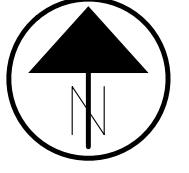




#### LOCATION MAP

LATITUDE: 39°12'79" LONGITUDE: -84°35'08"

SCALE IN MILES  
0 0.5 1 1.5 2



- PORTION TO BE IMPROVED
- INTERSTATE HIGHWAY
- FEDERAL ROUTES
- STATE ROUTES
- COUNTY & TOWNSHIP ROADS
- OTHER ROADS

#### DESIGN DESIGNATION

- CURRENT ADT (2022)
- DESIGN YEAR ADT (2022)
- DESIGN HOURLY VOLUME (2022)
- DIRECTIONAL DISTRIBUTION
- TRUCKS (24 HOUR B&C)
- DESIGN SPEED 35 MPH
- LEGAL SPEED 35 MPH
- DESIGN FUNCTIONAL CLASSIFICATION:

NHS PROJECT

**DESIGN EXCEPTIONS** NONE REQUIRED

**ADA DESIGN WAIVERS** NONE REQUIRED

UNDERGROUND UTILITIES	
CONTACT TWO WORKING DAYS BEFORE YOU DIG.	
	Before You Dig
OHIO811, 8-1-1, OR 1-800-362-2764 (Non-members must be called directly)	

PLAN PREPARED BY:

**KZF DESIGN**

Designing Better Futures

700 Broadway Street TEL 513 621 6211  
Cincinnati, OH 45202-6010 FAX 513 621 6530

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION HAM US 27 11.09 SIDEWALKS

COLERAIN TOWNSHIP

HAMILTON COUNTY

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#### PROJECT DESCRIPTION

RECONSTRUCTION OF EXISTING SIDEWALK AND CURBS ON BOTH SIDES OF COLERAIN AVENUE (US 27) FROM JONROSE AVENUE TO SHADYCREST DRIVE.

PROJECT EARTH DISTURBED AREA: 0.83 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.09 ACRES

NOTICE OF INTENT EARTH DISTURBED AREA:  
N/A (NOI not required)

FEDERAL PROJECT NO.  
E220 (013)

PID NO.  
113851

CONSTRUCTION PROJECT NO.  
N/A

RAILROAD INVOLVEMENT  
NONE

#### 2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

**DISTRICT DEPUTY DIRECTOR**

*Tammy K Campbell* 4-18-23

**DIRECTOR, DEPARTMENT OF TRANSPORTATION**

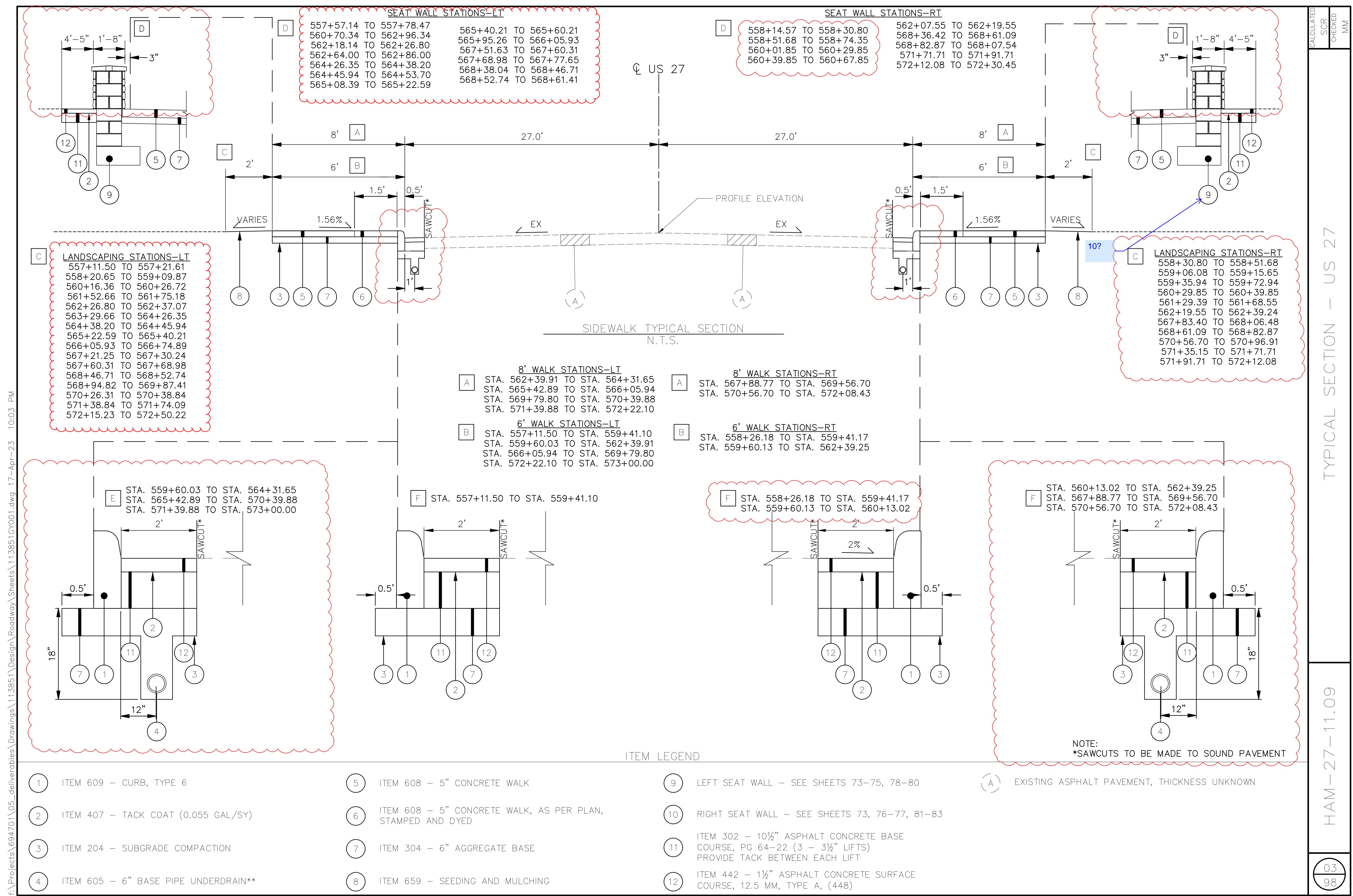
*Jack Markakis* 4-18-23

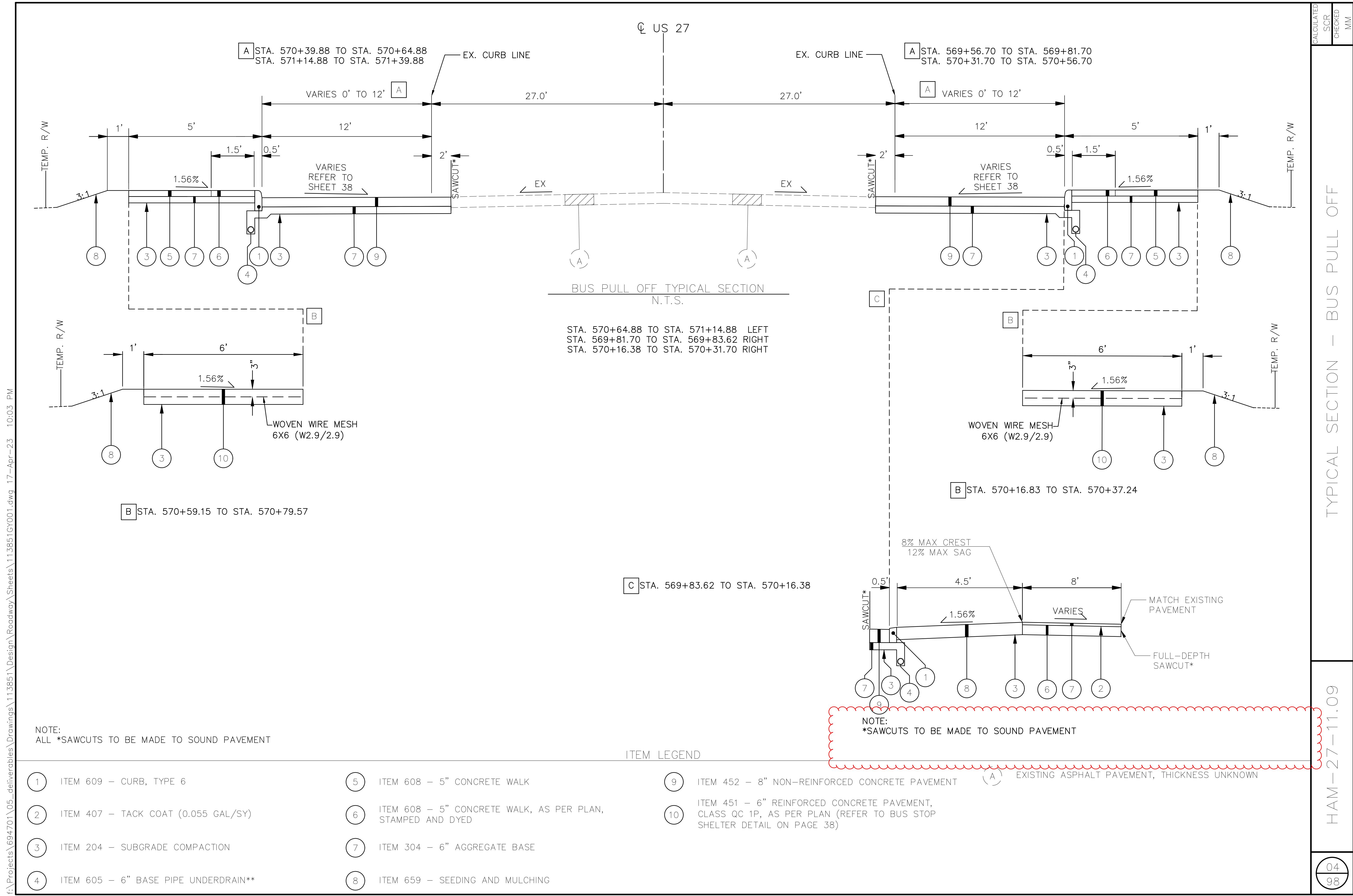
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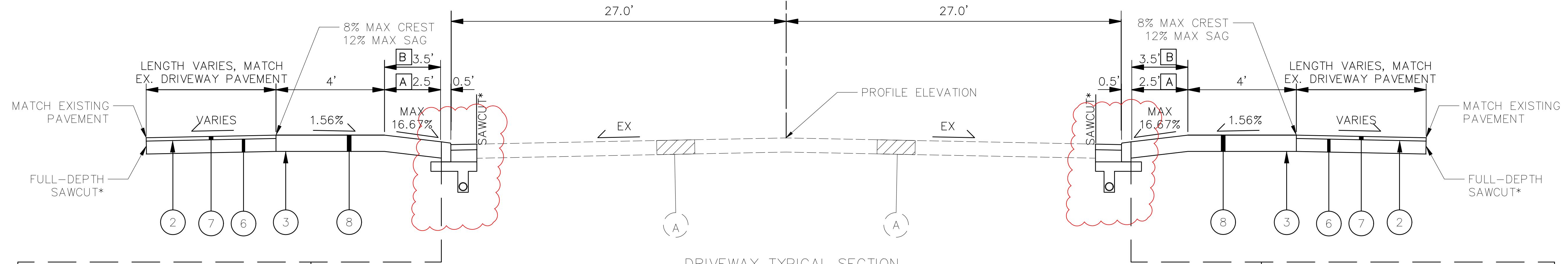
01  
98

ENGINEERS SEAL:	
FOR LIGHTING ONLY	
SIGNED:	7/13/23
DATE:	
ENGINEERS SEAL:	
FOR ENTIRE PLAN EXCEPT LIGHTING AND LANDSCAPING	
SIGNED:	7/13/23
DATE:	

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP 1.1	7/28/00	HL 10.11	7/15/22	MT 95.31	7/19/19	TC 41.2010/18/13	800 1/20/23
BP 4.1	7/19/13	HL 10.13	1/20/23	MT 99.20	4/19/19	TC 41.4010/18/13	813 10/19/18
BP 5.1	7/15/22	HL 20.1110	21/22	MT 99.30	1/17/20	TC 42.2010/18/13	832 7/15/22
BP 7.1	1/20/23	HL 30.11	1/15/21	MT 101.90	7/17/20	TC 65.10 1/17/14	878 1/21/22
		HL 30.22	1/15/21	MT 102.20	4/19/19	TC 65.11 7/15/22	880 1/21/22
CB 3A	7/16/21	HL 40.20	7/15/22	MT 105.10	1/17/20	TC 71.10 7/15/22	884 10/19/18
CB 6	1/21/22	HL 60.11	7/21/17	MT 110.10	7/19/13	TC 74.10 1/20/23	902 7/19/19
		HL 60.12	7/16/21				913 4/16/21
DM 1.1	7/17/20	HL 60.31	1/17/20				GCWW SPEC
DM 1.2	7/16/21						1126 1/1/19
DM 4.3	1/15/16						1131 1/1/19
DM 4.4	1/15/16						MSD SPEC
							49057 8/1/06



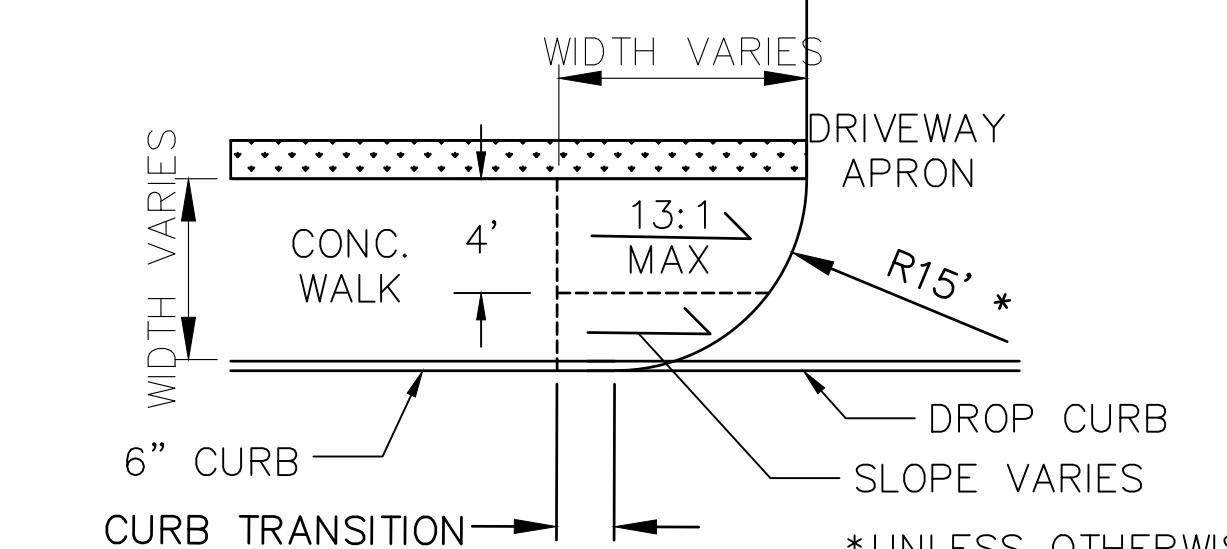




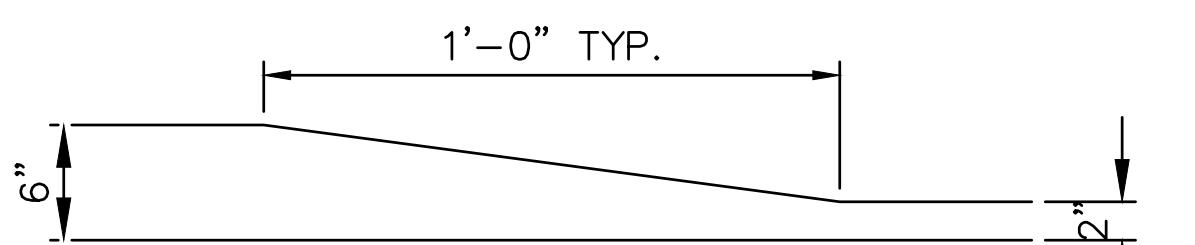
DRIVEWAY TYPICAL SECTION

LEFT N.T.S. RIGHT

A 557+31.10 558+02.05 560+28.68 560+46.58 561+28.32 561+94.46 567+01.02 567+38.40 567+98.53 568+25.63 568+25.63 568+82.32 572+68.99	B 562+49.08 563+10.12 563+64.94 565+77.32 570+06.08 571+92.12	A 558+92.63 559+24.83 559+85.25 561+09.41 561+85.97	B 568+19.40 569+31.24 571+16.02
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TYPICAL DRIVEWAY TRANSITION DETAIL - PLAN VIEW  
N.T.S.



NOTE:  
REFER TO SHEETS 39-42 FOR INDIVIDUAL DRIVEWAY DETAILS  
\*SAWCUTS TO BE MADE TO SOUND PAVEMENT

ITEM LEGEND

(1) ITEM 609 - CURB, TYPE 6 (5) ITEM 304 - 6" AGGREGATE BASE

(2) ITEM 407 - TACK COAT (0.055 GAL/SY)  
(6) ITEM 302 - 10½" ASPHALT CONCRETE BASE COURSE, PG 64-22 (3 - 3½" LIFTS)  
PROVIDE TACK BETWEEN EACH LIFT

(3) ITEM 204 - SUBGRADE COMPACTION  
(7) ITEM 442 - 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (448)

(4) ITEM 605 - 6" BASE PIPE UNDERDRAIN\*\*  
(8) ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT

CALCULATED  
SCR  
CHECKED  
MM

HAM-27-11.09

05  
98

**UTILITY OWNERSHIP**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

DUKE ELECTRIC (DISTRIBUTION)  
2010 DANA AVE  
CINCINNATI, OHIO 45207  
513-514-8211 (AARON WRIGHT)  
[AARON.WRIGHT@DUKE-ENERGY.COM](mailto:AARON.WRIGHT@DUKE-ENERGY.COM)

DUKE ENERGY - GAS  
139 EAST 4<sup>TH</sup> STREET, ROOM 460A  
CINCINNATI, OHIO 45202  
513-287-2517 (MARK BRANSUM)  
[MARK.BRANSUM@DUKE-ENERGY.COM](mailto:MARK.BRANSUM@DUKE-ENERGY.COM)  
(PLEASE SEND ALL UTILITY PLAN REVIEWS TO THIS ADDRESS:  
[OH/KYHOUSEBILL@DUKE-ENERGY.COM](mailto:OH/KYHOUSEBILL@DUKE-ENERGY.COM))

CINCINNATI BELL TELEPHONE (UNDERGROUND)  
221 EAST 4<sup>TH</sup> STREET, BLDG. 121-900  
CINCINNATI, OHIO 45201  
513-565-7187 (BRECK COWAN)  
(PLEASE SEND ALL UTILITY PLAN REVIEWS TO THIS ADDRESS:  
[ROADPROJECTS@CINBELL.COM](mailto:ROADPROJECTS@CINBELL.COM))

CINCINNATI BELL TELEPHONE (AERIAL)  
209 WEST 7<sup>TH</sup> STREET, BLDG. 121-900  
CINCINNATI, OHIO 45202  
513-565-6014 (ROBERT STROCHINSKY)  
(PLEASE SEND ALL UTILITY PLAN REVIEWS TO THIS ADDRESS:  
[ROADPROJECTS@CINBELL.COM](mailto:ROADPROJECTS@CINBELL.COM))

CHARTER COMMUNICATIONS/SPECTRUM  
10920 KENWOOD ROAD  
BLUE ASH, OHIO 45242  
513-386-5918 (TODD VANVRANKEN)  
(SEND ALL PLANS/CORRESPONDENCE TO EMAIL BOX FOR  
DISTRIBUTION:  
[DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM](mailto:DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM))

MCI/VERIZON  
5400 DUFF ROAD  
CINCINNATI, OHIO 45129  
254-721-8977 (BRUCE TURKIEWICZ)  
[BRUCE.TURKIEWICZ@VERIZONWIRELESS.COM](mailto:BRUCE.TURKIEWICZ@VERIZONWIRELESS.COM)

TEAM FISHEL  
4740 R INTERSTARE DRIVE  
WEST CHESTER, OHIO 45246  
937-233-2268 (TYLER SPARKS)  
[TSPARKS@TEAMFISHEL.COM](mailto:TSPARKS@TEAMFISHEL.COM)

GREATER CINCINNATI WATER WORKS  
4747 SPRING GROVE AVENUE  
CINCINNATI, OHIO 45232  
513-591-5056 (MIKE LAWSON)  
[MIKE.LAWSON@GCWW.CINCINNATI-OH.GOV](mailto:MIKE.LAWSON@GCWW.CINCINNATI-OH.GOV)

METROPOLITAN SEWER DISTRICT  
1600 GEST STREET  
CINCINNATI, OHIO 45204  
513-244-1369 (ALICE OLIVER)  
(PLEASE SEND ALL UTILITY PLAN REVIEWS TO THIS ADDRESS:  
[MSDUTILITYREVIEW@CINCINNATI-OH.GOV](mailto:MSDUTILITYREVIEW@CINCINNATI-OH.GOV))

**EXISTING FACILITIES**

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THEIR WORK IN SUCH MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FACILITY. IF ANY DAMAGE TO ANY EXISTING FACILITY OCCURS DUE TO THE CONTRACTOR'S OPERATIONS, THEY SHALL REPLACE THE DAMAGED FACILITY AT THEIR EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

**CONSTRUCTION NOISE**

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**SURVEYING**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 02 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITION, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**PROJECT CONTROL****VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD 88  
GEOD: 12A

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD83 (86)  
ELLIPSOID: GRS80  
MAP PROTECTION: LAMBERT  
COORDINATION SYSTEM: STATE OF PLANE OH SOUTH  
1.000094421104

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 823.

**CLEARING AND GRUBBING**

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATION UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEADED AREAS:

659, TOPSOIL	37 CU. YD.
659, SEEDING AND MULCHING	336 SQ. YD.
659, REPAIR SEEDING AND MULCHING	17 SQ. YD.
659, COMMERCIAL FERTILIZER	0.05 TON
659, LIME	0.07 ACRE
659, WATER	1.8 M. GAL.

**ITEM 690 - SPECIAL - VERIZON/MCI UTILITY SLEEVING**

VERIZON/MCI FIBER LINES WITHIN 12 INCHES OF THE BOTTOM OF WALL FOOTER REQUIRE A SLEEVE. USE SCHEDULE 40 STEEL PIPE AND SHALL ALLOW 1 INCH CLEAR ALL AROUND THE UTILITY BEING SLEEVED. THE COST OF THE SLEEVE AND INSTALLATION ARE INCLUDED IN THE CONTRACT UNIT PRICE OF OTHER RELEVANT PAY ITEMS. RESPECTIVE APPROVALS FROM UTILITIES AND THE PIPE SLEEVE WALL LOCATION: L9, R1, R2, R3, R4, R5, R6, R9, R10

**MSD SANITARY SEWERS**

HAND DIGGING IT TO OCCUR WITHIN 18" OF ANY SANITARY MAIN OR LATERAL. CONTRACTOR TO FIELD VERIFY LATERAL DEPTHS PRIOR TO EXCAVATION. IF 18" CLEARANCE CANNOT BE OBTAINED CONTRACTOR TO PROVIDE CONCRETE ENCASEMENT PER MSD ACC. NO. 49057.

**CINCINNATI BELL UTILITIES**

CBT HAS AN EXISTING (10) DUCT CONDUIT SYSTEM THAT WILL BE IN CLOSE PROXIMITY OF ALL PROPOSED WALL SEGMENTS. CAUTION SHOULD BE USED AT ALL TIMES DURING EXCAVATION OF THE PROPOSED WALLS. REFER TO ITEM 203 - EXCAVATION, AS PER PLAN FOR HAND DIGGING REQUIREMENTS.

DURING EXCAVATION AND CONSTRUCTION OF THE PROPOSED WALL SEGMENTS SHOULD THE CBT CONDUIT SYSTEM BE EXPOSED AND THERE IS ANY QUESTION AS TO THE INTEGRITY OR DAMAGE OF THE SYSTEM CONTACT THE CBT INSPECTOR (RICH RAYLE: 513.608.7419) TO FIELD INSPECT PRIOR TO BACKFILLING.

**ITEM 203 - EXCAVATION, AS PER PLAN**

ANY EXCAVATIONS WHICH OCCURS IN THE "OUPS SAFE WORK / OUPS TICKET MARKINGS" OF THE ALTA FIBER DUCT BANK SHALL BE FIELD LOCATED PRIOR TO PERFORMING BID WORK ITEMS. LIMITS OF EXCAVATION, NEW BID WORK ITEMS, AND EXISTING SURVEY DATA OF THE ALTA FIBER DUCK BANK ARE DOCUMENTED IN THE CROSS SECTIONS, AS WELL AS, PLAN AND PROFILE SHEETS.

IT MAY BE NECESSARY TO HAND DIG IN ORDER TO PROTECT THE INTEGRITY OF THE SYSTEM AS DIRECTED BY THE PROJECT ENGINEER.

IF THERE IS ANY QUESTION AS TO THE INTEGRITY OF THE SYSTEM OR DAMAGE TO THE SYSTEM CONTACT THE CBT INSPECTOR (RICH RAYLE: 513.608.7419) TO FIELD INSPECT PRIOR TO BACKFILLING.

THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT TO COMPLETE WORK FOR ITEM 203: EXCAVATION, AS PER PLAN.

**ITEM 690 - SPECIAL - SLEEVE EXISTING GAS LINE**

THIS ITEM SHALL INCLUDE THE INSTALLATION OF RUBBER INSULATION WITH A PLASTIC JACKET ON ALL GAS LINE CROSSINGS WITHIN 2 FEET OF THE BOTTOM OF THE SEAT WALLS FOOTER. SLEEVING TO OCCUR 2 FEET TO EITHER SIDE OF THE WALL. INSTALLATION TO BE PER MANUFACTURER SPECIFICATIONS.

INSULATION TO BE MCCMASTER CARR ITEM# 4463K142 FLEXIBLE RUBBER FOAM PIPE INSULATION OR APPROVED EQUAL

JACKET TO BE MCCMASTER-CARR ITEM #45325K153 PLASTIC PIPE INSULATION JACKETING OR APPROVED EQUAL

THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT TO COMPLETE WORK FOR ITEM 690: SPECIAL - SLEEVE EXISTING GAS LINE.

**NOTIFICATION OF TRAFFIC RESTRICTIONS**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE OFFICE OF COMMUNICATIONS. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO OFFICE OF COMMUNICATION
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES AND RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE.

**UNRECORDED STORM WATER DRAINAGE**

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECT-STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

611, 6" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION 100 FT CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE Affected BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS

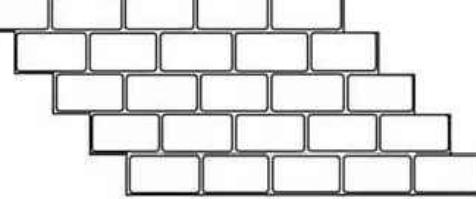
**ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS**

UNDERDRAINS SHOULD BE CORED INTO THE EXISTING STRUCTURE AND SUBSEQUENTLY GROUTED PER 611.10.B

"OMUTCD" REFERS TO "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.

"SCD" REFERS TO "STANDARD CONSTRUCTION DRAWING".

"CMS" REFERS TO "CONSTRUCTION AND MATERIAL SPECIFICATION" ODOT, CURRENT EDITION.

ITEM 690 SPECIAL – LACP CCTV	ITEM 690 SPECIAL – LACP CCTV (CONT)	ITEM SPECIAL – CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION (CONT.)	PARKING DISRUPTION LIMITATION																																																												
REQUIREMENTS OF LACP CCTV	<p>• IN THE CASE OF REJECTION OF A WHOLE OR ANY PART OF A SUBMITTAL, CONTRACTOR SHALL HAVE FOURTEEN (14) CALENDAR DAYS FROM THE DATE OF NOTIFICATION OF SAID REJECTION TO ADDRESS, CORRECT, AND/OR RE-PERFORM AND THEN RE-SUBMIT SAID WORK TO MSDGC.</p> <p>ALL WORK, LABOR AND MATERIALS, SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 690 SPECIAL – LACP CCT</p>	<p>ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATION AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANTS SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.</p>	<p>THE CONTRACTOR IS TO SCHEDULE THEIR WORK SUCH THAT FULL ACCESS IS PROVIDED TO THE AFFECTED BUSINESS. FOR THE BUSINESSES/PARCELS LISTED IN THE FOLLOWING TABLE, THE CONTRACTOR IS TO KEEP ANY DISRUPTION OF PARKING AND BUSINESS TRAFFIC FLOW WITHIN THE TEMPORARY RIGHT OF WAY TO A MINIMUM. THIS LIMITATION ALSO INCLUDES THE DRIVEWAY APRON AND THE SIDEWALK WORK INSIDE PUBLIC RIGHT OF WAY. THIS LIMITATION DOES NOT INCLUDE SEEDING AND MULCHING WORK. PARKING/TRAFFIC FLOW DISRUPTION WILL BE ALLOWED ONLY ONCE UNLESS NOTED AND WILL BE LIMITED TO THE MAXIMUM DURATION OF 30 DAYS. IN THE EVENT THE TIME DURATION DATE IS EXCEEDED, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AMOUNT OF \$2,500 FOR EACH CALENDAR DAY EXCEEDING THE STIPULATED DURATION OF 30 DAYS.</p>																																																												
PRECONSTRUCTION AND POST CONSTRUCTION VIDEO INSPECTIONS ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER FOR THE SEWER LATERALS THAT ARE TO REMAIN IN PLACE AND IN SERVICE. IF DAMAGE IS FOUND IN THE PRECONSTRUCTION VIDEO THE CONTRACTOR SHALL DOCUMENT THE DAMAGE AND PROVIDE THE DOCUMENTATION TO THE ENGINEER. IF DAMAGE IS FOUND IN THE POST CONSTRUCTION VIDEO THEN REPAIRS TO THE SATISFACTION OF THE DEPARTMENT AND MSD SHALL BE PERFORMED BY THE CONTRACTOR AT NO EXTRA COST. REFER TO MSD STANDARDS FOR VIDEO INSPECTION AND FORMAT REQUIREMENTS. THE POST CONSTRUCTION VIDEO WILL BE USED TO COMPARE TO THE PRECONSTRUCTION VIDEO TO DETERMINE IF ANY NEW DAMAGE WAS CREATED DUE TO THE PROJECT. ALL PROPOSED MODIFICATIONS TO EXISTING COMBINED AND SANITARY SEWERS MUST BE REVIEWED AND APPROVED BY MSD.	<p>ITEM 608 – 5" CONCRETE WALK, AS PER PLAN</p> <p>THIS ITEM SHALL CONSIST OF ITEM 608 5" CONCRETE WALK THAT IS STAMPED AND COLORED PER SPECIFICATIONS BELOW OR APPROVED EQUAL.</p> <p>PATTERN: SOLOMON COLORS-BRICKFORM-PALADIANO – YORKSHIRE COBBLE  <a href="https://WWW.SOLOMONCOLORS.COM/PAGES/BRICKFORM/PALADIANO.PHP#GSC.TAB=0">HTTPS://WWW.SOLOMONCOLORS.COM/PAGES/BRICKFORM/PALADIANO.PHP#GSC.TAB=0</a></p>  <p>COLOR: BUTTERFIELD COLOR U33-HAMPSHIRE RED  <a href="https://WWW.BUTTERFIELDCOLOR.COM/PRODUCT-CATEGORY/INTEGRAL-CONCRETE-COLOR/">HTTPS://WWW.BUTTERFIELDCOLOR.COM/PRODUCT-CATEGORY/INTEGRAL-CONCRETE-COLOR/</a></p> <p>THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT TO COMPLETE WORK FOR ITEM 608: 5" CONCRETE WALK, AS PER PLAN.</p>	<p>THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.</p> <p>THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATION UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.</p>	<p>THE CONTRACTOR SHALL ALSO COORDINATE THIS WORK WITH THE RESPECTIVE PROPERTY/BUSINESS OWNER A MINIMUM OF FOURTEEN CALENDAR DAYS PRIOR TO BEGINNING ANY WORK.</p>																																																												
ALL STORM BUILDING SEWER INSPECTIONS (LACP) CCTV WORK TO BE PERFORMED VIA THIS NOTE SHALL BE CARRIED OUT UTILIZING A COLOR PAN AND TILT ROTATING HEAD CAMERA SPECIFICALLY DESIGNED AND CONSTRUCTED FOR SEWER INSPECTION. ALL CCTV WORK SHALL BE RECORDED ENTIRELY IN DIGITAL MP4 FORMAT ENCODED WITH A FILE COMPRESSION OF HIGH EFFICIENCY VIDEO CODING (HEVC OR H.265) (OTHER FORMATS NEED MSDGC PM APPROVAL) WITH AN APPROPRIATE PACP/LACP DATABASE FILE (NASSCO PACP/LACP V7.0 CERTIFIED ACCESS DATABASE HAVING COMPATIBILITY WITH PIPETECH@PIPELINE INSPECTION SOFTWARE), AND ALL VIDEO MUST BE CONTINUOUSLY METERED.	<p>ITEM 202 – CATCH BASIN REMOVED, AS PER PLAN</p> <p>THIS ITEM SHALL CONSIST OF THE REMOVAL OF THE EXISTING CURB INLET FRAME AND GRATE TO THE ELEVATION REQUIRED TO INSTALL THE PROPOSED FRAME AND GRATE. EXISTING STORM PIPE CONNECTIONS ARE NOT TO BE DISTURBED.</p> <p>THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE WORK.</p>	<p>UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANTS SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.</p>	<table border="1"> <thead> <tr> <th>PARCEL</th><th>OWNER OF BUSINESS</th></tr> </thead> <tbody> <tr><td>3</td><td>CLIPPARD INSTRUMENT LABORATORY INCORPORATED</td></tr> <tr><td>4</td><td>SUKHI, INC</td></tr> <tr><td>5</td><td>CHARLES M. SCHULTZ</td></tr> <tr><td>6</td><td>THE LENA Z COMPANY, LTD</td></tr> <tr><td>7</td><td>THE RALPH H. BRUENEMAN REVOCABLE LIVING TRUST</td></tr> <tr><td>8</td><td>THE LENA Z COMPANY, LTD</td></tr> <tr><td>9</td><td>THE RALPH H. BRUENEMAN REVOCABLE LIVING TRUST</td></tr> <tr><td>10</td><td>NKB INVESTMENTS, LLC</td></tr> <tr><td>11</td><td>INTOWN SUITES COLERAIN, LP</td></tr> <tr><td>12</td><td>DUKE ENERGY OHIO, INC</td></tr> <tr><td>13</td><td>GANAPATHI, LLC</td></tr> <tr><td>14</td><td>LAUMEN I, LLC</td></tr> <tr><td>15</td><td>GANAPATHI, LLC</td></tr> <tr><td>16</td><td>COLERAIN EA 7810, LLC</td></tr> <tr><td>17</td><td>GANAPATHI, LLC</td></tr> <tr><td>18</td><td>LAUMEN I, LLC</td></tr> <tr><td>19</td><td>PEAK ONE HOLDINGS, LLC</td></tr> <tr><td>20</td><td>KDRM PROPERTIES, LLC</td></tr> <tr><td>21</td><td>GANAPATHI, LLC</td></tr> <tr><td>22</td><td>ILIA CORPORATION</td></tr> <tr><td>23</td><td>CASH AMERICA CENTRAL, INC</td></tr> <tr><td>24</td><td>LARIANE M. THIELMEYER</td></tr> <tr><td>25</td><td>THIELMEYER PROPERTIES, LLC</td></tr> <tr><td>26</td><td>JAMIS &amp; JUNE PROPERTIES, LLC</td></tr> <tr><td>27</td><td>WELCH SAND AND GRAVEL , INC</td></tr> <tr><td>28</td><td>JANET HENSON, AS TRUSTEE OF THE JANET E. HENSON REVOCABLE LIVING TRUST</td></tr> <tr><td>29</td><td>WELCH SAND AND GRAVEL , INC</td></tr> <tr><td>30</td><td>WELCH SAND AND GRAVEL , INC</td></tr> <tr><td>31</td><td>RONALD F. KOCH</td></tr> </tbody> </table>	PARCEL	OWNER OF BUSINESS	3	CLIPPARD INSTRUMENT LABORATORY INCORPORATED	4	SUKHI, INC	5	CHARLES M. SCHULTZ	6	THE LENA Z COMPANY, LTD	7	THE RALPH H. BRUENEMAN REVOCABLE LIVING TRUST	8	THE LENA Z COMPANY, LTD	9	THE RALPH H. BRUENEMAN REVOCABLE LIVING TRUST	10	NKB INVESTMENTS, LLC	11	INTOWN SUITES COLERAIN, LP	12	DUKE ENERGY OHIO, INC	13	GANAPATHI, LLC	14	LAUMEN I, LLC	15	GANAPATHI, LLC	16	COLERAIN EA 7810, LLC	17	GANAPATHI, LLC	18	LAUMEN I, LLC	19	PEAK ONE HOLDINGS, LLC	20	KDRM PROPERTIES, LLC	21	GANAPATHI, LLC	22	ILIA CORPORATION	23	CASH AMERICA CENTRAL, INC	24	LARIANE M. THIELMEYER	25	THIELMEYER PROPERTIES, LLC	26	JAMIS & JUNE PROPERTIES, LLC	27	WELCH SAND AND GRAVEL , INC	28	JANET HENSON, AS TRUSTEE OF THE JANET E. HENSON REVOCABLE LIVING TRUST	29	WELCH SAND AND GRAVEL , INC	30	WELCH SAND AND GRAVEL , INC	31	RONALD F. KOCH
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ROBOTIC LACP INSPECTION	<p>ITEM 611 – CATCH BASIN FRAME AND GRATE, AS PER PLAN</p> <p>THIS ITEM SHALL CONSIST OF THE INSTALLATION OF A TYPE 6 CATCH BASIN FRAME AND GRATE ON THE EXISTING STORM STRUCTURE. A 1" THICK (MIN) STEEL PLATE SHALL BE USED TO CONNECT THE TYPE 6 INLET TO THE EXISTING CONCRETE STRUCTURE.</p> <p>THE GRATE ELEVATION SHALL MATCH THE EXISTING ELEVATION. EXISTING STORM PIPE CONNECTIONS ARE NOT TO BE DISTURBED.</p> <p>THE UNIT BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE WORK.</p>	<p>THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.</p> <p>THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.</p>	<p>START OF WORK RESTRICTIONS</p>																																																												
SUBMITTAL OF WORK TO MSDGC	<p>AIRWAY/HIGHWAY CLEARANCE FOR PUBLIC AIRPORTS</p> <p>NO PUBLIC OR PRIVATE AIRWAY/HIGHWAY ARE LOCATED WITHIN 20,000 FEET OF THE PROJECT AREA. NOTIFICATION IS NOT REQUIRED</p>	<p>ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.</p>	<p>ANY WORK IN CONFLICT WITH THE UTILITY RELOCATIONS IDENTIFIED IN THE PROJECT UTILITY NOTE, CAN NOT BE SCHEDULED TO START UNTIL 4/1/2024. BASED ON THE CONTRACTOR'S MEANS AND METHODS THERE MAY BE WORK THAT CAN BE COMPLETED ALONGSIDE THE UTILITY RELOCATIONS AT THE DISCRETION OF THE PROJECT ENGINEER. SHOULD THE UTILITY RELOCATION WORK BE COMPLETED PRIOR TO 4/1/2024, THIS DATE CAN BE WAIVED AT THE DISCRETION OF THE PROJECT ENGINEER.</p>																																																												
WORK COMPLETED AND SUBMITTED TO MSDGC SHALL FOLLOW THE SPECIFICATIONS DETAILED IN THE SUBSECTIONS BELOW.	<p>ITEM SPECIAL – CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION</p> <p>ALL CONCRETE SHALL BE TESTED. ALL TESTING INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL, THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.</p> <p>TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONS 455 RESPECTIVELY.</p> <p>THROUGH THE CONTRACTOR, THE CONSULTANTS SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN</p>	<p>PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:</p> <p>UPON APPROVAL OF CONSULTANT..... 20%      PROGRESSIVE EQUIVALENT PAYMENTS..... 50%      UPON SUBMISSION OF FINAL REPORT..... 30%</p> <p>THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.</p>	<p>"OMUTCD" REFERS TO "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.      "SCD" REFERS TO "STANDARD CONSTRUCTION DRAWING".      "CMS" REFERS TO "CONSTRUCTION AND MATERIAL SPECIFICATION" ODOT, CURRENT EDITION.</p>																																																												
REQUIREMENTS OF ALL PACP AND LACP CCTV SUBMITTALS AND MANHOLE INSPECTION SUBMITTALS																																																															
ALL SUBMITTALS OF PACP AND LACP INSPECTIONS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:																																																															
<ul style="list-style-type: none"> <li>EACH SUBMITTAL – THE PACP/LACP DATABASE FILE AND ITS CORRESPONDING VIDEO FILES – SHALL CONTAIN WORK FROM ONLY 1 (ONE) INSPECTOR AND ONLY 1 (ONE) CCTV WORK CATEGORY FROM THE LIST BELOW:            O STORM BUILDING SEWER INSPECTIONS (LACP)</li> <li>EACH SUBMITTAL SHALL BE ASSIGNED A UNIQUE TRACKING IDENTIFIER.            O IN THE EVENT THAT A SUBMITTAL IS REJECTED AS UNACCEPTABLE, THE MSD PM SHALL DIRECT THE CONTRACTOR WHETHER TO REUSE THE ORIGINAL OR TO ASSIGN A NEW TRACKING IDENTIFIER.</li> <li>EACH SUBMITTAL SHALL INCLUDE INSPECTIONS FROM ONLY ONE CALENDAR MONTH.</li> <li>EACH LACP VIDEO FILE MUST BE IN STANDARD *.MP4 FORMAT AND NAMED AS DESCRIBED BELOW:            *[MONTH]_[DAY]_[YEAR]-[HOUR]_[MINUTE]_[AM/PM]-[INSPECTOR NAME]-[ADDRESS]-[STREET]-[WORK ORDER NUMBER].MP4            *E.G., 1_02_2012-07_51_PM-E SCHNEIDER-842 SUNDERLAND DR-405623.MP4</li> <li>ALL LACP INSPECTIONS MUST BE SUBMITTED WITHIN FOURTEEN (14) CALENDAR DAYS OF THE DATE OF WORK.</li> </ul>																																																															

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF TWO 11 FOOT LANE(S) OF TRAFFIC IN BOTH THE NORTH BOUND AND SOUTH BOUND DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT.

SINGLE LANE CLOSURES SHALL BE MADE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS MT-95.31 CLOSURES WILL BE RESTRICTED TO NIGHT TIME ONLY BETWEEN THE HOURS OF 8 PM AND 6 AM.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

TRAFFIC SHALL BE MAINTAINED AT ALL INTERSECTIONS AND DRIVES AT ALL TIMES AND SHALL BE CONTROLLED BY TRAFFIC CONTROL DEVICES AS REQUIRED AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410, TRAFFIC COMPACTED SURFACE,  
TYPE A OR B 250 CU. YD.  
ITEM 616, WATER 50 M. GAL.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 12 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UN-COMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

SIDEWALK CLOSED SIGNS

THE CONTRACTOR SHALL ERECT AND MAINTAIN, FOR THE DURATION OF THIS PROJECT, "SIDEWALK CLOSED" SIGNS AT ALL INTERSECTIONS AFFECTED BY THE ACTIVE PHASE. "SIDEWALK CLOSED" SIGNS SHALL INCLUDE DETOUR SIGNAGE TO THE OPEN SIDEWALK. FOR FURTHER INFORMATION, SEE SCD MT-110.10.

PAYMENT FOR THE SIDEWALK CLOSED SIGNS SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO INSTALL AND MAINTAIN THE SIGNS, SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 -MAINTAINING TRAFFIC.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER —————— 0.26 M. GAL.

WATER SERVICE REPLACEMENT

A MINIMUM OF ONE 11 FOOT LANE SHALL BE PROVIDED AND MAINTAINED IN BOTH THE NORTH AND SOUTH BOUND DIRECTION AT ALL TIMES BY USE OF THE EXISTING PAVEMENT.

LANE CLOSURES SHALL BE MADE IN ACCORDANCE WITH STANDARD DRAWING MT-95.31. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER.

TRAFFIC SHALL BE MAINTAINED AT ALL INTERSECTIONS AND DRIVES AT ALL TIMES AND SHALL BE CONTROLLED BY TRAFFIC CONTROL DEVICES AS APPROVED BY THE ENGINEER.

TRENCH BACKFILL SHALL BE COMPLETED BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. IF WORK CANNOT BE COMPLETED OR MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE UN-COMPLETED TRENCH SHALL BE BACKFILLED OR PLATED AT THE DIRECTION OF THE ENGINEER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

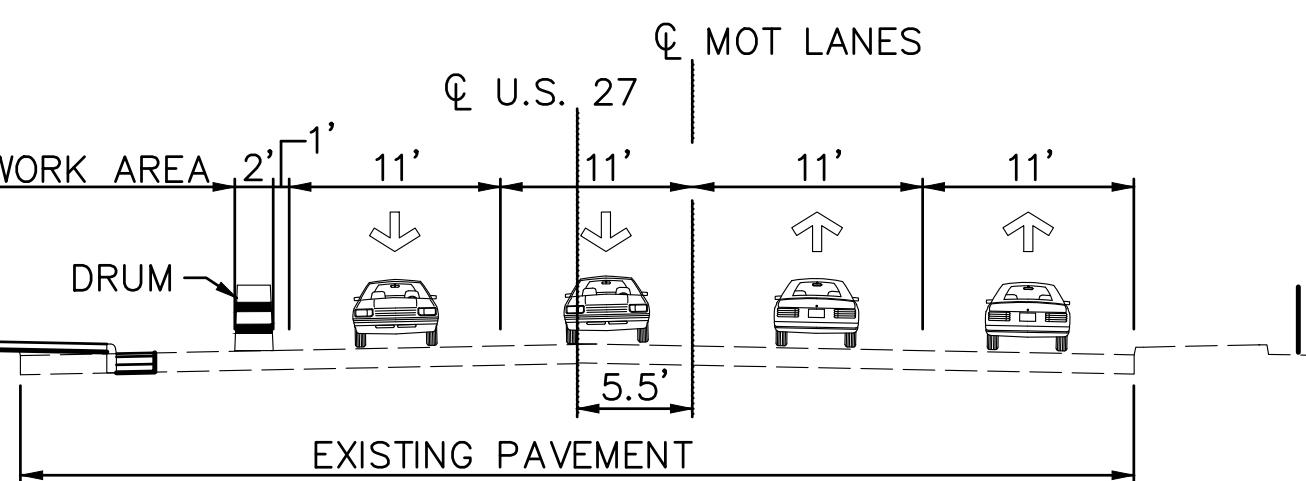
PHASE 1 – LEFT SIDE CURB/SIDEWALK CONSTRUCTION

Maintain two 11' lanes in each direction using the existing pavement as shown in the MOT plans.

Business access shall be maintained at all times.

Construct proposed curb on the left side (west side), restore pavement, construct the new sidewalk and seat walls. Seed and mulch exposed soil.

Work zone pavement markings and MOT equipment shall be in place prior to opening the lanes of traffic for the next phase.

CURB/SIDEWALK CONSTRUCTION

LEFT SIDE CONSTRUCTION  
STA. 557+11.50 – STA. 573+03.05 (NTS)

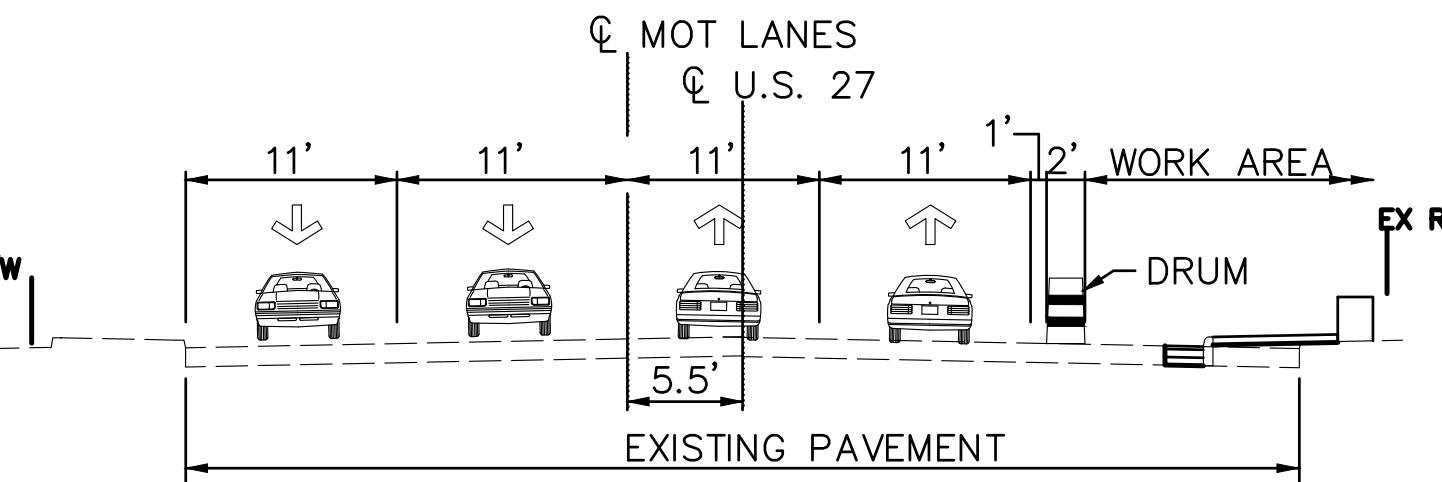
PHASE 2 – RIGHT SIDE CURB/SIDEWALK CONSTRUCTION

Maintain two 11' lanes in each direction using the existing pavement as shown in the MOT plans.

Business access shall be maintained at all times.

Construct proposed curb on the right side (east side), restore pavement, construct the new sidewalk and seat walls. Seed and mulch exposed soil.

Work zone pavement markings and MOT equipment shall be in place prior to opening the lanes of traffic for the next phase.

CURB/SIDEWALK CONSTRUCTION

RIGHT SIDE CONSTRUCTION  
STA. 557+11.50 – STA. 573+03.05 (NTS)

PHASE 3 – PAVEMENT RESTORATION

Maintain one 11' lane in each direction using cones and flaggers. Provide turn lanes where required.

Restore traffic to the original configuration and perform short term lane closures per MT-95.31 and MT-95.32.

Once all construction items have been installed and approved by the engineer, remove all MOT equipment items and open lanes to through traffic.

ITEM 614 – WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

Work zone raised pavement markers, as per plan, and their installation shall conform to C&MS 614 or C&MS 621 as specified herein.

Raised pavement markers in use during the snow-plowing season shall conform to 621.

Raised pavement markers in use during the non-snow-plow season shall conform to either 614 or 621.

The snow-plowing season shall run from October 15th through April 1st.

If project delays, not the fault of ODOT, cause the work to extend into the snow-plowing season, the contractor shall be responsible for replacing work zone raised pavement markers (WZRPMS) conforming to C&MS 614, with raised pavement markers conforming to 621, as determined by the engineer, at the contractor's expense.

This item shall include purchase, installation and removal of item 614 work zone raised pavement marker, as per plan, including filling of any depressions created in the pavement as per C&MS 621.08.

Resurfacing of the transition areas shall be performed at the time that the surface course is being applied to the entire project. Prior to application of the surface course on the project, the existing pavement within the transition area shall be removed to a depth necessary to reach the level of the intermediate course of the pavement, as determined by the engineer.

The following bid items should be included in the plans:

ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN 263 EACH

Payment for resurfacing within the transition area shall be paid for under the appropriate bid items for the work required, as provided for in the plans.

"PCB" refers to "PORTABLE CONCRETE BARRIER"  
"OMUTCD" refers to the "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.  
"SCD" refers to "STANDARD CONSTRUCTION DRAWING"  
"CMS" refers to "CONSTRUCTION AND MATERIAL SPECIFICATION" ODOT, CURRENT EDITION.  
"MOT" refers to "MAINTENANCE OF TRAFFIC"

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HAM-27-11.09



SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED SCR CHECKED MM					
6	7	8	9	16	17	18	19	20	57	71	73		EXT	TOTAL									
												228	625	25100	228	FT	CONDUIT, 1", 725.04						
												800	625	25400	800	FT	CONDUIT, 2", 725.04						
												2,021	625	25500	2,021	FT	CONDUIT, 3", 725.04						
												110	625	25600	110	FT	CONDUIT, 4", 725.04						
												265	625	25802	265	FT	CONDUIT, CONCRETE ENCASED, 2"						
												753	625	25802	753	FT	CONDUIT, CONCRETE ENCASED, 3"						
												363	625	25802	363	FT	CONDUIT, CONCRETE ENCASED, 4"						
												30	625	25902	30	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3'						
												29	625	27551	29	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN, 18'H CAST ALUM LED POLE LTG	56					
												2,459	625	29001	2,459	FT	TRENCH, AS PER PLAN						
												359	625	29400	359	FT	TRENCH IN PAVED AREA						
												39	625	30700	39	EACH	PULL BOX, 725.08, 18"						
												38	625	32000	38	EACH	GROUND ROD						
												1	625	34001	1	EACH	POWER SERVICE, AS PER PLAN	56					
												2,863	625	36010	2,863	FT	UNDERGROUND WARNING/MARKING TAPE						
												<b>OTHER UTILITIES</b>											
												12	SPECIAL	61199700	12	EACH	GAS VALVE BOX ADJUSTED TO GRADE	16					
												2	625	31600	2	EACH	PULL BOX, MISC.: ADJUST TO GRADE	16					
												18	SPECIAL	69098100	18	FT	SLEEVE EXISTING GAS LINE	6					
												107	SPECIAL	69098100	107	FT	VERIZON/MCI UTILITY SLEEVING	6					
LS												LS	SPECIAL	69098400	LS		LACP CCTV	6					
												<b>LANDSCAPING</b>											
												79	661	20040	79	EACH	DECIDUOUS SHRUB, 2' HEIGHT, RHUS AROMATICA						
												26	661	20060	26	EACH	DECIDUOUS SHRUB, 3' HEIGHT, MYRICA PENNSYLVANICA						
												13	661	40100	13	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, CERIS CANADENSIS INERMIS IMPERIAL						
												7	661	40100	7	EACH	DECIDUOUS TREE, 2-1/2" CALIPER, SYRINGA RETICULATE						
												14	661	40120	14	EACH	DECIDUOUS TREE, 3" CALIPER, GINKO BILOBA						
												26	661	40120	26	EACH	DECIDUOUS TREE, 3" CALIPER, GLEDITSIA TRIACANTHOS						
												<b>TRAFFIC CONTROL</b>											
												FOR TRAFFIC CONTROL GENERAL SUMMARY REFER TO SHEET 52											
												<b>RETAINING WALLS</b>											
												8.46	203	10001	8.46	CY	EXCAVATION, AS PER PLAN	6					
												117.37	203	20000	117.37	CY	EMBANKMENT						
												165.31	503	21100	165.31	CY	UNCLASSIFIED EXCAVATION						
												3,578	509	10000	3,578	LB	EPOXY COATED STEEL REINFORCEMENT						
												32.85	511	46510	32.85	CY	CLASS QC1 CONCRETE, FOOTING						
												94.18	602	15001	94.18	CY	BLOCK MASONRY, AS PER PLAN	73					
												1,662.95	602	97000	1,662.95	SF	MASONRY, MISC.: CAST STONE FACING	73					
												391.17	602	98100	391.17	FT	MASONRY, MISC.: CAST STONE CAP	73					
												<b>MAINTENANCE OF TRAFFIC</b>											
												250	410	22000	250	TON	TRAFFIC COMPACTED SURFACE, TYPE A OR B						
												263	614	12800	263	EACH	WORK ZONE RAISED PAVEMENT MARKER						
												0.38	614	20210	0.38	MILE	WORK ZONE LANE LINE, CLASS I, 6", 740.06, TYPE I						
												0.74	614	21200	0.74	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I						
												0.68	614	22200	0.68	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I						
												1,927	614	23400	1,927	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 740.06, TYPE I						
												50.26	616	10000	50.26	MGAL	WATER						
												<b>INCIDENTALS</b>											
												LS	614	11000	LS		MAINTAINING TRAFFIC						
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING						
												LS	624	10000	LS		MOBILIZATION						
												HAM - 27-11.09											
																			15 98				



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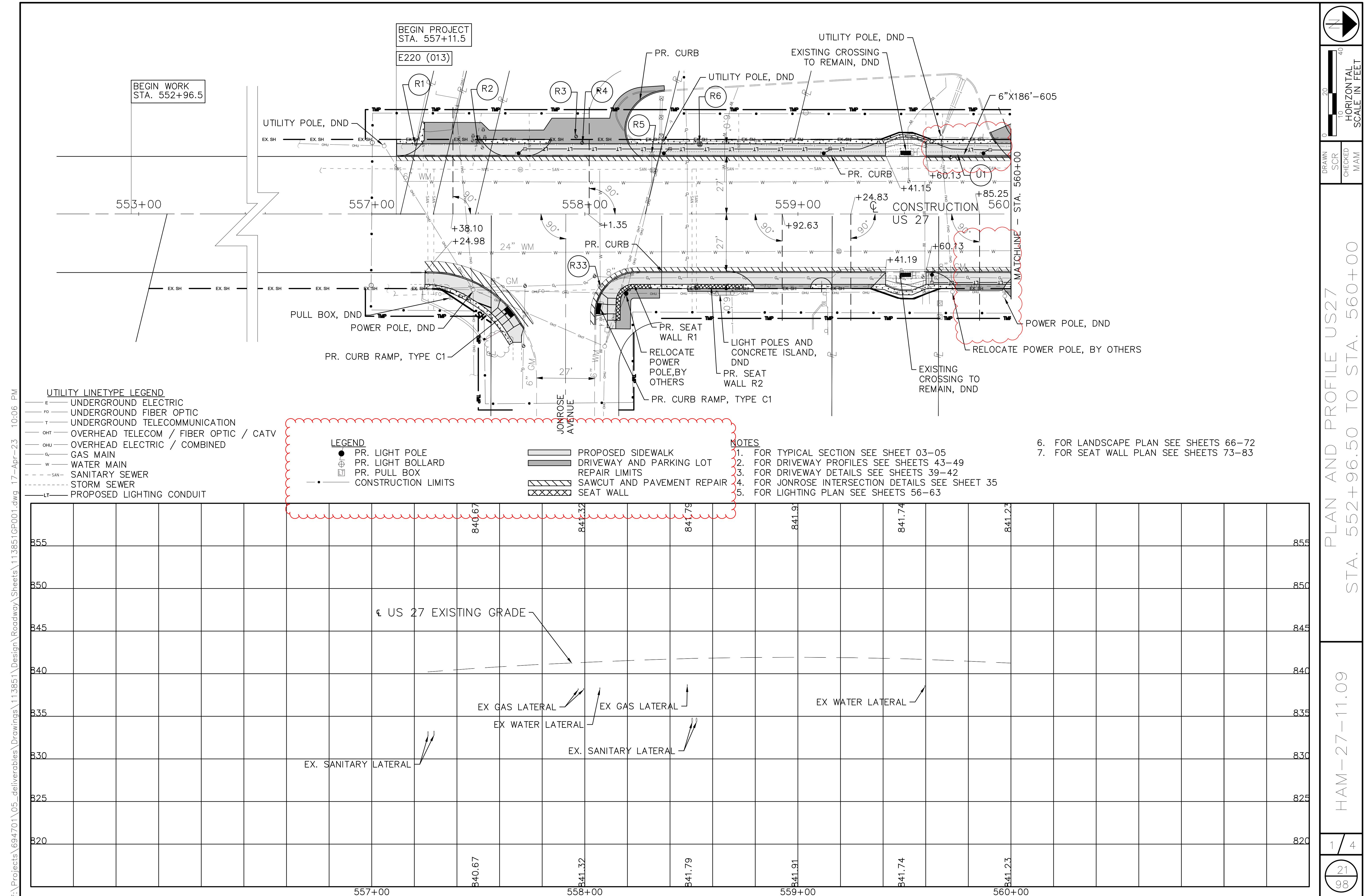
# DRAINAGE AND UNDERDRAIN SUBSUMMARY

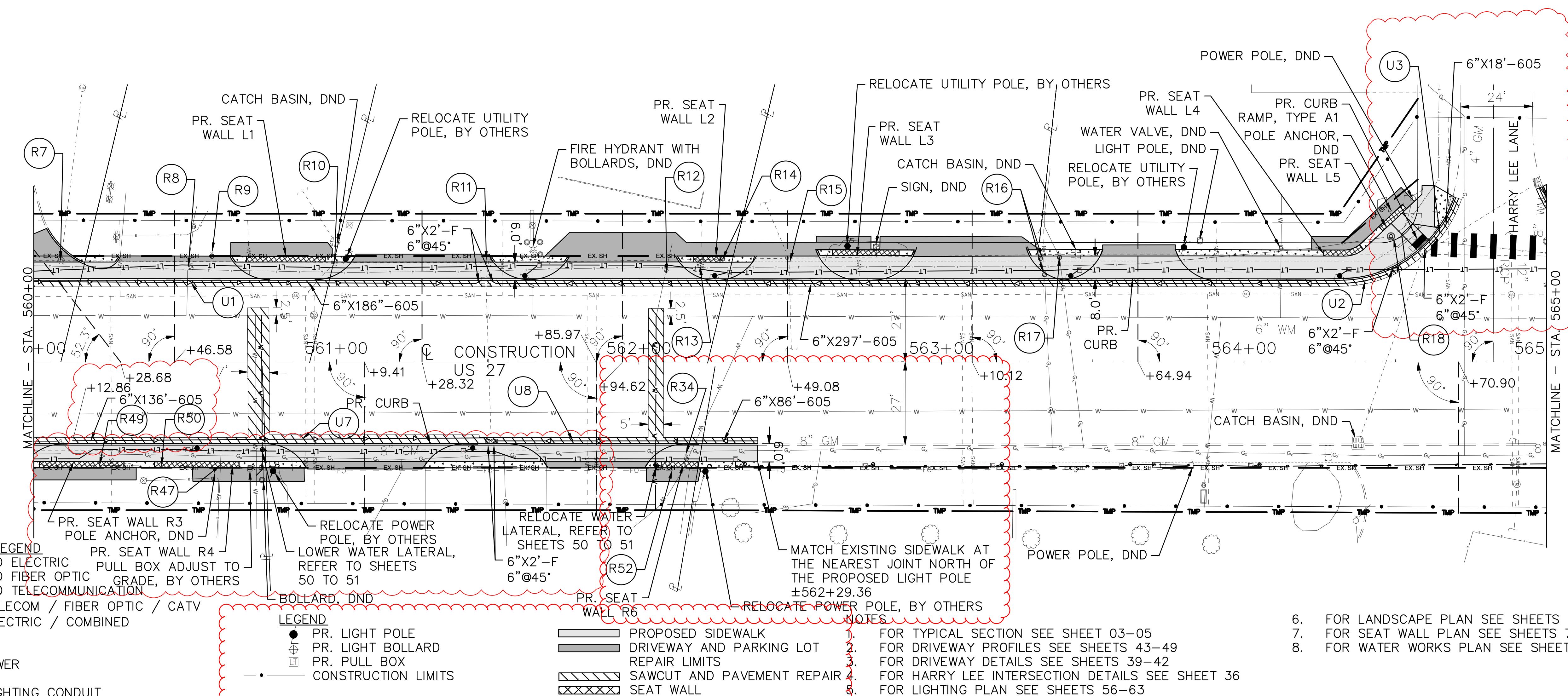
STATION RANGE		TYPICAL SECTION		SIDE	DISTANCE (D)	AVERAGE WIDTH (W) A=DxW/9		SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202	202	202	203	204	303	304	407	442	451	452	608	608	609	625	
						FT	FT	SY	SY	SF	FT	CY	SY	CY	GAL	CY	CY	TACK COAT				FT	FT		
CL US 27																									
557+11.69	TO	559+41.10	US 27	LT	229.41			50.98			229.41		63.72	14.87	10.05	2.80	2.12						229.41		
559+59.61	TO	564+31.65	US 27	LT	472.04			104.90			472.04		131.12	30.60	17.48	5.77	4.37						472.04		
565+42.77	TO	573+00.00	US 27	LT	757.23			168.27			757.23		210.34	49.08	28.05	9.26	7.01						757.23		
558+25.09	TO	559+41.19	US 27	RT	116.10			25.80			116.10		32.25	7.53	4.30	1.42	1.08						116.10		
559+60.13	TO	562+39.25	US 27	RT	279.12			62.03			279.12		77.53	18.09	10.34	3.41	2.58						279.12		
567+81.18	TO	572+08.43	US 27	RT	427.25			94.94			427.25		118.68	27.69	15.82	5.22	3.96						427.25		
560+70.73	TO	560+77.73	US27		7.00	42.00	32.67	32.67															32.67		
562+03.13	TO	562+08.13	US27		5.00	42.67	23.71	23.71															23.71		
557+11.69	TO	559+41.10	US 27	LT	229.41	6.00	152.94	86.82		1376.46		86.82		14.47								520.94	195.35		
559+59.61	TO	562+38.88	US 27	LT	279.27	6.00	186.18	60.05		1675.62		60.05		10.01								360.27	135.10		
562+38.88	TO	564+31.65	US 27	LT	192.77	8.00	171.35	68.83		1156.62		68.83		11.47								464.61	116.15		
565+42.77	TO	566+05.94	US 27	LT	63.17	8.00	56.15	21.80		379.02		21.80		3.63								147.18	36.80		
566+05.94	TO	569+80.44	US 27	LT	374.50	6.00	249.67	140.57		2247.00		140.57		23.43								843.41	316.28		
569+80.44	TO	570+39.28	US 27	LT	58.84	8.00	52.30	8.12		353.04		8.12		1.35								54.79	13.70		
570+39.28	TO	570+64.28	BUS	LT	25.00	5.00	13.89	13.89		150.00		13.89		2.32							150.00	75.01	37.50		
570+64.28	TO	571+14.28	BUS	LT	50.00	5.00	27.78	27.78		300.00		27.78		4.63							600.00	150.01	75.01		
571+14.28	TO	571+39.28	BUS	LT	25.00	5.00	13.89	13.89		150.00		13.89		2.32							150.00	75.01	37.50		
571+39.28	TO	572+22.10	US 27	LT	82.82	8.00	73.62	28.99		496.92		28.99		4.83								195.69	48.92		
572+22.10	TO	573+00.00	US 27	LT	77.90	6.00	51.93	37.41		467.40		37.41		6.23								224.43	84.16		
													0.00												
558+25.09	TO	559+41.19	US27	RT	116.10	6.00	77.40	71.32		696.60		71.32		11.89								427.92	160.47		
559+60.13	TO	562+39.25	US27	RT	279.12	6.00	186.08	171.43		1674.72		171.43		28.57								1028.57	385.71		
567+81.40	TO	569+56.60	US27	RT	175.20	8.00	155.73	135.24		1051.20		135.24		22.54								912.85	228.21	89.32	
569+56.60	TO	569+81.60	BUS	RT	25.00	5.00	13.89	13.89		150.00		13.89		2.32							150.00	75.01	37.50		
569+81.60	TO	570+31.60	BUS	RT	50.00	5.00	27.78	24.99		300.00		24.99		4.16							600.00	134.92	67.46		
570+31.60	TO	570+56.60	BUS	RT	25.00	5.00	13.89	13.89		150.00		13.89		2.32							150.00	75.01	37.50		
570+56.60	TO	572+08.43	US27	RT	151.83	8.00	134.96	128.58		910.98		128.58		21.43								867.89	216.97		
564+31.65	TO	564+71.85	US27	LT	40.20	12.00	53.60	59.95	18.76	247.66	50.22	59.95	1.86	9.99	0.61	0.47					279.44	34.00	103.35	40.20	
564+96.37	TO	565+42.77	US27	LT	46.40	8.00	41.24	60.27	12.63	333.06	56.83	60.27	2.10	10.05	0.69	0.53					273.03	60.03	95.70	46.40	
557+24.99	TO	557+75.96	US27	RT	50.97	6.00	33.98	77.53	31.36	444.29	56.45	77.53	2.09	12.92	0.69	0.52					256.76	57.75	101.04	50.97	
558+02.67	TO	558+25.09	US27	RT	22.42	6.00	14.95	33.68	8.53	232.60	38.40	33.68	1.42	5.61	0.47	0.36					95.02	45.08	86.27	22.42	
572+08.43																									

# PAVEMENT CALCULATIONS

HAM-27-11.09

19  
98





**PLAN AND PROFILE US27 STA. 560+00 TO STA. 565+00**

HAM - 27 - 11.09

841.23	840.64	839.20	839.64	840.35	841.01	841.39	841.34	841.06	840.52	839.99
840.23	840.64	839.20	839.64	840.35	841.01	841.39	841.34	841.06	840.52	839.99
845	840	835	830	825	820	815	810	805	800	815

US 27 EXISTING GRADE

EX WATER LATERAL, TBR

EX GAS LATERAL

EX SANITARY LATERAL

PR WATER LATERAL

REFER TO SHEETS 50 TO 51

EX SANITARY LATERAL

EX WATER LATERAL

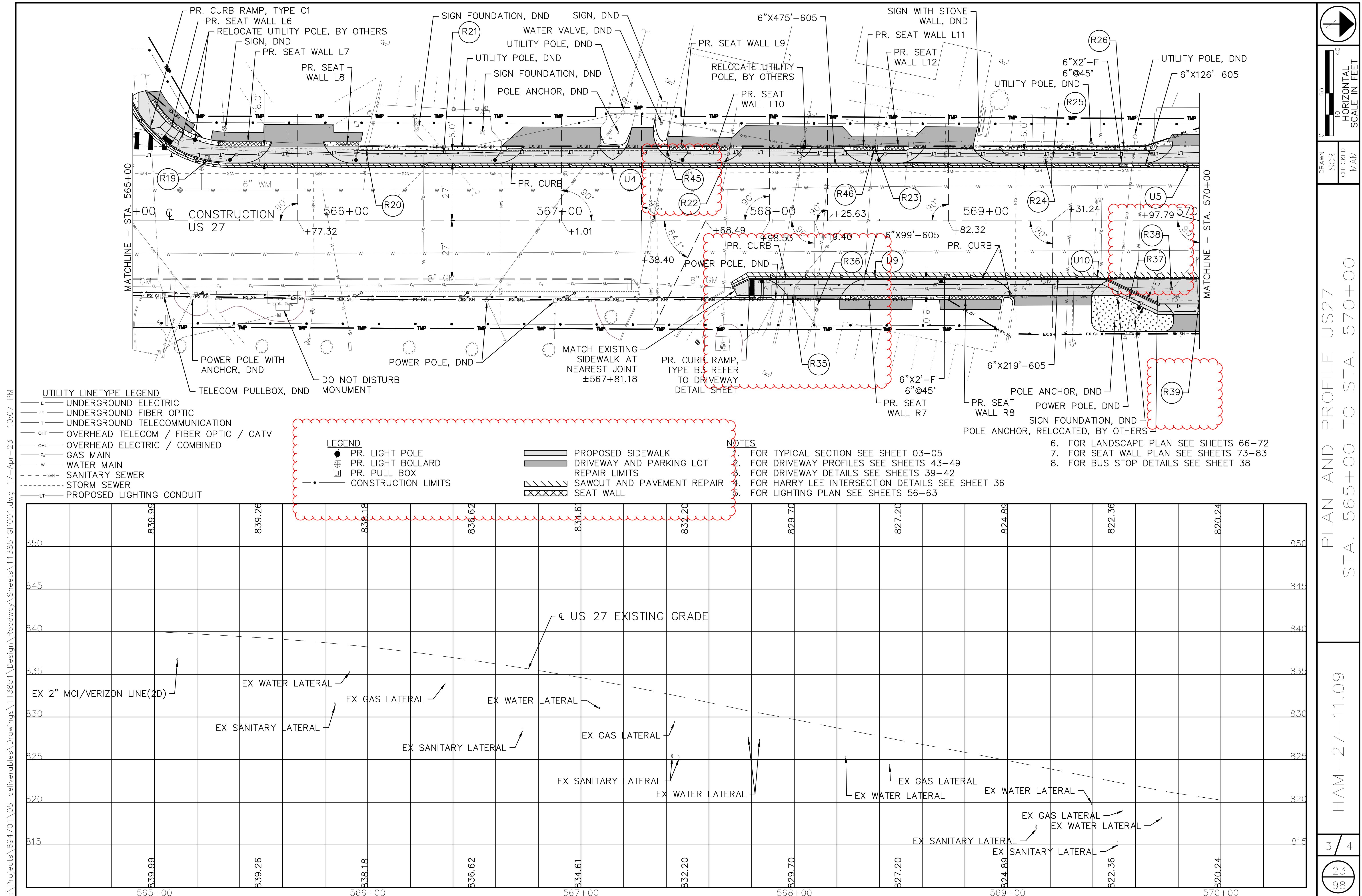
EX GAS LATERAL

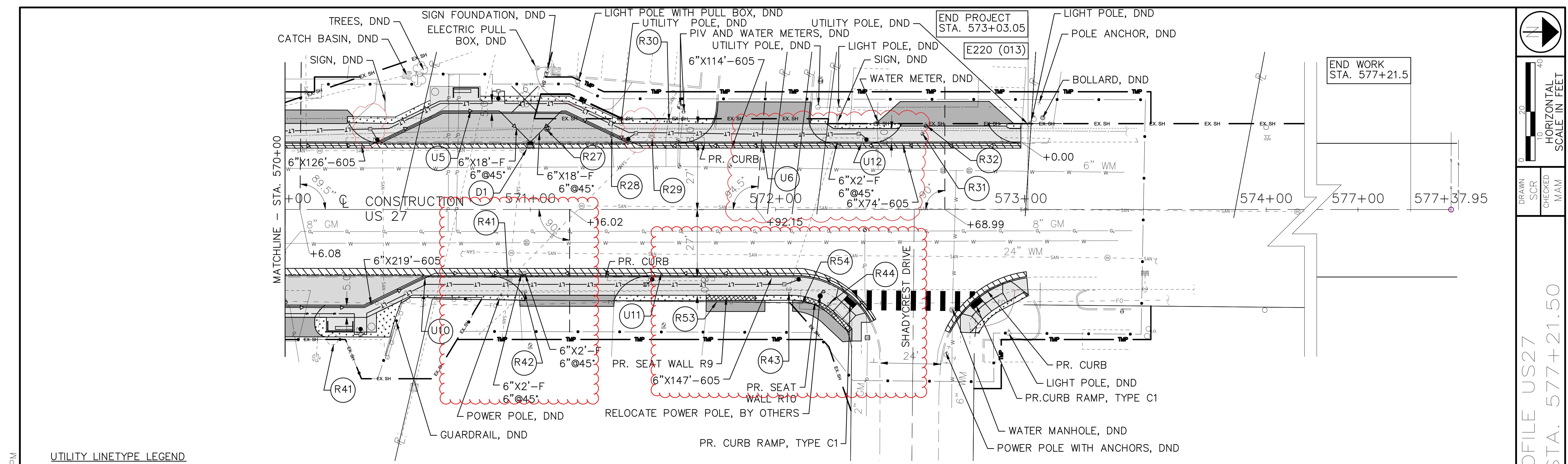
EX SANITARY LATERAL

EX WATER LATERAL

EX SANITARY LATERAL







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UTILITY LINETYPE LEGEND

- e- UNDERGROUND ELECTRIC
- fo- UNDERGROUND FIBER OPTIC
- t- UNDERGROUND TELECOMMUNICATION
- oht- OVERHEAD TELECOM / FIBER OPTIC / CATV
- ohu- OVERHEAD ELECTRIC / COMBINED
- g- GAS MAIN
- w- WATER MAIN
- san- SANITARY SEWER
- st- STORM SEWER
- lt- PROPOSED LIGHTING CONDUIT

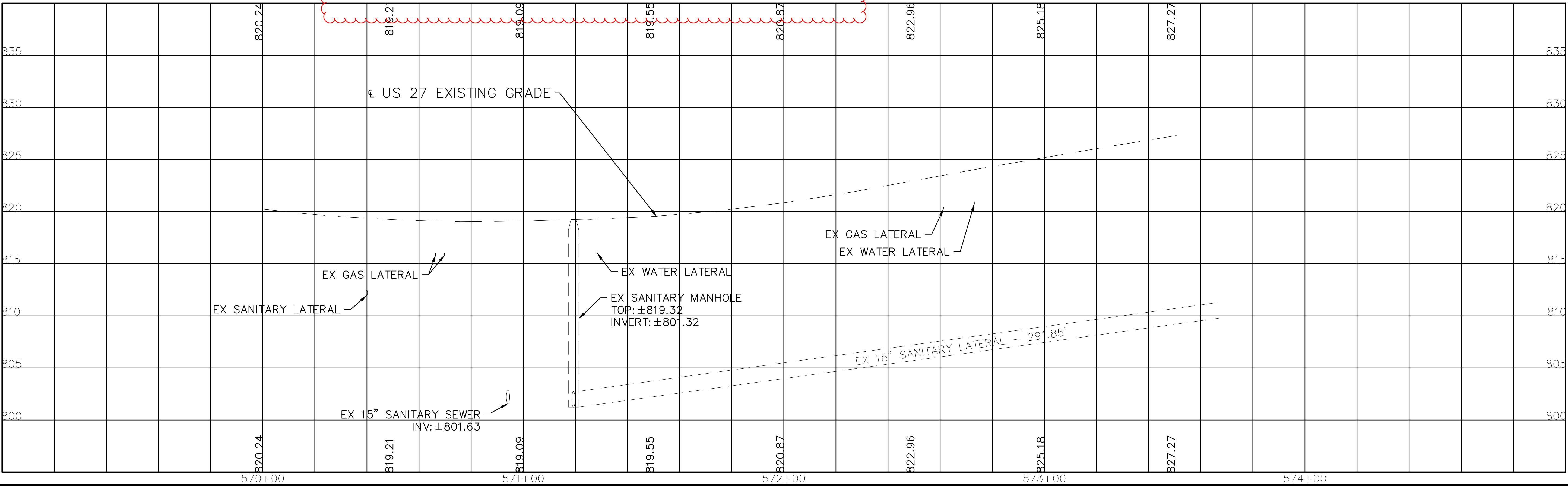
LEGEND

- PR. LIGHT POLE
- ⊕ PR. LIGHT BOLLARD
- PR. PULL BOX
- CONSTRUCTION LIMITS

NOTES

- 1. FOR TYPICAL SECTION SEE SHEET 03-05
- 2. FOR DRIVEWAY PROFILES SEE SHEETS 43-49
- 3. FOR DRIVEWAY DETAILS SEE SHEETS 39-42
- 4. FOR SHADYCREST INTERSECTION DETAILS SEE SHEET 37
- 5. FOR LIGHTING PLAN SEE SHEETS 56-63

6. FOR LANDSCAPE PLAN SEE SHEETS 66-72
7. FOR SEAT WALL PLAN SEE SHEETS 73-83
8. FOR BUS STOP DETAILS SEE SHEET 38



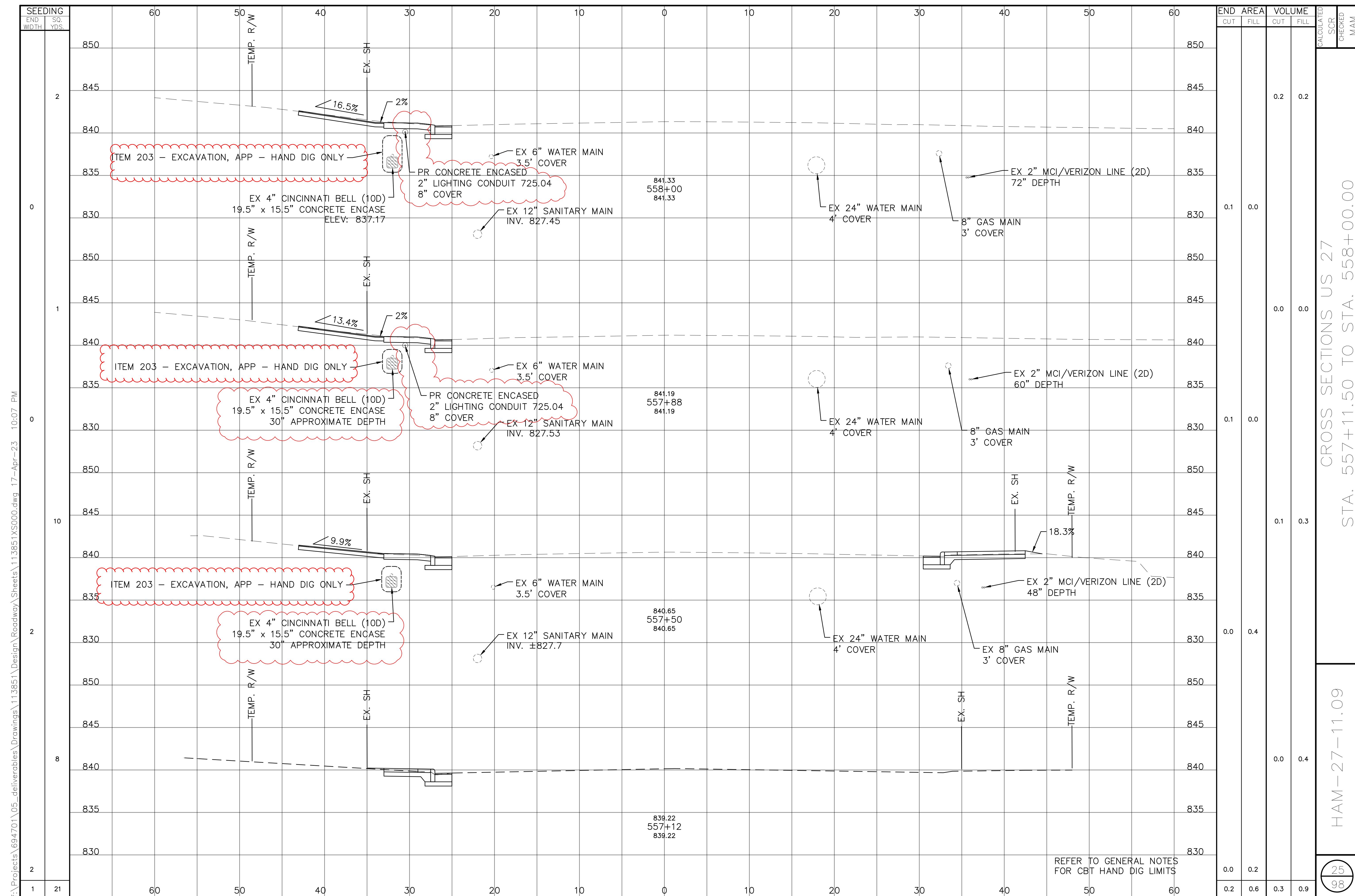
PLAN AND PROFILE US27  
STA. 570+00 TO STA. 577+21.50

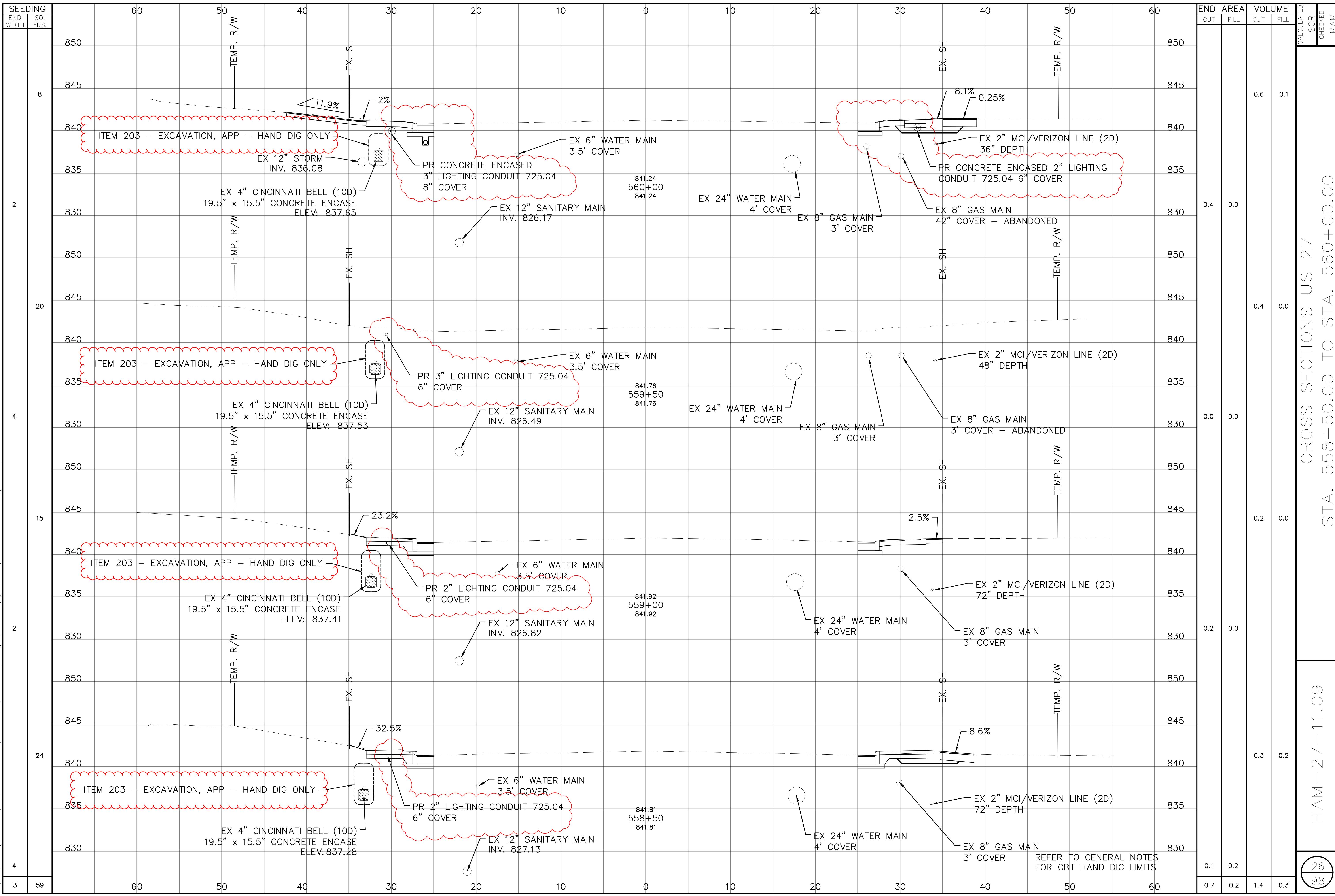
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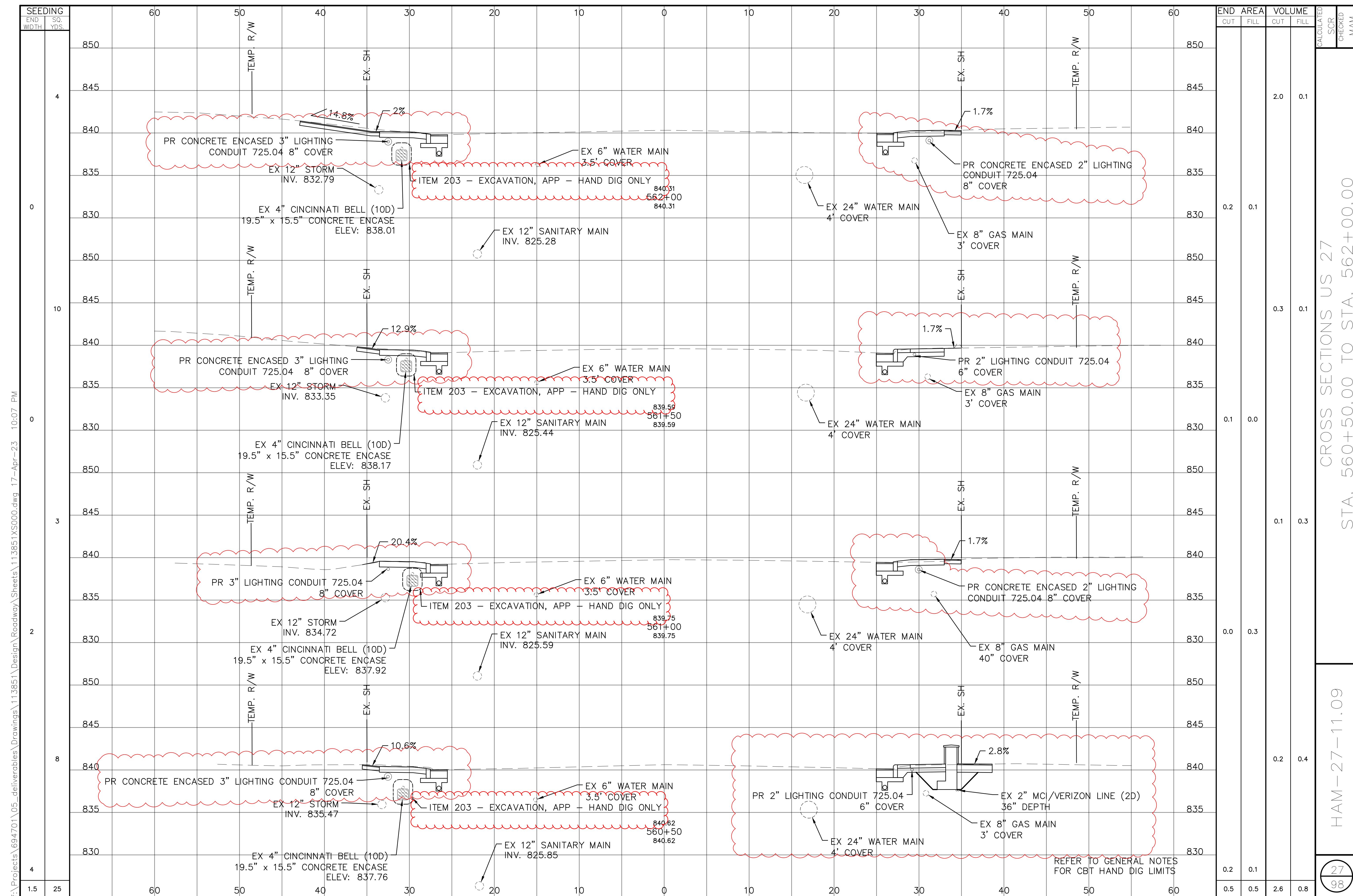
4 4  
24 98

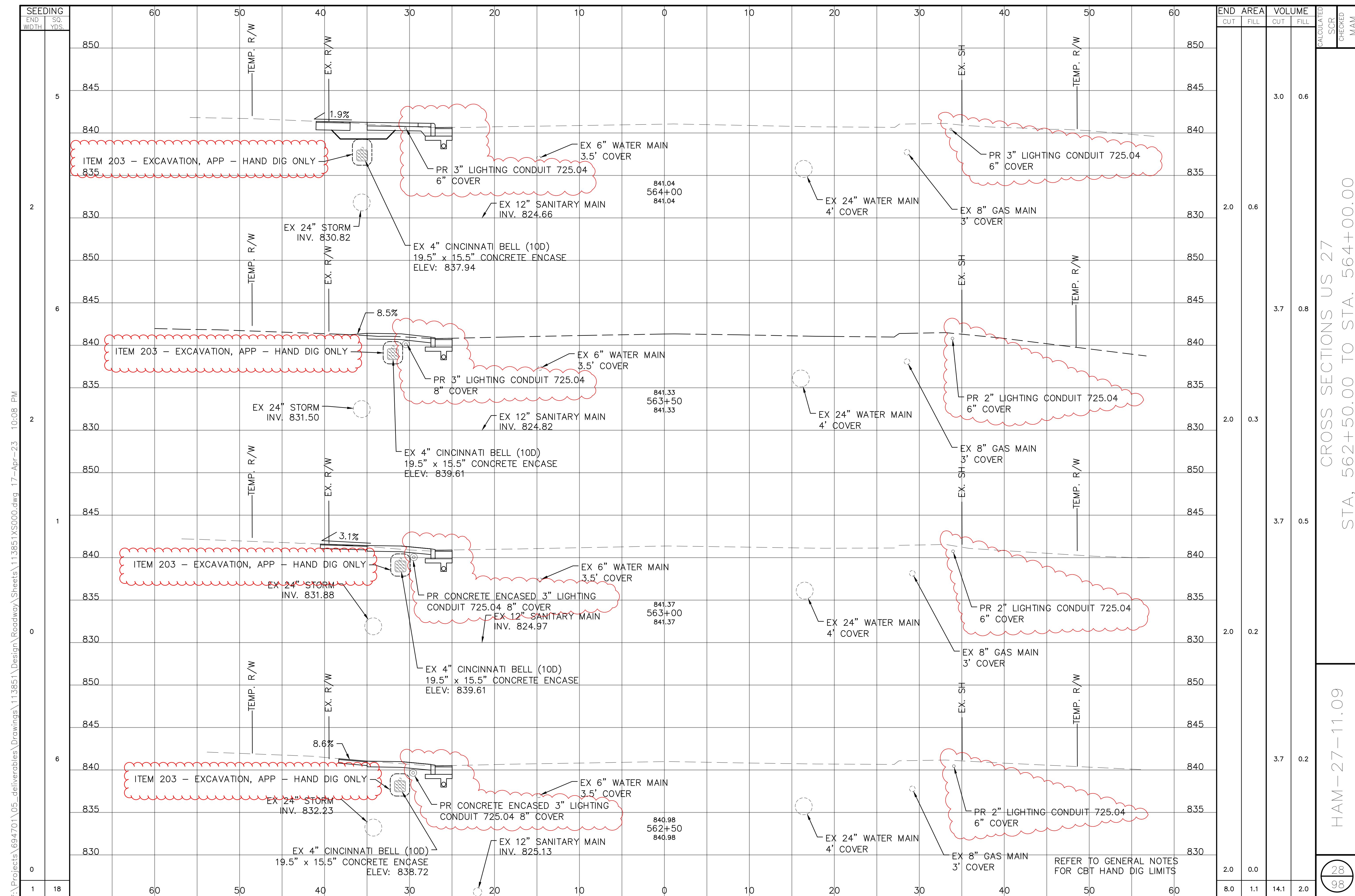
DRAWN  
SCR  
CHECKED  
MAM

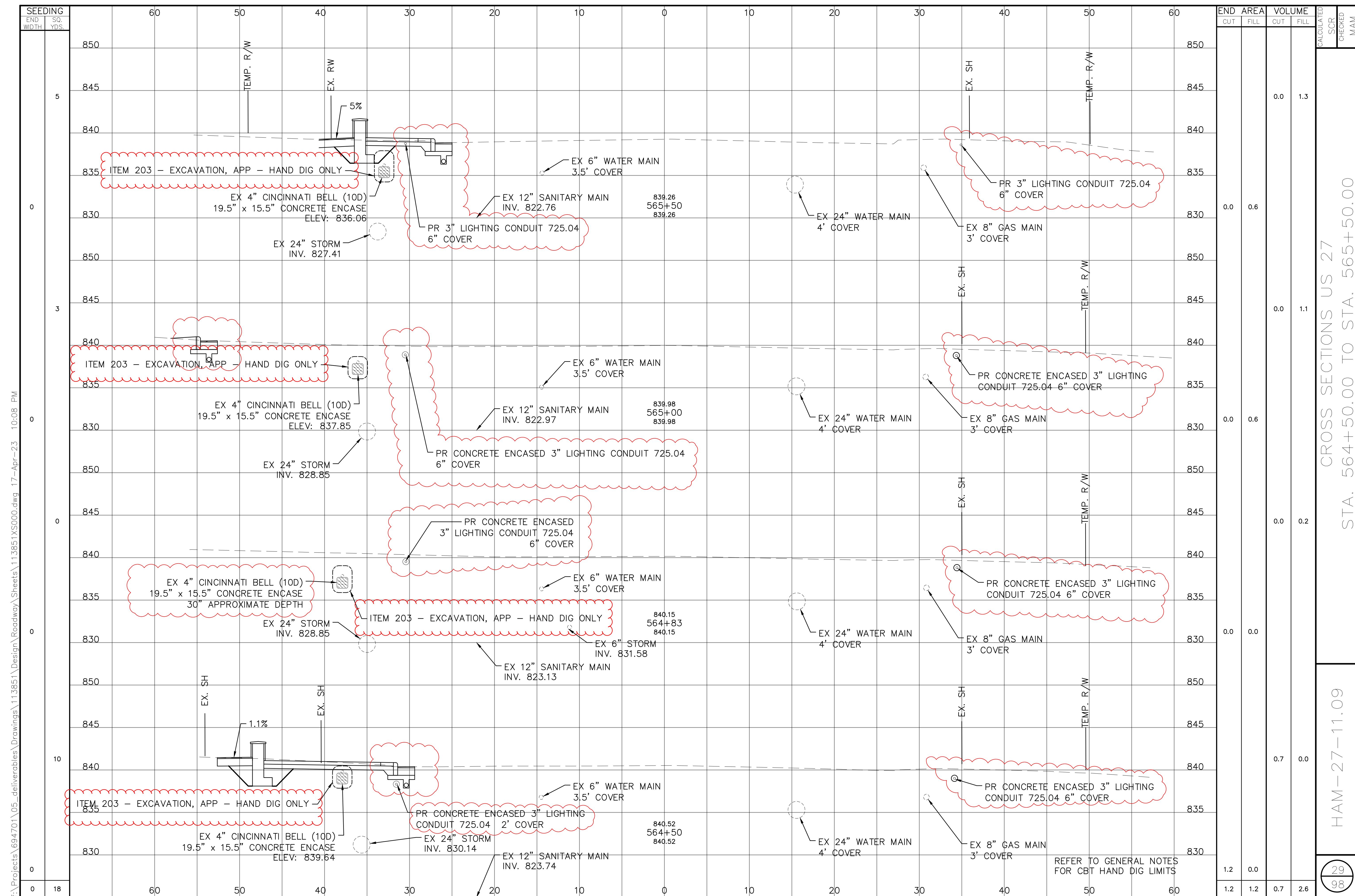
40  
20  
10  
0  
HORIZONTAL  
SCALE IN FEET

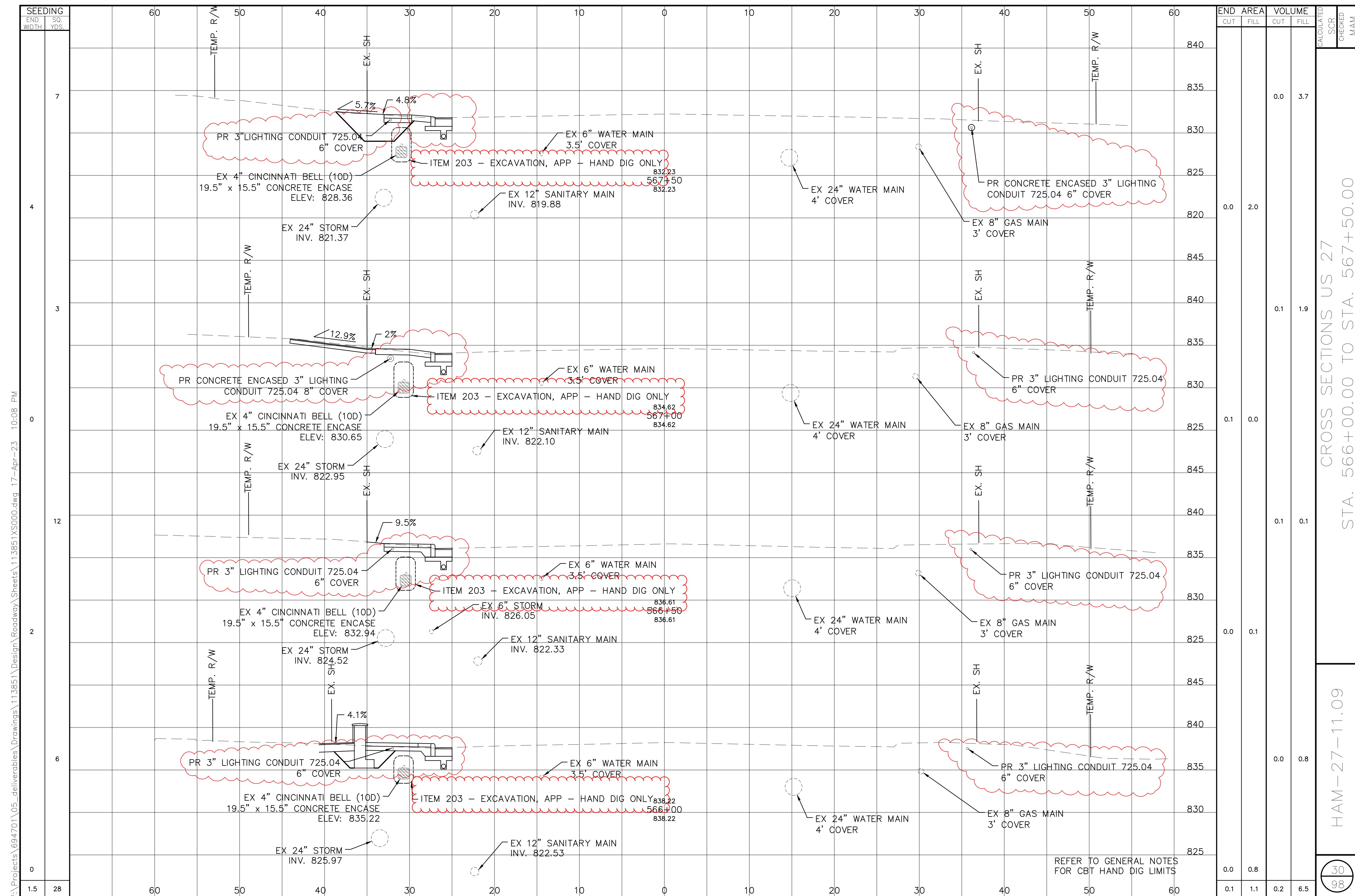


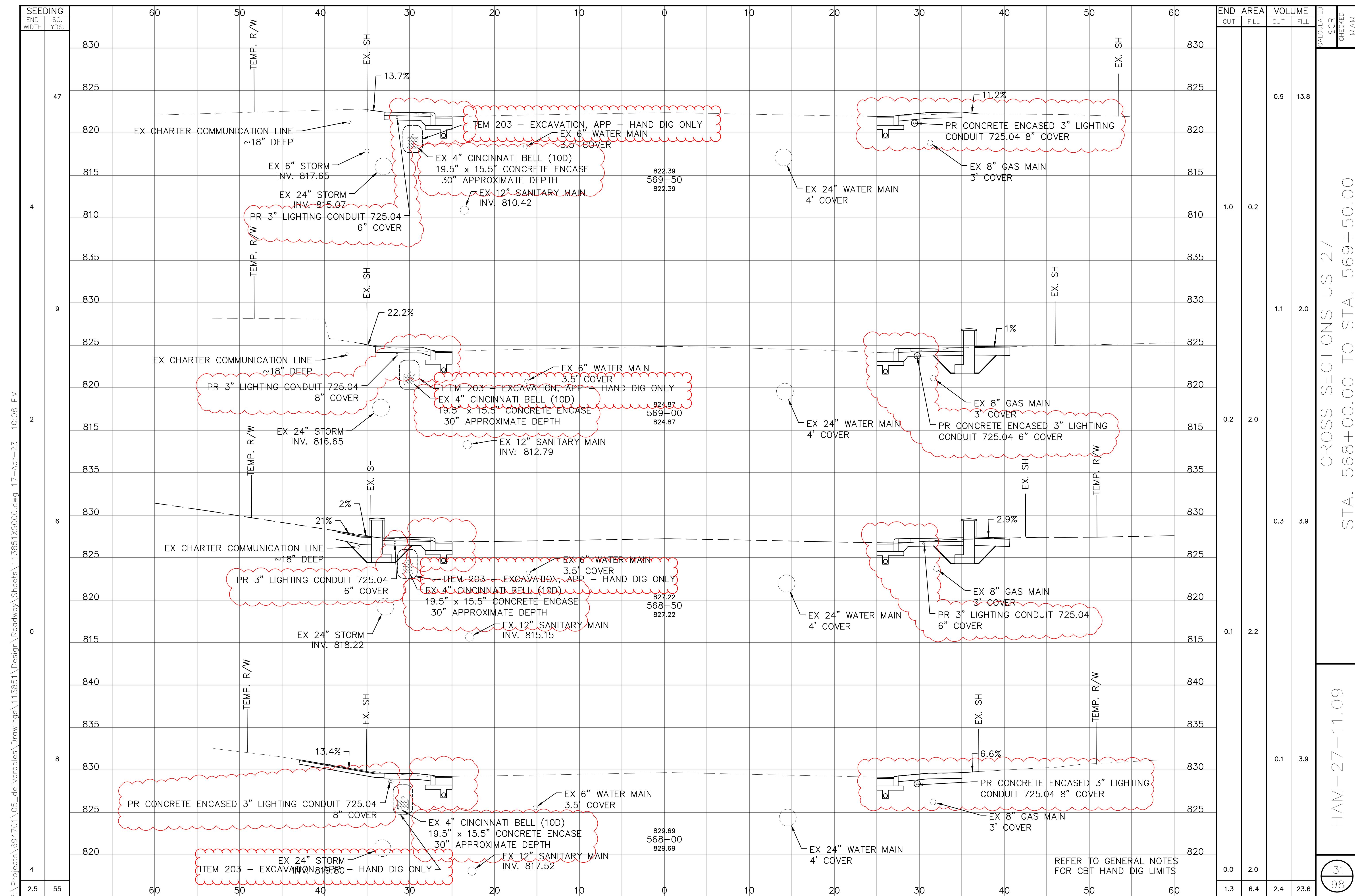


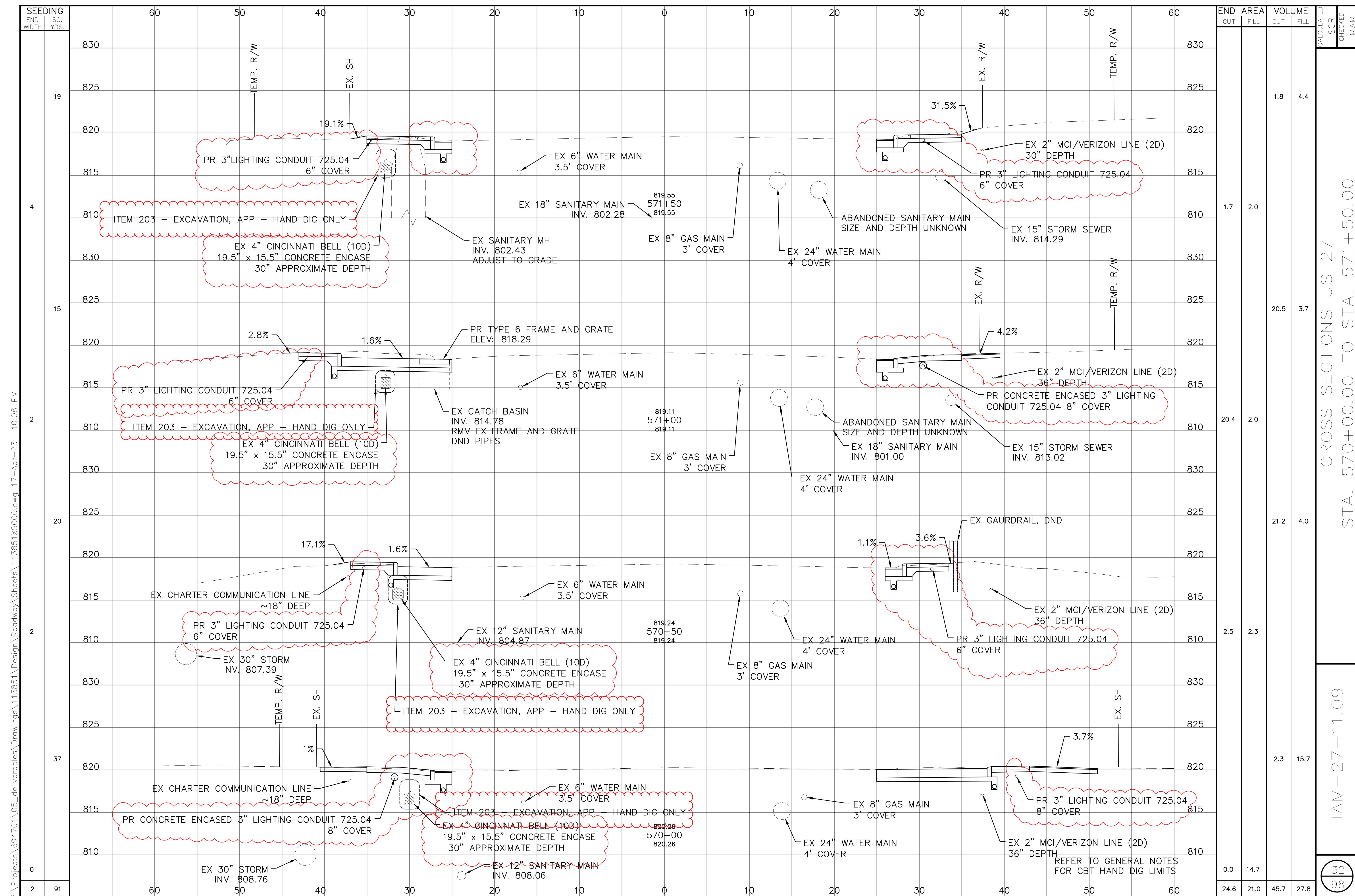


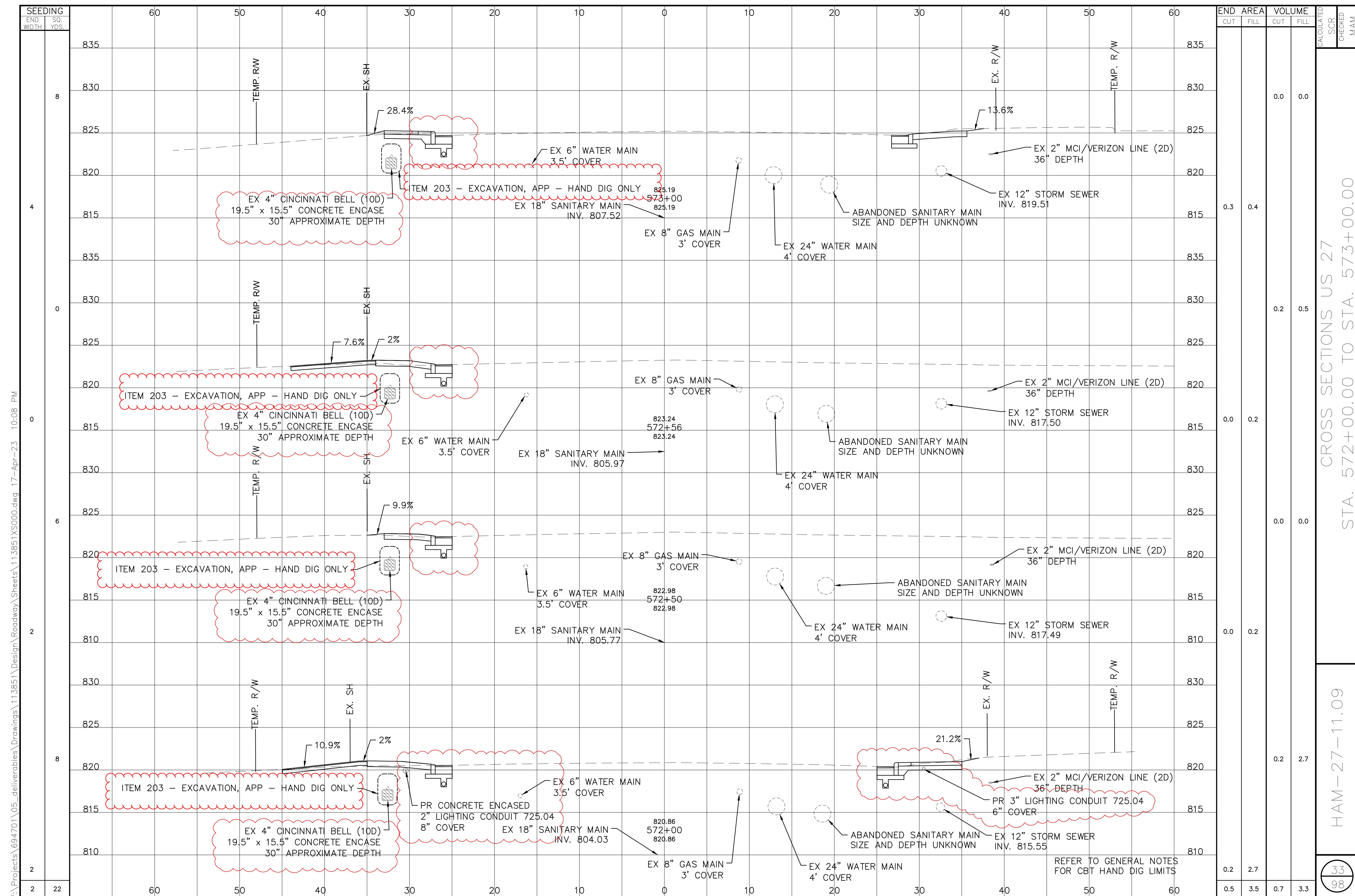


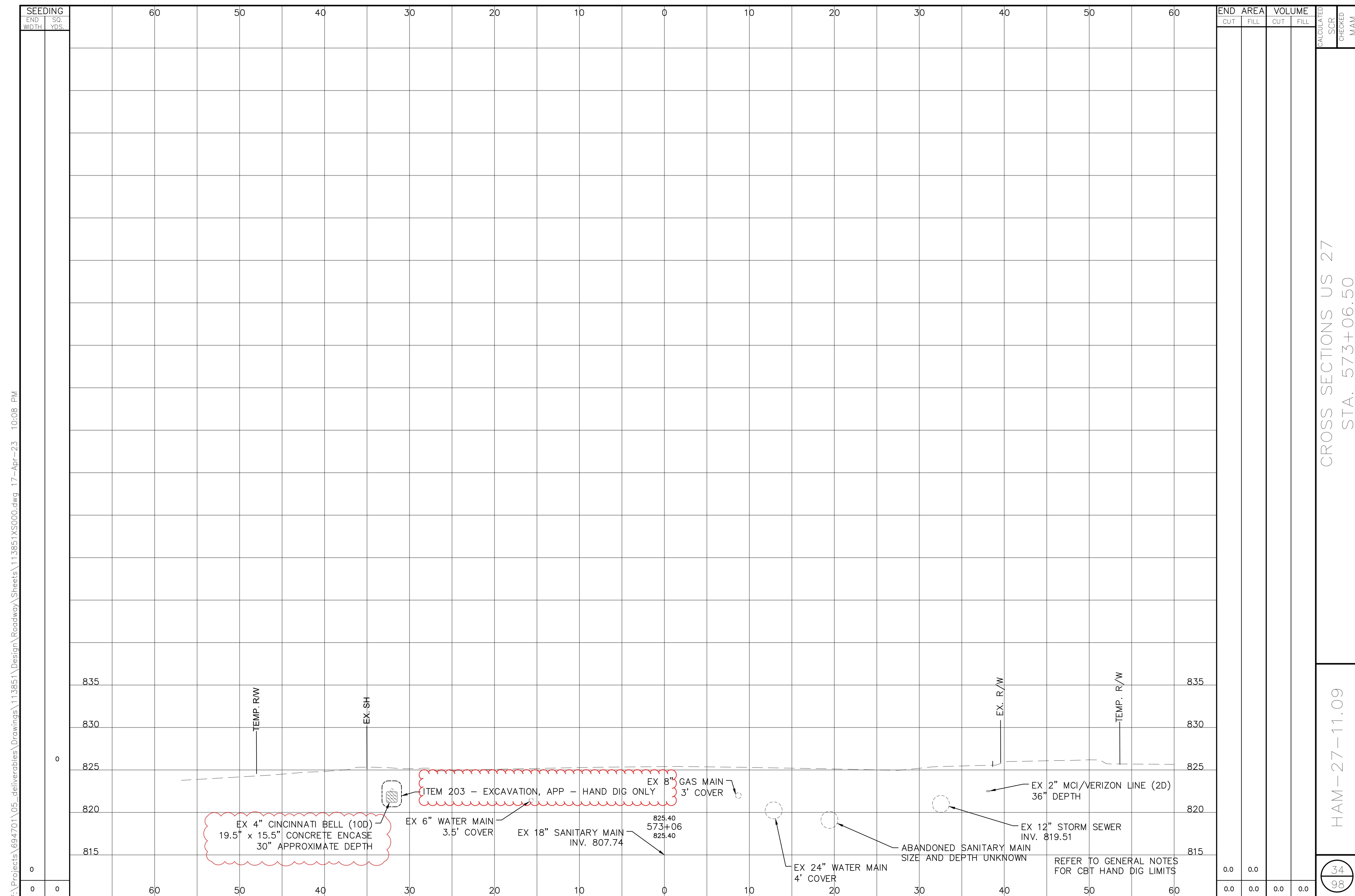


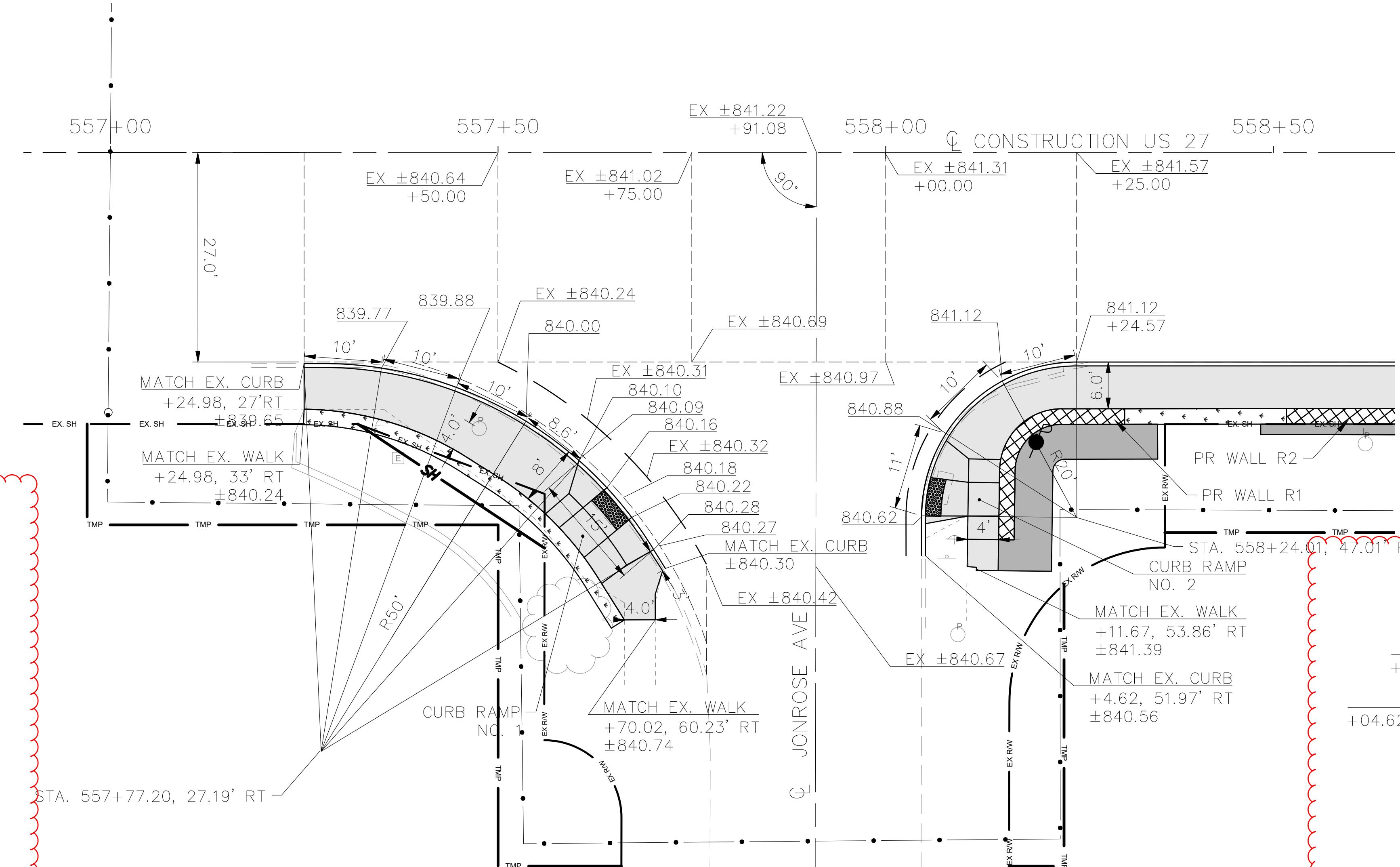








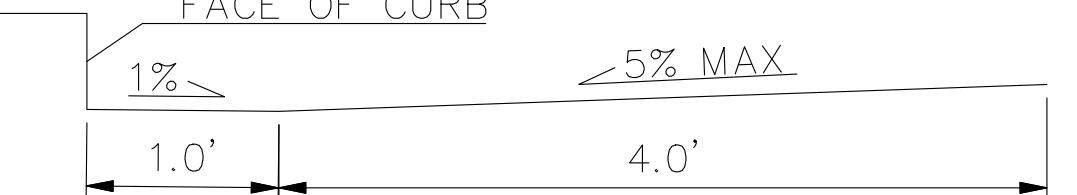


**LEGEND**

- CONSTRUCTION LIMITS
- SEAT WALL
- PROPOSED SIDEWALK
- DRIVEWAY AND PARKING LOT REPAIR LIMITS
- PROPOSED SAWCUT

**NOTES**

- ADA RAMPS TO BE CONSTRUCTED PER ODOT SCD BP-7.1.
- SOUTHEAST CORNER OF US 27 AND JONROSE AVE TO BE SAW CUT 5' FROM FACE OF CURB



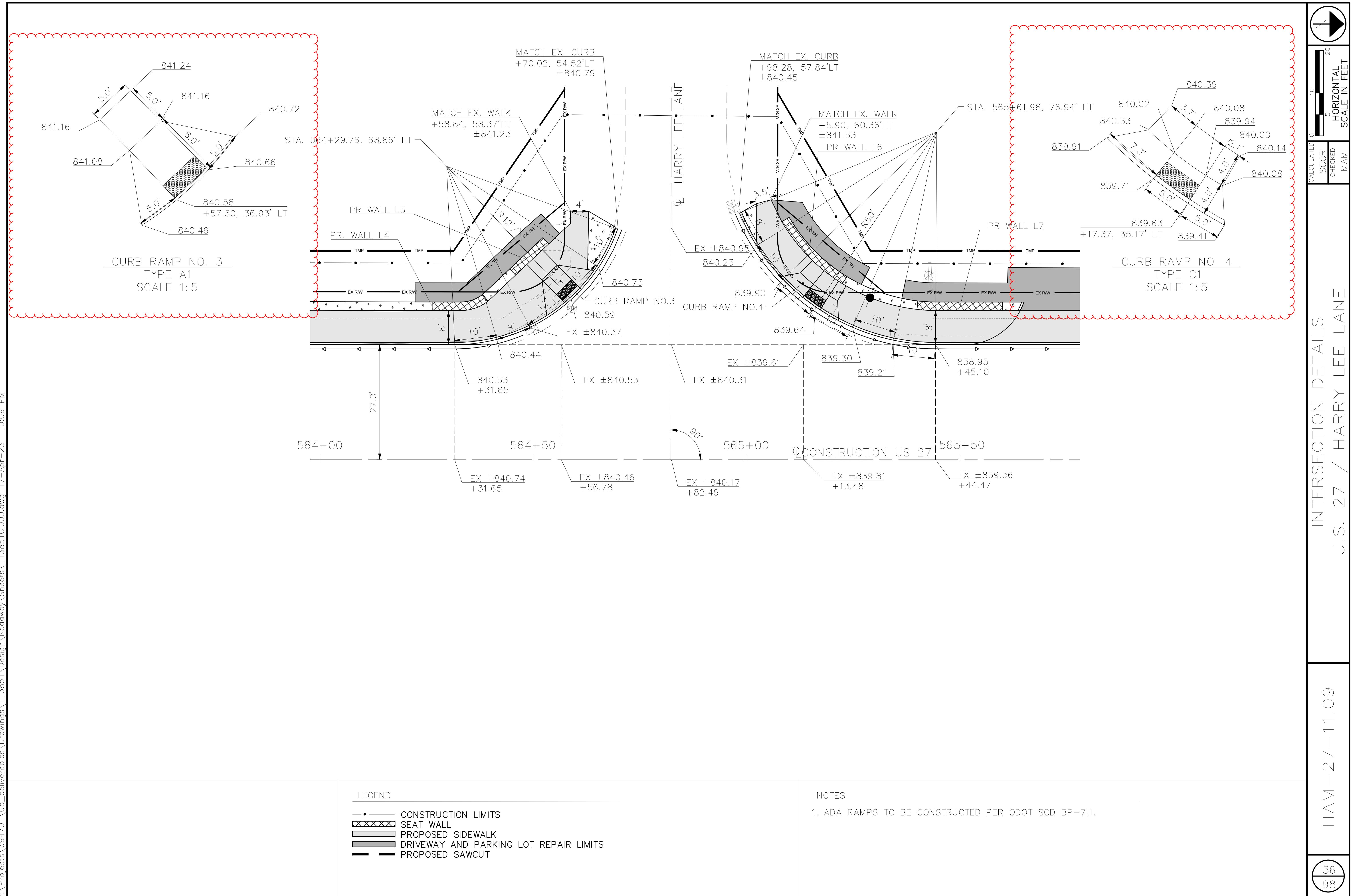
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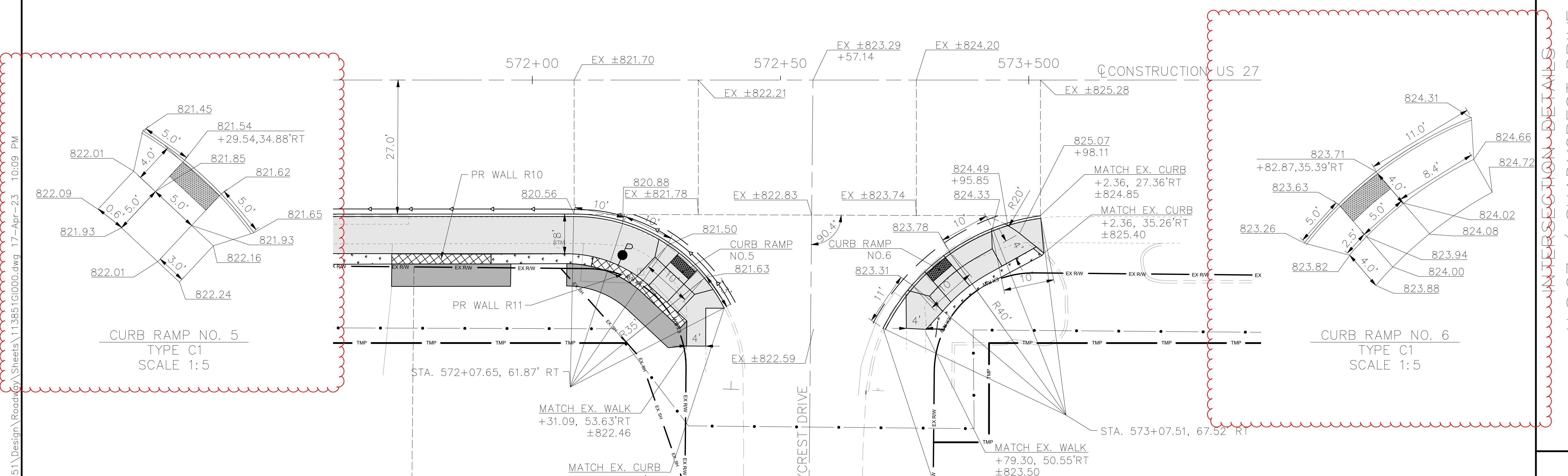
INTERSECTION DETAILS

U.S. 27 / JONROSE AVE

CALCULATED	0
SCR	10
CHECKED	5
MAX	20

35  
98

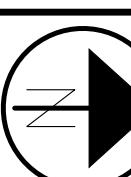


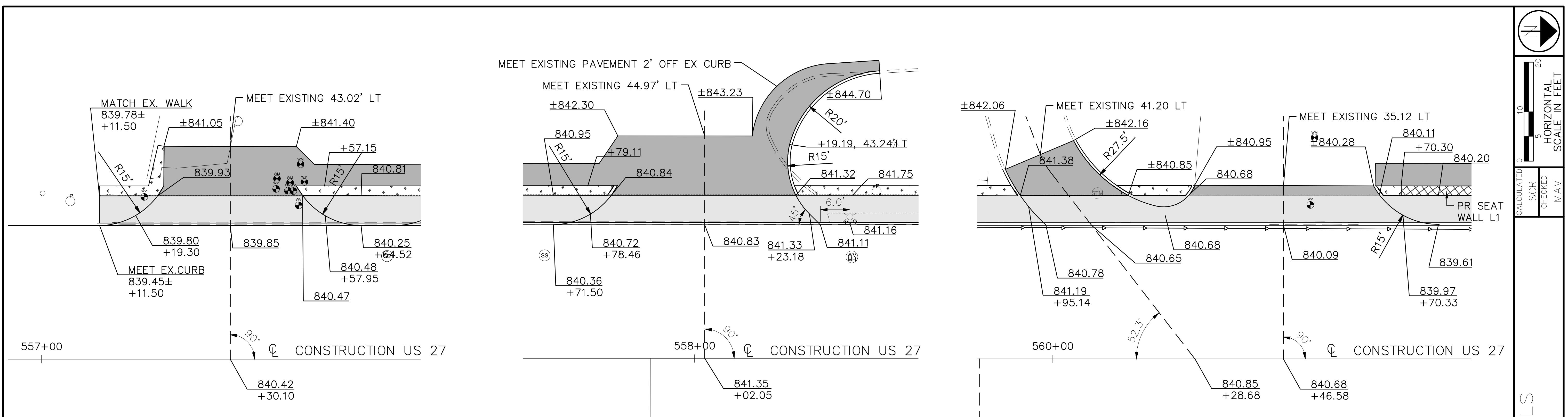
**LEGEND**

- CONSTRUCTION LIMITS
- SEAT WALL
- PROPOSED SIDEWALK
- DRIVEWAY AND PARKING LOT REPAIR LIMITS
- PROPOSED SAWCUT

**NOTES**

- ADA RAMPS TO BE CONSTRUCTED PER ODOT SCD BP-7.1.



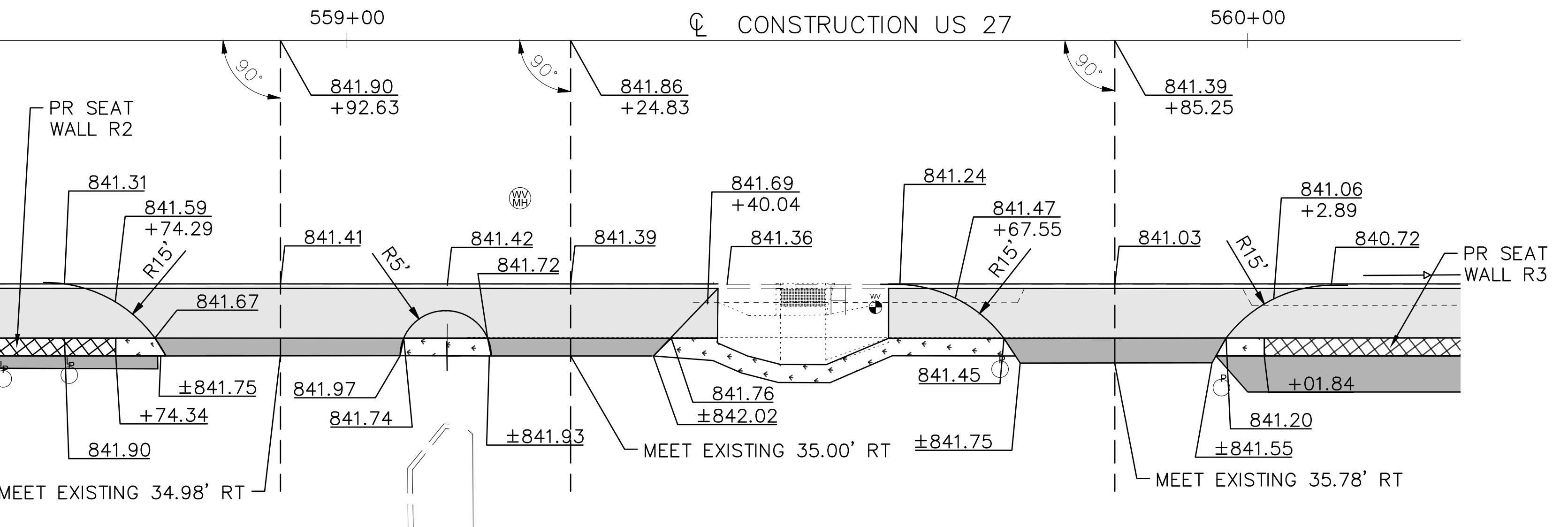
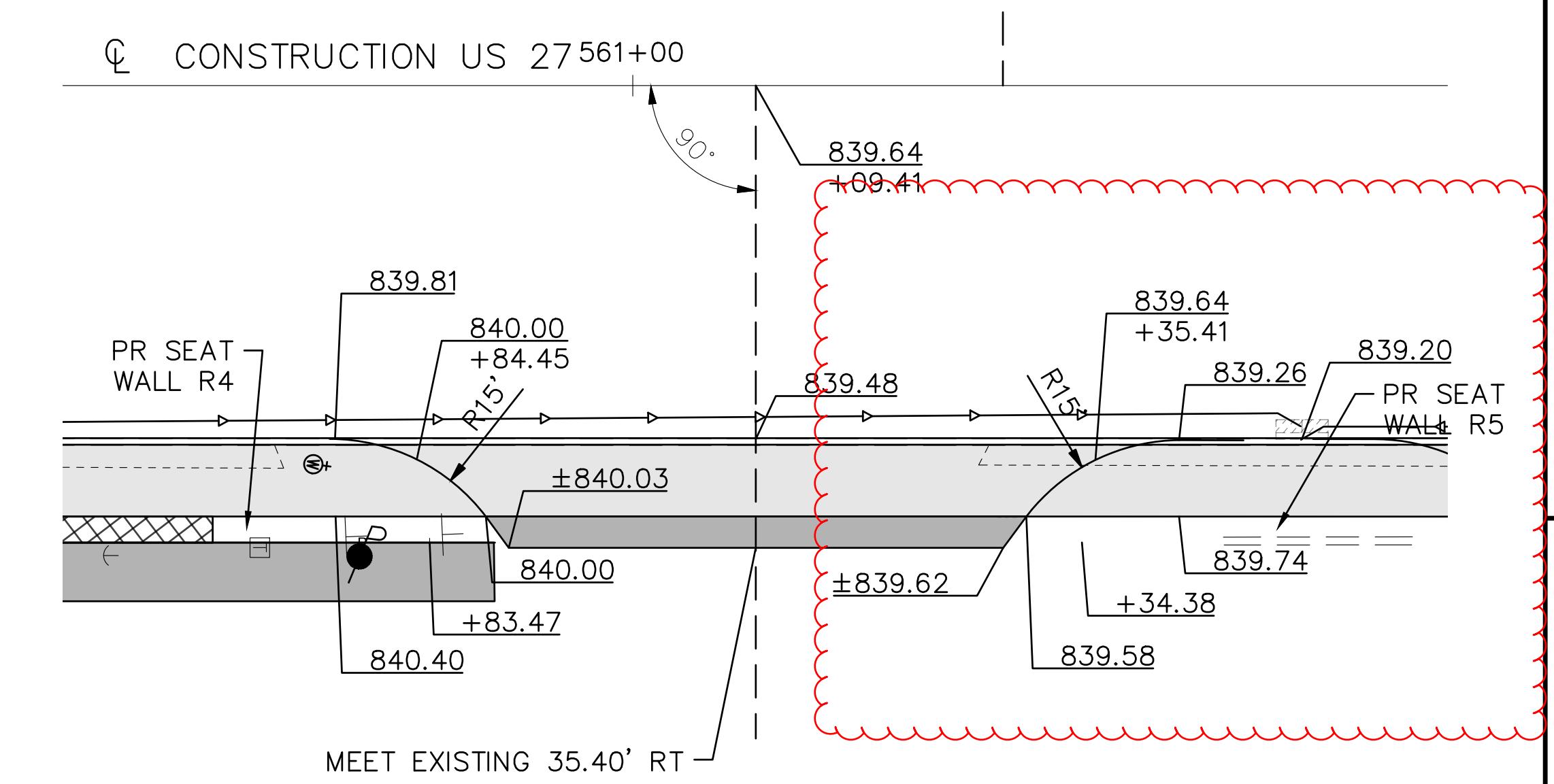


DRIVEWAY DETAILS

CALCULATED  
CHECKED  
MAN

HORIZONTAL SCALE IN FEET

HAM - 27-11.09

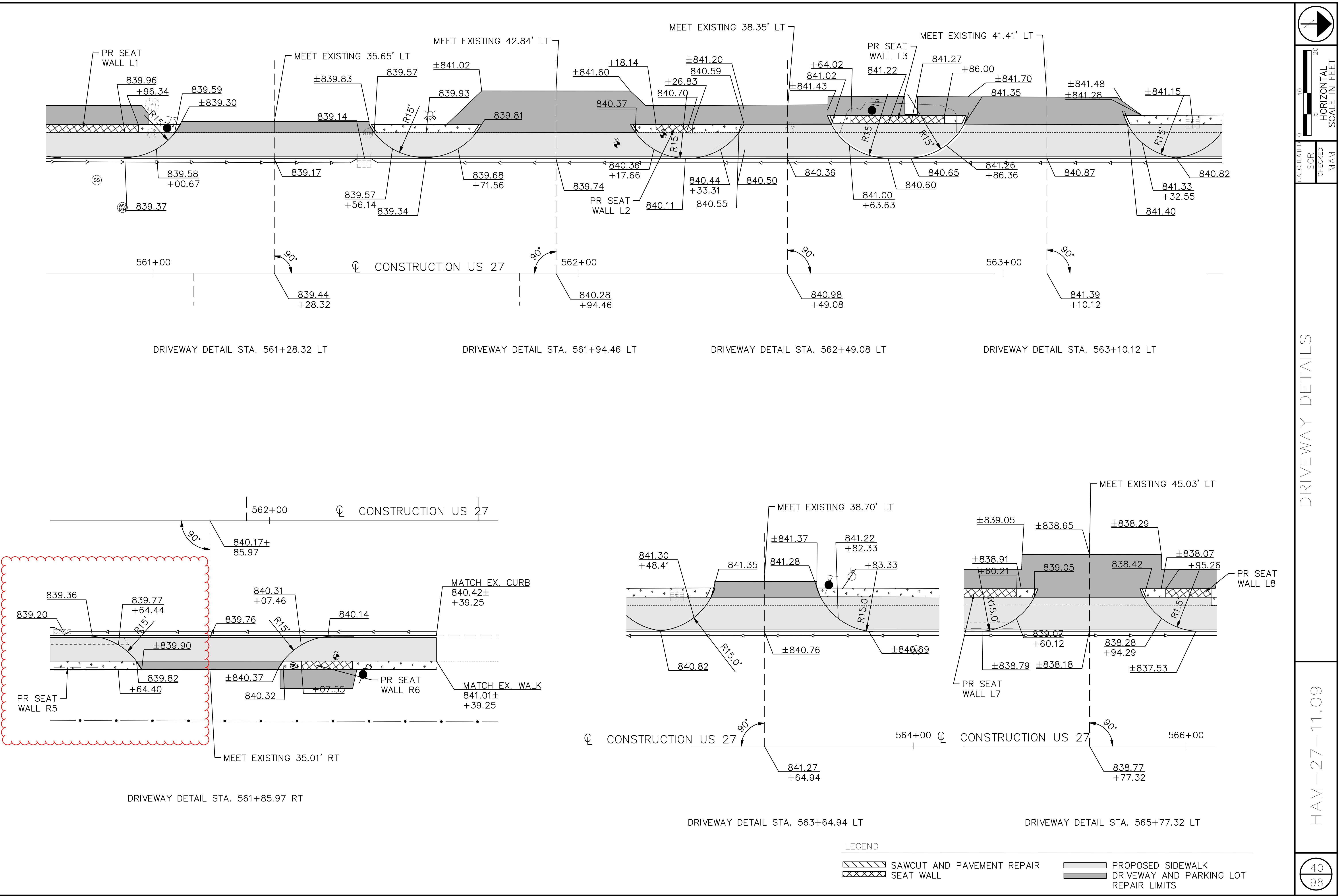


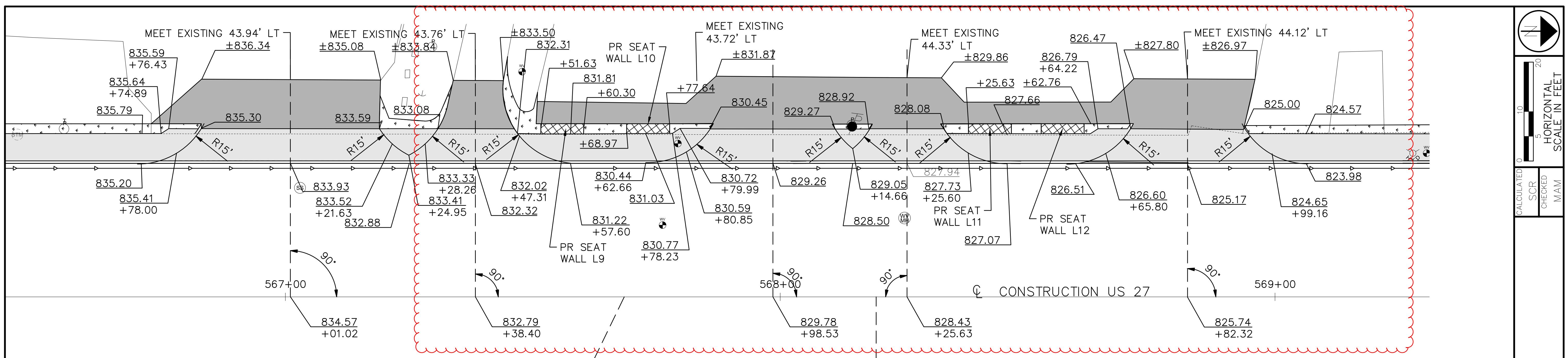
DRIVEWAY DETAIL STA. 558+92.63 RT      DRIVEWAY DETAIL STA. 559+24.83 RT      DRIVEWAY DETAIL STA. 559+85.25 RT

LEGEND

SAWCUT AND PAVEMENT REPAIR  
SEAT WALL

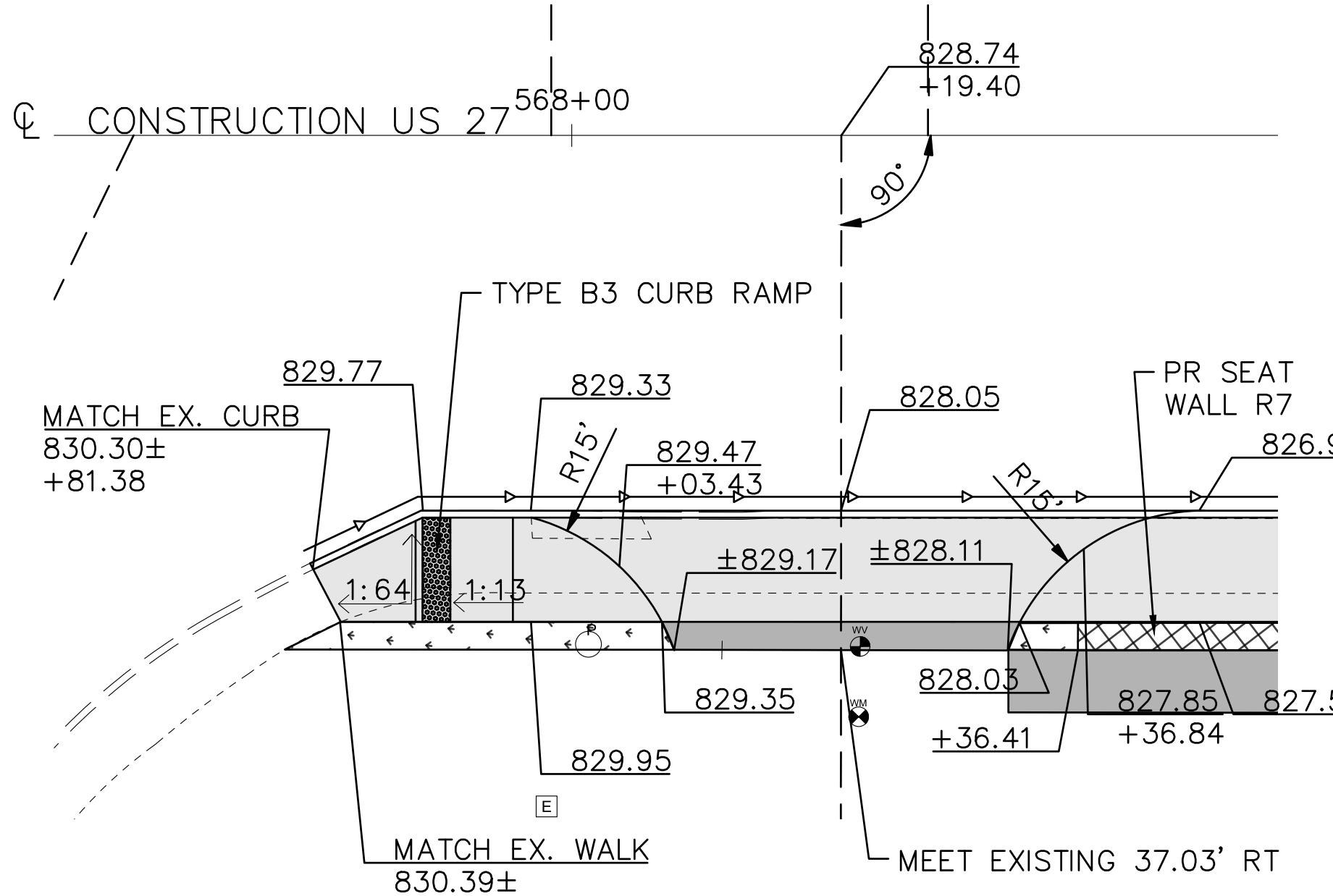
PROPOSED SIDEWALK  
DRIVEWAY AND PARKING LOT  
REPAIR LIMITS



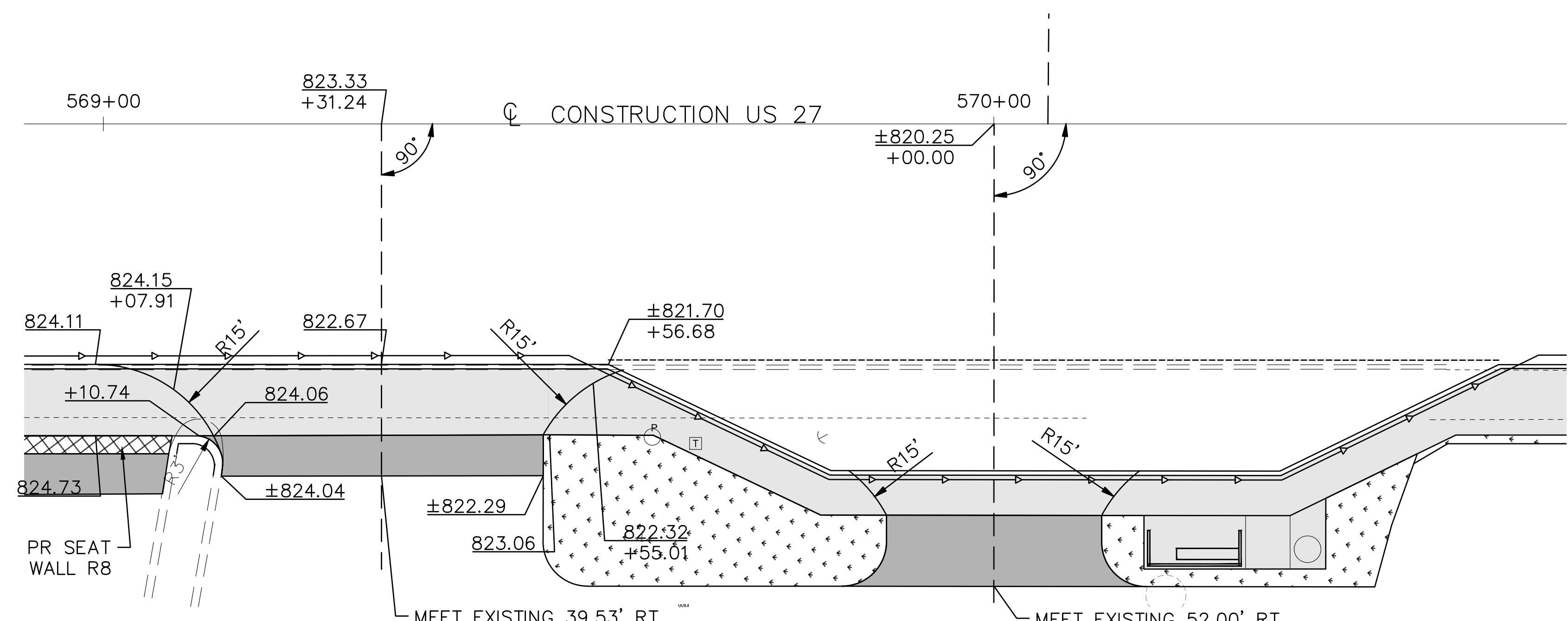


DRIVEWAY DETAIL STA. 567+01.02 LT      DRIVEWAY DETAIL STA. 567+38.40 LT      DRIVEWAY DETAIL STA. 567+98.53 LT      DRIVEWAY DETAIL STA. 568+25.63 LT      DRIVEWAY DETAIL STA. 568+82.32 LT

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DRIVEWAY DETAIL STA. 568+19.40 R



DRIVEWAY DETAIL STA. 570+00.00 RT  
REFER TO BUS STOP DETAIL FOR DRIVEWAY APRON ELEVATIONS

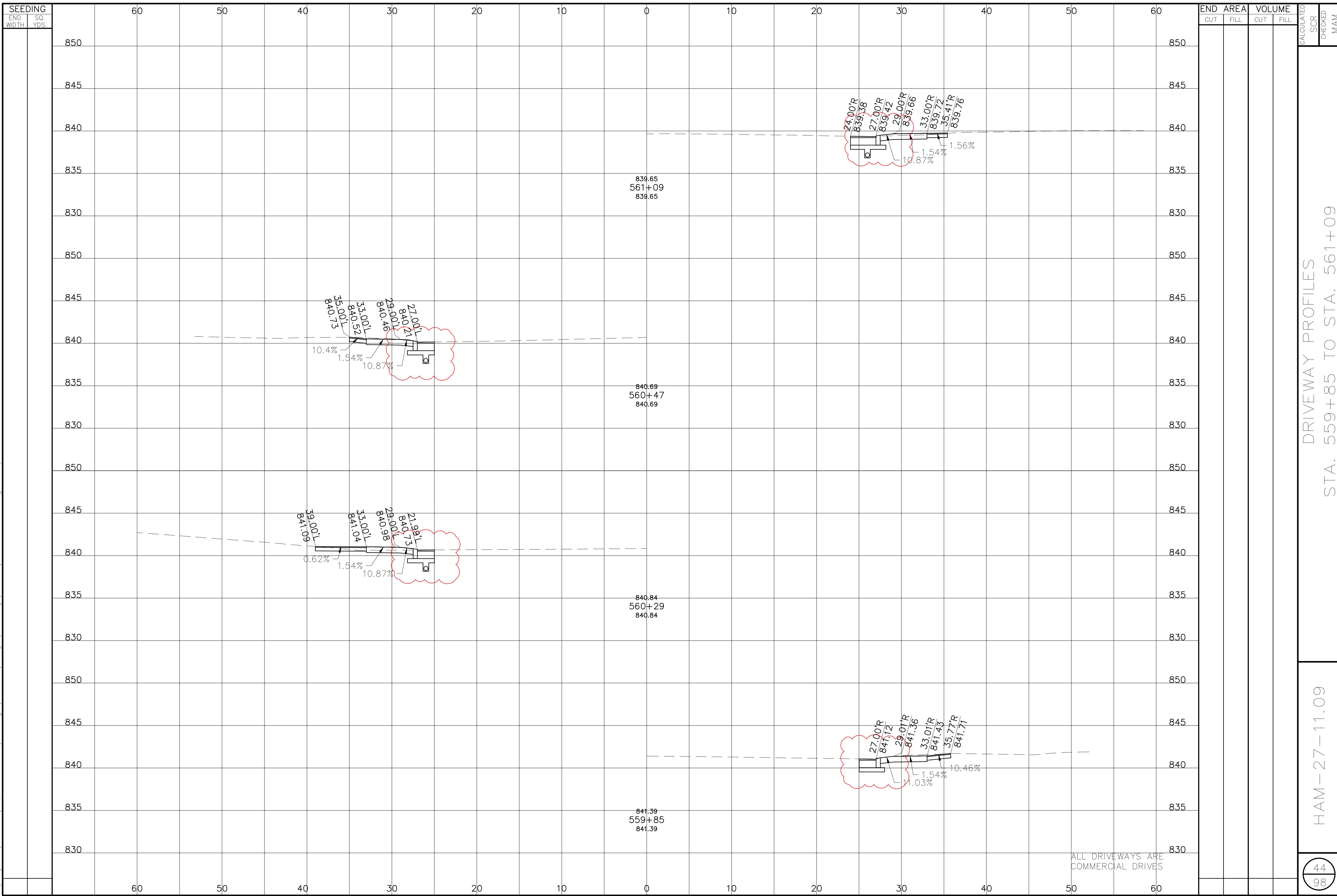
# DRIVEWAY DETAILS

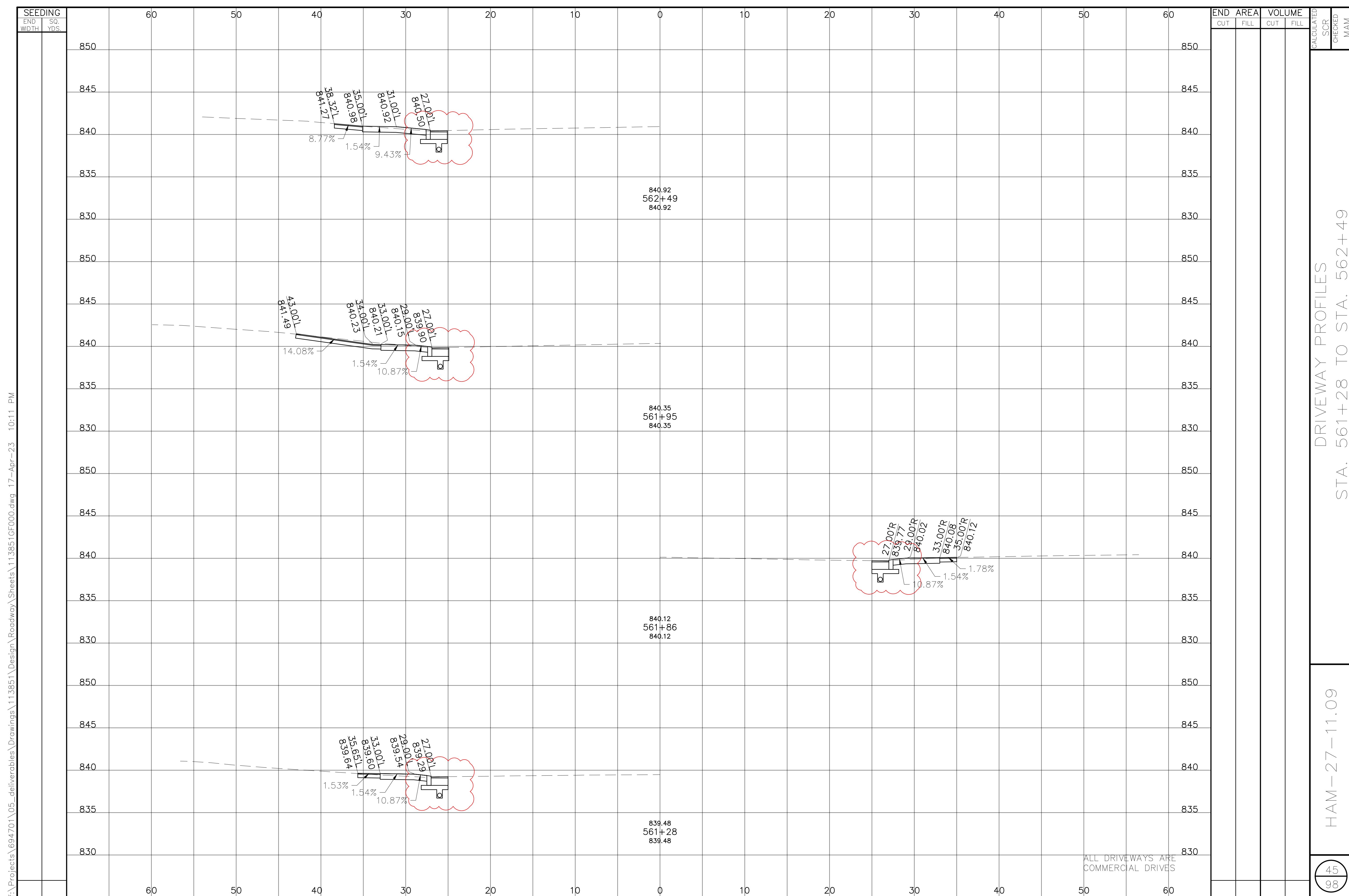
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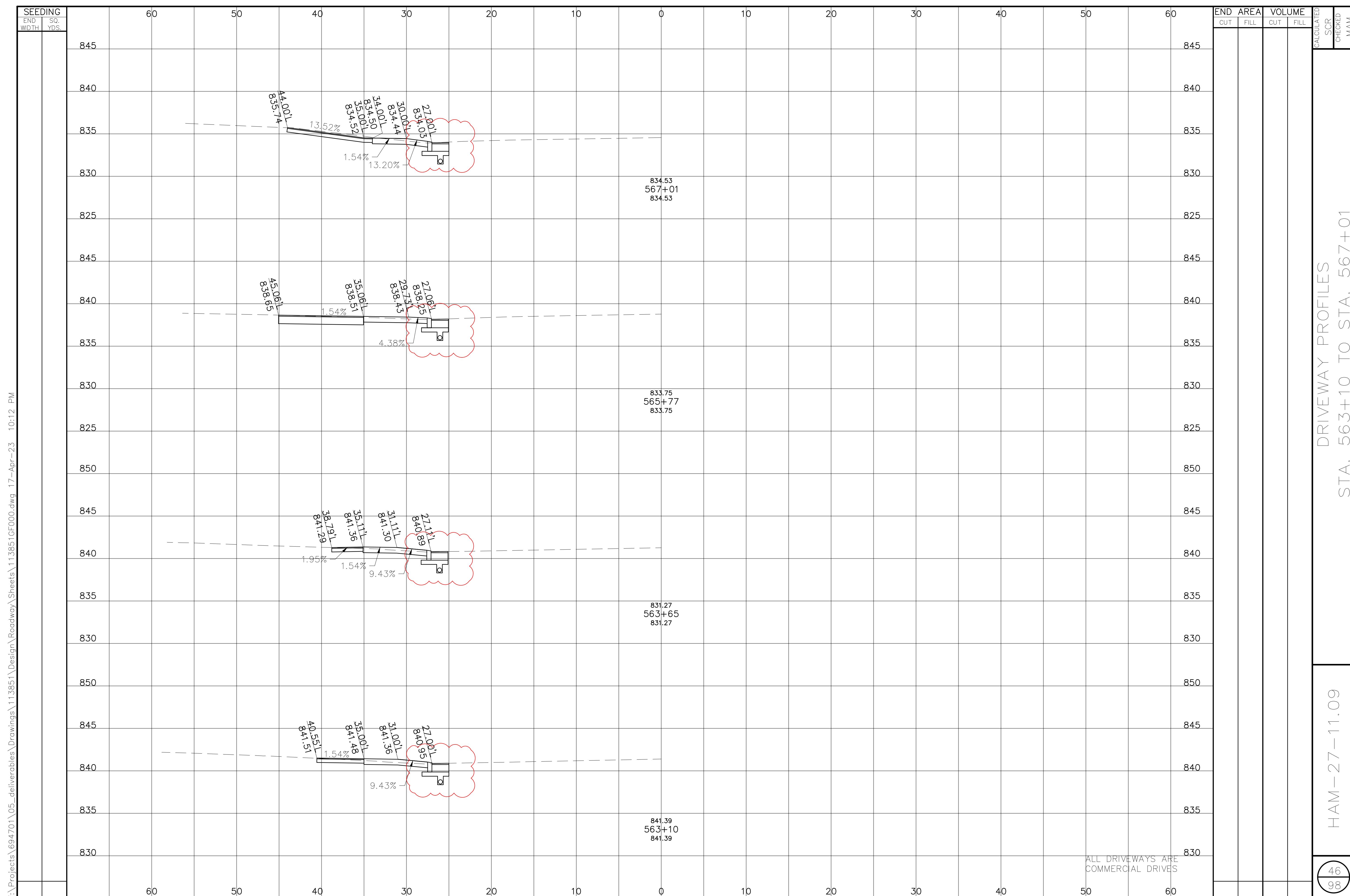
## LEGEND

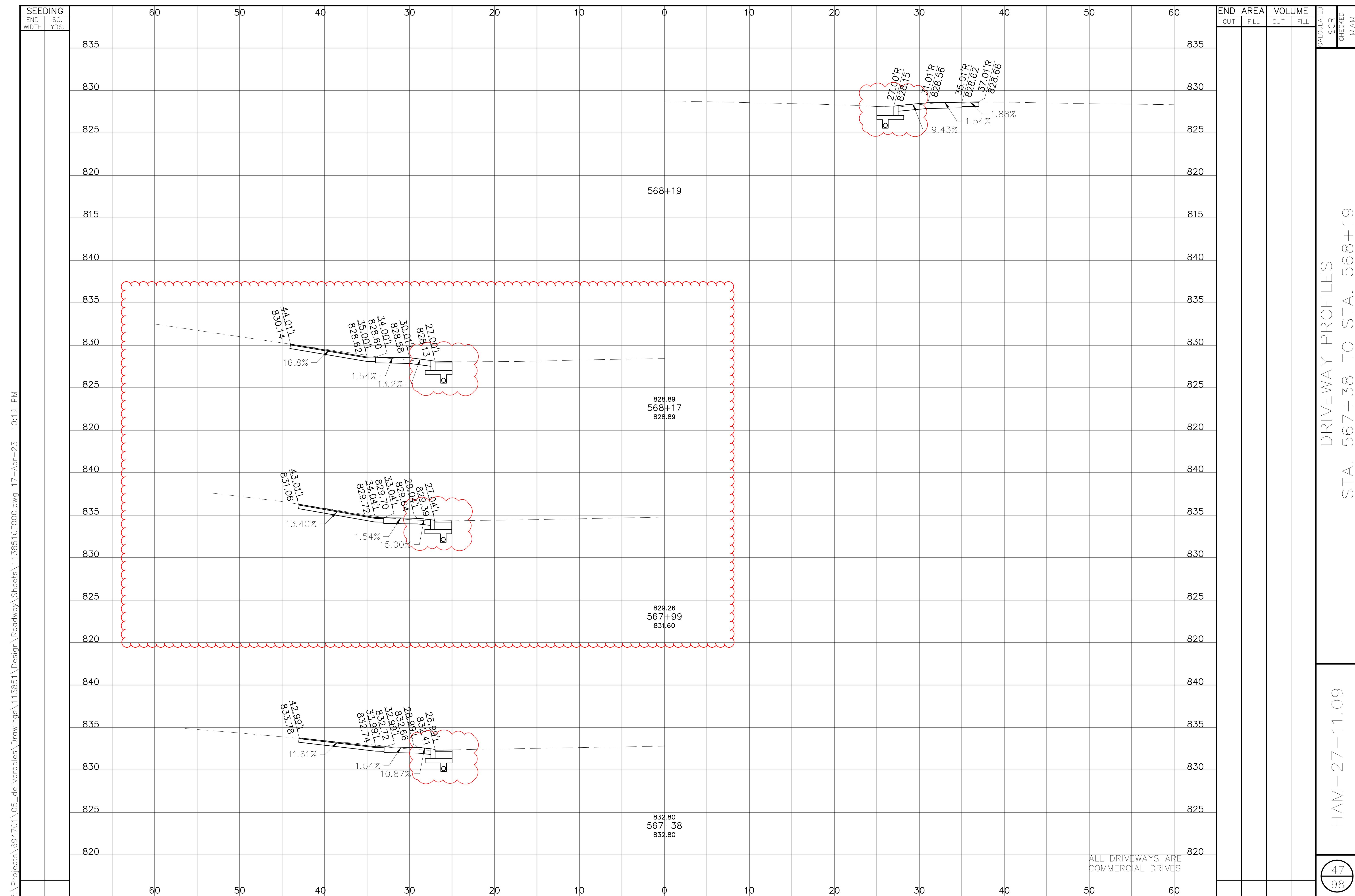
# SAWCUT AND PAVEMENT REPAIR SEAT WALL

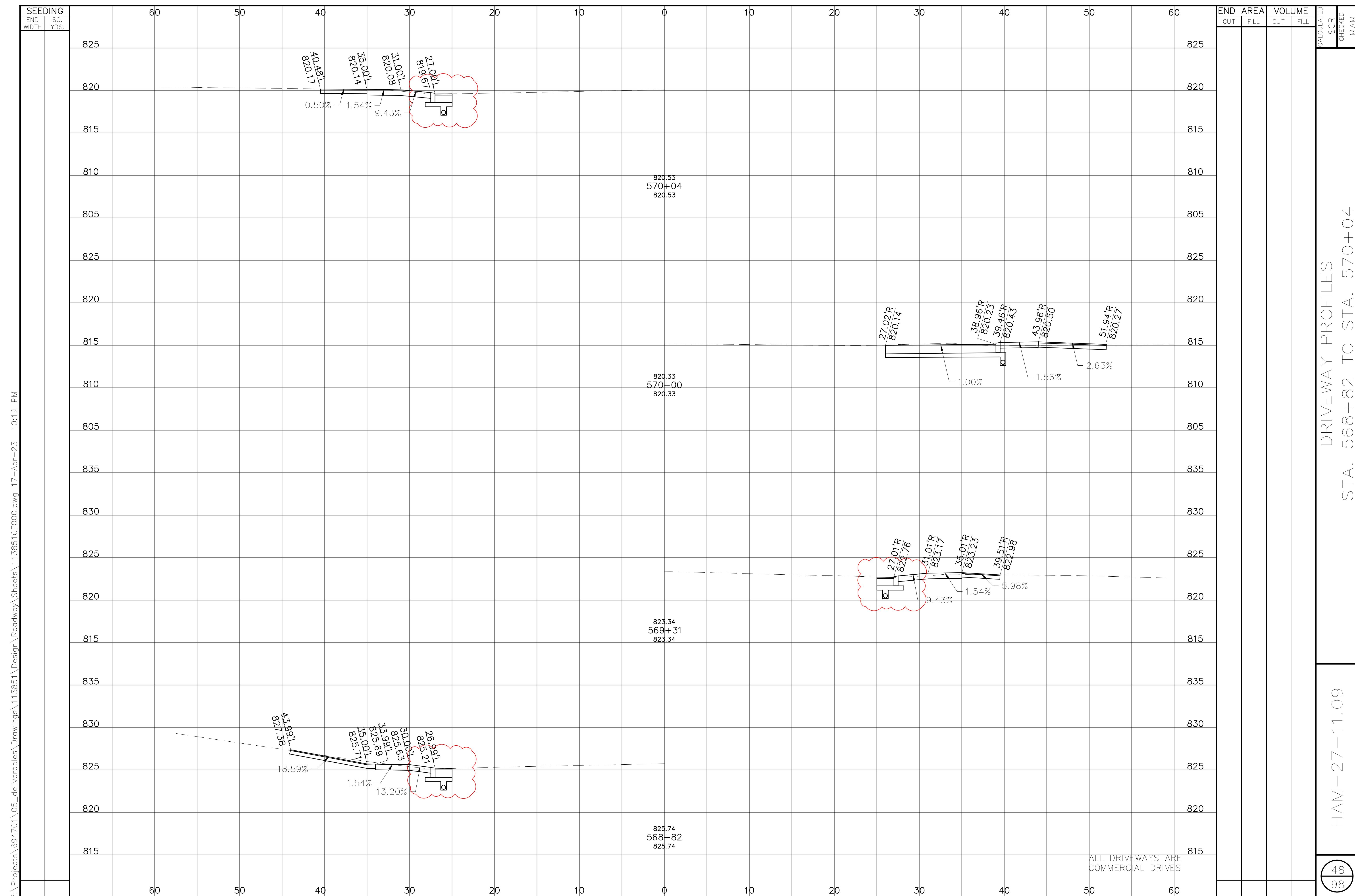
 SAWCUT AND PAVEMENT REPAIR       SEAT WALL       PROPOSED SIDEWALK  
 DRIVeway AND PARKING LOT  
REPAIR LIMITS

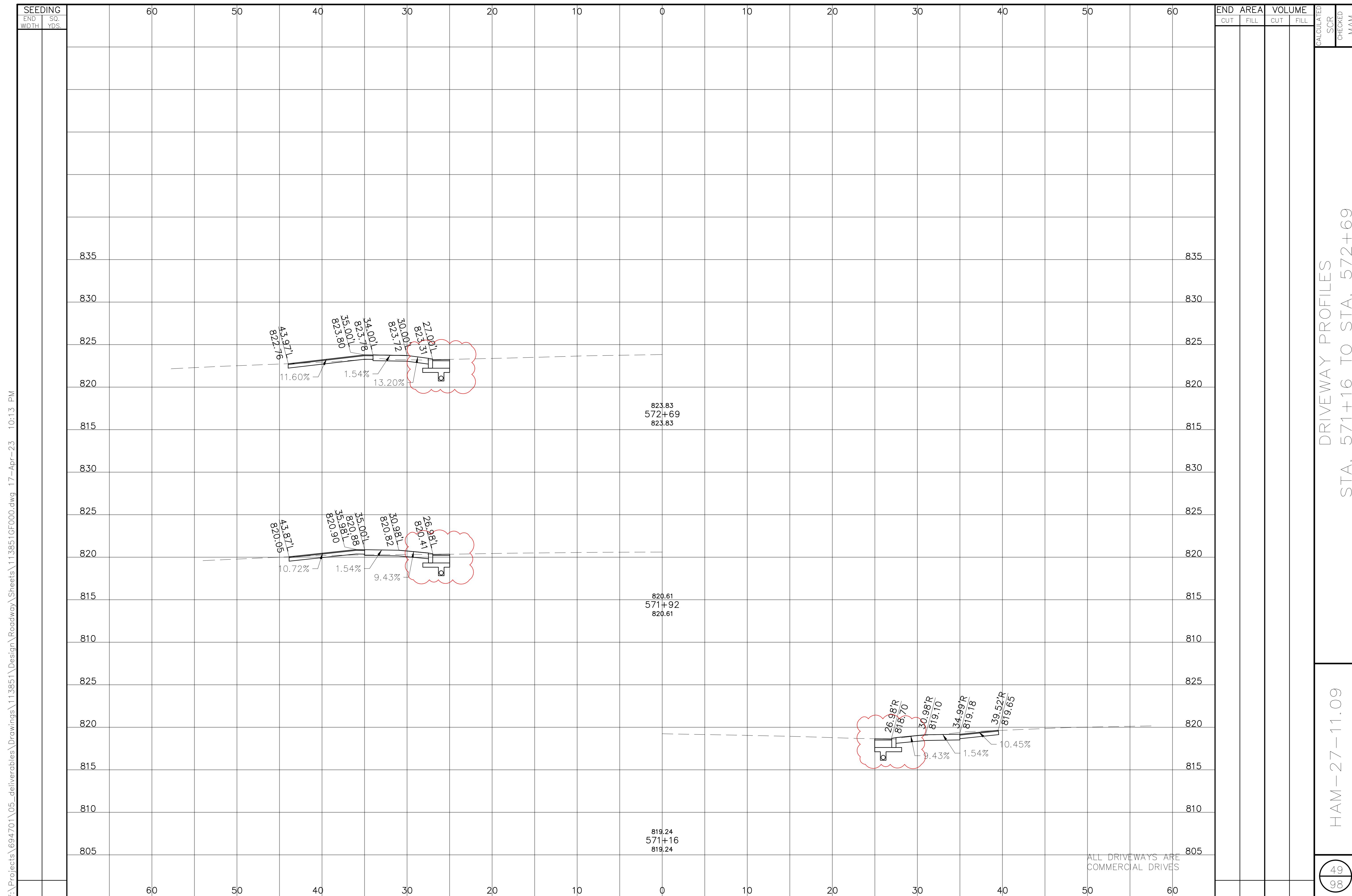










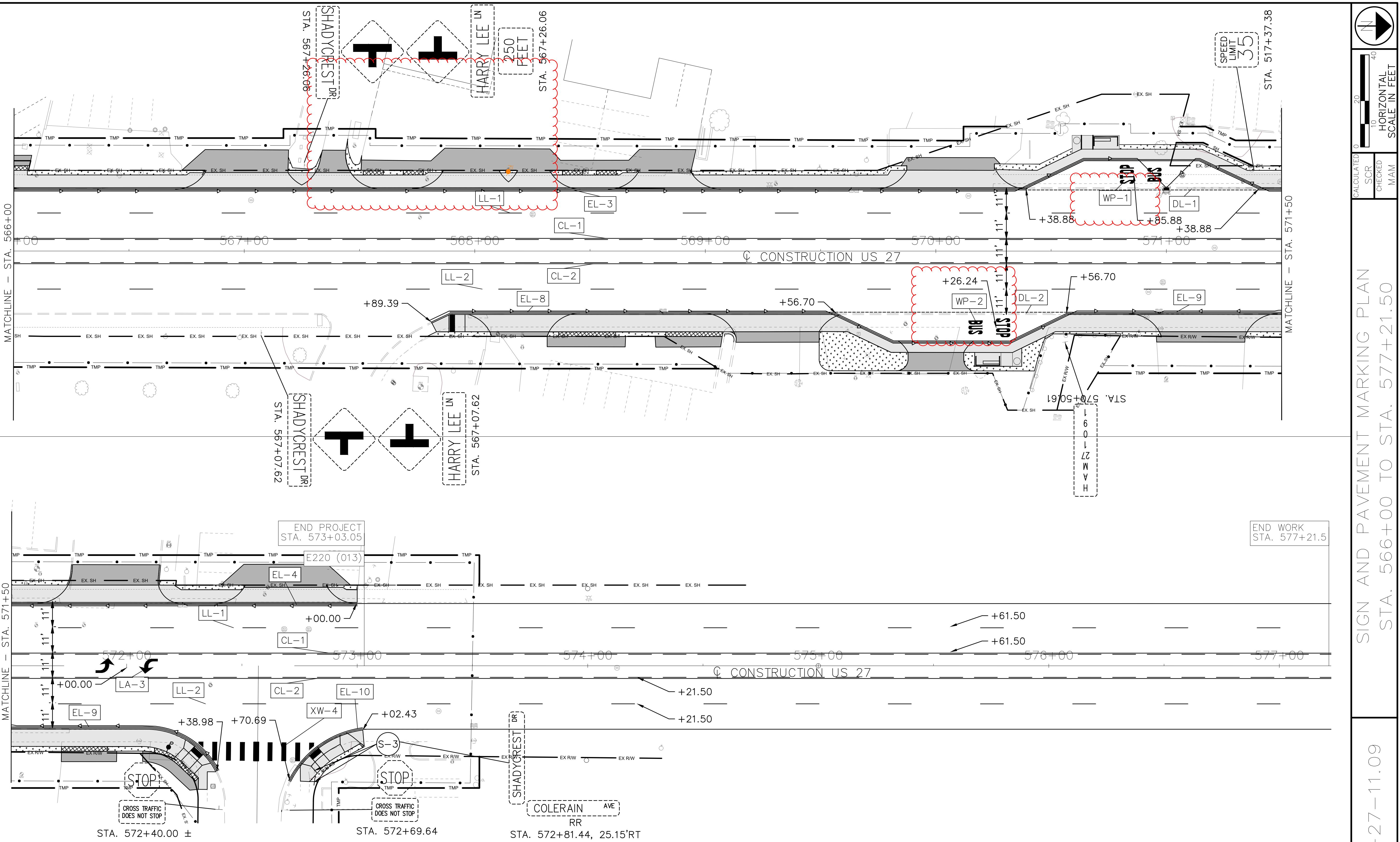


SHEET NUM.						PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
						EXT	TOTAL						
					53	1/MPO/28						TRAFFIC CONTROL	
					27.5	27.5		630	03100	27.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
					11	11		630	08520	11	FT	STREET NAME SIGN SUPPORT, NO. 3 POST	
					5	5		630	85100	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERCTION	
					0.45	0.45		644	00104	0.45	MILE	EDGE LINE, 6"	
					0.74	0.74		644	00204	0.74	MILE	LANE LINE, 6"	
					0.74	0.74		644	00300	0.74	MILE	CENTER LINE	
					173	173		644	00630	173	FT	CROSSWALK LINE, 24"	
					6	6		644	01300	6	EACH	LANE ARROW	
					2	2		644	01400	2	EACH	WORD ON PAVEMENT, 72"	
					200	200		644	01510	200	FT	DOTTED LINE, 6"	
					8	8		644	20800	8	FT	YIELD LINE	

H A M - 27 - 11 . 09

# SIGN AND PAVEMENT MARKING GENERAL SUMMARY





SIGN AND FAVEMENT MARKING PLAN  
STA: 566+00 TO STA: 577+21.50

HAW - 27-11.09

## PAVEMENT MARKING LEGEND

- EL EDGE LINE, WHITE 6"
- YL YIELD LINE, WHITE 36"
- DY CENTER LINE, SOLID DC
- CL CENTER LINE, BROKEN
- DL DOTTED LINE, WHITE 6"

## SIGN LEGEND

[ ] EXISTING SIGN TO REMAIN [ ] EXISTING SIGN TO BE REMOVED  
AND RE-ERECTED ON NEW POST

## NOTES

1. BUS STOP SIGNAGE AND PAVEMENT MARKINGS TO BE REMOVED OR INSTALLED BY OTHERS
  2. FOR RAISED PAVEMENT MARKERS (RPM) INSTALLATION, SEE SCD TC-65.10 AND TC-65.11.
  3. FOR CENTERLINE GEOMETRY, SEE SCHEMATIC PLAN SHEETS.
  4. EXISTING SIGNS TO REMAIN ARE NOT TO BE DISTURBED.
  5. PROPOSED PAVEMENT MARKINGS TO MATCH EXISTING AT BEGINNING AND END OF PROJECT LIMITS
  6. PARKING STALL PAINT REMOVED FOR CONSTRUCTION PURPOSES TO BE REPLACED IN KIND UNLESS OTHERWISE NOTED.
  7. NEW PARKING STALL PAVEMENT MARKING TO BE PLACED PER COLERAIN TOWNSHIP ZONING CODES.

**ITEM 625 – POWER SERVICE, AS PER PLAN**

POWER IS TO BE OBTAINED FROM THE DUKE ENERGY. THE SERVICE IS TO BE GROUND MOUNTED IN A LOCKABLE CABINET AS SHOWN IN THE PLANS. CONTROL CENTER SHALL BE SC60 SINGLE OR DOUBLE STYLE FOR 120/240 VOLTS, 3-WIRE, GROUNDED NEUTRAL SERVICE. A GROUND ROD SHALL BE PROVIDED AT THE POINT OF SERVICE. PROVIDE A CABINET, WORK PAD, RISER AND FOUNDATION PER ODOT ITEM 633 AND ODOT SCD TC-83.20. MOUNT A METER BASE ON THE EXTERIOR OF EACH CABINET WITH THE CONDUIT FOR INCOMING POWER EXTERNAL TO THE CABINET. PROVIDE TWO 4-INCH, 725.04 CONDUITS BETWEEN THE CONTROL CABINET AND THE FIRST PULLBOX. ALSO PROVIDE A 4-INCH, 725.04 CONDUIT BETWEEN THE CONTROL CABINET AND POWER POLE IF APPLICABLE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHARGES MADE BY THE POWER COMPANY FOR WORK BY THE COMPANY IN CONJUNCTION WITH THE ESTABLISHMENT OF THE REQUIRED SERVICE. THIS SHALL INCLUDE NEW POWER SERVICE ESTABLISHED BY THIS PROJECT AS WELL AS REASSIGNMENT OF EXISTING SERVICE DO TO WORK PERFORMED BY THIS PROJECT. ELECTRICAL ENERGY FROM EXISTING POWER SERVICES SHALL CONTINUE TO BE CHARGED TO THE MAINTAINING AGENCY. THE CONTRACTOR SHALL PAY ELECTRICAL ENERGY CHARGES FOR NEW POWER SERVICES ESTABLISHED BY THIS PROJECT. AFTER ACCEPTANCE OF THE LIGHTING, THE POWER SERVICE ELECTRICAL ENERGY ACCOUNT SHALL BE TRANSFERRED TO COLERAIN. THE CONTRACTOR SHALL PAY ALL CHARGES MADE BY THE POWER COMPANY FOR ESTABLISHMENT OF ELECTRICAL SERVICE AT THE CONTROL CENTER LOCATION SHOWN IN THE PLANS.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ODOT ITEM 625 – POWER SERVICE, AS PER PLAN WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, FOUNDATIONS, CABINET, PAINTING, WORK PAD, METER BASE, CONTROL EQUIPMENT, CONDUIT, LOCKS, SERVICE CHARGES, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMAN LINE MANNER.

**ITEM 625-LIGHT POLE FOUNDATION, AS PER PLAN**

THIS ITEM SHALL BE AS ITEM 625 LIGHT POLE FOUNDATION AS DETAILED IN THE LIGHTING PLANS AND DETAILS. BELOW GRADE DIMENSIONS SHALL BE APPROXIMATELY 18" DIAMETER AND 5'-0" DEEP. ANCHOR BOLTS SHALL BE PER THE LIGHT POLE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL USE A CLEAR-CURING COMPOUND ON THE FOUNDATION.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ODOT ITEM 625 – LIGHT POLE FOUNDATION, AS PER PLAN WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, FOUNDATIONS, CONDUIT, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMAN LINE MANNER.

**ITEM 625 PADLOCKS AND KEYS**

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND SHALL BE KEYED IN ACCORDANCE WITH C&MS 631.06. PAYMENT SHALL BE INCLUDED IN THE BID FOR THE ITEM(S) BEING LOCKED.

**ITEM 625 UTILITY COORDINATION**

THE CONTRACTOR SHALL CONTACT THE OHIO UTILITY PROTECTION SERVICE (OUPS) A MINIMUM OF 2 BUSINESS DAYS PRIOR THE CONDUIT INSTALLATION TO AVOID INTERFERENCE WITH EXISTING UTILITIES.

**ITEM 625 PULL BOX INSTALLATION**

THE CONTRACTOR SHALL INSTALL THE PROPOSED PULL BOXES AT THE LOCATIONS SHOWN IN THE PLANS AND AS PER SCD HL-30.11. IN ADDITION, TO THE REQUIREMENTS OF ITEM 625, THE PULL BOX TOP SHALL MATCH THE SLOPE OF THE FINISH GRADE. THE CONTRACTOR SHALL VERIFY ALL SLOPES, GRADES, AND ELEVATIONS PRIOR TO THE INSTALLATION OF PULL BOXES.

**ITEM 625 – TRENCH, AS PER PLAN**

THE CONTRACTOR SHALL COORDINATE ALL THE TRENCHING AND LIGHT POLE BASES WITH OTHER TRADES AND EXISTING UNDERGROUND UTILITY SERVICES.

CLEAR ZONES DIGGING AROUND UTILITIES ARE:  
DUKE GAS = 12" CLEAR (8" MAIN + 12"=16" FROM CENTER LINE)  
ALTA/CBT = 6" CLEAR (15.5" FIBER + 13.75" FROM CENTERLINE)  
MSD LATERALS = 18"  
ANYTHING CLOSER COORDINATE WITH UTILITY COMPANIES AND HAND DIG. REFER TO CIVIL DRAWINGS FOR ELEVATIONS AND CLARITY.

**ITEM 625 – LIGHT POLE, DECORATIVE, AS PER PLAN**

1.) POLE – HEIGHT PER PLANS. POLE SHALL INCLUDE HARDWARE AND SUPPORT FOR BANNER ARMS AND GFI RECEPTACLE. POLE SHALL ALSO HAVE OUTLET INSTALLED AT TOP FOR FUTURE USE. POLE SHALL BE COMPOSED OF ALUMINUM ALLOY AND OF ONE PIECE CONSTRUCTION.

2.) FINISH – POWDER COATED BLACK.

3.) POLE DIMENSIONS AND STYLE SHALL BE PER STERNBERG (BASIS OF DESIGN)  
LIGHTING POLE: 4500 SERIES OR APPROVED EQUAL.

4.) POLE CONSTRUCTION AND MATERIALS SHALL CONFORM TO AASHTO AND ODOT STANDARDS AND SPECIFICATIONS.

5.) WELDING IN LIEU OF THE REQUIREMENTS OF ITEM 625 AND  
725, WELDING SHALL BE AS SPECIFIED IN THE AMERICAN WELDING SOCIETY SPECIFICATIONS.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ODOT ITEM 625 – LIGHT POLE, DECORATIVE, AS PER PLAN

WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, PAINTING, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMAN LINE MANNER.

**ITEM 625 – LUMINAIRE, DECORATIVE, AS PER PLAN**

APPROVED EQUIVALENT MANUFACTURER BASED AROUND THE BASIS OF DESIGN HARDWARE SHALL BE PER MANUFACTURER AS FOLLOWS:

STERNBERG LIGHTING  
555 LAWRENCE AVE  
ROSELLE, IL 60172  
800-621-3376

## POLE AND BASE :

MODEL #4500 SERIES POLE, MAIN SHAFT 4" DIA X .25"  
THICK CAST ALUMINUM WALL,  
10.5" DIAMETER BASE BY 14' HIGH RATED FOR 120 EPA,  
STRAIGHT SMOOTH ONE PIECE CAST ALUMINUM POLE  
WITH NOMINALLY 29" HIGH FLUTED BASE, (2) 18" LONG  
BANNER ARMS,, INTEGRAL GFI RECEPTACLE WITH  
"WHILE-IN-USE" COVER MOUNTED BELOW THE LUMINAIRE  
SLIP FITTER, POLE BASE ACCESS HANHOLE, ANCHOR  
BASE BOLT COVER PLATE, BREAK AWAY ANCHOR BOLTS,  
BLACK TEXTURED COLOR FINISH. THE BANNER ARMS,  
RECEPTACLE AND POLE HAND HOPE SHALL BE FACING  
THE SIDEWALK SIDE OF THE POLE.

## LUMINAIRE HEAD:

STERNBERG "CAMBRIDGE" MODEL #A78LED POST TOP  
MOUNT LUMINAIRE, NOMINALLY 18" DIA BY 41" HIGH,  
ACRYLIC LENSE, CAST ALUMINUM HOUSING, CAST  
ALUMINUM ROOF AND FINIAL, TYPE #991 FITTER, "MDL06"  
DRIVER, 5400 LUMENS, TYPE T5 OPTICS, 3500 KELVIN  
RATING LED,

## BOLLARD:

STERNBERG "GENEVA" 8701LED BOLLARD, CAST  
ALUMINUM BODY WITH 1" CAST FLOOR BASE, INDIVIDUAL  
VERTICAL COLLIMATING ACRYLIC SYMMETRIC OPTICS, 3500  
KELVIN LAMP.

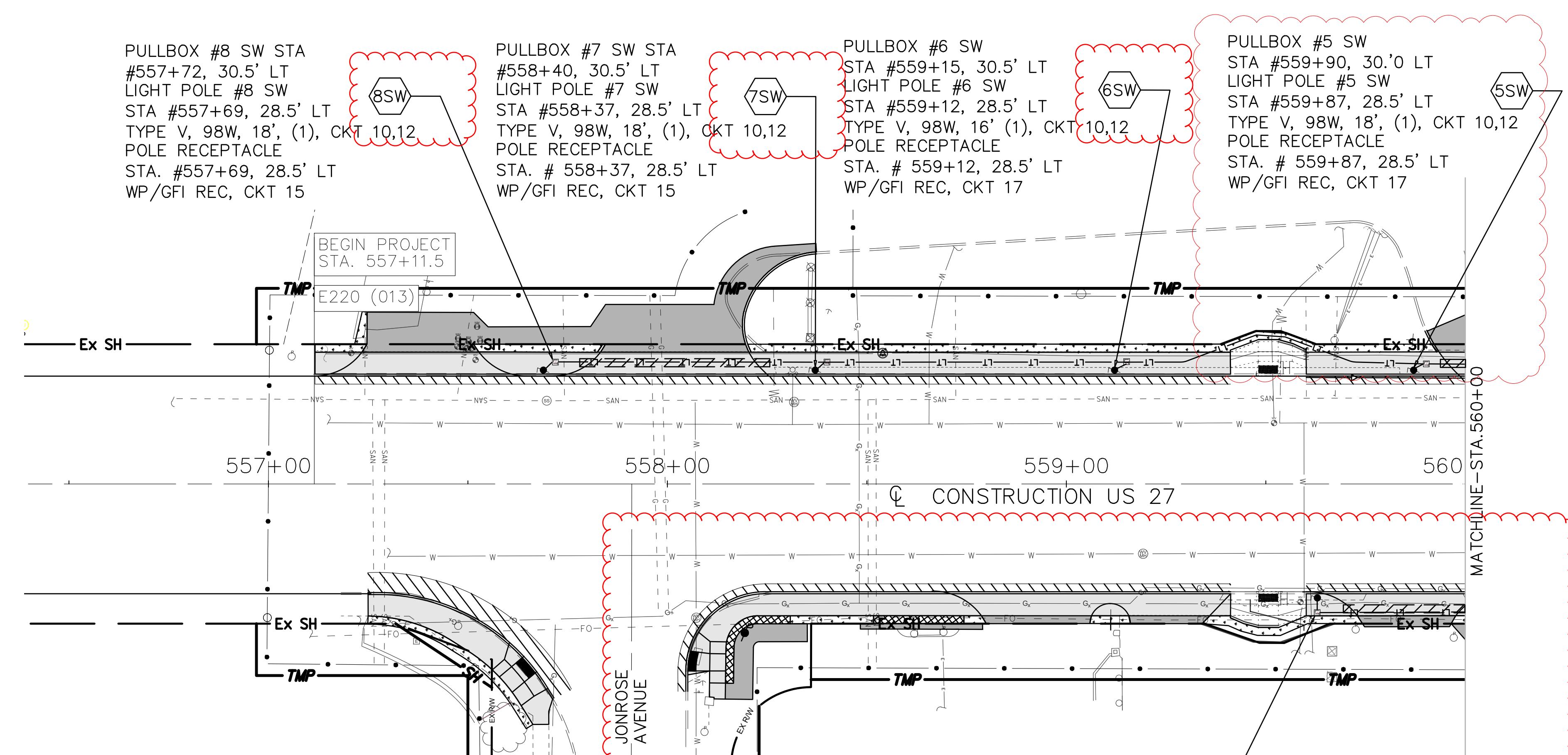
FINISH FOR POLE, LUMINAIRE AND BOLLARDS – POWDER  
COATED BLACK.

LUMINAIRE CONSTRUCTION AND MATERIALS SHALL  
CONFORM TO AASHTO AND ODOT STANDARDS AND  
SPECIFICATIONS.

WELDING IN LIEU OF THE REQUIREMENTS OF ITEM 625  
AND  
725, WELDING SHALL BE AS SPECIFIED IN THE AMERICAN  
WELDING SOCIETY SPECIFICATIONS.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR  
EACH ODOT ITEM 625 – LUMINAIRE, DECORATIVE, AS  
PER PLAN WHICH SHALL BE FULL COMPENSATION FOR  
ALL LABOR, MATERIALS, PAINTING, AND INCIDENTALS  
REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY  
AND WORKMAN LINE MANNER.





PULLBOX #8 SE  
STA #559+63,31.5' RT  
TYPE "A" LIGHT POLE #8 SE  
STA #559+63, 28.5' RT  
TYPE V, 98W, 18'(1), CKT 2,4  
POLE RECEPTACLE  
STA. # 559+63, 28.5' RT  
WP/GFI REC, CKT 1

**UTILITY LINETYPE LEGEND**

- E — UNDERGROUND ELECTRIC
- FO — UNDERGROUND FIBER OPTIC
- T — UNDERGROUND TELECOMMUNICATION
- OHT — OVERHEAD TELECOM / FIBER OPTIC / CATV
- OHU — OVERHEAD ELECTRIC / COMBINED
- G — GAS MAIN
- W — WATER MAIN
- - SAN - SANITARY SEWER
- - STORM SEWER
- LT — PROPOSED LIGHTING CONDUIT

**LEGEND**

- PR. LIGHT POLE
- ⊕ PR. LIGHT BOLLARD
- PR. PULL BOX
- CONSTRUCTION LIMITS
- CONCRETE ENCASED CONDUIT

- PROPOSED SIDEWALK
- DRIVEWAY AND PARKING LOT
- REPAIR LIMITS
- SAWCUT AND PAVEMENT REPAIR
- SEAT WALL

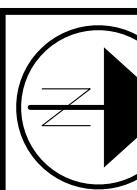
HAM- 27-11.09

58  
98

LIGHTING PLAN

STA. 557+00.00 TO STA. 560+00.00

CALCULATED	0
TSR	40
CHECKED	
EAS	



# LIGHTING PLAN

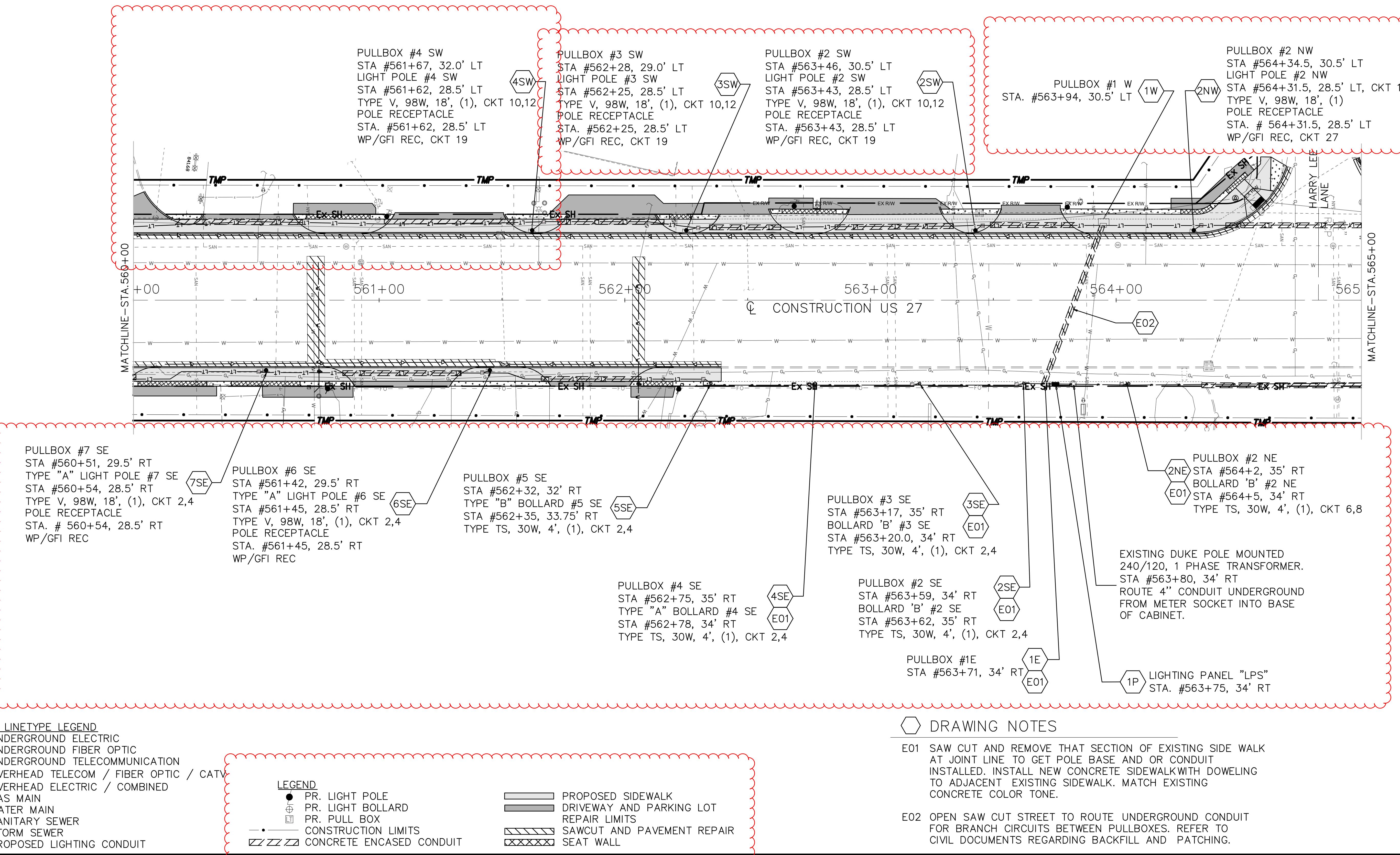
# LIGHTING PLAN

Calculated TSR

11

5  
9

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# LIGHTING PLAN

565+00;  
565+00;  
570+00;  
570+00;

H A M - 27 - 11.00

60  
98

PULLBOX #10 NW  
STA #569+78, 31.5' LT  
BOLLARD 'B' #10 NW  
STA #569+75, 33.75' LT  
TYPE TS, 30W, 4', (1), CKT 14,16

JLLBOX #9 NW  
TA #569+44, 31.5' LT  
OLLARD 'B' #9 NW  
TA #569+41, 33.75' LT  
YPE TS, 30W, 4', (1), CKT 14,16

PULLBOX #8 NW  
STA #569+10, 31.5' LT  
BOLLARD 'B' #8 NW  
STA #569+7, 33.75' LT  
TYPE TS, 30W, 4', (1), CKT 14,16



PULLBOX #3 NW  
STA #565+48.5, 31' LT  
LIGHT POLE 'A' #3 NW  
STA #565+45.5, 28.5' LT  
TYPE V, 98W, 18', (1), CKT 14,16  
POLE RECEPTACLE  
STA. #565+45.5, 28.5' LT WP/GFI REC, CKT 21

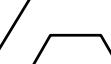
PULLBOX #4 NW  
STA #566+7, 32' LT  
LIGHT POLE 'A' #4 NW  
STA #566+4, 28.5' LT  
TYPE V, 98W, 18', (1), CKT 14,16  
POLE RECEPTACLE  
STA. # 566+4, 28.5 LT WP/GFI REC, CKT 21

PULLBOX #5 NW  
STA #566+73, 32' LT  
LIGHT POLE 'A' #5 NW  
STA #566+70, 28.5' LT  
TYPE V, 98W, 18', (1), CKT 14, 1  
POLE RECEPTACLE  
STA. #566+70, 28.5' LT  
WP/GFI REC. CKT 23

PULLBOX #6 NW  
STA #567+61, 32' LT  
LIGHT POLE 'A' #6 NW  
STA #567+58, 28.5' LT  
TYPE V, 98W, 18', (1), CKT 14,  
POLE RECEPTACLE  
STA. # 567+58, 28.5' LT  
WP/GFI REC, CKT 23

MATCHLINE-STA.565+00

PULLBOX #3 NE  
STA #565+29.5, 35' RT  
BOLLARD 'B' #3 NE  
STA #565+32.5, 34' RT  
TYPE TS, 30W, 4', (1), CKT 6,8

 PULLBOX #4 NE  
STA #566+4, 35' RT  
BOLLARD 'B' #4 NE  
STA #566+7, 34' RT  
TYPE TS, 30W, 4', (1), CKT 6,

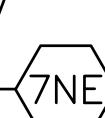
 PULLBOX #6 NE  
STA #567+4, 35' RT  
BOLLARD 'B' #6 NE  
STA #567+07, 34' RT, CKT 6,8  
TYPE TS, 30W, 4', (1)

 PULLBOX #5 NE  
STA #566+54, 35' RT  
BOLLARD 'B' #5 NE  
STA #566+57, 34' RT, CKT 6,8  
TYPE TS, 30W, 4', (1)

PULLBOX #6 NE  
STA #567+4, 35' RT  
BOLLARD 'B' #6 NE  
STA #567+07, 34' RT, CK-  
TYPE TS 30W 4' (1)

TYPE TS, 30W, 4', (1)

PULLBOX #5 NE  
STA #566+54, 35' RT  
BOLLARD 'B' #5 NE  
STA #566+57, 34' RT, CKT 6,8  
TYPE TS 30W 4' (1)

 PULLBOX #7 NE  
STA #567+95, 36' RT  
LIGHT POLE 'A' #7 NE  
STA #567+95, 28.5' RT  
TYPE V, 98W, 18', (1), CKT 6,8  
POLE RECEPTACLE  
STA. #567+95, 28.5' RT  
WP/GFI REC, CKT 9

PULLBOX #7 NE  
STA #567+95, 36' RT  
LIGHT POLE 'A' #7 NE

⑤ E01 STA #567+95, 28.5' RT  
TYPE V, 98W, 18', (1), CKT 6,8  
POLE RECEPTACLE  
STA. #567+95, 28.5' RT  
WP/GFI REC, CKT 9

## CYCLOHEXANE DRAWING NOTES

E01 SAW CUT AND REMOVE THAT SECTION OF EXISTING SIDE WALK AT JOINT LINE TO GET POLE BASE AND OR CONDUIT INSTALLED. INSTALL NEW CONCRETE SIDEWALK WITH DOWELING TO ADJACENT EXISTING SIDEWALK. MATCH EXISTING CONCRETE COLOR TONE.

E02 BORE UNDER EXISTING GRADE MOUNTED MONUMENT WITH EXISTING GRADE MOUNTED LIGHTING.

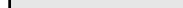
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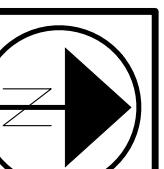
UTILITY LINETYPE LEGEND

— E — UNDERGROUND ELECTRIC  
— FO — UNDERGROUND FIBER OPTIC  
— T — UNDERGROUND TELECOMMUNICATION  
— OHT — OVERHEAD TELECOM / FIBER OPTIC / CATV  
— OHU — OVERHEAD ELECTRIC / COMBINED  
— Gx — GAS MAIN  
— W — WATER MAIN  
- - - SAN — SANITARY SEWER  
- - - STORM — STORM SEWER  
— LT — PROPOSED LIGHTING CONDUIT

**LEGEND**

- PR. LIGHT POLE
- PR. LIGHT BOLLARD
- PR. PULL BOX
- • — CONSTRUCTION LIMITS
- // CONCRETE ENCASED CONDUIT

-  PROPOSED SIDEWALK
-  DRIVEWAY AND PARKING LOT
-  REPAIR LIMITS
-  SAWCUT AND PAVEMENT REPAIR
-  SEAT WALL

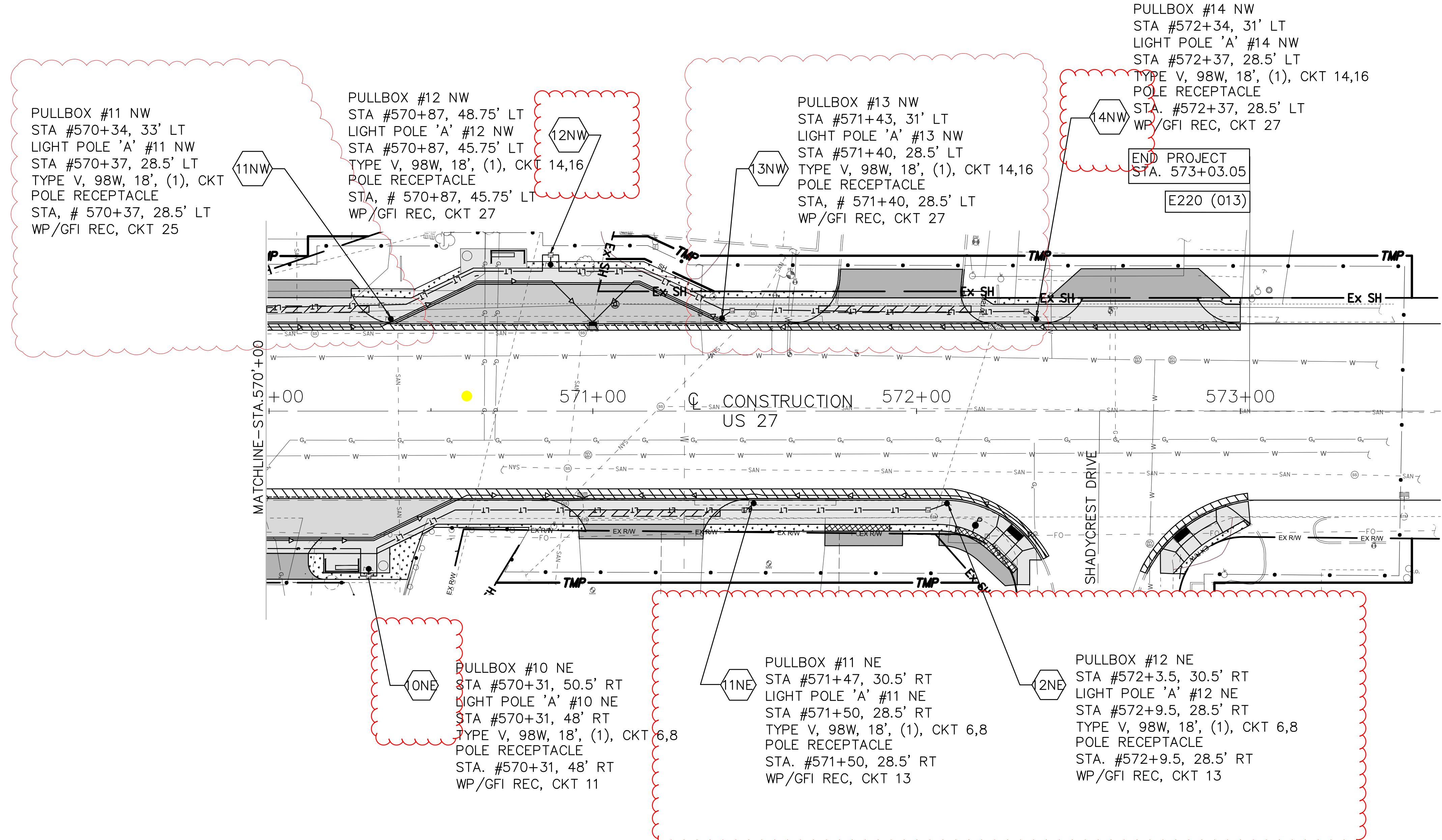


HORIZONTAL SCALE IN FEET  
CALCULATED 0  
TSR  
CHECKED  
EAS

# LIGHTING PLAN

HAM-27-11.09

61  
98



**UTILITY LINETYPE LEGEND**

- E — UNDERGROUND ELECTRIC
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**LEGEND**

- PR. LIGHT POLE
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- CONSTRUCTION LIMITS
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- DRIVEWAY AND PARKING LOT
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- SAWCUT AND PAVEMENT REPAIR
- CONCRETE ENCASED CONDUIT
- SEAT WALL

SE LIGHTING POLES VOLTAGE DROP CALCULATIONS																	
					Panel: S												
Voltage: 240		Wire Factor Used (Number - Type of wire used) = 1.210 ohms/mft/1000					Circuit: 2,4										
Per #10 Cooper AWG rated at 75C																	
VOLTAGE DROP (IN SECTION) = AMPS IN & BEYOND SECTION (A) X SECTION LENGTH (FT) X WIRE FACTOR																	
Section			Amperes		Ampere-Foot	AWG	Voltage Drop		At Point								
From	To	Feet	At Point	Accum.	In Section	Accum.	% Drop	At Point									
8SE	PULLBOX 7SE	113	0.42	0.42	47	#10	0.06	0.68	0.28	8SE							
7SE	PULLBOX 6SE	115	0.42	0.84	97	#10	0.12	0.63	0.26	7SE							
6SE	PULLBOX 5SE	115	0.42	1.26	145	#10	0.18	0.51	0.21	6SE							
5SE	PULLBOX 4SE	53	0.13	1.39	73	#10	0.09	0.33	0.14	5SE							
4SE	PULLBOX 3SE	52	0.13	1.51	79	#10	0.10	0.24	0.10	4SE							
3SE	PULLBOX 2SE	52	0.13	1.64	85	#10	0.10	0.15	0.06	3SE							
2SE	PANEL	22	0.13	1.76	39	#10	0.05	0.05	0.02	2SE							

NE LIGHTING POLES VOLTAGE DROP CALCULATIONS																	
					Panel: S												
Voltage: 240		Wire Factor Used (Number - Type of wire used) = 1.210 ohms/mft/1000					Circuit: 6,8										
Per #10 Cooper AWG rated at 75C																	
VOLTAGE DROP (IN SECTION) = AMPS IN & BEYOND SECTION (A) X SECTION LENGTH (FT) X WIRE FACTOR																	
Section			Amperes		Ampere-Foot	AWG	Voltage Drop		At Point								
From	To	Feet	At Point	Accum.	In Section	Accum.	% Drop	At Point									
12NE	PULLBOX 11NE	81	0.42	0.42	34	#10	0.00	2.49	1.04	12NE							
11NE	PULLBOX 10NE	141	0.42	0.84	118	#10	0.14	2.49	1.04	11NE							
10NE	PULLBOX 9NE	84	0.42	1.26	106	#10	0.13	2.34	0.98	10NE							
9NE	PULLBOX 8NE	121	0.42	1.68	203	#10	0.25	2.22	0.92	9NE							
8NE	PULLBOX 7NE	106	0.42	2.10	223	#10	0.27	1.97	0.82	8NE							
7NE	PULLBOX 6NE	116	0.42	2.52	292	#10	0.35	1.70	0.71	7NE							
6NE	PULLBOX 5NE	60	0.13	2.65	159	#10	0.19	1.35	0.56	6NE							
5NE	PULLBOX 4NE	60	0.13	2.77	166	#10	0.20	1.16	0.48	5NE							
4NE	PULLBOX 3NE	84.5	0.13	2.90	245	#10	0.30	0.95	0.40	4NE							
3NE	PULLBOX 2NE	137.5	0.13	3.02	415	#10	0.50	0.66	0.27	3NE							
2NE	PANEL	41	0.13	3.15	129	#10	0.16	0.16	0.07	2NE							

SW LIGHTING POLES VOLTAGE DROP CALCULATIONS																	
					Panel: S												
Voltage: 240		Wire Factor Used (Number - Type of wire used) = 1.210 ohms/mft/1000					Circuit: 10,12										
Per #10 Cooper AWG rated at 75C																	
VOLTAGE DROP (IN SECTION) = AMPS IN & BEYOND SECTION (A) X SECTION LENGTH (FT) X WIRE FACTOR																	
Section			Amperes		Ampere-Foot	AWG	Voltage Drop		At Point								
From	To	Feet	At Point	Accum.	In Section	Accum.	% Drop	At Point									
8SW	PULLBOX 7SW	93	0.42	0.42	39.06	#10	0.05	1.16	0.49	8SW							
7SW	PULLBOX 6SW	100	0.42	0.84	84	#10	0.10	1.12	0.47	7SW							
6SW	PULLBOX 5SW	100	0.42	1.26	126	#10	0.15	1.02	0.42	6SW							
5SW	PULLBOX 4SW	1	0.42	1.68	1.68	#10	0.00	0.86	0.36	5SW							
4SW	PULLBOX 3SW	86	0.42	2.10	180.6	#10	0.22	0.86	0.36	4SW							
3SW	PULLBOX 2SW	143	0.42	2.52	360.36	#10	0.44	0.64	0.27	3SW							
2SW	PULLBOX 1W	58	0.42	2.94	170.52	#10	0.21	0.21	0.09	2SW							
1W	PANEL	60	0.42	3.36	201.6	#10	0.24	0.24	0.10	1W							

NW LIGHTING POLES VOLTAGE DROP CALCULATIONS																	
					Panel: S												
Voltage: 240		Wire Factor Used (Number - Type of wire used) = 1.210 ohms/mft/1000					Circuit: 14,16										
Per #10 Cooper AWG rated at 75C																	
VOLTAGE DROP (IN SECTION) = AMPS IN & BEYOND SECTION (A) X SECTION LENGTH (FT) X WIRE FACTOR																	
Section			Amperes		Ampere-Foot	AWG	Voltage Drop		At Point								
From	To	Feet	At Point	Accum.	In Section	Accum.	% Drop	At Point									
13NW	PULLBOX 12NW	125	0.42	0.42	52.5	#10	0.06	4.52	1.88	13NW							
12NW	PULLBOX 11NW	100	0.42	0.84	84	#10	0.10	4.45	1.86	12NW							
11NW	PULLBOX 10NW	90	0.42	1.26	113.4	#10	0.14	4.35	1.81	11NW							
10NW	PULLBOX 9NW	102	0.42	1.68	171.36	#10	0.21	4.22	1.76	10NW							
9NW	PULLBOX 8NW	95	0.42	2.10	199.5	#10	0.24	4.01	1.67	9NW							
8NW	PULLBOX 7NW	95	0.42	2.52	239.4	#10	0.29	3.77	1.57	8NW							
7NW	PULLBOX 6NW	111	0.42	2.94	326.34	#10	0.39	3.48	1.45	7NW							
6NW	PULLBOX 5NW	106	0.42	3.36	356.16	#10	0.43	3.08	1.28	6NW							
5NW	PULLBOX 4NW	94	0.42	3.78													

## ELECTRICAL SCHEDULES

CALCULATED

TSR

CHECKED

EAS

LIGHTING CONTACTOR SCHEDULE - LC1				
POLE	CIRCUIT NO	AREA OF CONTROL	CONTROL BY	VOLTAGE / PH
1	2	SE LIGHT POLES & BOLLARDS	STAGE 1 TC / PC	240V /1P
2	4			
3	6	NE LIGHT POLES & BOLLARDS	STAGE 1 TC / PC	240V /1P
4	8			
5	10			
6	12	SW LIGHT POLES	STAGE 1 TC / PC	240V /1P
7	14			
8	16	NW LIGHT POLES	STAGE 1 TC / PC	240V /1P
9	SPARE			
10	SPARE			

LIGHTING CONTACTOR SCHEDULE - RC1				
POLE	CIRCUIT NO	AREA OF CONTROL	CONTROL BY	VOLTAGE / PH
1	1	SE POLE RECEPT	STAGE 2 TC / PC	120V /1P
2	3	SE POLE RECEPT	STAGE 2 TC / PC	120V /1P
3	5	SE POLE RECEPT	STAGE 2 TC / PC	120V /1P
4	7	NE POLE RECEPT	STAGE 2 TC / PC	120V /1P
5	9	NE POLE RECEPT	STAGE 2 TC / PC	120V /1P
6	SPARE			
7	SPARE			
8	SPARE			

LIGHTING CONTACTOR SCHEDULE - RC2				
POLE	CIRCUIT NO	AREA OF CONTROL	CONTROL BY	VOLTAGE / PH
1	11	SW POLE RECEPT	STAGE 2 TC / PC	120V /1P
2	13	SW POLE RECEPT	STAGE 2 TC / PC	120V /1P
3	15	SW POLE RECEPT	STAGE 2 TC / PC	120V /1P
4	17	NW POLE RECEPT	STAGE 2 TC / PC	120V /1P
5	19	NW POLE RECEPT	STAGE 2 TC / PC	120V /1P
6	21	NW POLE RECEPT	STAGE 2 TC / PC	120V /1P
7	23	NW POLE RECEPT	STAGE 2 TC / PC	120V /1P
8	SPARE			

PANEL: "LP-S"											
120/240V, 1PH, 3W											
150 AMP MCB											
225 A BUS											
22,000 AIC											
GROUND BAR											
MOUNTING SURFACE											
LOAD IN KVA PER PHASE											
CKT	DESCRIPTION	NOTE	BKR	PL	A	PL	BKR	NOTE	DESCRIPTION	CKT	
1	SE POLE RECEPT	2	20	1	0.36	0.21			SE LIGHT POLES & BOLLARDS	2	
3	SE POLE RECEPT	2	20	1		0.18	0.21			4	
5	SE POLE RECEPT	2	20	1	0.36	0.37			NE LIGHT POLES & BOLLARDS	6	
7	NE POLE RECEPT	2	20	1		0.36	0.37			8	
9	NE POLE RECEPT	2	20	1	0.36	0.34			SW LIGHT POLES	10	
11	NE POLE RECEPT	2	20	1		0.36	0.34			12	
13	NE POLE RECEPT	2	20	1	0.36	0.64				14	
15	SW POLE RECEPT	3	20	1		0.54	0.64		NW LIGHT POLES	16	
17	SW POLE RECEPT	3	20	1	0.54	0.00				18	
19	SW POLE RECEPT	3	20	1		0.54	0.00			20	
21	NW POLE RECEPT	3	20	1	0.36	0.00				22	
23	NW POLE RECEPT	3	20	1		0.36	0.00			24	
25	SPARE		20	1	0.00	0.00			SPARE	26	
27	SPARE		20	1		0.00	0.05	1 20	LIGHTING CONTROLS	28	
29	SPARE		20	1	0.00	0.18		1 20	PANEL RECEPT	30	
TOTAL PER PHASE:				KVA	4.08	3.95	KVA				
TOTAL CONNECTED LOAD:				KVA	8.02	66.87	AMPS				
FEEDER DEMAND LOAD:				KVA	7.86	65.47	AMPS				
NOTES											
1 - ROUTE CIRCUIT VIA CONTACTOR "LC1"											
2 - ROUTE CIRCUIT VIA CONTACTOR "RC1"											
3 - ROUTE CIRCUIT VIA CONTACTOR "RC2"											

POWER SERVICE DATA						
POWER SERVICE	LINE VOLTAGE (VOLTS)	CONNECTED LOAD (KVA)	SERVICE ENTRANCE CABLE (AWG)	ENCLOSURE RATING (AMPS)	CIRCUIT LOAD (AMPS)	CIRCUIT BREAKER SIZE (AMPS)
LP-S	240/120, 1P, 3W	10.9	2#1/0, 1#6G	225	90.6	150

DUKE ENERGY TO PROVIDE PRIMARY CABLING FROM POLE MOUNTED TRANSFORMER TO METER. ELECTRICAL CONTRACTOR TO PROVIDE PRIMARY AND SECONDARY SERVICE CONDUIT ALONG WITH SECONDARY SERVICE CABLE.

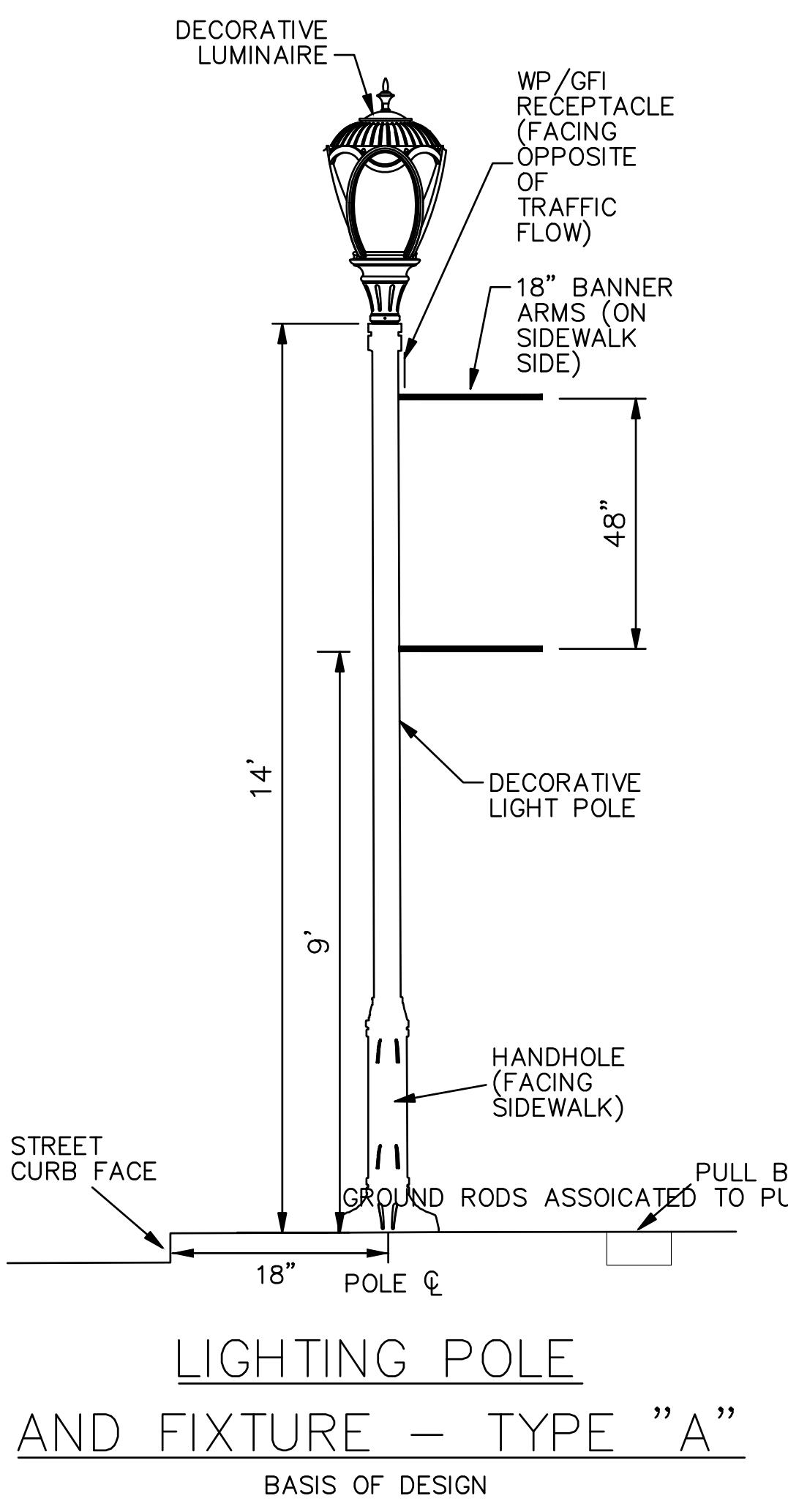
**BOLLARD LIGHT-TYPE "B"****BASIS OF DESIGN**

Diagram showing a decorative fluted shaft light bollard (47" tall) mounted on a sidewalk. The fixture includes a handhole (facing opposite of sidewalk). The bollard has a 11" dia. base.

**GROUNDING OF STEEL CONDUIT**  
no scale

Diagram showing the grounding of steel conduit. It illustrates the connection of a 4" conduit to a drain pull box, the attachment of a ground rod (1" x 10') to the conduit, and the connection of the conduit to a typical RMC 725.04. A typical 1" #6 SLC (as per circuit) is used as equipment ground. A typical insulated bonding & grounding bushing is used. The cost of bushing and conduit grounding shall be incidental to the cost of RMC 725.04. A typical 8" of #7 or #8 aggregate coarse gravel thoroughly compacted is shown around the conduit.

**GROUND MOUNTED POWER SERVICE DETAIL**  
no scale

Diagram showing the ground mounted power service detail. It includes a disconnect switch, a service cable in a 4" conduit (725.04), a riser, a work pad, a service to lights, a service cable splice with a PVC pull box, and a pull box (use if applicable).

**TYPICAL CIRCUIT WIRING SCHEMATIC**

Diagram showing the typical circuit wiring schematic. Power is supplied from a lighting controller through L1 (black), 5 amp fuses (typ), and equipment ground (green). The circuit splits into two paths (L1 and L2) to luminaires (typ). Each luminaire is connected to ground rod (typ) and equipment ground (green). The circuit then continues to the next fixture.

**WIRING DIAGRAM**  
WIRING IN POLE BASE

Diagram showing the wiring in the pole base. Power is supplied from a source through L1 Black, L2 Red, and equipment ground (green). The circuit splits into two paths (L1 and L2) to luminaires (typ). Each luminaire is connected to a fused pull-apart connector, a pole grounding stud, and a pole ground #6 AWG insulated wire (green). The circuit then continues to the next fixture.

**WIRING DIAGRAM**  
POLE WIRING AT END OF LINE

Diagram showing the wiring at the end of a pole. Power is supplied from a source through L1 and L2. The circuit splits into two paths (L1 and L2) to luminaires (typ). Each luminaire is connected to a non-fused pull-apart connector, a pole grounding stud, and a pole ground #6 AWG insulated wire (green). The circuit then continues to the next fixture.

**WIRING DIAGRAM**  
3-WAY SPLICE IN A PULLBOX

Diagram showing the wiring for a 3-way splice in a pullbox. Power is supplied from a source through L1 Black, L2 Red, and equipment ground (green). The circuit splits into three paths (L1 Black, L2 Red, and equipment ground green) through non-fused pull-apart connectors.

**FOUNDATION DETAIL**  
FOR TYPE "A" & "B"

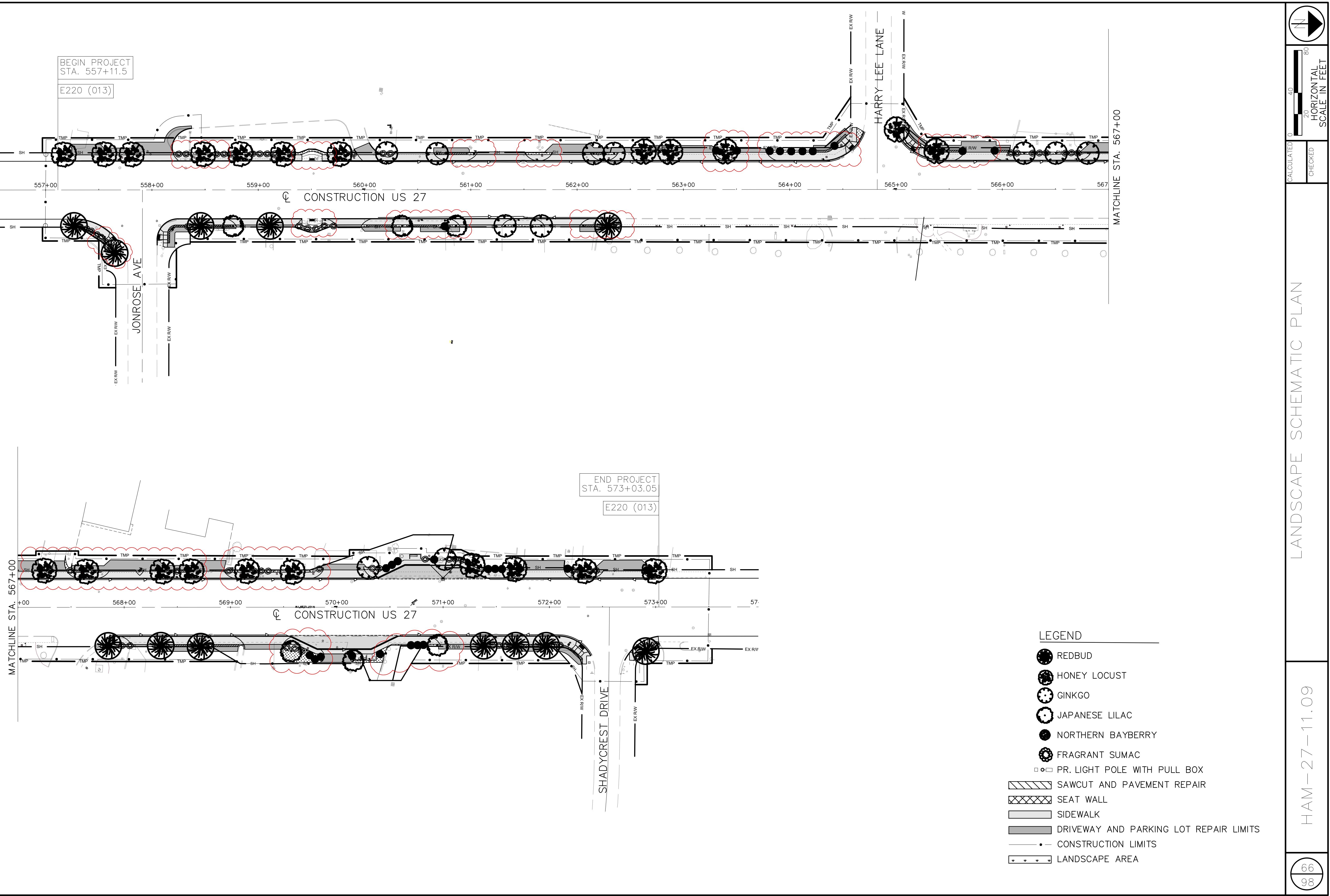
Diagram showing the foundation detail for Type A and Type B poles. The foundation is 1' 6" dia. for the pole and 13" for the bollard. It is 5" for Type A pole and 2.5" for Type B bollard. It contains 6 - #6 bars and 4000 PSI conc. with #4 bars @ 11" o.c. The finish grade is indicated.

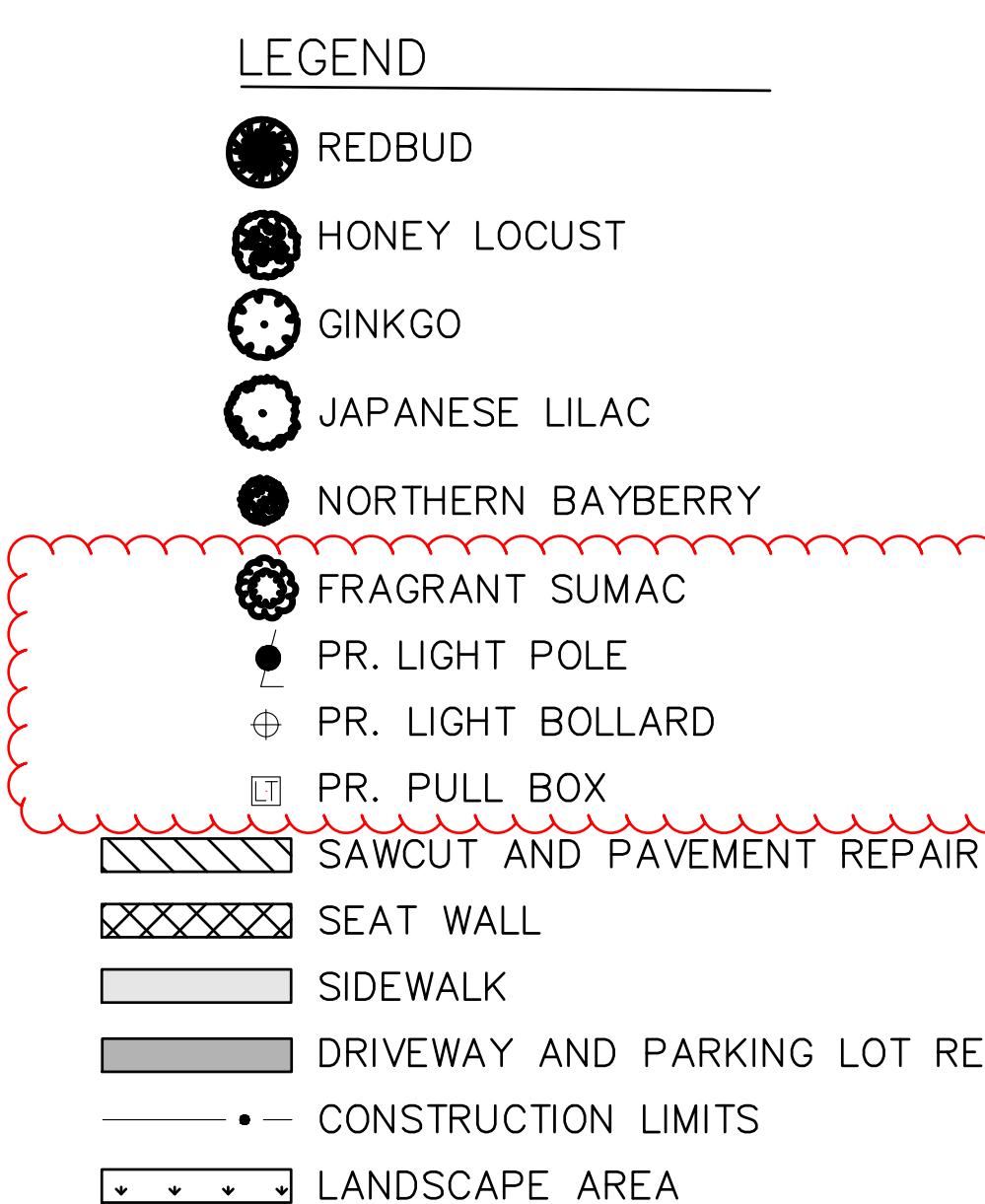
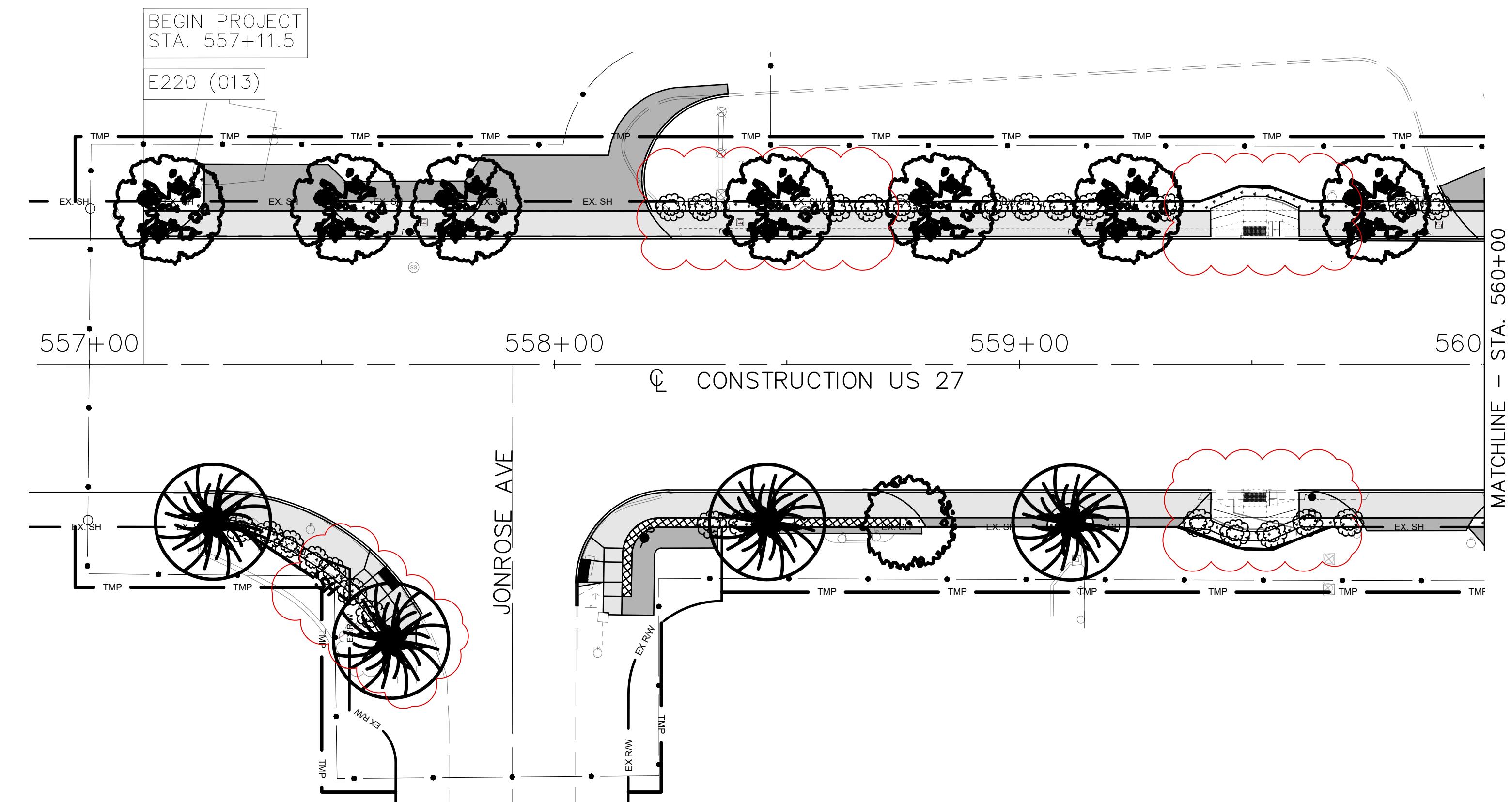
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# LANDSCAPE SCHEMATIC PLAN

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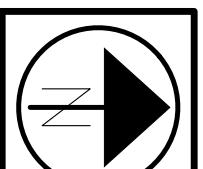
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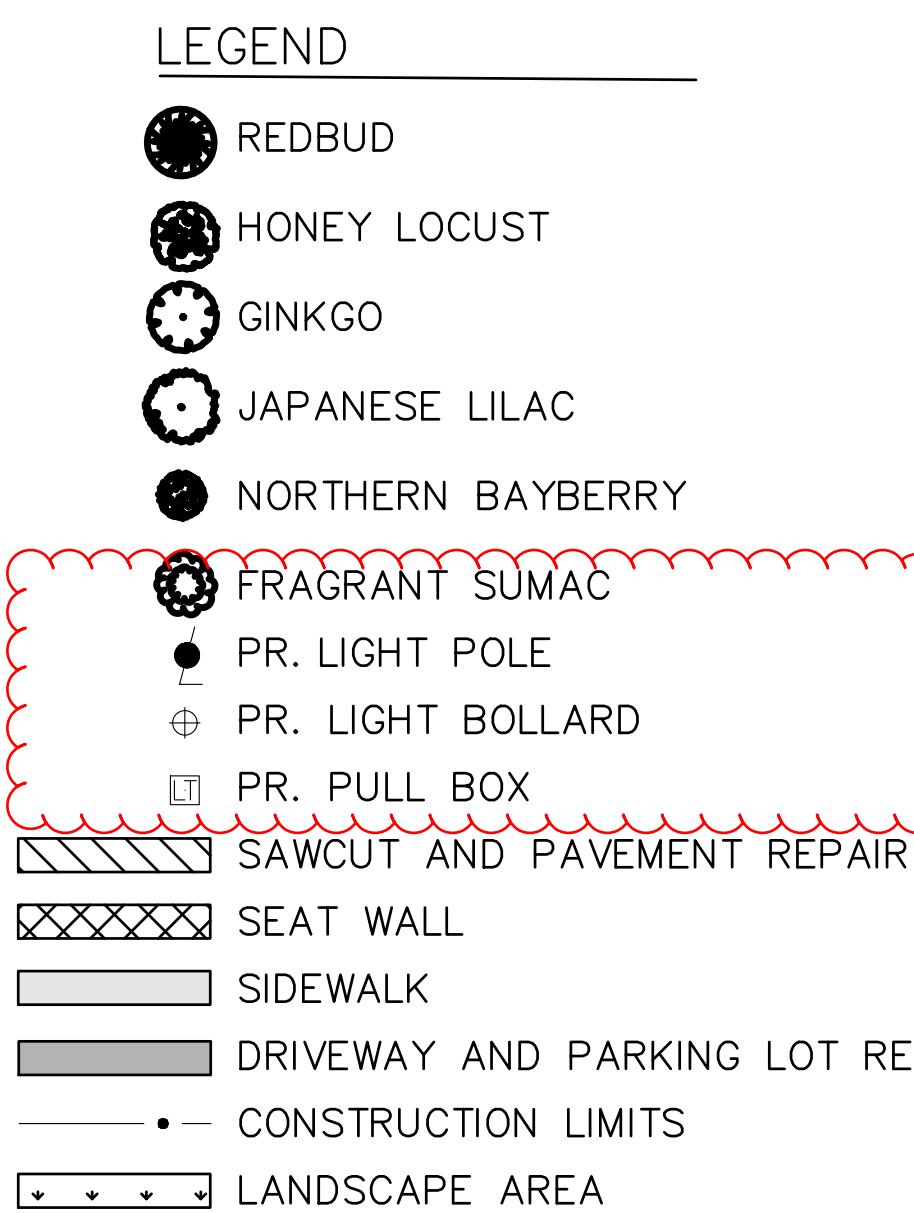
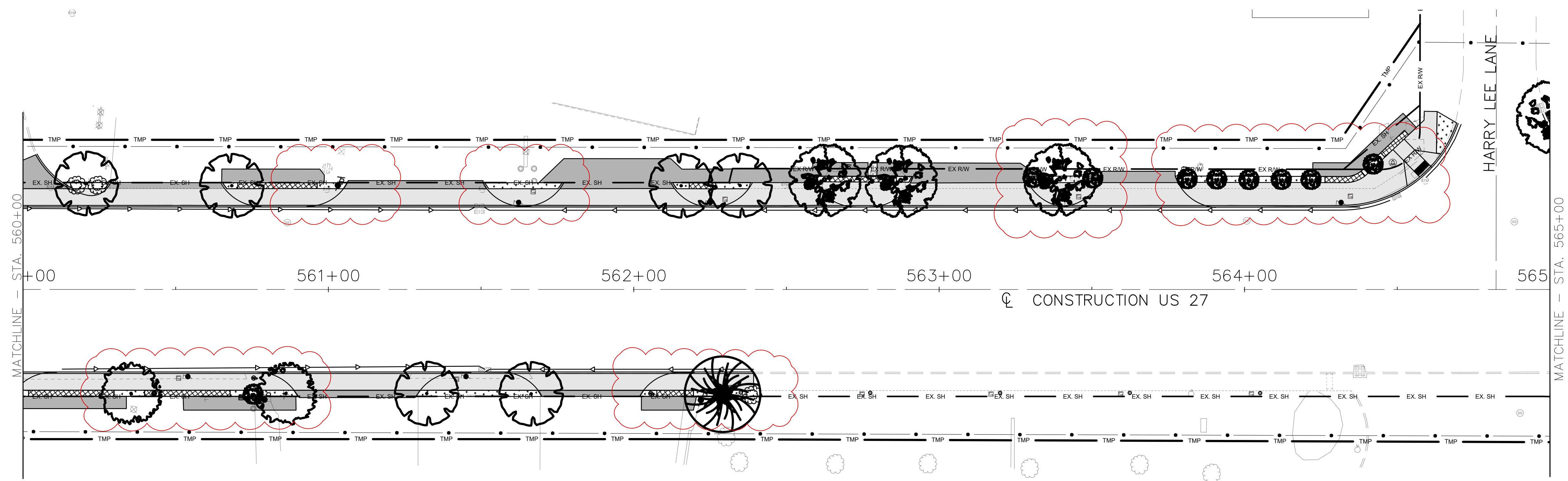
LANDSCAPE PLAN US27  
STA. 557+00 TO STA. 560+00

1 / 4

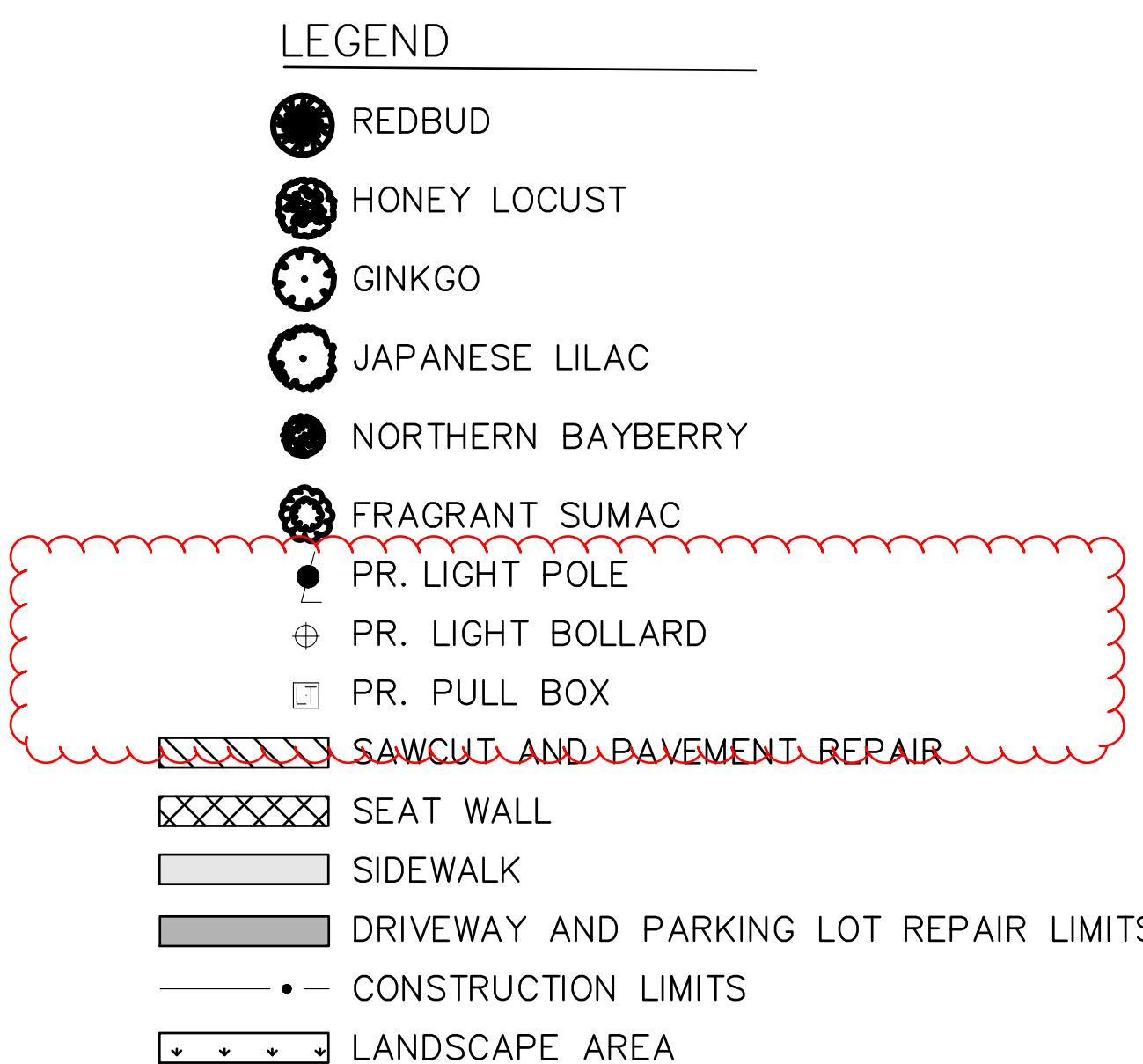
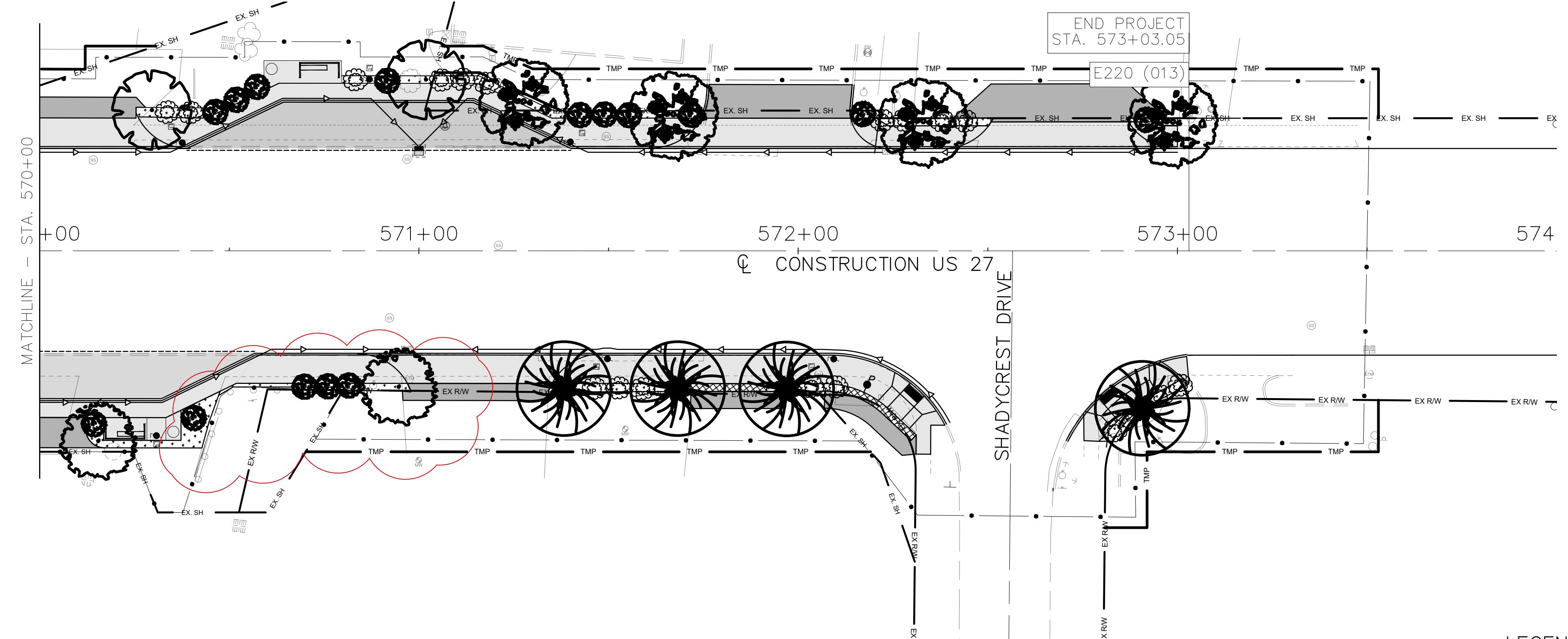
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DRAWN GM  
CHECKED SCR  
HORIZONTAL SCALE IN FEET









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LANDSCAPE PLAN US27  
STA. 570+00 TO STA. 574+00

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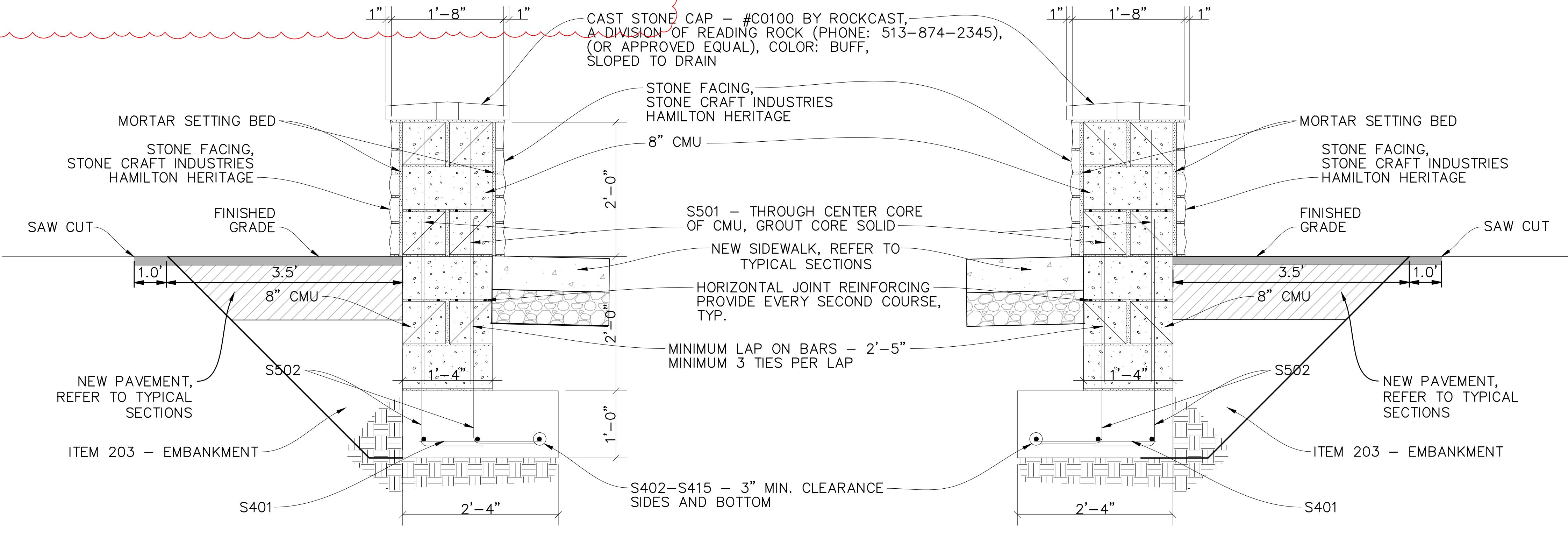
DRAWN GM  
CHECKED SCR  
HORIZONTAL SCALE IN FEET

4 / 4

ESTIMATED QUANTITIES						SEE SHEET
ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION		
203	20000	117.37	CY	EMBANKMENT		
503	21100	165.31	CY	UNCLASSIFIED EXCAVATION		
203	10001	8.46	CY	EXCAVATION, AS PER PLAN		
509	10000	3578	POUNDS	EPOXY COATED REINFORCING STEEL		
511	46510	32.85	CY	CLASS QC1 CONCRETE, FOOTING		
602	15001	94.18	CY	BLOCK MASONRY, AS PER PLAN	67	
602	97000	1662.95	SF	MASONRY, MISC.: CAST STONE FACING	67	
602	98100	391.17	FT	MASONRY, MISC.: CAST STONE CAP	67	

CALCULATED  
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### SEAT WALL DETAILS



TYPICAL SEAT WALL DETAIL – LEFT SIDE

TYPICAL SEAT WALL DETAIL – RIGHT SIDE

### ITEM 602 – BLOCK MASONRY, AS PER PLAN

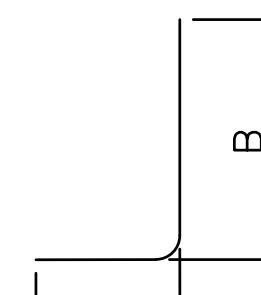
THIS ITEM SHALL INCLUDE PROVIDING AND INSTALLING BLOCK MASONRY FOR SEAT WALLS. ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PERFORM THIS WORK, INCLUDING HORIZONTAL JOINT REINFORCING, MORTAR SETTING BED, AND GROUT CORE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 602 – BLOCK MASONRY, AS PER PLAN.

### ITEM 602 – MASONRY, MISC.: CAST STONE FACING

THIS ITEM SHALL INCLUDE PROVIDING AND INSTALLING CAST STONE FACING FOR SEAT WALLS. THE CAST STONE FACING SHALL BE BY STONE CRAFT INDUSTRIES HAMILTON HERITAGE, OR APPROVED EQUAL. THE CAST STONE FACING SHALL BE INSTALLED USING A MORTAR SETTING BED. ALL MATERIALS, LABOR AND EQUIPMENT TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 602 – MASONRY, MISC.: CAST STONE FACING.

### ITEM 602 – MASONRY, MISC.: CAST STONE CAP

THIS ITEM SHALL INCLUDE PROVIDING AND INSTALLING CAST STONE CAPS FOR SEAT WALLS. THE CAST STONE CAP SHALL BE BY #C0100 BY ROCKCAST A DIVISION OF READING ROCK, OR APPROVED EQUAL; COLOR: BUFF. ALL MATERIALS, LABOR AND EQUIPMENT TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 602 – MASONRY, MISC.: CAST STONE CAP.



TYPE-1

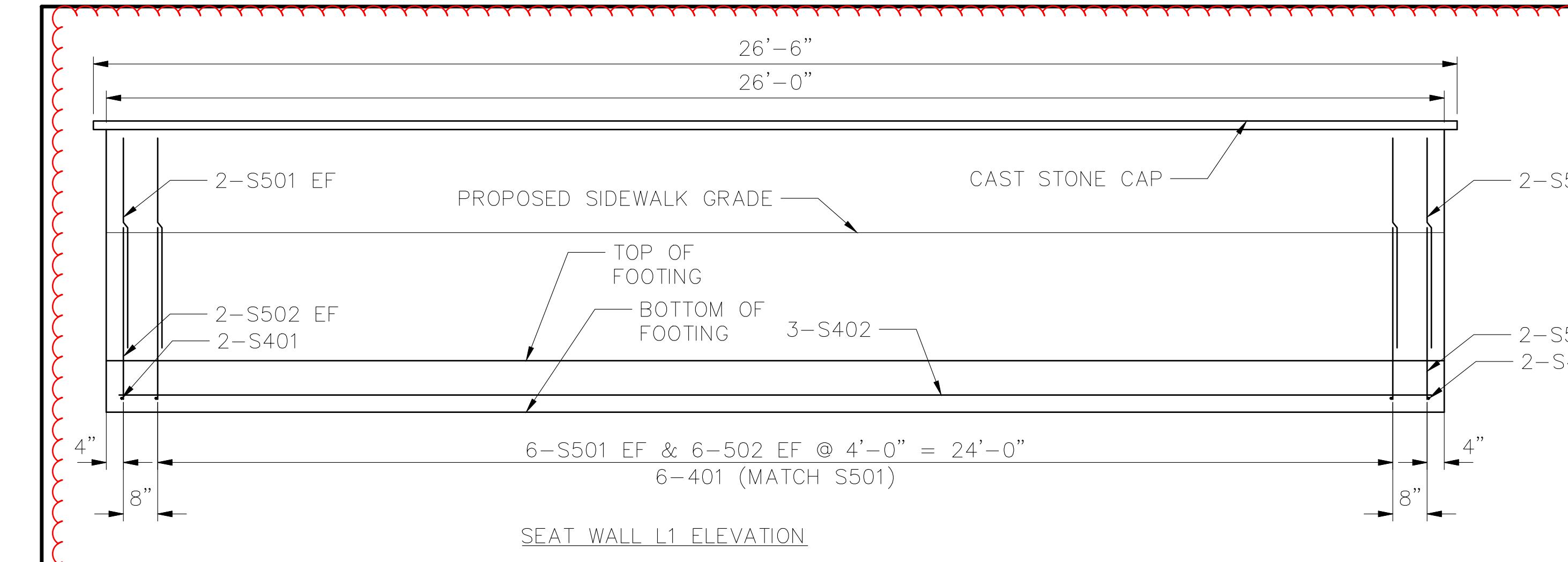
### BENDING DIAGRAMS

MARK	TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS							
					A	B	C	D	E	R	INC	
<b>SEAT WALL</b>												
S501	327	3'-8"	1202	STR								
S502	327	4'-3"	1450	1	0'-11"	3'-4"						
S401	158	1'-10"	194	STR								
S402	3	25'-6"	51	STR								
S403	15	8'-2"	82	STR								
S404	3	21'-6"	43	STR								
S405	3	12'-2"	24	STR								
S406	6	10'-2"	41	STR								
S407	9	19'-6"	117	STR								
S408	9	27'-6"	165	STR								
S409	6	22'-6"	89	STR								
S411	3	11'-6"	23	STR								
S412	6	24'-2"	97	STR								
		TOTAL	3578									

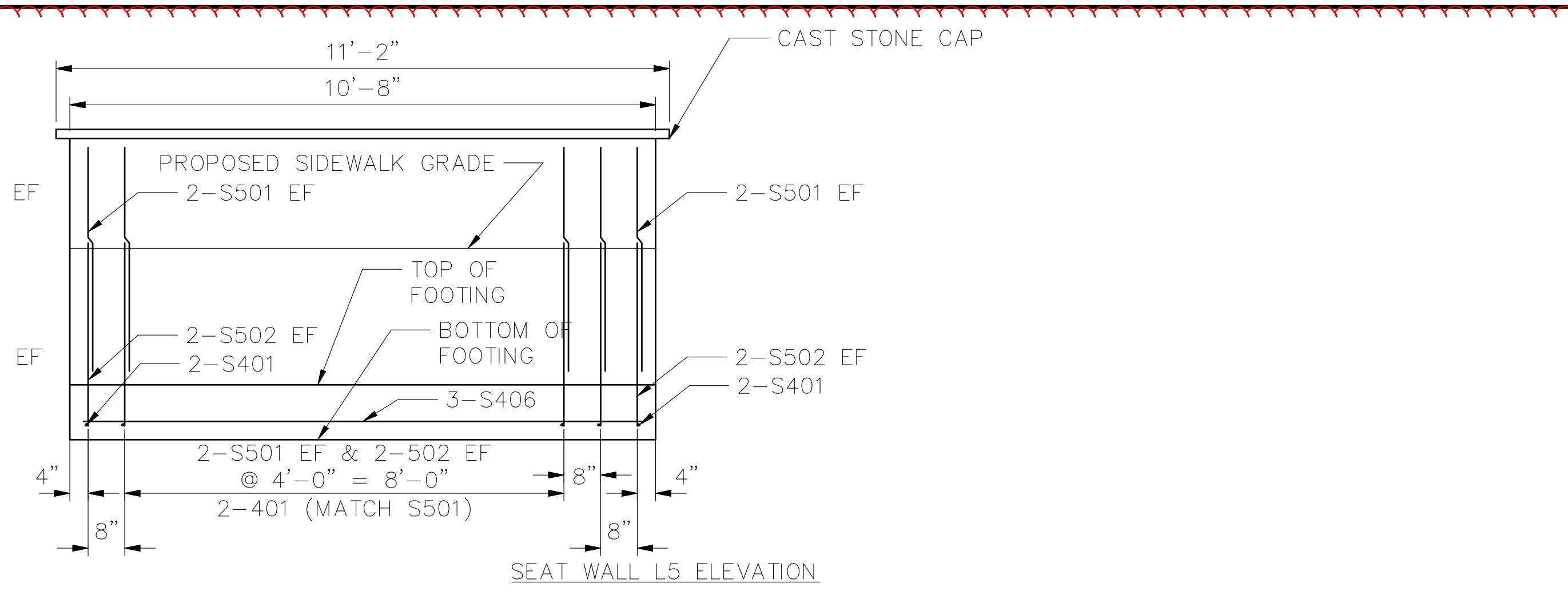
### SEAT WALL REINFORCING STEEL LIST

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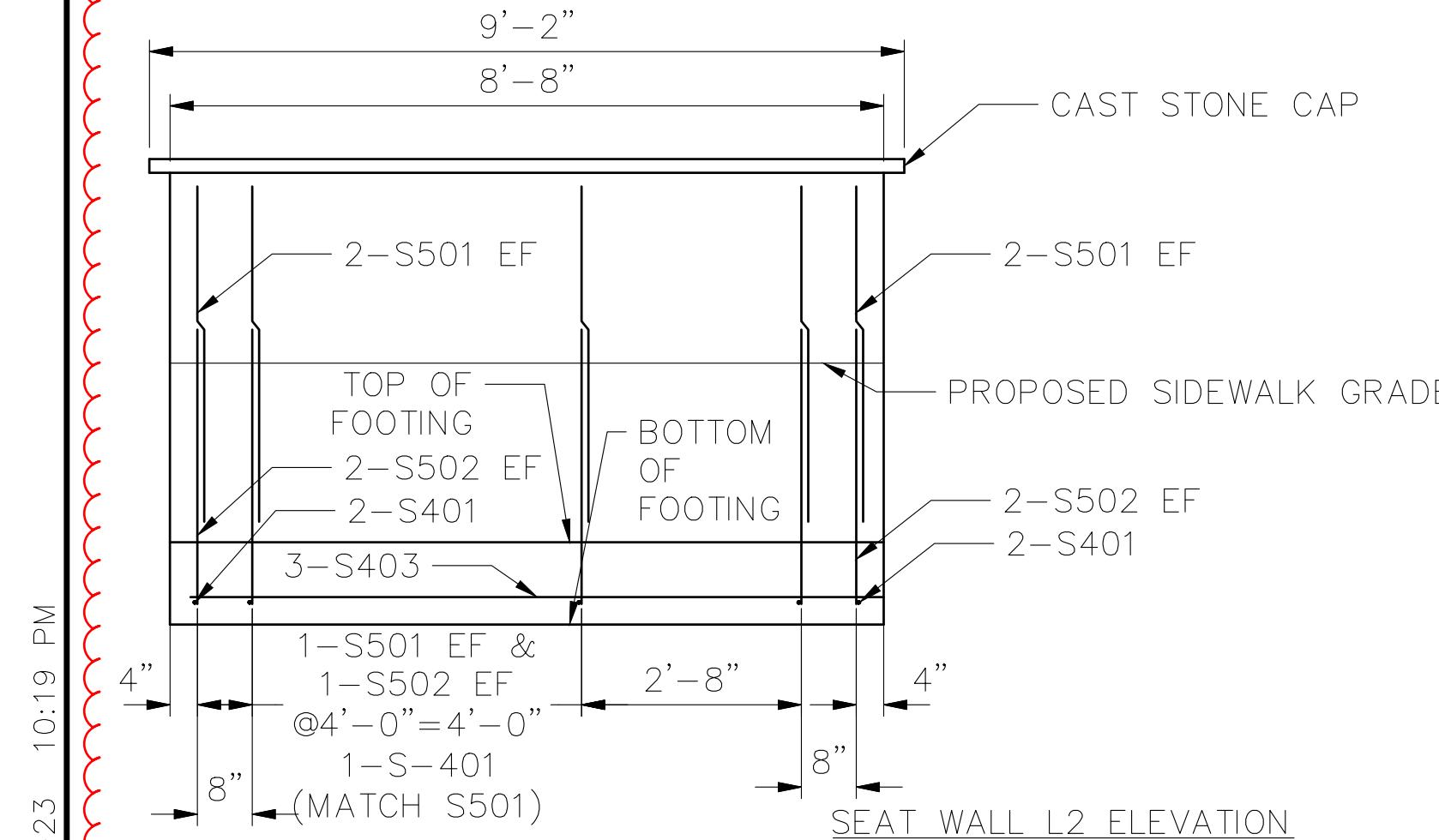
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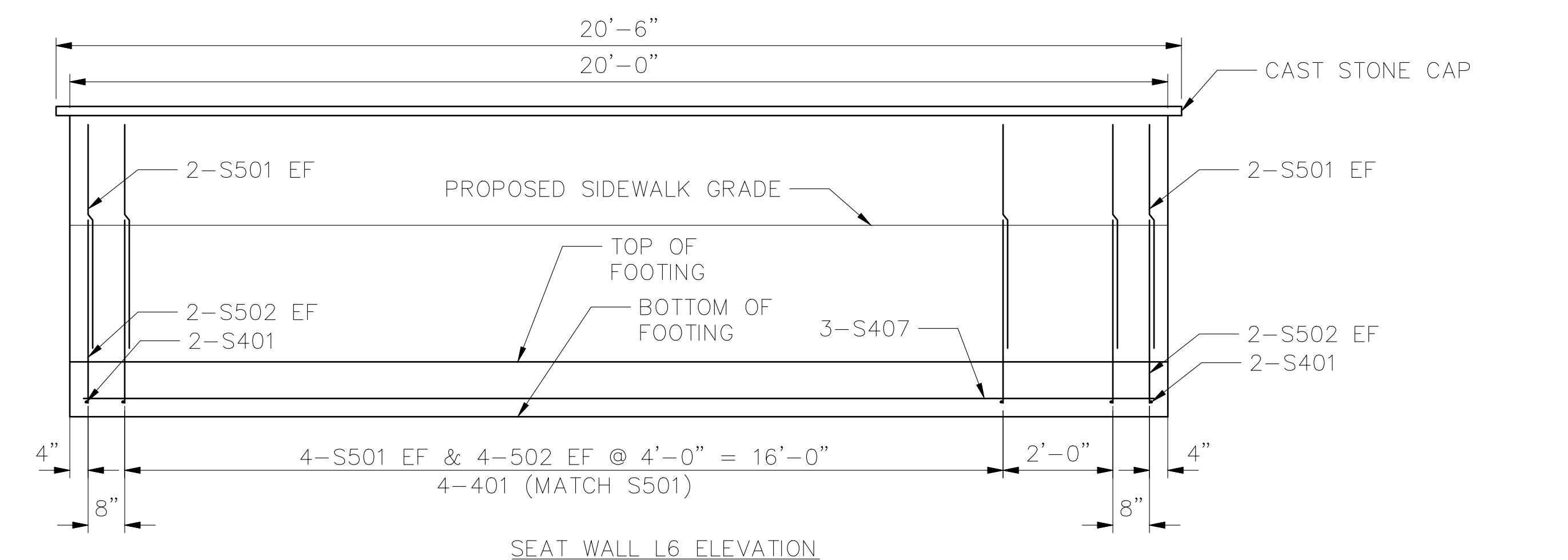
## SEAT WALL L1 ELEVATION



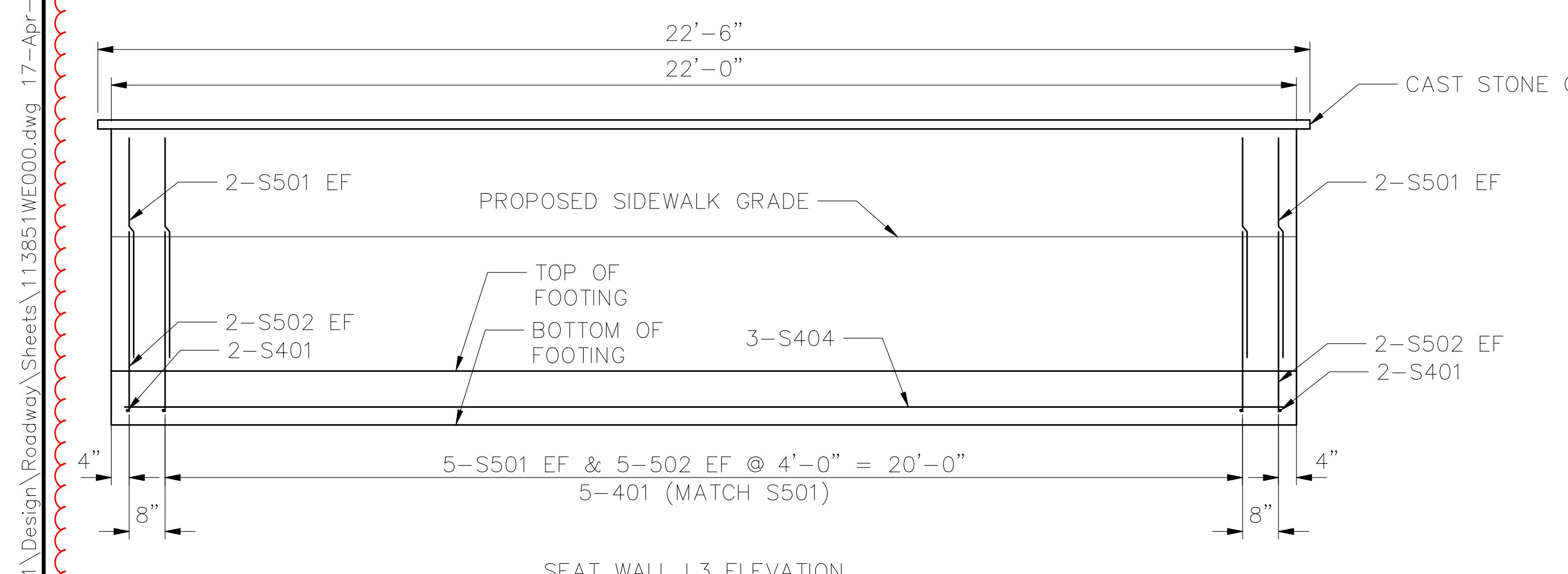
SEAT WALL L5 ELEVATION



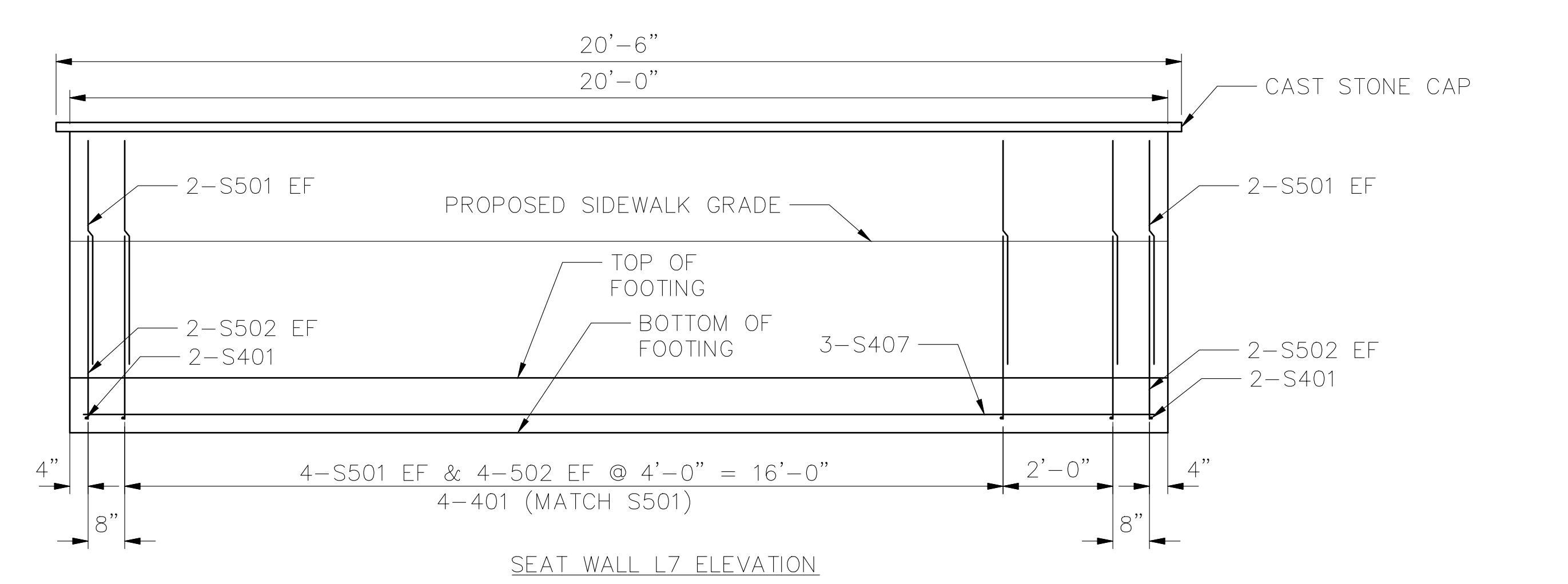
## SEAT WALL L2 ELEVATION



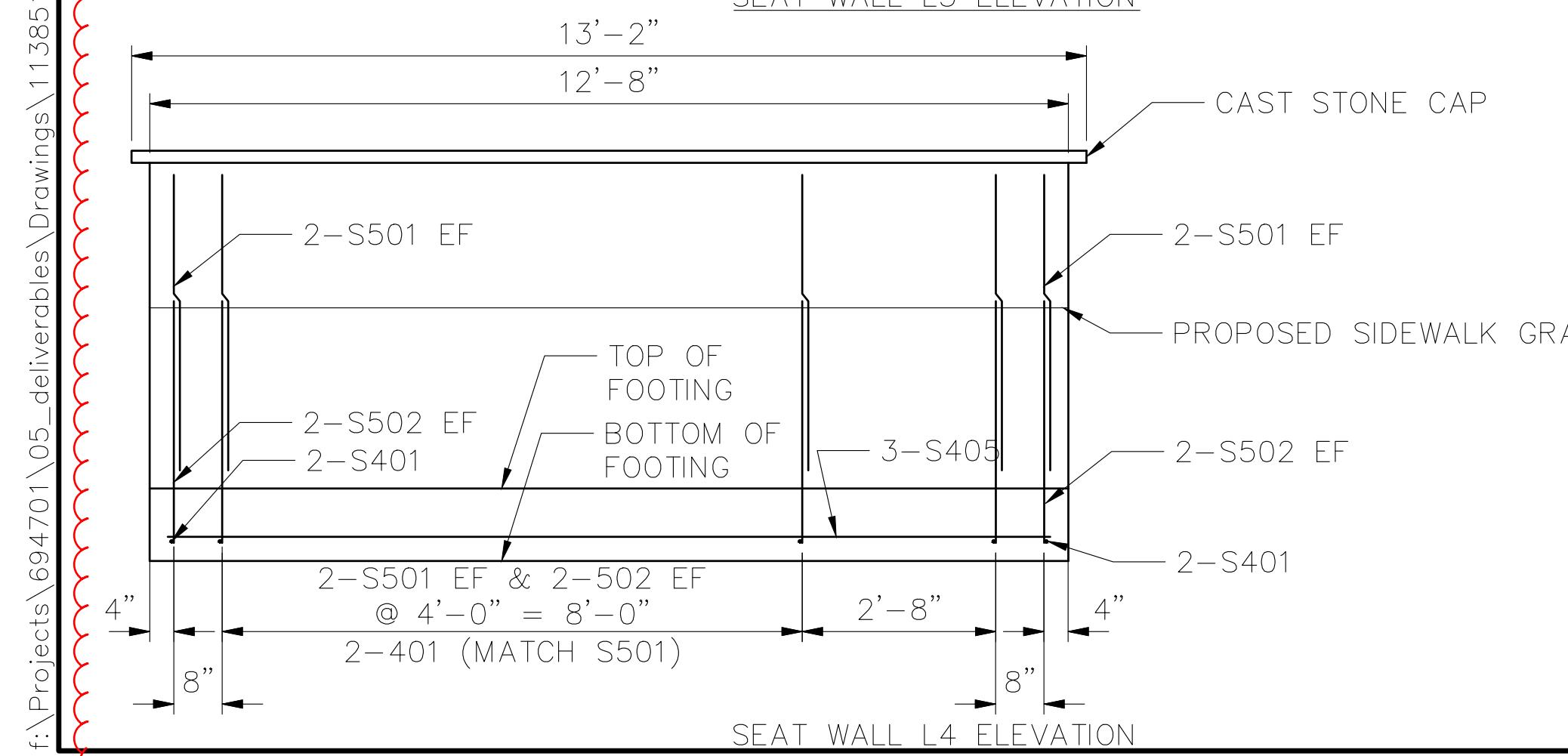
## SEAT WALL L6 ELEVATION



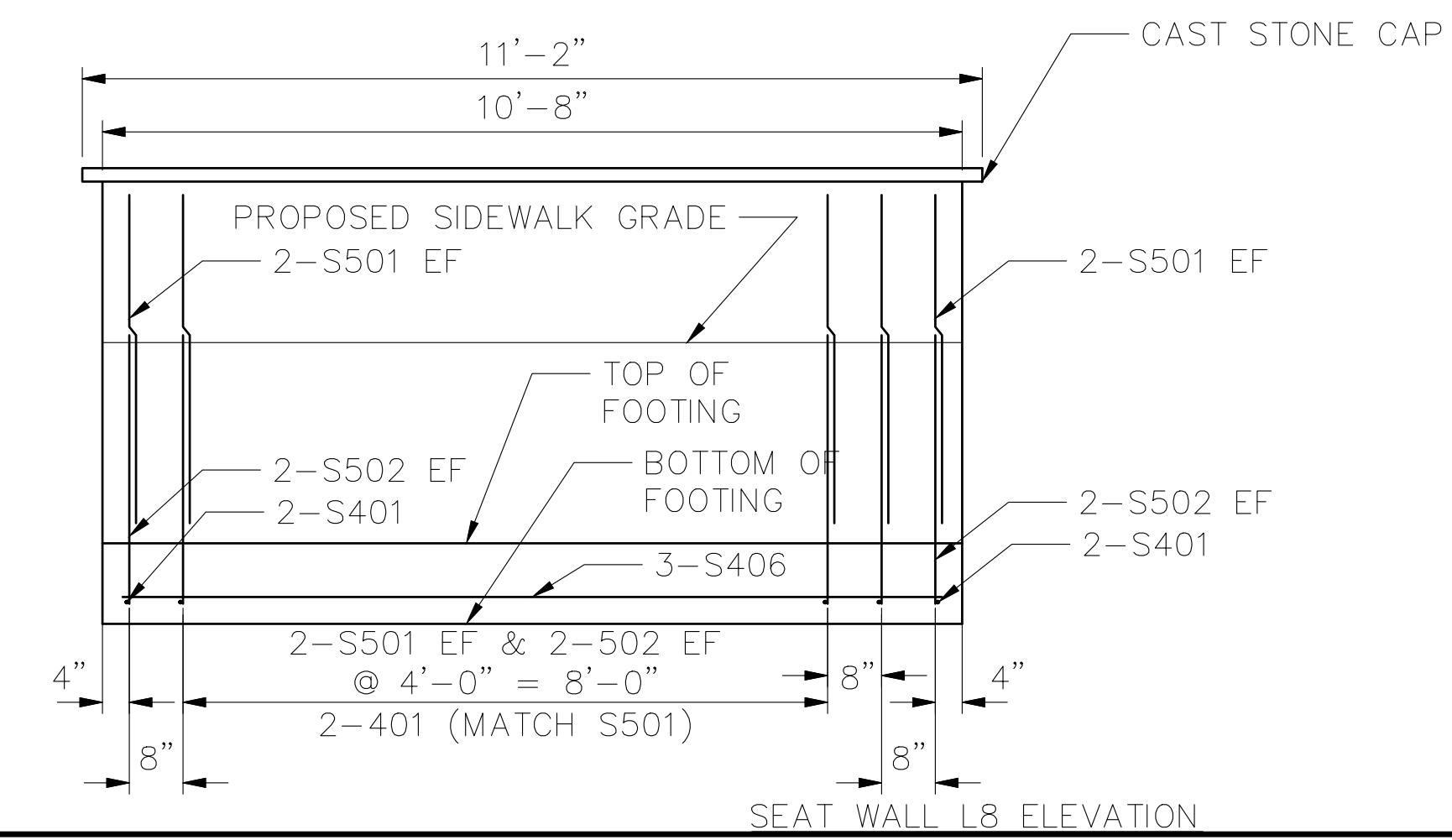
## SEAT WALL L3 ELEVATION



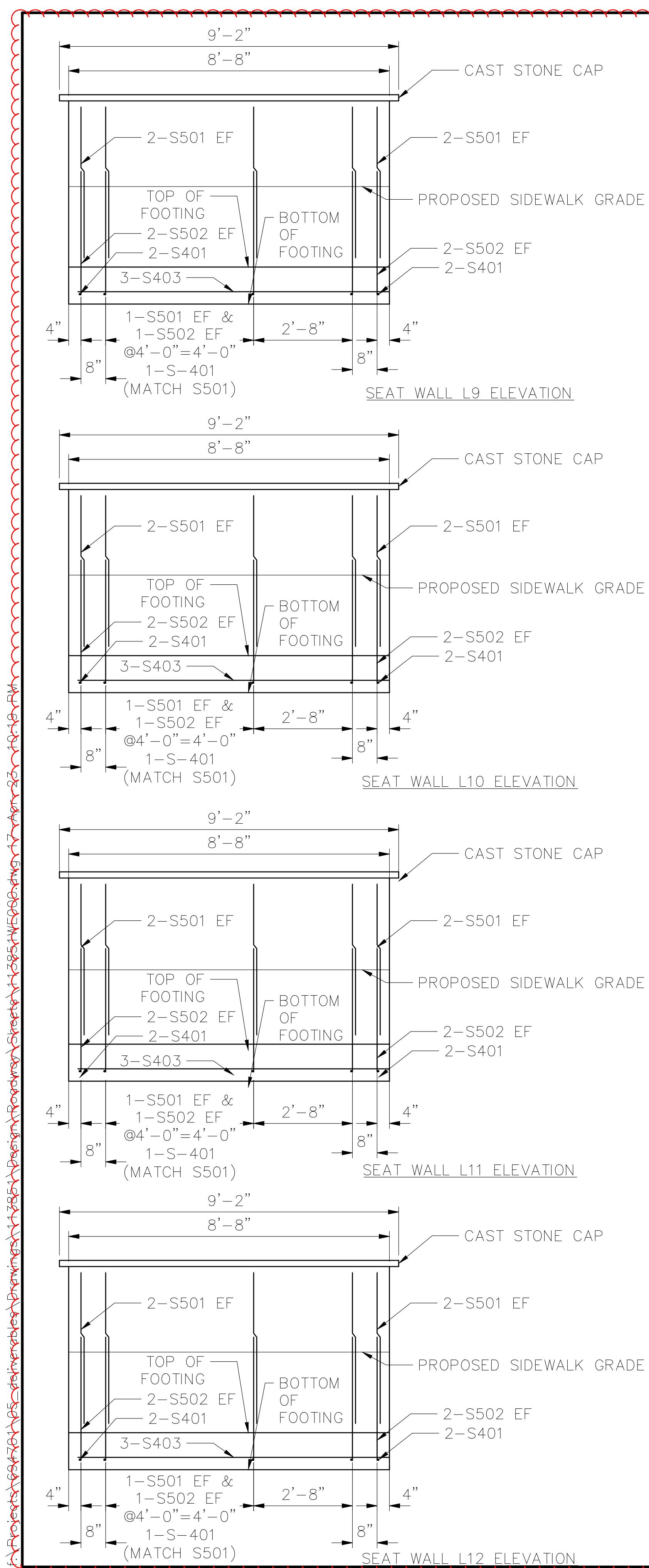
## SEAT WALL L7 ELEVATION

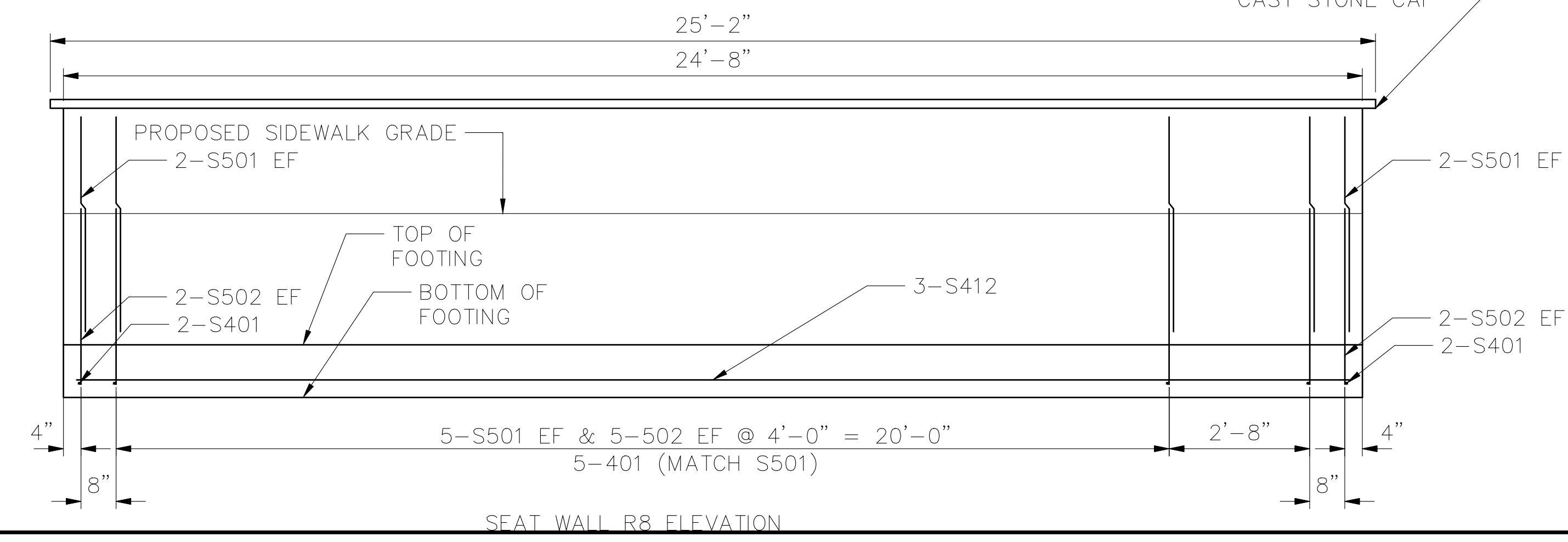
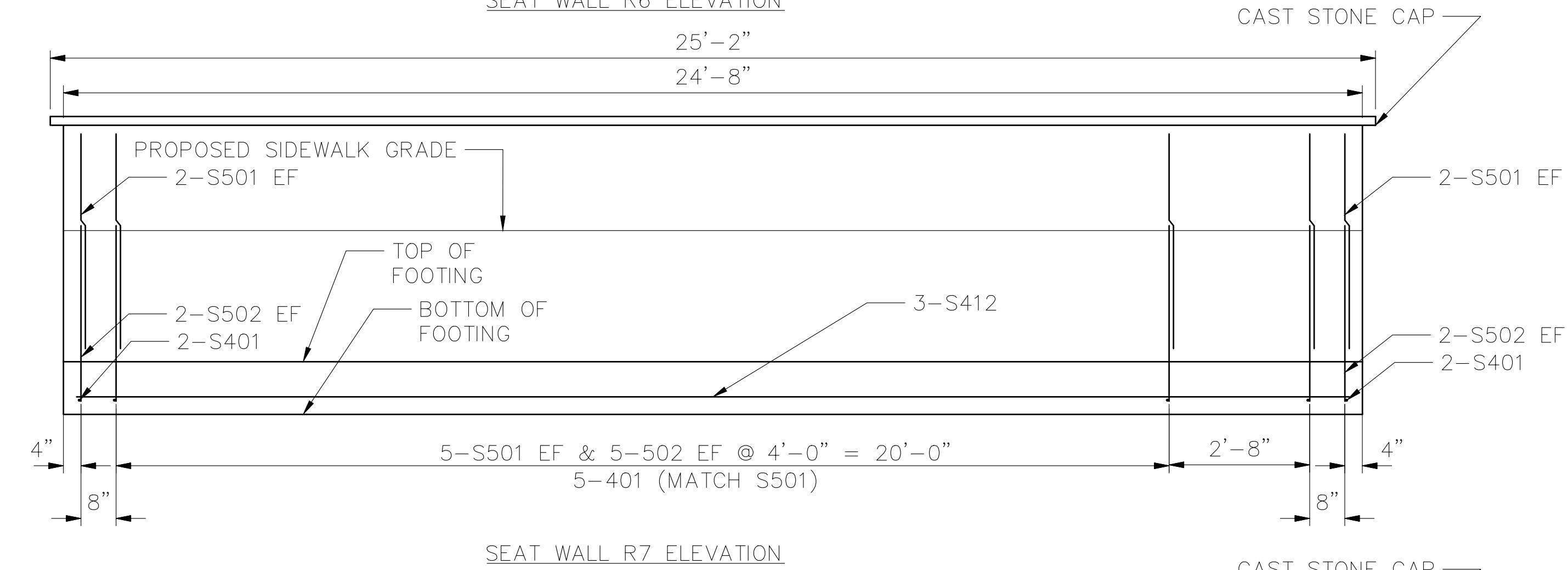
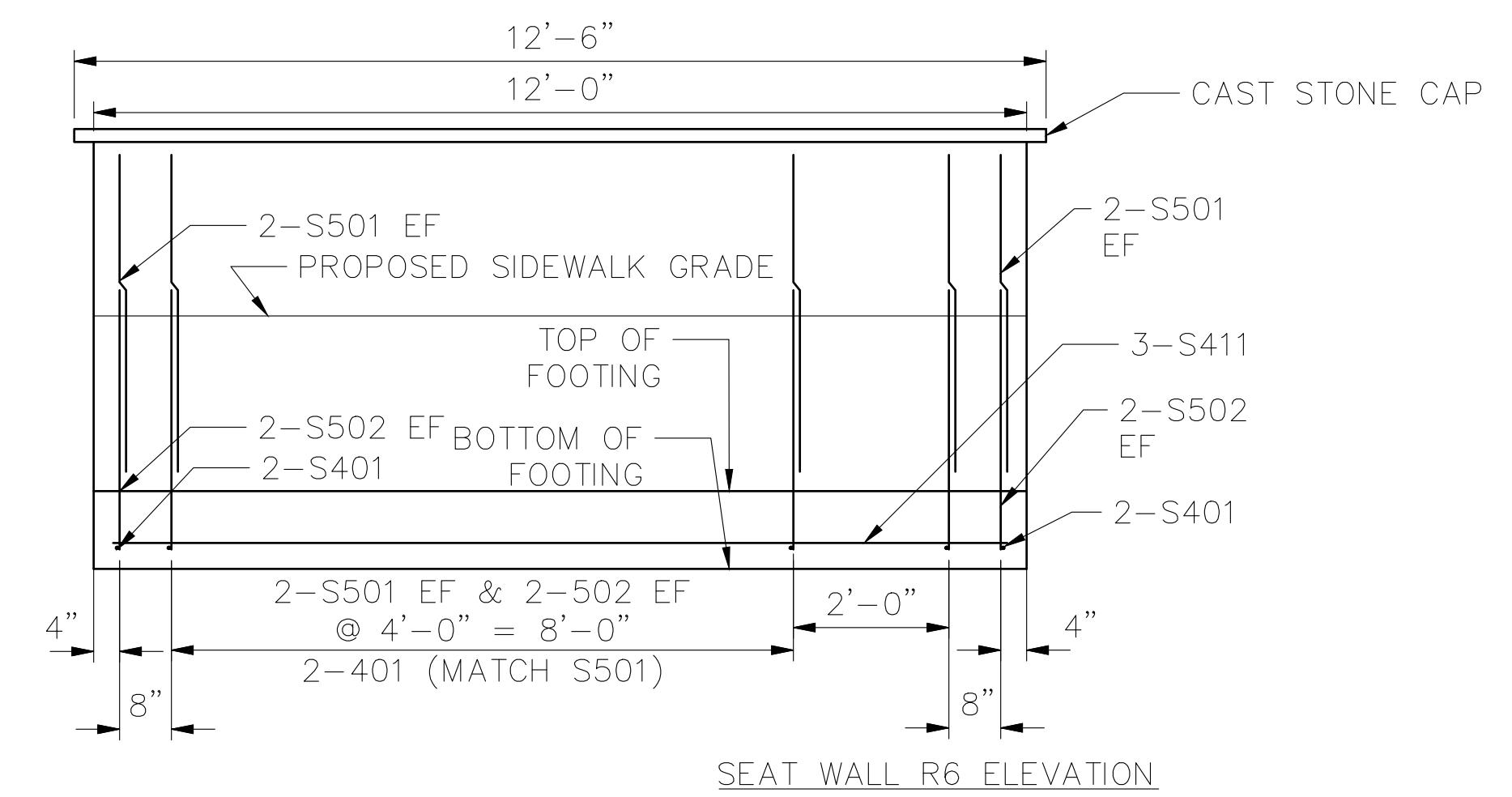
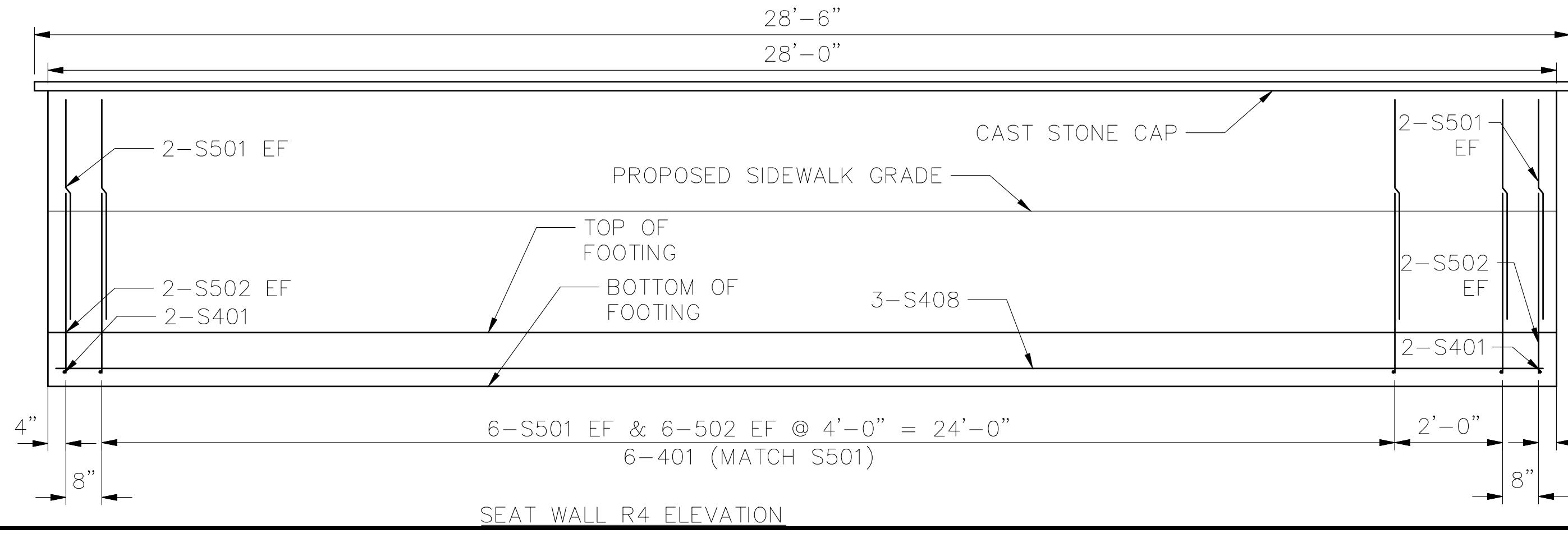
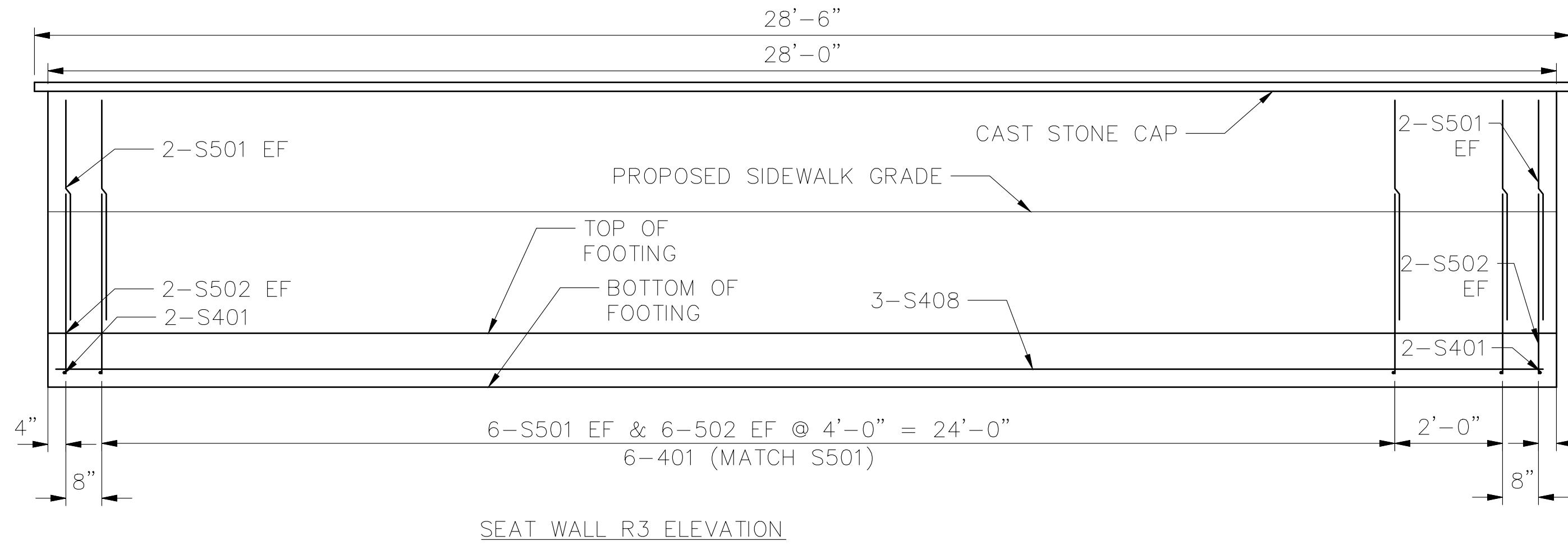
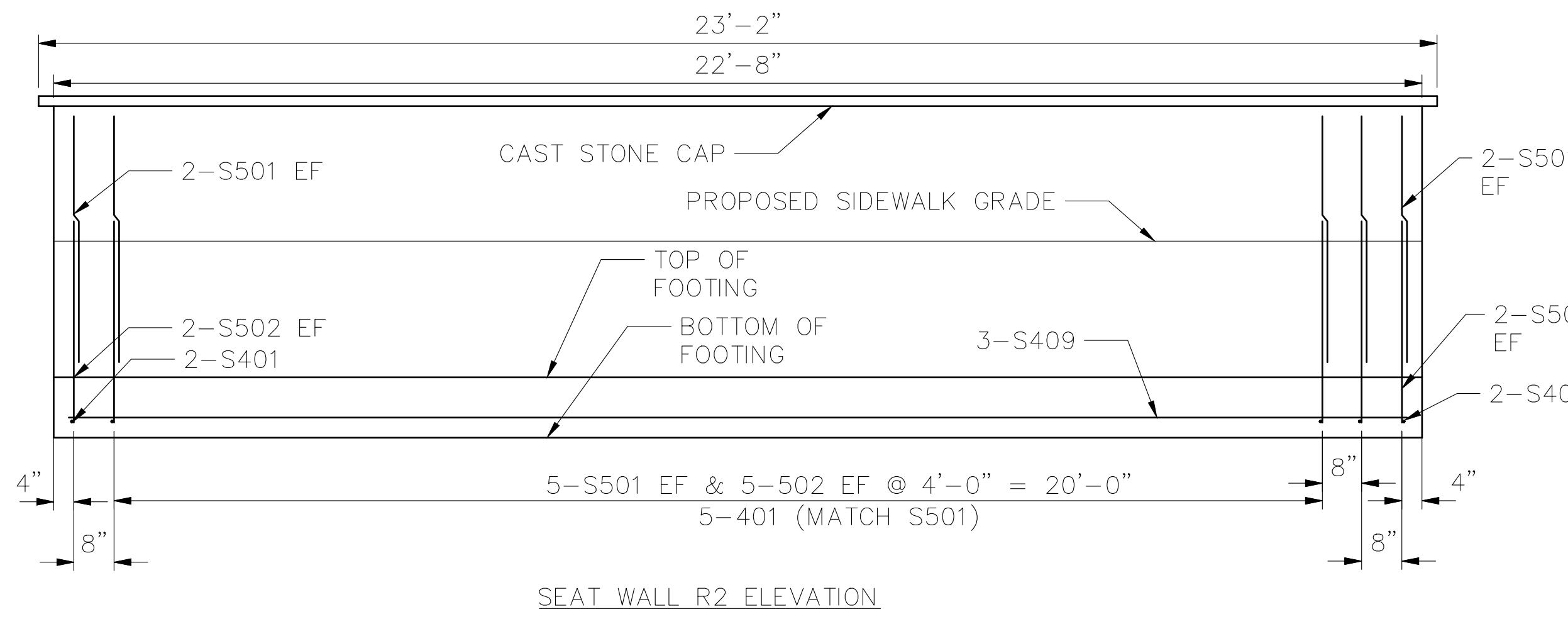
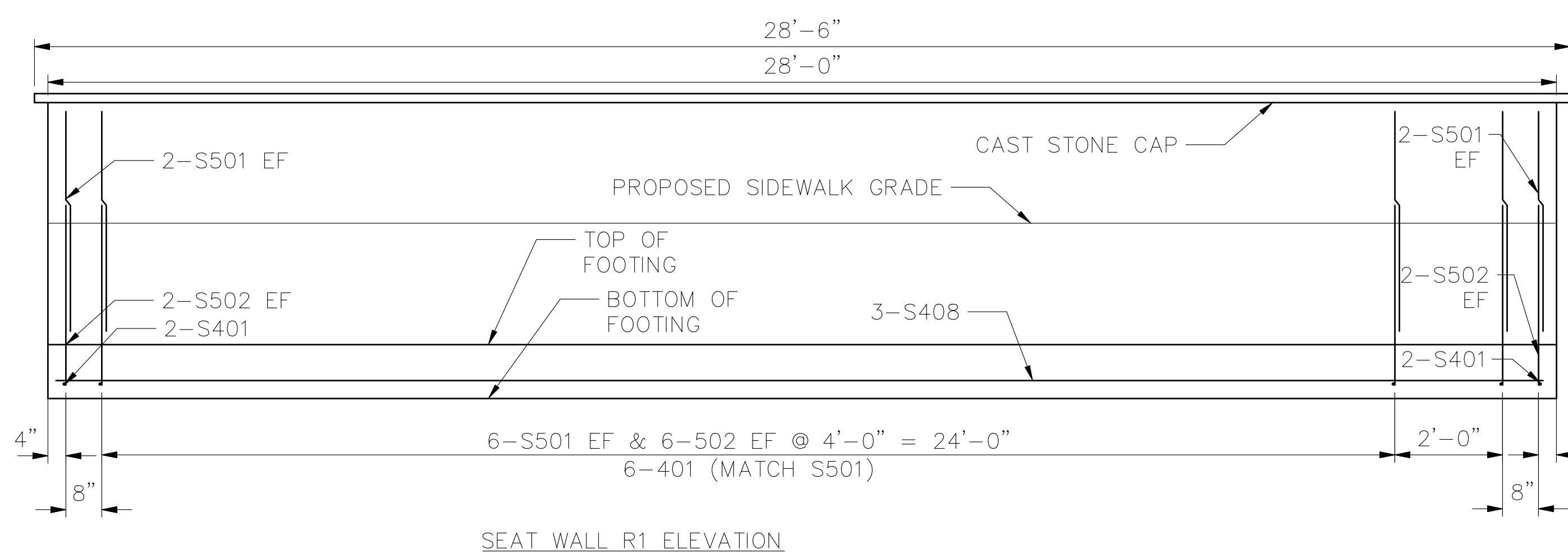


SEAT WALL L4 ELEVATION



SEAT WALL L8 ELEVATION

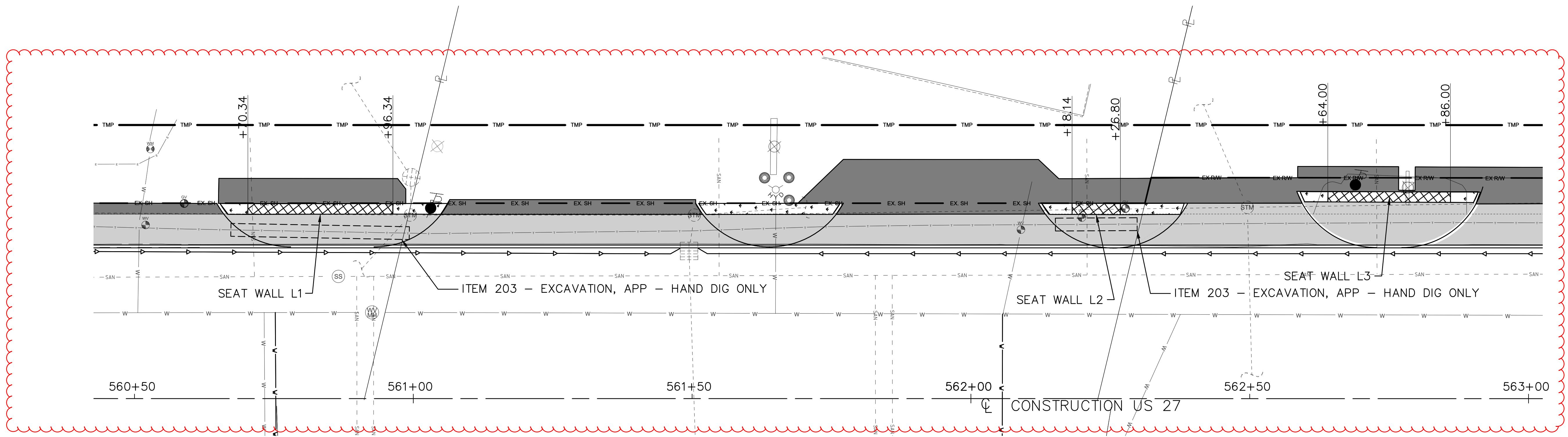




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SEAT WALL ELEVATIONS



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UTILITY LINETYPE LEGEND

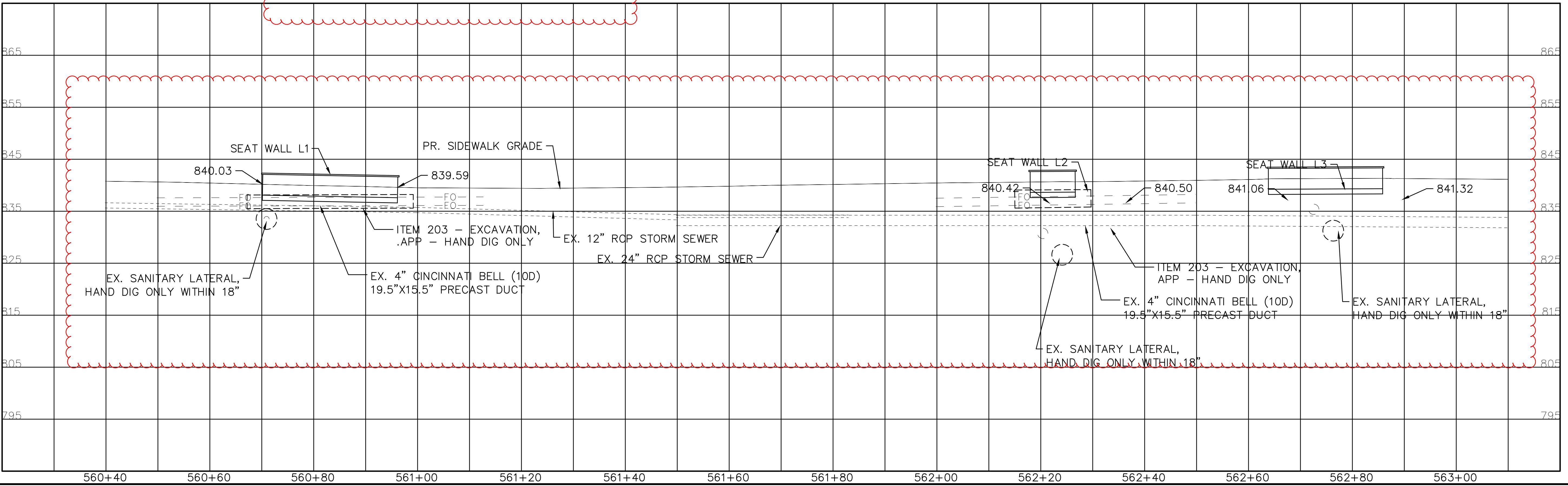
- E — UNDERGROUND ELECTRIC
- FO — UNDERGROUND FIBER OPTIC
- T — UNDERGROUND TELECOMMUNICATIONS
- OHT — OVERHEAD TELECOM / FIBER OPTIC
- OHU — OVERHEAD ELECTRIC / COMBINED
- Gx — GAS MAIN
- W — WATER MAIN
- SAN — SANITARY SEWER
- STORM SEWER
- LT— PROPOSED LIGHTING CONDUIT

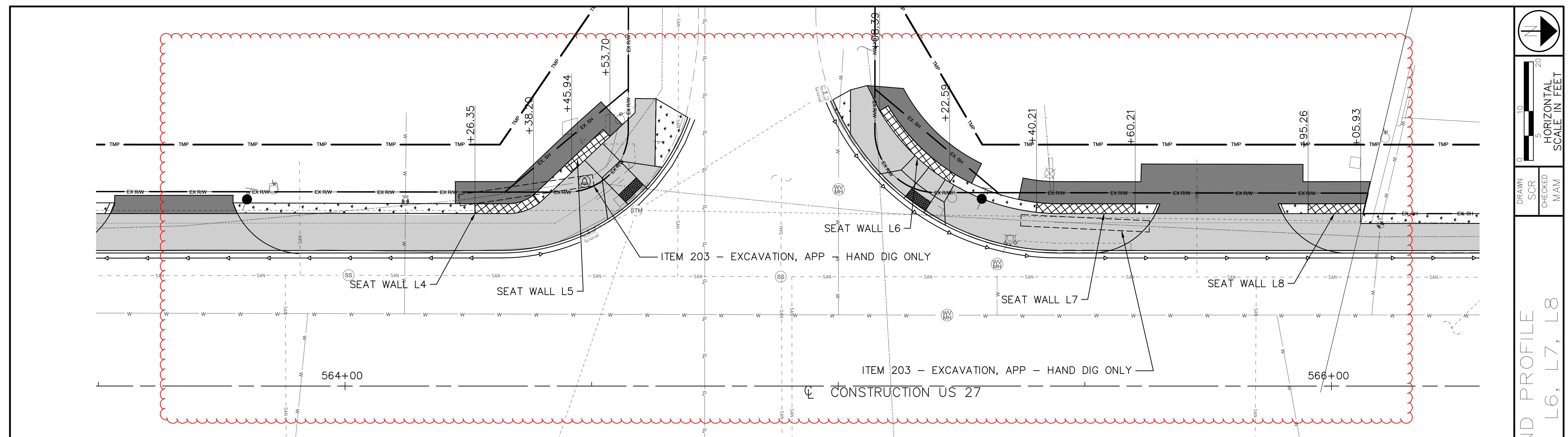
**LEGEND**

- PR. LIGHT POLE
- PR. LIGHT BOLLARD
- PR. PULL BOX
- SAWCUT AND PAVEMENT REPAIR
- SEAT WALL
- PROPOSED SIDEWALK
- DRIVEWAY AND PARKING LOT REPAIR LIM

A vertical red wavy line, likely representing a boundary or a specific signal in a diagram.

- CBT HAS AN EXISTING (10) DUCT CONDUIT SYSTEM THAT WILL BE IN CLOSE PROXIMITY OF PROPOSED WALL SEGMENTS ALONG THE LEFT SIDE OF US27. CAUTION SHOULD BE USED AT ALL TIMES DURING EXCAVATION OF THE PROPOSED WALLS.
- DURING EXCAVATION AND CONSTRUCTION OF THE PROPOSED WALL SEGMENTS SHOULD THE CBT CONDUIT SYSTEM BE EXPOSED AND THERE IS ANY QUESTION AS TO THE INTEGRITY OR DAMAGE OF THE SYSTEM CONTACT THE CBT INSPECTOR (RICH RAYLE: 513.608.7419) TO FIELD INSPECT PRIOR TO BACKFILLING.
- ONLY UTILITIES CROSSING THE WALL OR ITS FOUNDATION FOOTPRINT ARE SHOWN IN PROFILE.





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<u>UTILITY LINETYPE LEGEND</u>	
- E	UNDERGROUND ELECTRIC
- FO	UNDERGROUND FIBER OPTIC
- T	UNDERGROUND TELECOMMUNIC
OHT	OVERHEAD TELECOM / FIBER
OHU	OVERHEAD ELECTRIC / COMB
Gx	GAS MAIN
- W	WATER MAIN
- SAN	SANITARY SEWER
-----	STORM SEWER
-LT	PROPOSED LIGHTING CONDUIT

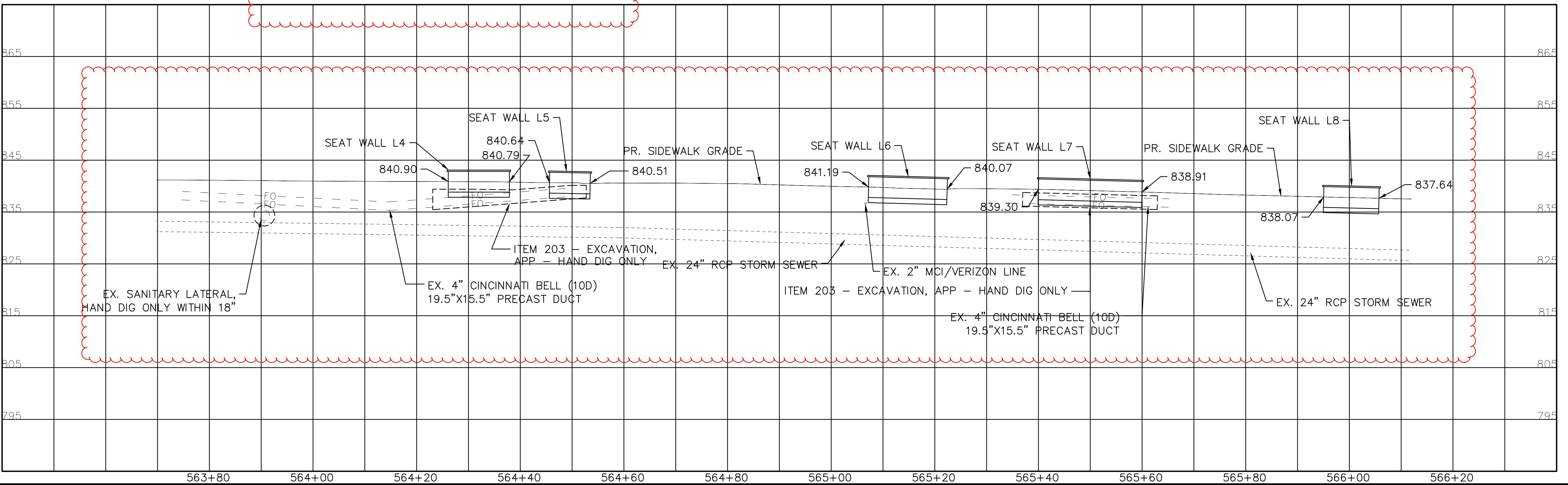
A decorative element consisting of a vertical red line with a wavy, undulating pattern along its entire length.

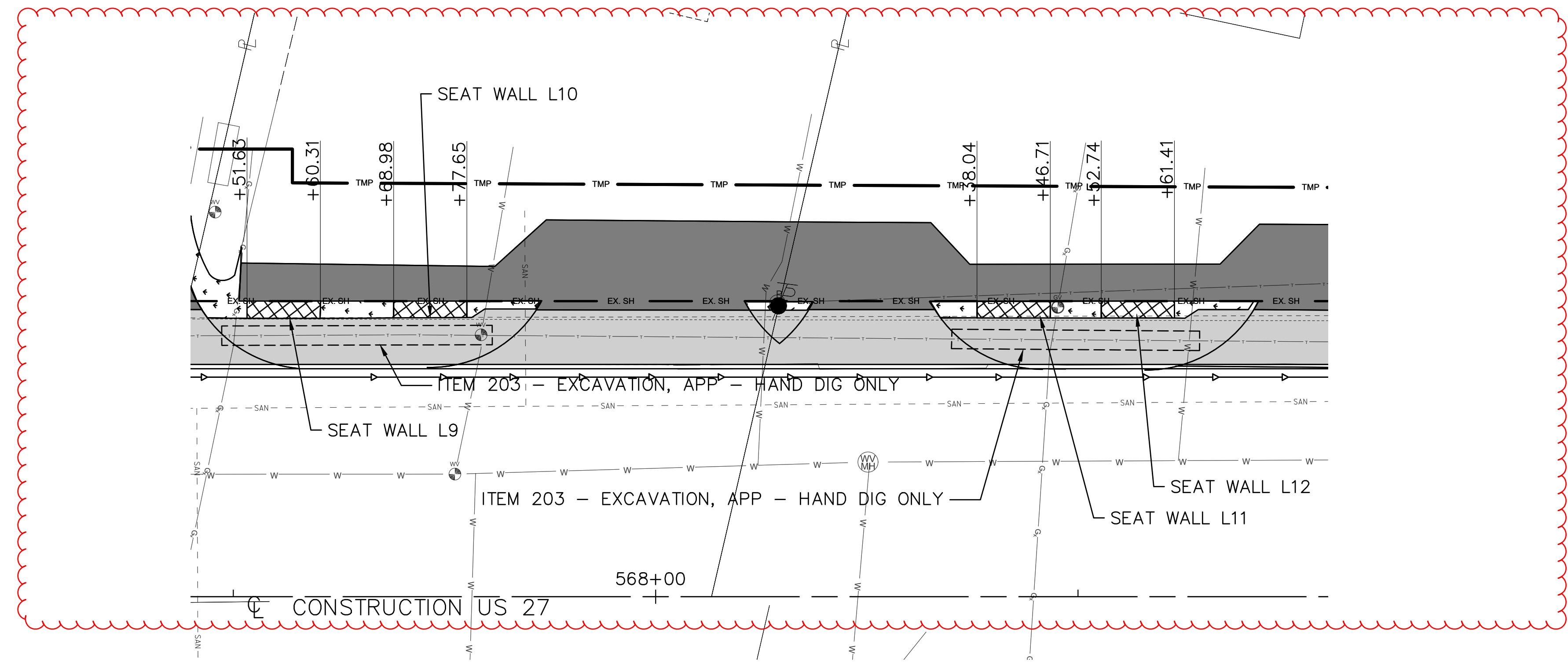
LEGEND

- PR. LIGHT POLE
- ⊕ PR. LIGHT BOLLARD
- [LT] PR. PULL BOX
- \\\\\\\\ SAWCUT AND PAVEMENT REPAIR
- XXXX SEAT WALL
- PROPOSED SIDEWALK
- DRIVEWAY AND PARKING LOT REPAIR LIMIT

NOTE:

- CBT HAS AN EXISTING (10) DUCT CONDUIT SYSTEM THAT WILL BE IN CLOSE PROXIMITY OF PROPOSED WALL SEGMENTS ALONG THE LEFT SIDE OF US27. CAUTION SHOULD BE USED AT ALL TIMES DURING EXCAVATION OF THE PROPOSED WALLS.
- DURING EXCAVATION AND CONSTRUCTION OF THE PROPOSED WALL SEGMENTS SHOULD THE CBT CONDUIT SYSTEM BE EXPOSED AND THERE IS ANY QUESTION AS TO THE INTEGRITY OR DAMAGE OF THE SYSTEM CONTACT THE CBT INSPECTOR (RICH RAYLE: 513.608.7419) TO FIELD INSPECT PRIOR TO BACKFILLING.
- ONLY UTILITIES CROSSING THE WALL OR ITS FOUNDATION FOOTPRINT ARE SHOWN IN PROFILE.





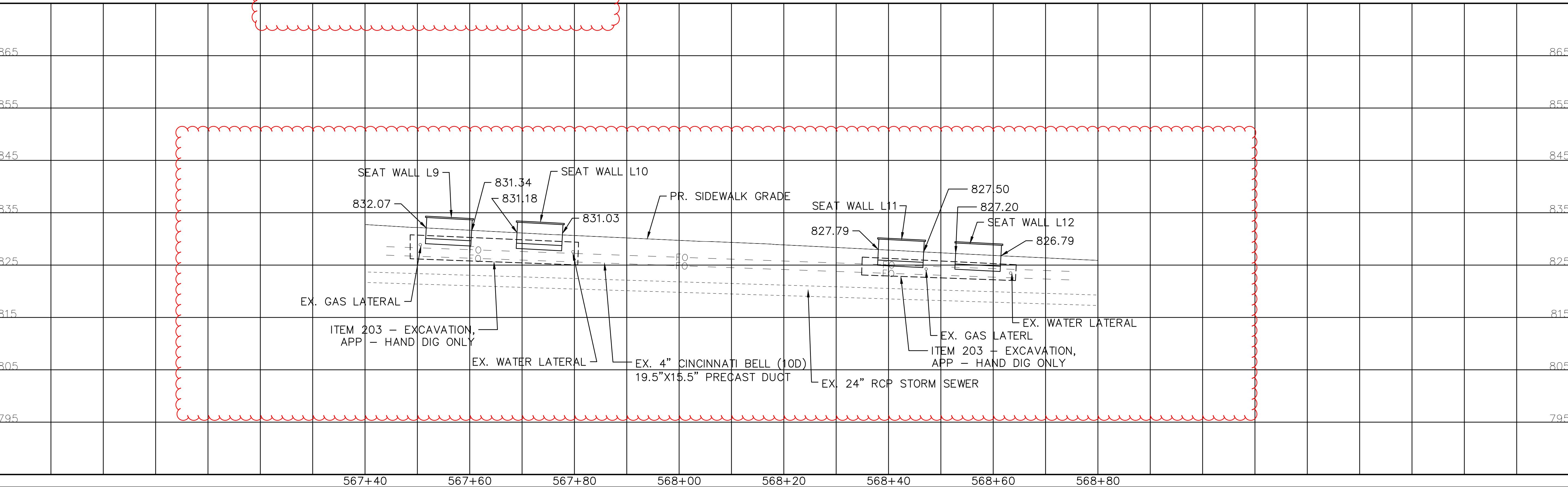
UTILITY LINETYPE LEGEND

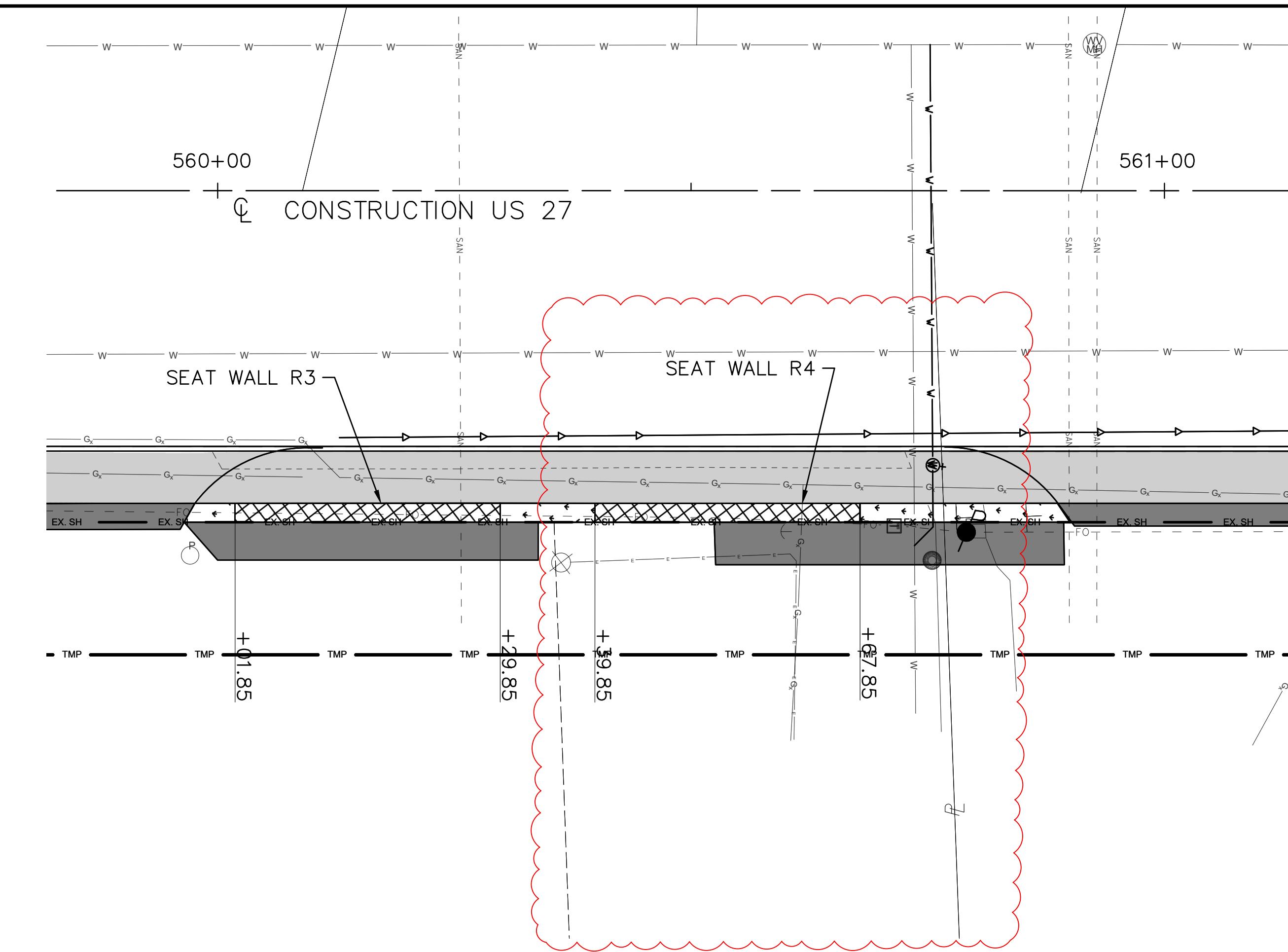
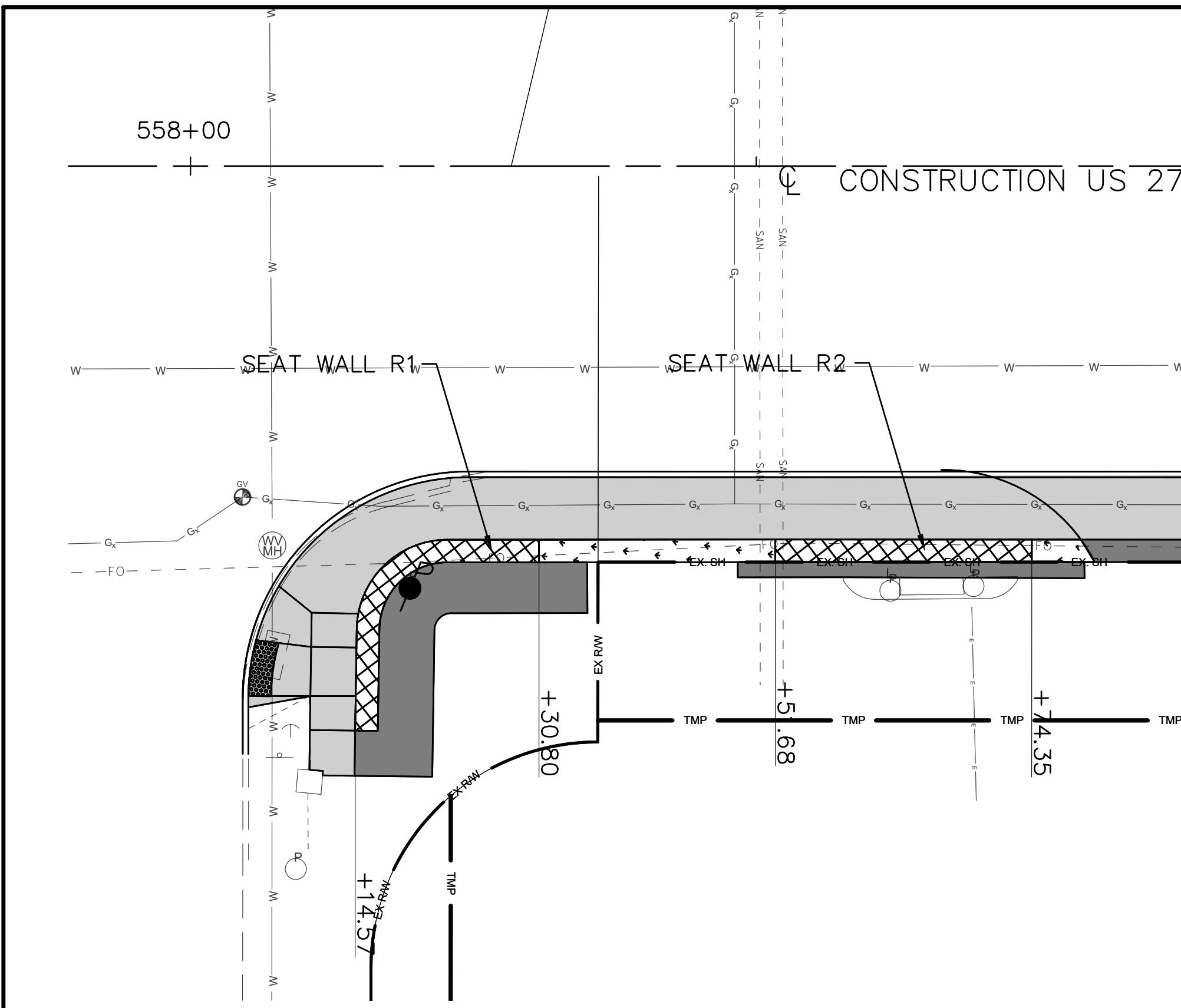
- E — UNDERGROUND ELECTRIC  
FO — UNDERGROUND FIBER OPTIC  
- T — UNDERGROUND TELECOMMUNIC  
OHT — OVERHEAD TELECOM / FIBER  
OHU — OVERHEAD ELECTRIC / COMBIN  
- Gx — GAS MAIN  
W — WATER MAIN  
- SAN — SANITARY SEWER  
---- STORM SEWER  
- LT — PROPOSED LIGHTING CONDUIT

<u>LEGEND</u>	
CATV	● PR. LIGHT POLE
	⊕ PR. LIGHT BOLLARD
	□ PR. PULL BOX
	\\\\\\\\ SAWCUT AND PAVEMENT REPAIR
	XXXXXX SEAT WALL
	PROPOSED SIDEWALK
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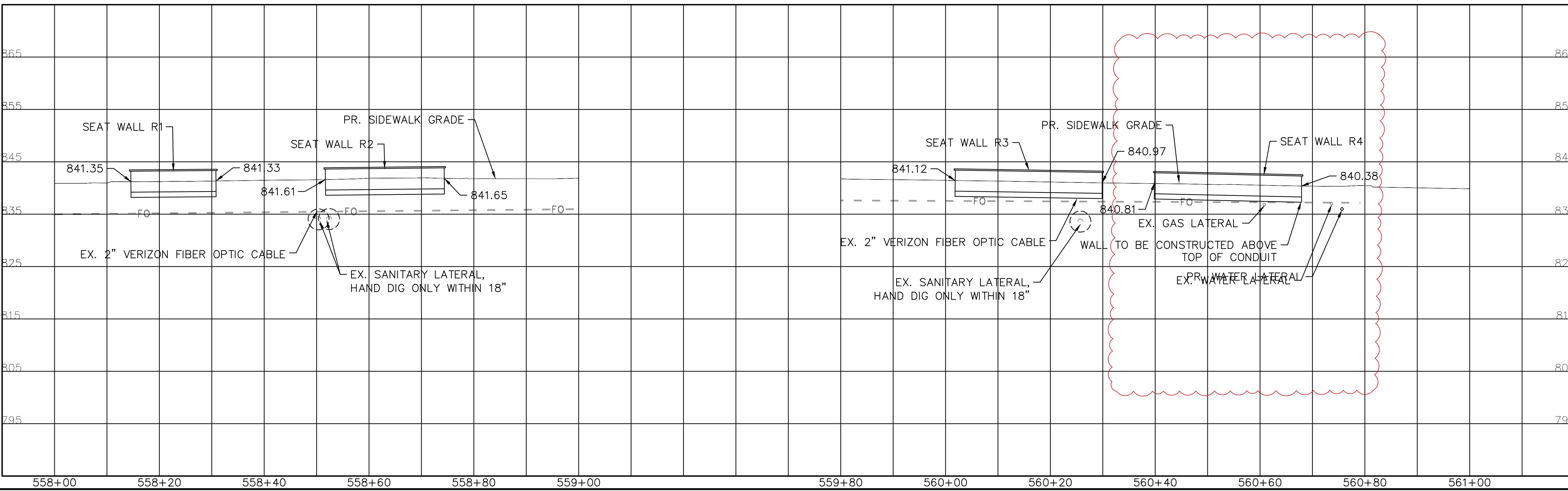
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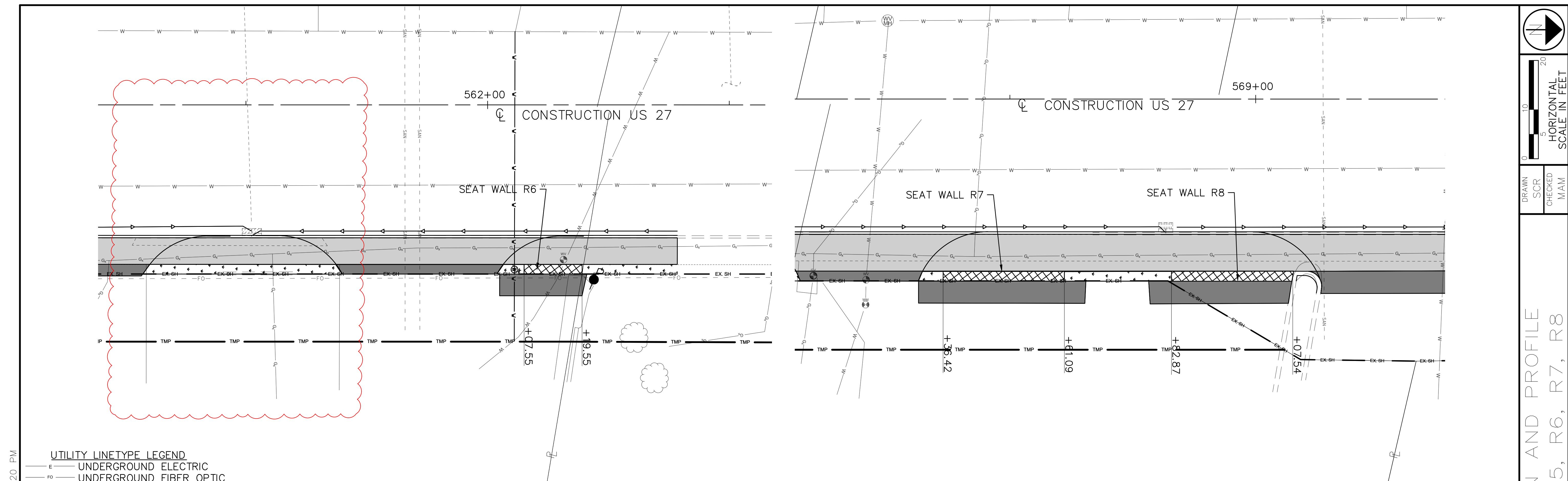
SEAT WALL PLAN AND PROFILE  
SEAT WALLS R1, R2, R3, R4



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4 6  
81 98

DRAWN SCR  
CHECKED MAM  
HORIZONTAL SCALE IN FEET



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UTILITY LINETYPE LEGEND

E — UNDERGROUND ELECTRIC  
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---- STORM SEWER  
LT — PROPOSED LIGHTING CONDUIT

The LEGO logo consists of the word "LEGO" in a bold, black, sans-serif font, with a registered trademark symbol (®) at the end. Below the text is a black circular logo containing a white stylized "L" shape. To the right of the circle is a black square logo with a white "E" shape inside.

GEND

- PR. LIGHT POLE
- PR. LIGHT BOLLARD
- PR. PULL BOX
- SAWCUT AND PAVEMENT REPAIR
- SEAT WALL
- PROPOSED SIDEWALK

NO

– ONLY UTILITIES CROSSING THE WALL OR ITS FOUNDATION FOOTPRINT ARE SHOWN IN PROFILE.

