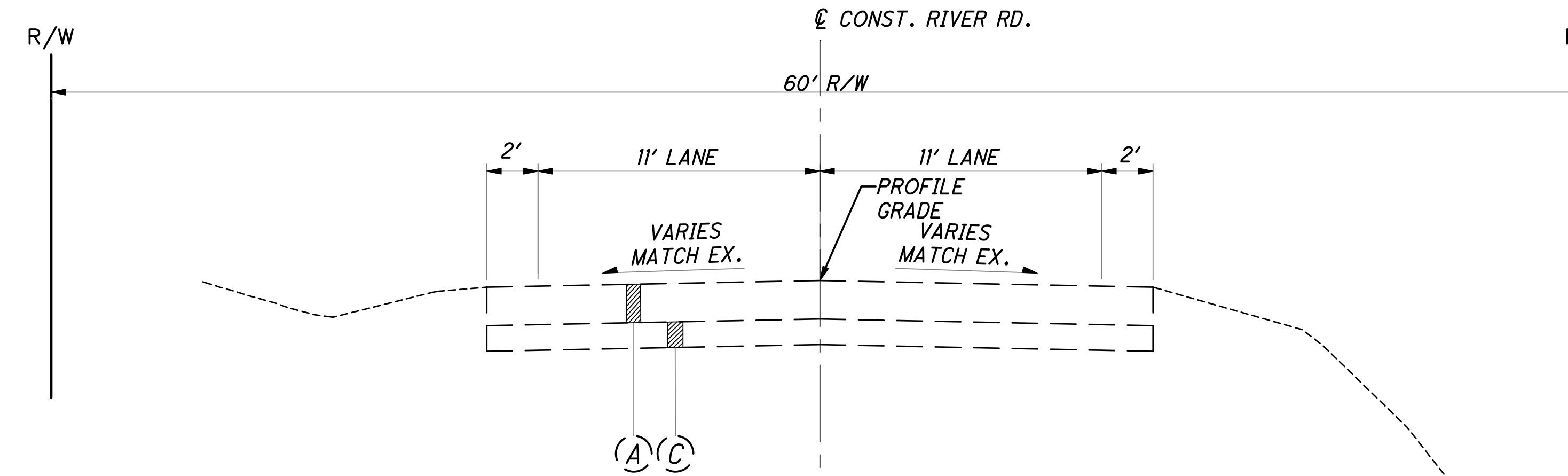


TYPICAL SECTIONS

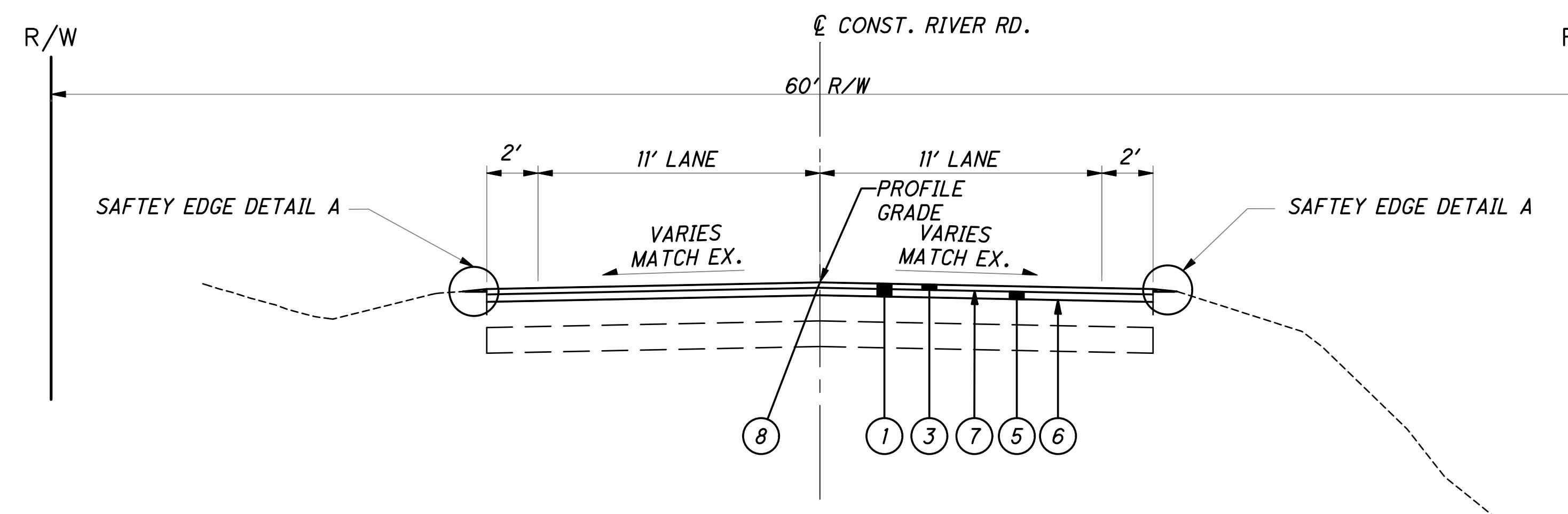


RIVER RD. - EXISTING SECTION

STA. 10+00.00 TO 76+79.21

&

STA. 92+19.16 TO 210+21.20

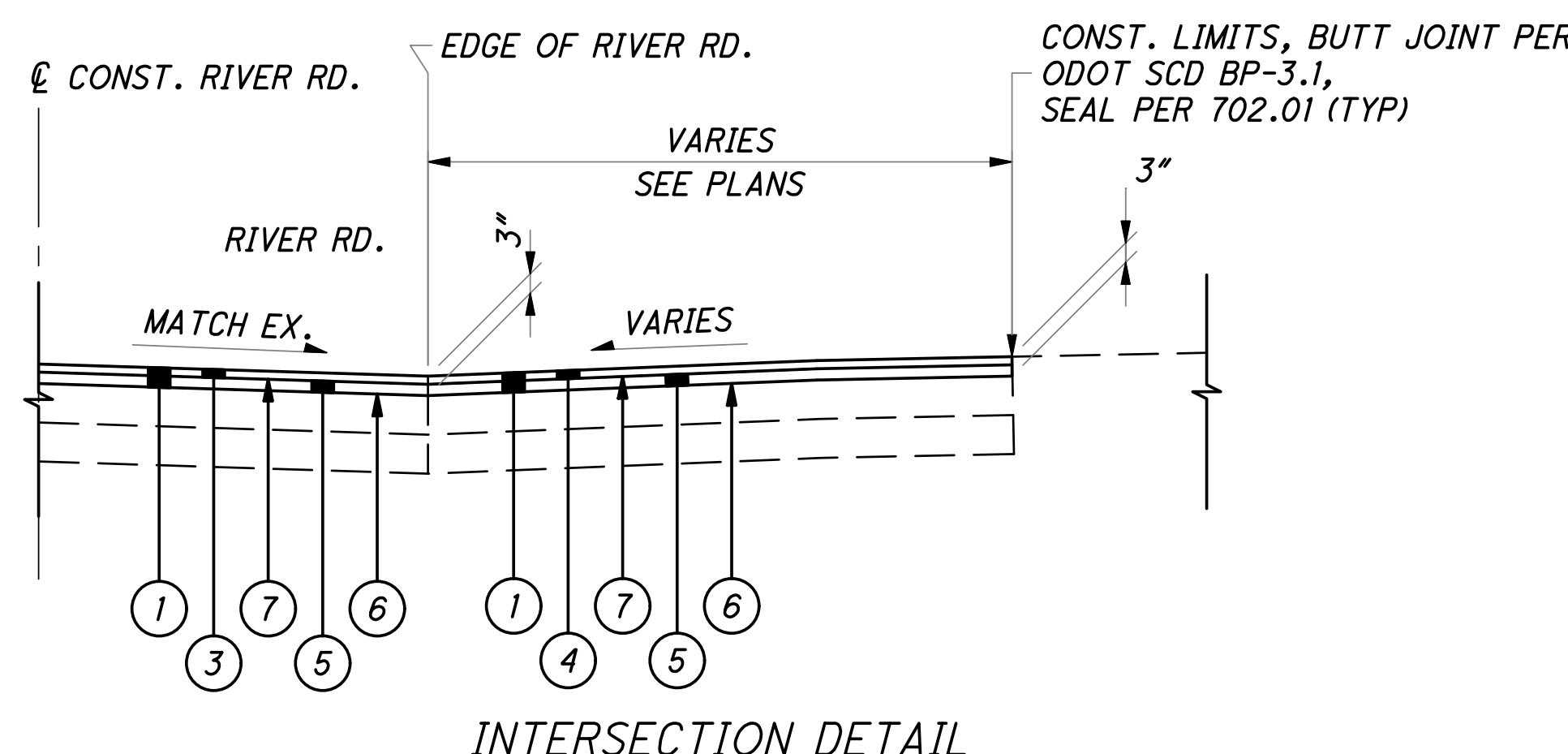


RIVER RD. - PROPOSED SECTION

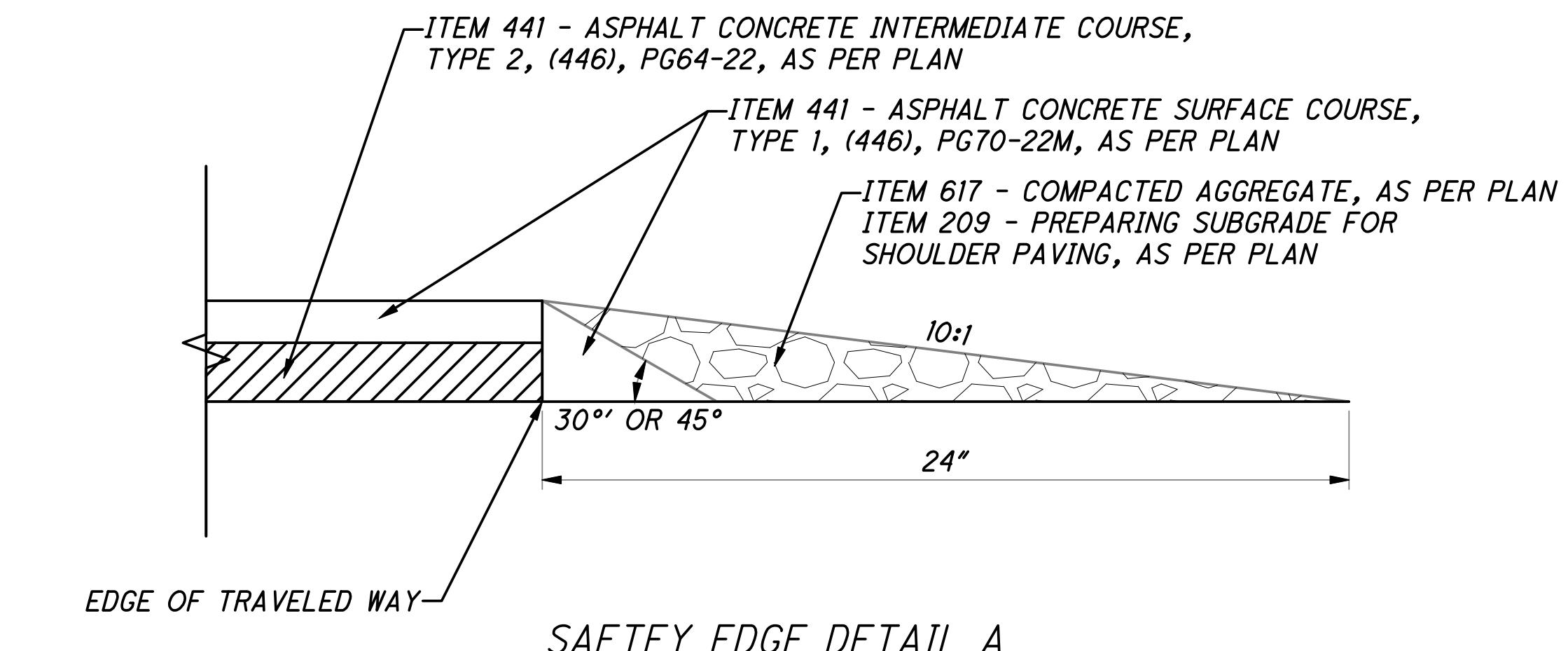
STA. 10+00.00 TO 76+79.21

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STA. 92+19.16 TO 210+21.20



INTERSECTION DETAIL



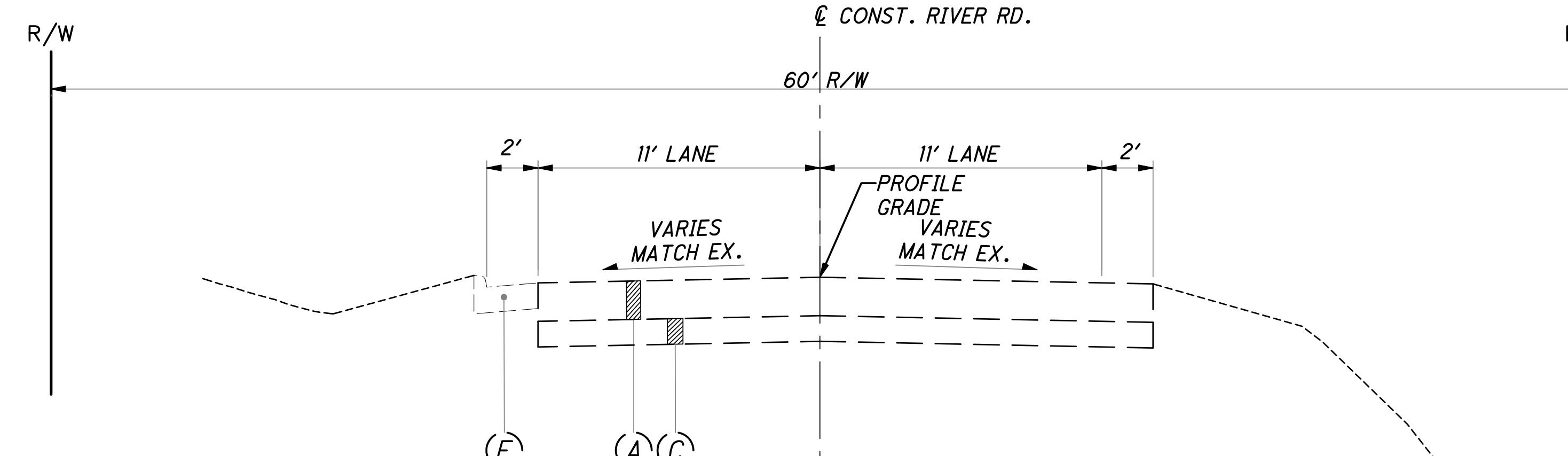
EX. LEGEND

- (A) EX. ASPHALT CONCRETE, 9" - 11" ±
- (B) EX. REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- (C) EX. AGGREGATE OR SLAG BASE, 2" - 3" ±
- (D) EX. SUBBASE, 6"
- (E) EX. CONCRETE CURB

PROP. LEGEND

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3") (SEE NOTE SHEET 8)
- (2) ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (SEE NOTE SHEET 9)
- (3) ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG70-22M, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)
- (4) ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)
- (5) ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446), PG64-22, AS PER PLAN (1-3/4") (SEE NOTE SHEET 9)
- (6) ITEM 407 - TACK COAT, 702.13 (APPLIED AT A RATE OF 0.09 GAL/SY)
- (7) ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE OF 0.06 GAL/SY)
- (8) ITEM 875 - LONGITUDINAL JOINT ADHESIVE

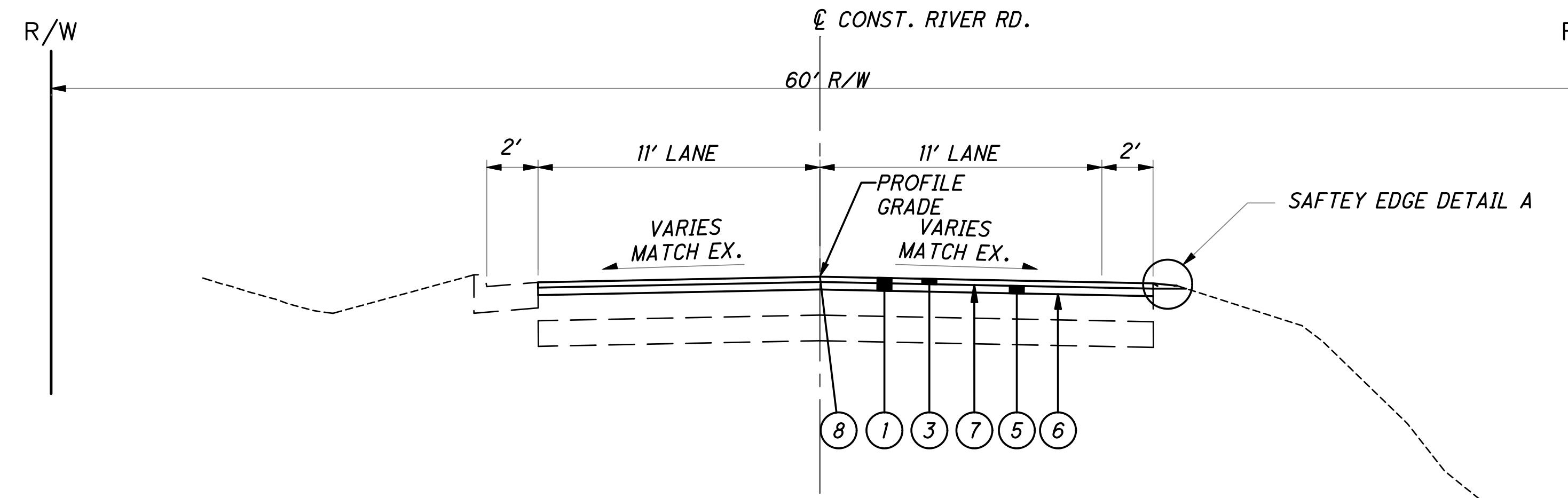
NOTE:
EXISTING GUARD RAILS ARE NOT SHOWN AND NOT TO BE DISTURBED

EX. LEGEND

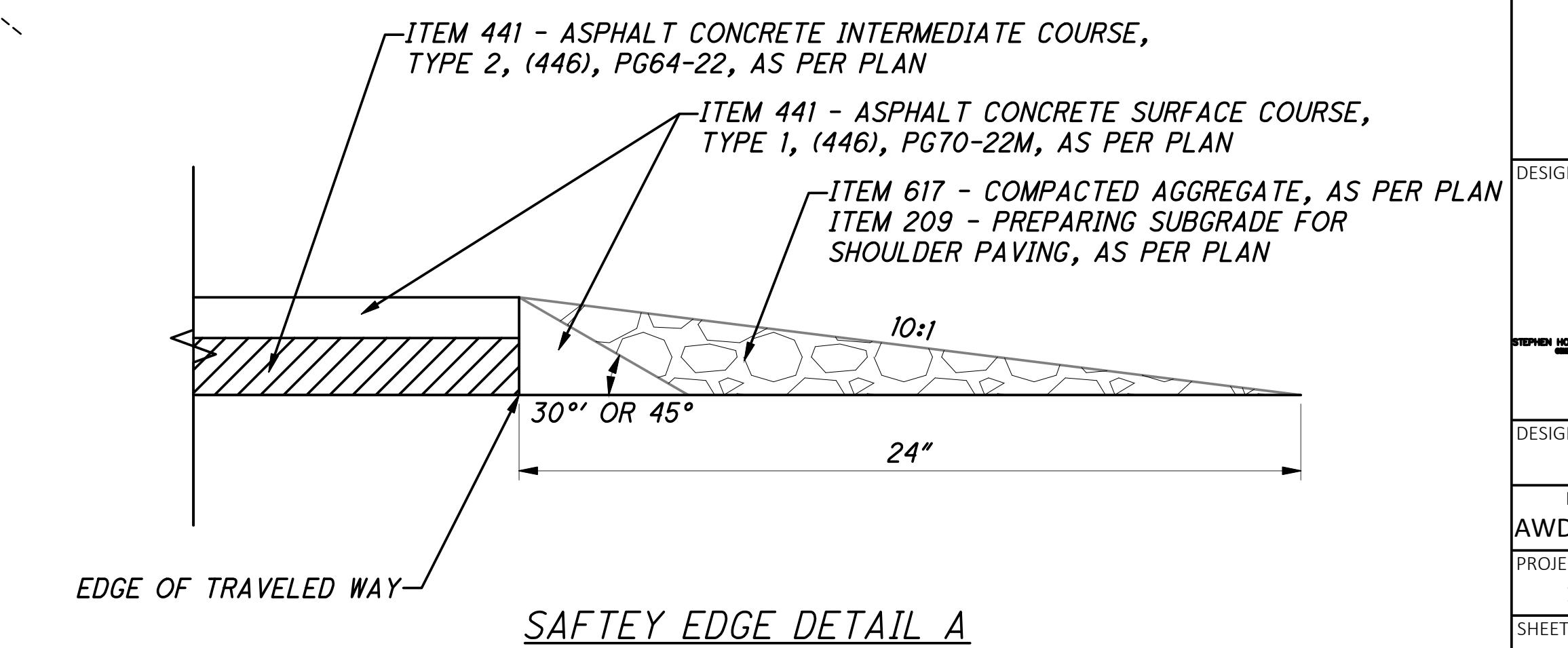
- (A) EX. ASPHALT CONCRETE, 9" - 11" ±
- (B) EX. REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- (C) EX. AGGREGATE OR SLAG BASE, 2" - 3" ±
- (D) EX. SUBBASE, 6"
- (E) EX. CONCRETE CURB

PROP. LEGEND

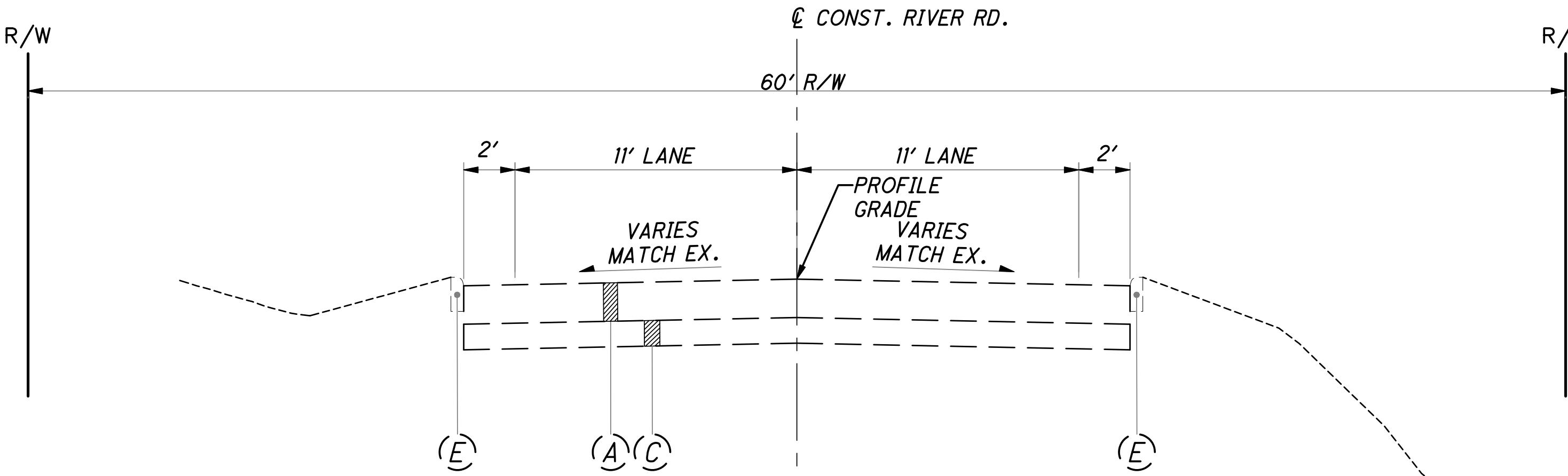
- ① ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3") (SEE NOTE SHEET 8)
- ② ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (SEE NOTE SHEET 9)
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- ⑥ ITEM 407 - TACK COAT, 702.13 (APPLIED AT A RATE OF 0.09 GAL/SY)
- ⑦ ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE OF 0.06 GAL/SY)
- ⑧ ITEM 875 - LONGITUDINAL JOINT ADHESIVE



NOTE:
EXISTING GUARD RAILS ARE NOT SHOWN AND NOT TO BE DISTURBED

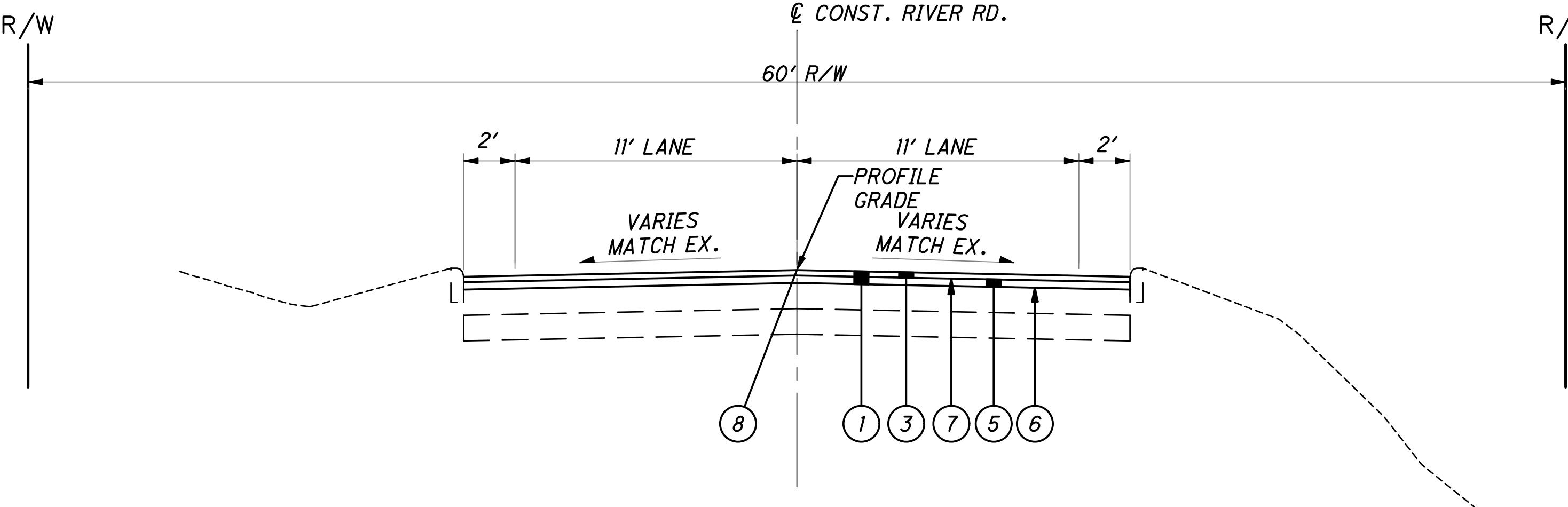


TYPICAL SECTIONS



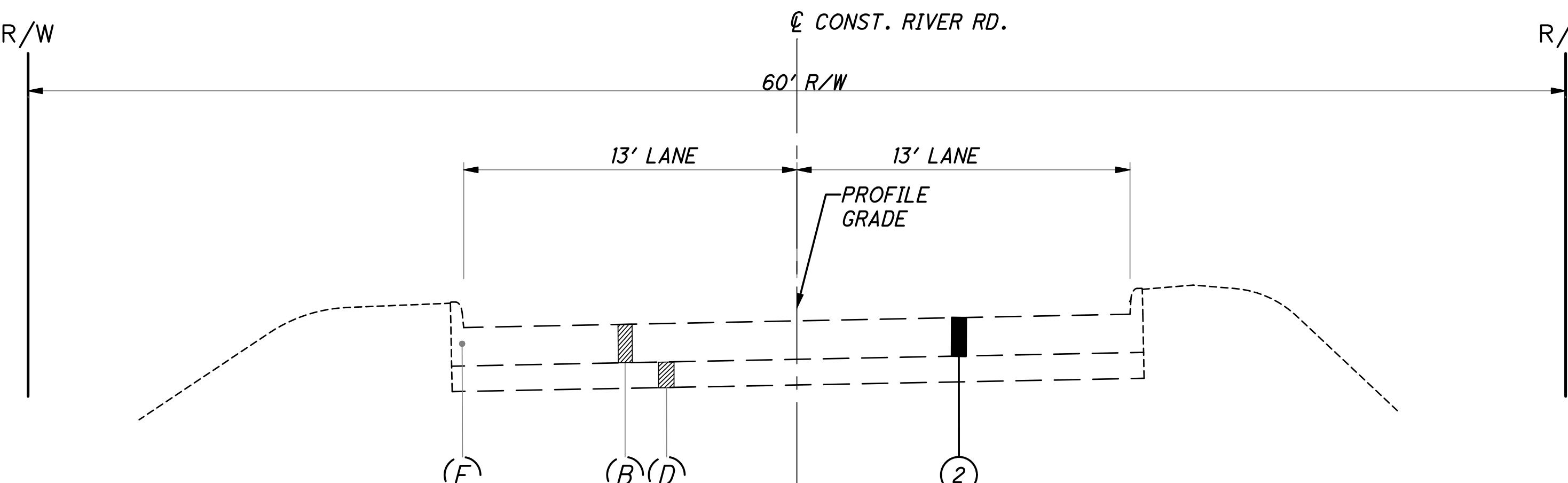
RIVER RD. - EXISTING SECTION

STA. 91+77.37 TO 92+19.16



RIVER RD. - PROPOSED SECTION

STA. 91+77.37 TO 92+19.16



RIVER RD. - EXISTING & PROPOSED SECTION

STA. 210+21.20 TO STA. 211+28.49

EX. LEGEND

- (A) EX. ASPHALT CONCRETE, 9" - 11" ±
- (B) EX. REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- (C) EX. AGGREGATE OR SLAG BASE, 2" - 3" ±
- (D) EX. SUBBASE, 6"
- (E) EX. CONCRETE CURB

PROP. LEGEND

- ① ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3") (SEE NOTE SHEET 8)
- ② ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (SEE NOTE SHEET 9)
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- ⑦ ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE OF 0.06 GAL/SY)
- ⑧ ITEM 875 - LONGITUDINAL JOINT ADHESIVE

NOTE:
EXISTING GUARD RAILS ARE NOT SHOWN AND NOT TO BE DISTURBED

DESIGN AGENCY
STEPHEN HOVANEC & ASSOCIATES, INC.
DESIGNER
MSL
REVIEWER
AWD 8/22/2025
PROJECT ID
105894
SHEET TOTAL
P.6 36

PAVEMENT CONT.

ITEM 253- PAVEMENT REPAIR, AS PER PLAN

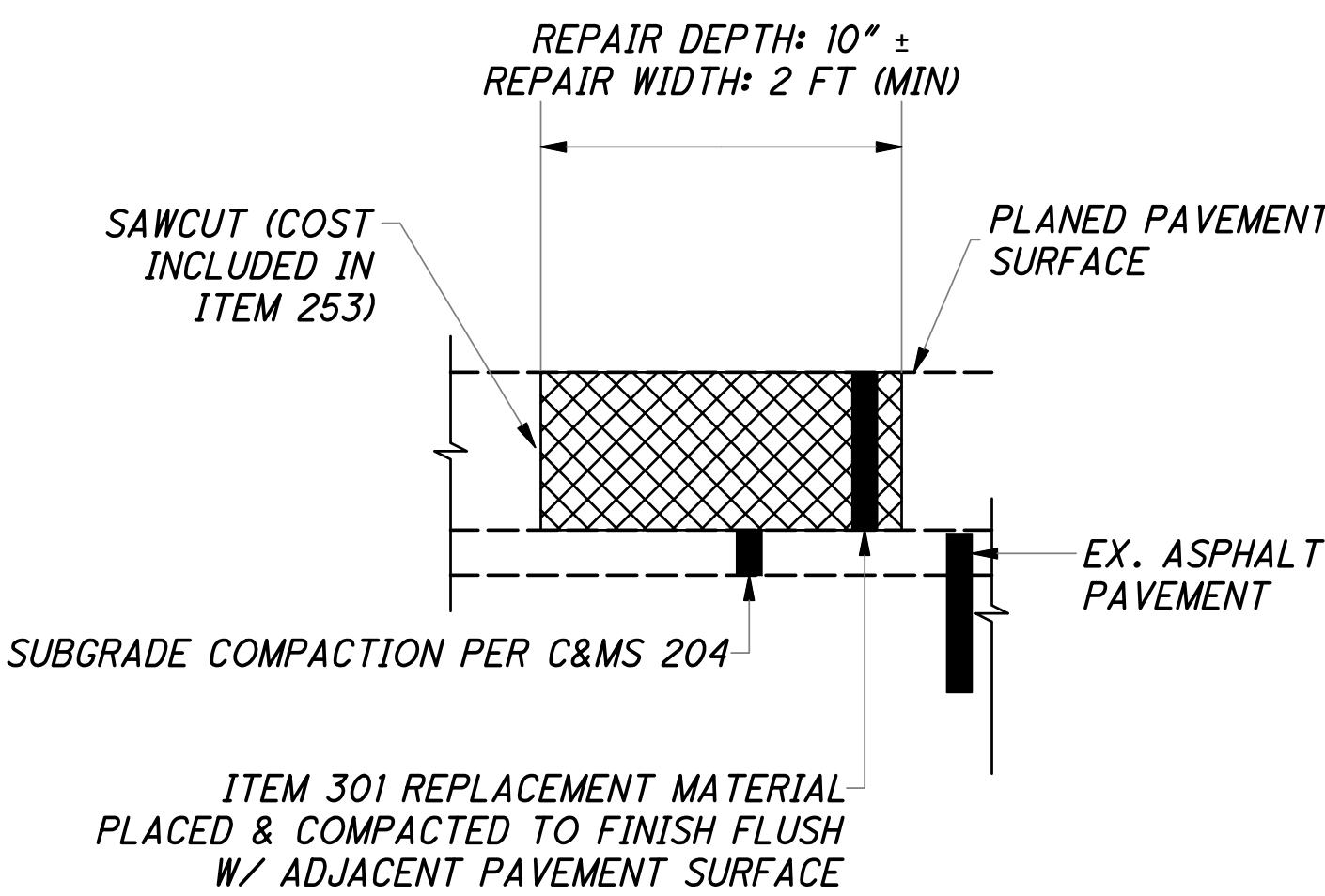
THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING PAVEMENT, FULL DEPTH, AND REPLACING WITH FLEXIBLE PAVEMENT.

FOR ESTIMATING PURPOSES, THE DEPTH SHALL BE $10'' \pm$ THE ENGINEER WILL DESIGNATE THE LOCATION AND LIMITS OF THE AREAS TO BE REPAIRED PRIOR TO ANY FULL DEPTH SAWCUTTING. CONTRACTOR TO SAWCUT THE LIMITS OF THE FULL DEPTH REPAIR AT THE LIMITS OF THE AREA DESIGNATED BY THE ENGINEER TO BE REPAIRED.

REPLACEMENT MATERIAL SHALL BE ASPHALT CONCRETE BASE PER C&MS 301, AND SHALL BE PLACED AND COMPAKTED TO FINISH FLUSH WITH ADJACENT PAVEMENT SURFACE. THE MAXIMUM SINGLE LIFT IS 6".

PAYMENT SHALL INCLUDE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIRS. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD OF ITEM 253- PAVEMENT REPAIR, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO BE USED AT LOCATIONS DETERMINED BY THE ENGINEER:

ITEM 253- PAVEMENT REPAIR, AS PER PLAN 300 CY



ITEM 253- PAVEMENT REPAIR, AS PER PLAN

ITEM 255- FULL DEPTH PAVEMENT REPAIR AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, AS PER PLAN

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 255, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

255.04 CORRECTION OF SUBGRADE (AND SUBBASE).

SUITABLE SUBBASE DISTURBED IN AREAS WHERE CONCRETE PAVEMENT IS REMOVED SHALL BE SHAPED AND COMPAKTED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST. UNSUITABLE SUBBASE, AS DETERMINED BY THE ENGINEER, SHALL BE REMOVED AND REPLACES WITH "ITEM 304 - AGGREGATE BASE, AS PER PLAN" TO THE DEPTH OF ADJACENT SUBBASE.

WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO THE DEPTH DETERMINED BY THE ENGINEER, AND REPLACED IN EIGHT (8) INCH MAXIMUM (LOOSE DEPTH) MECHANICALLY COMPAKTED LAYERS. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO REPLACE THE UNDERCUT SUBGRADE SHALL, TO THE EXTENT POSSIBLE, EXHIBIT THE SAME PHYSICAL PROPERTIES AS THE ADJACENT SOUND SUBGRADE MATERIALS. HOWEVER, USE OF SLAG, IN ANY FORM, IS NOT PERMITTED. ALL EXPOSED OR RECONSTRUCTED SUBGRADE SOILS SHALL BE COMPAKTED TO THE SATISFACTION OF THE ENGINEER. IN CONJUNCTION WITH THE ABOVE SUBGRADE WORK, AN ESTIMATED QUANTITY OF ITEM 204 - GEOTEXTILE FABRIC AND ITEM 204 - GEOGRID ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

REMOVAL AND DISPOSAL OF UNSUITABLE SUBBASE OR SUBGRADE MATERIAL SHALL NOT BE CONSIDERED INCIDENTAL TO ITEM 255 AND NO SEPARATE PAYMENT WILL BE MADE.

255.061 CURB REPLACEMENT

INTEGRAL CONCRETE CURB REMOVED IN CONJUNCTION WITH THE PAVEMENT REMOVAL OPERATIONS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM 255 PAVEMENT REMOVAL. INTEGRAL CONCRETE CURB TO BE REMOVED SHALL BE REPLACED (IN KIND) AND PAID FOR UNDER ITEM 609 - CURB, TYPE 2-A USING CLASS QC MS CONCRETE.

255.09 METHOD OF MEASUREMENT.

THE REPLACEMENT MATERIAL FOR UNSUITABLE SUBBASE SHALL BE FURNISHED, PLACED, MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 304 - AGGREGATE BASE, AS PER PLAN.

255.10 BASIS FOR PAYMENT.

PAYMENT FOR ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, AS PER PLAN IS FULL COMPENSATION FOR FURNISHING ALL MATERIALS AND LABOR PER 255.10 AND AS SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO INTEGRAL CONCRETE CURB AND/OR PAVEMENT REMOVAL, SUBBASE/SUBGRADE CORRECTION AND/OR REMOVAL, AS NECESSARY, FURNISHING AND PLACING DOWELS, TIE BARS, MESH AND THE CLASS QC MS CONCRETE.

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER, ARE CARRIED TO THE GENERAL SUMMARY FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

ITEM 204 - GEOTEXTILE FABRIC	<u>70 SY</u>
ITEM 204 - GEOGRID	<u>70 SY</u>
ITEM 204 - GRANULAR MATERIAL, TYPE B	<u>8 CY</u>
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 2, CLASS QC MS, AS PER PLAN	<u>110 SY</u>
ITEM 255 - FULL DEPTH PAVEMENT SAWING	<u>150 FT</u>
ITEM 304 - AGGREGATE BASE, AS PER PLAN	<u>24 CY</u>
ITEM 609 - CURB, TYPE 2-A	<u>100 FT</u>

PLANED SURFACES

THE DURATION OF THE ITEM BETWEEN MILLING AND PLACEMENT OF THE INTERMEDIATE COURSE SHALL BE NO LONGER THAN FOURTEEN (14) DAYS, UNLESS MOT NOTES STATES OTHERWISE. THE LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANING AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY BAD WEATHER DAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.

ITEM 304 - AGGREGATE BASE, AS PER PLAN

MATERIAL FURNISHED FOR THIS ITEM SHALL BE LIMITED TO CRUSHED CARBONATE STONE.

ITEM 202 - CURB REMOVED, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS 202 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

ALL SAWCUTTING SHALL BE IN ACCORDANCE WITH ODOT CMS 255 AND SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED THROUGH TO THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202 - CURB REMOVED, AS PER PLAN 100 FT

ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH. PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA $10''$ WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER. THIS ITEM OF WORK SHALL ALSO INCLUDE THE GRADING OF THE SHOULDER BEYOND THE LIMITS OF THE SAFETY EDGE TO ELIMINATE HIGH SPOTS AND PROVIDE POSITIVE SHEET FLOW OFF THE PAVEMENT INTO ROADSIDE DITCHES OR DRAINAGE STRUCTURES. THIS ITEM IS INTENDED FOR PREPARATION OF THE SHOULDER FOR PLACEMENT OF ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN. ANY DEBRIS COLLECTED SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.16 & 105.17 OF THE CMS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

THIS ITEM SHALL BE USED TO PLACE COMPACTED AGGREGATE ALONG THE SHOULDERS. MATERIAL SHALL BE LIMITED TO RECLAIMED ASPHALT PAVEMENT (RAP). THE ACTUAL DEPTH OF COMPACTED AGGREGATE PLACED WILL VARY DEPENDING UPON EXISTING CONDITIONS. FOR ESTIMATING PURPOSES, AN AVERAGE DEPTH OF TWO INCH ($2''$) AT A TWO FOOT WIDTH HAS BEEN USED. WATER, IF NEEDED, SHALL BE APPLIED ACCORDING TO 617.05 AND SHALL BE INCLUDED WITH ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN.

ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2, (446), PG64-22, AS PER PLAN

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAMPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC, A "BUMP" SIGN (MB-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PAYMENT OF SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC. REQUIREMENTS OF 441 APPLY.

AN ADDITIONAL QUANTITY OF ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 APP HAS BEEN INCLUDED TO BE USED AS A LEVELING COURSE FOR CORRECTION OF CROWN, PROFILE AND OTHER IRREGULARITIES AT LOCATIONS DETERMINED BY THE ENGINEER.

ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 (446) AS PER PLAN 50 CY

ITEM 441 ASPHALT CONCRETE SURFACE COURSE TYPE 1, (446), PG70-22M, AS PER PLAN ITEM

441 ASPHALT CONCRETE SURFACE COURSE TYPE 1, (449), PG 64-22, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS 441 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

BINDER SHALL BE PG70-22 FOR RIVER ROAD, AND PG 64-22 FOR INTERSECTIONS AS SHOWN IN PAGES 21-28. THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MINIMUM AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVE APRONS, INTERSECTIONS, ETC.

ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN ITEM 609 - CURB, TYPE 4-C, AS PER PLAN

EXISTING CURB SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER. MATCH THE EXISTING HEIGHT OF THE NEW CURB TO THE HEIGHT OF THE ADJACENT EXISTING CURB, AND TRANSITION THE FULL REVEAL (4" FOR TYPE 4-C & 6" FOR TYPE- 2) AT A RATE OF 1" CURB HEIGHT PER FOOT OF CURB LENGTH.

ITEM 875 - LONGITUDINAL JOINT ADHESIVE

APPLY ASPHALTIC JOINT ADHESIVE ALONG CENTERLINE OF ROAD AND ANY OTHER LONGITUDINAL COLD JOINTS PRODUCED FROM PAVING OPERATIONS, OR AS DIRECTED BY THE ENGINEER. FURNISH MATERIALS IN ACCORDANCE WITH ODOT SUPPLEMENTAL SPECIFICATION 875.

ITEM 632- DETECTOR LOOP, AS PER PLAN

DETECTOR LOOPS DISTURBED BY PAVEMENT PLANING, PAVEMENT REPAIR, OR BUTT JOINT OPERATIONS SHALL BE ABANDONED IN PLACE. THE NEW DETECTOR LOOP WIRE SHALL BE CUT INTO THE SURFACE COURSE OF THE ASPHALT. NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS AND BE THE SAME SIZE AND TYPE OF THE EXISTING, OR AS DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL CONFIRM THAT ALL DETECTOR LOOPS HAVE BEEN DISCONNECTED BY THE CITY PRIOR TO THE START OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE LOOP INSTALLATIONS.

THE CONTRACTOR SHALL NOTIFY CITY OF WILLOUGHBY HILLS ENGINEER 216-377-3838 FIVE WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED TO DISCONNECT THE LOOP DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY THE CITY WITHIN TWO WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT SIGNAL TIMINGS CAN BE RESTORED TO THE ORIGINAL SETTINGS.

THE NEW DETECTOR LOOPS WIRES SHALL BE RUN INTO EXISTING CONTROL BOX, POLE, OR PULLBOX, WHICHEVER IS APPLICABLE. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT FOR PROPER INSTALLATION AND OPERATION SHALL BE INCIDENTAL TO PAYMENT OF FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

TRAFFIC SIGNING

ADVANCE TRAFFIC SIGNING, INCLUDING DETOUR SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS ON BARRICADES BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.

TEMPORARY PAVING OF VERTICAL SURFACES

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND TRAFFIC SHALL BE WARNED WITH WB-1 "BUMP" SIGNS IN ADVANCE OF THE RAMPED AREAS.

ALL CASTINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE GENERAL NOTES OR SPECIFICATIONS. WHEN EXPOSED TO TRAFFIC, CASTINGS MAY BE REQUIRED TO BE ADJUSTED MORE THAN ONCE, BUT PAYMENTS FOR ADJUSTING WILL ONLY BE PAID ONCE. WHEN CONSTRUCTION IS ADJACENT TO DRIVES, MAINTAIN ACCESS TO DRIVES BY ONLY CONSTRUCTING THE PORTIONS OF THE ROADWAY NOT IN CONFLICT WITH THE DRIVES. ADDITIONAL CONSTRUCTION JOINTS SHALL BE ALLOWED BY THE ENGINEER. IN ORDER TO PROVIDE FOR LOCAL ACCESS, TEMPORARY RAMPING SHALL BE INSTALLED WITH ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROVIDE FOR TEMPORARY RAMPING SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 100 CY

SEQUENCE OF CONSTRUCTION

THE CONTRACTOR SHALL CONTACT AND WORK WITH THE CITY OF WILLOUGHBY HILLS TO MAKE SIGNAL PHASING AND TIMING ADJUSTMENTS, AS NEEDED TO MOVE TRAFFIC AS EFFICIENTLY AS POSSIBLE. TURN LANES SHALL BE MAINTAINED WHEREVER POSSIBLE AND BY MOVING DRUMS AS APPROVED OR AS DIRECTED BY THE PROJECT REPRESENTATIVE. PAYMENT INCLUDED IN ITEM 614-MAINTAINING TRAFFIC, AS PER PLAN.

THE CONTRACTOR SHALL MAINTAIN NORTHBOUND TRAFFIC AT ALL TIMES DURING THE PAVING OPERATIONS/WORK, SOUTHBOUND TRAFFIC SHALL BE DETOURED TO SOM CENTER ROAD.

CONSTRUCTION PHASINGPHASE 1

PHASE 1 SHALL CONSIST OF ALL WORK BETWEEN ROGERS ROAD AND CHARDON ROAD (US-6).

PHASE 1A

THE CONTRACTOR SHALL CLOSE THE SOUTHBOUND LANE OF RIVER ROAD AND DIVERT TRAFFIC TO SOM CENTER ROAD. THE NORTHBOUND LANE MUST BE MAINTAINED AT ALL TIME. THE CONTRACTOR SHALL PERFORM ALL ROADWAY IMPROVEMENTS IN THE SOUTHBOUND LANE BETWEEN ROGERS ROAD AND CHARDON ROAD (US-6).

PHASE 1B

THE CONTRACTOR SHALL SHIFT RIVER ROAD NORTHBOUND TRAFFIC TO THE SOUTHBOUND LANE. SOUTHBOUND TRAFFIC SHALL CONTINUE TO BE DIVERTED TO SOM CENTER ROAD. THE CONTRACTOR SHALL PERFORM ALL ROADWAY IMPROVEMENTS IN THE NORTHBOUND LANE BETWEEN ROGERS ROAD AND CHARDON ROAD (US-6).

PHASE 1C

THE CONTRACTOR SHALL PERFORM ALL FINAL PAVEMENT MARKING OPERATIONS. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-99.20.

PHASE 2

PHASE 2 SHALL CONSIST OF ALL WORK BETWEEN CHARDON ROAD (US-6) AND GULLY BROOK PARK (END PROJECT LIMITS).

CONSTRUCTION PHASING (CONT.)PHASE 2A

THE CONTRACTOR SHALL CLOSE THE SOUTHBOUND LANE OF RIVER ROAD AND DIVERT TRAFFIC TO SOM CENTER ROAD. THE NORTHBOUND LANE MUST BE MAINTAINED AT ALL TIME. THE CONTRACTOR SHALL PERFORM ALL ROADWAY IMPROVEMENTS IN THE SOUTHBOUND LANE BETWEEN CHARDON ROAD (US-6) AND GULLY BROOK PARK.

PHASE 2B

THE CONTRACTOR SHALL SHIFT RIVER ROAD NORTHBOUND TRAFFIC TO THE SOUTHBOUND LANE. SOUTHBOUND TRAFFIC SHALL CONTINUE TO BE DIVERTED TO SOM CENTER ROAD. THE CONTRACTOR SHALL PERFORM ALL ROADWAY IMPROVEMENTS IN THE NORTHBOUND LANE BETWEEN CHARDON ROAD (US-6) AND GULLY BROOK PARK.

PHASE 2C

THE CONTRACTOR SHALL PERFORM ALL FINAL PAVEMENT MARKING OPERATIONS. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-99.20.

REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES.

ITEM 616, WATER 50 MGAL
ITEM 616, CALCIUM CHLORIDE 14 TON

ADVANCED WORK ZONE INFORMATION

ADVANCE WORK ZONE INFORMATION SIGNS, AS USED IN THIS NOTE, ARE FIXED MESSAGE TYPES. THE SIGNS ARE TO BE LOCATED AT EXTREME DISTANCE FROM THE WORK AREA, AS SHOWN IN THE PLANS.

THE SIGNS SHALL BE BLACK ON ORANGE (INCLUDING A BLACK BORDER). THE LAYOUT SHALL BE IN CONFORMANCE WITH TEM CHAPTER 211.

WHEN REGULATORY INFORMATION IS PROVIDED, IT SHALL BE DISPLAYED SEPARATELY AS A STANDARD BLACK-ON-WHITE SIGN. MIXING OF BLACK-ON-WHITE REGULATORY INFORMATION ON A BLACK-ON-ORANGE INFORMATION SIGN IS PROHIBITED.

IF THE MOTORIST IS BEING DETOURED OR IF AN ALTERNATE ROUTE IS PROVIDED, THE ROUTE SHOULD BE SIGNED WITH ASSEMBLIES CONSISTING OF THE APPROPRIATE BLACK-ON-ORANGE DETOUR OR ALT MARKER WITH A STANDARD ROUTE MARKER AND ARROW PLATE. IF MORE TARGET VALUE IS DESIRED, THIS TRAIL BLAZER INFORMATION MAY BE SHOWN ON AN ORANGE PANEL (OMUTCD SECTION 2D.32).

ROUTE SIGN ASSEMBLIES SHALL BE SIZED ACCORDING TO THE TYPE OF ROAD ON WHICH THEY ARE LOCATED IN ACCORDANCE WITH THE OMUTCD.

SUPPORTS FOR SIGN INSTALLATIONS SHALL CONFORM TO ALL EXISTING STANDARDS FOR PERMANENT SIGNS. THESE SIGNS SHOULD NOT BE ATTACHED TO EXISTING SUPPORTS.

WHERE THE PLANS CALL FOR AN OVERLAY TO COVER A PORTION OF AN EXISTING SIGN, THE OVERLAY SHALL BE BLACK-ON-ORANGE. LETTER SIZES SHOULD BE THE SAME AS ON THE EXISTING SIGNS. WHEN LANE ARROWS ARE TO BE COVERED, A BLANK OVERLAY SHOULD BE PLACED OVER EACH OF THE AFFECTED ARROWS.

ADVANCED WORK ZONE INFORMATION (CONT.)

ALL ADVANCE WORK ZONE INFORMATION SIGN INSTALLATIONS LOCATED OUTSIDE OF THE PROJECT WORK LIMITS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

614 WORK ZONE EDGE LINE, CLASS 1, 4", 642 PAINT, WHITE
614 WORK ZONE CENTERLINE, CLASS 1, 642 PAINT, YELLOW
614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT, WHITE

7.39 MILE
3.68 MILE
103 FEET

FAILURE TO COMPLY

IF THERE IS ANY FAILURE TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL, AS OUTLINED IN THESE PLANS AND NOTES OR WITH THE PROVISIONS OF THE OMUTCD, THE ROADWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED IN A CONDITION FOR SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE ROADWAY IN THE VICINITY OF THE WORK AREA IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

HOLIDAY TRAFFIC LIMITATION

NO WORK SHALL BE PERFORMED, AND ALL EXISTING LANES WHICH ARE NOT INSIDE A DESIGNATED WORK ZONE SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

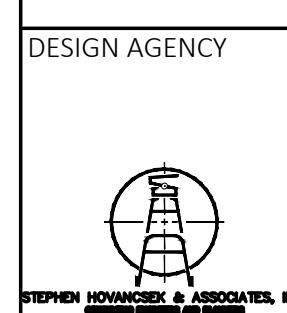
NEW YEARS DAY (JANUARY 1)
MARTIN LUTHER KING DAY (THIRD MONDAY IN JANUARY)
EASTER SUNDAY (DATE VARIES)
MEMORIAL DAY (LAST MONDAY IN MAY)
INDEPENDENCE DAY (JULY 4)
LABOR DAY (FIRST MONDAY IN SEPTEMBER)
THANKSGIVING DAY (FOURTH THURSDAY IN NOVEMBER)
CHRISTMAS DAY (DECEMBER 25)

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07.

CONTRACTOR'S VEHICLES AND EQUIPMENT

ALL VEHICLES AND EQUIPMENT BELONGING TO THE CONTRACTOR OR THE CONTRACTOR'S WORKERS MUST BE PARKED IN ACCORDANCE WITH CITY REGULATIONS, VEHICLES AND EQUIPMENT MAY NOT BE PARKED IN PRIVATE PARKING LOTS, PUBLIC SIDE STREETS, OR OTHER PRIVATE PROPERTY UNLESS WRITTEN APPROVAL OF THE OWNER AND THE ENGINEER HAS BEEN GRANTED. THE CONTRACTOR OR CONTRACTOR'S WORKERS MAY NOT PARK VEHICLES OR EQUIPMENT OR STORE MATERIALS WHERE IT IS DEEMED BY THE ENGINEER TO BE A SAFETY HAZARD; NOR IN MANNER WHICH OBSTRUCTS SIGNS, BARRIERS, BARRICADES, OR OTHER TRAFFIC CONTROL DEVICES OR INTERFERES WITH ACCESS TO ABUTTING PROPERTIES.

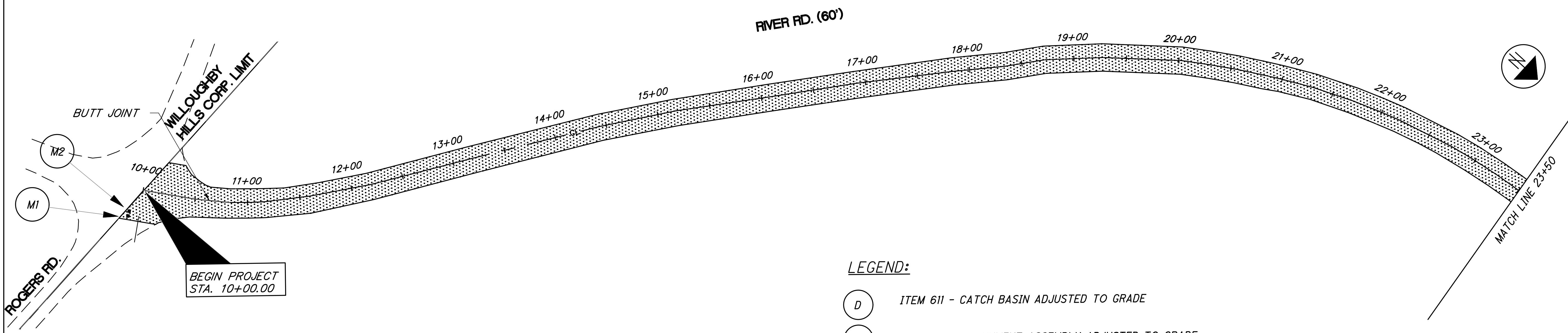


DESIGN AGENCY	STEPHEN NOWAKOWSKI & ASSOCIATES, INC.
DESIGNER	MSL
REVIEWER	
PROJECT ID	AWD 8/22/2025
SHEET	105894
TOTAL	
P.11	36

SHEET NO.	REFERENCE NO.	STATION		SIDE	642	642 CENTER LINE, TYPE 1		642					
		FROM	TO		EDGE LINE, 4" TYPE 1	DOUBLE SOLID LINE, YELLOW	SINGLE SOLID/SINGLE DASHED LINE, YELLOW	SINGLE DASHED LINE, YELLOW	STOP LINE, TYPE 1				
					MILE	MILE	MILE	MILE	FEET				
29	EL	10+14	37+50	RT	0.52								
29	DY	10+45	29+63	LT/RT		0.36							
29	EL	10+34	37+50	LT	0.51								
29	DYD	29+63	36+03	LT/RT			0.12						
29	SYD	36+03	37+50	LT/RT				0.03					
30	EL	37+50	60+89	LT	0.44								
30	SYD	37+50	48+38	LT/RT				0.21					
30	EL	37+50	60+89	RT	0.44								
30	DY	48+38	60+89	LT/RT		0.24							
30	EL	61+47	66+50	LT	0.10								
30	DY	61+47	62+25	LT/RT		0.01							
30	EL	61+47	66+50	RT	0.10								
30	DYD	62+25	64+44	LT/RT			0.04						
30	SYD	64+44	66+50	LT/RT				0.04					
31	EL	66+50	90+30	LT	0.45								
31	SYD	66+50	73+51	LT/RT				0.13					
31	EL	66+50	90+30	RT	0.45								
31	DYD	73+51	75+11	LT/RT			0.03						
31	DY	75+11	90+30	LT/RT		0.29							
31	EL	91+77	95+00	LT	0.06								
31	DY	91+77	95+00	LT/RT		0.06							
31	EL	91+77	95+00	RT	0.06								
32	EL	95+00	124+00	LT	0.55								
32	DY	95+00	96+96	LT/RT		0.04							
32	EL	95+00	96+83	RT	0.03								
32	SL	97+09	97+19	RT					10				
32	DY	97+25	100+99	LT/RT		0.07							
32	EL	97+35	114+32	RT	0.32								
32	SYD	100+99	105+39	LT/RT				0.08					
32	DYD	105+39	110+49	LT/RT			0.10						
32	DY	110+49	114+40	LT/RT		0.07							
32	SL	114+57	114+70	RT					13				
32	DY	114+80	124+00	LT/RT		0.17							
32	EL	114+97	124+00	RT	0.17								
33	EL	124+00	124+43	LT	0.01								
33	DY	124+00	124+25	LT/RT		0.00							
33	EL	124+00	126+84	RT	0.05								
33	SL	124+45	124+63	LT					18				
33	EL	124+94	149+88	LT	0.47								
33	DY	125+14	126+84	LT/RT		0.03							
33	SL	127+50	127+68	RT				0.30		18			
33	DY	127+70	143+38	LT/RT									
33	EL	127+89	143+21	RT	0.29								
SUBTOTALS THIS SHEET (CARRIED TO SHEET 19)					5.03	1.65	0.29	0.49	59				

SHEET NO.	REFERENCE NO.	STATION	SIDE	642	642				642	STOP LINE, TYPE 1	FEET	22
				EDGE LINE, 4" TYPE 1	DOUBLE SOLID LINE, YELLOW	SINGLE SOLID/SINGLE DASHED LINE, YELLOW	SINGLE DASHED LINE, YELLOW					
		FROM	TO	MILE	MILE	MILE	MILE					
33	SL	143+53	143+75	RT								
33	DY	143+92	150+30	LT/RT		0.12						
33	EL	144+03	153+00	RT	0.17							
33	SL	150+40	150+62	LT								
33	DY	150+91	153+00	LT/RT		0.04						
33	EL	151+05	153+00	LT	0.04							
34	EL	153+00	160+50	LT	0.14							
34	DY	153+00	160+50	LT/RT		0.14						
34	EL	153+00	181+50	RT	0.54							
34	EL	161+24	181+50	LT	0.38							
35	EL	181+50	207+50	LT	0.49							
35	DY	181+50	207+50	LT/RT		0.49						
35	EL	181+50	207+50	RT	0.49							
36	EL	207+50	210+21	LT	0.05							
36	DY	207+50	211+28	LT/RT		0.07						
36	EL	207+50	210+21	RT	0.05							
SUBTOTALS (THIS SHEET)				2.36	1.25	0	0	44				
SUBTOTALS SHEET 18				5.03	1.65	0.29	0.49	59				
TOTALS CARRIED TO GENERAL SUMMARY				7.39	3.68			103				

SHEET NO.	STATION TO STATION		CADD GENERATED AREA		PREPARING SUBGRADE FOR SHOULDER PAVING. AS PER PLAN		PAVEMENT PLANNING, ASPHALT CONCRETE / CONCRETE, AS PER PLAN		407		407		441		441		441		617		875				
					SY	MILE	SY	GAL	GAL	CY	CY	CY	CY	CY	CY	CY	CY	CY	CY	LB	LB	LB	LB	LB	LB
21	10+00	37+50	8,044	1.05	8,044	724	483	288	392	51	550														
22	37+50	66+50	8,313	1.1	8,313	749	499	296	2	405	54	580													
23	66+50	95+00	7,322	1.08	7,322	659	440	264		356	53	570													
24	95+00	124+00	8,754	1.1	8,754	788	526	305	9	426	54	580													
25	124+00	153+00	9,721	1.1	9,721	875	584	317	30	473	54	580													
26	153+00	181+50	8,620	1.08	8,620	776	518	304	5	420	53	570													
27	181+50	207+50	7,319	0.99	7,319	659	440	263		356	49	520													
28	207+50	210+21	805	0.11	805	73	49	29		40	6	54													

**LEGEND:**

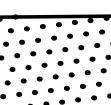
ITEM 611 - CATCH BASIN ADJUSTED TO GRADE



ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE



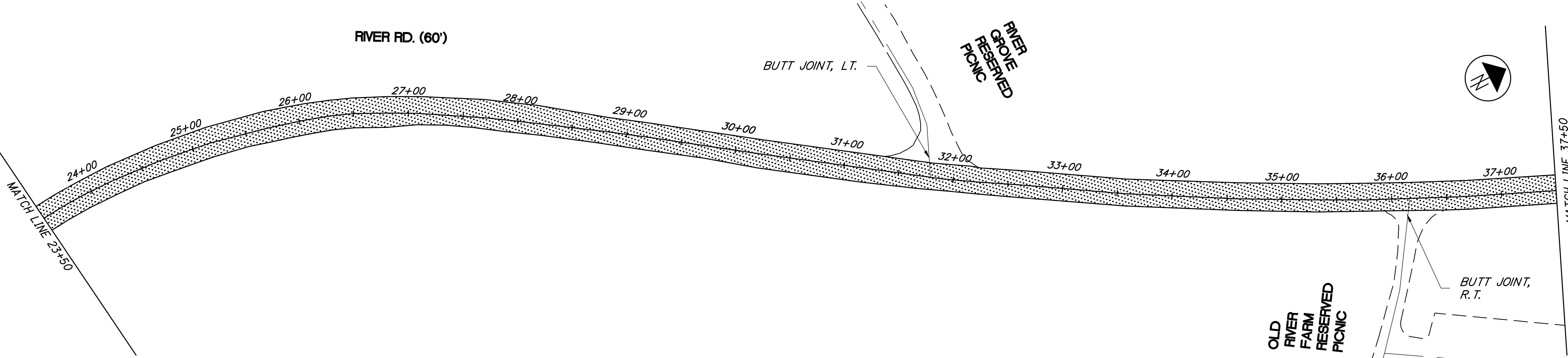
ITEM 638 - VALVE BOX ADJUSTED TO GRADE

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (446), PG70-22M, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (449), PG64-22, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)

PLAN
STA. 10+00.00 TO STA. 37+50

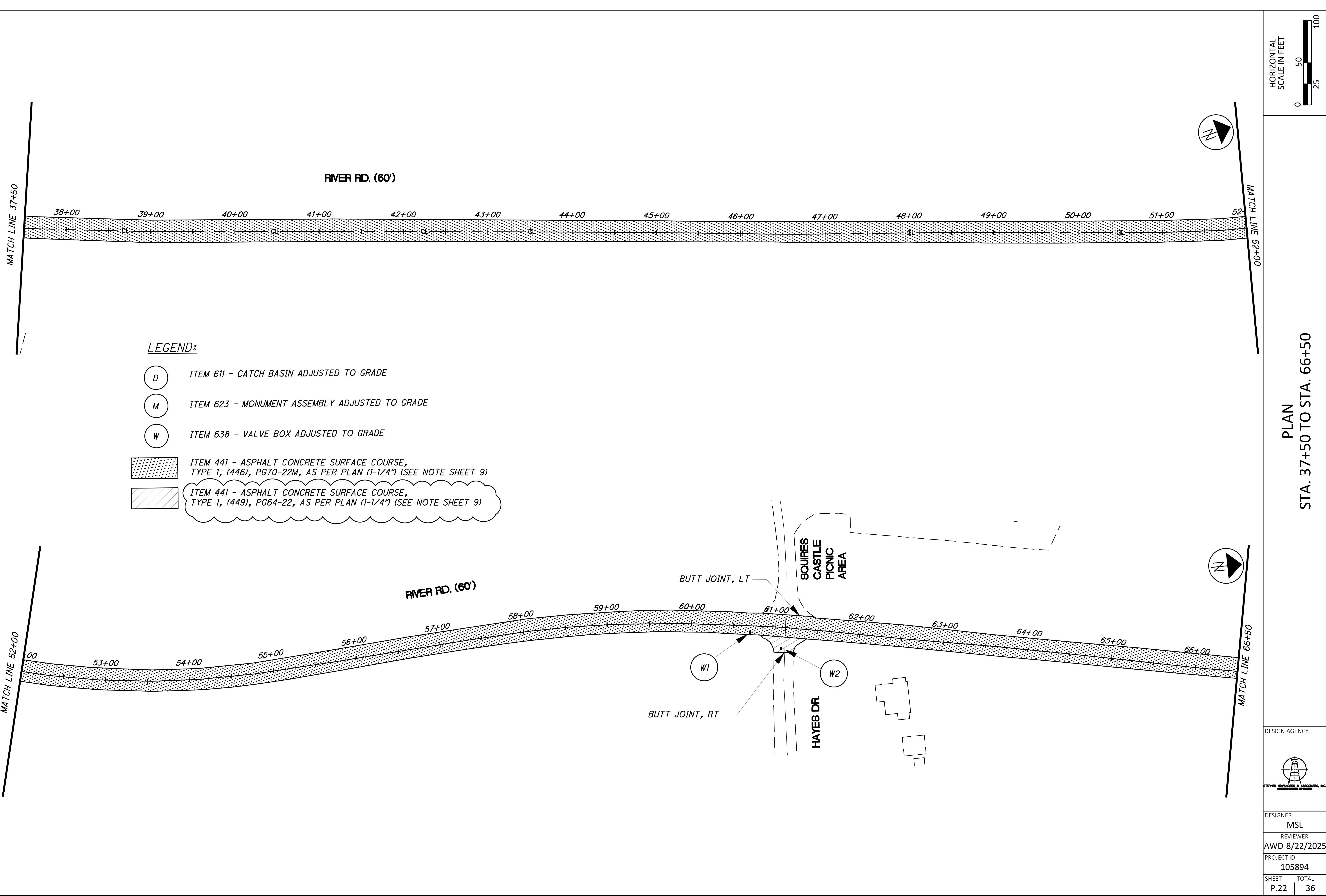
HORIZONTAL SCALE IN FEET

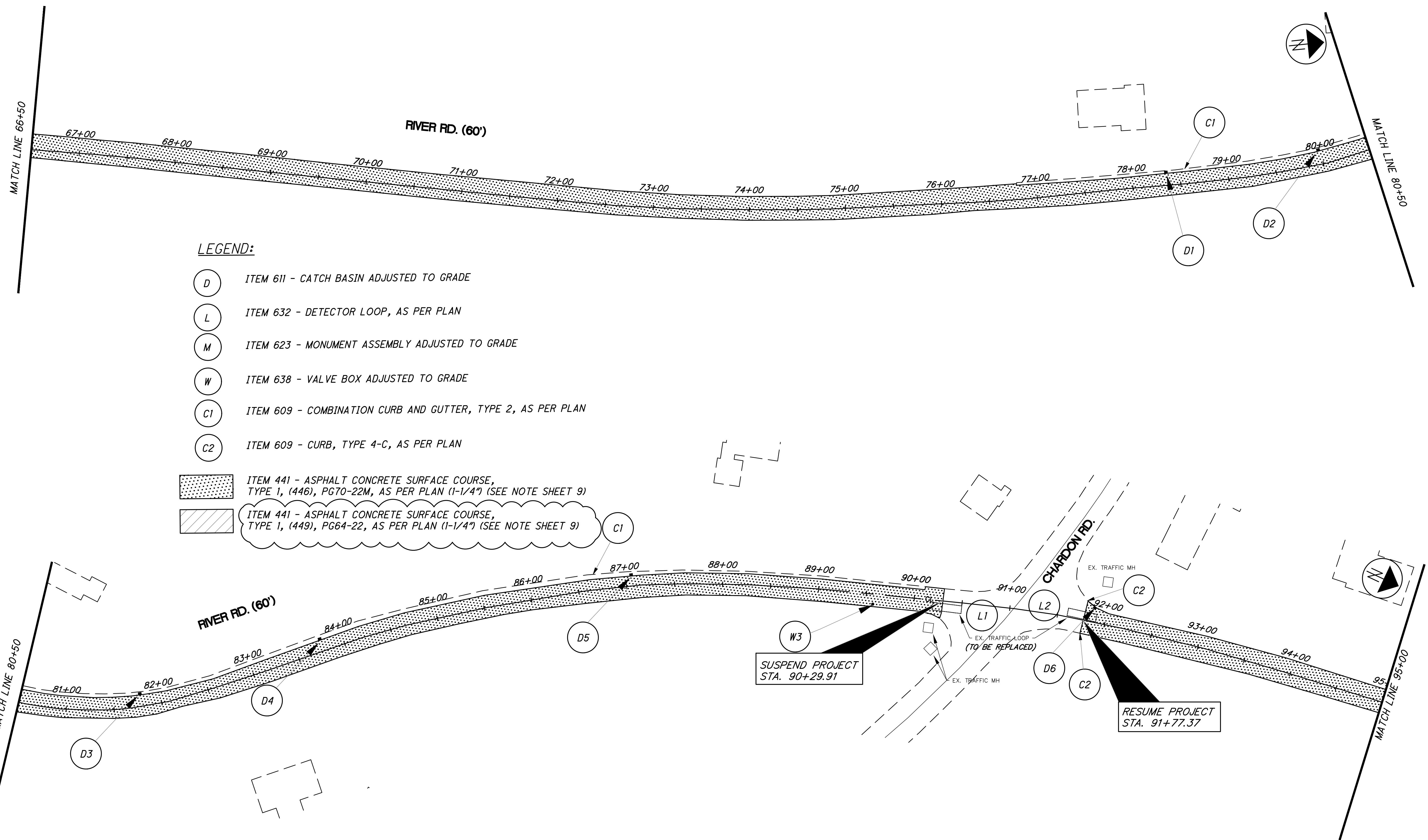
0 25 50 100



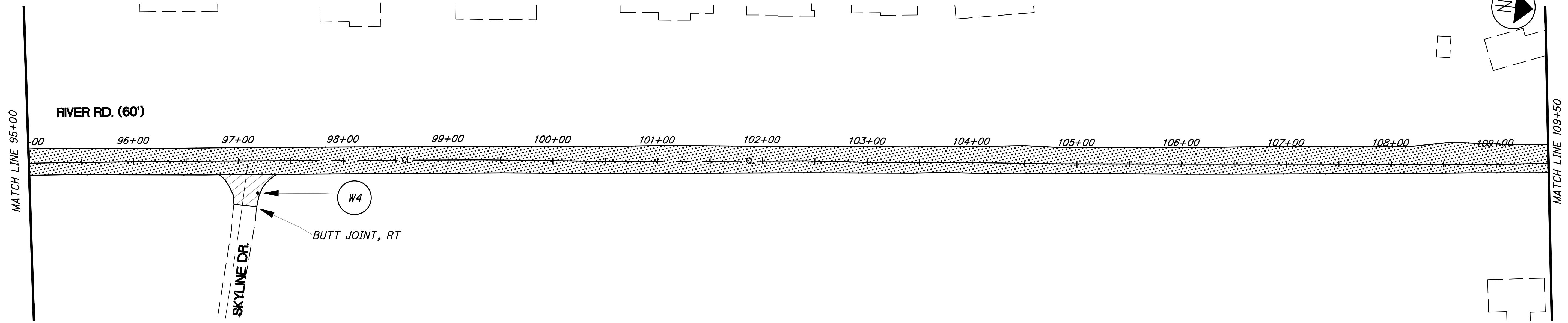
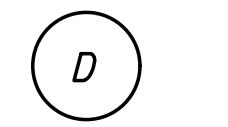
DESIGN AGENCY
STEPHEN HOVANESK & ASSOCIATES, INC.

DESIGNER **MSL**
REVIEWER **AWD 8/22/2025**
PROJECT ID **105894**
SHEET TOTAL **P.21 36**





HORIZONTAL SCALE IN FEET
0 25 50 100

LEGEND:

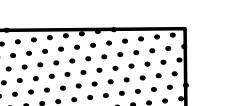
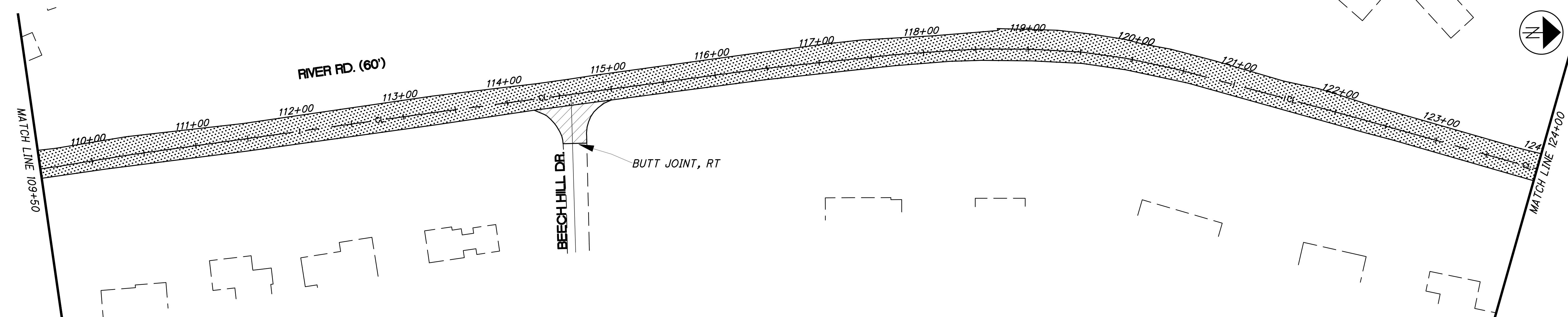
ITEM 611 - CATCH BASIN ADJUSTED TO GRADE



ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE



ITEM 638 - VALVE BOX ADJUSTED TO GRADE

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (446), PG70-22M, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (449), PG64-22, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)

PLAN STA. 95+00 TO STA. 124+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGN AGENCY



DESIGNER MSL

REVIEWER

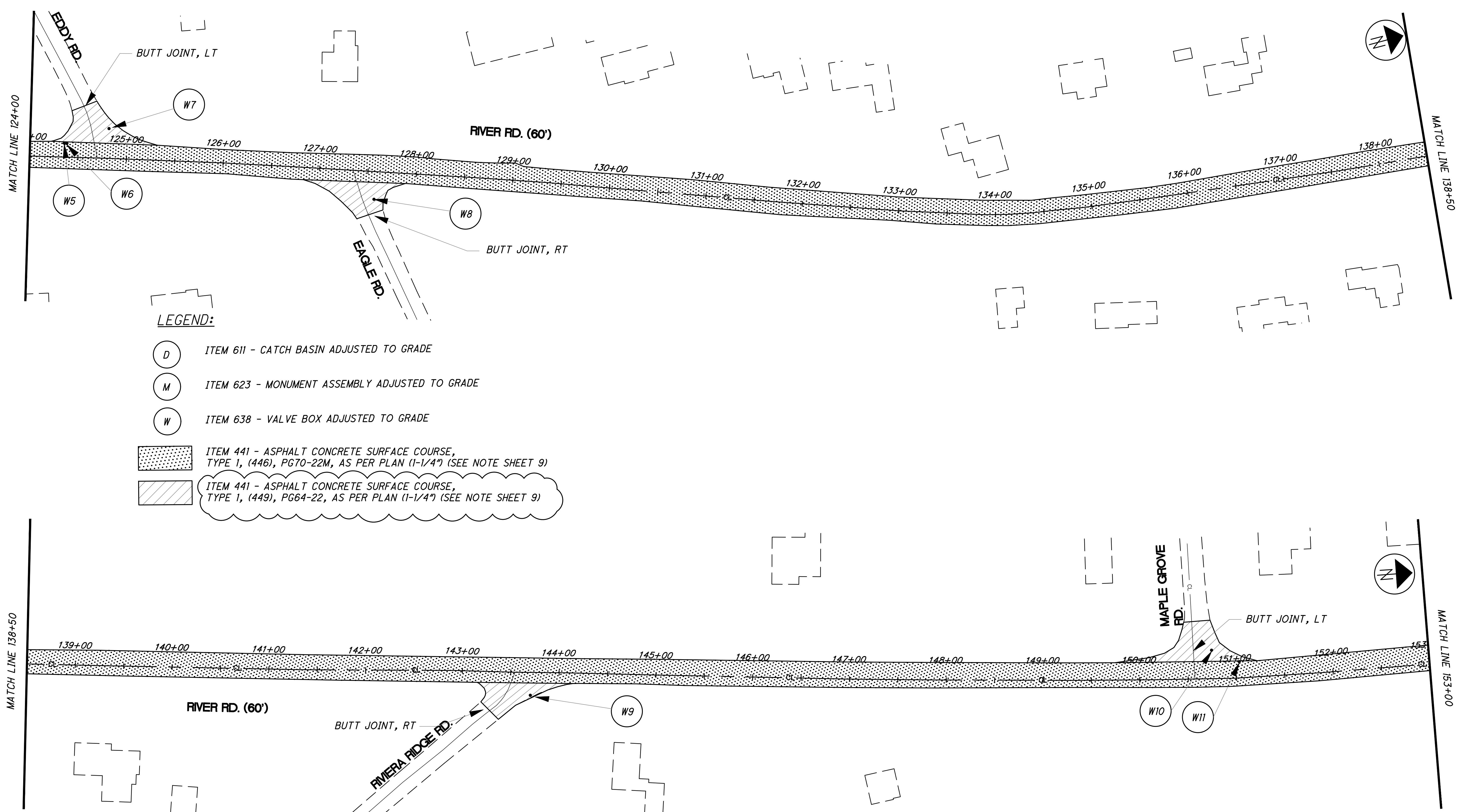
AWD 8/22/2025

PROJECT ID

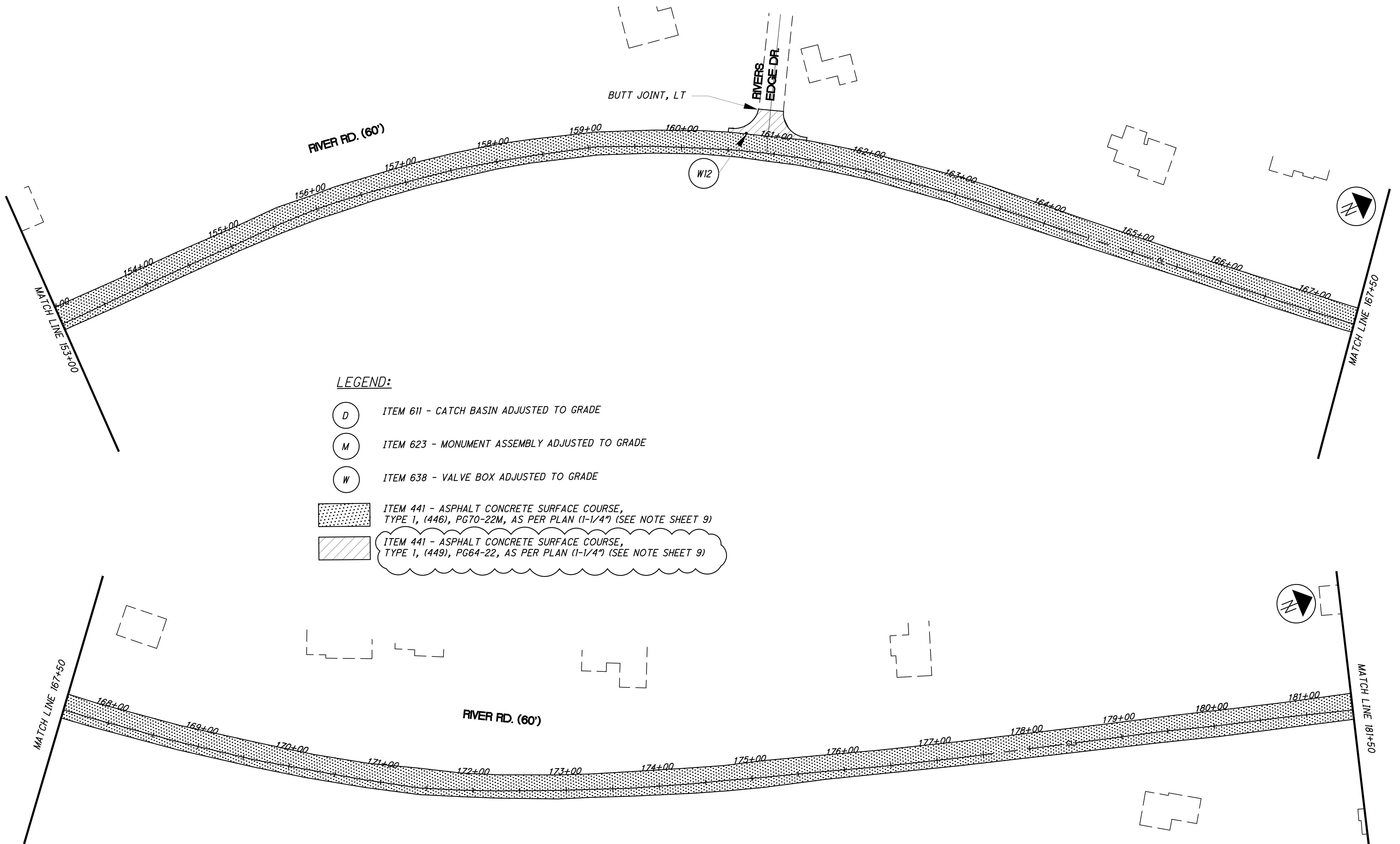
105894

SHEET TOTAL

P.24 36



HORIZONTAL SCALE IN FEET
0 25 50 100

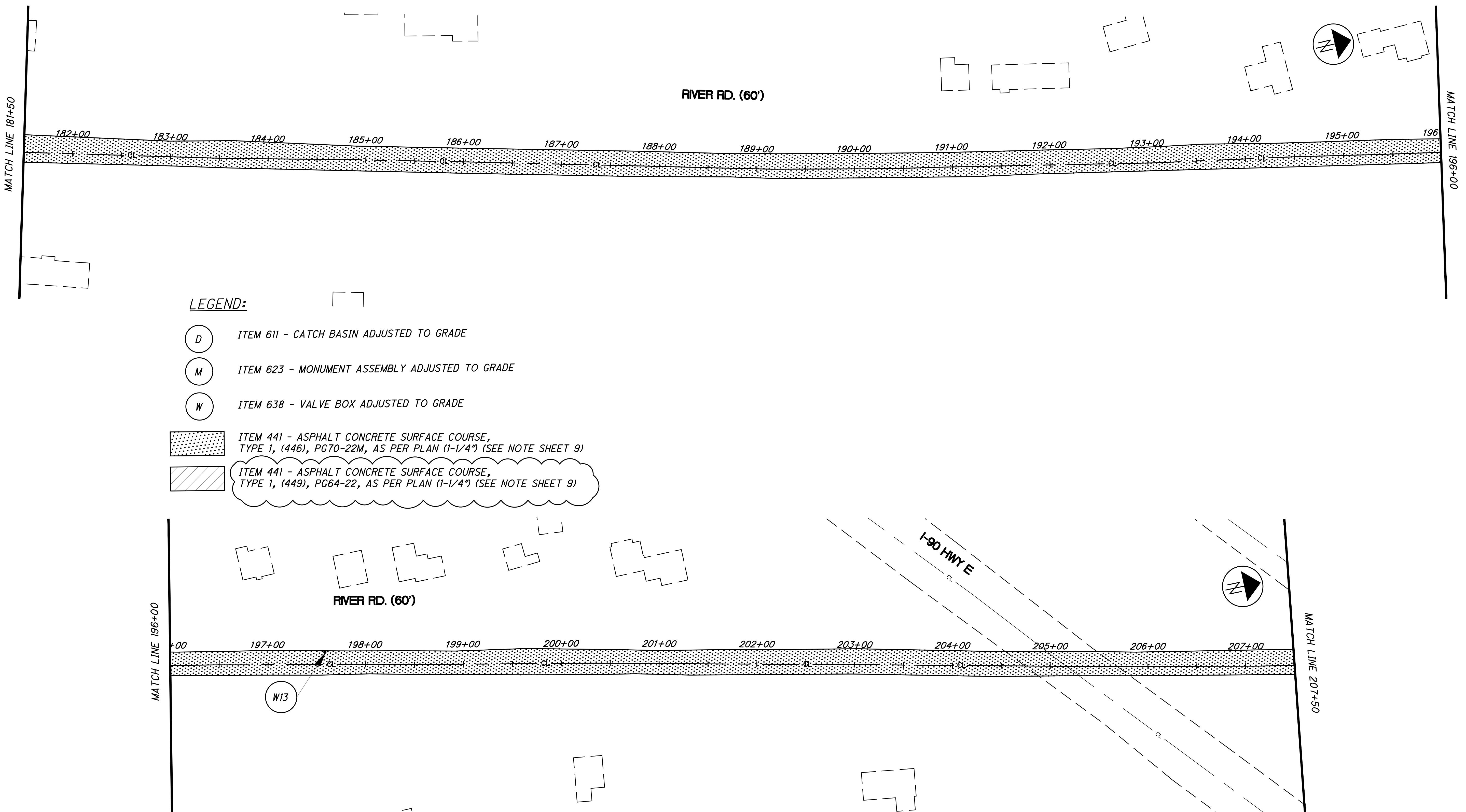


PLAN
STA. 153+00 TO STA. 181+50

HORIZONTAL SCALE IN FEET
0 25 50 100

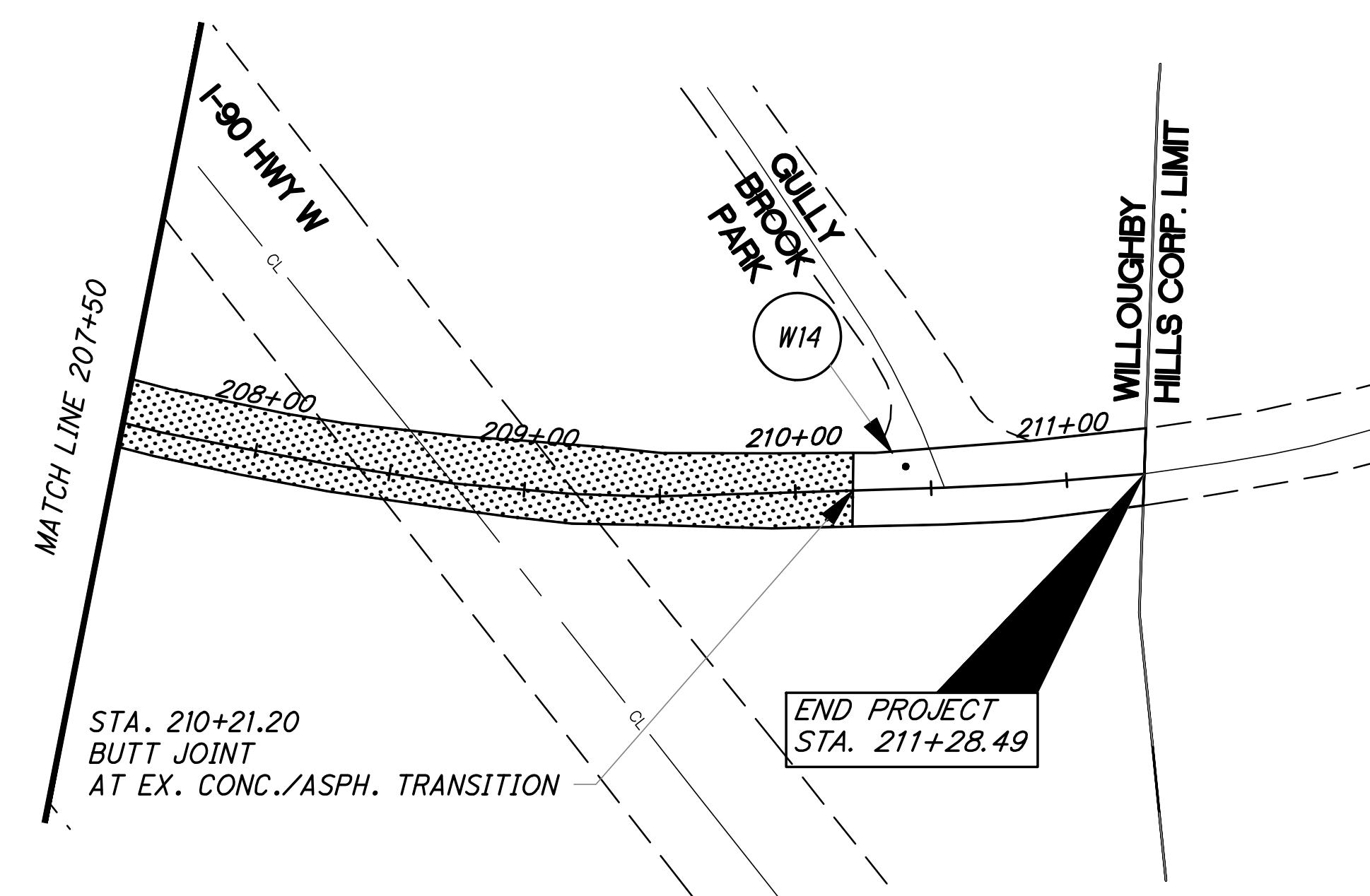
DESIGN AGENCY
STEPHEN HOVANESK & ASSOCIATES, INC.

DESIGNER MSL
REVIEWER AWD 8/22/2025
PROJECT ID 105894
SHEET TOTAL P.26 36

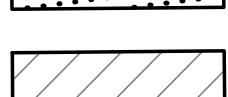


PLAN
STA. 181+50 TO STA. 207+50

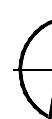
DESIGN AGENCY
STEPHEN HOVANESK & ASSOCIATES, INC.
DESIGNER
MSL
REVIEWER
AWD 8/22/2025
PROJECT ID
105894
SHEET TOTAL
P.27 36



LEGENDS

-  *ITEM 611 - CATCH BASIN ADJUSTED TO GRADE*
-  *ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE*
-  *ITEM 638 - VALVE BOX ADJUSTED TO GRADE*
-  *ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (446), PG70-22M, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)*
-  *ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, (449), PG64-22, AS PER PLAN (1-1/4") (SEE NOTE SHEET 9)*

NOTE: THE I-90 OVERPASS HAS A LOW CLEARANCE SIGN OF 14', THIS CLEARANCE MUST NOT BE REDUCED AFTER RESURFACING

DESIGN AGENCY	
 PHEN HOVANCSK & ASSOCIATES, INC.	
DESIGNER	
MSL REVIEWER	
WD 8/22/2025	
PROJECT ID	
105894	
HEET	TOTAL
P.28	36