

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	1
F.H.W.A. REG.	ILLINOIS	PROJECT:		
CONTRACT NO. 61B81				

# STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

### DIVISION OF HIGHWAYS

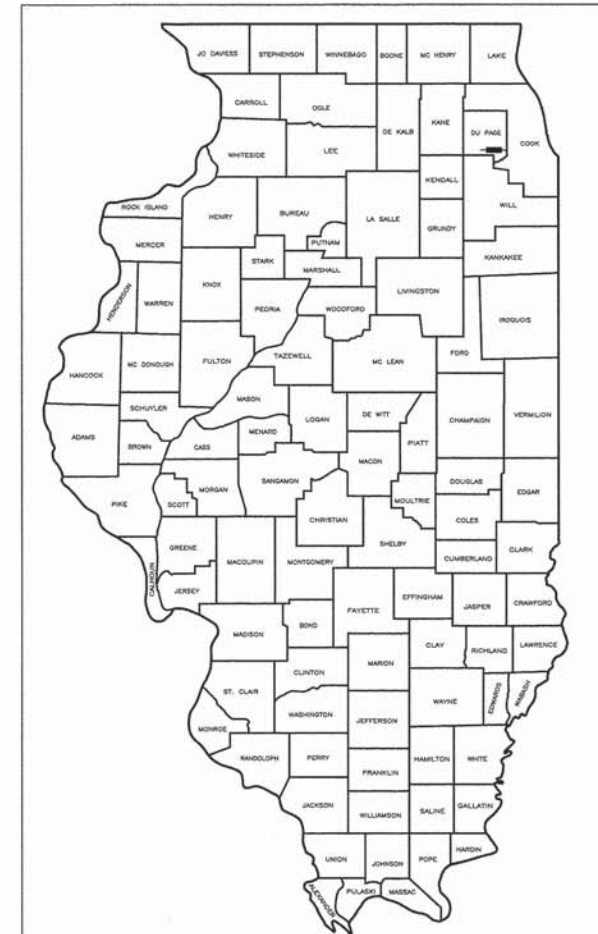
# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**(FAU 1560) 91ST STREET  
FROM SOUTH CASS AVENUE TO KINGERY HWY (RTE. 83)**

**RESURFACING**  
**SECTION NO. 15-03125-00-RS**  
**PROJECT M-4003 (506)**  
**DOWNERS GROVE TOWNSHIP**  
**DUPAGE COUNTY**  
**JOB NO. C-91-304-15**

**INDEX OF SHEETS**

1. COVER SHEET, INDEX OF SHEETS, LOCATION MAP
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- 6.-8. ROADWAY AND PAVEMENT MARKING PLANS - 91ST STREET
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15. PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
16. ARTERIAL ROAD INFORMATION SIGN (TC-22)
17. DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
18. DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED May 28<sup>th</sup> 2015  
*Tawana C. Anderson*  
SUPERINTENDENT, DOWNERS GROVE TOWNSHIP

PASSED May 29 2015  
*C. Holt* *Christopher Holt*  
DISTRICT #1 ENGINEER OF LOCAL ROADS AND STREETS

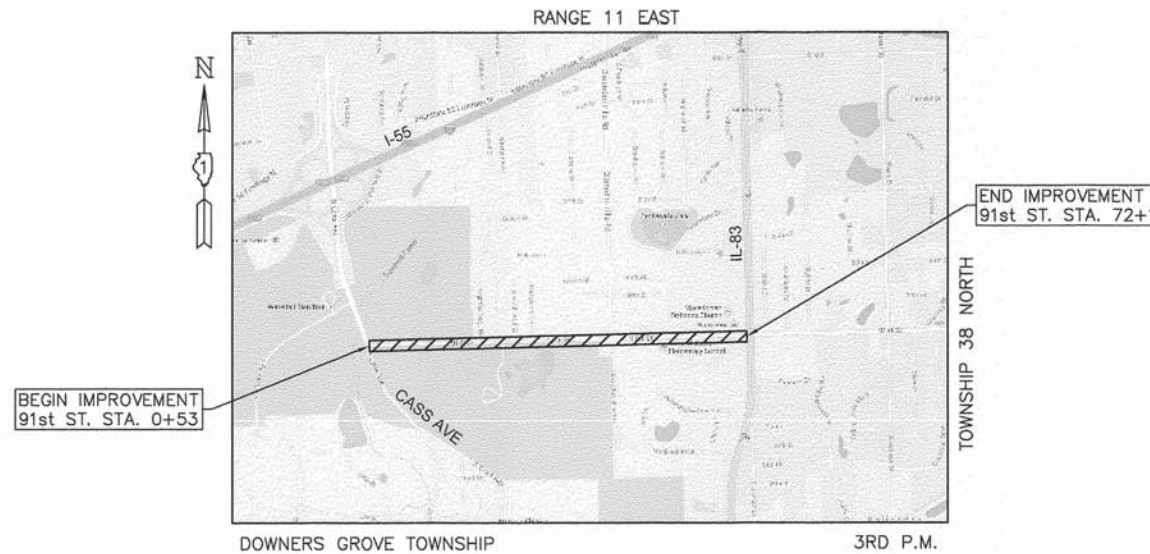
RELEASING FOR BID  
BASED ON LIMITED  
REVIEW June 1 2015  
*John F. ...*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION #1 ENGINEER

FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL, P.E., PTOE, (847)705-4021 SCHAUMBURG, IL

PLOT DATE: May 27, 2015 FILENAME: I:\15-TP-3009-91st Resurfacing-Downers Grove\Plans-Eng\15-TP-3009-1001-COVER SHEET.dwg

**91st STREET TRAFFIC DATA**

ADT = 5450 (2012)  
POSTED SPEED = 35 MPH  
DESIGN SPEED = 45 MPH  
FUNCTIONAL CLASSIFICATION = MINOR ARTERIAL



**LOCATION MAP**

- DENOTES PROJECT LOCATION  
 NET LENGTH OF PROJECT = 7,159 FEET (1.36 MILE)  
 GROSS LENGTH OF PROJECT = 7,159 FEET (1.36 MILE)



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.

SCALES  
PLAN 1 INCH = 50 FEET



**ENGINEER'S CERTIFICATION**

STATE OF ILLINOIS) SS.  
COUNTY OF DuPAGE)

I, SIGITAS P. VAZNELIS, A REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY MORRIS ENGINEERING, INC. 5100 S. LINCOLN AVENUE, SUITE 100, LISLE, ILLINOIS, 60532 UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS.

DATED THIS May DAY OF 28<sup>th</sup>, A.D. 2015

*Sigitas P. Vaznelis*  
ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-044114  
MY REGISTRATION EXPIRES ON NOVEMBER 30, 2015



**LIST OF ILLINOIS DOT HIGHWAY STANDARDS**

280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-06	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

**GENERAL NOTES**

- ALL EARTHWORK, GRADING, UTILITIES, AND STREET IMPROVEMENTS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAY'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, AND ALL REVISIONS THERETO.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS IN ACCORDANCE WITH SECTION 107 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE URBAN COMMITTEE OF THE ASSOCIATION OF ILLINOIS SOIL AND WATER CONSERVATION DISTRICTS' PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS AND ALL REVISIONS THERETO AND IN ACCORDANCE WITH THE DETAILS ON THE PLANS.
- THE CONTRACTOR SHALL BE AWARE OF POTENTIAL CONFLICTS WITH EXISTING UTILITIES AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL EXCAVATE AROUND UTILITIES TO DETERMINE ELEVATIONS BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING EACH OF THE UTILITY COMPANIES BEFORE ANY WORK COMMENCES. ALL UTILITIES SHALL BE STAKED PRIOR TO CONSTRUCTION.
- THE OWNER WILL FURNISH THE CONTRACTOR WITH LINES, GRADES AND ELEVATIONS NECESSARY TO THE PROPER PROSECUTION AND CONTROL OF THE WORK ONCE.
- THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST SEVENTY-TWO (72) HOURS NOTICE FOR ANY STAKING TO BE DONE. EACH OF THE VARIOUS ITEMS OF WORK COVERED BY THIS CONTRACT WILL BE STAKED ONCE. ADDITIONAL STAKING REQUIRED DUE TO THE CONTRACTOR'S NEGLIGENCE IN PRESERVING THE STAKES SHALL BE PAID FOR BY THE CONTRACTOR AT THE CURRENT HOURLY RATE.
- THE CONTRACTOR SHALL INFORM THE RESIDENT ENGINEER, CITY ENGINEER, AND THE MUNICIPALITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.  
  
TELEPHONE NUMBERS: CITY ENGINEER - (630) 271-0770  
DOWNERS GROVE TOWNSHIP - (630) 719-6620  
HIGHWAY DEPARTMENT - (630) 871-6423  
FPDDC CONSTRUCTION COORDINATOR - (630) 871-6423
- THE CONTRACTOR RESPONSIBLE FOR DRAINAGE IMPROVEMENTS (UNDERGROUND STRUCTURES AND CONDUITS) SHALL DISPOSE OF ALL SURPLUS EXCAVATED MATERIAL FROM TRENCHES OR STRUCTURE EXCAVATIONS AND SHALL DEPOSIT SAID SURPLUS MATERIALS ON THE SITE IN ACCORDANCE WITH THE GRADING PLAN OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOT PLACE ANY EXCAVATED MATERIAL UPON ANY TOPSOIL. THE TOPSOIL SHALL BE REMOVED FROM ALL AREAS TO BE FILLED AND SHALL BE STOCKPILED IN AREAS AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOT DISCHARGE INTO STREAMS, PONDS, WETLANDS OR ITS TRIBUTARIES ANY MOTOR OIL, TRANSMISSION FLUID, LUBRICANTS OR ANY OTHER PETROLEUM DISTILLATES. ANY PETROLEUM DISTILLATES DISCHARGED ON THE GROUND SURFACE SHALL BE PROMPTLY AND PROPERLY REMOVED PRIOR TO THE RESUMPTION OF ANY WORK ON THE PROJECT.

- THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING FIELD TILES. ANY FIELD TILES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE. INVESTIGATION SHALL BE MADE TO INSURE THAT FIELD TILES DO NOT CONVEY OFF SITE WATER. TILES THAT CONVEY OFF SITE WATER SHALL BE REROUTED THROUGH THE SITE. TILES THAT DO NOT CONVEY OFF SITE WATER SHALL BE ABANDONED IN AN APPROPRIATE MANNER APPROVED BY THE MUNICIPALITY. FIELD TILES WITHIN A RIGHT-OF-WAY SHALL BE REMOVED AND BACKFILLED WITH CA-6 COMPACTED IN EIGHT INCH LIFTS TO THE BOTTOM OF THE ROADWAY BASE. EXISTING FIELD TILES SHALL BE REMOVED BY SLIT TRENCHING.
- THE CONTRACTOR RESPONSIBLE FOR DRAINAGE IMPROVEMENTS SHALL BE RESPONSIBLE TO PLACE ALL FIRE HYDRANTS, FRAMES AND LIDS OR GRATES, AND ALL GRATES FOR MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS AT THE ELEVATIONS SHOWN AND SPECIFIED ON THE PLANS. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR SAID ADJUSTMENT AND THE COST OF SAID ADJUSTMENT SHALL BE INCLUDED IN THE UNIT PRICE FOR THE VARIOUS DRAINAGE STRUCTURES MENTIONED ABOVE.
- THE CONTRACTOR SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, SHALL ON A DAILY BASIS CLEAN THE PAVEMENT OF SUCH DIRT AND DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL PROVIDE PIPE BEDDING IN ACCORDANCE WITH THE DETAIL ON THE PLANS. THE COST OF THE BEDDING SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAL FOOT OF THE VARIOUS SIZES OF STORM SEWER. NO ADDITIONAL COMPENSATION WILL BE MADE FOR PIPE BEDDING.
- THE CONTRACTOR SHALL EXAMINE THE DRAINAGE PATTERNS SHOWN ON THE PLANS AND MAKE CERTAIN THAT ALL OVERFLOW POINT ELEVATIONS AND CROSS SECTIONS ARE CONSTRUCTED STRICTLY IN ACCORDANCE WITH THOSE SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK IN THE RIGHT OF WAY OR EASEMENTS TO LOCATE UTILITIES, AND CONTACT THE OWNER'S REPRESENTATIVE SHOULD PUBLIC UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- CURB SHALL BE REMOVED IN A WAY TO PREVENT DAMAGE TO EXISTING PAVEMENT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR REPAIRS.
- THE LOCATION OF CLASS D PATCHING OF VARIOUS TYPES WILL BE DIRECTED BY THE ENGINEER IN THE FIELD PRIOR TO STARTING CONSTRUCTION.

**TRAFFIC CONTROL AND PROTECTION**

- AT THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL FURNISH THE NAME OF THE INDIVIDUAL IN HIS DIRECT EMPLOY WHO IS TO BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE TRAFFIC CONTROL FOR THIS PROJECT. IF THE ACTUAL INSTALLATION AND MAINTENANCE ARE TO BE ACCOMPLISHED BY A SUBCONTRACTOR, CONSENT SHALL BE REQUESTED OF THE ENGINEER AT THE TIME OF THE PRECONSTRUCTION MEETING IN ACCORDANCE WITH ARTICLE 108.01 OF THE STANDARD SPECIFICATIONS. THIS SHALL NOT RELIEVE THE CONTRACTOR OF THE FOREGOING REQUIREMENT FOR A RESPONSIBLE INDIVIDUAL IN HIS DIRECT EMPLOY TO SUPERVISE THIS WORK.
- THE GOVERNING FACTOR IN THE EXECUTION AND STAGING OF WORK FOR THIS PROJECT IS TO PROVIDE THE MOTORING PUBLIC WITH THE SAFEST POSSIBLE TRAVEL CONDITIONS ALONG THE ROADWAY THROUGH THIS CONSTRUCTION ZONE. THE CONTRACTOR SHALL SO ARRANGE HIS OPERATION AS TO KEEP THE CLOSING OF ANY LANE OF THE ROADWAY TO A MINIMUM.
- THE CONTRACTOR SHALL ENSURE THAT ALL TRAFFIC CONTROL DEVICES INSTALLED BY HIM ARE OPERATIONAL 24 HOURS A DAY, INCLUDING SUNDAYS AND HOLIDAYS.
- CONTRACTOR VEHICLES SHALL ENTER OR LEAVE WORK AREAS IN A MANNER WHICH WILL NOT BE HAZARDOUS TO, OR WILL NOT INTERFERE WITH, TRAFFIC AND SHALL NOT PARK OR STOP EXCEPT WITHIN DESIGNATED WORK AREAS. PERSONAL VEHICLES SHALL NOT PARK WITHIN THE RIGHT-OF-WAY EXCEPT IN SPECIFIC AREAS DESIGNATED BY THE ENGINEER.
- DELAYS TO THE CONTRACTOR CAUSED BY COMPLYING WITH THESE REQUIREMENTS WILL BE INCLUDED IN THE COST OF THE ITEM FOR TRAFFIC CONTROL AND PROTECTION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 AT LEAST 72 HOURS IN ADVANCE OF BEGINNING WORK.

**EXCAVATION**

- ALL SITE CLEARING, EXCAVATION, GRADING, COMPACTION, SUBGRADE PREPARATION, BASE COURSE, SURFACE COURSE, PCC CURB AND GUTTER AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS, LATEST EDITION.
- EARTHWORK UNDER THIS CONTRACT SHALL INCLUDE THE FOLLOWING:
  - REMOVAL OF EXISTING VEGETATION WITHIN CONSTRUCTION LIMITS FROM THE SITE.
  - PROTECTION OF CERTAIN TREES AS SHOWN ON PLANS.
  - STRIPPING OF ALL TOPSOIL AND OTHER UNSUITABLE MATERIALS FROM BUILDING AND/OR PAVEMENT AREAS AND REMOVAL FROM SITE OF ALL EXCESS.
  - COMPLETE REMOVAL AND DISPOSAL OF THE NATURAL GROUND TO THE PROPOSED SUB-GRADE ELEVATION OF NEW PAVEMENT.

**SOIL EROSION AND SEDIMENTATION CONTROL NOTES**

- THE FOLLOWING PRINCIPLES SHALL APPLY TO ALL MOVEMENT OF EARTH AND STORM DRAINAGE. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON SITE.
- THE SMALLEST PRACTICAL AREA OF LAND IS TO BE EXPOSED AT ANY GIVEN TIME DURING CONSTRUCTION. EXPOSURE SHALL BE KEPT TO AS SHORT A DURATION OF TIME AS IS PRACTICAL.
- STABILIZE AND PROTECT DISTURBED AREAS. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. MECHANICAL, STRUCTURAL, AND/OR VEGETATIVE CONTROL METHODS SHALL BE USED IN ORDER TO RETARD SOIL EROSION IF DIRECTED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE.
- KEEP RUN-OFF VELOCITIES LOW WITH SHORT SLOPES AND LOW GRADIENTS. THE INSTALLATION OF NATURAL VEGETATIVE COVER HELPS TO KEEP STORM WATER VELOCITIES LOW, AND THUS LIMIT SOIL EROSION EFFECTS.
- PROTECT DISTURBED AREAS FROM STORM WATER RUN-OFF. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. PROTECTIVE MEASURES SHALL BE UTILIZED TO DIVERT RUN-OFF FROM DISTURBED AREAS.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED.
- NATURAL PLANT COVER SHALL BE MAINTAINED AND PROTECTED AND ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION.
- PROTECTION OF EXISTING FACILITIES AND UTILITIES - THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY FACILITIES FOR THE PROTECTION OF ALL EXISTING UTILITIES ON OR ADJACENT TO THE PROJECT. ALL STORM SEWER FACILITIES THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED, OR OTHERWISE TREATED TO REMOVE SEDIMENT. FURTHERMORE, ANY DAMAGE DONE BY HIM, HIS AGENTS, OR ASSIGNS SHALL BE REPAIRED AT NO ADDITIONAL COMPENSATION.
- DIRT ON PAVEMENT - WHERE A CONTRACTOR'S EQUIPMENT IS OPERATED UPON AN EXISTING PAVEMENT USED BY TRAFFIC THE CONTRACTOR SHALL CLEAN THE PAVEMENT OF ALL DIRT AND DEBRIS AT THE END OF EACH DAY'S OPERATIONS AND AT OTHER TIMES AS DIRECTED BY THE OWNER, THE ENGINEER, OR THE GOVERNING MUNICIPALITY. THE CLEANING WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACTOR'S CONTRACT FOR EARTH EXCAVATION.
- DUST CONTROL - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF EXCESSIVE DUST DURING THE CONSTRUCTION PERIOD UNTIL PROPOSED IMPROVEMENTS COMPLETED. THE REQUIREMENT FOR DUST CONTROL SHALL BE AS DIRECTED BY THE LOCAL APPROVING AUTHORITIES OR THE ENGINEER, AND SUCH DUST CONTROL (IF REQUIRED) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR CITY OF PALOS HEIGHTS.
- THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE USE OF HEAVY EQUIPMENT WITHIN THE DESIGNATED DRAINAGE FACILITIES.

PLOT DATE: May 28, 2015  
FILE NAME: H:\IS-TP-3009-Mutl Resurfacer-Downers Grove\Plans-Eng-US-TP-3009-GENERAL-NOTES.dwg

USER NAME *	DESIGNED - AS	REVISED -
PLOT SCALE *	DRAWN - DMO / DJB	REVISED -
PLOT DATE * May 28, 2015	CHECKED - AS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES  
91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	2
CONTRACT NO. 61B81			ILLINOIS FED. AID PROJECT	

SCALE: - SHEET NO. 2 OF 18 SHEETS STA. TO STA.

SUMMARY OF QUANTITIES				CONSTRUCTION CODE 0005
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL	SUBTOTAL
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	500.00	500.00
* 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	167.00	167.00
* 40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	29222.00	29222.00
40600400	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	TON	7.00	7.00
40600635	LEVELING BINDER (MACHINE METHOD), N70 1"	TON	1460.00	1460.00
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	423.00	423.00
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 1 1/2"	TON	2231.00	2231.00
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	80.00	80.00
42400800	DETECTABLE WARNINGS	SQ FT	32.00	32.00
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	230.00	230.00
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	1149.00	1149.00
44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	919.00	919.00
48101498	AGGREGATE SHOULDERS, TYPE B 4"	SQ YD	2363.00	2363.00
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	1.00	1.00
67100100	MOBILIZATION	L SUM	1.00	1.00
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.00	1.00
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1.00	1.00
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00	1.00
70300100	SHORT TERM PAVEMENT MARKING	FOOT	13980.00	13980.00
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4660.00	4660.00
Δ 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	158.20	158.20
Δ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	26715.00	26715.00
Δ 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	153.00	153.00
Δ 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	129.00	129.00
Δ 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	52.00	52.00

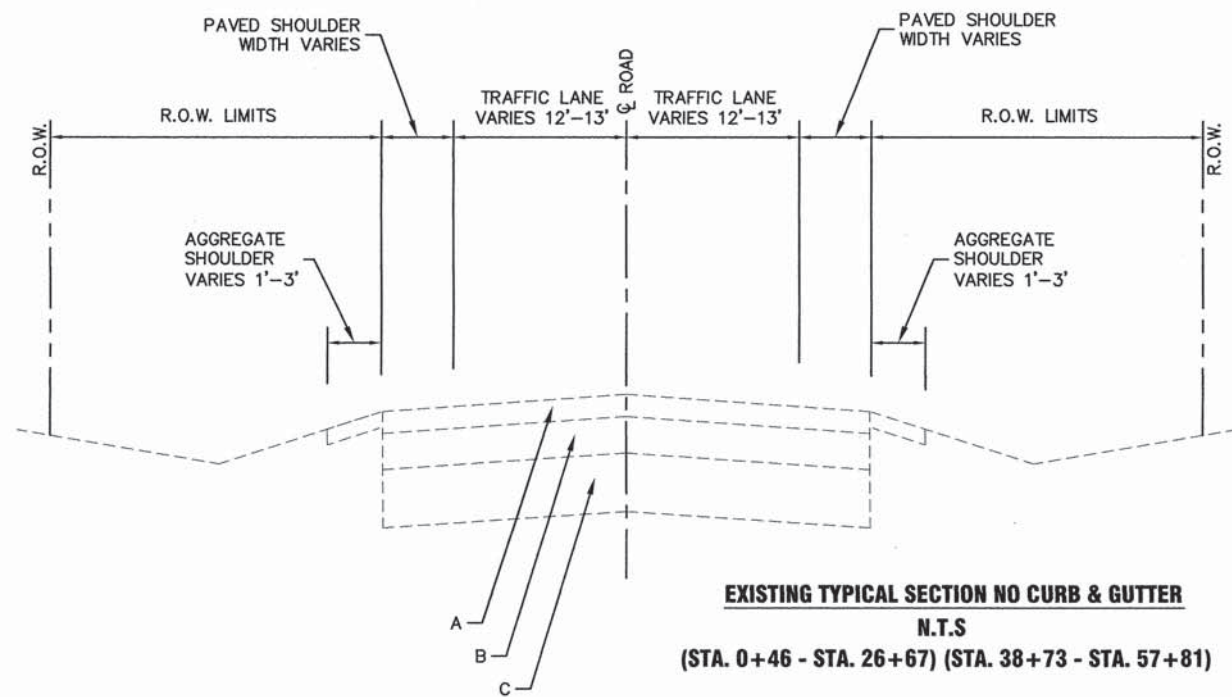
Δ DENOTES SPECIALTY ITEMS

SUMMARY OF QUANTITIES				CONSTRUCTION CODE 0005
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL	SUBTOTAL
Δ 88600600	DETECTOR LOOP REPLACEMENT	FOOT	93.00	93.00
* X4401198	HOT-MIX ASPHALT SURFACE REMOVAL - VARIABLE DEPTH	SQ YD	1165.00	1165.00
* Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	50.00	50.00

Δ DENOTES SPECIALTY ITEMS  
\* SPECIAL PROVISION

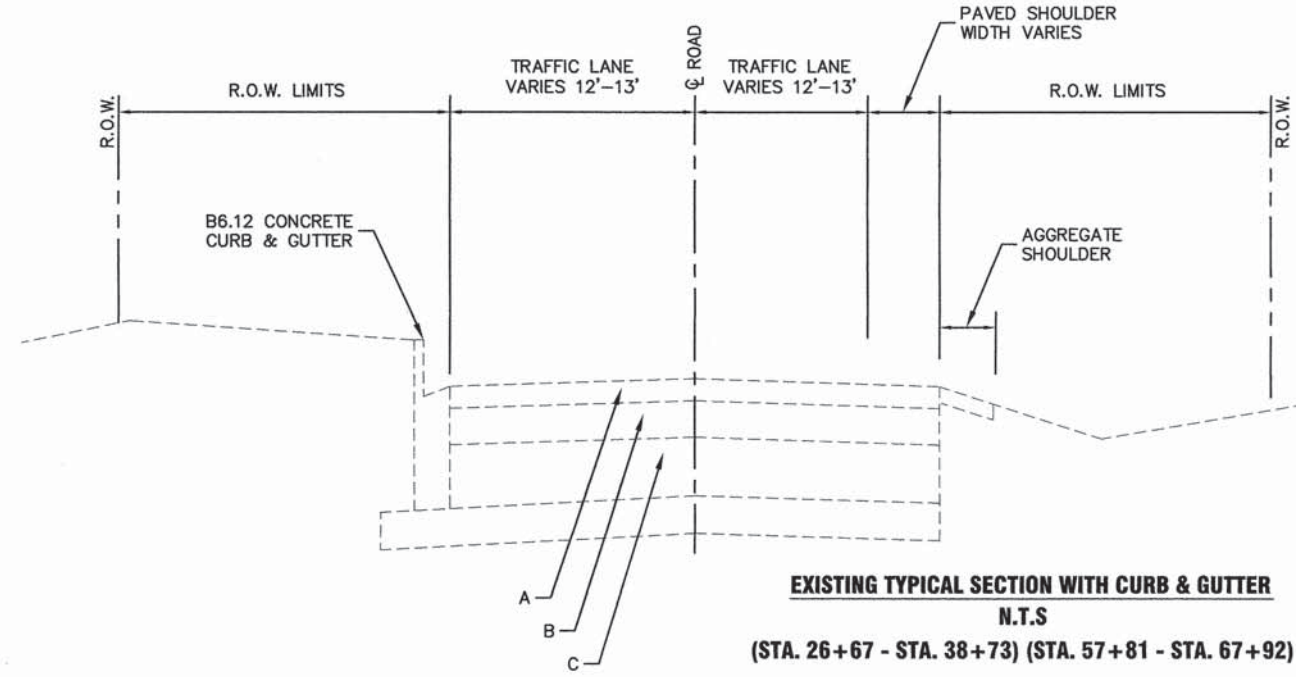
PLOT DATE: May 28, 2015  
FILENAME: H:\13-TP\3009-91st Resurfacing-Domers Grove Plans-Eng US-TP-3009-91st-SUM-QUANTITIES.dwg

USER NAME *	DESIGNED - AS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		SUMMARY OF QUANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE *	DRAWN - DMO / DJB	REVISED -			1560	15-03125-00-RS	DUPAGE	18	3		
PLOT DATE * May 28, 2015	CHECKED - AS	REVISED -			CONTRACT NO. 61B81						
DATE -			REVISED -		SCALE: -	SHEET NO. 3 OF 18 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



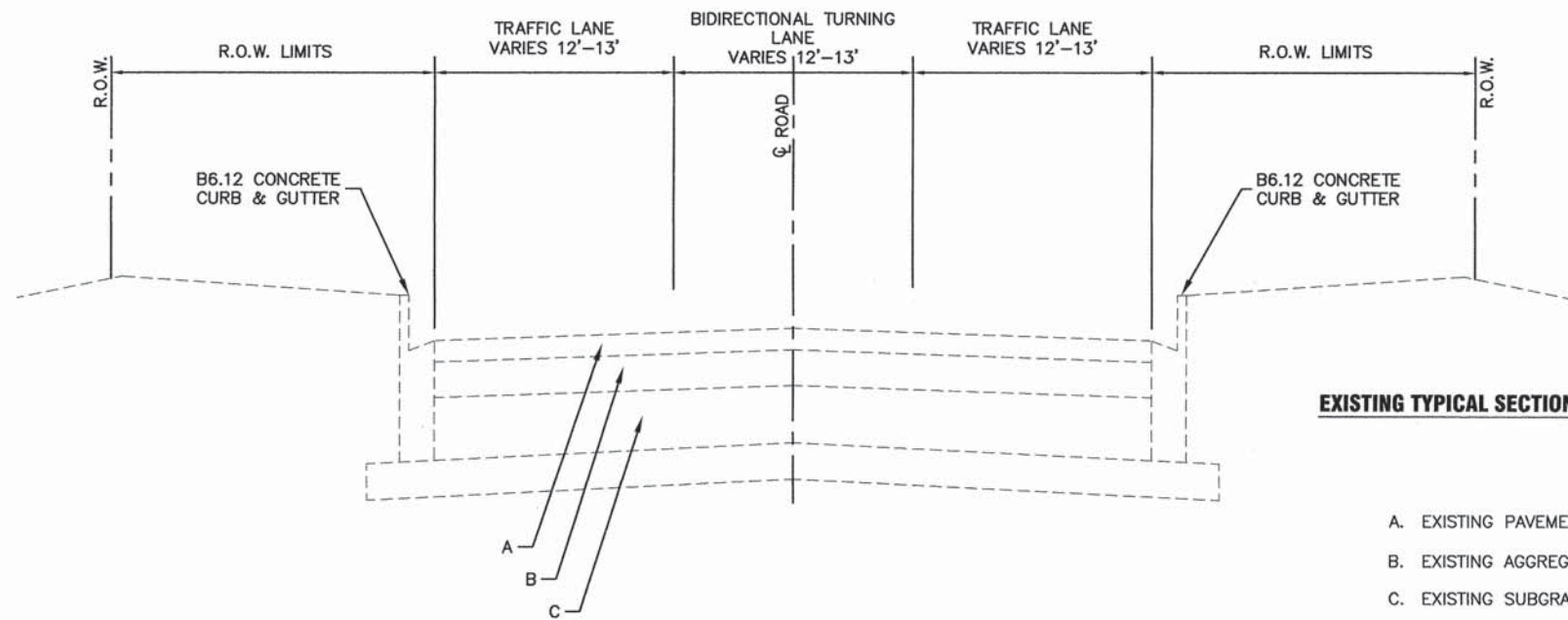
**EXISTING TYPICAL SECTION NO CURB & GUTTER**  
**N.T.S**  
**(STA. 0+46 - STA. 26+67) (STA. 38+73 - STA. 57+81)**

A. EXISTING PAVEMENT (5" - 12")  
 B. EXISTING AGGREGATE BASE COURSE (3.5" - 9")  
 C. EXISTING SUBGRADE



**EXISTING TYPICAL SECTION WITH CURB & GUTTER**  
**N.T.S**  
**(STA. 26+67 - STA. 38+73) (STA. 57+81 - STA. 67+92)**

A. EXISTING PAVEMENT (5" - 12")  
 B. EXISTING AGGREGATE BASE COURSE (3.5" - 9")  
 C. EXISTING SUBGRADE



**EXISTING TYPICAL SECTION WITH CURB & GUTTER & BI-DIRECTIONAL TURN LANE**  
**N.T.S**  
**(STA. 67+92 - STA. 72+12)**

A. EXISTING PAVEMENT (5" - 12")  
 B. EXISTING AGGREGATE BASE COURSE (3.5" - 9")  
 C. EXISTING SUBGRADE

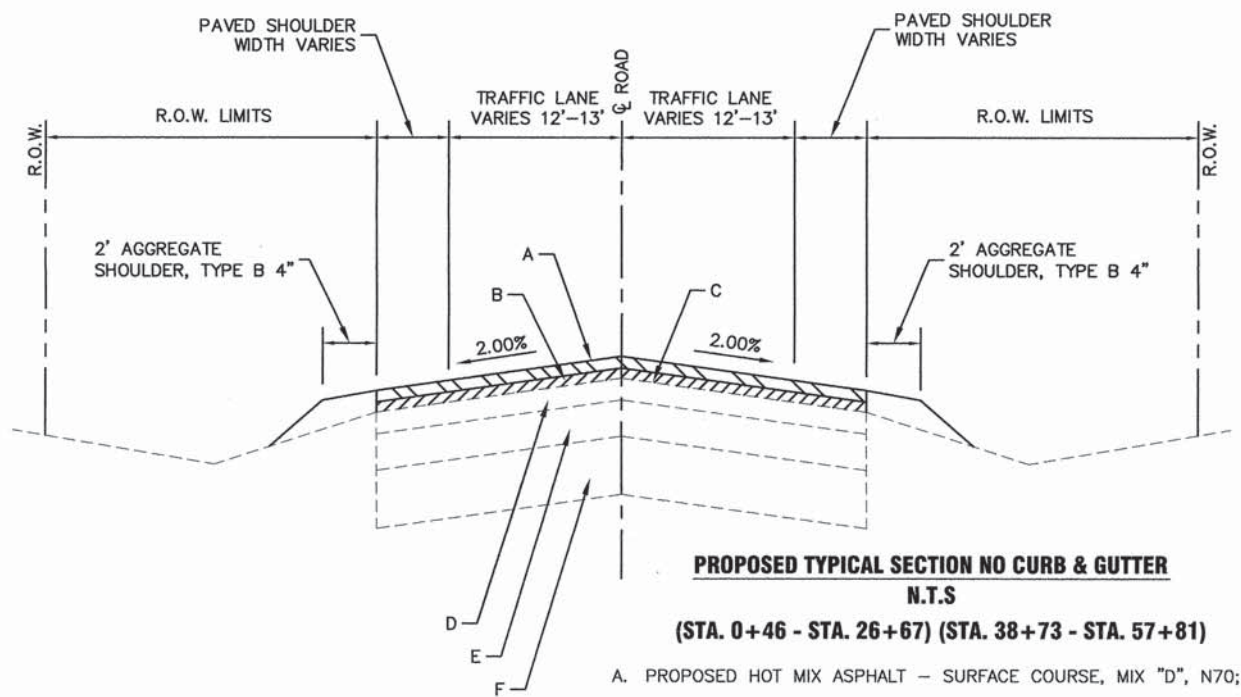
PLOT DATE: May 28, 2015  
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USER NAME *	DESIGNED - AS	REVISED -
	DRAWN - DMO / DJB	REVISED -
PLOT SCALE *	CHECKED - AS	REVISED -
PLOT DATE * May 28, 2015	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

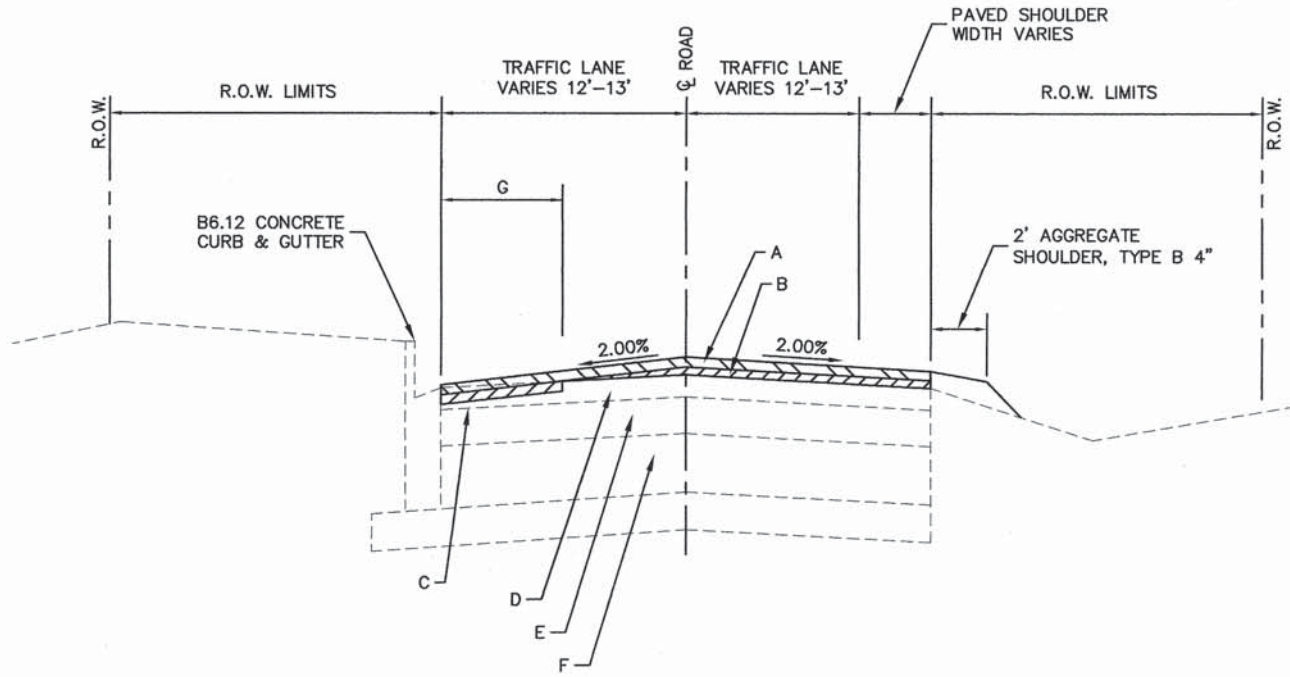
EXISTING TYPICAL SECTIONS  
 91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)  
 SCALE: N.T.S. SHEET NO. 4 OF 18 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	4
CONTRACT NO. 61B81			ILLINOIS FED. AID PROJECT	



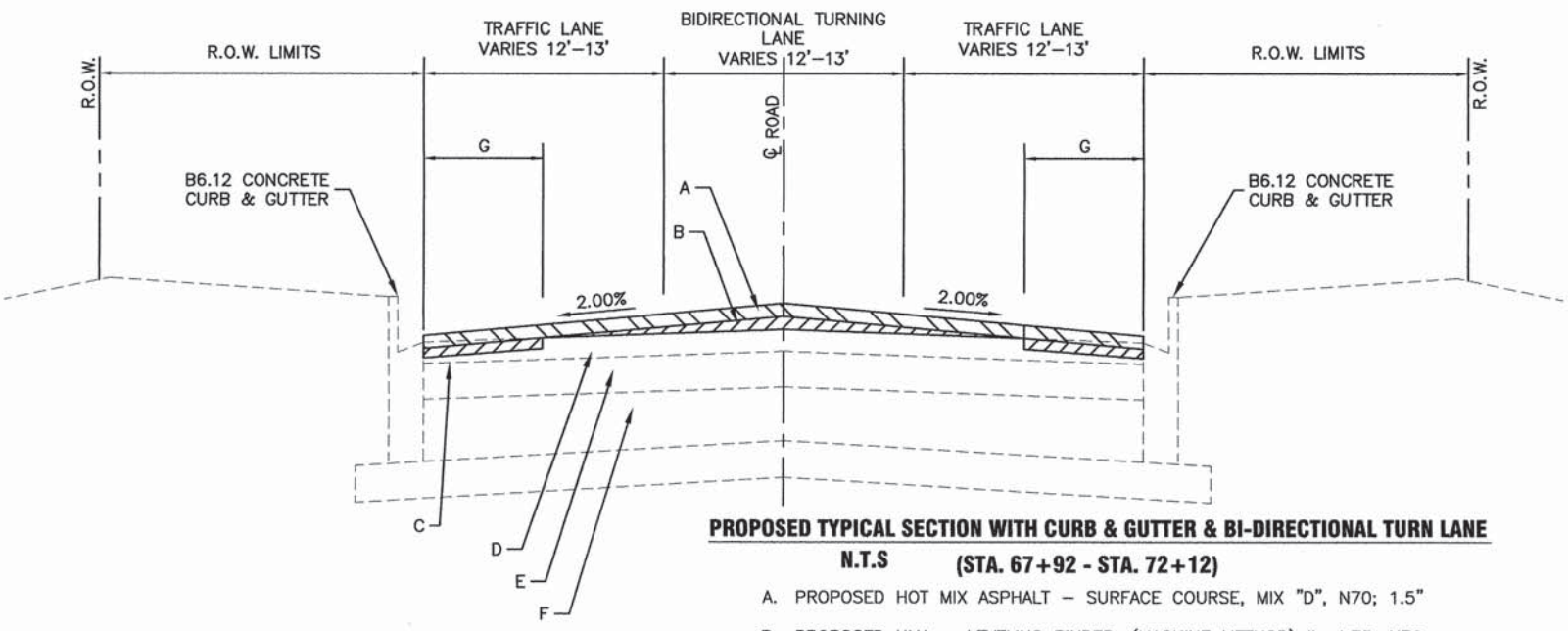
**PROPOSED TYPICAL SECTION NO CURB & GUTTER**  
**N.T.S**  
**(STA. 0+46 - STA. 26+67) (STA. 38+73 - STA. 57+81)**

- A. PROPOSED HOT MIX ASPHALT - SURFACE COURSE, MIX "D", N70; 1.5"
- B. PROPOSED HMA - LEVELING BINDER, (MACHINE METHOD) IL-4.75, N70; AVERAGE DEPTH = 1"
- C. PROPOSED CRACK FILLING
- D. EXISTING PAVEMENT (5" - 12")
- E. EXISTING AGGREGATE BASE COURSE (3.5" - 9")
- F. EXISTING SUBGRADE



**PROPOSED TYPICAL SECTION WITH CURB & GUTTER**  
**N.T.S**  
**(STA. 26+67 - STA. 38+73) (STA. 57+81 - STA. 67+92)**

- A. PROPOSED HOT MIX ASPHALT - SURFACE COURSE, MIX "D", N70; 1.5"
- B. PROPOSED HMA - LEVELING BINDER, (MACHINE METHOD) IL-4.75, N70; AVERAGE DEPTH = 1"
- C. PROPOSED CRACK FILLING
- D. EXISTING PAVEMENT (5" - 12")
- E. EXISTING AGGREGATE BASE COURSE (3.5" - 9")
- F. EXISTING SUBGRADE
- G. HMA - SURFACE REMOVAL (VARIABLE DEPTH) - 39" WIDE TYPICAL



**PROPOSED TYPICAL SECTION WITH CURB & GUTTER & BI-DIRECTIONAL TURN LANE**  
**N.T.S**  
**(STA. 67+92 - STA. 72+12)**

- A. PROPOSED HOT MIX ASPHALT - SURFACE COURSE, MIX "D", N70; 1.5"
- B. PROPOSED HMA - LEVELING BINDER, (MACHINE METHOD) IL-4.75, N70; AVERAGE DEPTH = 1"
- C. PROPOSED CRACK FILLING
- D. EXISTING PAVEMENT (5" - 12")
- E. EXISTING AGGREGATE BASE COURSE (3.5" - 9")
- F. EXISTING SUBGRADE
- G. HMA - SURFACE REMOVAL (VARIABLE DEPTH) - 39" WIDE TYPICAL

HOT-MIX MIXTURE REQUIREMENTS		
MIXTURE TYPE	VOIDS	LIFT THICKNESS
<b>PAVEMENT RESURFACING</b>		
HOT-MIX ASPHALT PAVEMENT PATCHING, CLASS D, 6"	4% @ 70 Gyr	
HMA SURFACE COURSE, MIX "D", IL-9.5		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm)	4% @ 70 Gyr	1 1/2"
LEVELING BINDER (MACHINE METHOD), IL-9.75, N70	4% @ 70 Gyr	1"

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

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 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.

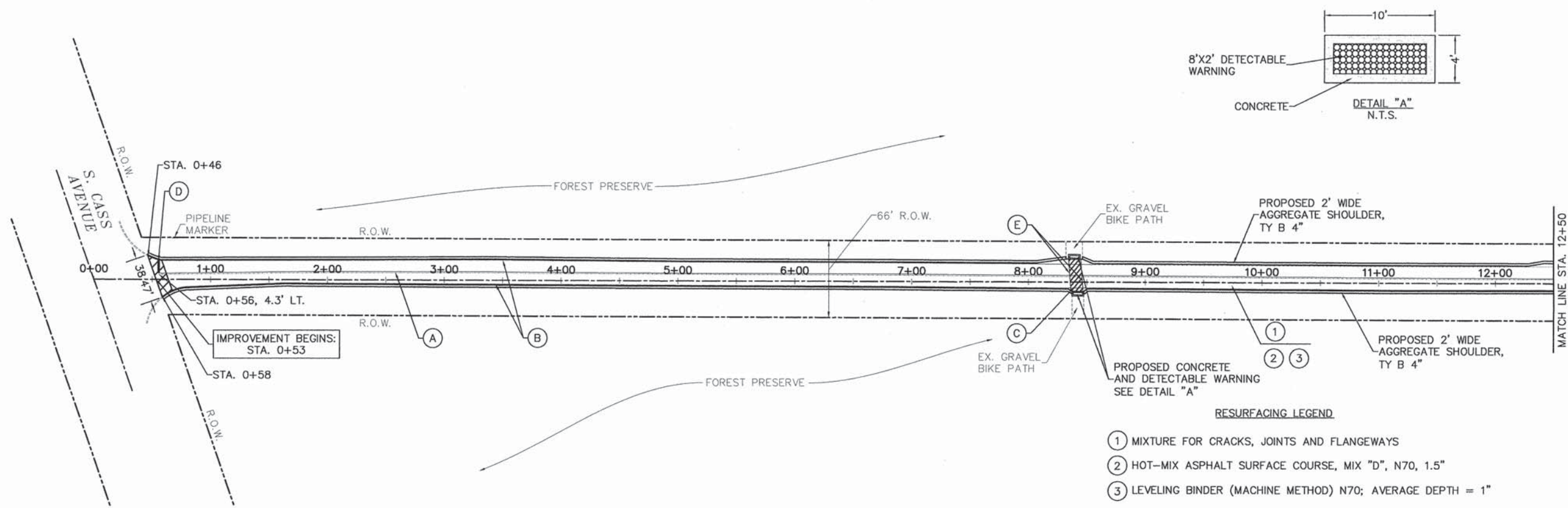
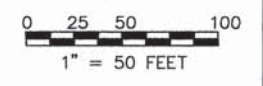
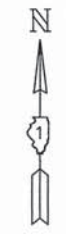
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USER NAME -	DESIGNED - AS	REVISED -
PLOT SCALE -	DRAWN - DMO / DJB	REVISED -
PLOT DATE - May 28, 2015	CHECKED - AS	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**PROPOSED TYPICAL SECTIONS**  
**91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)**  
 SCALE: N.T.S. SHEET NO. 5 OF 18 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	5
CONTRACT NO. 61B81				
ILLINOIS FED. AID PROJECT				

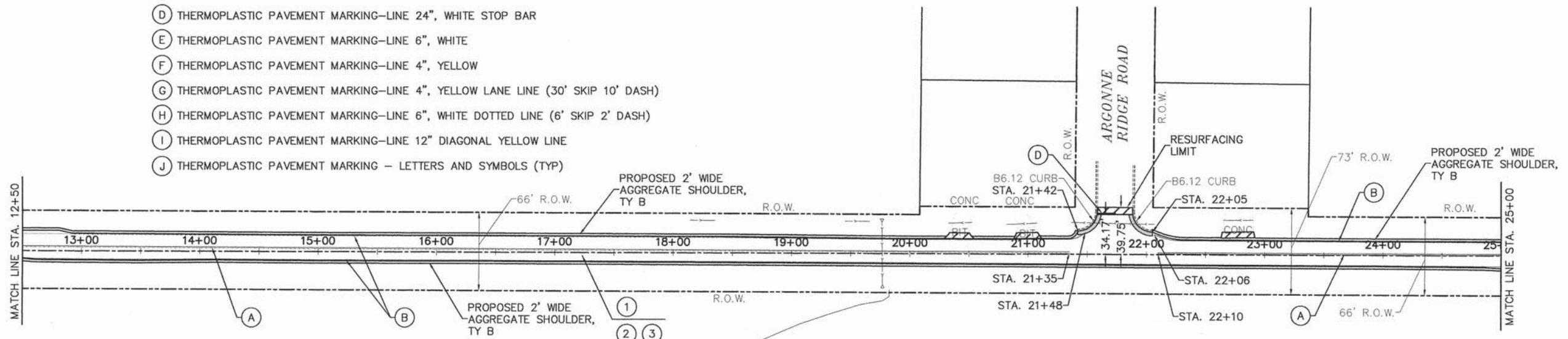


**PAVEMENT MARKING LEGEND**

- (A) THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4" @ 11" C-C, YELLOW
- (B) THERMOPLASTIC PAVEMENT MARKING—LINE 4", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING—LINE 12" @ 3' C-C, WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING—LINE 24", WHITE STOP BAR
- (E) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW
- (G) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW LANE LINE (30' SKIP 10' DASH)
- (H) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE DOTTED LINE (6' SKIP 2' DASH)
- (I) THERMOPLASTIC PAVEMENT MARKING—LINE 12" DIAGONAL YELLOW LINE
- (J) THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP)

**RESURFACING LEGEND**

- (1) MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS
  - (2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.5"
  - (3) LEVELING BINDER (MACHINE METHOD) N70; AVERAGE DEPTH = 1"
- HMA SURFACE REMOVAL - BUTT JOINT  
 HMA SURFACE REMOVAL - VARIABLE DEPTH



**NOTES:**

1. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
2. REFER TO TYPICAL SECTIONS.

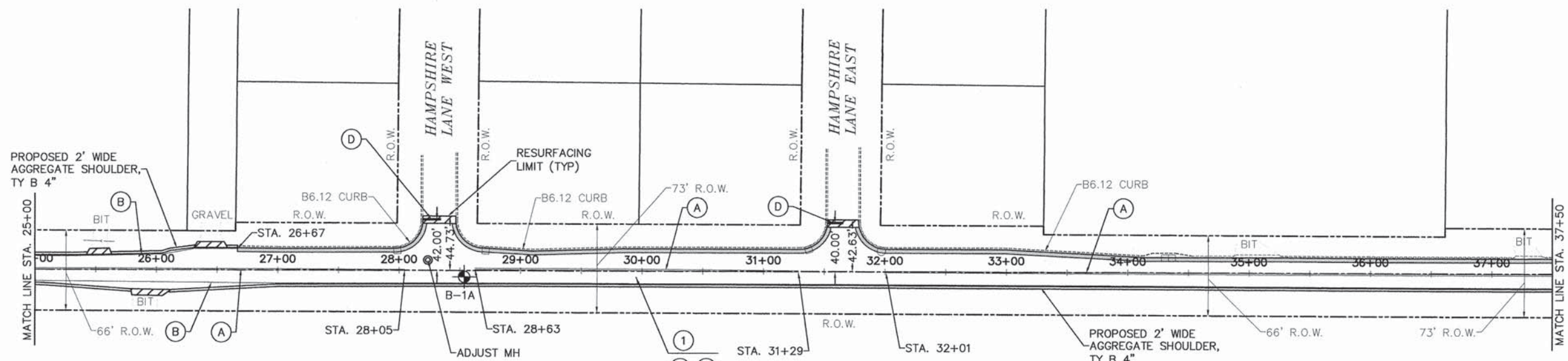
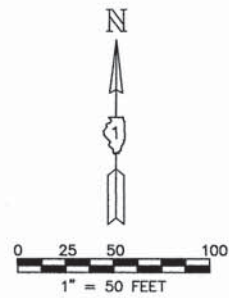
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PLOT SCALE *	DRAWN - DMO / DJB	REVISED -
PLOT DATE * May 28, 2015	CHECKED - AS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLANS - 91st STREET**  
**91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)**  
 SCALE: 1"=50' SHEET NO. 6 OF 18 SHEETS STA. 0+53 TO STA. 25+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	6
CONTRACT NO. 61B81			ILLINOIS FED. AID PROJECT	

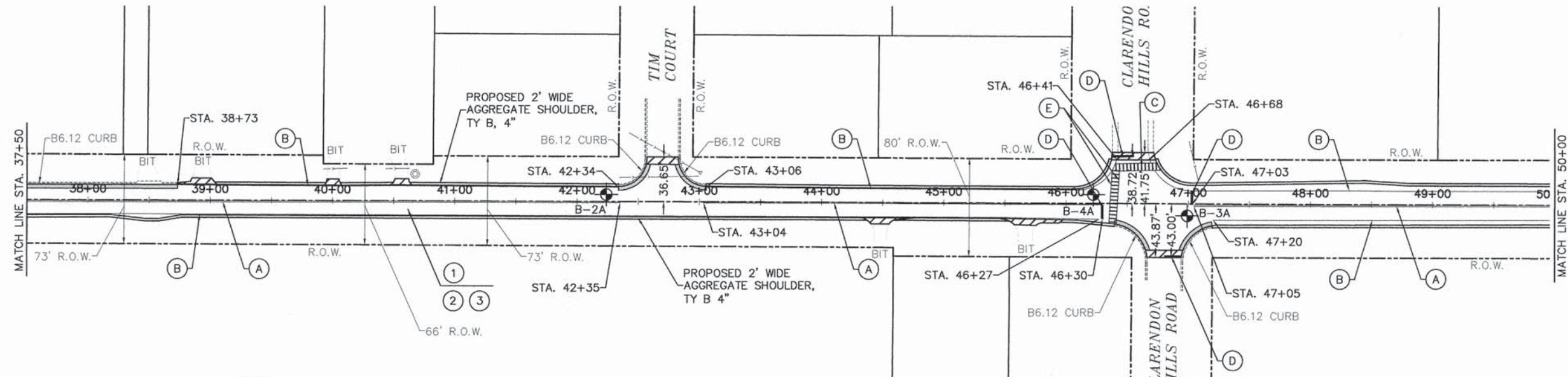


**PAVEMENT MARKING LEGEND**

- (A) THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4" @ 11" C-C, YELLOW
- (B) THERMOPLASTIC PAVEMENT MARKING—LINE 4", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING—LINE 12" @ 3' C-C, WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING—LINE 24", WHITE STOP BAR
- (E) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW
- (G) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW LANE LINE (30' SKIP 10' DASH)
- (H) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE DOTTED LINE (6' SKIP 2' DASH)
- (I) THERMOPLASTIC PAVEMENT MARKING—LINE 12" DIAGONAL YELLOW LINE
- (J) THERMOPLASTIC PAVEMENT MARKING — LETTERS AND SYMBOLS (TYP)

**RESURFACING LEGEND**

- (1) MIXTURE FOR CRACKS, JOINTS AND FLANGWAYS
- (2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.5"
- (3) LEVELING BINDER (MACHINE METHOD), N70; AVERAGE DEPTH = 1"
- SURFACE REMOVAL BUTT JOINT
- HMA SURFACE REMOVAL — VARIABLE DEPTH
- APPROXIMATE PAVEMENT PROBE LOCATION  
B-1A



**NOTES:**

1. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
2. REFER TO TYPICAL SECTIONS.
3. REFER TO SOILS REPORTS FOR PAVEMENT PROBE INFORMATION.

PLOT DATE: May 28, 2015  
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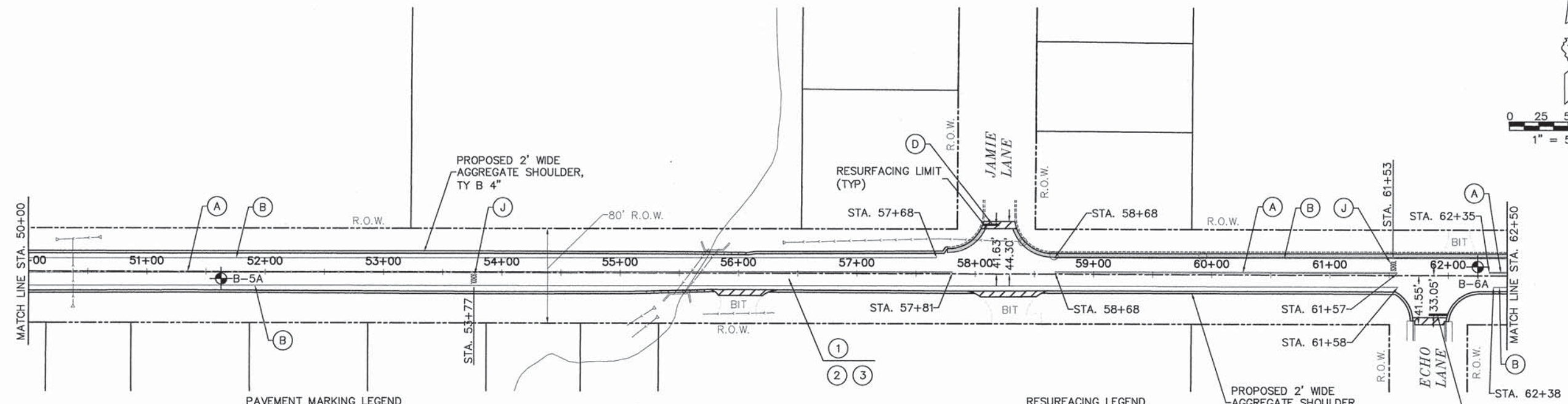
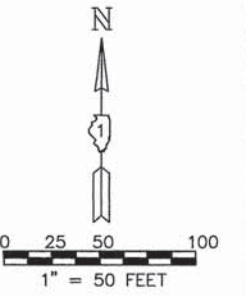
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	DRAWN - DMO / DJB	REVISED -
PLOT SCALE *	CHECKED - AS	REVISED -
PLOT DATE * May 28, 2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLANS - 91st STREET  
91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)**

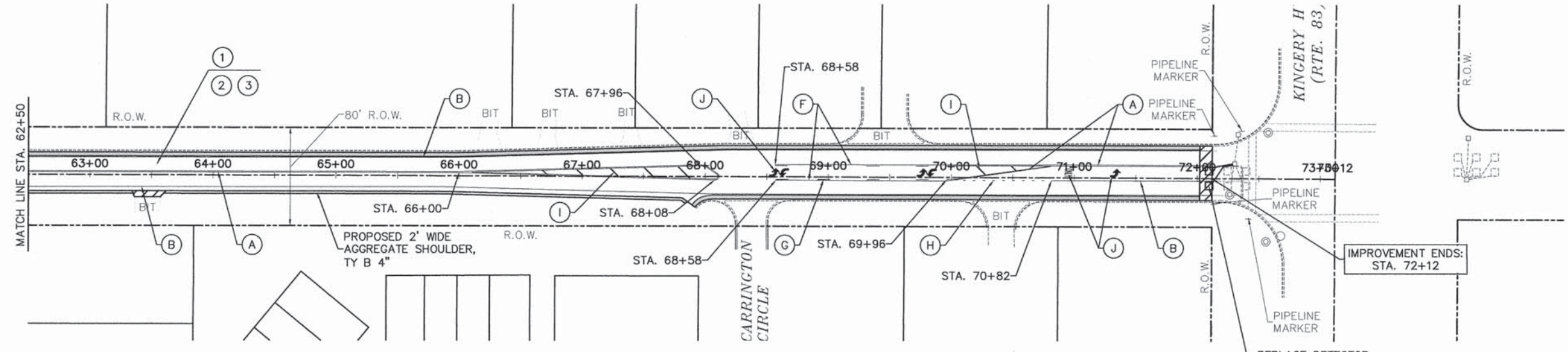
SCALE: 1"=50'    SHEET NO. 7 OF 18 SHEETS    STA. 25+00 TO STA. 50+00

F.A.U. RTE. 1560	SECTION 15-03125-00-RS	COUNTY DUPAGE	TOTAL SHEETS 18	SHEET NO. 7
				CONTRACT NO. 61B81
ILLINOIS FED. AID PROJECT				



- PAVEMENT MARKING LEGEND**
- (A) THERMOPLASTIC PAVEMENT MARKING DOUBLE LINES 4" @ 11" C-C, YELLOW
  - (B) THERMOPLASTIC PAVEMENT MARKING—LINE 4", WHITE
  - (C) THERMOPLASTIC PAVEMENT MARKING—LINE 12" @ 2.5' C-C, WHITE
  - (D) THERMOPLASTIC PAVEMENT MARKING—LINE 24", WHITE STOP BAR
  - (E) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE
  - (F) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW
  - (G) THERMOPLASTIC PAVEMENT MARKING—LINE 4", YELLOW LANE LINE (30' SKIP 10' DASH)
  - (H) THERMOPLASTIC PAVEMENT MARKING—LINE 6", WHITE DOTTED LINE (6' SKIP 2' DASH)
  - (I) THERMOPLASTIC PAVEMENT MARKING—LINE 12" DIAGONAL YELLOW LINE
  - (J) THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP)

- RESURFACING LEGEND**
- (1) MIXTURE FOR CRACKS, JOINTS AND FLANGWAYS
  - (2) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.5"
  - (3) LEVELING BINDER (MACHINE METHOD), N70; AVERAGE DEPTH = 1"
- SURFACE REMOVAL BUTT JOINT  
 HMA SURFACE REMOVAL - VARIABLE DEPTH  
 APPROXIMATE PAVEMENT PROBE LOCATION  
 B-1A



- NOTES:**
1. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
  2. REFER TO TYPICAL SECTIONS.
  3. REFER TO SOILS REPORTS FOR PAVEMENT PROBE INFORMATION.

REPLACE DETECTOR LOOPS (TYP) (2) (SEE SHEET 8 FOR REFERENCE)

PLOT DATE: May 28, 2015  
 PLOTTING FILE: P:\3009-PLAN-SHEETS.dwg  
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USER NAME *	DESIGNED - AS	REVISED -
	DRAWN - DMO / DJB	REVISED -
PLOT SCALE *	CHECKED - AS	REVISED -
PLOT DATE * May 28, 2015	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY AND PAVEMENT MARKING PLANS - 91ST STREET**  
**91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)**  
 SCALE: 1"=50' SHEET NO. 8 OF 18 SHEETS STA. 50+00 TO STA. 72+12

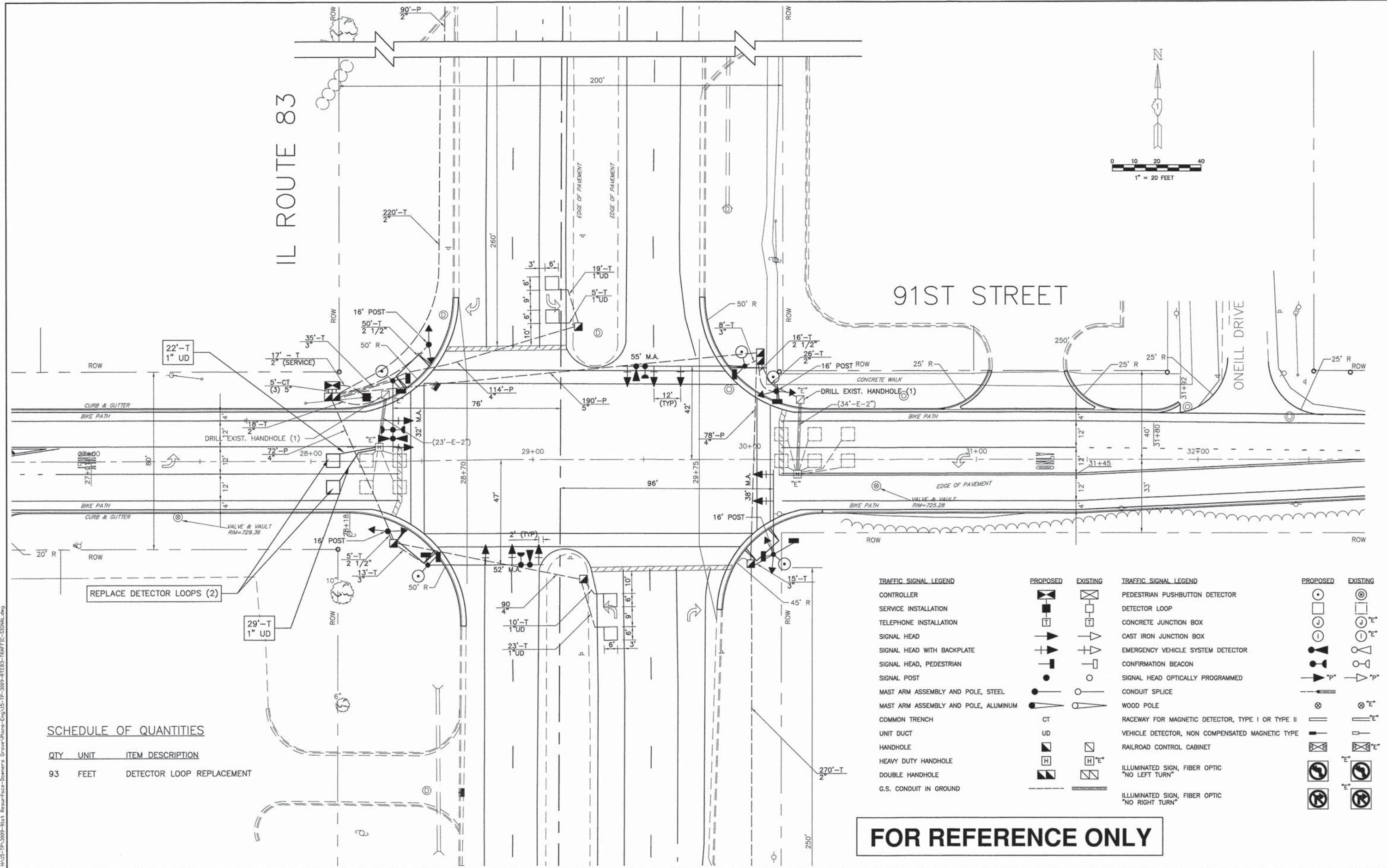
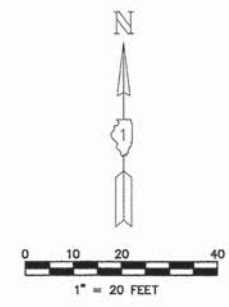
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	8
CONTRACT NO. 61B81			ILLINOIS FED. AID PROJECT	



IL ROUTE 83

91ST STREET

ONEILL DRIVE



**SCHEDULE OF QUANTITIES**

QTY	UNIT	ITEM DESCRIPTION
93	FEET	DETECTOR LOOP REPLACEMENT

TRAFFIC SIGNAL LEGEND		PROPOSED	EXISTING	TRAFFIC SIGNAL LEGEND		PROPOSED	EXISTING
CONTROLLER				PEDESTRIAN PUSHBUTTON DETECTOR			
SERVICE INSTALLATION				DETECTOR LOOP			
TELEPHONE INSTALLATION				CONCRETE JUNCTION BOX			
SIGNAL HEAD				CAST IRON JUNCTION BOX			
SIGNAL HEAD WITH BACKPLATE				EMERGENCY VEHICLE SYSTEM DETECTOR			
SIGNAL HEAD, PEDESTRIAN				CONFIRMATION BEACON			
SIGNAL POST				SIGNAL HEAD OPTICALLY PROGRAMMED			
MAST ARM ASSEMBLY AND POLE, STEEL				CONDUIT SPLICE			
MAST ARM ASSEMBLY AND POLE, ALUMINUM				WOOD POLE			
COMMON TRENCH				RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II			
UNIT DUCT				VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE			
HANDHOLE				RAILROAD CONTROL CABINET			
HEAVY DUTY HANDHOLE				ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"			
DOUBLE HANDHOLE				ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"			
G.S. CONDUIT IN GROUND							

**FOR REFERENCE ONLY**

PLOT DATE: May 28, 2015  
 FILENAME: I:\15-11-3009-91st Repair\Drawings\91st-RT83-TRAFFIC-SIGNAL.dwg

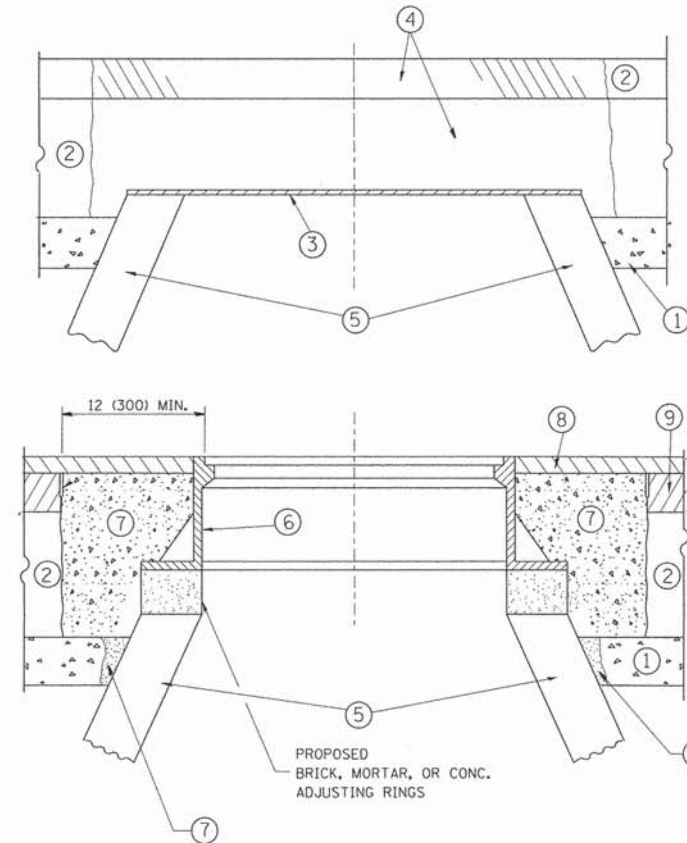
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	DRAWN - DMO / DJB	REVISED -
PLOT SCALE =	CHECKED - AS	REVISED -
PLOT DATE = May 28, 2015	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN  
91ST STREET - SOUTH CASS STREET TO KINGERY HWY. (RTE 83)

SCALE: 1"=20' SHEET NO. 9 OF 18 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	9
CONTRACT NO. 61B81			ILLINOIS FED. AID PROJECT	



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

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

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

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

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

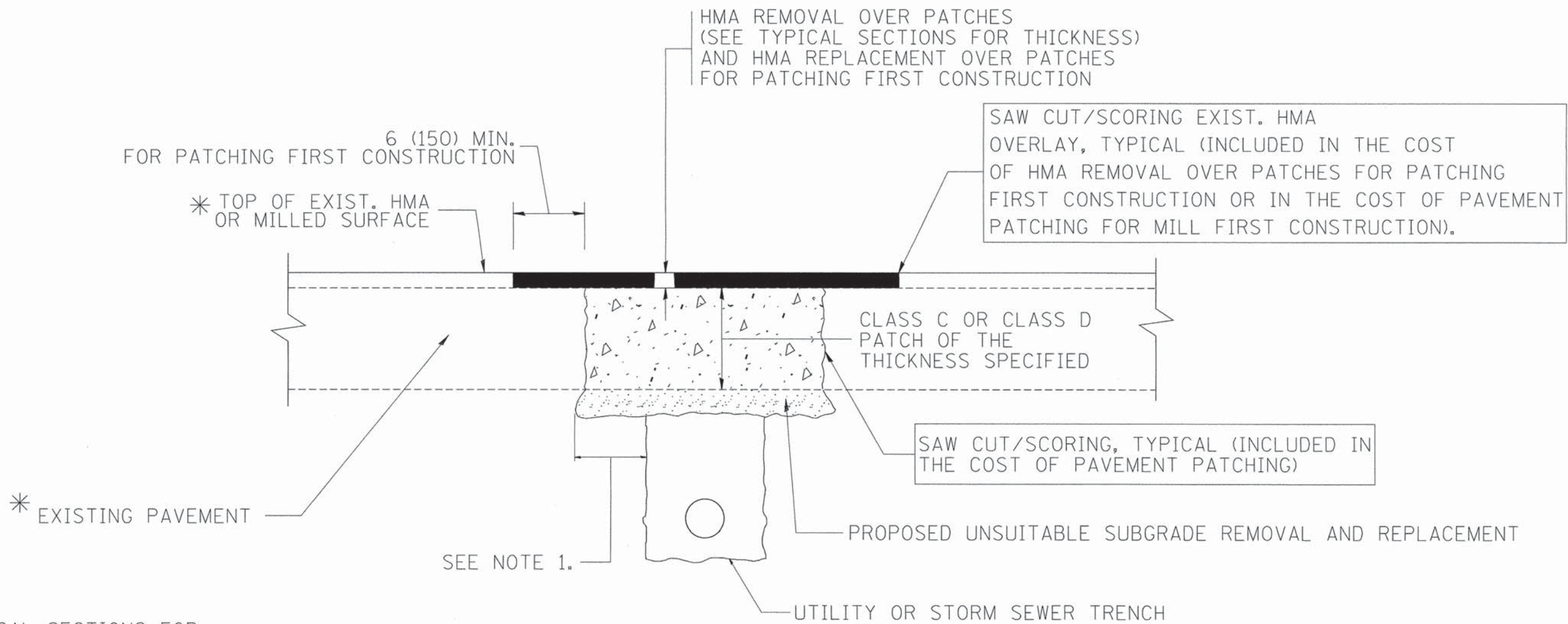
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	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	10
BD600-03 (BD-8)		CONTRACT NO. 61B81		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

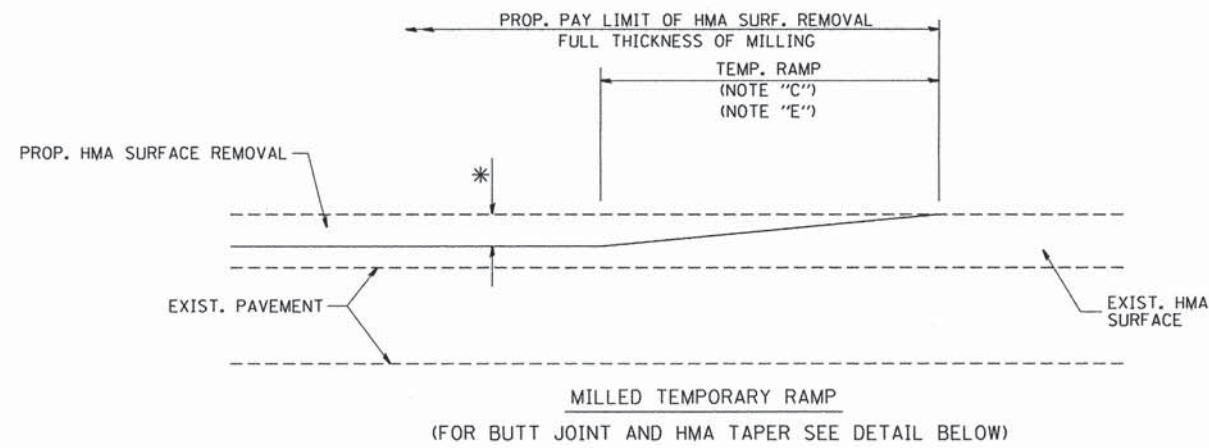
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

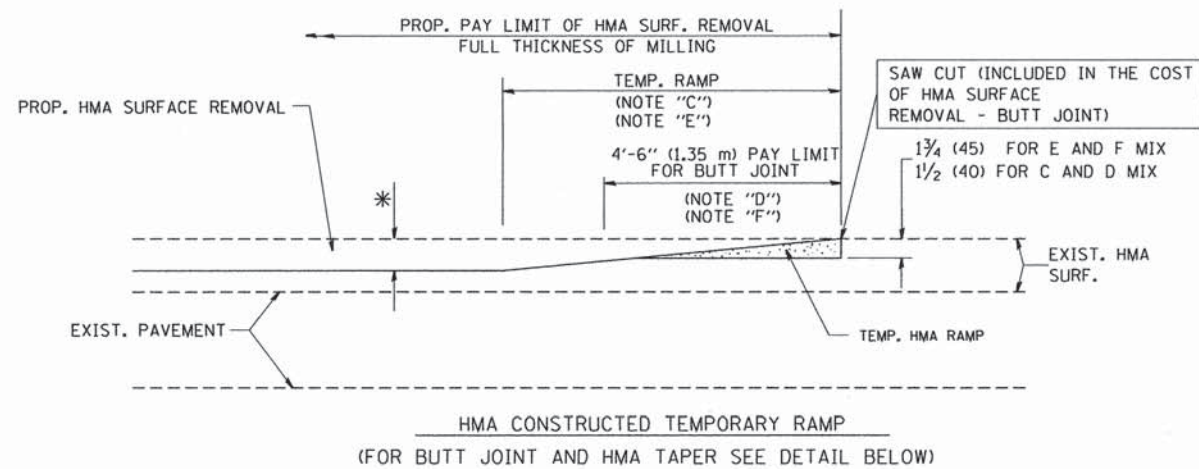
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

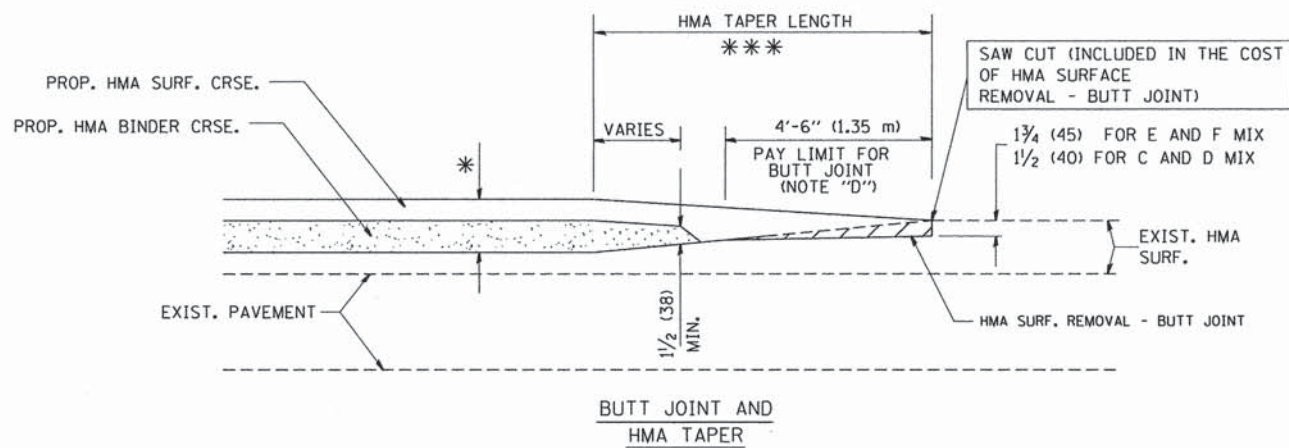
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	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
			REVISED - K. ENG 10-27-08									



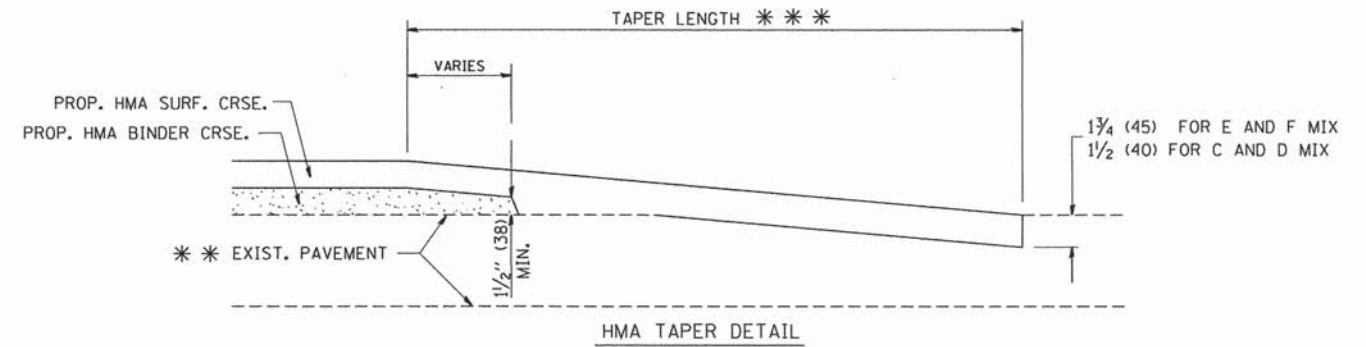
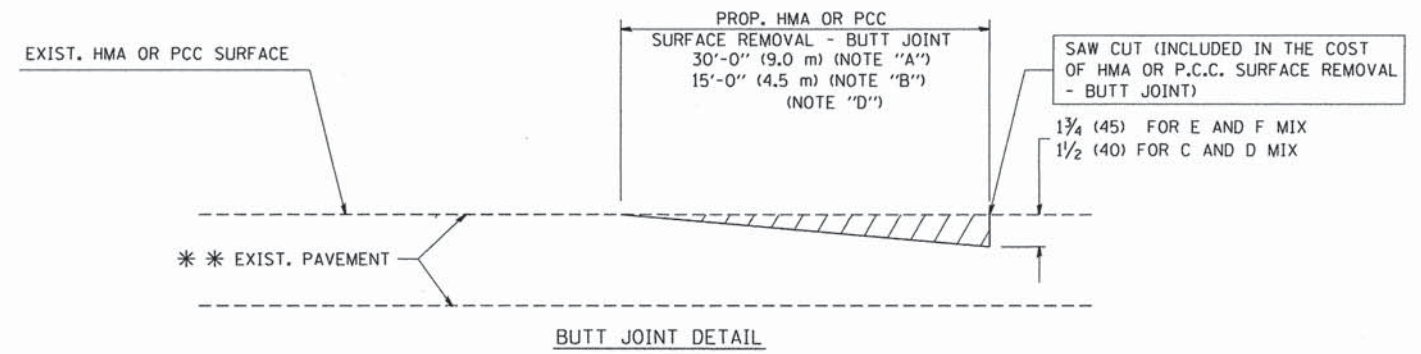
**OPTION 1**



**OPTION 2  
TYPICAL TEMPORARY RAMP**



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



**TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY**

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

**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

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USER NAME = gaglianobt  
PLOT SCALE = 50,0000' / IN.  
PLOT DATE = 1/4/2008

DESIGNED - M. DE YONG  
DRAWN -  
CHECKED -  
DATE - 06-13-90

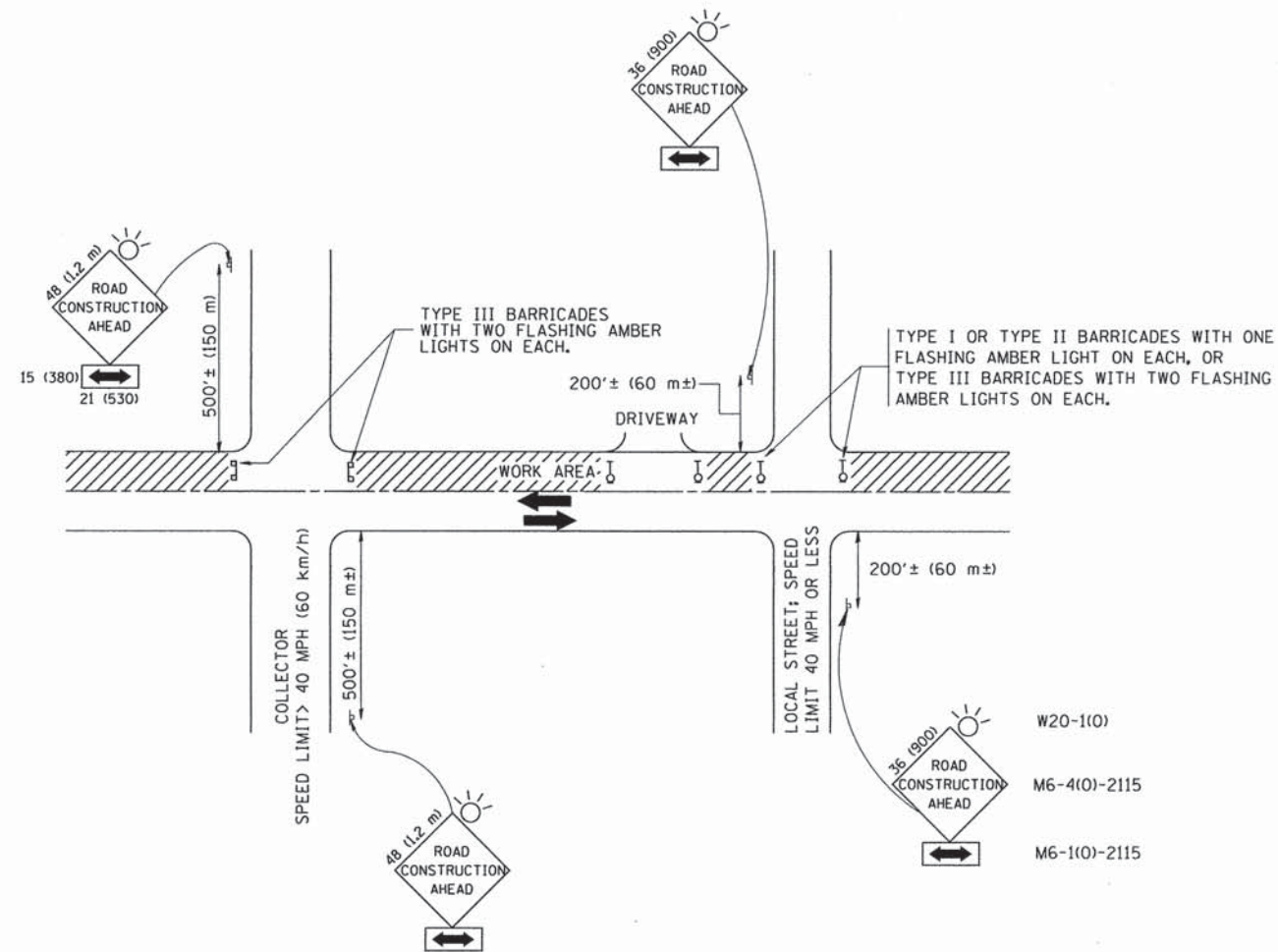
REVISED - R. SHAH 10-25-94  
REVISED - A. ABBAS 03-21-97  
REVISED - M. GOMEZ 04-06-01  
REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	12
BD400-05 BD32		CONTRACT NO. 61B81		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

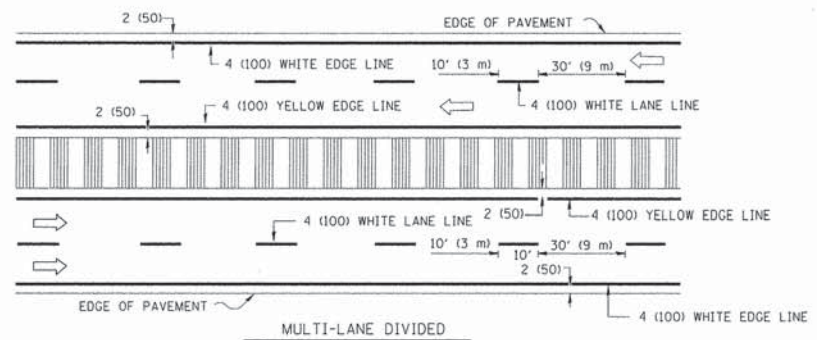
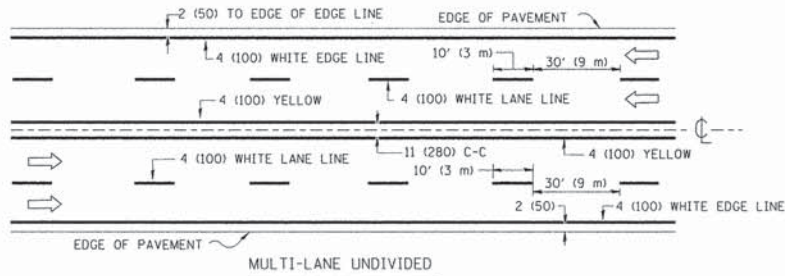
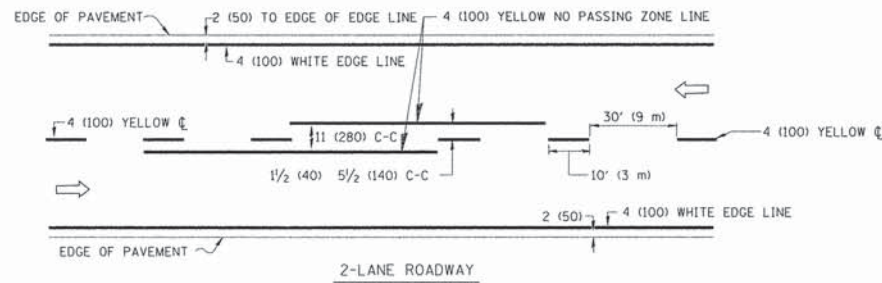
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

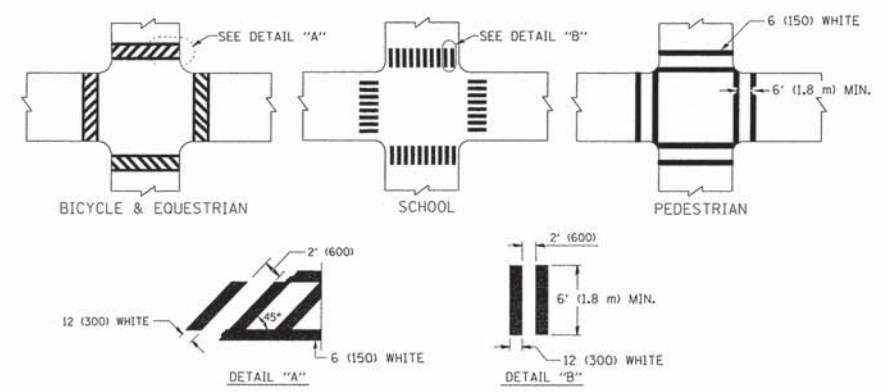
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TC-10				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

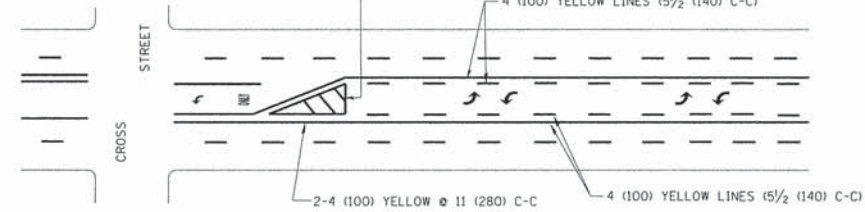
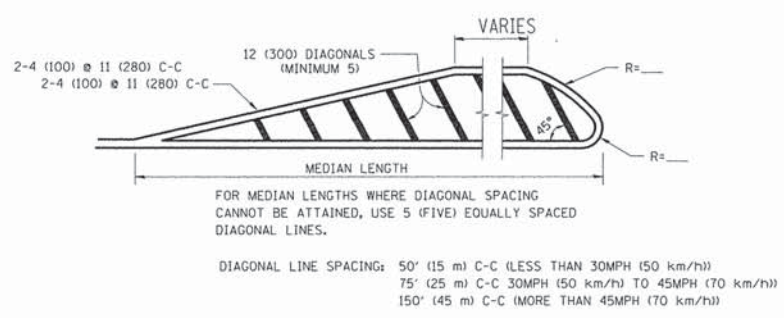
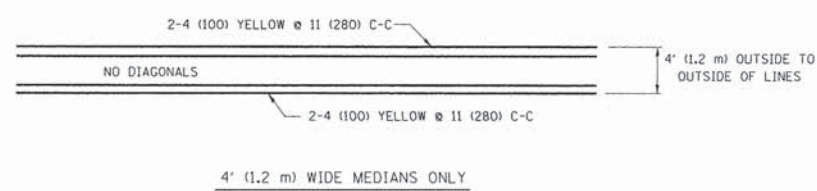


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

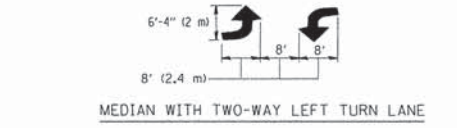
TYPICAL LANE AND EDGE LINE MARKING



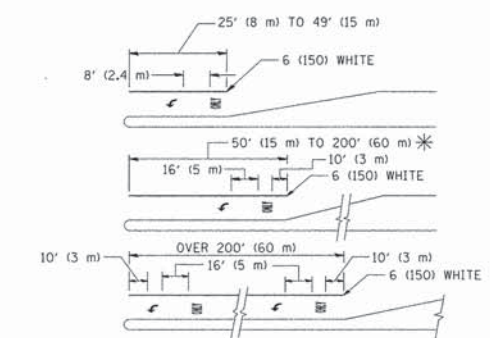
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

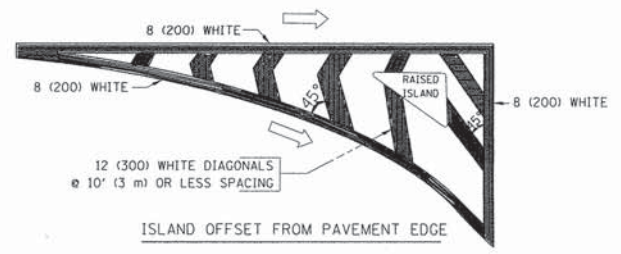


TYPICAL TURN LANE MARKING

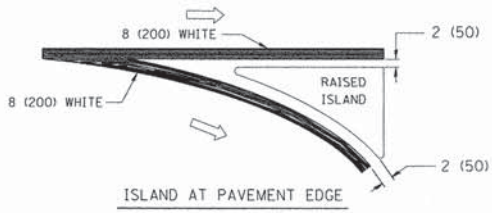


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	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; 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)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	2' (600) APART
				SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS			
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (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" 15' 6" (4.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. 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))

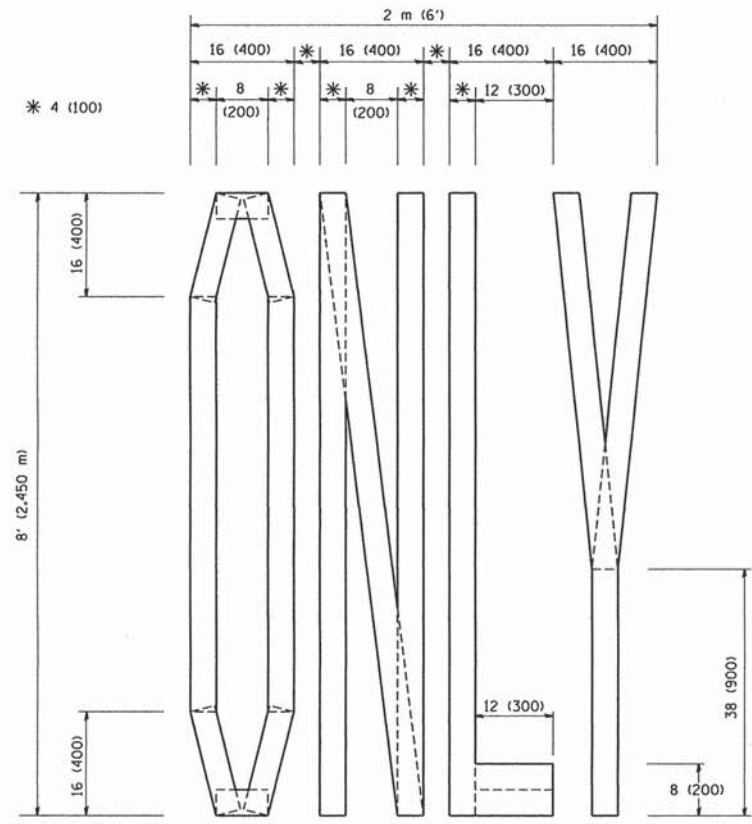
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

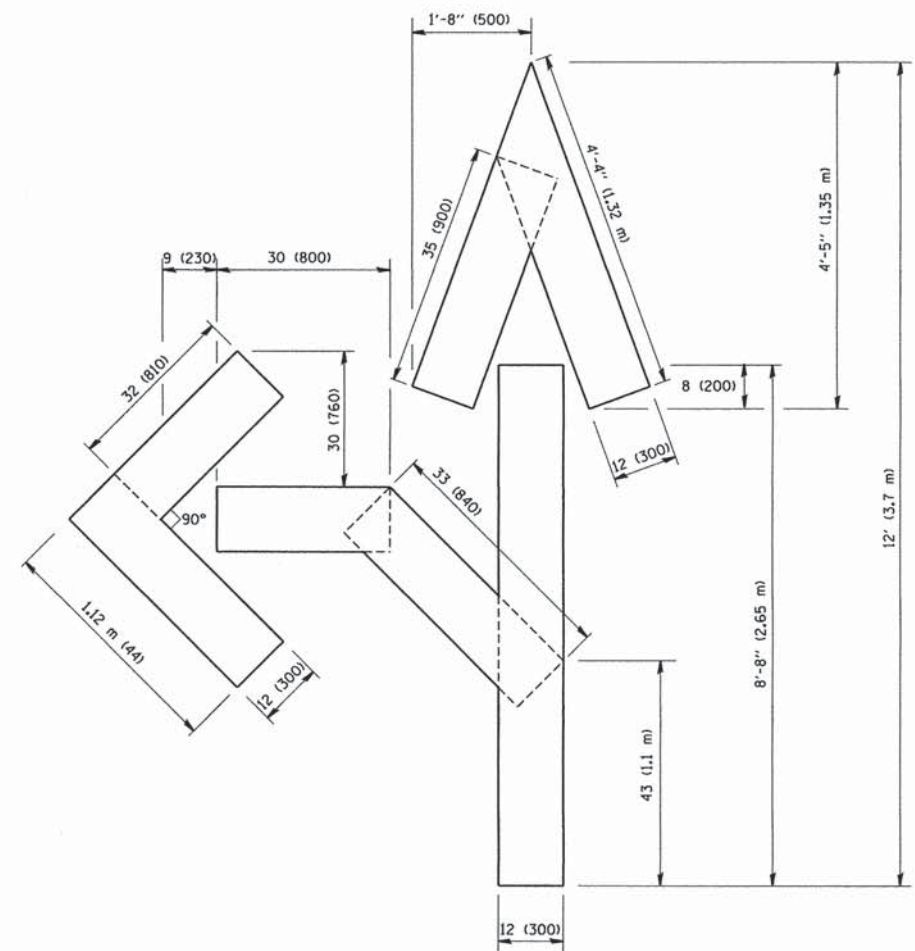
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

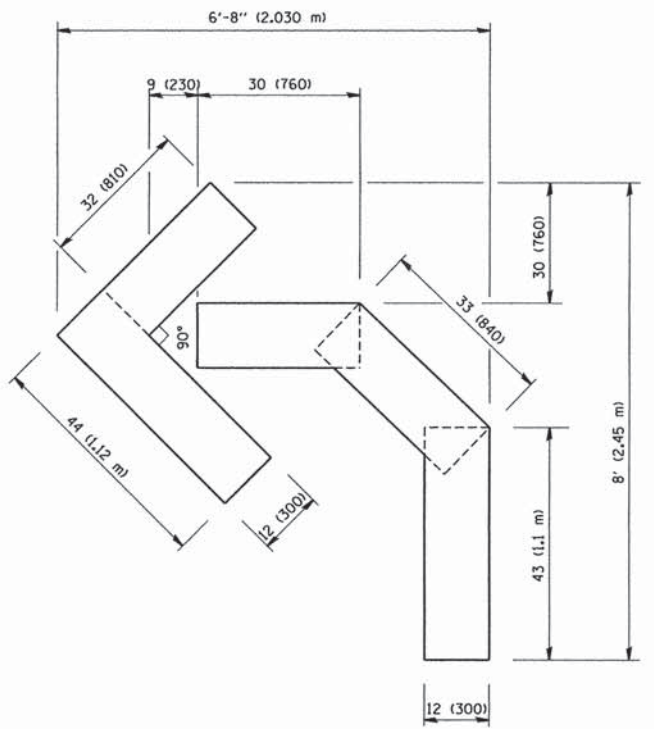
DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		1560	15-03125-00-RS	DUPAGE	18	14
SCALE: NONE		TC-13		CONTRACT NO. 61881		
SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



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



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



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

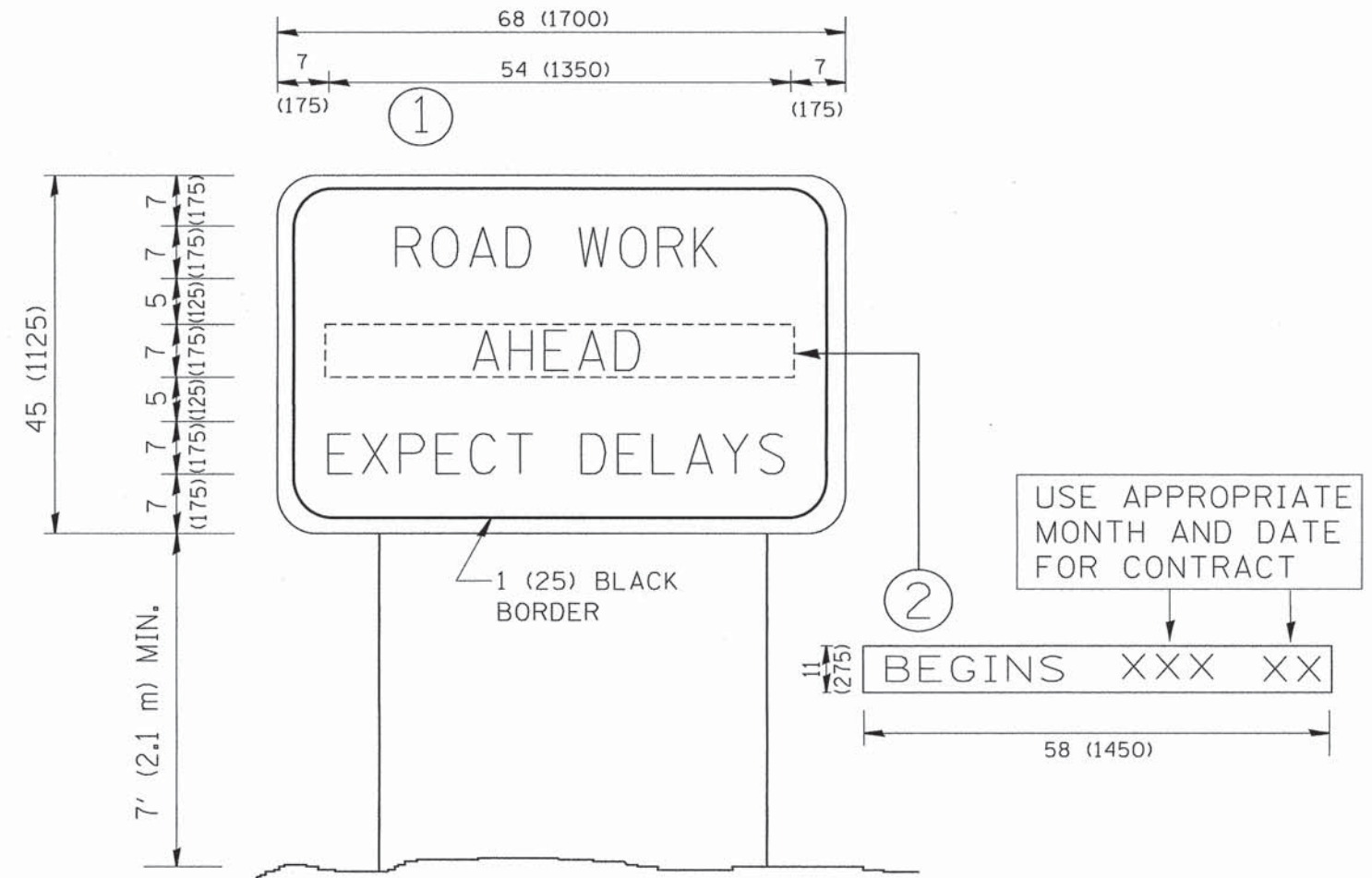
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		CHECKED -	REVISOR -
		DATE - 09-18-94	REVISOR - E. GOMEZ 08-28-00

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1580	15-03125-00-RS	DUPAGE	18	15
TC-16			CONTRACT NO. 61B81	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

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

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

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	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

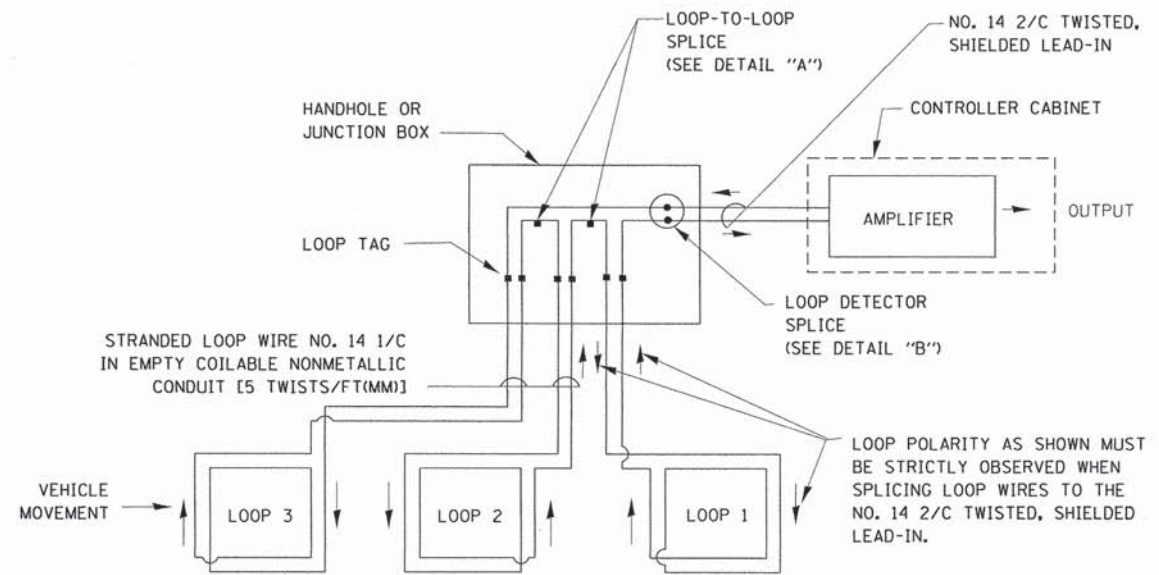
ARTERIAL ROAD INFORMATION SIGN			
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	16
TC-22			CONTRACT NO. 61B81	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



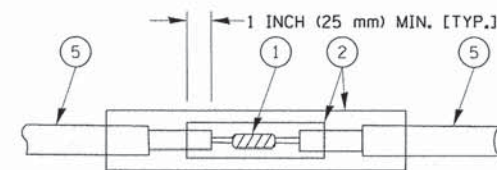
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR 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.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

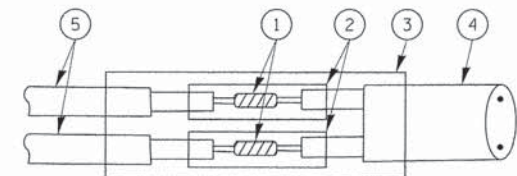


**DETECTOR LOOP WIRING SCHEMATIC**

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

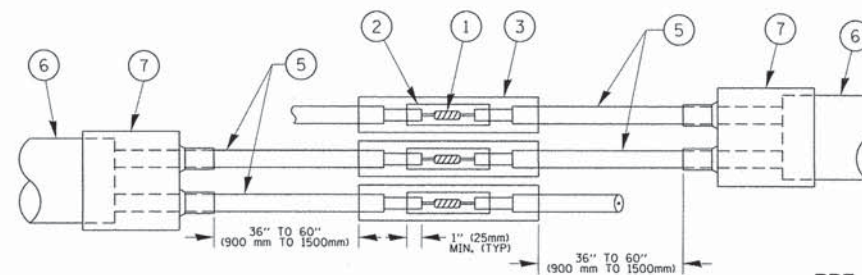


DETAIL "A"  
LOOP-TO-LOOP SPLICE

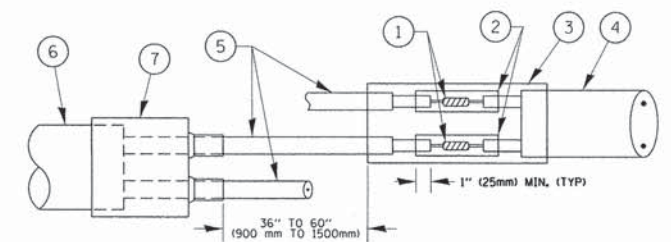


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



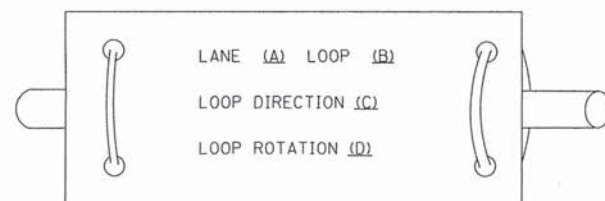
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

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

**LOOP LEAD-IN CABLE TAG**



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

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

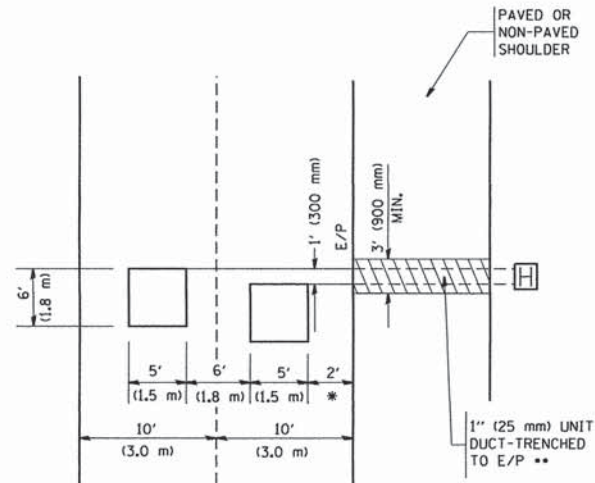
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1560	15-03125-00-RS	DUPAGE	18	17
TS-05		CONTRACT NO. 61B81		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FILE NAME =	USER NAME = Footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
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	PLOT SCALE = 50.0000" / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

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

**LOOPS NEXT TO SHOULDERS**

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

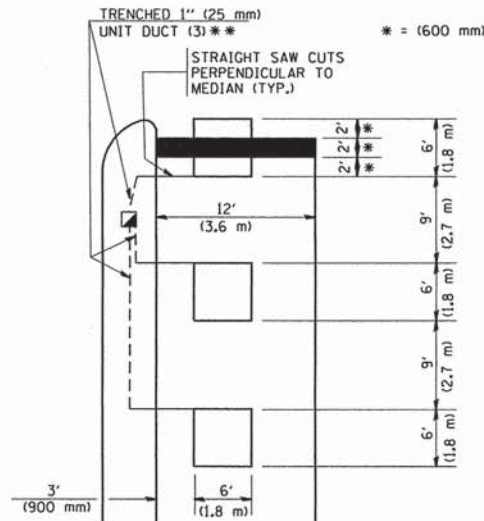


\* = (600 mm)

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

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

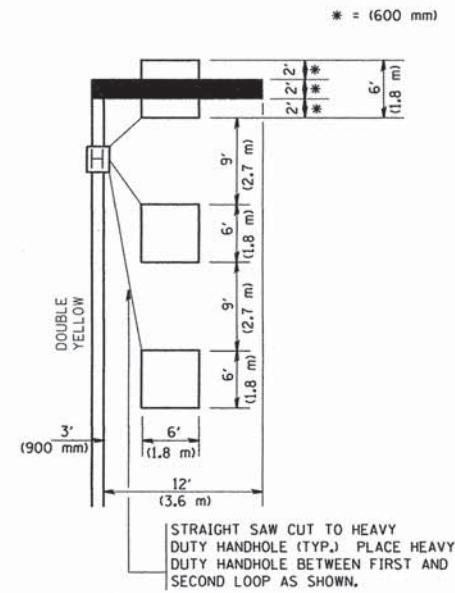
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD B14001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

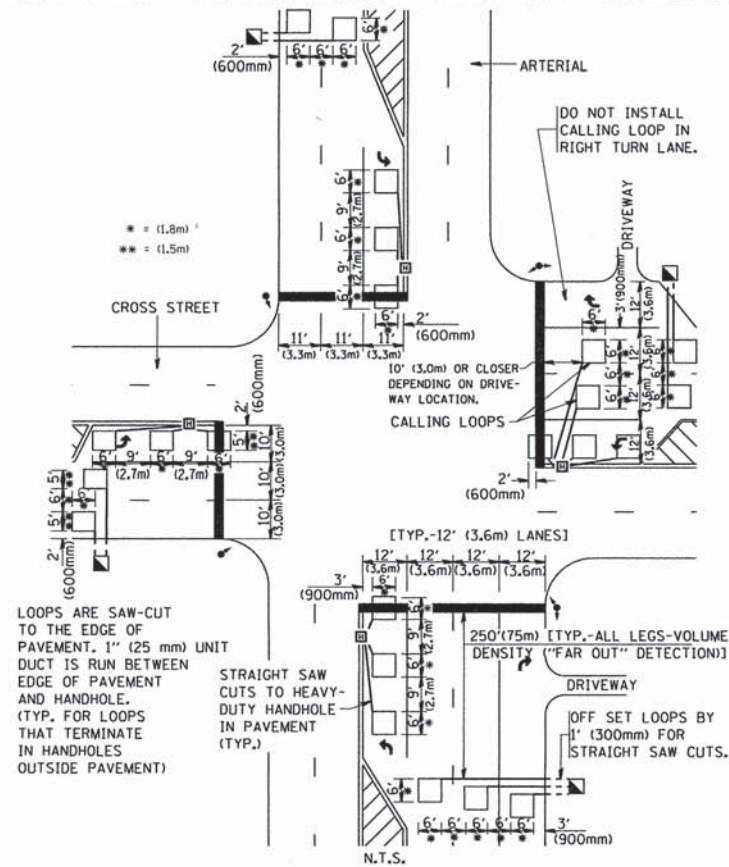
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



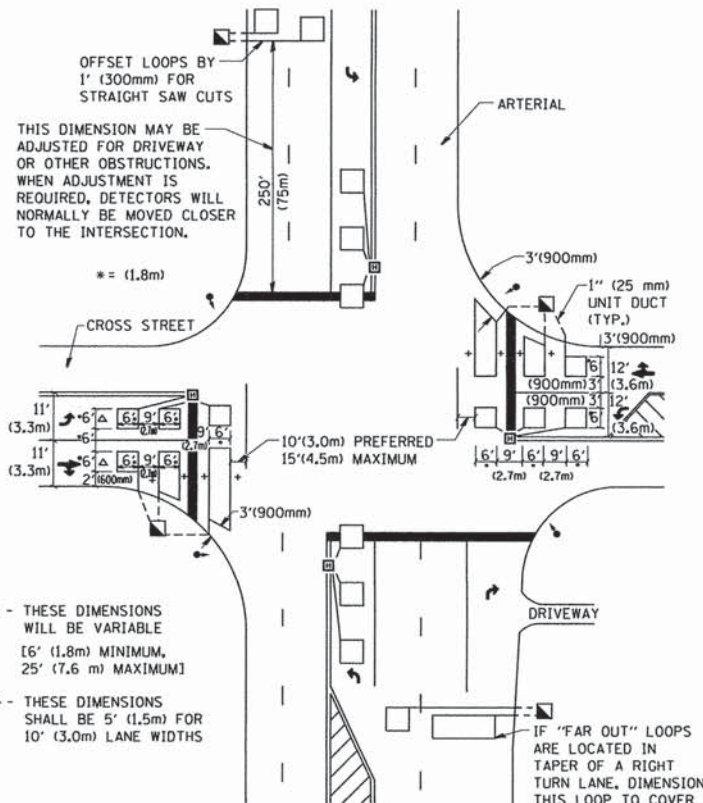
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

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

**NOTE:**

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

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

FILE NAME = W:\dststd\22x34\ts07.dgn	USER NAME = gaglionobt	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A.U. RTE. 1560	SECTION 15-03125-00-RS	COUNTY DUPAGE	TOTAL SHEETS 18	SHEET NO. 18
PLOT SCALE = 50.0000' / IN.	CHECKED - R.K.F.	REVISED - IN.	REVISED - IN.		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 61B81			
PLOT DATE = 1/4/2008	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							