

DEPARTMENT OF TRANSPORTATION

PROJECT

JOB NO. R-93-004-16

SCALE: 1" = 20' SHEET 32 OF XX SHEETS STA. 777+00.00 TO STA. 783+50.00

CONTRACT NO. 66D26

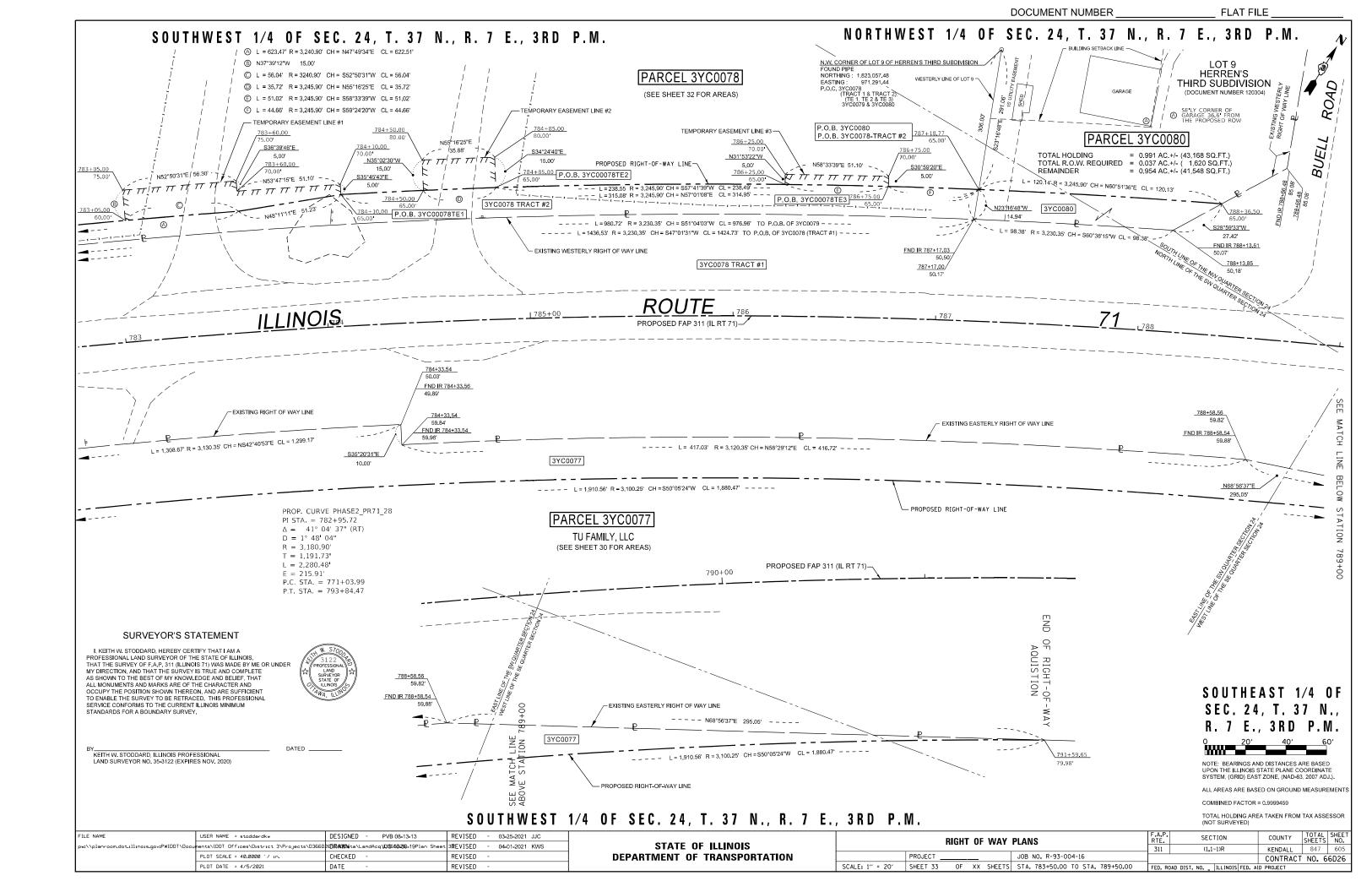
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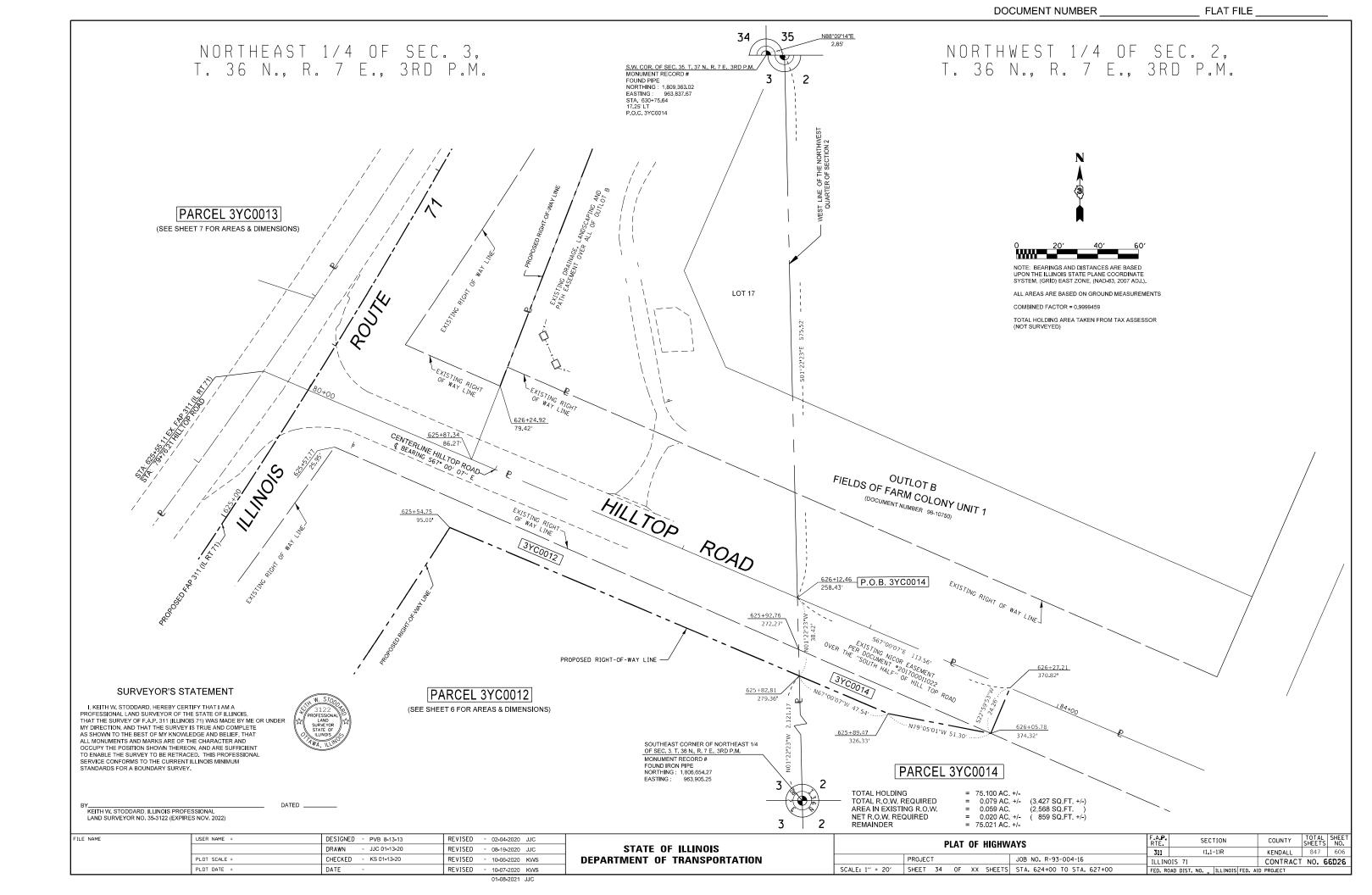
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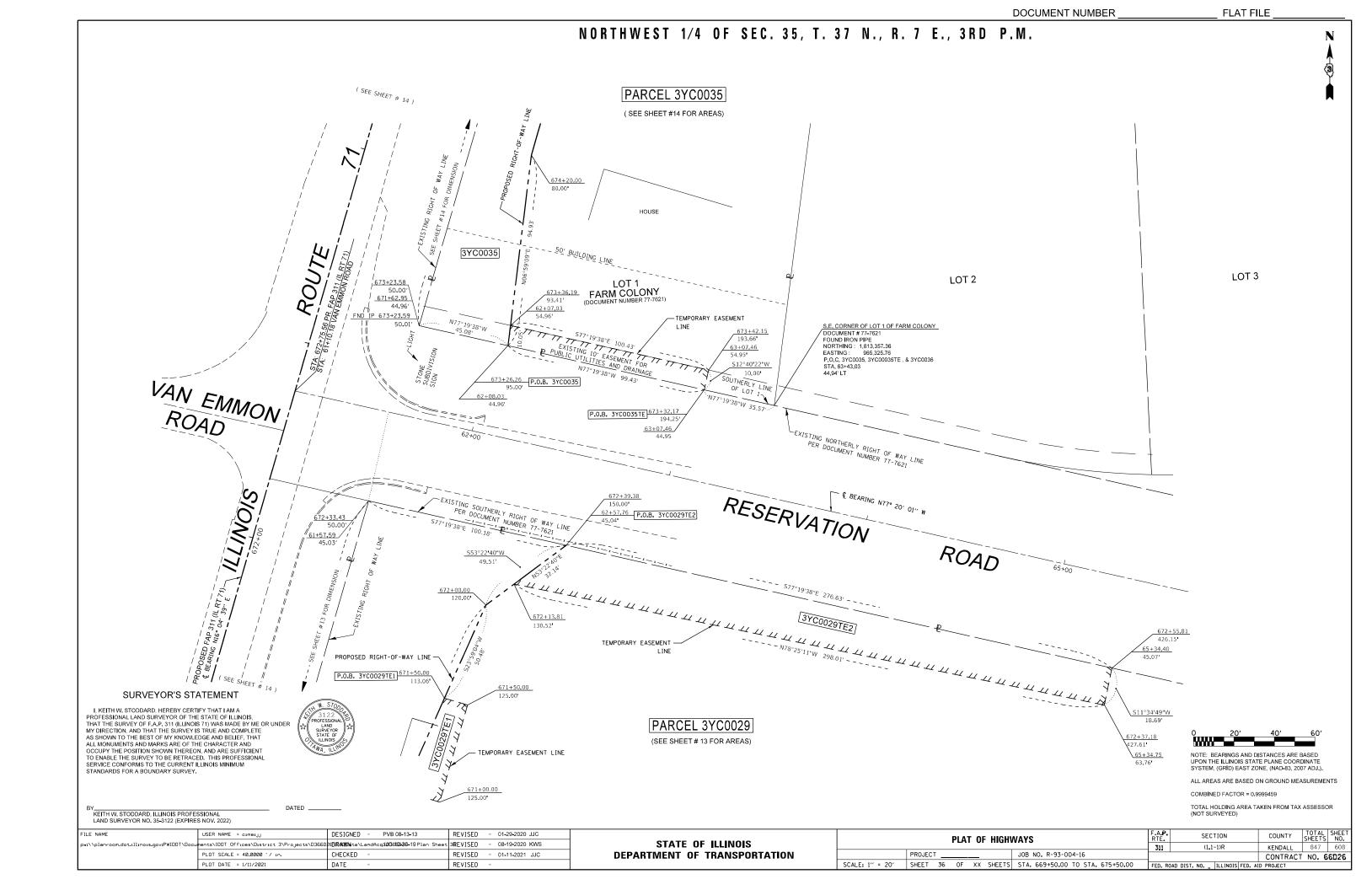
PLOT DATE = 4/1/2021

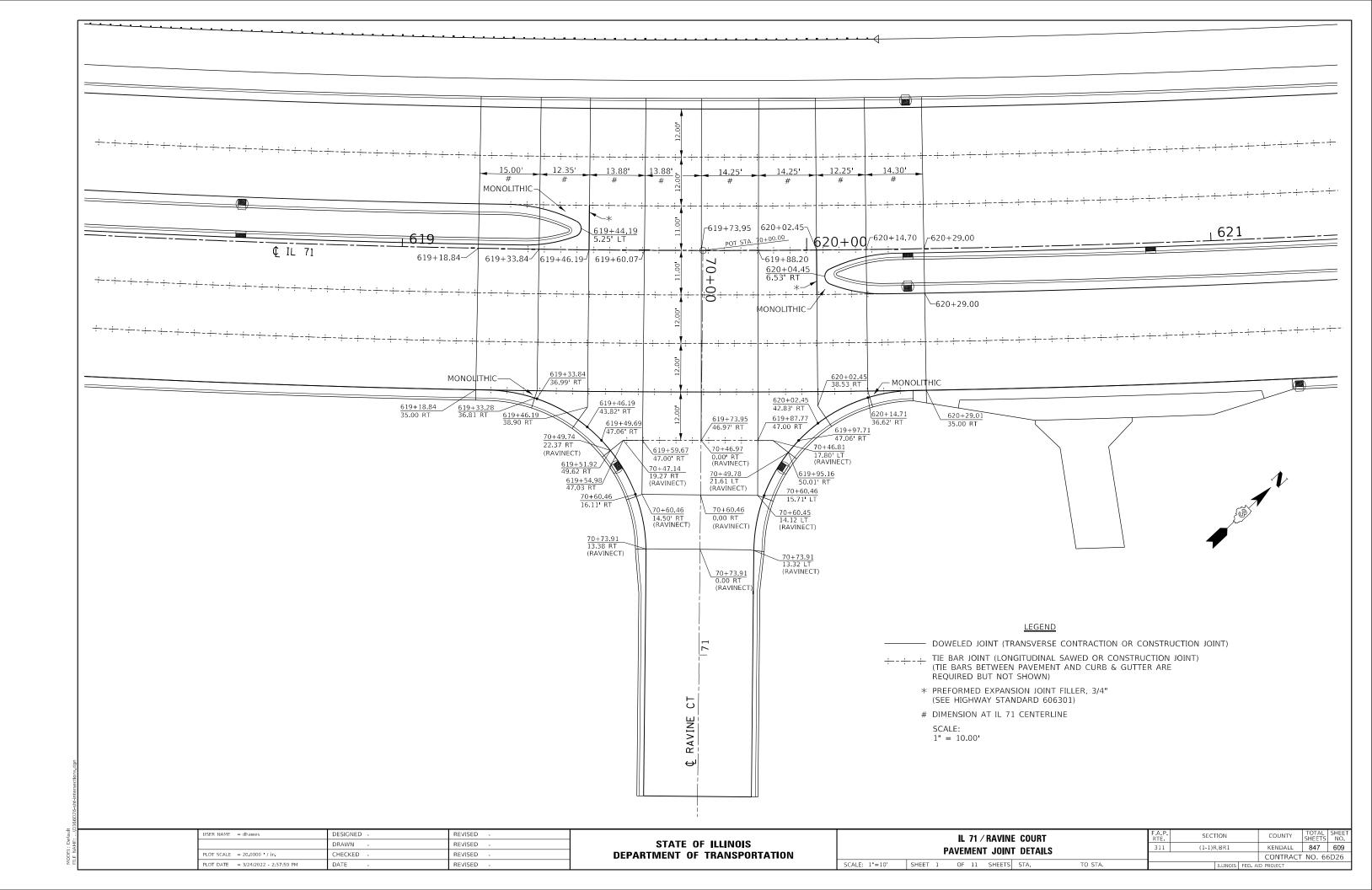
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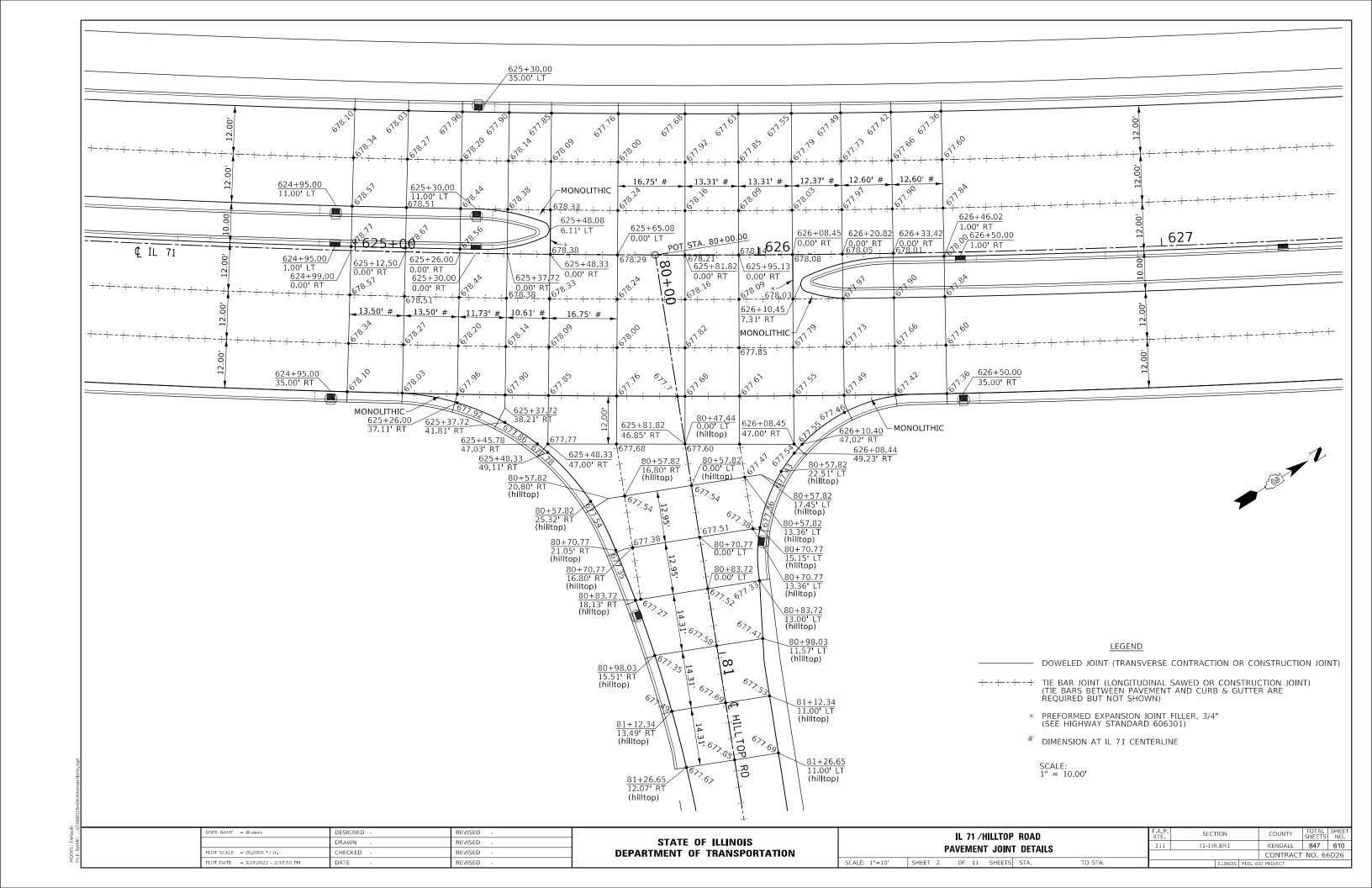
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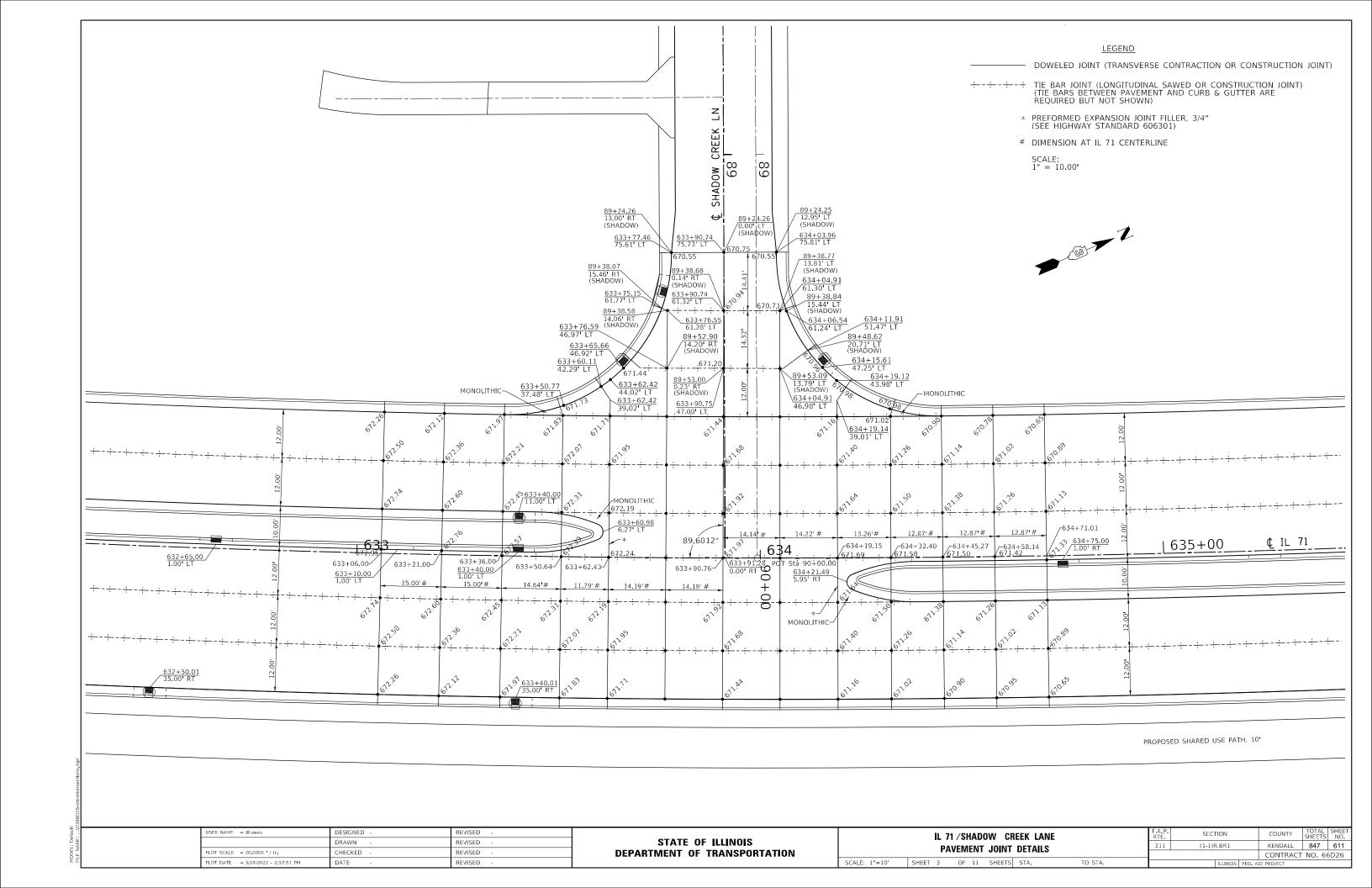


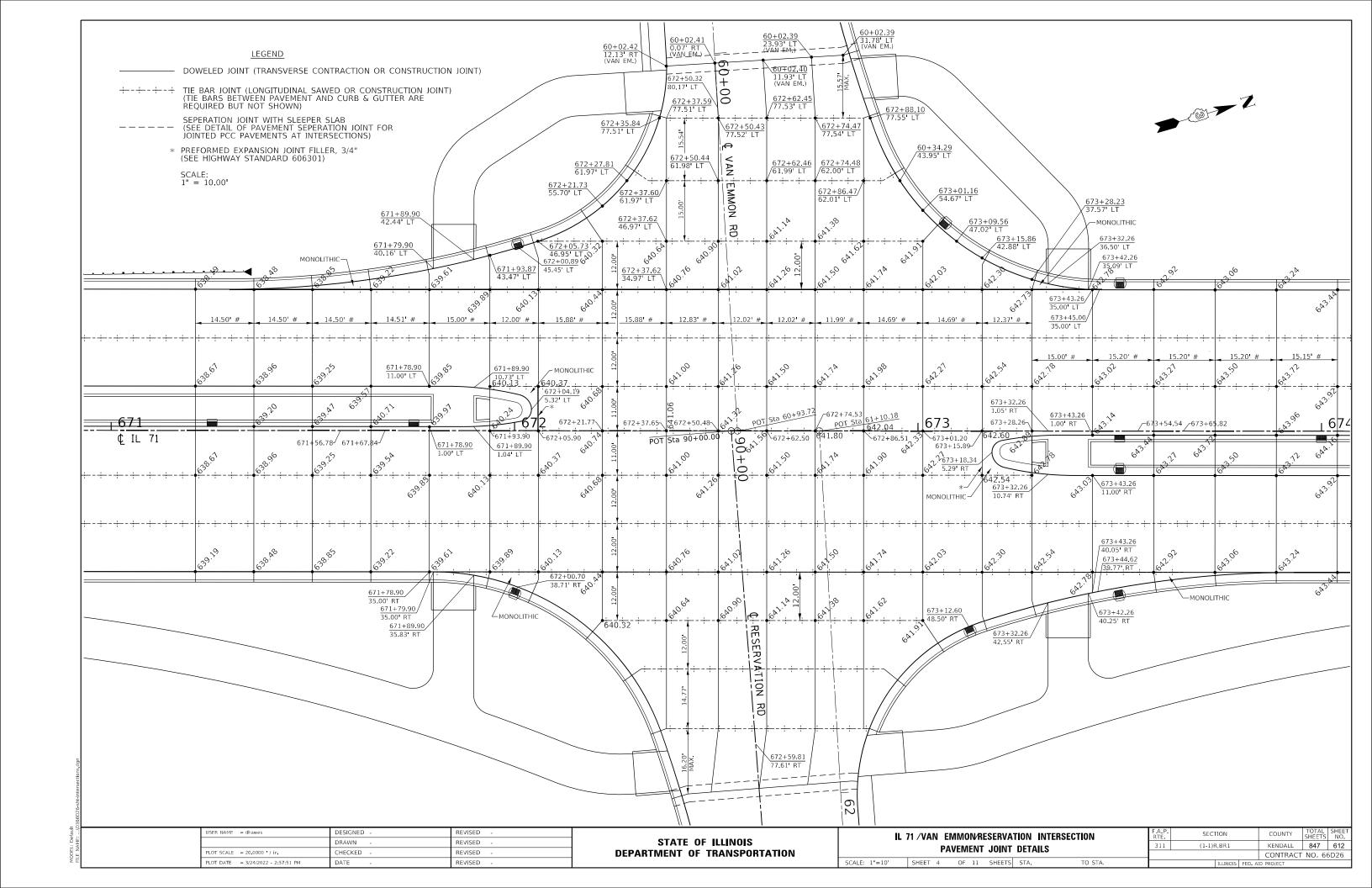


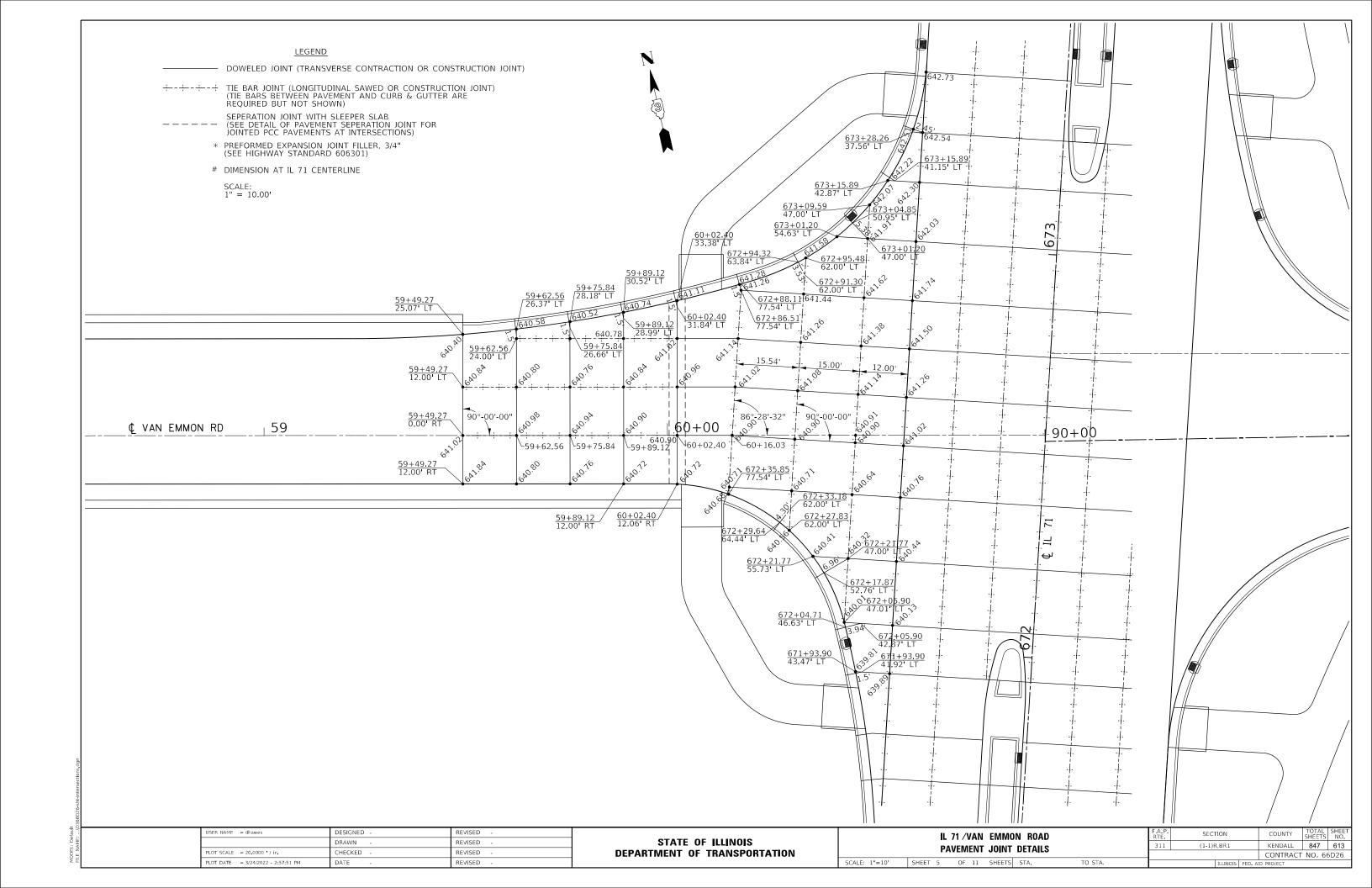


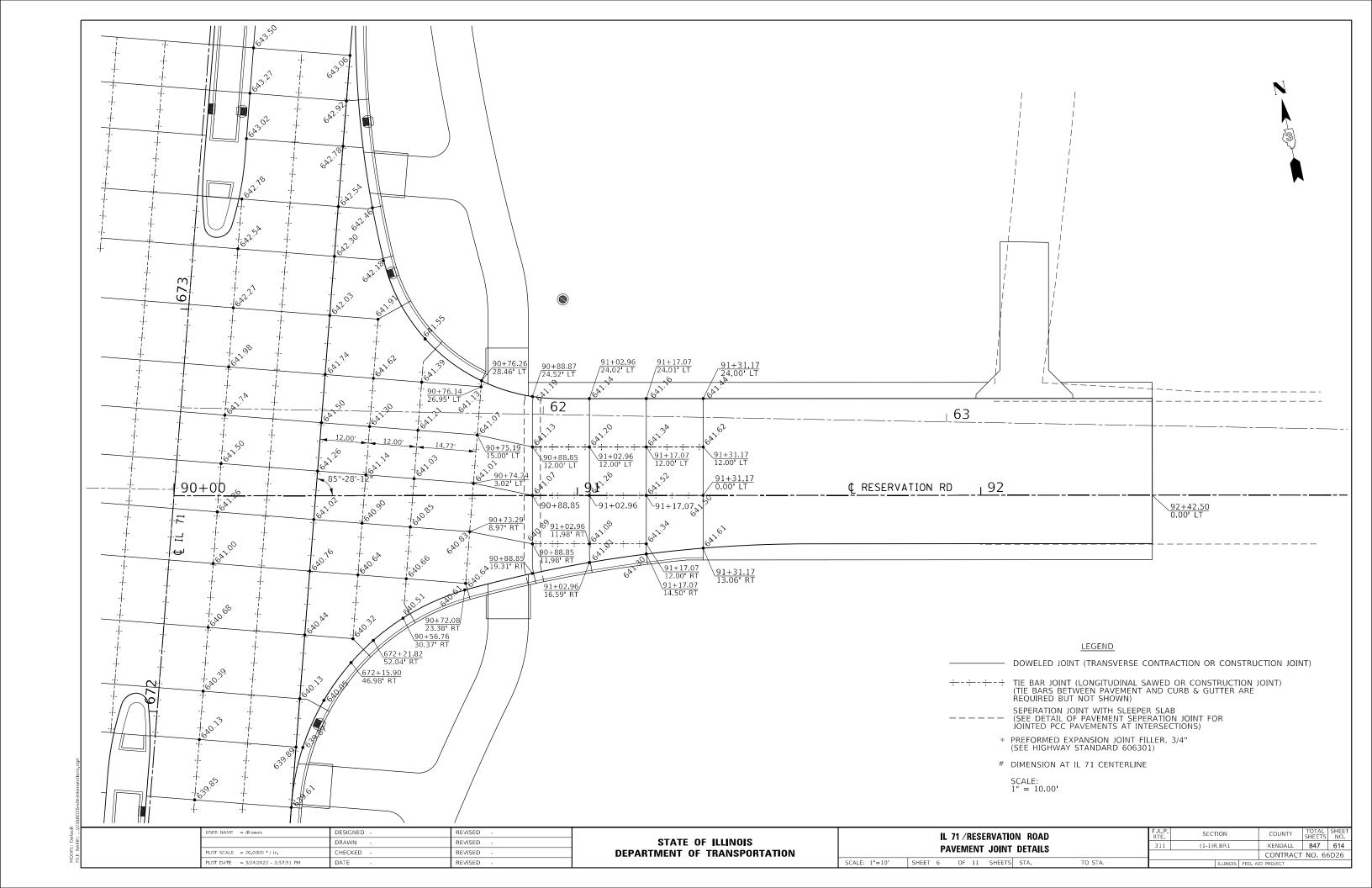


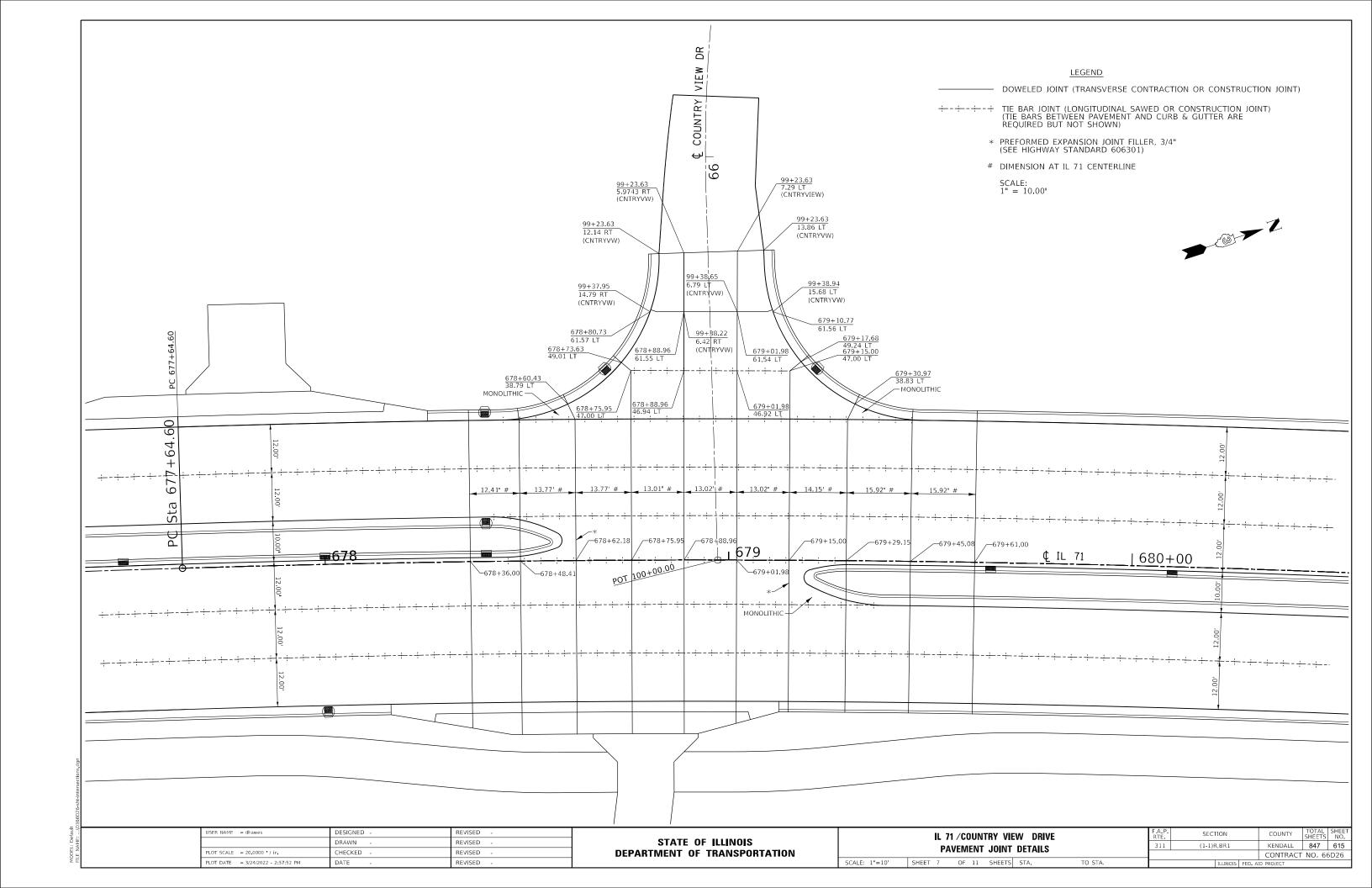


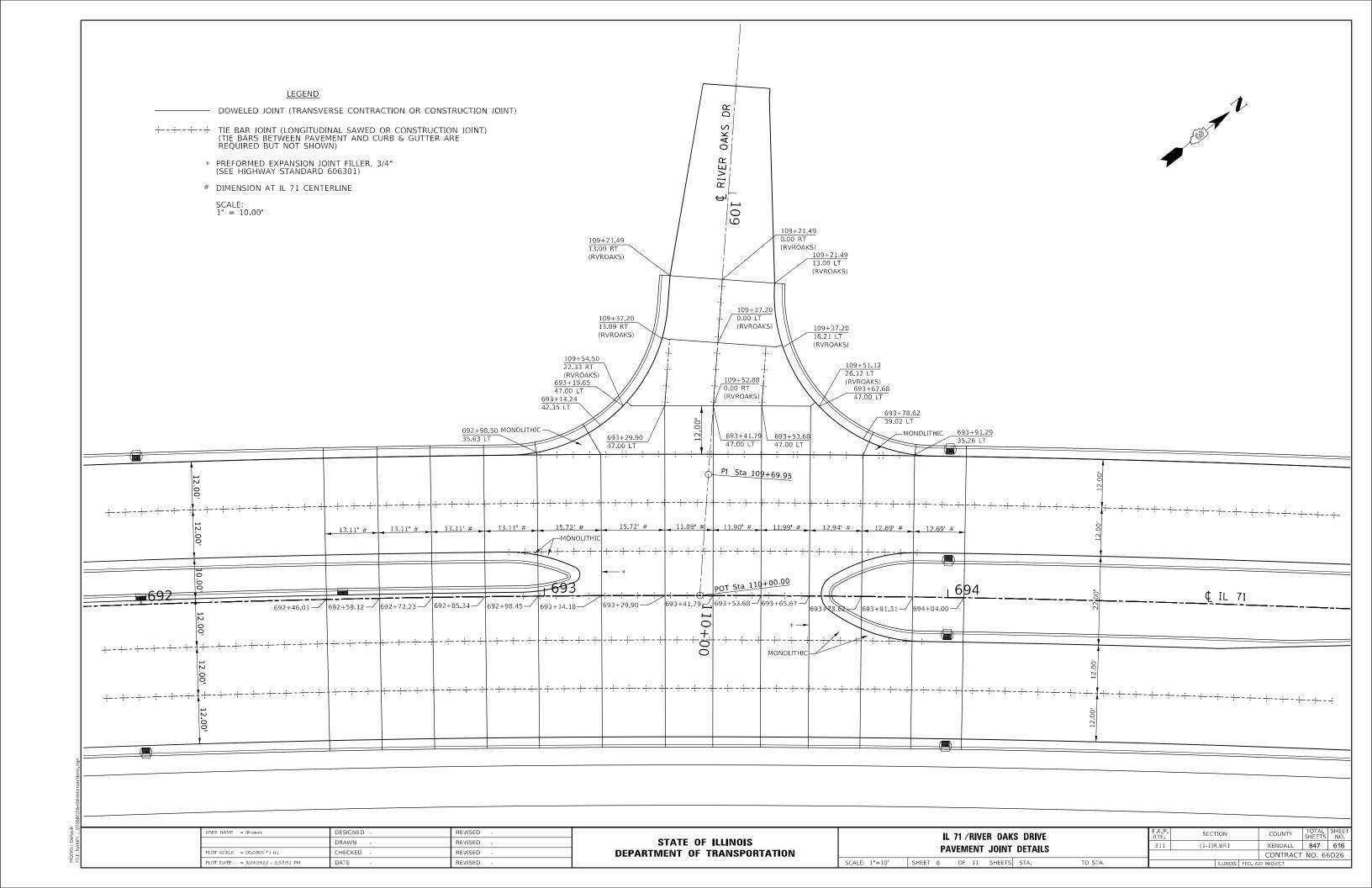


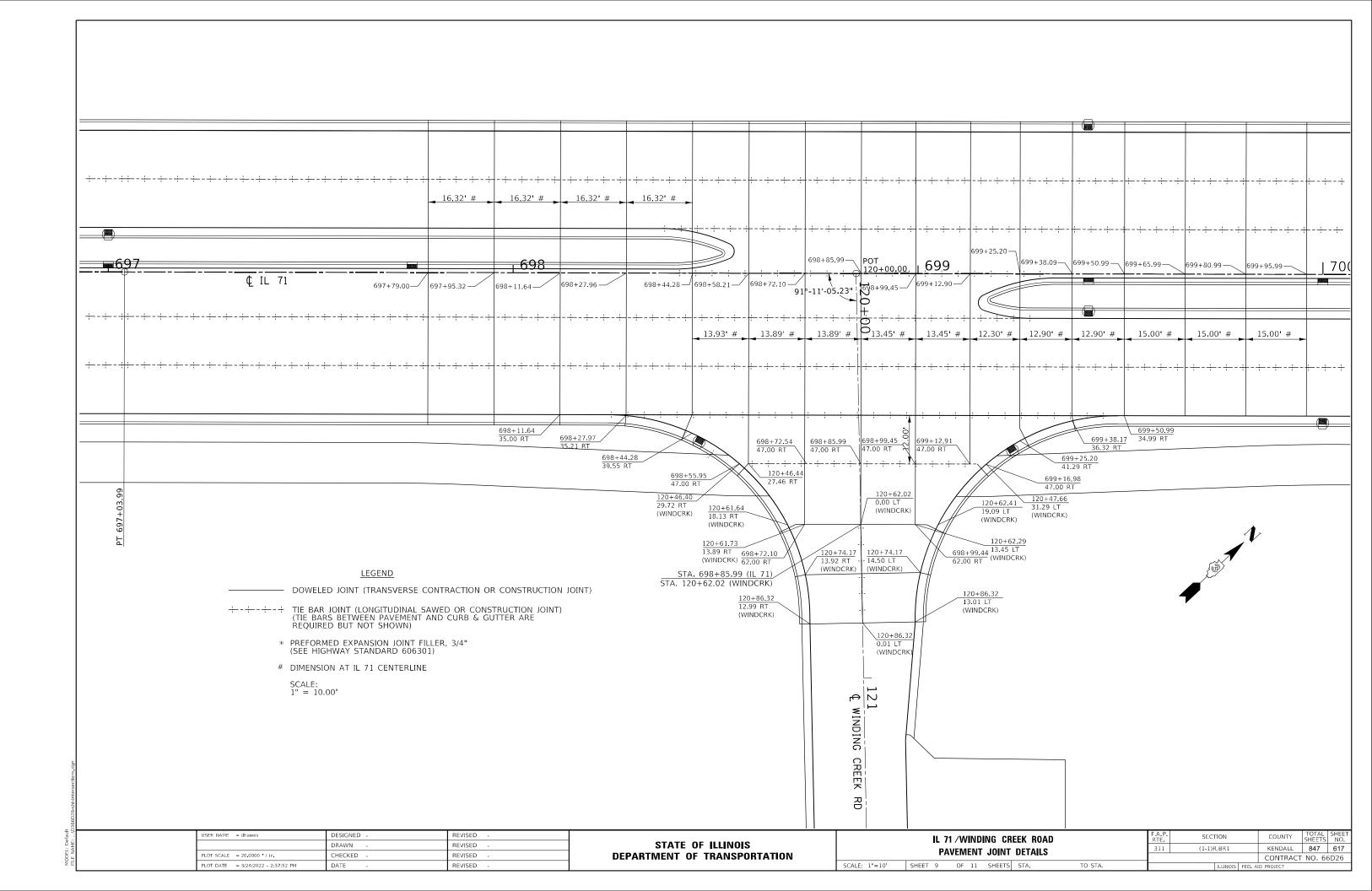


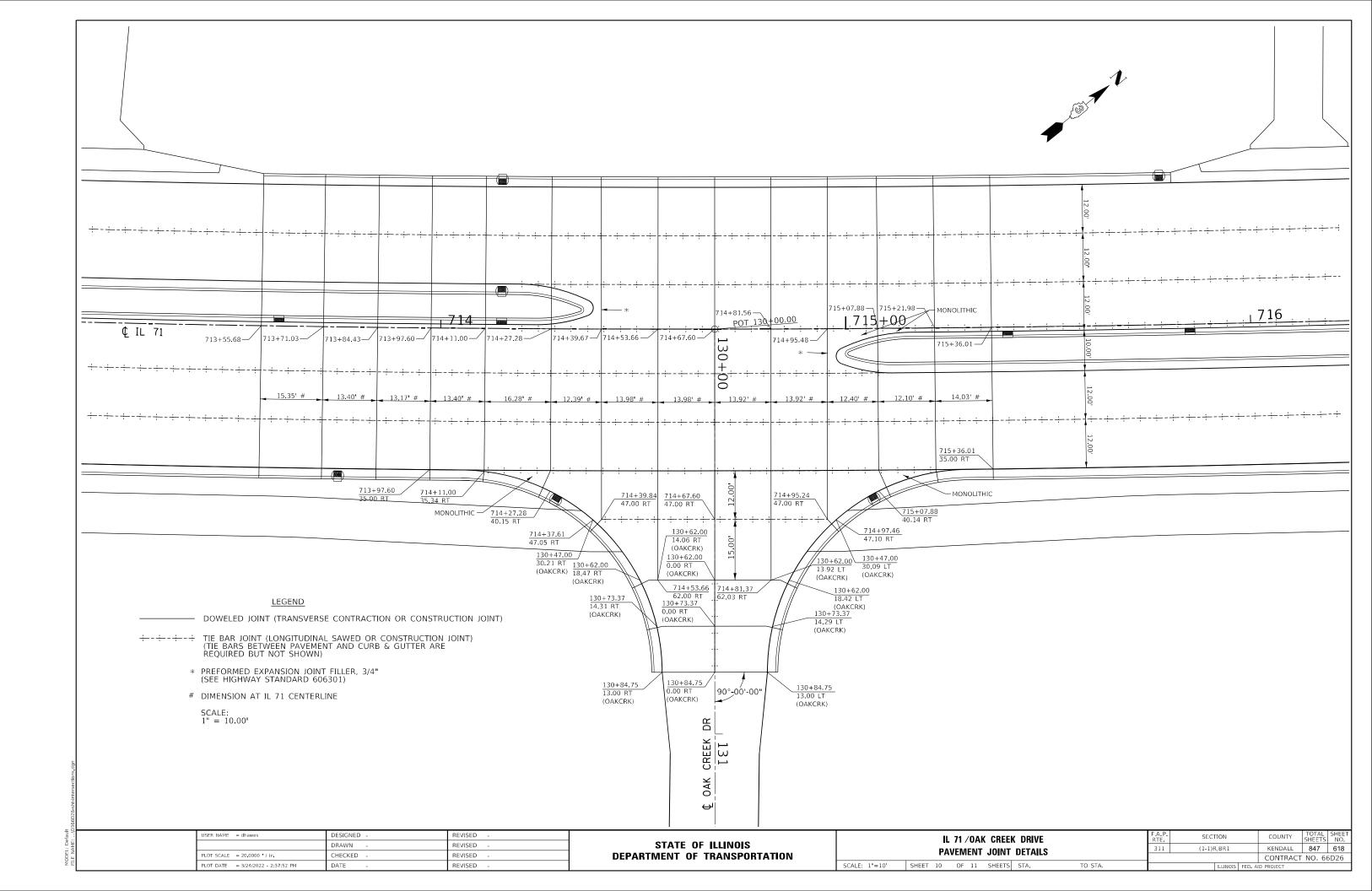


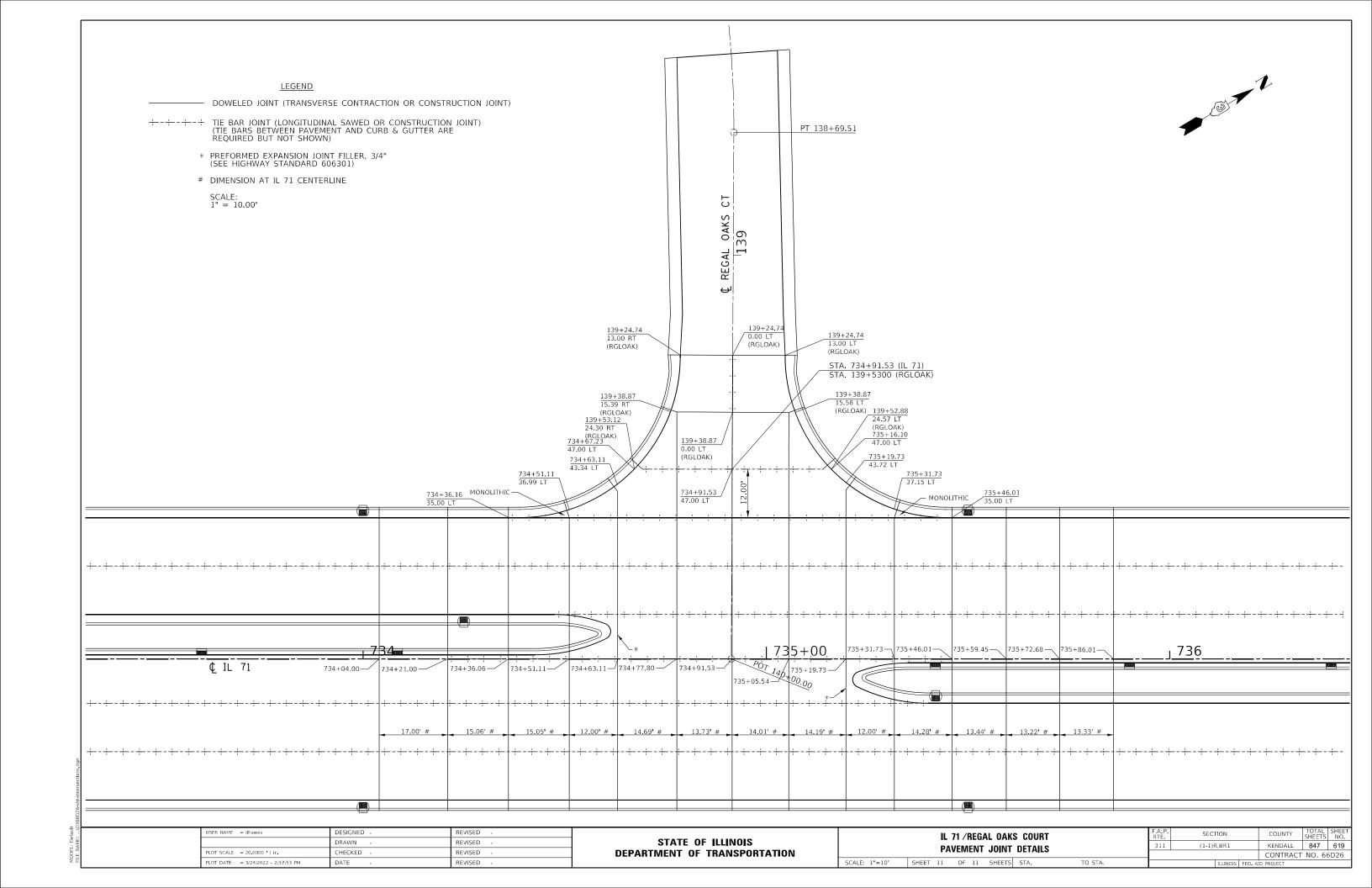


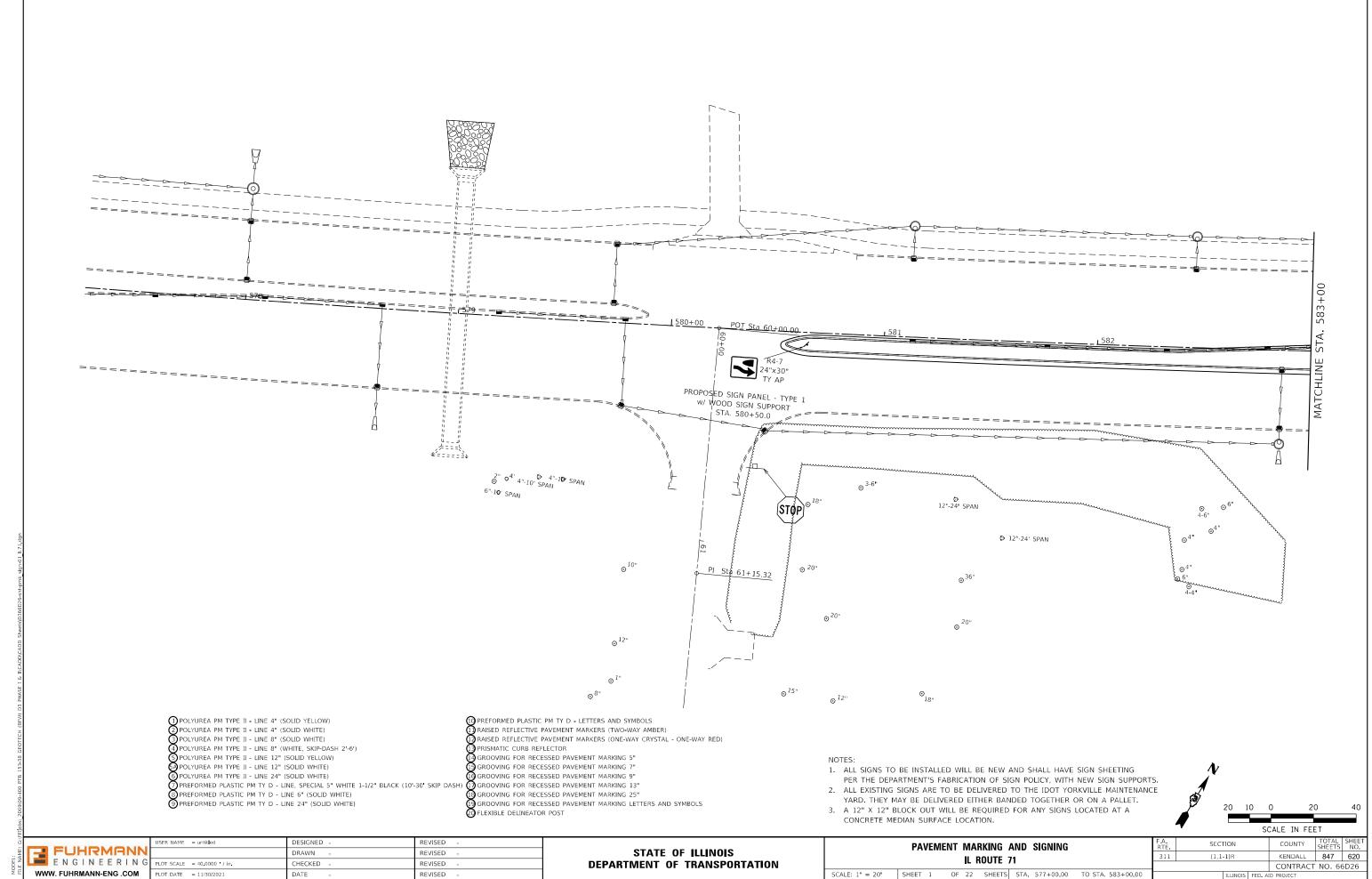


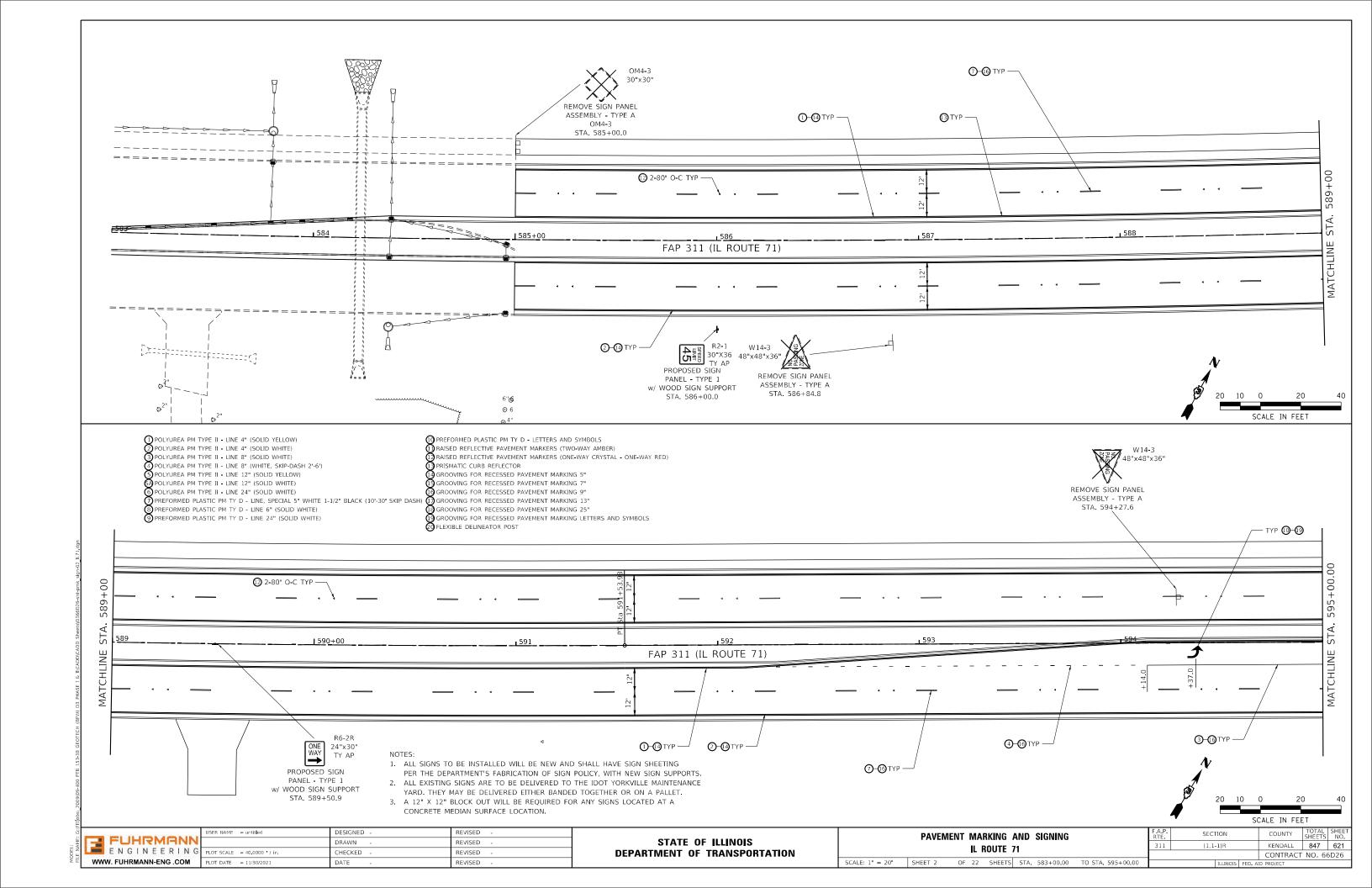


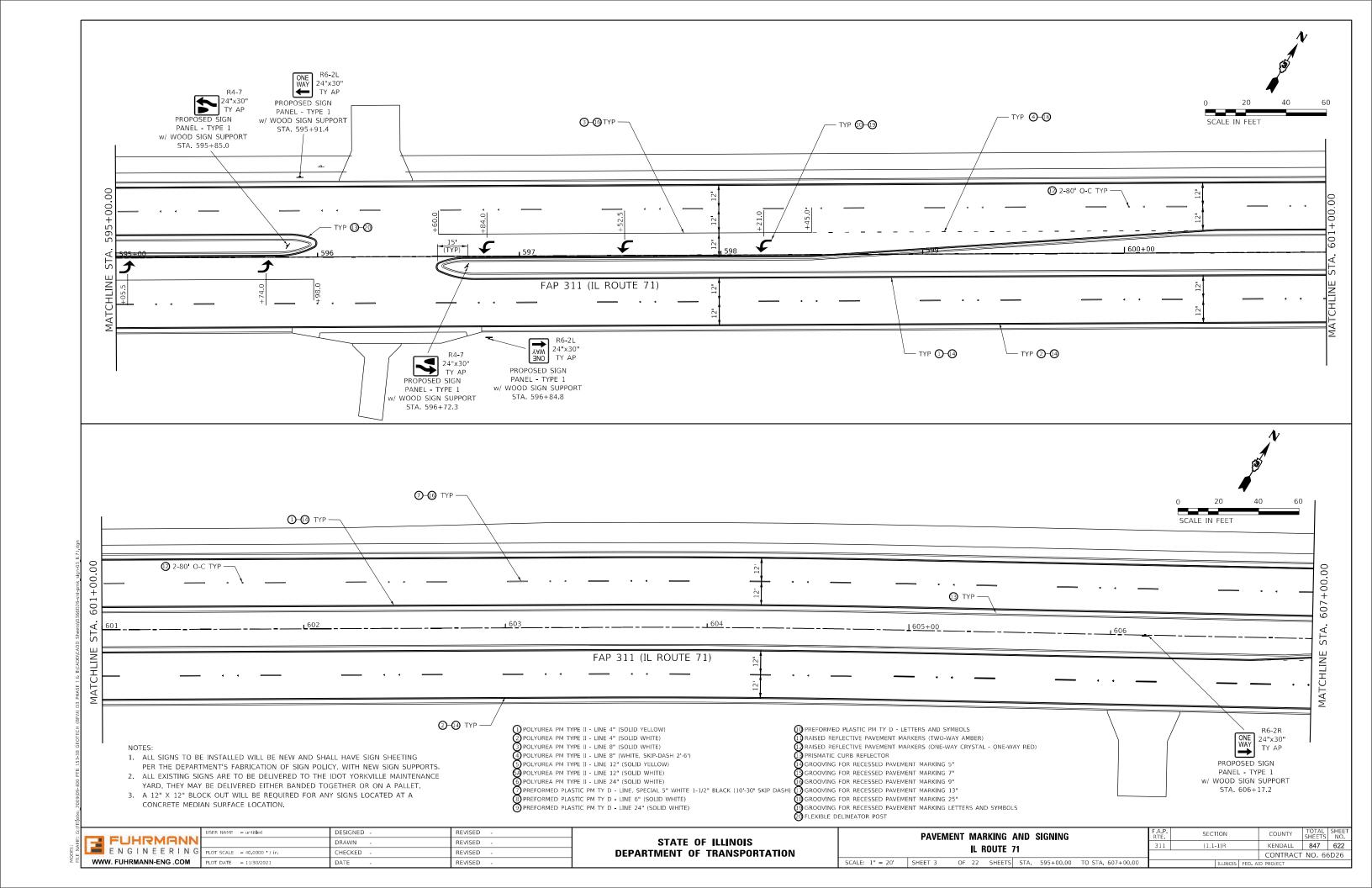


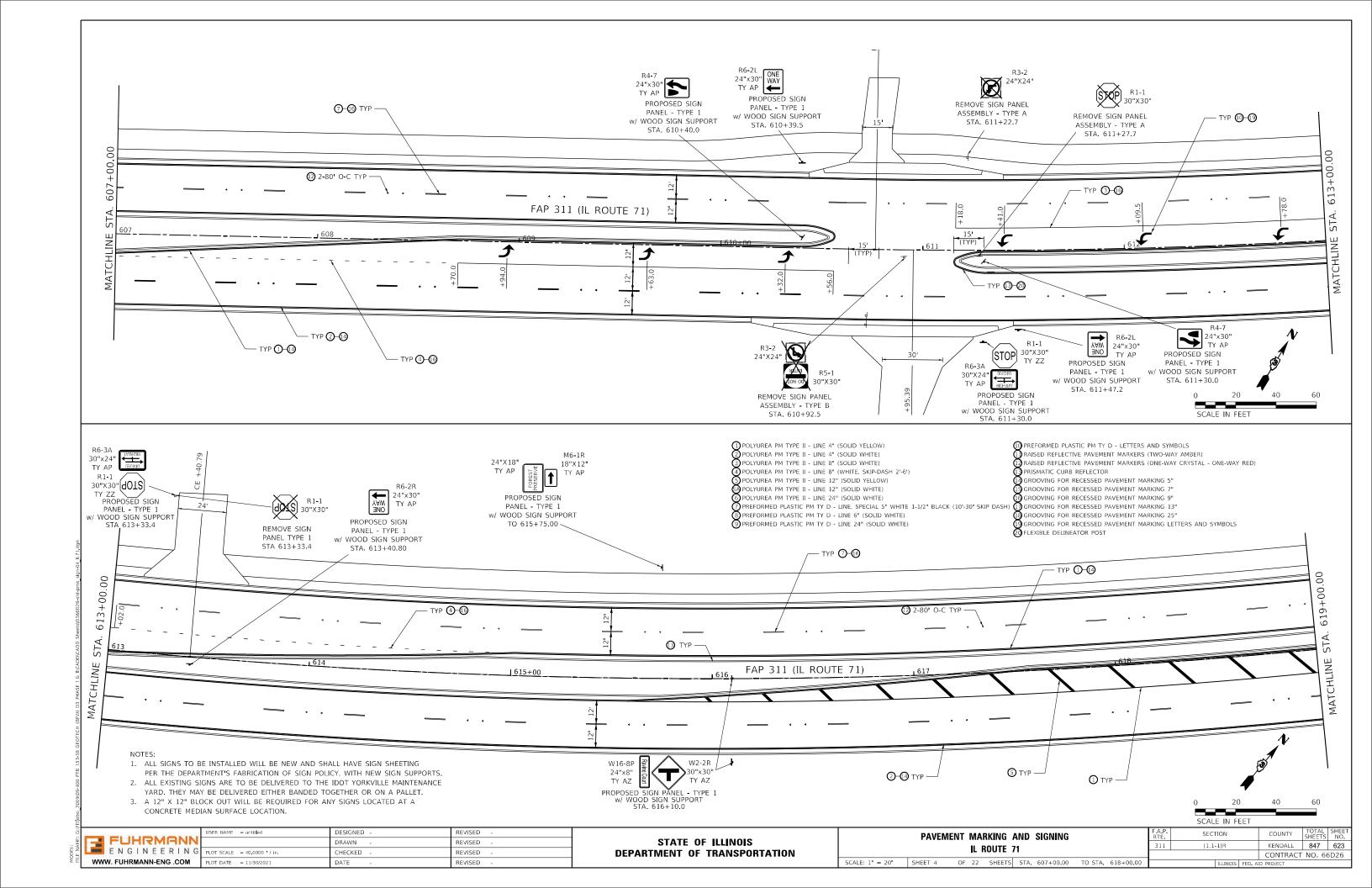


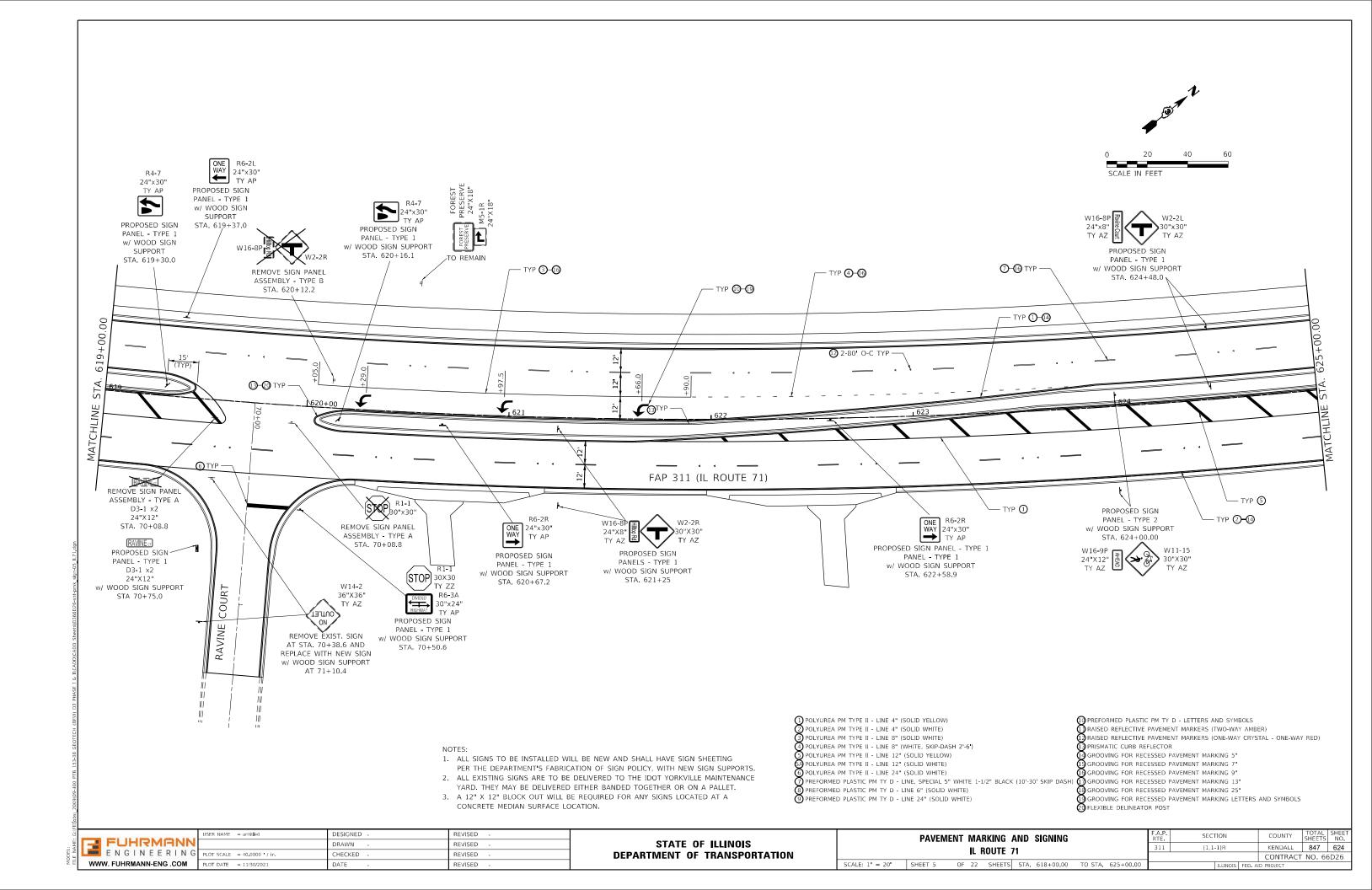


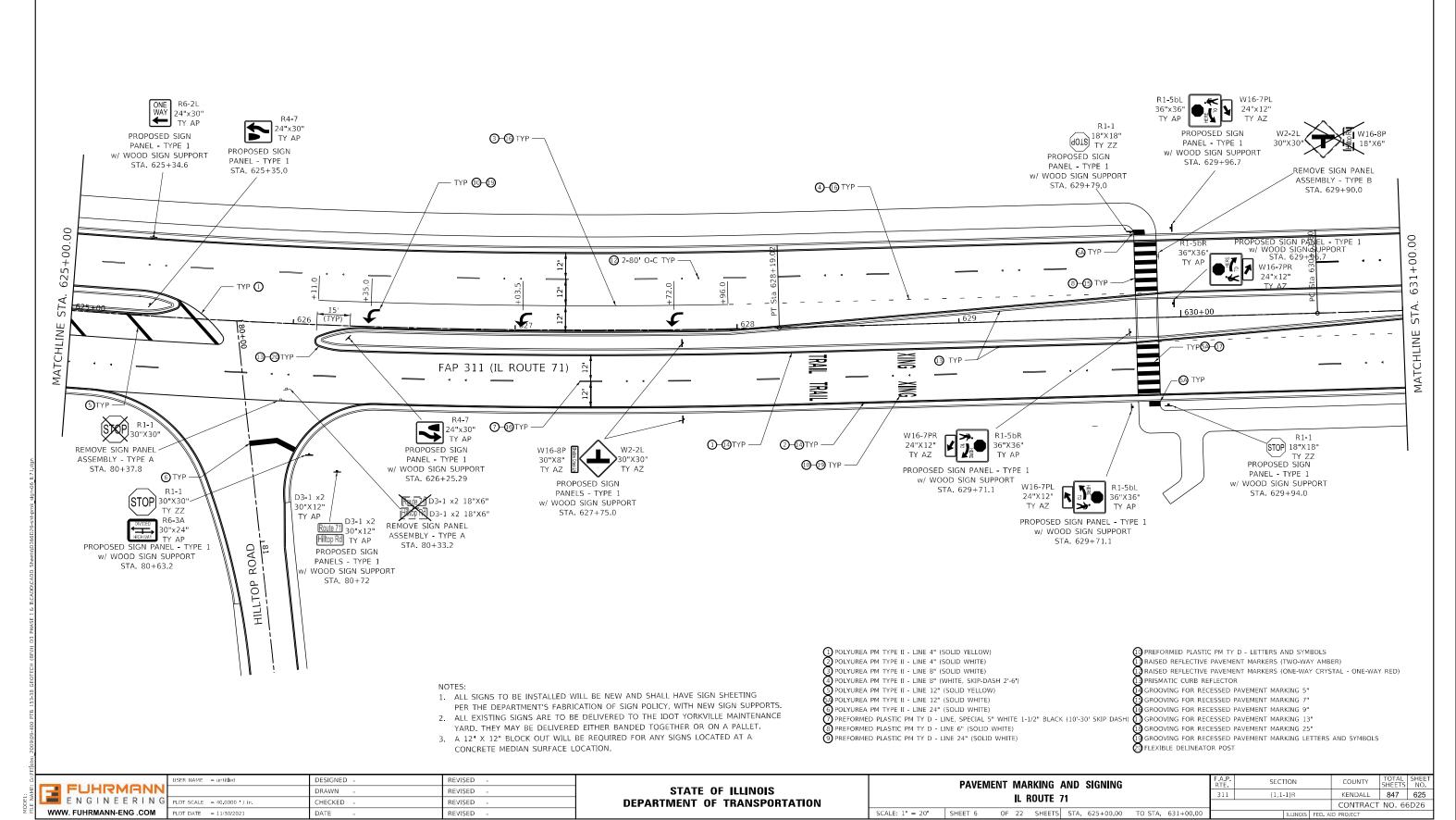


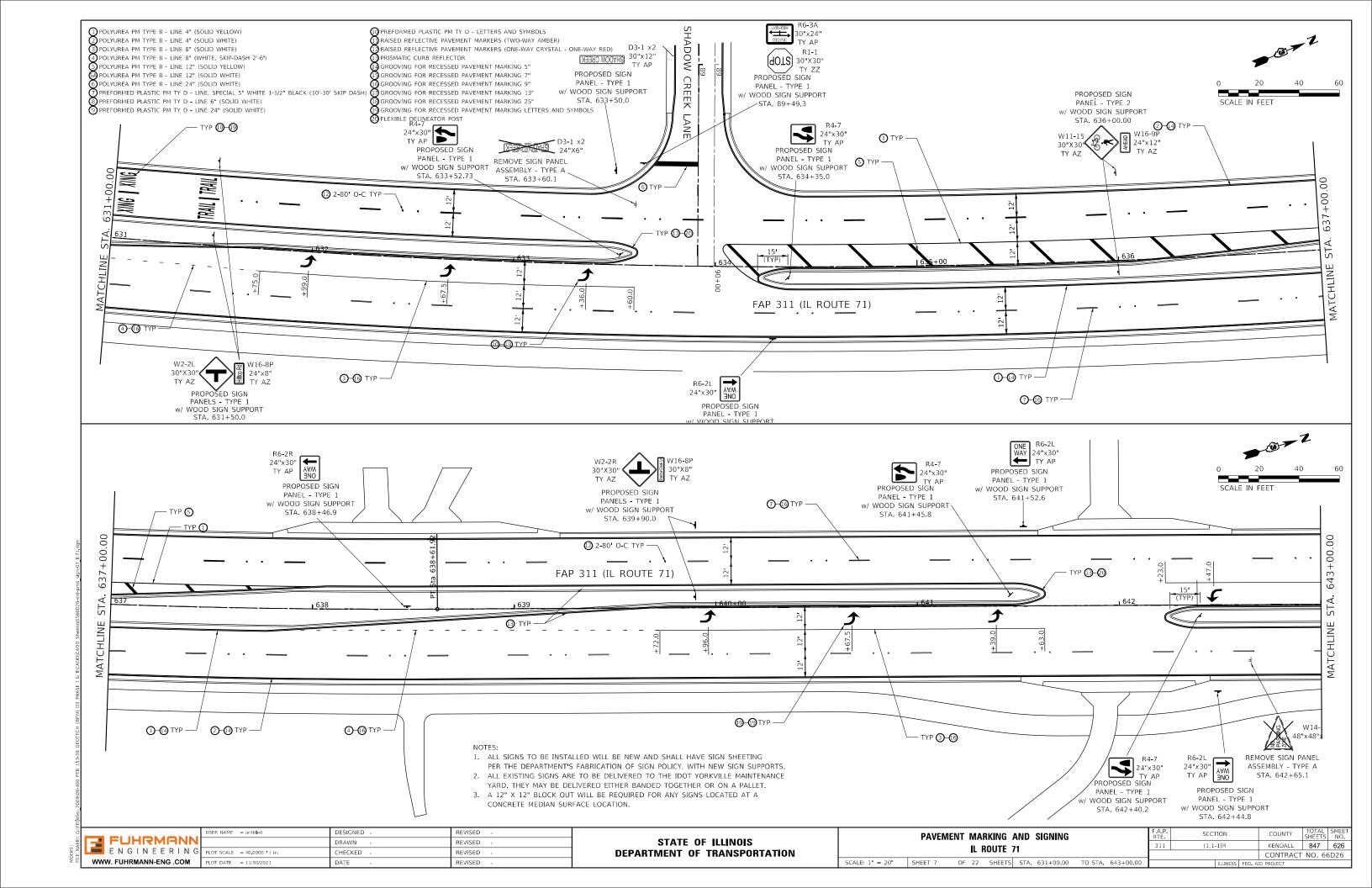


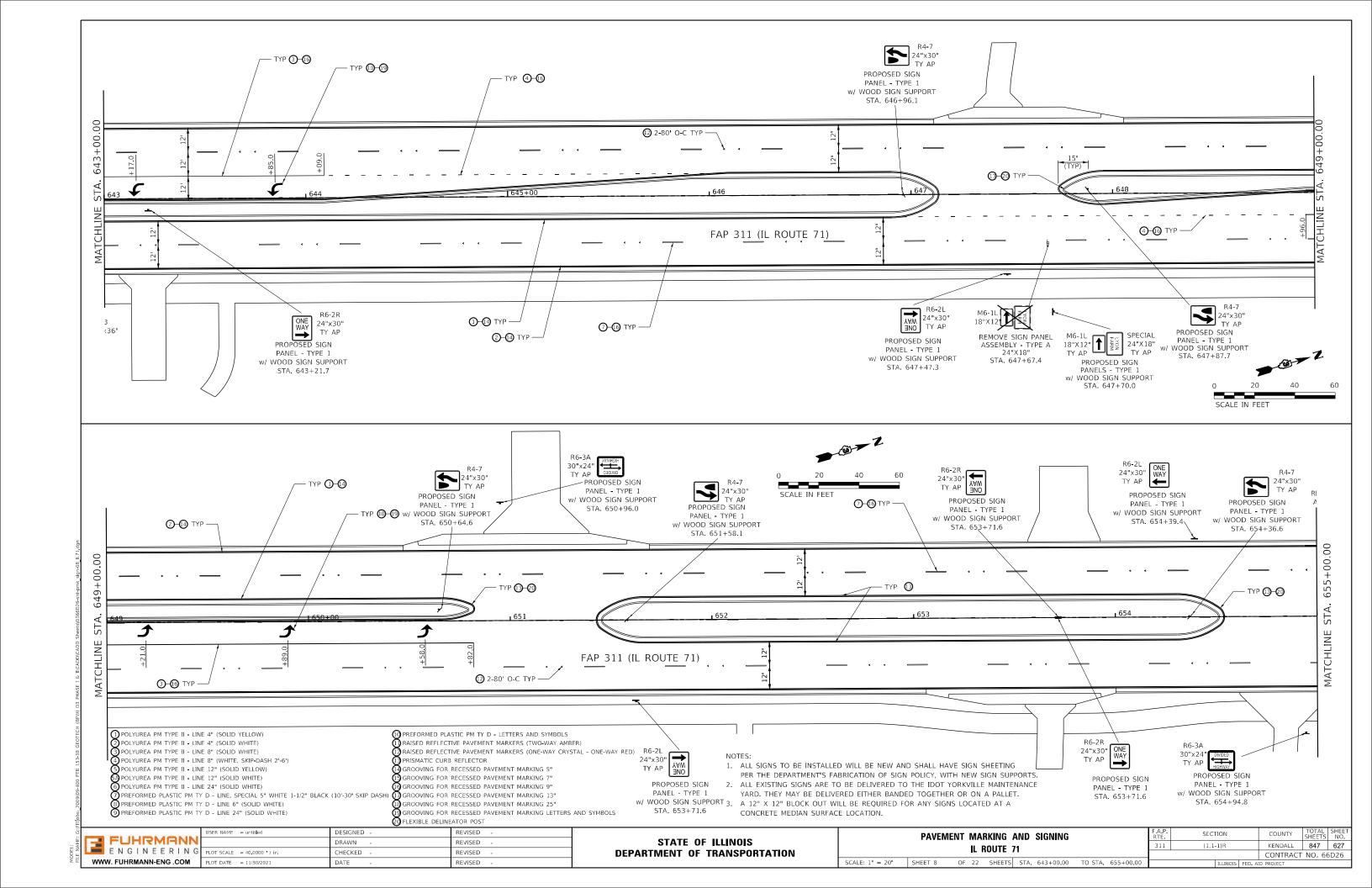


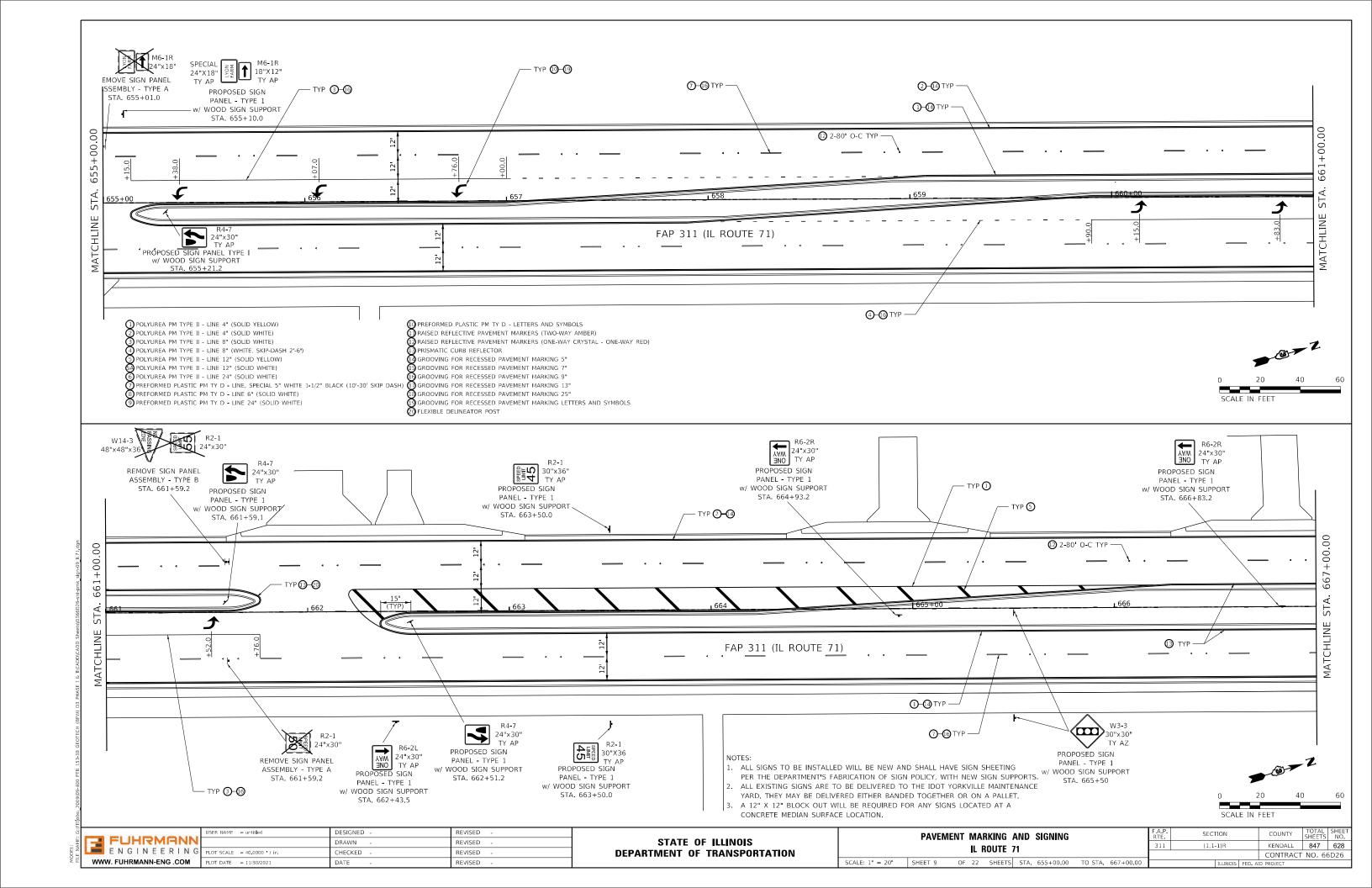


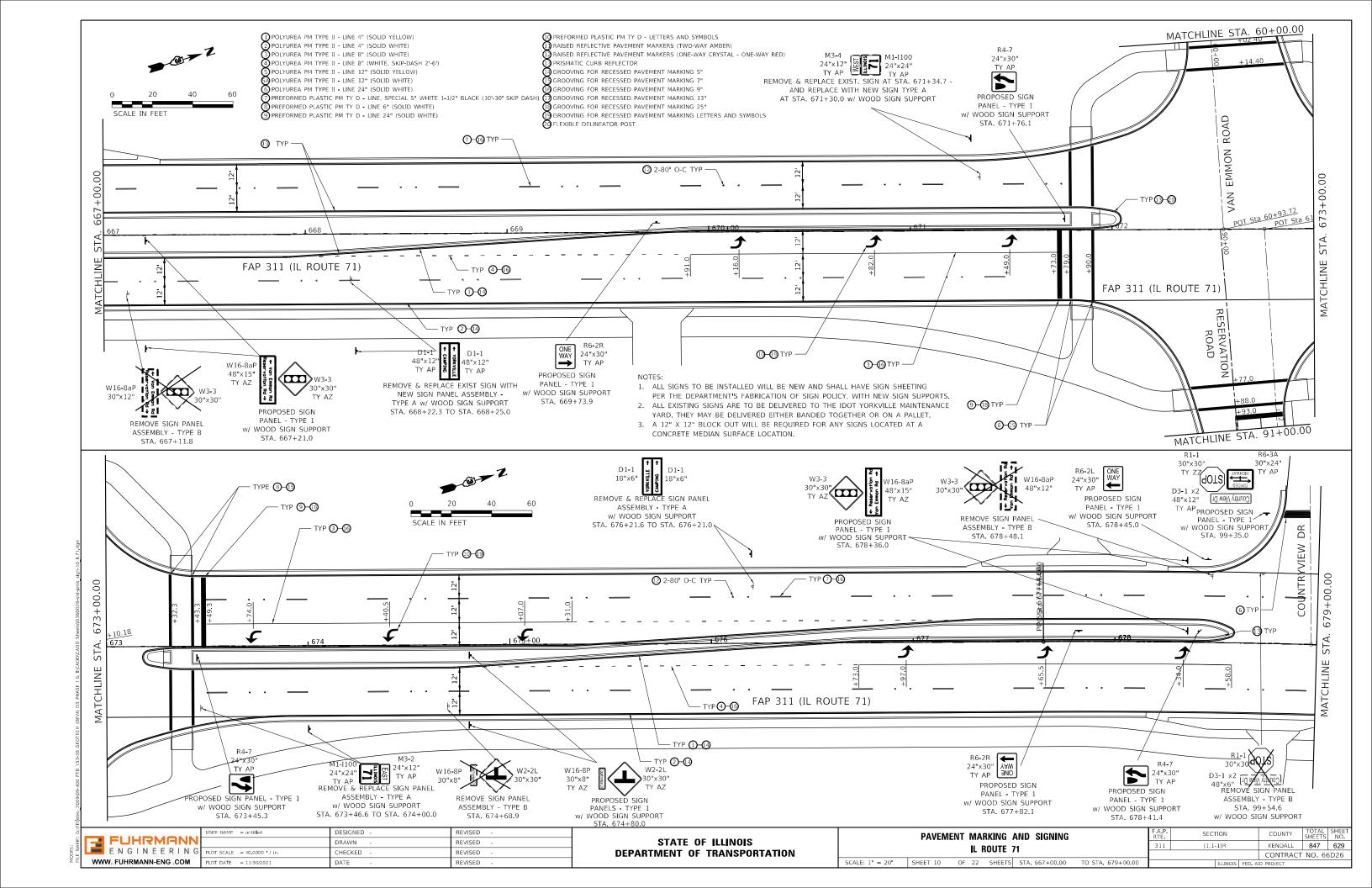


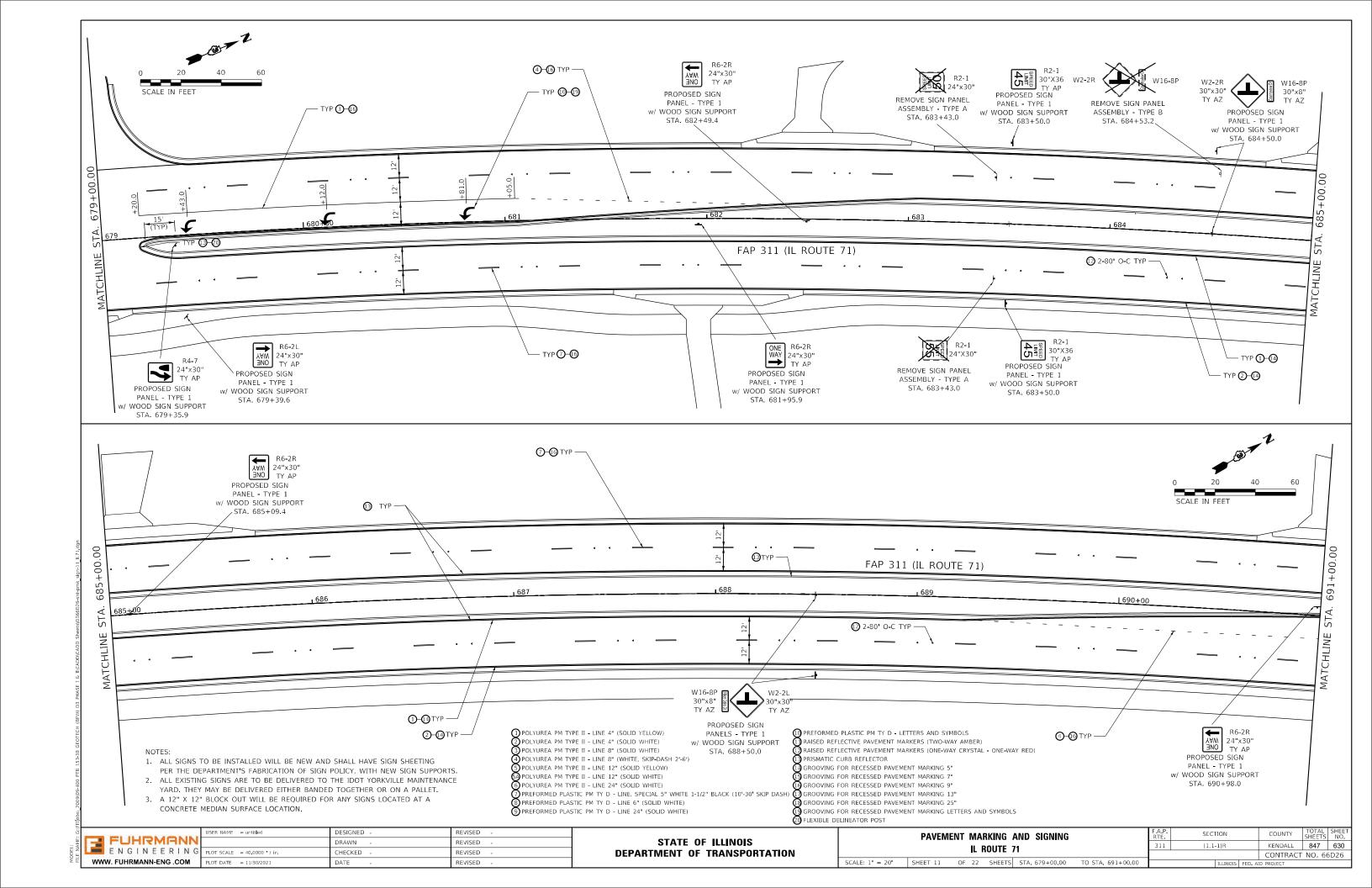


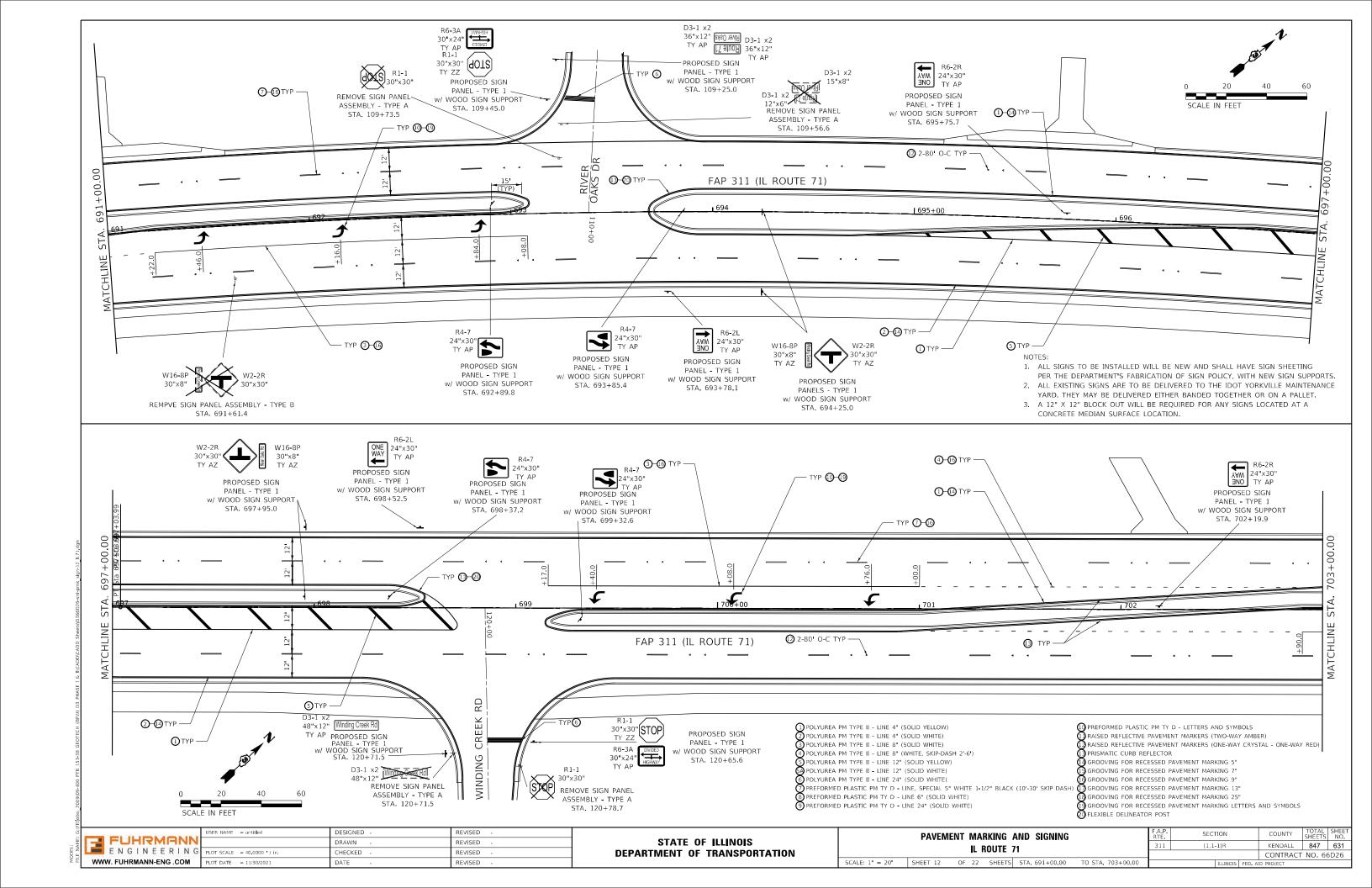


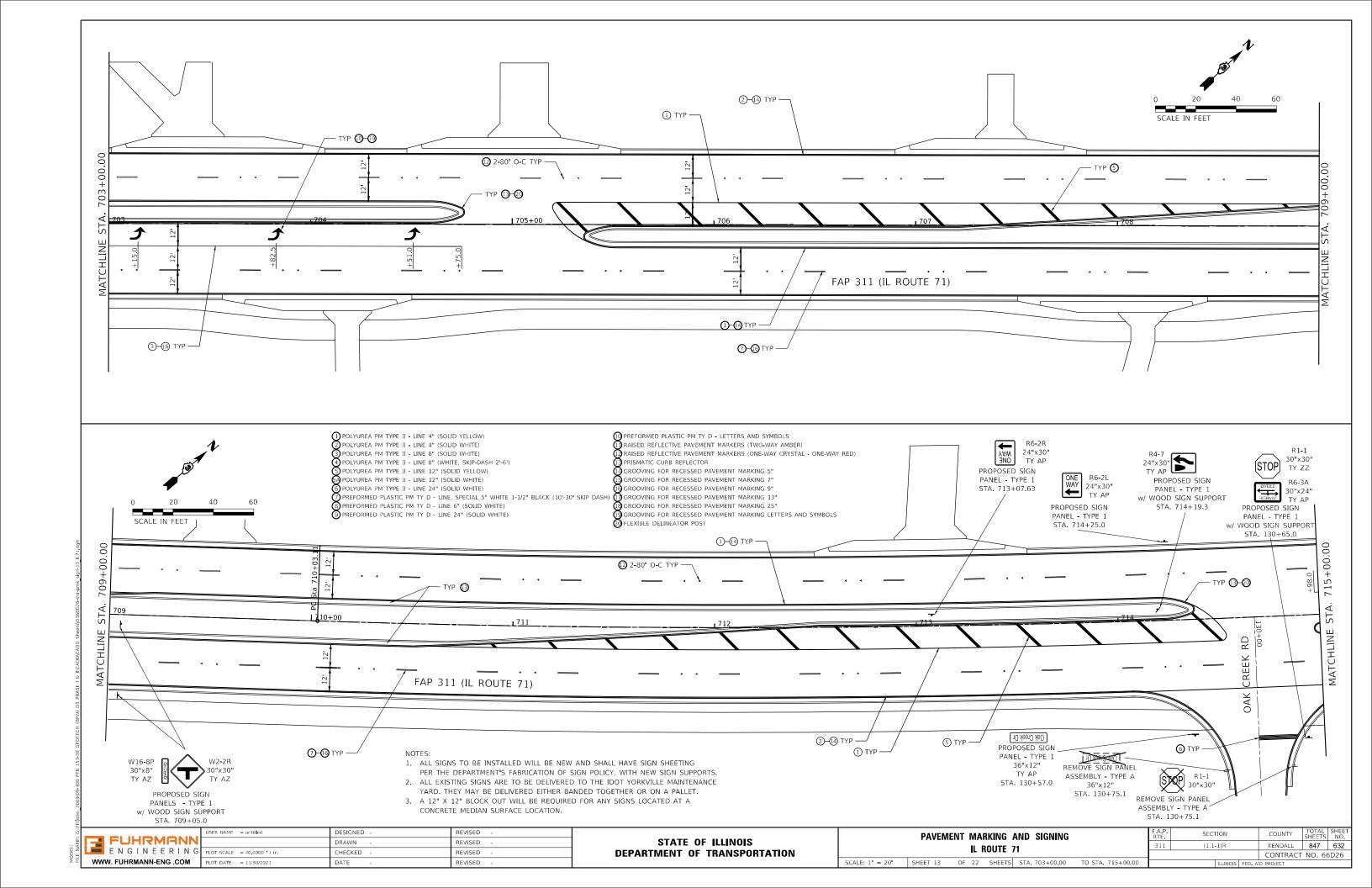


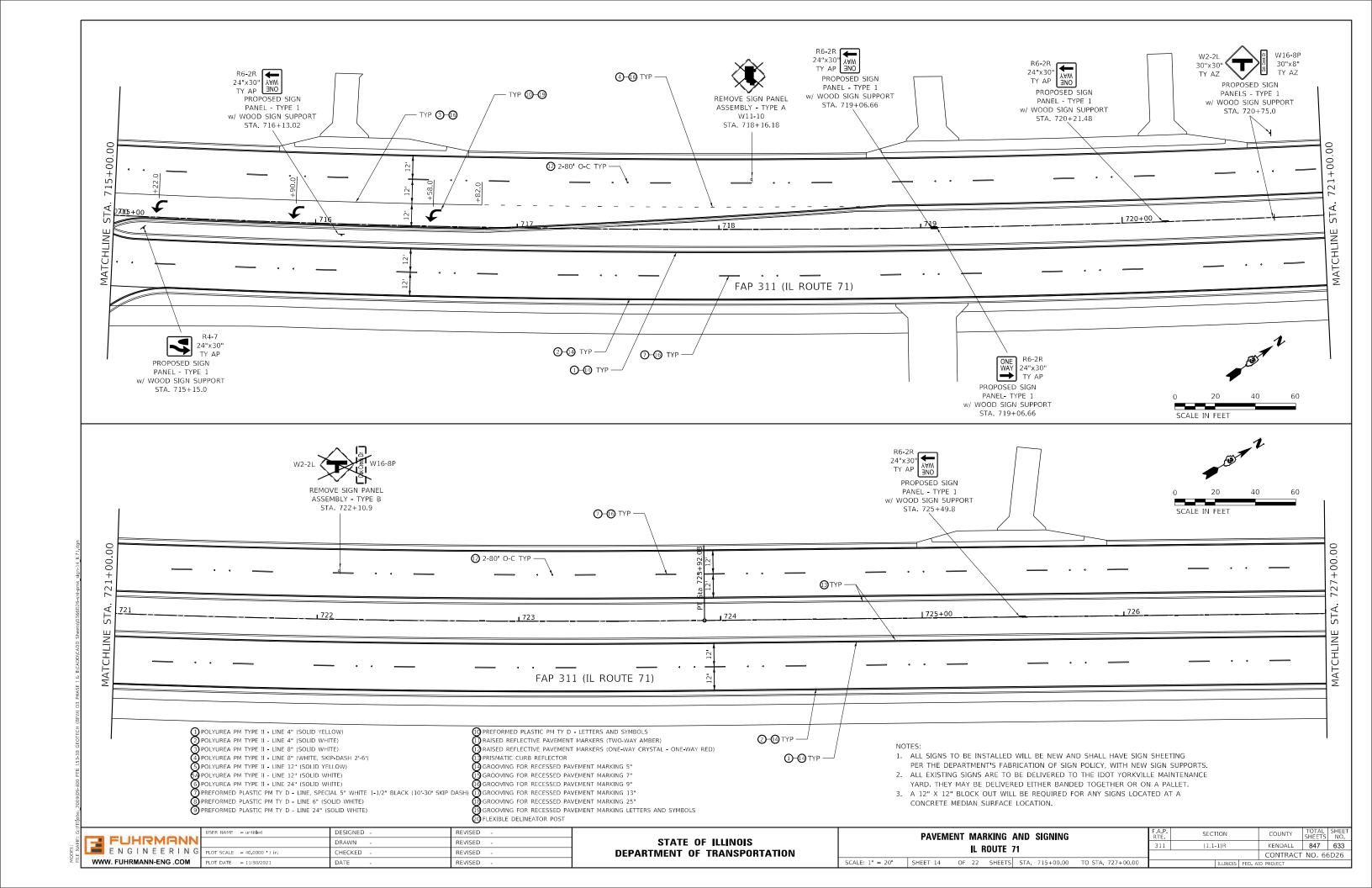


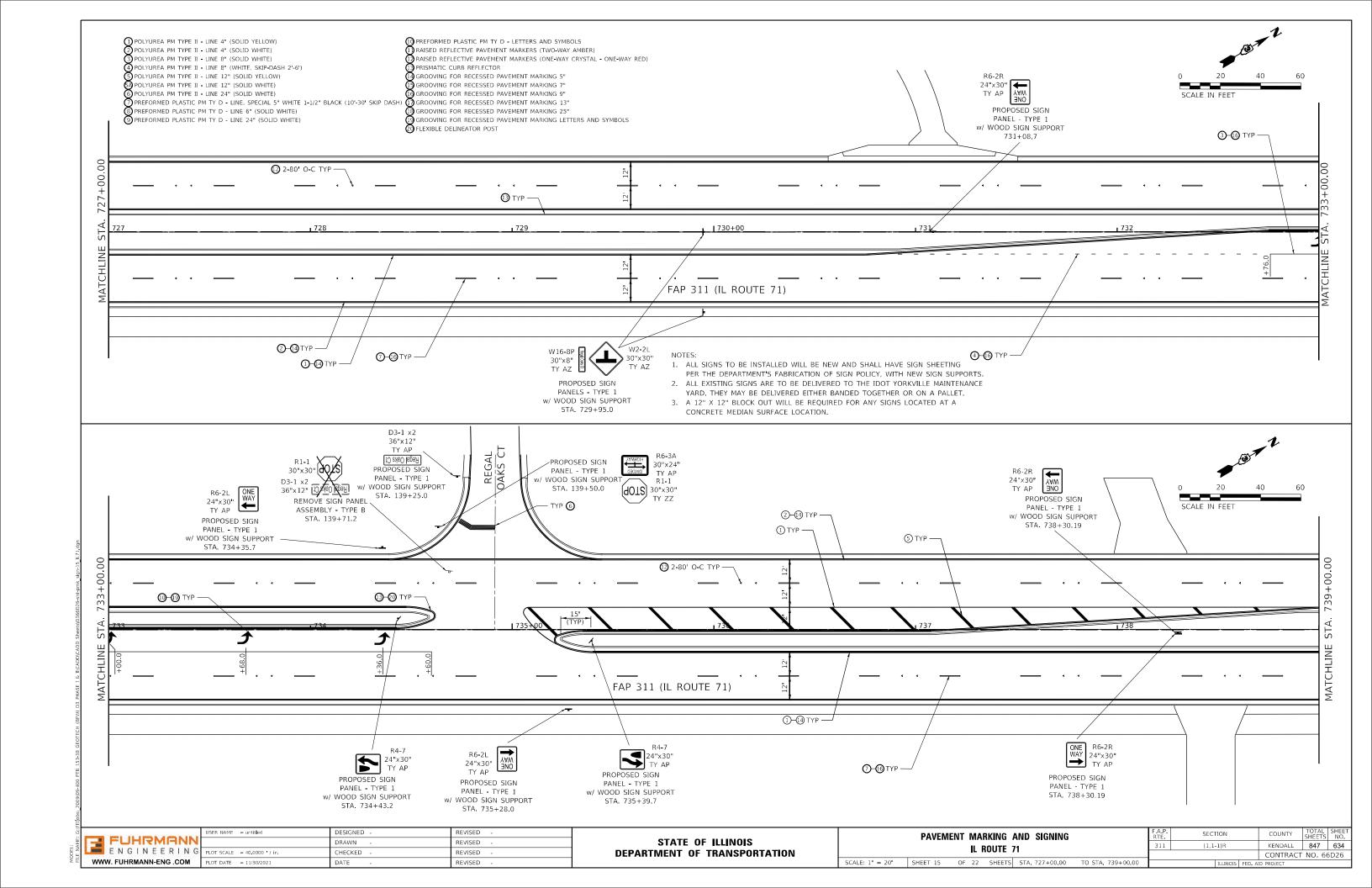


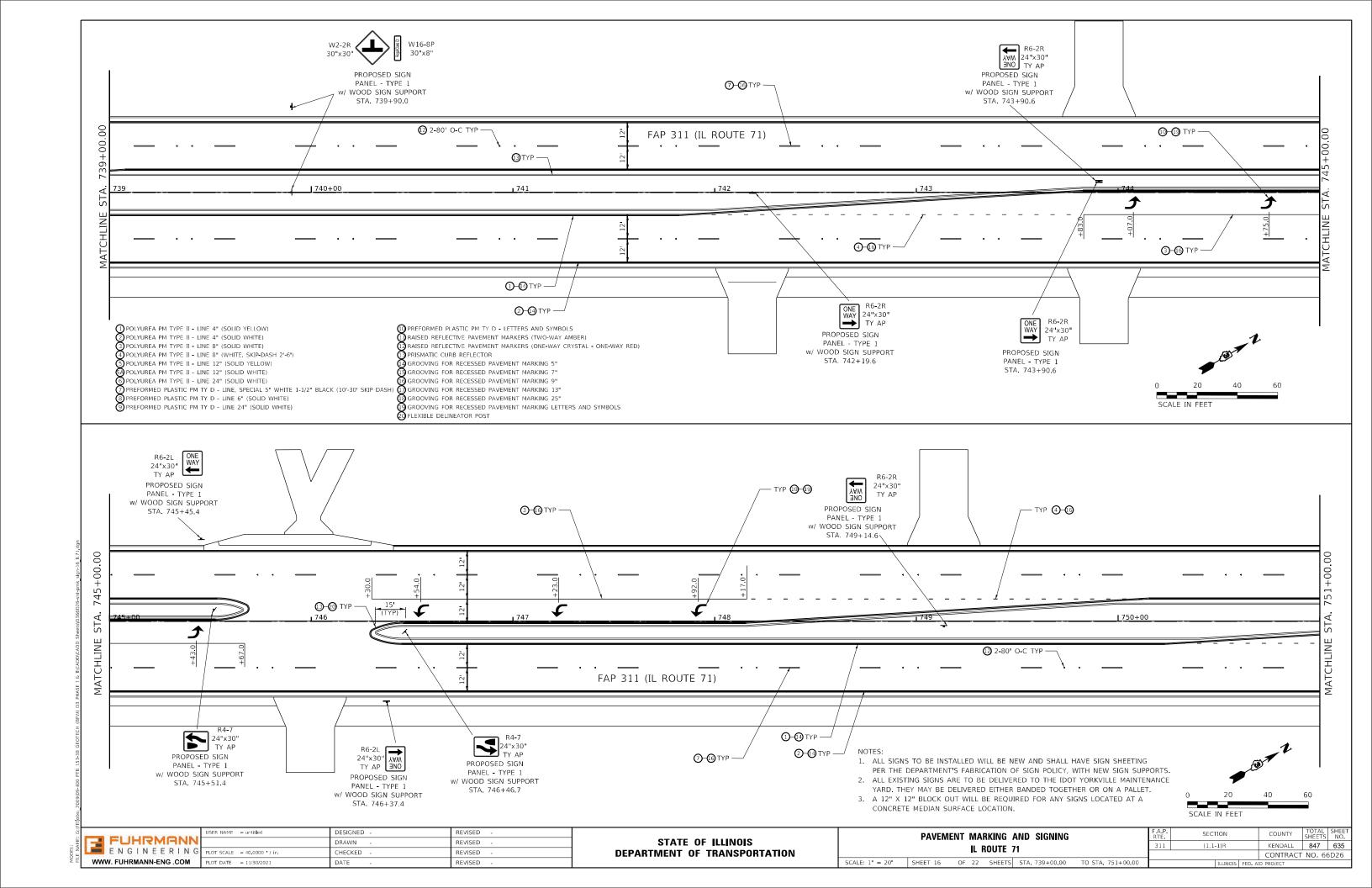


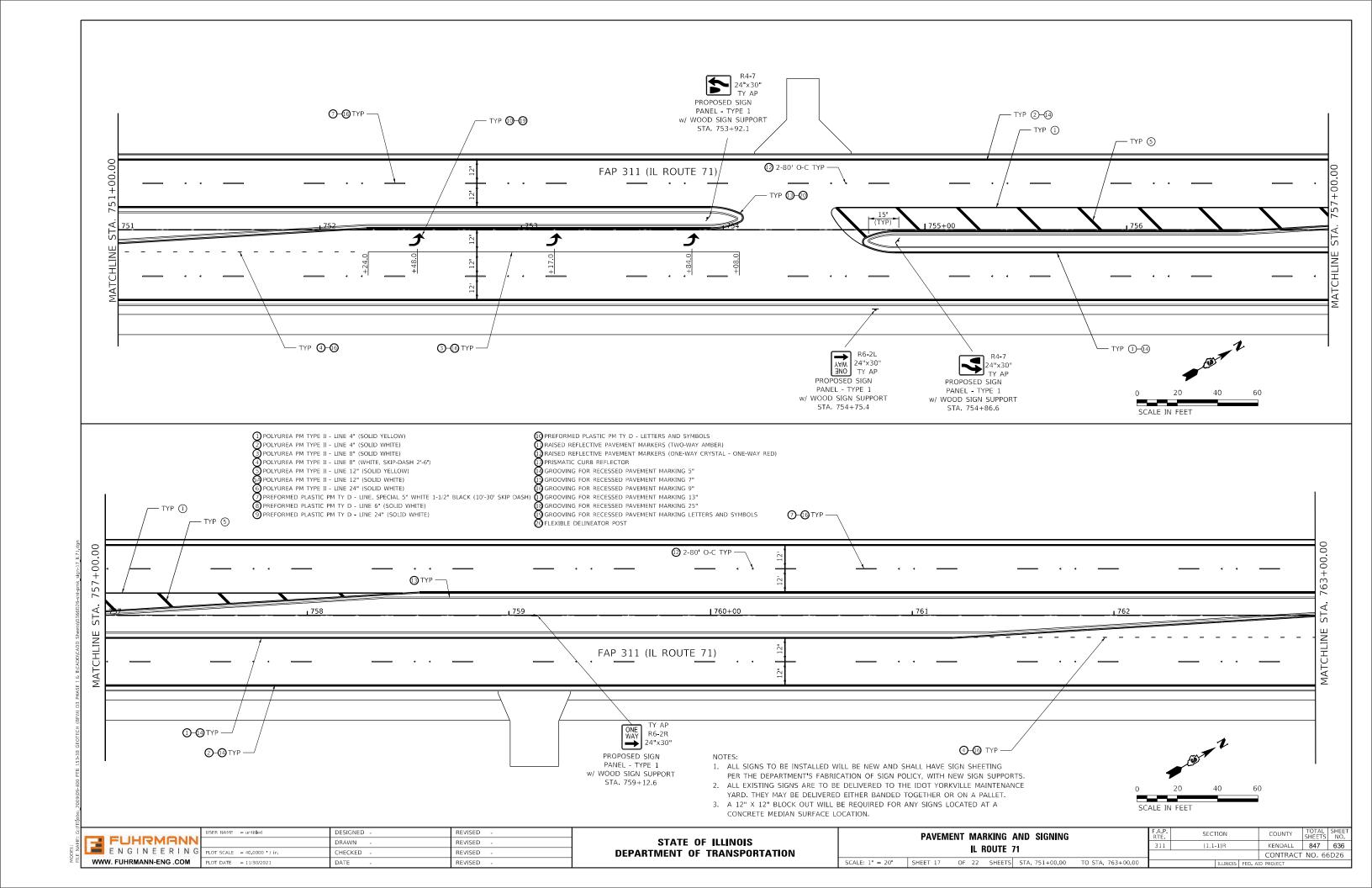


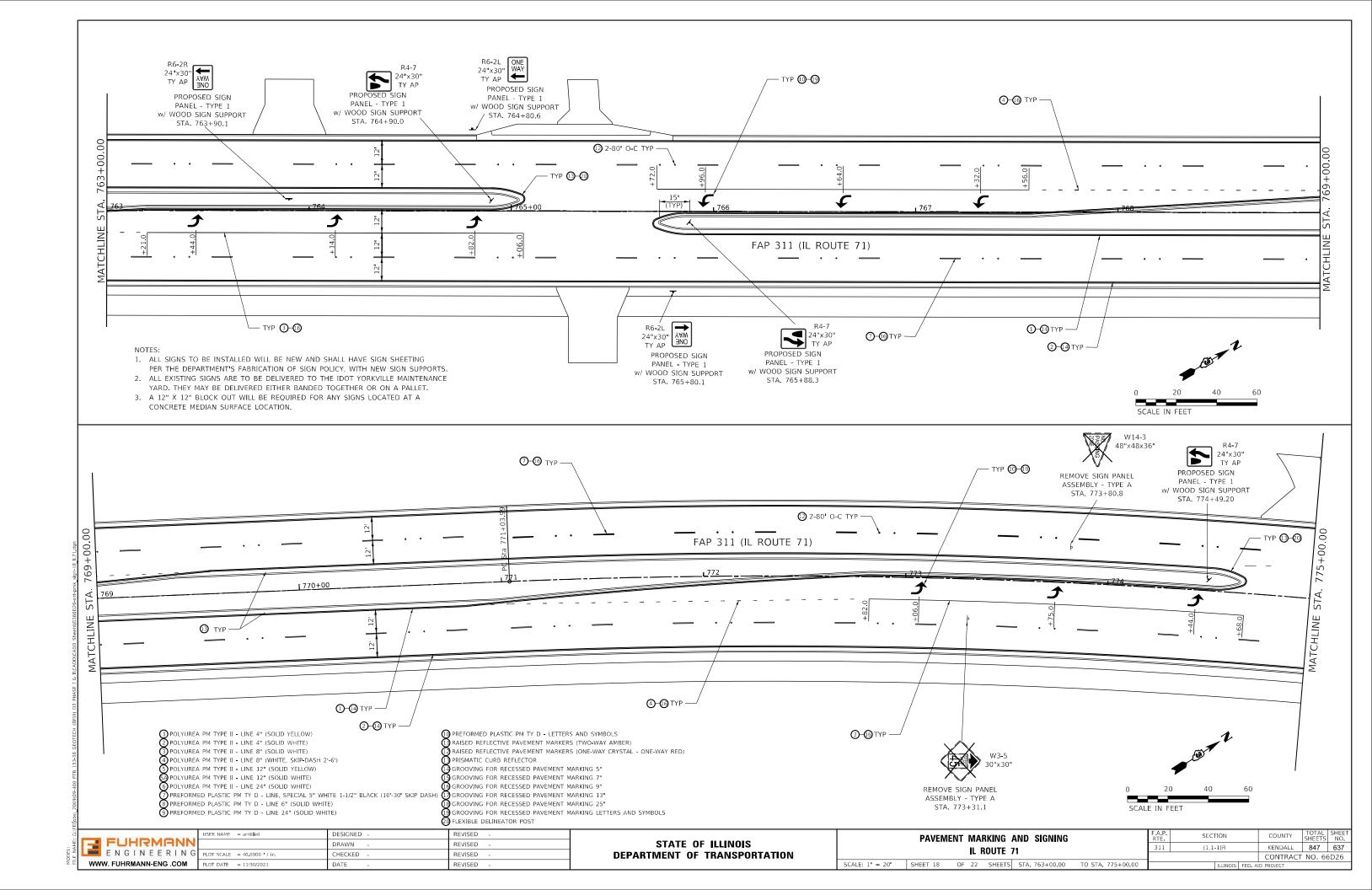


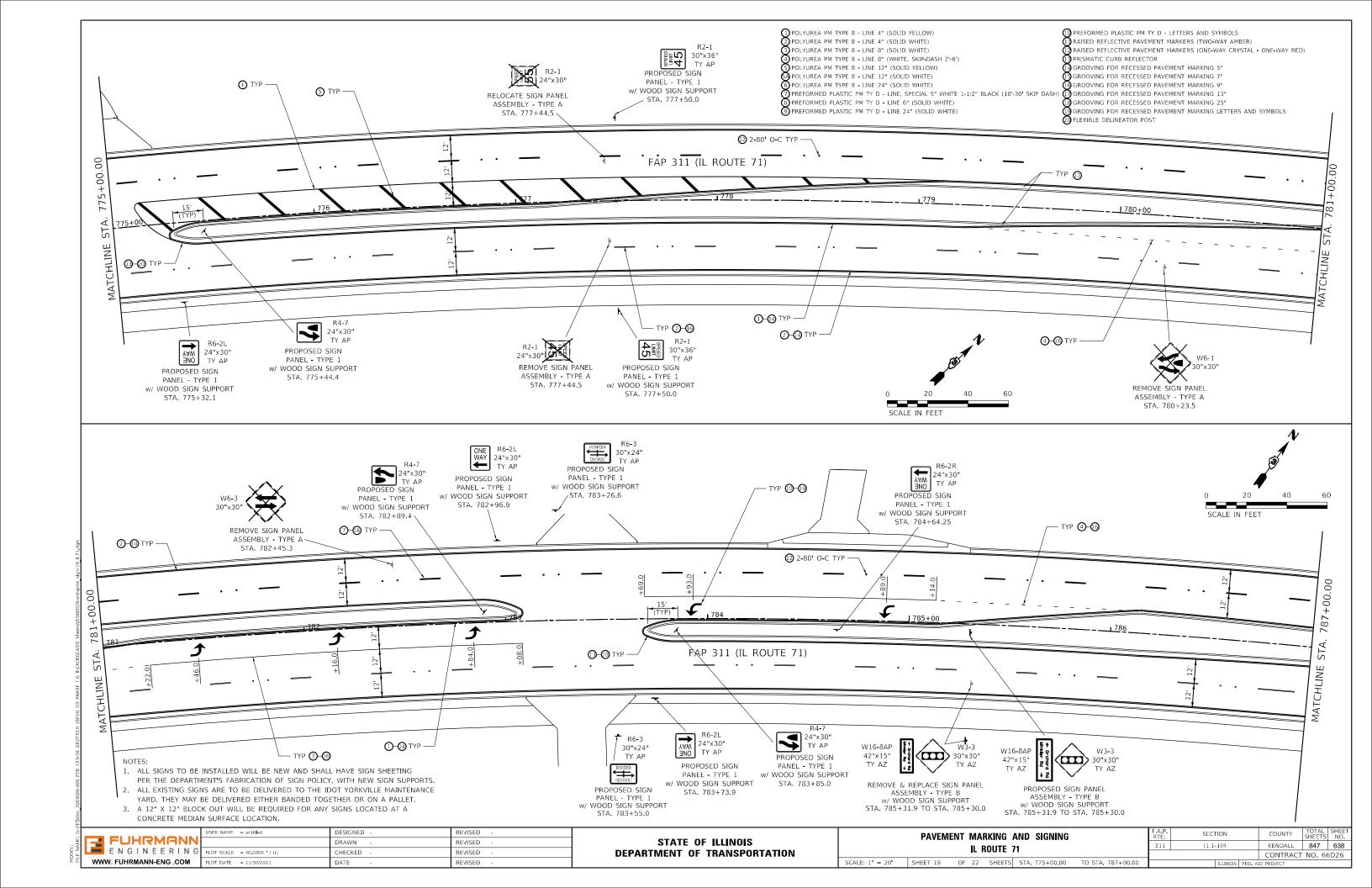


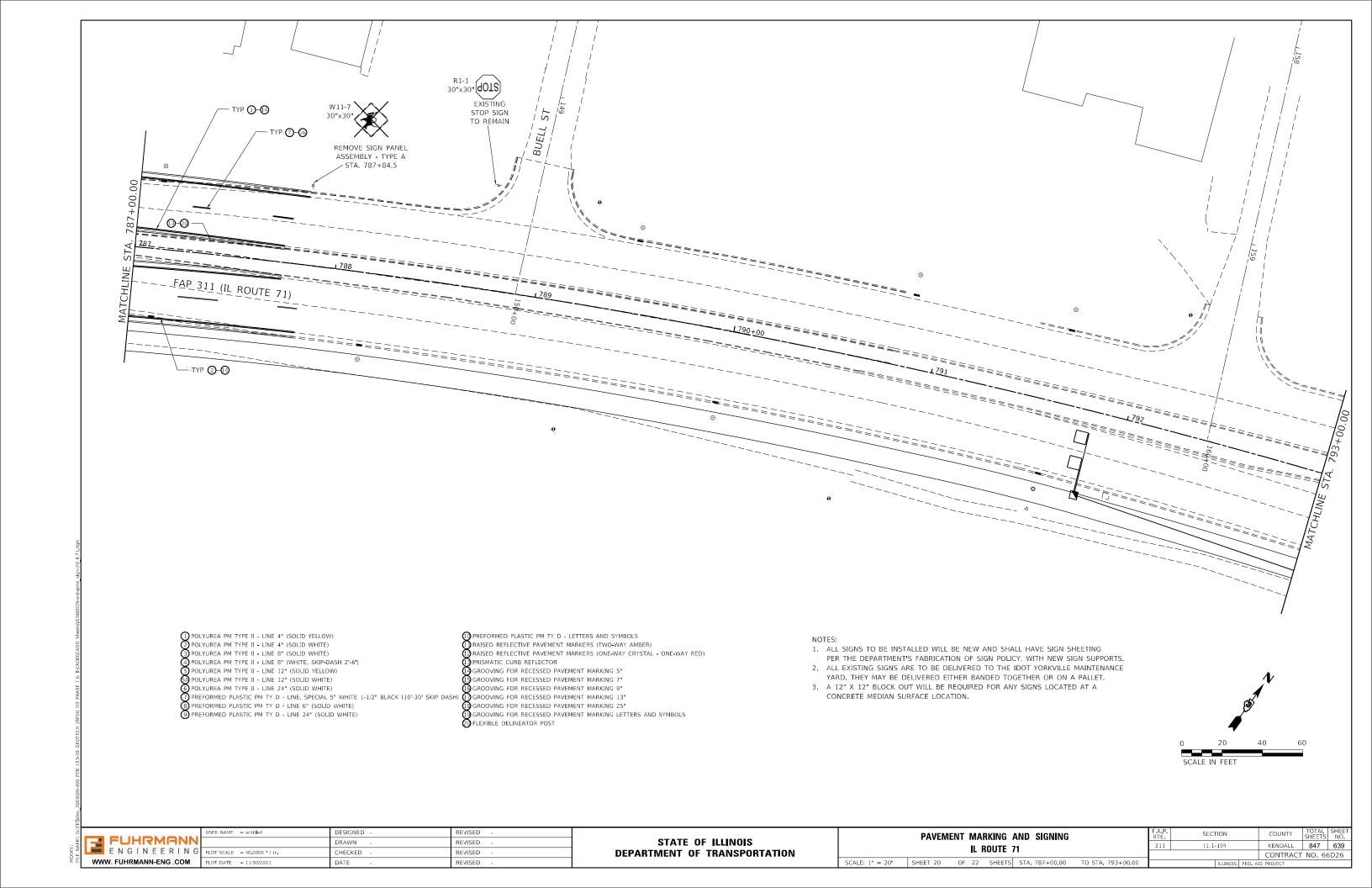


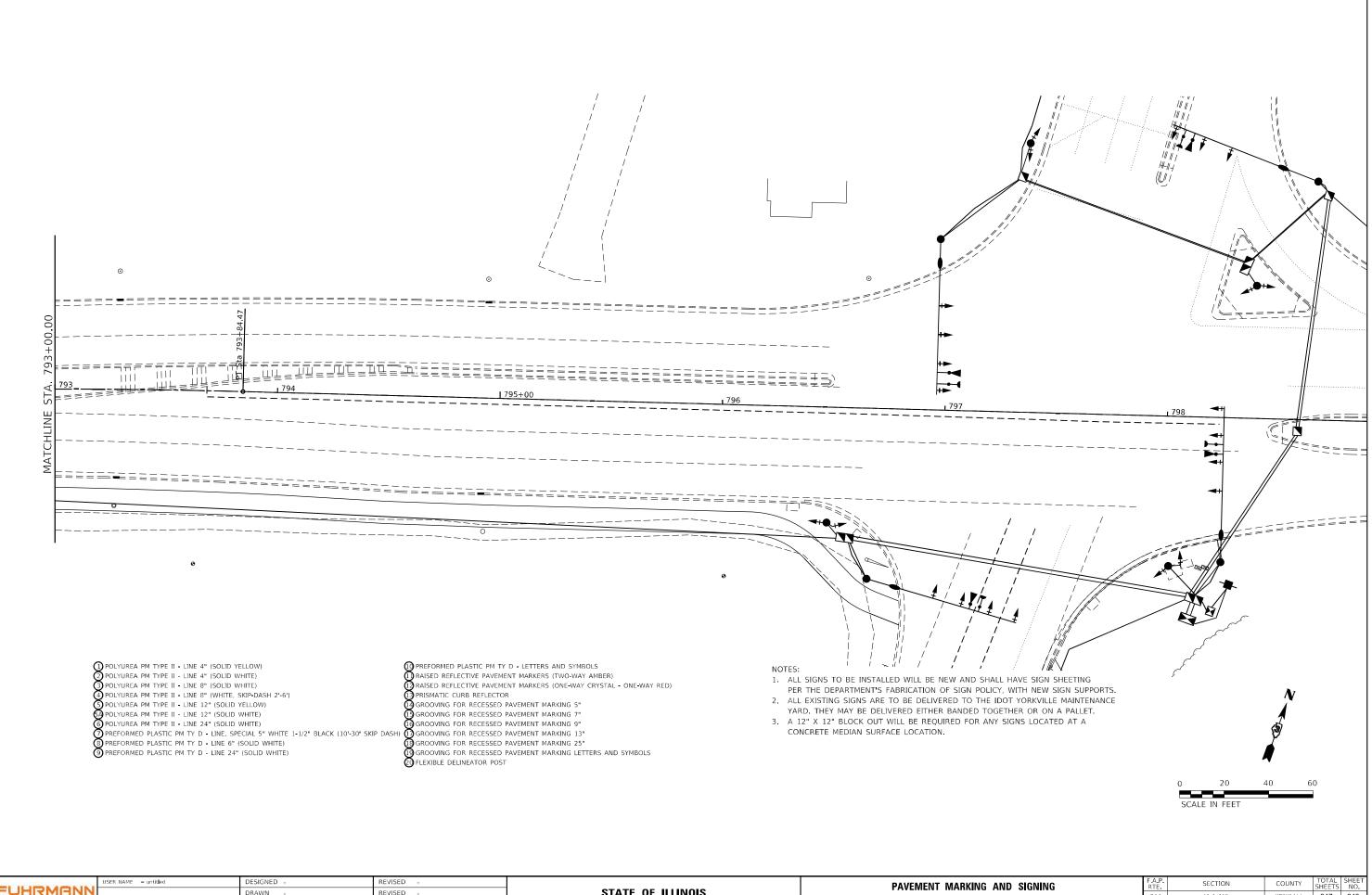












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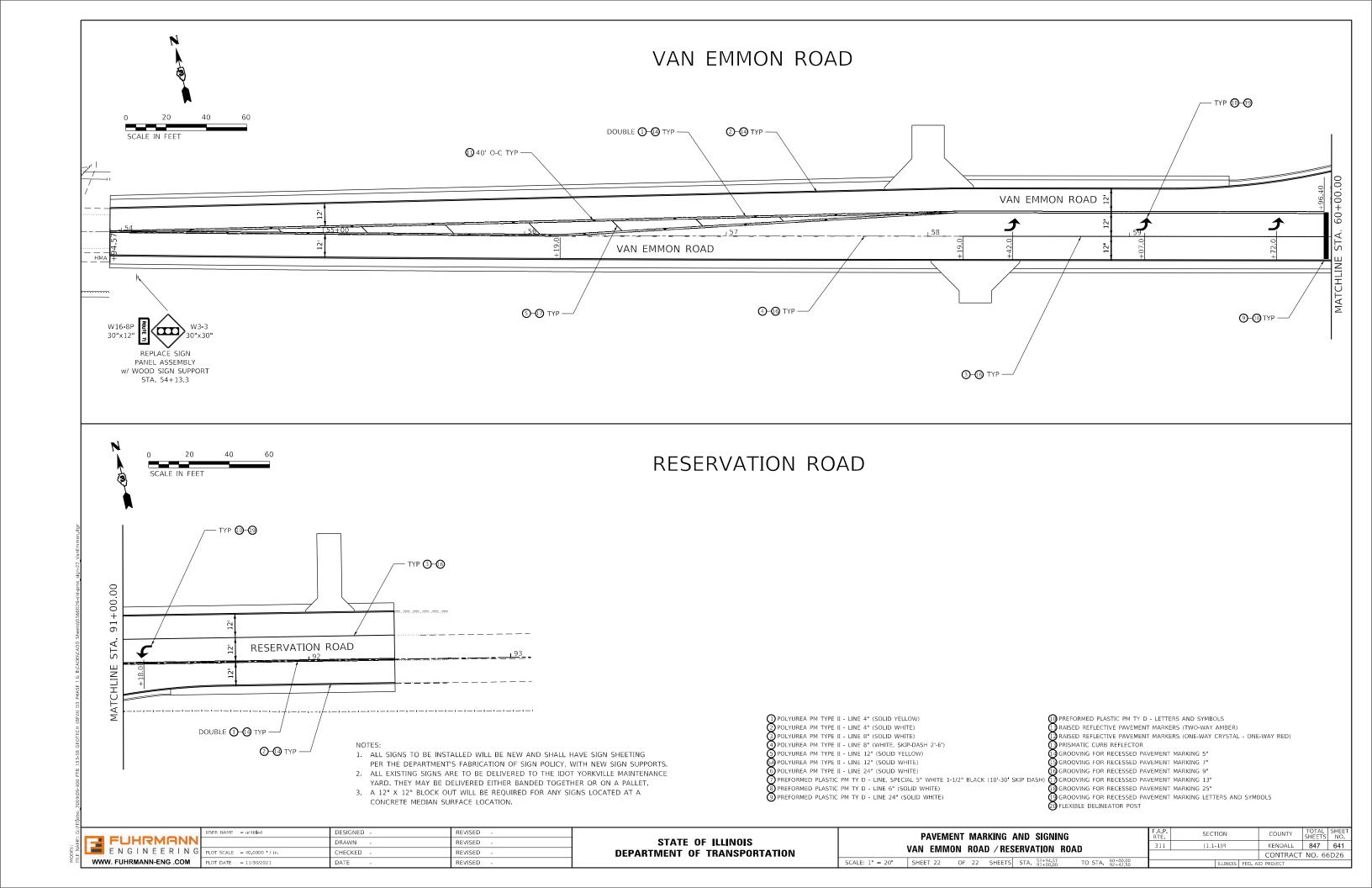
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 PLOT SCALE
 = 40,0000 '/ in.
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 PLOT DATE
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



- 2. THE TRAFFIC SIGNAL SECTION AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3 SHALL BE NOTIFIED AT (815)434-8506 A MINIMUM OF 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNITS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. (J.U.L.I.E. (800)892-0123).
- 4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE POSSIBLE PRESENCE OF CITY OF YORKVILLE-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE CITY OF YORKVILLE TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE CITY IS A MEMBER OF JULLIE.
- 5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE POSSIBLE PRESENCE OF YORKVILLE-BRISTOL SANITARY DISTRICT-OWNED UNDERGROUND SANITARY SEWER WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE DISTRICT TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE SANITARY DISTRICT IS NOT A MEMBER OF J.U.L.I.E.
- 6. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815)434-8417 TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF J.U.L.I.E.
- 7. ALL DAMAGE TO CITY OF YORKVILLE, YORKVILLE-BRISTOL SANITARY DISTRICT, OR DEPARTMENT OWNED UNDERGROUND FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRICAL CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.
- THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK.
- 10. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS AND LIGHTING. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY PRIOR TO BEGINNING WORK TO OBTAIN THE UTILITY COMPANY'S REQUIREMENTS FOR THE SERVICE INSTALLATION
- 12. THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNAL IS TURNED ON. THIS COST SHALL BE INCLUDED IN THE COST OF THE TRAFFIC SIGNAL CONTROLLER PAY ITEM.
- 13. THE MAST ARMS SHALL BE LOCATED A MINIMUM OF 6' FROM THE FACE OF CURB OR A MINIMUM 18' FROM THE EDGE OF PAVEMENT TO THE FACE OF FOUNDATION WHERE THERE IS NO CURB, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SIGNAL POLE LOCATIONS SHALL NOT INTERFERE WITH SIDEWALK OR SHARED-USE PATH.
- 14. TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
- 15. ALL CONDUIT IN TRENCH SHALL BE P.V.C.. ALL CONDUIT PUSHED MAY BE P.V.C. OR GALVANIZED STEEL. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.
- 16. A $\frac{1}{4}$ " DIAMETER CONTINUOUS RODENT RESISTANT NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER. THIS COST SHALL BE INCLUDED IN THE COST OF THE CONDUIT PAY ITEMS.
- 17. THE PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE FURNISHED WITH A MANUAL CONTROL SWITCH AND MANUAL CONTROL CORD WITHIN THE POLICE DOOR COMPARTMENT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTROLLER CABINET PAY ITEM
- 18. THE SURGE PROTECTOR IN THE CONTROLLER CABINET SHALL HAVE AN INDICATOR LIGHT.
- 19. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT A GREATER THAN 2' MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

GENERAL NOTES FOR TRAFFIC SIGNALS

- 20. ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER AND MAINTAIN A MINIMUM 16.5' CLEARANCE FROM THE HIGHEST POINT OF THE ROADWAY.
- 21. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
- 22. DOUBLE FUSE HOLDERS AND SURGE ARRESTORS ARE TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR IN THE BASE OF THE COMBINATION MAST ARM, WHICH SHALL BE INCLUDED IN THE LIGHT FIXTURE PAY ITEM. THE LIGHT FIXTURE ON THE COMBINATION MAST ARM SHALL BE ATTACHED TO A 15' ARM UNLESS SPECIFICALLY STATED OTHERWISE ELSEWHERE IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 23. BACKPLATES SHALL BE POLYCARBONATE, LOUVERED FORMED BACKPLATES WITH FLUORESCENT YELLOW SHEETING.
- 24. THE DOUBLE HANDHOLE SHALL BE FURNISHED WITH RECESSED, INTEGRAL, HINGED LIDS.
- 25. ALL THREADS OF BOLTS USED IN THE ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY, ALL MAST ARM POLE BASES SHALL BE PROTECTED BY A STAINLESS STEEL MESH SCREENING AROUND THE BASEBOLTS TO PREVENT RODENT ENTRY. THE MESH SHALL BE SECURED TO THE BASE BY STAINLESS STEEL BANDING WHICH IS INCLUDED IN THE INDIVIDUAL MAST ARM ASSEMBLY PAY ITEM.
- 26. THE CONTROLLER CABINET SHALL BE PLACED SO THAT A TECHNICIAN MAY SEE THE INTERSECTION OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET. THE BOTTOM OF THE CONTROLLER CABINET SHALL BE A MINIMUM OF 1' ABOVE THE NEAREST HANDHOLE GRADE.
- 27. THE ELEVATION OF THE TOP OF THE DOUBLE HANDHOLE SHALL BE LESS THAN THE ELEVATION OF THE TOP OF THE CONTROLLER FOUNDATION. THE DOUBLE HANDHOLES INSTALLED CLOSE TO THE ROADWAY SHALL OPEN UP TOWARDS THE ROADWAY SO THE ELECTRICAL MAINTAINER IS NOT EXPOSED TO TRAFFIC WHEN WORKING.
- 28. SIGN PANELS, SIGN PANEL ASSEMBLIES, AND LIGHTING UNITS, REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE YORKVILLE PUBLIC WORKS YARD AT 610 TOWER LANE.
- 29. ALL TRAFFIC SIGNALS SHALL HAVE 12-INCH SINGLE LED LENSES.
- 30. ALL TRAFFIC SIGNAL HEADS SHALL BE 12-INCH POLYCARBONATE.
- 31. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS
- 32. THE CONTRACTOR SHALL PROVIDE 3 FEET OF SLACK CABLE IN EACH TRAFFIC SIGNAL STRUCTURE, MAST ARM, POST, CONTROLLER, AND HANDHOLES. THE SLACK, WHICH IS IN ADDITION TO THE VERTICAL LENGTH OF CABLE DEFINED IN THE SPECIFICATIONS, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR EACH CABLE. THESE REQUIREMENTS SHALL BE IN ADDITION TO THE EXTRA CABLE REQUIREMENTS AS SPECIFIED IN SECTIONS 871 AND 873 OF THE STANDARD SPECIFICATIONS.
- 33. THE DOUBLE HANDHOLE SHALL HAVE A 13 FEET OF SLACK IN EACH CABLE NEATLY WOUND ON THE HOOKS. THE CABLE SHALL BE PAID FOR AT ITS INDIVIDUAL UNIT PRICE.
- 34. ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED. CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.
- 35. THE CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR.
- 36. ALL TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN HANDHOLES AND JUNCTION BOXES WILL NOT BE ALLOWED.
- 37. ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL HAVE POLYCARBONATE BLACK HOUSING AND BLACK BRACKETS.
- 38. ALL UNINTERRUPTABLE POWER SUPPLIES SHALL BE EQUIPPED WITH ALPHA GUARD MONITORS.
- 39. ALL GROUNDING MATERIALS FOR THE TRAFFIC SIGNAL CONCRETE FOUNDATIONS SHALL REFER TO SECTION 806 OF THE STANDARD SPECIFICATIONS.
- 40. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED WITH SEED OR SOD TO THE SATISFACTION OF THE ENGINEER. SEEDING OR SODDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.
- 41. THE FIBER OPTIC CABLE SHALL BE LABELED WITH DIRECTION AND ASSIGNMENT NUMBER.
- 42. ALL WORK PERFORMED RELATIVE TO THIS IMPROVEMENT SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF O.S.H.A.
- 43. THE QUANTITIES PROVIDED IN THE PLANS ARE INTENDED AS A GUIDE FOR THE CONTRACTOR IN DETERMINING THE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL MATERIAL QUANTITIES AND EVALUATING SITE CONDITIONS. NO CLAIMS FOR EXTRA WORK WILL BE AWARDED UNLESS ORDERED IN WRITING BY THE ENGINEER.

- 44. ALL TRAFFIC SIGNAL CONTROL EQUIPMENT SHALL BE ECONOLITE.
- 45. ALL CONDUIT IN TRENCH SHALL BE P.V.C., GALVANIZED STEEL, OR SCHEDULE 80 AND SHALL BE USED UNDER PAVEMENT, STABILIZED SHOULDER, PAVED MEDIAN, PAVED DRIVEWAY, CURB AND/OR GUTTER, AND SIDEWALK. CONDUIT ATTACHED TO STRUCTURE SHALL BE GALVANIZED STEEL.
- 46. ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL HAVE POLYCARBONATE BLACK HOUSING AND STEEL OR ALUMINUM BRACKETS.
- 47. ALL TRAFFIC SIGNAL CONTROLLERS SHALL INCLUDE NTCIP AND THE VIDEO DETECTION SHALL USE VIDEO G.
- 48. HANDHOLES SHALL OPEN UP TOWARDS THE ROADWAY SO THE ELECTRICAL MAINTAINER IS NOT EXPOSED TO TRAFFIC WHILE WORKING.

QUIGG ENGINEERING INC

USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -

SCALE: NONE

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GENERAL NOTES FOR TEMPORARY TRAFFIC SIGNALS

- 1. THE CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT WITH RESPECT TO THE SPAN WIRE MOUNTED TRAFFIC SIGNAL INSTALLATION. THIS SHALL INCLUDE ALL CABLES, SIGNAL AND PEDESTRIAN HEADS, CONDUIT, PUSH-BUTTONS, CONTROLLER AND CABINET AND ALL OTHER PERIPHERAL EQUIPMENT.
- 2. ALL CONTROL EQUIPMENT FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE STATED ON THE PLANS. ON PROJECTS WITH MULTIPLE TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, ALL CONTROLLERS SHALL BE THE SAME MANUFACTURER BRAND AND MODEL NUMBER WITH CURRENT SOFTWARE INSTALLED.
- DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER
- 4. THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AS INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER.
- 5. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED, AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- 6. THE SPAN WIRE MOUNTED TEMPORARY SIGNAL HEADS SHALL MAINTAIN A UNIFORM 18' CLEARANCE OVER THE ROADWAY.
- 7. ALL SIGNAL HEADS ON AN INDIVIDUAL SPAN WIRE SHALL BE MOUNTED SO THAT THE "RED" INDICATIONS ARE LEVEL WITH EACH OTHER.
- 8. TEMPORARY WOOD POLES SHALL BE LOCATED A MINIMUM OF 6' FROM THE FACE OF CURB OR A MINIMUM 18' FROM THE EDGE OF PAVEMENT WHERE THERE IS NO CURB. UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 9. ALL TEMPORARY WOOD POLES SHOULD BE INSTALLED SO THAT A MINIMUM OF 32 FEET OF POLE IS ABOVE THE EXISTING PAVEMENT ELEVATION ADJACENT TO THE POLE. A SUFFICIENT LENGTH OF POLE SHALL BE BURIED AND BACK GUYED TO ALLOW THE INSTALLATION TO WITHSTAND A 10 M.P.H. SUSTAINED WIND LOADING.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE WOOD POLE LOCATIONS BEFORE ORDERING TO DETERMINE IF LONGER POLES ARE REQUIRED
- 11. 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 3, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- 12. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET OR EXCEED THE REQUIREMENTS OF SECTION 857 OF THE STANDARD SPECIFICATIONS AND THE TRAFFIC SIGNAL SPECIAL PROVISIONS WITH REGARDS TO INTERNAL TIME BASE COORDINATION. PREEMPTION, AND TESTING.
- 13. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" 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 FOR STAGING AND AS DIRECTED BY THE ENGINEER. 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. TEMPORARY SIGNAL HEADS SHALL BE RELOCATED AS NECESSARY TO LINE UP WITH STAGE TRAFFIC LANES. DO NOT INSTALL HEADS THAT BLOCK OPPOSING TRAFFIC HEADS. WHEN POSSIBLE, PLACE TEMPORARY SIGNALS IN FRONT OF EXISTING TRAFFIC SIGNALS. THIS WORK WILL BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION.
- 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.
- 15. UNINTERRUPTABLE 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.
- 16. 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
- 17. ALL LABOR AND MATERIALS REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.
- 18. THE CONTRACTOR SHALL CONTACT THE SIGNAL SECTION AT IDOT 1-815-434-8506 BEFORE INSTALLING THE TEMPORARY SIGNAL.

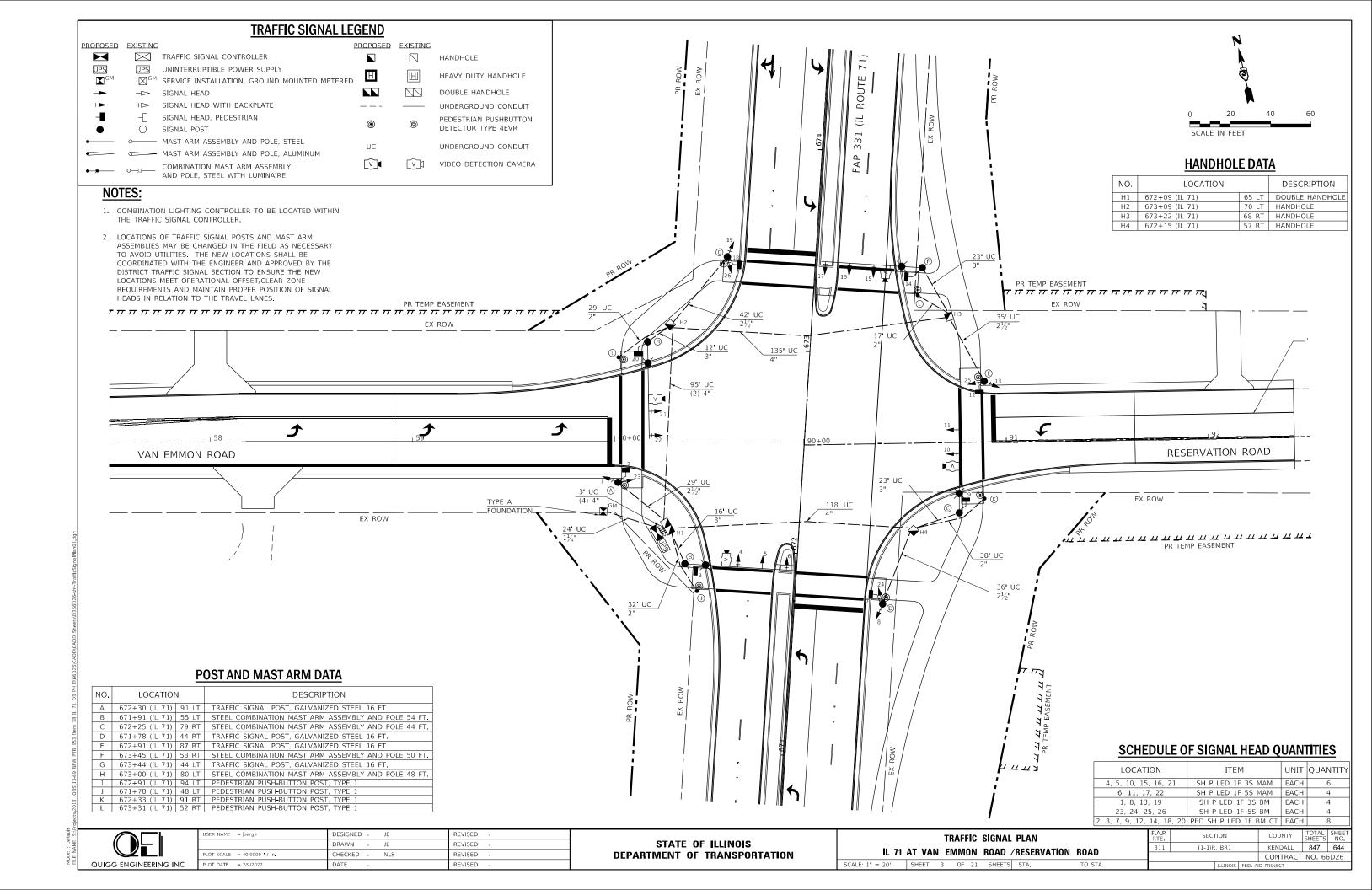


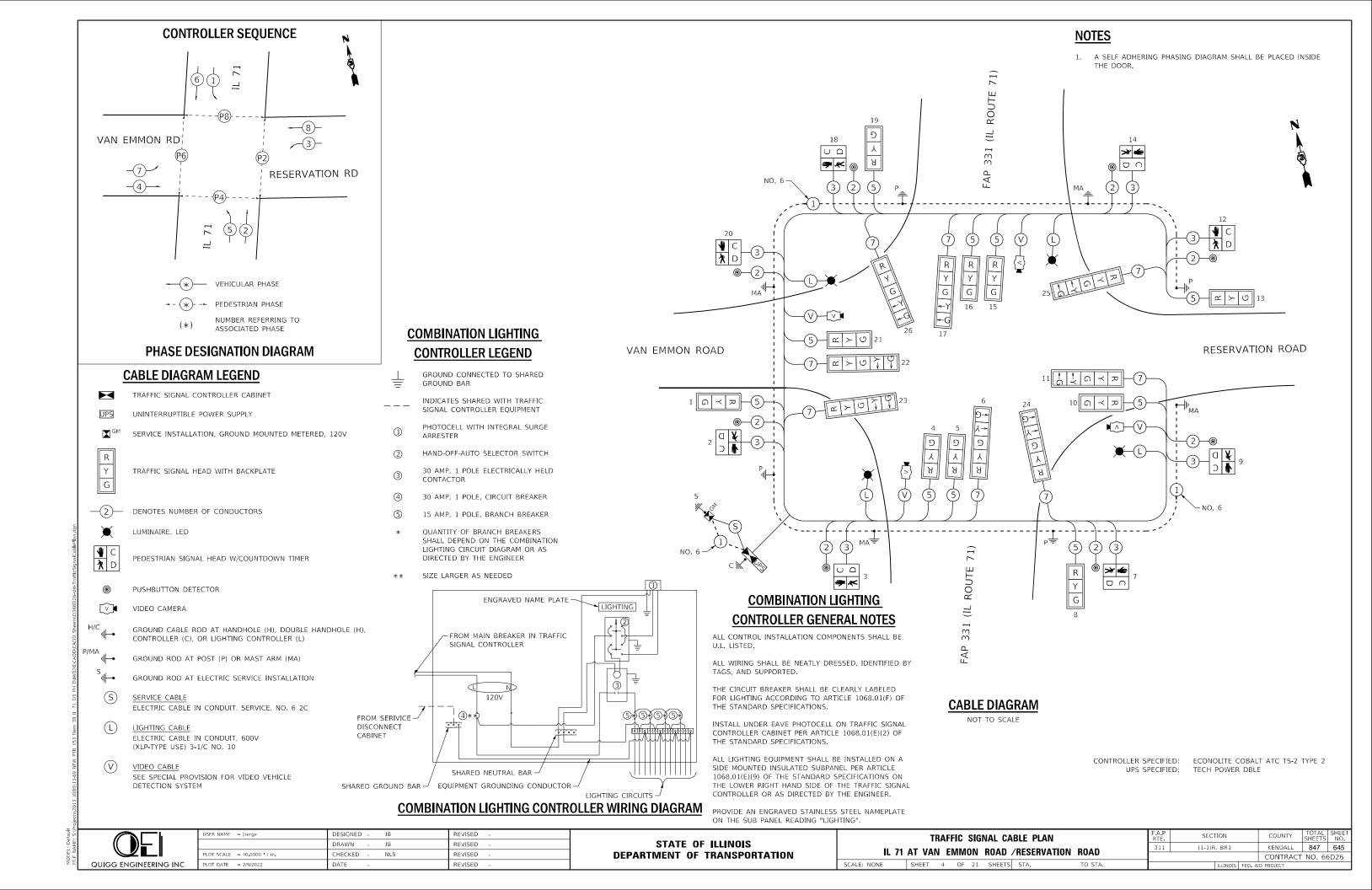
USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE: NONE

								F.A.P RTE	SEC	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEE NO.
TEI	TEMPORARY TRAFFIC SIGNAL GENERAL NOTES				311	(1-1)R	, BR1		KENDALL	847	643			
												CONTRACT	NO. 66	5D26
	CHEET	~	OF	2.1	CHEETC	CTA	TO CTA				I			





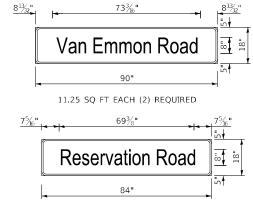
BILL OF MATERIALS - IL 71 AT VAN EMMON ROAD/RESERVATION ROAD

CODE NO.	ITEM	UNIT	QUANTITY
72000100	SIGN PANEL - TYPE 1	SQ FT	34
72000200	SIGN PANEL - TYPE 2	SQ FT	44
80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
81028180	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1 1/4" DIA.	FOOT	27
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	128
81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	152
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	86
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	465
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	3
81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	667
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	4
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1492
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1506
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2105
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1719
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	30
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	765
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
87600100	PEDESTRIAN PUSH-BUTTON POST, TYPE I	EACH	4
87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
87702990	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	15
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800415	CONCRETE FOUNDATION, THE E CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER		8
		EACH	1
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1 4
89502380	REMOVE EXISTING HANDHOLE	EACH	
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	2
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
X1400318	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC, SPECIAL	EACH	18
X8250091	COMBINATION LIGHTING CONTROLLER	EACH	1
X8410102	TEMPORARY LIGHTING SYSTEM	L SUM	1
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	1
Z0073509	PERMANENT TRAFFIC SIGNAL TIMING	EACH	1
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2

STREET NAME SIGN DETAIL



6.75 SQ FT EACH (2) REQUIRED



10.5 SQ FT EACH (2) REQUIRED

NOTES:

- 1. TYPE ZZ SHEETING REQUIRED.
- 2. WHITE LETTERING ON GREEN BACKGROUND.
- 3. ¾" WHITE BORDER.
- 4. DESIGN SERIES D.
- 5. 8" HIGH UPPERCASE, 6" HIGH LOWERCASE LETTERING.

PEDESTRIAN CROSSING SIGN

COUNT-DOWN PEDESTRIAN SIGN R10-3e TO BE USED.

0.94 SQ FT EACH, (8) REQUIRED.

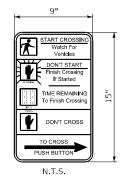
DIMENSIONS: 9" x 15" (TYP.) LEGEND AND BORDER: NON-REFLECTORIZED BLACK BACKGROUND: RETROREFLECTIVE WHITE UPRAISED HAND SYMBOL,

TIMER: RETROREFLECTIVE ORANGE ON BLACK
PEDESTRIAN SYMBOL: RETROREFLECTIVE WHITE ON BLACK

ONE SIGN SHALL BE PROVIDED FOR EACH ACCESSIBLE PEDESTRIAN SIGNAL. ORIENTATION OF DIRECTIONAL ARROWS TO BE DETERMINED BY ACCESSIBLE PEDESTRIAN SIGNAL LOCATION.

ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL CONSTRUCTION. ALL MOUNTING BOLTS SHALL BE HEX HEAD.

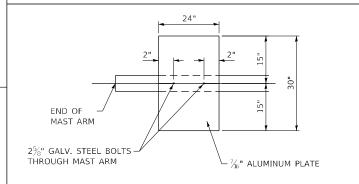
MATERIALS AND INSTALLATION OF THIS SIGN SHALL BE INCLUDED IN THE COST OF ACCESSIBLE PEDESTRIAN SIGNALS.



IL 71 AT VAN EMMON ROAD/RESERVATION ROAD ELECTRICAL LOAD CHART

IL 71	NUMBER	WATTAGE		TOTAL
INDICATION RED	10	EACH 12.0	TIME (%)	WATTAGE 60.0
YELLOW	10	32.0	25	80.0
GREEN	10	12.0	25	
			10	30.0
YELLOW ARROW	4	12.0		4.8
GREEN ARROW	4	11.0	10	4.4
PED SIGNAL - WALK	4	7.0	5	1.4
PED SIGNAL - DON'T WALK	4	7.0	95	26.6
VAN EMMON/RESERVATION		WATTAGE	BURN	TOTAL
INDICATION	NUMBER	EACH	TIME (%)	WATTAGE
RED	8	12.0	50	48.0
YELLOW	8	32.0	25	64.0
GREEN	8	12.0	25	24.0
YELLOW ARROW	4	12.0	10	4.8
GREEN ARROW	4	11.0	10	4.4
PED SIGNAL - WALK	4	7.0	5	1.4
PED SIGNAL - DON'T WALK	4	7.0	95	26.6
TRAFFIC SIGNAL CABINET		WATTAGE	BURN	TOTAL
ITEM	NUMBER	EACH	TIME (%)	WATTAGE
CONTROLLER	1	100.0	100	100.0
VIDEO VEHICLE DETECTION SYSTEM	1	150.0	100	150.0
UNINTERRUPTIBLE POWER SUPPLY	1	50.0	100	50.0
CHARLES TOWER SOTTER	-	33.0	130	30.0
			TOTAL =	680.4
			I DIAL -	000.4

AGENCY RESPONSIBLE FOR CHARGES: ILLINOIS DEPARTMENT OF TRANSPORTATION



DAMPENING PLATE DETAIL

(TOP VIEW) INCIDENTAL TO MAST ARM QUANTITY

DAMPENING DEVICE SHALL CONSIST OF A 24" x 30" TYPE I, UNPAINTED ALUMINUM SIGN STOCK MOUNTED HORIZONTALLY ON TOP OF MAST ARM WITH THE 30" LENGTH PERPENDICULAR TO THE ARM. COST OF DAMPENING DEVICE SHALL BE INCLUDED IN THE MAST ARM PAY ITEM.



R10-12 TYPE AP SHEETING REQUIRED 5.0 SQ FT EACH (4) REQUIRED

LEFT TURN CONTROL SIGN DETAIL

THIS SIGN SHALL BE LOCATED 6 TO 12 INCHES TO THE RIGHT OF THE MAST ARM MOUNTED LEFT TURN SIGNAL HEAD.

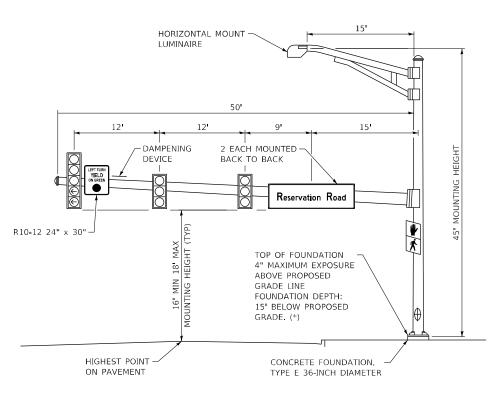


JSER NAME = dhawes	DESIGNED - JB	REVISED -	
	DRAWN - JB	REVISED -	
PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -	
PLOT DATE = 3/24/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

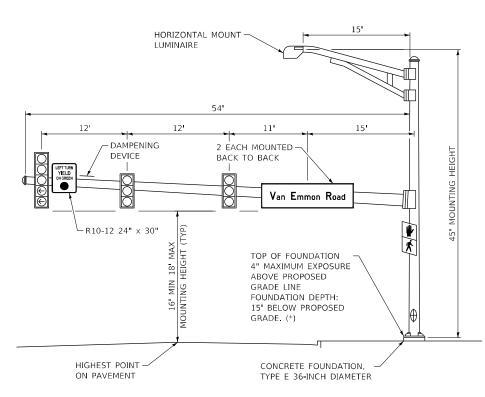
TRAFI	FIC SIGN	IAI	. DE1	ΙΑ	LS AND	BILL 0	F MATE	RIALS
		_					VATION	ROAD
E	SHEET	5	OF	21	SHEETS	STA.		TO STA.

A P TE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
311	(1-1)R, BR1		KENDALL	847	646
		CONTRACT	NO. 66	5D26	
	ILLINOIS	D PROJECT			

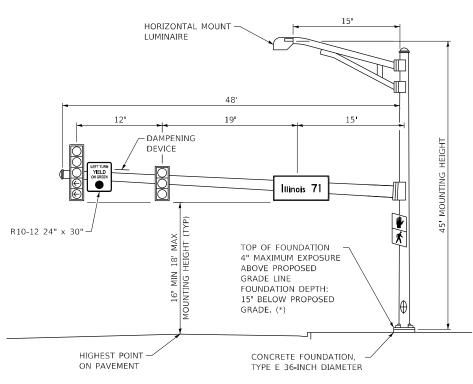


IL 71 NB (NE QUADRANT)

(*) FOUNDATION DEPTHS ARE BASED ON THE TABLE INCLUDED IN HIGHWAY STANDARD 878001 WHICH ARE DESIGNED FOR SOILS WITH AN AVERAGE UNCONFINED COMPRESSIVE STRENGTH GREATER THAN 1.0 TSF. PRIOR TO FOUNDATION INSTALLATION, THE CONTRACTOR SHALL VERIFY THE SOIL STRENGTH TO THE DEPTH OF THE FOUNDATION AT EACH PROPOSED LOCATION.



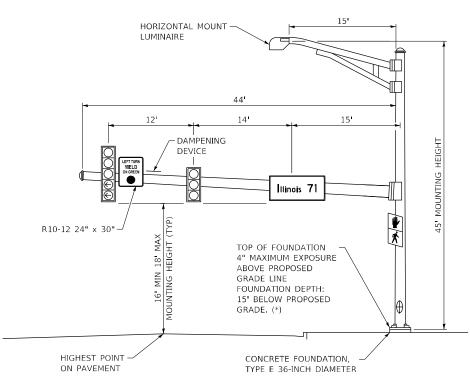
IL 71 SB (SW QUADRANT)



RESERVATION ROAD WB (NW QUADRANT)

NOTES:

- 1. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
- TOP OF FOUNDATION SHALL NOT BE EXPOSED MORE THAN 4 INCHES ABOVE THE SURROUNDING GRADE LINE IN ACCORDANCE WITH HIGHWAY STANDARD 878001.
- . TOP OF FOUNDATION SHOULD BE 2 INCHES ABOVE TOP OF CURB OR 1 FOOT ABOVE CENTERLINE OF THE ROADWAY, WHICHEVER IS HIGHER.



VAN EMMON ROAD EB (SE QUADRANT)

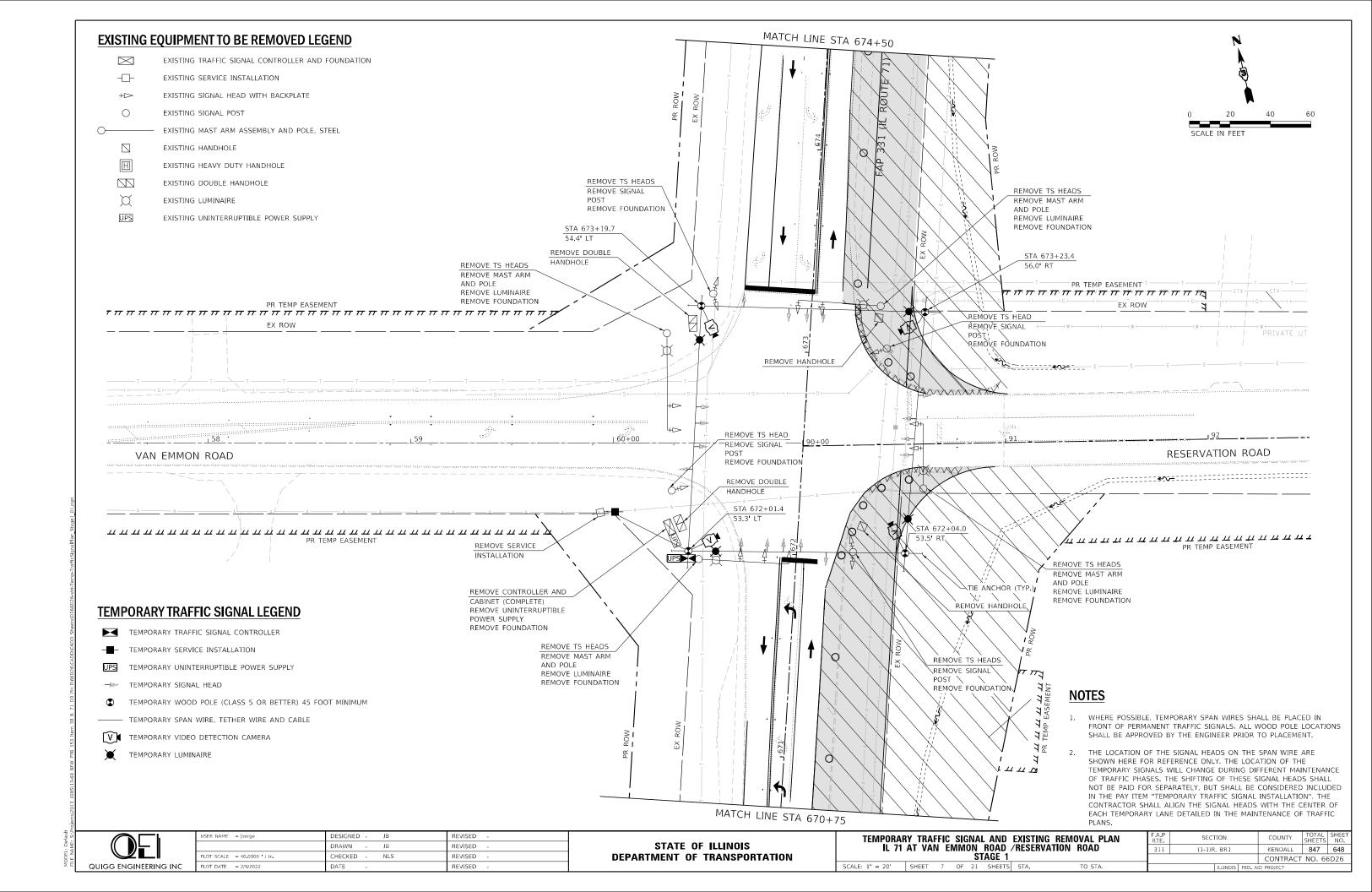


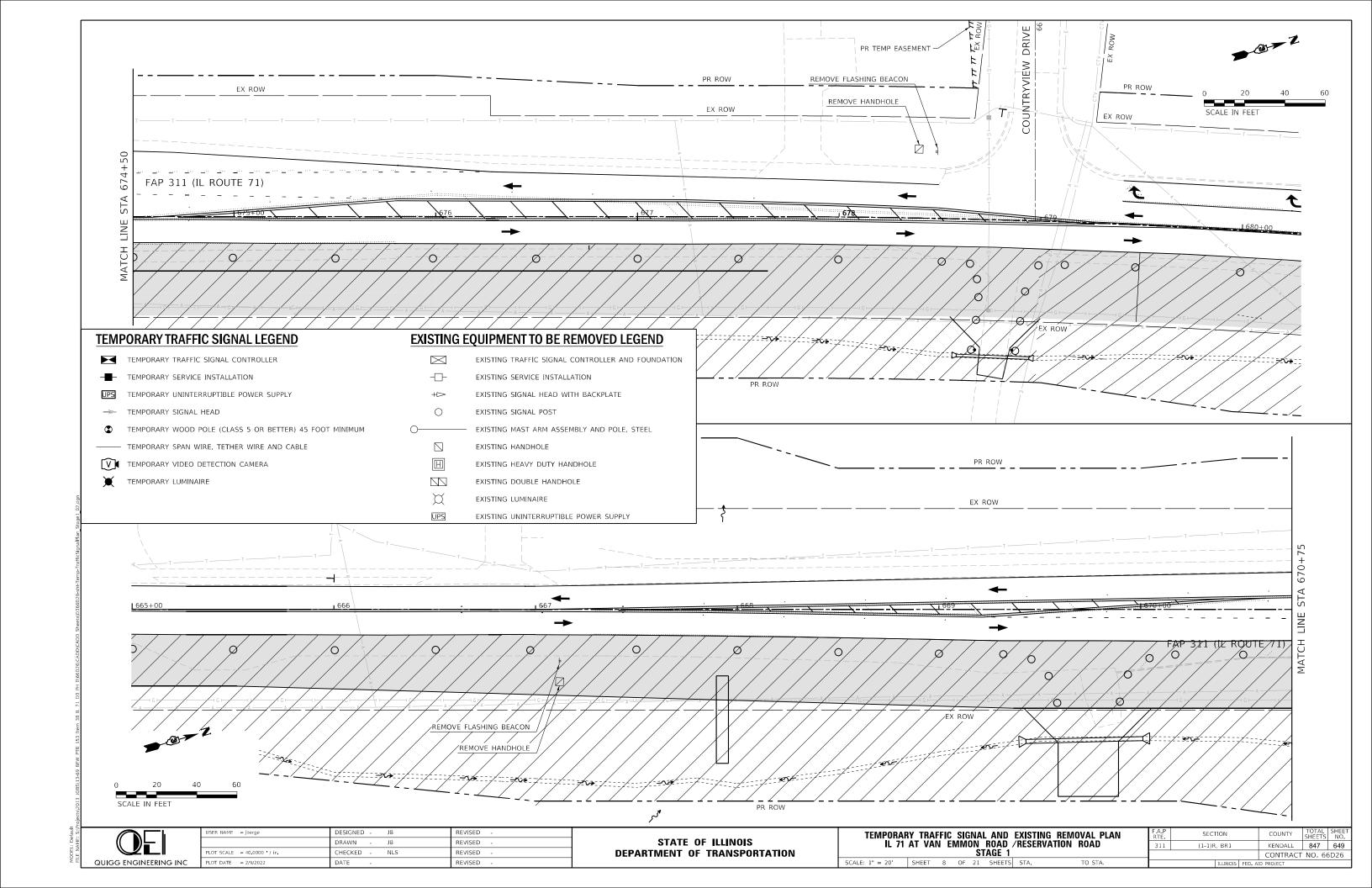
USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -

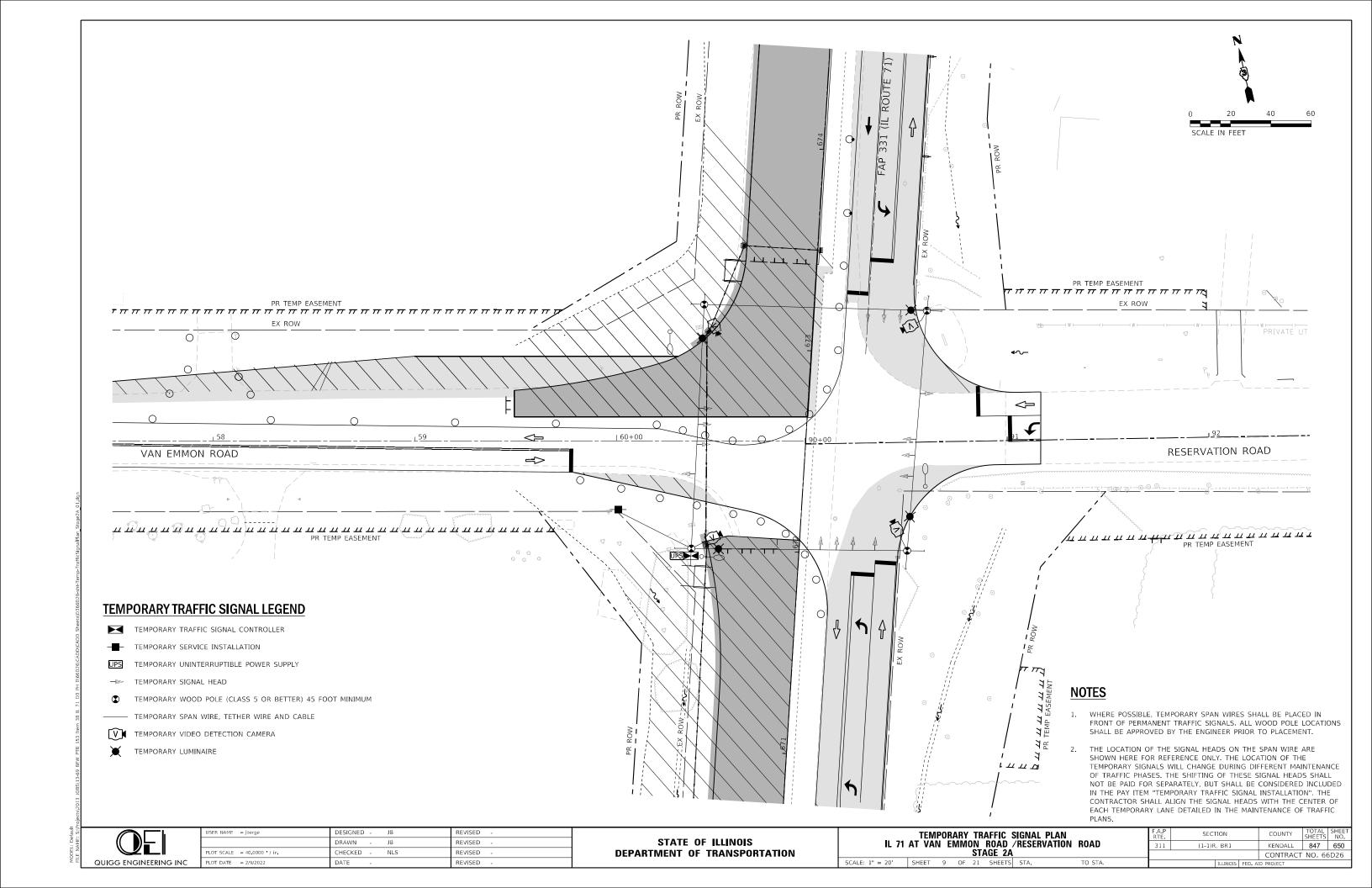
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

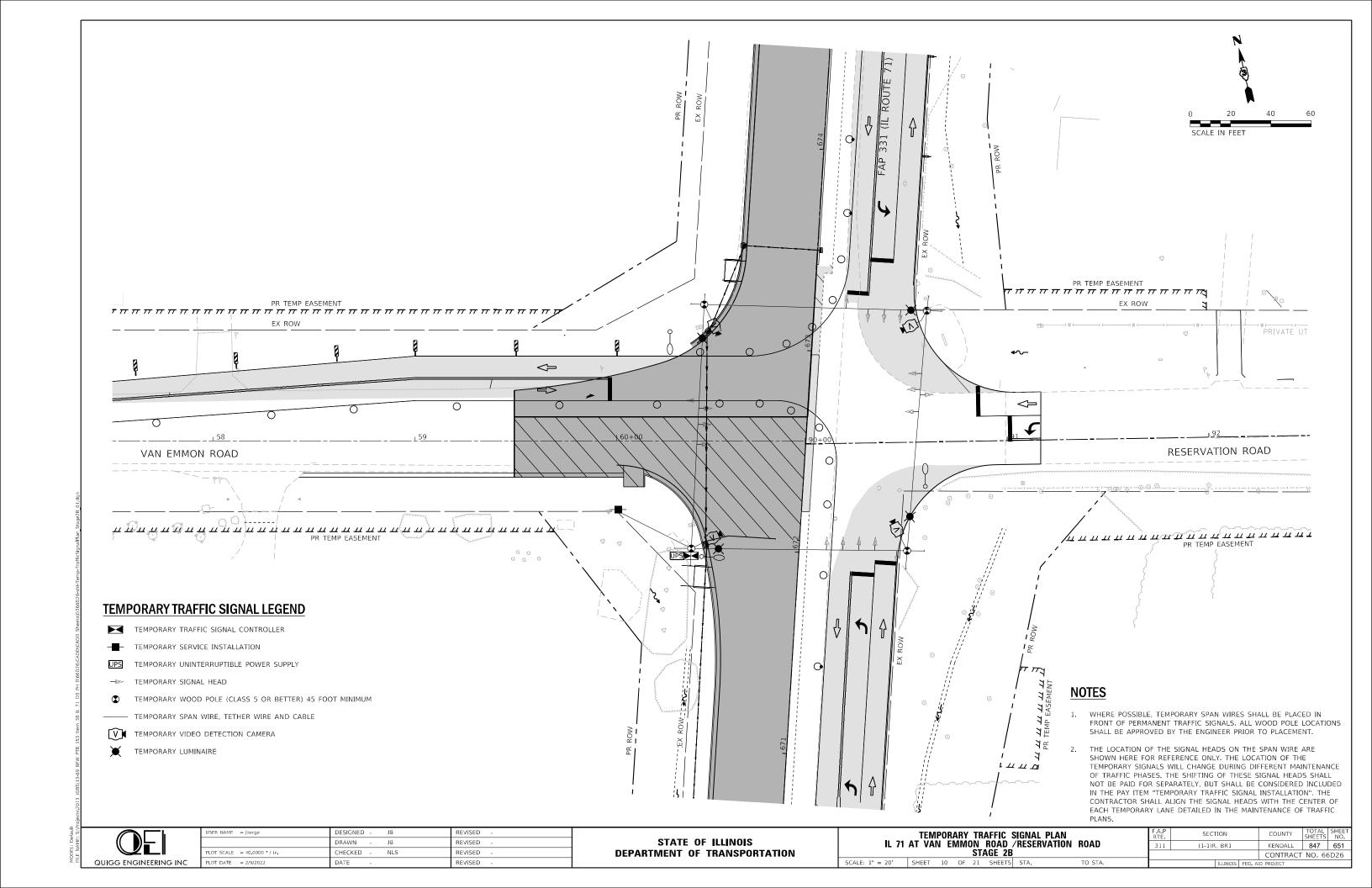
MAST ARM LOADING DIAGRAM	F.A.P RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
IL 71 AT VAN EMMON ROAD /RESERVATION ROAD	311	(1-1)R, BR1		KENDALL	847	647
IL /I AI VAIN EININIUN NUAD / NESENVATIUN NUAD				CONTRACT	NO. 66	D26
SHEET 6 OF 21 SHEETS STA. TO STA.		ILLINOIS	FED. A	ID PROJECT		

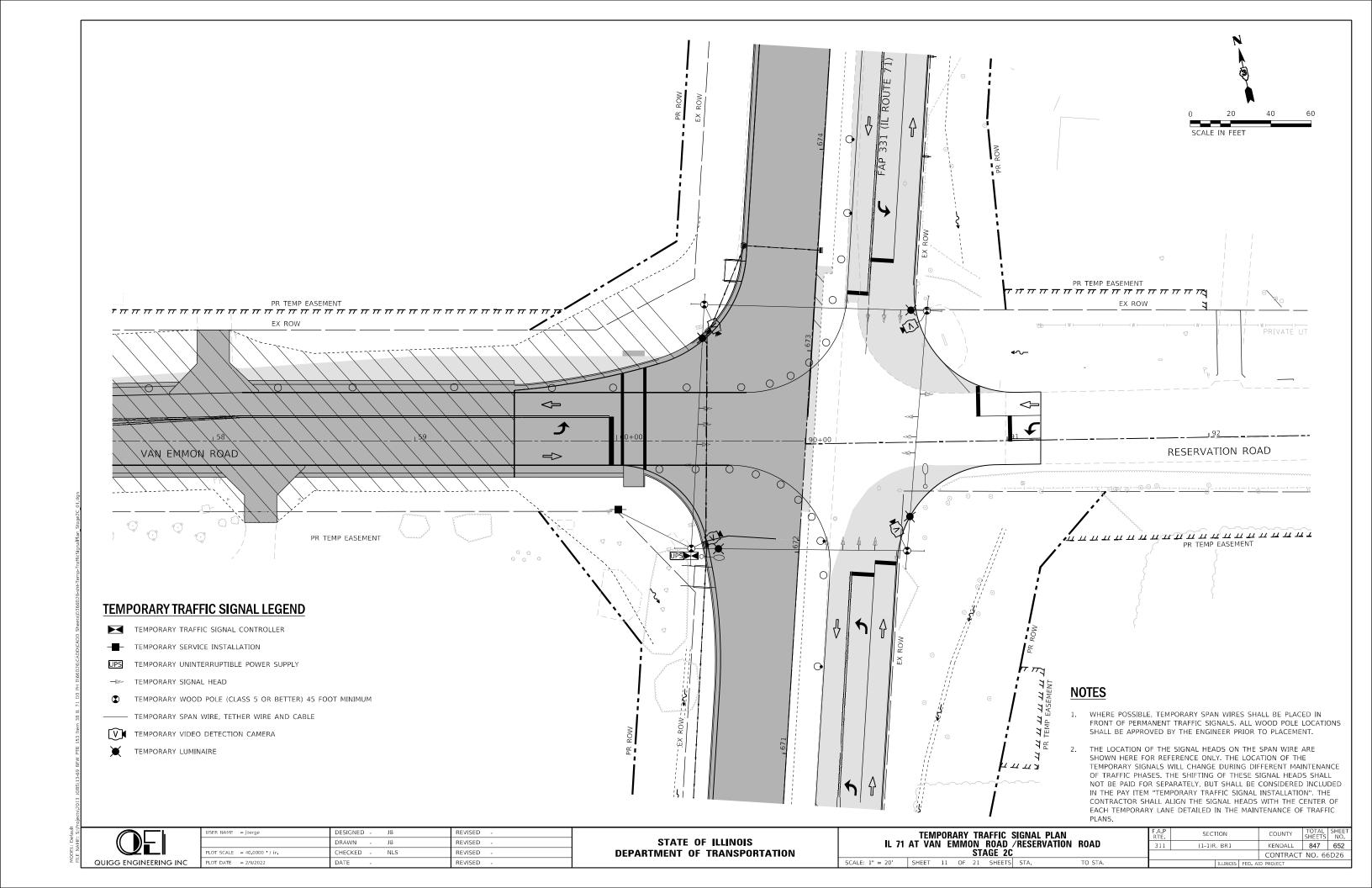
ojects/2013 JOBS\13-69 BFW PTB 153 Item 38 IL 71 D3 PH II\66D26\CADD\

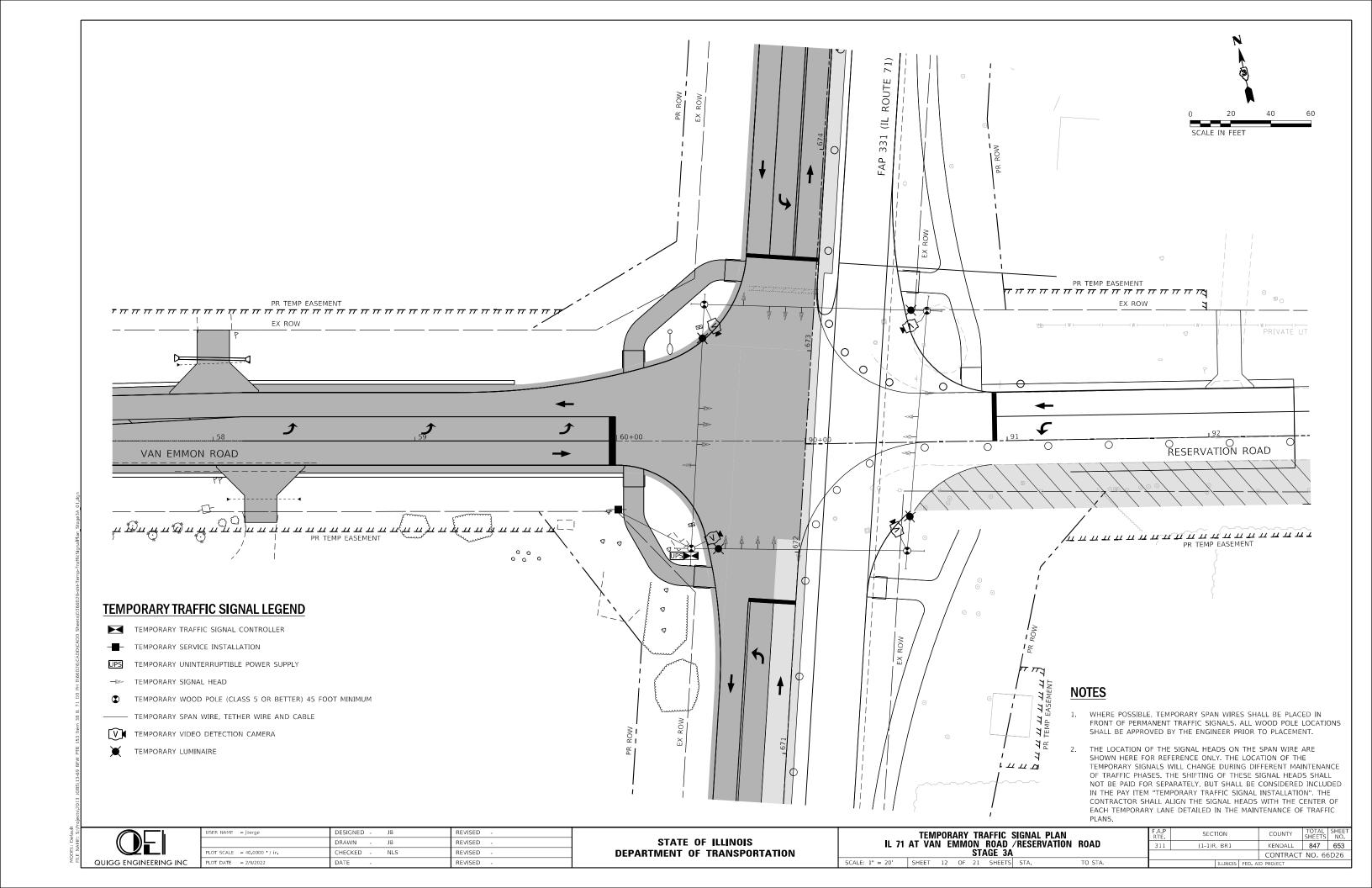


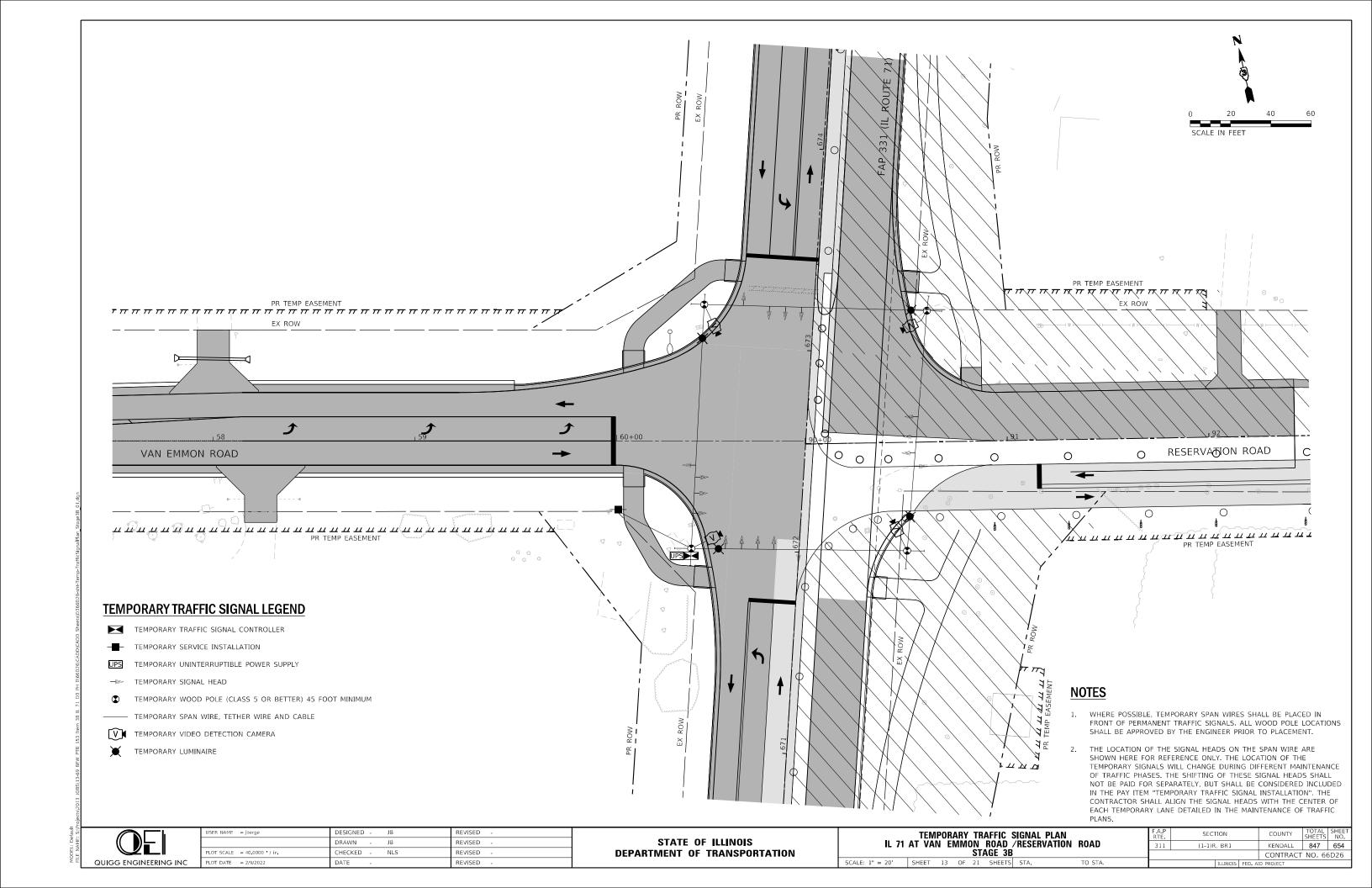


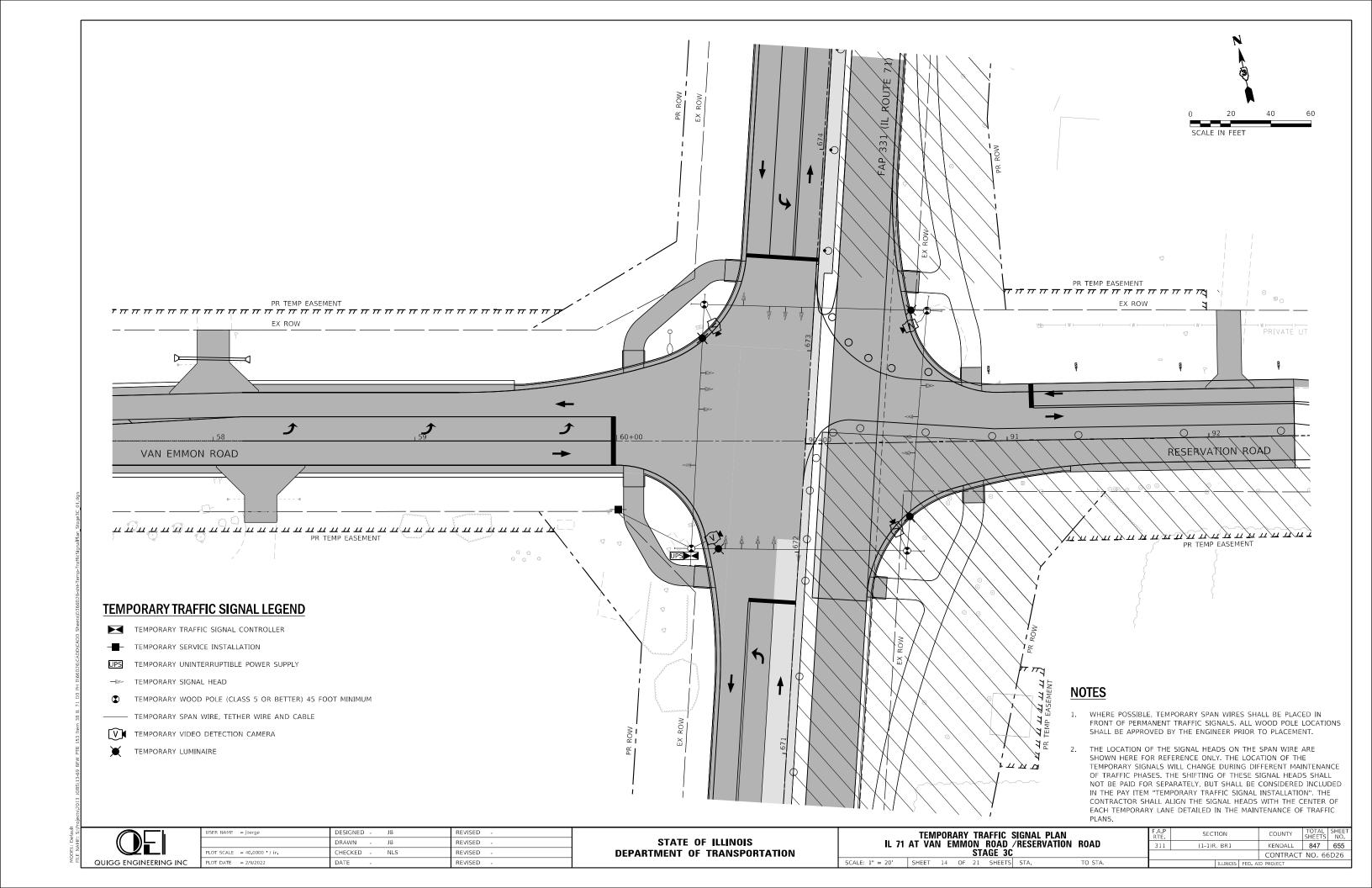


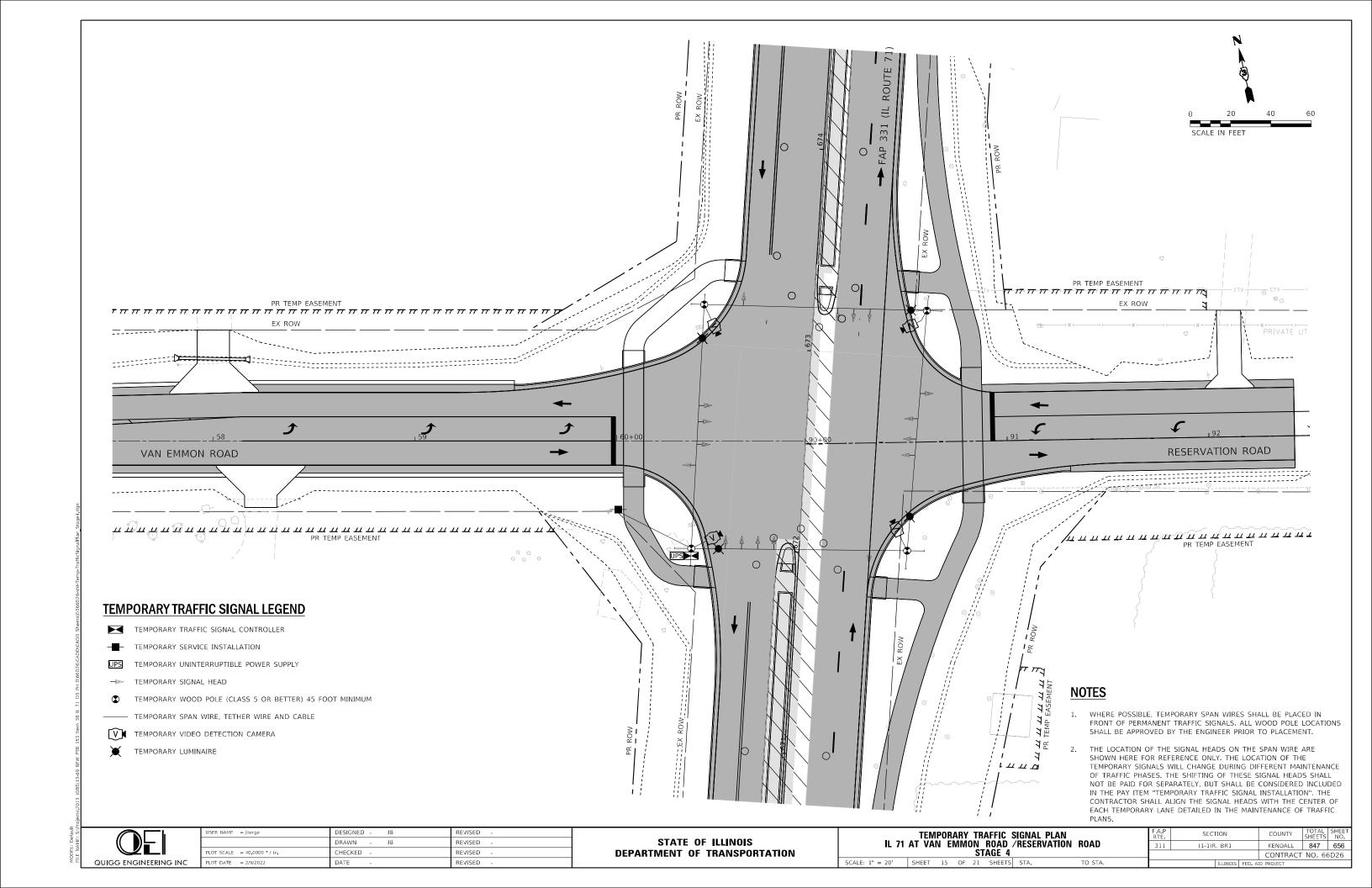














TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET

TEMPORARY UNINTERRUPTIBLE POWER SUPPLY

TEMPORARY SERVICE INSTALLATION

R
Y
TEMPORARY TRAFFIC SIGNAL
HEAD WITH BACKPLATE

—(2)— DENOTES NUMBER OF CONDUCTORS

TEMPORARY LUMINAIRE

TEMPORARY VIDEO DETECTION SYSTEM

VIDEO CAMERA CABLE
6 PAIRS, TWISTED REQUIRED
3 PAIRS CONDUCTOR FOR POWER
- 24V AC (AC+, AC-, GND)
1 PAIR DATA
1 PAIR COMPOSITE VIDEO
1 PAIR DETECTOR DATA
OVERALL SHIELD
MINIMUM 16 AWG (PAIRS)

S SERVICE CABLE ELECTRICAL CABLE IN CONDUIT, SERVICE, NO. 6 2C

LIGHTING CABLE ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND DELIVERED BY THE CONTRACTOR TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION HEADQUARTERS AT

700 E. NORRIS DRIVE, OTTAWA IL. CONTACT: JON WOODYER PHONE: (815) 434-8506

1 EACH TRAFFIC SIGNAL CABINET AND ALL COMPONENTS 4 EACH TRAFFIC SIGNAL POST A BASES AND DOORS

8 EACH HANDHOLE COVERS

4 EACH MAST ARM CAP & END CAP, HANDHOLE DOOR & NUT COVER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT 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 CONTRACT BID PRICE.

4 EACH SIGNAL HEAD, 1-FACE, 3 SECTION, MAST ARM MOUNTED, WITH BACKPLATE
5 EACH SIGNAL HEAD, 1-FACE, 5 SECTION, MAST ARM MOUNTED, WITH BACKPLATE
6 EACH SIGNAL HEAD, 1-FACE, 3 SECTION, BRACKET MOUNTED, WITH BACKPLATE
6 EACH SIGNAL HEAD, 1-FACE, 5 SECTION, BRACKET MOUNTED, WITH BACKPLATE
6 COMBINATION STEEL MAST ARM ASSEMBLY AND POLE (EXCLUDING CAP, END CAP, HANDHOLE DOOR, AND NUT COVER)
6 EACH TRAFFIC SIGNAL POST (EXCLUDING A BASE AND DOOR)

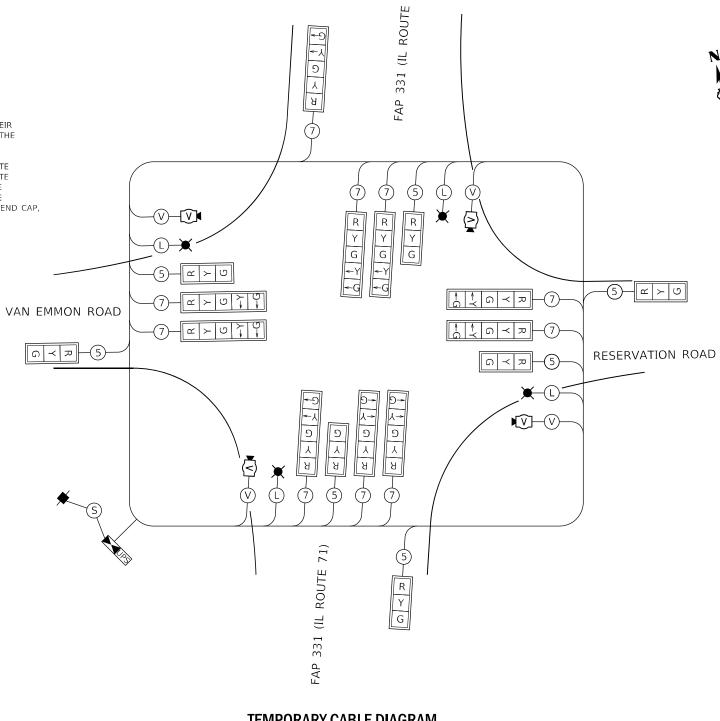
4 EACH LUMINAIRE

1 EACH SERVICE INSTALLATION

ALL CONDUIT WIRES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND DELIVERED BY THE CONTRACTOR TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION YORKVILLE MAINTENANCE YARD:

2 EACH FLASHING BEACON AND SERVICE

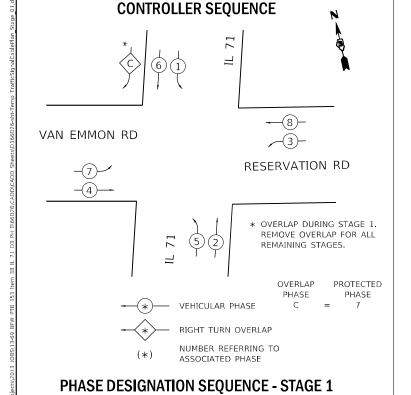


TEMPORARY CABLE DIAGRAM

NOT TO SCALE

NOTES

- DURING MAINTENANCE OF TRAFFIC STAGES THAT DO NOT REQUIRE A PROTECTED LEFT TURN PHASE OR PROTECTED RIGHT TURN PHASE, THE ASSOCIATED LEFT TURN OR RIGHT TURN ARROW SECTIONS SHALL BE DISABLED AND APPROPRIATELY BAGGED.
- 2. FOR SPLIT PHASE TIMING ON SIDE ROADS, THE YELLOW ARROW TIME SHALL BE THE SAME LENGTH OF TIME AS THE YELLOW BALL TIME.

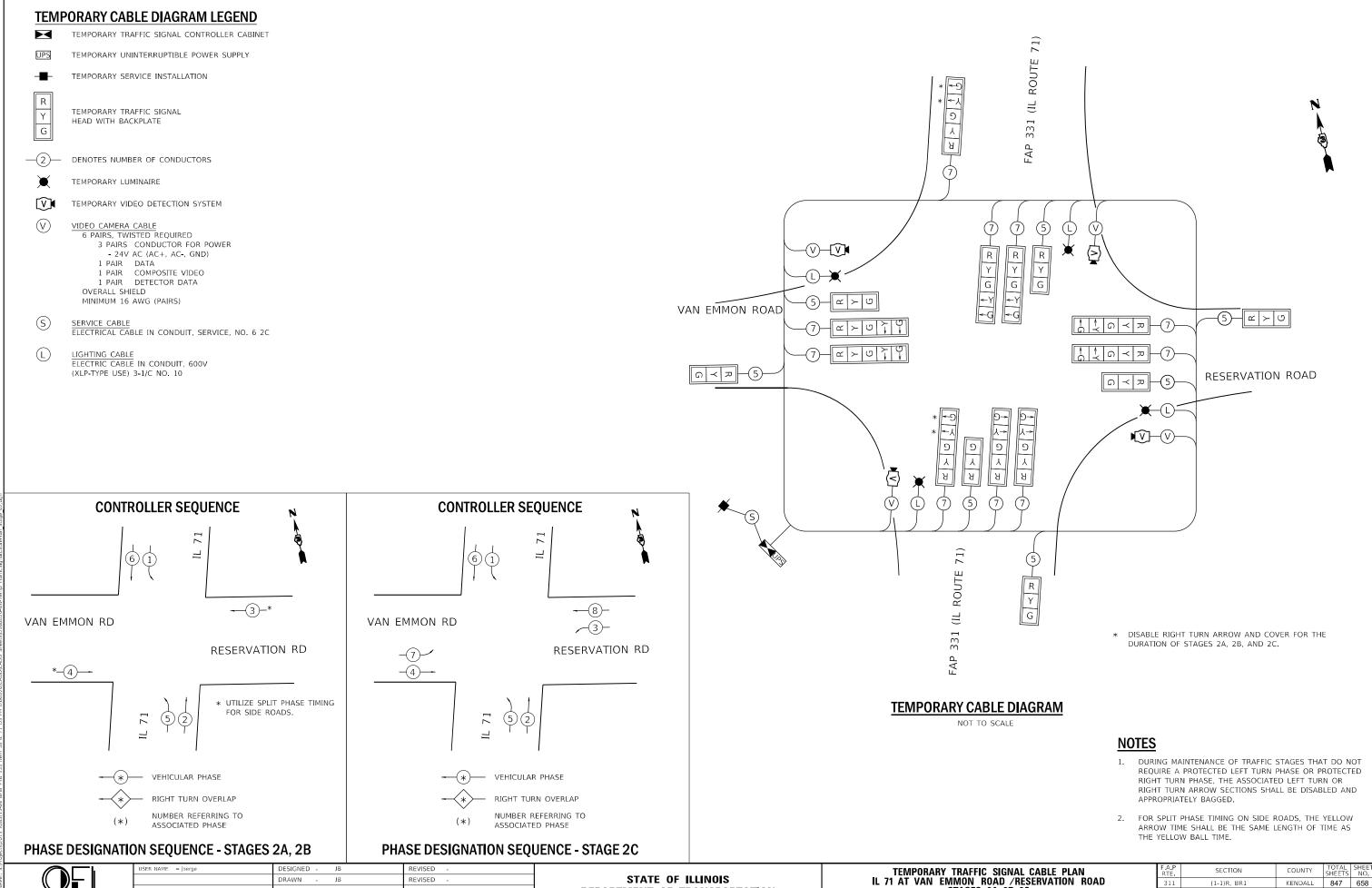


QUIGG ENGINEERING INC

	USER NAME = jberge	DESIGNED -	JB	REVISED -
		DRAWN -	JB	REVISED -
	PLOT SCALE = 40.0000 / in.	CHECKED -	NLS	REVISED -
	PLOT DATE = 2/9/2022	DATE -		REVISED -
_				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL CABLE PLAN IL 71 AT VAN EMMON ROAD /RESERVATION ROAD STAGE 1										
SCALE: NONE	SHEET	16	OF	21	SHEETS	STA.	TO STA.			



DEPARTMENT OF TRANSPORTATION

STAGES 2A, 2B, 2C

SHEET 17 OF 21 SHEETS STA.

CONTRACT NO. 66D26

MODEL: Default

QUIGG ENGINEERING INC

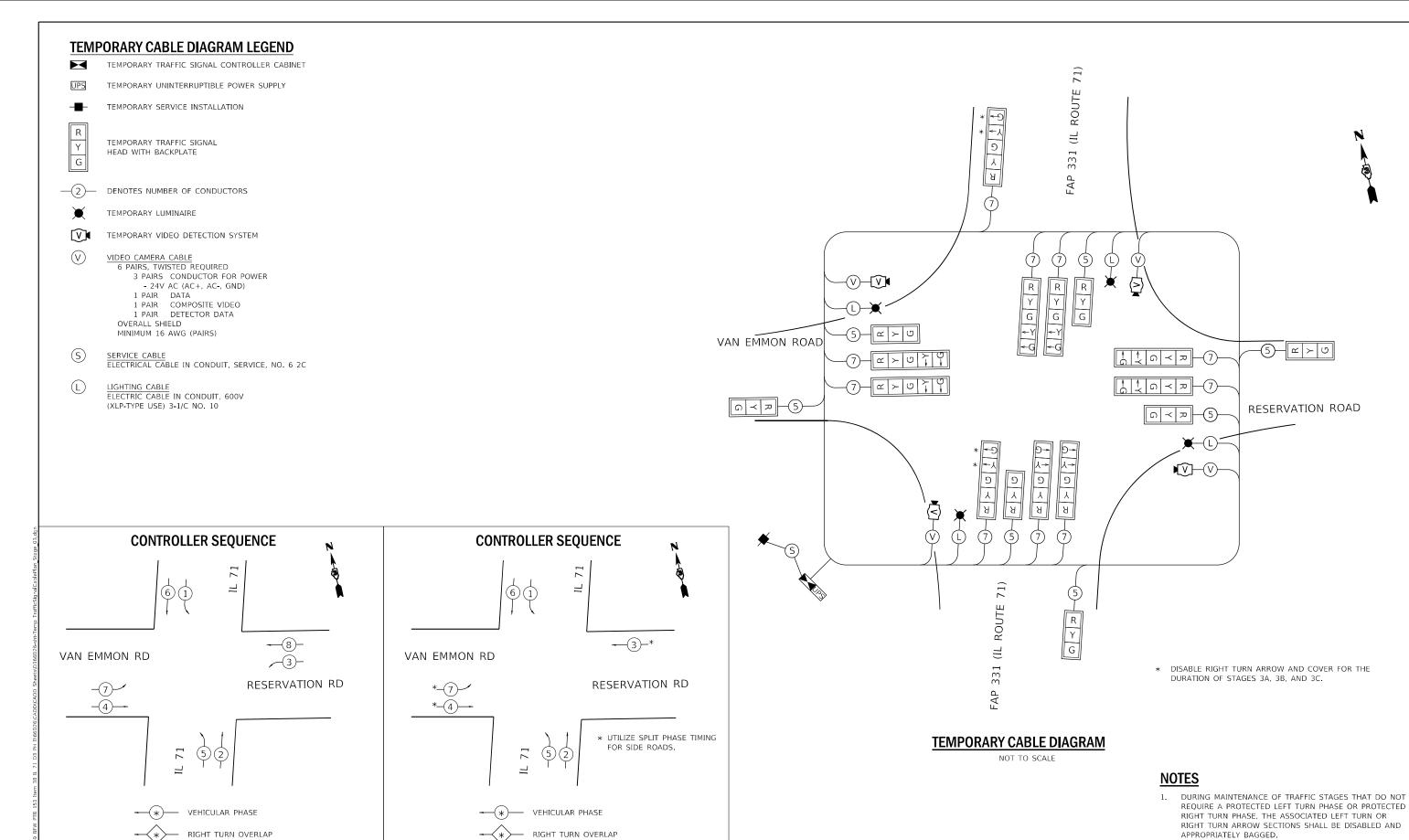
PLOT DATE = 2/9/2022

HECKED

DATE

REVISED

REVISED



NUMBER REFERRING TO ASSOCIATED PHASE

PHASE DESIGNATION SEQUENCE - STAGES 3B, 3C

NUMBER REFERRING TO ASSOCIATED PHASE

PHASE DESIGNATION SEQUENCE - STAGE 3A

QUIGG ENGINEERING

USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** TEMPORARY TRAFFIC SIGNAL CABLE PLAN
IL 71 AT VAN EMMON ROAD /RESERVATION ROAD STAGES 3A, 3B, 3C SHEET 18 OF 21 SHEETS STA.

SECTION (1-1)R, BR1 KENDALL **847** 659 CONTRACT NO. 66D26

2. FOR SPLIT PHASE TIMING ON SIDE ROADS, THE YELLOW ARROW TIME SHALL BE THE SAME LENGTH OF TIME AS

THE YELLOW BALL TIME.

RESERVATION ROAD

TEMPORARY CABLE DIAGRAM LEGEND

TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET

UPS TEMPORARY UNINTERRUPTIBLE POWER SUPPLY

- TEMPORARY SERVICE INSTALLATION

R
Y
TEMPORARY TRAFFIC SIGNAL
HEAD WITH BACKPLATE

—(2)— DENOTES NUMBER OF CONDUCTORS

TEMPORARY LUMINAIRE

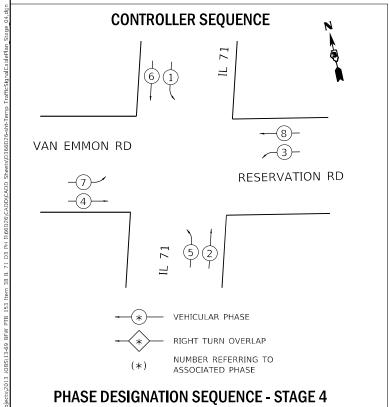
TEMPORARY VIDEO DETECTION SYSTEM

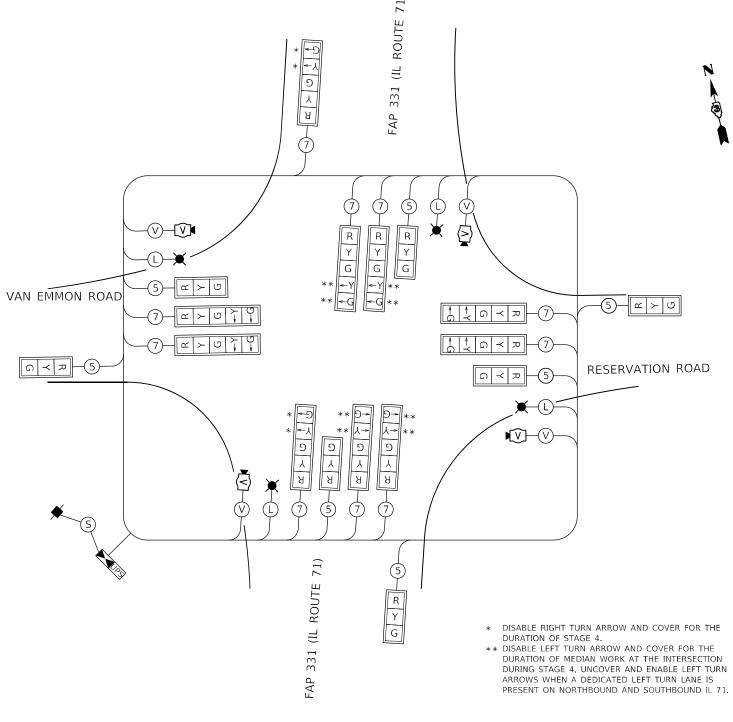
V VIDEO CAMERA CABLE
6 PAIRS, TWISTED REQUIRED
3 PAIRS CONDUCTOR FOR POWER
- 24V AC (AC+, AC-, GND)
1 PAIR DATA

1 PAIR COMPOSITE VIDEO 1 PAIR DETECTOR DATA OVERALL SHIELD MINIMUM 16 AWG (PAIRS)

S SERVICE CABLE ELECTRICAL CABLE IN CONDUIT, SERVICE, NO. 6 2C

LIGHTING CABLE
ELECTRIC CABLE IN CONDUIT, 600V
(XLP-TYPE USE) 3-1/C NO. 10





TEMPORARY CABLE DIAGRAM

NOT TO SCALE

NOTES

- DURING MAINTENANCE OF TRAFFIC STAGES THAT DO NOT REQUIRE A PROTECTED LEFT TURN PHASE OR PROTECTED RIGHT TURN PHASE, THE ASSOCIATED LEFT TURN OR RIGHT TURN ARROW SECTIONS SHALL BE DISABLED AND APPROPRIATELY BAGGED.
- FOR SPLIT PHASE TIMING ON SIDE ROADS, THE YELLOW ARROW TIME SHALL BE THE SAME LENGTH OF TIME AS THE YELLOW BALL TIME.

QUIGG ENGINEERING INC

USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL CABLE PLAN IL 71 AT VAN EMMON ROAD /RESERVATION ROAD STAGE 4										
SCALE: NONE	SHEET	19	OF	21	SHEETS	STA.	TO STA.			

F.A.P RTE	SECT	ПОИ		COUNTY	TOTAL SHEETS	SHEET NO.	
311	(1-1)R	, BR1		KENDALL	847	660	
			CONTRACT	NO. 66	5D26		
		TURNOTC	D DROJECT				

SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date 8/24/10

ROUTE IL 71 (FAP 311)	_ DE	Intersection with Van Emmon Rd & Reservation Rd, South of Oswego LOGGED BY Larry My								
SECTION (1-1)N, TS		_ ι	OCAT	ON_	NW 1/	4, SEC. 35, TWP. 37N, I	RNG. 7E			
COUNTY Kendall Di	RILLING	ME	THOD		Hol	low Stem Auger	HAMMER TYP	ECME Automatic		
STRUCT. NO		D E P	L	U C S	% - 0 M	Surface Water Elev Stream Bed Elev	ft			
Station		H (ft)		Qu (tsf)	T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry ft Dry ft			
Augered Black Silty Clay Loam Fil & Brown/Silty Clay Loam Fill		_								
Very Stiff Brown Silty Clay Loam Till	638.61		5		18.8					
Soft Light Brown Clay Loam	636.61	-5	3 2	P	17.2					
i	633.11	_	3	P				,		
Medium Brown/Tan Fine Gravel to Coarse Gravel - Loamy	631.11	_	10	0.5 P	6.1					
Medium Brown Fine to Coarse Sand with some Fine/Medium Gravel	001.11		12 9 6		7.5	-				
i i			12		6.4					
	624.6		12 10 12 10		7.8					
End of Boring			-					11		
		-	-							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99) Illinois Department of Transportation Division of Highways Dietrict #3, Ottawa

SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date 8/24/10

ROUTE IL 71 (FAP 311)	Intersection with Van Emmon Rd & Reservation JTE IL 71 (FAP 311) DESCRIPTION Rd, South of Oswego LOGGED BY Larry Mye										
SECTION (1-1)N, TS		_ L	OCAT	ON .	NW 1/	4, SEC. 35, TWP. 37N,	RNG. 7E				
COUNTY Kendall DF	RILLING	ME.	THOD		<u>Hol</u>	low Stem Auger	_ HAMMER TYPE	CME Automatic			
STRUCT. NO	_	D E P	0	UCS	M O 1	Surface Water Elev Stream Bed Elev	ft ft				
BORING NO. 2 (S.W. Quad.) Station 672+24 Offset 37.00ft Lt.	_	H	W S (/6")	Qu (tsf)	S T (%)	Upon Completion	ft ft				
Ground Surface Elev. 639.55 Augered Black Silty Clay Loam Fill		(11)	(10)	(151)	(/0)	After Hrs.	n				
& Brown Silty Clay Loam Stiff to Very Stiff Brown Silty Clay	637.05		2								
Loam Till		_	3	1.0 P	12.3						
	633.05		8 10 12	3.5 P	13.2						
Medium Brown Fine Sand/Coarse Gravel - Loamy	.000.00	_	10								
		_	12 18		5.7	1					
t.		10	8 10 12		6.1	***					
Medium Brown Fine/Coarse Sand with Minor Fine/Medium Gravel	627.55	_	5		4.7						
		_	7			_					
	623.05	-15	6 7 9		4.2						
End of Boring			-								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



	USER NAME = jberge	DESIGNED - JB	REVISED -
		DRAWN - JB	REVISED -
	PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -
NC	PLOT DATE = 2/9/2022	DATE -	REVISED -



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date __8/24/10

ROUTE IL 71 (FAP 311)	_ DES	SCRI	PTION	Inte	rsection	on with Van Emmon Rd Rd, South of Oswed	& Reservation	LOGGED BY Larry Mys
SECTION(1-1)N, TS	. <u> </u>	_ L	OCAT	ON_	NW 1/	4, SEC. 35, TWP. 37N,	RNG. 7E	
COUNTY Kendall DR	ILLING	ME	THOD		Hol	low Stem Auger	HAMMER TYP	PE CME Automatic
STRUCT. NO	-	DEPT	B L O W	U C S	M O I	Surface Water Elev. Stream Bed Elev.	ft	
SORING NO. 3 (S.E. Quad.) Station 672+67 Offset 82.00ft Rt.	-	Н	S	Qu	T	Groundwater Elev.: First Encounter Upon Completion	ft	
Ground Surface Elev. 642.08	ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	ft	
Augered Black & Brown Silty Clay Loam Fill with Concrete Debris	,	_						
Very Stiff to Stiff Light Brown Silty Clay Loam Till	639.58	_	4	2.0	11.7	i.		
		_	5	P				
		5	3		18.5			
		_	5	P				
		_	5 7	3.9 S	13.3	-		
Dense Brown Fine to Coarse Gravel - Loamy	632.58	-10	9					
·		_	17 18		4.4			
		_	8		5.0	 -		
	627.08			_		-		
Medium Brown Fine to Coarse Sand with Minor Fine Gravel	625.58		6 7 9		7.8	_		
End of Boring								
		_						

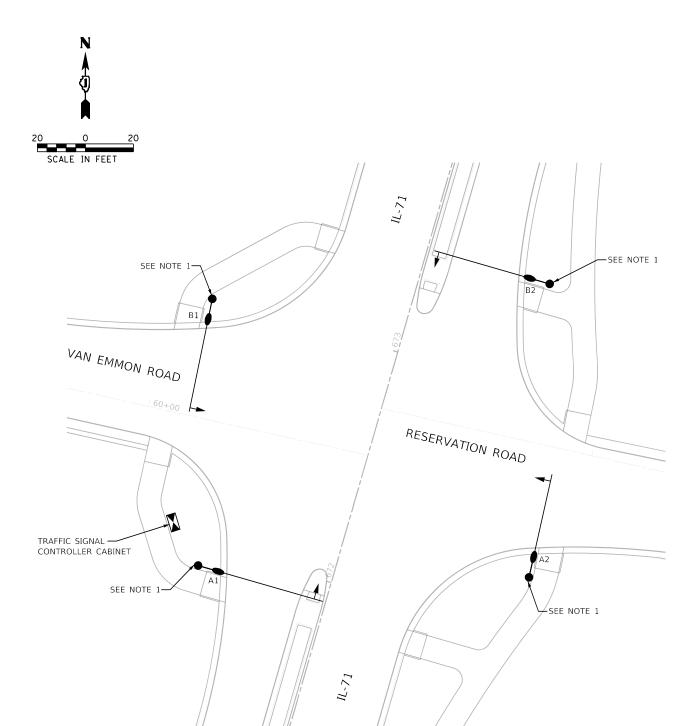
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SCALE: NONE

QUIGG ENGINEERING INC	

USER NAME = jberge	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED - NLS	REVISED -
PLOT DATE = 2/9/2022	DATE -	REVISED -



NOTES:

- 1. PROVIDE ONE ROADWAY LUMINAIRE ON EACH OF THE 4 COMBINATION MAST ARM TRAFFIC SIGNAL STRUCTURES. LUMINAIRE TRUSS ARMS SHALL BE ORIENTED AS SHOWN ON THE PLANS AND AT 40-FT AFG ON 15-FT ARMS. CONNECT TO THE LIGHTING CIRCUIT BREAKERS IN THE TRAFFIC SIGNAL CONTROLLER CABINET.
- 2. PROVIDE LIGHTING CIRCUIT CONDUCTORS IN THE TRAFFIC SIGNAL UNDERGROUND RACEWAY SYSTEM. SEE TRAFFIC SIGNAL PLAN SHEET FOR UNDERGROUND CONDUITS AND HANDHOLES.

Earneyworth	
Farnsworth	
GROUP	
2211 WEST BRADLEY AVENUE	
CHAMPAIGN, IL 61821	
(217) 352-7408 / info@f-w.com	

SER NAME = dreimer	DESIGNED - TJS	REVISED -
	DRAWN - DC	REVISED -
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OT DATE = 10/11/2021	DATE - 8/16/21	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

						_	CHEDULES	
IL-/1 AND	VAN	EIVI	IVIU	IN	KUAL	//	RESERVATION ROAD	
ALE: 1"-20"	CHEET	1	OΕ	2	CHEETC	СТЛ	TO STA	

F.A.P. RTE	SEC ⁻	ΓΙΟΝ	COUNTY	TOTAL SHEETS	SHE	
311	(1-1) F	KENDALL	847	660		
				CONTRACT	NO. 66	5D26
		ILLINOIS	FED. A	D PROJECT		

LUMINAIRE PERFORMANCE TABLE LUMINAIRE, LED ROADWAY, OUTPUT DESIGNATION G

6. Initial lumens of the propsed luminaire may vary from the values given in Article 1067.06 of the BDE Special Provisons for Luminaire, LED.

4. Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

LUMINAIRE PERFORMANCE TABLE

I.E.S. Surface Class

Number of Luminaires

(Highmast & Sign only)

I.E.S. Vertical Distribution Dimming Protocol

Uniformity Ratio, Lmax/Lmin Veiling Luminance Ratio, Lv/Lave

Municipality

Median Width

NONE

Set-Back

Configuration (Opposite, Staggered, 1 Sided or Median)
STAGGERED

Max. Horizontal Illuminance at Max. Vertical Illuminance at ROW, Ev

2. Lighting calculations shall be performed with luminaires oriented toward and perpendicular to the roadway.

3. LLF = LLD (0.9), LLD (0.8), and EF (0.95)

PROJECT

8/13/2021 Marked Route Number

ROADWAY Lane Width

Mounting Height

LAYOUT

Spacing (to nearest 5 ft)

LIGHT TRESSPASS Distance to ROW

(behind pole)

Average Illuminance, Eave (fc)

Average Lum., Lave (cd/m2) Uniformity Ratio, Lave/Lmin
N/A N/A

Set-Back is from Edge of Pavement (white line).

ROW, Eh

5. Compliance with performance criteria shall be held to one significant digit.

Contract Number

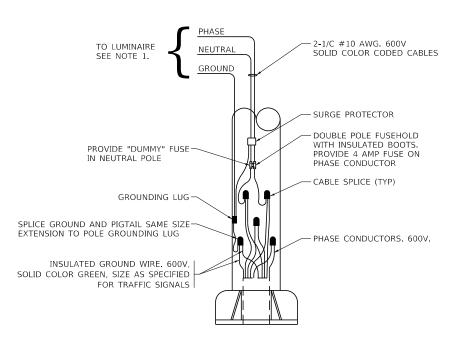
of Lanes

Arm Length

4 TRAVELED LANE

| LE.S. Lateral Distribution | LUMINAIRE, LED ROADWAY, OUTPUT DESIGNATION G | TYPE 4 | Total Light Loss Factor (LLF) | B-U-G Rating | Shields | 0.7|U0 | NONE |

LIGHTING CIRCUIT DIAGRAM



COMBINATION POLE LIGHTING WIRING DETAIL

NOTES:

- 1. PROVIDE #10 EQUIPMENT GROUND CONDUCTOR TO EACH LUMINAIRE AND CONNECT TO GROUND LUG IN POLE HANDHOLE.
- PROVIDE A 15 AMP CIRCUIT BREAKER IN TRAFFIC SIGNAL CONTROLLER FOR CIRCUIT A AND CIRCUIT B (TWO TOTAL). SEE COMBINATION LIGHTING CONTROL WIRING DIAGRAM ON TRAFFIC SIGNAL CABLE PLAN.
- 3. 2 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 4. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- 5. ALL CONTROLLERS TO HAVE TWO CIRCUIT BREAKERS.
- 6. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 7. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT.
- 8. COMBINATION LIGHTING MUST BE INSTALLED PRIOR TO SIGNAL TURN ON.
- 9. LUMINAIRE VOLTAGE SHALL BE 120V.
- 10. SEE TRAFFIC SIGNAL PLANS FOR LIGHTING CIRCUIT CONDUCTORS FROM THE TRAFFIC SIGNAL CONTROLLER TO EACH COMBINATION POLE. CONDUCTORS SHOWN IN THIS DIAGRAM ARE FOR INFORMATION AND SHALL BE PAID BY THE ASSOCIATED TRAFFIC SIGNAL CABLE PAY ITEM.
- 11. UNDERGROUND SPLICING OF LIGHTING CONDUCTORS SHALL NOT BE PERMITTED PER ARTICLE 817.03 OF THE STANDARD SPECIFICATIONS.

NOTES:

- 1. PROVIDE #10 EQUIPMENT GROUND CONDUCTOR TO EACH LUMINAIRE AND CONNECT TO GROUND LUG IN POLE HANDHOLE.
- POLE WIRING SHALL BE PROVIDED WITH THE LUMINAIRE, COMPLETE WITH SURGE ARRESTOR, FUSE HOLDERS, FUSES AND SHALL NOT BE COUNTED SEPARATELY.

Farnsworth	
2211 WEST BRADLEY AVENUE	
CHAMPAIGN, IL 61821	

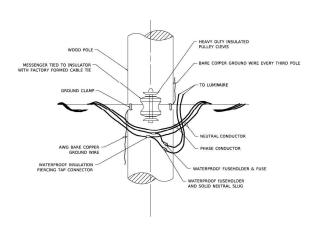
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STATE OF ILLINOIS

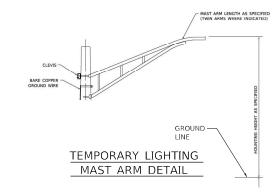
				_			SIGNAL SCHEMATIC ESERVATION ROAD
IL—/I AND	VAIN	С	VIIVI	IN	NUAL	, / N	ESERVATION ROAD
ALE: N.T.S.	SHEET	2	OF	2	SHEETS	STA.	TO STA.

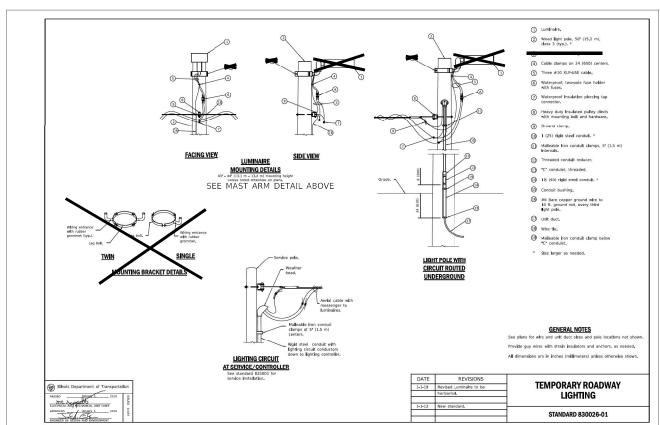
SECTION COUNTY (1-1) R, BR1 KENDALL 847 664 CONTRACT NO. 66D26

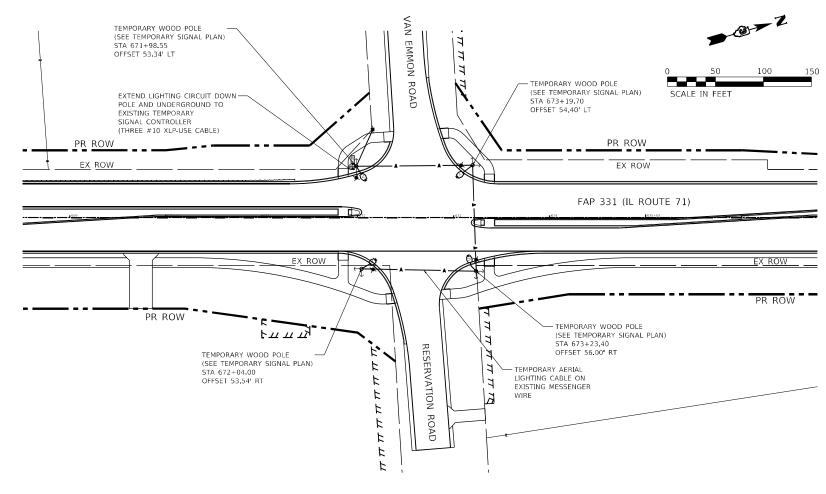
DEPARTMENT OF TRANSPORTATION



TEMPORARY LIGHT POLE ATTACHMENT DETAIL







TEMPORARY LIGHTING NOTES

 TEMPORARY LIGHTING MAST ARM INSTALLATION SHALL NOT INTERFERE WITH OVERHEAD POWER LINES.

TEMPORARY LIGHTING LEGEND

A	AERIAL CABLE WITH MESSENGER WIRE
	EXISTING TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET
THES	EXISTING TEMPORARY UNINTERRUPTIBLE POWER SUPPLY
-	EXISTING TEMPORARY SERVICE INSTALLATION
Θ	EXISTING TEMPORARY WOOD POLE
←	EXISTING TEMPORARY WOOD POLE ANCHOR
○─≭	TEMPORARY MAST ARM AND LUMINAIRE
- ©	EXISTING TEMPORARY VIDEO DETECTION SYSTEM



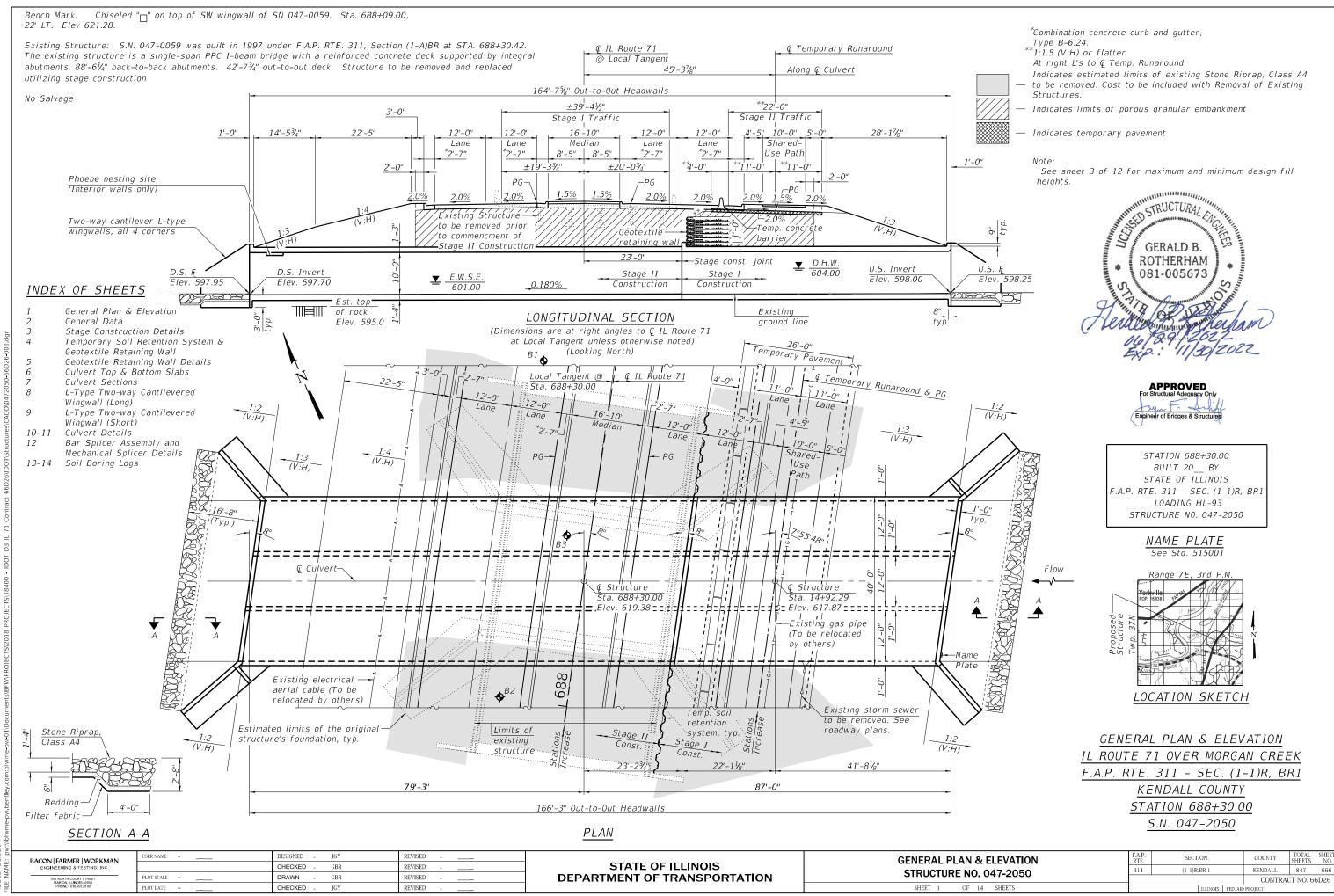
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ABNA

USER NAME = mconroy	DESIGNED	-	FPE	REVISED -
	DRAWN	-	MJC	REVISED -
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PLOT DATE = 3/11/2022	DATE	-	02/10/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I	TEMPORARY LIGHTING PLAN	F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I		311	(1-1)R,BR1	KENDALL	847	665
l				CONTRACT	T NO. 66	5D26
I	SCALE: 1" = 50' SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FEE	. AID PROJECT		



<u>IL ROUTE 71</u> PROP. CURVE PR71-7 V.P.C. Sta. 687+14.72 C. Elev. 622.43 C. Elev. 622.43 C. Elev. 613.41 Elev. 613.41 C. Elev. 622.43 C. Elev. 622.43 C. Elev. 622.43 C. Elev. 622.43

IL ROUTE 71
PROFILE GRADE
(Along roadway median

edge of pavement)

V.P.C. Sta. 13+70.77

Elev. 621.07

V.P.I. Sta. 17+57.45

Elev. 616.19

V.P.T. Sta. 18+99.12

Elev. 621.08

L.V.C.= 530'

TEMPORARY RUNAROUND
PROFILE GRADE

(Along & temporary runaround)

GENERAL NOTES

Precast alternate is not allowed.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Reinforcement bars designated (E) shall be epoxy coated.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	3140
Stone Riprap, Class A4	Sq. Yd.	206
Filter Fabric	Sq. Yd.	206
Rock Excavation for Structures	Cu. Yd.	1
Removal Of Existing Structures No. 5	Each	1
Reinforcement Bars	Pound	210,930
Reinforcement Bars, Epoxy Coated	Pound	4,850
Bar Splicers	Each	246
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	241
Geotextile Retaining Wall	Sq. Ft.	566
Concrete Box Culverts	Cu. Yd.	939.6

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

<u>DESIGN STRESSES</u>

FIELD UNITS

f'c = 3,500 psi fy = 60,000 psi(Reinforcement)

WATERWAY INFORMATION

Existing Low Grade Elev. = 617.1 @ Sta. 690+00.00									+00.00	
Drainage Area = 17.8 s	Prop. Low Grade Elev. = 617.1 @ Sta. 690+00.00									
Flood	Freq.	Q	Opening	Sq. Ft.	Nat.	Head	- Ft.	Headwater El.		
	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.	
Ten-Year	10	1030	176	189	603.3	0.3	0.0	603.6	603.3	
Design	50	1510	212	216	604.0	0.7	0.0	604.7	604.1	
Base	100	1700	226	226	604.3	0.8	0.3	605.1	604.6	
Overtopping Proposed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Max. Calc.	500	2160	256	247	604.9	1.1	0.9	606.0	605.8	

Existing 10 Year Outlet Velocity = 6.1 ft/s Proposed 10 Year Outlet Velocity = 6.0 ft/s

BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 047-2050

SHEET 2 OF 14 SHEETS

 MP.
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 11
 (1-1)R.BR 1
 KENDALL 847 667

 CONTRACT NO. 66D26

NAME: pw:\\bfw

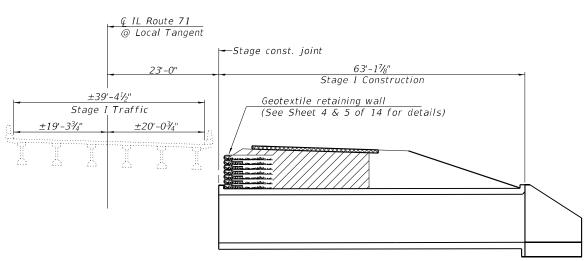
— Indicates limits of porous granular embankment (See Sheet 11 of 14 for details)

 Indicates temporary pavement (See roadway plans)

*Existing structure to be reomved prior to commencement of Stage II Construction

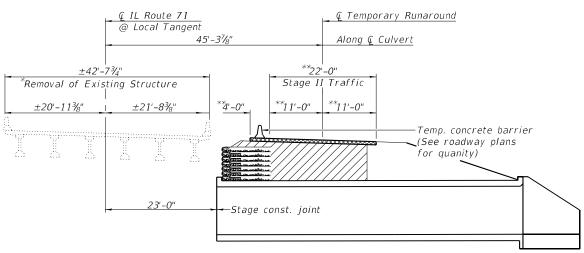
**At right L's to & Temp. Runaround

***See roadway plans for additional traffic staging details, and construction staging details of final roadway cross section not shown.



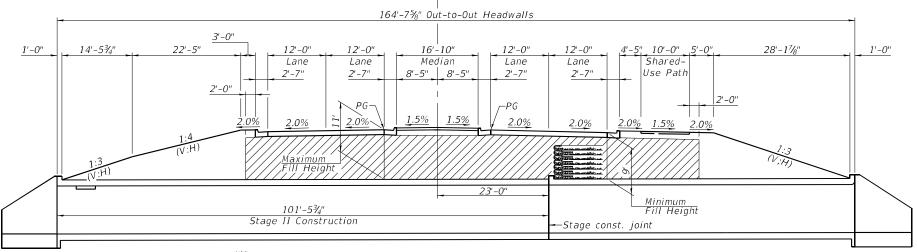
STAGE I CONSTRUCTION & TRAFFIC

(Dimensions are at right angles to © 1L Route 71 at Local Tangent unless otherwise noted) (Looking North)



STAGE II TRAFFIC & REMOVAL OF EXISTING STRUCTURE

(Dimensions are at right angles to © IL Route 71 at Local Tangent unless otherwise noted) (Looking North) © IL Route 71 © Local Tangent

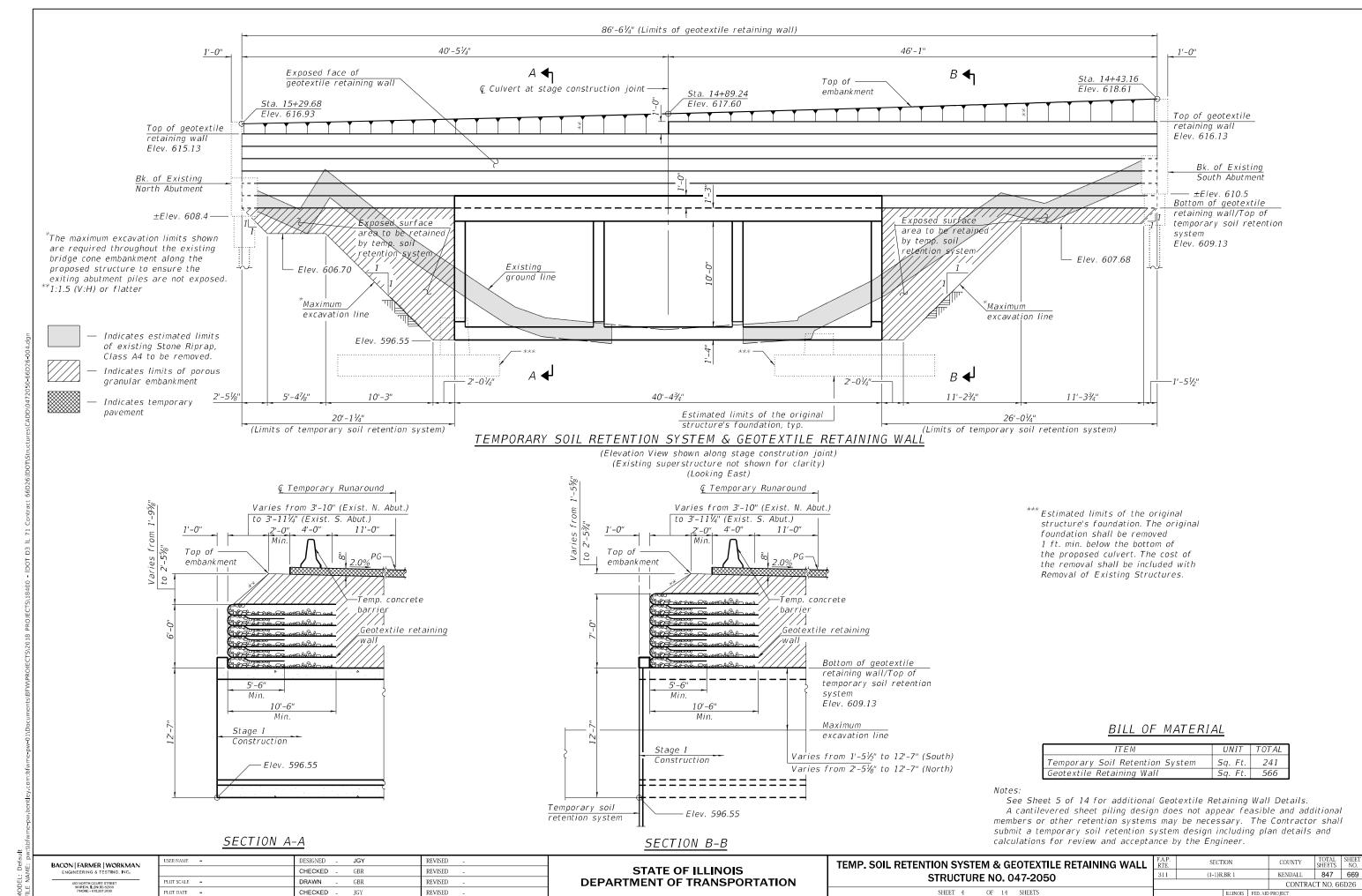


***STAGE II CONSTRUCT<u>ION & FINAL LONGITUDINAL SECTION</u>

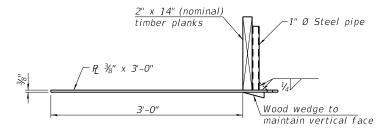
(Dimensions are at right angles to & IL Route 71 at Local Tangent unless otherwise noted) (Looking North)

BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 400 NORTH COURT STREET MARTINE LINUX STREET PROME - 1 LINUX STREET	USER NAME =	DESIGNED - JGY	REVISED -
		CHECKED - GBR	REVISED -
	PLOT SCALE =	DRAWN - GBR	REVISED -
	PLOT DATE =	CHECKED - JGY	REVISED -

STAGE CONSTRUCTION DETAILS STRUCTURE NO. 047-2050		SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
		(1-1)R,BR 1			KENDALL	847	668
					CONTRACT NO. 66D26		
SHEET 3 OF 14 SHEETS		ILLINOIS FED. AID PROJECT					



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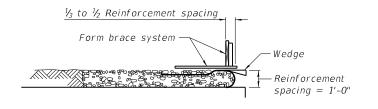


SECTION A-A

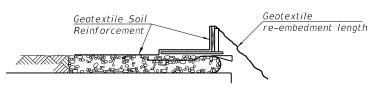
Note:

This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.

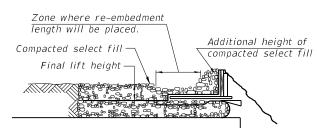
<u>GEOTEXTILE</u> FORM BRACE DETAIL



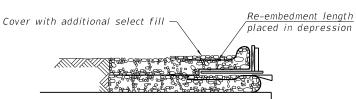
1.Place form brace system on completed reinforcement level; back from the finished fabric face a distance of ½ to ½ the geotextile reinforcement spacing.



2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.



3. Compact select fill material in lifts to final lift height, create (±3") depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.



4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill (±3") to embed geotextile and bring to final lift height.



5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

GEOTEXTILE WALL CONSTRUCTION SEQUENCE

Note:

The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 44 lb./in. as determined by the procedure described in Section 522 of the Standard Specifications. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.

SER NAME = DESIGNED JGY REVISED BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. CHECKED GBR REVISED LOT SCALE = DRAWN GBR REVISED PLOT DATE = CHECKED IGY REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GEOTEXTILE RETAINING WALL DETAILS
STRUCTURE NO. 047-2050

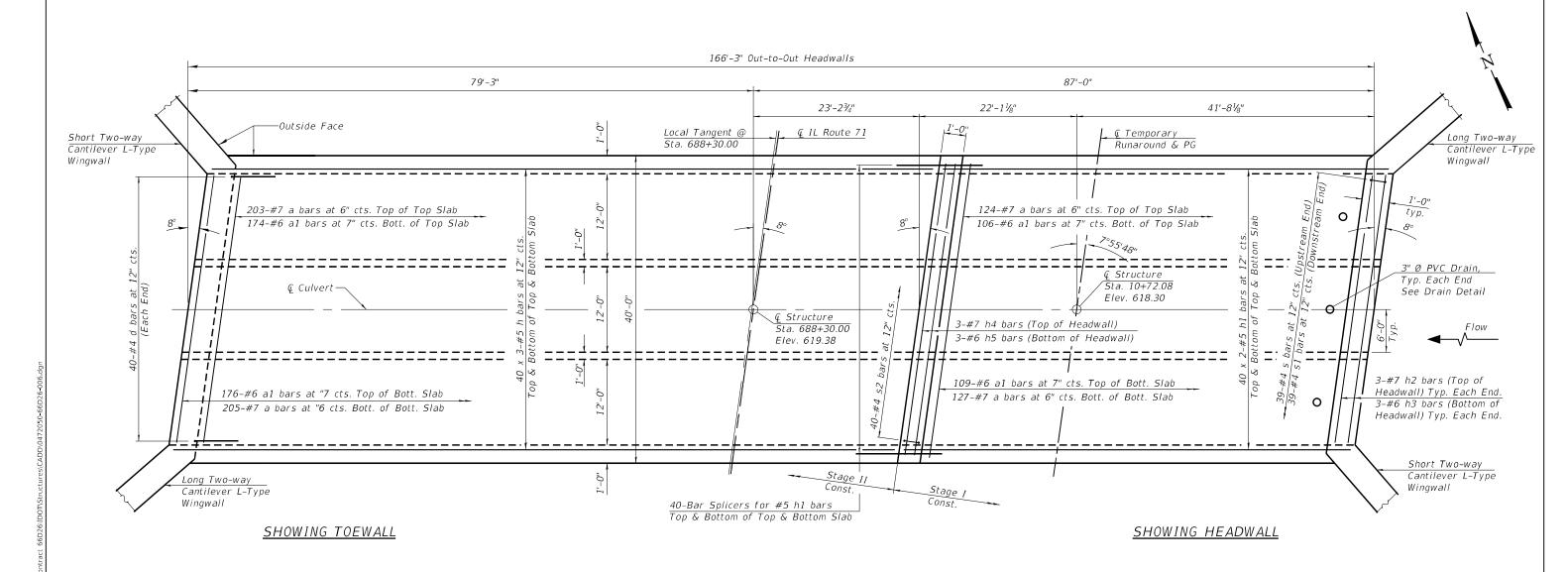
SHEET 5 OF 14 SHEETS

AP. SECTION COUNTY TOTAL SHEETS NO.

11 (1-1)R.BR 1 KENDALL 847 670
CONTRACT NO. 66D26

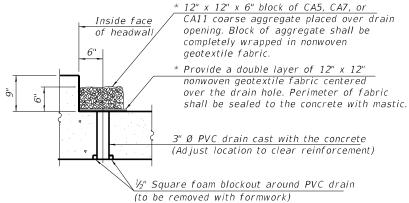
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PLAN - TOP AND BOTTOM SLAB

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

REVISED DESIGNED -BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC. CHECKED GBR REVISED DRAWN JGY REVISED PLOT DATE = CHECKED REVISED GBR

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT TOP AND BOTTOM SLABS STRUCTURE NO. 047-2050 SHEET 6 OF 14 SHEETS

SECTION COUNTY (1-1)R,BR 1 KENDALL 847 671 CONTRACT NO. 66D26

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MINIMUM BAR LAP #5 Bar = 2'-9''

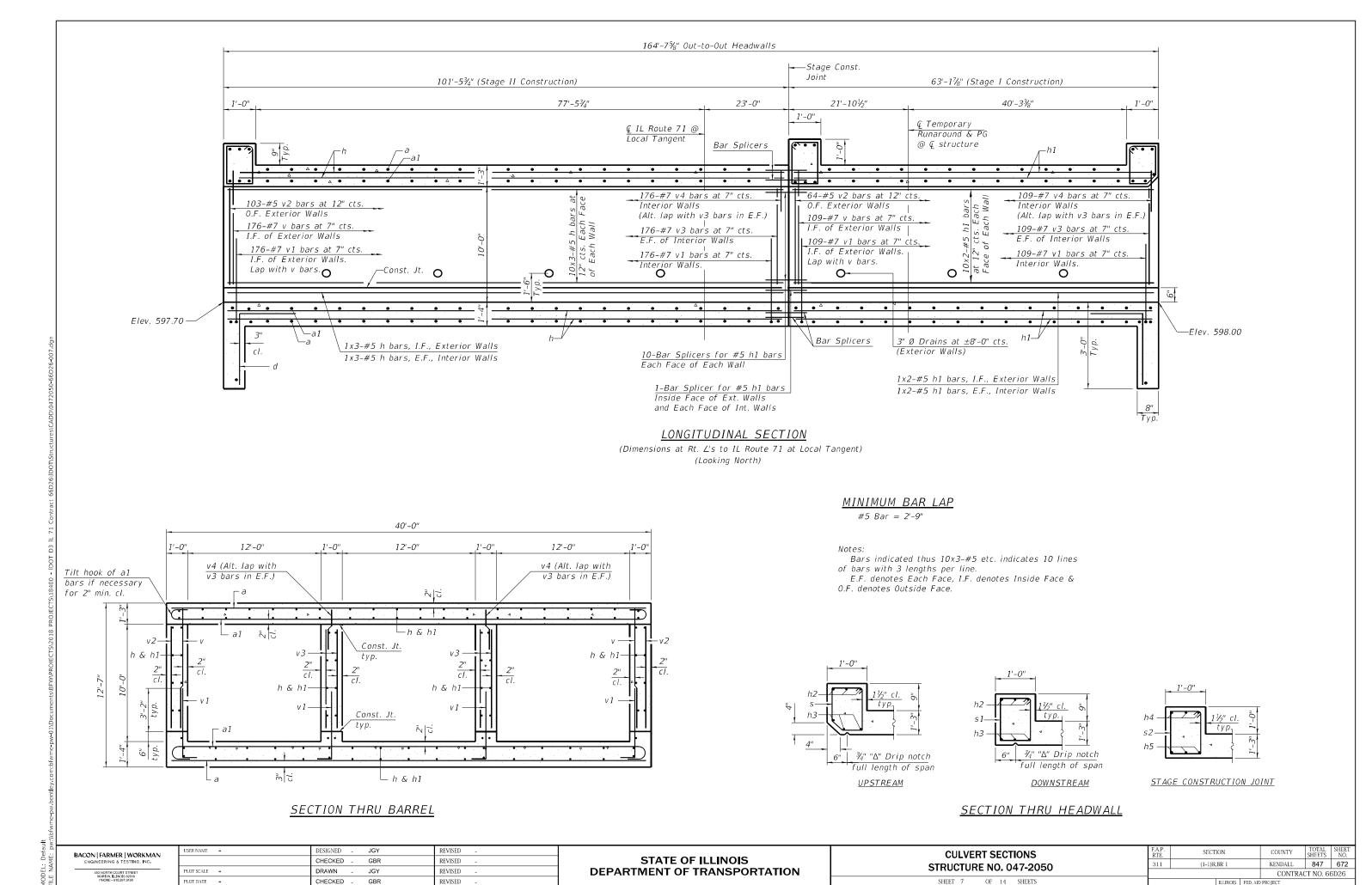
Notes: Bars indicated thus 40x3-#5 etc. indicates 40 lines of bars with 3 lengths per line.

See Sheet 7 of 14 for Longitudinal Section, Section Thru Barrel and Section Thru Headwalls.

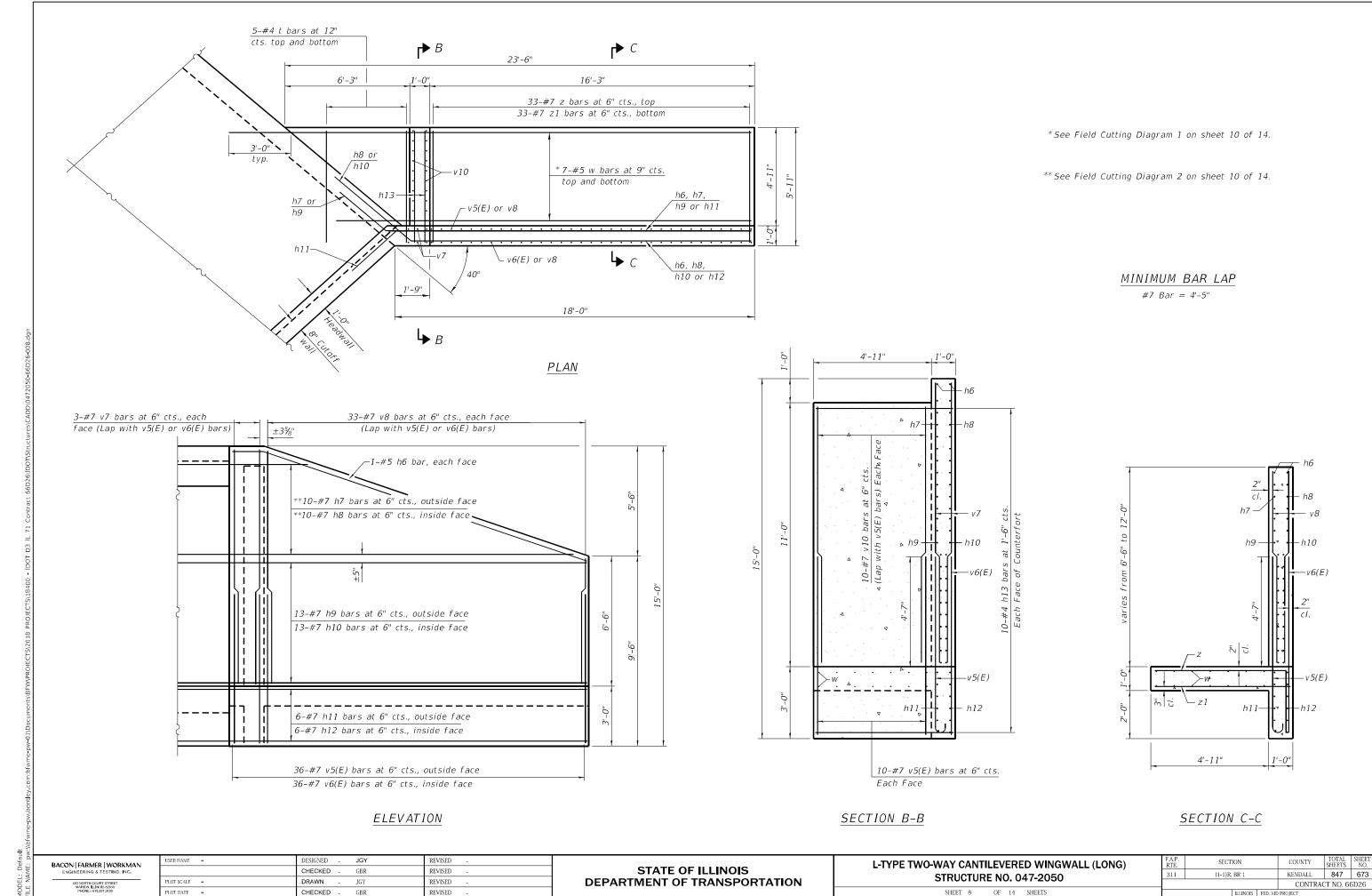
See Sheets 8 & 9 of 14 for L-Type Two-way

Cantilever Wingwalls Details.

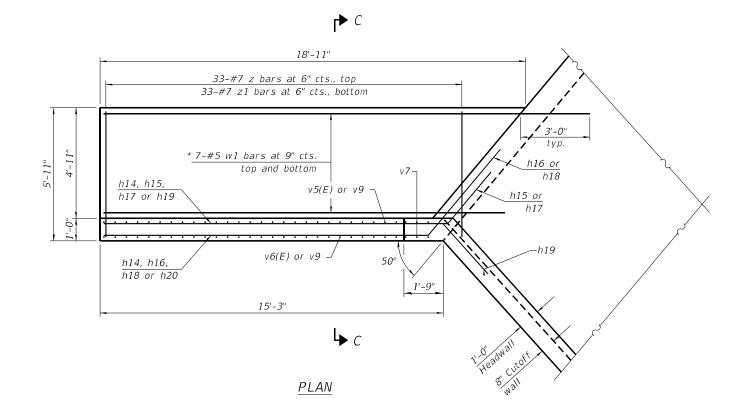
See Sheet 10 of 14 for Bar Details & Bill of Materials. See Sheet 12 of 14 for Bar Splicer Details and Quantity.



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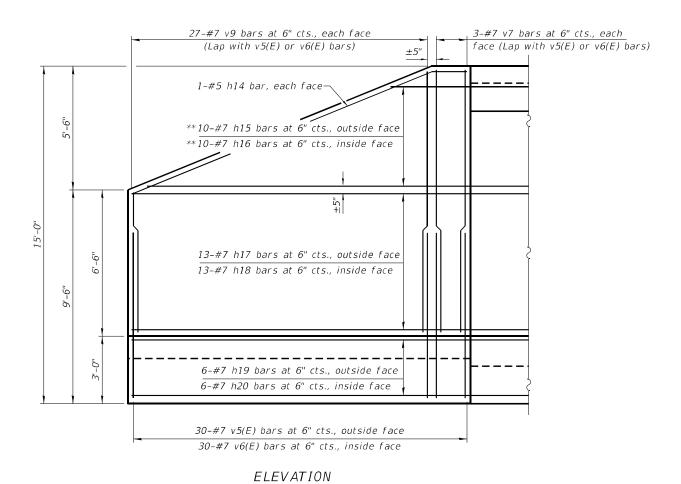
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*See Field Cutting Diagram 1 on sheet 10 of 14.

** See Field Cutting Diagram 2 on sheet 10 of 14.

MINIMUM BAR LAP #7 Bar = 4'-5"



2"
h16
h15
v9
h17
v6(E)

2"
c1.
h18
v6(E)

2"
c1.
h19
v5(E)
h19
v5(E)

SECTION C-C

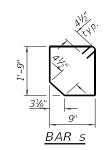
BACON FARMER WORKMAN	USER NAME =	DESIGNED - JGY	REVISED -
ENGINEERING & TESTING, INC.		CHECKED - GBR	REVISED -
403 NORTH COURT STREET MARKIN, LLINOIS 62859	PLOT SCALE =	DRAWN - JGY	REVISED -
PHONE - 618-997-9190	PLOT DATE =	CHECKED - GBR	REVISED -

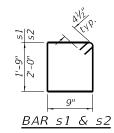
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

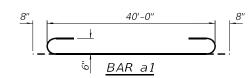
L-TYPE TWO-WAY CANTILEVERED WINGWALL (SHORT)
STRUCTURE NO. 047-2050

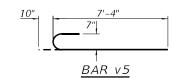
SHEET 9 OF 14 SHEETS

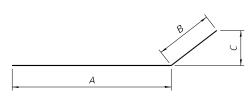
MARKN, LLINOIS 82999 PHONE - 618,997,3190 10/11/2021 1:11:32 PM





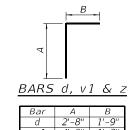


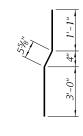




BARS h6, h9, h10, h11, h14, h17, h18 & h19

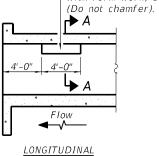
Bar	Α	В	С
h6	17'-0"	1'-6"	6"
h9	18'-3"	3'-0"	1'-111%"
h10	17'-0"	5'-0"	3'-2½"
h11	17'-5"	3'-0"	2'-01/8"
h14	14'-5"	1'-6"	7"
h17	15'-3"	3'-0"	2'-35/8"
h18	14'-4"	5'-0"	3'-10"
h19	14'-10"	3'-0"	2'-23/4"





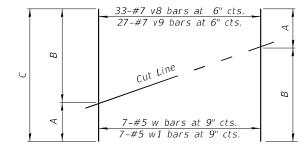
BAR v4

Notch formed by rough finished board attached to and removed with form work, each interior wall.



SECTION

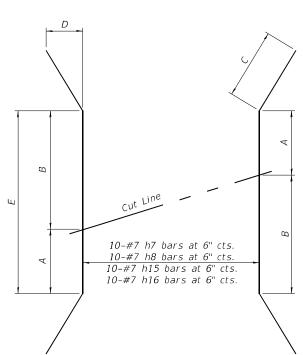
Top Slab



FIELD CUTTING DIAGRAM 1

Order bars shown full length. Cut as shown

and use remainder of bars in opposite wingwall.



FIELD CUTTING DIAGRAM 2

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.

Bar	Α	В	С	D	Е
h7	4'-4"	17'-8"	3'-0"	1'-111/8"	22'-0
h8	3'-1"	16'-5"	5'-0"		19'-6
h15	3'-9"	14'-9"	3'-0"	2'-35%"	18'-6
h16	2'-10"	13'-11"	5'-0"	3'-10"	16'-9

SECTION A-A

PLOT DATE =

HOEBE NESTING	
SITE DETAILS	
Downstream End Only)	

DESIGNED -

CHECKED -

CHECKED -

DRAWN

GBR

Interior

Wall

REVISED	-		
REVISED	-		
REVISED	-		1

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS	F.A.P. RTE.	SECTION
STRUCTURE NO. 047-2050	311	(1-1)R, BR 1
311(00101)L 1(0: 047-2030		
SHEET 10 OF 14 SHEETS		II I INOP

BILL OF MATERIAL

	DILL	OF MA	11 E D 1.	<u>AL</u>
Bar	No.	Size	Length	Shape
а	659	#7	40'-0"	
a1	565	#6	41'-4"	ى
d	80	#4	4'-5"	
u	- 00		, ,	
h	738	#5	36'-0''	
h1	492	#5	33'-4"	
h2	6	#7	38'-10"	
h3	6	#6	38'-10"	
h4	3	#7	40'-0''	
h5	3	#6	40'-0''	
h6	4	#5	10' 6"	
h7	10	#7	28'-0"	
h8	10	#7	29'-6"	
			21'-3"	
h9	26	#7	21-3	
h10	26	#7	22'-0"	
h11	12	#7	20'-5"	_
h12	12	#7	17'-3"	_
h13	40	#4	5'-7"	
h14	4	#5	15'-11"	
h15	10	#7	24'-6"	_
h16	10	#7	26'-9"	_
h17	26	#7	18'-3"	_
h18	26	#7	19'-4"	_
h19	12	#7	17'-10"	
h20	12	#7	14'-7"	
S	39	#4	5'-8"	U
s 1	39	#4	5'-9"	
s2	40	#4	6'-3"	
t	20	#4	5'-7"	
V	570	#7	10'-5"	-
v 1	1140	#7	5'-11"	\neg
v2	334	#5	9'-2"	
v3	1140	#7	9'-2"	
v 4	570	#7	4'-7"	
v5(E)	172	#7	8'-2"	
v6(E)	132	#7	1 7'-4"	
v7	24	#7	11'-8"	
v8	66	#7	17'-9"	
v9	54	#7	17'-8"	
v 10	40	#7	10'-8"	
	,,,		10 0	
W	14	#5	47'-0"	
w 1	14	#5	39'-6"	
** 1	1 7	" 3	33 0	
Z	132	#7	8'-3"	
z1	132	#7	5'-7"	
∠ 1	1 12	π,	J '/	
ancra	to Roy	Culverts	Cu. Yd.	939.6
Rainf	Orcamo	nt Rare	Pound	210930
		nt Bars	round	210936
		nt Bars,	Pound	4850
⊏poxy	Coate	a		

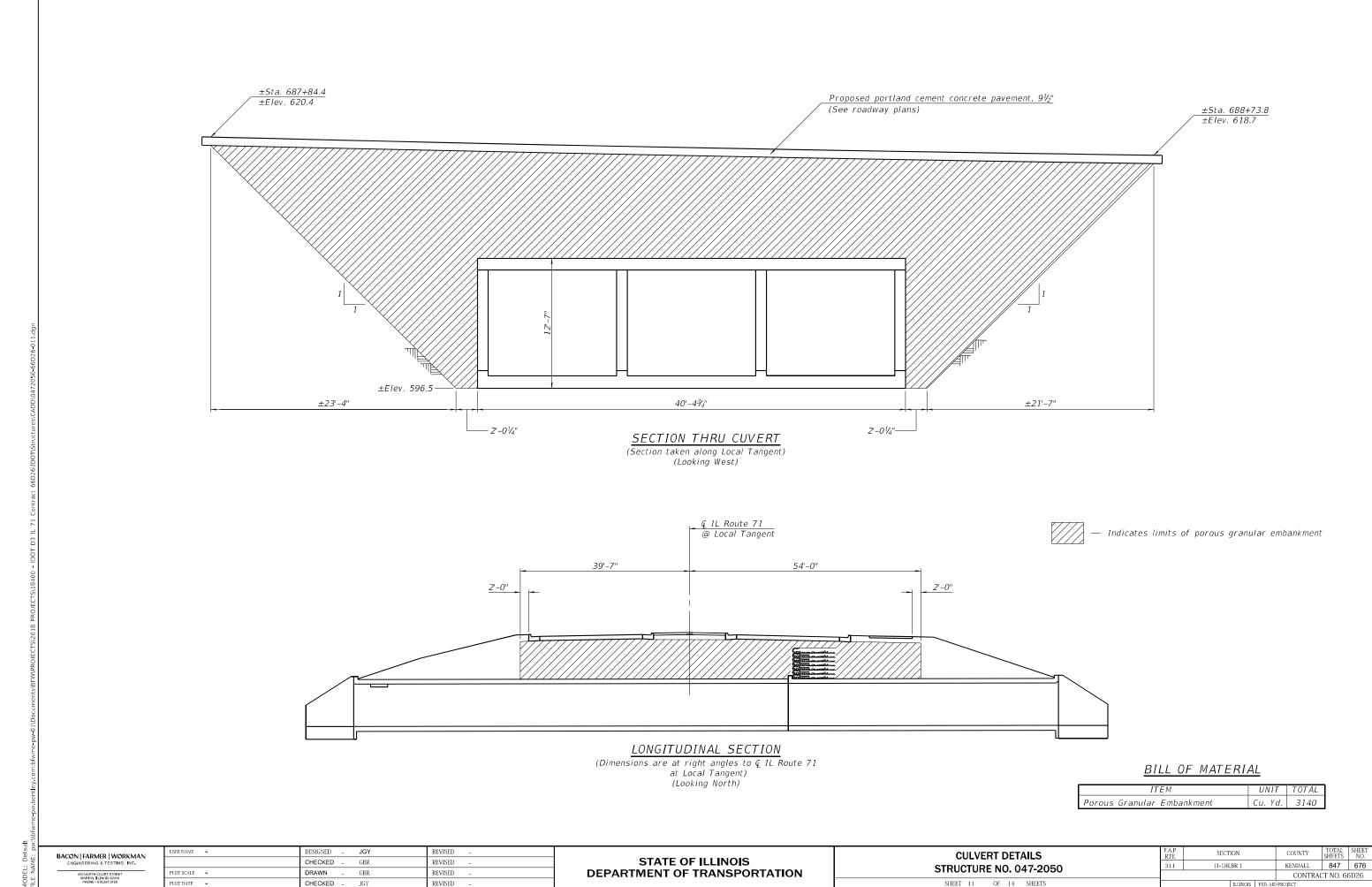
COUNTY TOTAL SHEET NO.

KENDALL 847 675

CONTRACT NO. 66D26

10/11/2021 1:11:38 PM

BACON | FARMER | WORKMAN ENGINEERING & TESTING, INC.



10/11/2021 1:11:44 PM

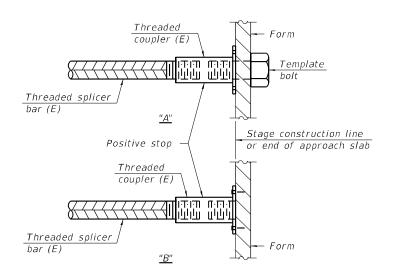
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

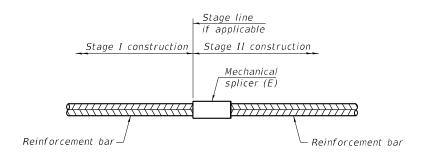
Location	Bar size	No. assemblies required	Minimum Iap length
Top Slab	#5	80	2'-9"
Walls	#5	86	2'-9"
Bottom Slab	#5	80	2'-9"



INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum $60\ ksi$ yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

BACON FARMER WORKMAN	USER NAME =	DESIGNED - JGY	REVISED -
ENGINEERING & TESTING, INC.		CHECKED - GBR	REVISED -
403 NORTH COURT STREET MARION, LLINOIS 62859	PLOT SCALE =	DRAWN - GBR	REVISED -
PHONE - 618-997-9190	PLOT DATE =	CHECKED - JGY	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 047-2050

SHEET 12 OF 14 SHEETS

10/11/2021 1:11:50 PM

SOIL BORING LOG

Page $\underline{1}$ of $\underline{1}$

Date 9/24/93

ROUTE FAP 311 (IL 71) DESCRIPTION IL 71 Over Morgan Creek, East of Yorkville LOGGED BYK Whittington SECTION LOCATION SW1/4, SEC. 26, TWP. 37, RNG. 7, 3rd PM Latitude , Longitude Hollow Stem Auger COUNTY **DRILLING METHOD HAMMER TYPE** Kendall 047-2050 Pro. B U L C O S D B U 047-0059 Exist. STRUCT. NO. Surface Water Elev. E P L 688+30 С 0 Station Stream Bed Elev. 0 s W BORING NO. 1 (N. Abut.) Groundwater Elev.: s Qu s Qu 595.0 **ft**▼ Station 688+80 First Encounter Offset 17.0 ft Left **Upon Completion** 599.2 ft∑ Ground Surface Elev. 616.20 ft (ft) (/6") (tsf) (%) (ft) (/6") (tsf) (%) 18 Not Recorded Medium Dark Gray to Black Loamy Sand Gravel with Angular 14 \blacksquare Dolomite Pieces mixed with Gray 10 Silty Loam Till - Free Water 594.20 (continued) 613.70 Gray Shale Medium Brown Silty Clay with Gravel (Fill) 2 0.7 60/4" 3 P 611.70 Soft Brown Silty Clay Loam (Fill) 100/0.75 <0.5 20 2 P 589.70 Dolomite 588.70 4 0.7 14 Auger Refusal @ 27.5' 608.20 8 \ P Medium Brown Sand/Gravel (Fill) End of Boring 606.70 Stiff Brown Silty Clay Loam with -30 Gravel Pebbles (Fill) 3 1.5 20 8 P 5 2.0 12 Soft to Medium Brown Silty Clay -15 with Pebbles (Fill?) 2 0.7 24 3 P 599.**20** Medium Dark Gray to Black Loamy Sand Gravel with Angular Dolomite Pieces mixed with Gray Silty Loam Till - Free Water 12 12 9

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Page $\underline{1}$ of $\underline{1}$

Date 9/24/93

Station 688+30	SECTION1 A BR				Latitu	de , Longitude					
STRUCT. NO. O47-0059 Exist. Data Station 688+30 688+30 688+30 7 W Station 6888+00 6888+00 6 W W Station 6888+00 7 W Station 6888+00 W W W Station 6888+00 W W W W W W W W W		RILLING M	IETHOD		Hol	low Stem Auger HA	AMMER TYPE		С	ME	
BORING NO. 2 (S. Abut.) 638-100 15 (total minus of the second surface Elev.) 638-100 15 (total minus of the second surface Elev.) 618.50 16 (total minus of the second surface Elev.) 618.50 16 (total minus of the second surface Elev.) 618.50 17 (total minus of the second surface Elev.) 618.50 17 (total minus of the second surface Elev.) 618.50 17 (total minus of the second surface Elev.) 618.50 17 (total minus of the second surface Elev.) 618.50 18 18 19 19 19 19 19 19	STRUCT. NO. 047-0059 Exist.	_ E	L	С	0			E	L	С	M 0 1
Gravel, Buried Concrete, Brown Soil Gravel Mix (Fill) Gravel Mix (Fill)	Station 688+00 Offset 16.0 ft Left	_ H	W S		S T	First Encounter Upon Completion	ft	Н	W S	ALCHI YARRA	S T
Soil So	AND CONTRACTOR OF THE CONTRACT	ft (fi	t) (/6")	(tsf)	(%)			(ft)		(tsf)	(%)
Comparison Com		-				with Gray Till and Large Pie	ieces of tinued)		14		10
Gray Shale with some Dolomite		_				Dense Hard Gray Silty Loa with Rock Pieces	am Till	v _	1000000	>4.5	6
Soft Brown Silty Clay Loam & 3		_						_			6
2 P 2 0.5 15 3 P -10 2 1 0.5 16 4 P Medium Gray Loam Gravel (Fill?) -15 51 -6 5 16 -6 5 16 -6 5 21 -6 4 21 -6 5 21 -6 5 21 -6 5 21 -6 6 7 6		613.50	3						100/4"		
2 0.5 15	Graver Mix (Fill)				20						8
3 P		-	2				590.5	, –			
					15	Gray Dolomite					
1		1					589.0		100/2"		
Dark Gray & Black Silty Clay &		_	1000		16						
604.50 6		606.50	3								
-15 51 -35 -35 -35 -35 -35 -35 -35 -35 -35 -35		604.50	500.0		23						
Soft Black Silty Clay with some Gravel Pieces 4 5 4 21	Medium Gray Loam Gravel (Fill?)	1	6		16			-35			
Gravel Pieces 4	Coff Disale City Olympide	601.50									
		-			21						
		599.00	- CO.					-			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME: pw:\\bfwme.p

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 047-2050

SHEET 13 OF 14 SHEETS

SOIL BORING LOG

Page $\underline{1}$ of $\underline{1}$

Date 9/28/93

FAP 311 (IL 71) DESCRIPTION IL 71 Over Morgan Creek, East of Yorkville LOGGED BYK Whittington SECTION LOCATION SW1/4, SEC. 26, TWP. 37, RNG. 7, 3rd PM Latitude , Longitude Hollow Stem Auger COUNTY **DRILLING METHOD** HAMMER TYPE Kendall 047-2050 Pro. B U L C O S D B E L P O 047-0059 Exist. STRUCT. NO. 597.90 ft Surface Water Elev. С 688+30 597.40 ft Station Stream Bed Elev. s T W H S BORING NO. 3 (Bridge Deck)
Station 688+40 Groundwater Elev.: S Qu Qu First Encounter 5.5 ft Left **Upon Completion** Ground Surface Elev. 617.40 ft (ft) (/6") (tsf) (%) (ft) (/6") (tsf) (%) Bridge Deck Streambed. Augered 5' 592.40 -25 80 20/5 Borehole continued with rock 597.90 ত্ত Top of Water @ 597.9

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



ROCK CORE LOG

Page <u>1</u> of <u>1</u>

Date 9/28/93

ECTION 1 A BR LOCATION SW1/4, SEC. 26, TWP. 37 Latitude , Longitude DUNTY Kendall CORING METHOD				R	Б	CORE	S
047-2050 Pro. 047-2050 Pro. 047-2059 Exist. CORING BARREL TYPE & SIZE		D E P T H	C O R E	C O V E R Y	R . Q . D .	T I M E	R E N G T
Ground Surface Elev. 617.40 ft Itstone, Fine, Black to Gray, Contains Fossils, Argillaceous with Dolomite Cement	592.40	(ft)	(#)	(%) 93	(%) 43	(min/ft)	(tsf)
nale, Gray, Mudstone, Calcareous olomite, Dark Gray, Dense, Contains many Fragmented Fossils and Crystalline alcite Cement, Vuggy & Vesicular with Calcite and Pyrite Crystals, Occasional areas Wavy Shale Partings ort Atkinson Formation Maquoketa Group Ordovician System	591.50 591.10	-					
		-30	2	100	86		280.
		_	۷	100	00		
		_					211
	582.90						
nd of Boring		-35					
		-40					
		_					
		_					

Color pictures of the cores Yes

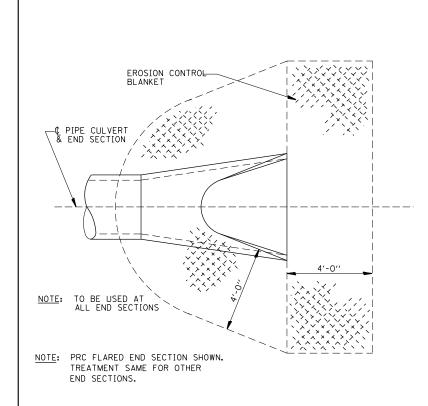
Cores will be stored for examination until No

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

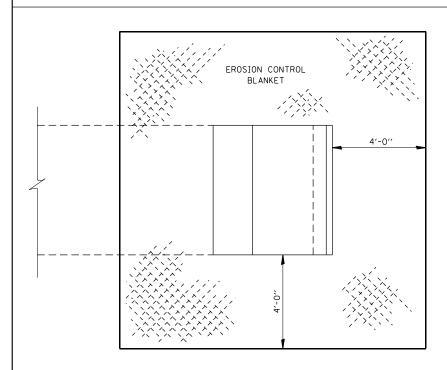
BBS, form 138 (Rev. 8-99)

FILE NAME: pw:\\bfwme-pw.b

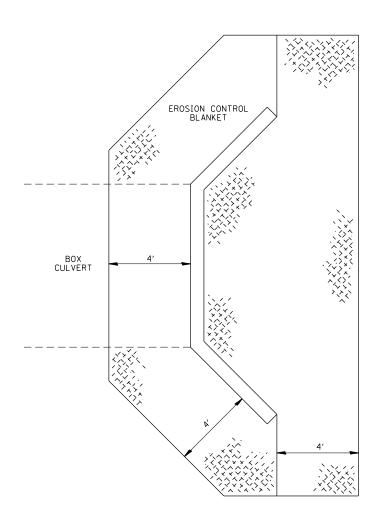
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



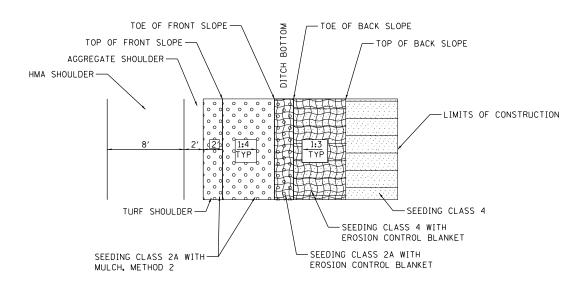
DETAIL OF EROSION CONTROL BLANKET LINING AROUND END SECTION



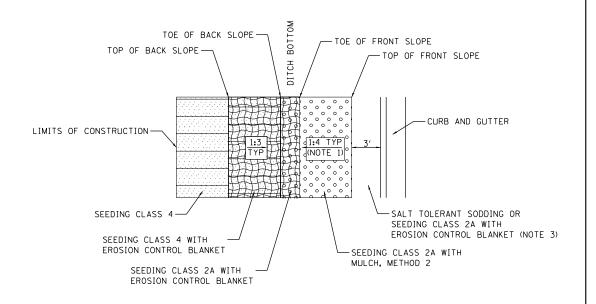
EROSION CONTROL BLANKET AT PRECAST BOX CULVERT END SECTIONS



EROSION CONTROL BLANKET AT BOX CULVERT END SECTIONS



IN SHOULDER AREAS



IN CURB AND GUTTER AREAS

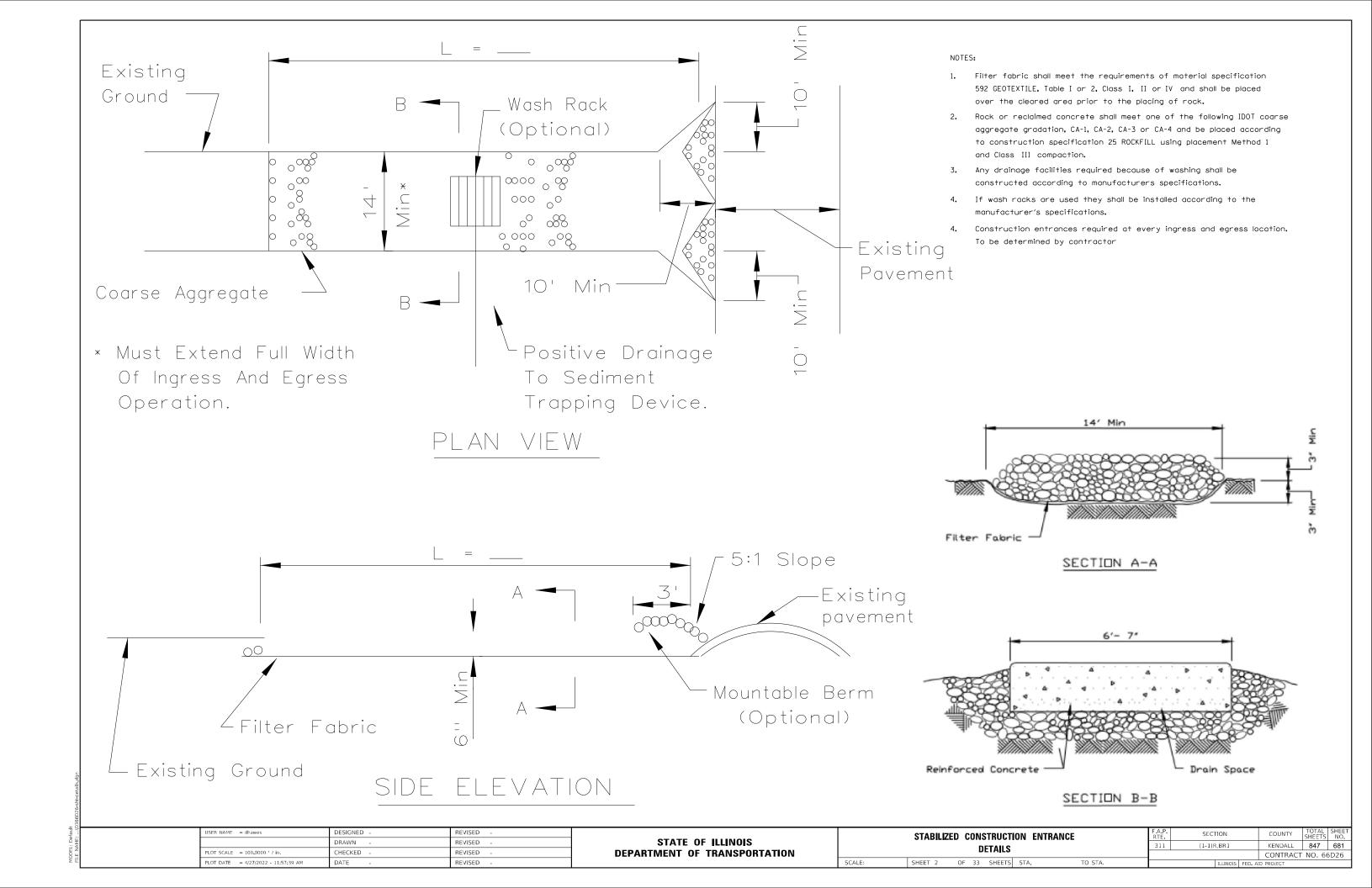
NOTES.

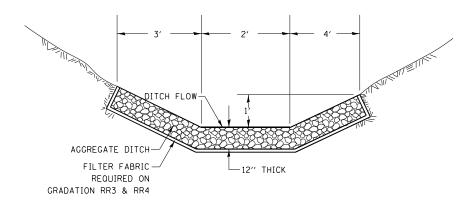
- 1. IN LOCATIONS WITH FORE SLOPES 1:3 OR STEEPER USE EROSION CONTROL BLANKET INSTEAD OF MULCH.
- 2. SEE LANDSCAPING & EROSION CONTROL PLANS FOR EXACT LOCAITONS OF LANDSCAPING ITEMS.
- 3. SEE LANDSCAPING AND EROSION CONTROL SHEETS FOR LOCATIONS.

TYPICAL LANDSCAPING DETAILS

USER NAME = dhawes	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 4/27/2022 - 11:57:38 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

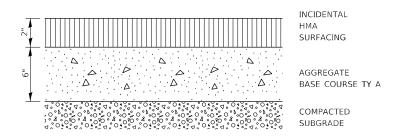




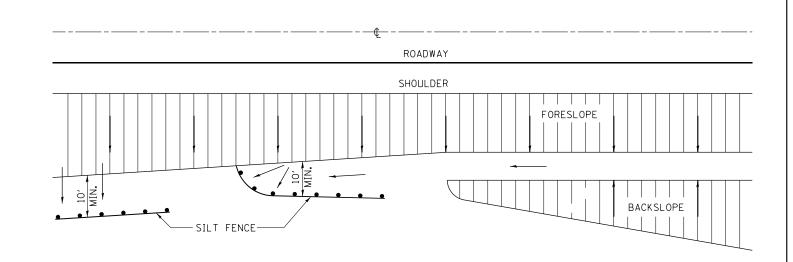
CLASS A3 WILL BE REQUIRED ON THIS PROJECT AT THE LOCATION SHOWN ON THE PLANS.

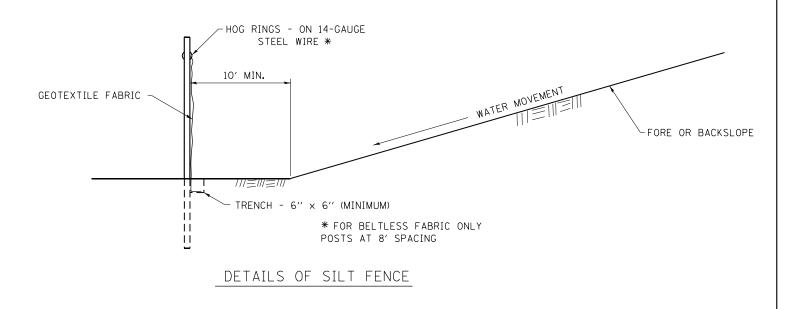
THIS WORK SHALL BE DONE ACCORDING TO SECTION 283
OF THE STANDARD SPECIFICATION. AGGREAGTE DITCH
WILL BE MEASURED FOR PAYMENT IN TONS ACCORDING
TO ARTICLE 311.08(b). AGGREGATE DITCH WILL BE PAID
FOR AT THE CONTRACT UNIT PRICE PER TON FOR
AGGREGATE DITCH.

AGGREGATE DITCH FOR FLEXIBLE DITCH LINING



BICYCLE PATH OR SHARED-USE TRAIL CROSS SECTION

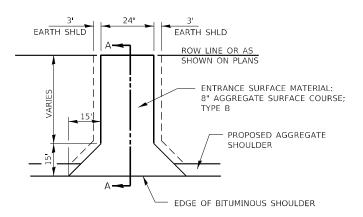


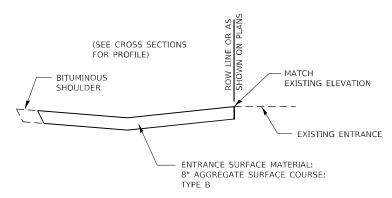


FOR SILT FENCE

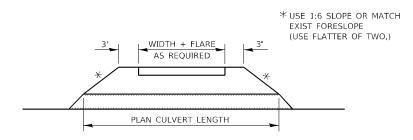
USER NAME = dhawes	DESIGNED -	REVISED -		EROSION CONTROL & SHARED-USE PATH		F.A.P.	SECTION	COUNTY	TOTAL	SHEET		
	DRAWN -	REVISED -	STATE OF ILLINOIS		DETAILS			311	(1-1)R.BR1	KENDALL	847	682
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						, , ,	CONTRAC	T NO. 66	6D26
PLOT DATE = 4/27/2022 - 11:57:40 AM	DATE -	REVISED -		SCALE: SHEET 3 OF 33 SHEETS STA. TO STA.					ILLINOIS FED. AI	D PROJECT		

FILE NAME: ...\D366D26-sht-de

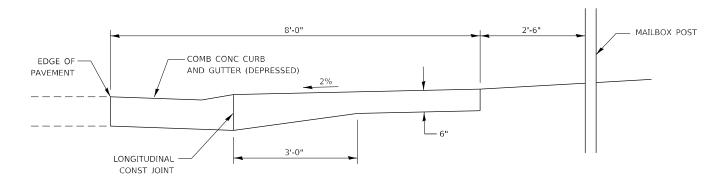




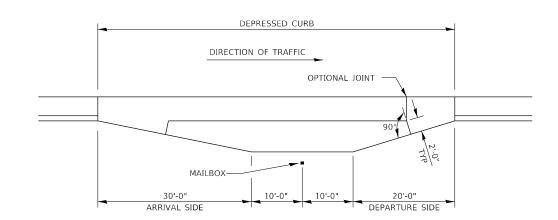
SECTION A-A

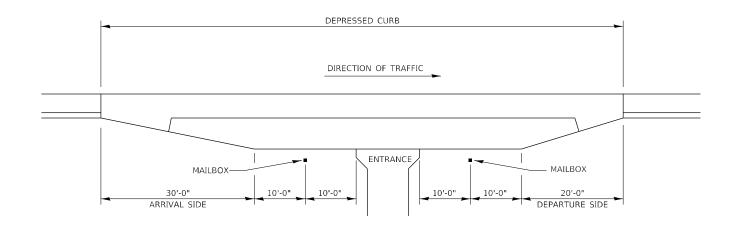


FIELD ENTRANCE DETAIL



TYPICAL CROSS SECTION





DETAIL OF MAILBOX TURNOUT IN CURB AND GUTTER SECTION TYPICAL INSTALLATION

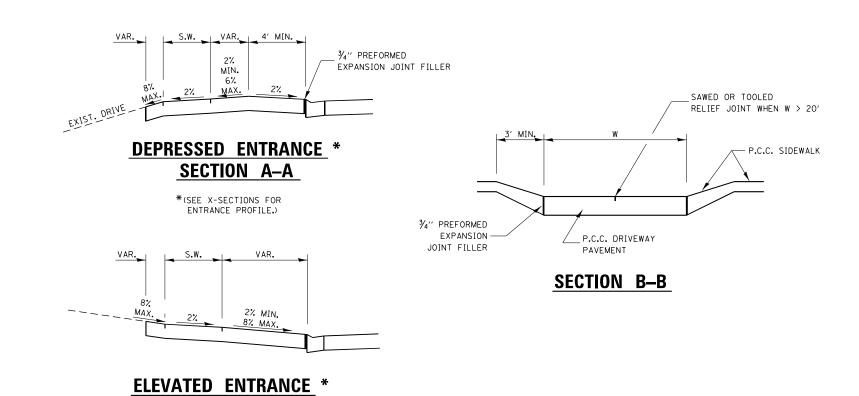
GENERAL NOTES

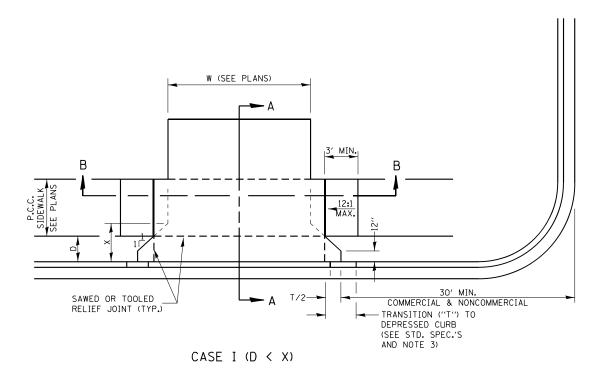
- 1. THE LONGITUDINAL CONSTRUCTION JOINT SHALL CONFORM TO SECTION 420.05 OF THE STANDARD SPECIFICATIONS.
- 2. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PC CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED ON THE PLANS WHICH PRICE SHALL INCLUDE THE LONGITUDINAL CONSTRUCTION JOINT, AND THE ADDITIONAL THICKNESS REQUIRED TO TRANSITION TO THE DEPRESSED COMBINATION CONCRETE CURB AND GUTTER.
- 3. MAINTAIN A MINIMUM 10' TANGENT SECTION FROM EACH SIDE OF MAILBOX.

MAILBOX TURNOUT WITH URBAN TYPICAL

TOTAL SHEET NO. 847 683

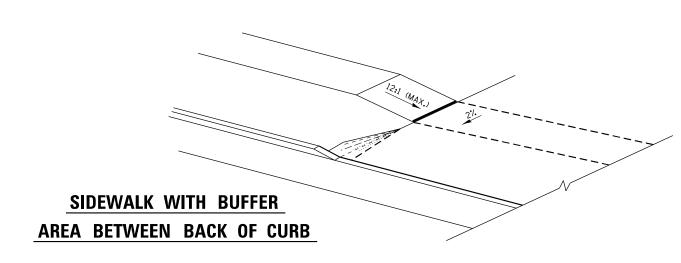
USER NAME = dhawes	DESIGNED -	REVISED -				URAL ENTRAP			F.A.P.	SECTION	COUNTY	SI
	DRAWN -	REVISED -	STATE OF ILLINOIS						311	(1-1)R.BR1	KENDALL	+
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		IVIA	ILBOX TURNO	OI DEIVITS				CONTRAC	T N
PLOT DATE = 4/27/2022 - 11:57:40 AM	DATE -	REVISED -		SCALE:	SHEET 4	OF 33 SHEETS	STA.	TO STA.		ILLINOIS FED	AID PROJECT	_

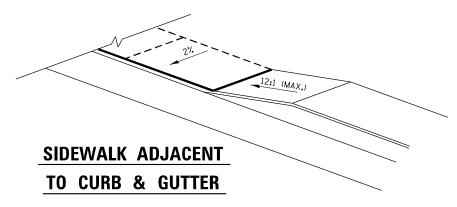




GENERAL NOTES:

- 1. X = 15' FOR ALL CASES
- 2. COST OF EXPANSION JOINTS AND RELIEF JOINTS SHALL BE INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT.
- 3. AS THE DIMENSION "D" APPROACHES ZERO, THE TRANSITION TO DEPRESSED CURB SHALL BE NO STEEPER THAN 12:1

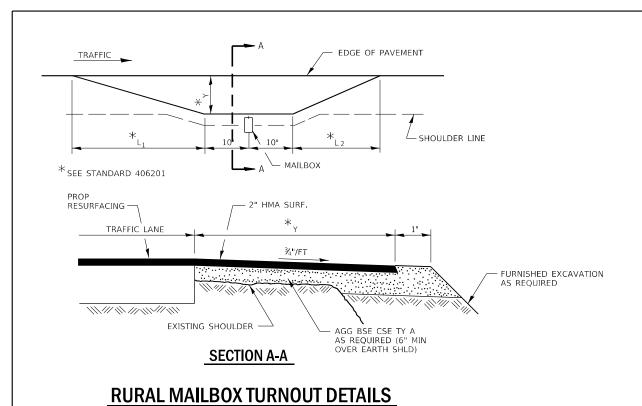




PCC URBAN ENTRANCES

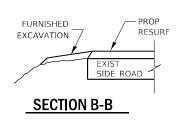
USER NAME = dhawes	DESIGNED -	REVISED -				URBAN ENTRANCE AND		F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		•			311	(1-1)R,BR1	KENDALL	847	684
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			SIDEWALK DETAILS				CONTRAC	T NO. 66	5D26
PLOT DATE = 4/27/2022 - 11:57:40 AM	DATE -	REVISED -		SCALE:	SHEET 5	OF 33 SHEETS STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

SECTION A-A



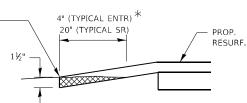
EDGE OF PROPOSED PAVEMENT OR HMA SHLD MIN 30' RURAL MIN 20' URBAN SEE DETAIL A SIDE ROADS PRIVATE & COMMERCIAL ENTRANCES

<u>SECTION A-A</u> DETAILS AT ENTRANCES & SIDE ROADS

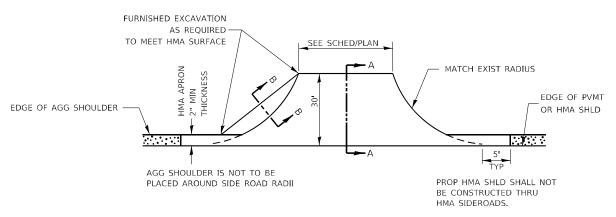


SCALE:

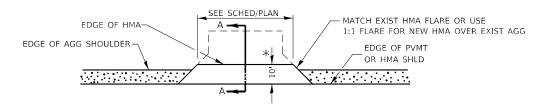
THE COST OF REMOVAL AT EXISTING HMA OR—
PCC LOCATIONS SHALL BE PAID FOR PER
SQ YD BY THE APPROPRIATE PAY ITEM.
REMOVAL AT THE EXISTING AGG LOCATIONS
SHALL BE INCIDENTAL TO THE HMA. A-3
LOCATIONS SHALL BE FEATHER TAPERED.



DETAIL A



PLAN AT SIDE ROADS



PLAN AT PRIVATE & COMMERCIAL ENTRANCES

(DO NOT RESURFACE FIELD ENTRANCES)

* PROPOSED HMA RESURFACING AT PUBLIC EDUCATIONAL FACILITY ENTRANCES SHALL BE EXTENDED TO THE RIGHT-OF-WAY LIMITS.

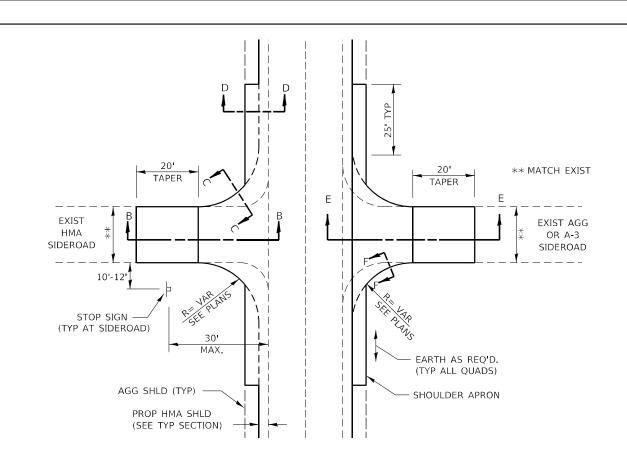
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	DRAWN -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

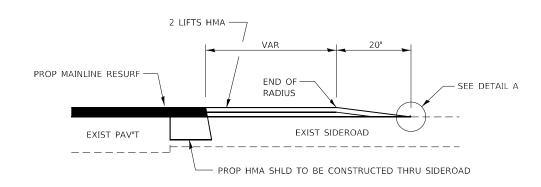
 PRIVATE ENTRANCE
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

 DETAILS
 311
 (1-1)R,BR1
 KENDALL
 847
 685

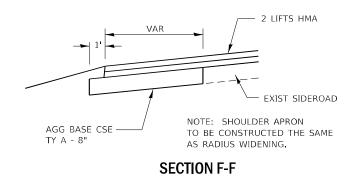
 SHEET 6
 OF 33
 SHEETS
 STA.
 TO STA.
 ILLINOIS FED. ALD PROJECT

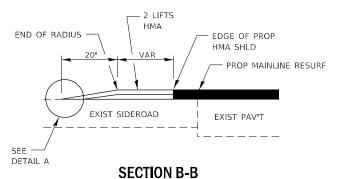


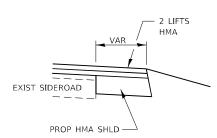
SIDEROAD DETAIL



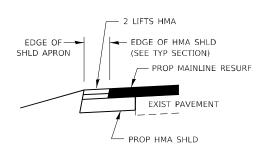
SECTION E-E



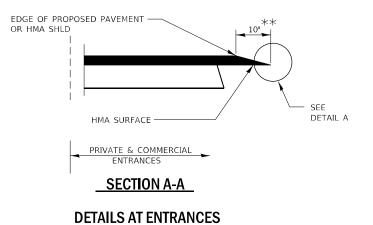


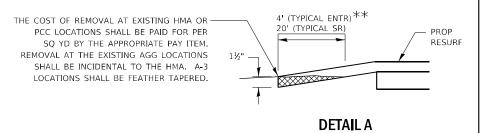


SECTION C-C

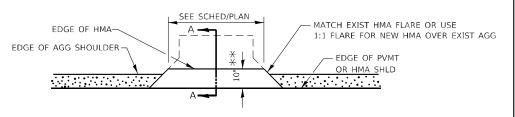


SECTION D-D





** PROPOSED HMA RESURFACING AT PUBLIC EDUCATIONAL FACILITY ENTRANCES SHALL BE EXTENDED TO THE RIGHT-OF-WAY LIMITS.



PLAN AT PRIVATE & COMMERCIAL ENTRANCES

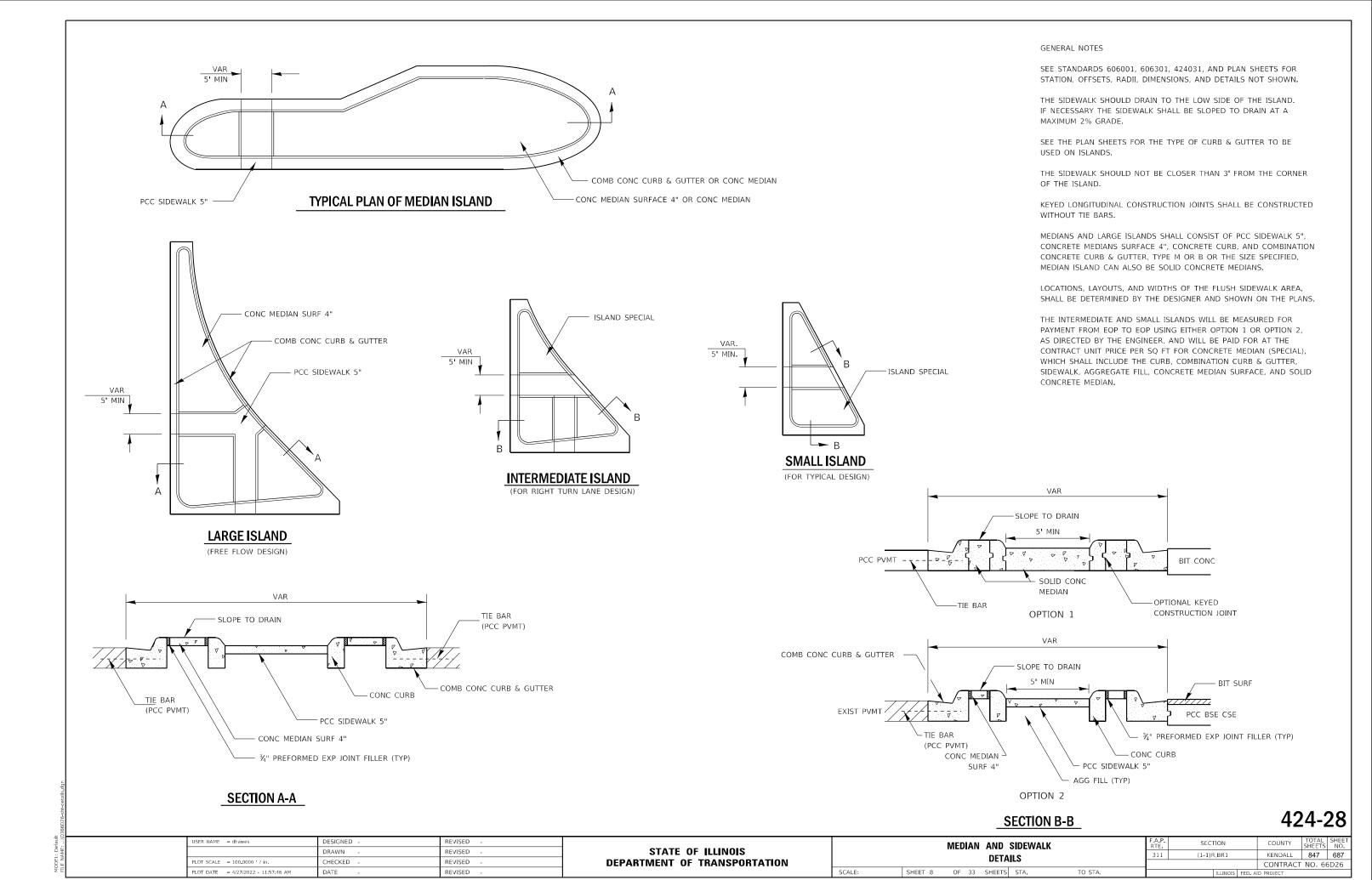
(DO NOT RESURFACE FIELD ENTRANCES)

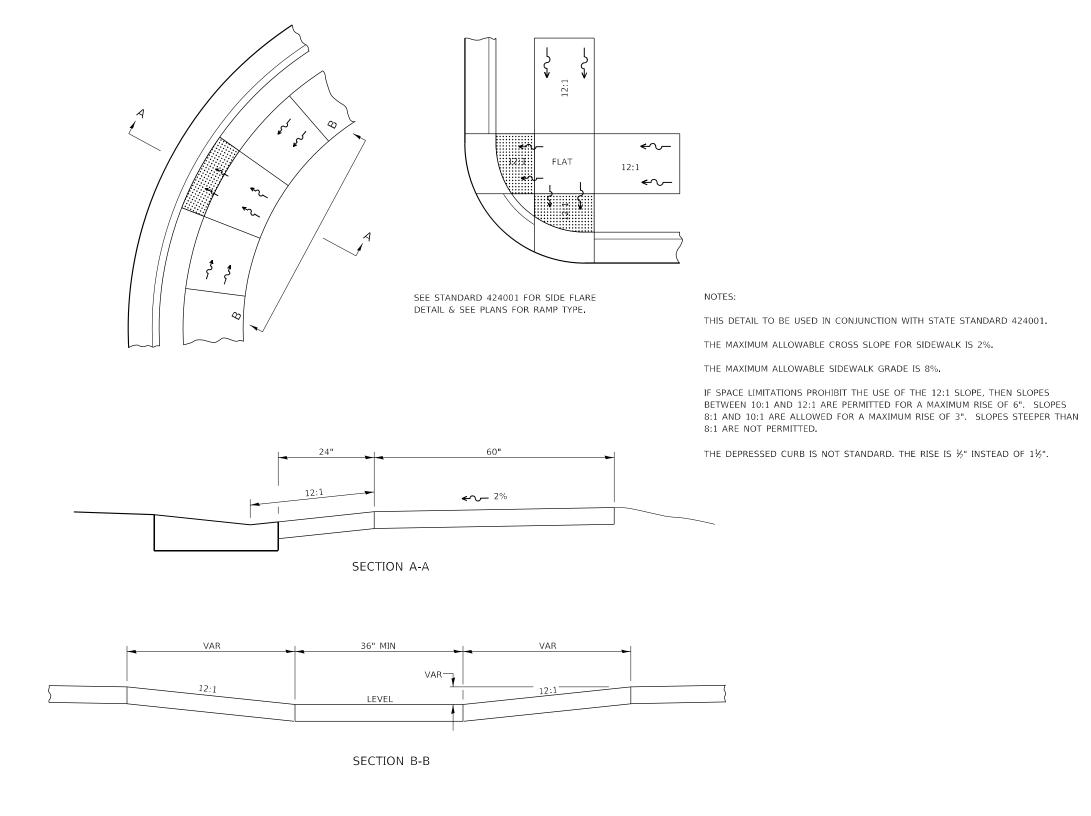
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	DRAWN -	REVISED -
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PLOT DATE = 4/27/2022 - 11:57:44 AM	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

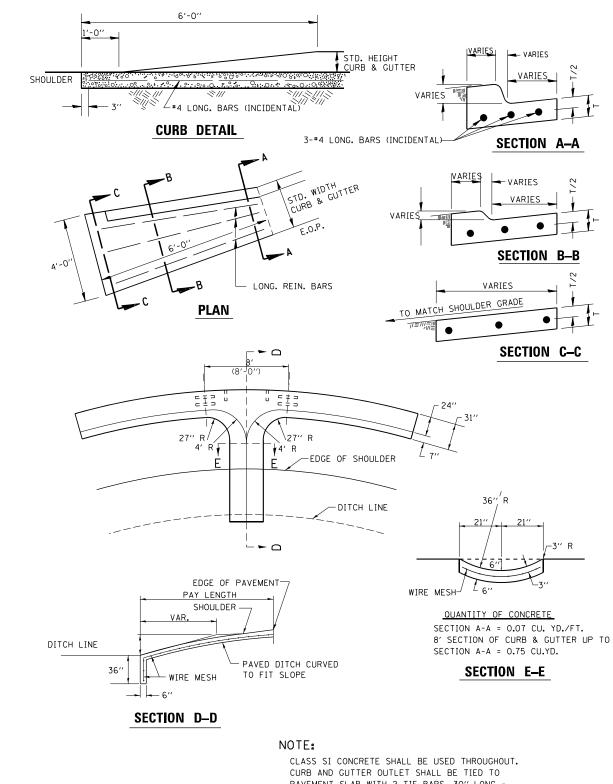
				SIDERO/	AD		F.A.P. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
	DETAILS							(1-1)F	R,BR1		KENDALL	847	686
DETAILS										CONTRACT	NO. 66	5D26	
	SHEET 7	OF	33	SHEETS	STA.	TO STA.			ILLINOIS	FED ΔI	D PROJECT		





ADA SIDEWALK ACCESSIBILITY RAMP DETAIL

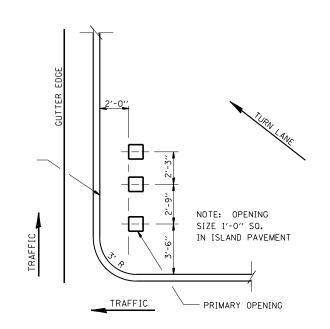
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	DRAWN -	REVISED -	STATE OF ILLINOIS		RAMP DETAILS		311	(1-1)R,BR1	KENDALL	847	688	3
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT	Γ NO. 6	6D26	, \Box
PLOT DATE = 4/27/2022 - 11:57:49 AM	DATE -	REVISED -		SCALE:	SHEET 9 OF 33 SHEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT			\neg



CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
CURB AND GUTTER OUTLET SHALL BE TIED TO
PAVEMENT SLAB WITH 2 TIE BARS, 30" LONG 30" CENTERS. OUTLET SHALL BE TIED TO CURB AND
GUTTER AT CONTRACTION JOINTS AS SHOWN. GUTTER
OUTLET AND PAVED DITCH SHALL BE REINFORCED WITH
WIRE MESH HAVING A WEIGHT OF AT LEAST 58 LBS/SO. FT.
COST TO BE INCLUDED IN THE UNIT PRICE PER CU. YD.
FOR CLASS SI CONCRETE (OUTLET).

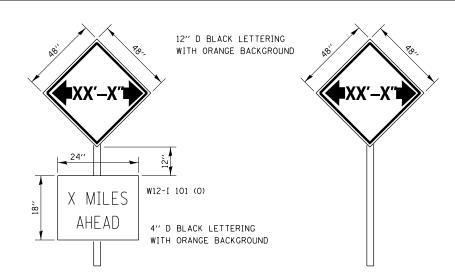
CURB & GUTTER OUTLET, SPECIAL

USER NAME = dhawes	DESIGNED -	REVISED -		CURB AND GUTTER		F.A.P.	SECTION	COUNTY	TOTAL	SHE	ET
	DRAWN -	REVISED -	STATE OF ILLINOIS			311	(1-1)R,BR1	KENDALL	847	68	9
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		DETAILS			CONTRACT	T NO. 66	6D2f	5
PLOT DATE = 4/27/2022 - 11:57:52 AM	DATE -	REVISED -		SCALE:	SHEET 10 OF 33 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT			\neg



ISLAND SIGN POST SPACING DETAIL

NOTE: THE ENGINEER SHALL DETERMINE THE NUMBER OF OPENINGS REQUIRED.



TO BE POST MOUNTED AS SHOWN ELSEWHERE IN THE PLANS.

COST OF SUPPLYING, INSTALLING, MAINTAINING AND REMOVING WIDTH RESTRICTION SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

WIDTH RESTRICTION SIGNING DETAILS

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	DRAWN -	REVISED -
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

RDWY.

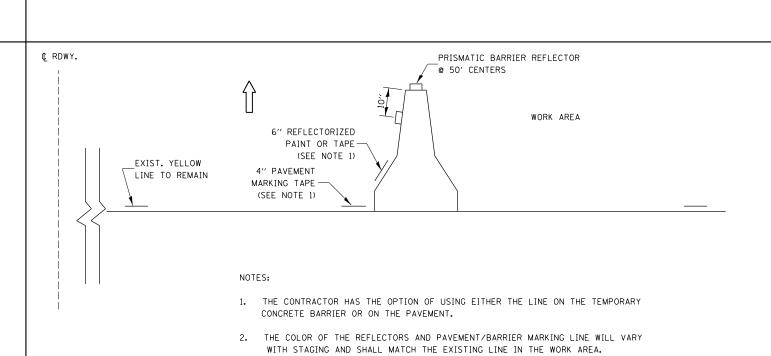
EXIST. YELLOW LINE TO BE REM. AND REPLACED

WITH WHITE PAINT OR TAPE

NOTES:

ISLAND SIGN POST SPACING & TEMP. CONC. BARRIER DETAILS SHEET 11 OF 33 SHEETS STA.

SECTION (1-1)R,BR1 KENDALL 847 690 CONTRACT NO. 66D26



3. THE COST OF THE REFLECTORS AND THE PAVEMENT/BARRIER MARKING LINE IS INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.

TRAFFIC CONTROL DETAIL

FOR TEMPORARY CONCRETE BARRIER

YELLOW PRISMATIC BARRIER REFLECTOR @ 50' CENTERS

1. THE CONTRACTOR HAS THE OPTION OF USING EITHER THE LINE ON THE TEMPORARY

TRAFFIC CONTROL DETAIL

FOR TEMPORARY CONCRETE BARRIER

2. THE COST OF THE REFLECTORS AND THE BARRIER/PAVEMENT MARKING LINE IS

INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.

CONCRETE BARRIER OR ON THE PAVEMENT.

6" YELLOW REFLECTORIZED

4" YELLOW PAVEMENT

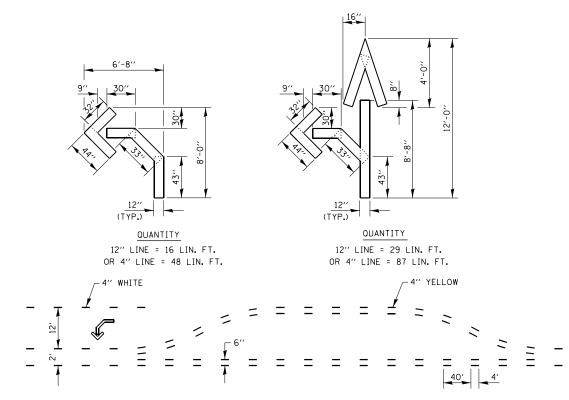
EXIST. WHITE

LINE TO REMAIN

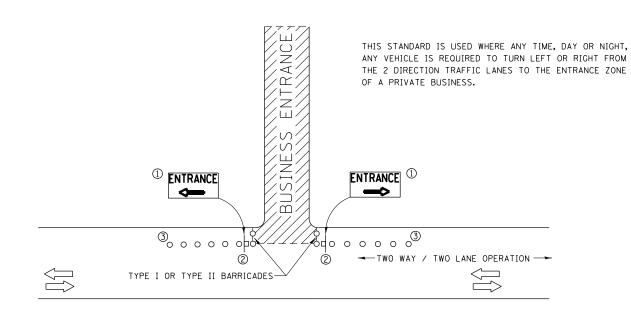
PAINT OR TAPE (SEE NOTE 1)

- MARKING TAPE

(SEE NOTE 1)



SHORT-TERM PAVEMENT MARKING
FOR MEDIANS AND ARROWS



SYMBOLS

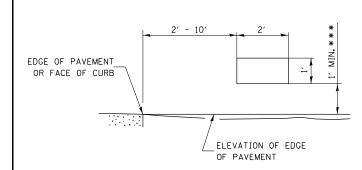


BUSINESS ENTRANCE ZONE

O BARRICADE OR DRUM WITH FLASHING LIGHT

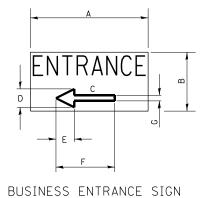
SIGN ON TEMPORARY SUPPORT

- ① REFER TO BUSINESS ENTRANCE SIGN TABLE FOR DIMENSIONS.
- ② SEE "SIGNS ON TEMPORARY SUPPORTS" DETAIL.
- 3 DRUMS



SIGNS ON TEMPORARY SUPPORTS

*** WHEN WORK OPERATIONS EXCEED FOUR DAYS, THIS DIMENSION SHALL BE 5' MIN. IF LOCATED BEHIND OTHE DEVICES, THE HEIGHT SHALL BE SUFFICIENT TO BE SEEN BY MOTORISTS.



4" BLUE LETTERING NON-REFLECTIVE WITH WHITE REFLECTIVE BACKGROUND

SIGN				DIMENS	SIONS		
SIZE	Α	В	С	D	Ε	F	G
24 X 12	24	12	8.25	4.75	3.75	12	2.25

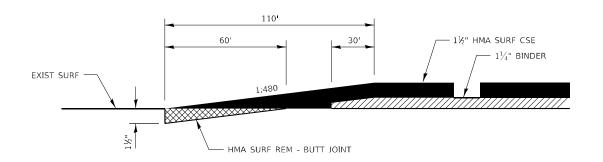
SIGNS FOR BUSINESSES ABUTTING THE WORK ZONE, DELINEATING THE WAY THROUGH THE BARRICADES TO RESPECTIVE ENTRANCES.

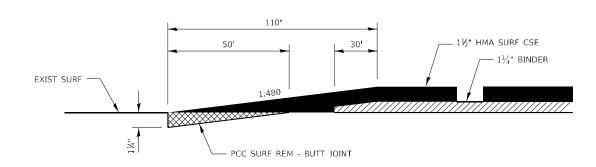
BUSINESS ABUTTING WORK ZONE ENTRANCE SIGN

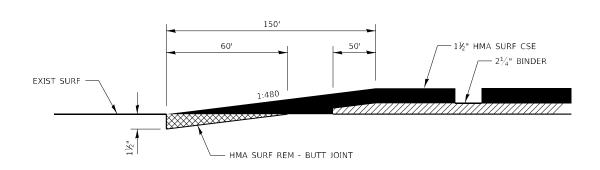
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	DRAWN -	REVISED -	Ì
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PLOT DATE = 4/27/2022 - 11:57:56 AM	DATE -	REVISED -	

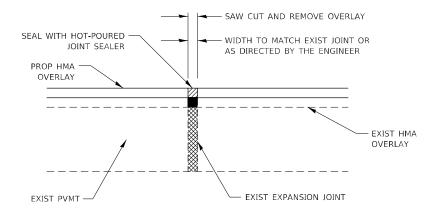
STATE	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

ARRO	ARROW MARKING & BUSINESS ENTRANCE DETAILS T 12 OF 33 SHEETS STA. TO STA.	ESS	F.A.P. RTE	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.				
							311 (1-1)R,BR1			KENDALL	847	691	ı
	LIV		TINGE D	LIAIL						CONTRACT	NO. 60	5D26	ı
SHEET 12	OF	33	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT			ı





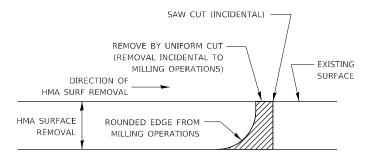




EXPANSION JOINT REHABILITATION DETAIL

GENERAL NOTES:

- THE NEW HMA OVERLAY SHALL BE SAWED, REMOVED AND THE JOINT AREA CLEANED. PRIOR TO PLACING THE HOT-POURED JOINT SEALER, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR.
- 2. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR EXPANSION JOINT REHABILITATION.



NOTE:

SCALE:

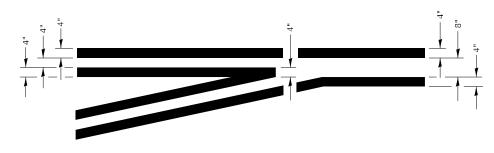
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE,
THEN A SAW CUT SHALL BE USED TO MANUFACTURE
A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL.
THE ENGINEER SHALL BE THE SOLE JUDGE
CONCERNING THE USE OF THIS DETAIL

HMA DETAIL AT BUTT JOINTS

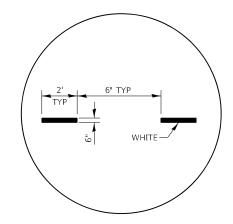
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	DRAWN -	REVISED -	ì
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	ì
PLOT DATE = 4/27/2022 - 11:57:58 AM	DATE -	REVISED -	l

STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

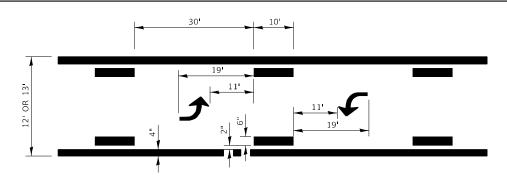
			E	BUTT J	DINT		F.A.P. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
DETAILS								1 (1-1)R,BR1			KENDALL	847	692
				DLIA	ILO						CONTRACT	NO. 66	D26
:	SHEET 13	OF	33	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		



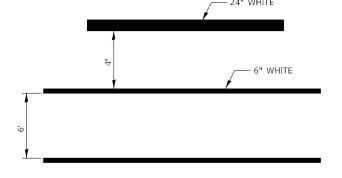
LEFT TURN LANE TYPICAL APPLICATION



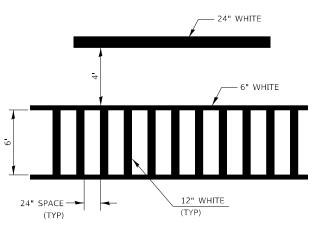
ADVANCE AND INTERSECTION LANE DIVIDER LINES



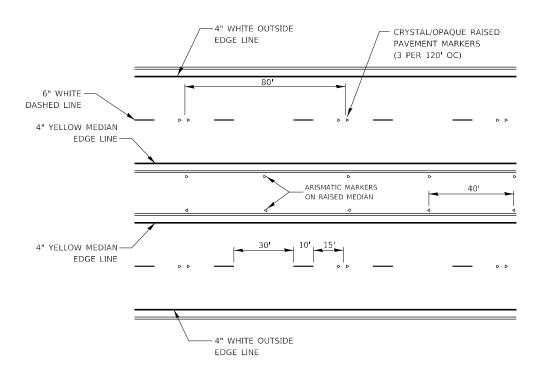
TYPICAL APPLICATION @
BI-DIRECTIONAL TURN LANE



TYPICAL SPACING DETAIL FOR CROSSWALKS AND STOP BARS



TYPICAL SPACING DETAIL FOR
CROSSWALKS AND STOP BARS
780-3
OPTION 2



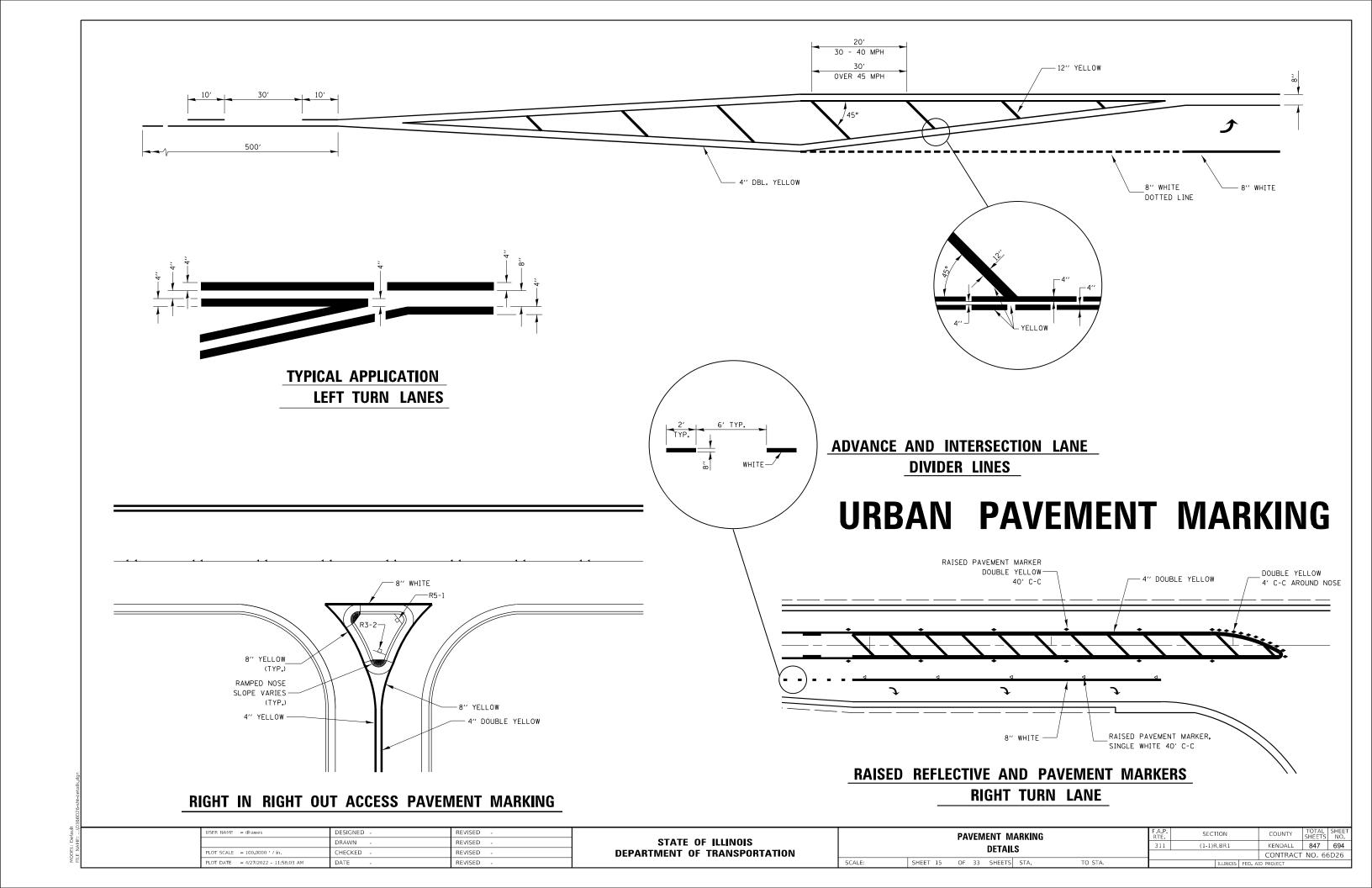
TYPICAL PAVEMENT MARKINGS

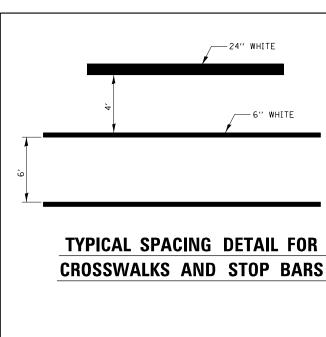
SHEET 14

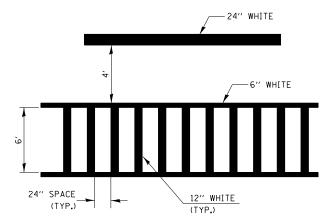
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

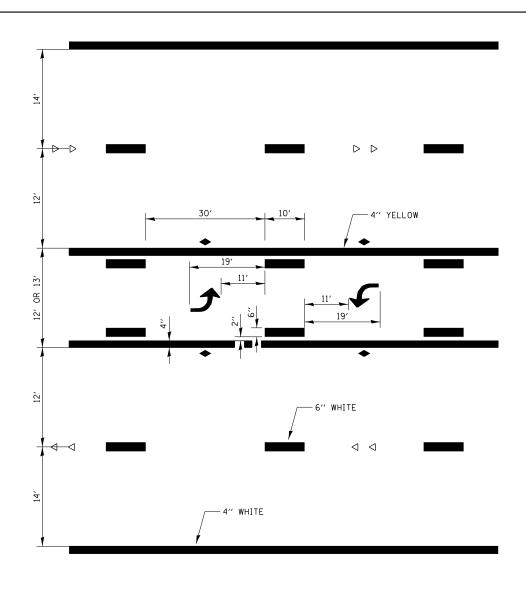
PAVEMENT M	ARKING		F.A.P. RTE	SECTION	N			SHEET NO.		
DETAIL	c		311	(1-1)R,BF	R1	KENDALL	847	693		
DETAIL	.0			CONTRACT NO. 660						
OF 33 SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT						



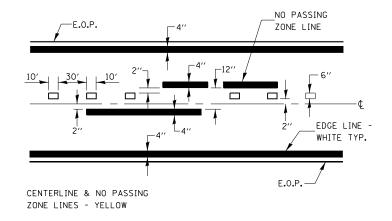




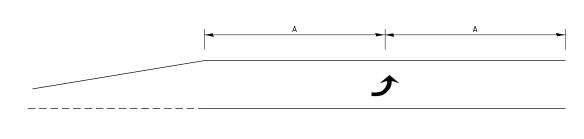
TYPICAL SPACING DETAIL FOR CROSSWALKS AND STOP BARS



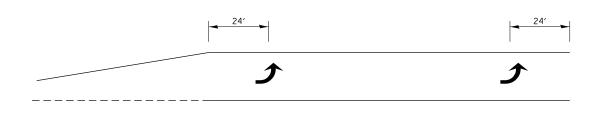
TYPICAL APPLICATION
TWO WAY LEFT TURN LANE (TWLTL)



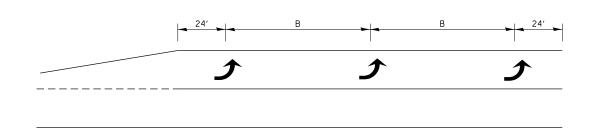
PAVEMENT MARKING



99' AND UNDER



100' TO 149'



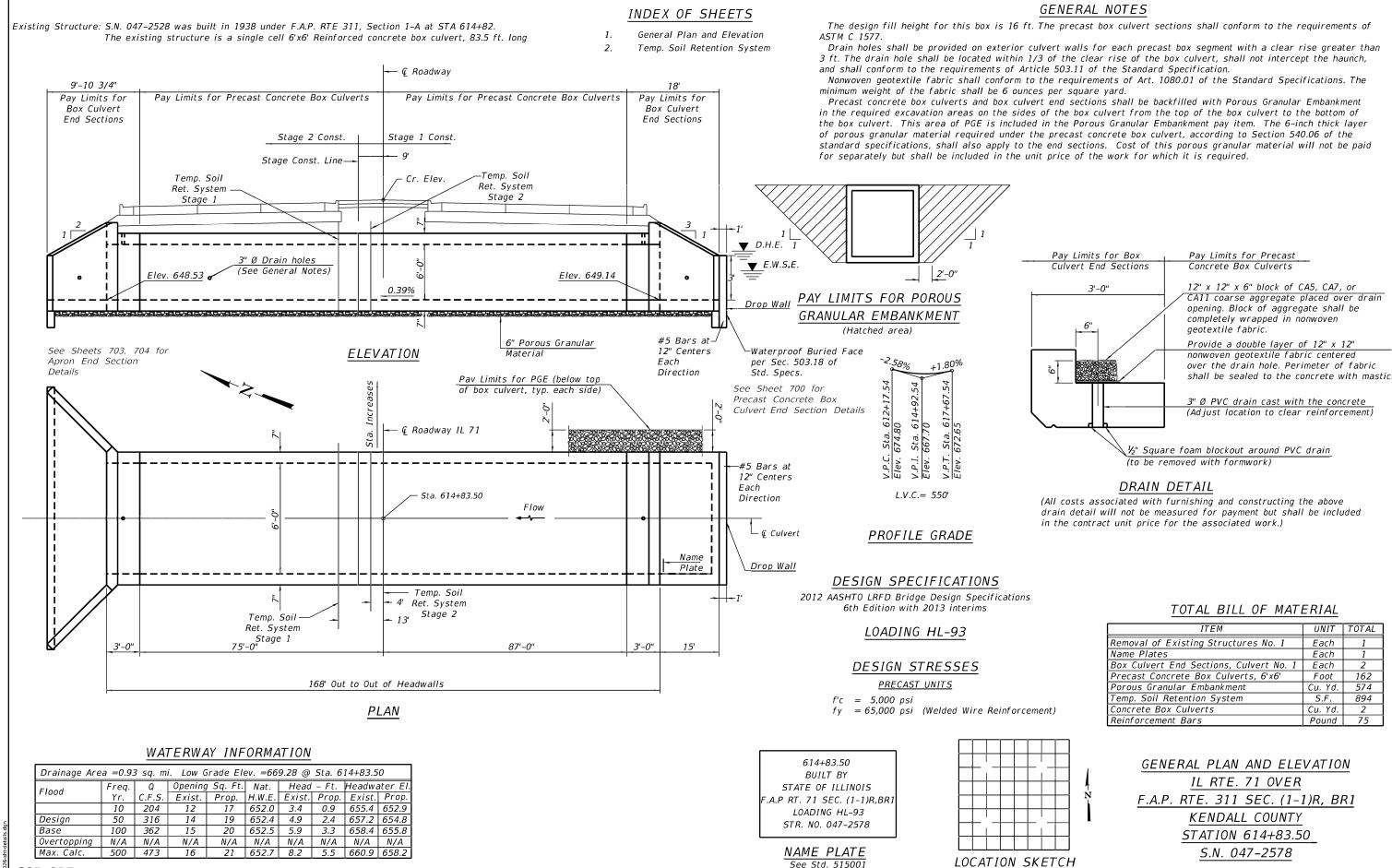
150' AND LONGER

TYPICAL PLACEMENT OF ARROWS
IN TURN LANES

URBAN PAVEMENT MARKING

USER NAME = dhaves DESIGNE - REVISED - REVISED - STATE OF ILLINOIS
DRAWN - REVISED - STATE OF ILLINOIS
DRAWN - REVISED - REVIS

MODEL: Default FILE NAME: ...\D366D26-sl



MODEL: Default

SCB-GPE

2-17-2017

DESIGNED

CHECKED

DRAWN

DATE

REVISED

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REVISED

REVISED

USER NAME = dhawes

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PLOT DATE = 8/12/2022 - 11:24:40 AM

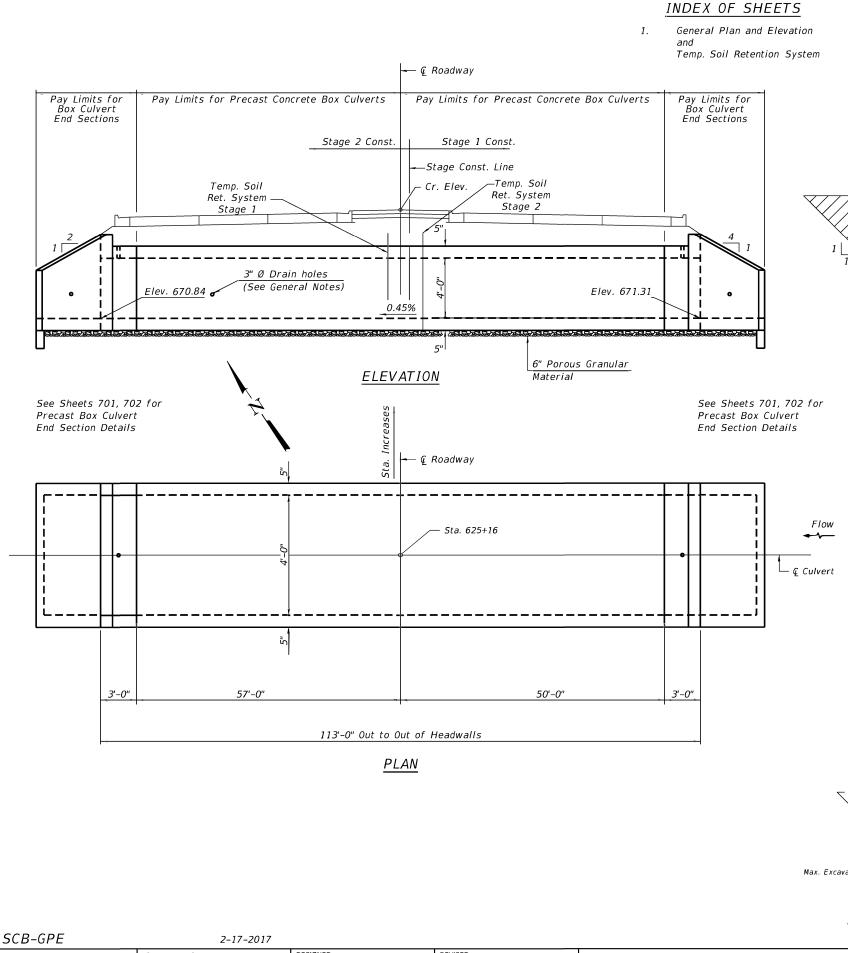
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BOX CULVERT DETAILS
SN 047-2578, STA. 614 + 83.50

| SHEET 17 OF 35 SHEETS STA.

TO STA.

SCALE:



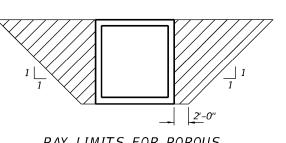
GENERAL NOTES

The design fill height for this box is 3 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.



PAY LIMITS FOR POROUS
GRANULAR EMBANKMENT

(Hatched area)



PROFILE GRADE

DESIGN SPECIFICATIONS

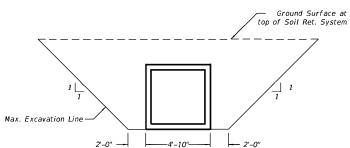
2012 AASHTO LRFD Bridge Design Specifications 6th Edition with 2013 interims

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

c = 5,000 psi y = 65,000 psi (Welded Wire Reinforcement)



STAGE 1 & 2 - TEMP. SOIL RETENTION SYSTEM

SCALE:

Pay Limits for Precast Pay Limits for Box Culvert End Sections Concrete Box Culverts 12" x 12" x 6" block of CA5, CA7, or 3'-0" CAll coarse aggregate placed over drain opening. Block of aggregate shall be completely wrapped in nonwoven geotextile fabric. Provide a double layer of 12" x 12" nonwoven geotextile fabric centered over the drain hole. Perimeter of fabric shall be sealed to the concrete with mastic. 3" Ø PVC drain cast with the concrete (Adjust location to clear reinforcement) ½" Square foam blockout around PVC drain (to be removed with formwork)

DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 2	Each	1
Box Culvert End Sections, Culvert No. 2	Each	2
Precast Concrete Box Culverts, 4'x4'	Foot	107
Porous Granular Embankment	Cu. Yd.	219
Temp. Soil Retention System	S.F.	684
Traversable Pipe Grate for	Foot	42
Concrete End Sections		

GENERAL PLAN AND ELEVATION

IL RTE. 71 OVER

F.A.P. RTE. 71 SEC. (1-1)R, BR1

KENDALL COUNTY

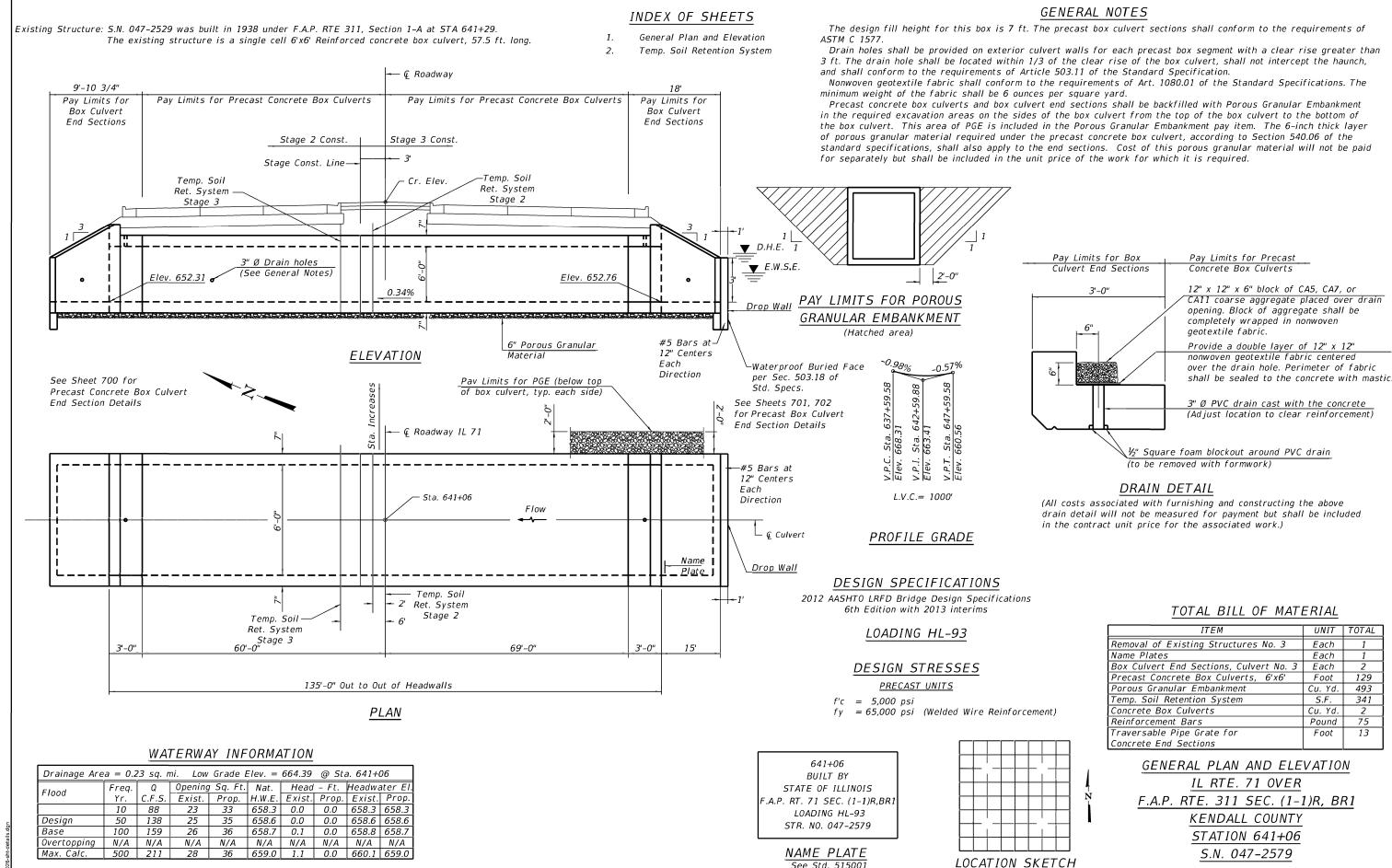
STATION 625+16

CULVERT NO. 2

USER NAME = dhawes	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/12/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BOX CULVERT DETAILS							F.A.P. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
CULVERT NO. 2. STA. 625 + 16					311	(1-1)R,BR1		KENDALL	849	696A			
CULVERT NU. 2, 51A. 625 + 16							_[CONTRACT	r NO. 60	5D26
SHEET 18	OF	35	SHEETS	STA.	TO	O STA.	ILLINOIS FED. AID PROJECT						



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

See Std. 515001

SCALE:

PRECAST BOX CULVERT DETAILS

SN 047-2579, STA. 641 + 06

SHEET 19 OF 35 SHEETS STA.

SECTION

(1-1)R.BR1

311

TO STA.

COUNTY

KENDALL | 849 | 697

CONTRACT NO. 66D26

2-17-2017

DESIGNED

CHECKED

DRAWN

DATE

REVISED

REVISED

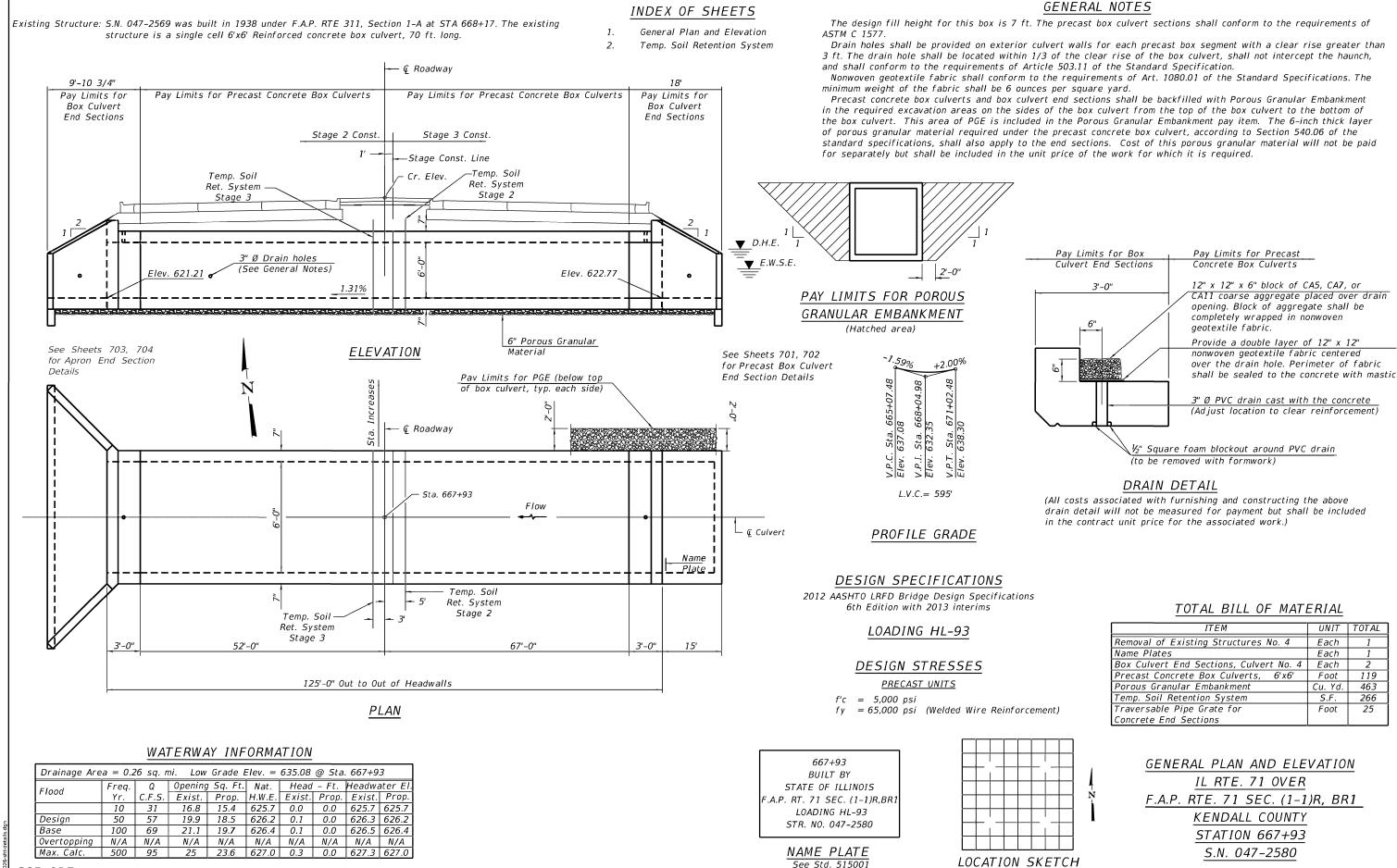
REVISED

REVISED

USER NAME = dhawes

PLOT SCALE = 100.0000 ' / in.

PLOT DATE = 8/12/2022 - 11:24:41 AM



MODEL: Default

SCB-GPE

2-17-2017

DESIGNED

CHECKED

DRAWN

DATE

REVISED

REVISED

REVISED

REVISED

USER NAME = dhawes

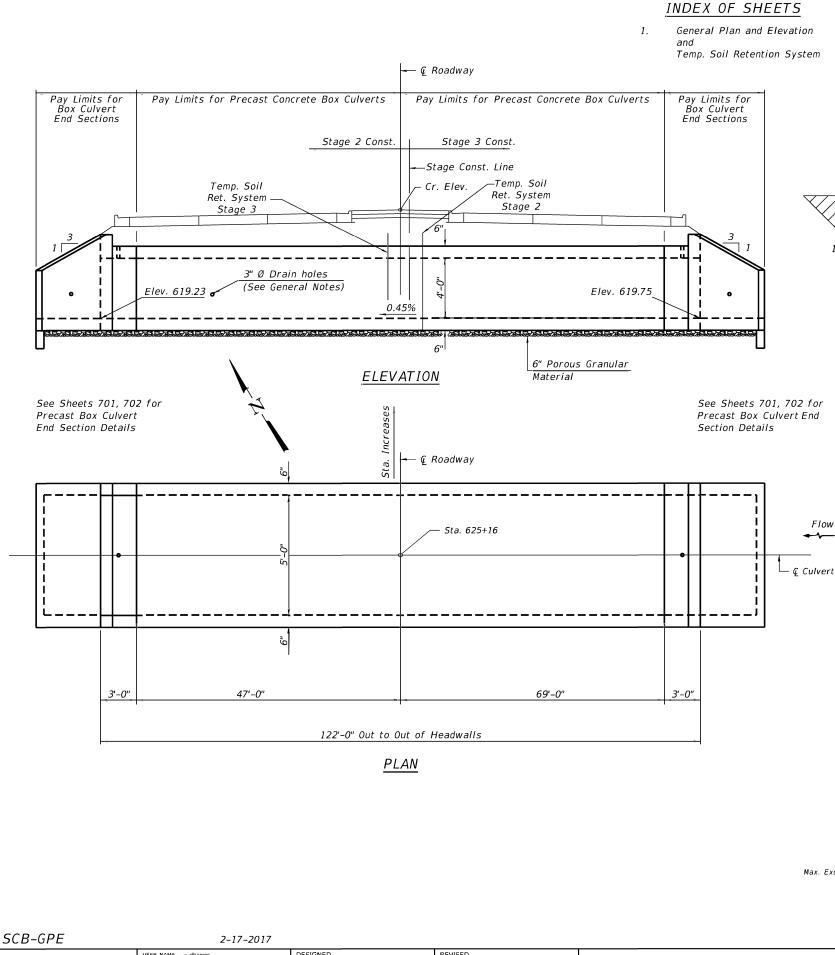
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TO STA.

SCALE:



REVISED

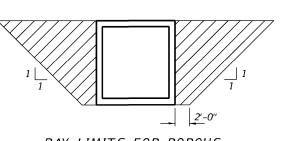
GENERAL NOTES

The design fill height for this box is 5 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.



PAY LIMITS FOR POROUS
GRANULAR EMBANKMENT
(Hatched area)

7.P.C. Sta. 729+18.10 (Stev. 629.65) (Stev. 629.65) (Stev. 628.34) (F.P.I. Sta. 730+75.60) (F.P.I. Sta. 732+33.10) (Stev. 630.04) (Stev. 630.04)

L.V.C.= 315'
PROFILE GRADE

DESIGN SPECIFICATIONS

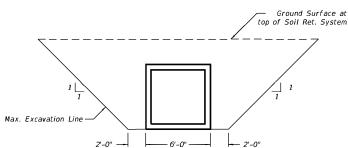
2012 AASHTO LRFD Bridge Design Specifications 6th Edition with 2013 interims

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

c = 5,000 psi y = 65,000 psi (Welded Wire Reinforcement)



STAGE 2 & 3 - TEMP. SOIL RETENTION SYSTEM

SCALE:

Pay Limits for <u>Precast</u> Pay Limits for Box Culvert End Sections Concrete Box Culverts 12" x 12" x 6" block of CA5, CA7, or 3'-0" CA11 coarse aggregate placed over drain opening. Block of aggregate shall be completely wrapped in nonwoven geotextile fabric. Provide a double layer of 12" x 12" nonwoven geotextile fabric centered over the drain hole. Perimeter of fabric shall be sealed to the concrete with mastic. B" Ø PVC drain cast with the concrete (Adjust location to clear reinforcement) ½" Square foam blockout around PVC drain (to be removed with formwork)

<u>DRAIN DETAIL</u>

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 5	Each	1
Box Culvert End Sections, Culvert No. 5	Each	2
Precast Concrete Box Culverts, 5'x4'	Foot	116
Porous Granular Embankment	Cu. Yd.	244
Temp. Soil Retention System	S.F.	1088
Traversable Pipe Grate for	Foot	40
Concrete End Sections		

GENERAL PLAN AND ELEVATION

IL RTE. 71 OVER

F.A.P. RTE. 71 SEC. (1-1)R, BR1

KENDALL COUNTY

STATION 730+47.20

CULVERT NO. 5

DATE

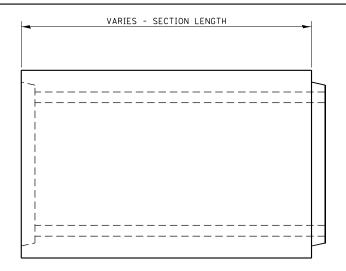
PLOT DATE = 8/12/2022

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

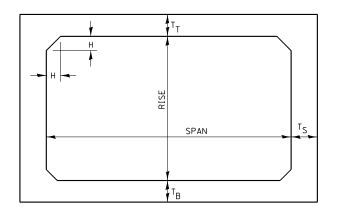
 PRECAST BOX CULVERT DETAILS
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.

 CULVERT NO. 5, STA. 730 + 47.20
 311
 (1-1)R,BR1
 KENDALL
 849
 698A

 SHEET 21
 OF 35
 SHEETS STA.
 TO STA.
 ILLINOIS FED. AD PROJECT



ELEVATION



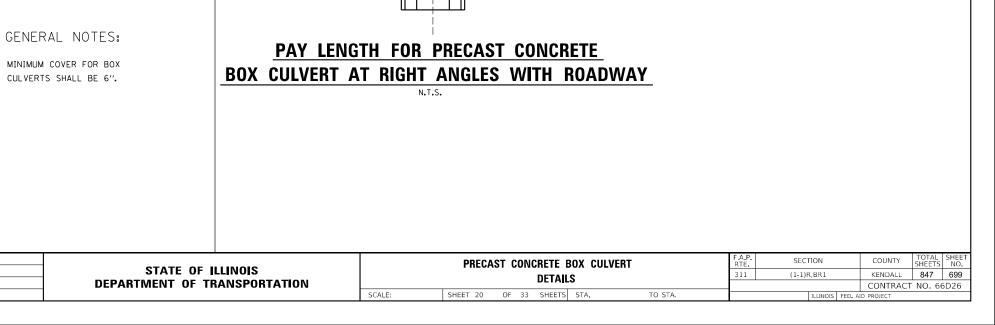
NOTE: THE HAUNCH DIMENSION H, IS EQUAL TO THE WALL THICKNESS T_S .

TYPICAL BOX SECTION

SPAN, FEET	T _T , INCHES		T _B , IN	ICHES	T _S , INCHES		
	М 259	М 273	М 259	M 273	м 259	M 273	
3	4	7	4	6	4	4	
4	5	71/2	5	6	5	5	
5	6	8	6	7	6	6	
6	7	8	7	7	7	7	
7	8	8	8	8	8	8	
8	8	8	8	8	8	8	
9	9	9	9	9	9	9	
10	10	10	10	10	10	10	
11	11	11	11	11 11		11	
12	12	12	12	12	12	12	

TYPICAL THICKNESSES

PRECAST CONCRETE BOX SECTION



PRECAST CONC.

BOX CULV. END SEC., EA.

¢ OF ROADWAY

CAST-IN-PLACE CONC. CONC. COLLAR

C OF ROADWAY

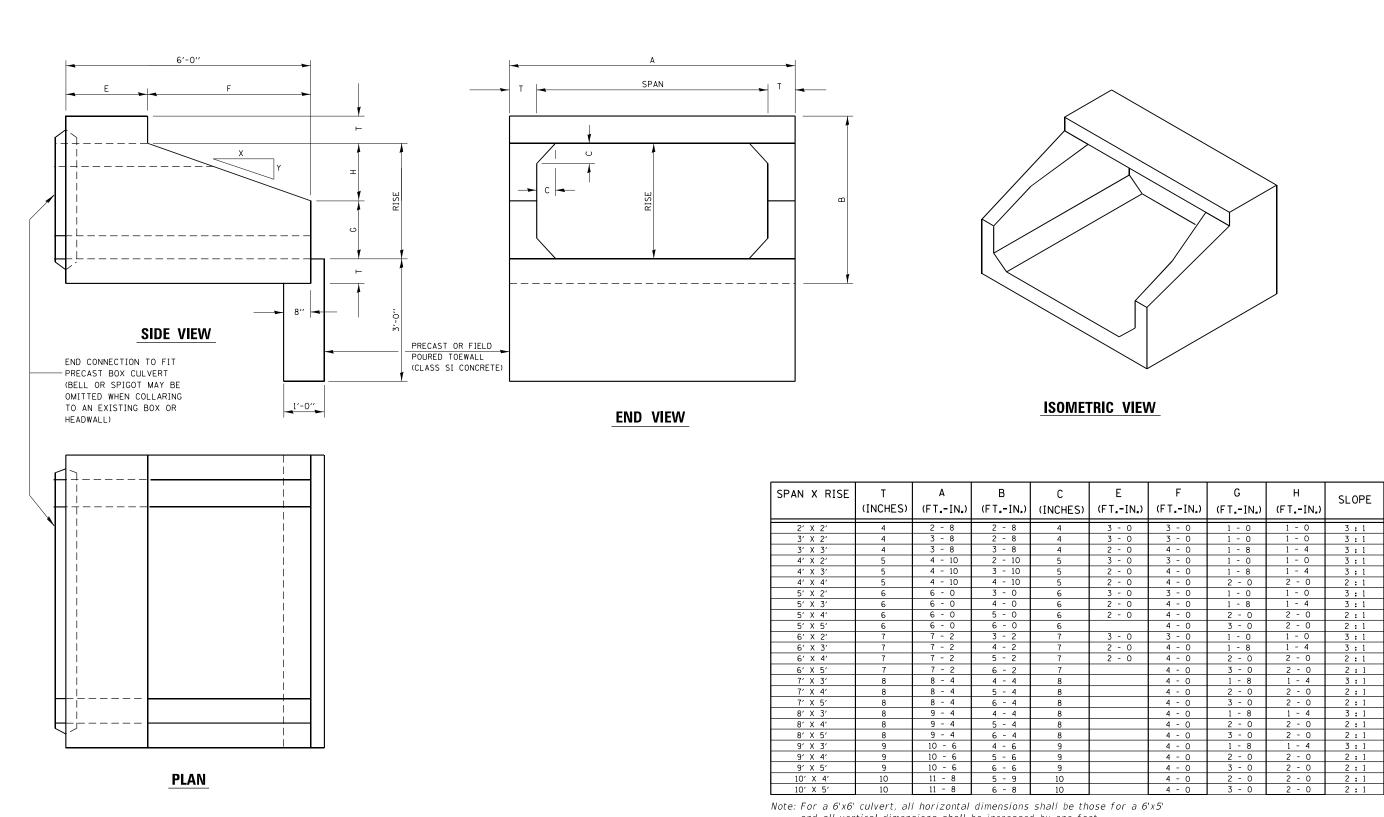
CAST-IN-PLACE CONC. HEADWALL

BOX CULV. END SEC., EA.

PAY LENGTH FOR PRECAST CONCRETE

BOX CULVERT SKEWED WITH ROADWAY N.T.S.

DESIGNED DRAWN REVISED CHECKED REVISED PLOT DATE = 4/27/2022 - 11:58:13 AM



and all vertical dimensions shall be increased by one foot.

PRECAST CONCRETE BOX CULVERT END SECTION

USER NAME = dhawes	DESIGNED -	REVISED -	PRI		PRECAST CONCRETE BOX CULVERT		SECTION	COUNTY TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS			311	(1-1)R,BR1	KENDALL 847 700
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	END SECTION DETAILS			CONTRACT NO. 66D26	
PLOT DATE = 7/21/2022 - 10:37:35 AM	DATE -	REVISED -		SCALE: N.T.S.	SHEET 23 OF 35 SHEETS STA. TO STA.		ILLINOIS FED. A	AID PROJECT