

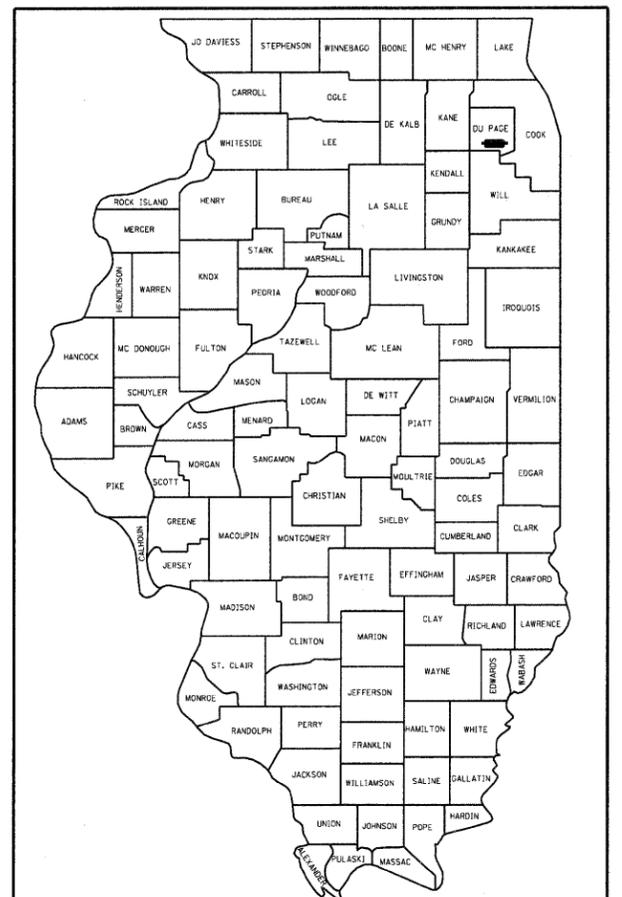
PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	1
		ILLINOIS	CONTRACT NO. 63575	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

FAP 0369 (75TH STREET)  
OXFORD LANE TO FAU 3831 (GREENE ROAD)  
RESURFACING  
SECTION: 10-00288-02-RS  
PROJECT: M-9003 (776)  
DUPAGE COUNTY  
JOB NO C-91-375-11



LOCATION OF SECTION INDICATED THUS: - [Symbol] -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED March 23 20 11  
*Charles F. Pohanski*  
DUPAGE COUNTY DIVISION OF TRANSPORTATION, COUNTY ENGINEER

PASSED APRIL 4 20 11  
*Christina Chesnut*  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS  
RELEASING FOR BID BASED ON LIMITED REVIEW APRIL 11 20 11  
*Diana M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

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OF THE STATE OF ILLINOIS

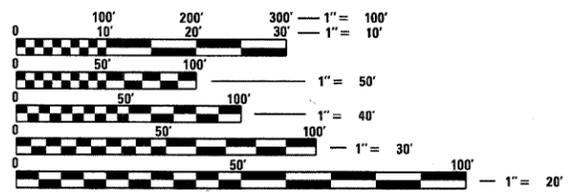
PROFESSIONAL ENGINEER'S CERTIFICATION  
I, MARK A. REZNICEK, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS SUBMISSION WAS PREPARED ON BEHALF OF DUPAGE COUNTY, BY ESI CONSULTANTS, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.  
DATED THIS 23rd DAY OF March, A.D., 2011.  
*Mark A. Reznicek*  
ENGINEER  
ILLINOIS REG. PROF. ENGINEER NO. 062-046136 EXPIRATION DATE 11/30/2011

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUMMARY OF QUANTITIES
3	GENERAL NOTES, DESIGN STANDARDS
4-5	TYPICAL SECTIONS
6-12	75TH STREET PLANS
13	75TH PAVEMENT MARKING PLAN- NAPER BLVD.
14-17	EXISTING DETECTOR LOOP PLANS
18-28	DISTRICT ONE STANDARD DETAILS
29	DUPAGE COUNTY DETAILS

FOR INDEX OF STANDARDS, SEE SHEET 3

DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL  
POSTED SPEED LIMIT: 45-50 MPH  
ADT (2008): 31,200 - 37,300



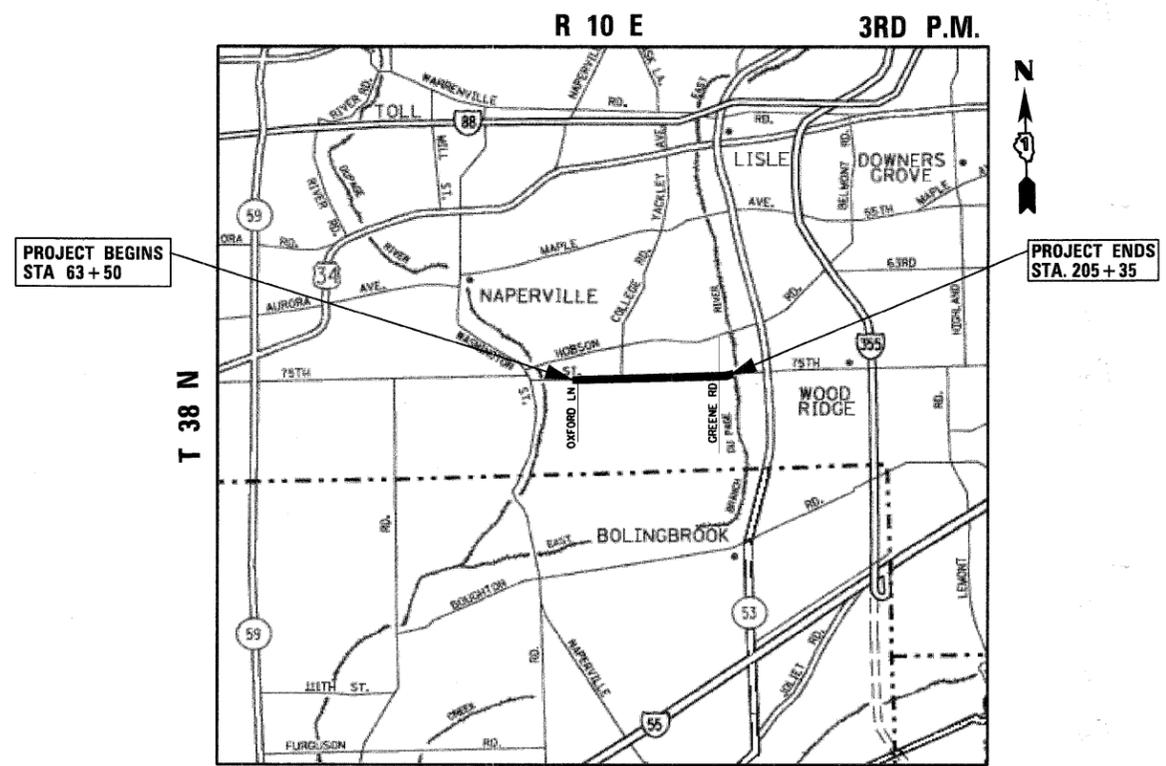
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.



J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT MANAGER: MARK A. REZNICEK, P.E.

CONTRACT NO. 63575



LOCATION MAP (N.T.S.)  
LISLE TOWNSHIP  
GROSS AND NET LENGTH OF PROJECT  
14,185 FEET (2.69 MILES)

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ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003685



1. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE BASED ON RECORD INFORMATION AND ARE APPROXIMATE ONLY, AND ARE NOT NECESSARILY COMPLETE. CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AS TO LOCATION OF ALL EXISTING UNDERGROUND STRUCTURES, CABLES, AND PIPELINES.
2. ALL ROAD SIGNS, STREET SIGNS, AND TRAFFIC SIGNS WHICH NEED TO BE RELOCATED OR MOVED DUE TO CONSTRUCTION SHALL BE TAKEN DOWN AND STORED BY THE CONTRACTOR EXCEPT THOSE THAT ARE NECESSARY FOR PROPER TRAFFIC CONTROL WHICH SHALL BE TEMPORARILY RESET UNTIL COMPLETION OF CONSTRUCTION OPERATIONS. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESET ALL SAID SIGNS. THE WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25.
3. SPECIAL ATTENTION IS DRAWN ARTICLE 105.06 OF THE STANDARD SPECIFICATIONS REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.08.
4. THE UNIT PRICE FOR ALL REMOVAL PAY ITEMS SHALL INCLUDE ALL REQUIRED SAW CUTS.
5. ALL WORK PERFORMED RELATIVE TO THIS IMPROVEMENT SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF O.S.H.A. IN ACCORDANCE WITH ARTICLE 107.01.
6. CONTRACTOR SHALL PROVIDE AND INSTALL TWO WEIGHTED SAND BAGS ON EACH TYPE II OR TYPE II BARRICADE USED. (ONE WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR THE CONSTRUCTION ITEMS INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. MIXTURE FOR CRACKS, JOINTS AND FLANGWAYS: AN ESTIMATED QUANTITY BASED ON FIELD OBSERVATION HAS BEEN INCLUDED IN THE CONTRACT. THE LOCATIONS AND LIMITS OF ALL JOINT OR CRACK FILLING SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. IF THE MIXTURE FOR CRACKS, JOINTS AND FLANGWAYS IS NOT REQUIRED, THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
8. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
9. 10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB & GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 2 INCHES (50 MM). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3-1/2 INCHES (85 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
11. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE THE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE IDOT DETAIL FOR "BUTT JOINT DETAIL".
12. WHENEVER, DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY AT THE CONCLUSION OF CONSTRUCTION OPERATIONS. ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT PAY ITEMS.
13. SHOULD ANY DAMAGES OCCUR DUE TO THE CONTRACTOR'S NEGLIGENCE, THE CONTRACTOR, IN ACCORDANCE WITH ARTICLES 107.20 AND 105.07, SHALL MAKE REPAIRS IN A MANNER ACCEPTABLE TO THE ENGINEER. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF HIS CONSTRUCTION SCHEDULE AND COORDINATE CONSTRUCTION OPERATIONS WITH THE UTILITY COMPANIES SO THAT RELOCATION OF UTILITY LINES AND STRUCTURES MAY PROCEED IN AN ORDERLY MANNER.
14. 75TH STREET SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. WHEN NECESSARY TO CLOSE ONE LANE DUE TO CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION HOURS WITH THE USE OF SIGNS AND FLAGMEN AS SHOWN ON THE TRAFFIC CONTROL STANDARDS. ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.
15. UNLESS AUTHORIZED BY THE ENGINEER, ALL EXISTING ACCESS ENTRANCES SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
16. THE CONTRACTOR WILL BE REQUIRED, AT HIS EXPENSE, TO HAVE AVAILABLE A WATER TRUCK OR SIMILAR EQUIPMENT TO CONTROL DUST. IF NECESSARY, THE CONTRACTOR SHALL BE REQUIRED TO CONTROL DUST DURING NONWORKING HOURS. THIS WORK IS INCLUDED IN THE CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL.
17. ALL EXCESS MATERIAL (BROKEN CONCRETE, CULVERT PIPE, WASTE ROADWAY EXCAVATION, SURPLUS MATERIAL FROM SEWER TRENCHES, ETC.) SHALL BE LEGALLY DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SELECT DUMP SITES AND OBTAIN PERMISSION AND ALL NECESSARY PERMITS TO USE SUCH DUMP SITES. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAVEMENT REMOVAL.
18. THE CONTRACTOR SHALL RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RECESSED REFLECTIVE PAVEMENT MARKERS) SO THESE LOCATIONS CAN BE VERIFIED FOR PROPOSED STRIPING. LOCATIONS OF ALL PROPOSED PAVEMENT MARKINGS SHALL BE AS SHOWN ON THE PLANS.
19. ALL PAVEMENT PATCHING LOCATIONS, COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT LOCATIONS, AND SIDEWALK REMOVAL AND REPLACEMENT LOCATIONS, SHALL BE DETERMINED BY THE ENGINEER.
20. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
21. THE CONTRACTOR SHALL MILL BEFORE PATCHING.

DENOTES ITEM OR WORK INCLUDED IN THE COST OF OTHER ITEMS

**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-07	PAVEMENT JOINTS
601001-04	SUB-SURFACE DRAINS
606001-04	CONCRETE CURB & COMBINATION CURB & GUTTER
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-07	URBAN LANE CLOSURE, MULTI LANE, 1-WAY OR 2-WAY, WITH NON TRAVERSABLE MEDIAN
701606-07	URBAN LANE CLOSURE, MULTI LANE, 2-WAY MOUNTABLE MEDIAN
701701-07	LANE CLOSURE, MULTI LANE, INTERSECTION, FOR SPEEDS (45 MPH)
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

**IDOT DISTRICT ONE STANDARDS**

BD-22	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-32	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
TC-10	BUTT JOINT AND HMA TAPER DETAILS
TC-13	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-14	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TS-05	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TS-07	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

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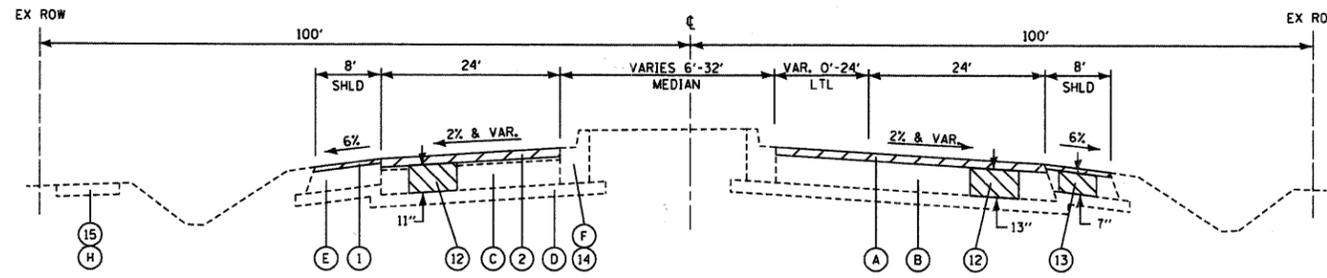
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DATE -	REVISED -

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 DEPARTMENT OF TRANSPORTATION

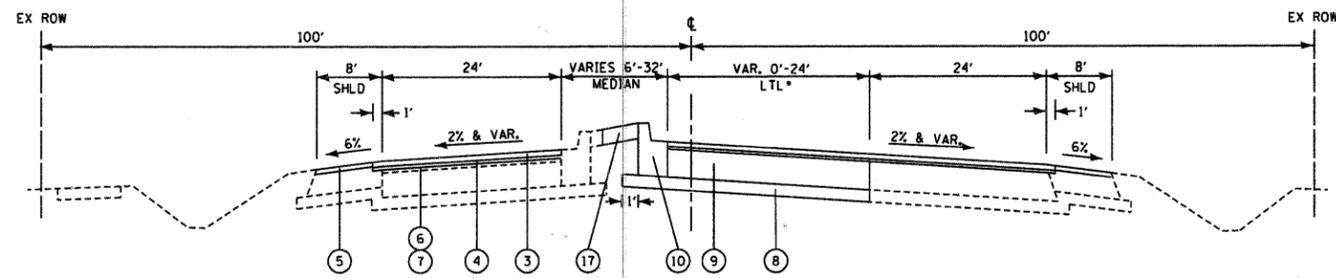
**GENERAL NOTES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	3
CONTRACT NO. 63575			ILLINOIS FED. AID PROJECT	

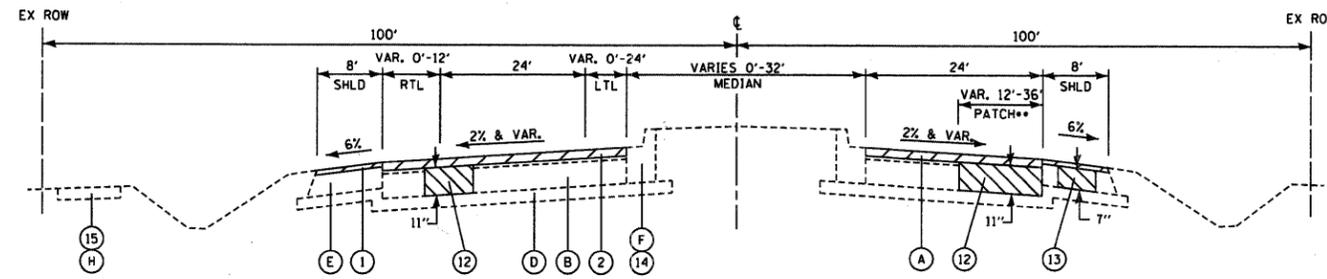


CH 33 75TH STREET  
EXISTING TYPICAL SECTION  
STA. 63+50 TO STA. 88+53

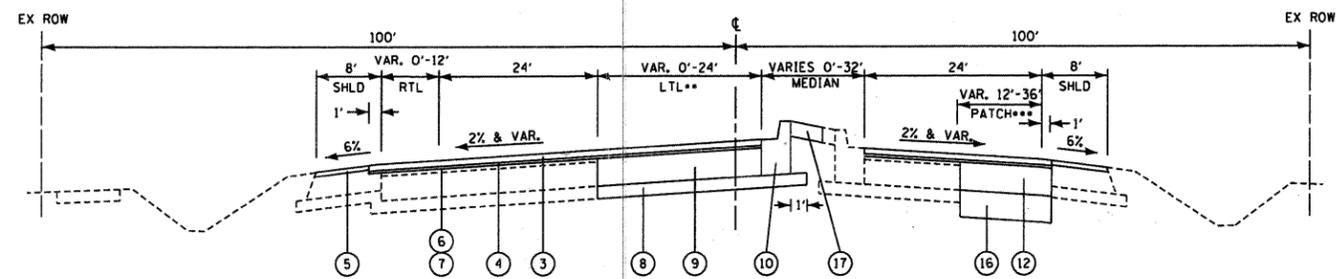


CH 33 75TH STREET  
PROPOSED TYPICAL SECTION  
STA. 63+50 TO STA. 88+53

\* WIDENING, 13" FROM STA. 81+58 TO STA. 88+53 (LEFT TURN LANE) VARIES FROM 0'-18"



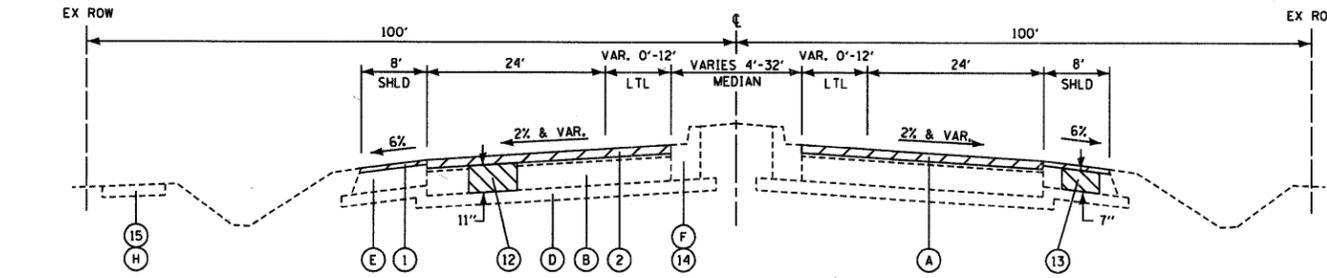
CH 33 75TH STREET  
EXISTING TYPICAL SECTION  
STA. 88+53 TO STA. 97+73



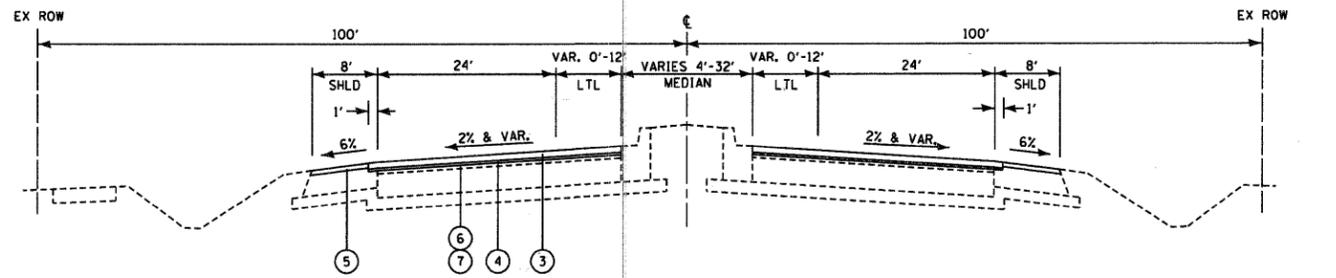
CH 33 75TH STREET  
PROPOSED TYPICAL SECTION  
STA. 88+53 TO STA. 97+73

\*\* WIDENING, 11" FROM STA. 90+04 TO STA. 97+73 (LEFT TURN LANE) VARIES FROM 0'-18"

\*\*\* CLASS D PATCH FROM STA. 89+77 TO STA. 93+58



CH 33 75TH STREET  
EXISTING TYPICAL SECTION  
STA. 97+73 TO STA. 161+24  
STA. 201+23 TO STA. 205+35



CH 33 75TH STREET  
PROPOSED TYPICAL SECTION  
STA. 97+73 TO STA. 161+24  
STA. 201+23 TO STA. 205+35

LEGEND

- (A) EXISTING HMA BINDER & SURFACE, 3" AND VARIES
- (B) EXISTING HMA PAVEMENT
- (C) EXISTING P.C.C. BASE COURSE
- (D) EXISTING AGGREGATE SUBGRADE, 4"
- (E) EXISTING BITUMINOUS SHOULDER, 8"
- (F) EXISTING COMB. CONCRETE CURB & GUTTER, TYPE B-6.12
- (G) EXISTING COMB. CONCRETE CURB & GUTTER, TYPE B-6.24
- (H) EXISTING SIDEWALK
- (I) EXISTING BITUMINOUS PATH
- (1) HMA SURFACE REMOVAL, 1-1/2"
- (2) HMA SURFACE REMOVAL, 3"
- (3) POLY. HMA SURFACE COURSE, MIX "F", N90, 1-3/4"
- (4) LEVELING BINDER (MM), IL-9.5, N70, 1-1/4"
- (5) HMA SURFACE COURSE, MIX "D", N70, 1-1/2"
- (6) BITUMINOUS MATERIALS (PRIME COAT)
- (7) AGGREGATE (PRIME COAT)
- (8) SUB-BASE GRANULAR MATERIAL, 4"
- (9) HMA BASE COURSE, VARIES 11" TO 13"
- (10) P.C.C. COMBINATION CURB AND GUTTER, TYPE B-6.12
- (11) P.C.C. COMBINATION CURB AND GUTTER, TYPE B-6.24
- (12) CLASS D PATCH (AS DIRECTED BY THE ENGINEER) VARIES 11" TO 13"
- (13) CLASS D PATCH, 7" (AS DIRECTED BY THE ENGINEER), (SHOULDER)
- (14) COMB. CONC. CURB & GUTTER REMOVAL (AS DIRECTED BY THE ENGINEER)
- (15) SIDEWALK/ BIKE PATH REMOVAL & REPLACEMENT (AS DIRECTED BY THE ENGINEER)
- (16) POROUS GRANULAR EMBANKMENT, SUBGRADE, 12"
- (17) TOPSOIL FURNISH AND PLACE, 6" SEEDING, CLASS 2A

NOTES:

1. THE UNIT WEIGHT USED TO CALC. ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/50 YD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

HOT-MIX ASPHALT MIX REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @Ndes
<b>PAVEMENT RESURFACING</b>	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm), 1-3/4"	4% @ 90 GYR.
LEVELING BINDER (MACHINE METHOD), N70 (IL 9.5 mm), 1-1/4"	4% @ 70 GYR.
<b>PAVEMENT WIDENING</b>	
HOT-MIX ASPHALT BASE COURSE, 11" (HMA BINDER IL-19mm) (IN 4 LIFTS)	4% @ 90 GYR.
HOT-MIX ASPHALT BASE COURSE, 13" (HMA BINDER IL-19mm) (IN 4 LIFTS)	4% @ 90 GYR.
<b>SHOULDERS</b>	
HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70 (IL 9.5 mm), 1-1/2"	4% @ 70 GYR.
<b>PATCHING</b>	
CLASS D PATCHES (HMA BINDER IL-19 mm), 11" (IN 3 LIFTS)	4% @ 70 GYR.
CLASS D PATCHES (HMA BINDER IL-19 mm), 13" (IN 4 LIFTS)	4% @ 70 GYR.
CLASS D PATCHES (HMA BINDER IL-19 mm), 7" (IN 2 LIFTS) (SHOULDER)	4% @ 70 GYR.
<b>PARTIAL DEPTH PATCHING</b>	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.

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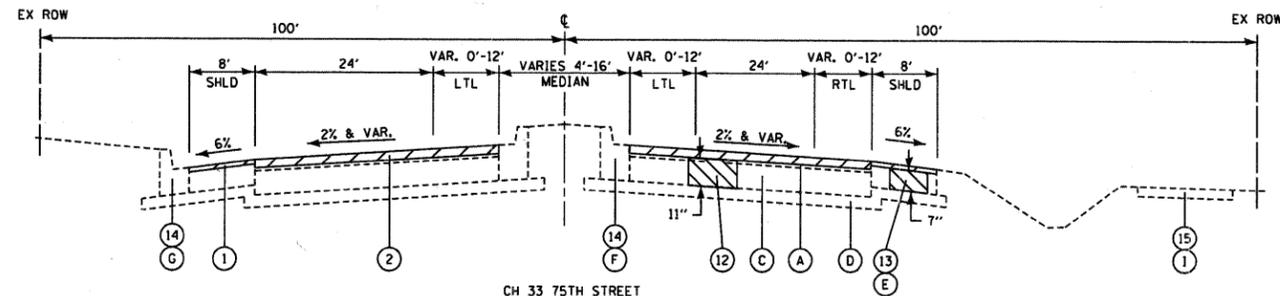
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

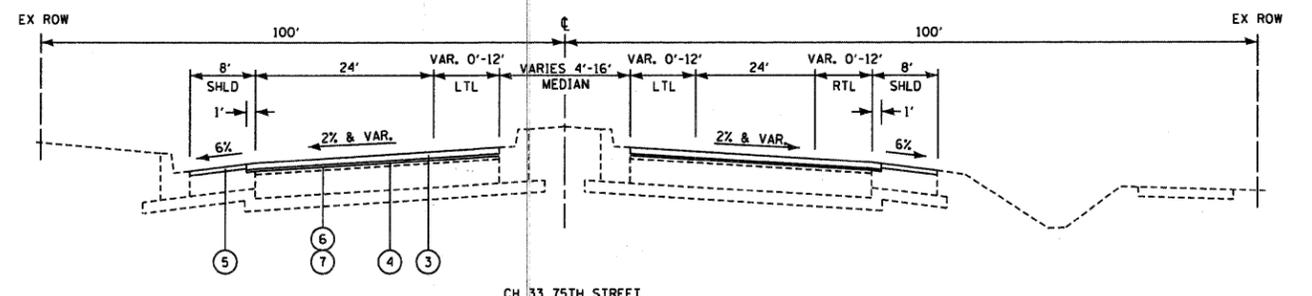
TYPICAL SECTIONS- 75TH STREET  
OXFORD LANE TO GREENE ROAD

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

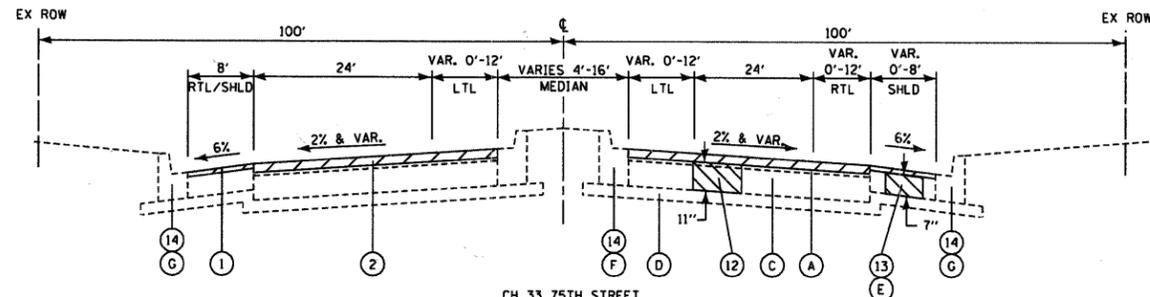
F.A.P. RTE. 0369	SECTION 10-00288-02-RS	COUNTY	TOTAL SHEETS 29	SHEET NO. 4
				CONTRACT NO. 63575
ILLINOIS FED. AID PROJECT				



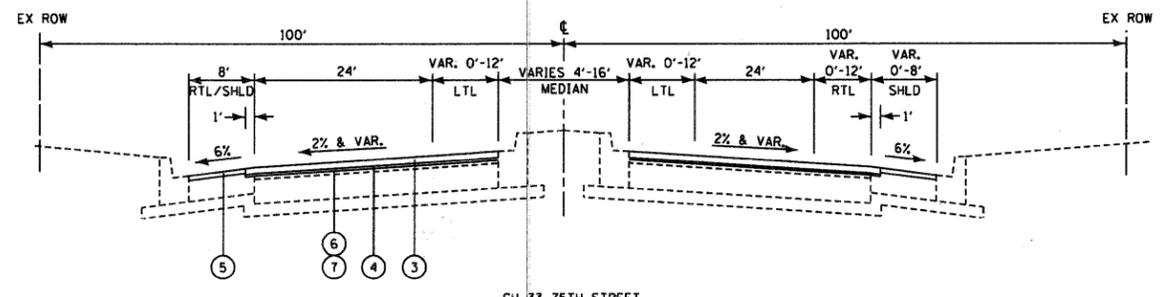
CH 33 75TH STREET  
EXISTING TYPICAL SECTION  
STA. 161+24 TO STA. 177+04  
STA. 179+85 TO STA. 187+42  
STA. 194+00 TO STA. 201+23



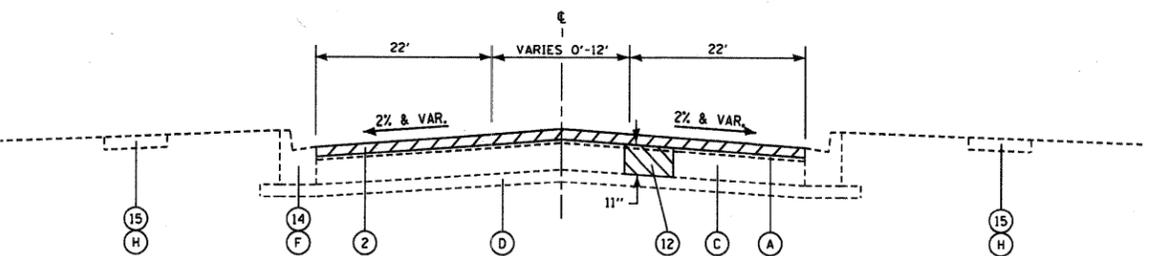
CH 33 75TH STREET  
PROPOSED TYPICAL SECTION  
STA. 161+24 TO STA. 177+04  
STA. 179+85 TO STA. 187+42  
STA. 194+00 TO STA. 201+23



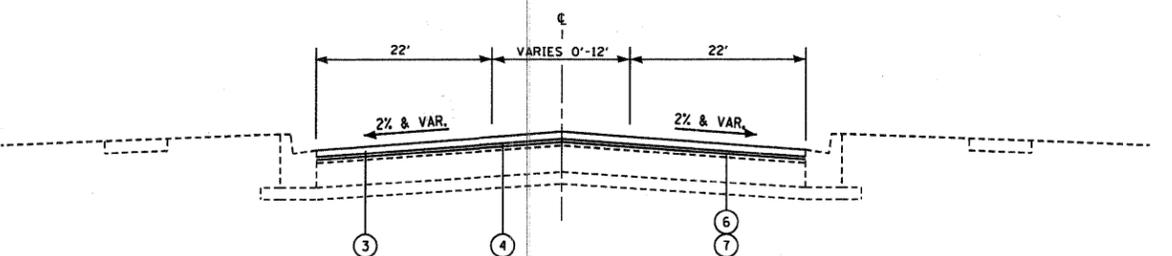
CH 33 75TH STREET  
EXISTING TYPICAL SECTION  
STA. 177+04 TO STA. 179+85  
STA. 187+42 TO STA. 194+00



CH 33 75TH STREET  
PROPOSED TYPICAL SECTION  
STA. 177+04 TO STA. 179+85  
STA. 187+42 TO STA. 194+00



CH 40 WERHLI ROAD  
EXISTING TYPICAL SECTION  
STA. 15+26 TO STA. 20+03



CH 40 WERHLI ROAD  
PROPOSED TYPICAL SECTION  
STA. 15+26 TO STA. 20+03

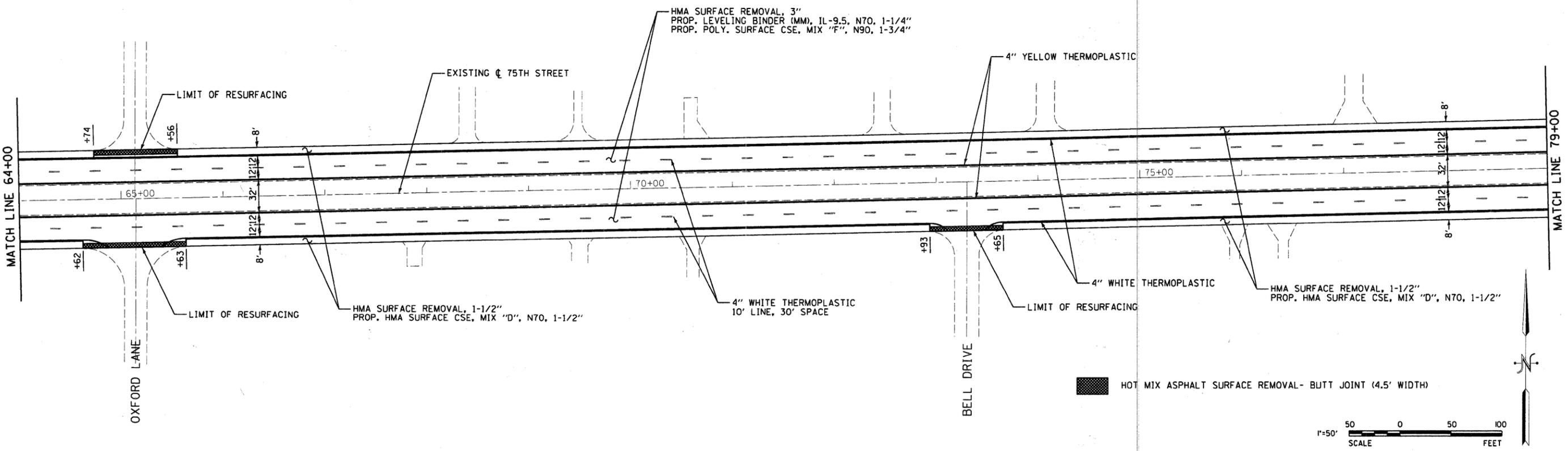
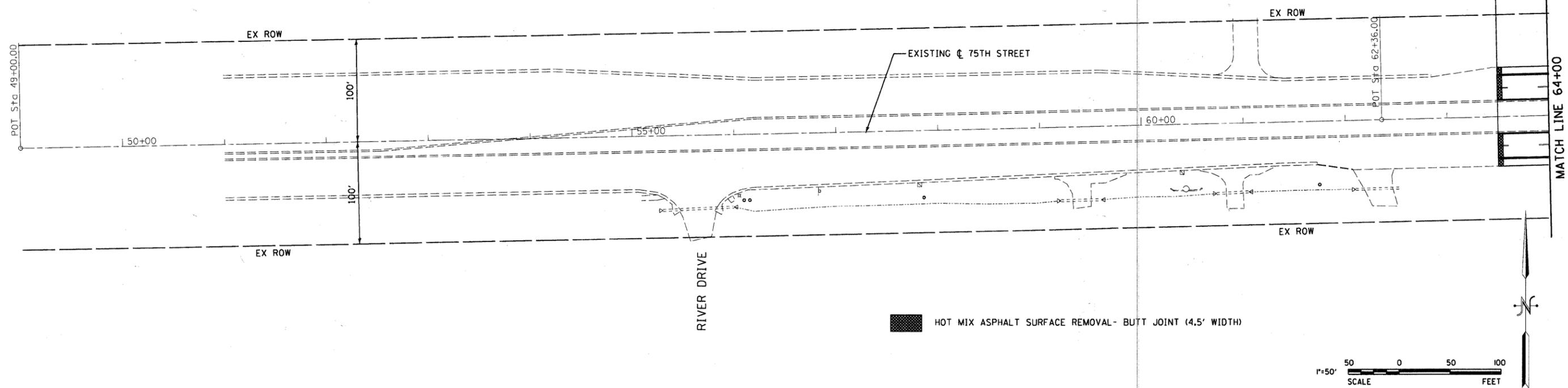
- LEGEND**
- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>(A) EXISTING HMA BINDER &amp; SURFACE, 3"</li> <li>(B) EXISTING HMA PAVEMENT</li> <li>(C) EXISTING P.C.C. BASE COURSE</li> <li>(D) EXISTING AGGREGATE SUBGRADE, 4"</li> <li>(E) EXISTING BITUMINOUS SHOULDER, 8"</li> <li>(F) EXISTING COMB. CONCRETE CURB &amp; GUTTER, TYPE B-6.12</li> <li>(G) EXISTING COMB. CONCRETE CURB &amp; GUTTER, TYPE B-6.24</li> <li>(H) EXISTING SIDEWALK</li> <li>(I) EXISTING BITUMINOUS PATH</li> </ul> | <ul style="list-style-type: none"> <li>(1) HMA SURFACE REMOVAL, 1-1/2"</li> <li>(2) HMA SURFACE REMOVAL, 3"</li> <li>(3) POLY. HMA SURFACE COURSE, MIX "F", N90, 1-3/4"</li> <li>(4) LEVELING BINDER (MM), IL-9.5, N70, 1-1/4"</li> <li>(5) HMA SURFACE COURSE, MIX "D", N70, 1-1/2"</li> <li>(6) BITUMINOUS MATERIALS (PRIME COAT)</li> <li>(7) AGGREGATE (PRIME COAT)</li> <li>(8) SUB-BASE GRANULAR MATERIAL, 4"</li> <li>(9) HMA BASE COURSE, VARIES 11" TO 13"</li> </ul> | <ul style="list-style-type: none"> <li>(10) P.C.C. COMBINATION CURB AND GUTTER, TYPE B-6.12</li> <li>(11) P.C.C. COMBINATION CURB AND GUTTER, TYPE B-6.24</li> <li>(12) CLASS D PATCH (AS DIRECTED BY THE ENGINEER), VARIES 11" TO 13"</li> <li>(13) CLASS D PATCH, 7" (AS DIRECTED BY THE ENGINEER), (SHOULDER)</li> <li>(14) COMB. CONC. CURB &amp; GUTTER REMOVAL (AS DIRECTED BY THE ENGINEER)</li> <li>(15) SIDEWALK REMOVAL (AS DIRECTED BY THE ENGINEER)</li> </ul> |
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0369	10-00288-02-RS	DUPAGE	29	5
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				

NOTE: EXISTING RIGHT-OF-WAY IS 100 FT EACH SIDE OF THE CENTERLINE OF 75TH STREET THROUGHOUT THE TOTAL LENGTH OF THE PROJECT

PROJECT BEGINS STA. 63+50



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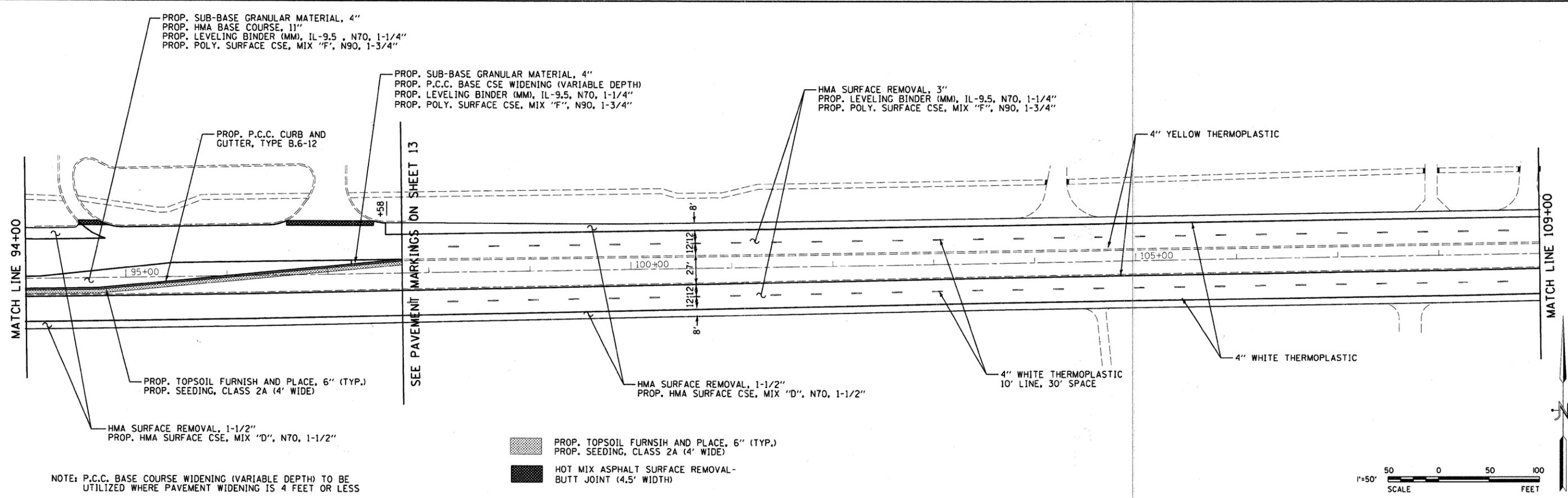
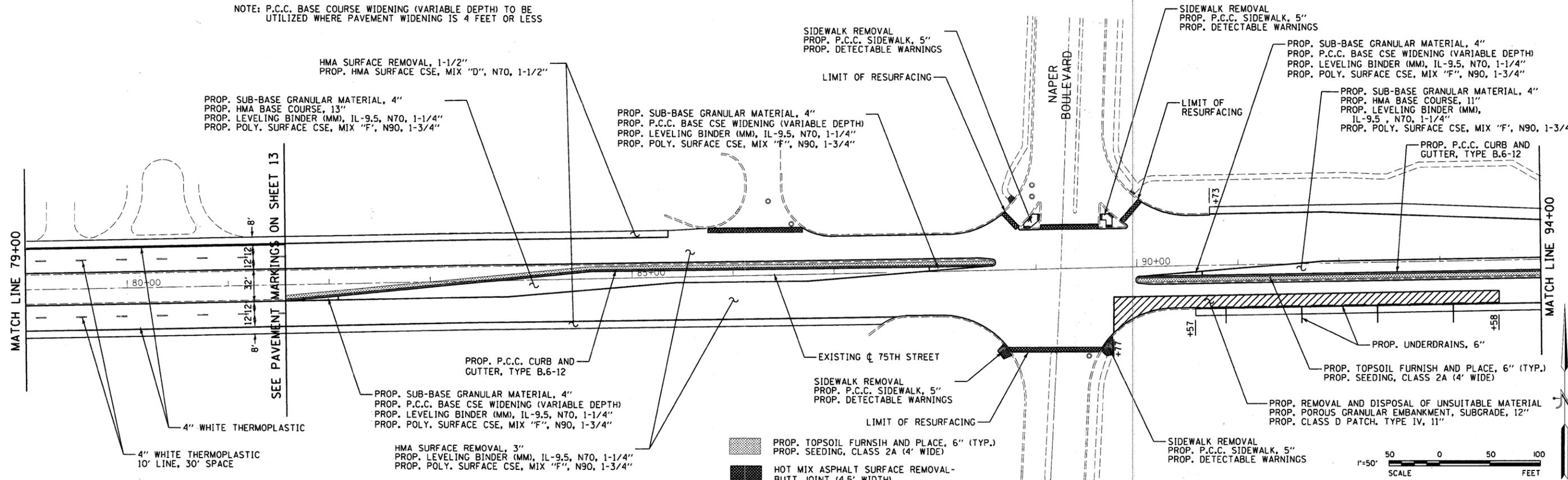
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**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 63+50 TO STA. 79+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	6
CONTRACT NO. 63575			ILLINOIS FED. AID PROJECT	

NOTE: P.C.C. BASE COURSE WIDENING (VARIABLE DEPTH) TO BE UTILIZED WHERE PAVEMENT WIDENING IS 4 FEET OR LESS



NOTE: P.C.C. BASE COURSE WIDENING (VARIABLE DEPTH) TO BE UTILIZED WHERE PAVEMENT WIDENING IS 4 FEET OR LESS

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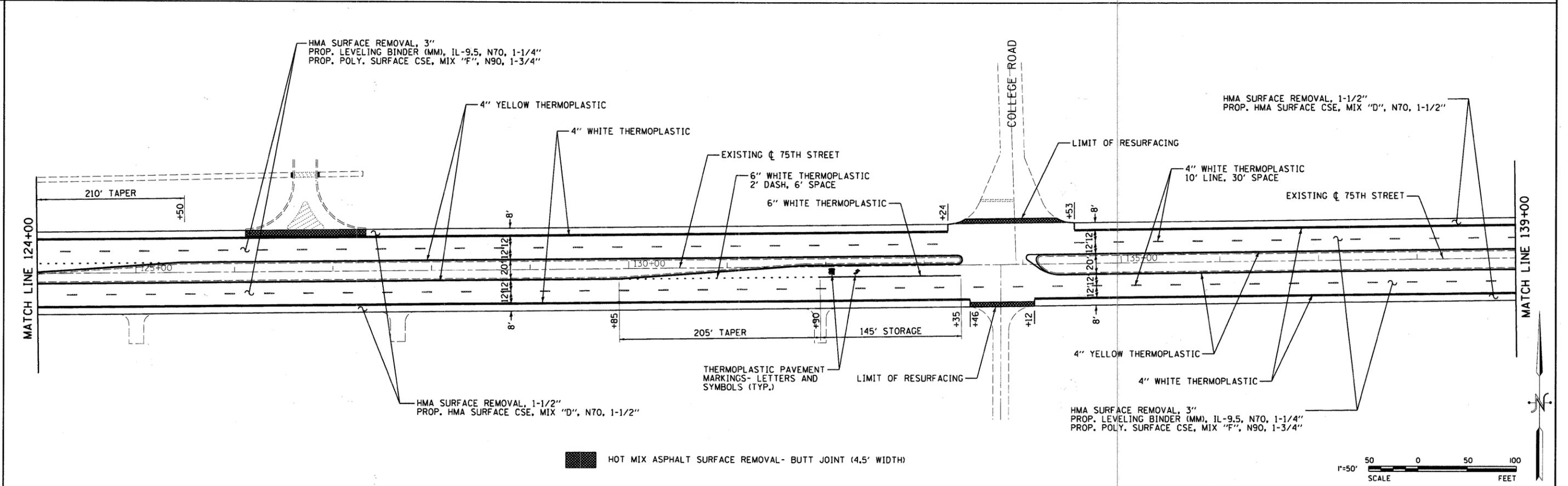
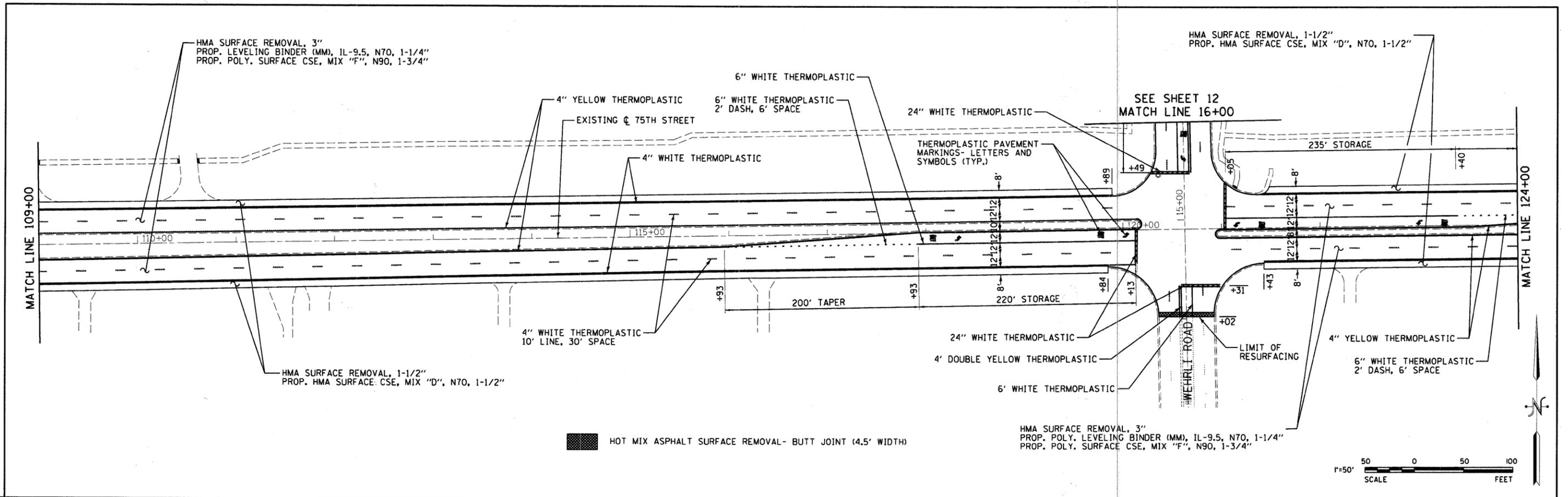
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**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 79+00 TO STA. 109+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	7
				CONTRACT NO. 63575
ILLINOIS FED. AID PROJECT				



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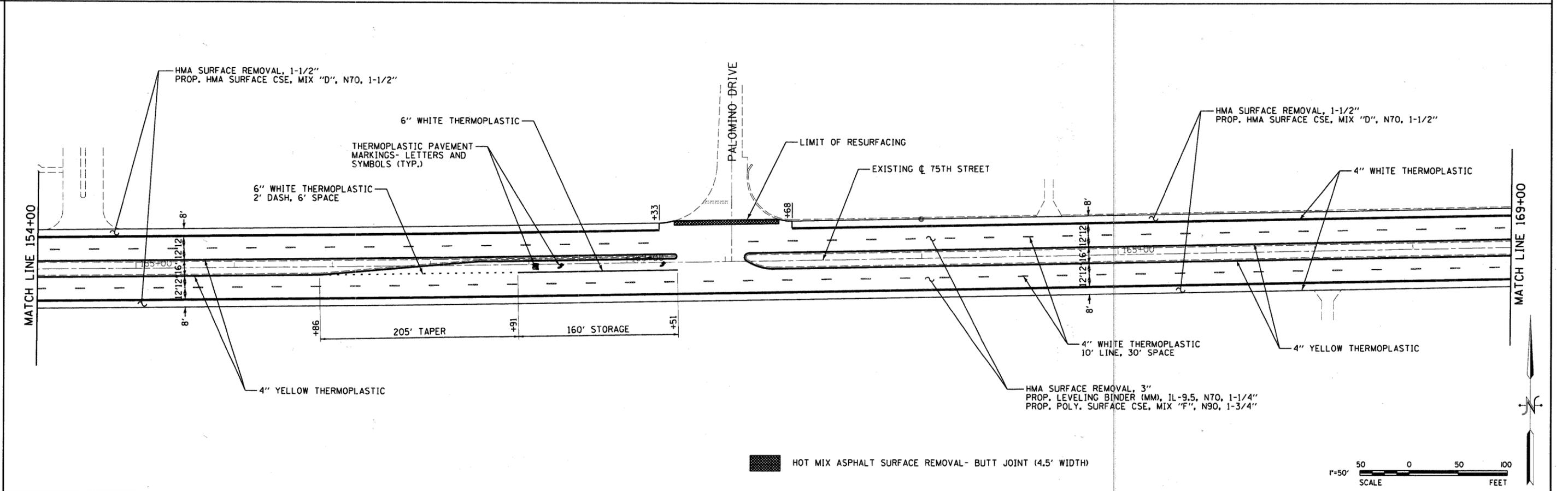
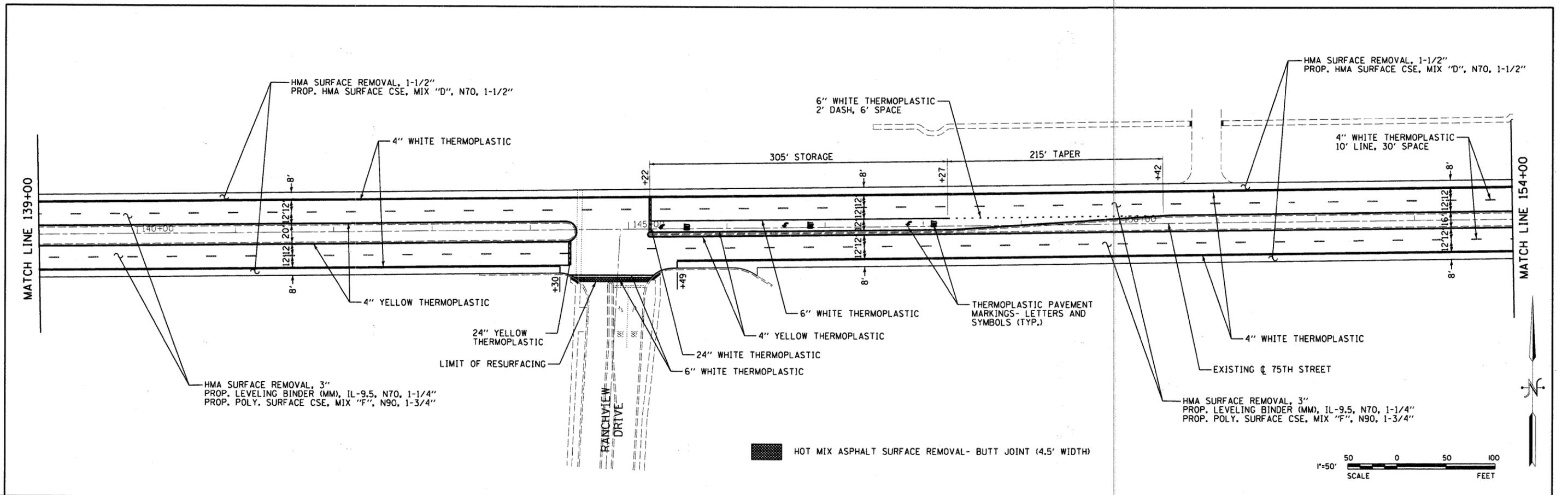
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**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 109+00 TO STA. 139+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	8
CONTRACT NO. 63575				ILLINOIS FED. AID PROJECT



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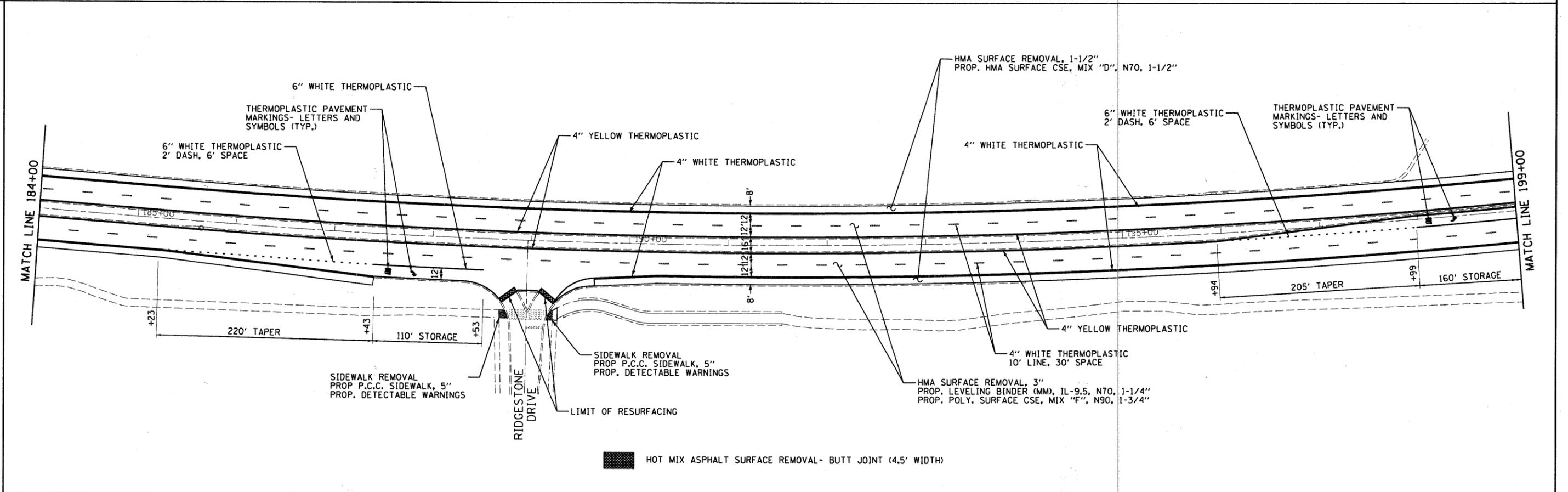
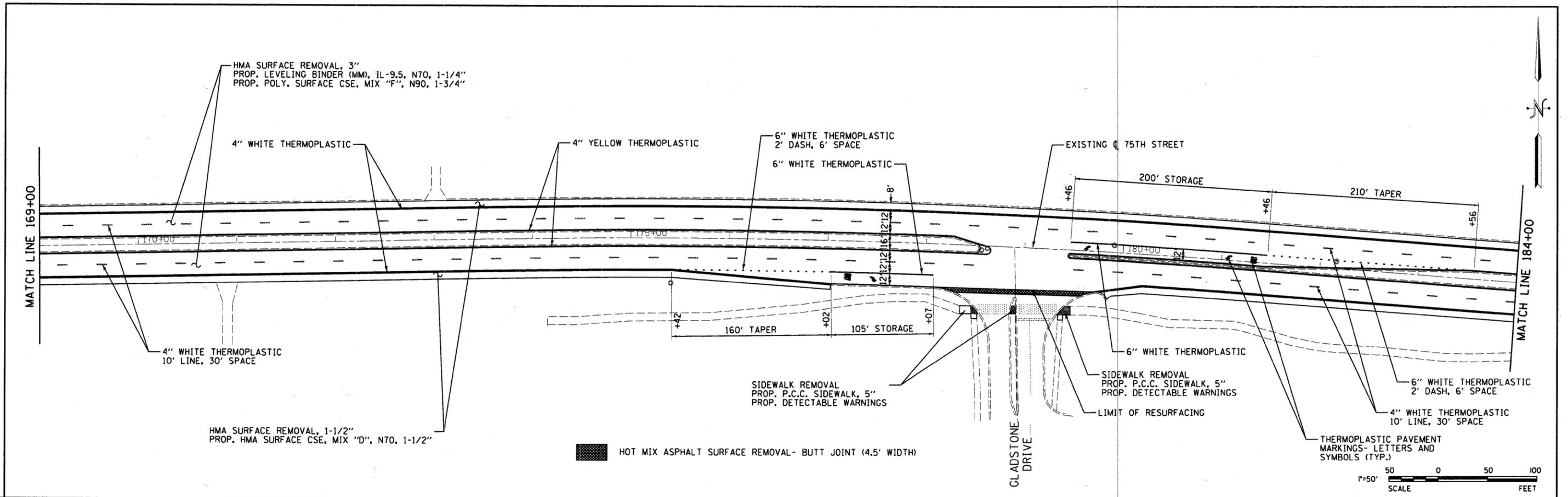
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**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 139+00 TO STA. 169+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	9
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				



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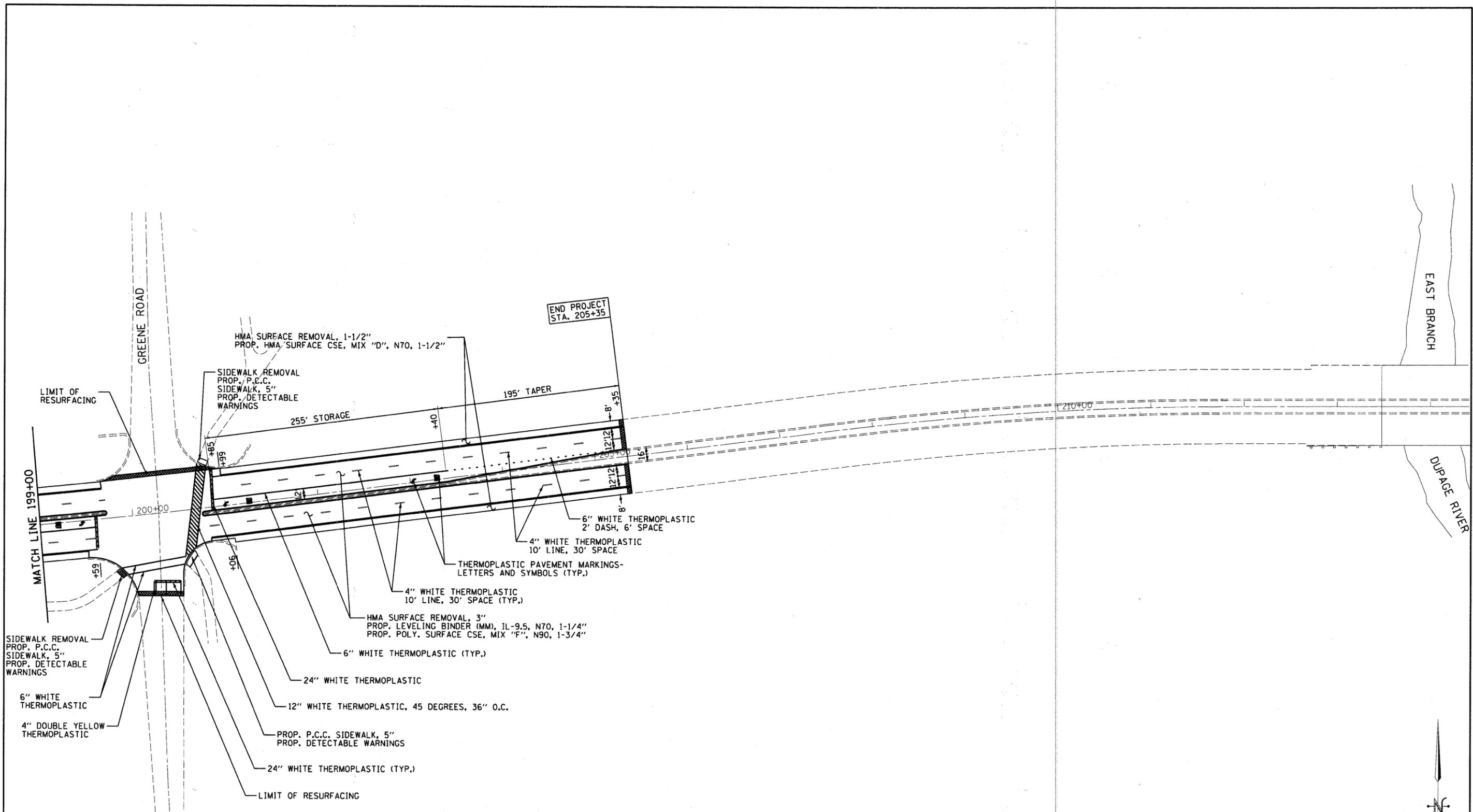
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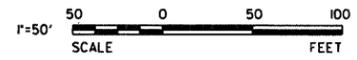
**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 169+00 TO STA. 199+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	10
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				



■ HOT MIX ASPHALT SURFACE REMOVAL- BUTT JOINT (4.5' WIDTH)



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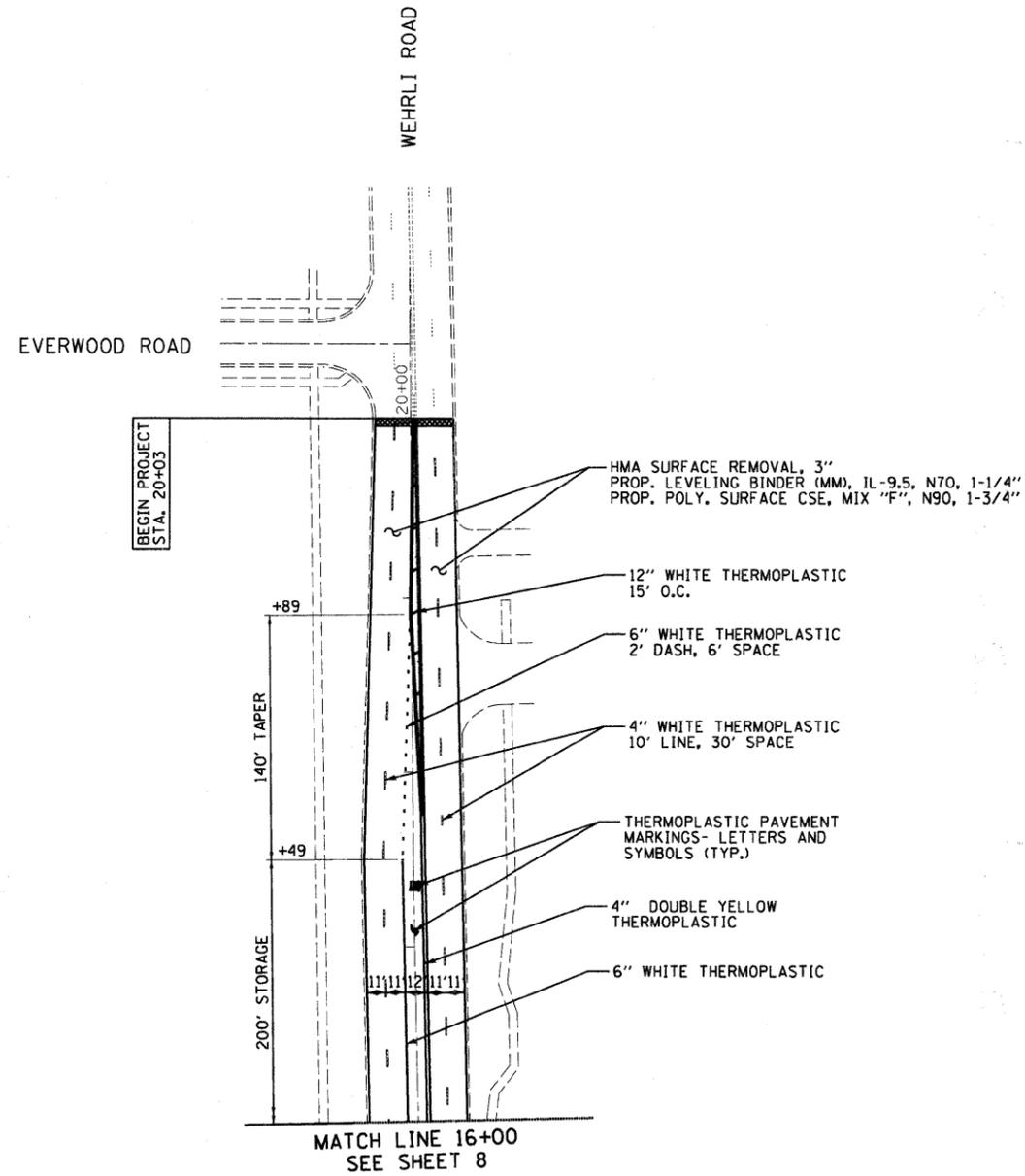
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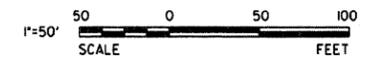
**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 199+00 TO STA. 205+35

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	11
CONTRACT NO. 63575			ILLINOIS FED. AID PROJECT	



 HOT MIX ASPHALT SURFACE REMOVAL- BUTT JOINT (4.5' WIDTH)



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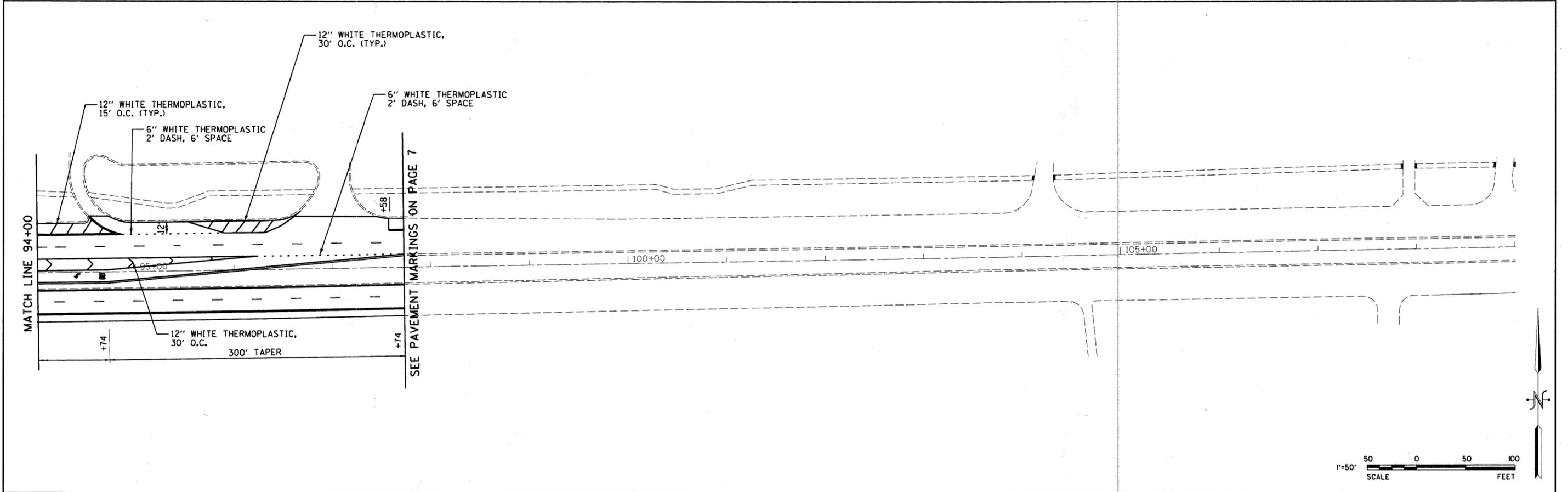
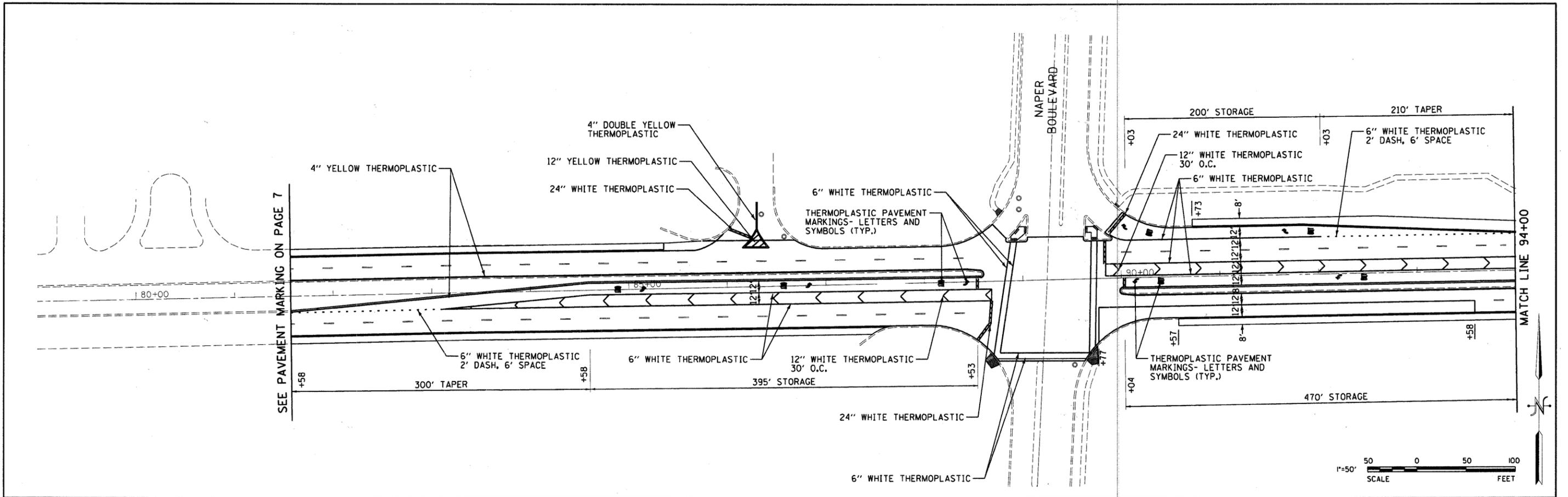
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**75TH STREET**  
**OXFORD LANE TO GREENE ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 16+00 TO STA. 20+03

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	12
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				



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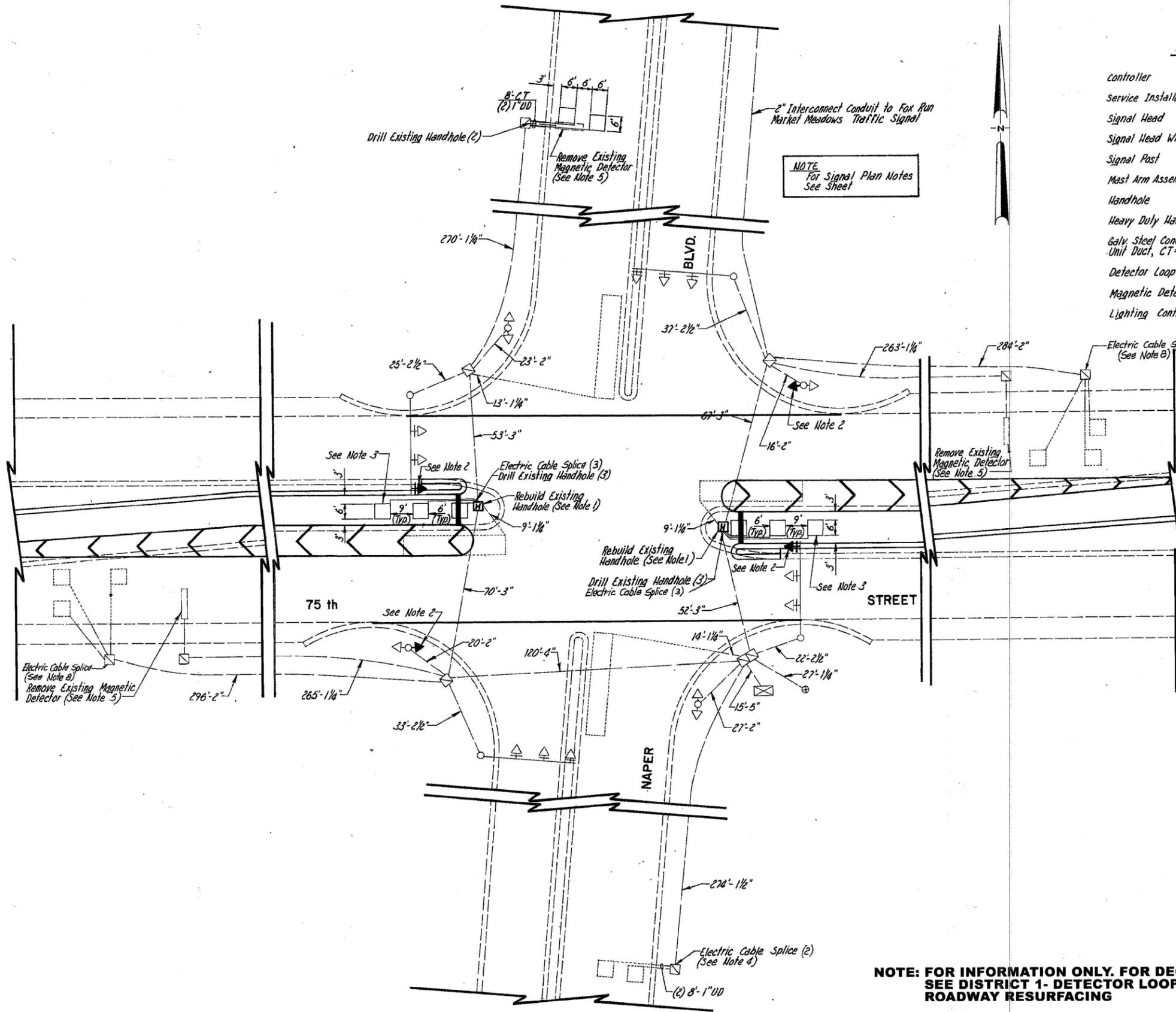
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**75TH STREET  
 PAVEMENT MARKING PLAN - NAPER BLVD.**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 79+00 TO STA. 109+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	13
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				



**SIGNAL PLAN LEGEND**

	EXISTING	PROPOSED
Controller	⊠	⊠
Service Installation	□	→
Signal Head	▽	→
Signal Head With Backplate	▽	→
Signal Post	○	○
Mast Arm Assembly and Pole, Steel	—	—
Handhole	⊠	⊠
Heavy Duty Handhole		⊠
Galv. Steel Conduit (T= Trench, UD= Unit Duct, CT= Common Trench)	—	—
Detector Loop	□	□
Magnetic Detector	⊠	⊠
Lighting Control Unit	⊙	⊙

**NOTE**  
For Signal Plan Notes  
See Sheet

**NOTE: FOR INFORMATION ONLY. FOR DETECTOR LOOP REPLACEMENT, SEE DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING**

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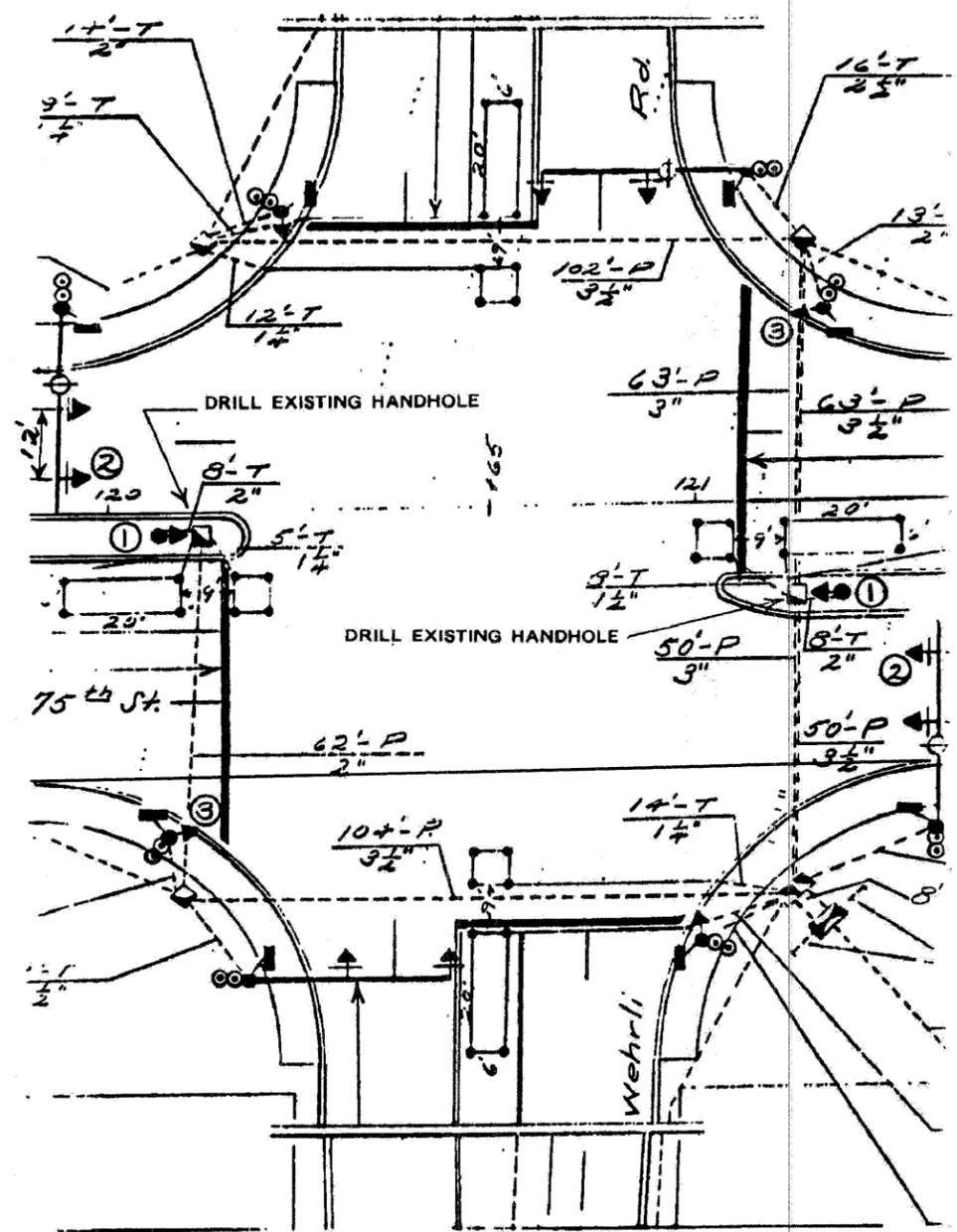
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**75TH STREET AND NAPER BLVD.  
EXISTING DETECTOR LOOP PLAN**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	14
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				

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



**GENERAL PLAN**

**TRAFFIC SIGNAL LEGEND**

- |                                    |                 |
|------------------------------------|-----------------|
|                                    | <b>EXISTING</b> |
| CONTROLLER                         |                 |
| SERVICE INSTALLATION               |                 |
| SIGNAL HEAD                        |                 |
| SIGNAL HEAD WITH BACKPLATE         |                 |
| SIGNAL POST                        |                 |
| MAST ARM ASSEMBLY AND POLE, STEEL  |                 |
| HANDHOLE                           |                 |
| HEAVY DUTY HANDHOLE                |                 |
| DOUBLE HANDHOLE                    |                 |
| G. S. CONDUIT - TRENCHED OR PUSHED |                 |
| DETECTOR LOOP                      |                 |
| COMMON TRENCH                      | CT              |
| UNIT DUCT                          | UD              |

**NOTE: FOR INFORMATION ONLY. FOR DETECTOR LOOP REPLACEMENT, SEE DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING**

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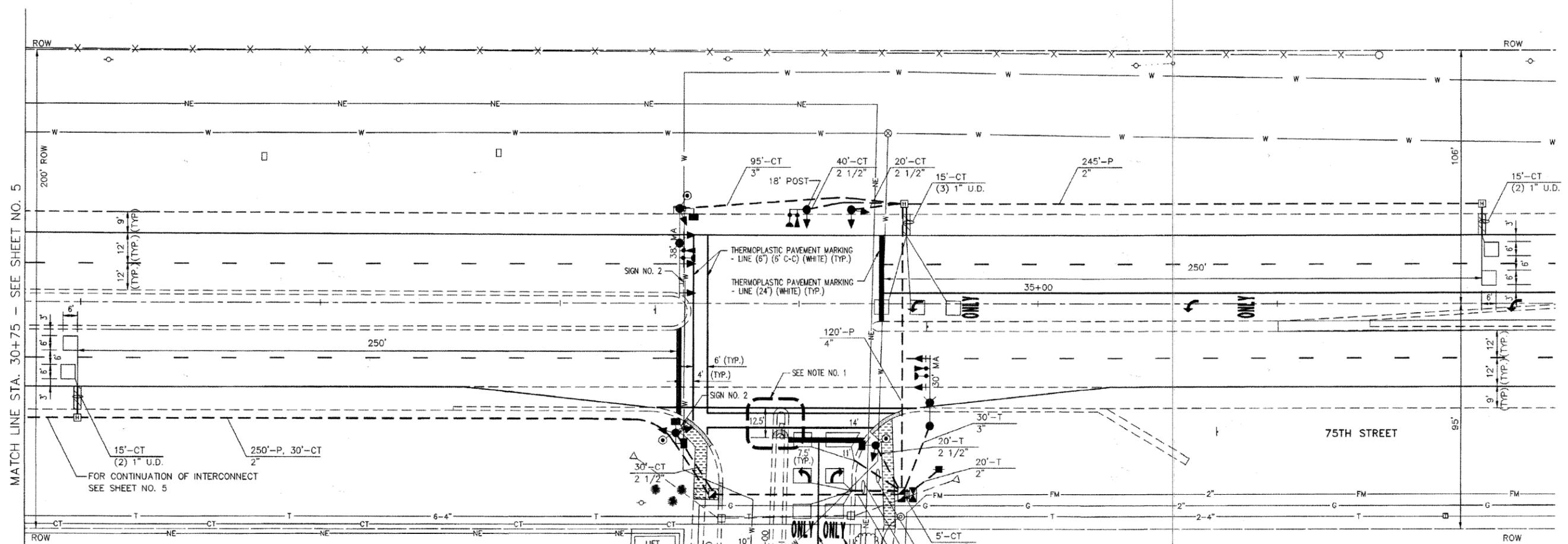
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**75TH STREET AND WEHRLI ROAD  
 EXISTING DETECTOR LOOP PLAN**

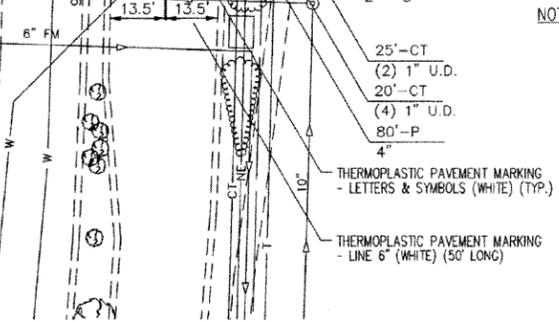
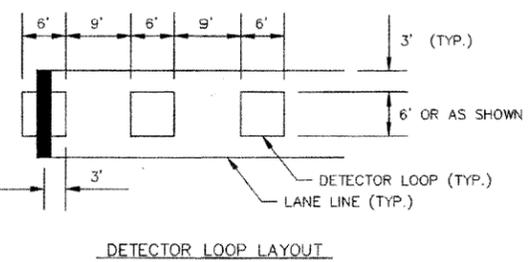
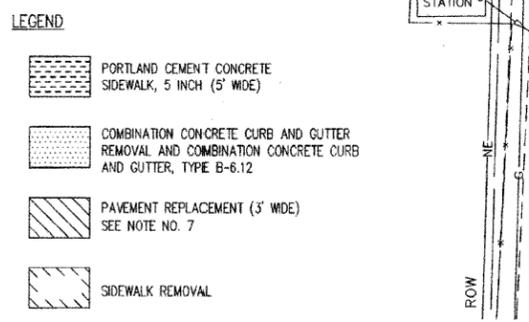
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 0369	SECTION 10-00288-02-RS	COUNTY DUPAGE	TOTAL SHEETS 29	SHEET NO. 15
CONTRACT NO. 63575				ILLINOIS FED. AID PROJECT



**TRAFFIC SIGNAL LEGEND**

EXISTING	PROPOSED
CONTROLLER	[Symbol]
SERVICE INSTALLATION	[Symbol]
SIGNAL HEAD	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]
SIGNAL POST	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]
COMMON TRENCH	[Symbol]
UNIT DUCT	[Symbol]
HANDHOLE	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]
DOUBLE HANDHOLE	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]
DETECTOR LOOP	[Symbol]
CAST IRON JUNCTION BOX	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]
CONFIRMATION BEACON	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]
CONDUIT SPLICE	[Symbol]
WOOD POLE	[Symbol]
LUMINAIRE	[Symbol]



- NOTES**
- THE FOLLOWING WORK SHALL BE COMPLETED AT THIS LOCATION:  
 REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE: THE DIRECT BURIAL LIGHT POLE, MAST ARM AND LUMINAIRE SHALL BE RETURNED TO THE CITY OF NAPERVILLE.  
 REMOVE SIGN PANEL - TYPE 1: THE EXISTING STREET SIGN AND NO LEFT TURN SIGN WITH SUPPLEMENTAL PLATE MOUNTED ON THE LIGHT POLE SHALL BE REMOVED AND RETURNED TO THE CITY OF NAPERVILLE. THE NO LEFT TURN SIGN WITH SUPPLEMENTAL PLATE SHALL BE TEMPORARILY MOUNTED IN THE MEDIAN UNTIL THE TRAFFIC SIGNALS ARE FULLY OPERATIONAL. THE TEMPORARY MOUNTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.  
 RELOCATE SIGN PANEL - TYPE 1: THE EXISTING KEEP RIGHT SIGN MOUNTED ON THE LIGHT POLE SHALL BE REMOVED AND STORED BY THE CONTRACTOR. THE KEEP RIGHT SIGN SHALL BE TEMPORARILY MOUNTED IN THE MEDIAN UNTIL THE TRAFFIC SIGNALS ARE OPERATIONAL. AT SUCH TIME, THE KEEP RIGHT SIGN WILL BE PERMANENTLY MOUNTED ON A NEW TYPE B METAL POST. THE NEW TYPE B METAL POST WILL BE PAID FOR SEPARATELY.  
 THE CONTRACTOR SHALL REMOVE 12.5' OF THE EXISTING MEDIAN, THIS WORK SHALL BE PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER REMOVAL. THE AREA WILL THEN BE EXCAVATED TO A DEPTH OF THIRTEEN INCHES BELOW THE TOP OF EXISTING PAVEMENT. SUB-BASE GRANULAR MATERIAL, TYPE B 4" WILL BE PLACED IN THE BOTTOM OF THE EXCAVATED AREA. NEW COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 WILL BE INSTALLED TO CLOSE OFF THE NOSE OF THE MEDIAN. THE REMAINING AREA WILL BE FILLED WITH BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH) TYPE 2, 5". THE EARTH EXCAVATION AND/OR EMBANKMENT REQUIRED SHALL BE CONSIDERED INCIDENTAL TO THE SUB-BASE AND PAVEMENT PAY ITEMS.
  - ALL EXCAVATION, EMBANKMENT OR REGRADING REQUIRED TO CONSTRUCT NEW SIDEWALK OR COMBINATION CURB AND GUTTER SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE PAY ITEMS.
  - SIGN NO. 1 SHALL BE ERECTED ON A NEW TYPE B METAL POST AT THE START OF THE LEFT AND RIGHT TURN LANES. THE EXACT LOCATION SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION.
  - SIGN NO. 3 SHALL BE ERECTED ON TWO NEW TYPE B METAL POSTS APPROXIMATELY 540 FEET FROM THE STOP BAR ON THE EAST AND WEST LEGS OF THE INTERSECTION. THE EXACT LOCATION SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION.
  - REMOVE SIGN PANEL ASSEMBLY - TYPE A: THE CONTRACTOR SHALL NOT REMOVE THE EXISTING STOP SIGN UNTIL THE TRAFFIC SIGNALS ARE FULLY OPERATIONAL. IF THE SIGN INTERFERES WITH THE CONSTRUCTION OPERATIONS, IT SHALL BE TEMPORARILY MOUNTED. THE TEMPORARY MOUNTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
  - THE PROPOSED POC SIDEWALK 5" SHALL BE CONSTRUCTED WITH TYPE B HANDICAP RAMPS AS SHOWN IN THE STANDARD DRAWINGS.
  - THE TRAFFIC SIGNAL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" BRAND TO MATCH THE EXISTING SYSTEM.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STOP SIGNS AT THE INTERSECTION UNTIL THE TRAFFIC SIGNAL TURN-ON. THE CITY OF NAPERVILLE DEPARTMENT OF PUBLIC WORKS WILL REMOVE THE EXISTING STOP SIGNS AND POSTS AT THE TIME OF THE TRAFFIC SIGNAL TURN-ON.
  - THE 24-INCH THERMOPLASTIC PAVEMENT MARKING FOR THE STOP BARS ON 75TH STREET AND RANCH VIEW DRIVE SHALL BE INSTALLED AFTER THE TRAFFIC SIGNAL IS OPERATIONAL.

**NOTE: FOR INFORMATION ONLY. FOR DETECTOR LOOP REPLACEMENT, SEE DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING**

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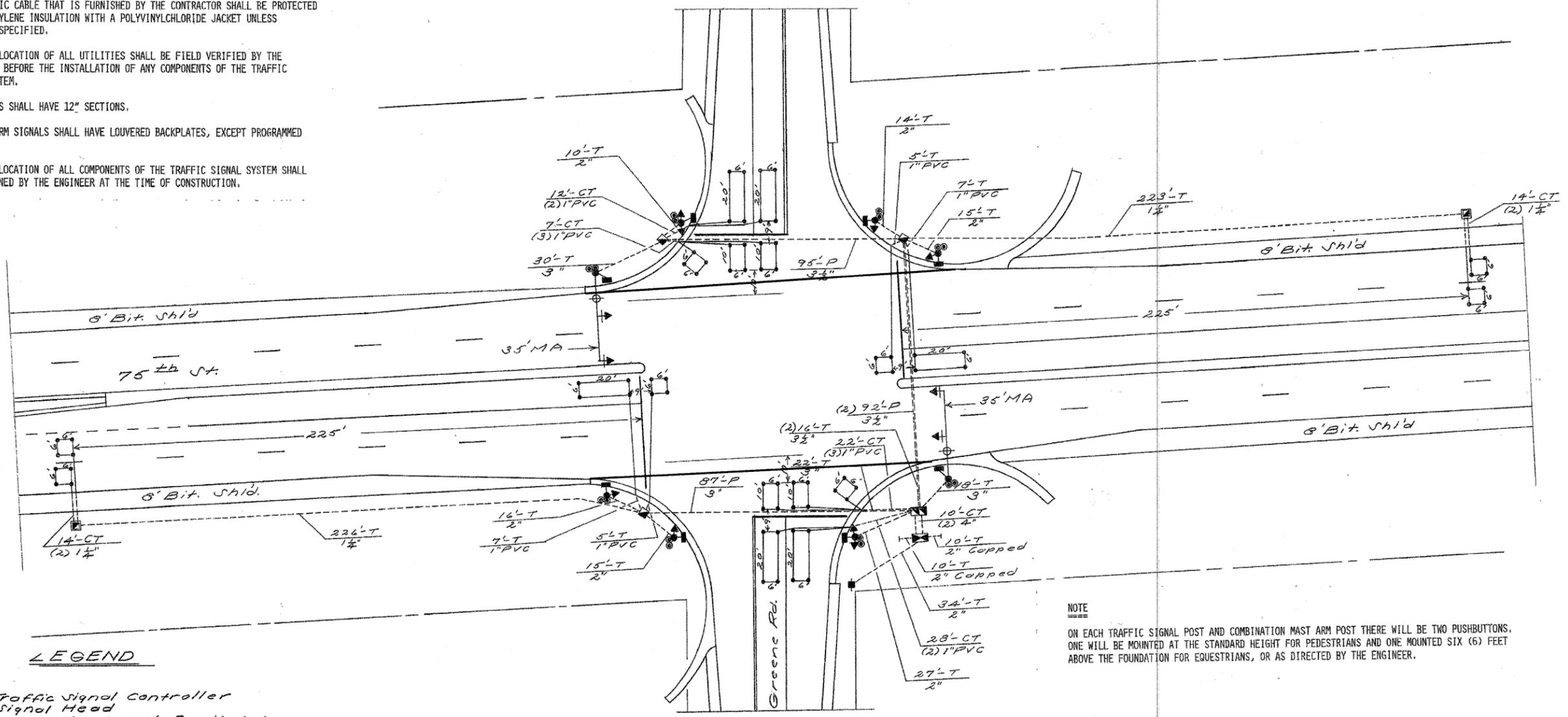
**75TH STREET AND RANCH VIEW DR.  
 EXISTING DETECTOR LOOP PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	16
CONTRACT NO. 63575				ILLINOIS FED. AID PROJECT

GENERAL NOTES

1. ALL DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS REQUIRED AND SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE LOOP DETECTOR AMPLIFIER MANUFACTURER'S RECOMMENDATIONS. THE DETECTOR LOOP SHALL BE MEASURED FOR THAT PORTION OF SAW CUT BEYOND THE SPLICE AS SPECIFIED IN SECTION 418.04 OF THE SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
2. LEAD-IN WIRING SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER'S RECOMMENDATIONS. THE 2/C SHIELDED CABLE TO BE USED FOR THE DETECTOR LOOP LEAD-IN SHALL BE MEASURED FROM THE SPLICE TO THE CONTROLLER AS SPECIFIED IN SECTION 421.04 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. FLAT CABLE WILL NOT BE PERMITTED.
3. ALL ELECTRIC CABLE THAT IS FURNISHED BY THE CONTRACTOR SHALL BE PROTECTED BY POLYETHYLENE INSULATION WITH A POLYVINYLCHLORIDE JACKET UNLESS OTHERWISE SPECIFIED.
4. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM.
5. ALL SIGNALS SHALL HAVE 12" SECTIONS.
6. ALL MAST ARM SIGNALS SHALL HAVE LOUVERED BACKPLATES, EXCEPT PROGRAMMED SIGNALS.
7. THE EXACT LOCATION OF ALL COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.



GENERAL PLAN  
scale 1" = 20'

NOTE  
ON EACH TRAFFIC SIGNAL POST AND COMBINATION MAST ARM POST THERE WILL BE TWO PUSHBUTTONS. ONE WILL BE MOUNTED AT THE STANDARD HEIGHT FOR PEDESTRIANS AND ONE MOUNTED SIX (6) FEET ABOVE THE FOUNDATION FOR EQUESTRIANS, OR AS DIRECTED BY THE ENGINEER.

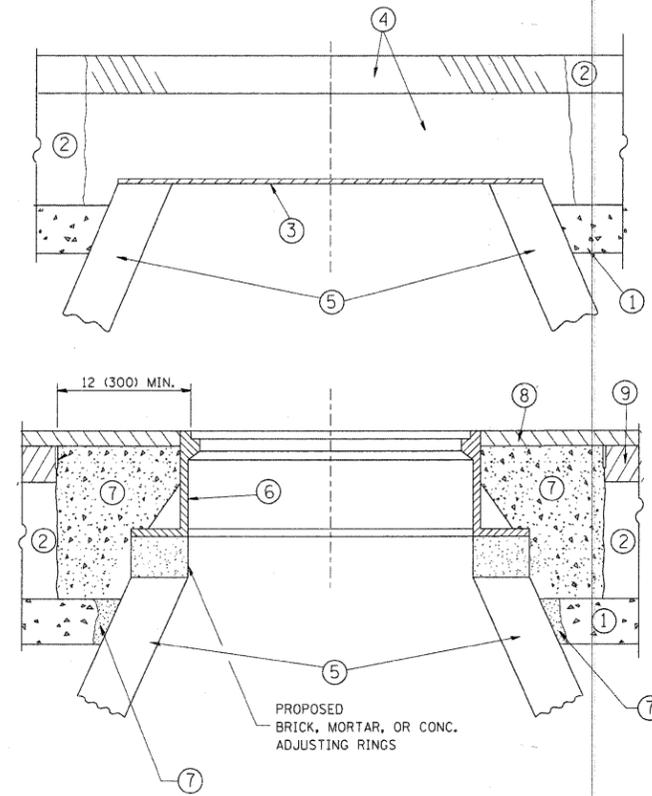
NOTE: FOR INFORMATION ONLY. FOR DETECTOR LOOP REPLACEMENT, SEE DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

LEGEND

- Traffic signal Controller
- Signal Head
- Signal Head with Backplate
- Signal Post
- Mast Arm Assembly And Post
- Handhole
- Double Handhole
- Service Pole
- Detector Loop
- Luminaire
- G. S. Conduit, Unit Duct In Trench or Pushed
- Common Trench
- Heavy Duty Handhole
- Pushbutton
- Redeurban Signal Head

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	17
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				



**NOTES:**

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

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

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

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

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

**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 4-1/2" (112.5) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING) & BINDER COURSE PLACEMENT)**

- 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 EXISTING BASE COURSE OR THE BINDER COURSE.

\* THE CLASS OF PP CONCRETE WILL BE AS UNLESS OTHERWISE SPECIFIED IN THE PLANS DIRECTED BY THE ENGINEER.

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

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS 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.

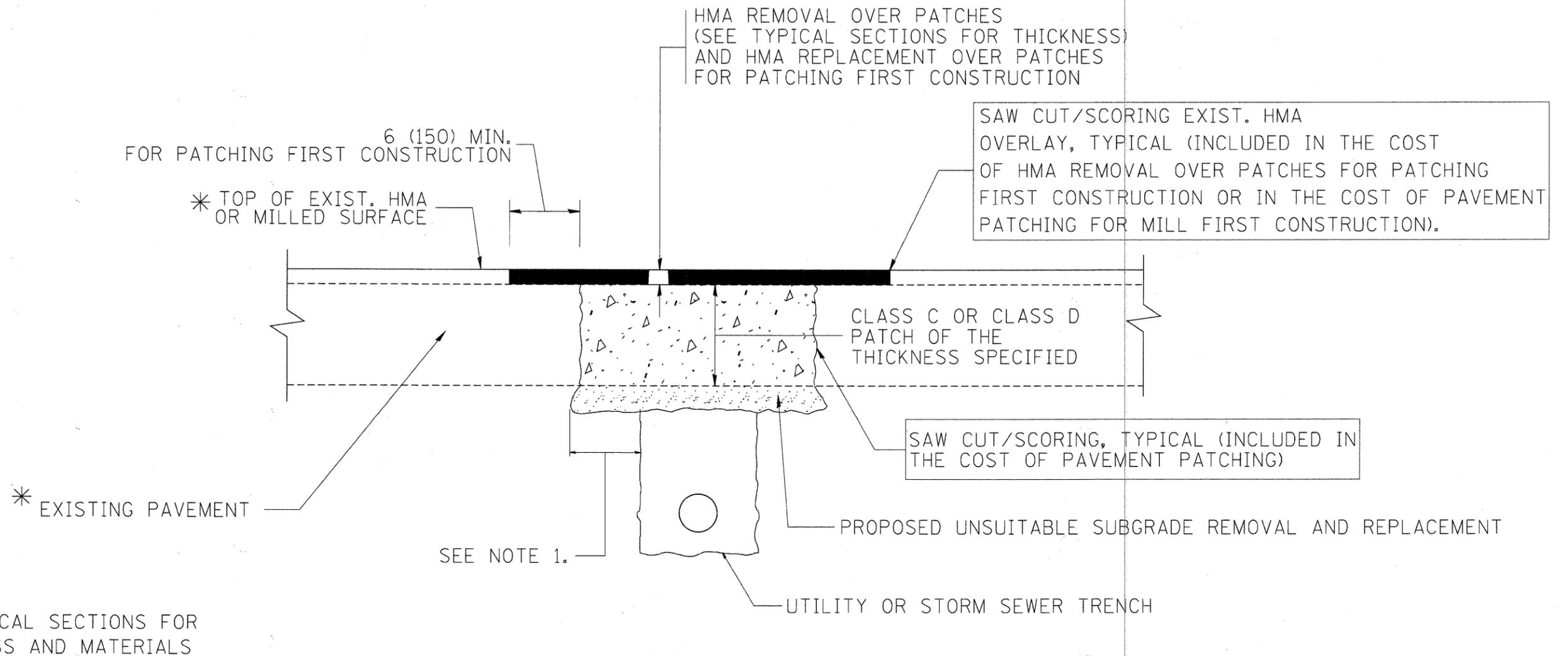
**BASIS OF PAYMENT:**

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

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = leyso	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-07	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>	F.A. RTE. 0369	SECTION 10-00288-02-RS	COUNTY DUPAGE	TOTAL SHEETS 29	SHEET NO. 18	
PLLOT SCALE = 48.9999' / IN.	CHECKED -	REVISED - R. WEDEMAN 05-14-04	REVISED - R. BORO 01-01-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	<b>0369-03 (DD-0)</b>		CONTRACT NO. 63575	
PLLOT DATE = 2/4/2011	DATE - 10-25-94	REVISED - R. BORO 02-01-11				STA. TO STA.		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			



**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)~~

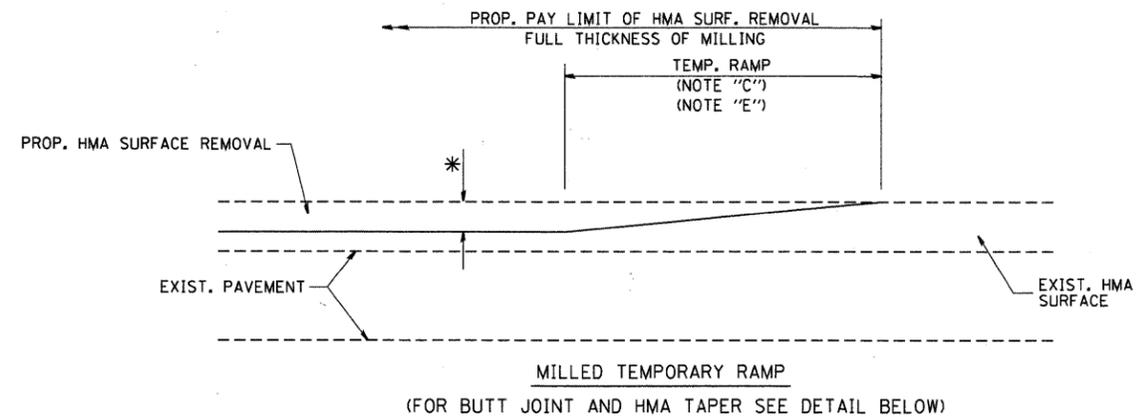
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

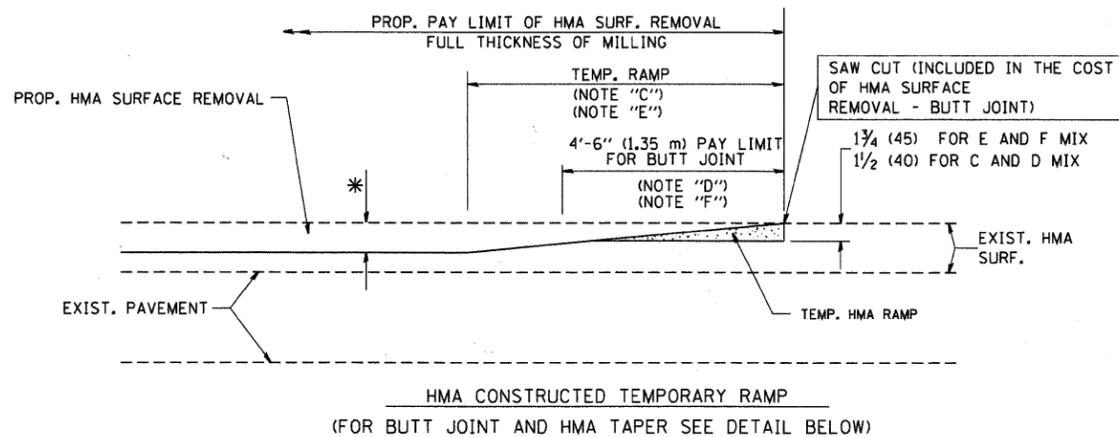
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

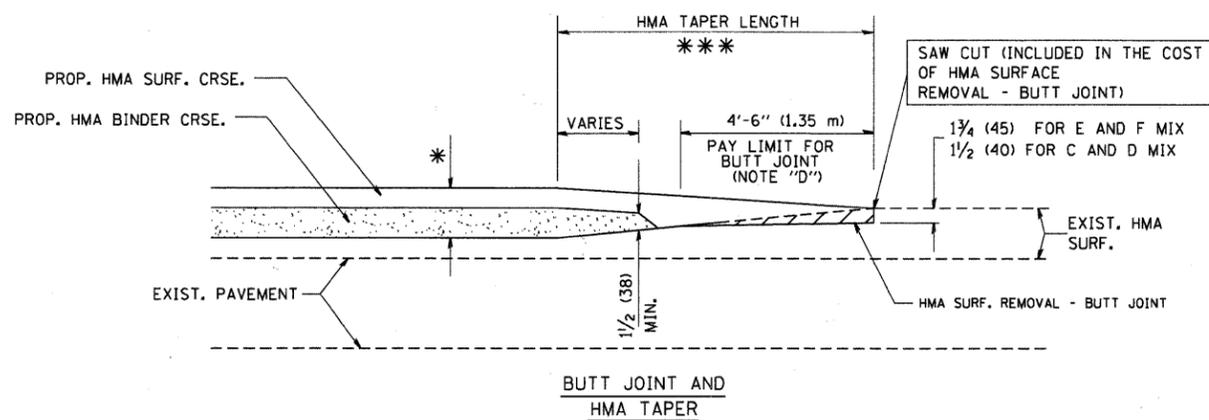
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	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>BD400-04 (BD-22)</b>		CONTRACT NO. 63575		
	PLOT DATE = 10/27/2008	CHECKED -	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT							
		DATE - 10-25-94	REVISED - K. ENG 10-27-08									



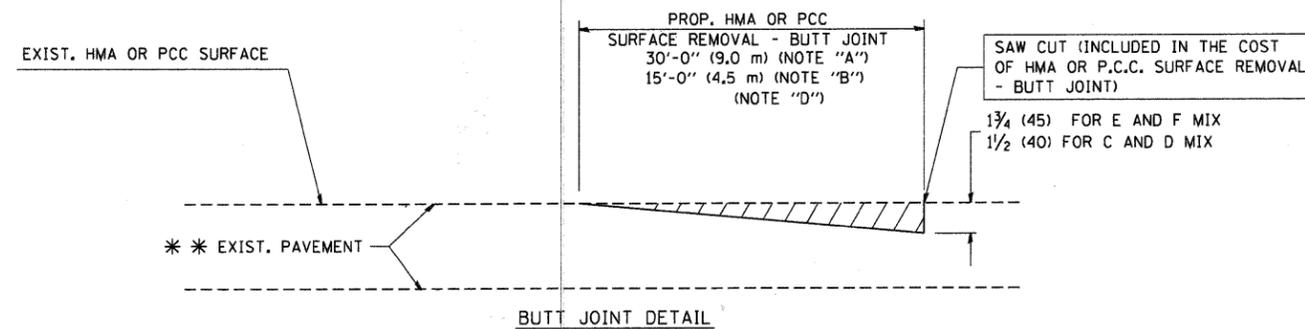
**OPTION 1**



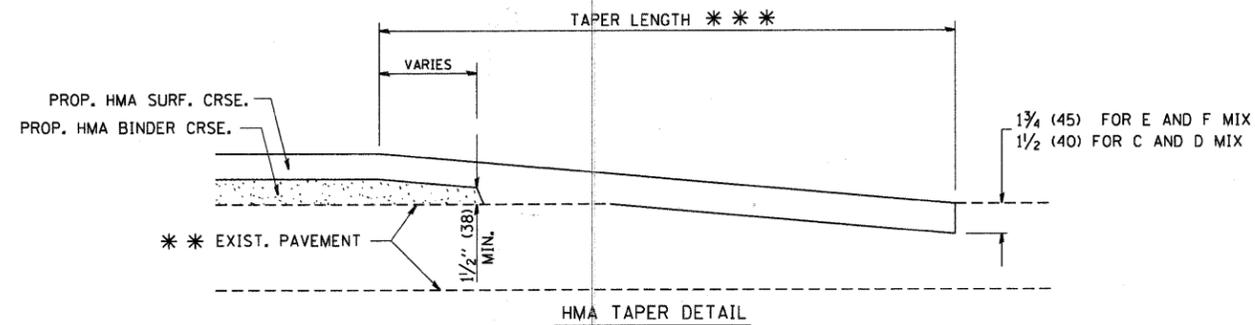
**OPTION 2  
TYPICAL TEMPORARY RAMP**



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



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

**NOTES**

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

**BASIS OF PAYMENT:**

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

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

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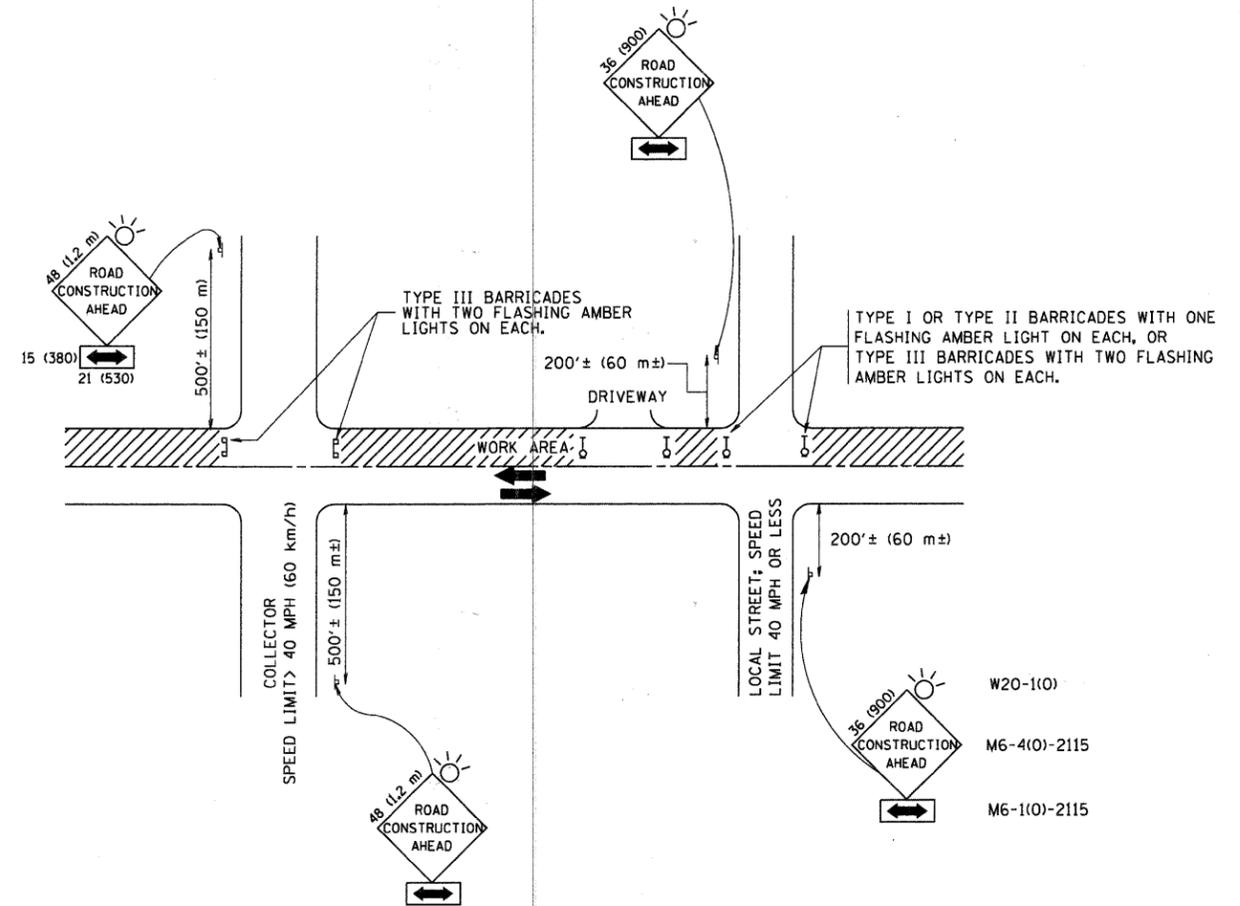
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PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED - A. ABBAS 03-21-97
PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - M. GOMEZ 04-06-01
		REVISED - R. BORO 01-01-07

**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. RTE. 0369	SECTION 10-00288-02-RS	COUNTY DUPAGE	TOTAL SHEETS 29	SHEET NO. 20
BD400-05 BD32		CONTRACT NO.		
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.

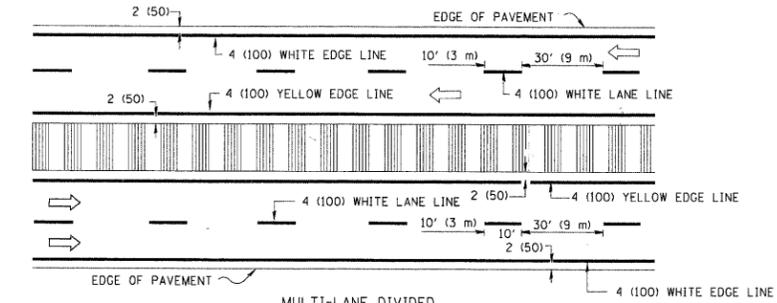
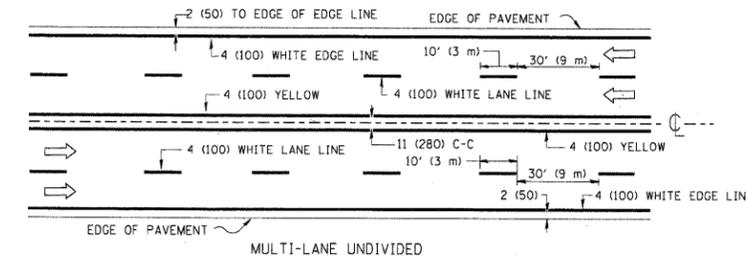
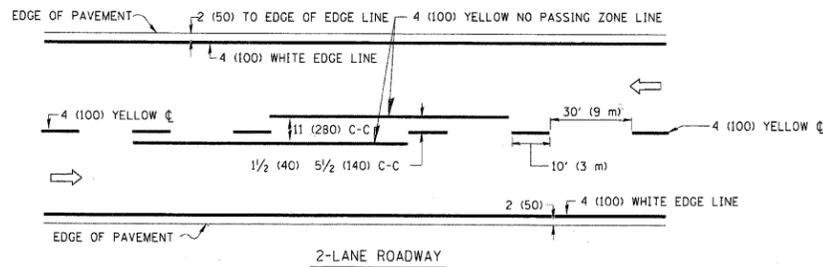
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	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

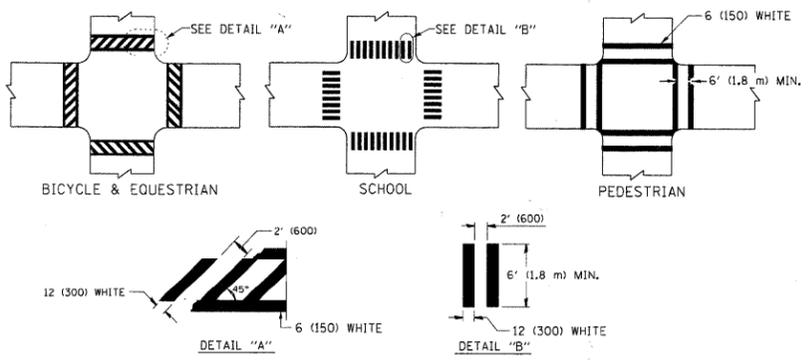
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

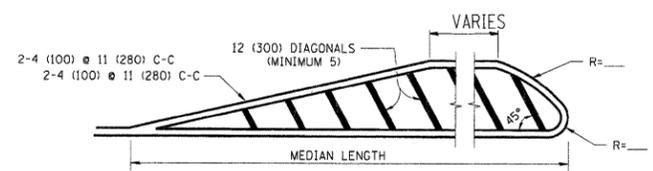
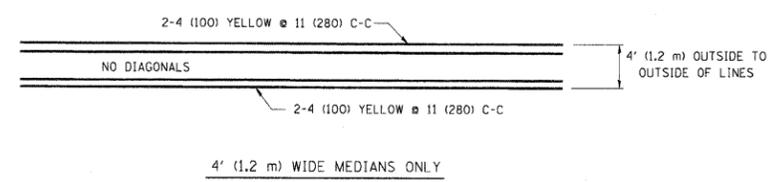


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

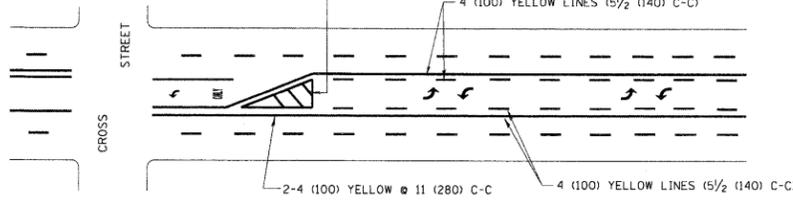


TYPICAL CROSSWALK MARKING

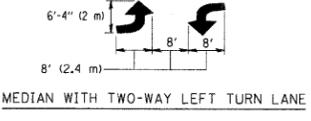


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

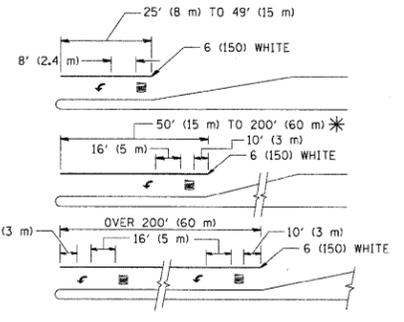
MEDIANS OVER 4' (1.2 m) WIDE



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.



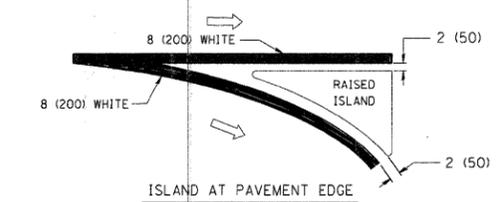
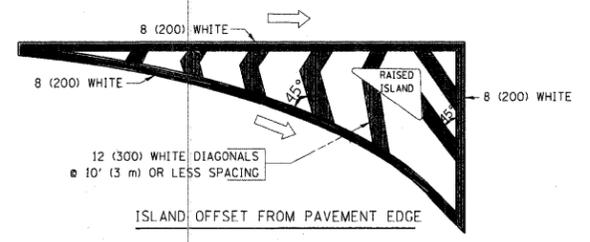
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

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

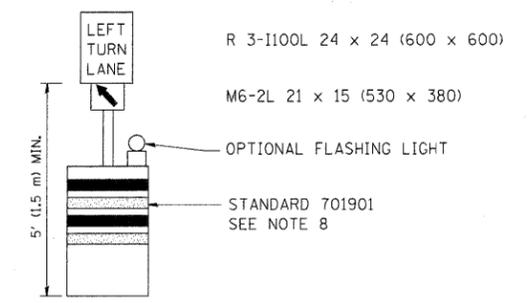
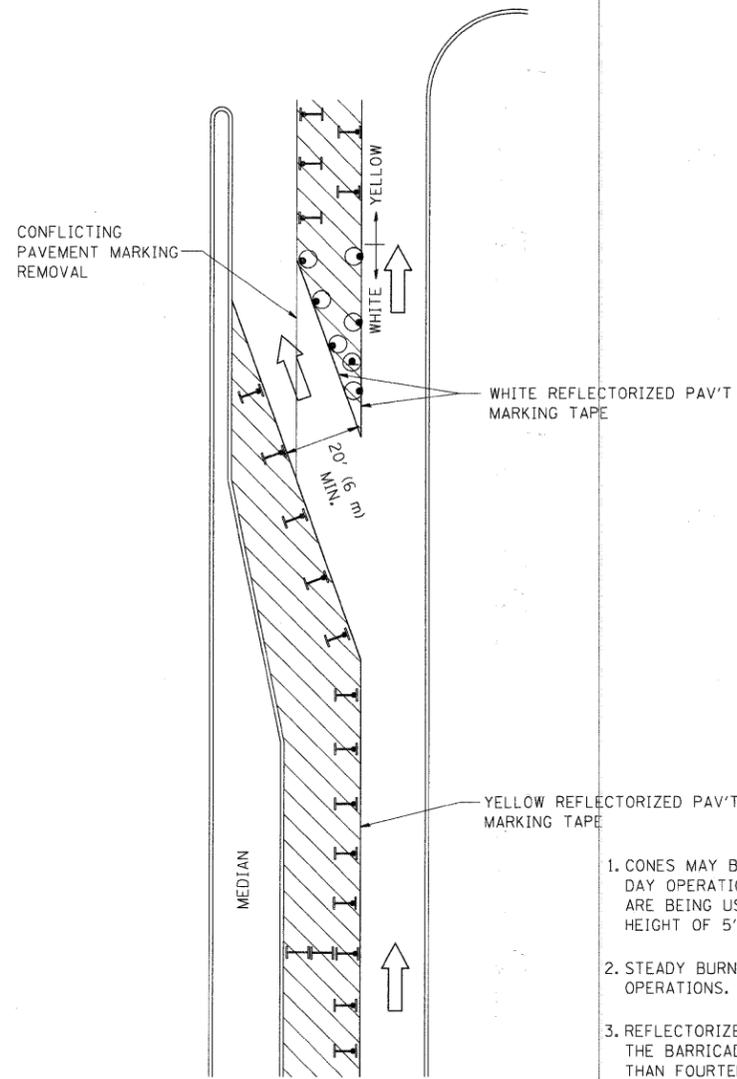
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	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	F.A. RTE. 0369	SECTION 10-00288-02-RS	COUNTY DUPAGE	TOTAL SHEETS 29	SHEET NO. 22
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CONTRACT NO. TC-13  
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

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

FILE NAME =	USER NAME = drivakosgn	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
est\pwwork\PWIDOT\DRIVAKOSGN\d0108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 49,9999 / / IN.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 9/14/2009	REVISED - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

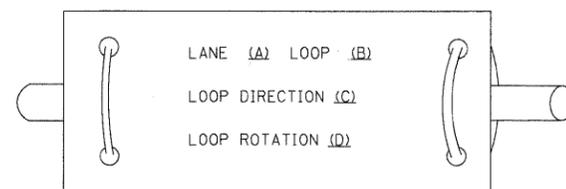
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	23
<b>TC-14</b>		CONTRACT NO. 63575		
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

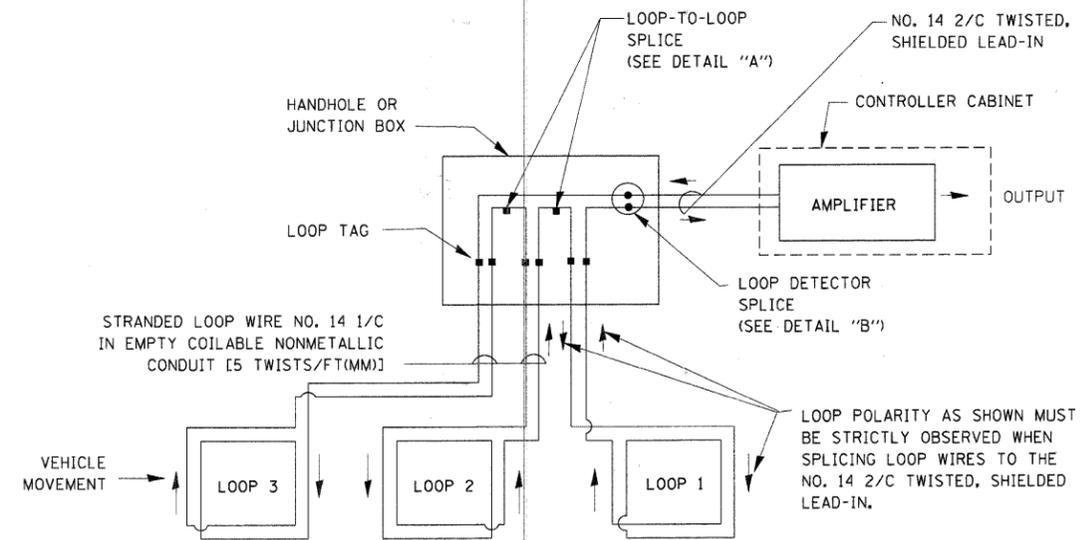
## LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 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.
- 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

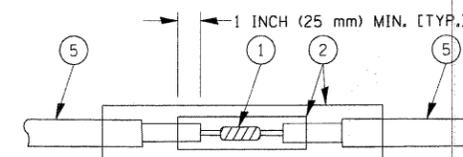


- LANE #1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

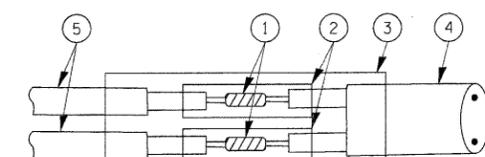


### DETECTOR LOOP WIRING SCHEMATIC

- 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.

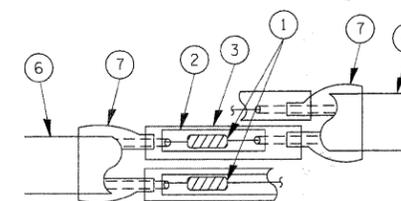


DETAIL "A"  
LOOP-TO-LOOP SPLICE

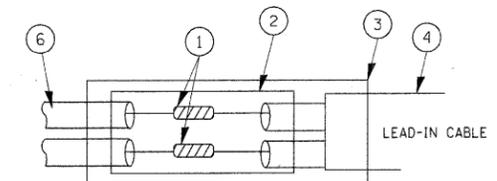


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

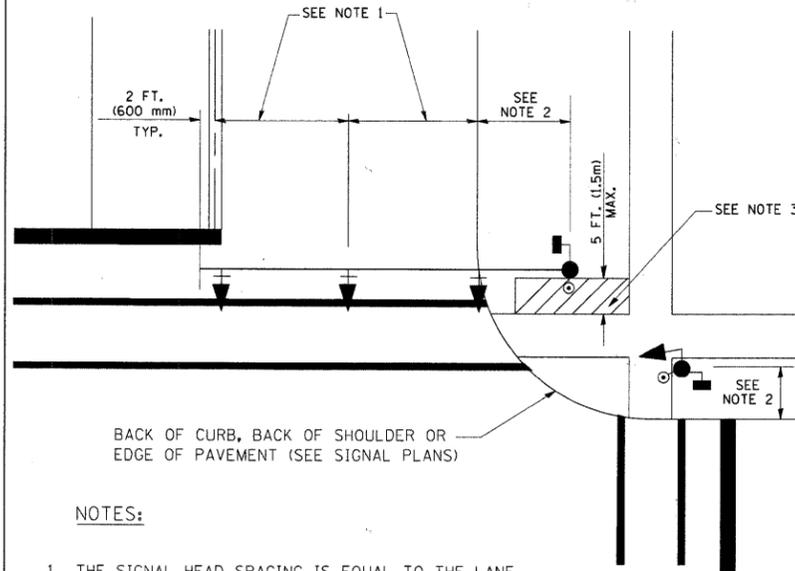
### LOOP DETECTOR SPLICE

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

FILE NAME =	USER NAME = bauerd	DESIGNED - DAD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd:\pwork\pwork\1001\BAUERDL\d0189315\ts05.dgn	DRAWN - BCK	REVISED -	0369			10-00288-02-RS	DUPAGE	29	24	
PLOT SCALE = 50,0000' / IN.	CHECKED - DAD	REVISED -	<b>TS-05</b>			CONTRACT NO. 63575				
PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT							
				SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.			

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

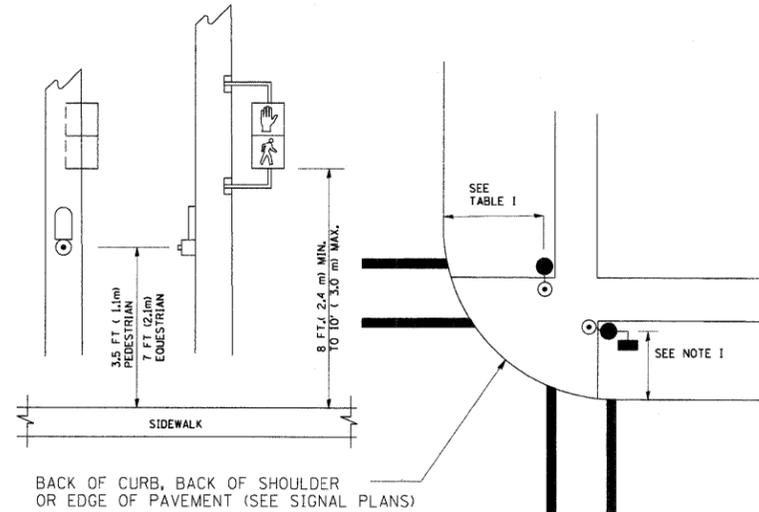
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT" ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

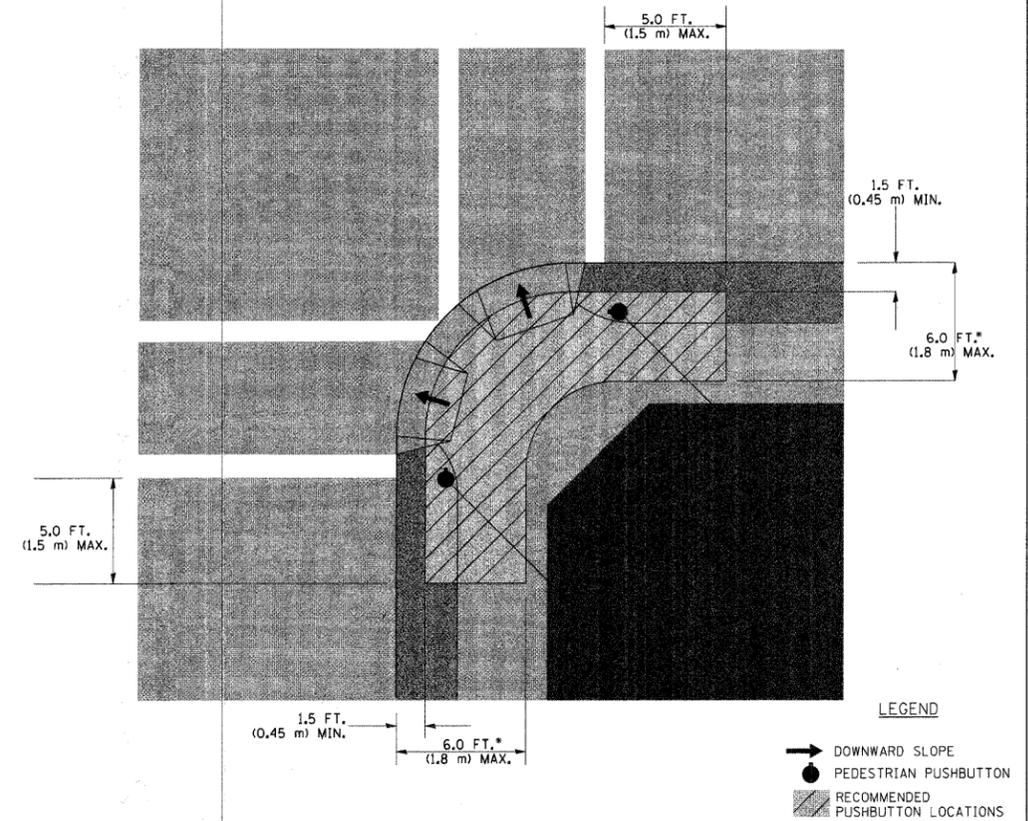
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT" ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

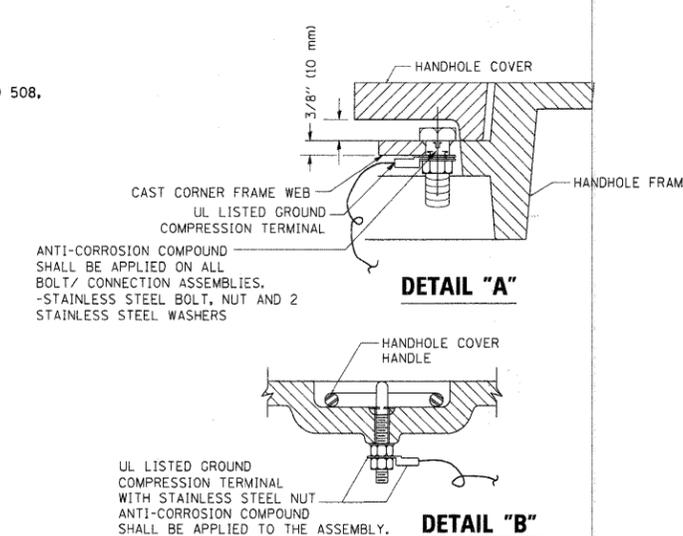
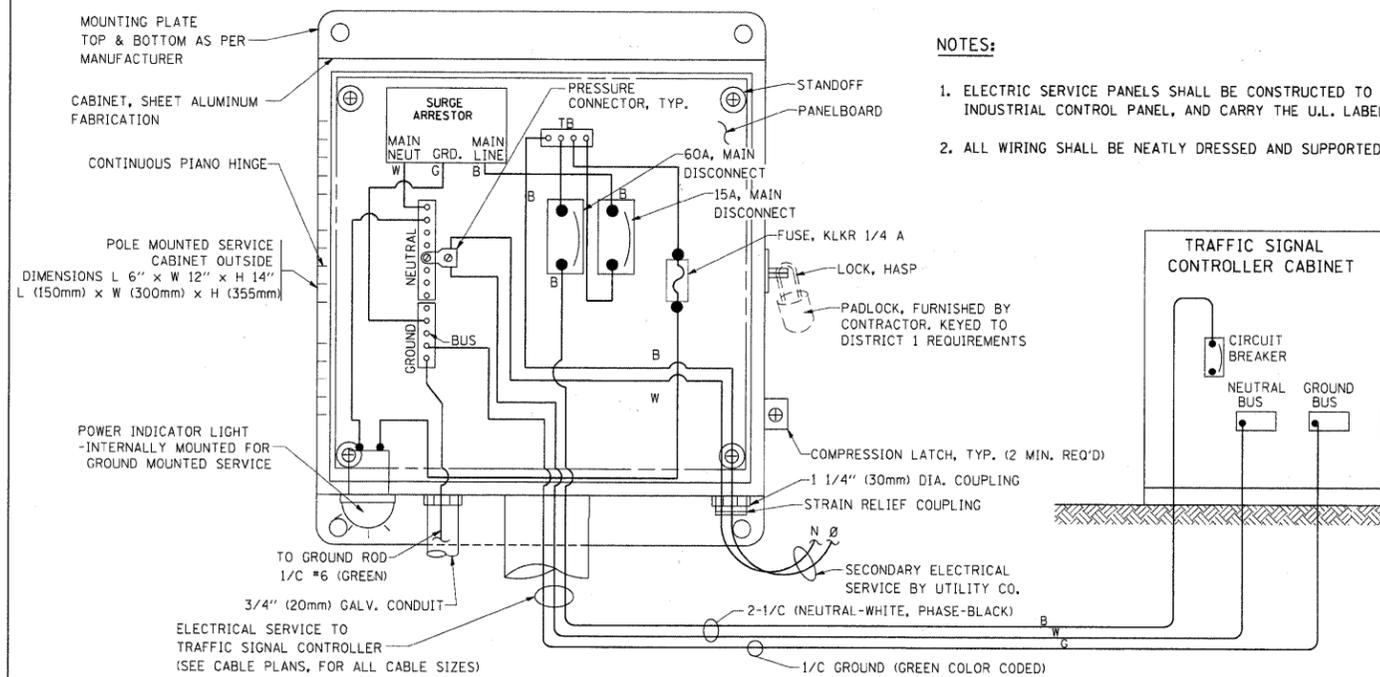
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

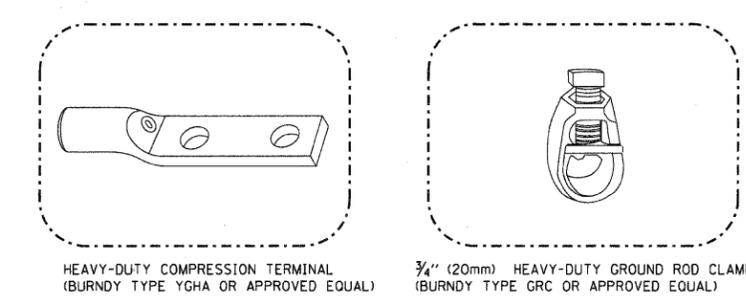
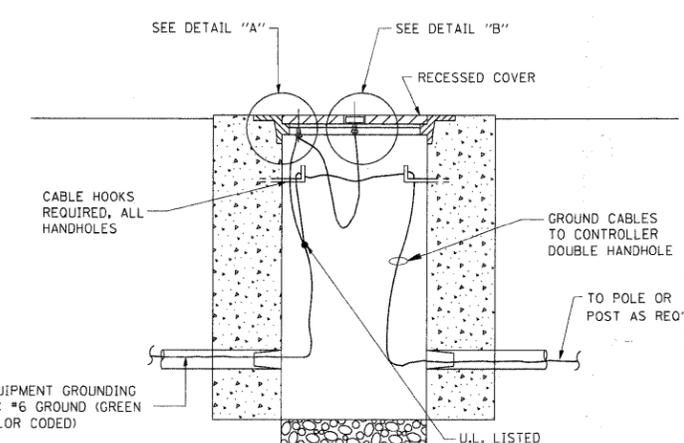
**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

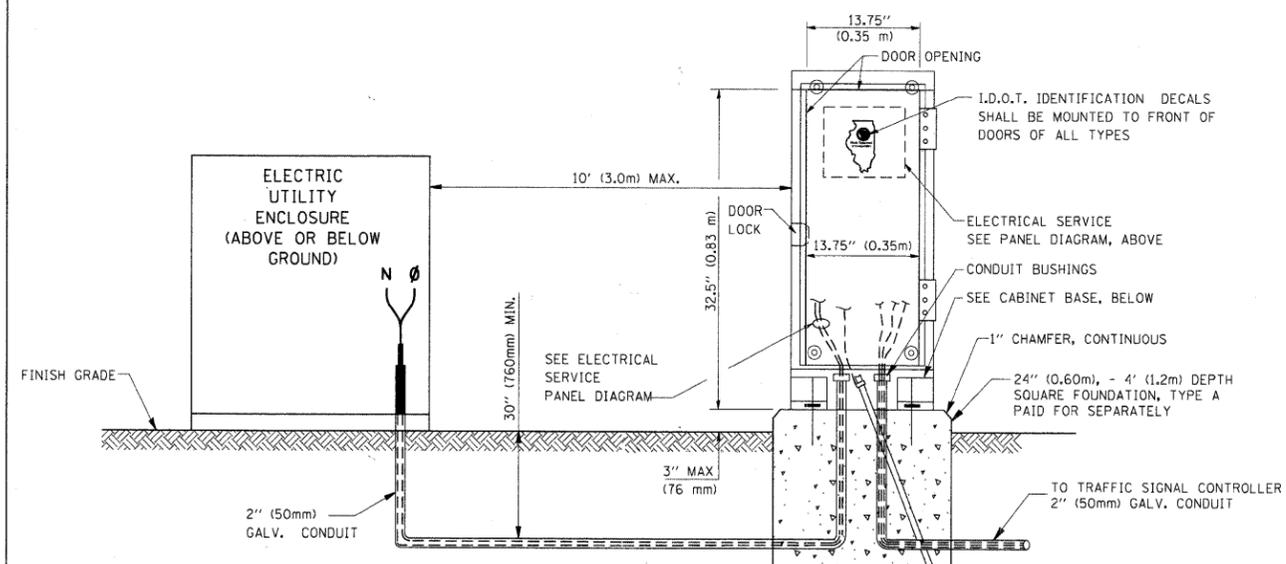


- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
  2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
  3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
  4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

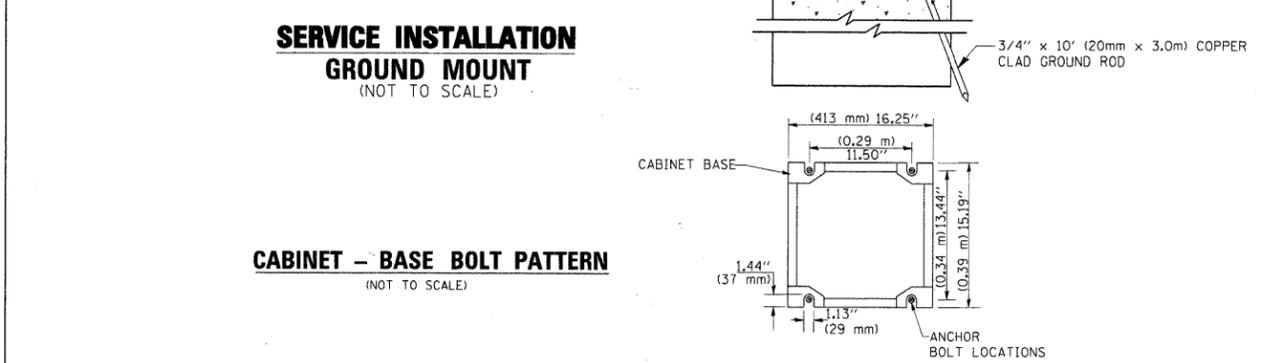
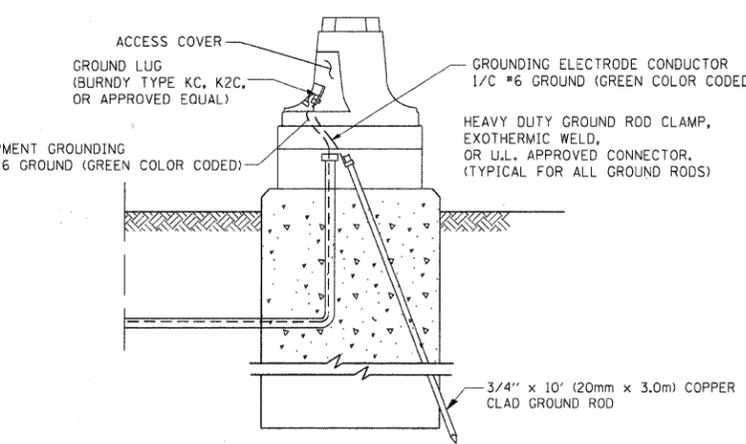
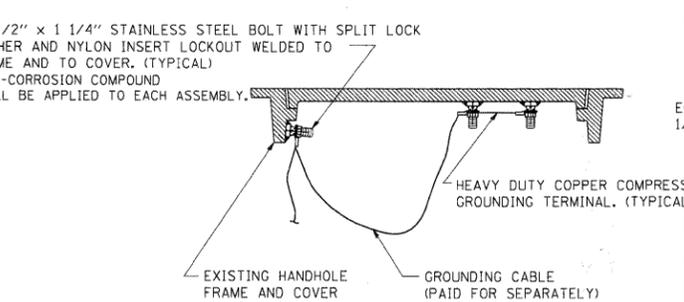
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

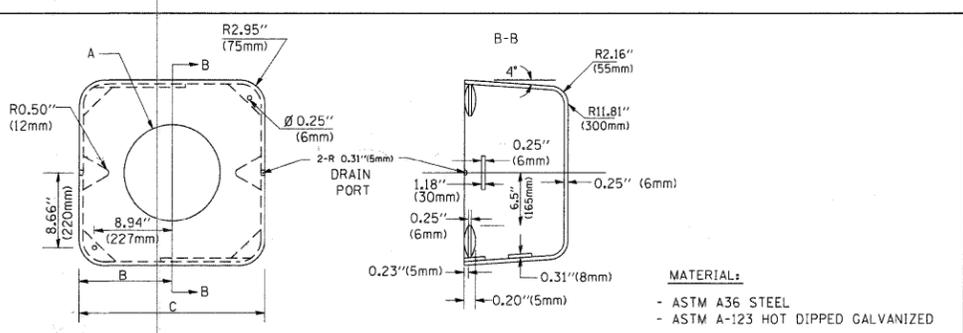
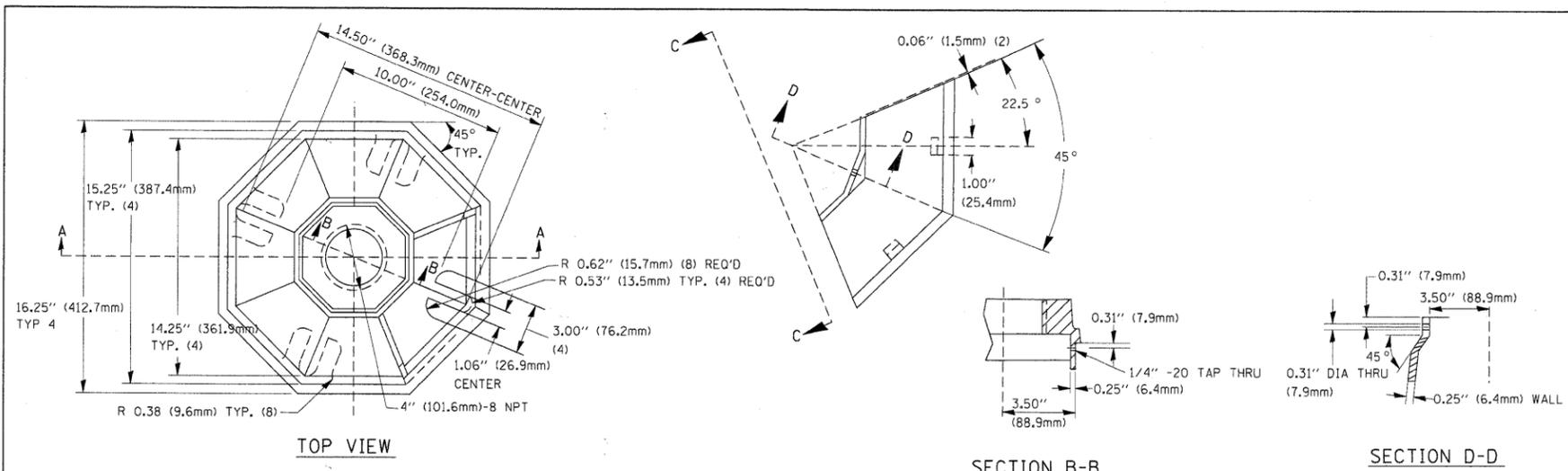


**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)



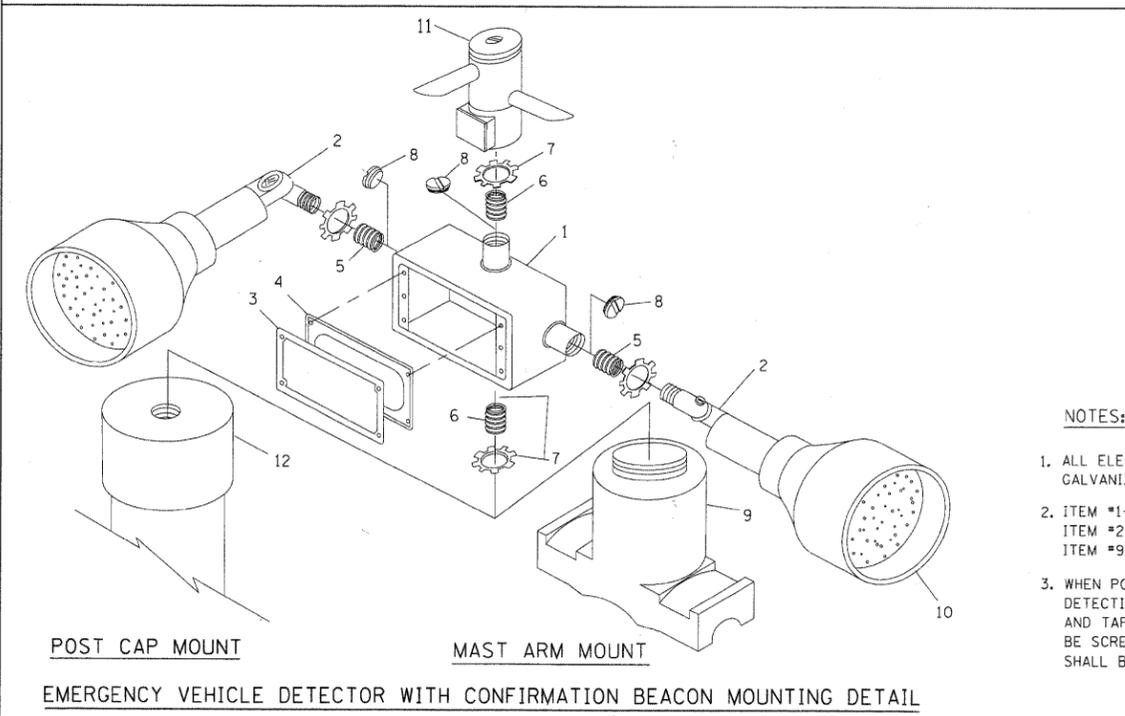
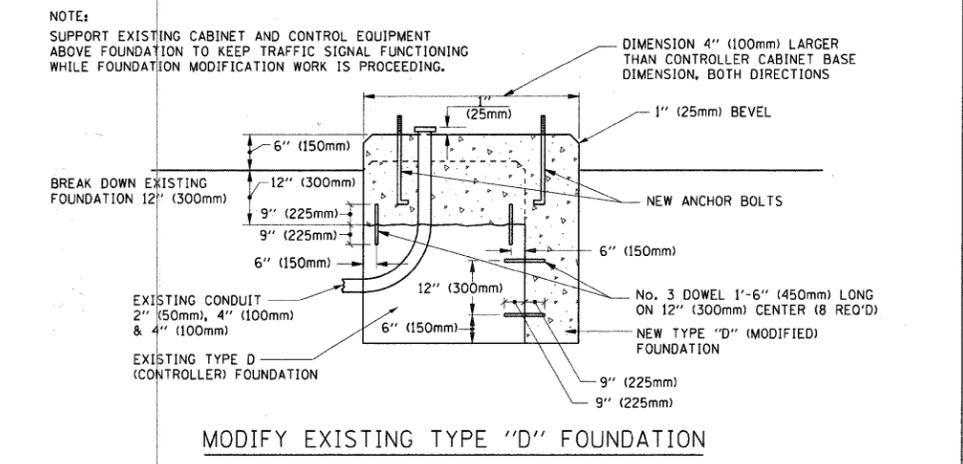
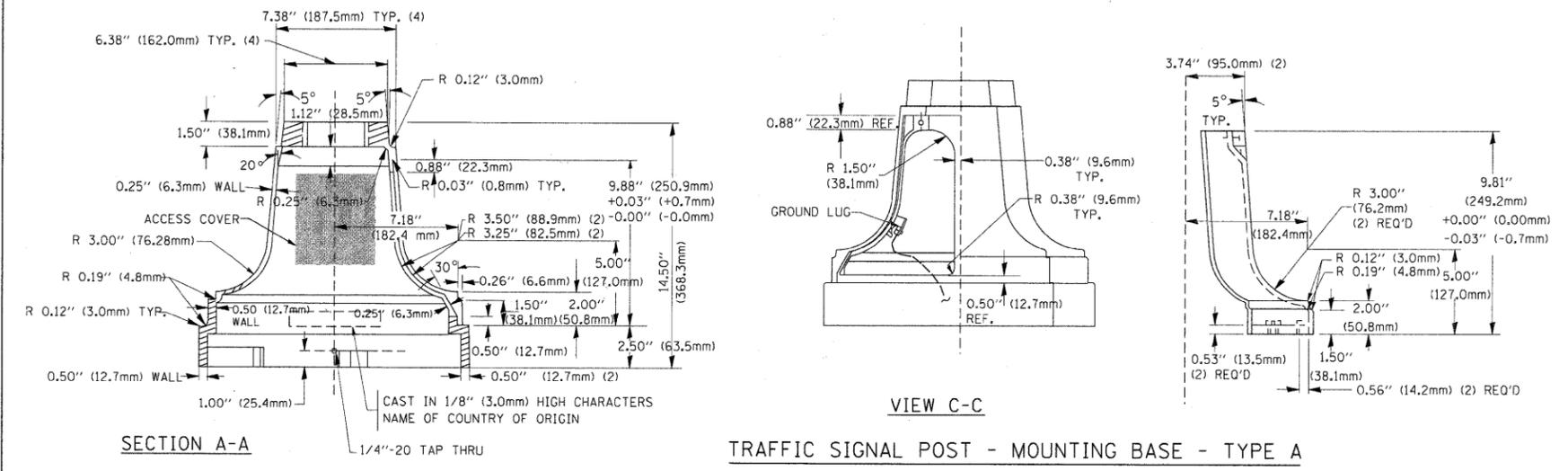
**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)

**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)



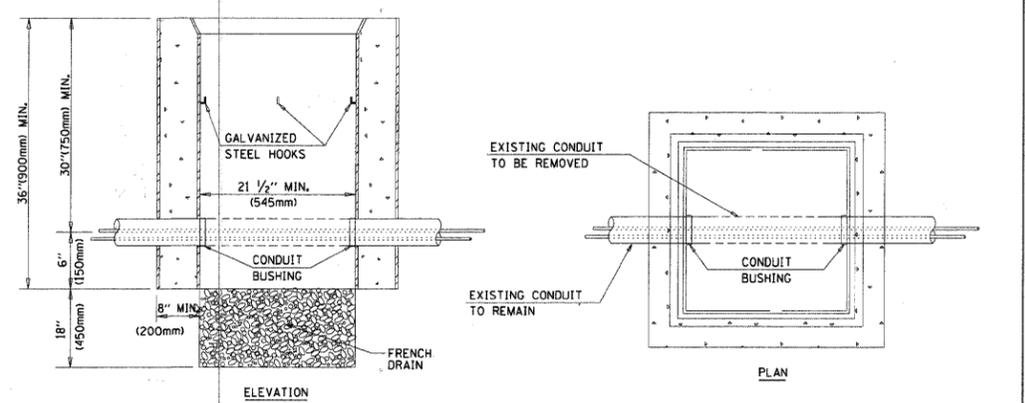
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIABLES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIABLES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIABLES	18.5\" (470mm)	37\" (940mm)	7\" (178mm) - 12\" (300mm)	126 lbs (57 kg)

- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
  - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
  - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

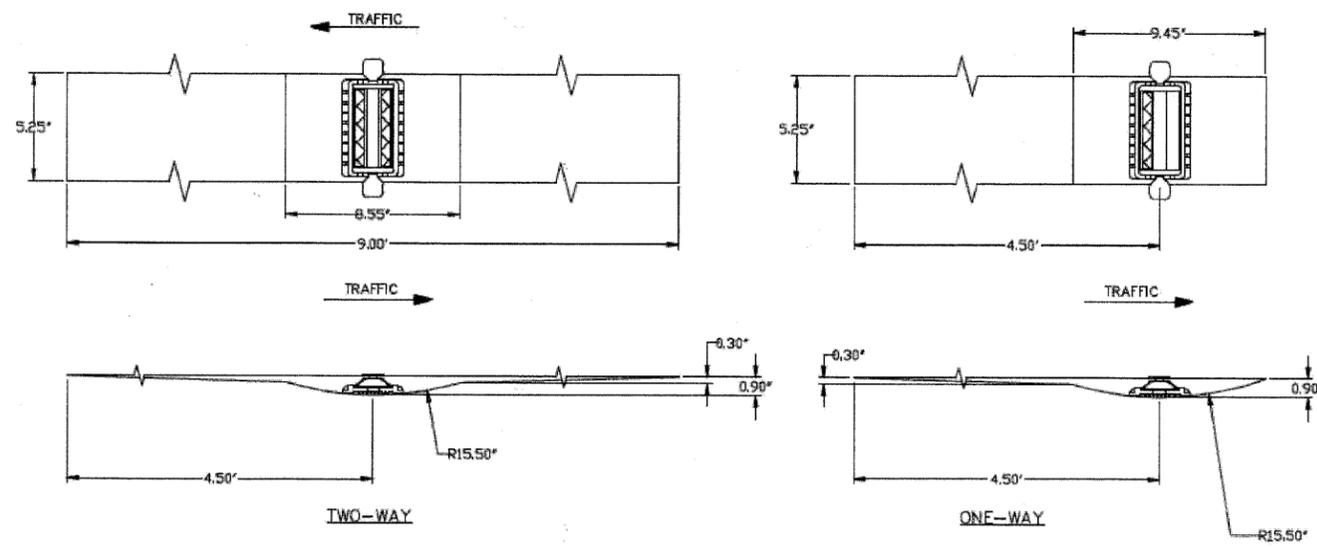
- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
  - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
  - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
  - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.



# RECESSED REFLECTIVE PAVEMENT MARKERS



## PAVEMENT MARKINGS, SIGNING

RECESSED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED AS FOLLOWS:

- TWO (2) TWO-WAY AMBER RECESSED PAVEMENT MARKERS SHALL BE PLACED AT FORTY FEET (40') C-C ALONG DOUBLE YELLOW CENTERLINES AT INTERSECTIONS AND CURVES. IN TANGENT SECTIONS THE RECESSED PAVEMENT MARKERS WILL BE AT EIGHTY FEET (80') CENTERS.
- ONE ONE-WAY CRYSTAL RECESSED MARKERS SHALL BE PLACED AT (40') C-C ALONG LANE LINES BETWEEN WHITE DASHES AT INTERSECTIONS AND CURVES. IN TANGENT SECTIONS, ONLY ONE (1) CRYSTAL RECESSED PAVEMENT MARKERS SHALL BE PLACED AT (80') C-C.
- TURN BAY LINES SHALL HAVE ONE-WAY CRYSTAL MARKERS PLACED AT FORTY FEET (40') C-C.
- TWO-WAY AMBER MARKERS SHALL BE USED WHEN THE PAINTED MEDIAN IS LESS THAN OR EQUAL TO FOUR FEET (4') IN WIDTH; ONE-WAY AMBER MARKERS SHALL BE USED WHEN THE PAINTED MEDIAN IS GREATER THAN FOUR FEET (4') IN WIDTH.
- CRYSTAL/RED MARKERS SHALL BE PLACED AT LANE LINES AND TURN BAYS ON DIVIDED HIGHWAYS AND HIGHWAYS WITH RAISED MEDIANS.

TURNING LANES 150 TO 199 FEET SHALL HAVE AN ADDITIONAL ARROW PLACED PRIOR TO THE END OF THE TURN LANE.

TURNING LANES 200 FEET AND LONGER SHALL HAVE AN ADDITIONAL ARROW AND ONLY PLACED PRIOR TO THE END OF THE LANE.

SKIP DASHED AND YELLOW CENTERLINES SHALL BE GAPPED AT SIDE ROAD INTERSECTIONS. THE GAP SHALL BEGIN AND END AT A FORTY FOOT TO FORTY-FIVE FOOT RADIUS POINT FROM THE CENTERLINE OF THE SIDE ROAD.

ALL FOUR INCH (4") AND SIX INCH (6") LONGITUDINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

CROSS WALK PAVEMENT MARKINGS SHALL BE INSTALLED AS FOLLOWS:

- TWO (2) SIX INCH (6") PARALLEL LINES SIX FOOT (6') APART SHALL BE USED ON SIDE ROADS AND AT SIGNALIZED INTERSECTIONS WITHOUT SCHOOL CROSSINGS.
- NEAR ALL SCHOOL AND NON-SIGNALIZED CROSS WALKS ACROSS COUNTY HIGHWAYS, A SERIES OF TWELVE INCH (12") WIDE, SIX FEET (6') LONG LINES AT TWENTY-FOUR INCH (24") C-C SPACING SHALL BE USED.
- ALL BICYCLE AND EQUESTRIAN PATH CROSSINGS SHALL INCLUDE TWO (2) TWELVE INCH (12") PARALLEL LINES AND A SERIES OF TWELVE INCH (12") WIDE LINES AT 45° AT THIRTY-SIX INCH (36") C-C SPACING.

TEMPORARY PAVEMENT MARKING DELINEATION SHALL BE AS FOLLOWS: FOUR INCH (4") CENTERLINES, LANE LINES, TURN BAY LINES, PAINTED MEDIANS AND TWENTY-FOUR INCH (24") STOP BARS. THE MARKINGS SHALL BE PAINTED AND PLACED THE SAME DAY AS BITUMINOUS SURFACE REMOVAL.

TEMPORARY PAVEMENT MARKINGS SHALL USE A CONTINUOUS DOUBLE YELLOW LINE FOR THE CENTERLINE FOLLOWING BITUMINOUS SURFACE REMOVAL.

ALL SHORT TERM PAVEMENT MARKINGS WILL BE PLACED AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL COORDINATE WITH THE DUPAGE COUNTY DOT FOR THE RELOCATION OF PERMANENT ROADWAY SIGNS DURING CONSTRUCTION.

DESIGNED	- MR	REVISED	-
DRAWN	- DN	REVISED	-
CHECKED	- MR	REVISED	-
DATE	-	REVISED	-

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	10-00288-02-RS	DUPAGE	29	29
CONTRACT NO. 63575				
ILLINOIS FED. AID PROJECT				