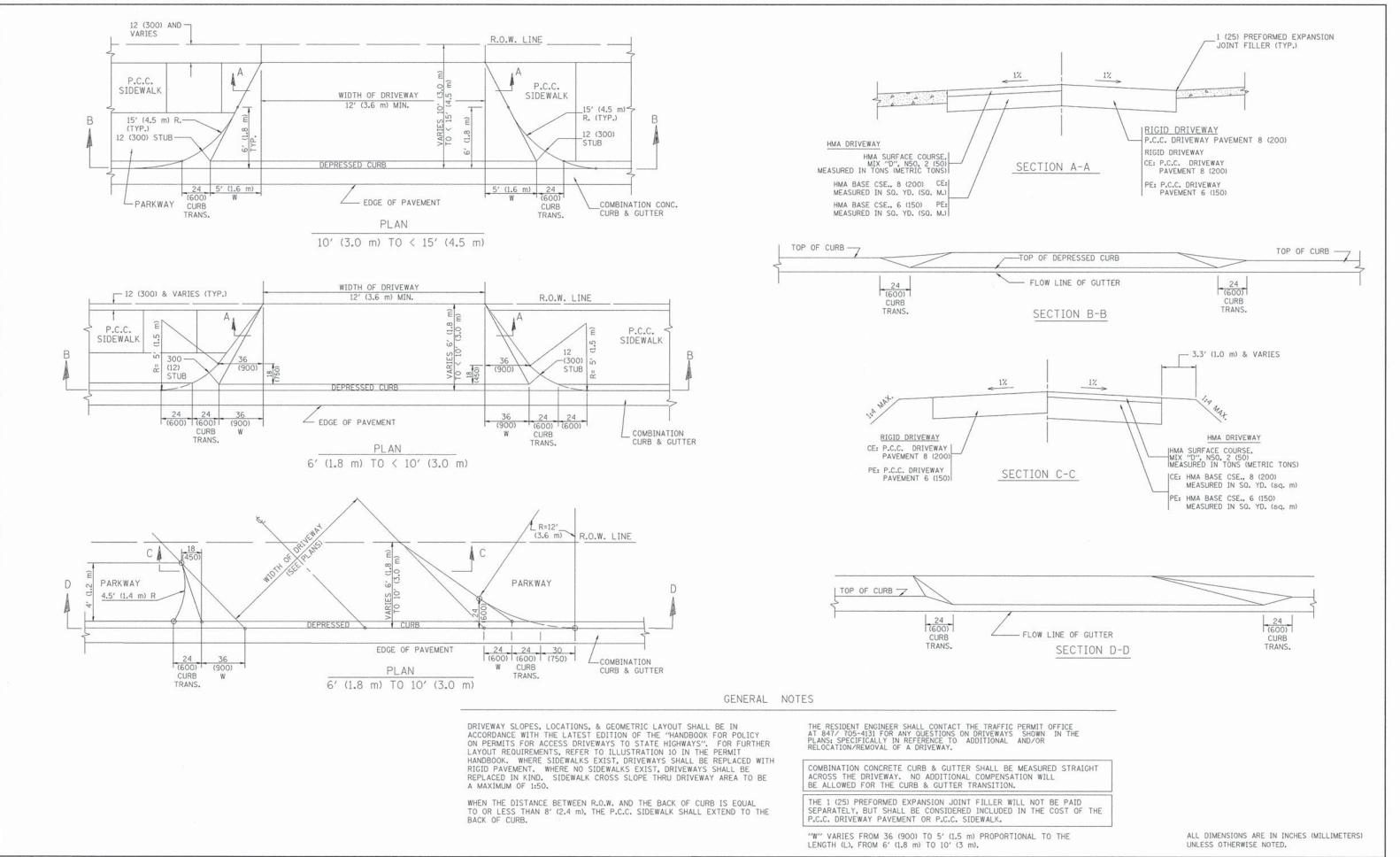
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

SCALE: NONE

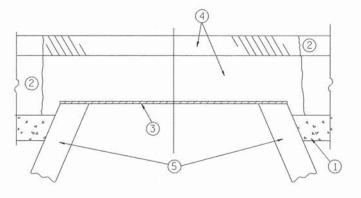
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|-------|------------------------------|
| | -variation internal regional |

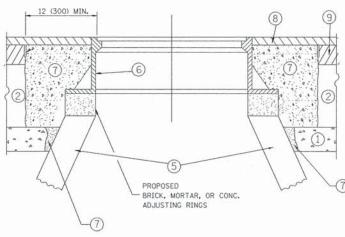
| USER NAME = bauerdl | DESIGNED - R. SHAH | REVISED - M. GOMEZ 04-06-01 |
|-----------------------------|--------------------|-------------------------------|
| | DRAWN - | REVISED - P. LaFLUER 04-15-03 |
| PLOT SCALE = 49,9999 '/ IN. | CHECKED - | REVISED - R. BORO 01-01-07 |
| PLOT DATE = 6/12/2008 | DATE - 11-04-95 | REVISED - R. BORO 06-11-08 |

| | DISTRICT ONE | | | F.A.U. RTE. | SEC | TION | | COUNTY | TOTAL | SHEE NO. |
|---|---------------------------|------|--------------------|----------------|-------------|----------|--------|-----------------|----------|-------------|
| FRAMES AND LIDS ADJUSTMENT WITH MILLING | | | 429 15-00062-00-RS | | | | WILL | | 12 | |
| | | | | | BD-1 | | | CONTRACT | NO. 61B | 63 |
| | SHEET NO. 12 OF 23 SHEETS | STA. | TO STA. | FED. ROAD I | DIST. NO. 1 | ILLINOIS | FED. A | ID PROJECT M-40 | 03 (487) | |



DESIGNED - R. SHAH REVISED - M. GOMEZ 04-06-01 DISTRICT ONE SECTION DRAWN REVISED - P. LaFLEUR 04-15-0 STATE OF ILLINOIS c:\pw_work\pwidot\leysa\d0108315\bd02.dc FRAMES AND LIDS ADJUSTMENT WITH MILLING 429 15-00062-00-RS WILL 23 13 PLOT SCALE = 50.0000 '/ in. CHECKED REVISED - R. BORO 01-01-07 DEPARTMENT OF TRANSPORTATION BD-2 CONTRACT NO. 61B63 PLOT DATE = 10/28/2011 DATE REVISED R. BORO 09-06-11 SCALE: NONE 11-06-95 SHEET NO. 13 OF 23 SHEETS STA. TO STA.





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.

SCALE: NONE

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 1TS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- * UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- (2) EXISTING PAVEMENT
- 7 CLASS PP-1* CONCRETE
- 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 PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

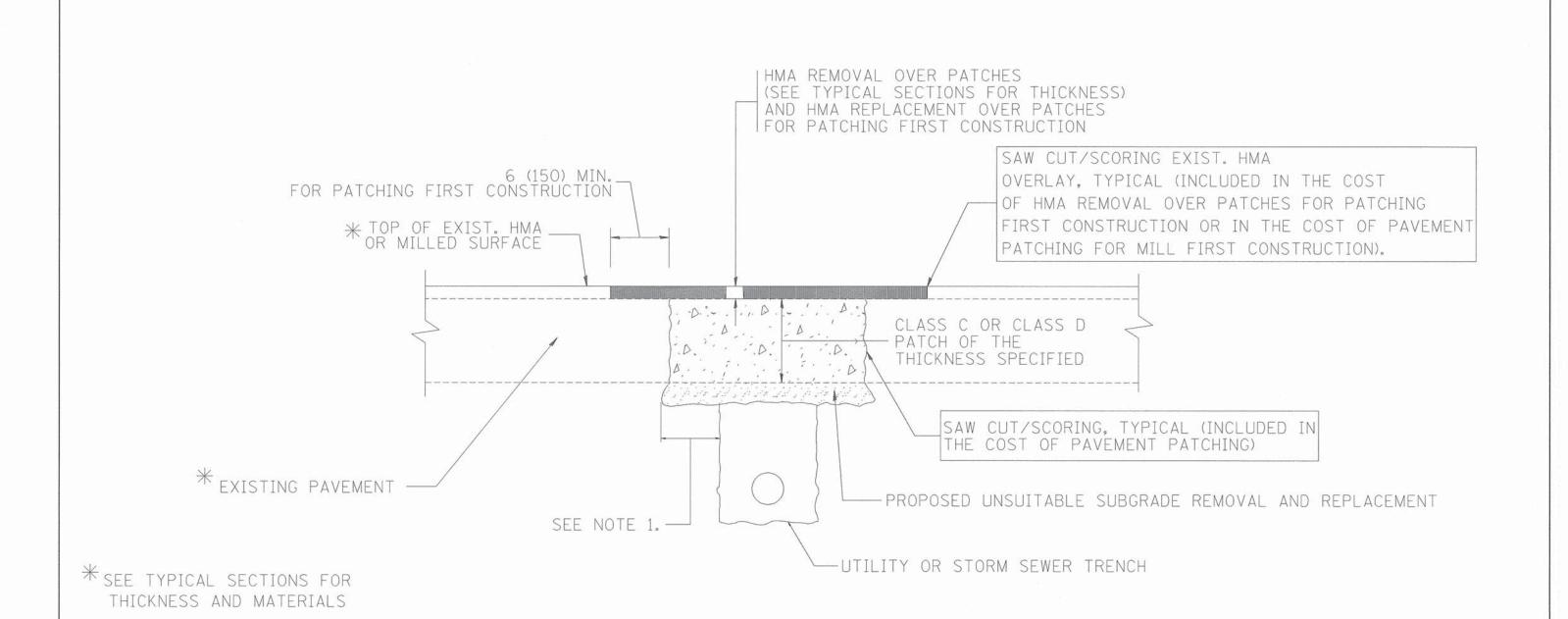
23 14

DESIGNED - R. SHAH REVISED - R. WIEDEMAN 05-14-04 c:\pw_work\pwidot\bouerd1\d0108315\bd08.dgr DRAWN REVISED - R. BORO 01-01-07 REVISED - R. BORO 03-09-11 PLOT SCALE = 1968.5000 ' / m CHECKED REVISED - R. BORO 12-06-11 PLOT DATE = 12/6/2011 DATE 10-25-94

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE SECTION COUNTY FRAMES AND LIDS ADJUSTMENT WITH MILLING 429 15-00062-00-RS WILL BD-8 CONTRACT NO. 61B63 SHEET NO. 14 OF 23 SHEETS STA.

TO 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)

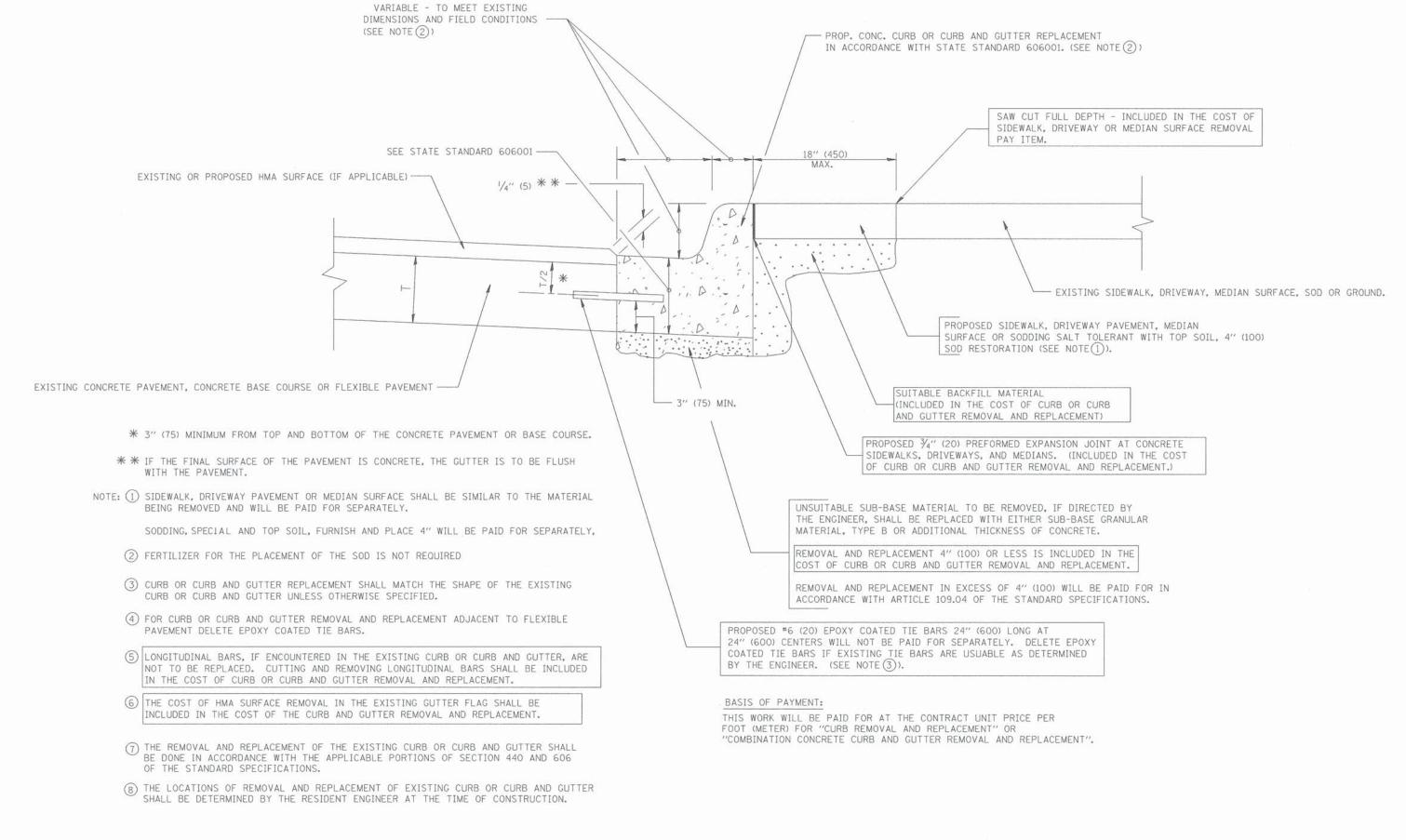
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

| FILE NAME = | USER NAME = bound1 | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 | | | DISTRICT ONE | | F | A.U. | SECTION | COUNTY | SHEETS | SHEET |
|-----------------------------------|-----------------------------|--------------------|-----------------------------|------------------------------|-------------|-----------------------------|--------------|----|------|------------------------|---------|-------------------------------|-------|
| c:\projects\diststd22x34\bd22.dgn | | DRAWN - | REVISED - R. BORO 01-01-07 | STATE OF ILLINOIS | | PAVEMENT PATCHIN | NG FOR | H' | 429 | 15-00062-00-RS | WILL | 23 | - |
| | PLOT SCALE = 50.000 ' / IN. | CHECKED - | REVISED - R. BORO 09-04-07 | DEPARTMENT OF TRANSPORTATION | | HMA SURFACED PAV | /EMENT | - | RD | | CONTRAC | | _ |
| | PLOT DATE = 10/27/2008 | DATE - 10-25-94 | REVISED - K. ENG 10-27-08 | | SCALE: NONE | SHEET NO. 15 OF 23 SHEETS S | STA. TO STA. | 1 | | ST. NO. 1 ILLINOIS FED | | where the same of the same of | |



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

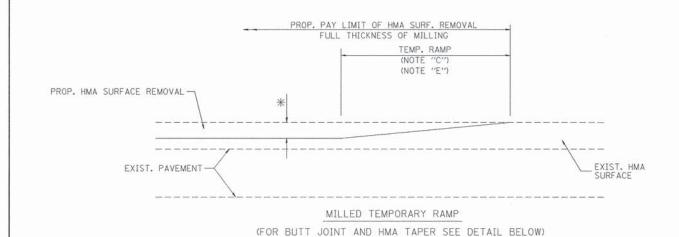
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| FILE NAME = | USER NAME = drivakosgn | DESIGNED - A. HOUSEH | REVISED - R. SHAH 1 | 0-03-96 |
|--|-----------------------------|----------------------|---------------------|----------|
| c:\pw_work\pwidot\drivakosgn\d0108315\bo | 24.dgn | DRAWN - | REVISED - A. ABBAS | 03-21-97 |
| Ī | PLOT SCALE = 58.000 ' / IN. | CHECKED - | REVISED - M. GOMEZ | 01-22-01 |
| | PLOT DATE = 12/15/2009 | DATE - 03-11-94 | REVISED - R. BORO 1 | 2-15-09 |

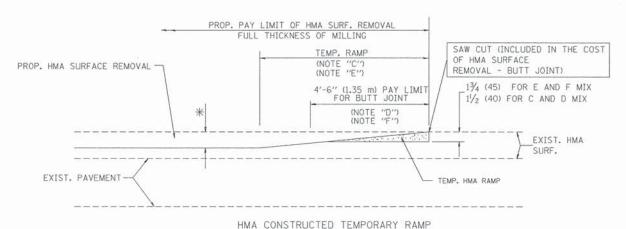
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| | C | URB | OR | CURB | AND | GUTTER | |
|---|-------------|------|------|--------|-------|--------|--------|
| | R | EMO | VAL. | AND | REPLA | CEMENT | |
| Ī | SHEET NO. 1 | 6 OF | 23 | SHEETS | S | TA. | TO STA |

SCALE: NONE



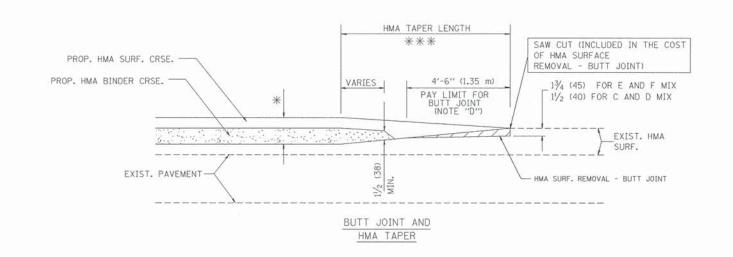
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

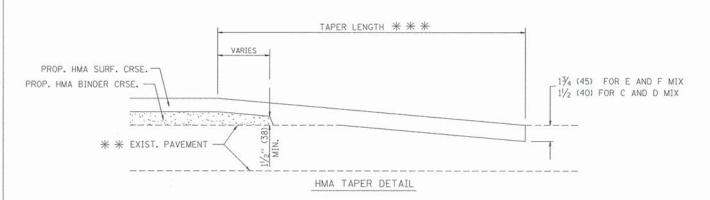
EXIST. HMA OR PCC SURFACE

SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")
15'-0" (4.5 m) (NOTE "B")

(NOTE "D")

** * EXIST. PAVEMENT

BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

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

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".

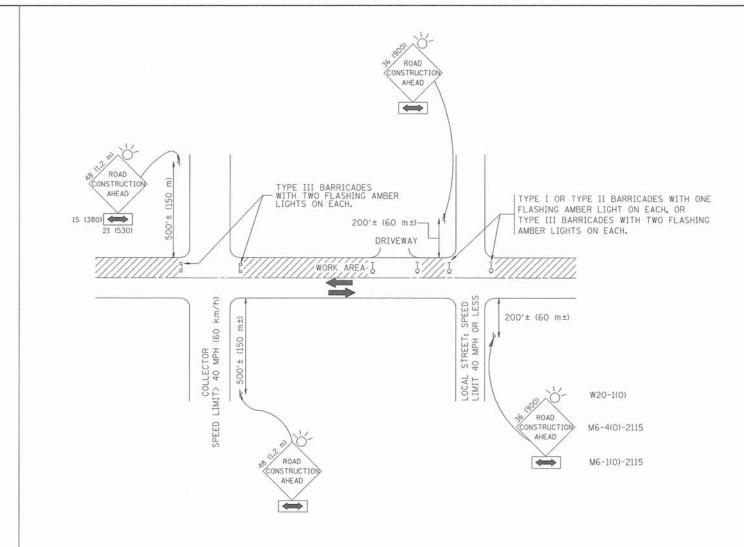
SCALE: NONE

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

| FILE NAME = | USER NAME = gaglianobt | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94 |
|---------------------------|------------------------------|-----------------------|-----------------------------|
| W:\diststd\22x34\bd32.dgn | | DRAWN - | REVISED - A. ABBAS 03-21-97 |
| | PLOT SCALE = 50.0000 ' / IN. | CHECKED - | REVISED - M. GOMEZ 04-06-01 |
| | PLOT DATE = 1/4/2008 | DATE - 06-13-90 | REVISED - R. BORO 01-01-07 |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| | | TRICT O | | | F.A.U. RTE. | s | SECTION COUNTY TOTAL SHE | | | | | |
|--------------------------|--------------------|---------|------|----------------|----------------|--------------|--------------------------|----------|--------|-----------------|----------|----|
| BUTT JOINT AND HMA TAPER | | | 429 | 15-00062-00-RS | | | WILL 23 | | 1 | | | |
| | | DETAILS | | | | BD400- | -05 | BD32 | | CONTRACT | NO. 61B | 63 |
| | SHEET NO. 17 OF 23 | SHEETS | STA. | TO STA. | FED. ROA | AD DIST. NO. | 1 | ILLINOIS | FED. A | ID PROJECT M-40 | 03 (487) | |



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:
- Q) ONE ROAD CONSTRUCTION AMEAD 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:
- 0) 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.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

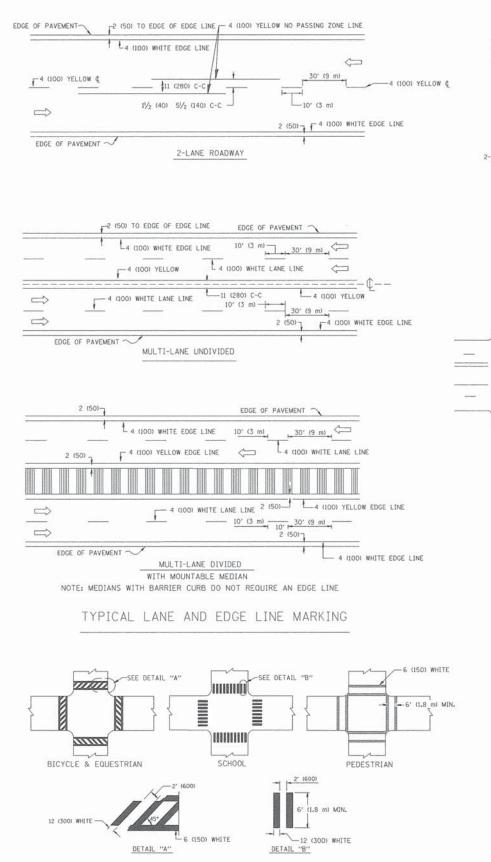
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SHEET NO. 18 OF 23 SHEETS STA. TO STA.



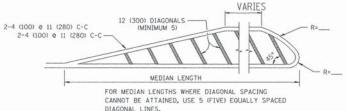
2-4 (100) YELLOW © 11 (280) C-C

NO DIAGONALS

4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES

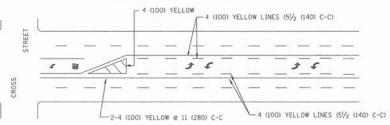
2-4 (100) YELLOW © 11 (280) C-C

4' (1.2 m) WIDE MEDIANS ONLY

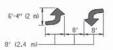


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

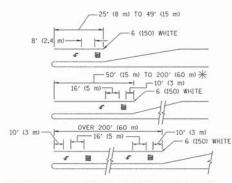


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

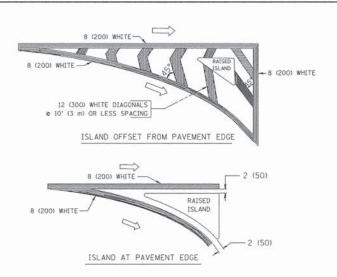


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) \P AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS | | |
|---|---|-------------------------|---|--|--|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE | | |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 9 4 (100) | SOLID | YELLOW | 11 (280) C-C | | |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS | 4 (100) 2 @ 4 (100) | SOLID SOLID | YELLOW YELLOW | 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN | | |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE | | |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE | | |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB | | |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL | | |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION | SKIP-DASH AND SOLID | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (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) A. DIAGONALS (BIKE & EOUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 © 6 (150) 12 (300) © 45° 12 (300) © 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART 5EE TYPICAL CROSSWALK MARKING DETAILS. | | |
| STOP LINES | 24 (600) | SOLID | жнітє | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE | | |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. | | |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | жнітє | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) | | |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "%"5-3.6 SO. FT. (0.33 m²) EACH "%"5-4.0 SO. FT. (5.0 m²) | | |
| SHOULDER DIAGONALS | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h)) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 45MPH (70 km/h)) | | |

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

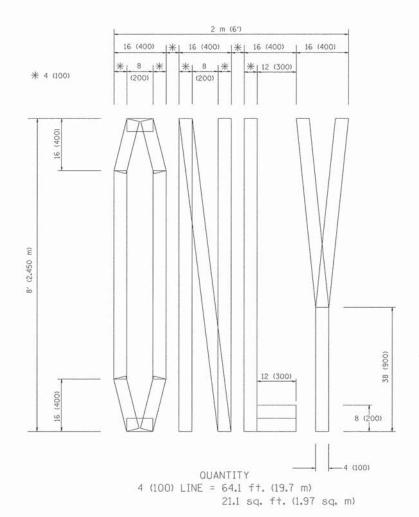
All dimensions are in inches (millimeters) unless otherwise shown.

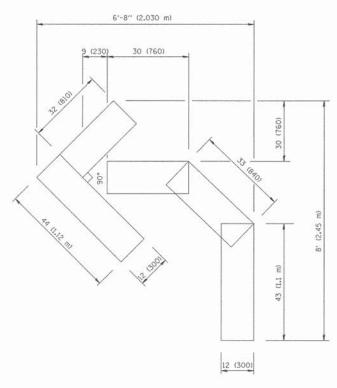
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| c:\pw_work\pwidot\drivokosgn\d0108315\tc | 13.dgn | DRAWN - | REVISED -C. JUCIUS 09-09-09 |
| | PLOT SCALE = 50.000 ' / IN. | CHECKED - | REVISED ~ |
| | PLOT DATE = 9/9/2009 | DATE - 03-19-90 | REVISED - |

TYPICAL CROSSWALK MARKING

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

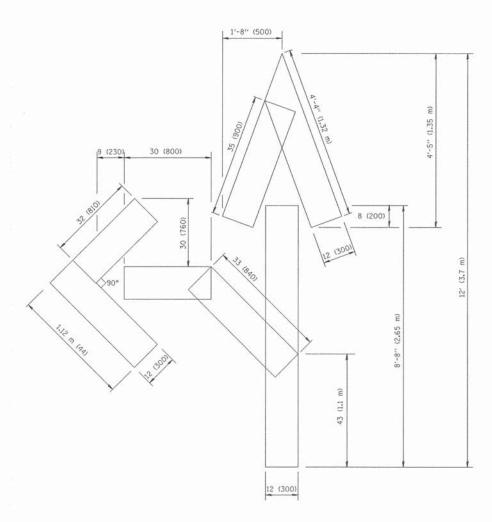
| 1. | | | | | F.A.U. RTE. | SEC | TION | | COUNTY | TOTAL | SHEET NO. |
|--------------|---------------------------|----------|---------|-------------------|--------------------|-------------|----------|--------|----------------|----------|--------------|
| DISTRICT ONE | | | | | 429 15-00062-00-RS | | | | WILL 23 | | 19 |
| | TYPICAL PAVEMENT | MARKINGS | | TC-13 CONTRACT NO | | | NO. 61B | 63 | | | |
| SCALE: NONE | SHEET NO. 19 OF 23 SHEETS | STA. | TO STA. | | FED. ROAD D | DIST. NO. 1 | ILLINOIS | FEO. A | D PROJECT M-40 | 03 (487) | |





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

SCALE: NONE



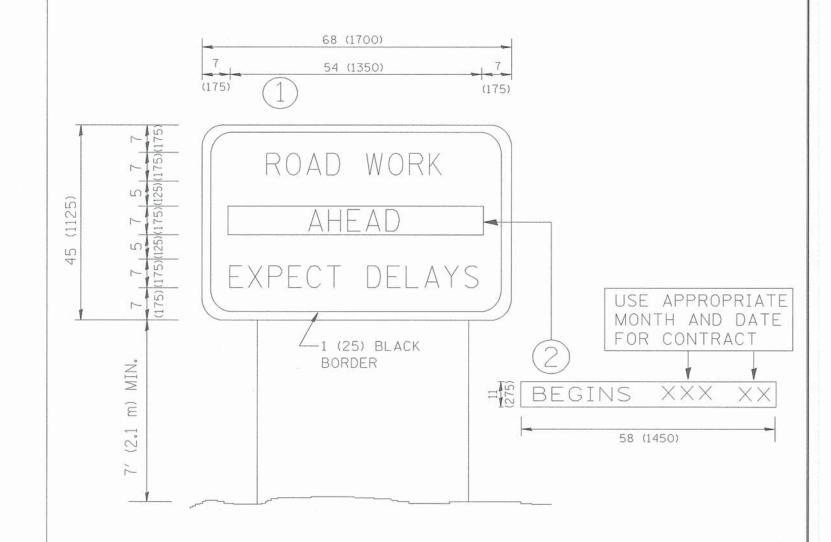
OUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)

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

| FILE NAME = | USER NAME = goglionobt | DESIGNED - | REVISED -T. RAMMACHER 06-05-96 |
|---------------------------|-----------------------------|-----------------|--------------------------------|
| W:\diststd\22x34\tcl6.dgn | | DRAWN - | REVISED -T. RAMMACHER 11-04-97 |
| | PLOT SCALE = 50.0000 '/ IN. | CHECKED + | REVISED -T. RAMMACHER 03-02-98 |
| | PLOT DATE = 1/4/2008 | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00 |

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

| | F.A.U. RTE. | SECTION | COUNTY | TOTAL | SHEET NO. |
|---|----------------|-------------------------------|----------|---------|--------------|
| DISTRICT ONE - PAVEMENT MARKING LETTERS AND | 429 | 15-00062-00-RS | WILL | 23 | 20 |
| SYMBOLS FOR TRAFFIC STAGING | | TC-16 | CONTRACT | NO. 61B | 33 |
| CHEET NO OO OF 22 CHEETC CTA TO CTA | | the state of the state of the | | | |



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 = drivakosgn | DESIGNED - EVERS | REVISED -T. RAMMACHER 10-27-94 |
|---|-----------------------------|------------------|--------------------------------|
| c:\pw_work\pwidot\drivakosgn\d0108315\t | cl3.dgn | DRAWN - | REVISED -C. JUCIUS 09-09-09 |
| | PLOT SCALE = 50.000 ' / IN. | CHECKED - | REVISED - |
| | PLOT DATE = 9/9/2009 | DATE - 03-19-90 | REVISED - |

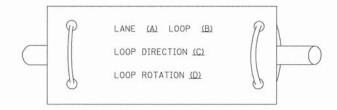
| STATE OF ILLINOIS |
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| DEPARTMENT OF TRANSPORTATION |

| | | DIOTRICT OF | | | F.A.U. RTE. | SECT | TION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|---------------------------|------|---------|----------------|---------------|-----------------|------------------|-----------------|--------------|
| | | DISTRICT ON | | 20 | 429 | 15-0006 | 2-00-RS | WILL | 23 | 21 |
| į | | TYPICAL PAVEMENT I | | aS . | | TC-22 | | CONTRACT | NO. 61B | 63 |
| | SCALE: NONE | SHEET NO. 21 OF 23 SHEETS | STA. | TO STA. | FED. ROA | D DIST. NO. 1 | ILLINOIS FED. A | ID PROJECT M-400 | 3 (487) | 100 |

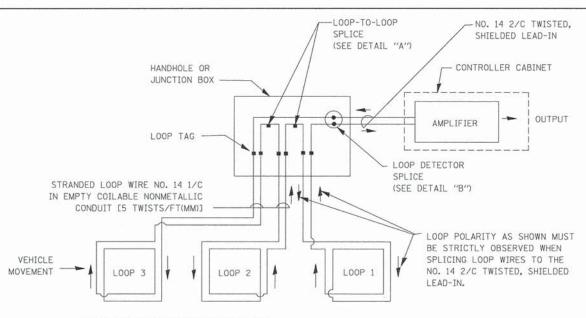
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

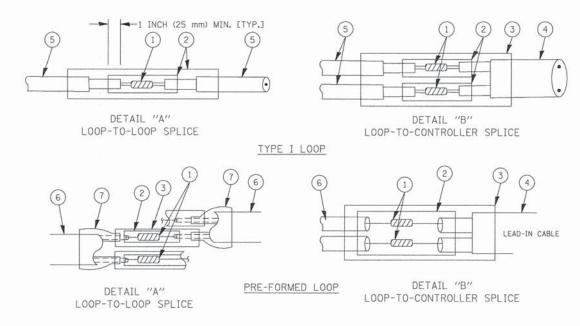


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

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



LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP

SCALE: NONE

7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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| | PLOT DATE = 11/4/2009 | DATE - | 10-28-09 | REVISED - | |

| STATE OF ILLINOIS |
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| DEPARTMENT OF TRANSPORTATION |

| DISTRICT ONE | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|----------------|----------------|------------------|-----------------|--------------|
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS | 429 | 15-00062-00-RS | WILL | 23 | 22 |
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | TS-05 | CONTRACT | NO. 61B | 63 |
| SHEET NO. 22 OF 23 SHEETS STA TO STA | EED BOAD D | | AID PROJECT M.40 | | |

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 10' 10' (3.0 m) (3.0 m)

* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

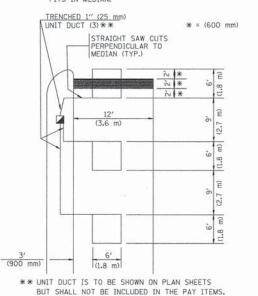
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (600 mm)

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
BI4001 TO ENSURE THAT HANDHOLE

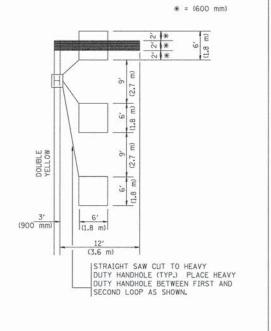


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

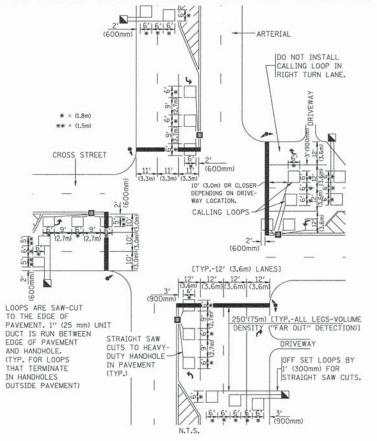


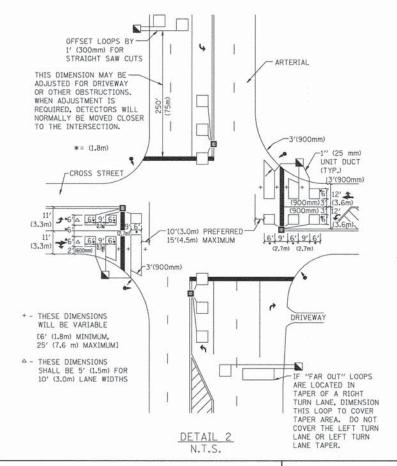
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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 $\underline{\text{ALL}}$ 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.

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| | PLOT DATE = 1/4/2008 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| DISTRICT ONE - DETECTOR DETAILS FOR ROADWA | |
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