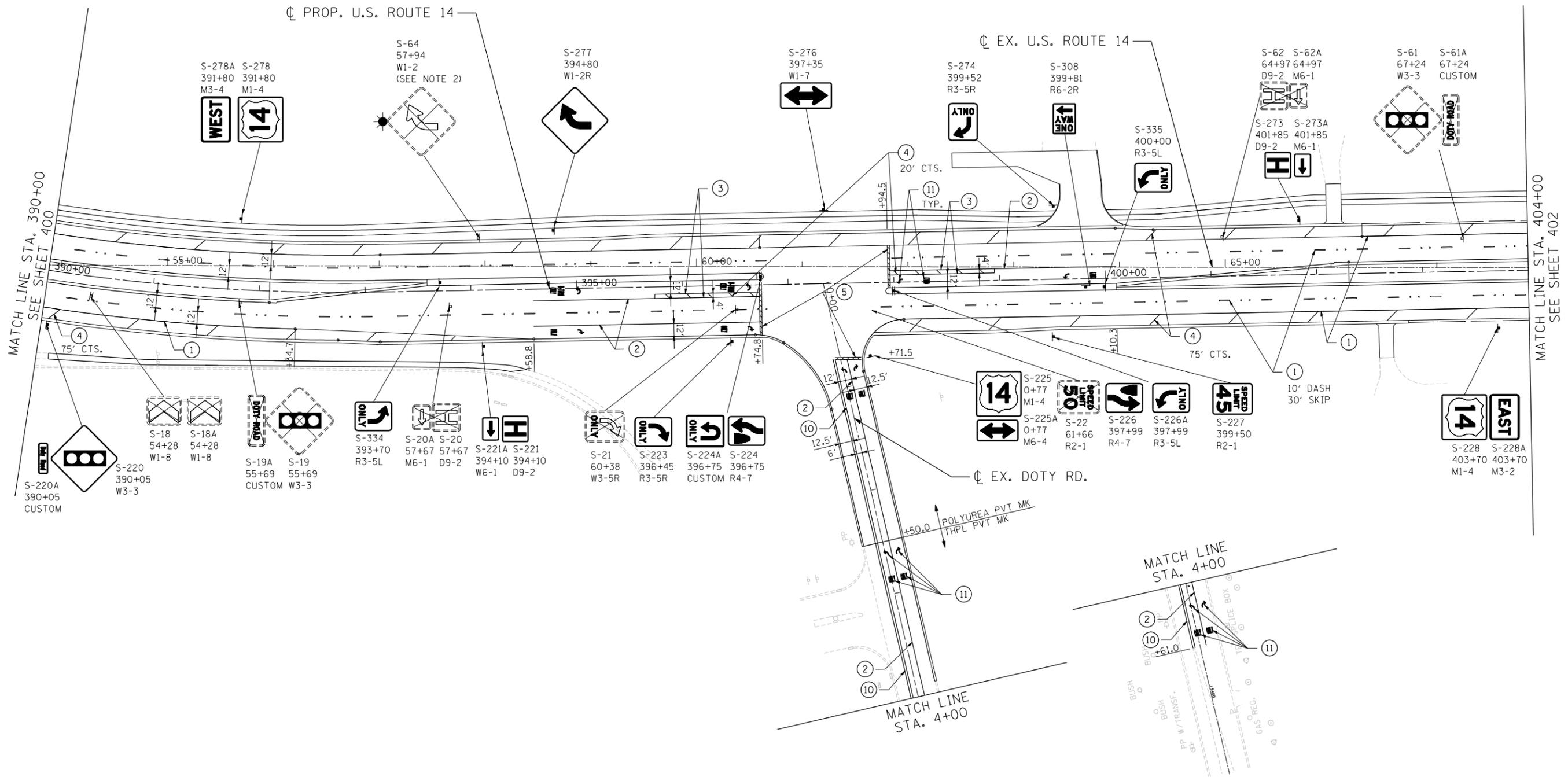


**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
② PAVEMENT MARKING - LINE 6" WHITE	⑧ PAVEMENT MARKING - LINE 8" YELLOW	EX. SIGN TO BE REMOVED AND RELOCATED	PROP. GROUND SIGN
③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊣ EXISTING GROUND SIGN
④ PAVEMENT MARKING - LINE 12" WHITE	⑩ PAVEMENT MARKING - DOUBLE LINE 4" YELLOW		⊣ PROPOSED GROUND SIGN
⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◁ ONE-WAY CRYSTAL MARKER		

NOTE:  
 1. SEE SHEET 396 FOR NOTES.  
 2. SEE THE PREVIOUS SHEET FOR NOTE 2



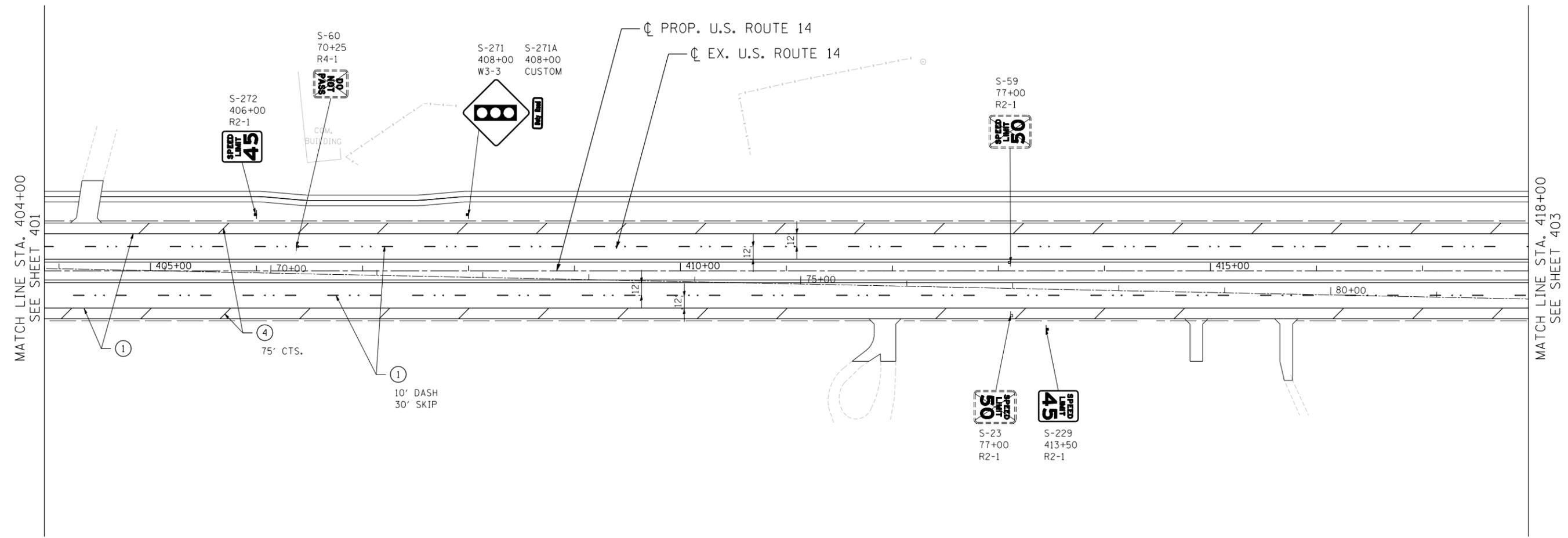
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SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 62268			

**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
② PAVEMENT MARKING - LINE 6" WHITE	⑧ PAVEMENT MARKING - LINE 8" YELLOW	EX. SIGN TO BE REMOVED AND RELOCATED	PROP. GROUND SIGN
③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊣ EXISTING GROUND SIGN
④ PAVEMENT MARKING - LINE 12" WHITE	⑩ PAVEMENT MARKING - DOUBLE LINE 4" YELLOW		⊣ PROPOSED GROUND SIGN
⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◁ ONE-WAY CRYSTAL MARKER		

NOTE:  
SEE SHEET 396 FOR NOTES.



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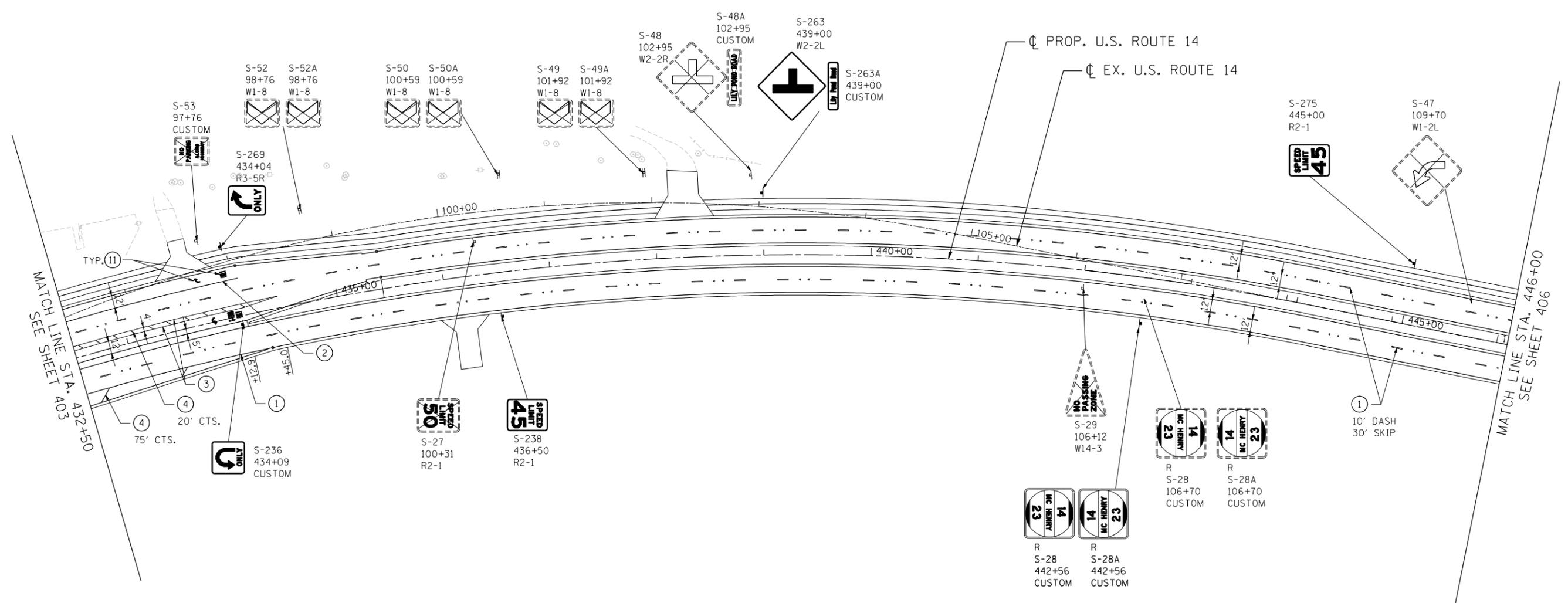
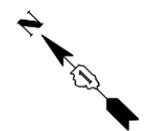
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											CONTRACT NO. 62268		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			



**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
② PAVEMENT MARKING - LINE 6" WHITE	⑧ PAVEMENT MARKING - LINE 8" YELLOW	EX. SIGN TO BE REMOVED AND RELOCATED	PROP. GROUND SIGN
③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊥ EXISTING GROUND SIGN
④ PAVEMENT MARKING - LINE 12" WHITE	⑩ PAVEMENT MARKING - DOUBLE LINE 4" YELLOW		⊥ PROPOSED GROUND SIGN
⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◀ ONE-WAY CRYSTAL MARKER		

NOTE:  
SEE SHEET 396 FOR NOTES.

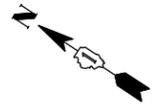


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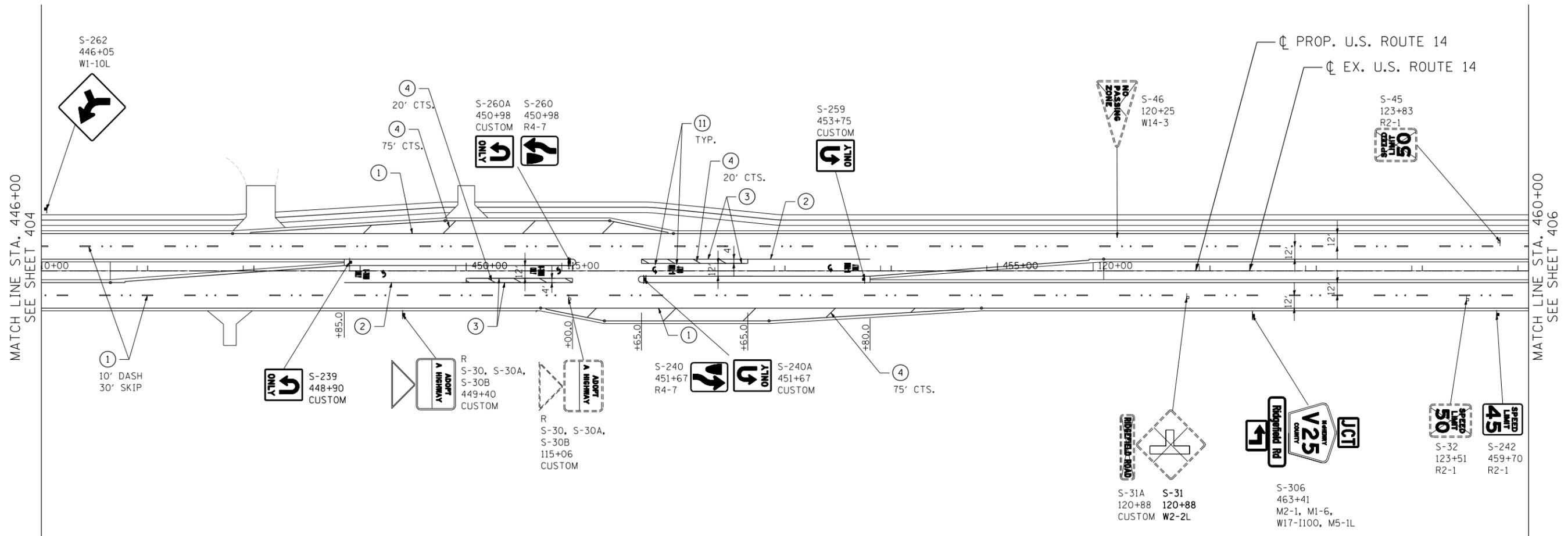
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exp U.S. Services Inc. Chicago, IL BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	PLOT SCALE = *SCALE*	DRAWN - AMB	REVISED -		SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.	305	27R-2	MCHENRY	673	404
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		DATE - 11/01/13	REVISED -											
										CONTRACT NO. 62268			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
② PAVEMENT MARKING - LINE 6" WHITE	⑧ PAVEMENT MARKING - LINE 8" YELLOW	EX. SIGN TO BE REMOVED AND RELOCATED	PROP. GROUND SIGN
③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊥ EXISTING GROUND SIGN
④ PAVEMENT MARKING - LINE 12" WHITE	⑩ PAVEMENT MARKING - DOUBLE LINE 4" YELLOW		⊥ PROPOSED GROUND SIGN
⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◀ ONE-WAY CRYSTAL MARKER		



NOTE:  
SEE SHEET 396 FOR NOTES.



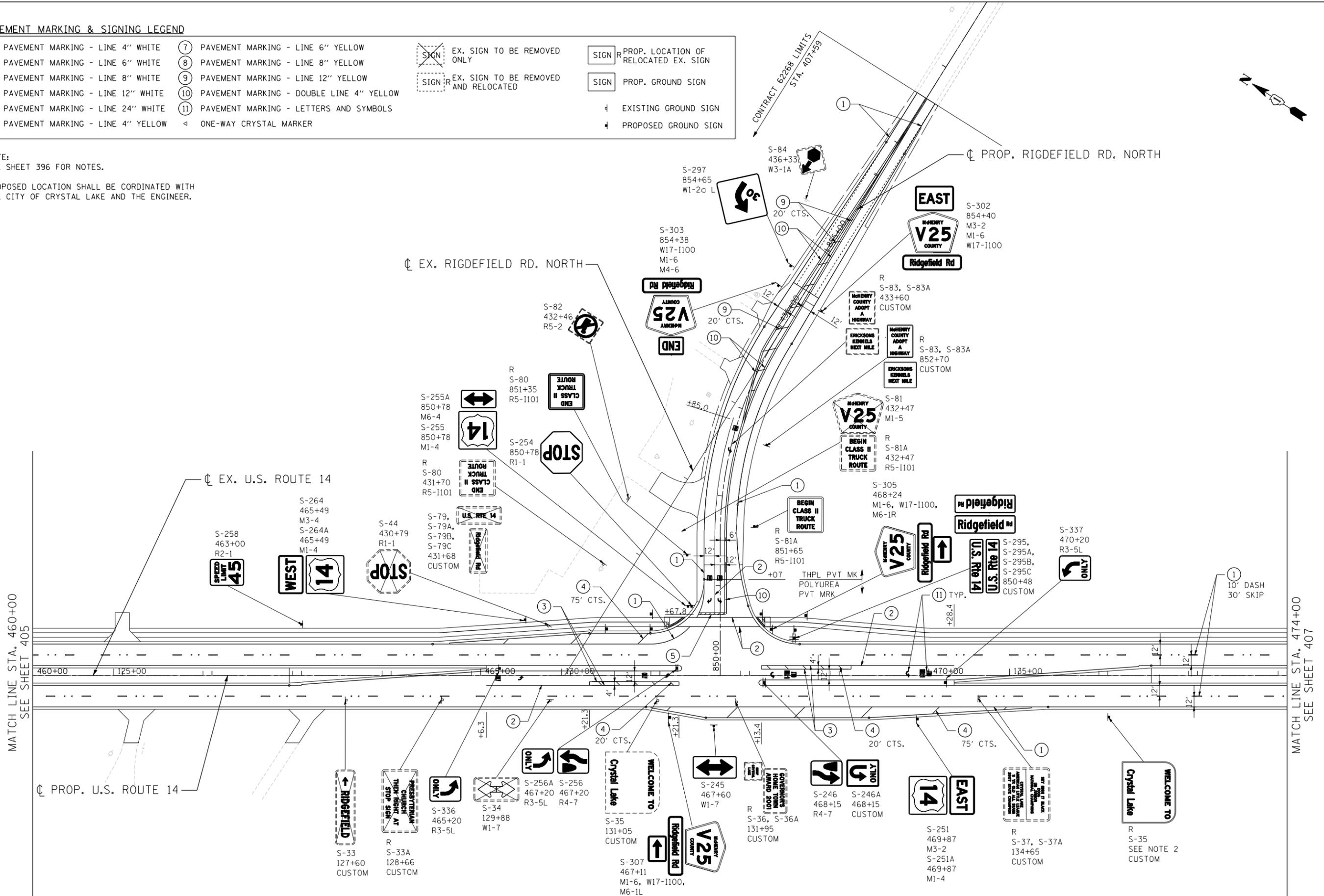
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 exp U.S. Services Inc.  
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY  
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

FILE NAME = *FILEL*	USER NAME = HECHTBR	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b> U.S. ROUTE 14	<b>PAVEMENT MARKING &amp; SIGNING PLANS</b> <b>STA. 446 + 00 TO STA. 460 + 00</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
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		DATE - 11/01/13	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT											

**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
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③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊕ EXISTING GROUND SIGN
④ PAVEMENT MARKING - LINE 12" WHITE	⑩ PAVEMENT MARKING - DOUBLE LINE 4" YELLOW		⊕ PROPOSED GROUND SIGN
⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◀ ONE-WAY CRYSTAL MARKER		

NOTE:  
 1. SEE SHEET 396 FOR NOTES.  
 2. PROPOSED LOCATION SHALL BE CORDINATED WITH THE CITY OF CRYSTAL LAKE AND THE ENGINEER.

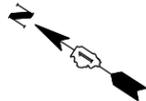


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 REVISED -  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 U.S. ROUTE 14  
 SCALE: 1"=50'  
 SHEET NO. OF SHEETS STA. TO STA.  
 PAVEMENT MARKING & SIGNING PLANS  
 STA. 460+00 TO STA. 474+00  
 F.A.P. RTE. 305 SECTION 27R-2 COUNTY MCHENRY TOTAL SHEETS 673 SHEET NO. 406 CONTRACT NO. 62268  
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

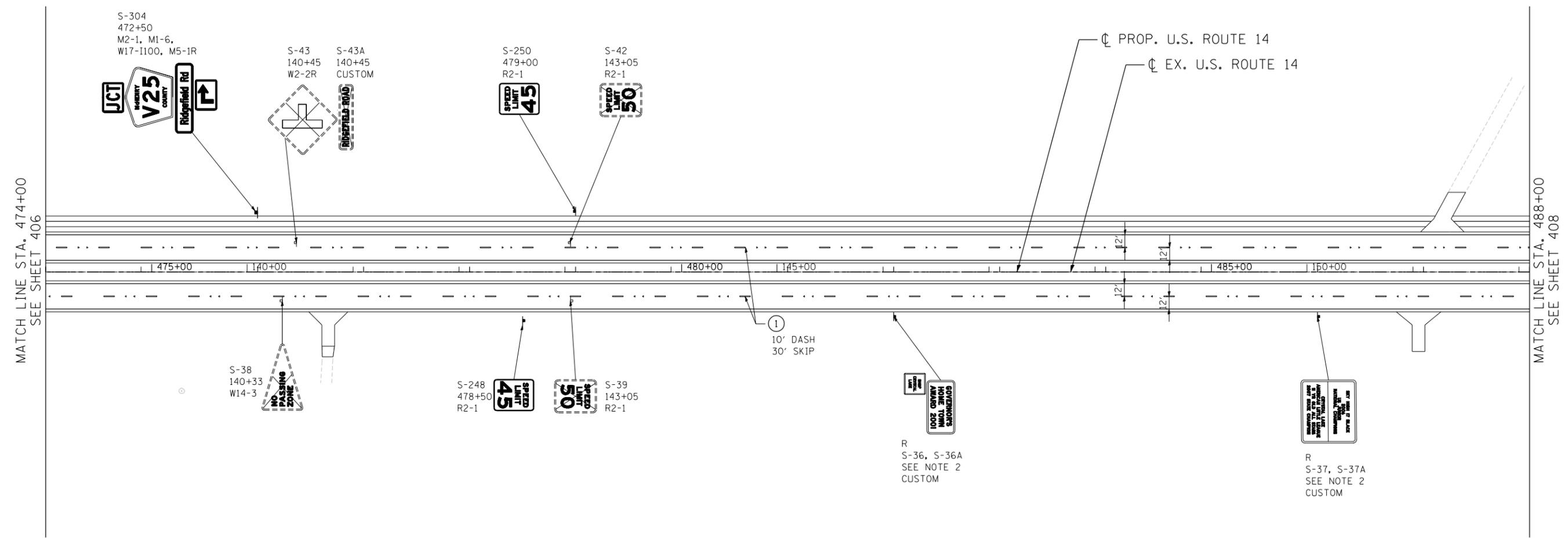
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**PAVEMENT MARKING & SIGNING LEGEND**

① PAVEMENT MARKING - LINE 4" WHITE	⑦ PAVEMENT MARKING - LINE 6" YELLOW	EX. SIGN TO BE REMOVED ONLY	PROP. LOCATION OF RELOCATED EX. SIGN
② PAVEMENT MARKING - LINE 6" WHITE	⑧ PAVEMENT MARKING - LINE 8" YELLOW	EX. SIGN TO BE REMOVED AND RELOCATED	PROP. GROUND SIGN
③ PAVEMENT MARKING - LINE 8" WHITE	⑨ PAVEMENT MARKING - LINE 12" YELLOW		⊣ EXISTING GROUND SIGN
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⑤ PAVEMENT MARKING - LINE 24" WHITE	⑪ PAVEMENT MARKING - LETTERS AND SYMBOLS		
⑥ PAVEMENT MARKING - LINE 4" YELLOW	◁ ONE-WAY CRYSTAL MARKER		



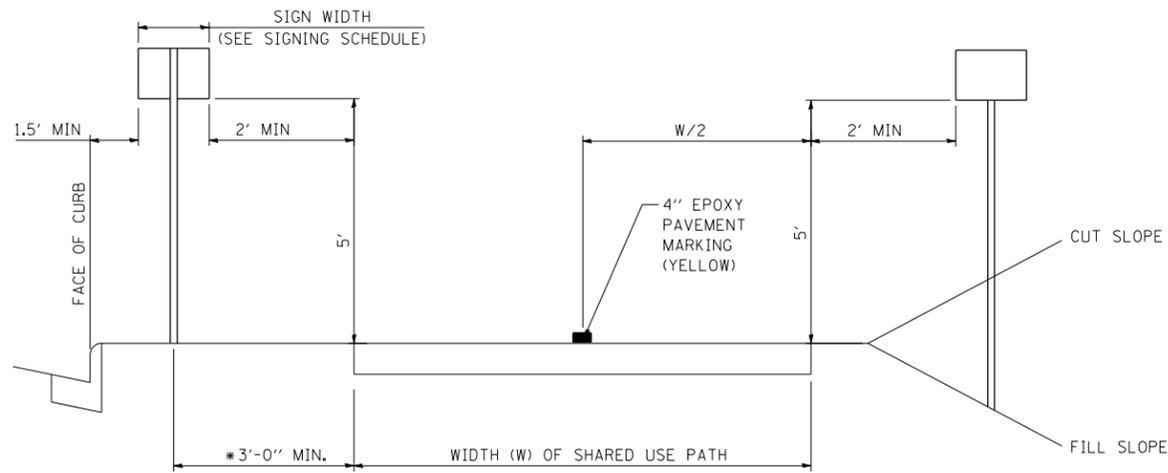
- NOTE:  
 1. SEE SHEET 396 FOR NOTES.  
 2. PROPOSED LOCATION SHALL BE COORDINATED WITH THE CITY OF CRYSTAL LAKE AND THE ENGINEER.



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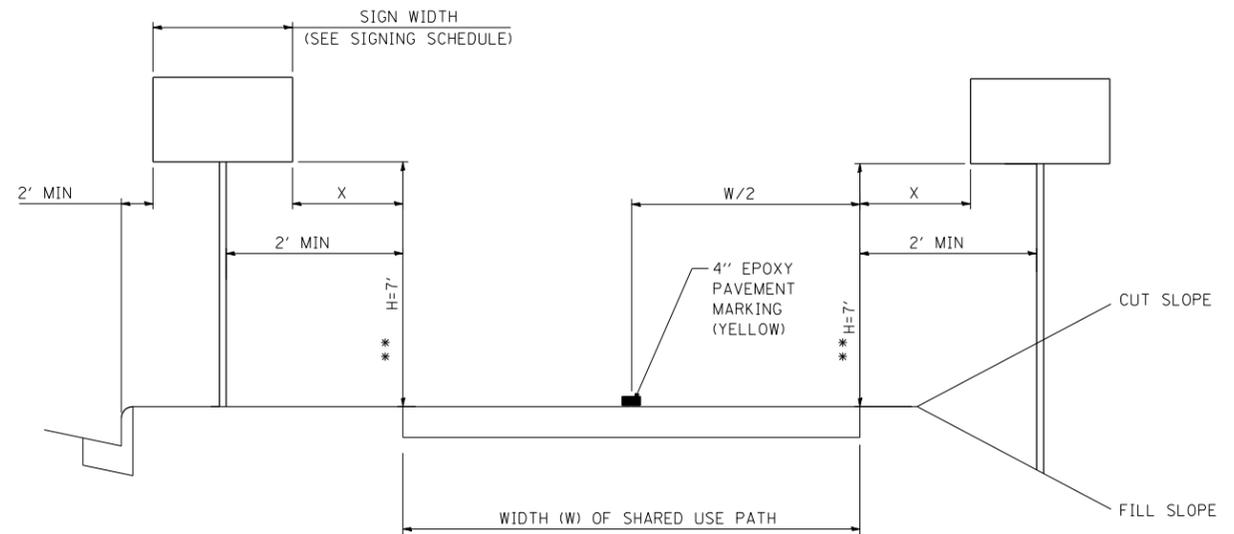
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exp U.S. Services Inc. Chicago, IL BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	PLOT SCALE = *SCALE*	DRAWN - AMB	REVISED -		SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.	305	27R-2	MCHENRY	673	407
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										CONTRACT NO. 62268		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		





\* BASED ON AN 24" SIGN WIDTH

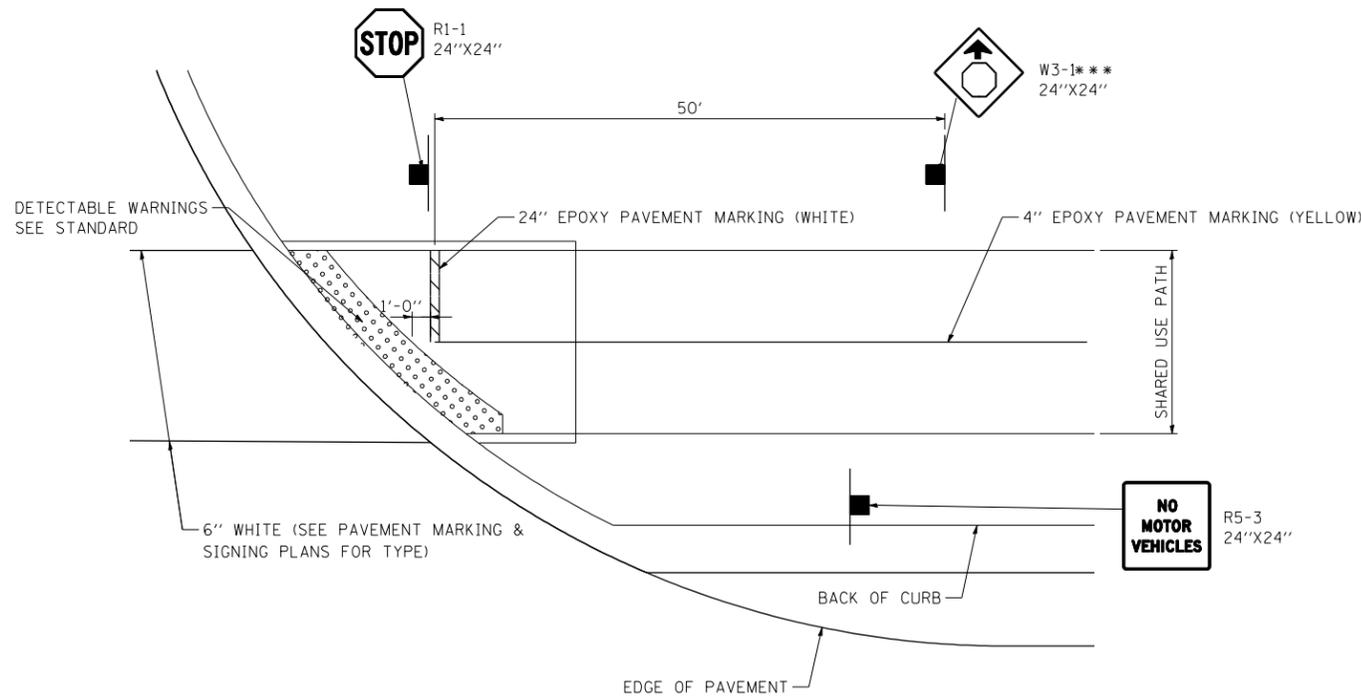
TYPICAL SIGN PLACEMENT FOR BICYCLE SIGNS  
ADJACENT TO SHARED USE PATH



\*\* H=8' WHEN X LESS THAN 2'

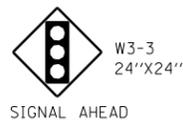
NOTE:  
SIGN PANEL SHALL NOT EXTEND OVER SHARED  
USE PATH WHEN H < 8'.

TYPICAL SIGN PLACEMENT FOR ROAD SIGNS  
ADJACENT TO SHARED USE PATH

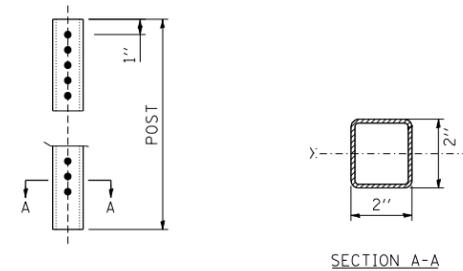


SHARED USE PATH AT INTERSECTION PLAN

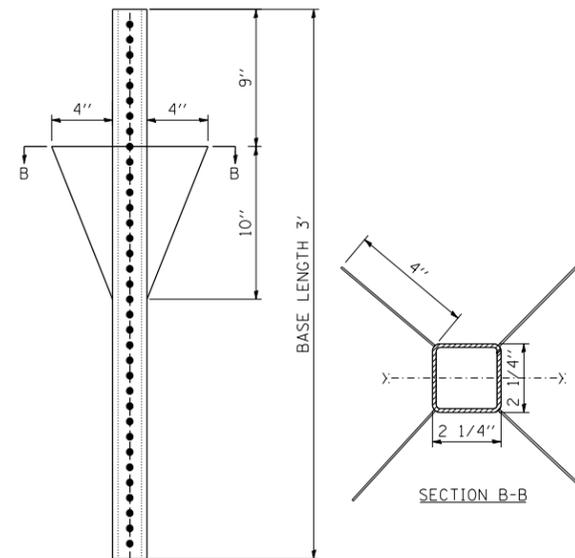
\*\*\* "STOP AHEAD" SIGN (W3-1) SHALL BE REPLACED  
WITH A "SIGNAL AHEAD" SIGN (W3-3) IN ADVANCE  
OF WEST LAKE SHORE DRIVE



SIGNAL AHEAD



SECTION A-A



SECTION B-B

NOTES:

- 1) WINGED BASE SHALL BE DRIVEN TO A DEPTH OF 32 INCHES LEAVING 2 TO 4 INCHES EXPOSED.
- 2) POST AND BASE SHALL BE FASTENED WITH ONE ALUMINUM DRIVE RIVET AND ONE CORNER BOLT.

GENERAL NOTES

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING TELESCOPING STEEL SIGN SUPPORTS FOR GROUND-MOUNTED SIGNS UTILIZING A TELESCOPING BASE SECTION IN ACCORDANCE WITH APPLICABLE ARTICLES OF SECTION 728 AND AS DETAILED IN THE PLANS AND THE FOLLOWING.

POSTS AS SPECIFIED IN ARTICLE 1093.01 (C) SHALL BE FORMED OF 14 GAGE STEEL, EXCEPT THAT THE BASE SHALL BE FORMED OF 12 GAGE STEEL. HOLES 7/16 + OR - 1/64 INCH DIAMETER WILL BE SPACED ONE INCH ON CENTERS ON ALL SIDES FOR THE ENTIRE LENGTH OF THE POSTS. HOLES SHALL BE ON THE CENTERLINE OF EACH SIDE IN TRUE ALIGNMENT AND OPPOSITE OF EACH OTHER TO ACCEPT A 3/8 INCH BOLT THROUGH THE POST AT ANY LOCATION. THE POST SHALL HAVE A SMOOTH GALVANIZED FINISH APPLIED EITHER BEFORE OR AFTER FORMING.

THE BASE SHALL BE CONSTRUCTED WITH 12 GAGE STEEL WINGED ANCHORS BY USING STANDARD TUBULAR STEEL AND WELDING METAL TRIANGULAR FINS ON EACH CORNER OF THE TUBULAR STEEL. HOLES 7/16 + OR - 1/64 INCH DIAMETER WILL BE SPACED ONE INCH ON CENTERS ON ALL SIDES FOR THE ENTIRE LENGTH OF THE BASE. THE FOUR TRIANGULAR FINS SHALL BE 10" LONG BY 4" WIDE MOUNTED 9" FROM THE TOP OF THE BASE POINTING IN A DOWNWARD DIRECTION. THE BASE SHALL BE 3 FEET IN LENGTH. THE BASE SHALL HAVE A SMOOTH GALVANIZED FINISH APPLIED EITHER AFTER FABRICATION.

TELESCOPING STEEL SIGN SUPPORT (SPECIAL)

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exp U.S. Services Inc.		CHECKED - BRH	REVISED -
BUILDINGS-EARTH & ENVIRONMENT-ENERGY		DATE - 11/01/13	REVISED -
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
U.S. ROUTE 14

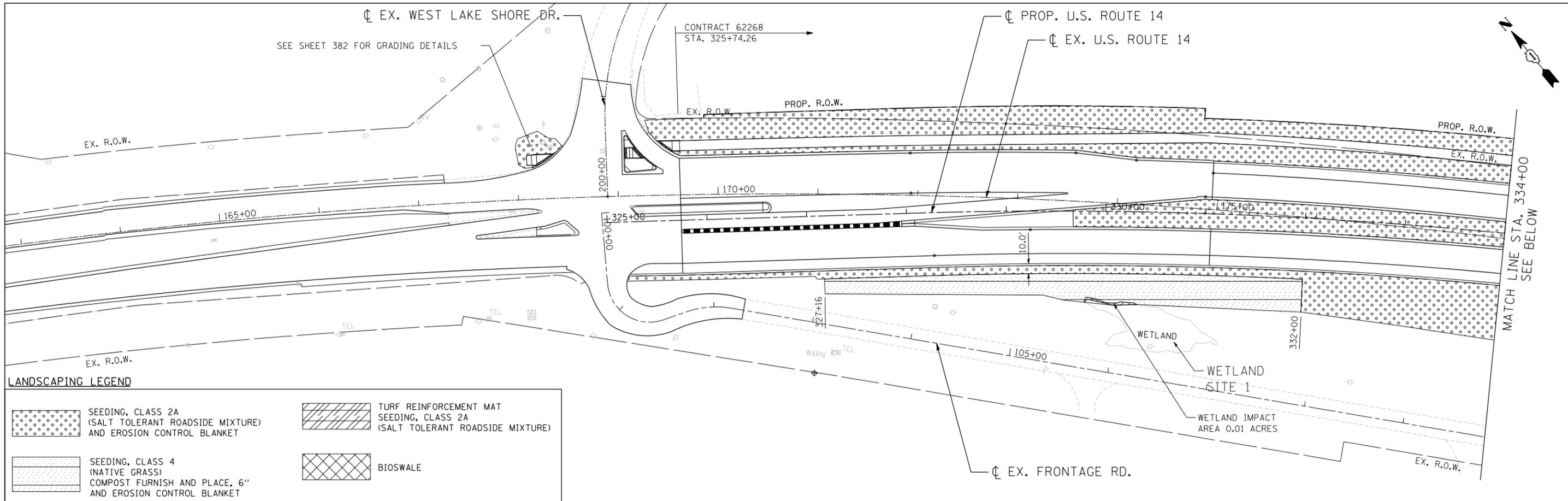
PAVEMENT MARKING & SIGNING DETAIL			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	409
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



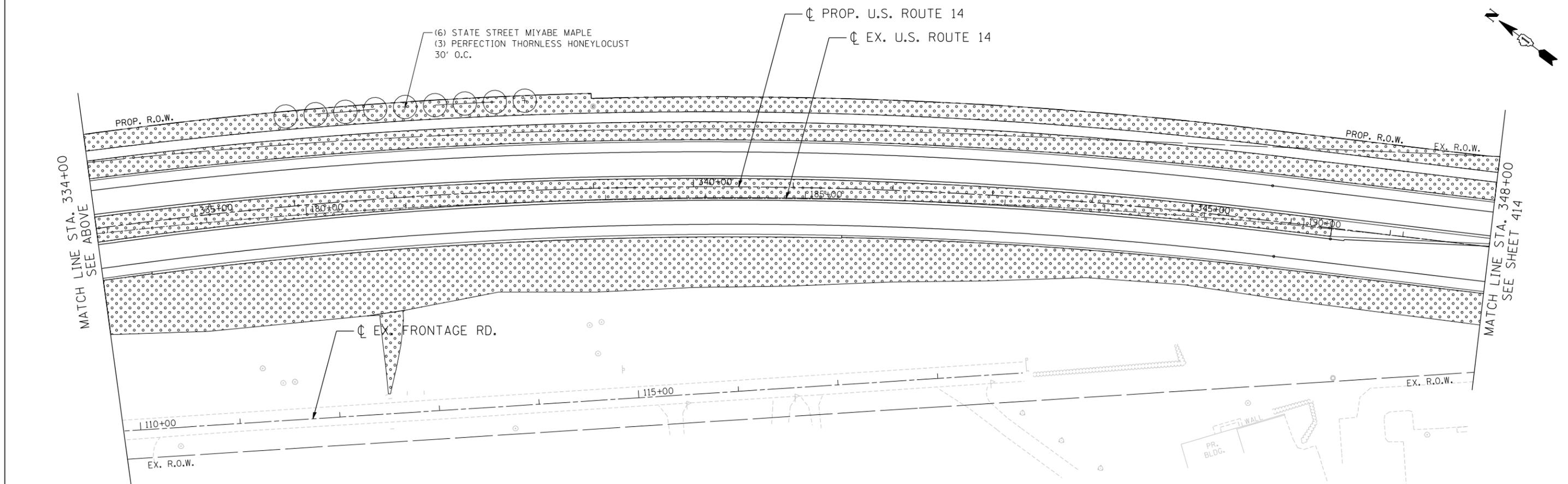






**LANDSCAPING LEGEND**

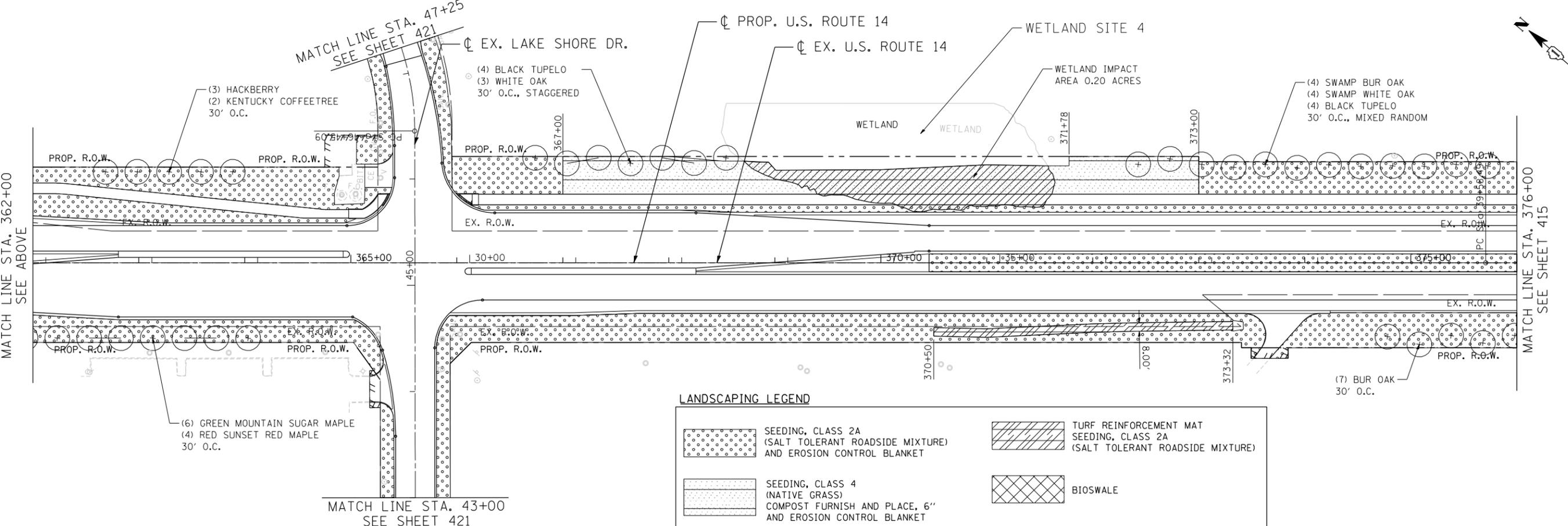
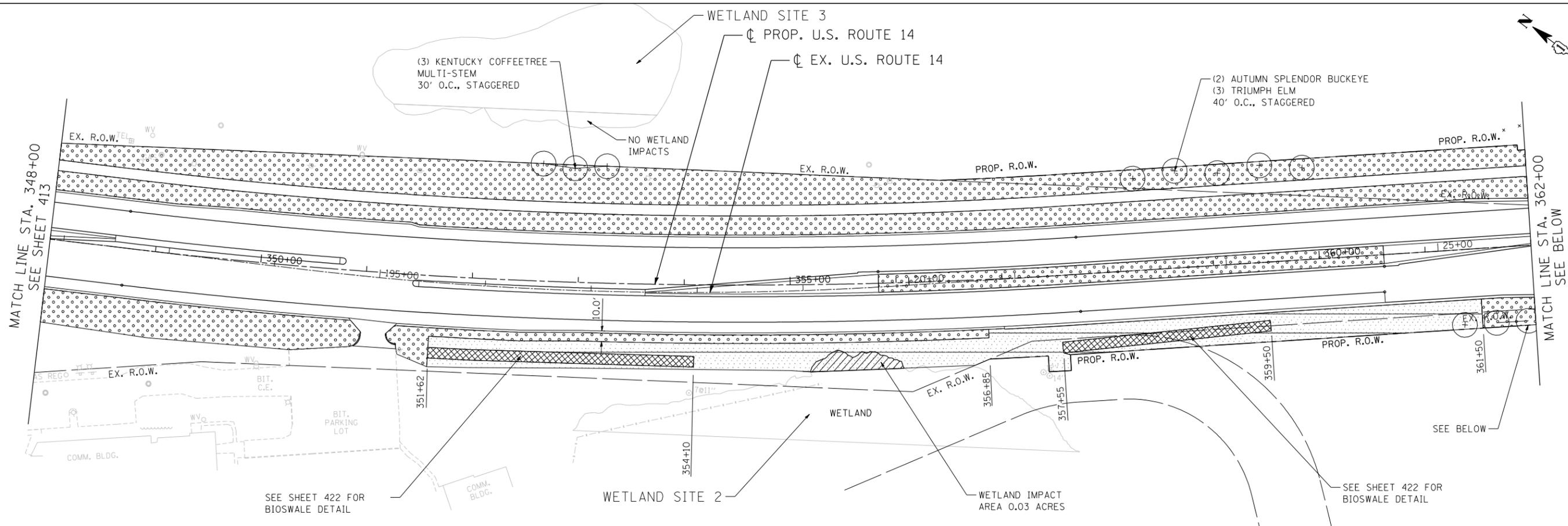
- SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET
- TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
- SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET
- BIOSWALE



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DATE - 11/01/13		REVISIED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



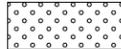
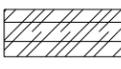
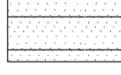


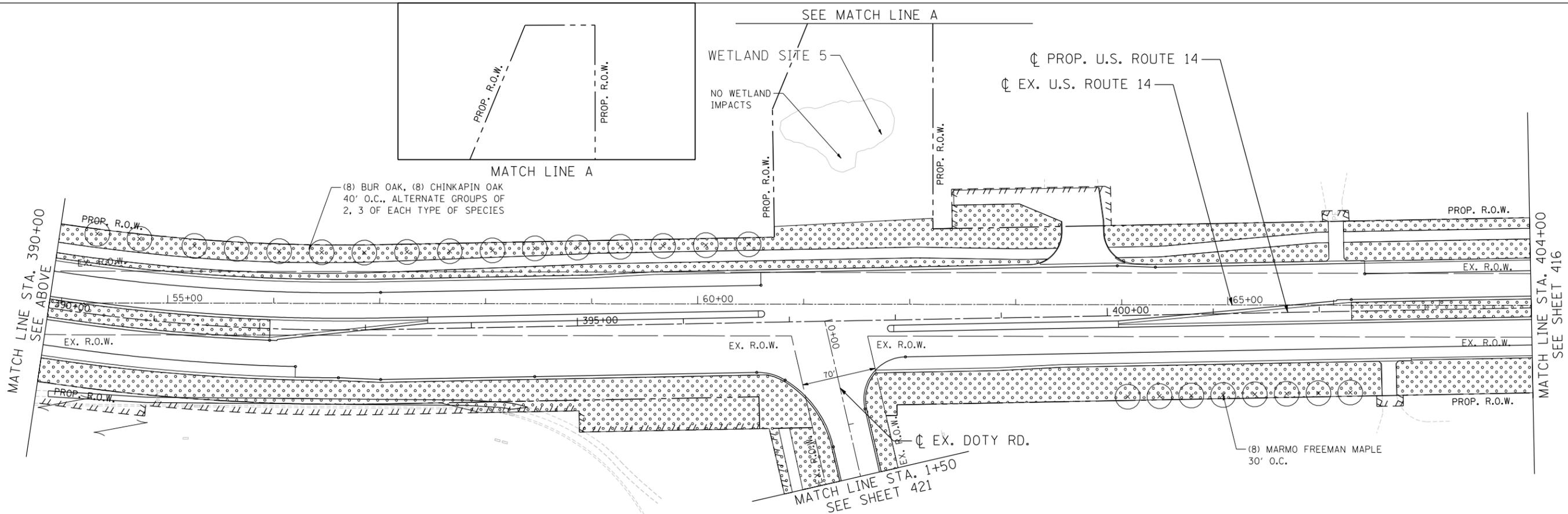
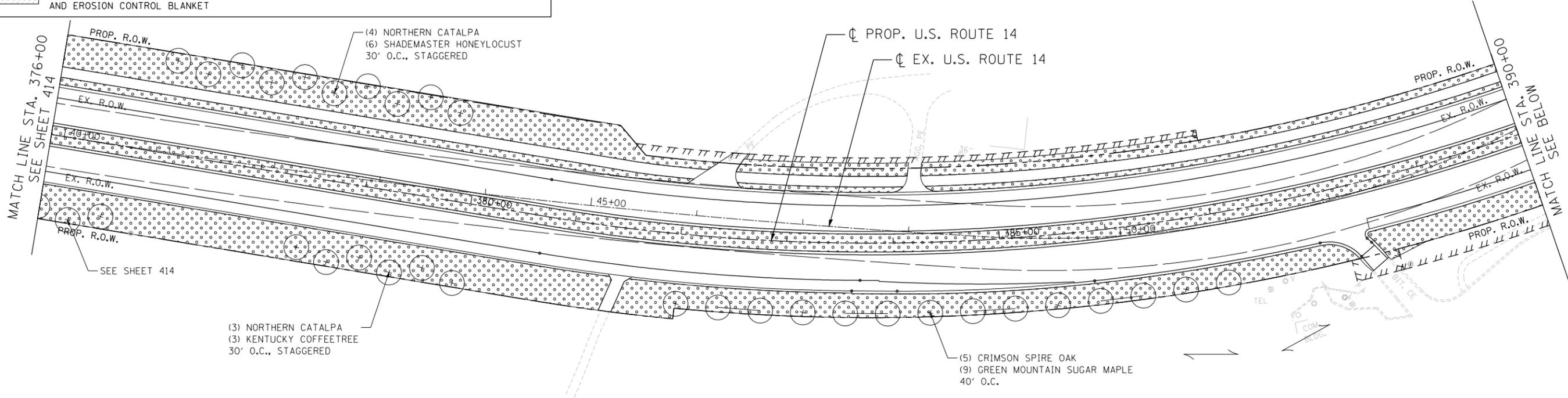
**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

FILE NAME = ...  
 USER NAME = HECHTBR  
 DESIGNED - MRK  
 DRAWN - MRK  
 CHECKED - TKL  
 DATE - 11/01/13

LANDSCAPING LEGEND

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE



FILE NAME = ... USER NAME = HECHTBR ... DESIGNED - ... REVISED - ... DRAWN - MRK ... CHECKED - TKL ... DATE - 11/01/13 ...

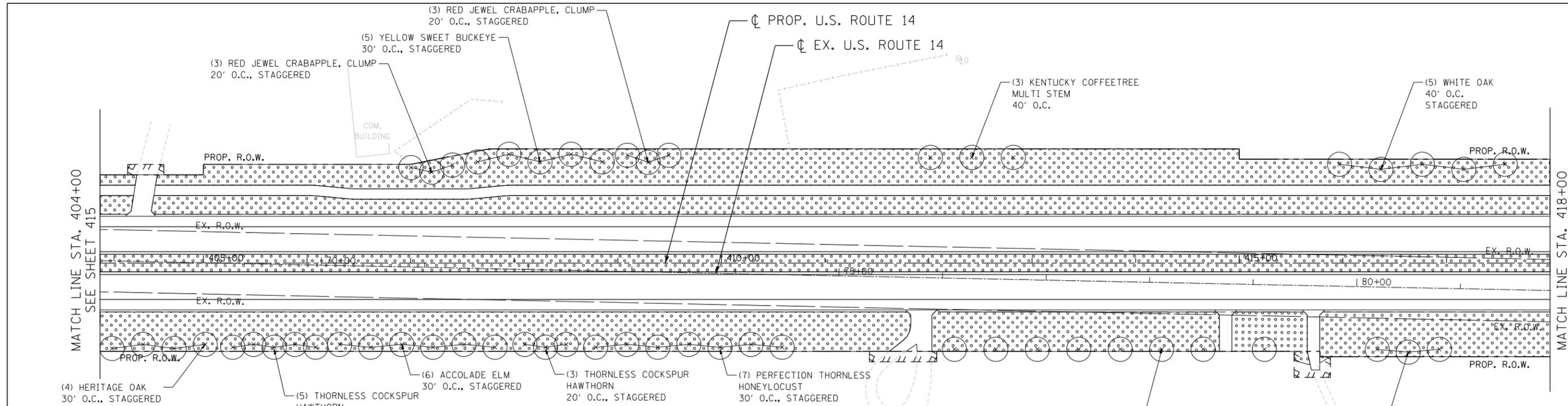
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
U.S. ROUTE 14

**LANDSCAPING PLANS**  
**STA. 376 + 00 TO STA. 404 + 00**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

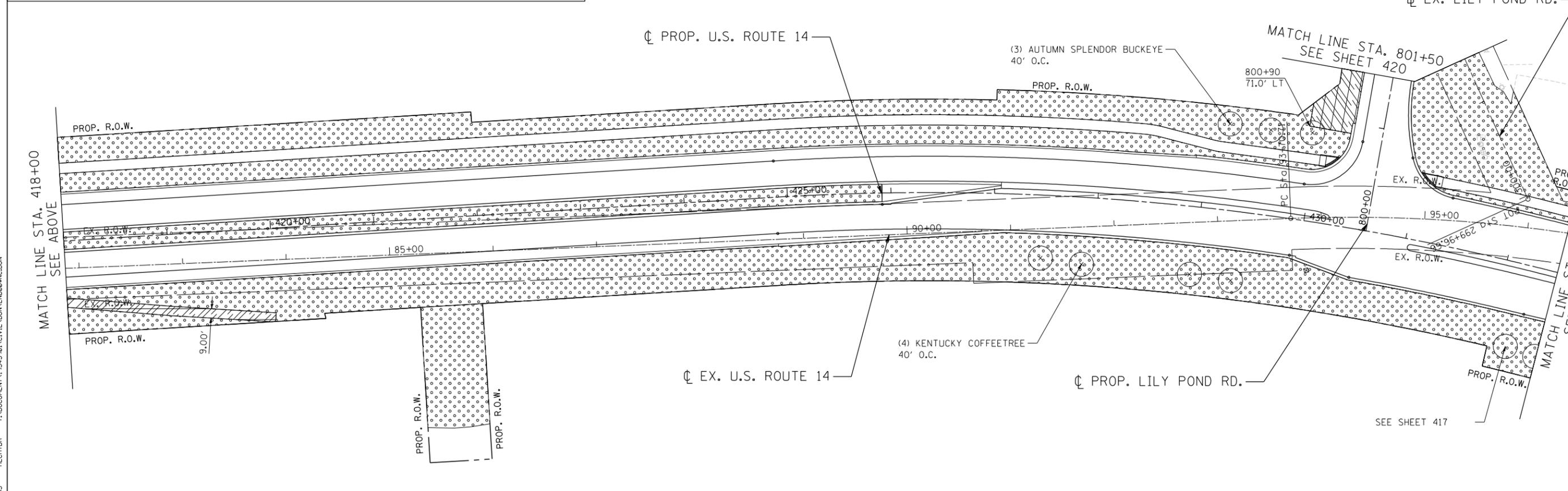
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	415
CONTRACT NO. 62268				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE



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 CHICAGO, IL  
 BUILDING-EARTH & ENVIRONMENT-ENERGY  
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

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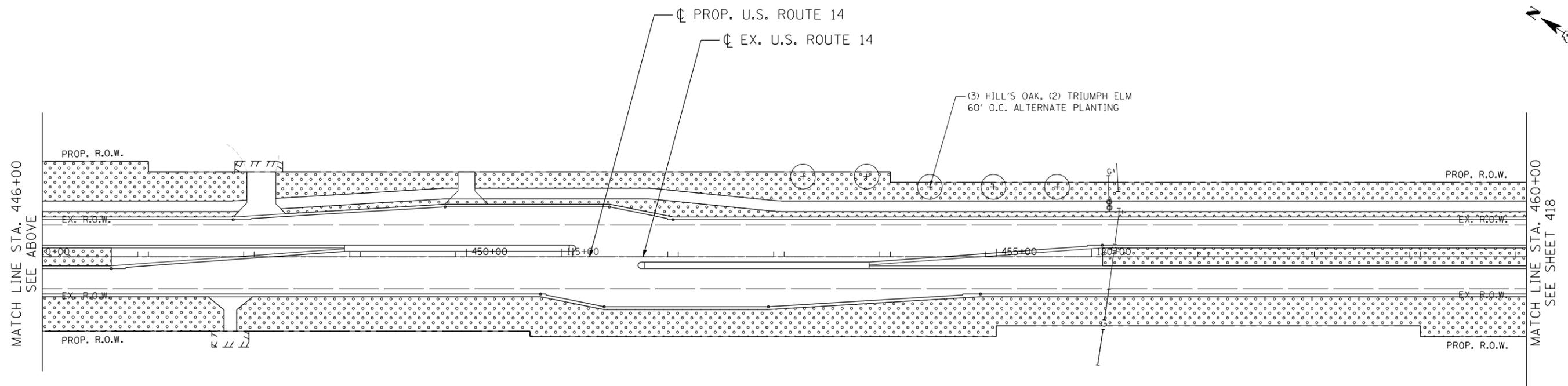
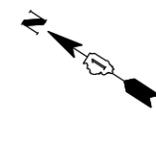
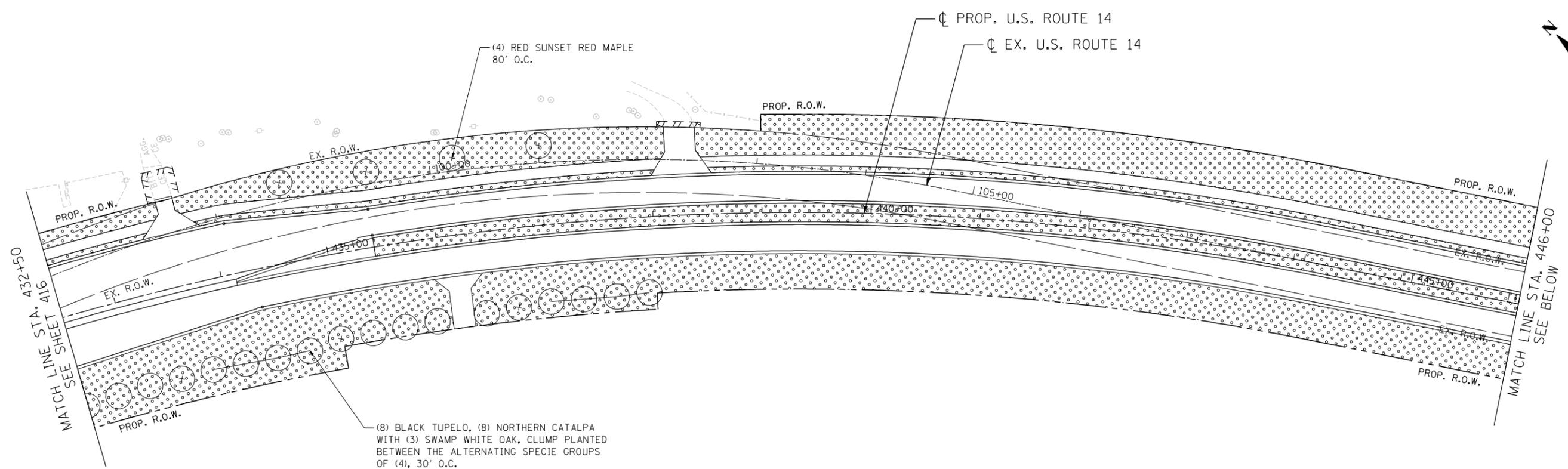
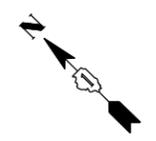
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

**LANDSCAPING PLANS**

**STA. 404+00 TO STA. 432+50**

SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	416
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	



**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

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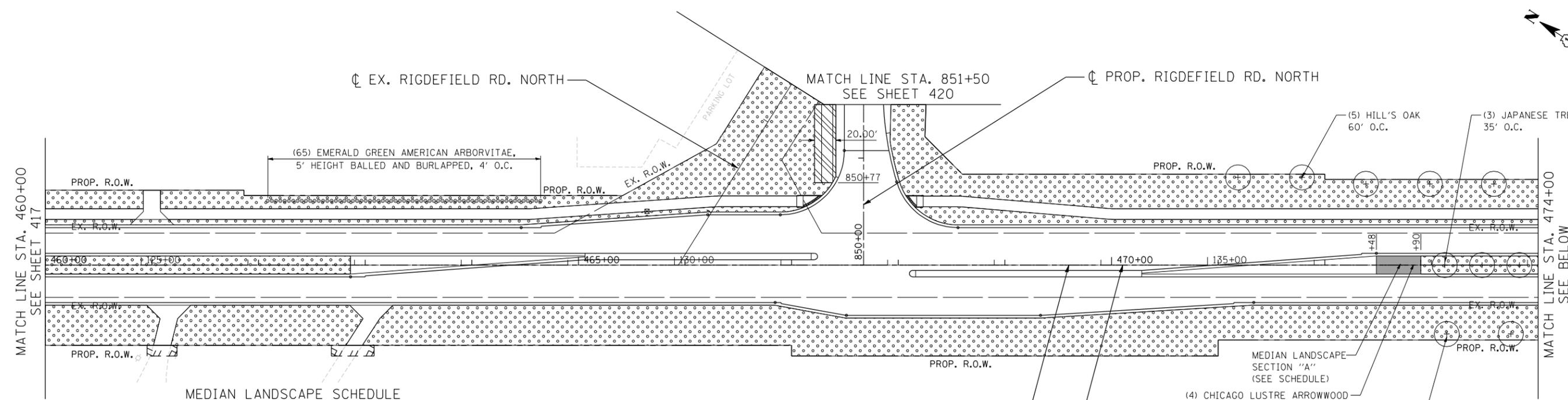
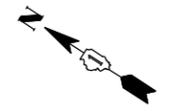
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

**LANDSCAPING PLANS**  
**STA. 432 + 50 TO STA. 460 + 00**

SCALE: 1"=50'      SHEET NO.    OF    SHEETS    STA.            TO STA.

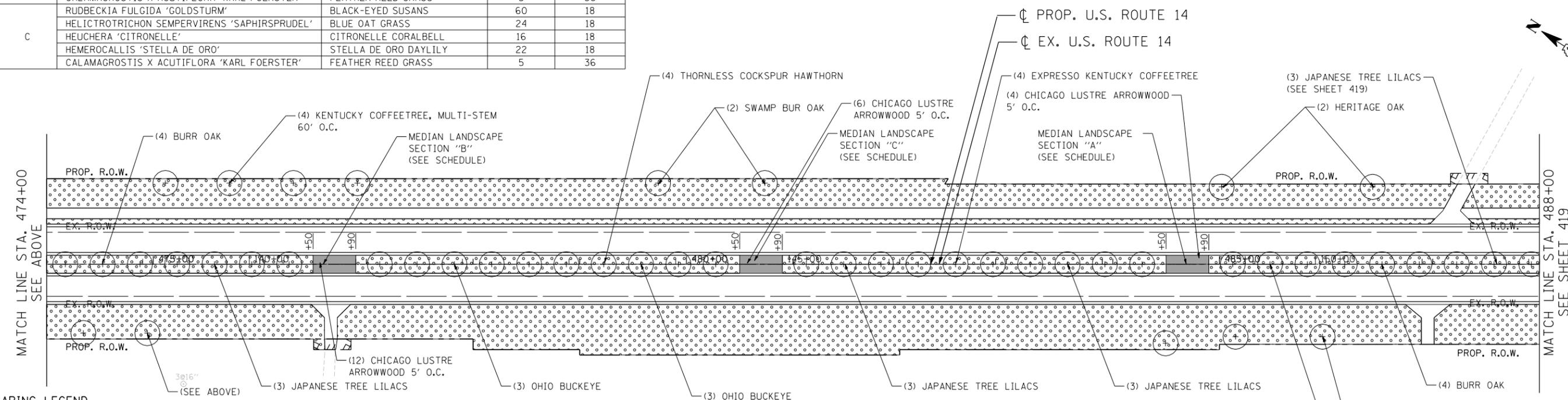
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305	27R-2	MCHENRY	673	417
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



MEDIAN LANDSCAPE SCHEDULE

SECTION	PERENNIAL PLANT, ORNAMENTAL TYPE (SCIENTIFIC NAME)	COMMON NAME	QUANTITY	SPACING (IN)
A	RUDBECKIA FULGIDA 'GOLDSTURM'	BLACK-EYED SUSANS	28	18
	HELICTROTTRICHON SEMPVIRENS 'SAPHIRSPRUDEL'	BLUE OAT GRASS	12	18
	HEUCHERA 'CITRONELLE'	CITRONELLE CORALBELL	14	18
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	4	36
	NEPETA X FAASSENII 'KIT CAT'	KIT CAT CATMINT	24	18
B	ECHINACEA PURPUREA 'MAGNUS'	MAGNUS CONEFLOWERS	32	18
	HEMEROCALLIS 'STELLA DE ORO'	STELLA DE ORO DAYLILY	24	18
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5	36
C	RUDBECKIA FULGIDA 'GOLDSTURM'	BLACK-EYED SUSANS	60	18
	HELICTROTTRICHON SEMPVIRENS 'SAPHIRSPRUDEL'	BLUE OAT GRASS	24	18
	HEUCHERA 'CITRONELLE'	CITRONELLE CORALBELL	16	18
	HEMEROCALLIS 'STELLA DE ORO'	STELLA DE ORO DAYLILY	22	18
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5	36

EX. U.S. ROUTE 14  
 PROP. U.S. ROUTE 14



LANDSCAPING LEGEND

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

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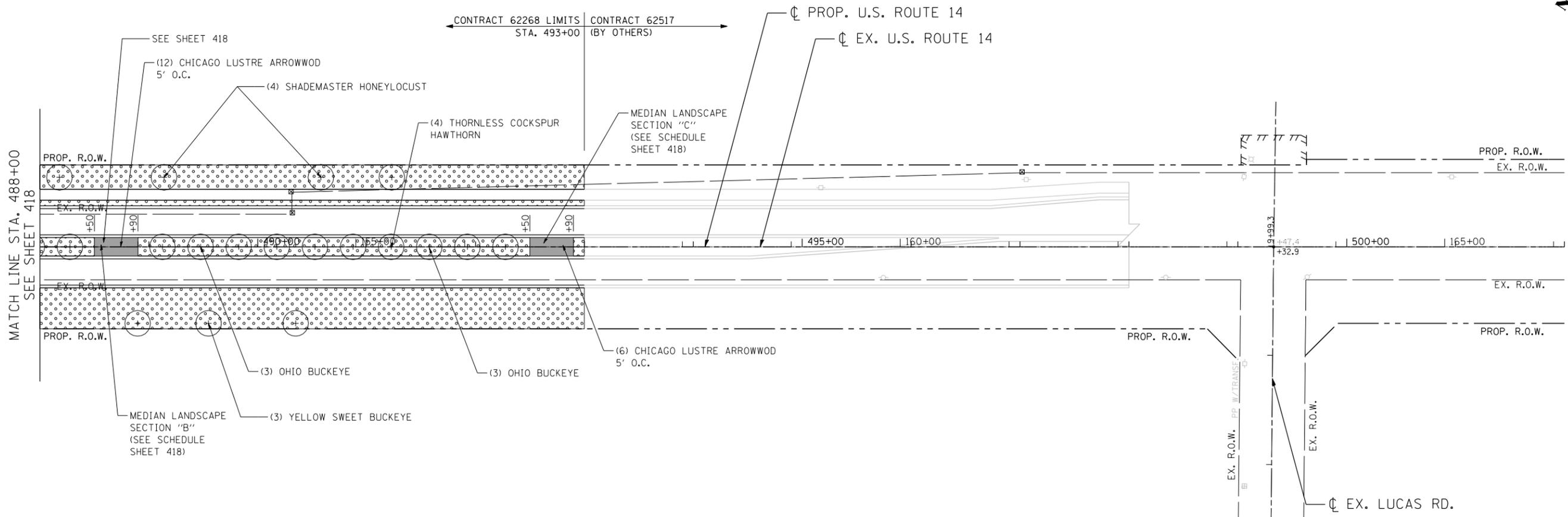
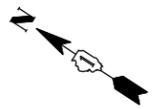
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

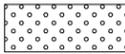
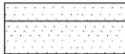
**LANDSCAPING PLANS**  
**STA. 460+00 TO STA. 488+00**

SCALE: 1"=50'      SHEET NO.      OF      SHEETS      STA.      TO      STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	418
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	



**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

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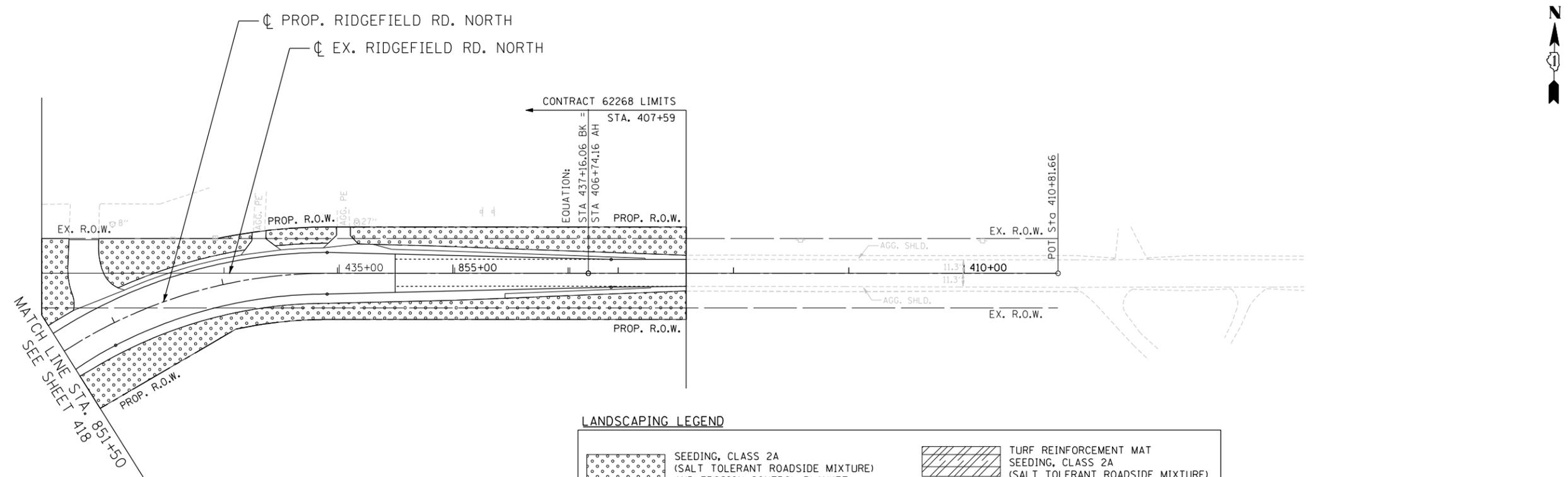
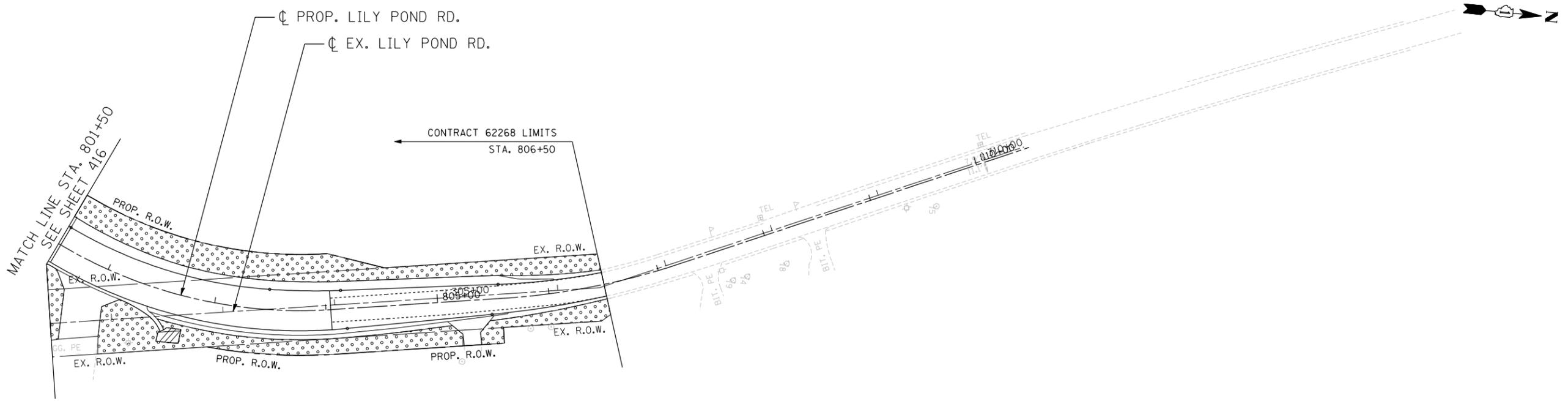
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

**LANDSCAPING PLANS**  
**STA. 488 + 00 TO STA. 502 + 00**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	419
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

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 Chicago, IL  
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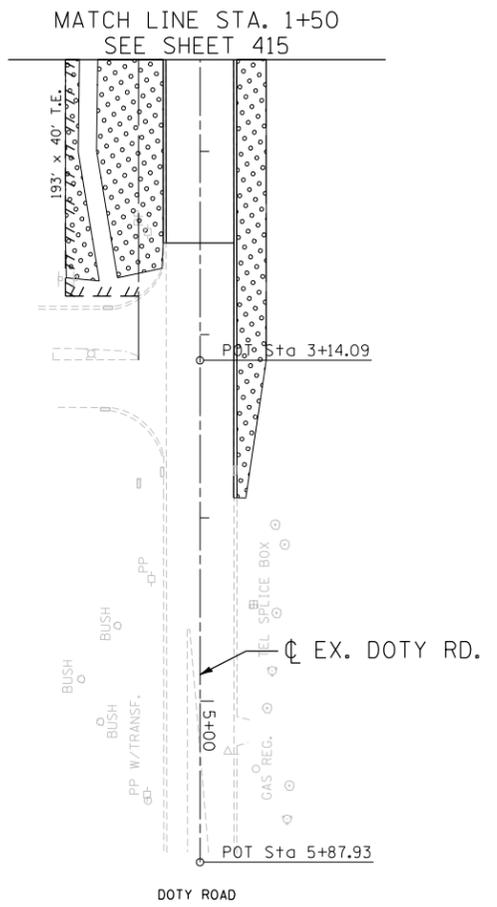
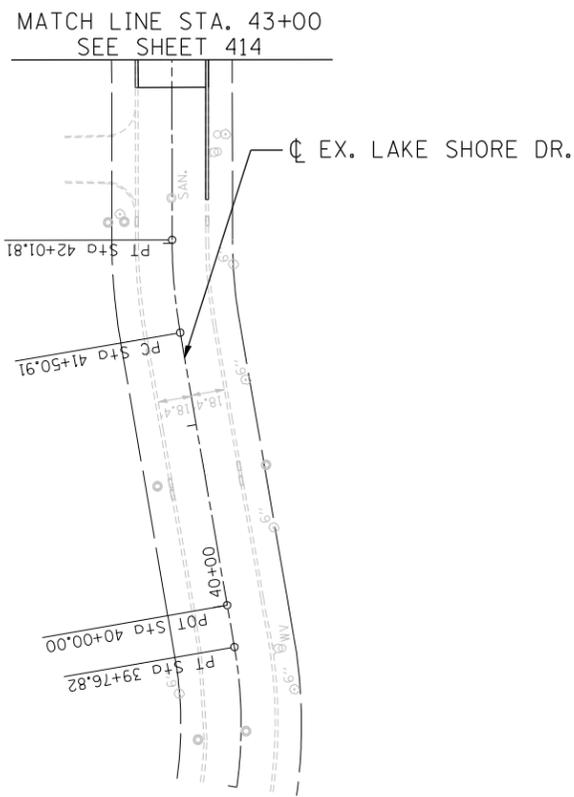
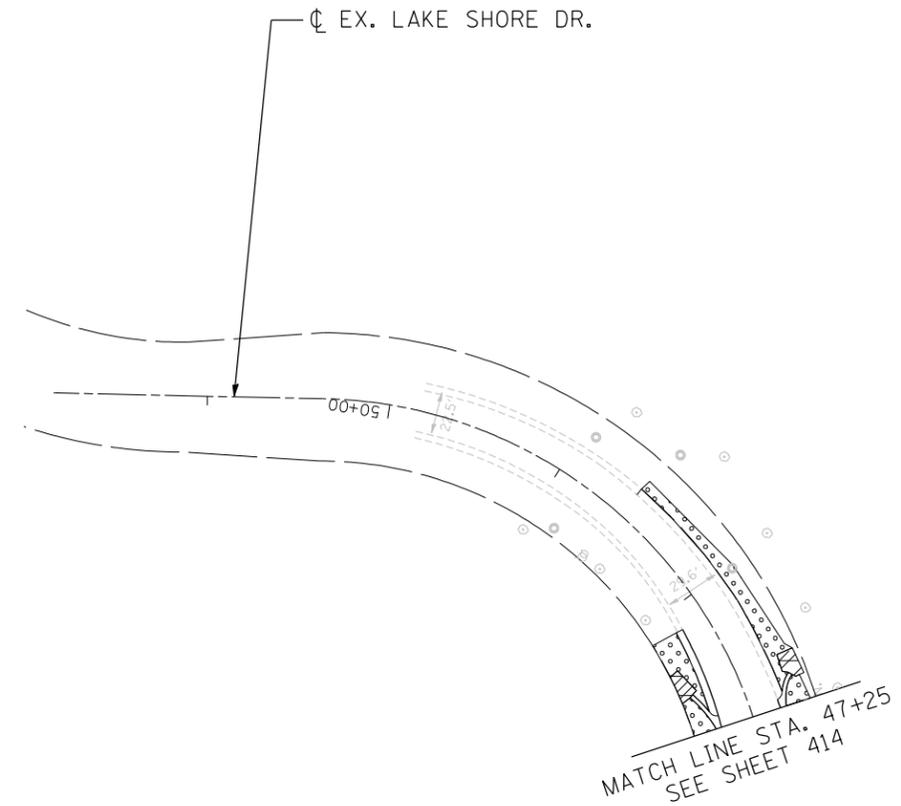
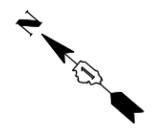
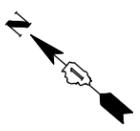
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	DATE - 11/01/13	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

**LANDSCAPING PLANS**  
**LILY POND & RIDGEFIELD ROAD**

SCALE: 1"=50'    SHEET NO.    OF    SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	420
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



**LANDSCAPING LEGEND**

	SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE) AND EROSION CONTROL BLANKET		TURF REINFORCEMENT MAT SEEDING, CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING, CLASS 4 (NATIVE GRASS) COMPOST FURNISH AND PLACE, 6" AND EROSION CONTROL BLANKET		BIOSWALE

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

**LANDSCAPING PLANS**  
**LAKE SHORE DRIVE & DOTY ROAD**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	421
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCHEDULE OF PERENNIAL PLANTS FOR BIOSWALE

PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER X 4" DEEP PLUG - 20.00 UNITS TOTAL

WETLAND SITE #2 - STA. 351+62 TO STA. 354+10 - 1111 EACH

SPARTINA PECTINATA      PRAIRIE CORDGRASS      1,111 EACH

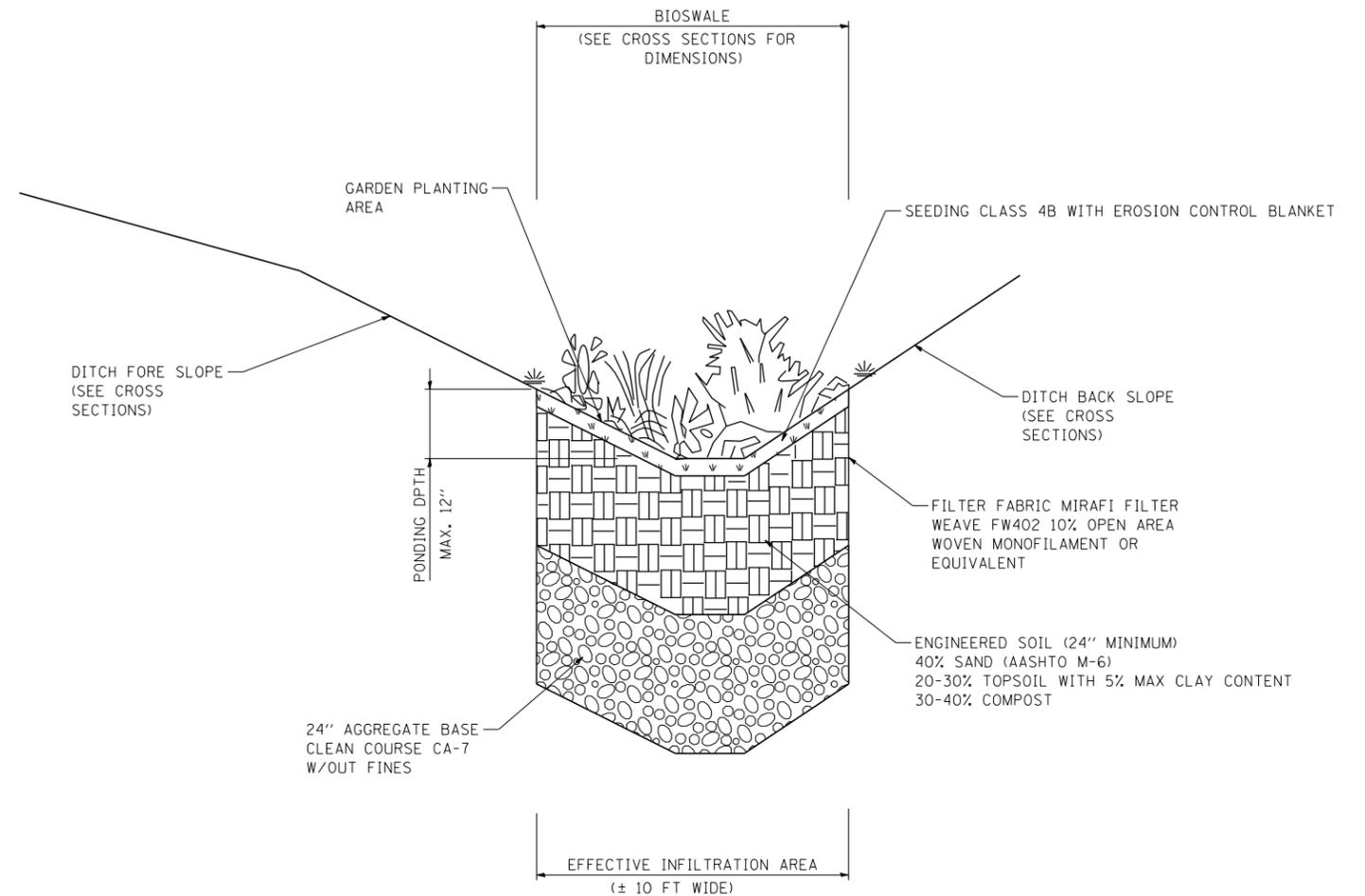
WETLAND SITE #2 - STA 357+55 TO STA 359+50 - 889 EACH

SPARTINA PECTINATA      PRAIRIE CORDGRASS      889 EACH

NOTE: ALL PLANTS SHALL BE SPACED 18" APART AND STAGGERED UNLESS OTHERWISE NOTED.

**PERENNIAL PLANT CARE CALENDAR**

Activity	Time
Plant Perennials as per Plan	May 1 - June 15 August 15 - September 15
Mulch Perennial Beds	24 Hours After Planting
Install Selective Mow Stakes as per Plan or Direction of RE	Prior to Period of Establishment Inspection
Perennial Plant Period of Establishment - Water Once Every 7 Days for 4 Weeks	Within 30 Days After Planting
Replace Dead Plants	After Period of Establishment Inspection
Perennial Plant Care (First Cycle)	30 Days After Period of Establishment Inspection
Perennial Plant Care (Second Cycle)	60 Days After Period of Establishment Inspection
Perennial Plant Care (Third Cycle)	90 Days After Period of Establishment Inspection
Supplemental Watering	Use After Period of Est. Insp. As Directed by Resident Engineer



**BIOSWALE DETAIL**

• ENGINEERED SOIL MUST BE TESTED FOR TEXTURE, PH AND ORGANIC MATTER PRIOR TO INSTALLATION.

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
 U.S. ROUTE 14

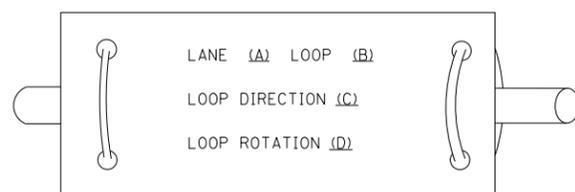
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<b>BIOSWALE DETAILS</b>			
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CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

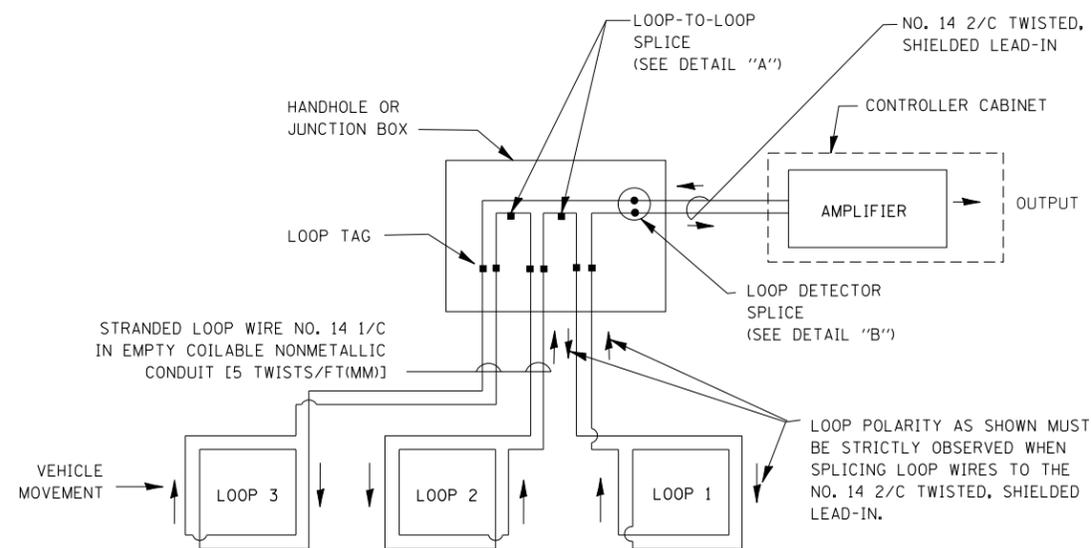
## LOOP DETECTOR NOTES

- 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

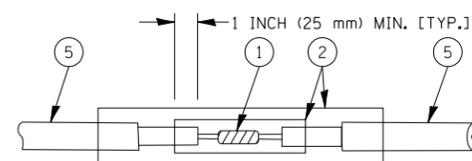


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

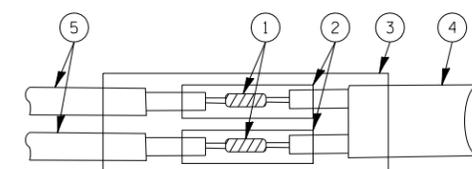


DETECTOR LOOP WIRING SCHEMATIC

- 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.

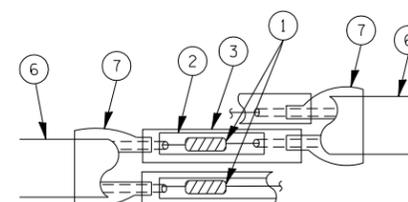


DETAIL "A"  
LOOP-TO-LOOP SPLICE

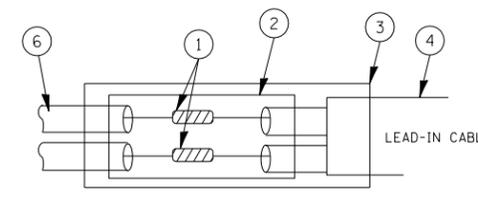


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### 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.
- PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

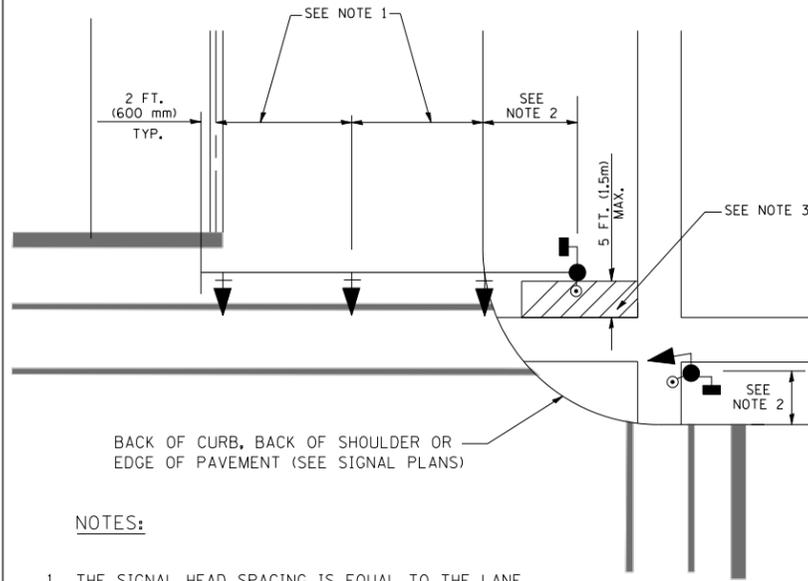
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 423
CONTRACT NO. 62268			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

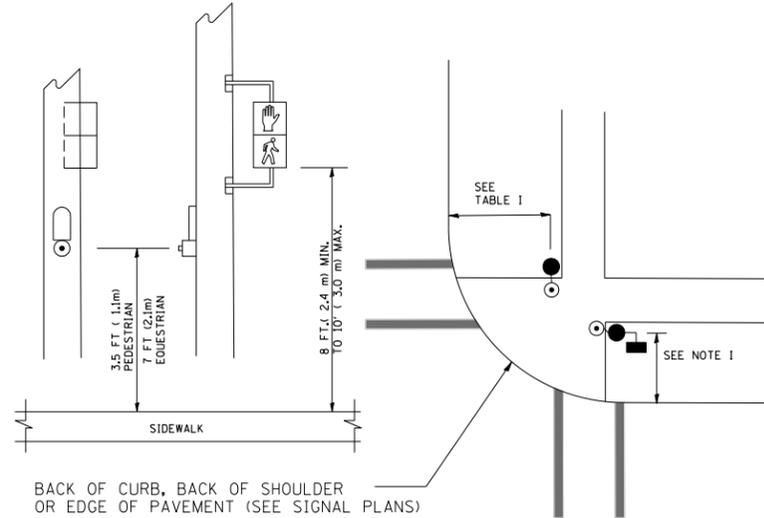
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

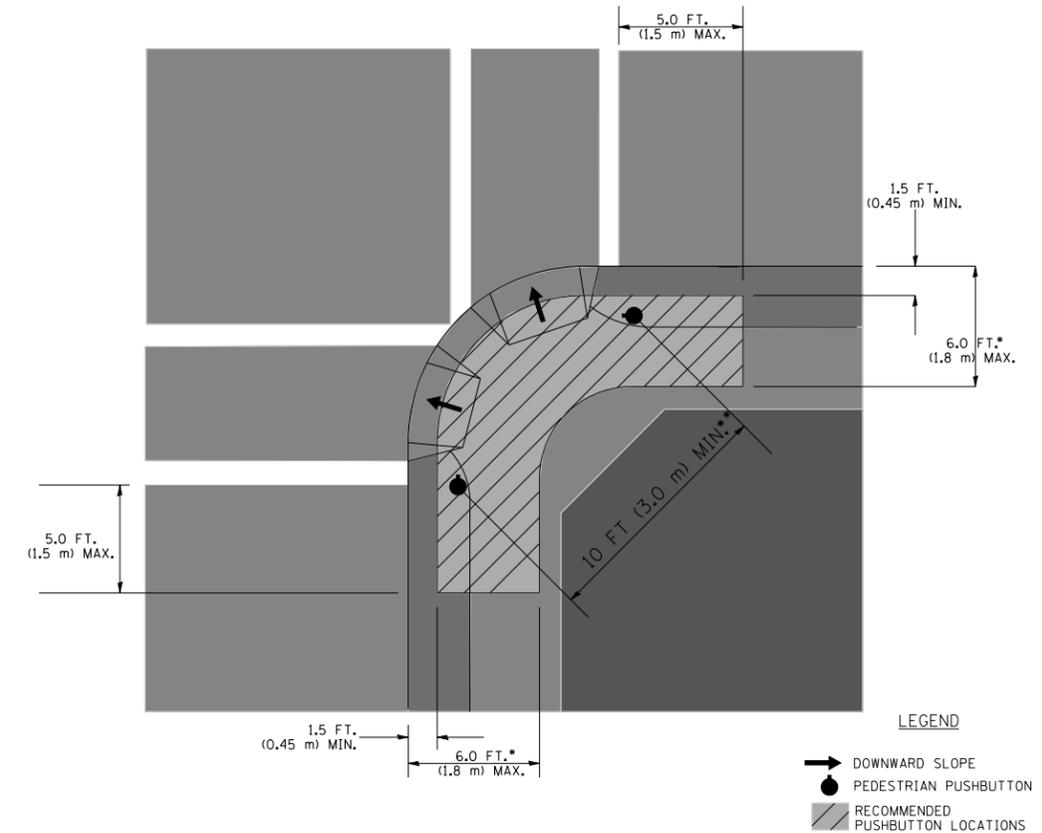
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**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) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

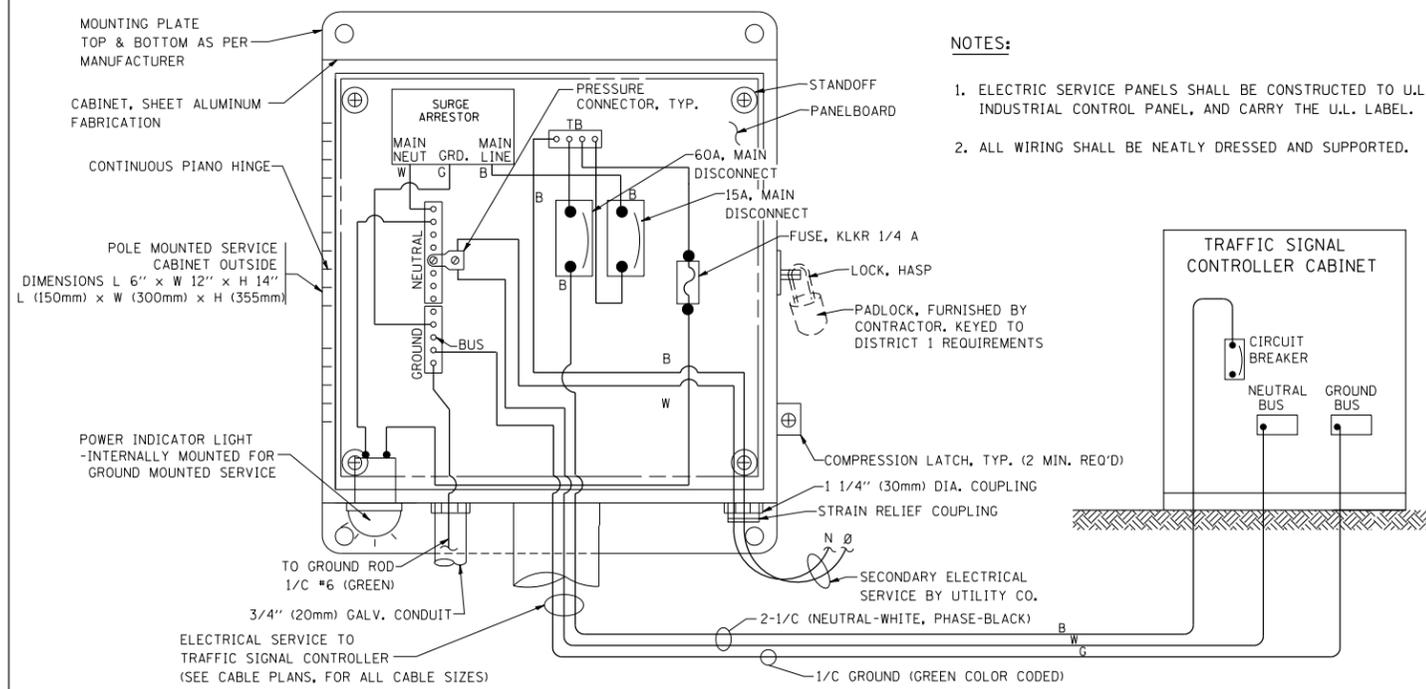
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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**

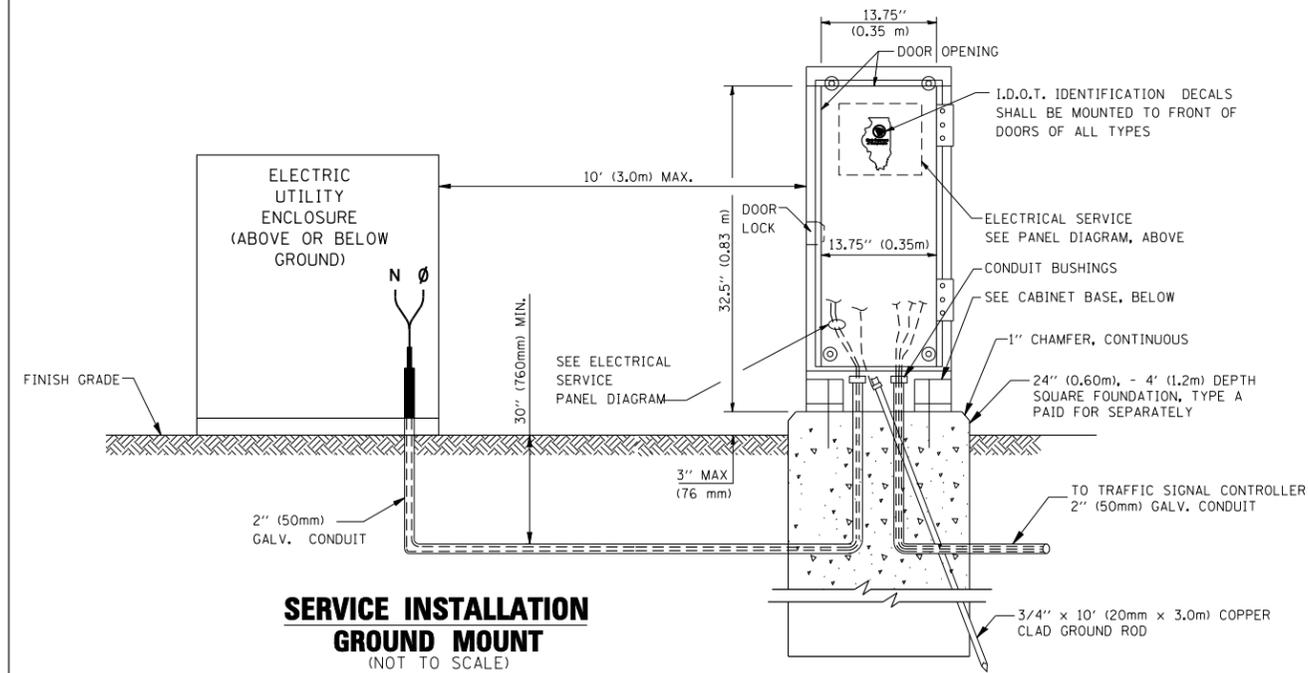
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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 EFFECT 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.

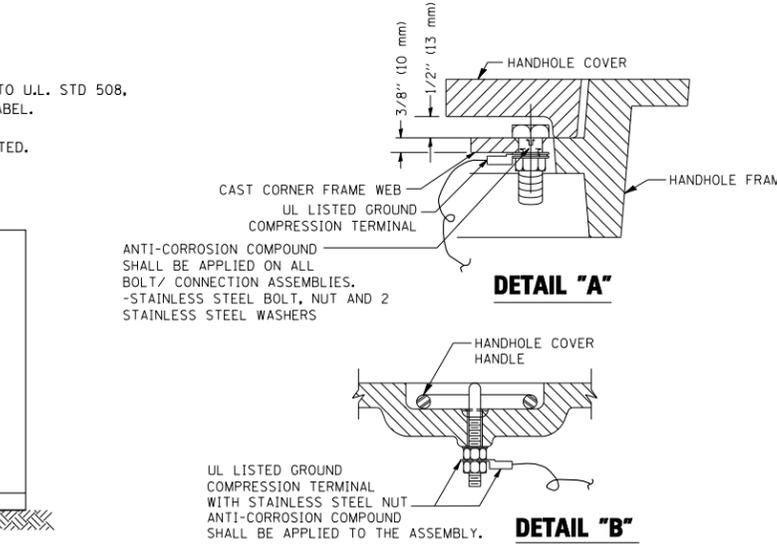
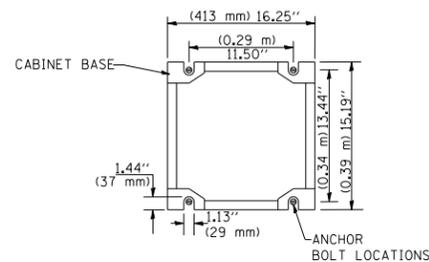


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)**



**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**

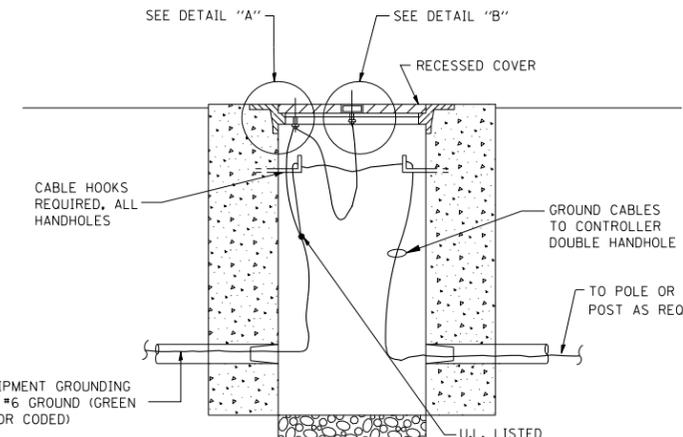
**CABINET – BASE BOLT PATTERN (NOT TO SCALE)**



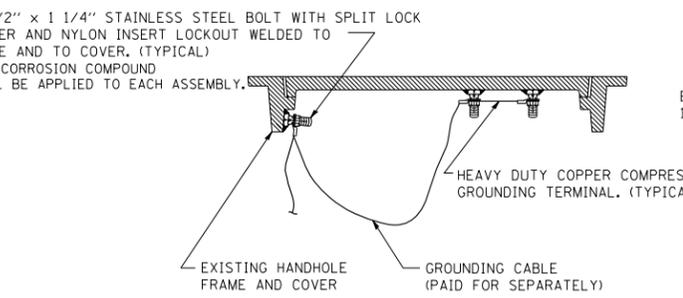
**NOTES:**

**GROUNDING SYSTEM**

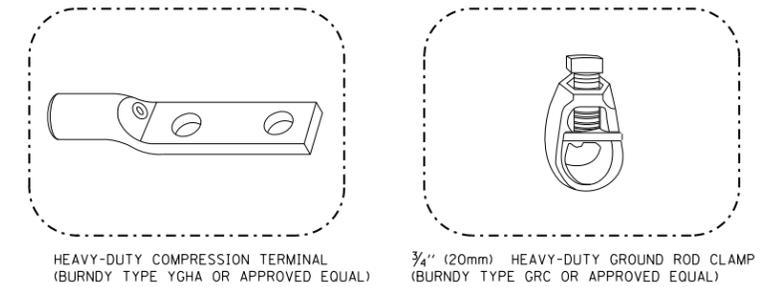
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



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

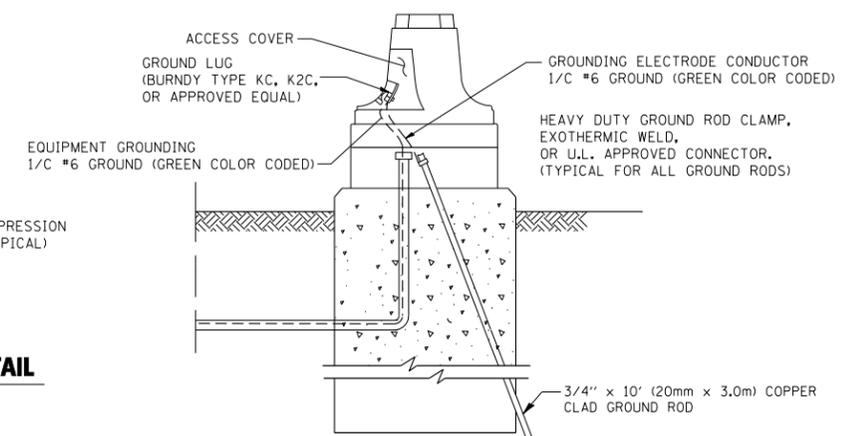


**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL (NOT TO SCALE)**



**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.



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

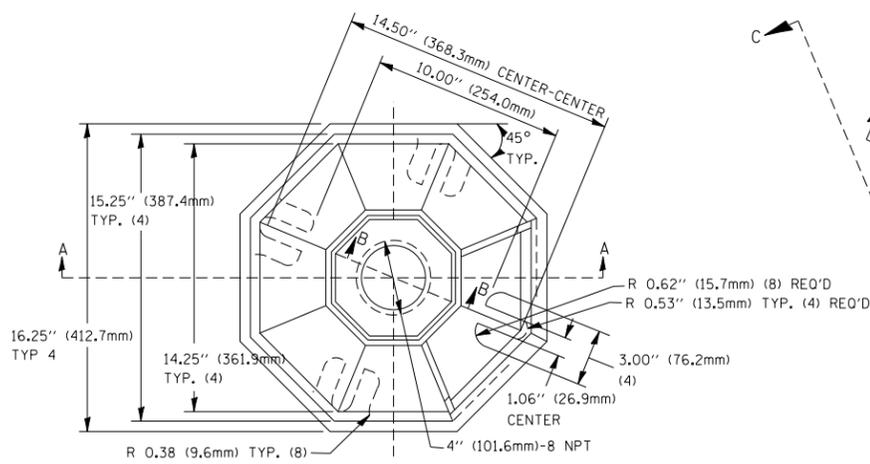
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

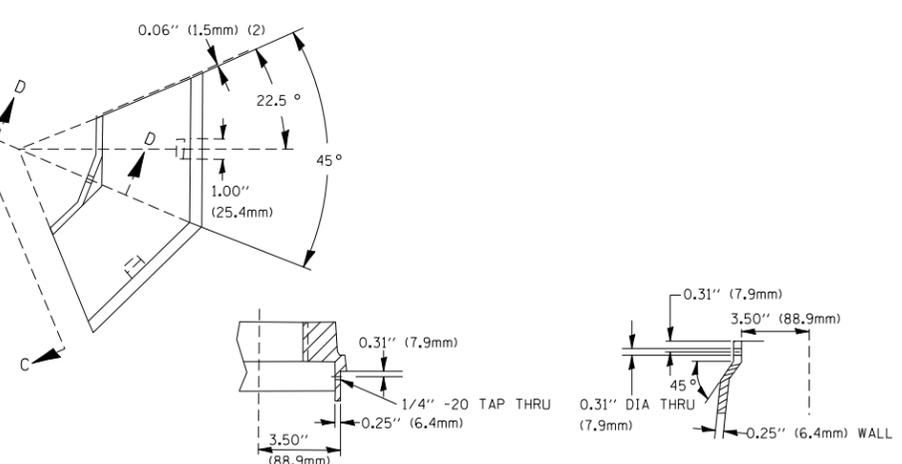
DISTRICT 1  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.P R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	425
CONTRACT NO. 62268				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

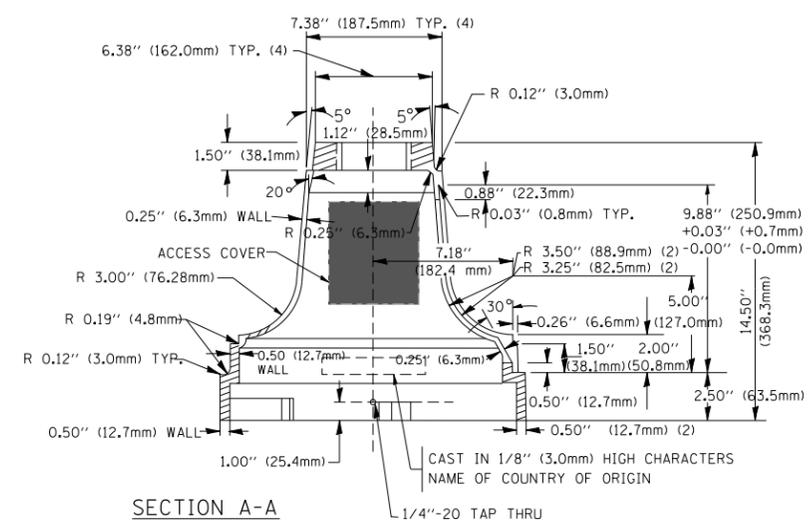


TOP VIEW

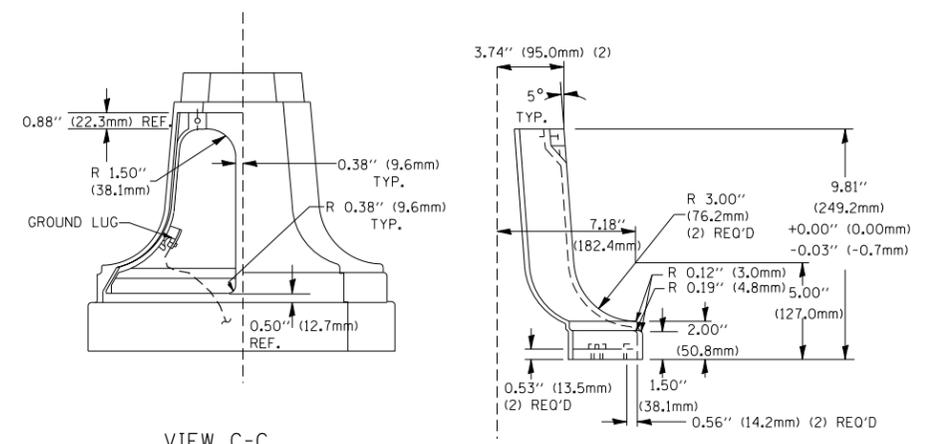


SECTION B-B

SECTION D-D

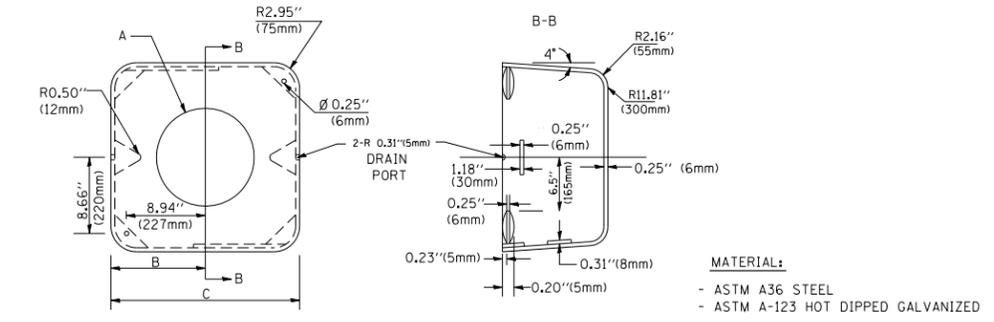


SECTION A-A



VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

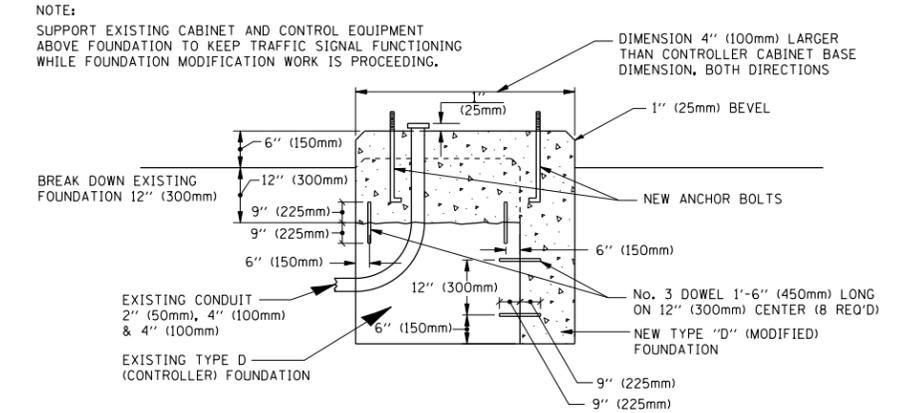


SHROUD

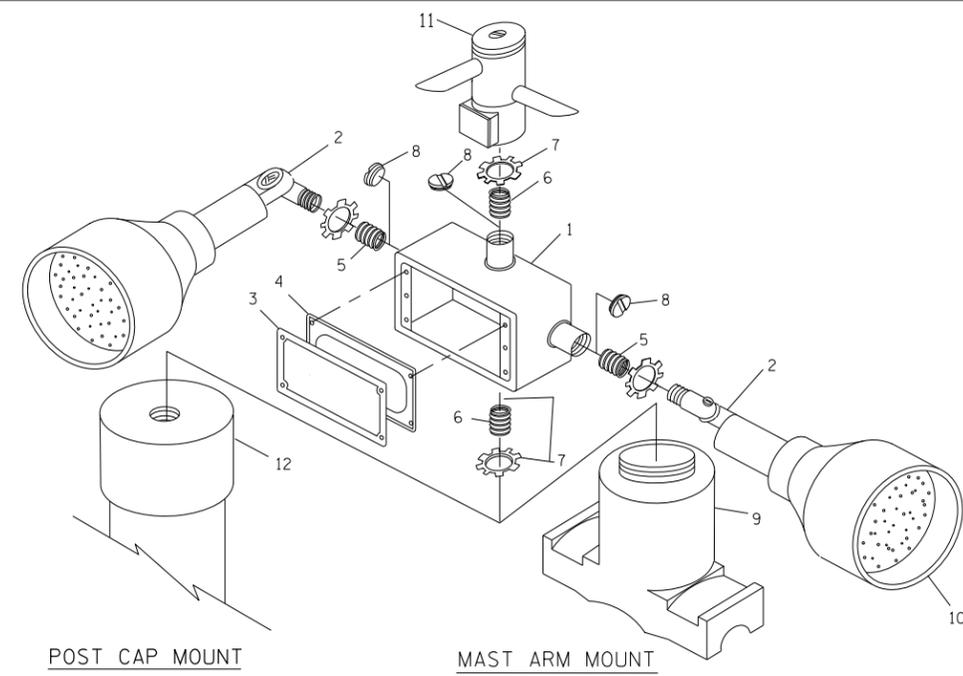
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12"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



MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

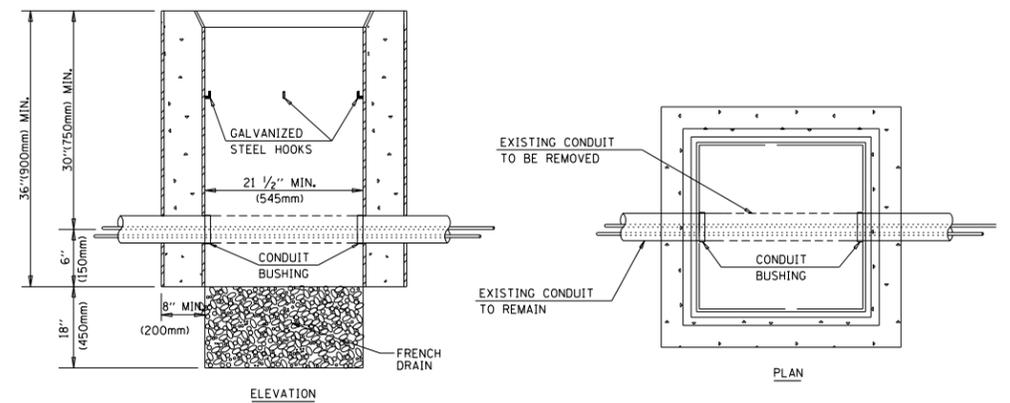
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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-0-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.

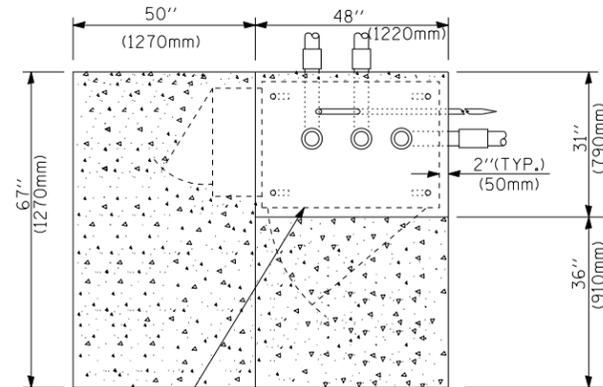
HANDHOLE TO INTERCEPT EXISTING CONDUIT

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		DATE - 10/28/09	REVISED -

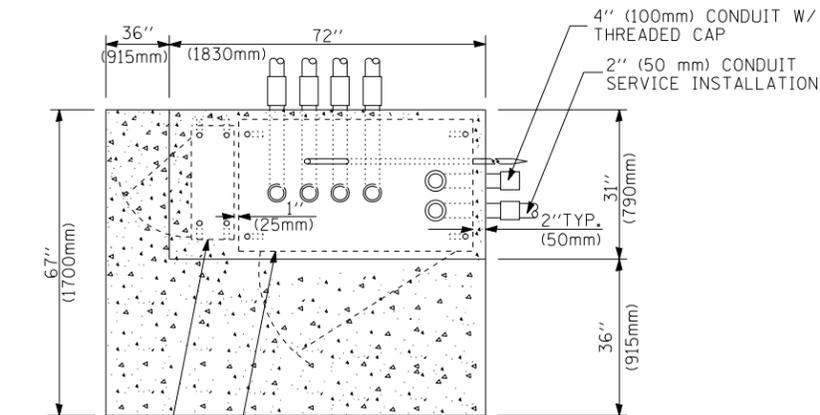
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

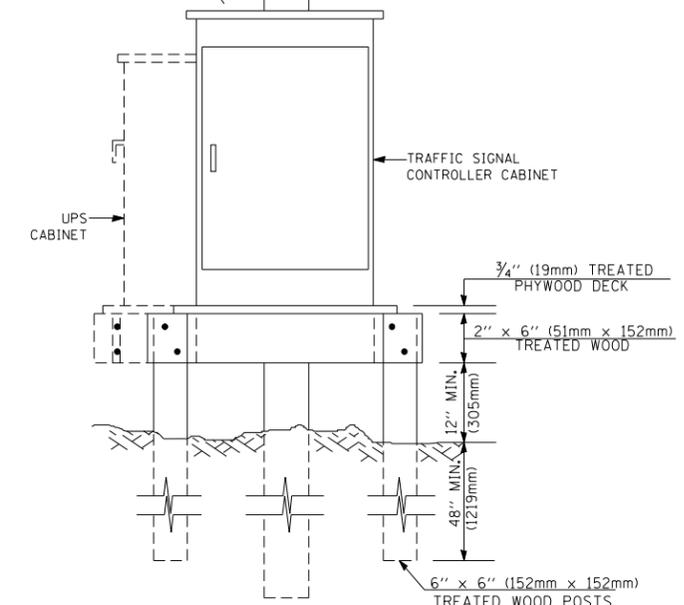
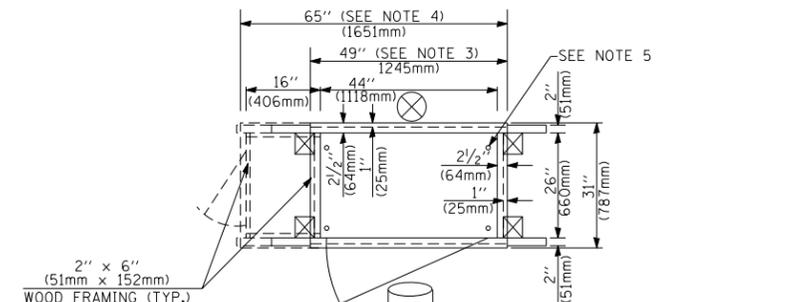
SCALE:	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	F.A.P. R.E. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 426
				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 62268		



CONTROLLER CABINET BASE  
EXISTING APRON  
PROPOSED APRON  
TOP VIEW



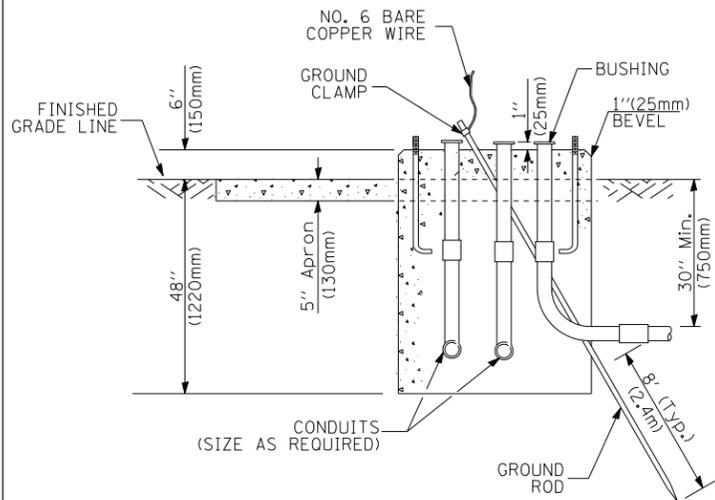
UPS CABINET BASE  
CONTROLLER CABINET BASE  
APRON  
TOP VIEW



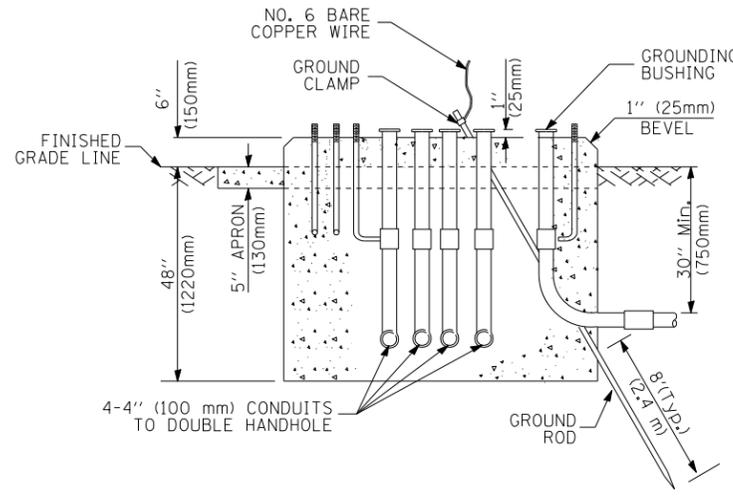
NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM



TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET



TYPE C  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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		DATE - 10/28/09	REVISED -

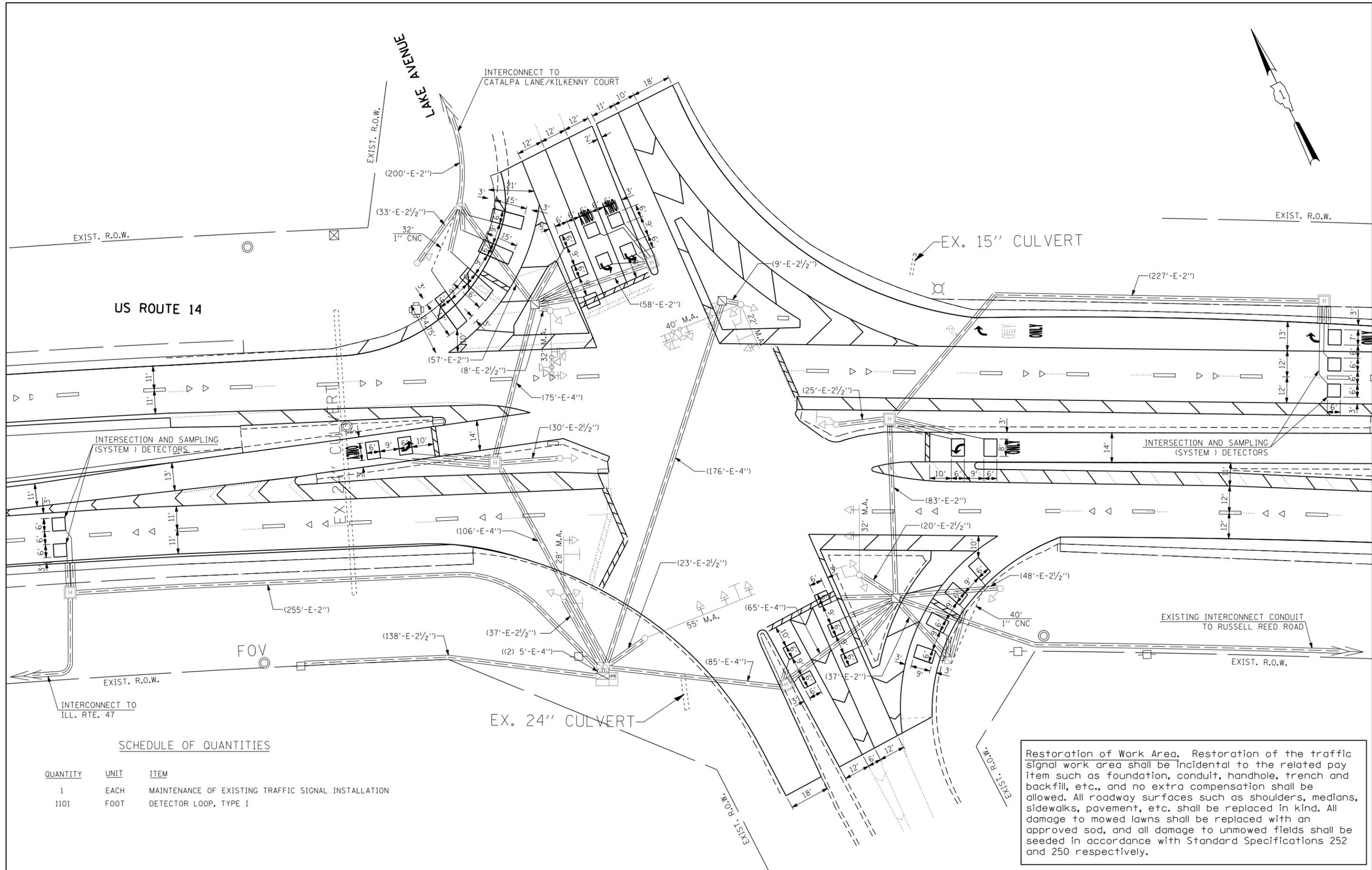
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: SHEET NO. 5 OF 6 SHEETS STA. TO STA.

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 427
CONTRACT NO. 62268			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	





**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1101	FOOT	DETECTOR LOOP, TYPE I

Restoration of Work Area. Restoration of the traffic signal work area shall be incidental to the related pay item such as foundation, conduit, handhole, trench and backfill, etc., and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded in accordance with Standard Specifications 252 and 250 respectively.

NOTES FOR TEMPORARY TRAFFIC SIGNALS

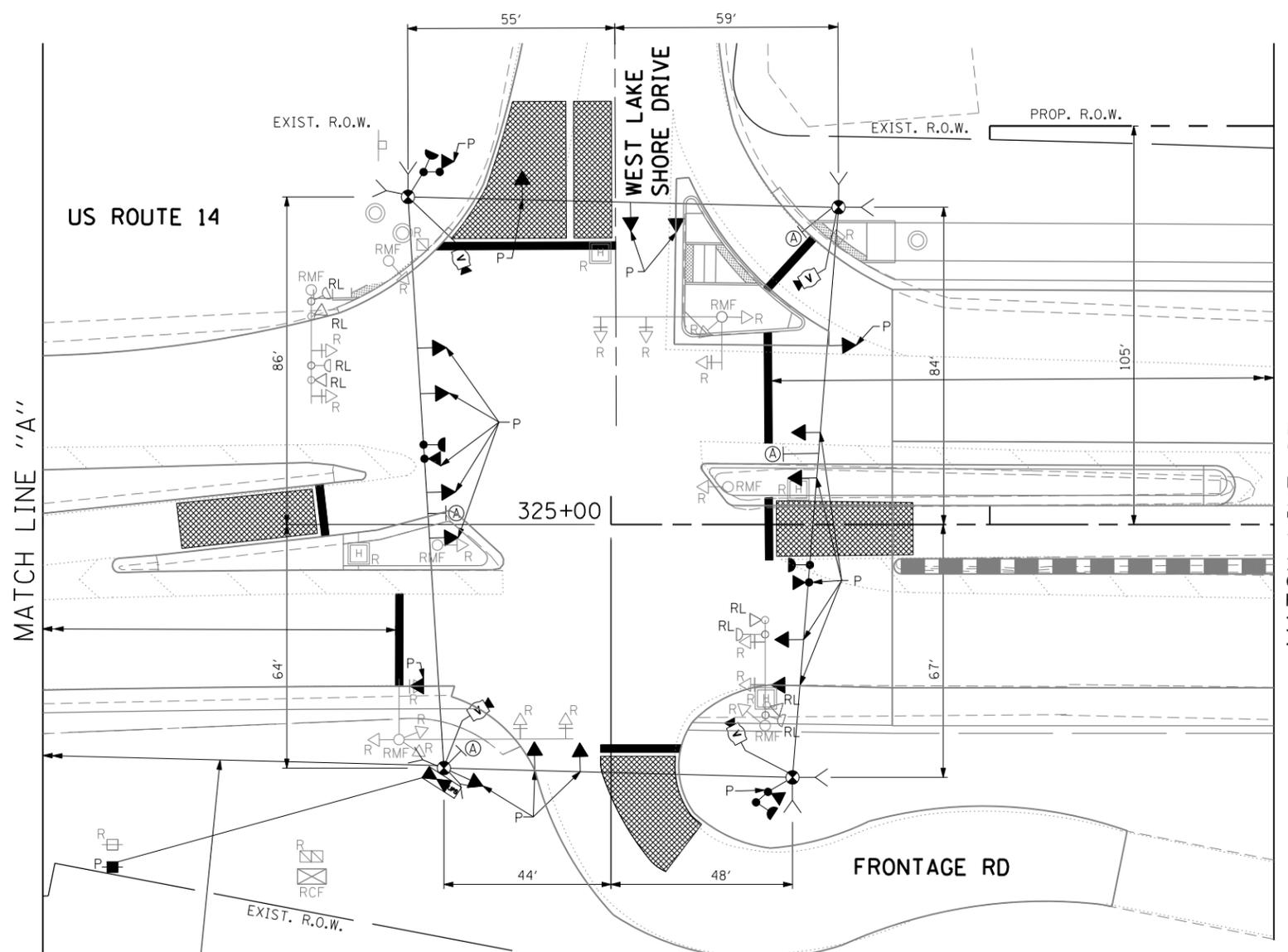
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 10 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH SIGNAL HEAD, 3-FACE, 3-SECTION, BRACKET MOUNTED
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 3 EACH TRAFFIC SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
- 1 EACH SERVICE INSTALLATION

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT US ROUTE 14 AT WEST LAKE SHORE DR.

NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.



SIGNAL HEAD PLACEMENTS FOR PRE-STAGE

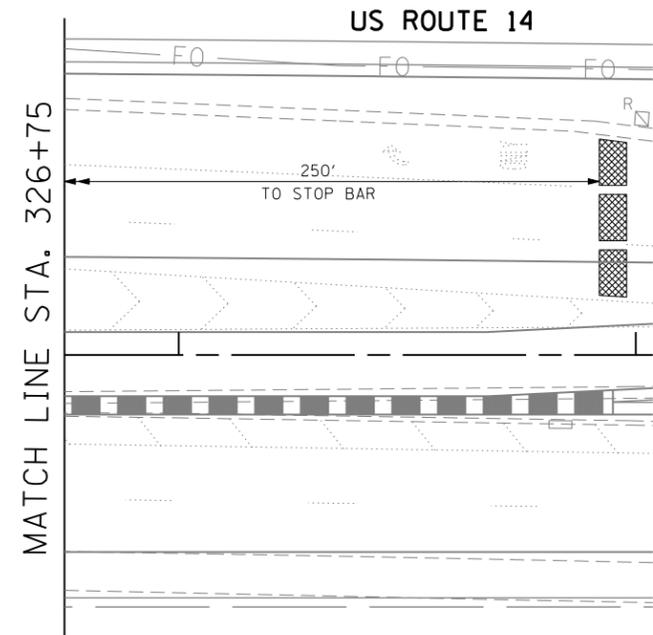
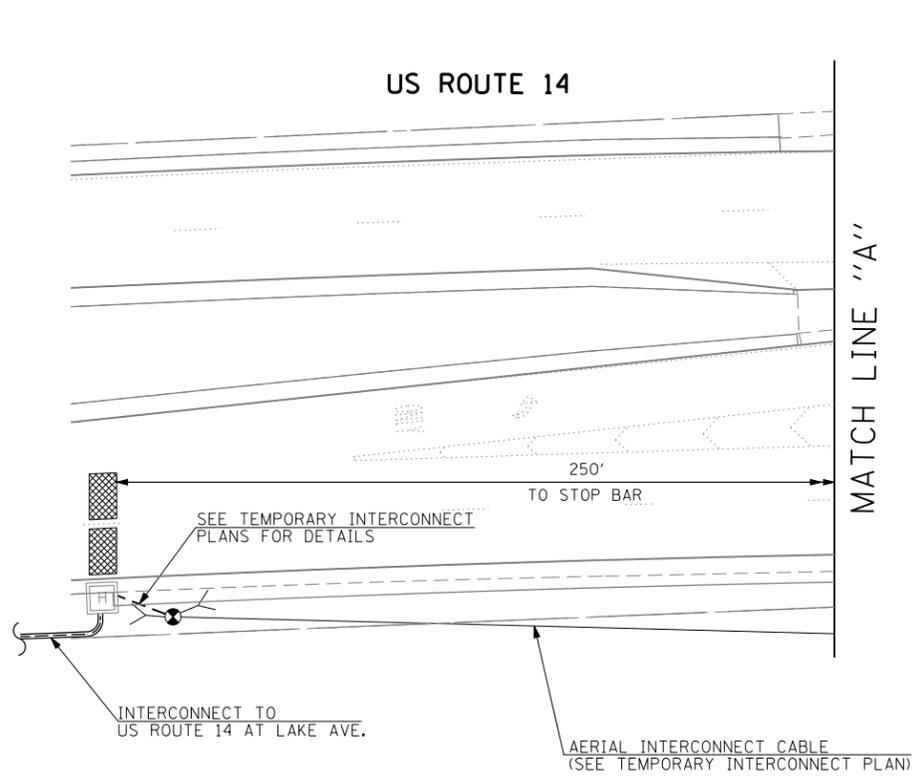
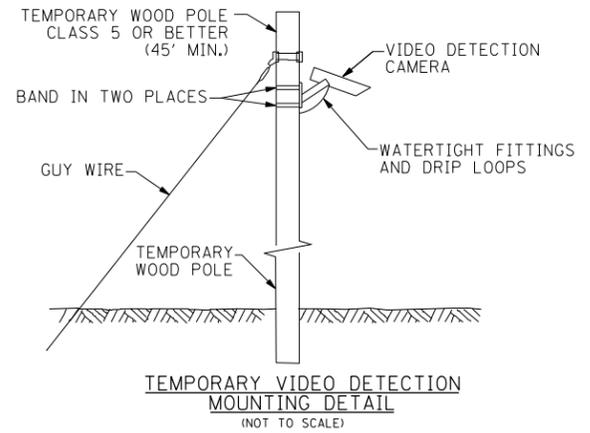
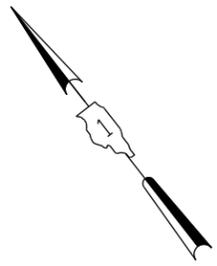
(A)  
LEFT ON GREEN ARROW ONLY  
R10-5, 30" X 36" (4 REQUIRED FOR ALL STAGES)

LEGEND

- PRE-STAGE P
- STAGE 1.1 1.1
- STAGE 1.1 SUBSTAGE A-1 1.1SA-1
- STAGE 1.1 SUBSTAGE A-2 1.1SA-2
- STAGE 1.1 SUBSTAGE A-3 1.1SA-3
- STAGE 1.2 1.2
- STAGE 2.1 2.1

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

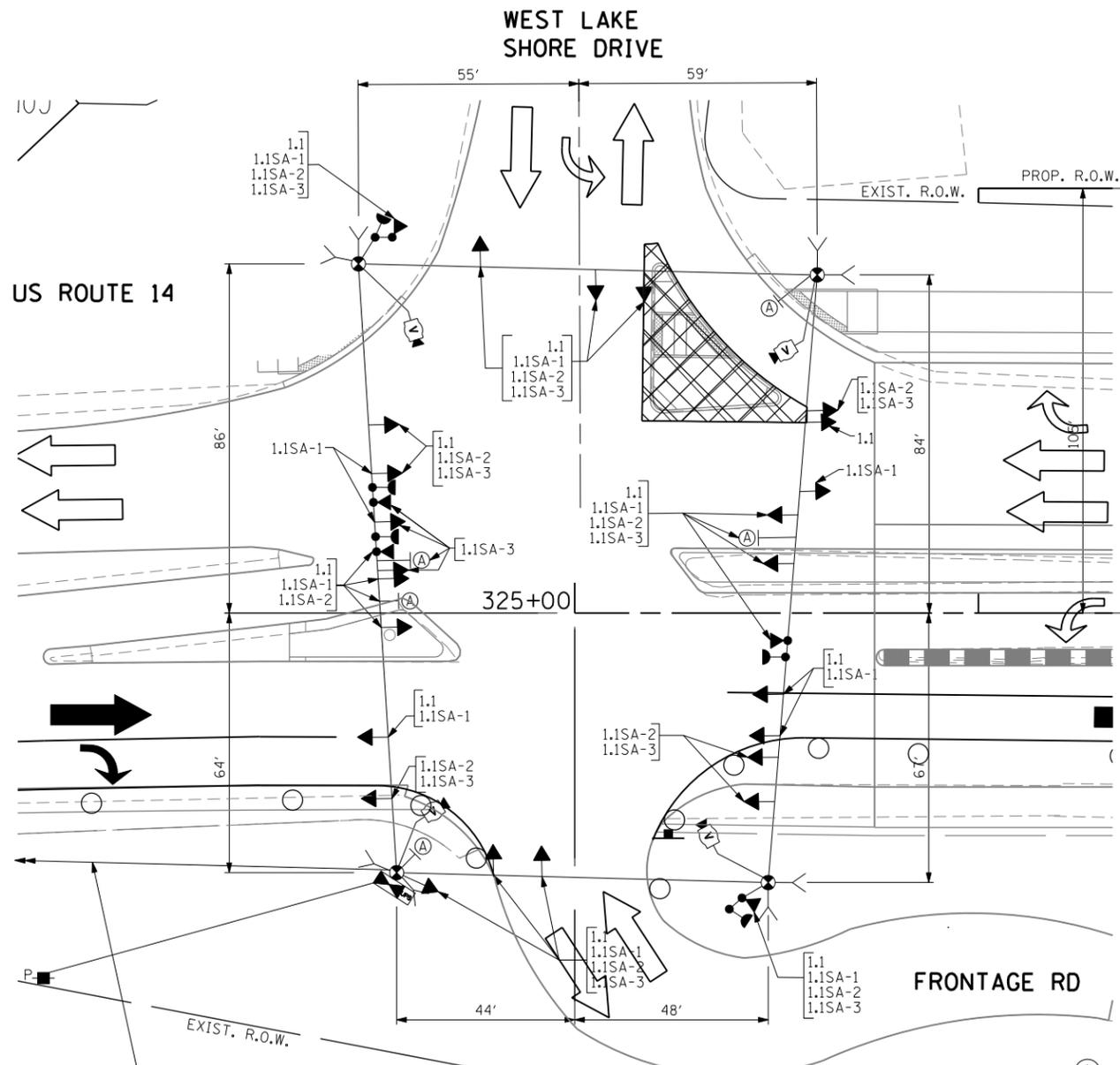
FILE NAME =	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN US ROUTE 14 AT WEST LAKE SHORE DRIVE PRE-STAGE (SHEET 1 OF 3)</b>			F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 430
\$FILE\$		DRAWN - EA, MG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
		CHECKED - PKG	REVISED -							FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		
		DATE - 11/6/2013	REVISED -									



NOTE 1: THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

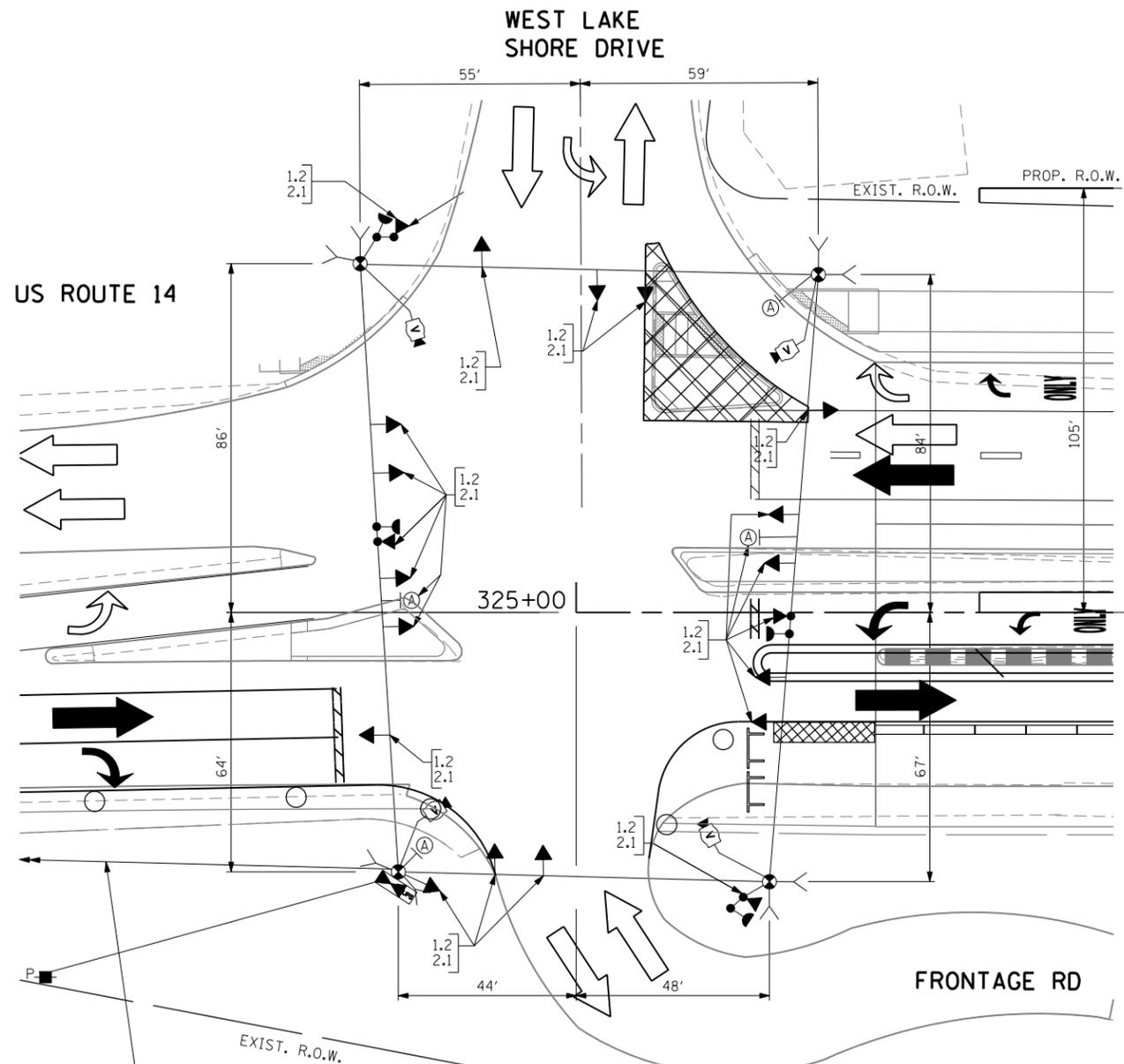
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN US ROUTE 14 AT WEST LAKE SHORE DRIVE PRE-STAGE (SHEET 2 OF 3)</b>				F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 431
	PLOT SCALE = *SCALE*	CHECKED - PKG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
	PLOT DATE = *DATE*	DATE - 11/6/2013	REVISED -		FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT								



SIGNAL HEAD PLACEMENTS FOR STAGES:  
 1.1, 1.1 SUBSTAGE A-1 (1.1SA-1), 1.1  
 SUBSTAGE A-2 (1.1SA-2), AND 1.1  
 SUBSTAGE A-3 (1.1SA-3)

- (A)
- LEFT ON
  - GREEN
  - ARROW
  - ONLY
- R10-5,  
 30" X 36"  
 (4 REQUIRED  
 FOR ALL STAGES)



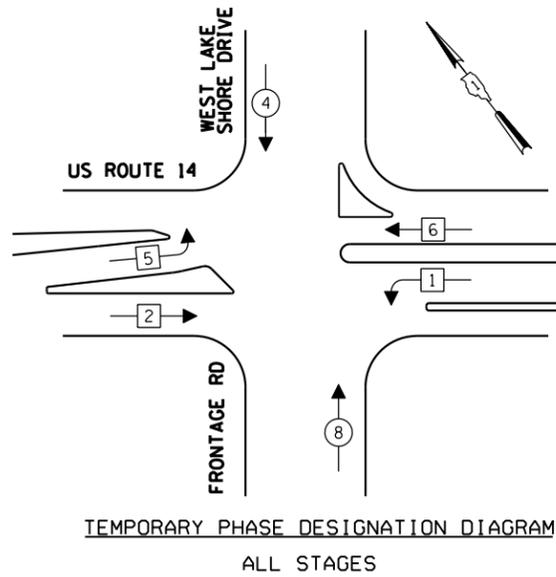
SIGNAL HEAD PLACEMENTS FOR  
 STAGES: 1.2 AND 2.1

- LEGEND**
- |                        |         |
|------------------------|---------|
| PRE-STAGE              | P       |
| STAGE 1.1              | 1.1     |
| STAGE 1.1 SUBSTAGE A-1 | 1.1SA-1 |
| STAGE 1.1 SUBSTAGE A-2 | 1.1SA-2 |
| STAGE 1.1 SUBSTAGE A-3 | 1.1SA-3 |
| STAGE 1.2              | 1.2     |
| STAGE 2.1              | 2.1     |

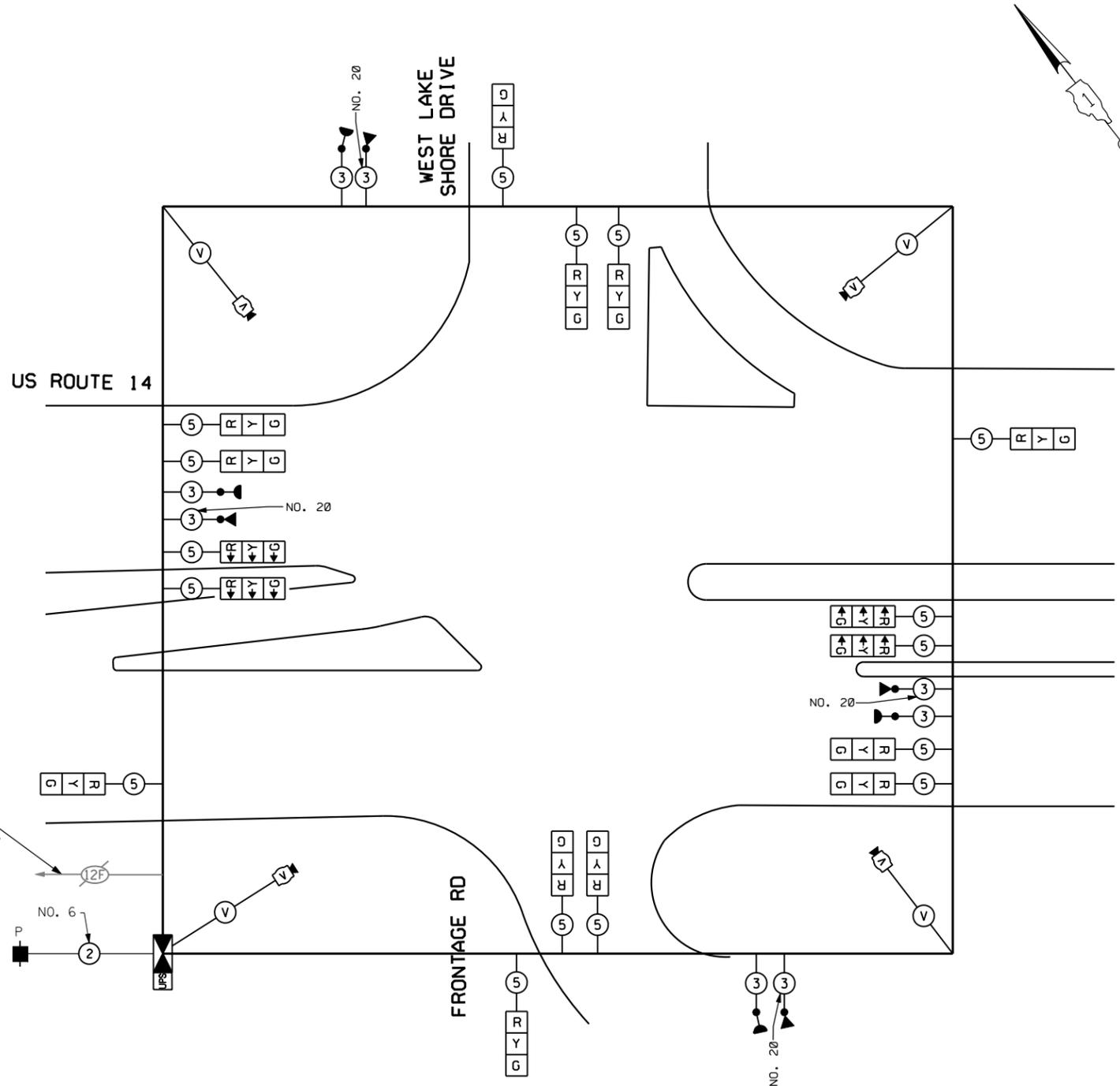
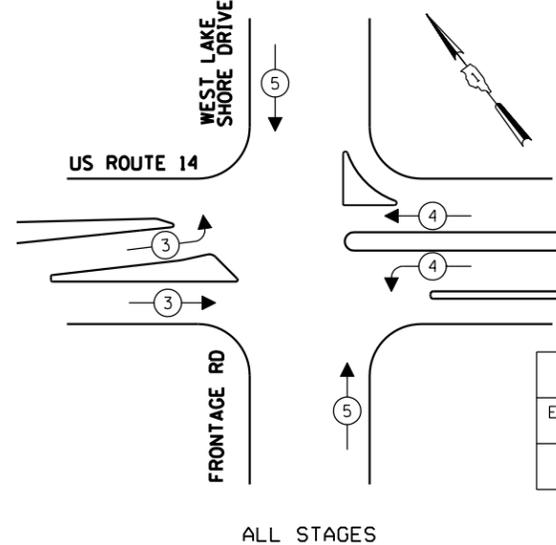
THE TRAFFIC SIGNAL CONTROL  
 EQUIPMENT FOR THIS PROJECT  
 SHALL BE "ECONOLITE" TO MATCH  
 THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 14 AT WEST LAKE SHORE DRIVE STAGE 1.1, STAGE 1.1 SUBSTAGE A-1, STAGE 1.1 SUBSTAGE A-2, STAGE 1.1 SUBSTAGE A-3, STAGE 1.2, AND STAGE 2.1 (SHEET 3 OF 3)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT SCALE = #SCALE#	DRAWN - EA, MG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	305	27R-2	MCHENRY	673	432
	PLOT DATE = #DATE#	CHECKED - PKG	REVISED -							CONTRACT NO. 62268				
		DATE - 11/6/2013	REVISED -							FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

**CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
VIDEO SYSTEM	1	150		1.00	150
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	546

CITY OF WOODSTOCK  
811 REGINA COURT  
WOODSTOCK, IL 60098

ENERGY SUPPLY CONTACT: LISA COOK  
PHONE: (815) 477-5204  
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -
\$FILEL\$		DRAWN - EA, MG	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED - PKG	REVISED -
	PLOT DATE = \$DATE\$	DATE - 11/6/2013	REVISED -

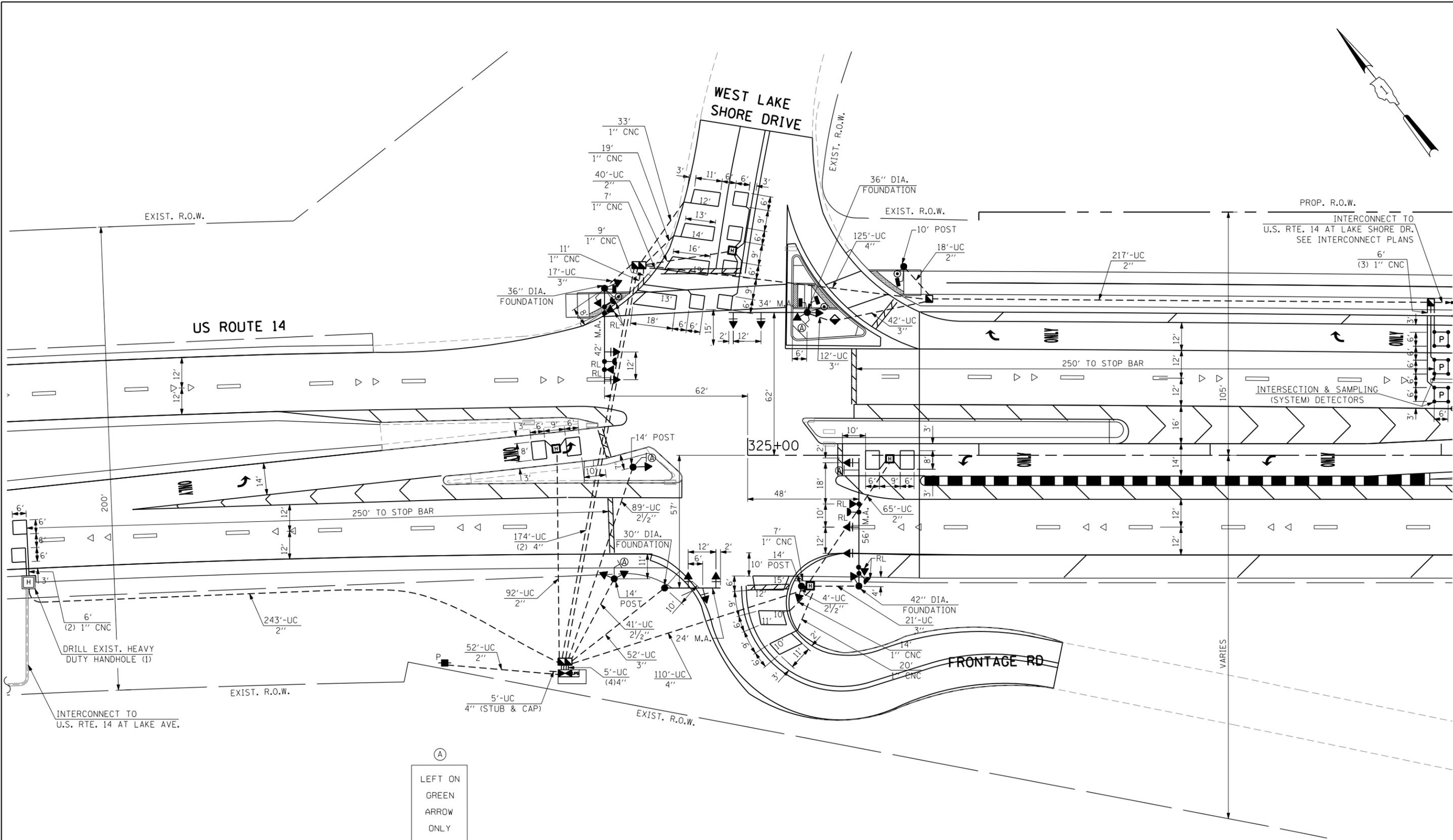
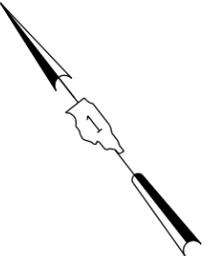
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
US ROUTE 14 AT WEST LAKE SHORE DRIVE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	433
CONTRACT NO. 62268				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



(A)  
 LEFT ON  
 GREEN  
 ARROW  
 ONLY  
 R10-5.  
 30" X 36"  
 (4 REQUIRED)

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT US ROUTE 14 AT WEST LAKE SHORE DR.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 14 AT WEST LAKE SHORE DRIVE</b>			F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 434
	PLOT SCALE = #SCALE#	DRAWN - EA, MG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
	PLOT DATE = #DATE#	CHECKED - PKG	REVISED -									
		DATE - 11/6/2013	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							

SCHEDULE OF QUANTITIES

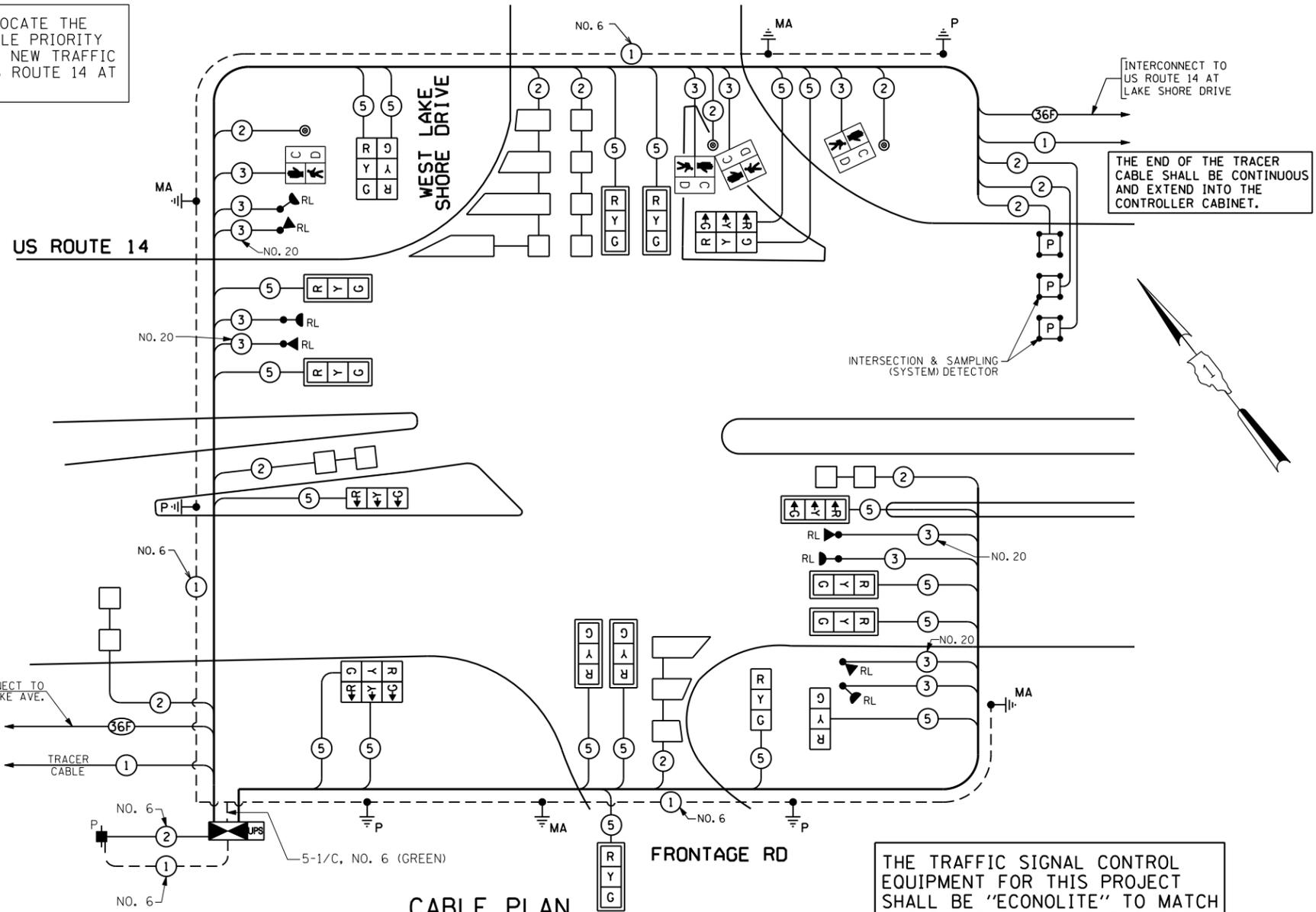
QUANTITY	UNIT	ITEM
45	SO FT	SIGN PANEL - TYPE 1
40	SO FT	SIGN PANEL - TYPE 2
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
727	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
134	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
144	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
608	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
3	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
1	EACH	TRANSCEIVER-FIBER OPTIC
1021	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
2422	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
4438	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
2904	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
72	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1000	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
24	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
21	FOOT	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
1	EACH	DRILL EXISTING HEAVY DUTY HANDHOLE
10	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED
9	EACH	INDUCTIVE LOOP DETECTOR
684	FOOT	DETECTOR LOOP, TYPE I
117	FOOT	PREFORMED DETECTOR LOOP
3	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
• 4	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
• 1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8	EACH	REMOVE EXISTING HANDHOLE
8	EACH	REMOVE EXISTING CONCRETE FOUNDATION
• 960	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
10	EACH	RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE

• 100% COST TO CITY OF WOODSTOCK

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
SIGNAL (RED)	19	135	17	0.50	161.5
(YELLOW)	19	135	25	0.25	118.75
(GREEN)	19	135	15	0.25	71.25
ARROW		135	12	0.10	
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER ILLUM. SIGN	1	100	100	1.00	100.0
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	551.5
CITY OF WOODSTOCK 811 REGINA COURT WOODSTOCK, IL 60098					
ENERGY SUPPLY CONTACT: LISA COOK PHONE: (815) 477-5204 COMPANY: COMMONWEALTH EDISON					

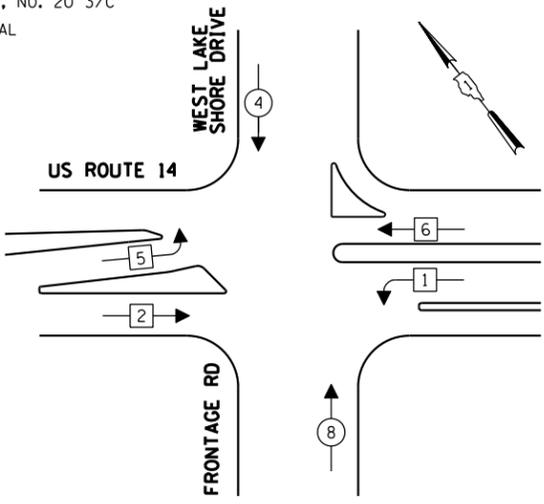
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#FILE#		DRAWN - EA, MG	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 11/6/2013	REVISED -

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT US ROUTE 14 AT WEST LAKE SHORE DR.



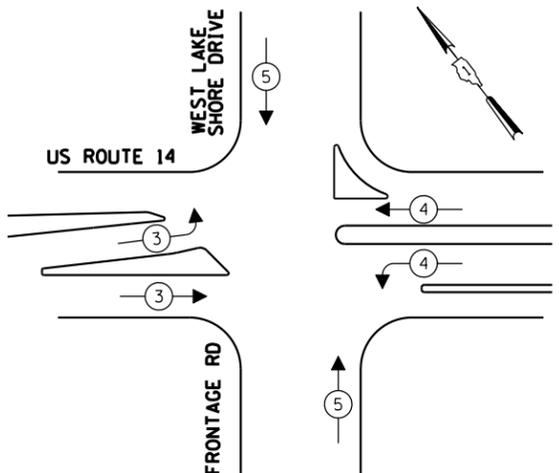
CABLE PLAN  
(NOT TO SCALE)

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



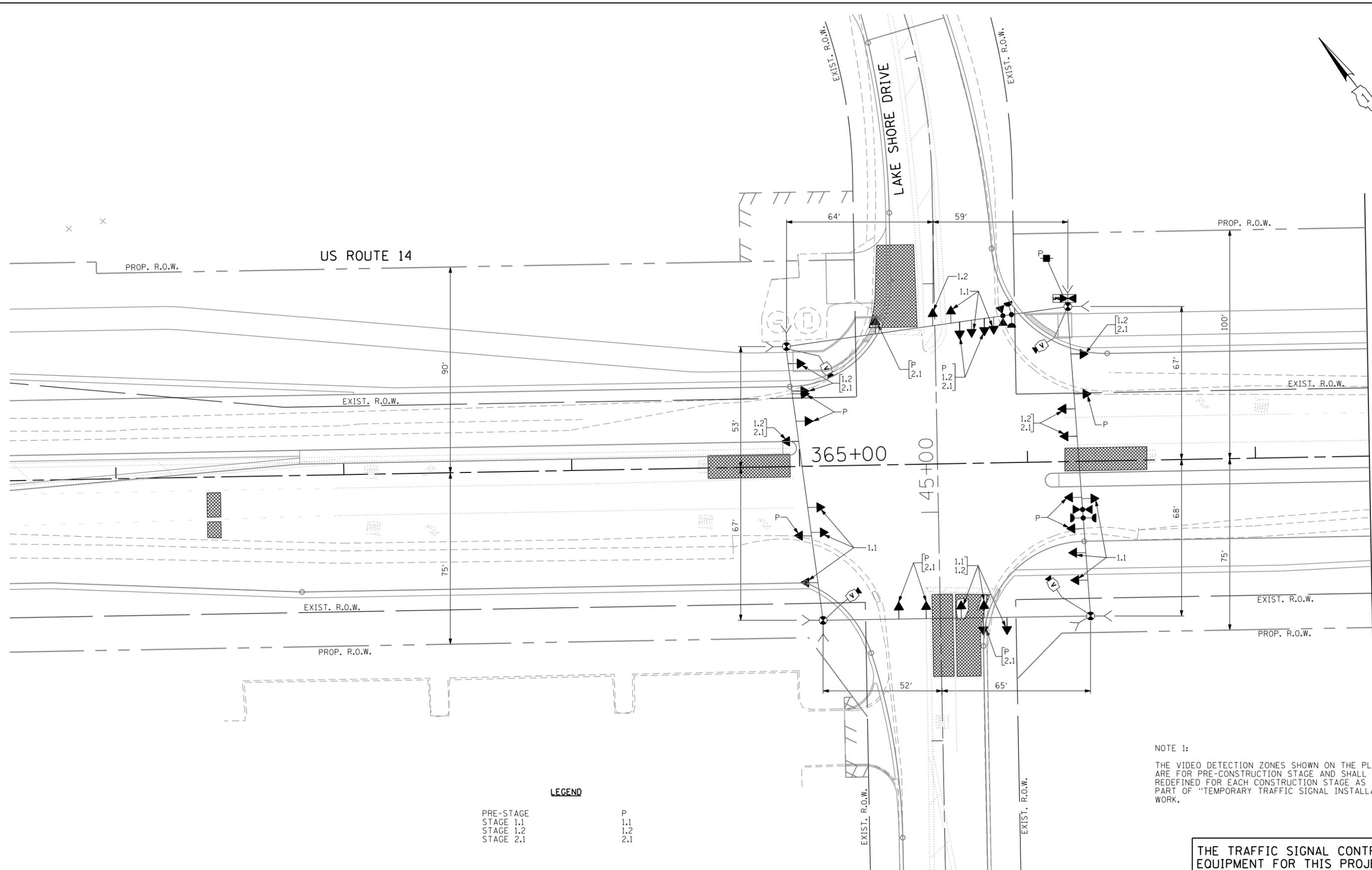
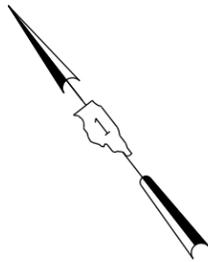
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↕

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
US ROUTE 14 AT WEST LAKE SHORE DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	435
CONTRACT NO. 62268				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



MATCH LINE STA. 367+50

**LEGEND**

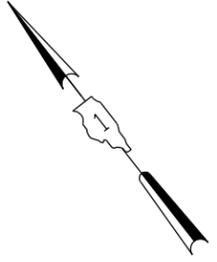
- PRE-STAGE
  - STAGE 1.1
  - STAGE 1.2
  - STAGE 2.1
- P
  - 1.1
  - 1.2
  - 2.1

NOTE 1:  
 THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

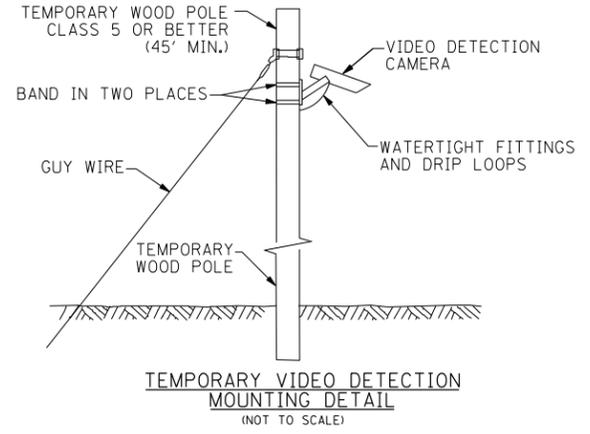
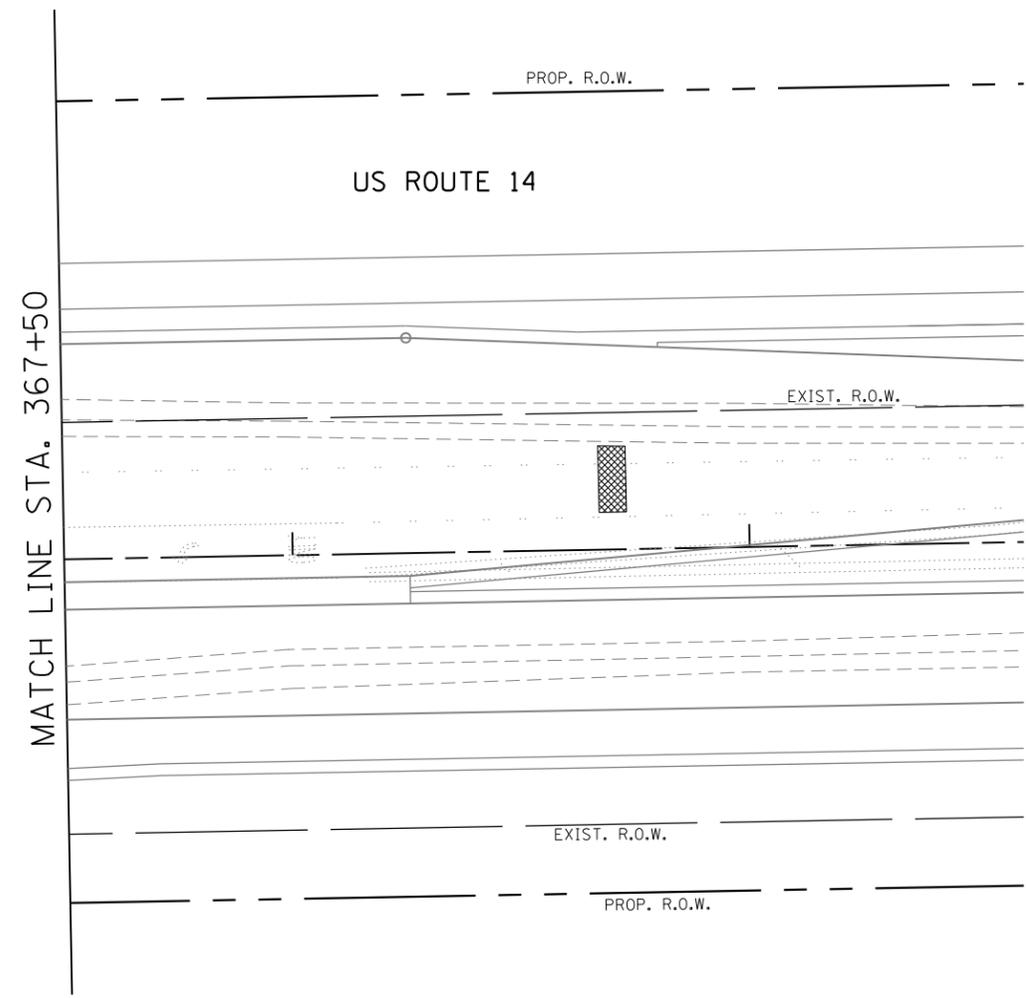
SIGNAL HEAD PLACEMENTS FOR STAGES: P, 1.1, 1.2, AND 2.1

FILE NAME = *FILE*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 14 AT LAKE SHORE DRIVE (SHEET 1 OF 2)</b>			F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 436
		DRAWN - EA, MG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
		CHECKED - PKG	REVISED -									
		DATE - 11/6/2013	REVISED -		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							



NOTES FOR TEMPORARY TRAFFIC SIGNALS

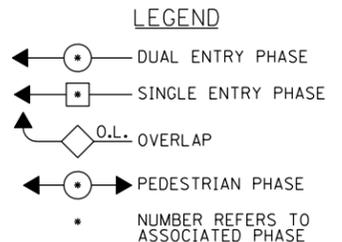
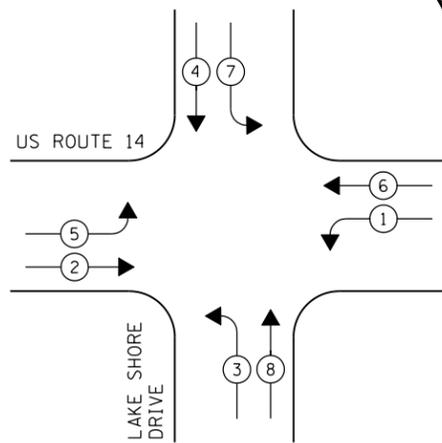
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

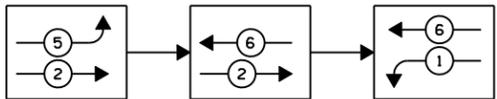
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		DRAWN - EA, MG	REVISED -		305	27R-2	MCHENRY	673	437			
	PLOT SCALE = \$SCALE\$	CHECKED - PKG	REVISED -		CONTRACT NO. 62268							
	PLOT DATE = \$DATE\$	DATE - 11/6/2013	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		

CONTROLLER SEQUENCE

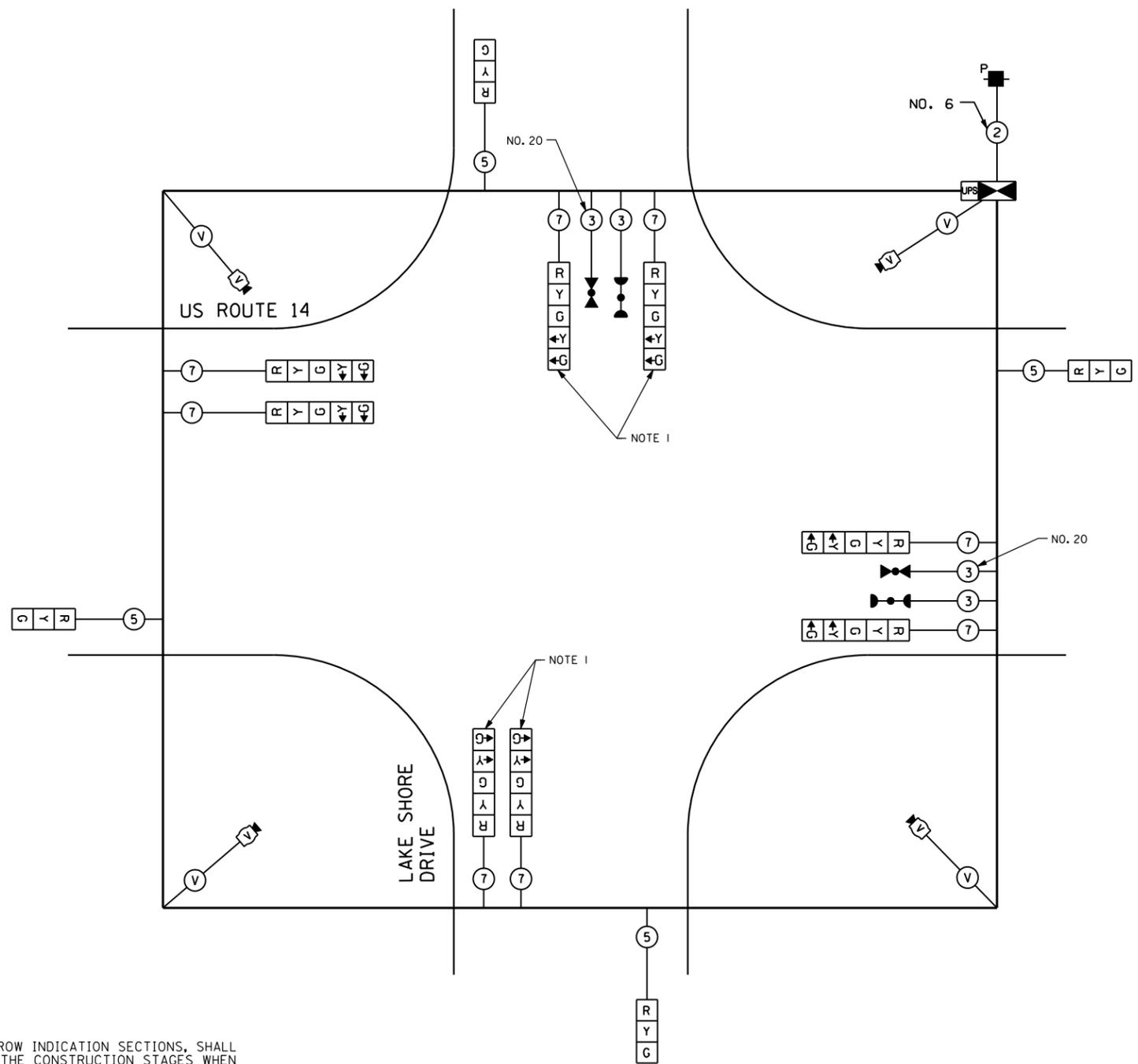


TEMPORARY PHASE DESIGNATION DIAGRAM

FOR PHASES 1, 2, 5, & 6 IN THE PHASE DESIGNATION DIAGRAM SHOWN ABOVE, THE FOLLOWING PHASE SEQUENCE SHALL BE FOLLOWED FOR STAGE 1,2, SUB-STAGE A-2.



PHASES 3, 4, 7 & 8 SHALL FOLLOW THE STANDARD SEQUENCE IN ACCORDANCE WITH STATE STANDARD 857001



NOTE 1: THE YELLOW AND GREEN LEFT TURN ARROW INDICATION SECTIONS, SHALL BE DISCONNECTED AND BAGGED DURING THE CONSTRUCTION STAGES WHEN THESE ARROW SIGNAL INDICATIONS ARE NOT NEEDED. THE APPLICABLE PHASES (3 AND 7) SHALL BE DISABLED.

TEMPORARY CABLE PLAN

(NOT TO SCALE)

ALL STAGES

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 491.20
CITY OF WOODSTOCK 811 REGINA COURT WOODSTOCK, IL 60098					
ENERGY SUPPLY CONTACT: LISA COOK PHONE: (815) 477-5204 COMPANY: COMMONWEALTH EDISON					

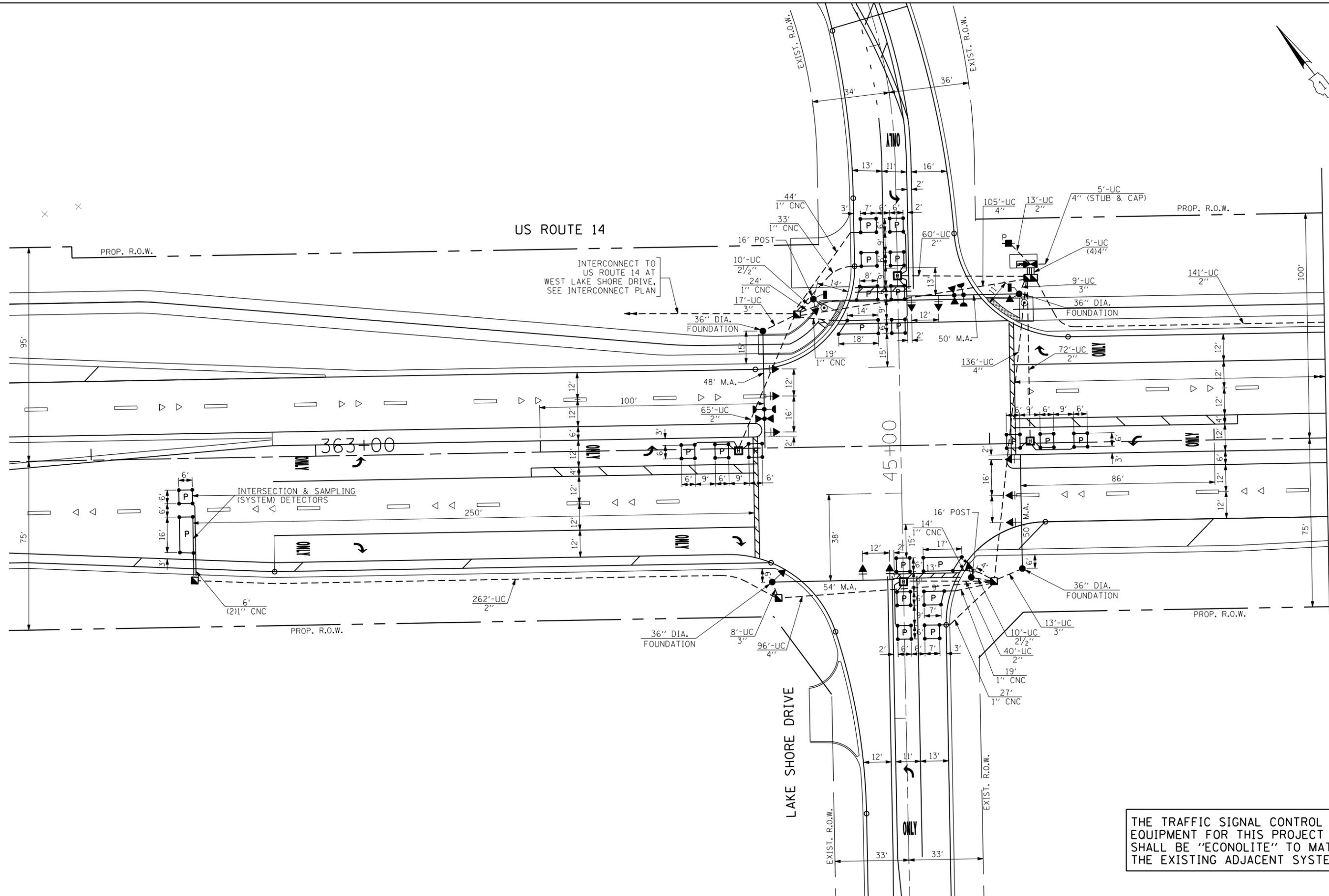
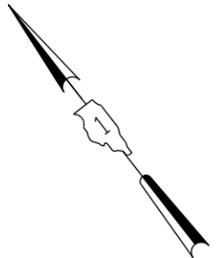
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\$FILEL\$		DRAWN - EA, MG	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 11/6/2013	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM  
US ROUTE 14 AT LAKE SHORE DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	438
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	



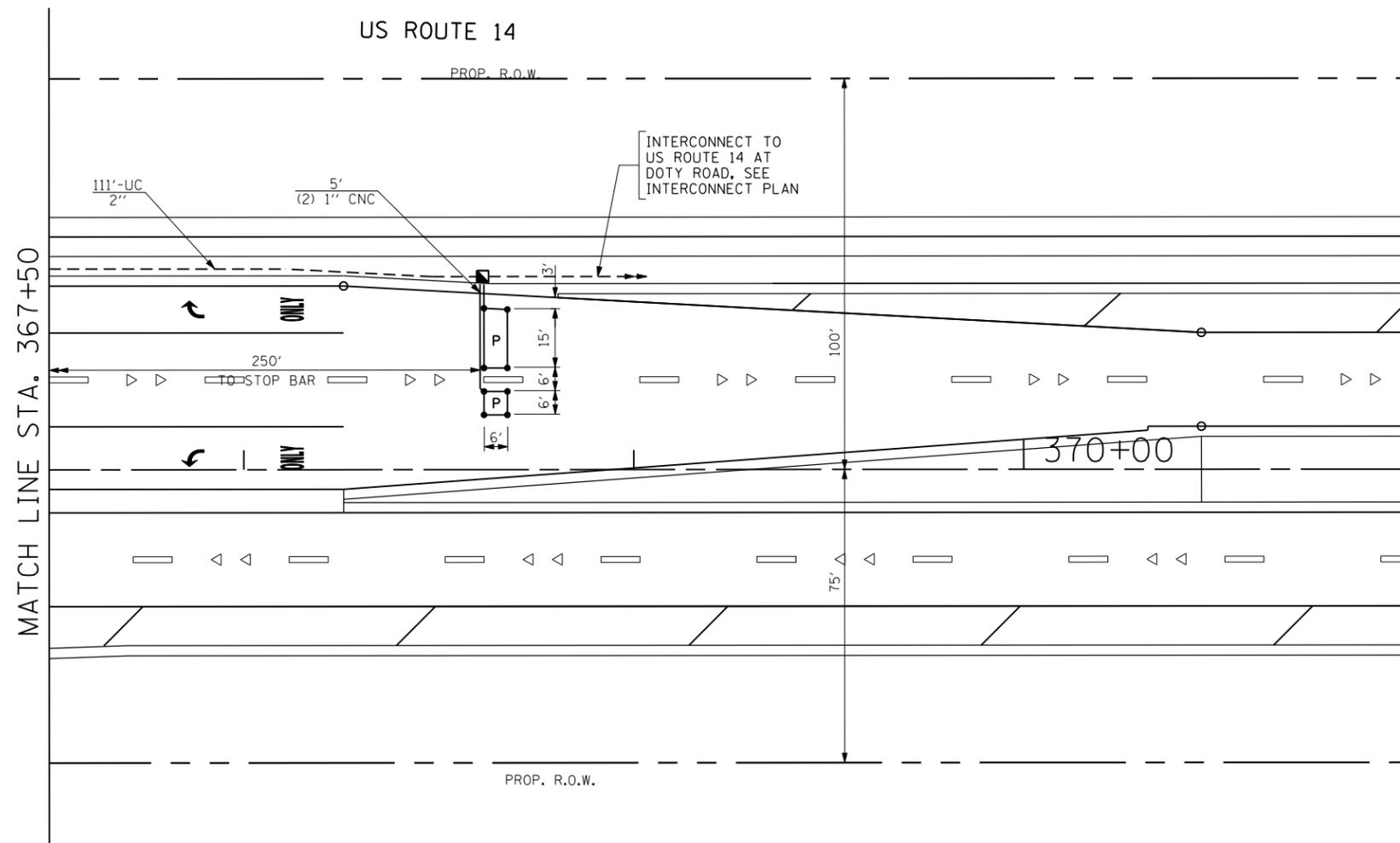
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -
		DRAWN - EA, MG	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 11/6/2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 14 AT LAKE SHORE DRIVE (SHEET 1 OF 2)</b>			
SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	439
CONTRACT NO. 62268				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN US ROUTE 14 AT LAKE SHORE DRIVE (SHEET 2 OF 2)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1"=20'	CHECKED - PKG	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	305	27R-2	MCHENRY
PLOT DATE = *DATE*	DATE - 11/6/2013	REVISED -							CONTRACT NO. 62268			
											FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES

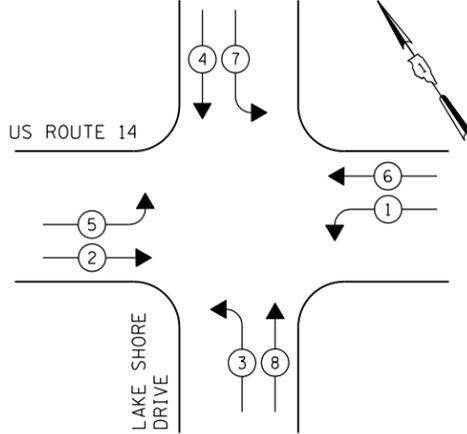
QUANTITY	UNIT	ITEM
15	SO FT	SIGN PANEL - TYPE 1
21.5	SO FT	SIGN PANEL - TYPE 2
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
764	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
20	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
47	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
362	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
5	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
1	EACH	TRANSCEIVER - FIBER OPTIC
198	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
516	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1292	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1630	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2260	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
33	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
580	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.
8	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
58	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED
9	EACH	INDUCTIVE LOOP DETECTOR
804	FOOT	PREFORMED DETECTOR LOOP
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
2	EACH	PEDESTIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
304	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
10	EACH	RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE

• 100% COST TO CITY OF WOODSTOCK

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

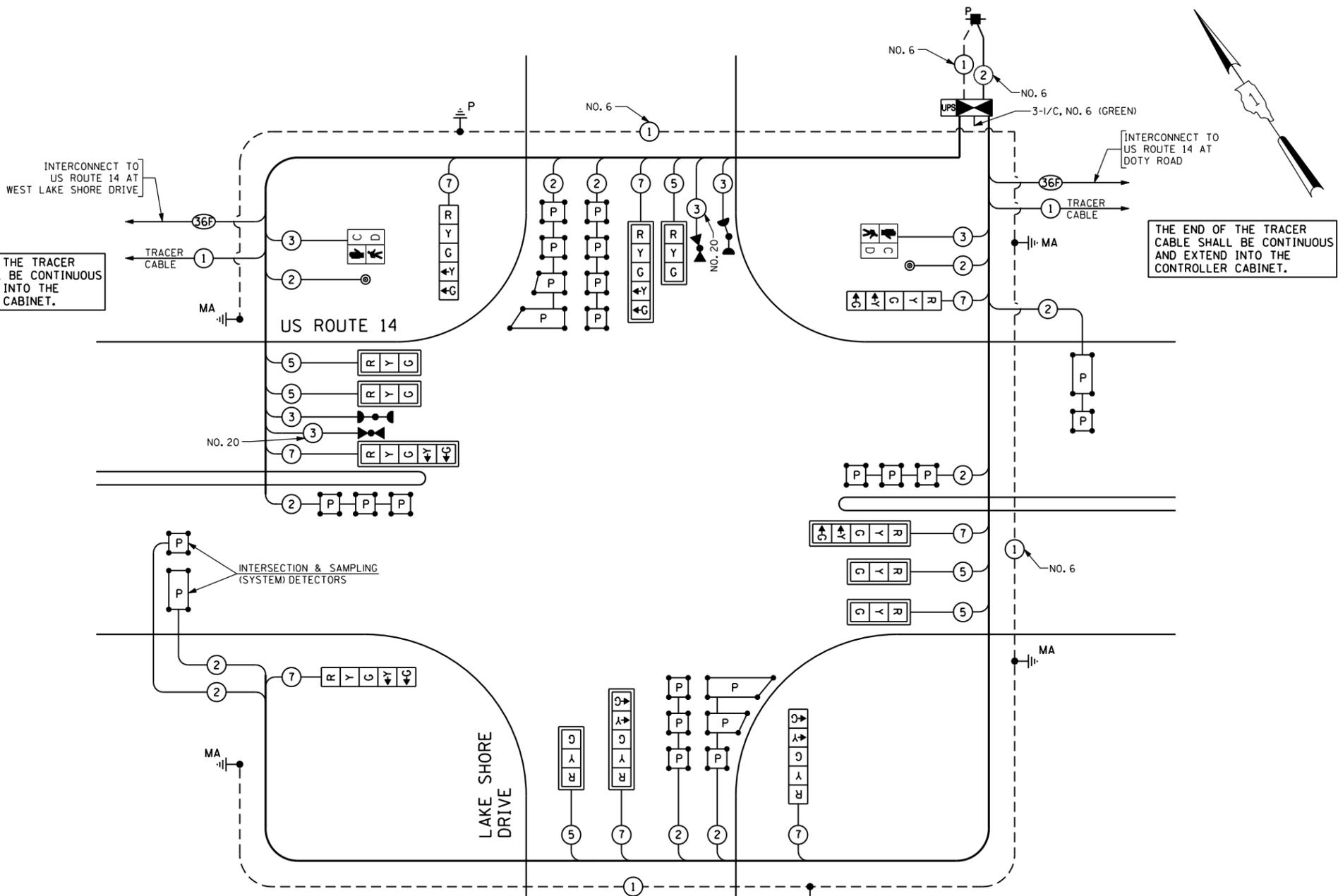
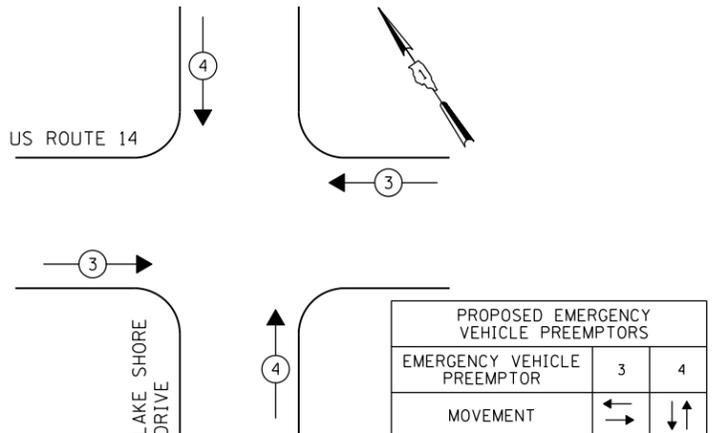
CONTROLLER SEQUENCE



- LEGEND
- ◉ DUAL ENTRY PHASE
  - ◻ SINGLE ENTRY PHASE
  - ◊ O.L. OVERLAP
  - ◉ PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	428.2

CITY OF WOODSTOCK  
811 REGINA COURT  
WOODSTOCK, IL 60098

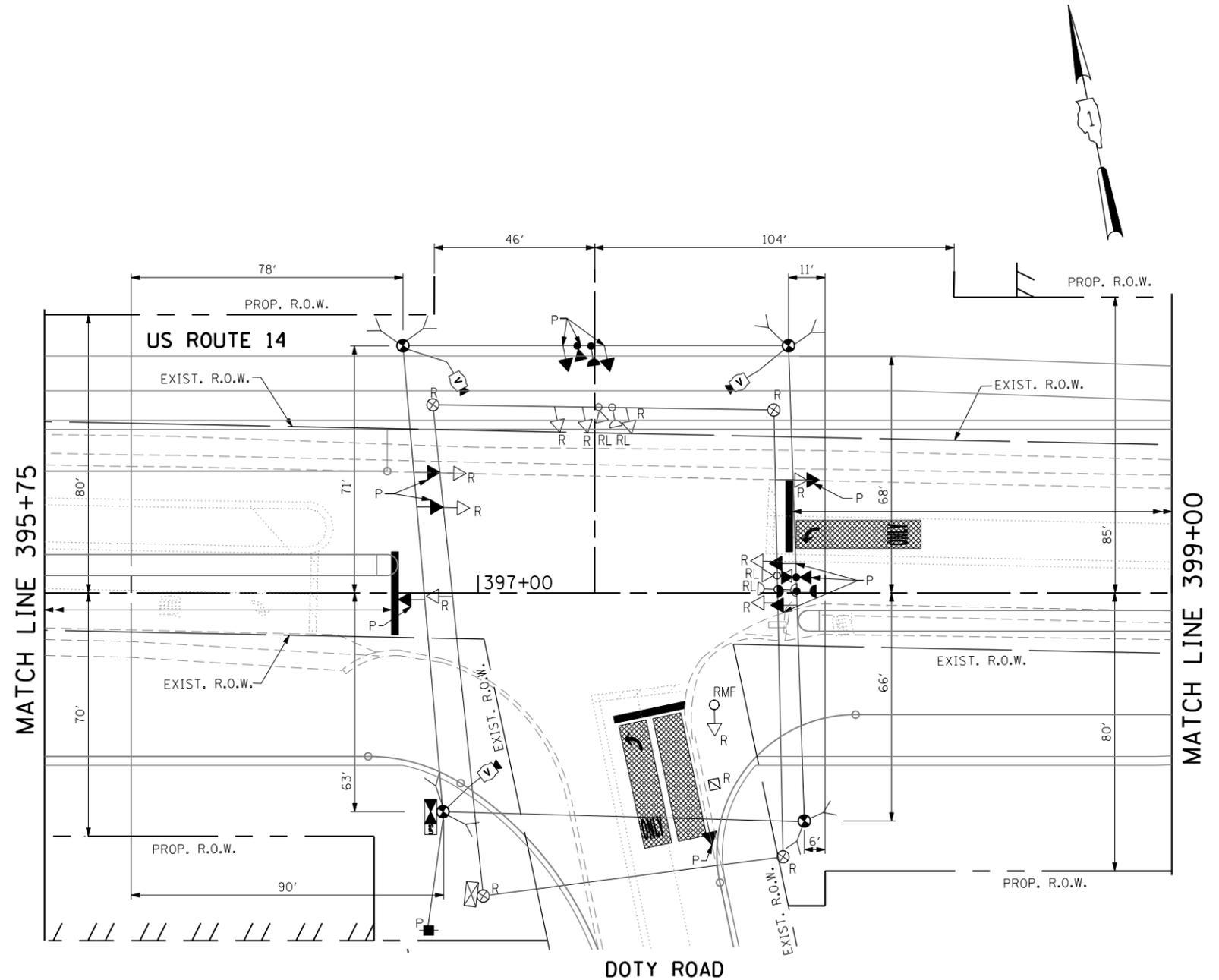
ENERGY SUPPLY CONTACT: LISA COOK  
PHONE: (815) 477-5204  
COMPANY: COMMONWEALTH EDISON

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

1	EACH	TEMPORARY CONTROLLER AND CABINET, COMPLETE
456	FOOT	SPAN WIRE
456	FOOT	TETHER WIRE
7	EACH	SIGNAL HEAD LED, 1-FACE, 3-SECTION, SPAN WIRE MOUNTED
1	EACH	SIGNAL HEAD LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD LED, 1-FACE, 5-SECTION, SPAN WIRE MOUNTED
4	EACH	TEMPORARY WOOD POLE
1	EACH	TRAFFIC SIGNAL POST WITH METAL (SCREW) FOUNDATION
1	EACH	SERVICE INSTALLATION



SIGNAL HEAD PLACEMENTS FOR PRE-STAGE

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT US ROUTE 14 AT DOTY RD.

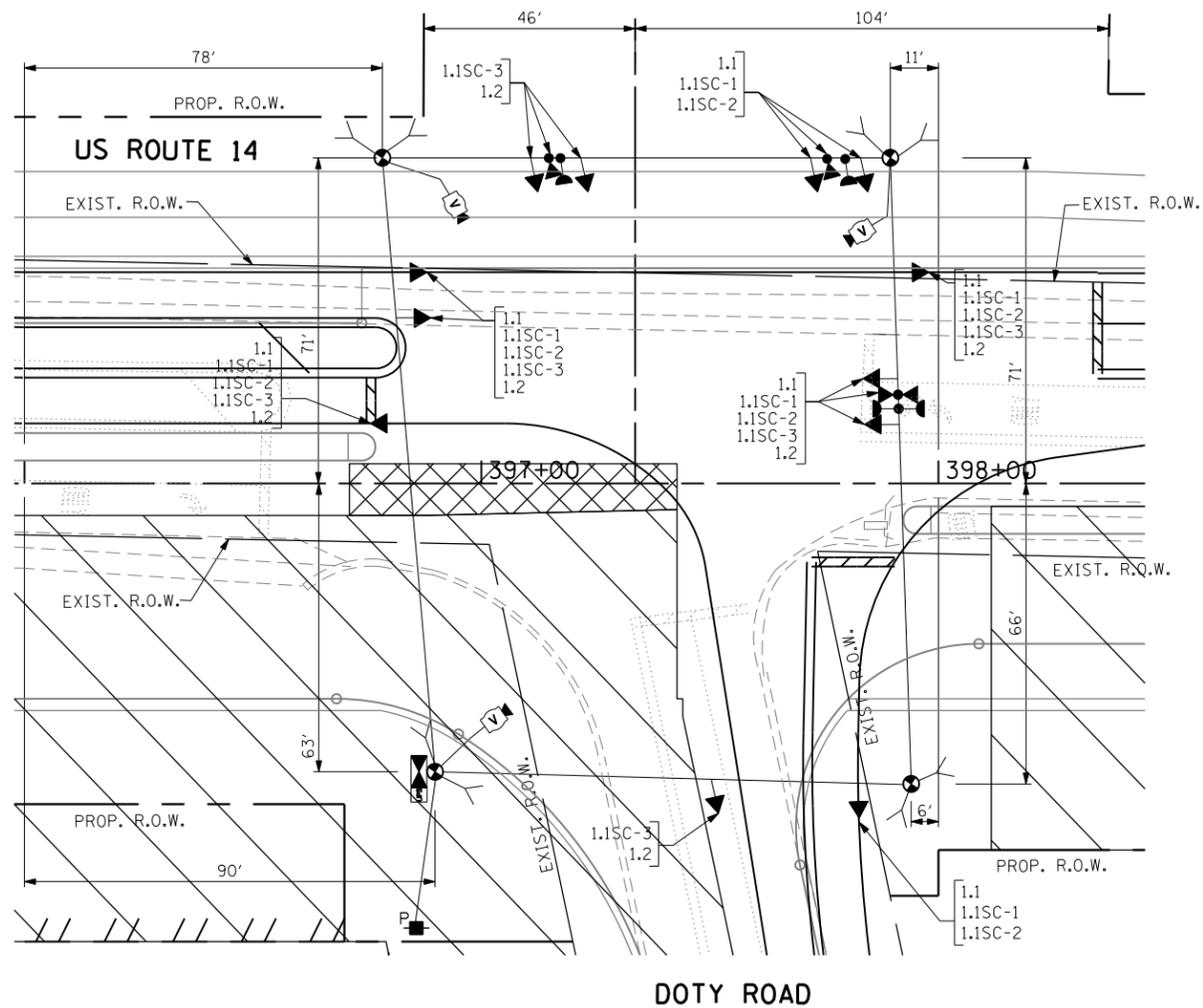
NOTE 1:  
THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR PRE-CONSTRUCTION STAGE AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

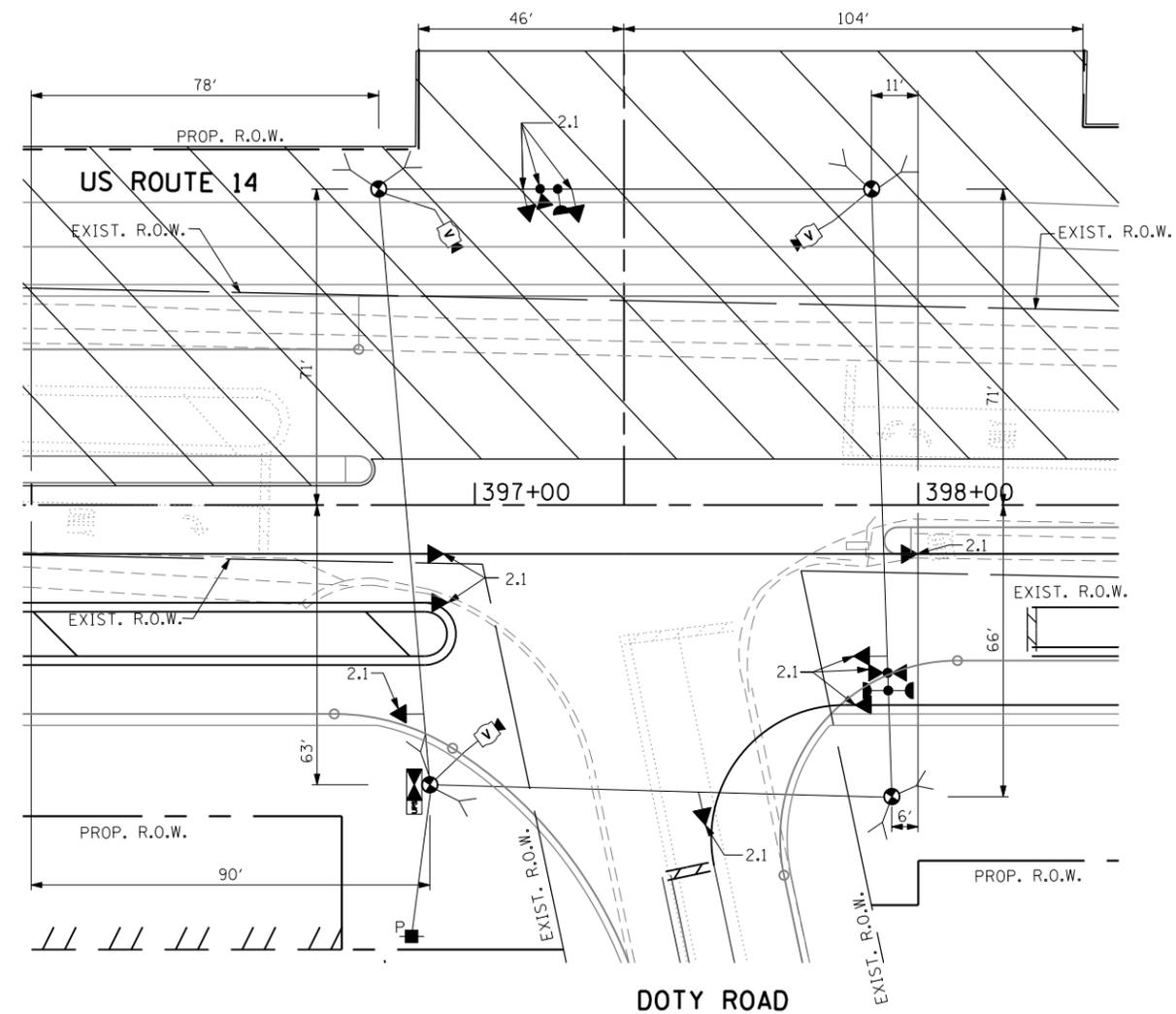
LEGEND

PRE-STAGE	P
STAGE 1.1	1.1
STAGE 1.1 SUBSTAGE C-1	1.1SC-1
STAGE 1.1 SUBSTAGE C-2	1.1SC-2
STAGE 1.1 SUBSTAGE C-3	1.1SC-3
STAGE 1.2	1.2
STAGE 2.1	2.1





SIGNAL HEAD PLACEMENTS FOR STAGES: 1.1, 1.1 SUBSTAGE C-1 (1.1SC-1), 1.1 SUBSTAGE C-2 (1.1SC-2), 1.1 SUBSTAGE C-3 (1.1SC-3), AND 1.2



SIGNAL HEAD PLACEMENTS FOR STAGE: 2.1

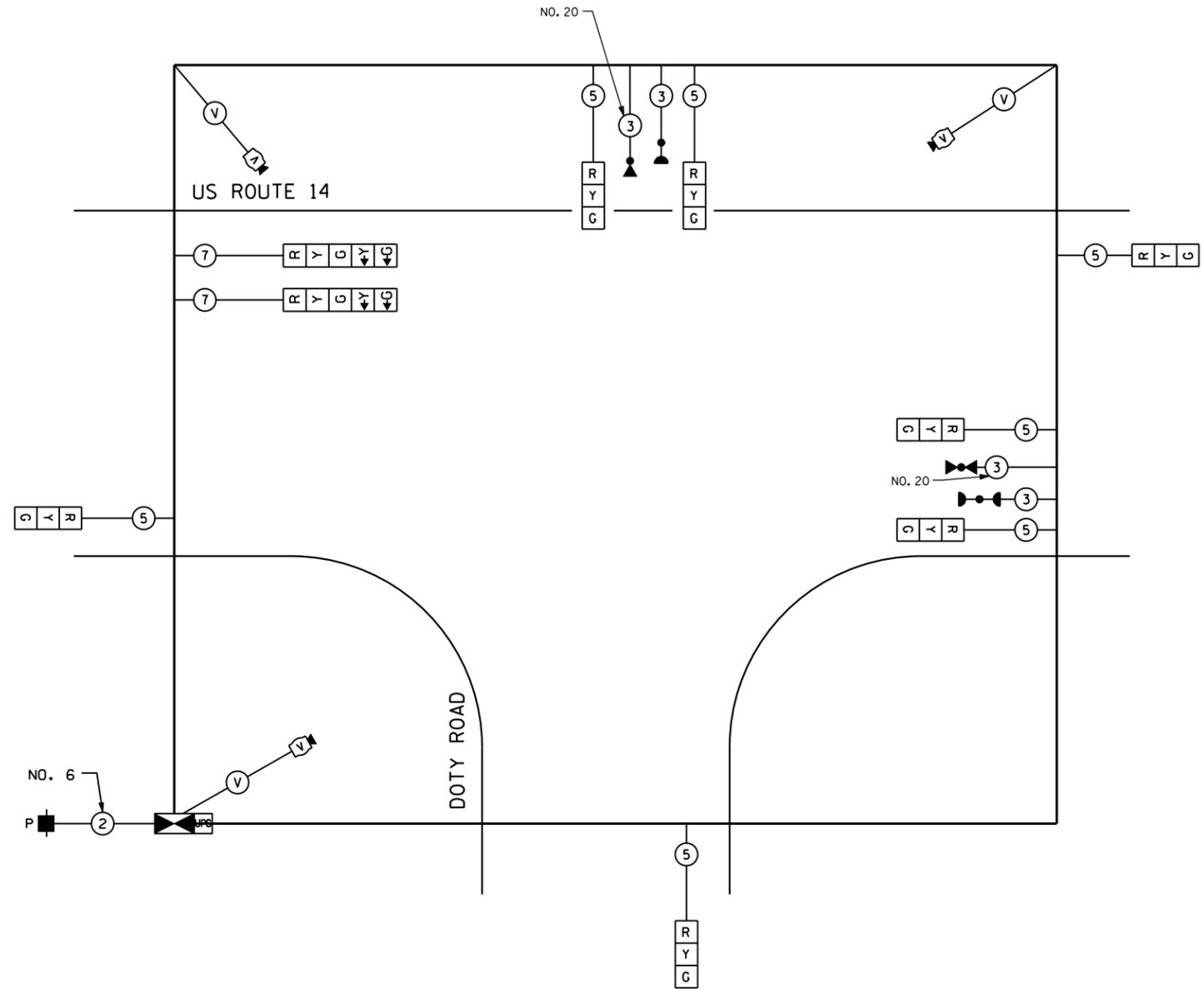
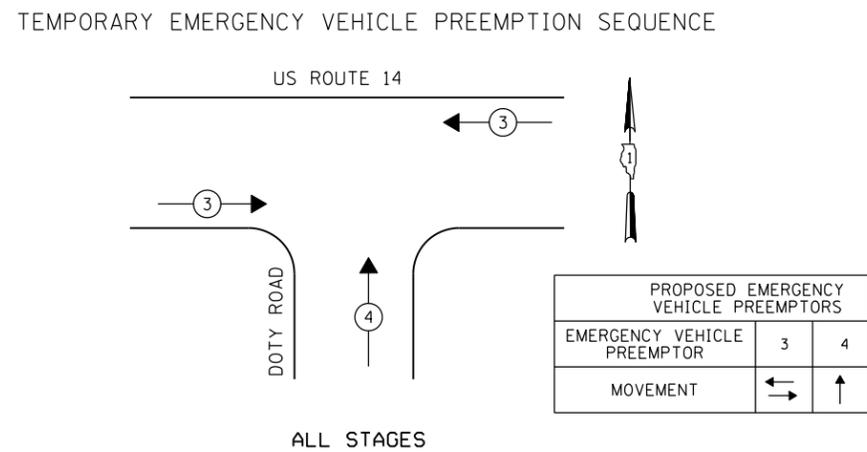
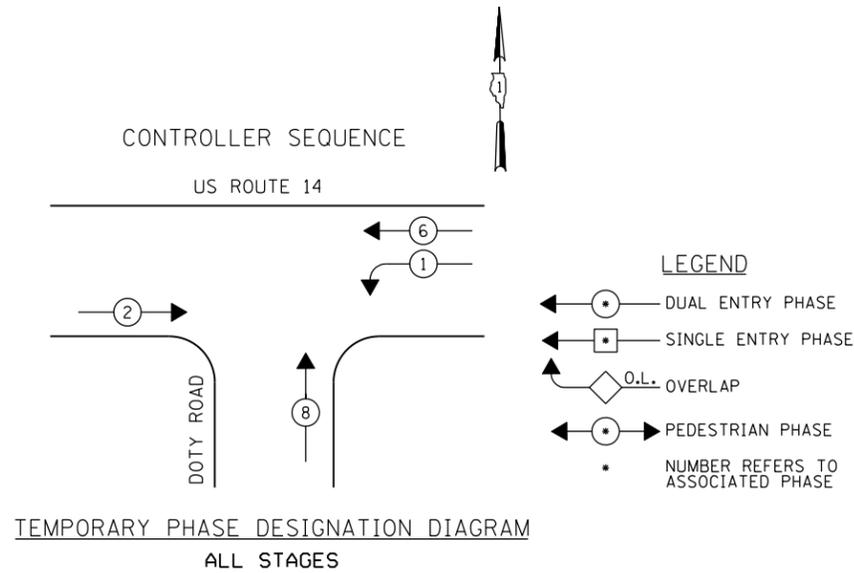
**LEGEND**

- |                        |         |
|------------------------|---------|
| PRE-STAGE              | P       |
| STAGE 1.1              | 1.1     |
| STAGE 1.1 SUBSTAGE C-1 | 1.1SC-1 |
| STAGE 1.1 SUBSTAGE C-2 | 1.1SC-2 |
| STAGE 1.1 SUBSTAGE C-3 | 1.1SC-3 |
| STAGE 1.2              | 1.2     |
| STAGE 2.1              | 2.1     |

**NOTE 1:**

THE VIDEO DETECTION ZONES SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	4	135	12	0.10	4.80
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM	1	150		1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	421.3
CITY OF WOODSTOCK 811 REGINA COURT WOODSTOCK, IL 60098					
ENERGY SUPPLY CONTACT: LISA COOK PHONE: (815) 477-5204 COMPANY: COMMONWEALTH EDISON					

FILE NAME =	USER NAME = \$USER*	DESIGNED - PKG	REVISED -
\$FILEL\$		DRAWN - EA, MG	REVISED -
	PLOT SCALE = \$SCALE*	CHECKED - PKG	REVISED -
	PLOT DATE = \$DATE*	DATE - 11/6/2013	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

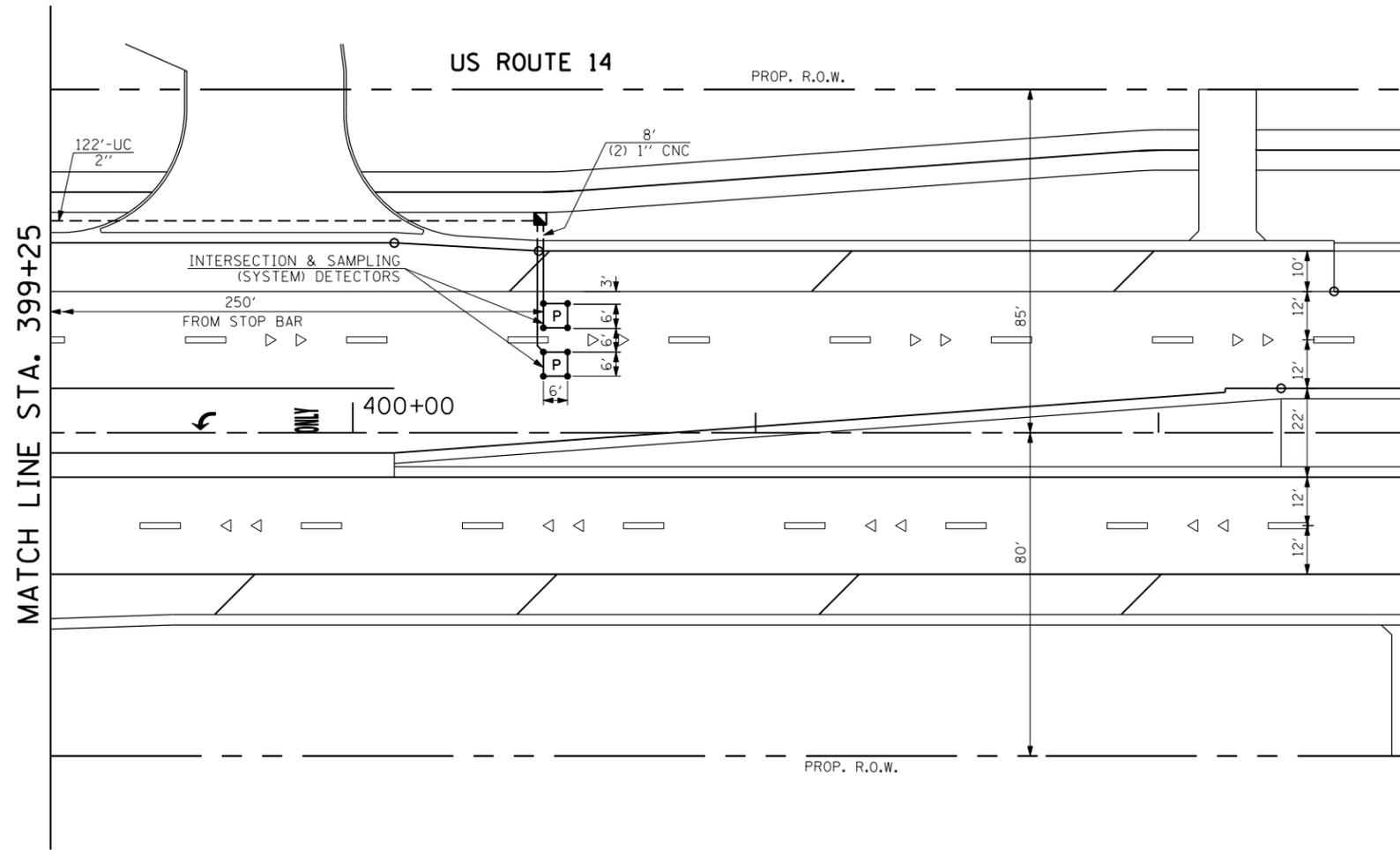
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
US ROUTE 14 AT DOTY ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	445
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.





THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -
		DRAWN - EA, MG	REVISED -
		CHECKED - PKG	REVISED -
		DATE - 11/6/2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN  
US ROUTE 14 AT DOTY ROAD (SHEET 2 OF 2)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	447
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	

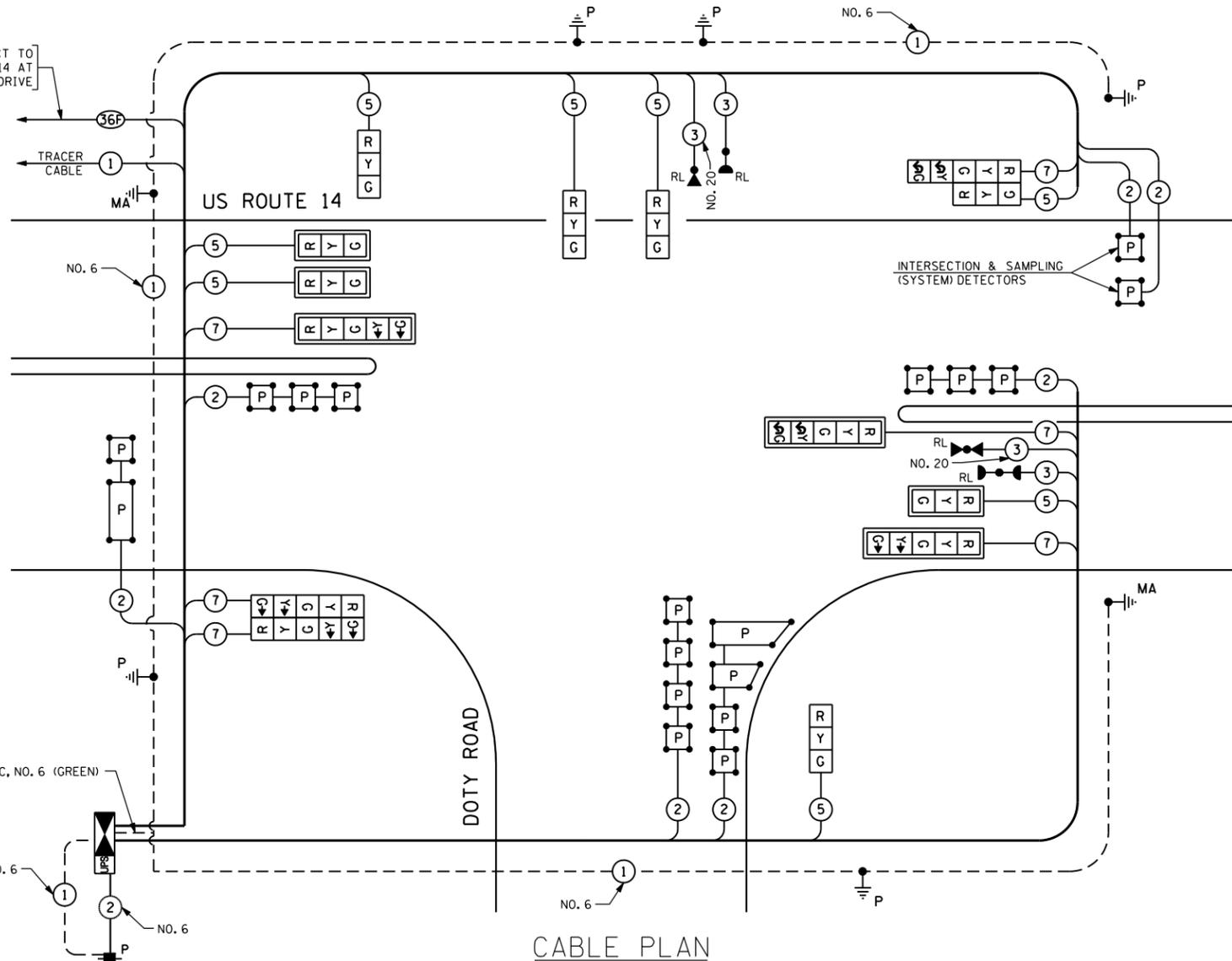
SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
19.5	SO FT	SIGN PANEL - TYPE 1
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
822	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
100	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
128	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
368	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
4	EACH	HANDHOLE
3	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
1	EACH	TRANSCEIVER - FIBER OPTIC
• 447	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1760	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1094	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2256	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
68	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
696	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
20	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
28	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
7	EACH	INDUCTIVE LOOP DETECTOR
671	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
• 2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
• 1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE EXISTING HANDHOLE
• 447	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
6	EACH	RETROREFLECTIVE TRAFFIC SIGNAL BACKPLATE

• 100% COST TO CITY OF WOODSTOCK

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

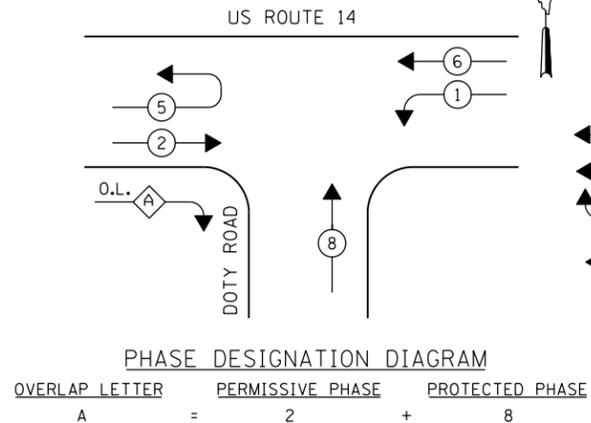
INTERCONNECT TO US ROUTE 14 AT LAKE SHORE DRIVE



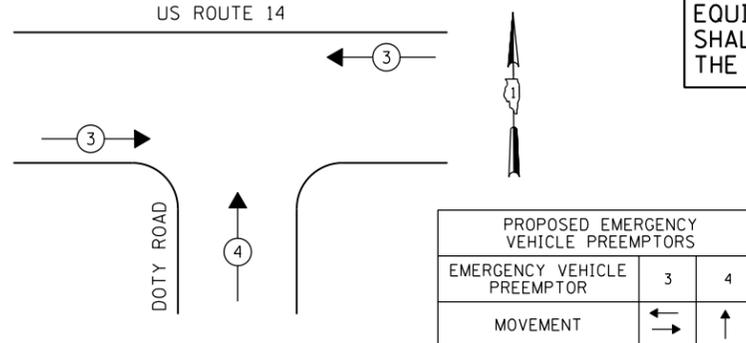
CABLE PLAN

THE CONTRACTOR SHALL RELOCATE THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM EQUIPMENTS TO THE NEW TRAFFIC SIGNAL INSTALLATION AT US ROUTE 14 AT DOTY RD.

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

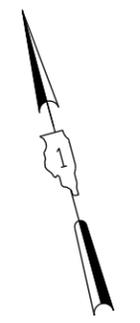
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	12	135	12	0.10	14.4
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN			25	0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	373.4
CITY OF WOODSTOCK 811 REGINA COURT WOODSTOCK, IL 60098					
ENERGY SUPPLY CONTACT: LISA COOK PHONE: (815) 477-5204 COMPANY: COMMONWEALTH EDISON					

FILE NAME =	USER NAME = \$USER\$	DESIGNED - PKG	REVISIONS
\$FILE\$		DRAWN - EA, MG	REVISIONS
		CHECKED - PKG	REVISIONS
		DATE - 11/6/2013	REVISIONS

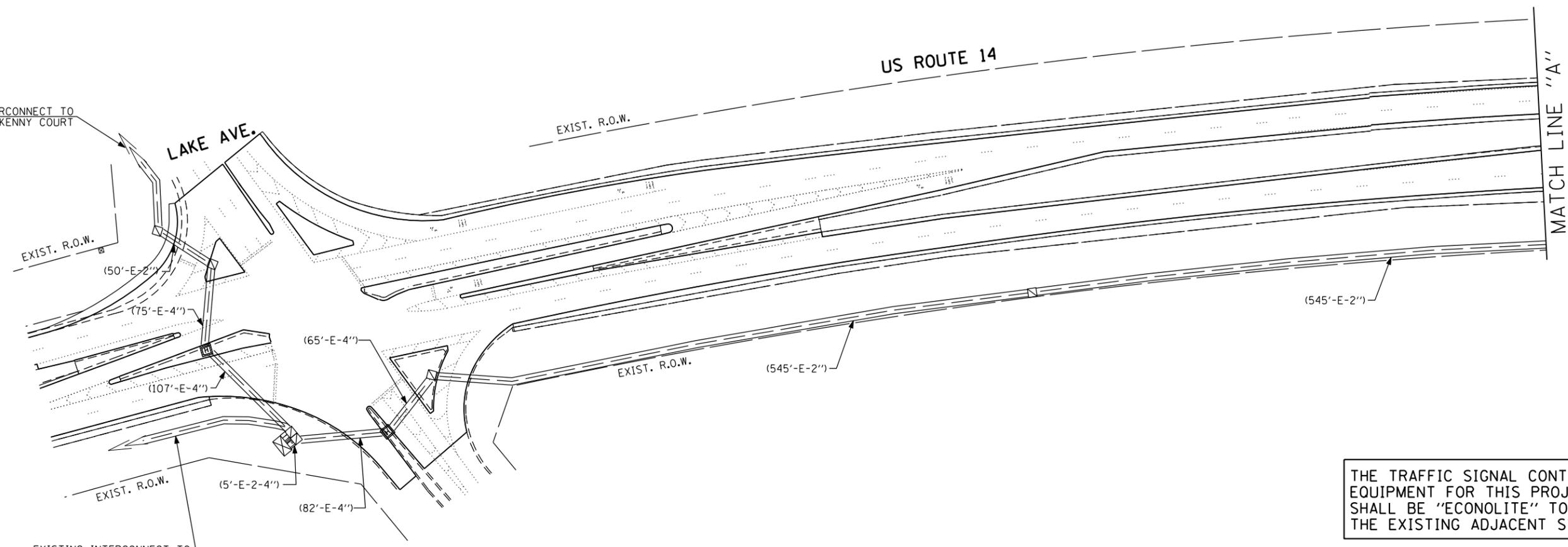
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
US ROUTE 14 AT DOTY ROAD			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	448
CONTRACT NO. 62268			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	



EXISTING INTERCONNECT TO CATALPA LANE/KILKENNY COURT

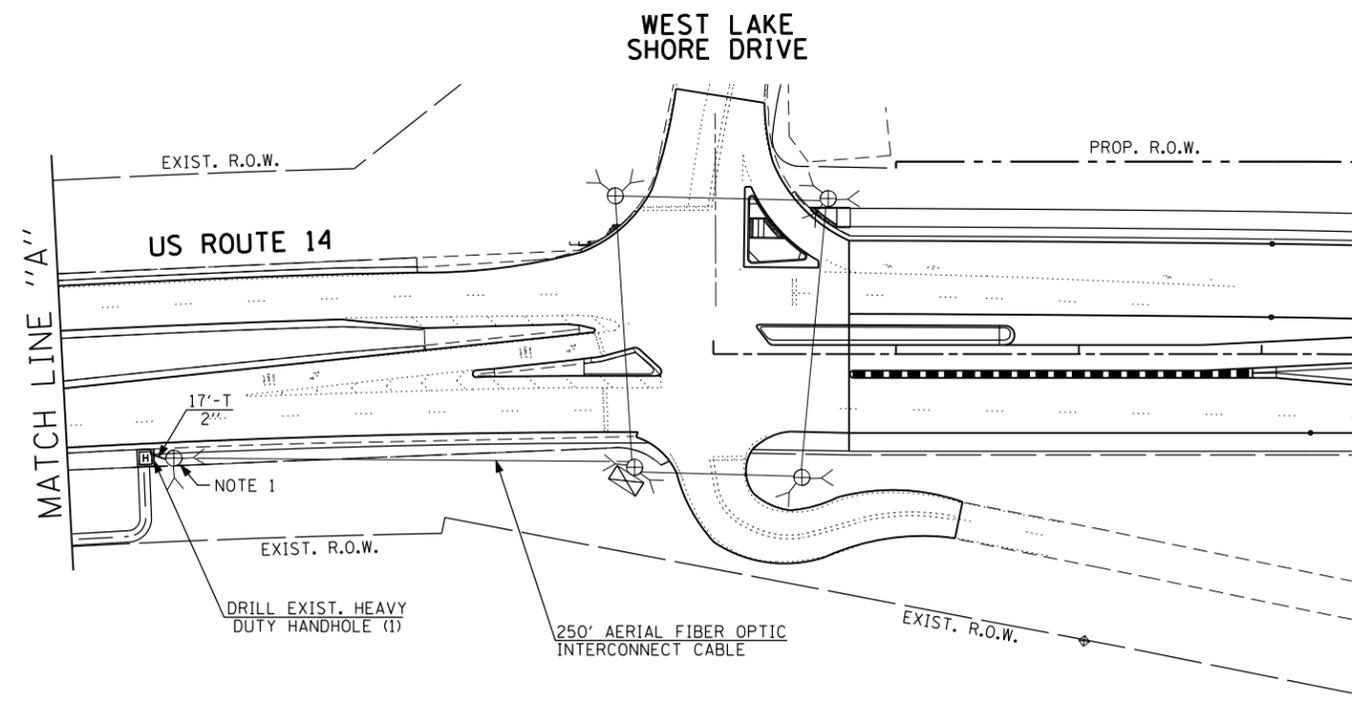


EXISTING INTERCONNECT TO ILL. RTE. 47/EASTWOOD DR.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE 1: DISCONNECT EXISTING FIBER OPTIC INTERCONNECT AND TRACER CABLES FROM THE EXISTING CONTROLLER AT WEST LAKE SHORE DRIVE & US ROUTE 14, PULL THEM BACK INTO THE HANDHOLE NEAR THIS WOOD POLE AND RE-ROUTE THE INTERCONNECT CABLE AERIALLY TO THE PROPOSED TEMPORARY CONTROLLER. ADDITIONAL CABLE SHALL BE SPLICED, IF NEEDED. THIS WORK SHALL BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION AND NO SEPARATE COMPENSATION SHALL BE ALLOWED FOR THE SAME.

THE TRACER CABLE WILL BE DISCONNECTED AT THE EXISTING CONTROLLER CABINET, PULLED BACK AND WILL REMAIN COILED IN THE HANDHOLE AND REINSTALLED TO THE PERMANENT CABINET.



FILE NAME =  
\$FILEL\$

USER NAME = \$USER\$  
DRAWN - MG, EA  
CHECKED - PKG  
DATE - 11/6/2013

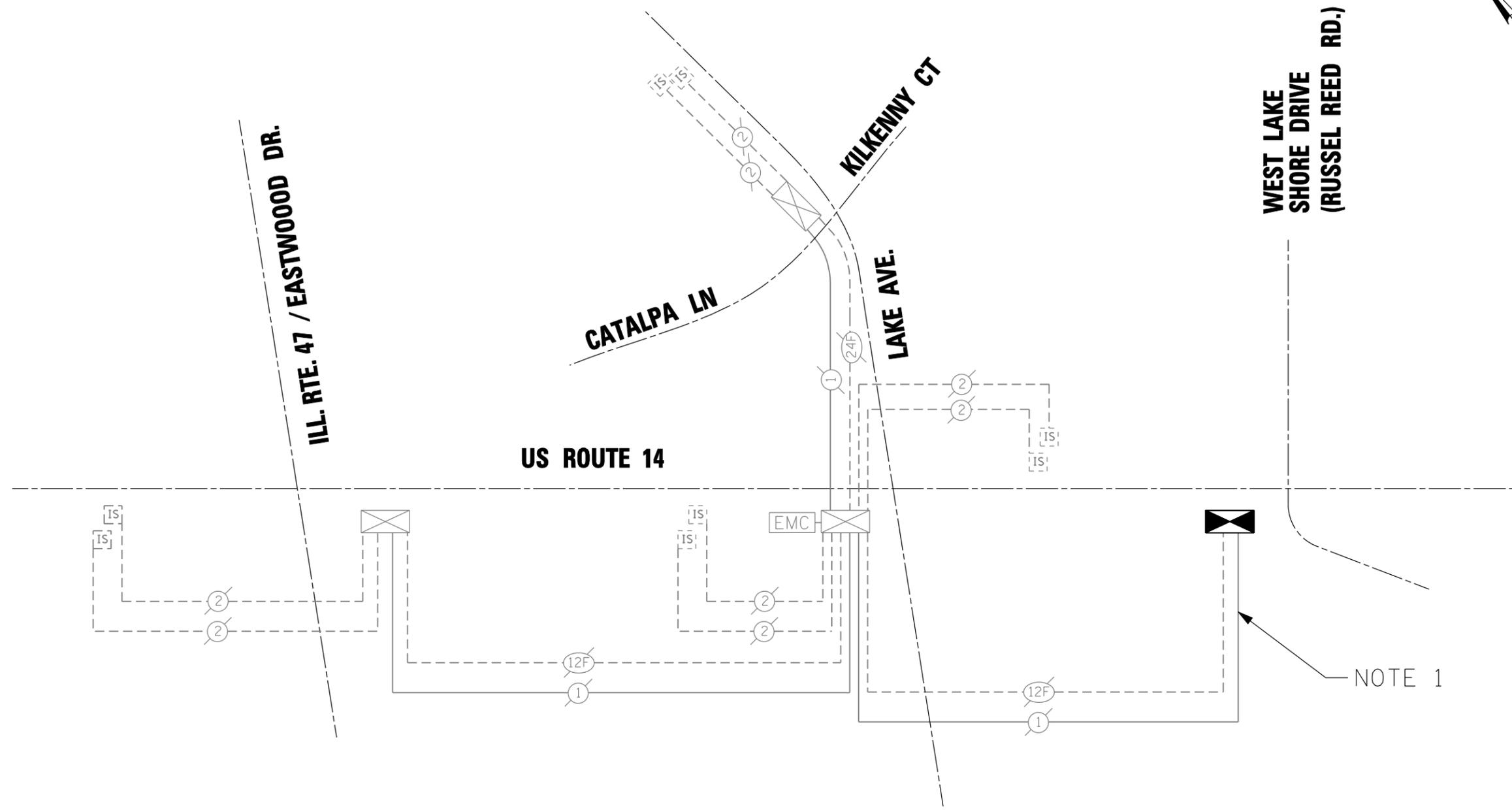
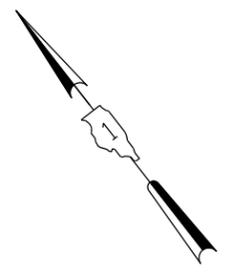
DESIGNED - PKG  
REVISER -  
REVISER -  
REVISER -  
REVISER -

REVISER -  
REVISER -  
REVISER -  
REVISER -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN  
US ROUTE 14 FROM LAKE AVE TO WEST LAKE SHORE DR.**  
SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

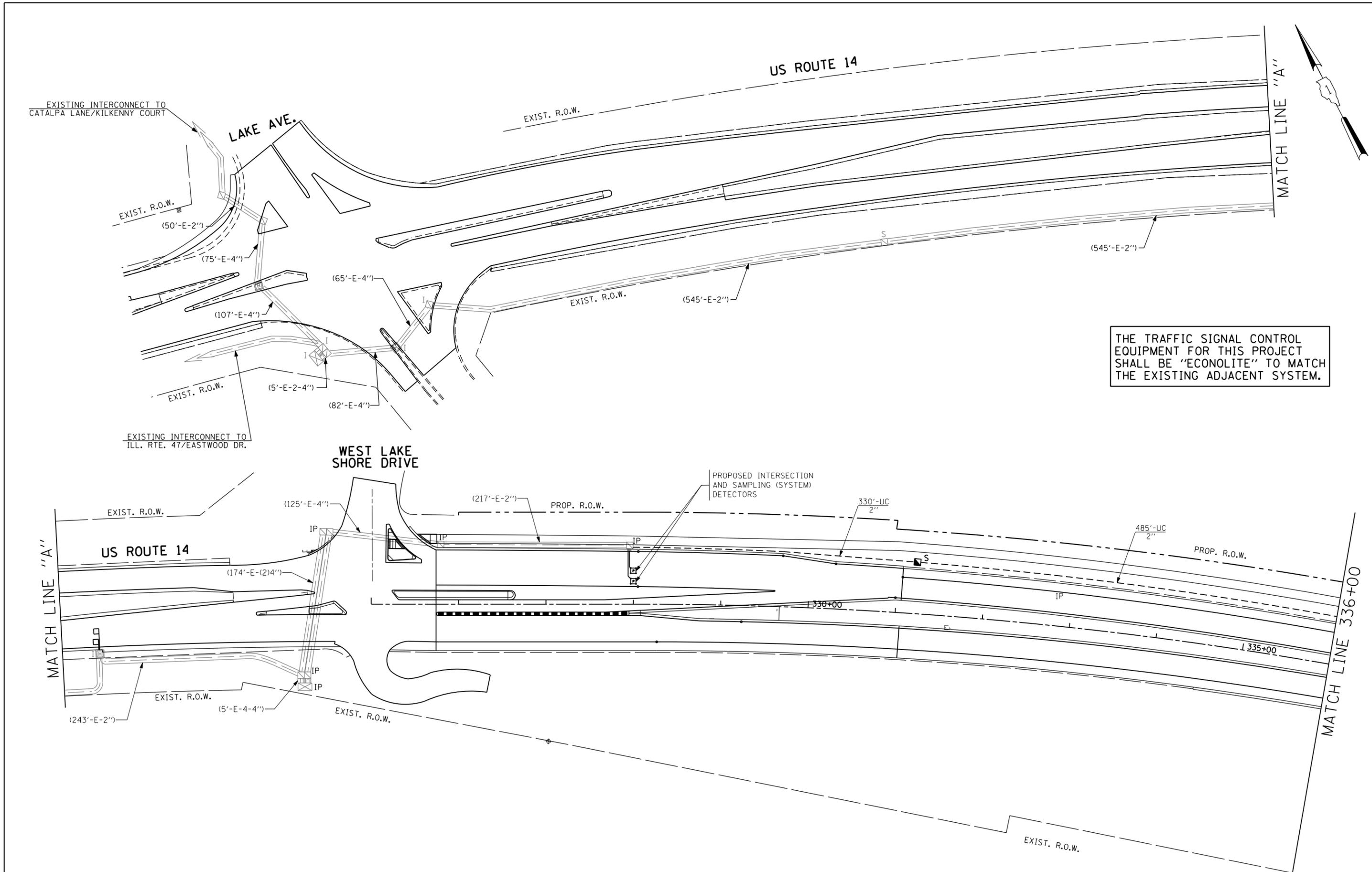
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	449
CONTRACT NO. 62268				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



NOTE 1: THE TRACER CABLE IS NOT PROVIDED WHERE THE CABLES ARE AERIALY SUSPENDED BETWEEN POLES.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY INTERCONNECT SCHEMATIC</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - EA, MG	REVISED -		<b>US ROUTE 14 FROM ILLINOIS ROUTE 47/EASTWOOD DRIVE TO WEST LAKE SHORE DRIVE</b>				305	27R-2	MCHENRY	673	450
		CHECKED - PKG	REVISED -		<b>SCALE: N.T.S.</b>				<b>CONTRACT NO. 62268</b>				
		DATE - 11/6/2013	REVISED -		SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

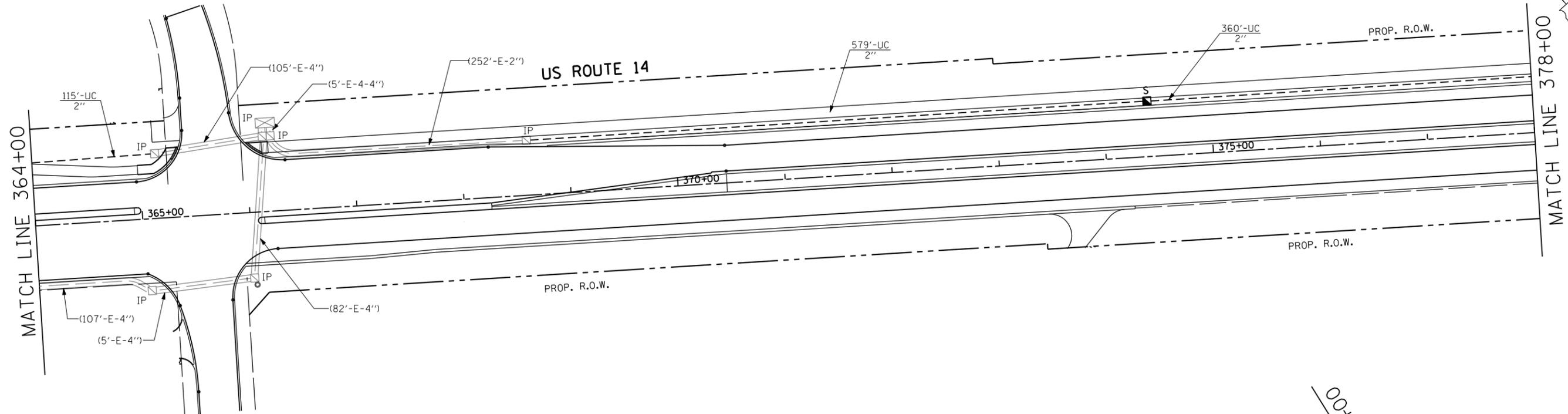


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN US ROUTE 14 FROM LAKE AVE. TO DOTY ROAD (SHEETS 1 OF 4)</b>			F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 451
	PLOT SCALE = *SCALE*	DRAWN - MG, EA	REVISED -		SCALE: 1" = 50'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
	PLOT DATE = *DATE*	CHECKED - PKG	REVISED -							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
		DATE - 11/6/2013	REVISED -									



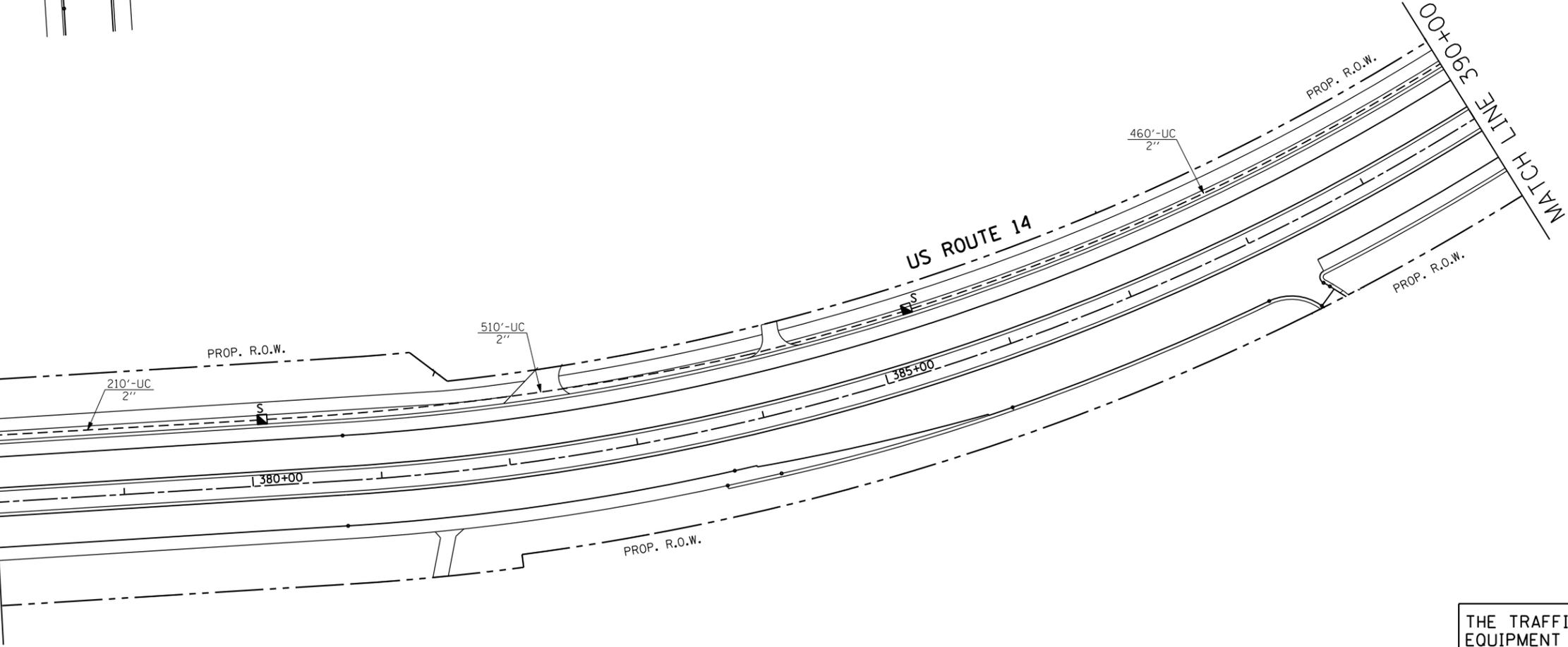
LAKE SHORE DRIVE



MATCH LINE 364+00

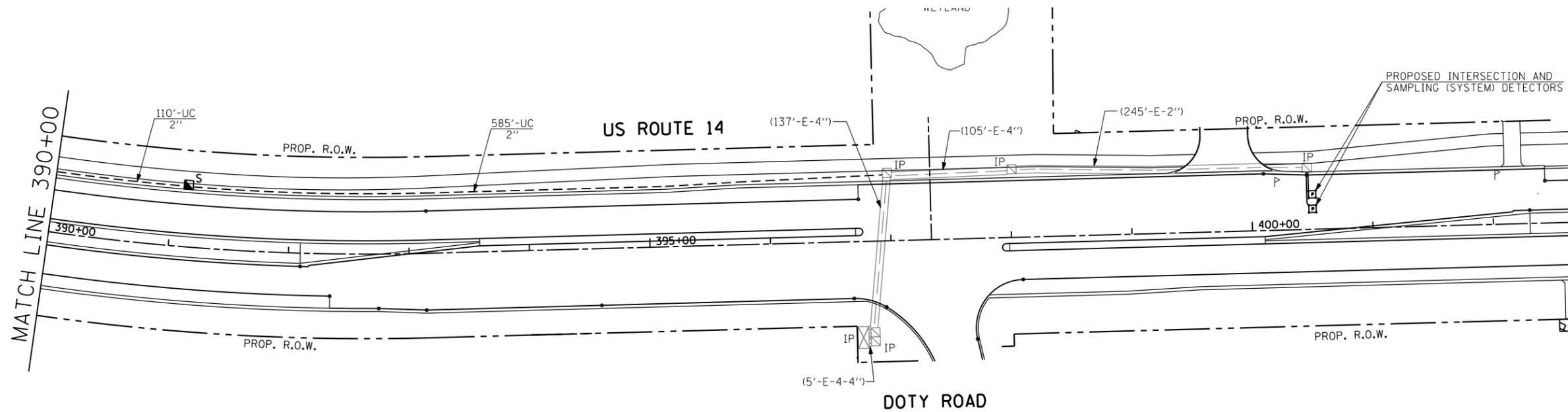
MATCH LINE 378+00

MATCH LINE 378+00



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

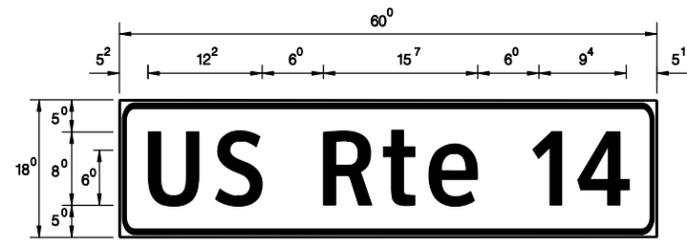
FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN US ROUTE 14 FROM LAKE AVE. TO DOTY ROAD (SHEETS 3 OF 4)</b>			F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 453
	PLOT SCALE = *SCALE*	DRAWN - MG, EA	REVISED -		SCALE: 1" = 50'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
	PLOT DATE = *DATE*	CHECKED - PKG	REVISED -							FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT		
		DATE - 11/6/2013	REVISED -									



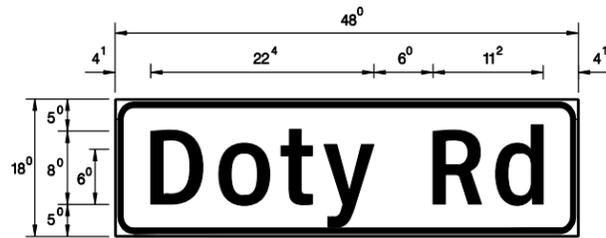
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - PKG	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED INTERCONNECT PLAN US ROUTE 14 FROM LAKE AVE. TO DOTY ROAD (SHEETS 4 OF 4)</b>				F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 454
	PLOT SCALE = \$SCALE\$	CHECKED - PKG	REVISED -		SCALE: 1"= 50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 62268		
	PLOT DATE = \$DATE\$	DATE - 11/6/2013	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

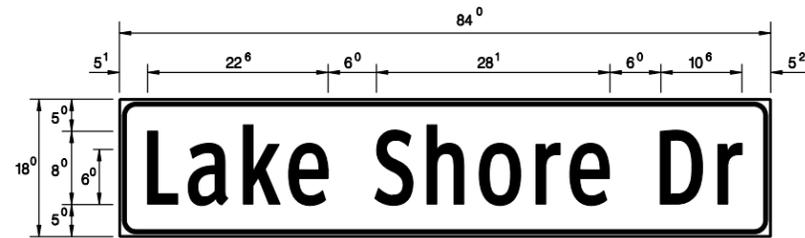




- Sq. M. each  
 7.5 Sq. Ft. each  
 5 Required  
 Design Series D



- Sq. M. each  
 6 Sq. Ft. each  
 2 Required  
 Design Series D



- Sq. M. each  
 10.5 Sq. Ft. each  
 2 Required  
 Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

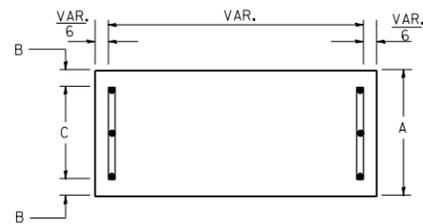
GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

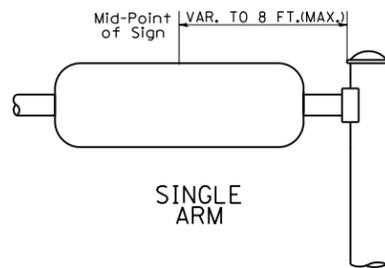
\* J.O. HERBERT CO. MIDLOTHIAN, VA. \* WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:  
 SIGN CHANNEL PART \*HPN053 (MED. CHANNEL)  
 SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
 BRACKETS PART \*HPN034 (UNIVERSAL)  
 CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING  
 OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS

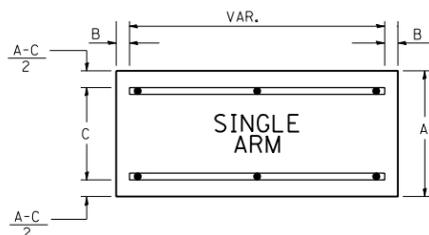


A	B	C
18"	2"	14"

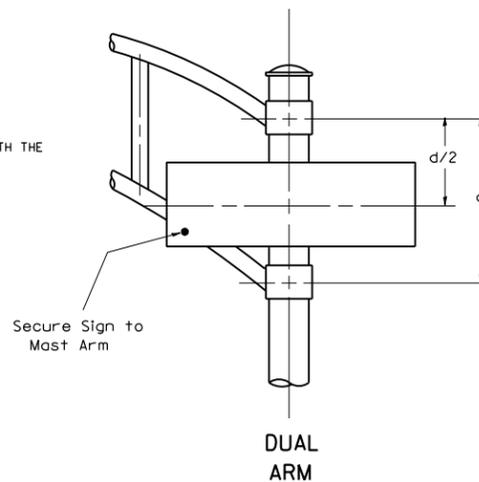


SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM  
 Shall be used. See Note #5.

Upper Case To Lower Case  
 Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2<sup>3</sup> DENOTES 3/8

FIRST LETTER	SECOND LETTER																			
	a c d e		g o q		b h i k l		m n p r u		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>
B	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
C E G	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
D O O R	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
F	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>						
H I M N	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>2</sup>	2 <sup>4</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>						
J U	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>						
K L	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>						
P	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
S	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>										
T	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>						
V	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>										
Y	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>7</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>
Z	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>						

Lower Case To Lower Case  
 Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER																			
	a c d e		g o q		b h i k l		m n p r u		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>						
l m n q u	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>						
b f k o p s	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>						
c e	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>										
r	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>3</sup>	0 <sup>3</sup>	0 <sup>5</sup>	0 <sup>6</sup>										
t z	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>						
v y	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>						
w	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>										
x	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>										

Number To Number  
 Spacing Chart 8 Inch Series "C & D"

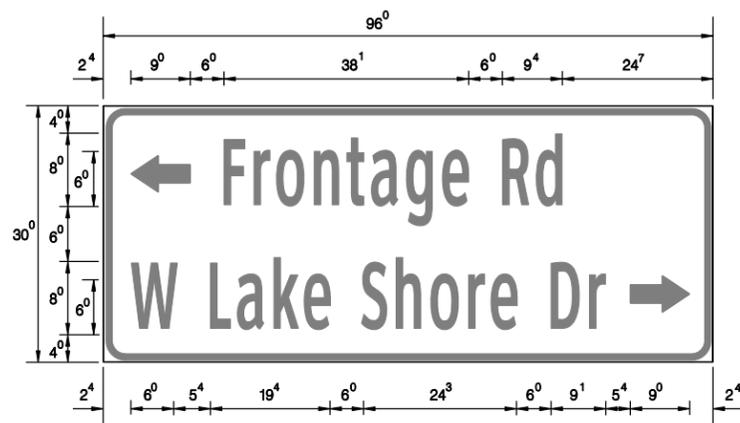
FIRST NUMBER	SECOND NUMBER																				
	0		1		2		3		4		5		6		7		8		9		
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
0 9	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	
1	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	
2 3 4	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
5	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
6	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
7	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>
8	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>				
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>				
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>				
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>				
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>				
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>				
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>				
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>				
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>				
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>				
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>				
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>				
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>				
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>							



- Sq. M. each  
 20 Sq. Ft. each  
 1 Required  
 Design Series C



- Sq. M. each  
 20 Sq. Ft. each  
 1 Required  
 Design Series C

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

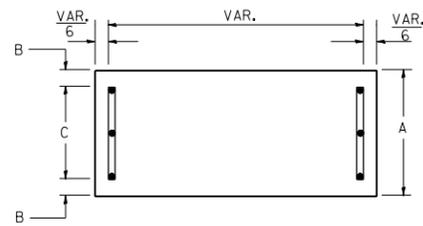
GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

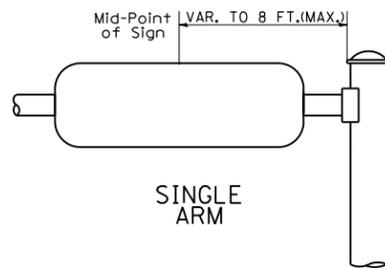
\* J.O. HERBERT CO. MIDLOTHIAN, VA. \* WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:  
 SIGN CHANNEL PART \*HPN053 (MED. CHANNEL)  
 SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
 BRACKETS PART \*HPN034 (UNIVERSAL)  
 CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING  
 OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

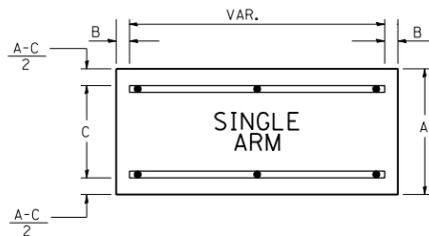
SUPPORTING CHANNELS



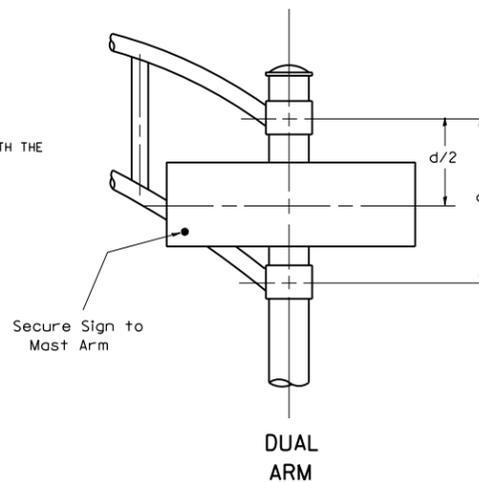
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM  
 Shall be used. See Note #5.

Upper Case To Lower Case  
 Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2<sup>3</sup> DENOTES 3/8

FIRST LETTER	SECOND LETTER																			
	a c d e		g o q		b h i k l		m n p r u		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A	W	X	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
B			1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>
C	E	G	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
D	O	R	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>
F			0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>		
H	I	M	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>2</sup>	2 <sup>4</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>		
J	U		2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>		
K	L		1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>		
P			1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>		
S			1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>								
T			1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>6</sup>	1 <sup>7</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>		
V			0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>								
Y			0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>4</sup>	1 <sup>5</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>7</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>		
Z			1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>0</sup>	2 <sup>1</sup>		

Lower Case To Lower Case  
 Spacing Chart 6 Inch Series "C & D"

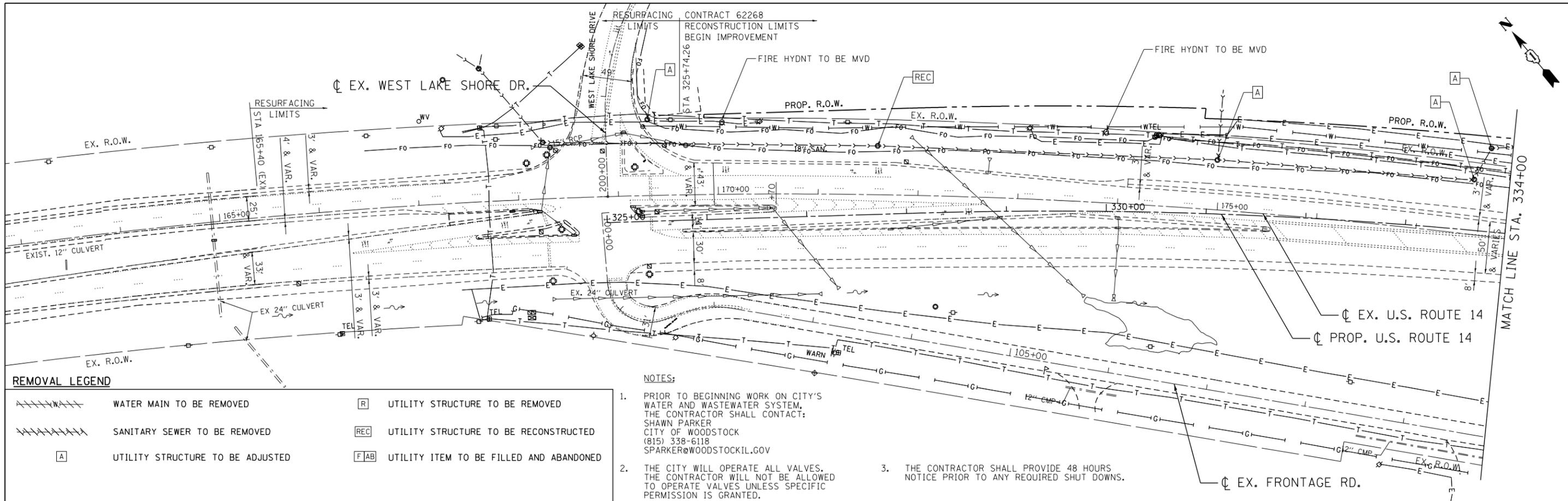
FIRST LETTER	SECOND LETTER																									
	a c d e		g o q		b h i k l		m n p r u		f w		j		s t		v y		x		z							
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D						
a	d	h	g	i	j	l	m	n	q	u	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>
b	f	k	o	p	s	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	
c	e					1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>											
r						0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>3</sup>	0 <sup>3</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>							
t	z					1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	
v	y					1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	1 <sup>1</sup>	1 <sup>2</sup>							
w						1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>											
x						1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>1</sup>	1 <sup>2</sup>											

Number To Number  
 Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER																						
	0		1		2		3		4		5		6		7		8		9				
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D			
0	9	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>
1		2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>		
2	3	4	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
5			1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
6			1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>4</sup>	1 <sup>5</sup>	
7			1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	0 <sup>5</sup>	0 <sup>6</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>2</sup>	1 <sup>4</sup>
8			1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>4</sup>	1 <sup>5</sup>	1 <sup>6</sup>	1 <sup>7</sup>	1 <sup>4</sup>

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	n	3 <sup>5</sup>	4 <sup>2</sup>
O	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	o	3 <sup>6</sup>	4 <sup>3</sup>
P	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	p	3 <sup>5</sup>	4 <sup>2</sup>
Q	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	q	3 <sup>5</sup>	4 <sup>2</sup>
R	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	r	2 <sup>6</sup>	3 <sup>2</sup>
S	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	s	3 <sup>6</sup>	4 <sup>2</sup>
T	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	t	2 <sup>7</sup>	3 <sup>2</sup>
U	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	u	3 <sup>5</sup>	4 <sup>2</sup>
V	3 <sup>5</sup>	4 <sup>4</sup>	4 <sup>7</sup>	6 <sup>0</sup>	v	4 <sup>2</sup>	4 <sup>7</sup>

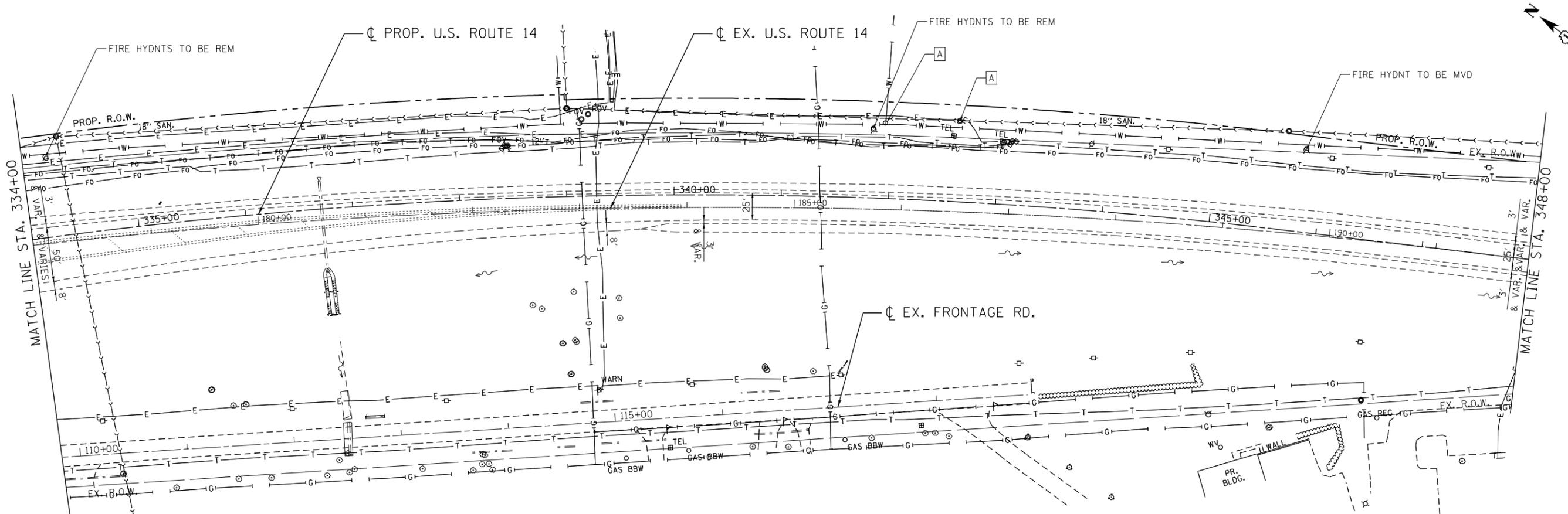


**REMOVAL LEGEND**

	WATER MAIN TO BE REMOVED		UTILITY STRUCTURE TO BE REMOVED
	SANITARY SEWER TO BE REMOVED		UTILITY STRUCTURE TO BE RECONSTRUCTED
	UTILITY STRUCTURE TO BE ADJUSTED		UTILITY ITEM TO BE FILLED AND ABANDONED

**NOTES:**

1. PRIOR TO BEGINNING WORK ON CITY'S WATER AND WASTEWATER SYSTEM, THE CONTRACTOR SHALL CONTACT: SHAWN PARKER, CITY OF WOODSTOCK, (815) 338-6118, SPARKER@WOODSTOCKIL.GOV
2. THE CITY WILL OPERATE ALL VALVES. THE CONTRACTOR WILL NOT BE ALLOWED TO OPERATE VALVES UNLESS SPECIFIC PERMISSION IS GRANTED.
3. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE PRIOR TO ANY REQUIRED SHUT DOWNS.



COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 9:49:22 AM  
 FILE NAME: 8610382-ut.rem.01.DGN  
 PLOT DRIVER: pdtplot  
 PEN TABLE: standard-trans.tbl



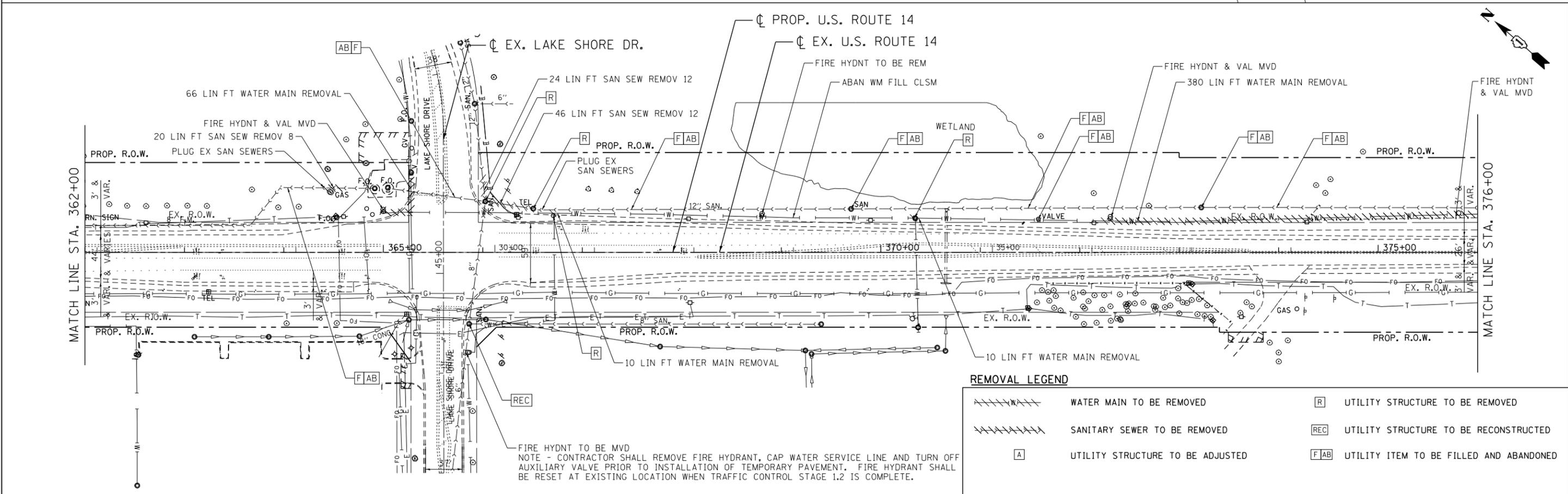
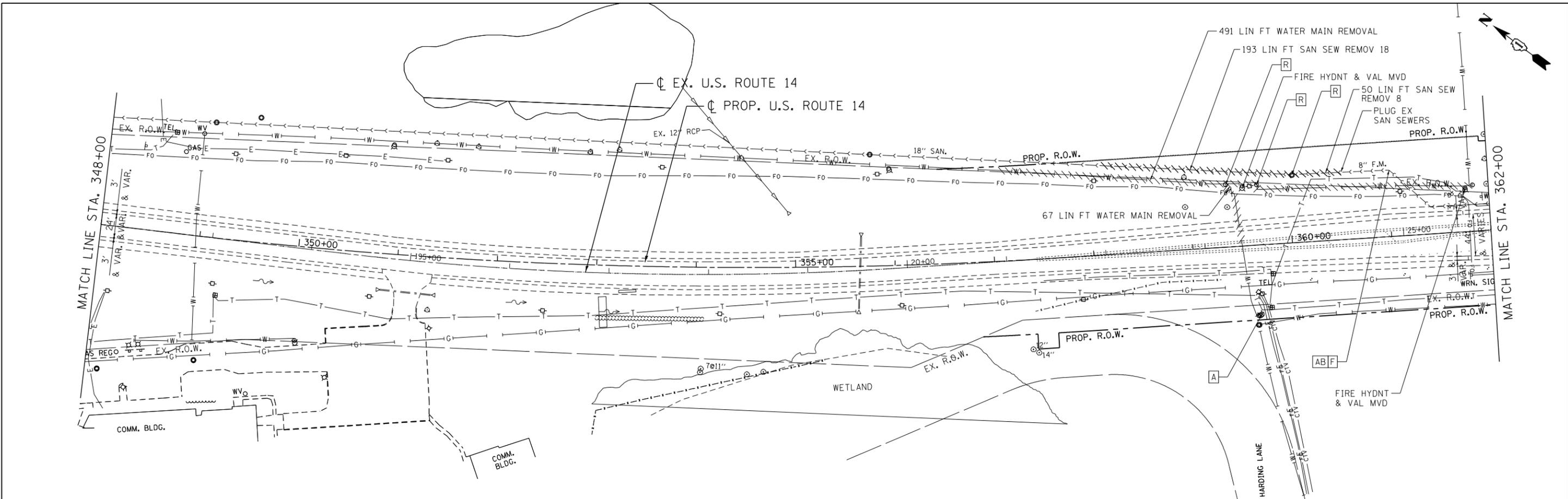
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PLOT DATE = 11/27/2012	CHECKED - MH	REVISED -
	DATE - 02/08/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CITY OF WOODSTOCK  
EXISTING UTILITY & REMOVAL PLANS  
STA. 325+00 TO STA. 348+00**

SCALE: 1"=50'    SHEET NO. 1 OF 3 SHEETS    STA. 325+00 TO STA. 348+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	458
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 62268		



**REMOVAL LEGEND**

	WATER MAIN TO BE REMOVED		UTILITY STRUCTURE TO BE REMOVED
	SANITARY SEWER TO BE REMOVED		UTILITY STRUCTURE TO BE RECONSTRUCTED
	UTILITY STRUCTURE TO BE ADJUSTED		UTILITY ITEM TO BE FILLED AND ABANDONED

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 9:49:57 AM  
 FILE NAME: 8610382-ut\_rem\_02.dgn  
 PLOT DRIVER: pdfcut  
 PEN TABLE: standard-trans.tbl



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PLOT DATE = 11/27/2012	CHECKED - MH	REVISED -
	DATE - 02/08/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

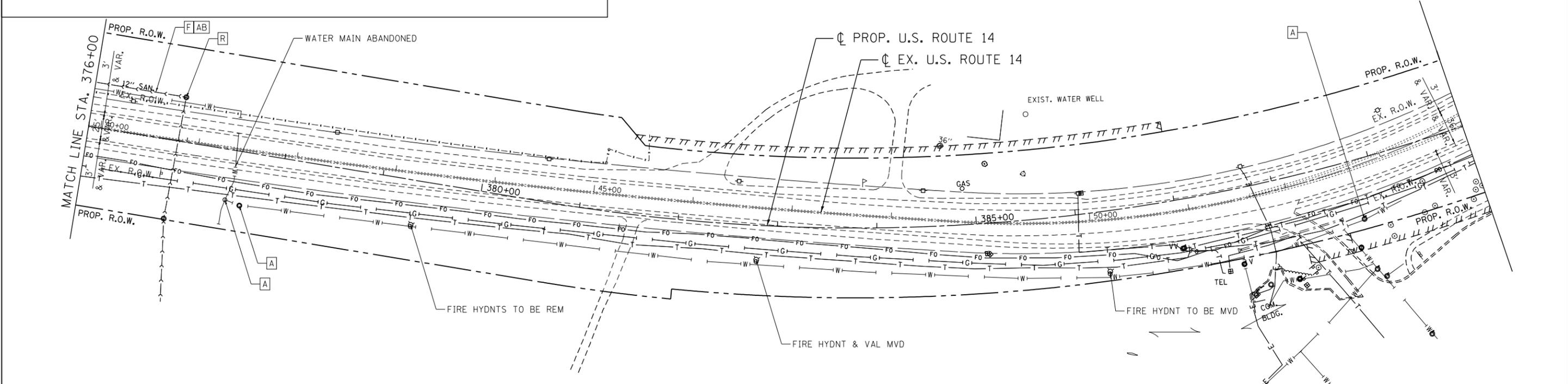
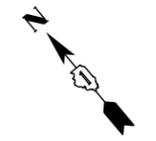
**CITY OF WOODSTOCK  
 EXISTING UTILITY & REMOVAL PLANS  
 STA. 348+00 TO STA. 376+00**

SCALE: 1"=50'    SHEET NO. 2 OF 3 SHEETS    STA. 348+00 TO STA. 376+00

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 459
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 62268		

**REMOVAL LEGEND**

- |  |                                  |  |   |
|--|----------------------------------|--|---|
|  | WATER MAIN TO BE REMOVED         |  | UTILITY STRUCTURE TO BE REMOVED         |
|  | SANITARY SEWER TO BE REMOVED     |  | UTILITY STRUCTURE TO BE RECONSTRUCTED   |
|  | UTILITY STRUCTURE TO BE ADJUSTED |  | UTILITY ITEM TO BE FILLED AND ABANDONED |



COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 9:50:32 AM  
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 PLOT DRIVER: pdt.plt  
 PEN TABLE: standard-trans.tbl



USER NAME = spenrl	DESIGNED - DCJ	REVISED -
DRAWN - SMP	CHECKED - MH	REVISED -
PLOT SCALE =	DATE - 02/08/2012	REVISED -
PLOT DATE = 11/27/2012		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CITY OF WOODSTOCK  
 EXISTING UTILITY & REMOVAL PLANS  
 STA. 376+00 TO STA. 404+00**

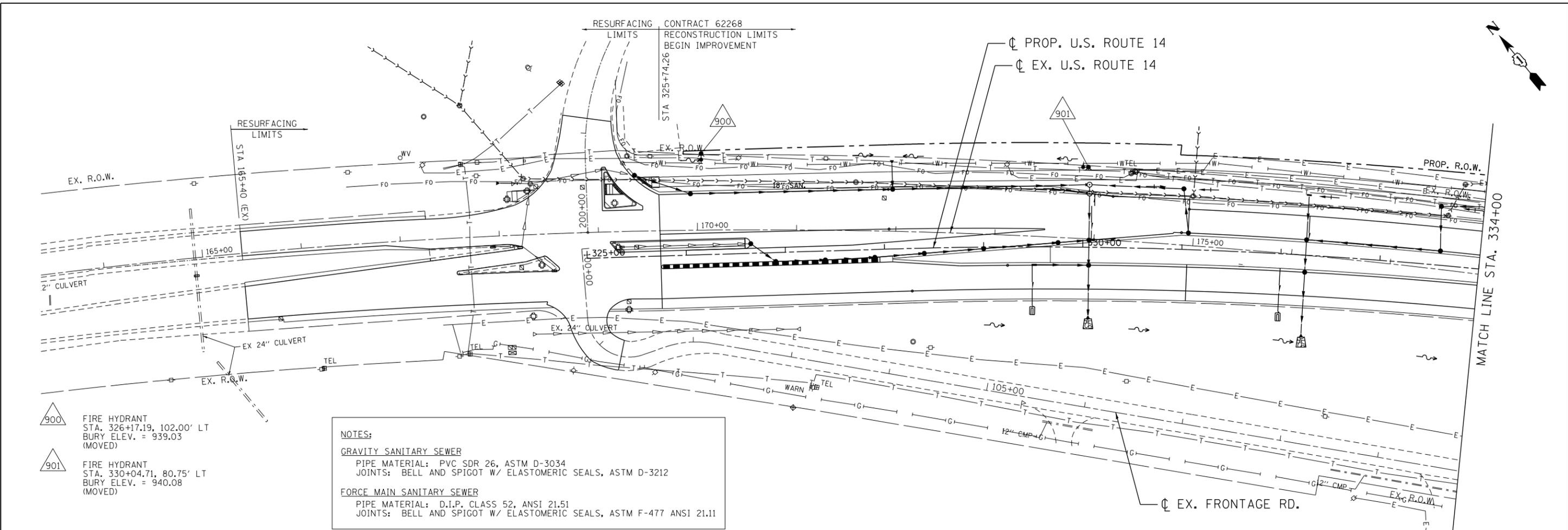
SCALE: 1"=50'    SHEET NO. 3 OF 3 SHEETS    STA. 376+00 TO STA. 404+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	460
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO. _____	
	NO. _____	
	NO. _____	

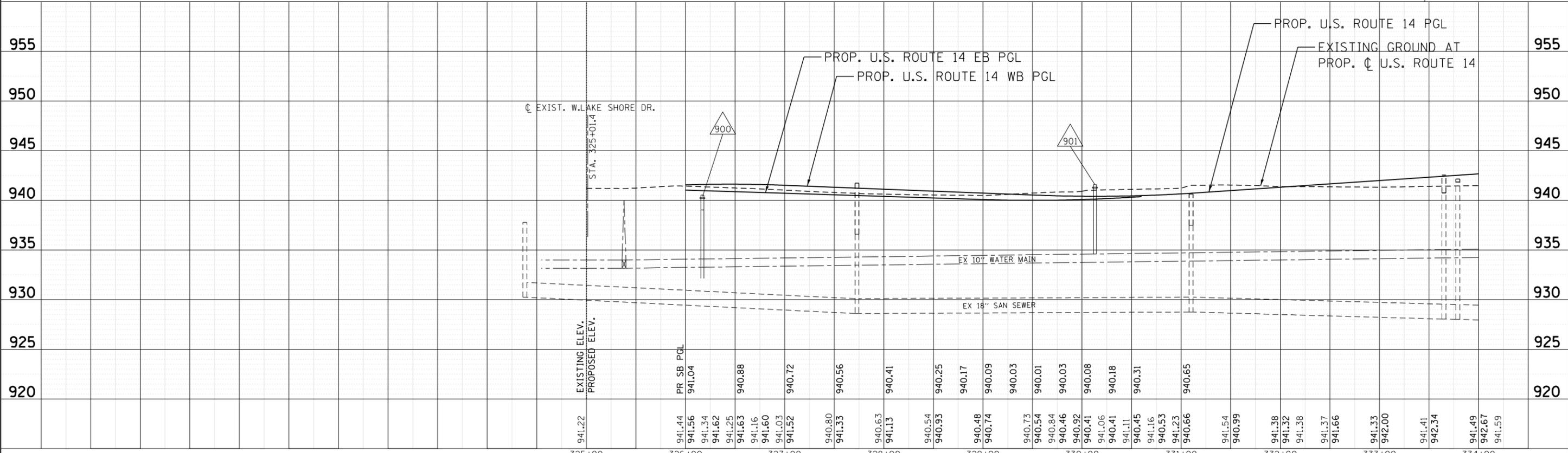
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	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO. _____	
	NO. _____	
	NO. _____	

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 CLIENT: Illinois Professional Design Firm  
 DATE PLOTTED: 11/27/2012 9:46:33 AM  
 FILE NAME: 86110382-ut\_pnp\_01.DGN  
 PLOT NUMBER: 01  
 PLOT DATE: 11/27/2012



- 900 FIRE HYDRANT  
STA. 326+17.19, 102.00' LT  
BURY ELEV. = 939.03  
(MOVED)
- 901 FIRE HYDRANT  
STA. 330+04.71, 80.75' LT  
BURY ELEV. = 940.08  
(MOVED)

**NOTES:**  
**GRAVITY SANITARY SEWER**  
 PIPE MATERIAL: PVC SDR 26, ASTM D-3034  
 JOINTS: BELL AND SPIGOT W/ ELASTOMERIC SEALS, ASTM D-3212  
**FORCE MAIN SANITARY SEWER**  
 PIPE MATERIAL: D.I.P. CLASS 52, ANSI 21.51  
 JOINTS: BELL AND SPIGOT W/ ELASTOMERIC SEALS, ASTM F-477 ANSI 21.11



941.22	941.44	941.56	941.34	941.62	941.25	941.63	941.16	941.60	941.03	941.52	940.80	941.33	940.63	941.13	940.54	940.93	940.17	940.09	940.03	940.01	940.03	940.92	940.41	941.06	940.41	941.11	940.45	941.16	940.53	941.23	940.66	941.54	940.99	941.38	941.32	941.38	941.37	941.66	941.33	942.00	941.41	942.34	941.49	942.67	941.59
EXISTING ELEV.	PR SB PGL																																												
325+00	326+00	327+00	328+00	329+00	330+00	331+00	332+00	333+00	334+00																																				

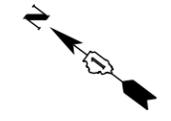
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED UTILITIES**  
**U.S. ROUTE 14 PLAN & PROFILE**  
**STA. 325+00 TO STA. 334+00**  
 SCALE: 1"=50' SHEET NO. 1 OF 6 SHEETS STA. 325+00 TO STA. 334+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	461
CONTRACT NO. 62268			ILLINOIS FED. AID PROJECT	

- 902 OMITTED
- 903 FIRE HYDRANT W/ AUXILIARY VALVE  
STA. 341+83.64, 80.89' LT  
BURY ELEV. = 943.60  
(MOVED)
- 904 OMITTED

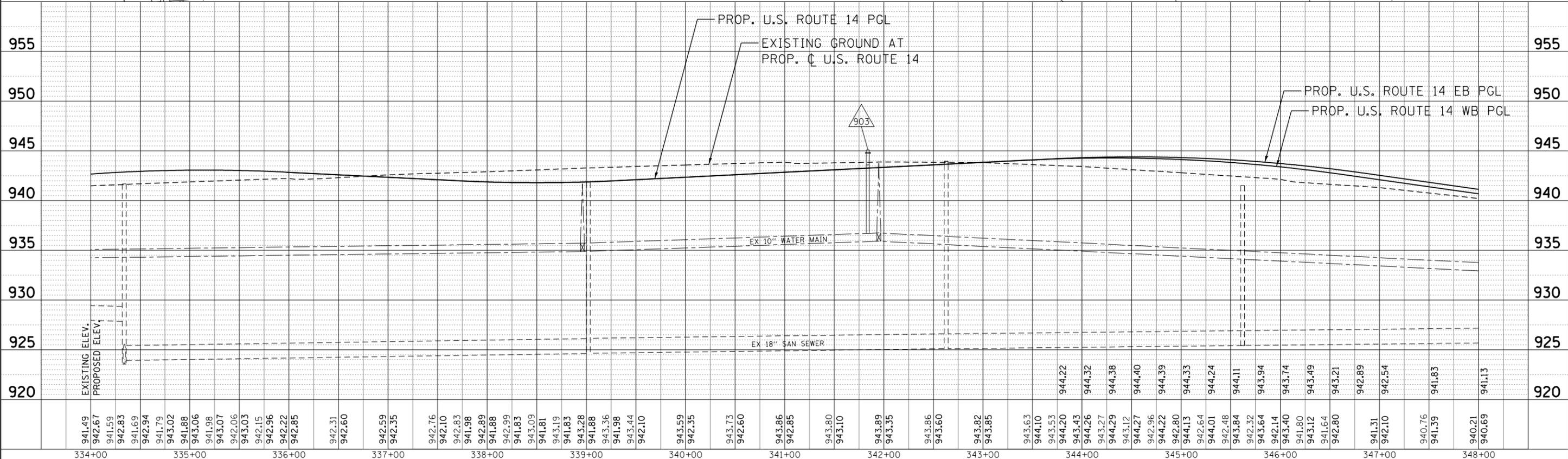
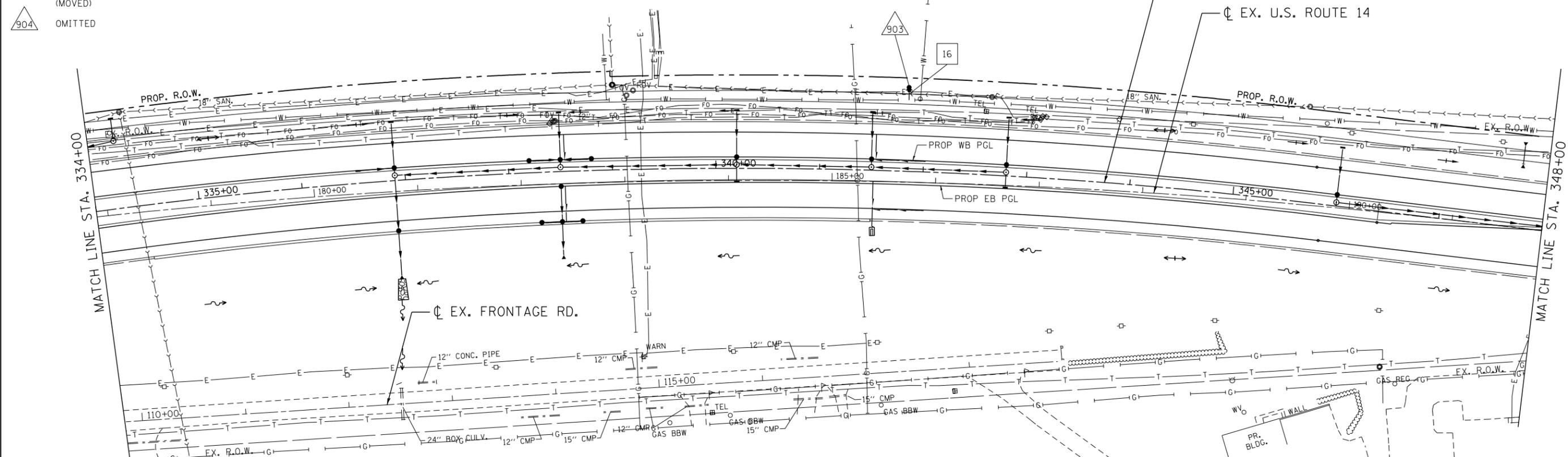
16 TOP OF EX SAN PIPE = 926.71  
BOTTOM OF PR WATER MAIN = 936.89  
CLEARANCE = 10.18



PLAN	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	CHECKED	
	FILE NAME	
	NO.	

COMPANY NAME: HRGreen  
PROJECT CONTACT: HRGreen.com  
CLIENT: Illinois Professional Design Firm  
DATE PLOTTED: 11/27/2012 9:45:17 AM  
FILE NAME: 86110382-ut.pnp\_02.DGN  
PLOT NUMBER: 6610382-ut.pnp\_02.DGN  
PER TABLE



941.49	942.67	941.59	942.83	941.69	942.94	941.79	943.02	941.88	943.06	943.07	942.06	943.03	942.15	942.96	942.22	942.85	942.31	942.60	942.59	942.35	942.76	942.10	942.83	941.98	942.89	941.88	942.99	941.83	943.09	941.81	943.19	941.83	943.28	941.88	943.36	941.98	943.44	942.10	943.59	942.35	943.73	942.60	943.86	942.85	943.90	943.10	943.89	943.35	943.86	943.60	943.82	943.85	943.63	944.10	943.53	944.20	943.43	944.26	943.27	944.29	943.12	944.27	942.96	944.22	942.80	944.13	942.64	944.01	942.48	943.84	942.32	943.64	942.14	943.40	941.80	943.12	941.64	942.80	941.31	942.10	940.76	941.39	940.21	940.69	941.13
334+00	335+00	336+00	337+00	338+00	339+00	340+00	341+00	342+00	343+00	344+00	345+00	346+00	347+00	348+00																																																																							



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PLOT SCALE =  
PLOT DATE = 11/27/2012

DESIGNED - DCJ  
DRAWN - SMP  
CHECKED - MH  
DATE - 02/08/2012

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REVISED -

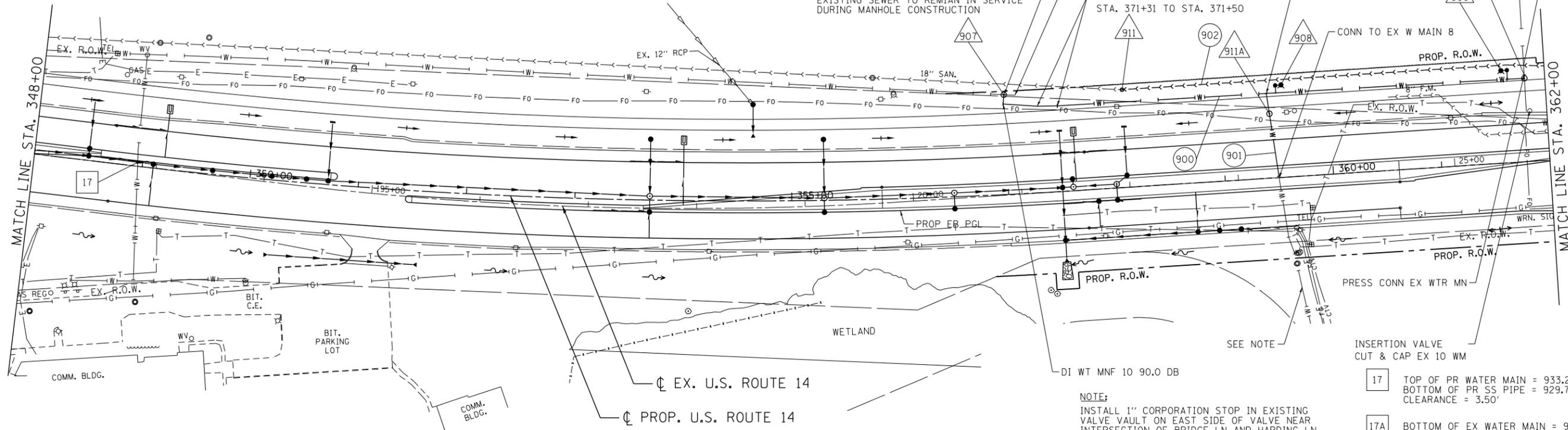
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED UTILITIES  
U.S. ROUTE 14 PLAN & PROFILE  
STA. 334+00 TO STA. 348+00  
SCALE: 1"=50'  
SHEET NO. 2 OF 6 SHEETS  
STA. 334+00 TO STA. 348+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	462
CONTRACT NO.			62268	
ILLINOIS FED. AID PROJECT				

- 905 OMITTED
- 906 OMITTED
- 907 10" GATE VALVE IN VV TA 5 DIA TIF CL STA. 356+99.96, 91.92' LT BURY ELEV. = 932.76
- 908 FIRE HYDRANT W/ AUXILIARY VALVE STA. 359+56.84, 84.99' LT BURY ELEV. = 930.70 (MOVED)
- 909 FIRE HYDRANT W/ AUXILIARY VALVE STA. 361+60.00, 85.10' LT BURY ELEV. = 928.55 (MOVED)
- 910 10" GATE VALVE IN VV TA 5 DIA TIF CL STA. 361+81.22, 76.72' LT BURY ELEV. = 930.07
- 911 MAN TA SAN 4D TIF CL STA. 358+10.41, 90.00' LT RIM = 932.18 INV = 927.58 SE INV = 927.07 NW EXISTING SEWER TO REMAIN IN SERVICE DURING MANHOLE CONSTRUCTION
- 900 490 LIN FT WATER MAIN 10"
- 901 79 LIN FT WATER MAIN 8"
- 902 648 LIN FT SAN FORCE MAIN 8" @ 1.40%
- 911A 8" GATE VALVE IN VV TA 4 DIA TIF CL STA. 359+44.47, 61.07' LT BURY ELEV. = 928.09

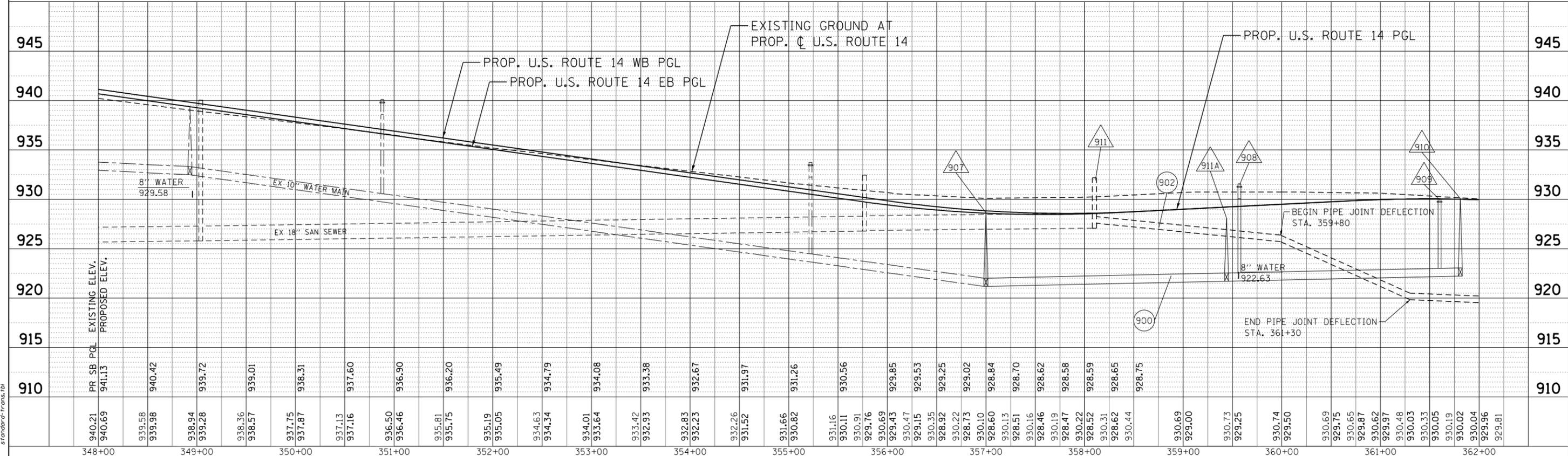
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	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	



NOTE:  
INSTALL 1" CORPORATION STOP IN EXISTING VALVE VAULT ON EAST SIDE OF VALVE NEAR INTERSECTION OF BRIDGE LN AND HARDING LN. (INCLUDED IN COST OF WATER MAIN)

- 17 TOP OF PR WATER MAIN = 933.22  
BOTTOM OF PR SS PIPE = 929.72  
CLEARANCE = 3.50'
- 17A BOTTOM OF EX WATER MAIN = 922.19  
TOP OF PR FORCE MAIN = 920.41  
CLEARANCE = 1.78'

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	



COMPANY NAME: HRGreen  
PROJECT CONTACT: HRGreen.com  
CLIENT: Illinois Professional Design Firm  
DATE PLOTTED: 11/27/2012 9:46:20 AM  
FILE NAME: 86110382-ut\_pnp\_03.DGN  
PLOT NUMBER: 3  
PER TABLE: 1



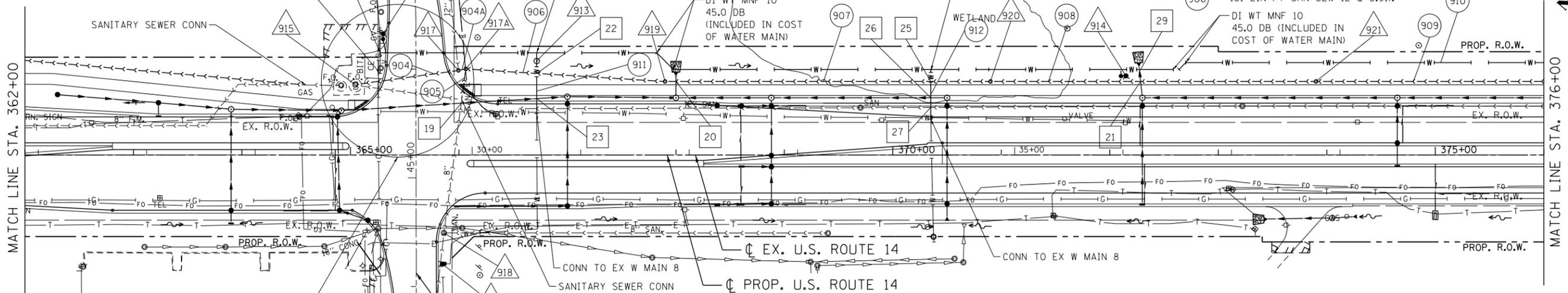
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PLOT SCALE =	CHECKED - MH	REVISED -
PLOT DATE = 11/27/2012	DATE - 02/08/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PROPOSED UTILITIES	
<b>U.S. ROUTE 14 PLAN &amp; PROFILE</b>	
<b>STA. 348+00 TO STA. 362+00</b>	
SCALE: 1"=50'	SHEET NO. 3 OF 6 SHEETS
STA. 348+00	TO STA. 362+00

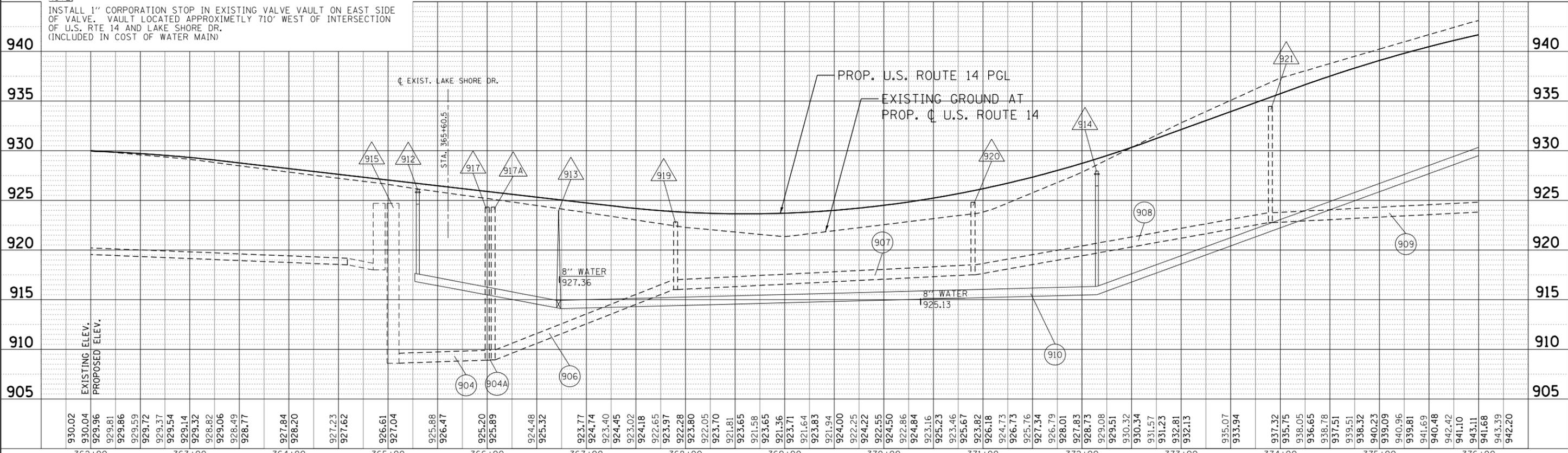
F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 463
CONTRACT NO. 62268			ILLINOIS FED. AID PROJECT	

- 912 FIRE HYDRANT W/ AUXILIARY VALVE STA. 365+30.16, 111.49' LT BURY ELEV. = 924.62 (MOVED)
- 913 8" GATE VALVE IN VV TA 4 DIA TIF CL STA. 366+71.69, 86.44' LT BURY ELEV. = 923.99
- 914 FIRE HYDRANT W/ AUXILIARY VALVE STA. 372+14.79, 72.80' LT BURY ELEV. = 926.45 (MOVED)
- 915 EXIST. 12' DIA WETWELL STA. 365+04.53, 64.66' LT RIM = 924.70 INV = 908.61 SE
- 916 OMITTED
- 917 MAN TA SAN 4D TIF CL STA. 365+99.54, 77.77' LT RIM = 924.32 INV = 909.41 NE EXISTING SEWER TO REMAIN IN SERVICE DURING MANHOLE CONSTRUCTION
- 918 EXIST. SAN MH STA. 365+86.23, 71.76' RT RIM = 923.10 INV = 909.30 E, SE, SW
- 919 MAN TA SAN 4D TIF CL STA. 367+90.00, 67.58' LT RIM = 922.83 INV = 916.02 SE, NW
- 920 MAN TA SAN 4D TIF CL STA. 370+90.00, 67.58' LT RIM = 924.82 INV = 917.50 SE, NW
- 903 OMITTED
- 904 90 LIN FT SAN SEW 12 @ 0.32%
- 904A 4 LIN FT SAN SEW 12 @ 1.00%
- 917A MAN TA SAN 4D TIF CL STA. 366+06.33, 79.10' LT RIM = 924.32 INV = 909.09 SW INV = 908.94 SE, NW
- 918A FIRE HYDRANT STA. 365+84.84, 100.42' RT BURY ELEV. = 926.43 (MOVED AND RESET)
- 905 27 LIN FT SAN SEW 8 @ 0.75%
- 906 181 LIN FT SAN SEW 12 @ 3.91%
- 907 297 LIN FT SAN SEW 12 @ 0.50%
- 908 297 LIN FT SAN SEW 12 @ 0.50%
- 909 298 LIN FT SAN SEW 12 @ 0.50%
- 910 1,386 LIN FT WATER MAIN 10"
- 911 56 LIN FT WATER MAIN 8"
- 912 46 LIN FT WATER MAIN 8"



- 19 TOP OF PR SAN PIPE = 909.85 BOTTOM OF PR SS PIPE = 919.74 CLEARANCE = 9.89'
- 20 TOP OF PR SAN PIPE = 916.93 BOTTOM OF PR SS PIPE = 918.00 CLEARANCE = 1.07'
- 21 TOP OF PR SAN PIPE = 919.93 BOTTOM OF PR SS PIPE = 921.58 CLEARANCE = 1.65'
- 22 TOP OF PR SAN PIPE = 912.63 TOP OF PR WATER MAIN = 914.15 CLEARANCE = 1.52'
- 23 TOP OF PR WATER MAIN = 915.40 BOTTOM OF PR SS PIPE = 917.98 CLEARANCE = 2.58'
- 24 OMITTED
- 25 TOP OF PR WATER MAIN = 915.00 BOTTOM OF PR SAN PIPE = 917.07 CLEARANCE = 2.07'
- 26 TOP OF PR WATER MAIN = 915.00 BOTTOM OF PR SS PIPE = 918.73 CLEARANCE = 3.73'
- 27 TOP OF PR WATER MAIN = 911.60 BOTTOM OF EX SAN PIPE = 915.29 CLEARANCE = 3.69'
- 28 OMITTED
- 29 TOP OF PR WATER MAIN = 916.91 BOTTOM OF PR SS PIPE = 921.48 CLEARANCE = 4.57'
- 908 297 LIN FT SAN SEW 12 @ 0.50%
- 909 298 LIN FT SAN SEW 12 @ 0.50%
- 910 1,386 LIN FT WATER MAIN 10"
- 911 56 LIN FT WATER MAIN 8"
- 912 46 LIN FT WATER MAIN 8"

NOTE:  
INSTALL 1" CORPORATION STOP IN EXISTING VALVE VAULT ON EAST SIDE OF VALVE. VAULT LOCATED APPROXIMATELY 710' WEST OF INTERSECTION OF U.S. RTE 14 AND LAKE SHORE DR. (INCLUDED IN COST OF WATER MAIN)



PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	NO. _____	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	NO. _____	

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PROJECT CONTACT: spenel  
CLIENT: Illinois Professional Design Firm  
DATE PLOTTED: 11/27/2012 9:16:04 AM  
FILE NAME: 86110382-ut\_pnp\_04.DGN  
PLOT NUMBER: 04/01/2012  
PLOT SCALE: 1"=50'



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FILE NAME = 86110382-ut_pnp_04.DGN	DRAWN - SMP	REVISED -
PLOT SCALE =	CHECKED - MH	REVISED -
PLOT DATE = 11/27/2012	DATE - 02/08/2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED UTILITIES	
U.S. ROUTE 14 PLAN & PROFILE	
STA. 362+00 TO STA. 376+00	
SCALE: 1"=50'	SHEET NO. 4 OF 6 SHEETS
STA. 362+00	TO STA. 376+00

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 464
CONTRACT NO. 62268			ILLINOIS FED. AID PROJECT	

922 MAN TA SAN 4D TIF CL  
STA. 376+19.15, 67.58' LT  
RIM = 942.20  
INV = 924.25 SW, NW

923 FIRE HYDRANT W/ AUXILIARY VALVE  
STA. 377+42.67, 80.37' LT  
BURY ELEV. = 939.90  
(MOVED)

924 10" GATE VALVE IN VV TA 5 DIA TIF CL  
STA. 377+72.39, 53.05' RT  
BURY ELEV. = 941.80

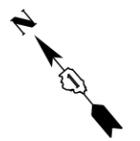
926 OMITTED

913 25 LIN FT SAN SEW 12 @ 0.43%

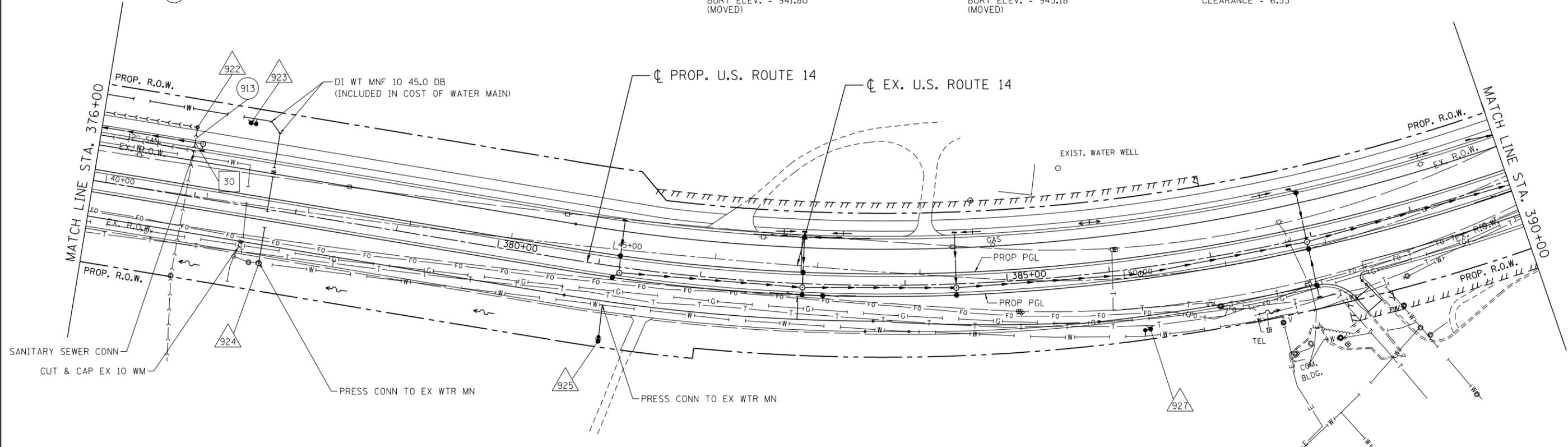
925 FIRE HYDRANT W/ AUXILIARY VALVE  
STA. 381+10.00, 74+45' RT  
BURY ELEV. = 941.80  
(MOVED)

927 FIRE HYDRANT  
STA. 386+32.32, 60.29' RT  
BURY ELEV. = 943.18  
(MOVED)

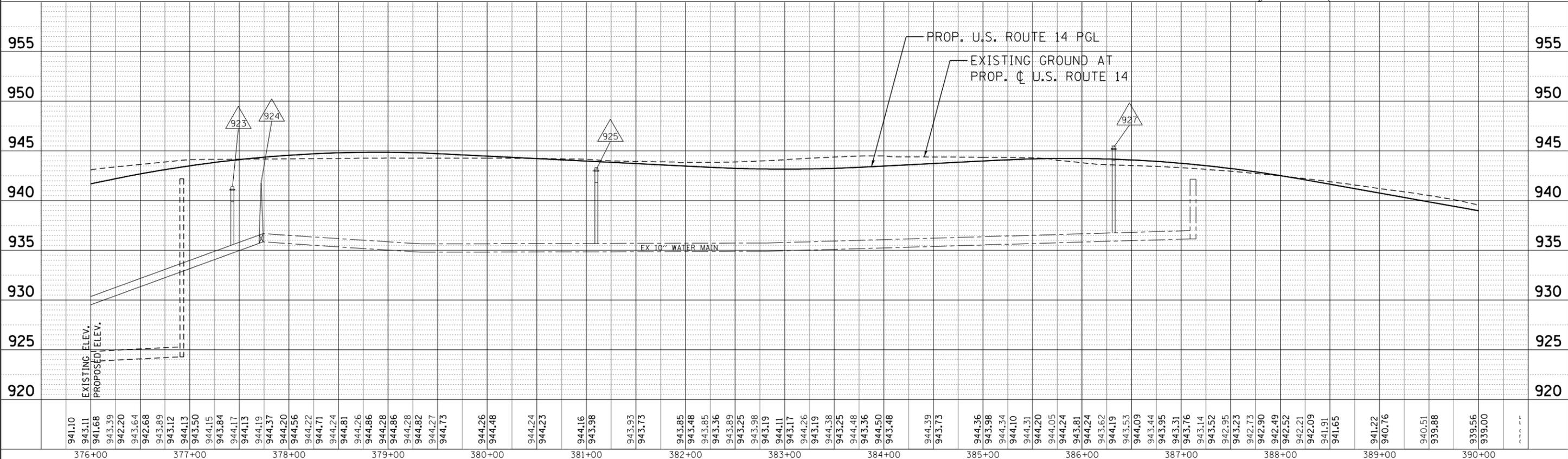
30 TOP OF PR SAN PIPE = 925.48  
BOT OF PR SS PIPE = 932.03  
CLEARANCE = 6.55'



PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNED	
	CHECKED	
	CARD FILE NAME	



PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
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PROJECT CONTACT: HRGreen.com  
CLIENT: Illinois Professional Design Firm  
DATE PLOTTED: 11/27/2012 9:47:40 AM  
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PLOT NUMBER: 601dri  
PER TABLE: srtender@hrgreen.com

**HRGreen**  
HRGreen.com  
Illinois Professional Design Firm  
#184-001322

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FILE NAME = 86110382-ut_pnp_05.DGN	DRAWN - SMP	REVISED -
PLOT SCALE =	CHECKED - MH	REVISED -
PLOT DATE = 11/27/2012	DATE - 02/08/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED UTILITIES**  
**U.S. ROUTE 14 PLAN & PROFILE**  
**STA. 376+00 TO STA. 390+00**

SCALE: 1"=50' SHEET NO. 5 OF 6 SHEETS STA. 376+00 TO STA. 390+00

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 465
CONTRACT NO. 62268			ILLINOIS FED. AID PROJECT	

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	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE	
	NOT AT THIS OFFICE	
	NO.	

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 PROJECT CONTACT: HRGreen.com  
 CLIENT: Illinois Professional Design Firm  
 DATE PLOTTED: 11/27/2012 9:46:36 AM  
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 PLOT NUMBER: 62268-06  
 PLOT DATE: 11/27/2012

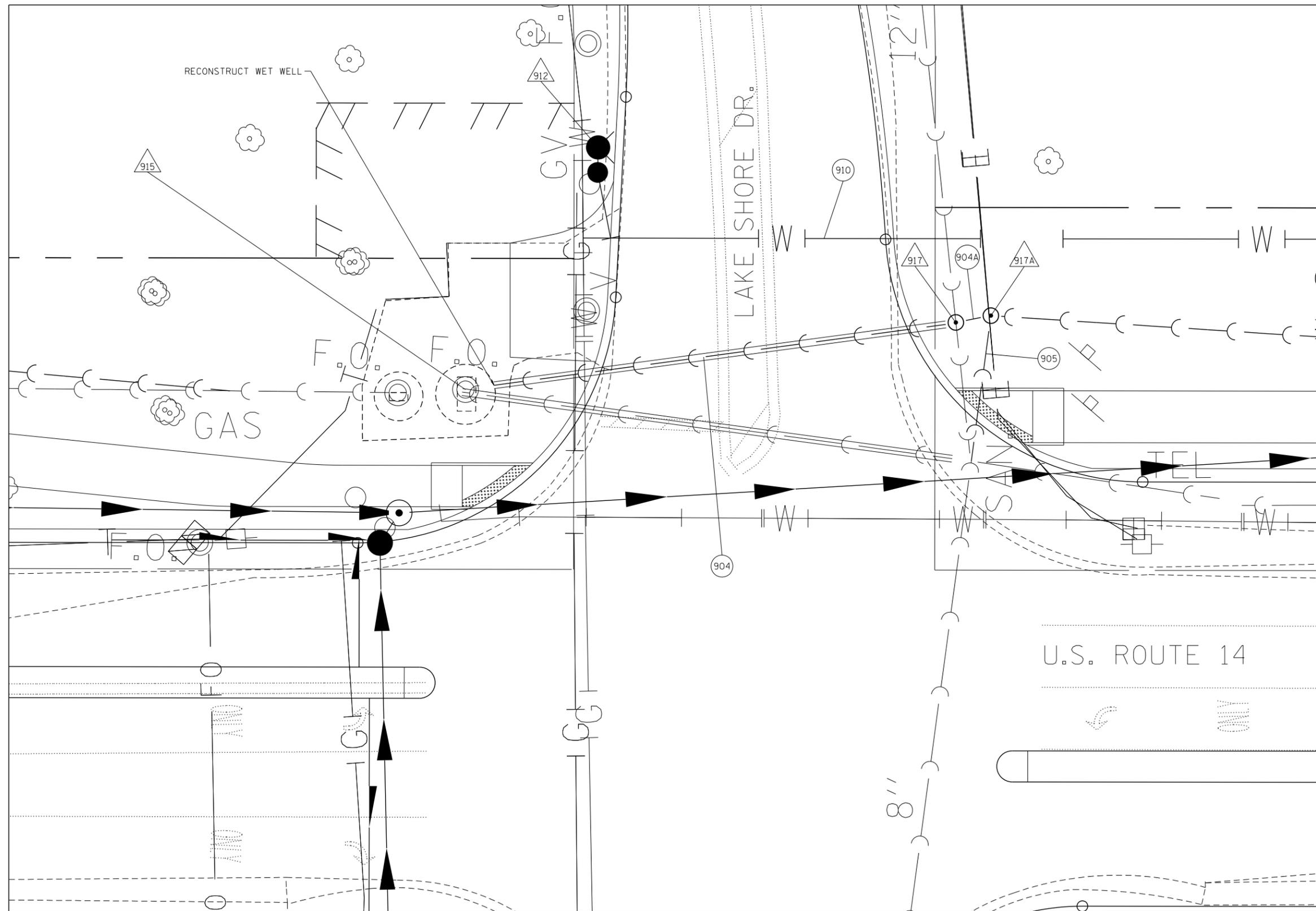


EXHIBIT  
 1" = 10'

NOTES:

- CORE DRILL APPROXIMATELY 16" DIAMETER HOLE THROUGH WET WELL AND PROVIDE BOOT.
- PROVIDE MINIMUM 9" SPACING BETWEEN EXISTING AND PROPOSED OPENINGS
- MODIFY FILLET TO DIRECT FLOW ALONG SOUTH PERIMETER AND CONNECT TO EXISTING CHANNEL.

SCALE: 1"=10'		SHEET NO. 6 OF 6 SHEETS		STA. 390+00 TO STA. 404+00	
PROPOSED UTILITIES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
U.S. ROUTE 14 PLAN & PROFILE		305	27R-2	MCHENRY	673
SANITARY EXHIBIT				CONTRACT NO.	62268
				ILLINOIS FED. AID PROJECT	

USER NAME = spenel	DESIGNED - DCJ	REVISED -
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PLOT SCALE =	CHECKED - MH	REVISED -
PLOT DATE = 11/27/2012	DATE - 02/08/2012	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



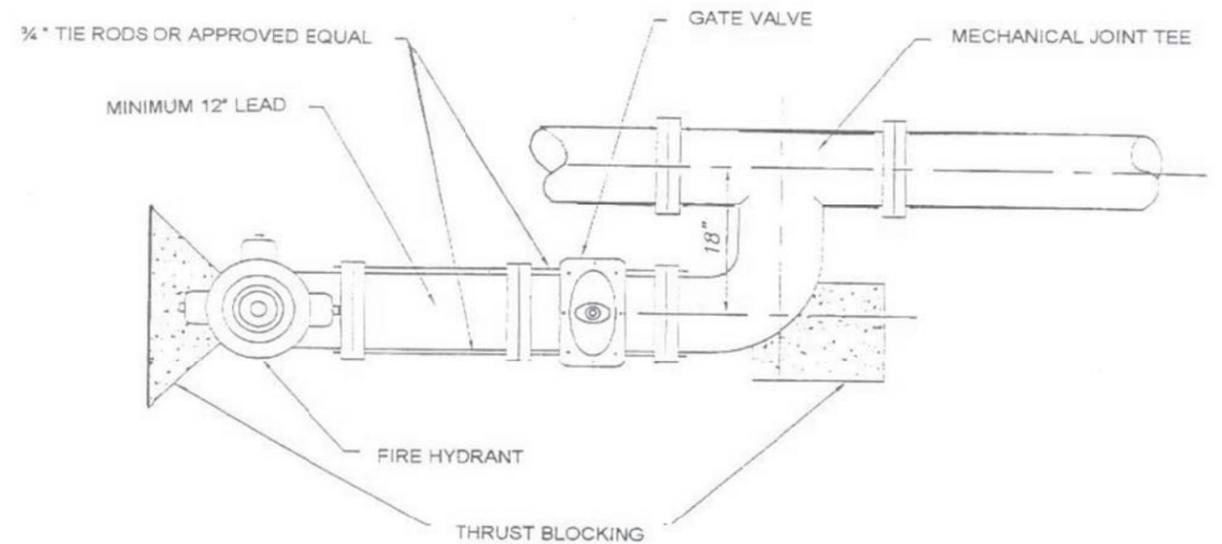
TYPE OF STRUCTURE	LOCATION	FRAME	COVER/GRATE
MANHOLE	STREET OR PAVED SURFACE	1050	1020 TYPE A SOLID W/O-RING (MARKED "STORM" OR "SANITARY")
WATER VAULT	STREET OR PAVED SURFACE	1050	1020 TYPE A SOLID W/O-RING (MARKED "WATER")
MANHOLE	PARKWAY/YARD OR DITCH	1022	1020 TYPE A SOLID W/O-RING (MARKED "STORM" OR "SANITARY")
WATER VAULT	PARKWAY/YARD	1022	1020 TYPE A SOLID W/O-RING (MARKED "WATER")
STORM INLET	CURB	7000	TYPE M1 GATE AND T1 BACK
STORM INLET	STREET OR PAVED SURFACE	1050	TYPE A SOLID COVER W/O-RING
STORM INLET	DEORESSSED CURB	7000	TYPE M3 FLAT GRATE
STORM INLET	DITCH	1022	TYPE O1 BEEHIVE GRATE

**NOTES:**

1. ALL CASTINGS ARE TO BE MANUFACTURED BY EAST JORDAN IRON WORKS, INC. – NO SUBSTITUTIONS ARE ALLOWED.
2. ALL CASTINGS ARE TO BE DIPPED TO PREVENT CORROSION.
3. ALL DITCH GRATES, PIPE GRATES, CURB AND GUTTER INLETS, AND CATCH BASINS SHALL HAVE THE FOLLOWING LETTERING: "DUMP NO WASTE - DRAINS TO WATERWAYS".

## FRAMES AND GRATES

City of Woodstock, IL – Public Improvement Standards and Details - Page 7



**NOTES:**

1. ALL JOINTS SHALL BE MECHANICAL.
2. THE LIMITED SPACE HYDRANT ASSEMBLY SHALL BE UTILIZED AT THE CITY'S DISCRETION.

## LIMITED SPACE HYDRANT ASSEMBLY

City of Woodstock, IL – Public Improvement Standards and Details - Page 12

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 10:48:39 AM  
 FILE NAME: 8610382-det-01.dgn  
 PLOT DRIVER: pdfcut  
 PEN TABLE: standard-trans.tbl



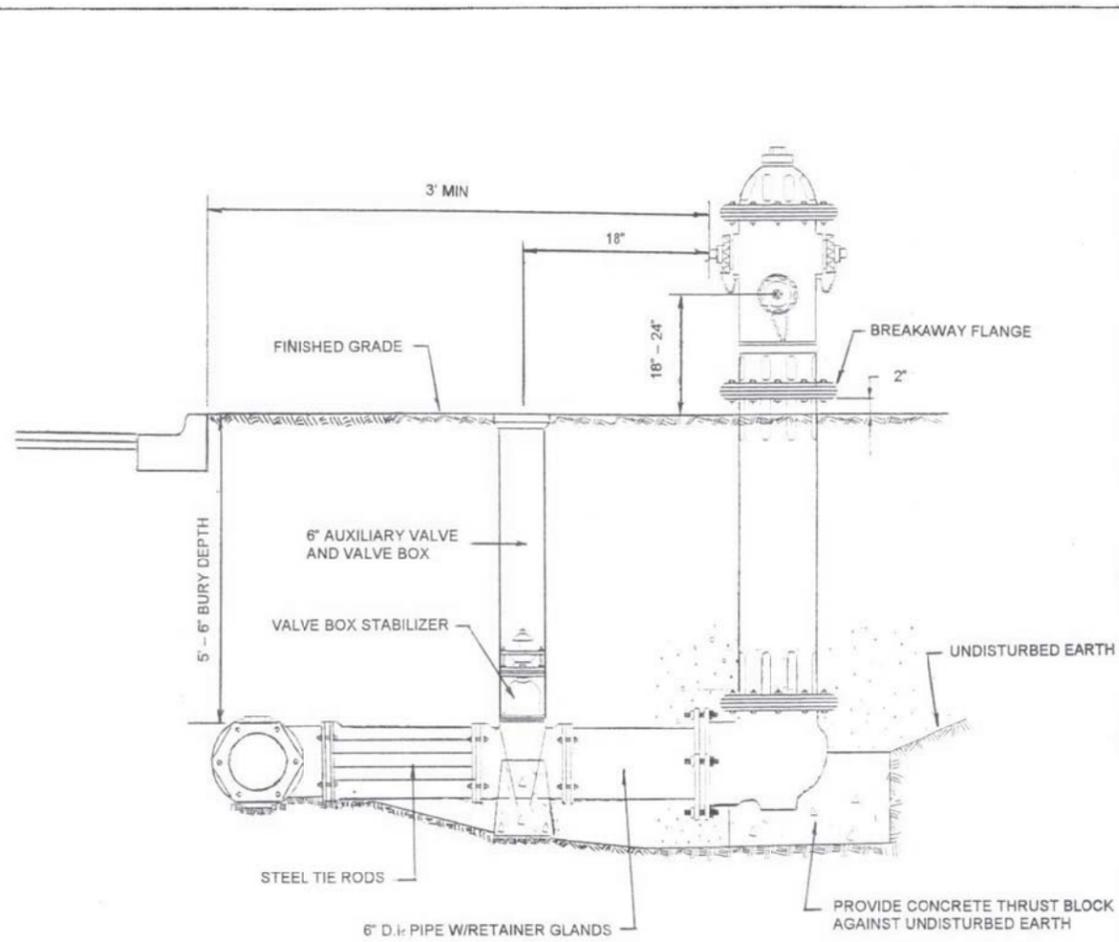
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	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 11/27/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CITY OF WOODSTOCK  
STANDARDS AND DETAILS**

SCALE: SHEET NO. 1 OF 5 SHEETS STA. TO STA.

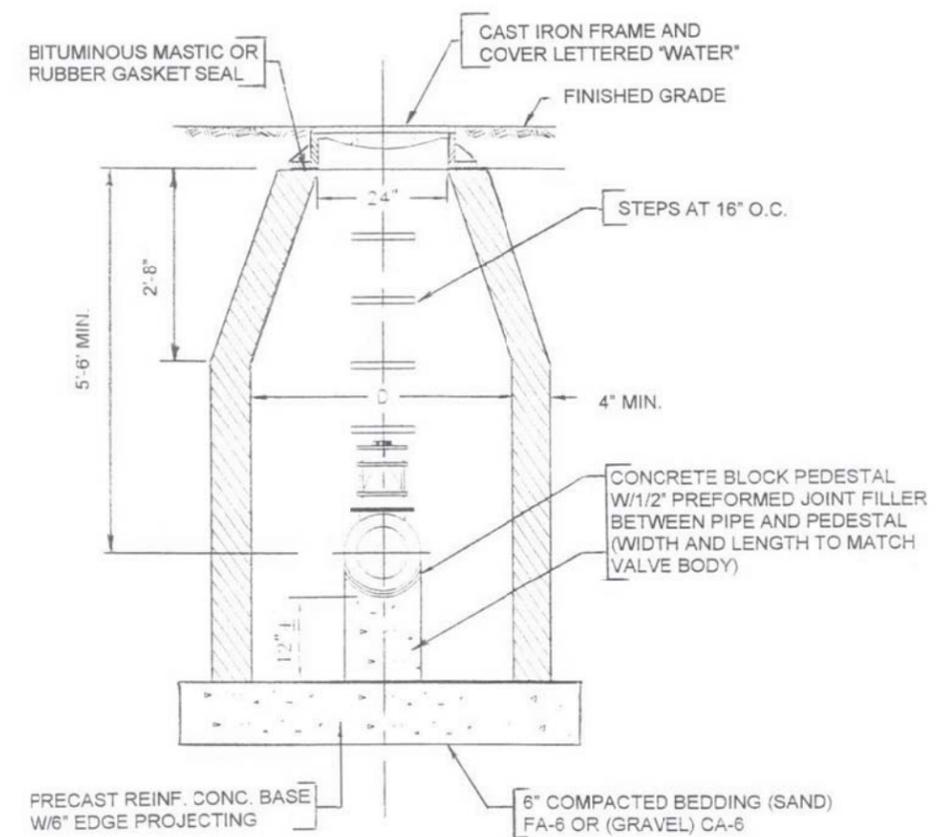
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	467
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	



**Notes:**

1. No portion of a hydrant or auxiliary valve can be located within a proposed or existing driveway or sidewalk.
2. All hydrants shall be located a least 5' from the edge of a driveway.

**FIRE HYDRANT ASSEMBLY**



**Notes:**

1. The valve must align with the center of the valve opening.
2. If the water main is 8" or less, the vault diameter should be 48". If the water main is 10" or larger, the vault diameter should be 60".
3. A cut-in sleeve should be installed adjacent to the valve. The end of the sleeve and the end of the valve should each be at least 8" away from the inside of the vault.

**VALVE VAULT DETAIL - WATER**

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 10:56:19 AM  
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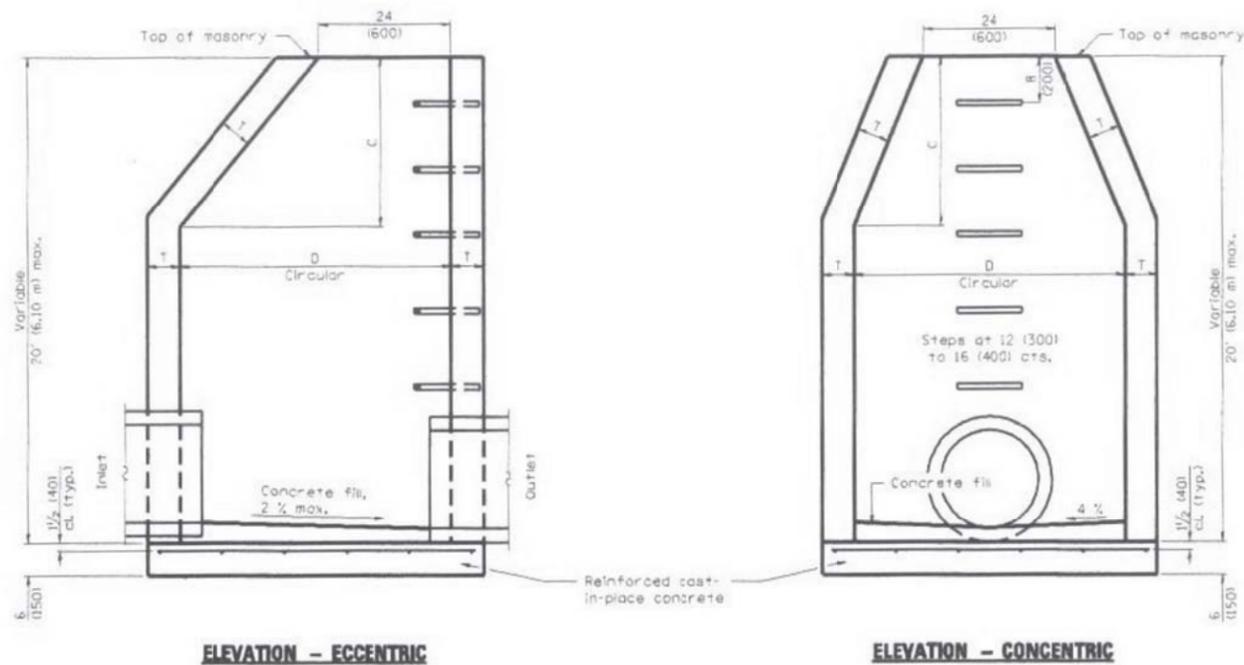


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PLOT DATE = 11/27/2012	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CITY OF WOODSTOCK STANDARDS AND DETAILS	
SCALE:	SHEET NO. 2 OF 5 SHEETS STA. TO STA.

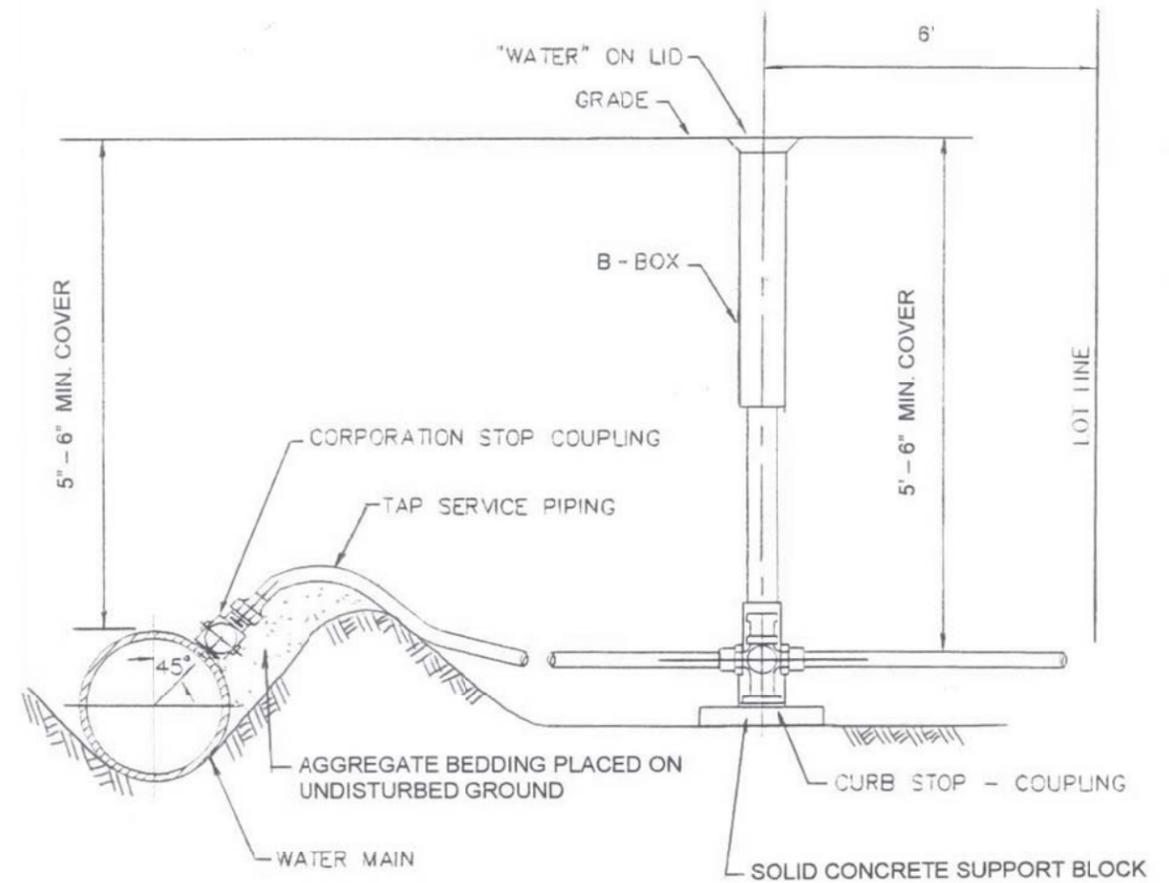
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	468
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 62268	



**Notes:**

1. The frame shall be set on precast concrete adjusting rings (6" min. / 12" max.) and an internal chimney seal shall be installed in all sanitary manholes.
2. The sanitary manhole shall set on a min. 6" of compacted sand (FA-1) or a min. of compacted gravel (CA-6). Granular backfill shall be provided around the sanitary manhole to within 12" of the final surface elevation.
3. Only precast reinforced concrete sections are allowed as an alternative material for walls.

**SANITARY MANHOLE - TYPE A**



**Notes:**

1. The b-box shall not be located within a sidewalk, driveway or driveway approach.

**TYPICAL WATER SERVICE LINE ASSEMBLY**

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 11:00:35 AM  
 FILE NAME: 8610382-det-03.dwg  
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PLOT DATE = 11/27/2012	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CITY OF WOODSTOCK STANDARDS AND DETAILS	
SCALE:	SHEET NO. 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	469
CONTRACT NO.			62268	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

# SEWER AND WATER MATERIAL LIST

## FIRE HYDRANT

- Clow Medallion
- Mueller Centurion
- Waterous Pacer

All hydrants shall be equipped with 5 and ¼ inch openings. Three (3) way hose connections shall include two (2) 2 and ½ inch nozzles with NST and one (1) STORZ fitting with locks and caps. Hydrants shall be one (1) piece construction from the traffic breakaway flange to the shoe. The shoe shall have mechanical joints.

## VALVE

- Clow Mechanical Joint Resilient Wedge (6100 Series)
- Mueller Mechanical Joint Resilient Sear (2360 Series)
- AFC Mechanical Joint Resilient Wedge (2500 Series)

All valves shall open to the left.

## VALVE BOX

- Tyler Cast Iron (664S)

A valve box stabilizer is required on each valve box.

## CORPORATION STOP AND CURB STOP

- Mueller
- A.Y. McDonald

Applicable for only 1 inch and 2 inch connections.

## BUFFALO BOXES

- Mueller (H10300)
- A.Y. McDonald (5614)

## MECHANICAL JOINT TAPPING SLEEVE

Tapping sleeves shall be stainless steel with a ductile flange (ROMAC or SMITH-BLAIR).

City of Woodstock, IL – Public Improvement Standards and Details - Page 36

## REPAIR CLAMP

- ROMAC

## SANITARY SEWER PIPE

Sanitary sewer pipe shall be polyvinyl chloride pipe (SDR 26) conforming to ASTM-3034 (PSM) for sizes ranging from 4 inches to 15 inches and to ASTM F-679 for sizes ranging from 18 inches to 27 inches. The required ASTM number and cell number (12454-B or 12364-C) shall appear on the pipe. All joints shall meet ASTM D-3212 requirements. **Pipes and fittings not marked with the proper classification will be rejected.**

## WATER MAIN PIPE

Water main pipe shall be cement lined (ANSI 21.4) Class 52 (ANSI 21.51) ductile iron with push on or mechanical joints (ANSI-21.10-11).

## MANHOLE CHIMNEY SEALS

Rubber internal or rubber internal/external chimney seals with stainless steel expansion bands are required on all new and existing sanitary manholes.

## FLOW METERS

- Krohne-Aquaflux (electromagnetic)

## FORCE MAINS

Force mains shall be Ductile Iron – Class 51. The normal operating pressure of sanitary force mains is between 20 psig and 125 psig. Hydrostatic testing shall be performed to 125 psig max.

City of Woodstock, IL – Public Improvement Standards and Details - Page 37

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 11:52:48 AM  
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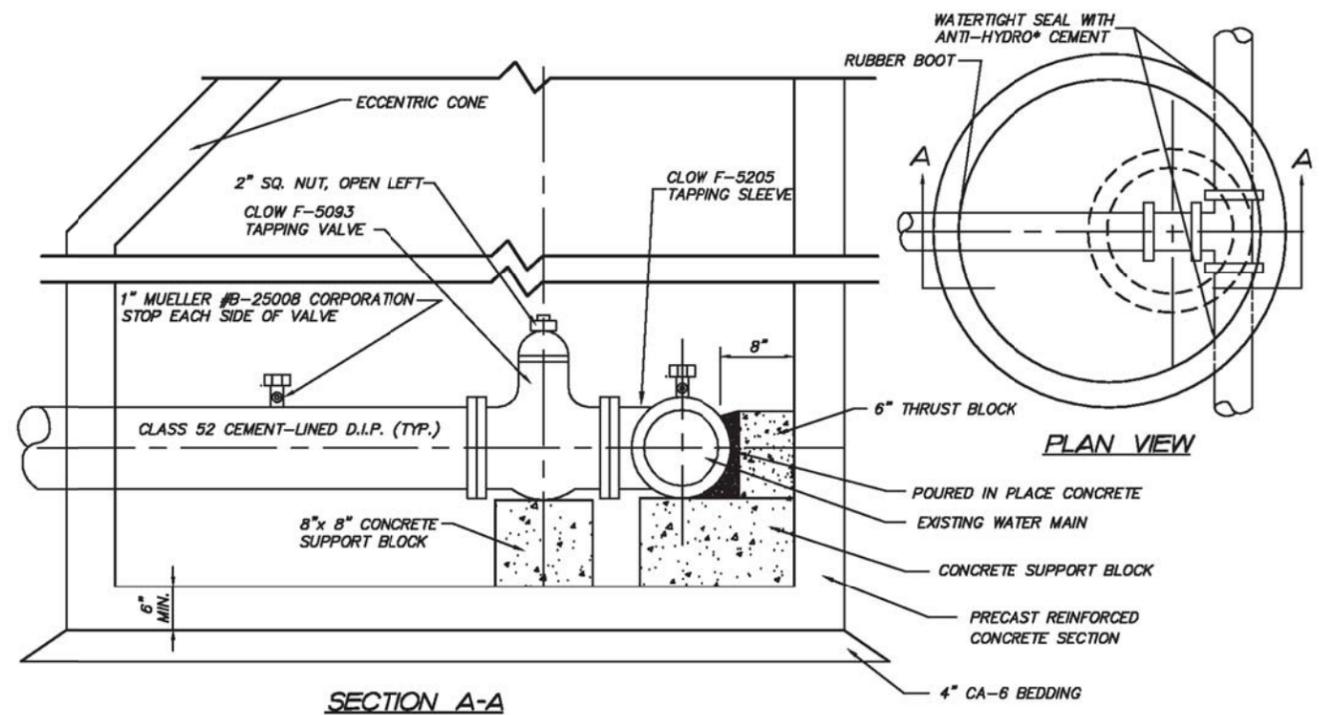
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CITY OF WOODSTOCK  
 STANDARDS AND DETAILS

SCALE: SHEET NO. 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	470
CONTRACT NO.			62268	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**WATER MAIN PRESSURE CONNECTION DETAIL**



**NOTES:**  
 C.I. MANHOLE FRAME AND COVER NEENAH R-1530 OR APPROVED EQUAL WITH STANDARD DUTY, NON-ROCKING TYPE LIDS. ADJUSTING RING HEIGHT NOT TO EXCEED 8\"/>

REVISIONS	
INITIAL	DATE
JFH	MARCH 2007

\* OR APPROVED EQUAL  
 OSW-W-1

COMPANY NAME: HRGreen  
 PROJECT CONTACT: HRGreen.com  
 DATE PLOTTED: 11/27/2012 11:50:21 AM  
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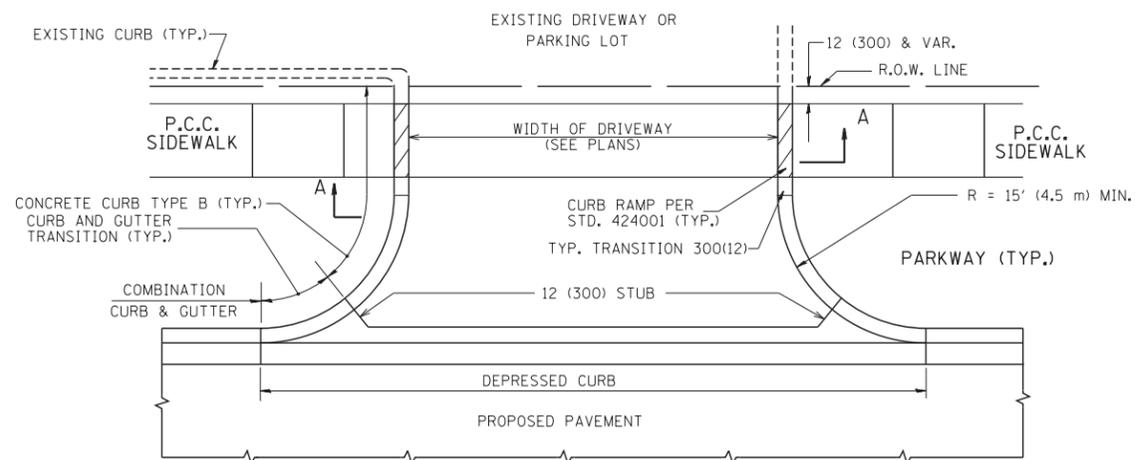


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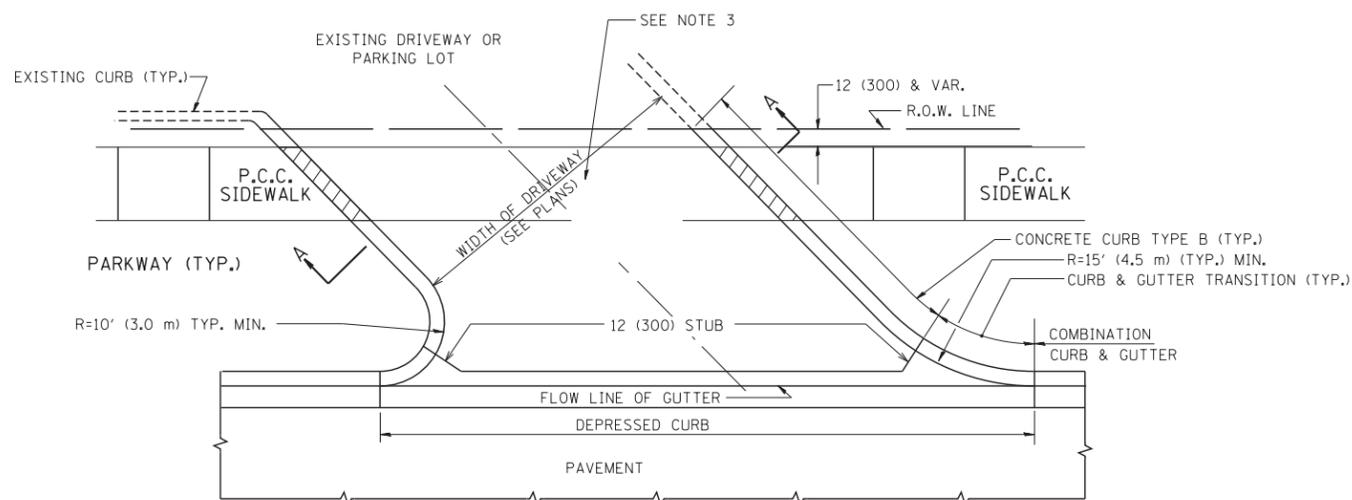
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>CITY OF WOODSTOCK STANDARDS AND DETAILS</b>	
SCALE:	SHEET NO. 5 OF 5 SHEETS STA. TO STA.

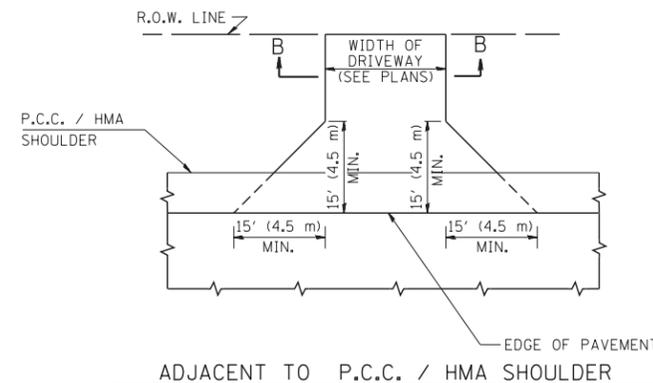
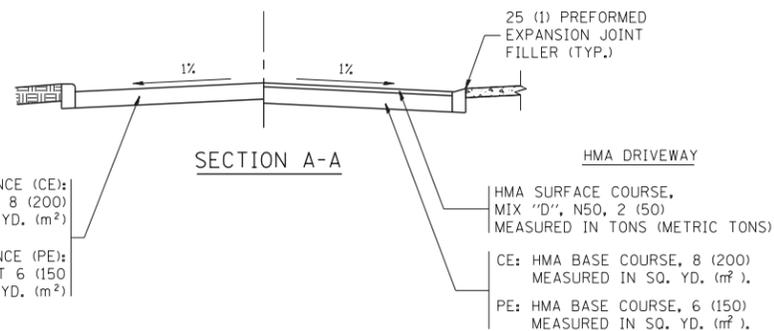
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	471
CONTRACT NO.			62268	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



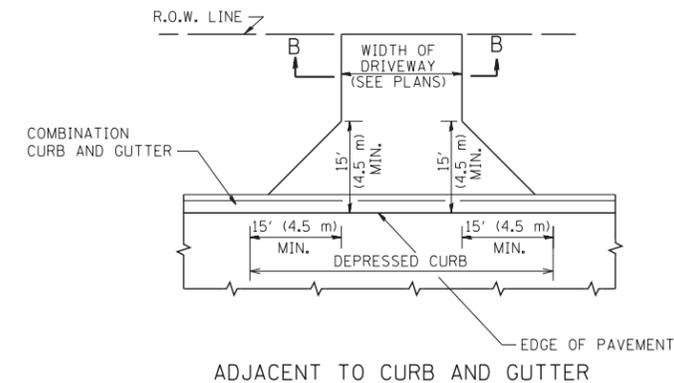
WITH CONCRETE CURB, TYPE B



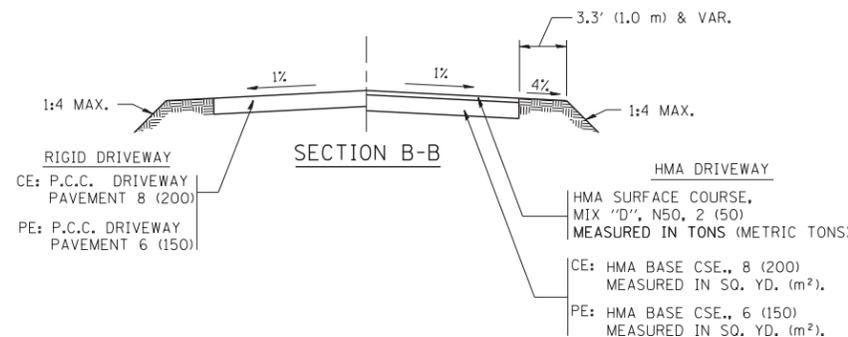
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)  
HMA SURFACE COURSE,  
MIX "D", N50, 2 (50)  
MEASURED IN TONS (METRIC TONS)  
AGGREGATE BASE CSE., TYPE B, 8 (200)  
MEASURED IN SQ. YD. (m²).

**GENERAL NOTES:**

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

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

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

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

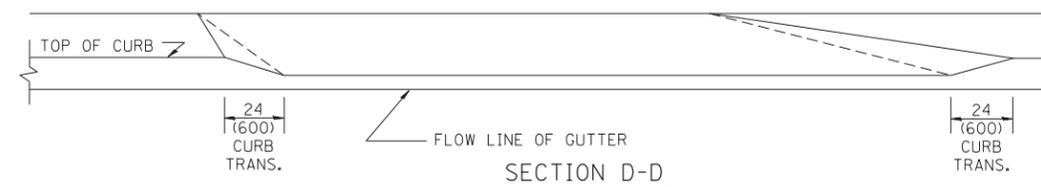
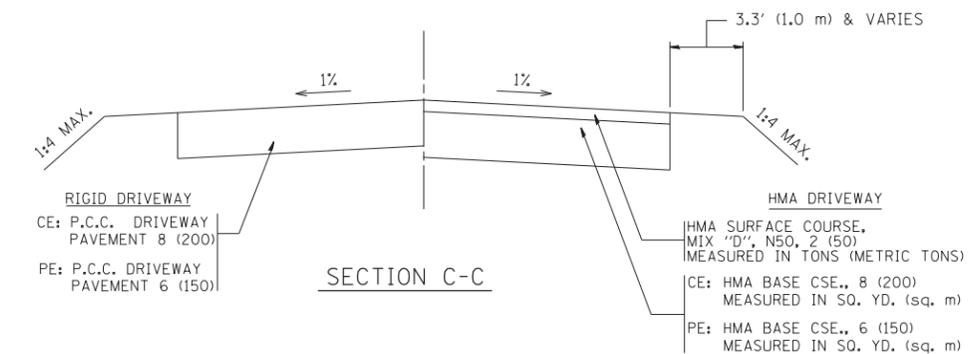
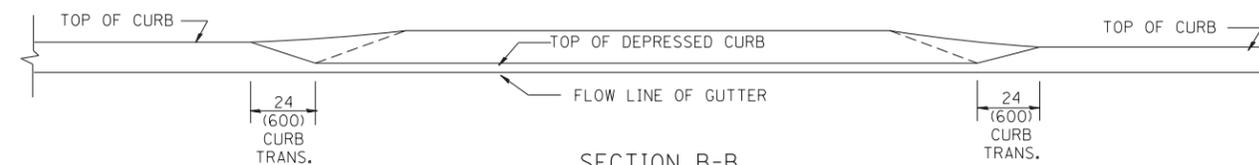
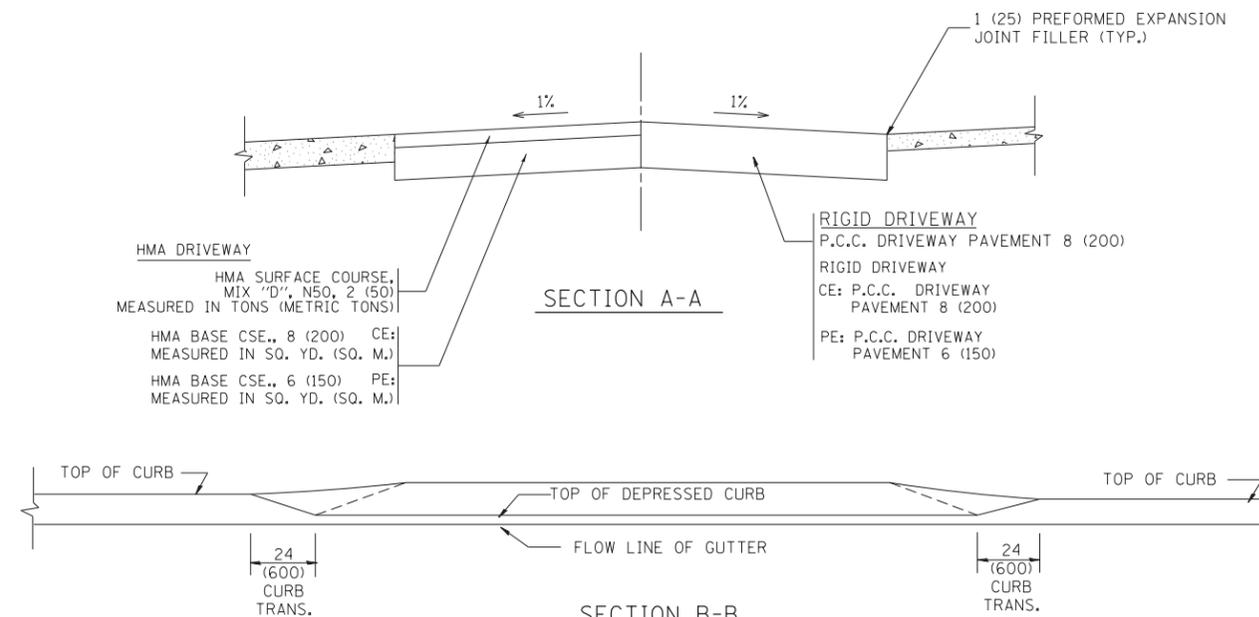
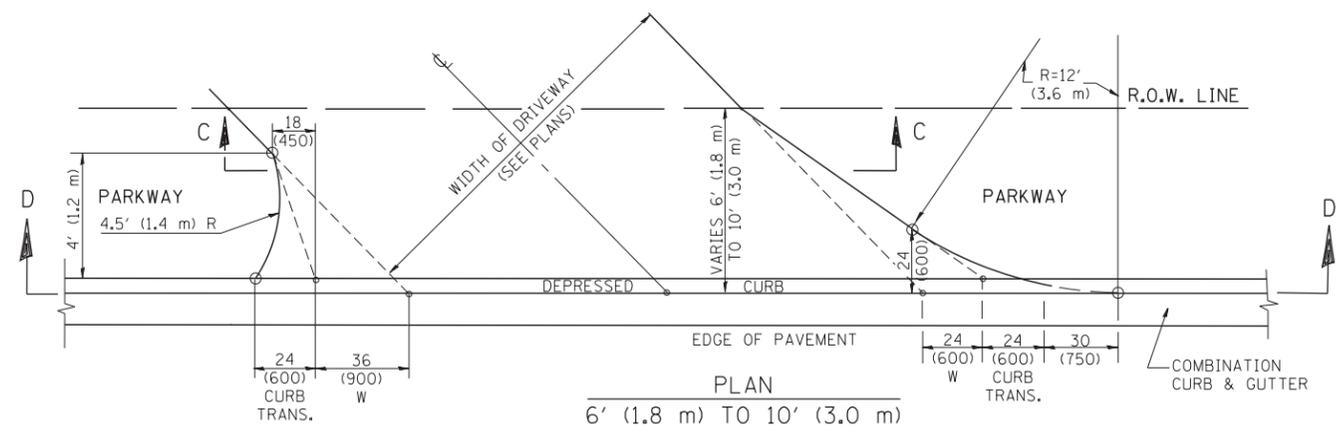
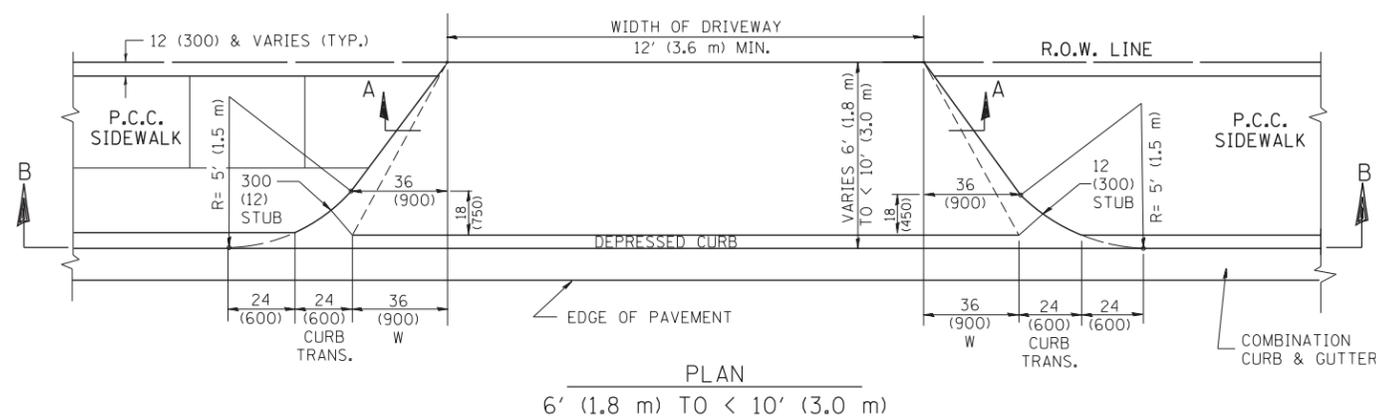
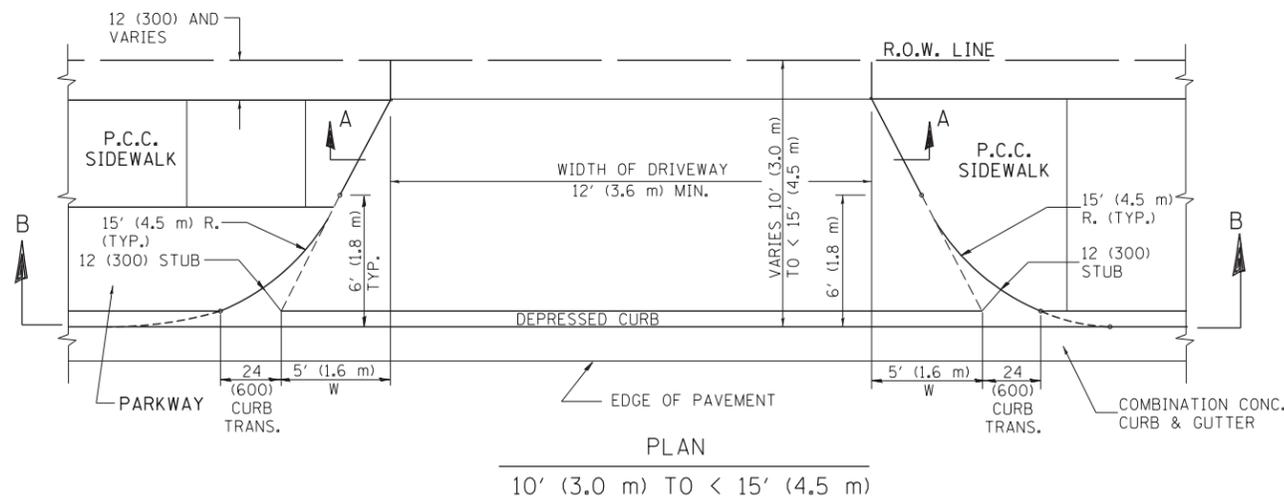
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	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.  
AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	472
BD0156-07 (BD-01)			CONTRACT NO. 62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

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

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

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

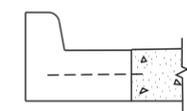
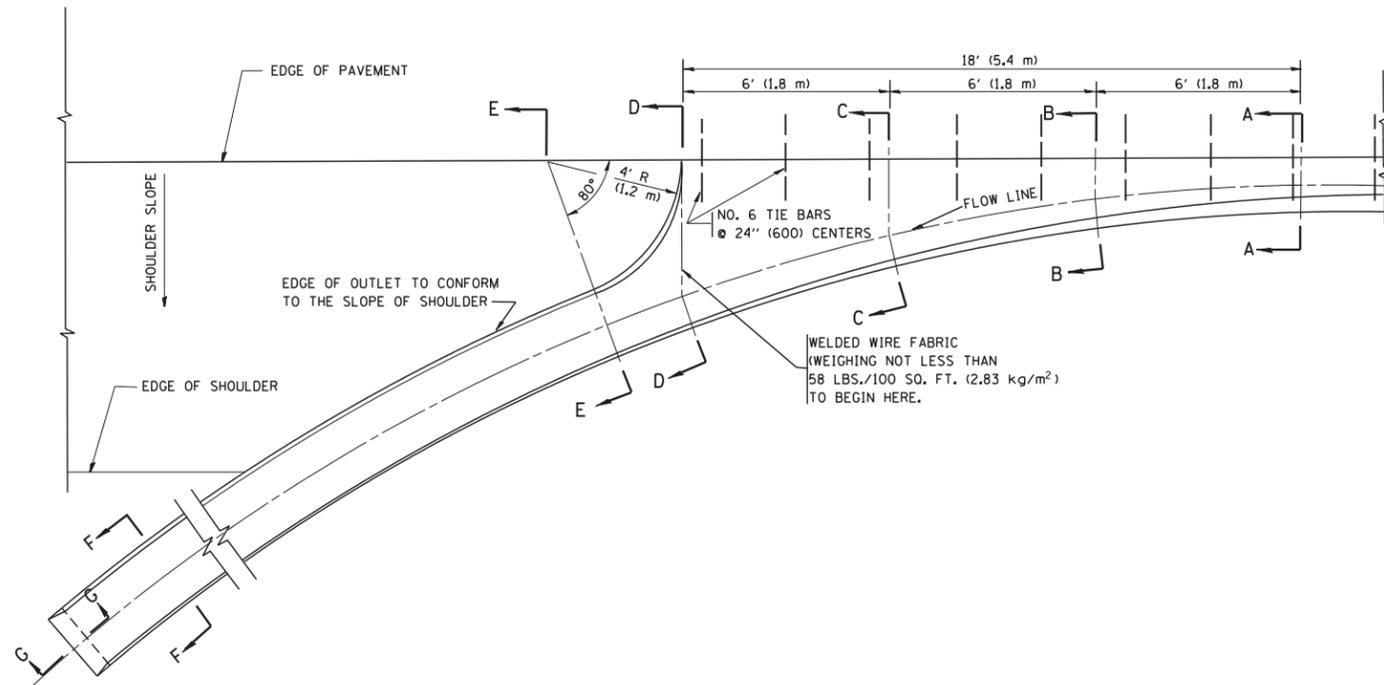
"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

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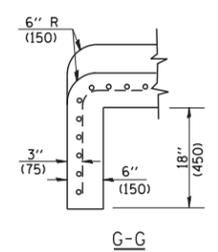
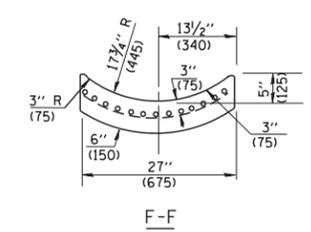
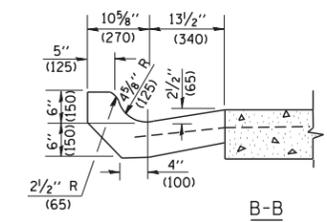
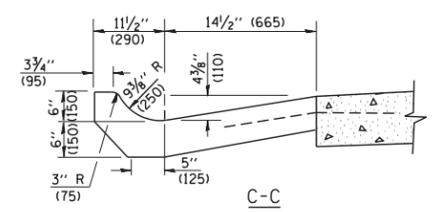
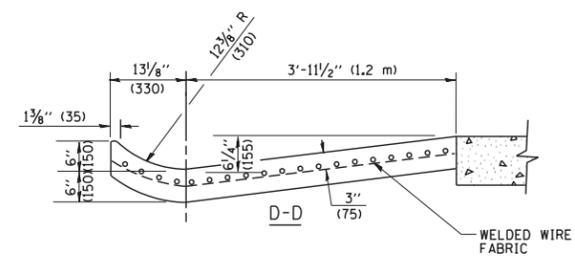
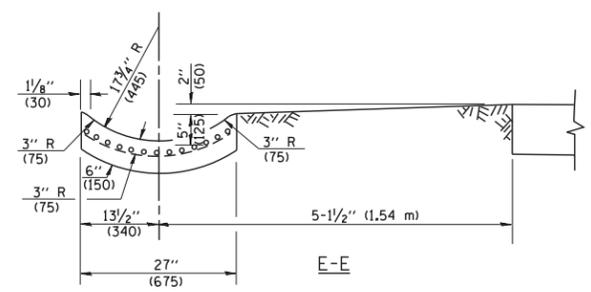
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)		305	27R-2	MCHENRY	673	473
SCALE: NONE		BD400-02 (BD-02)		CONTRACT NO.		62268
SHEET NO. 1 OF 1 SHEETS		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



A-A \*

\* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



**GENERAL NOTES**

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\"/>

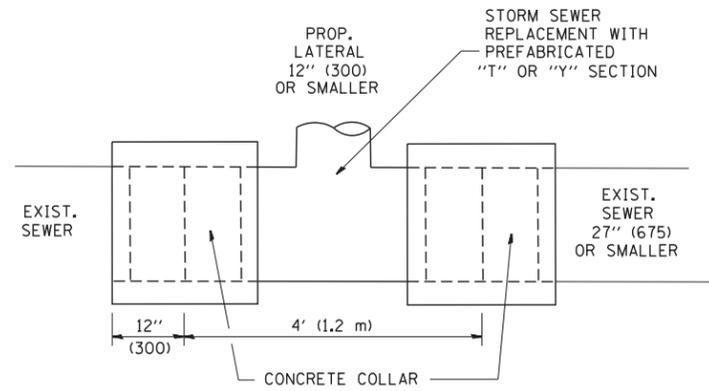
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

**QUANTITIES**

FOR SECTION A-A TO E-E AND CURTAIN WALL =  
 1.25 CU. YDS. (0.96 m<sup>3</sup>) CLASS S1 CONCRETE (OUTLET) FOR 9\"/>

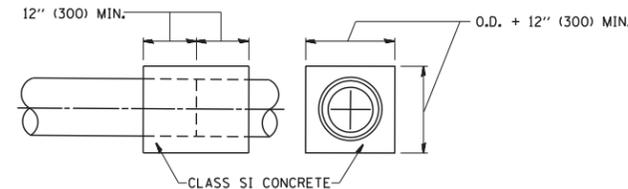
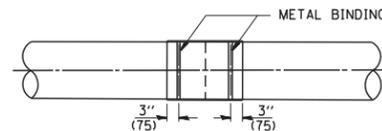
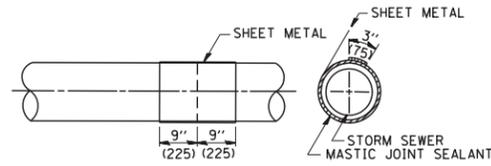
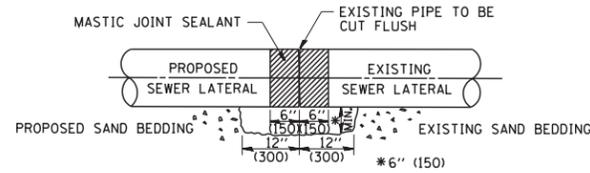
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94					305	27R-2	MCHENRY	673	474
	PLOT DATE = 1/4/2008	DATE - 08-04-86	REVISED - E. GOMEZ 12-21-00					<b>BD600-01 (BD-03)</b>		CONTRACT NO.	62268	
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



**DETAIL "A"**

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

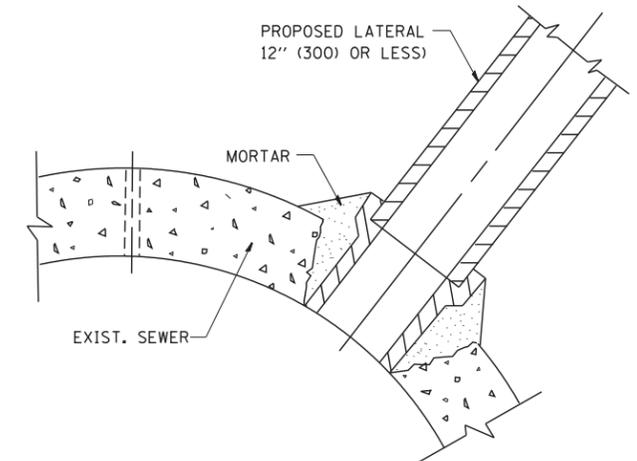


**DETAIL "B"**

CLASS SI CONCRETE COLLAR

**CONSTRUCTION SEQUENCE**

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



**DETAIL "C"**

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

**NOTES**

**MATERIAL**

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

**CONSTRUCTION METHODS**

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

**GENERAL**

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

**BASIS OF PAYMENT**

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

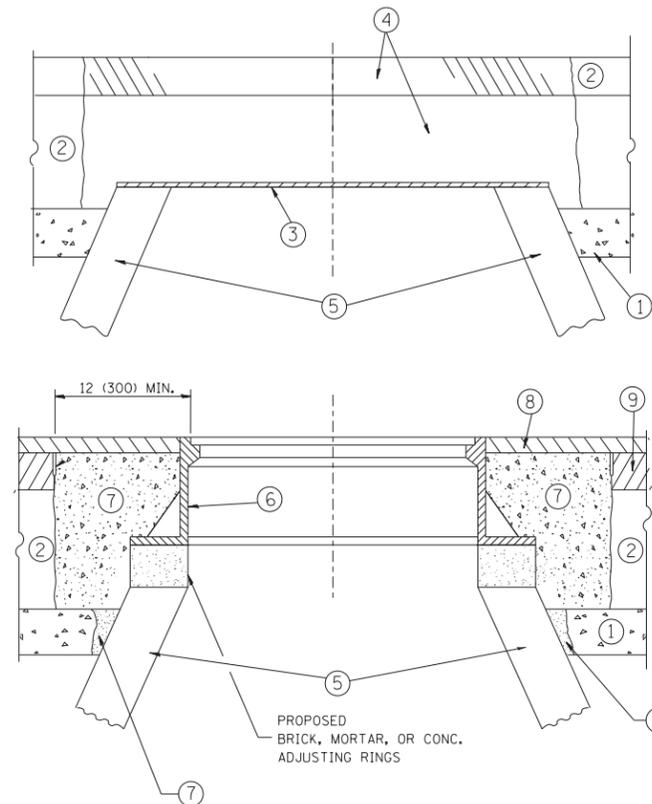
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	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	475
<b>BD500-01 (BD-7)</b>		CONTRACT NO.	62268	
FED. ROAD DIST. NO. 1 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
- ⑥ FRAME AND LID (SEE NOTES)
- ② EXISTING PAVEMENT
- ⑦ CLASS PP-1\* CONCRETE
- ③ 36 (900) DIAMETER METAL PLATE
- ⑧ PROPOSED HMA SURFACE COURSE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑨ PROPOSED HMA BINDER COURSE
- ⑤ EXISTING STRUCTURE

**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

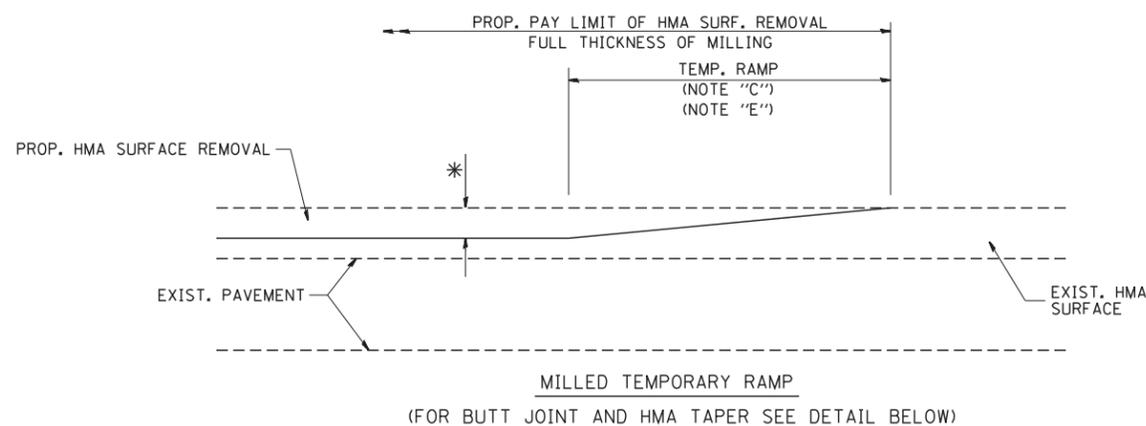
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

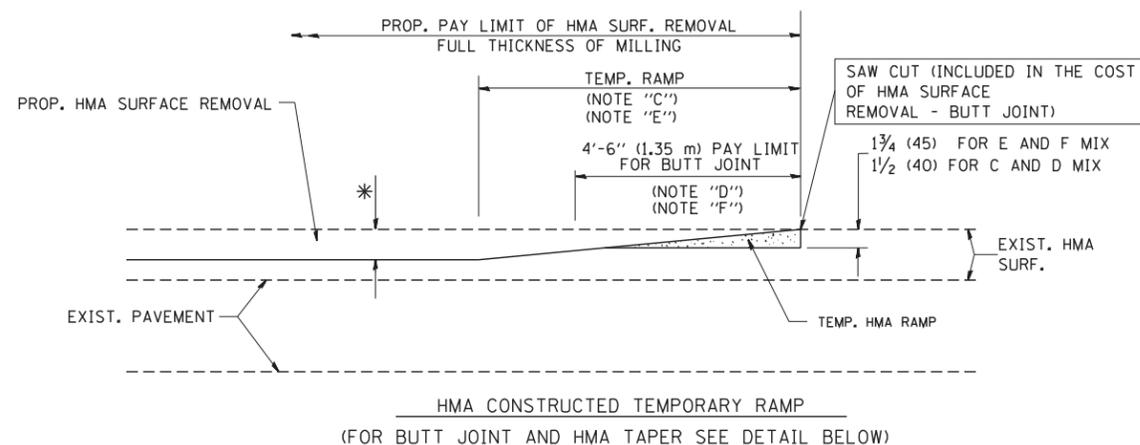
**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	476
<b>BD600-03 (BD-8)</b>		CONTRACT NO.	62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

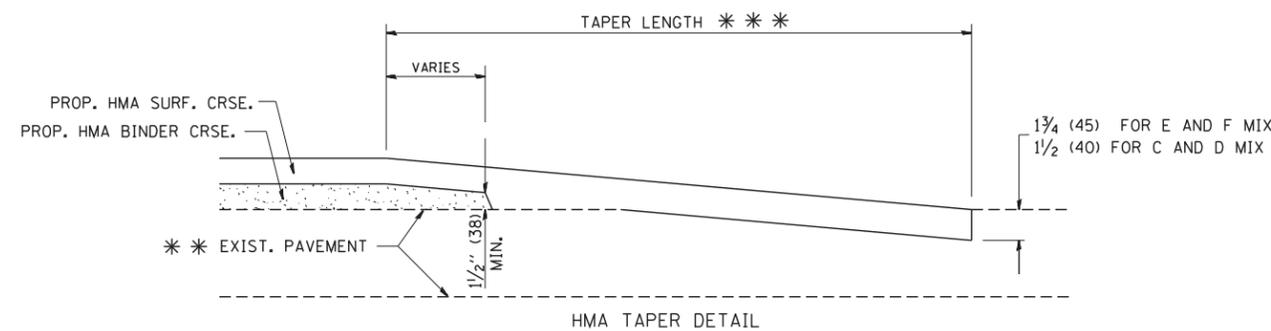
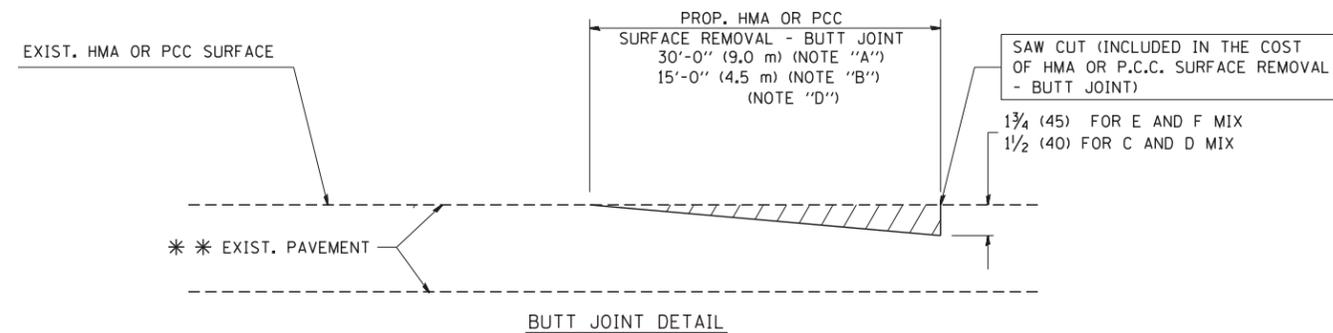


**OPTION 1**



**OPTION 2**

**TYPICAL TEMPORARY RAMP**



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

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

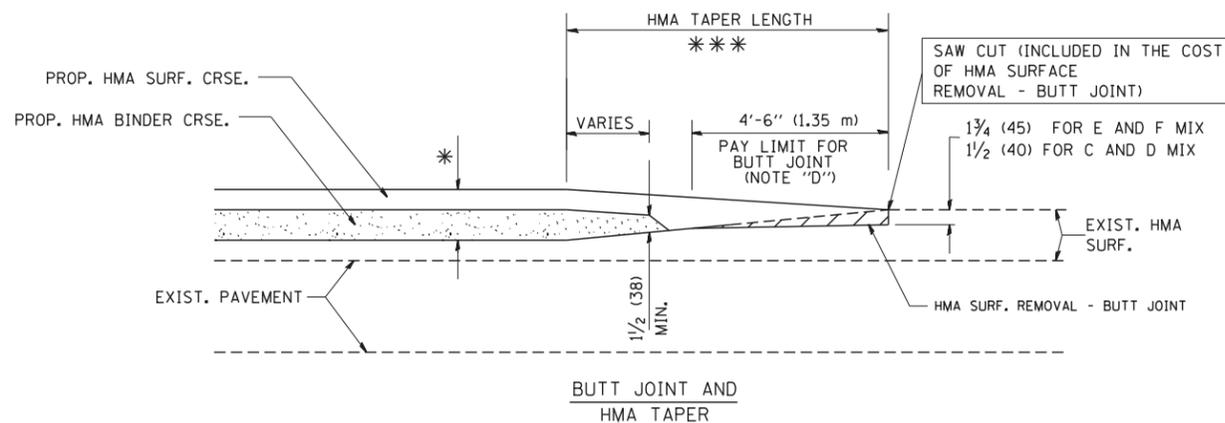
**NOTES**

- 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.



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

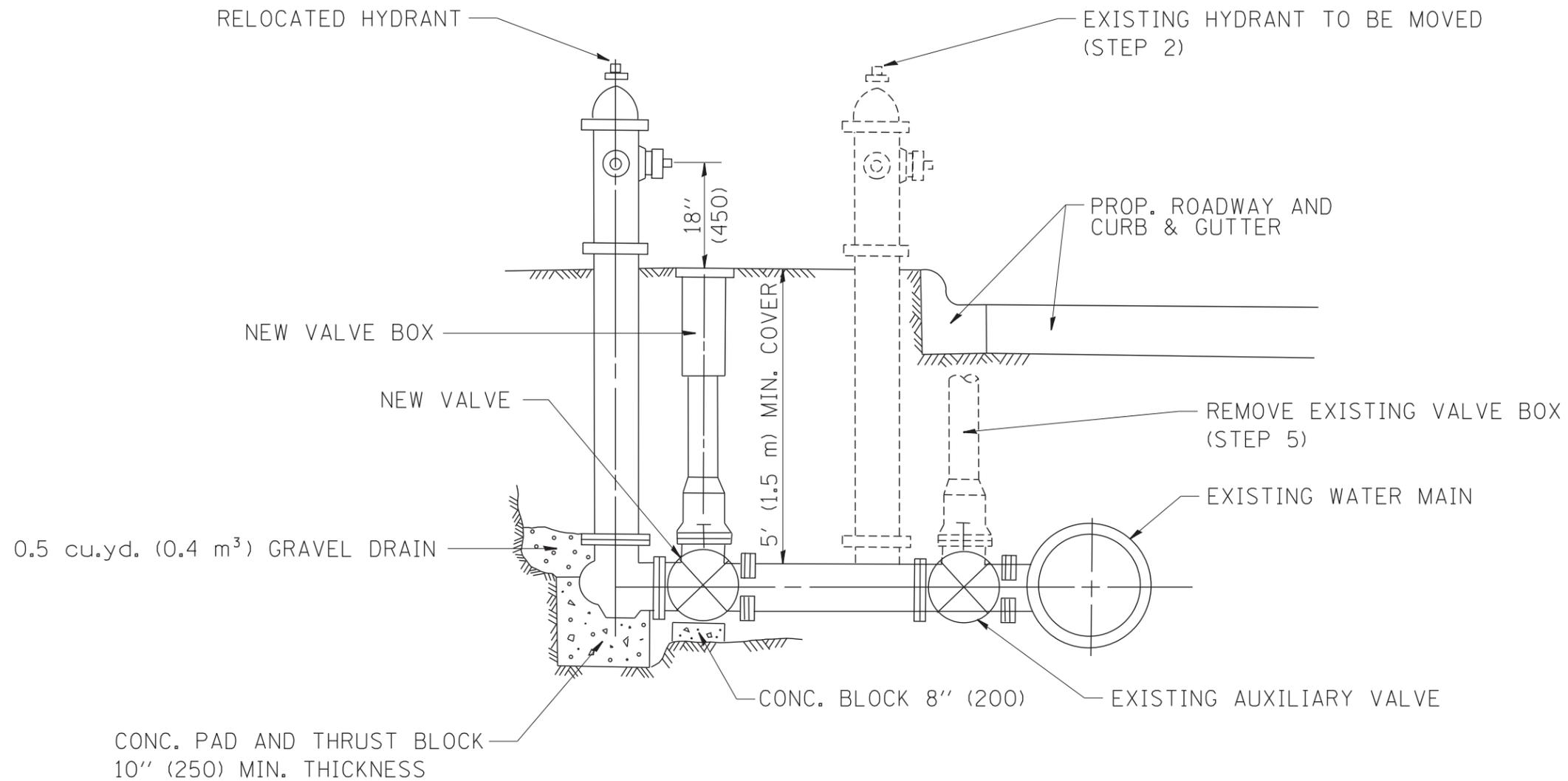
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	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	477
BD400-05 BD32			CONTRACT NO. 62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

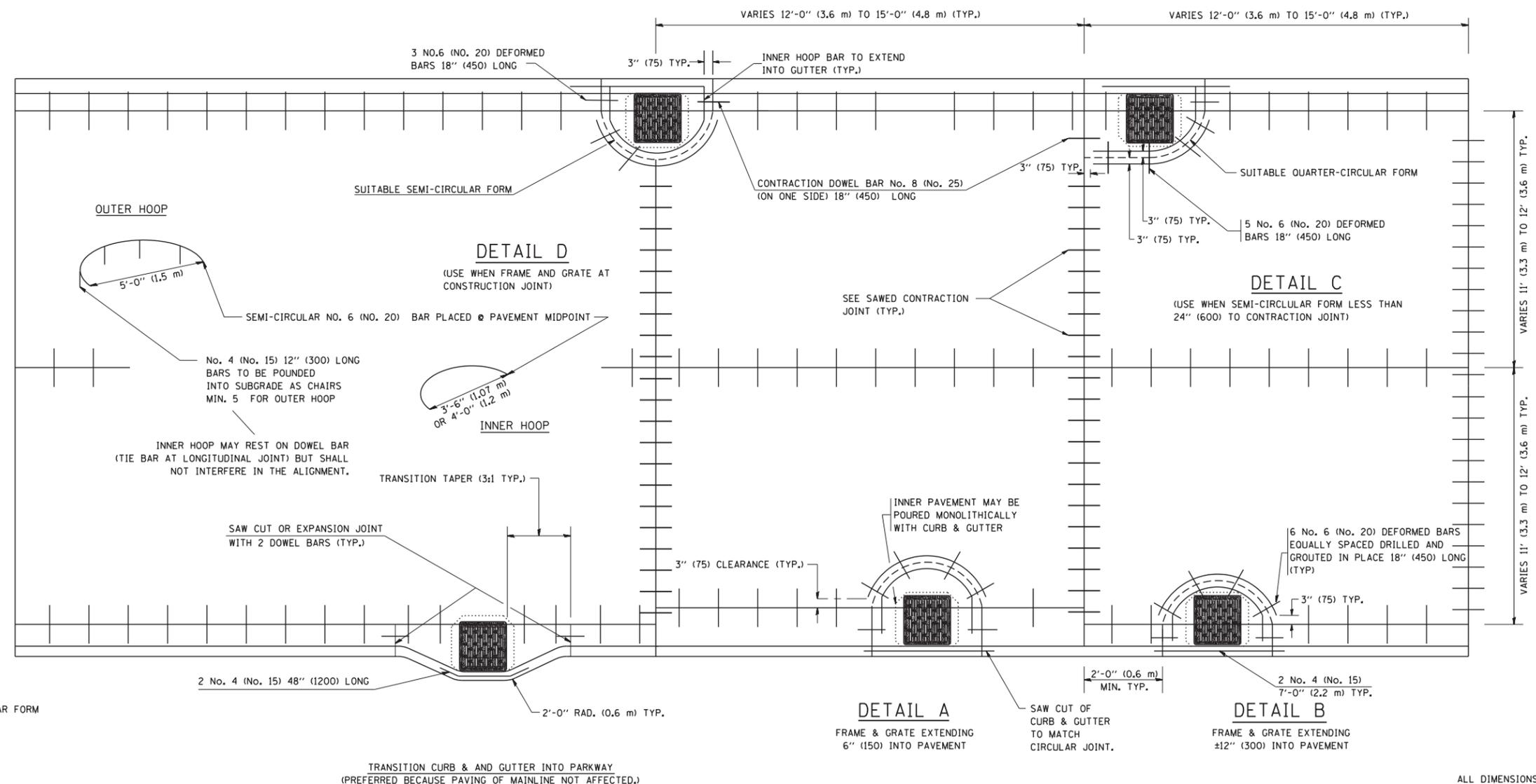
FILE NAME = W:\diststd\22x34\bd36.dgn	USER NAME = gajlonobt	DESIGNED -	REVISED - R. SHAH 09-09-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FIRE HYDRANT TO BE MOVED</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED - R. SHAH 10-25-94					305	27R-2	MCHENRY	673	478
PLOT DATE = 1/4/2008	CHECKED -	DATE -	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD-36</b>		CONTRACT NO.	62268	
								FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

DESIGNER NOTE:  
THIS DETAIL IS TO BE USED  
WHEN THE GUTTER FLAG IS  
LESS THAN 24"

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



LEGEND:  
..... CASTING  
----- SUITABLE SEMI-CIRCULAR FORM

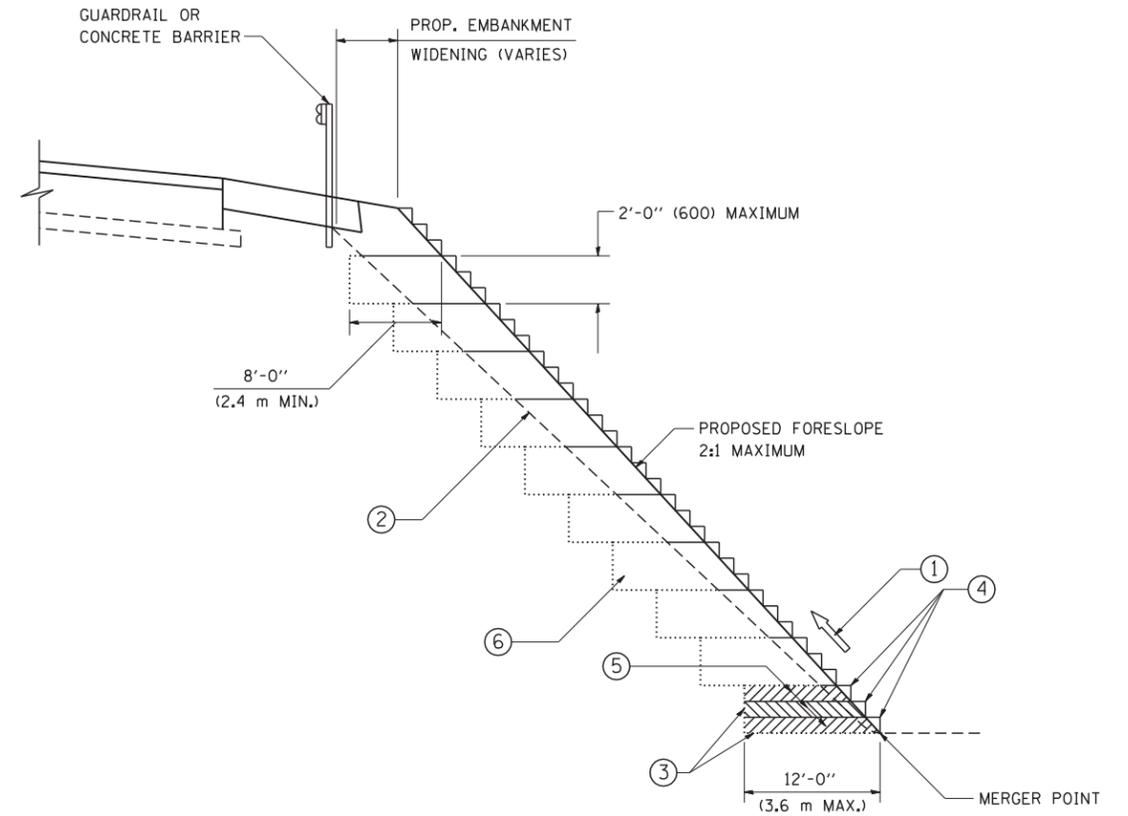
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

FILE NAME = W:\diststd\22x34\bd48.dgn	USER NAME = gaglionobt	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 08-28-00
		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 1/4/2008	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	479
BD-48			CONTRACT NO.	62268
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL BENCHING DETAIL  
FOR EMBANKMENT

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1onobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

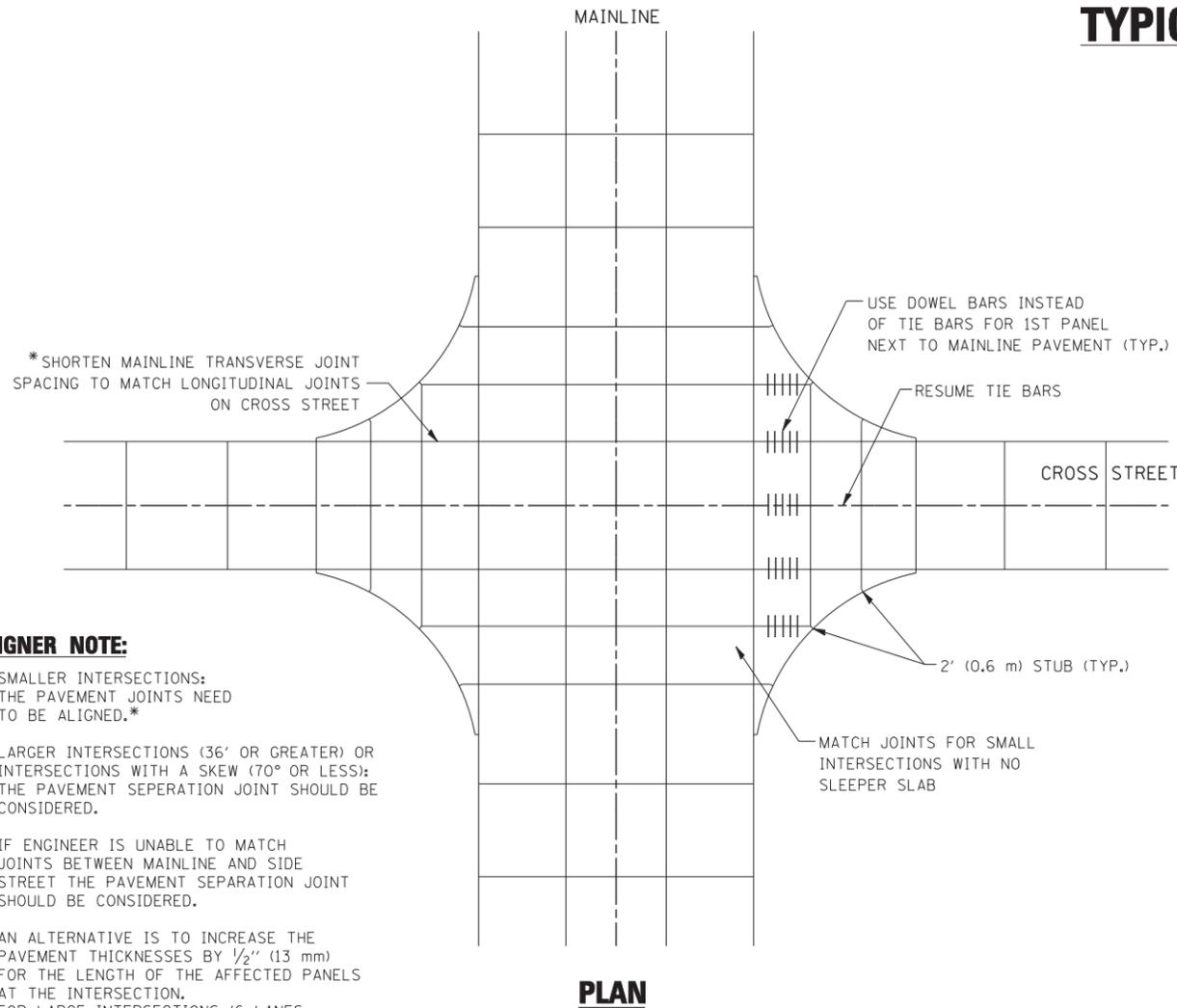
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>BENCHING DETAIL</b>			
<b>FOR EMBANKMENT WIDENING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	480
<b>BD-51</b>		CONTRACT NO.	62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# TYPICAL APPLICATION

**THE USE OF CROSS STREET PAVEMENT SEPARATION JOINTS FOR SKEWED OR LARGE INTERSECTIONS WHERE JOINTS MAY NOT MATCH**



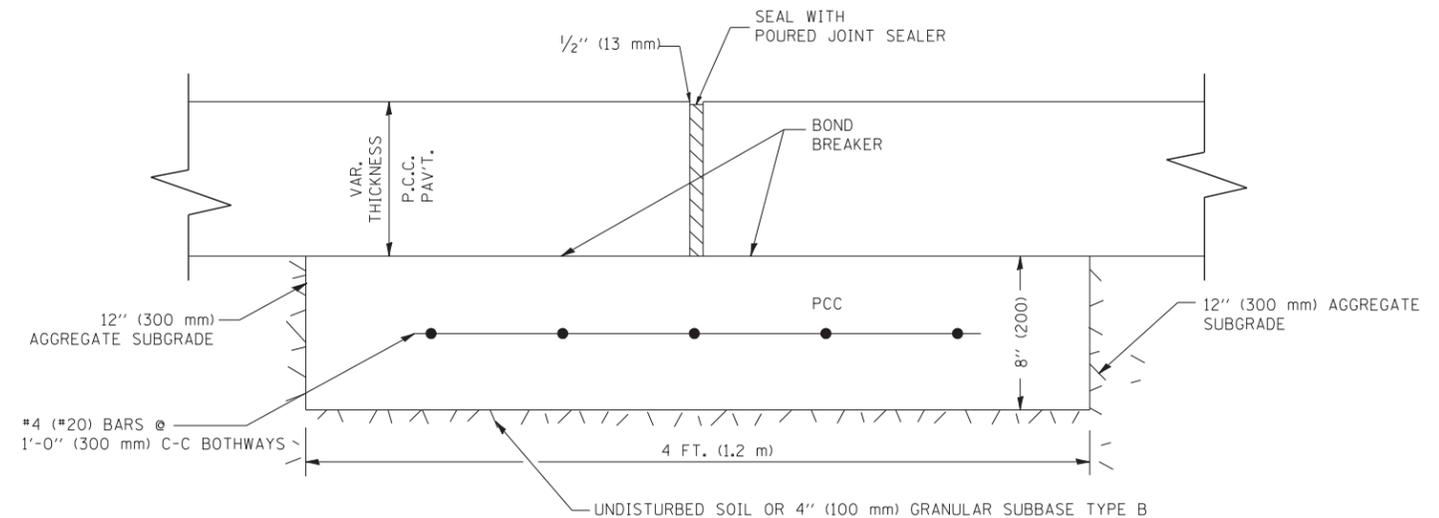
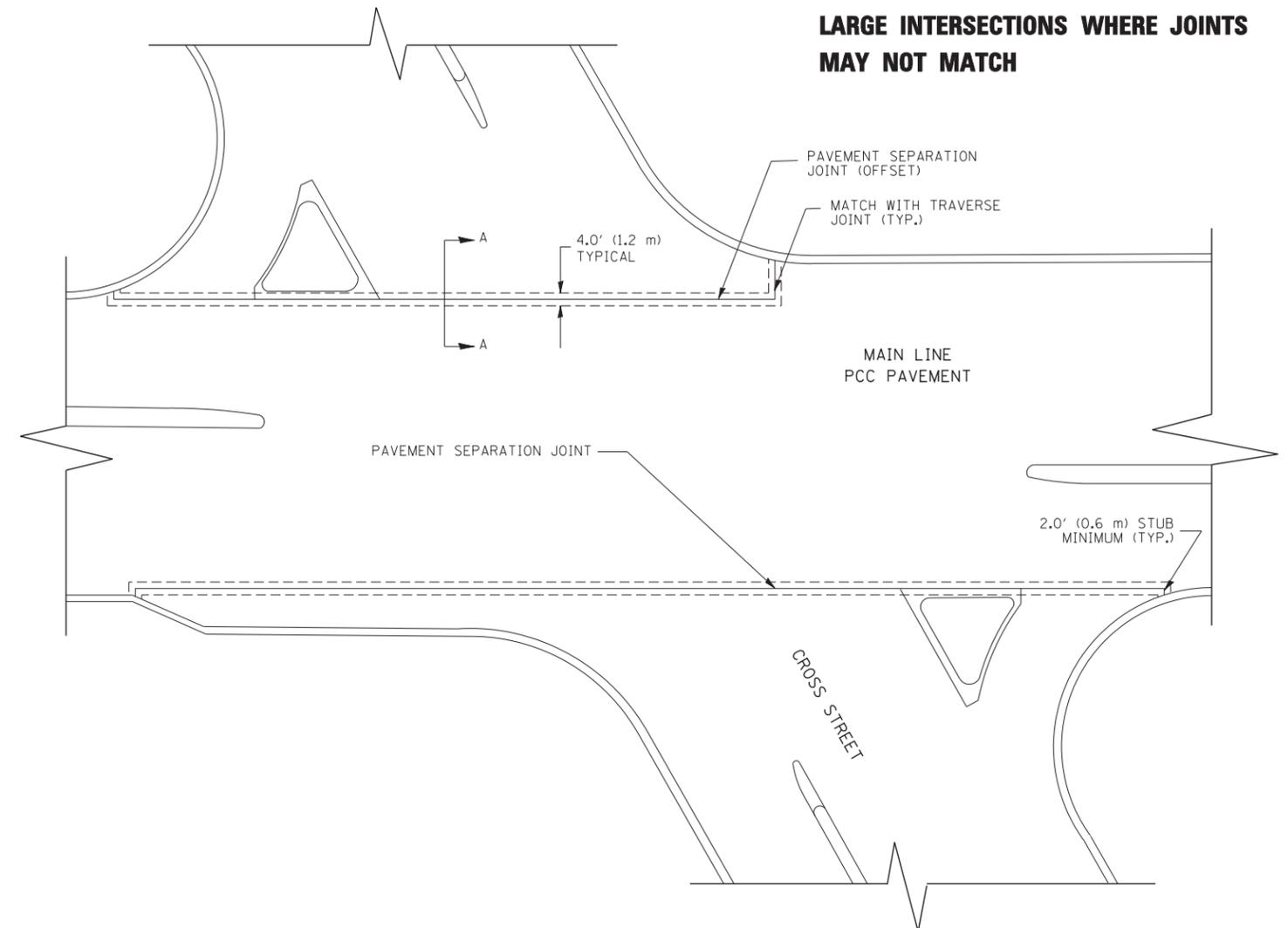
**PLAN**

**DESIGNER NOTE:**

1. SMALLER INTERSECTIONS: THE PAVEMENT JOINTS NEED TO BE ALIGNED.\*
2. LARGER INTERSECTIONS (36' OR GREATER) OR INTERSECTIONS WITH A SKEW (70° OR LESS): THE PAVEMENT SEPERATION JOINT SHOULD BE CONSIDERED.
3. IF ENGINEER IS UNABLE TO MATCH JOINTS BETWEEN MAINLINE AND SIDE STREET THE PAVEMENT SEPARATION JOINT SHOULD BE CONSIDERED.
4. AN ALTERNATIVE IS TO INCREASE THE PAVEMENT THICKNESSES BY 1/2" (13 mm) FOR THE LENGTH OF THE AFFECTED PANELS AT THE INTERSECTION. FOR LARGE INTERSECTIONS (6 LANES OR MORE) WHERE JOINTS CAN BE MATCHED, USE #8 (25) DOWEL BARS INSTEAD OF #8 (25) TIE BARS AT EDGE OF MAINLINE PAVEMENT WHEN NO PAVEMENT SEPARATION JOINTS USED.

**NOTE:**

1. JOINT FILLER SHALL CONSIST OF A SHEET OF 1/2" (13 mm) BITUMINOUS PREFORMED FIBER JOINT FILLER CONFORMING TO ARTICLE 1051.03 OF THE STANDARD SPECIFICATIONS.
2. THE JOINT SHALL BE SEALED WITH A HOT POUR JOINT SEALER CONFORMING TO ARTICLE 1050.02 OF THE STANDARD SPECIFICATIONS.
3. A SINGLE LAYER OF FELT ROOFING PAPER SHALL SERVE AS A BOND BREAKER.
4. JOINT SHALL CONTINUE THROUGH COMBINATION CURB & GUTTER OR PCC SHOULDER.
5. PAVEMENT SEPARATION JOINT IS TO BE PAID FOR AS "SLEEPER SLAB" AND IS TO BE MEASURED IN PLACE BY THE LINEAL FOOT.
6. BOND BREAKER AND 1/2" (13 mm) JOINT AND FILLER SHALL BE INCIDENTAL TO THE PAY ITEM "SLEEPER SLAB".



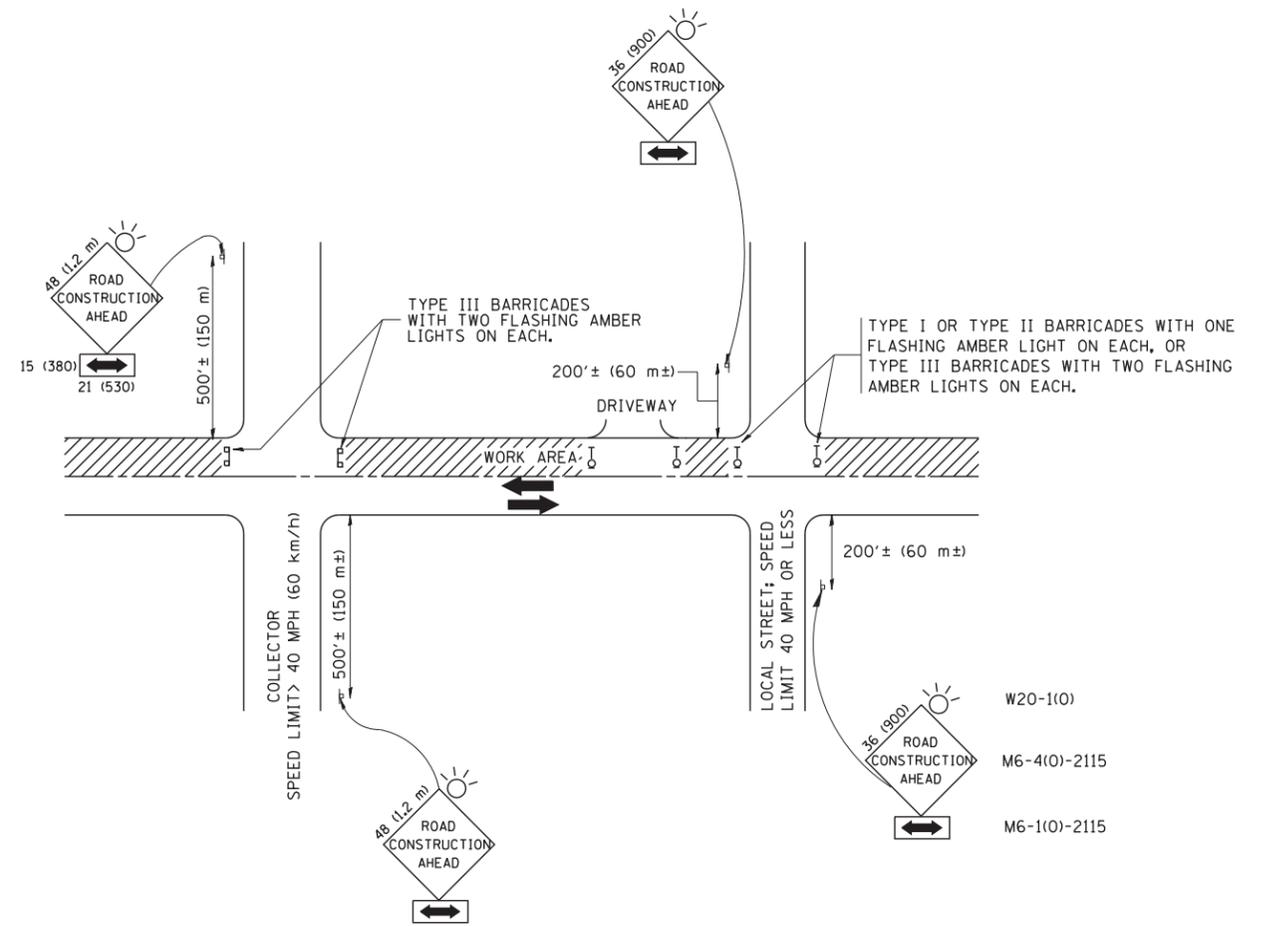
**PROPOSED SECTION A-A**

FILE NAME = bd52.dgn	USER NAME = leuss	DESIGNED - DRAWN -	REVISED - CADD 06-18-10 REVISED -
	PLOT SCALE = 49.9999' / IN.	CHECKED -	REVISED -
	PLOT DATE = 2/25/2011	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DETAIL OF PAVEMENT SEPARATION JOINT FOR JOINTED PCC PAVEMENTS AT INTERSECTIONS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	481
BD52			CONTRACT NO.	62268
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.

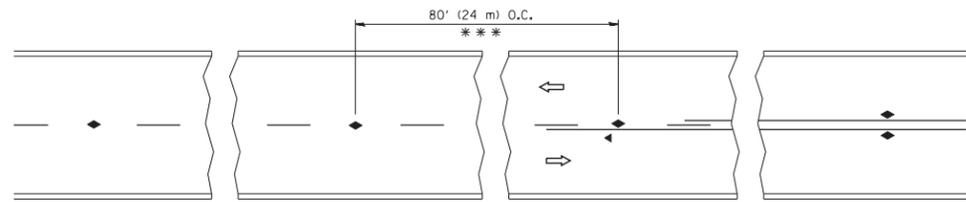
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

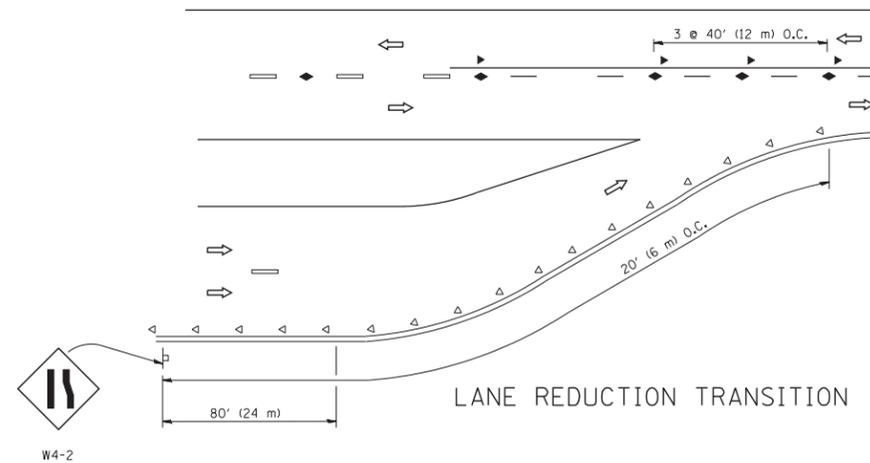
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>TC-10</b>		CONTRACT NO.	62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

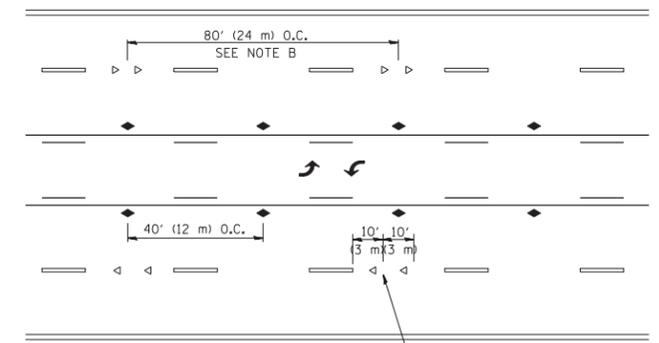


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

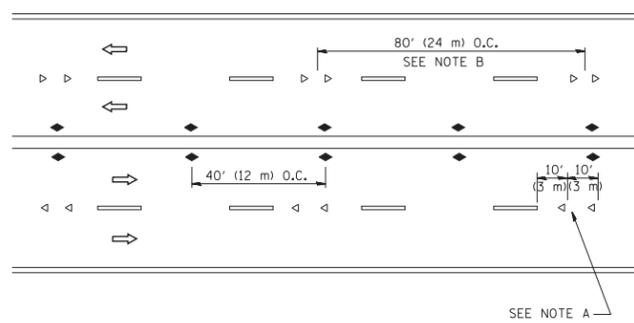
TWO-LANE/TWO-WAY



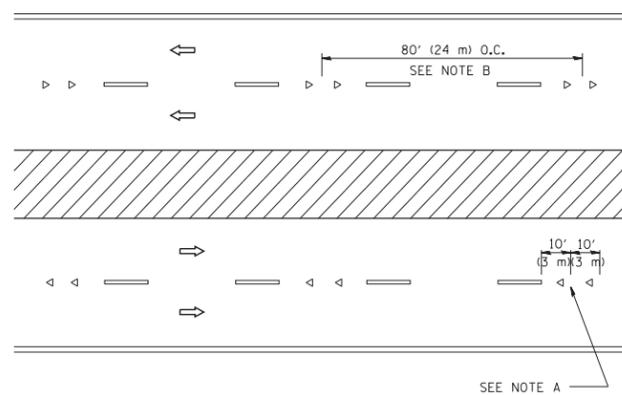
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

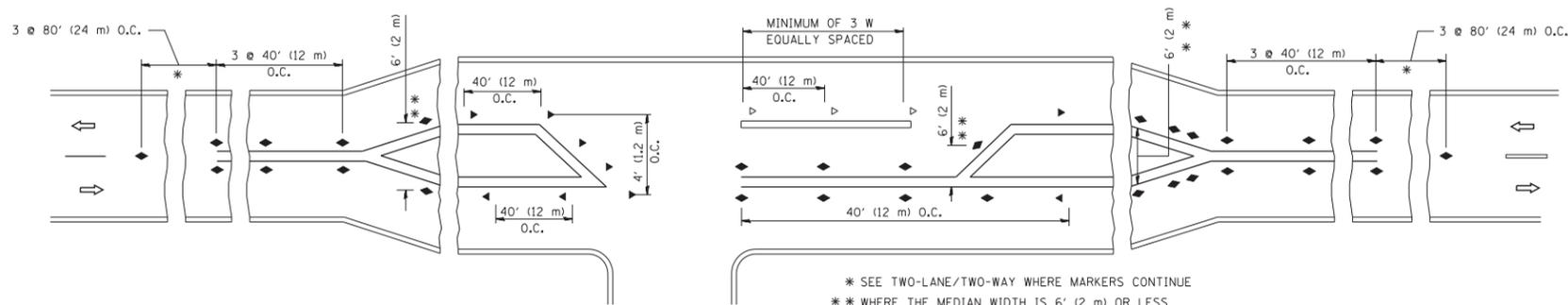
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

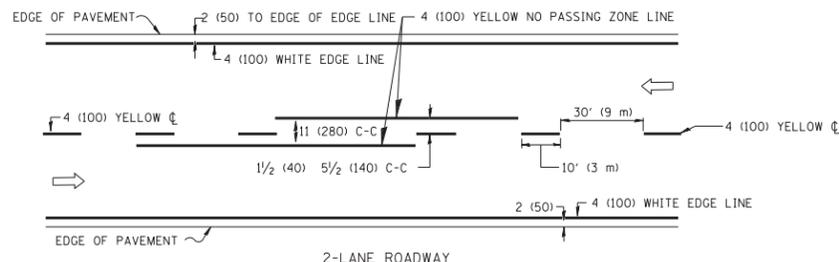
All dimensions are in inches (millimeters) unless otherwise shown.

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ct:\pw\work\p\dot\lryso\d0108315\l1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

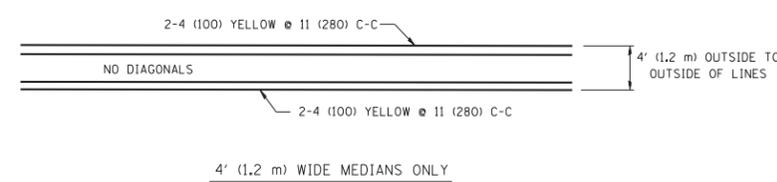
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

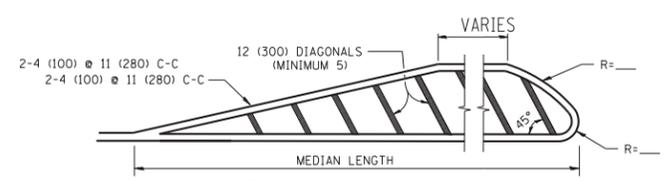
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	483
TC-11			CONTRACT NO. 62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



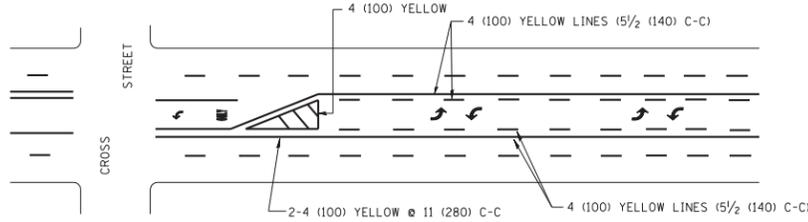
4' (1.2 m) WIDE MEDIANS ONLY



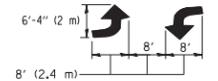
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

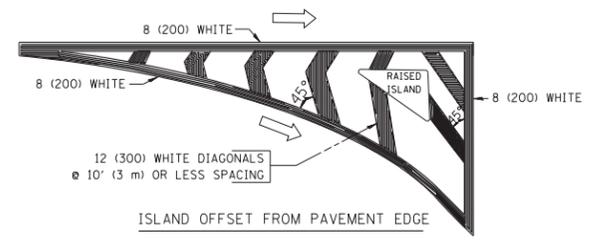


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

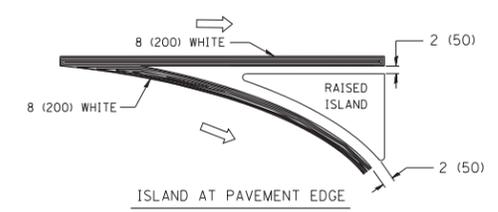


MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



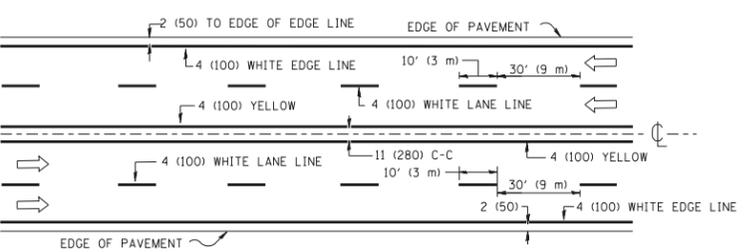
ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

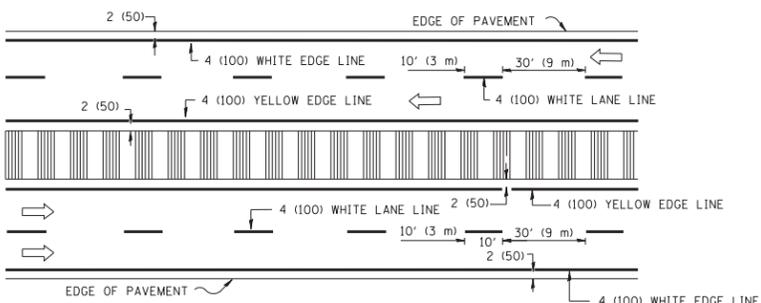
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5 1/2 (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 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 1/2 (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) 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°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	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" 15' (4.5 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.



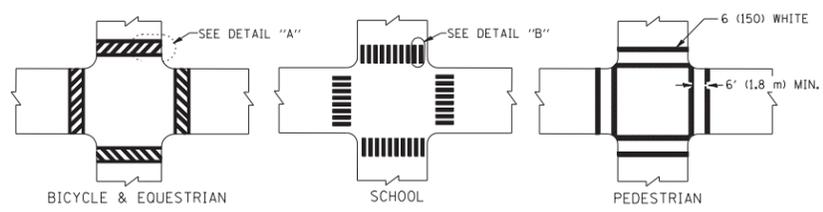
MULTI-LANE UNDIVIDED



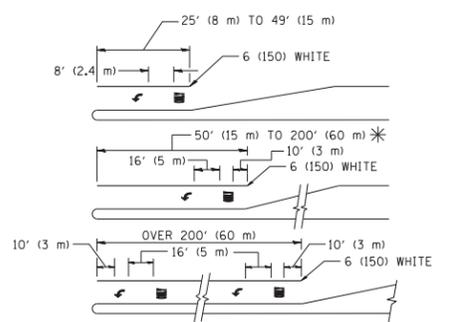
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

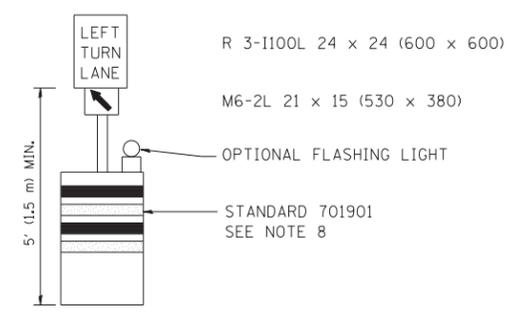
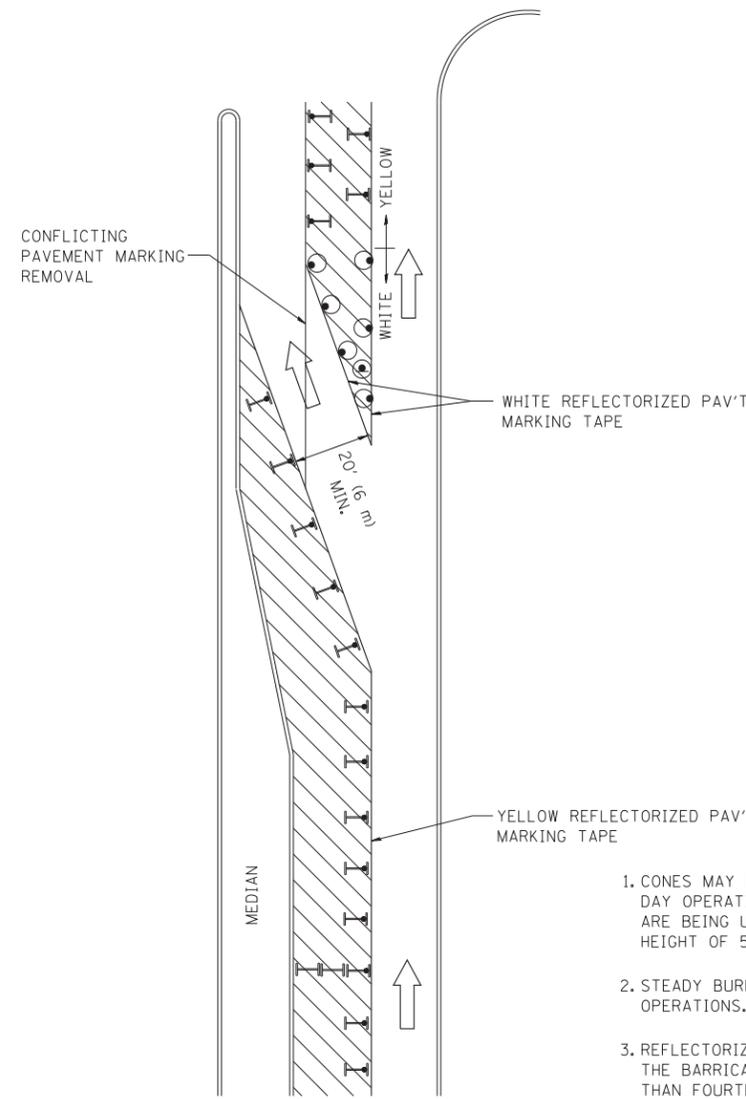


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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



**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 NCHRP 350 PREQUIREMENTS.
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

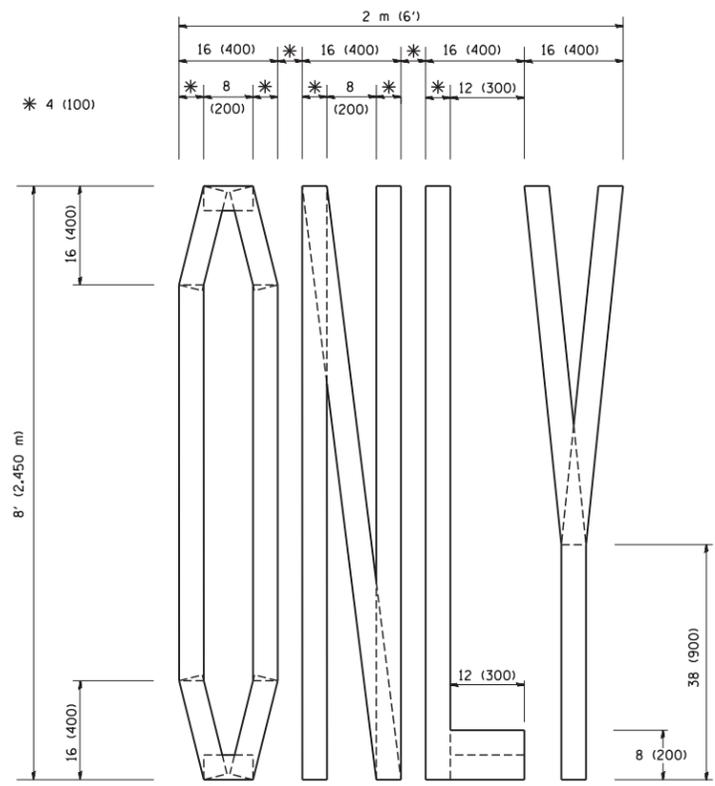
FILE NAME =	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 49.9999 ' / IN.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 9/14/2009	REVISED -T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

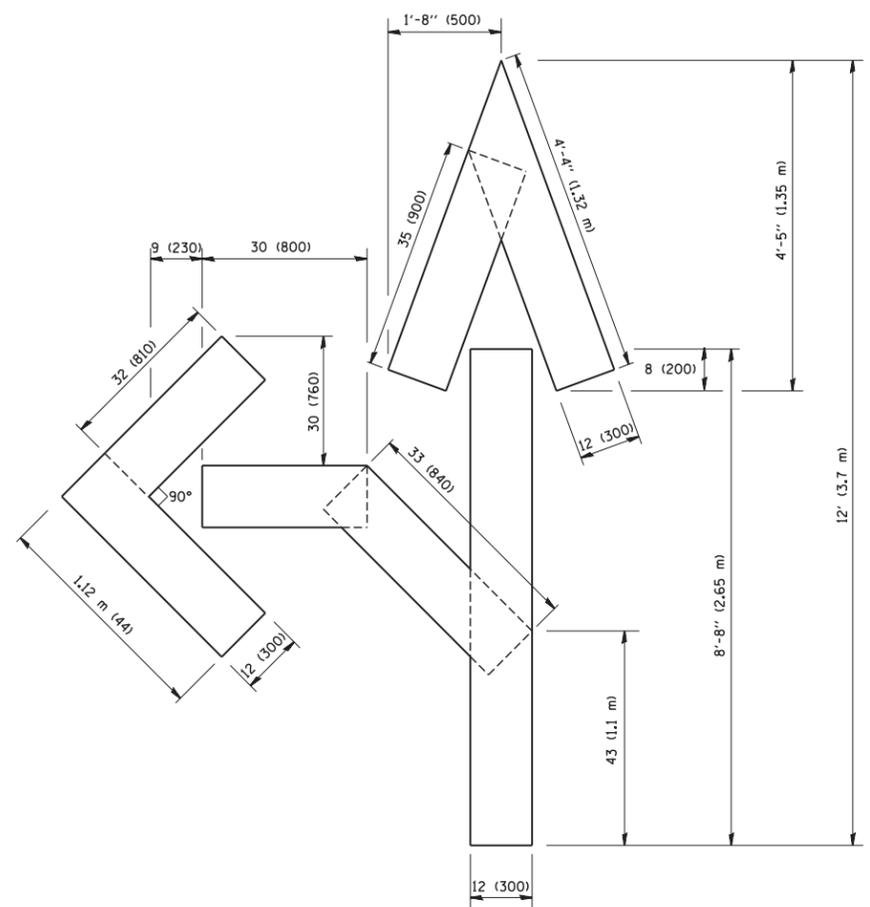
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

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

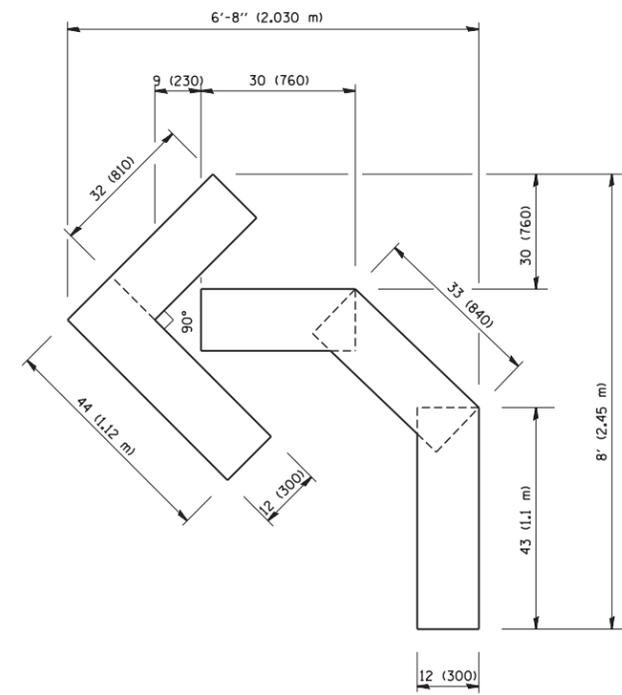
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	485
<b>TC-14</b>		CONTRACT NO.	62268	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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)

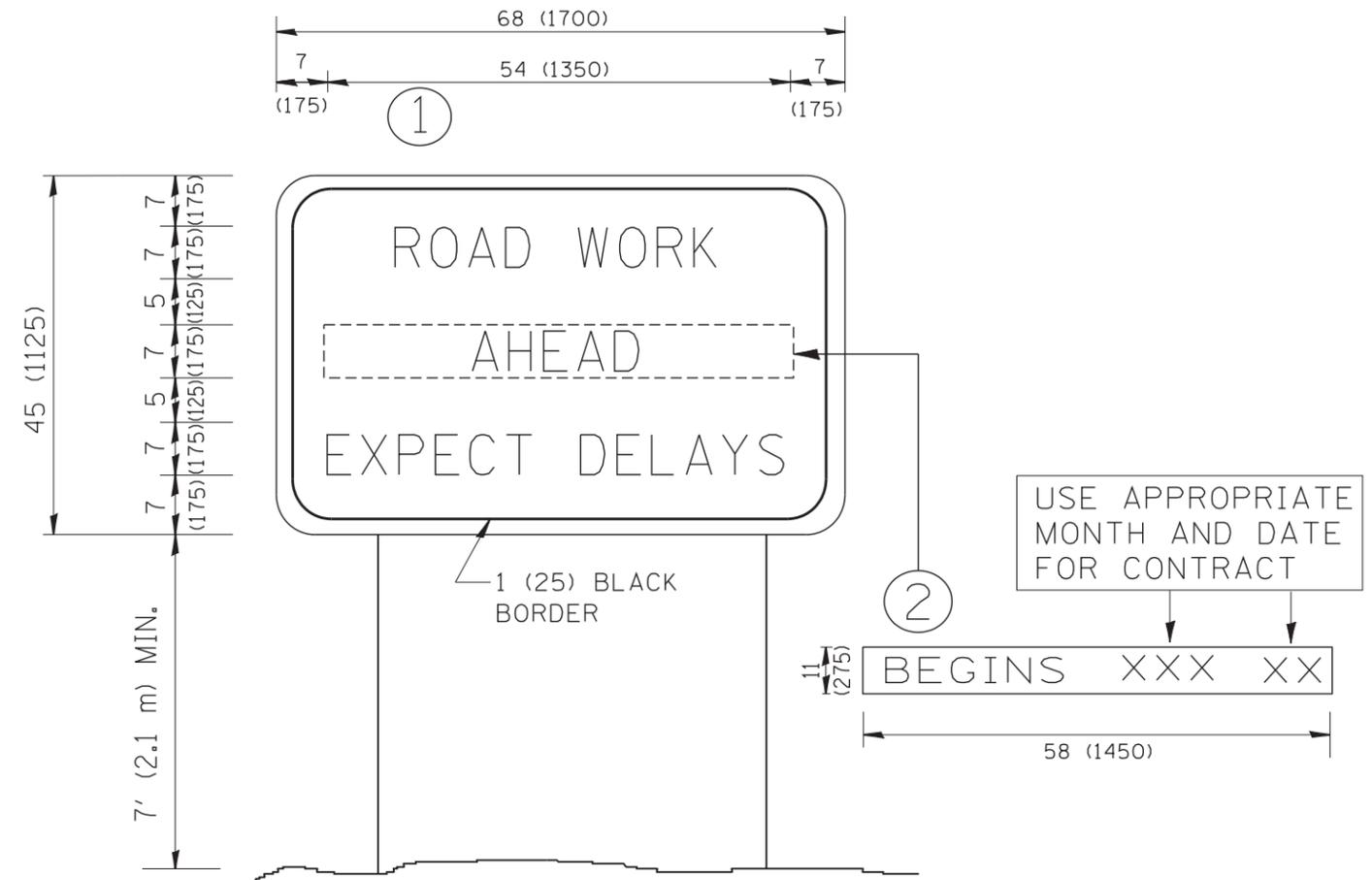
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	486
TC-16			CONTRACT NO.	62268
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.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		REVISOR - CHECKED -	REVISOR - CHECKED -
		DATE -	DATE -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 487
TC-22		CONTRACT NO. 62268		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE  
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)  
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY  
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE  
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gegl1anobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ct:\pw\work\p1dot\gagl1anobt\d0108315\to26.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

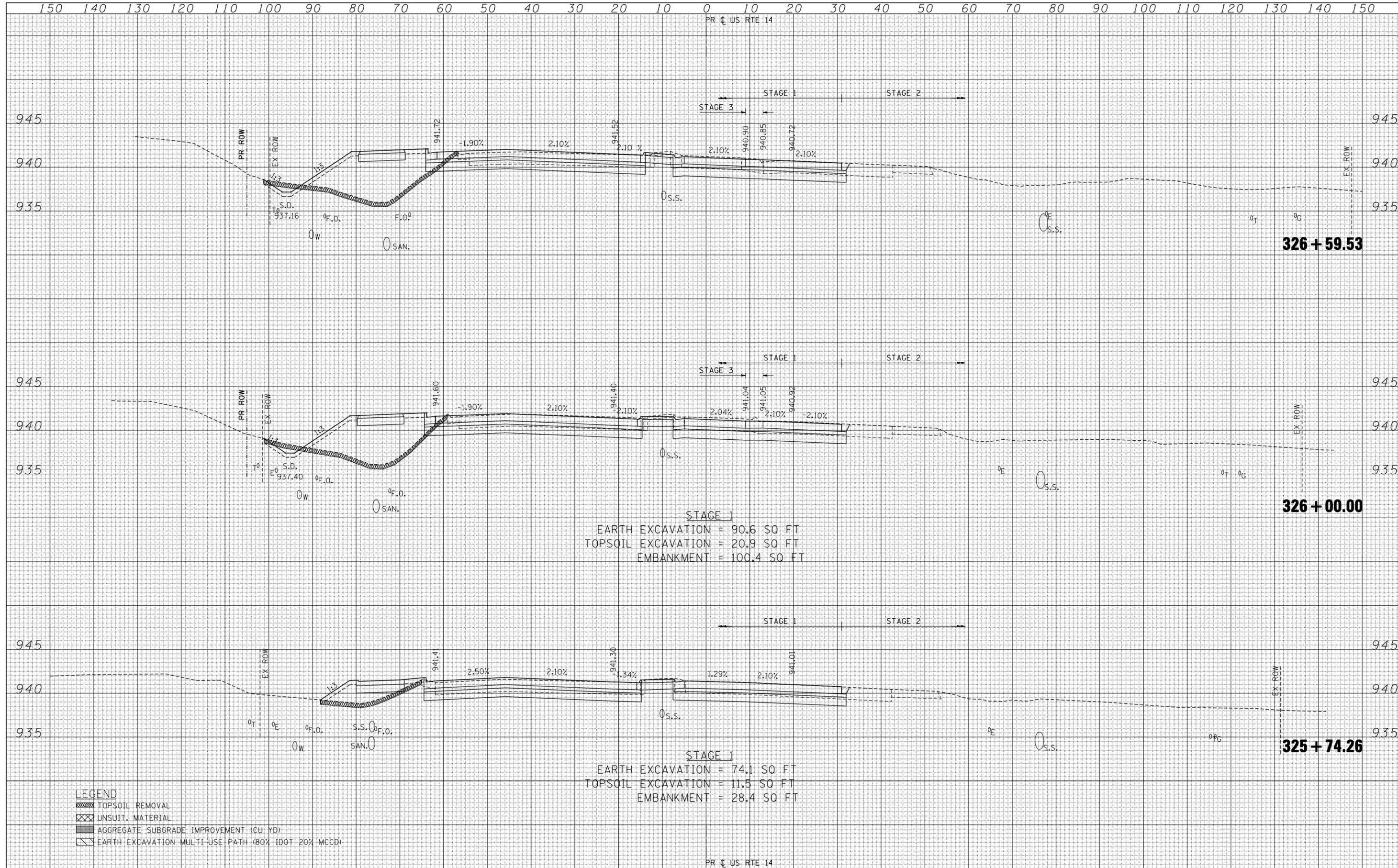
**DRIVEWAY ENTRANCE SIGNING**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	488
<b>TC-26</b>			<b>CONTRACT NO. 62268</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



**326 + 59.53**

**326 + 00.00**

**325 + 74.26**

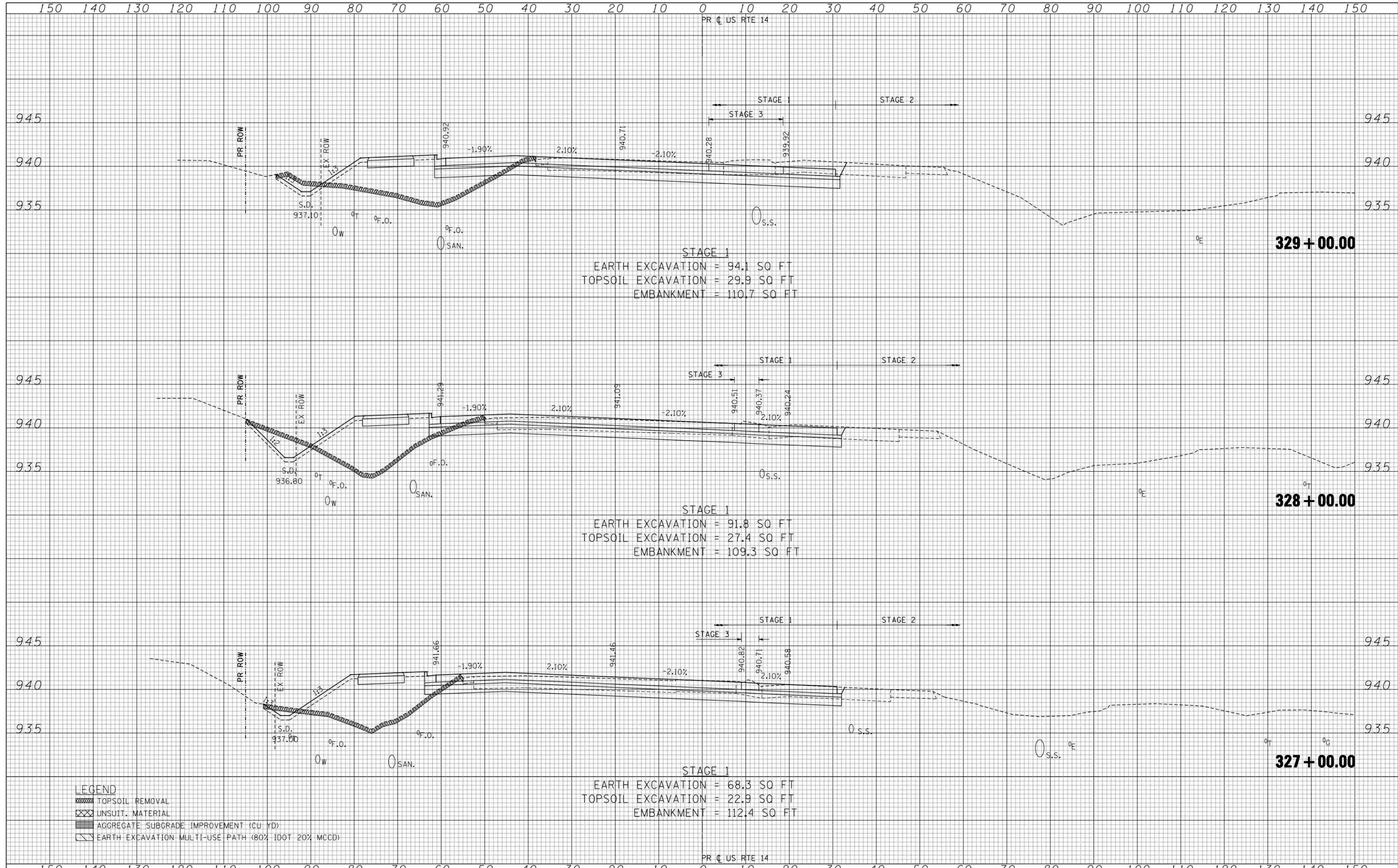
**STAGE 1**  
 EARTH EXCAVATION = 90.6 SQ FT  
 TOPSOIL EXCAVATION = 20.9 SQ FT  
 EMBANKMENT = 100.4 SQ FT

**STAGE 1**  
 EARTH EXCAVATION = 74.1 SQ FT  
 TOPSOIL EXCAVATION = 11.5 SQ FT  
 EMBANKMENT = 28.4 SQ FT

- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION: MULTI-USE PATH (80% IDOT 20% MCCD)

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



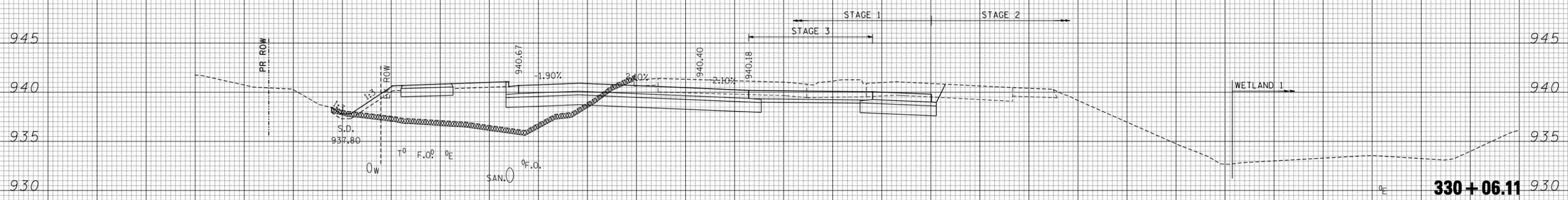
**LEGEND**

- TOPSOIL REMOVAL
- UNSUIT. MATERIAL
- AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCHD)

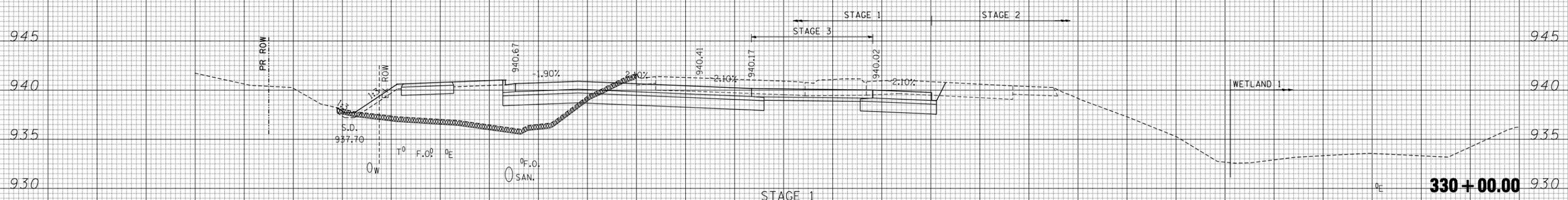
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PR C US RTE 14

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



STAGE 1  
 EARTH EXCAVATION = 101.5 SQ FT  
 TOPSOIL EXCAVATION = 30.5 SQ FT  
 EMBANKMENT = 127.6 SQ FT

- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION: MULTI-USE PATH (80% IDOT 20% MCD)

PR C US RTE 14

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME =  
 \*FILEL\*  
 exp U.S. Services Inc.  
 Chicago, IL  
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY  
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = \*DATE\*

DESIGNED -  
 DRAWN - AC  
 CHECKED - BRH  
 DATE - 11/01/13

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

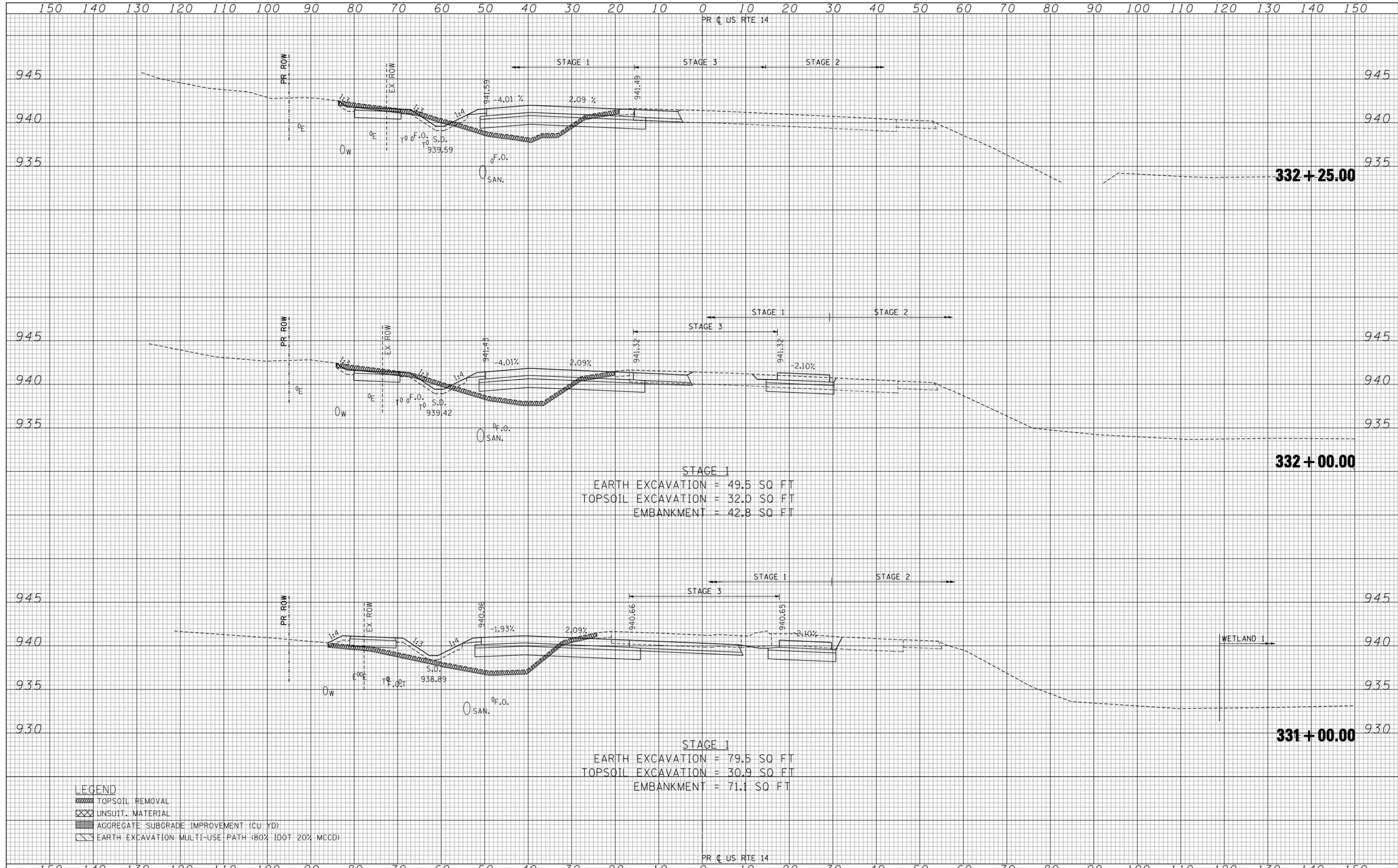
**U.S. ROUTE 14 CROSS SECTIONS**

SCALE: HORIZ. 1" = 10' VERT. 1" = 5' STA. 330+00.00 TO STA. 330+06.11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	491
			CONTRACT NO. 62268	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



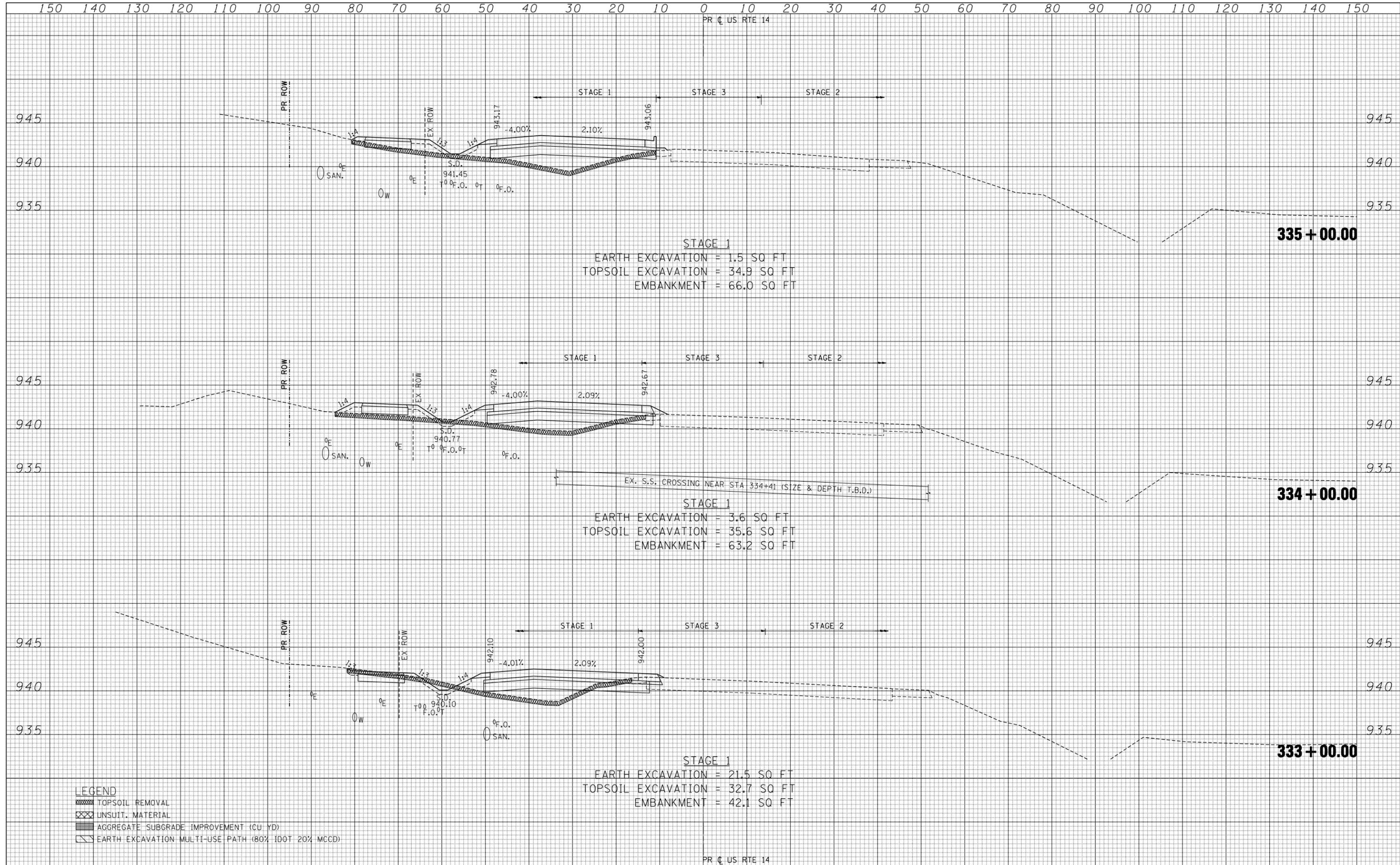
STAGE 1  
 EARTH EXCAVATION = 49.5 SQ FT  
 TOPSOIL EXCAVATION = 32.0 SQ FT  
 EMBANKMENT = 42.8 SQ FT

STAGE 1  
 EARTH EXCAVATION = 79.5 SQ FT  
 TOPSOIL EXCAVATION = 30.9 SQ FT  
 EMBANKMENT = 71.1 SQ FT

- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION: MULTI-USE PATH (80% IDOT 20% MCHD)

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

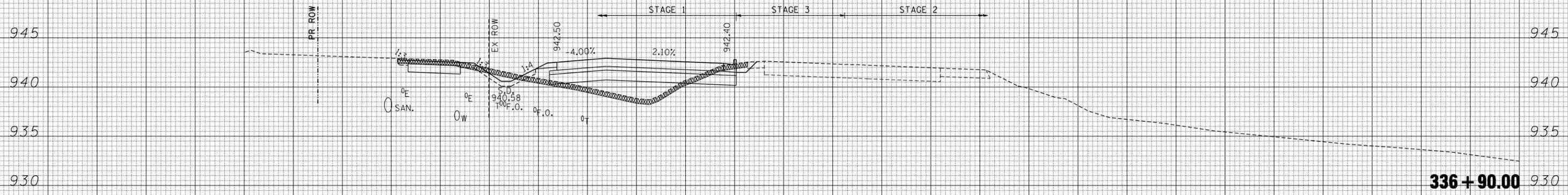
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



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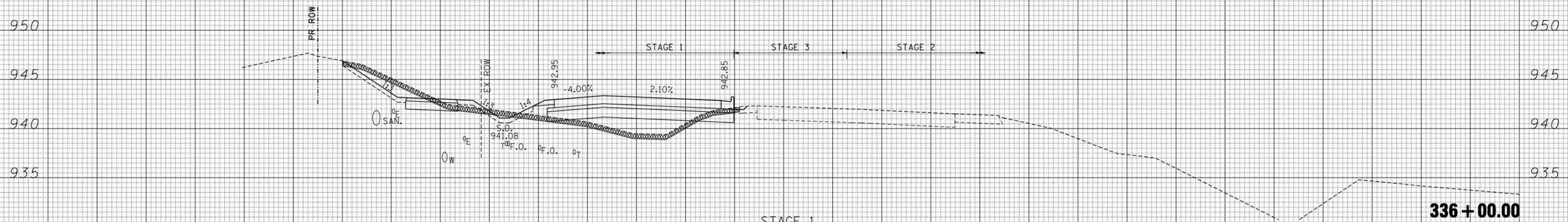
PR C US RTE 14

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



**336 + 90.00**

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



**336 + 00.00**

STAGE 1  
 EARTH EXCAVATION = 30.3 SQ FT  
 TOPSOIL EXCAVATION = 40.4 SQ FT  
 EMBANKMENT = 48.2 SQ FT

PR C US RTE 14

- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCD)

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME =  
 \*FILEL\*  
 exp U.S. Services Inc.  
 CHICAGO, IL  
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY  
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME = *USER*	DESIGNED -	REVISED -
	DRAWN - AC	REVISED -
PLOT SCALE = *SCALE*	CHECKED - BRH	REVISED -
PLOT DATE = *DATE*	DATE - 11/01/13	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 14 CROSS SECTIONS**

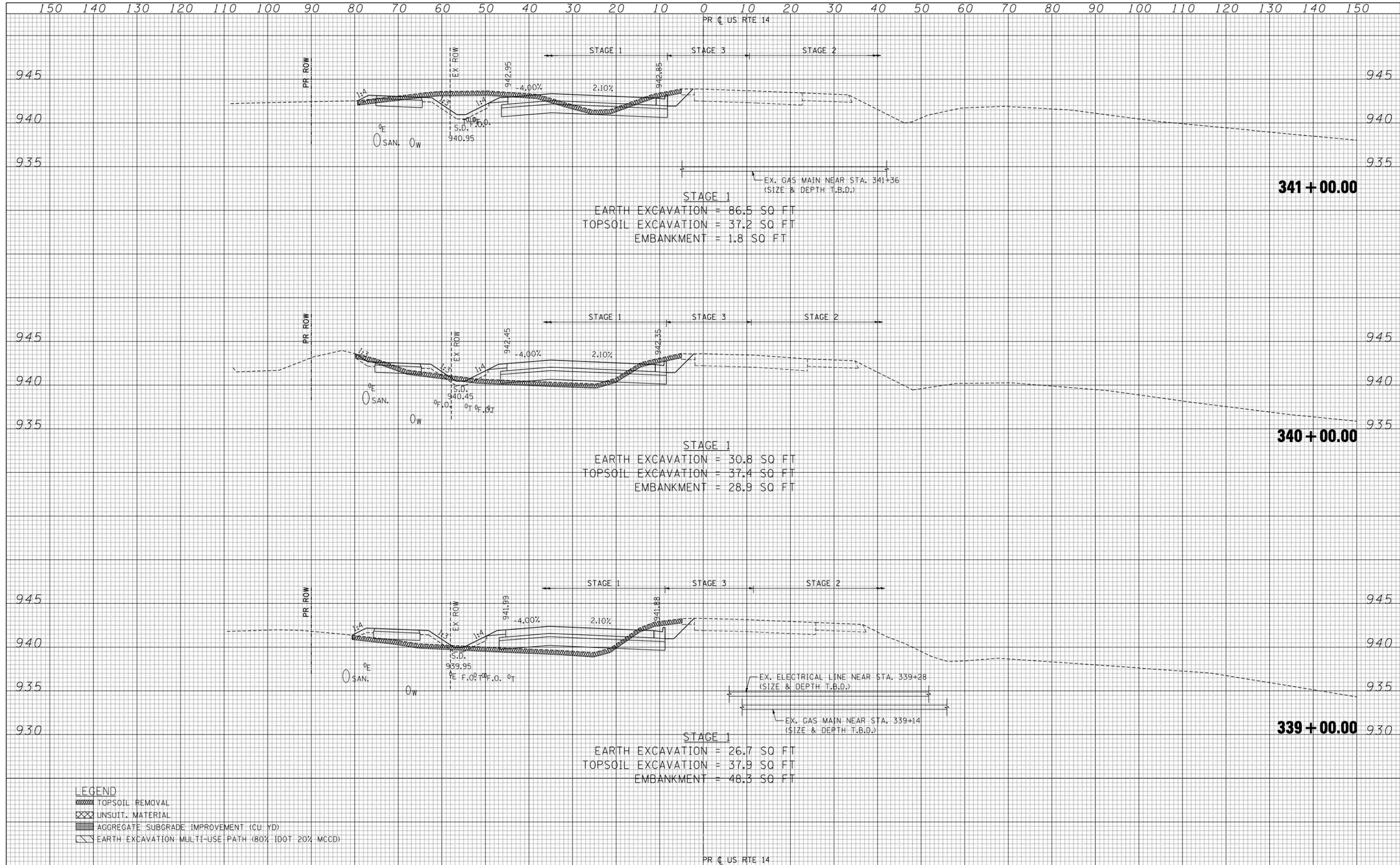
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	494
			CONTRACT NO. 62268	
ILLINOIS FED. AID PROJECT				



DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS	
CHECKED	
FINAL	
SURVEY	
NOTE	
BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS	
CHECKED	
ORIGINAL	
SURVEY	
NOTE	
BOOK	
NO.	



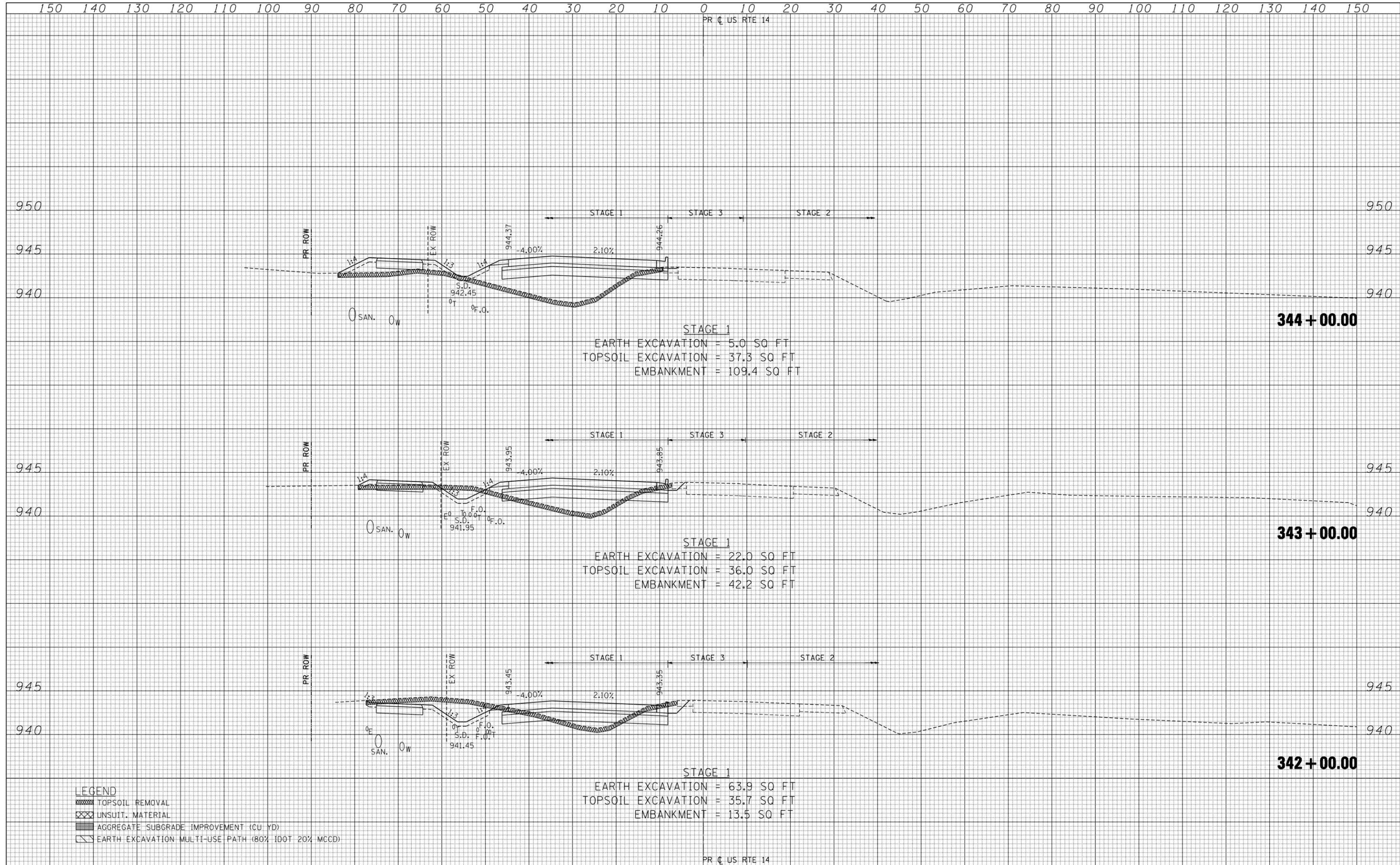
**LEGEND**

	TOPSOIL REMOVAL
	UNSUIT. MATERIAL
	AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
	EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCD)

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>U.S. ROUTE 14 CROSS SECTIONS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILEL*		DRAWN - AC	REVISED -			305	27R-2	MCHENRY	673	496	
exp U.S. Services Inc. Chicago, IL BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	PLOT SCALE = *SCALE*	CHECKED - BRH	REVISED -			SCALE: HORIZ. 1" = 10' VERT. 1" = 5'		STA. 339+00.00 TO STA. 341+00.00		CONTRACT NO. 62268	
	PLOT DATE = *DATE*	DATE - 11/01/13	REVISED -			ILLINOIS FED. AID PROJECT					

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



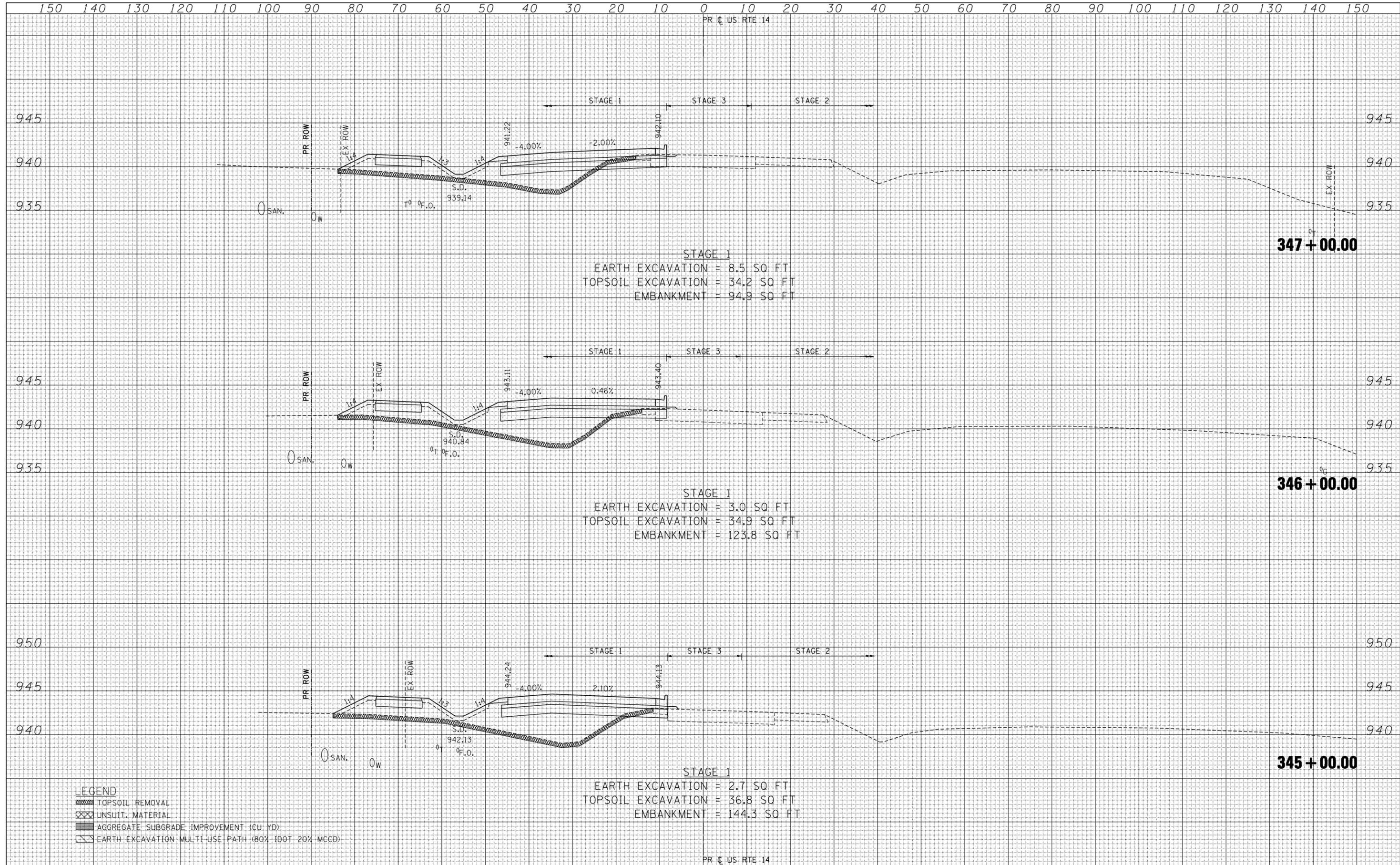
**LEGEND**

	TOPSOIL REMOVAL
	UNSUIT. MATERIAL
	AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
	EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCHD)

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	<p align="center"><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p> <p align="center"><b>U.S. ROUTE 14 CROSS SECTIONS</b></p>	F.A.P. RTE. 305	SECTION 27R-2	COUNTY MCHENRY	TOTAL SHEETS 673	SHEET NO. 497
*FILEL*		DRAWN - AC	REVISED -		SCALE: HORIZ. 1" = 10' VERT. 1" = 5'	STA. 342+00.00 TO STA. 344+00.00		CONTRACT NO. 62268	
PLOT SCALE = *SCALE*		CHECKED - BRH	REVISED -		ILLINOIS FED. AID PROJECT				
PLOT DATE = *DATE*		DATE - 11/01/13	REVISED -						

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



**LEGEND**

- TOPSOIL REMOVAL
- UNSUIT. MATERIAL
- AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCD)

FILE NAME =  
#FILEL#  
exp U.S. Services Inc.  
Chicago, IL  
BUILDINGS-EARTH & ENVIRONMENT-ENERGY  
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME = #USER#	DESIGNED -	REVISED -
	DRAWN - AC	REVISED -
PLOT SCALE = #SCALE#	CHECKED - BRH	REVISED -
PLOT DATE = #DATE#	DATE - 11/01/13	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

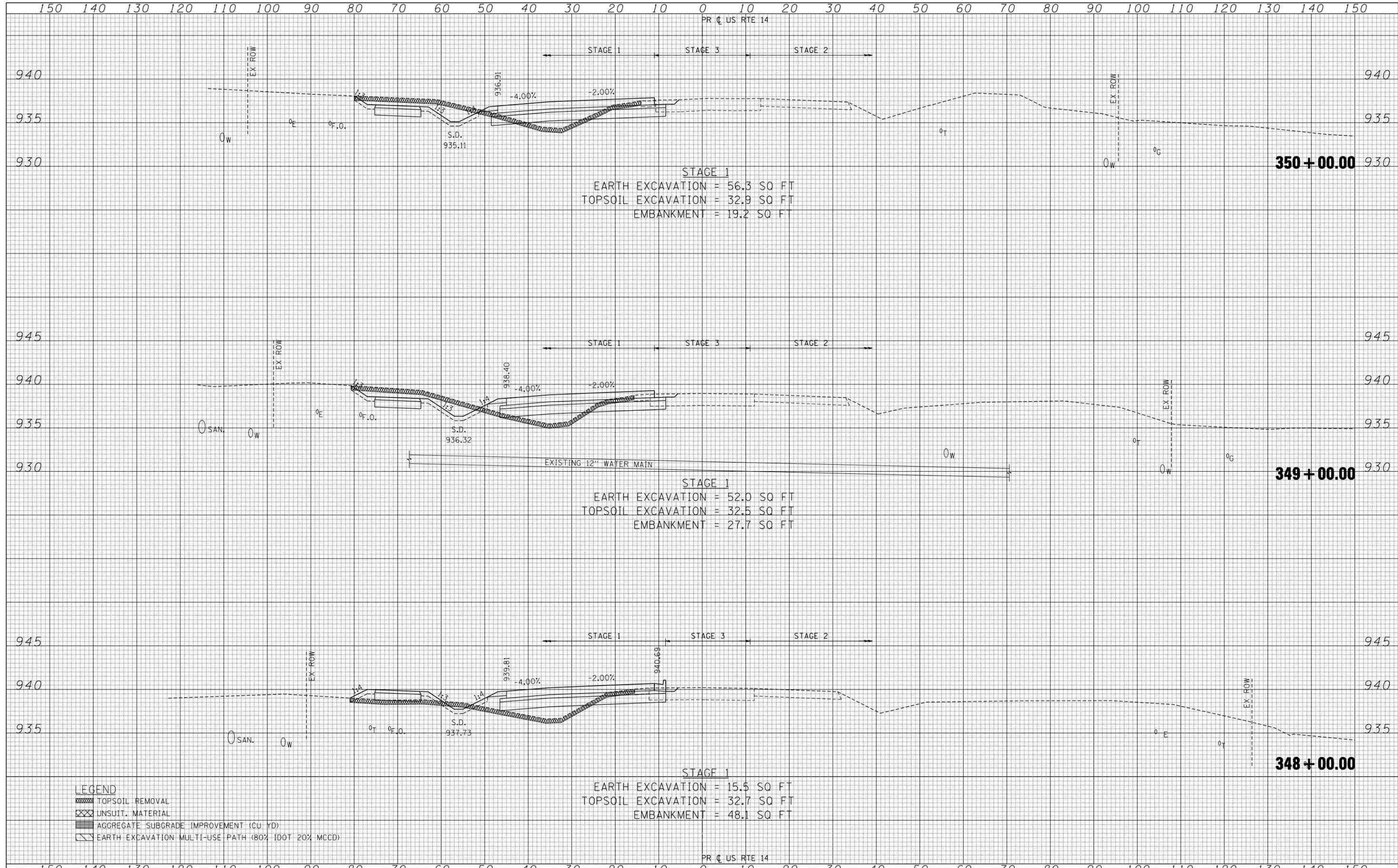
**U.S. ROUTE 14 CROSS SECTIONS**

SCALE: HORIZ. 1" = 10' VERT. 1" = 5'  
STA. 345+00.00 TO STA. 347+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	27R-2	MCHENRY	673	498
			CONTRACT NO. 62268	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



FILE NAME	USER NAME	DESIGNED	REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>U.S. ROUTE 14 CROSS SECTIONS</b> SCALE: HORIZ. 1" = 10' VERT. 1" = 5' STA. 348+00.00 TO STA. 350+00.00	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILEL*		DRAWN	REVISED			305	27R-2	MCHENRY	673	499	
PLOT SCALE		CHECKED	REVISED			CONTRACT NO. 62268					
PLOT DATE		DATE	REVISED			ILLINOIS FED. AID PROJECT					

exp U.S. Services Inc.  
 CHICAGO, IL  
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY  
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

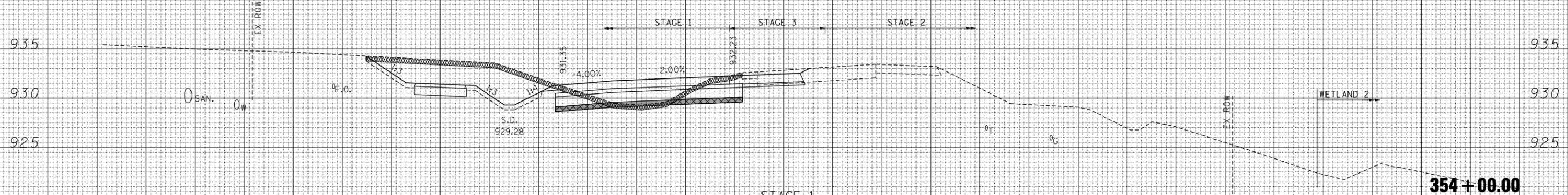
- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION MULTI-USE PATH (80% IDOT 20% MCHD)

**STAGE 1**  
 EARTH EXCAVATION = 15.5 SQ FT  
 TOPSOIL EXCAVATION = 32.7 SQ FT  
 EMBANKMENT = 48.1 SQ FT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

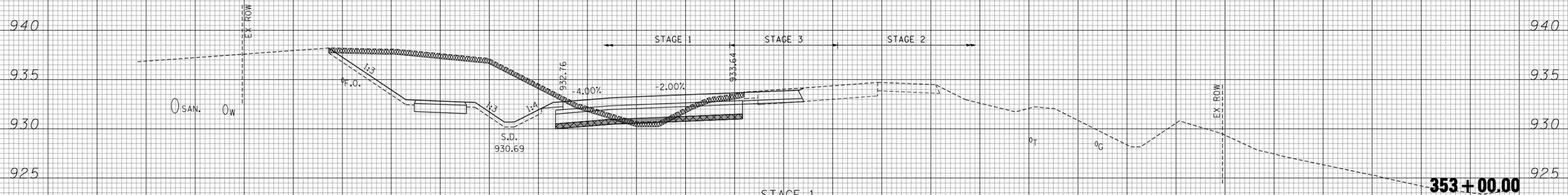
PR C US RTE 14

DATE	
BY	
FINAL SURVEY NO.	
SURVEYED PLOTTED TEMPLATE AREAS CHECKED	
NOTE BOOK NO.	



**STAGE 1**  
 EARTH EXCAVATION = 121.9 SQ FT  
 TOPSOIL EXCAVATION = 38.3 SQ FT  
 EMBANKMENT = 4.9 SQ FT  
 UNSUIT. MATERIALS = 12.1 SQ FT  
 AGGREGATE SUBGRADE IMPROVEMENT (CU YD) (CU YD) PLACEMENT = 19.0 SQ FT

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED TEMPLATE AREAS CHECKED	
NOTE BOOK NO.	



**STAGE 1**  
 EARTH EXCAVATION = 211.5 SQ FT  
 TOPSOIL EXCAVATION = 42.4 SQ FT  
 EMBANKMENT = 3.8 SQ FT  
 UNSUIT. MATERIALS = 13.6 SQ FT  
 AGGREGATE SUBGRADE IMPROVEMENT (CU YD) (CU YD) PLACEMENT = 19.0 SQ FT

- LEGEND**
- TOPSOIL REMOVAL
  - UNSUIT. MATERIAL
  - AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
  - EARTH EXCAVATION: MULTI-USE PATH (80% IDOT 20% MCD)

PR C US RTE 14