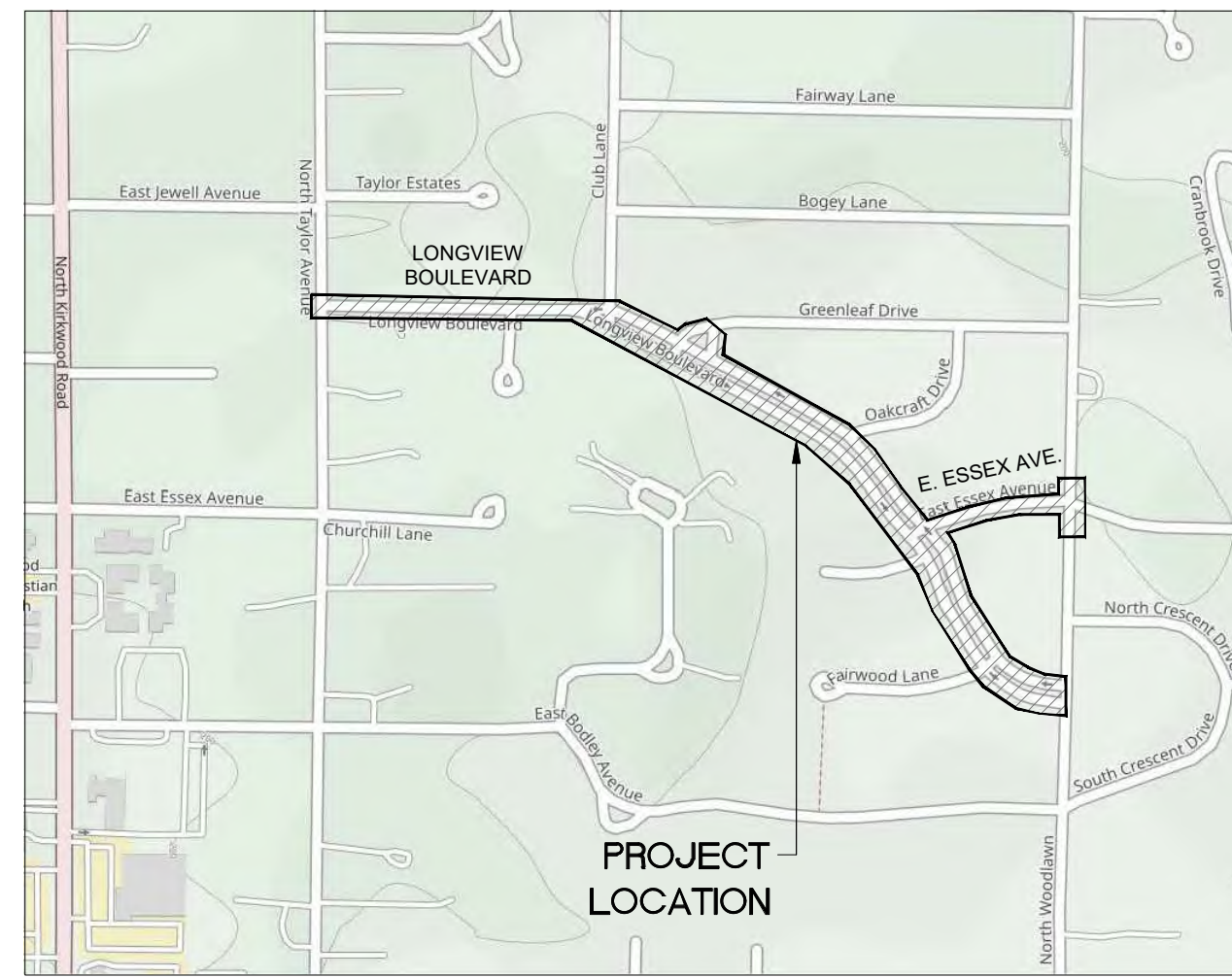


LONGVIEW BOULEVARD IMPROVEMENTS

LONGVIEW BLVD. & E. ESSEX AVE. (TAYLOR AVE. TO WOODLAWN AVE.)

KIRKWOOD, MISSOURI 63122



SITE LOCATION MAP

OWNER:



CITY OF KIRKWOOD
139 SOUTH KIRKWOOD ROAD
KIRKWOOD, MO 63122
(314) 822-5800
CONTACT: CHRIS KRUEGER

CONSULTANTS:



TWM, INC
720 OLIVE STREET, SUITE 200A
ST. LOUIS, MO 63101
(314) 241-6300
CONTACT: NICK CORRENTI

SHEET INDEX

SHEET NO.	DRAWING TITLE
1	TITLE SHEET
2	GENERAL NOTES AND SPECIFICATIONS
3	SUMMARY OF QUANTITIES
4-6	SCHEDULE OF QUANTITIES
7	TYPICAL SECTIONS
8-9	ALIGNMENT SHEETS
10-12	PLAN LAYOUTS
13-14	MEDIAN SIDEWALK PLAN & PROFILES
15-19	CURB RAMPS AND TRAFFIC CALMING
20-22	PAVEMENT MARKING & SIGNAGE
23-24	DRAINAGE AREA MAPS
25-26	CONSTRUCTION DETAILS
27-30	TRAFFIC CONTROL PLANS
31-37	CROSS SECTIONS



CONSULTING ENGINEERING
GEOSPATIAL SERVICES

ILLINOIS | SWANSEA
WATERLOO
EDWARDSVILLE
PEORIA

MISSOURI | ST. CHARLES
ST. LOUIS

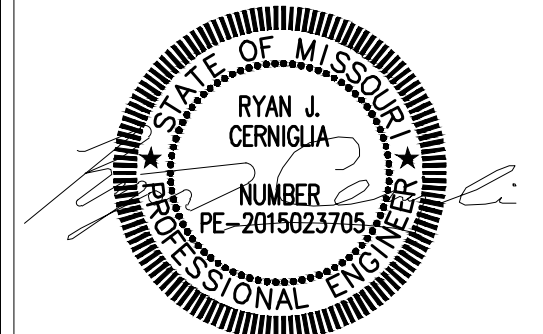
TENNESSEE | NASHVILLE

THOUVENOT, WADE & MOERCHEN, INC.

ST. LOUIS OFFICE
3701 S. LINDBERGH BLVD, STE 100
ST. LOUIS, MISSOURI
63127
(314) 241-6300
WWW.TWM-INC.COM
MO CERTIFICATE OF AUTHORITY: 001528

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL



SIGNATURE:
DATE SIGNED:
LICENSE EXPIRATION:

ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

REV.	DATE	DESCRIPTION
△		
△		
△		
△		

DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD IMPROVEMENTS
TAYLOR AVE. TO WOODLAWN AVE

TITLE:
TITLE SHEET

SHEET NO.
1

PROJECT CRITERIA

PRIOR TO COMMENCEMENT OF ANY WORK, OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL REVIEW ALL PLANS, SPECIFICATIONS, AND THE PROJECT SITE(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND ENGINEER WHO PREPARED THE PLANS OF ANY DISCREPANCIES THAT MAY REQUIRE MODIFICATION TO THESE PLANS OR OF ANY FIELD CONFLICTS.

SHOULD IT APPEAR THAT THE WORK TO BE PERFORMED OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY PRIOR TO COMMENCING WORK.

THESE PLANS AND SPECIFICATIONS ARE SUBJECT TO MODIFICATIONS DURING CONSTRUCTION WHEN CONDITIONS DEVELOP THAT WERE NOT APPARENT DURING THE DESIGN OF THE PLANS AND SPECIFICATIONS. ALL MODIFICATIONS MUST BE APPROVED BY ALL PERTINENT AGENCIES HAVING JURISDICTION OVER THIS PROJECT PRIOR TO CONSTRUCTION AND/OR IMPLEMENTATION OF PROPOSED CHANGES.

IN THE EVENT OF ANY DISCREPANCY BETWEEN ANY DRAWING OR ANY DRAWING AND SPECIFICATION AND FIGURES WRITTEN THEREON, THE CONTRACTOR SHALL NOTIFY ENGINEER FOR WRITTEN CLARIFICATION OF THE DISCREPANCY PRIOR TO COMMENCING THE WORK IN QUESTION. ONLY THOSE DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE UTILIZED FOR DETERMINATION OF LOCATION AND SIZES OF PROPOSED IMPROVEMENTS. DO NOT SCALE DRAWINGS.

CONTRACTOR SAFETY RESPONSIBILITIES

THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR PROJECT SITE(S) CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL, OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

TWM, INC. SHALL NOT BE RESPONSIBLE FOR OR HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES IN CONNECTION WITH THE WORK.

CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND INSTALLING ANY AND ALL TRAFFIC BARRICADES, MARKERS, SIGNS, FLAGMEN, TRAFFIC POLICE, AND/OR OTHER FACILITIES AS MAY BE REQUIRED BY THE VARIOUS JURISDICTIONS HAVING AUTHORITY OVER THIS PROJECT TO PROTECT THE GENERAL PUBLIC. SIGNS AND PROTECTIVE DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO NOTIFY THE STATE AND LOCAL POLICE, EMERGENCY SERVICE AGENCIES, AMBULANCE SERVICES, AND FIRE DEPARTMENTS OF ANY PROPOSED TRAFFIC DIVERSIONS.

TITLE / RIGHT-OF-WAY DISCLAIMER

TWM DOES NOT WARRANT THAT THESE DOCUMENTS CONTAIN COMPLETE INFORMATION REGARDING EASEMENTS, RESERVATIONS, RESTRICTIONS, RIGHT-OF-WAY BUILDING LINE SETBACKS AND OTHER ENCUMBRANCES. FOR COMPLETE INFORMATION, A CERTIFIED TITLE REPORT, OPINION, OR COMMITMENT FOR TITLE INSURANCE SHOULD BE OBTAINED AND THOROUGHLY REVIEWED.

F.E.M.A. CLASSIFICATION

FLOOD PLAIN MAP 29189C0309K, DATED 02-04-2015. SHOWS THAT NO PORTION OF SAID PROPERTY IMPROVEMENTS IS WITHIN A FLOOD PLAIN ZONE.

UTILITIES

WATER	KIRKWOOD WATER	(314)-822-5810
SEWER	METRO. ST. LOUIS SEWER DIST.	(314)-768-2787
STORM	METRO. ST. LOUIS SEWER DIST.	(314)-768-2787
ELECTRIC	KIRKWOOD ELECTRIC	(314)-822-5843
GAS	SPIRE	(314)-621-6960
TELEPHONE	AT&T	(314)-655-0649
CABLE TV	CHARTER / SPECTRUM	(636)-387-6641
MO ONE-CALL		(800) DIG-RITE

ANY RELOCATION OF PUBLIC OR PRIVATE UTILITIES SHALL BE UNDERTAKEN IN ACCORDANCE WITH ALL REQUIREMENTS OF THE UTILITY COMPANY AND WITH REGARD TO THE REQUIRED FEES, BONDS, PERMITS, AGREEMENTS, WORKING CONDITIONS, SAFETY CERTIFICATIONS, ETC. OF SAID COMPANY OR JURISDICTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND JURISDICTIONS A MINIMUM OF 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO ALLOW THE UTILITIES TO MARK THEIR SYSTEMS OR TO ALLOW THE PERTINENT JURISDICTIONS TIME TO COORDINATE THEIR STAFF, MATERIALS, AND EQUIPMENT TO CONDUCT INSPECTION.

ALL UTILITIES INCLUDING BUT NOT LIMITED TO FIRE HYDRANTS, VALVE PIT COVERS, VALVE BOXES, METER VAULTS, CURB STOP BOXES, FIRE OR POLICE CALL BOXES, TRAFFIC CONTROL SIGNALS OR OTHER UTILITY'S APPURTENANCES SHALL BE UN-OBSERVED AND ACCESSIBLE DURING THE CONSTRUCTION PERIOD.

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING OR INSTALLED UTILITIES OR STRUCTURES DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY OR JURISDICTION TO ENSURE APPROPRIATE REPAIR IS MADE IN ACCORDANCE WITH THE UTILITY OR JURISDICTIONS REQUIREMENTS. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT EXISTING UTILITIES.

UTILITIES AND APPURTENANCES TO REMAIN IN THEIR PRESENT LOCATION SHALL BE ADJUSTED TO GRADE.

THE CONTRACTOR IS RESPONSIBLE FOR SECURING ALL PERMIT FROM ST. LOUIS COUNTY, MISSOURI DEPARTMENT OF NATURAL RESOURCES, AND/OR THE METROPOLITAN ST. LOUIS SEWER DISTRICT.

UTILITY DISCLAIMER

THE TYPE, SIZE, AND LOCATION OF UTILITIES AS DELINEATED ON THESE DRAWINGS AND/OR CIVIL ENGINEERING DESIGN DOCUMENTS HAVE BEEN PLOTTED BY REVIEW OF AVAILABLE "AS-BUILT" OR RECORD DRAWINGS, FIELD SURVEY OF ONE-CALL MARKED UTILITIES, OR FIELD SURVEY OF ABOVE-GROUND SURFACE UTILITY FEATURES. THE OWNER AND ENGINEER HAVE NOT UNDERTAKEN ANY EXPLORATORY INVESTIGATIONS TO CONFIRM OR VERIFY THE UTILITY LOCATION SHOWN ON THESE DOCUMENTS. THEREFORE, THE UTILITIES EXACT LOCATION, SIZE, TYPE, AND FUNCTION MUST BE CONSIDERED APPROXIMATE AND FIELD VERIFICATION OF UTILITIES BY THE CONTRACTOR MUST BE UNDERTAKEN.

THE OWNER AND ENGINEER FURTHER DO NOT WARRANT THAT ALL UTILITIES HAVE BEEN ILLUSTRATED ON THESE DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTACTING ONE-CALL AND ALL NON-MEMBER UTILITIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES FOR FIELD VERIFICATION OF ALL UTILITIES ON THE SITE PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DETERMINES THAT A SUBSTANTIAL DISCREPANCY EXISTS BETWEEN FIELD VERIFIED UTILITIES AND THOSE PRESENTED ON THESE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER FOR CLARIFICATION AND PROJECT DIRECTION.

STORMWATER MANAGEMENT FUTURE DISTURBANCE NOTE

PROJECT DISTURBANCE = 0.98 ACRES
PROJECT RUNOFF DIFFERENTIAL = 0.54 CFS (INCREASE)

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORMWATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THE TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN)

GENERAL PROJECT SPECIFICATIONS

ALL WORK, INSTALLATION, PROCEDURES, MATERIALS, AND TESTING SHALL CONFORM TO THE FOLLOWING:

- CITY OF KIRKWOOD'S R.O.W. IMPROVEMENTS, STANDARD DRAWINGS AND SPECIFICATIONS.
- ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION, STANDARD DRAWINGS, LATEST EDITION.
- ST. LOUIS COUNTY DEPARTMENT TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- METROPOLITAN ST. LOUIS SEWER DISTRICT'S STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES, LATEST EDITION.
- METROPOLITAN ST. LOUIS SEWER DISTRICT'S RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES, LATEST EDITION.
- MISSOURI DEPARTMENT OF NATURAL RESOURCES, LAND DISTURBANCE GENERAL PERMIT FOR SOIL EROSION AND SEDIMENT CONTROL.
- ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION, SEDIMENT AND EROSION CONTROL MANUAL, LATEST EDITION.
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), LATEST EDITION.
- ALL STATE, MUNICIPAL, AND LOCAL UNITS OF GOVERNMENT REGULATIONS HAVING JURISDICTION OVER THE PROJECT

TO THE EXTENT IN WHICH ANY INCONSISTENCIES, OR DISCREPANCIES EXIST BETWEEN THE LISTED SPECIFICATION, STANDARD, CODES, OR GUIDELINES BY GOVERNING BODIES AND/OR THESE PLANS AND SPECIFICATIONS, THE MOST STRINGENT SPECIFICATION AND/OR STANDARD SHALL BE BINDING AND APPLICABLE.

THE CONTRACTOR IS RESPONSIBLE FOR CONFORMING TO ALL MISSOURI DNR STORM WATER PERMIT REQUIREMENTS AND FOR OBTAINING A LAND DISTURBANCE PERMIT, AND THE STORM WATER POLLUTION PREVENTION PLAN FOR THE PROJECT SITE.

WHERE SECTION OR SUB-SECTION SURVEY MONUMENTS ARE ENCOUNTERED, THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AUTHORIZED SURVEYING AGENT HAVE WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL ABANDONED UNDERGROUND STRUCTURES ENCOUNTERED SHALL BE REMOVED TO SUFFICIENT DEPTH TO ENABLE THE PERTINENT UTILITIES TO BE CONSTRUCTED.

ALL ITEMS DESIGNATED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN COMPLIANCE WITH ALL CITY, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL CONSTRUCTION MATERIALS AND DEBRIS RESULTING FROM THE CONSTRUCTION OPERATIONS.

ALL WORK, MATERIALS, AND INSTALLATION SHALL NOT BE DEEMED SATISFACTORY UNTIL SUCH TIME THAT APPROVAL IS OBTAINED FROM THE AGENCY HAVING JURISDICTION OVER THE PROJECT.

THE CONTRACTOR SHALL PROCEED AT HIS OWN RISK IN PERFORMING ANY WORK PRIOR TO VERIFYING OR RECEIVING ALL NECESSARY PERMITS.

CITY REQUIRED STORMWATER BMPs:

THE PROPOSED AMENDED SOIL STORMWATER BMPs ARE UNDER THE CITY OF KIRKWOOD JURISDICTION AND ARE NOT REQUIRED BY MSD.

SURVEY INFORMATION

SURVEY GENERAL NOTES AND PARAMETERS:

- SURVEY IS ONLY VALID TO THE ORIGINAL PURCHASER. IT IS NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
- ALL BUILDINGS, SURFACES AND SUBSURFACE IMPROVEMENTS ON AND ADJACENT TO THE SITE ARE NOT NECESSARILY SHOWN.
- BASIS OF BEARING AND COORDINATES: ALL DISTANCE AND COORDINATS ARE GROUND (GRID SCALED) VALUES, REFERENCE TO MISSOURI STATE PLANE COORDINATE SYSTEM, EAST ZONE 2401.

STATION: SEILER TREECOURT CORS ARP
CORS ID: MOSI
PID: DL3650
NORTHING: 302,843.569 (M)
EASTING: 4,271,260.572 (M)

TO CONVERT TO GRID MULTIPLY BY A COMBINED SCALE FACTOR OF 0.99993347
LINEAR UNIT: US SURVEY FEED (SFT)
GEODETIC DATUM: NAD 83 (2011)
VERTICAL DATUM: NAVD 88 (GEOID 18)
PROJECT LOCATION:
LATITUDE: 38°35'25.19357"N NORTHING: 993578.328 SFT
LONGITUDE: 90°24'13.74296"W EASTING: 831254.662 SFT
HEIGHT: 556.277 FT ELEV.: 459.845 FT
CM SCALE FACTOR: 1.000092357335

SURVEY CONTROL POINTS

Point Table					
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION	
100	1003803.838	847700.533	651.03	GPS CONTROL POINT PK SET	
101	1003365.457	847658.350	658.00	GPS CONTROL POINT IRCS	
102	1003480.023	848980.381	627.73	SURVEY CONTROL POINT IRCS	
103	1002742.929	849597.205	620.89	GPS CONTROL POINT PK EXISTING	
104	1003778.527	847934.675	648.09	SURVEY CONTROL POINT PK SET	
105	1003799.944	848286.972	637.47	SURVEY CONTROL POINT PK SET	
106	1003712.590	848634.564	633.43	SURVEY CONTROL POINT PK SET	
107	1003238.760	849210.423	625.30	SURVEY CONTROL POINT PK SET	
108	1003301.800	849610.171	642.13	SURVEY CONTROL POINT PK SET	
109	1002871.908	849377.303	620.26	SURVEY CONTROL POINT PK SET	

SITE BENCHMARK

MSD POINT #13008: NAVD29 ELEV=640.52 FTUS. CUT SQUARE ON TOP OF NORTH EDGE OF CONCRETE SPILLWAY ON WEST SIDE OF LINDBERGH BOULEVARD; 53 FEET SOUTH OF CENTERLINE HOLLYWOOD LANE EXTENDED FROM THE EAST AND 27 FEET WEST OF CENTERLINE LINDBERGH BOULEVARD. SP MO EAST N=306550±
E=258149± METER--ESTIMATED ROUGH NAD83 LAT=38.595647(N/+)
LONG=90.406453± (W/-)

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MD-00310

PAVEMENT, SIDEWALK & CURBING NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS FOR CONSTRUCTION OF ALL PAVED SURFACES. THIS INCLUDES PLACEMENT BY MEANS OF MACHINE OR HAND FLATWORK AND THE SEQUENCING OF INSTALLATION.

ASPHALTIC CONCRETE SURFACE COURSE SHALL BE OF TYPE C BITUMINOUS CONCRETE WEARING SURFACE AND SHALL MEET THE MATERIAL SPECIFICATIONS AS STATED IN THE STANDARD SPECIFICATIONS. CONCRETE SURFACE MATERIALS SHALL HAVE MERAMEC SAND/GRAVEL, 7.27 SACK WITH AIR (5-8%) IN ACCORDANCE WITH THE DETAILS AS PROVIDED IN THIS PLAN SET AND THE STANDARD SPECIFICATIONS. DEPTHS OF MATERIALS SHALL BE AS SPECIFIED WITHIN THIS PLAN SET.

AGGREGATE BASE COURSES SHALL BE OF TYPE 5 AND MEET THE MATERIAL SPECIFICATIONS AS STATED IN THE STANDARD SPECIFICATIONS FOR THE MATERIAL TYPE.

CURING AND PROTECTION SHALL TAKE PLACE ON ALL EXPOSED CONCRETE SURFACES.

THE CONTRACTOR SHALL ENSURE PROPER BACKFILLING OF CURBS AND PAVEMENT.

THE SUBGRADE FOR PROPOSED PAVEMENT AREAS SHALL BE FINISHED TO WITHIN 0.1 FOOT PLUS OR MINUS OF THE PLAN ELEVATION. THE CONTRACTOR SHALL ENSURE THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND GRADED TO THE TOLERANCES INDICATED. IT IS UNDERSTOOD THAT HE/SHE ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE PRIOR TO THE INSTALLATION OF BASE MATERIALS.

CONCRETE FOR SIDEWALKS SHALL BE AT A MINIMUM OF SIX (6) SACK CEMENT MIX WITH A "MISSOURI" TYPE RIVER SAND AND STONE OR GRAVEL, MAXIMUM FOUR (4) INCH SLUMP. CONCRETE WILL BE PLACED BETWEEN FORMS, THE TOP TROWELED TO A SEMI-ROUGH FINISH OR BROOM FINISH TO PREVENT SLIPS. SIDEWALKS SHALL BE OF THICKNESS AS SHOWN ON THE PLANS ON TOP OF A 4" GRAVEL BASE UNLESS OTHERWISE NOTED. SIDEWALK CONCRETE SHALL BE A MINIMUM OF 3,500PSI COMPRESSIVE STRENGTH AT TWENTY EIGHT (28) DAYS. CONCRETE MATERIAL FOR SIDEWALK SHALL COMPLY WITH THE ST. LOUIS COUNTY STANDARD SPECIFICATIONS.

AN EDGING TOOL SHALL BE RUN ALONG THE SIDES AND AT CROSS JOINTS. EXPANSION JOINTS SHALL BE PLACED THE FULL WIDTH AND DEPTH OF CONCRETE AS SHOWN ON THE CONSTRUCTION DETAILS. EXPANSION JOINTING SHALL BE LOCATED EVERY 50 FEET AND WHERE THE SIDEWALK MEETS THE CURB, A BUILDING, ANOTHER SIDEWALK STRUCTURE OR AT THE END OF EACH POUR. EXPANSION JOINTS SHALL BE A PREFORMED FOAM JOINT FILLER WITH POURED JOINT SEALER AT ALL LOCATIONS. CONTRACTION JOINTS SHALL HAVE POURED JOINT SEALANT. THE TOP OF THE CONCRETE WALK SHALL BE MARKED WITH CROSS JOINTS (DUMMY JOINTS) A MINIMUM OF ONE-HALF (½) INCH DEEP, FIVE (5) FOOT ON CENTER AND SHALL BE AT RIGHT ANGLES. CONCRETE CONTRACTION JOINTING ON SIDEWALKS SHALL BE SET AT 5 FOOT CENTERS. SEALING OF JOINTS SHALL BE IN ACCORDANCE WITH SECTION 717 OF THE ST. LOUIS COUNTY STANDARD SPECIFICATIONS.

CONTRACTOR AT ALL TIMES SHALL ADHERE TO THE ADA STANDARDS AS SET FORTH IN THE U.S. 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN & UNITED STATES ACCESS BOARD'S PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY (PROWAG). ALL FINISHED GRADES ALONG THE SIDEWALK SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 2% AND MAXIMUM LONGITUDINAL SLOPE OF 5%. THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN COST FOR REMOVING AND REPLACING ANY PEDESTRIAN PATH SURFACE THAT EXCEEDS THE LIMITS SET ABOVE.

EARTHWORK NOTES

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE CITY OF KIRKWOOD AT LEAST SEVENTY TWO (72) HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES OR WORK REQUIRING INSPECTION OR APPROVAL BY THE AFFECTED UNITS OF GOVERNMENT.

THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHEREVER POSSIBLE. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

DEWATERING OF AREAS TO BE EXCAVATED OR FILLED FOR STRUCTURES, PAVEMENT, OR UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

ALL TRENCHES UNDER OR ADJACENT TO PROPOSED PAVEMENT OR SIDEWALKS SHALL BE BACKFILLED TO SUBGRADE ELEVATIONS WITH COMPACTED ¾" MINUS CRUSHED LIMESTONE. CRUSHED LIMESTONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.

ALL FILLED SPACES SHALL BE COMPACTED IN MAXIMUM OF 12" LIFTS TO 90% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.

ELEVATIONS AND CONTOURS SHOWN ARE TO TOP OF FINISHED GROUND OR PAVED SURFACE UNLESS NOTED OTHERWISE.

ALL TRASH, DEBRIS, ORGANIC MATERIALS, REFUSE, FROZEN EARTH, ETC. SHALL BE REMOVED FROM FILL AREAS PRIOR TO PLACEMENT OF CONTROLLED FILL. ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE THROUGHOUT CONSTRUCTION. THIS INCLUDES ALL LABOR MATERIALS USED BEYOND WHAT IS SPECIFIED IN THE PLANS. ITEMS DEEMED NECESSARY FOR MAINTAINING DRAINAGE ARE CONSIDERED TO BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL NOT BE PAID SEPARATELY.

NO GRADING MEASURES SHALL BE STEEPER THAN THREE FEET HORIZONTAL TO ONE FOOT VERTICAL (3H:1V) UNLESS OTHERWISE APPROVED BY THE ENGINEER. ANY LOCATIONS GREATER THAN THREE TO ONE SHALL HAVE EROSION CONTROL BLANKET PROVIDED.

EXISTING SLOPES TO RECEIVE FILL WHICH ARE STEEPER THAN FIVE FEET HORIZONTAL TO ONE FOOT VERTICAL (5H:1V) SHALL BE BENCHED PRIOR TO THE PLACEMENT OF FILL. THE BENCHES SHOULD BE SPACED SUCH THAT THE HEIGHT OF THE CUT AT THE UP-SLOPE END OF THE BENCH IS LESS THAN FIVE FEET (5FT).

REQUIRED EROSION CONTROL MEASURES AND SPECIFICATIONS CAN BE FOUND WITHIN THIS DOCUMENT AND ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE STANDARDS SET BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES FOR A LAND DISTURBANCE PERMIT. THE CONTRACTOR IS REQUIRED TO OBTAIN THIS PERMIT THROUGH THE DEPARTMENT OF NATURAL RESOURCES AND PROVIDE ALL NECESSARY DOCUMENTS. COSTS AND FEES RELATED TO PERMITTING IS CONSIDERED INCIDENTAL TO THE CONTRACT.

TRAFFIC CONTROL NOTES

ALL TRAFFIC CONTROL INCLUDING BUT NOT LIMITED TO, WORK ZONE, TEMPORARY, AND PERMANENT, SHALL BE FURNISHED, INSTALLED, MAINTAINED, RELOCATED, AND/OR REMOVED IN ACCORDANCE WITH SECTION 612 OF THE LATEST ST. LOUIS COUNTY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL IN COMPLIANCE WITH THE GOVERNING AGENCY REQUIREMENTS AND SHALL PROVIDE A TRAFFIC CONTROL PLAN TO THE OWNER AND THE CITY OF CREVE COEUR FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND INSTALLING ANY AND ALL TRAFFIC BARRICADES, MARKERS, SIGNS, FLAGGERS, TRAFFIC POLICE, AND/OR OTHER FACILITIES AS MAY BE REQUIRED BY THE VARIOUS JURISDICTIONS HAVING AUTHORITY OVER THIS PROJECT TO PROTECT THE GENERAL PUBLIC. SIGNS AND PROTECTIVE DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF NOTIFYING THE STATE AND LOCAL POLICE, EMERGENCY SERVICES AGENCIES, AMBULANCE SERVICES, POSTAL SERVICE AND FIRE DEPARTMENTS OF ANY PROPOSED TRAFFIC DIVERSION OR PARKING LOT CLOSURE FOR CONSTRUCTION MATERIAL ACCESS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ON ALL LOCATIONS FOR STAGGING OF CONSTRUCTION MATERIALS.

THE MUST NOTIFY ALL ADJACENT PROPERTY OWNERS IN THE AREA AT LEAST 48 HOURS IN ADVANCE OF ANY DISRUPTED ACCESS TO THEIR PROPERTY OR ADJACENT CONSTRUCTION ACTIVITIES.

STANDARD MSD NOTES

ALL DESIGN WORK, CONSTRUCTION MATERIALS AND TECHNIQUES MUST MEET GUIDELINES SET FORTH IN MSD STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES (2009) AND MSD RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES (2018) UNLESS SPECIFICALLY EXEMPTED AS NOTED ON THE PLANS.

ALL STORM AND SANITARY SEWER STRUCTURES AND APPURTENANCES TO BE DEDICATED TO MSD, OR TO BE PRIVATE UNDER MSD INSPECTION, SHALL CONFORM TO THE METROPOLITAN ST. LOUIS SEWER DISTRICT, STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES, 2023. THAT WILL INCLUDE STANDARD DETAILS SHOWN THEREIN, ALL SUBSEQUENT CHANGES MADE THERETO, AND SHALL ALSO INCLUDE THE FOLLOWING:

PART 2 – MATERIALS OF CONSTRUCTION

SECTION G PIPE.

- 12. CORRUGATED POLYPROPYLENE PIPE.
- D. PIPE FOR GRAVITY SEWER INSTALLATIONS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321. CONSOLIDATION BY WATER (JETTING OR PUDDLING) SHALL NOT BE USED. CONSOLIDATION SHALL BE IN ACCORDANCE WITH MSD STANDARD CONSTRUCTION SPECIFICATIONS FOR TRENCH BACKFILL. PRICE FOR COMPACTED BACKFILL SHALL BE INCLUDED IN PIPE UNIT COST.
 - 1. FOR USE IN SANITARY AND COMBINED SEWER INSTALLATIONS, A REPRESENTATIVE FROM THE PIPE MANUFACTURER SHALL VISIT THE SITE WITHIN THE FIRST 100 FEET OF PIPE INSTALLATION. COORDINATION OF THIS SITE VISIT SHALL BE ARRANGED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE THE MSD INSPECTOR AT LEAST 24 HOURS' NOTICE OF THE PLANNED DATE AND TIME OF THE MANUFACTURER'S SITE VISIT.
 - 2. FOLLOWING THE SITE VISIT, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A LETTER FROM THE PIPING MANUFACTURER SUMMARIZING THEIR OBSERVATIONS. AT A MINIMUM, THE LETTER SHALL:
 - a) INDICATE THE DATE THE INITIAL SECTION OF PIPE WAS INSTALLED; AND
 - b) VERIFY THAT THE INSTALLATION OCCURRED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- E. TRENCH WIDTH SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION RECOMMENDATIONS. DISTRICT STANDARD PAYLINE WIDTHS BASED ON THE NOMINAL INSIDE PIPE DIAMETER SHALL APPLY.

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THE SITE MAY REQUIRE ADDITIONAL STORM WATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THE THAT TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THE PLAN).

ANY FILLED AREAS, INCLUDING TRENCH BACKFILLS, UNDER BUILDINGS, PROPOSED STORM AND SANITARY LINES, AND PAVED AREAS, SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF "MODIFIED PROCTOR". FILL IS TO BE PLACED IN A MAXIMUM OF 9-INCH LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50-FOOT INTERVALS ALONG THE ROUTE OF THE PIPE; AT A MAXIMUM OF 2-FOOT VERTICALLY; AND LATERALLY ON EACH SIDE OF THE PIPE, AT A DISCHARGE EQUAL TO THE DEPTH OF FILL OVER THE PIPE. A COPY OF THESE RESULTS SHALL BE SUBMITTED TO MSD PRIOR TO CONSTRUCTION APPROVAL. THE UTILITY BACKFILL SHALL BE INCLUDED IN THE COST OF SEWER PIPE.

THE CONTRACTOR SHALL PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER & MSD. CONTACT MSD AT 314-768-2787.

LIMITS OF DISTURBANCE

THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHEREVER POSSIBLE.

GENERAL UTILITY NOTES

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE STORM SEWERS REQUIRED PRIOR TO ORDERING THESE ITEMS. STORM SEWER LENGTHS SHOWN ON THE PLANS ARE MEASURED TO THE CENTER OF EACH STRUCTURE.

SEWER PIPES, STRUCTURES & FITTINGS SHALL BE IN COMPLIANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICT RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY AND STORMWATER DRAINAGE FACILITIES, FEBRUARY 2018; AND THE METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES, 2009.

MSD PERMITS ARE REQUIRED PRIOR TO THE ABANDONMENT OR REMOVAL OF EXISTING SEWERS. TO RECEIVE MSD PERMITS THE PROJECT MUST HAVE MSD PLAN APPROVAL. NOTIFY MSD 48 HOURS PRIOR TO SEWER ABANDONMENT AND/OR REMOVAL. SURVEYING AND SUBMITTING AS-BUILT DRAWINGS TO MSD PER THEIR REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ANY RELOCATION OF PUBLIC OR PRIVATE UTILITIES SHALL BE UNDERTAKEN IN ACCORDANCE WITH ALL REQUIREMENTS OF THE UTILITY COMPANY AND WITH REGARD TO THE REQUIRED FEES, BONDS, PERMITS, AGREEMENTS, WORKING CONDITIONS, ETC. OF SAID COMPANY OR JURISDICTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND JURISDICTIONS A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF WORK TO ALLOW THE UTILITIES TO MARK THEIR LINES OR TO ALLOW THE PERTINENT JURISDICTIONS TIME TO COORDINATE THEIR STAFF, MATERIALS, AND EQUIPMENT TO CONDUCT INSPECTION.

ANY FACILITIES OR APPURTENANCES, WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION, SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL/ADJUSTMENTS AND ADJUST HIS OPERATIONS IN ORDER THAT, THE UTILITY'S OPERATIONS AND THE CONSTRUCTION OF THE PROJECT MAY PROGRESS IN A REASONABLE MANNER.

ANY FOUND ROOF DRAINS, SUMP PUMP LINES OR OTHER DRAINS WITHIN THE PROJECT LIMITS OR AS DIRECTED BY THE ENGINEER SHALL BE RECONNECTED INTO THE NEAREST SWALE, DITCH, STREET GUTTER OR PROPOSED STORM DRAINAGE STRUCTURE. COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

ABBREVIATIONS

ASPH.	PROPOSED POLYPROPYLENE SEWER PIPE	PP
ADJUST TO GRADE	PROPOSED PAVEMENT	PR. OR PROP.
BUILDING	RADIUS OR REMOVE	PVMT.
CONCRETE	REINFORCED CONCRETE PIPE	R
DO NOT DISTURB	REMOVED AND REPLACED	RCP
EACH	SIDEWALK	SW
ELEVATION	SANITARY SEWER	SAN
EDGE OF PAVEMENT	STORM SEWER	STM
EASEMENT	TO BE ABANDONED	TBA
EXISTING	TO BE REMOVED	TBR
GAS VALVE	TO BE REM'D AND REPLACED	TBRR
HYDRAULIC GRADE LINE	TEMPORARY	TEMP.
INVERT	TYPICAL	TYP.
MANHOLE	UNDERDRAIN	U.D.
MEET EXISTING	USE IN PLACE	UIP
MINIMUM	VITRIFIED CLAY PIPE	VCP
NOT TO SCALE	VERIFY IN THE FIELD	VIF
PERMANENT	WATER VALVE	WV
POWER POLE	WATER METER	WM

LEGEND

	ITEM	EXISTING	PROPOSED
EX. CENTER LINE	---	---	---
EX. EASEMENT	----	----	----
EX. OVERHEAD ELECTRIC	--- OHE ---	⊕	⊕
EX. UNDERGROUND ELECTRIC	--- UE ---	⊖	⊖
EX. FENCE	--- X ---	⊗	⊗
EX. GAS LINE	--- G ---	⊕	⊕
EX. RIGHT-OF-WAY	---	⊕	⊕
EX. SANITARY SEWER LINE	--- SAN ---	⊙	⊙
EX. SETBACK LINE	---	⊙	⊙
EX. UNDERGROUND TELEPHONE	--- UT ---	⊙	⊙
EX. TREE LINE	~ ~ ~ ~ ~	⊗	⊗
EX. WATER LINE	--- W ---	⊕	⊕
PR. FENCE	--- X ---	⊗	⊗

ILLINOIS | SWANSEA WATERLOO EDWARDSVILLE PEORIA

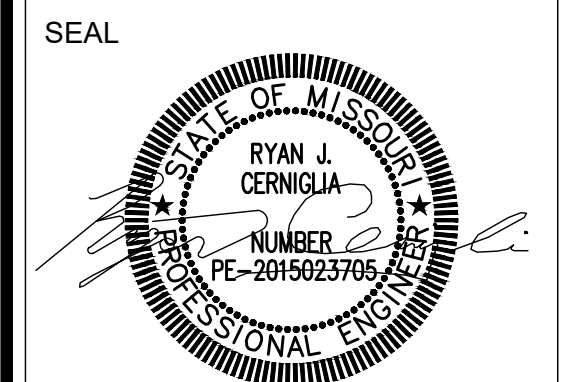
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 MO CERTIFICATE OF AUTHORITY: 001528

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IL. PROF. LAND SURV. CORP.	048-000029
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974



SIGNATURE:
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ISSUED FOR: FINAL ENGINEERING
 DATE OF ISSUANCE: 08/25/2023

REV.	DATE	DESCRIPTION
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DRAWN BY: RJC
 DESIGNED BY: RJC
 CHECKED BY: NMC
 APPROVED BY: JRL
 PROJECT NO: 211243

PROJECT:
 LONGVIEW BOULEVARD IMPROVEMENTS
 TAYLOR AVE. TO WOODLAWN AVE

TITLE:
 GENERAL NOTES AND SPECIFICATIONS

SHEET NO.
 2



WUNNENBERG: S24-35
 MSD MAP: 23M-1 & 23M-2
 MSD No.: 23MSD-00310

SUMMARY OF QUANTITIES				
ITEM NO.	PAY ITEM	ITEM DESCRIPTION	UNIT	QUANTITY
1	202-20.10	REMOVAL OF IMPROVEMENTS	LS	1
2	202-99.02	TREE REMOVALS	EA	36
3	203-99.07	MISC. AMENDED SOILS DISCONNECT	CUYD	24
4	207-99.09	LINEAR GRADING FOR ADA FACILITIES, CLASS 2	STA	26.2
5	304-05.04	TYPE 5 AGGREGATE BASE (4" THICK)	SQYD	1,860
6	304-99.05	6" BASE ROCK (2" CLEAN)	SQYD	1,809.5
7	403-99.02	ASPHALT SPEED HUMP, 4 IN. HEIGHT (INCL. STRIPING)	EA	10
8	403-99.10	2" TYPE C ASPHALT PAVEMENT	TON	1,188.7
9	407-10.07	TACK COAT - LOW OR NON-TRACKING	GAL	1,994.0
10	502-13.06	CONCRETE PAVEMENT (6 IN. NON-REINFORCED)	SQYD	149.4
11	502-13.07	CONCRETE PAVEMENT (7 IN. NON-REINFORCED)	SQYD	66.5
12	604-99.02	HEAVY DUTY INLET STONE (NON-STANDARD)	EA	1
13	607-99.03	6' HIGH WOOD CEDAR PRIVACY FENCE	LF	187
14	607-99.03	48" HIGH WOOD CEDAR FENCE, PICKETT STYLE	LF	60
15	608-99.05	CONCRETE MEDIAN (STAMPED AND COLORED)	SQYD	37.4
16	608-10.10	CONCRETE CURB RAMP	SQYD	112.9
17	608-10.12	TRUNCATED DOMES	SQFT	377
18	608-60.04	CONCRETE SIDEWALK, 4 IN.	SQYD	1,546.5
19	608-99.05	CONCRETE SIDEWALK, 6 IN.	SQYD	51.6
20	609-10.10	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S	LF	1,908
21	609-99.03	6" VERTICAL CURB INTEGRAL TO SIDEWALK	LF	987
22	609-99.03	ASPHALT CURB (SPOT REPAIRS)	LF	100
23	613-10.14	FULL DEPTH PAVEMENT REPAIR SAW CUT (FOR PERIMETER AND INTERNAL SAW CUTS)	LF	2,582
24	616-99.01	TEMPORARY TRAFFIC CONTROL	LS	1
25	618-10.00	MOBILIZATION	LS	1
26	620-00.06	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 4 IN YELLOW	LF	186
27	620-00.12	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN WHITE	LF	629
28	620-00.15	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24 IN WHITE	LF	144
29	620-00.36	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 30 IN WHITE MIDBLOCK	EA	27
30	620-00.42	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN WHITE, YIELD LINE TRIANGELS	EA	59
31	622-10.01	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS)	SQYD	10,508
32	627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1
33	609-99.03	MODIFIED CONCRETE CURB 12 IN. HEIGHT AND UNDER	LF	184
34	803-10.00A	TURF TYPE TALL FESCUE SODDING	SY	1,249
35	805-10.00A	SEEDING - COOL SEASON MIXTURES	ACRE	0.30
36	806-10.07A	CURB INLET CHECK	EA	21
37	903-99.02	GROUND MOUNTED SIGNAGE	EA	41

CURB AND GUTTER									
ROADWAY	STATION	STATION	OFFSET	LOCATION (LT/RT)	609-10.10 CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S (LF)	609-99.03 6" VERTICL CURB INTEGRAL TO SIDEWALK (LF)	609-99.03 MODIFIED CONCRETE CURB 12 IN. HEIGHT AND UNDER (LF)	609-99.03 ASPHALT CURB (SPOT REPAIRS) (LF)	REMARKS
LONGVIEW BLVD	5+13.65	6+41.25	23.40	RT			128		
LONGVIEW BLVD	6+65.85	7+20.68	25.50	RT			56		
LOGVIEW BLVD	0+29.16	4+66.05	16.00	RT		437			
LOGVIEW BLVD	5+14.08	7+44.06	27.50	RT		216			
ESSEXAVE	200+38.15	203+75.73	12.50	RT		334			
LOCATION VARIES THROUGHOUT				RT / LT				100	USE AS DIRECTED BY THE ENGINEER
LONGVIEW BLVD	0+12.70	0+29.15	15.80	RT	73				
LONGVIEW BLVD	0+24.17	0+24.17	17.20	RT	5				CURB RAMP
LONGVIEW BLVD	4+50.36	4+66.05	22.20	RT	16				CURB RAMP
LONGVIEW BLVD	6+77.98	7+35.55	0.00	RT / LT	128				MEDIAN ISLAND
LONGVIEW BLVD	7+15.78	7+35.55	0.00	RT / LT	32				CURB RAMP AT ISLAND
LONGVIEW BLVD	7+21.53	7+32.12	3.20	RT	17				CURB RAMP AT ISLAND
LONGVIEW BLVD	7+63.07	8+20.56	0.00	RT / LT	123				ISLAND NOSE
LONGVIEW BLVD	7+63.11	7+70.80	0.00	RT / LT	8				CURB RAMP
LONGVIEW BLVD	7+65.18	7+70.85	5.20	RT	6				CURB RAMP
LONGVIEW BLVD	9+18.00	9+23.00	12.10	LT	5				CURB RAMP
LONGVIEW BLVD	9+25.82	9+38.10	45.80	LT	52				ISLAND AT GREENLEAF
LONGVIEW BLVD	9+32.14	9+37.65	2.50	RT	6				CURB RAMP
LONGVIEW BLVD	9+32.08	9+37.80	3.00	LT	6				CURB RAMP
LONGVIEW BLVD	9+63.83	9+69.19	2.50	RT	6				CURB RAMP
LONGVIEW BLVD	9+63.87	9+69.12	3.00	LT	6				CURB RAMP
LONGVIEW BLVD	9+68.09	10+36.64	27.50	LT	226				ISLAND AT GREENLEAF
LONGVIEW BLVD	11+76.42	12+07.38	12.20	LT	34				BUMP OUT
LONGVIEW BLVD	13+79.68	14+08.59	26.50	LT	31				BUMP OUT
LONGVIEW BLVD	14+23.76	14+61.11	16.00	RT	38				BUMP OUT
LONGVIEW BLVD	14+93.75	14+98.68	13.00	LT	5				CURB RAMP
LONGVIEW BLVD	16+46.79	16+77.65	12.70	LT	33				BUMP OUT
LONGVIEW BLVD	16+66.00	17+38.11	0.00	RT / LT	99				ISLAND NOSE
LONGVIEW BLVD	17+32.03	17+37.53	1.50	RT	6				CURB RAMP
LONGVIEW BLVD	17+32.30	17+38.02	3.20	LT	6				CURB RAMP
LONGVIEW BLVD	17+70.76	18+38.36	0.00	RT / LT	109				ISLAND NOSE
LONGVIEW BLVD	17+70.67	17+81.08	0.50	LT	10				CURB RAMP
LONGVIEW BLVD	17+72.13	17+80.74	4.80	RT	8				CURB RAMP
LONGVIEW BLVD	17+85.40	17+86.34	13.50	LT	10				CURB RAMP
LONGVIEW BLVD	17+91.42	17+91.86	13.50	LT	5				CURB RAMP
LONGVIEW BLVD	17+94.41	18+06.60	58.50	LT	47				CURB RAMP & ROAD CURB
LONGVIEW BLVD	20+91.04	21+37.32	0.00	RT / LT	92				ISLAND NOSE
LONGVIEW BLVD	21+31.82	21+37.19	5.50	RT	5				CURB RAMP
LONGVIEW BLVD	21+31.56	21+37.05	0.50	LT	5				CURB RAMP
LONGVIEW BLVD	21+63.33	21+85.47	0.00	RT / LT	56				ISLAND NOSE
LONGVIEW BLVD	21+63.80	21+69.03	6.90	RT	6				CURB RAMP
LONGVIEW BLVD	21+63.80	21+69.81	1.40	LT	7				CURB RAMP
LONGVIEW BLVD	21+70.22	22+12.02	25.80	LT	41				BUMP OUT
LONGVIEW BLVD	22+21.17	22+56.87	17.40	LT	38				BUMP OUT
LONGVIEW BLVD	23+28.27	23+48.72	6.70	RT / LT	56				ISLAND NOSE
LONGVIEW BLVD	23+34.38	23+34.38	13.70	RT	6				CURB RAMP
LONGVIEW BLVD	23+39.40	23+39.40	19.60	RT	6				CURB RAMP
LONGVIEW BLVD	23+36.31	23+35.90	2.00	LT	6				CURB RAMP
LONGVIEW BLVD	23+41.24	23+40.90	1.40	LT	5				CURB RAMP
LONGVIEW BLVD	23+32.07	23+31.69	40.40	RT	7				CURB RAMP
LONGVIEW BLVD	23+32.45	0+65.42	41.00	RT	36				ROADWAY CURB
LONGVIEW BLVD	23+25.08	23+56	31.10	LT	51				ROADWAY CURB
LONGVIEW BLVD	23+37.95	23+38.43	37.50	LT	7				CURB RAMP
ESSEXAVE	203+73.24	203+96.29	13.00	LT	33				ROADWAY CURB
ESSEXAVE	203+87.08	203+86.21	13.00	LT	21				CURB RAMP
ESSEXAVE	203+92.78	203+92.78	31.50	LT	7				CURB RAMP
ESSEXAVE	203+75.73	203+96.03	12.30	RT	48				ROADWAY CURB
ESSEXAVE	203+75.80	203+89.51	18.80	RT	33				BACK OF WALK
WOODLAWN AVE	300+34.29	300+63.38	12.60	LT	34				ROADWAY CURB
WOODLAWN AVE	300+34.29	300+24.29	12.60	LT	4				CURB RAMP
WOODLAWN AVE	300+39.79	300+39.79	12.60	LT	4				CURB RAMP
WOODLAWN AVE	300+51.31	300+55.93	16.40	LT	4				CURB RAMP
WOODLAWN AVE	300+51.10	300+59.85	28.00	LT	12				BACK OF WALK
WOODLAWN AVE	300+94.7	301+24.69	11.80	LT	45				ROADWAY CURB
WOODLAWN AVE	300+94.20	301+24.64	19.85	LT	30				BACK OF WALK
WOODLAWN AVE	301+04.24	301+22.57	13.85	LT	20				BACK OF WALK
WOODLAWN AVE	301+42.71	301.58.81	11.00	LT	22				ROADWAY CURB
WOODLAWN AVE	301+43.83	301+48.42	22.00	LT	5				CURB RAMP
TOTALS					1,908	987	184	100	



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SEAL



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DRAWN BY:	RJC
DESIGNED BY:	RJC
CHECKED BY:	NMC
APPROVED BY:	JRL
PROJECT NO:	211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
SUMMARY
OF
QUANTITIES

SHEET NO.
3

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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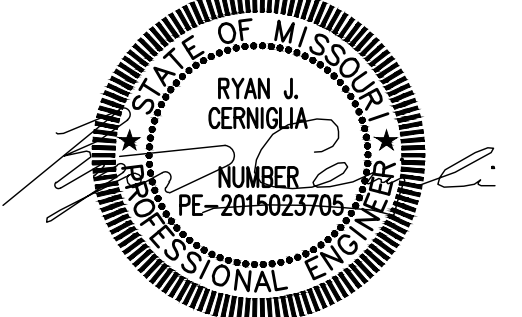
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DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
SCHEDULE
OF
QUANTITIES

SHEET NO.
4

PAVEMENT													
ROADWAY	STATION	STATION	LOCATION	304-05.04 TYPE 5 AGGREGATE FOR BASE (4 IN. THICK) (SQYD)	304-99.05 6" BASE ROCK (2" CLEAN) (SQYD)	403-99.02 ASPHALT SPEED HUMP, 4 IN. HEIGHT (INCL. STRIPING) (EA)	403-99.10 2" TYPE C ASPHALT PAVEMENT (TON)	407-10.07 TACK COAT LOW OR NON-TRACKING (GAL)	502-13.06 CONCRETE PAVEMENT (6 IN. NON-REINFORCED) (SQYD)	502-13.07 CONCRETE PAVEMENT (7 IN. NON-REINFORCED) (SQYD)	608-99.05 CONCRETE MEDIAN (STAMPED AND COLORED) (SQYD)	622-10.01 COLD MILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) (SQYD)	REMARKS
LONGVIEW BLVD	0+12.84	0+24.95	RT	20					20.0				DRIVEWAY APRON
LONGVIEW BLVD	6+41.25	6+51.00	RT	75					75.2				DRIVEWAY PAVEMENT
LONGVIEW BLVD	6+55.96	6+60.46	RT	2					1.6				HOUSE WALKWAY
ESSEX AVE	201+89.55	202+02.62	RT	15					15.3				
ESSEX AVE	202+66.89	202+87.17	RT	35					35.2				
WOODLAWN AVE	301+04.74	301+21.21	LT	2					2.1				
LONGVIEW BLVD	1+75.87	1+87.87	RT / LT			1							
LONGVIEW BLVD	5+81.19	5+93.19	RT / LT			1							
LONGVIEW BLVD	8+72.26	8+84.26	RT / LT			1							
LONGVIEW BLVD	10+11.6	10+23.16	LT			1							
LONGVIEW BLVD	14+35.98	14+48.98	RT			1							
LONGVIEW BLVD	15+19.15	15+30.86	LT			1							
LONGVIEW BLVD	19+44.70	19+57.04	LT			1							
LONGVIEW BLVD	20+18.61	20+30.37	RT			1							
ESSEX AVE	201+29.66	201+41.84	RT / LT			1							
ESSEX AVE	203+16.33	203+28.51	RT / LT			1							
LONGVIEW BLVD	0+9.21	23+57.78	RT / LT				1,055.8	966				9,560	MILL & RESURFACING
LONGVIEW BLVD	0+29.84	1+26.21	RT		1743.0		21.4	87.15					NEW DRIVEWAY
LONGVIEW BLVD	6+78.00		RT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	7.34.17		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	7+63.94		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	9+14.67	9+38.60	LT		17.4		1.5	0.87		17.4			FULL DEPTH CONC. PVMT
LONGVIEW BLVD	9+68.16	10+07.54	LT		30.6		3.4	1.53		30.6			FULL DEPTH ASPHALT RESTORATION
LONGVIEW BLVD	11+76.42	12+07.38	LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	13+79.68	14+08.59	LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	14+23.76	14+61.11	RT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	16+46.78	16+77.66	LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	17+38.02		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	17+71.09		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	17+94.41		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	21+37.32		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	21+63.30		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	21+70.22	22+12.02	LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	22+21.17	22+57.12	LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT BUMP OUT
LONGVIEW BLVD	23+48.72		RT / LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT ISLAND NOSE
LONGVIEW BLVD	23+25.08		LT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT CURB RADII
LONGVIEW BLVD	23+32.07		RT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT CURB RADII
ESSEX AVE	200+39.24	203+98.09	RT / LT				104.6	948				948	MILL & RESURFACING
ESSEX AVE	200+38.72		RT		1.0		0.1	0.05		1.0			INCIDENTAL REPLACEMENT AT CURB RADII
ESSEX AVE	203+73.24		LT		2.0		0.2	0.10		2.0			INCIDENTAL REPLACEMENT AT CURB RADII
ESSEX AVE	203+75.73		RT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT CURB RADII
WOODLAWN AVE	300+55.51		LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT CURB RADII
WOODLAWN AVE	301+04.24		LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT CURB RADII
WOODLAWN AVE	301+45.38		LT		0.5		0.1	0.03		0.5			INCIDENTAL REPLACEMENT AT CURB RADII
LONGVIEW BLVD	7+05.46	7+26.68	LT								23.3		NW LONGVIEW & CLUB
LONGVIEW BLVD	18+06.60	18+25.67	RT								14.1		
TOTALS				149	1,809.5	10.0	1,188.7	1,994.0	149.4	66.5	37.4	10,508	

LUMP SUM QUANTITIES			
PAY ITEM	DESCRIPTION	UNIT	QUANTITY
202-20.10	REMOVAL OF IMPROVEMENTS	LS	1
616-99.01	TEMPORARY TRAFFIC CONTROL	LS	1
618-10.00	MOBILIZATION	LS	1
627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1

UTILITIES					
ROADWAY	STATION	OFFSET	LOCATION	604-99.02 HEAVY DUTY INLET STONE (NON-STANDARD) (CUYD)	REMARKS
LONGVIEW BLVD	4+34.53	18.24	RT	1	
TOTAL				1	

FENCING							
ROADWAY	STATION	STATION	OFFSET	LOCATION	607-99.03 6" HIGH WOOD CEDAR FENCE (LF)	607-99.03 48" HIGH WOOD CEDAR FENCE, PICKETT STYLE (LF)	REMARKS
LONGVIEW BLVD	1+57.84	2+96.5	24.0'	0+49.2	139		
LONGVIEW BLVD	3+16.1	3+64.5	24.0'	0+49.2	48		
LONGVIEW BLVD	0+49.2	1+09.2	24.0'	0+49.2		60	
TOTALS					187	60	

P:\2021\211243\4_CADD - DMC\4.7 Iron\Sheets\04_Final\211243-SHF--Summary Quantities.dwg Plotted By: rcerngjia

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

REMOVAL OF IMPROVEMENTS						
ALIGNMENT	FROM		TO		LOCATION (LT/RT)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
LONGVIEW	0+12.21	16.35	1+44.13	43.06	RT	DRIVEWAY (TBR)
LONGVIEW	0+12.37	35.40	4+65.95	22.10	RT	CURB (TBR)
LONGVIEW	0+19.86	24.30			RT	SIGN (TBR&R)
LONGVIEW	0+39.31	22.90			RT	(3) METAL POSTS (TBR)
LONGVIEW	0+88.25	18.50			RT	SIGN (TBR)
LONGVIEW	2+22.17	18.10			RT	SIGN (TBR)
LONGVIEW	2+80.58	24.50	3+60.82	24.50	RT	FENCE (TBR)
LONGVIEW	3+92.19	18.10			RT	SIGN (TBR&R)
LONGVIEW	4+35.04	21.20			RT	INLET STONE (TBR)
LONGVIEW	5+13.98	23.10			RT	SIGN (TBR&RELOC)
LONGVIEW	5+13.98		7+35.12		RT / LT	ASPHALT PAVEMENT (TBR)
LONGVIEW	6+54.77	18.51	6+51.53	63.85	RT	DRIVEWAY & SIDEWALK (TBR)
LONGVIEW	6+77.94	4.00			RT	SIGN (TBR&RELOC)
LONGVIEW	7+06.16	18.05	7+26.58	58.32	RT	SIGN (TBR&RELOC)
LONGVIEW	7+21.00	28.80			RT	SIGN (TBR&RELOC)
LONGVIEW	7+62.30		8+20.08		RT / LT	ASPHALT PAVEMENT (TBR)
LONGVIEW	7+77.37		8+20.08		RT / LT	CURB (TBR)
LONGVIEW	7+82.81	1.83			LT	SIGN (TBR&RELOC)
LONGVIEW	8+00.61	11.35			RT	SIGN (TBR)
LONGVIEW	8+20.05	2.68			RT	STORM MH (ATG)
LONGVIEW	9+37.09	3.18			RT	CURB (TBR)
LONGVIEW	9+64.11	2.69			RT	CURB (TBR)
LONGVIEW	10+14.41	0.25			RT	STORM MH (ATG)
LONGVIEW	9+14.76	52.38	9+38.62	66.76	LT	ASPHALT PAVEMENT (TBR)
LONGVIEW	9+70.78		10+36.18		LT	ASPHALT PAVEMENT (TBR)-MEDIAN
LONGVIEW	9+70.78		10+36.18		LT	CURB (TBR)-MEDIAN
LONGVIEW	10+06.87	31.10			LT	SANITARY MH (ATG)
LONGVIEW	10+14.41	0.25			RT	STORM MH (ATG)
LONGVIEW	11+76.46	11.06	12+07.48	12.31	LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	13+79.69	31.16	14+08.70	32.47	LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	14+23.98	12.54	14+61.56	12.40	RT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	14+90.94	11.00			LT	SIGN POLE (TBR)
LONGVIEW	14+93.69	12.91	14+98.81	12.94	LT	CURB (TBR)
LONGVIEW	16+46.83	13.19	16+77.6	13.16	LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	16+85.84	11.13	17+38.00	1.05	RT / LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	17+70.53		18+37.89		RT / LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	18+00.00	33.34			LT	SIGN (TBR&RELOC)
LONGVIEW	20+90.35		21+37.4		RT / LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	21+63.19		21+85.09		RT / LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	21+70.57	31.53	22+11.98	31.47	LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	22+21.30	11.50	22+57.3	12.00	LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	23+28.25		23+49.25		RT / LT	ASPHALT PVTM & CURB (TBR)
LONGVIEW	23+27.84	16.63			RT	SIGN (TBR&RELOC)
LONGVIEW	23+38.74	16.23			RT	SIGN (TBR&RELOC)
LONGVIEW	23+41.96	8.94			RT	SIGN (TBR&RELOC)
LONGVIEW	23+24.88	30.72	23+56.04	60.72	LT	CURB & SIDEWALK (TBR)
ESSEX AVE.	23+32.03	40.40	23+49.43	65.39	RT	CURB & SIDEWALK (TBR)
ESSEX AVE.	200+42.77	42.25	203+86.34	15.30	RT	CURB (TBR)
ESSEX AVE.	201+88.70	13.79	202+00.97	33.25	RT	DRIVEWAY (TBR)
ESSEX AVE.	202+50.02	15.89			RT	GAS VALVE (ATG)
ESSEX AVE.	203+41.08	15.10			LT	SIGN (TBR)
ESSEX AVE.	202+60.88	14.38			RT	GAS VALVE (ATG)
ESSEX AVE.	203+73.79	13.05	203+96.09	32.10	LT	CURB (TBR)
ESSEX AVE.	203+73.79	11.48	203+86.04	14.13	LT	PAVEMENT (TBR)
ESSEX AVE.	203+86.55	16.10	203+89.81	39.75	LT	SIDEWALK (TBR)
ESSEX AVE.	203+80.14	16.81			RT	SIGN (TBR)
ESSEX AVE.	203+84.58	16.59			LT	WATER VALVE (ATG)
ESSEX AVE.	203+86.34	15.30	203+96.47	48.65	RT	CURB & SIDEWALK (TBR)
ESSEX AVE.	203+94.28	24.22			LT	SIGN (TBR&RELOC)
ESSEX AVE.	203+96.34	15.30	203+96.47	48.65	RT	CURB & SIDEWALK (TBR)
WOODLAWN AVE.	300+25.93	19.07	300+61.21	27.10	LT	SIDEWALK (TBR)
WOODLAWN AVE.	300+34.28	12.80	300+63.41	25.45	LT	CURB (TBR)
WOODLAWN AVE.	300+57.44	25.90			LT	SIGN (TBR&RELOC)
WOODLAWN AVE.	300+93.62		301+24.44		LT	ASPHALT MEDIAN, PVTM & CURB (TBR)
WOODLAWN AVE.	301+42.76	24.20	301+58.95	11.36	LT	CURB (TBR)
WOODLAWN AVE.	301+45.20	19.60	301+60.41	19.60	LT	SIDEWALK (TBR)
1 LUMP SUM						

TREE REMOVAL						
ROADWAY	STATION	OFFSET	LOCATION (LT/RT)	202-89.02 TREE REMOVALS		REMARKS
				(EA)		
LONGVIEW BLVD	0+66.0	20.0'	RT	1		18" dia
LONGVIEW BLVD	0+78.5	27.0'	RT	1		14" dia
LONGVIEW BLVD	0+93.0	27.0'	RT	1		10" dia
LONGVIEW BLVD	0+98.5	28.0'	RT	1		4" dia
LONGVIEW BLVD	1+07.5	24.5'	RT	1		18" dia
LONGVIEW BLVD	1+39.5	30.0'	RT	1		6" dia
LONGVIEW BLVD	1+44.0	20.5'	RT	1		14" dia
LONGVIEW BLVD	1+64.0	26.0'	RT	1		4" dia
LONGVIEW BLVD	1+68.5	26.5'	RT	1		8" dia
LONGVIEW BLVD	1+79.0	21.0'	RT	1		12" dia
LONGVIEW BLVD	1+81.0	26.0'	RT	1		5" dia
LONGVIEW BLVD	1+92.0	27.5'	RT	1		6" dia
LONGVIEW BLVD	1+94.0	17.5'	RT	1		5" dia
LONGVIEW BLVD	2+19.0	21.0'	RT	1		18" dia
LONGVIEW BLVD	2+34.5	23.0'	RT	1		16" dia
LONGVIEW BLVD	2+42.0	20.0'	RT	1		8" dia
LONGVIEW BLVD	2+48.0	22.5'	RT	1		6" dia
LONGVIEW BLVD	2+54.0	29.0'	RT	1		6" dia
LONGVIEW BLVD	2+76.5	18.5'	RT	1		26" dia
LONGVIEW BLVD	2+96.4	19.0'	RT	1		12" dia
LONGVIEW BLVD	3+25.5	20.0'	RT	1		6" dia
LONGVIEW BLVD	3+38.5	21.5'	RT	1		16" dia
LONGVIEW BLVD	3+61.0	20.0'	RT	1		12" dia
LONGVIEW BLVD	3+74.5	22.0'	RT	1		5" dia
LONGVIEW BLVD	3+79.0	21.5'	RT	1		5" dia
LONGVIEW BLVD	3+86.0	21.5'	RT	1		6" dia
LONGVIEW BLVD	3+92.0	21.5'	RT	1		6" dia
LONGVIEW BLVD	3+98.0	21.5'	RT	1		6" dia
LONGVIEW BLVD	4+04.0	21.5'	RT	1		6" dia
LONGVIEW BLVD	4+10.0	23.0'	RT	1		7" dia
LONGVIEW BLVD	4+22.0	22.5'	RT	1		7" dia
LONGVIEW BLVD	4+28.0	22.5'	RT	1		6" dia
LONGVIEW BLVD	4+34.5	22.5'	RT	1		5" dia
LONGVIEW BLVD	4+41.0	22.5'	RT	1		5" dia
ESSEX AVE.	203+29.5	18.5'	RT	1		10" dia
ESSEX AVE.	203+76.0	18.5'	RT	1		18" dia
TOTAL				36		

SIGNING						
ROADWAY	STATION	OFFSET	LOCATION (LT/RT)	903-99.02 GROUND MOUNTED SIGNAGE		REMARKS
				(EA)		
LONGVIEW BLVD	0+50.00	22.50	RT	1		NO PARKING SIGN
LONGVIEW BLVD	1+00.00	22.50	RT	1		SPEED LIMIT SIGN
LONGVIEW BLVD	1+50.00	22.50	RT	1		SPEED HUMP SIGN
LONGVIEW BLVD	2+90.00	12.00	LT	1		SPEED HUMP SIGN
LONGVIEW BLVD	4+58.00	22.50	RT	1		SPEED HUMP SIGN
LONGVIEW BLVD	5+70.00	22.50	RT	1		NO PARKING SIGN
LONGVIEW BLVD	6+52.00	12.00	LT	1		SPEED LIMIT SIGN
LONGVIEW BLVD	6+83.00	3.50	RT	1		KEEP RIGHT SIGN
LONGVIEW BLVD	6+93.00	20.00	LT	1		SPEED HUMP SIGN
LONGVIEW BLVD	7+33.00	4.00	LT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	7+70.00	7.00	RT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	7+82.00	34.00	RT	1		SPEED HUMP SIGN
LONGVIEW BLVD	8+82.00	34.00	RT	1		SPEED LIMIT SIGN
LONGVIEW BLVD	9+34.00	6.00	LT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	9+47.00	37.00	RT	1		ONE-WAY SIGN
LONGVIEW BLVD	9+68.00	5.00	RT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	9+75.00	11.00	LT	1		DO NOT ENTER SIGN
LONGVIEW BLVD	10+33.00	32.00	LT	1		DOUBLE ARROW SIGN
LONGVIEW BLVD	11+23.00	37.00	LT	1		SPEED HUMP SIGN
LONGVIEW BLVD	13+67.00	36.00	RT	1		SPEED HUMP SIGN
LONGVIEW BLVD	16+31.00	37.00	LT	1		SPEED HUMP SIGN
LONGVIEW BLVD	17+24.00	7.00	RT	1		DO NOT ENTER SIGN
LONGVIEW BLVD	17+34.00	5.00	LT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	17+43.00	34.00	RT	1		ONE-WAY SIGN
LONGVIEW BLVD	17+78.00	7.00	RT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	17+82.00	11.00	LT	1		DO NOT ENTER SIGN
LONGVIEW BLVD	18+17.00	46.00	RT	1		KEEP RIGHT SIGN
LONGVIEW BLVD	18+37.00	13.00	RT	1		ONE-WAY SIGN
LONGVIEW BLVD	19+19.00	31.00	RT	1		SPEED HUMP SIGN
LONGVIEW BLVD	20+58.00	35.00	LT	1		SPEED HUMP SIGN
LONGVIEW BLVD	21+23.00	14.00	RT	1		DO NOT ENTER SIGN
LONGVIEW BLVD	21+33.00	3.00	LT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	21+49.00	34.00	LT	1		ONE-WAY SIGN
LONGVIEW BLVD	21+68.00	9.00	RT	1		PEDESTRIAN SIGN
LONGVIEW BLVD	21+70.00	7.00	LT	1		DO NOT ENTER SIGN
ESSEX AVE.	200+89.00	20.00	RT	1		SPEED HUMP SIGN
ESSEX AVE.	201+50.00	16.00	LT	1		NO PARKING SIGN
ESSEX AVE.	202+09.00	20.00	RT	1		SPEED HUMP SIGN
ESSEX AVE.	202+15.00	16.00	LT	1		SPEED HUMP SIGN
ESSEX AVE.	202+65.00	16.00	LT	1		SPEED LIMIT SIGN
ESSEX AVE.	203+71.00	16.00	LT	1		SPEED HUMP SIGN
TOTAL				41		

EARTHWORK						
ROADWAY	STATION	STATION	LOCATION (LT/RT)	207-99.03 LINEAR GRADING FOR ADA FACILITIES, CLASS 2		REMARKS
				(STA)		
LONGVIEW BLVD	0+12.7	4+68.1	RT	4.5		Longview to Erickson
LONGVIEW BLVD	5+13.7	7+44.1	RT	2.3		Erickson to Club
LONGVIEW BLVD	6+78.0	7+35.2	RT/LT	0.6		Median at Club/Longview
LONGVIEW BLVD	7+62.9	9+37.8	RT/LT	1.7		Median (Club to Greenleaf)
LONGVIEW BLVD	9+63.7	17+38.1	RT/LT	7.7		Median (Greenleaf to Essex)
LONGVIEW BLVD	17+70.9	21+37.2	RT/LT	3.7		Median (Essex to Fairwood)
LONGVIEW BLVD	21+63.3	23+49.3	RT/LT	1.9		Median (Fairwood to Woodlawn)
LONGVIEW BLVD	9+66.8	10+37.3	LT	0.7		Island at Greenleaf
LONGVIEW BLVD	13+79.7	14+08.6	LT	0.3		Roadway Bump Out
LONGVIEW BLVD	21+70.3	22+12.2	LT	0.4		Roadway Bump Out
LONGVIEW BLVD	23+32.1	23+49.3	RT	0.2		SW Corner Longview & Woodlawn
LONGVIEW BLVD	23+25.1	23+56.5	LT	0.3		NW Corner Longview & Woodlawn
ESSEX AVE.	219+01.7	219+39.3	RT	0.4		Longview to Woodlawn
WOODLAWN AVE.	300+25.7	300+54.3	RT	0.3		NW Corner Essex & Woodlawn
WOODLAWN AVE.	300+25.7	300+63.4	RT	0.4		NE Corner Essex & Woodlawn
WOODLAWN AVE.	300+77.9	301+14.4	RT	0.4		SW Corner Essex & Woodlawn
WOODLAWN AVE.	300+93.7	301+25.7	LT	0.3		Woodlawn Cut Through Median
WOODLAWN AVE.	301+42.7	301+58.8	LT	0.2		SE Corner Essex & Woodlawn
TOTAL				26.2		

PERMANENT AND TEMPORARY EROSION CONTROL											
ROADWAY	STATION	STATION	OFFSET	LOCATION (LT/RT)	803-10.00A TURF TYPE TALL FESCUE SODDING (SY)		806-10.07A SEEDING - COOL SEASON MIXTURES (ACRE)		203-99.07 MISC. AMENDED SOILS DISCONNECT (CUYD)		REMARKS
					(EA)		(EA)		(CUYD)		
LONGVIEW BLVD	0+23.7	0+24.9	18'-64"	RT		53					
LONGVIEW BLVD	0+29.3	1+14.2	22'-64"	RT		390					
LONGVIEW BLVD	0+30.1	1+44.6	44'-79"	RT		94					
LONGVIEW BLVD	1+26.2	4+66.1	22'-45"	RT		374					
LONGVIEW BLVD	5+08.3	6+42.8	22'-59"	RT		114					
LONGVIEW BLVD	6+51.0	7+44.2	26'-65"	RT		48					
LONGVIEW BLVD	23+32.1	23+44.7	41'-65"	RT		7					
ESSEX AVE.	200+32.9	201+91.9	19'-33"	RT		76					
ESSEX AVE.	202+00.7	202+67.2	18'-33"	RT		30					

PEDESTRIAN FACILITIES										
ROADWAY	STATION	STATION	OFFSET	LOCATION (LT/RT)	304-05.04	608-10.10	608-10.12	608-60.04	608-99.05	REMARKS
					TYPE 5 AGGREGATE FOR BASE (4 IN. THICK) (SIDEWALK) **	CONCRETE CURB RAMP (7 IN THICK) (SQYD)	TRUNCATED DOMES (SQFT)	CONCRETE SIDEWALK (4 IN. THICK) (SQYD)	CONCRETE SIDEWALK (6 IN. THICK) (SQYD)	
LONGVIEW BLVD	0+29.28	0+35.88	16.00	RT	4	4.3				
LONGVIEW BLVD	1+06.69	1+14.19	14.50	RT	5	5.0				
LONGVIEW BLVD	4+39.88	4+50.38	16.00	RT	7	7.0				
LONGVIEW BLVD	7+05.07	7+13.67	24.00	RT	5	5.2				
LONGVIEW BLVD	9+32.14	9+37.14	0.00	RT / LT	3	2.9				
LONGVIEW BLVD	9+63.83	9+69.18	0.00	RT / LT	3	2.9				
LONGVIEW BLVD	23+34.81	23+39.79	13.70	RT	3	3.0				
LONGVIEW BLVD	23+38.48	23+47.74	43.00	RT	8	7.8				
LONGVIEW BLVD	23+43.13	23+55.80	32.90	LT	12	11.9				
ESSEX AVE	200+47.43	200+67.33	12.50	RT	11	11.4				
ESSEX AVE	202+02.49	202+17.65	12.50	RT	10	9.9				
ESSEX AVE	202+87.27	202+99.96	12.50	RT	8	8.3				
ESSEX AVE	203+87.07	203+86.88	15.00	LT	6	6.2				
WOODLAWN AVE	300+25.74	300+34.29	14.00	RT	5	5.1				
WOODLAWN AVE	300+34.29	300+40.15	10.50	RT	2	2.0				
WOODLAWN AVE	300+34.79	300+39.79	13.00	LT	2	2.1				
WOODLAWN AVE	300+40.29	300+51.31	17.00	LT	5	4.8				
WOODLAWN AVE	300+54.03	300+59.85	20.80	LT	3	3.4				
WOODLAWN AVE	300+89.16	300+98.48	11.50	RT	5	5.5				
WOODLAWN AVE	300+98.74	301+04.24	11.50	LT	1	1.2				
WOODLAWN AVE	301+44.36	301+51.14	20.50	LT	3	3.1				
LONGVIEW BLVD	0+24.20	0+29.20	17.7	RT			10			
LONGVIEW BLVD	4+50.38	4+64.71	15.9	RT			27			
LONGVIEW BLVD	5+14.90	5+32.92	15.2	RT			40			
LONGVIEW BLVD	7+13.67	7+20.14	25.5	RT			16			
LONGVIEW BLVD	7+16.30	7+21.60	8.7	RT			10			
LONGVIEW BLVD	7+29.47	7+32.04	3.1	RT			10			
LONGVIEW BLVD	7+65.77	7+67.80	0	RT / LT			10			
LONGVIEW BLVD	9+35.14	9+37.14	0	RT / LT			10			
LONGVIEW BLVD	17+35.02	17+37.32	0	RT / LT			10			
LONGVIEW BLVD	17+72.72	17+75.05	0	RT / LT			10			
LONGVIEW BLVD	17+86.64	17+91.81	13	LT			10			
LONGVIEW BLVD	17+89.26	17+95.75	34.7	LT			19			
LONGVIEW BLVD	21+34.74	21+36.52	0	RT / LT			10			
LONGVIEW BLVD	21+63.80	21+66.23	0	RT / LT			10			
LONGVIEW BLVD	23+32.33	23+38.33	41.1	RT			13			
LONGVIEW BLVD	23+34.45	23+39.58	18.7	RT			10			
LONGVIEW BLVD	23+36.08	23+41.07	3.9	LT			10			
LONGVIEW BLVD	23+37.98	23+43.29	31.1	LT			11			
ESSEX AVE	203+85.3	203+93.54	17.4	RT			20			
ESSEX AVE	203+87.07	203+93.00	14.8	LT			15			
WOODLAWN AVE	300+34.29	300+40.15	10.6	RT			12			
WOODLAWN AVE	300+34.29	300+40.15	10.6	LT			12			
WOODLAWN AVE	300+51.31	300+59.08	16.9	LT			12			
WOODLAWN AVE	300+95.95	300+97.95	13.8	LT			12			
WOODLAWN AVE	300+98.74	301+04.74	11.8	LT			11			
WOODLAWN AVE	300+98.48	301+04.48	11.5	RT			10			
WOODLAWN AVE	301+19.84	301+21.84	13.8	LT			12			
WOODLAWN AVE	301+44.36	301+50.04	21.8	LT			15			
LONGVIEW BLVD	0+27.00	0+27.00	16.70	RT			29			
LONGVIEW BLVD	0+35.65	1+06.69	15.50	RT			48			
LONGVIEW BLVD	1+26.19	4+64.71	15.50	RT			215			
LONGVIEW BLVD	5+14.90	6+41.91	23.80	RT			81			
LONGVIEW BLVD	6+66.59	7+05.07	23.80	RT			24			
LONGVIEW BLVD	7+13.67	7+20.14	25.40	RT			4			
LONGVIEW BLVD	7+16.30	7+35.05	0.00	RT / LT			13			
LONGVIEW BLVD	7+17.28	7+35.19	2.00	LT			8			
LONGVIEW BLVD	7+63.63	9+32.08	0.00	RT / LT			97			
LONGVIEW BLVD	7+22.78	7+31.00	3.50	RT			3			
LONGVIEW BLVD	9+69.12	17+37.51	0.00	RT / LT			443			
LONGVIEW BLVD	17+71.17	21+36.55	0.00	RT / LT			217			
LONGVIEW BLVD	21+63.79	23+40.36	0.00	RT / LT			112			
LONGVIEW BLVD	23+32.45	23+38.04	43.00	RT			4			
LONGVIEW BLVD	23+48.74	23+48.74	53.00	RT			8			
LONGVIEW BLVD	23+37.98	23+43.65	40.30	LT			4			
LONGVIEW BLVD	23+49.86	23+56	51.40	LT			5			
ESSEX AVE	200+38.72	200+47.43	19.42	RT			6			
ESSEX AVE	200+67.33	201+89.52	12.50	RT			80			
ESSEX AVE	202+17.65	22+66.69	12.50	RT			32			
ESSEX AVE	202+99.96	203+93.54	23.30	RT			62			
WOODLAWN AVE	300+34.29	300+47.26	13.60	RT			5			
WOODLAWN AVE	300+25.74	300+40.29	16.90	LT			6			
WOODLAWN AVE	300+51.31	300+59.16	20.80	LT			3			
WOODLAWN AVE	300+93.73	301+24.49	17.80	LT			20			
WOODLAWN AVE	300+98.48	301+14.48	11.75	RT			10			
WOODLAWN AVE	301+49.70	301.60.80	18.00	LT			5			
LONGVIEW BLVD	0+24.95	0+24.95	64.40	RT			6			6.1
LONGVIEW BLVD	1+14.19	1+26.19	15.50	RT			8			8.0
LONGVIEW BLVD	6+41.91	6+66.59	19.60	RT			16			15.6
ESSEX AVE	201+89.52	202+02.49	12.50	RT			9			8.5
ESSEX AVE	202+66.69	202+87.27	12.30	RT			13			13.4
TOTALS					1,709	112.9	377	1,544.9	51.6	

**NOTE: ADDITIONAL QUANTITIES FOR TYPE 5 AGGREGATE BASE IS ACCOUNTED FOR UNDER THE "PAVEMENT" SECTION IN THE PREVIOUS SHEET.

PAVEMENT MARKINGS										
ROADWAY	STATION	STATION	LOCATION (LT/RT)	620-00.06	620-00.12	620-00.15	620-00.36	620-00.42	REMARKS	
				PREFORMED THERMOPLASTIC PAVEMENT MARKING, 4 IN YELLOW (LF)	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN WHITE (LF)	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24 IN WHITE (LF)	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 30 IN WHITE MIDDLEBLOCK (EA)	PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12 IN WHITE, YELD LINE TRIANGLES (EA)		
LONGVIEW BLVD	6+42.15	6+80.00	RT	116					DOUBLE	
LONGVIEW BLVD	9+50.15	9+67.64	LT	70					DOUBLE	
LONGVIEW BLVD	0+21.70	0+23.81	RT / LT			27				
LONGVIEW BLVD	0+28.32	0+30.20	RT / LT			24				
LONGVIEW BLVD	4+50.38	5+28.74	RT			78				
LONGVIEW BLVD	4+65.63	5+13.66	RT			48				
LONGVIEW BLVD	7+15.75	7+13.48	RT			14				
LONGVIEW BLVD	7+20.47	7+22.33	RT			16				
LONGVIEW BLVD	17+86.14	17+88.60	LT			27				
LONGVIEW BLVD	17+62.61	17+94.41	LT			19				
LONGVIEW BLVD	23+32.28	23+33.79	RT			21				
LONGVIEW BLVD	23+40.33	23+38.52	RT			23				
LONGVIEW BLVD	23+35.57	23+37.19	LT			23				
LONGVIEW BLVD	23+41.87	23+43.88	LT			27				
ESSEX AVE	203+86.83	203+87.35	RT / LT			30				
ESSEX AVE	203+83.26	203+83.98	RT / LT			41				
WOODLAWN AVE	300+34.04	300+34.04	RT / LT			23				
WOODLAWN AVE	300+40.54	300+40.54	RT / LT			23				
WOODLAWN AVE	300+53.72	300+55.21	RT			42				
WOODLAWN AVE	300+60.64	300+64.30	RT			34				
WOODLAWN AVE	300+88.24	300+88.24	RT / LT			22				
WOODLAWN AVE	301+04.74	301+04.74	RT / LT			22				
WOODLAWN AVE	301+21.82	301+47.59	RT			26				
WOODLAWN AVE	301+24.88	301+43.53	RT			19				
LONGVIEW BLVD	0+33.35	0+34.22	RT / LT			11				
LONGVIEW BLVD	4+89.53	5+08.45	RT			19				
LONGVIEW BLVD	7+08.11	7+10.29	RT			14				
LONGVIEW BLVD	9+37.04	9+50.30	LT			14				
LONGVIEW BLVD	17+97.23	17+98.14	LT			16				
LONGVIEW BLVD	23+29.18	23+28.13	RT			20				
ESSEX AVE	203+82.08	203+82.31	RT			13				
WOODLAWN AVE	300+29.04	300+29.04	RT			11				
WOODLAWN AVE	300+81.77	300+68.71	RT			14				
WOODLAWN AVE	301+08.74	301+08.74	LT			12				
LONGVIEW BLVD	7+37.23	7+61.34	RT / LT			7				
LONGVIEW BLVD	9+40.97	9+61.05	RT / LT			6				
LONGVIEW BLVD	17+40.47	17+68.41	RT / LT			8				
LONGVIEW BLVD	21+40.18	21+59.61	RT / LT			6				
LONGVIEW BLVD	7+36.88	7+49.67	LT				7			
LONGVIEW BLVD	7+48.98	7+64.38	RT				8			
LONGVIEW BLVD	9+38.19	9+51.19	LT				7			
LONGVIEW BLVD	9+50.80	9+63.80	RT				7			
LONGVIEW BLVD	17+38.79	17+53.77	LT				8			
LONGVIEW BLVD	17+54.07	17+71.03	RT				9			
LONGVIEW BLVD	21+38.73	21+49.94	LT				6			
LONGVIEW BLVD	21+50.84	21+63.22	RT				7			
TOTALS				186	629	144	27	59		



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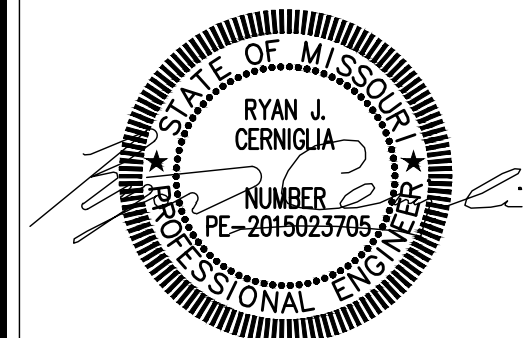
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ST. LOUIS, MISSOURI
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IL. PROF. ENGR. CORP. 62-035370
IL. PROF. STR. ENGR. CORP. 81-005202
IL. PROF. LAND SURV. CORP. 048-000029
MO. PROF. ENGR. CORP. 001528
MO. LAND SURVEYING CORP. 000346
TN. PROF. ENGR. FIRM 8974

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DATE SIGNED:

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DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243



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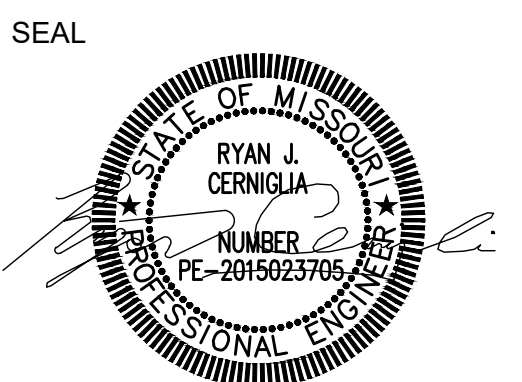
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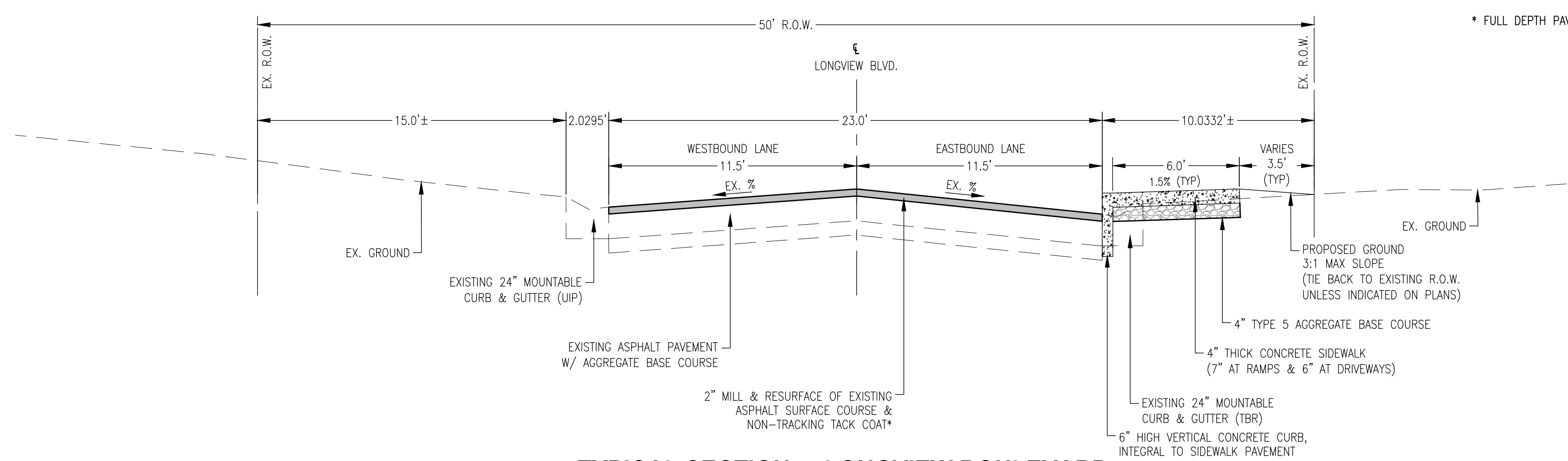
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
TYPICAL SECTIONS

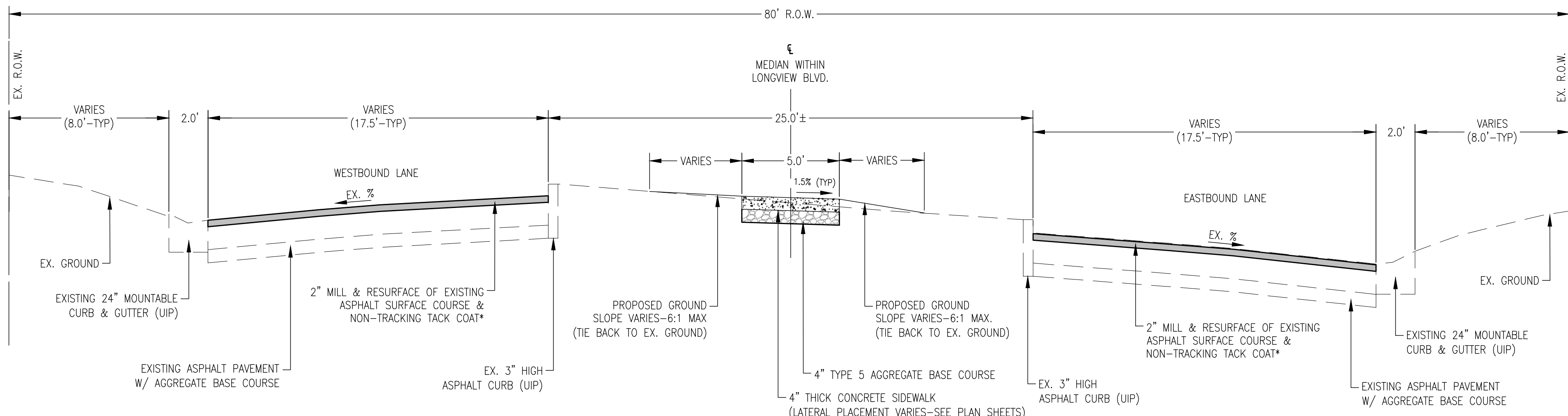
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7



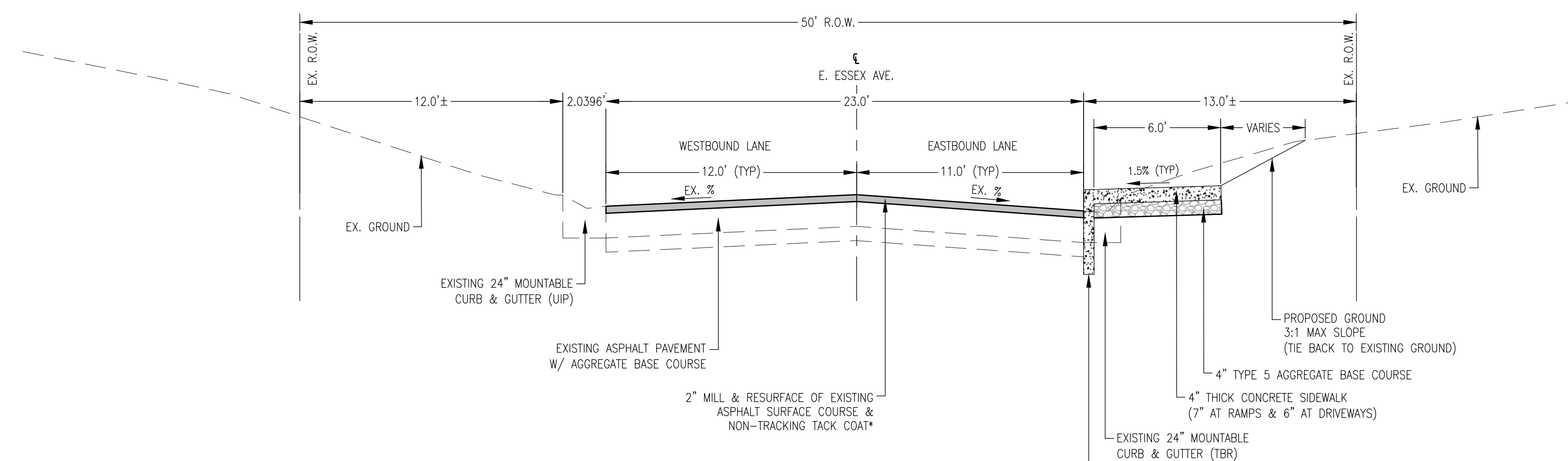
TYPICAL SECTION - LONGVIEW BOULEVARD
STA. 0+00 TO STA. 7+25 SCALE: 1"=4'

* FULL DEPTH PAVEMENT REPLACEMENT SECTION (LOCATIONS AS SHOWN ON THE PLANS)
2" TYPE "C" ASPHALT W/ TACK COAT (SS-1H / LOW OR NON-TRACKING)
7" CONCRETE W/ MERAMEC SAND/GRAVEL, 7.27 SACK W/ AIR (5-8%)
6" BASE ROCK (2" CLEAN)

TACK COAT APPLICATION RATES
ASPHALT PAVEMENT RESTORATION: 0.05 GAL/YD2
COLDMILLED ASPHALT SURFACES: 0.10 GAL/YD2



TYPICAL SECTION - LONGVIEW BOULEVARD (MEDIAN)
STA. 100+00 TO STA. 116+87 (SIDEWALK) SCALE: 1"=4'
STA. 7+25 TO STA. 23+55 (ROADWAY)



TYPICAL SECTION - E. ESSEX AVENUE
STA. 200+38 TO STA. 203+96 SCALE: 1"=4'

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

P:\2021\211243\4_CADD - DMC\4.7 Tran\Sheets\04_Final\211243-SHF-Typical Sections.dwg Plotted By: rcmernigla



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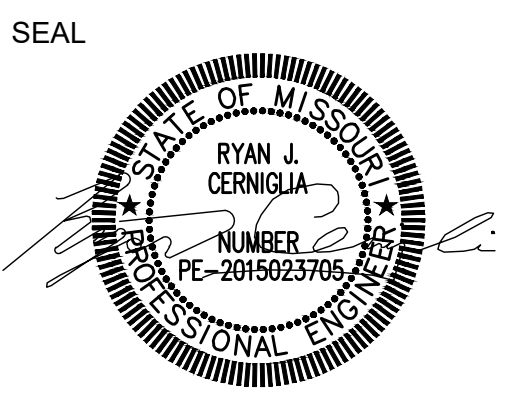
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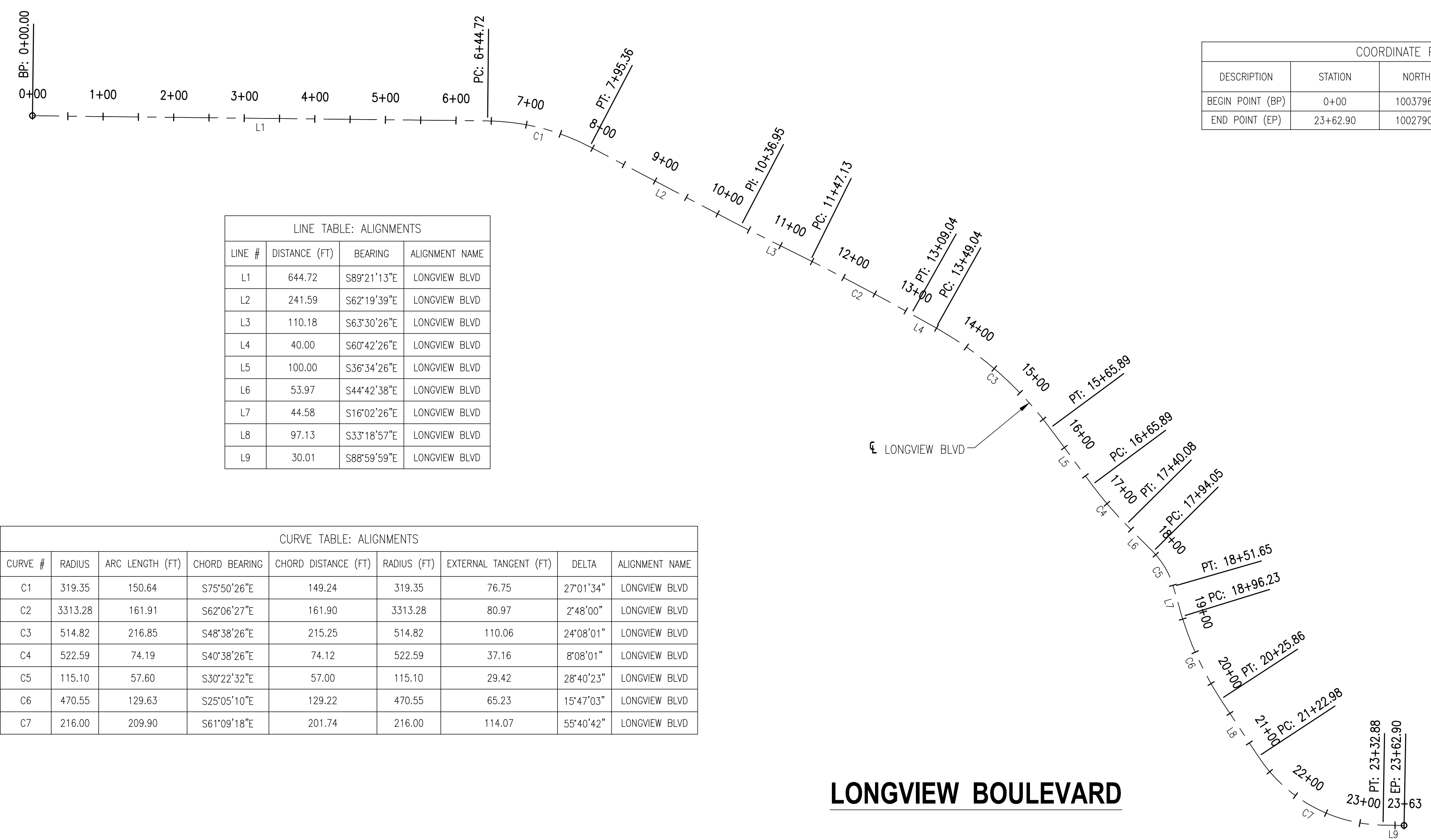
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
ALIGNMENT
SHEET

SHEET NO.
8

DESCRIPTION	STATION	NORTHING	EASTING	ALIGNMENT NAME
BEGIN POINT (BP)	0+00	1003796.262	847672.945	LONGVIEW BLVD
END POINT (EP)	23+62.90	1002790.618	849616.269	LONGVIEW BLVD



LINE #	DISTANCE (FT)	BEARING	ALIGNMENT NAME
L1	644.72	S89°21'13"E	LONGVIEW BLVD
L2	241.59	S62°19'39"E	LONGVIEW BLVD
L3	110.18	S63°30'26"E	LONGVIEW BLVD
L4	40.00	S60°42'26"E	LONGVIEW BLVD
L5	100.00	S36°34'26"E	LONGVIEW BLVD
L6	53.97	S44°42'38"E	LONGVIEW BLVD
L7	44.58	S16°02'26"E	LONGVIEW BLVD
L8	97.13	S33°18'57"E	LONGVIEW BLVD
L9	30.01	S88°59'59"E	LONGVIEW BLVD

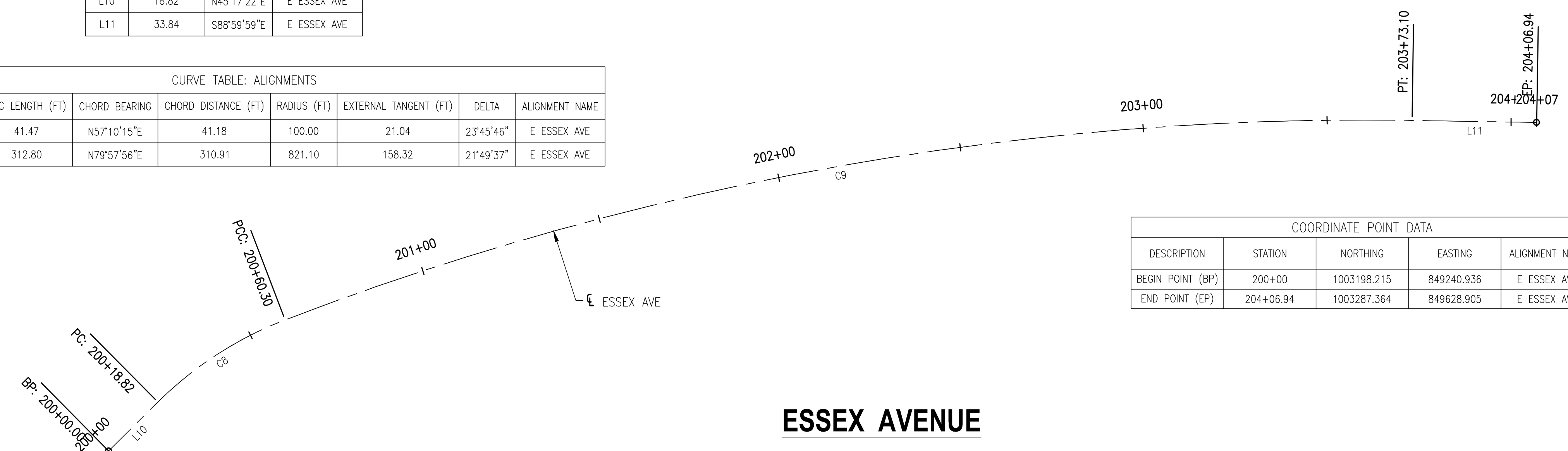
CURVE #	RADIUS	ARC LENGTH (FT)	CHORD BEARING	CHORD DISTANCE (FT)	RADIUS (FT)	EXTERNAL TANGENT (FT)	DELTA	ALIGNMENT NAME
C1	319.35	150.64	S75°50'26"E	149.24	319.35	76.75	27°01'34"	LONGVIEW BLVD
C2	3313.28	161.91	S62°06'27"E	161.90	3313.28	80.97	2°48'00"	LONGVIEW BLVD
C3	514.82	216.85	S48°38'26"E	215.25	514.82	110.06	24°08'01"	LONGVIEW BLVD
C4	522.59	74.19	S40°38'26"E	74.12	522.59	37.16	8°08'01"	LONGVIEW BLVD
C5	115.10	57.60	S30°22'32"E	57.00	115.10	29.42	28°40'23"	LONGVIEW BLVD
C6	470.55	129.63	S25°05'10"E	129.22	470.55	65.23	15°47'03"	LONGVIEW BLVD
C7	216.00	209.90	S61°09'18"E	201.74	216.00	114.07	55°40'42"	LONGVIEW BLVD

LONGVIEW BOULEVARD

LINE #	DISTANCE (FT)	BEARING	ALIGNMENT NAME
L10	18.82	N45°17'22"E	E ESSEX AVE
L11	33.84	S88°59'59"E	E ESSEX AVE

CURVE #	RADIUS	ARC LENGTH (FT)	CHORD BEARING	CHORD DISTANCE (FT)	RADIUS (FT)	EXTERNAL TANGENT (FT)	DELTA	ALIGNMENT NAME
C8	100.00	41.47	N57°10'15"E	41.18	100.00	21.04	23°45'46"	E ESSEX AVE
C9	821.10	312.80	N79°57'56"E	310.91	821.10	158.32	21°49'37"	E ESSEX AVE

DESCRIPTION	STATION	NORTHING	EASTING	ALIGNMENT NAME
BEGIN POINT (BP)	200+00	1003198.215	849240.936	E ESSEX AVE
END POINT (EP)	204+06.94	1003287.364	849628.905	E ESSEX AVE



ESSEX AVENUE

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

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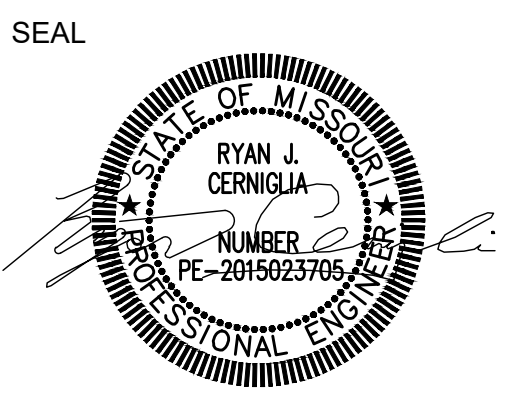
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MO CERTIFICATE OF AUTHORITY: 001528

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IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000209
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974



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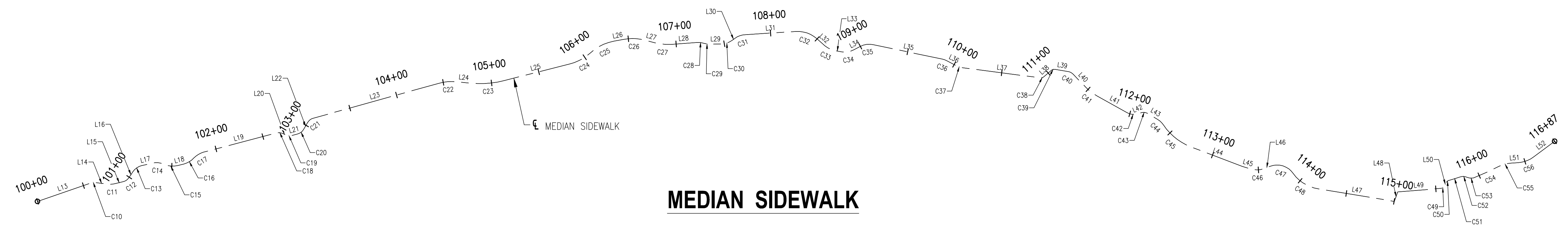
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PROJECT NO.:	211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
ALIGNMENT
SHEET

SHEET NO.
9

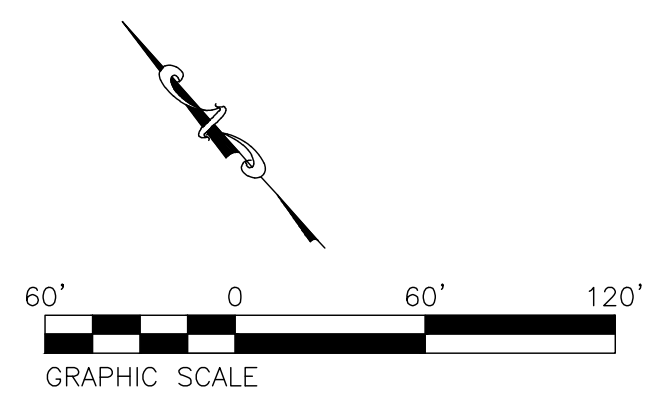


MEDIAN SIDEWALK

LINE TABLE: ALIGNMENTS			
LINE #	DISTANCE (FT)	BEARING	ALIGNMENT NAME
L13	58.40	S67°14'22"E	MEDIAN SIDEWALK
L14	12.57	S40°39'08"E	MEDIAN SIDEWALK
L15	8.94	S62°27'09"E	MEDIAN SIDEWALK
L16	7.23	N75°30'06"E	MEDIAN SIDEWALK
L17	10.90	S61°54'19"E	MEDIAN SIDEWALK
L18	7.08	S62°21'03"E	MEDIAN SIDEWALK
L19	77.89	S63°00'10"E	MEDIAN SIDEWALK
L20	2.99	S23°21'50"E	MEDIAN SIDEWALK
L21	5.81	S63°09'29"E	MEDIAN SIDEWALK
L22	7.98	N71°50'31"E	MEDIAN SIDEWALK
L23	134.59	S63°49'19"E	MEDIAN SIDEWALK
L24	15.07	S42°44'47"E	MEDIAN SIDEWALK
L25	70.08	S62°31'06"E	MEDIAN SIDEWALK
L26	10.19	S59°00'53"E	MEDIAN SIDEWALK
L27	11.15	S33°30'17"E	MEDIAN SIDEWALK
L28	26.57	S52°24'08"E	MEDIAN SIDEWALK
L29	11.25	S49°04'29"E	MEDIAN SIDEWALK
L30	3.82	S83°48'56"E	MEDIAN SIDEWALK
L31	52.50	S51°49'21"E	MEDIAN SIDEWALK
L32	11.08	S06°47'45"E	MEDIAN SIDEWALK
L33	7.23	S36°35'52"E	MEDIAN SIDEWALK
L34	7.52	S76°06'02"E	MEDIAN SIDEWALK
L35	72.81	S36°23'54"E	MEDIAN SIDEWALK
L36	10.15	S20°21'16"E	MEDIAN SIDEWALK
L37	80.74	S40°48'02"E	MEDIAN SIDEWALK
L38	9.75	S89°12'14"E	MEDIAN SIDEWALK
L39	13.45	S38°46'16"E	MEDIAN SIDEWALK
L40	18.69	S02°15'36"E	MEDIAN SIDEWALK
L41	34.98	S19°09'14"E	MEDIAN SIDEWALK
L42	0.09	S71°15'21"E	MEDIAN SIDEWALK
L43	11.11	S16°45'01"E	MEDIAN SIDEWALK
L44	56.75	S27°29'52"E	MEDIAN SIDEWALK
L45	9.65	S31°05'53"E	MEDIAN SIDEWALK
L46	7.59	S68°28'10"E	MEDIAN SIDEWALK
L47	79.65	S38°53'14"E	MEDIAN SIDEWALK
L48	10.34	N61°18'34"E	MEDIAN SIDEWALK
L49	44.30	S52°55'54"E	MEDIAN SIDEWALK
L50	4.01	N70°56'22"E	MEDIAN SIDEWALK
L51	7.11	S51°32'11"E	MEDIAN SIDEWALK
L52	27.19	S84°56'40"E	MEDIAN SIDEWALK

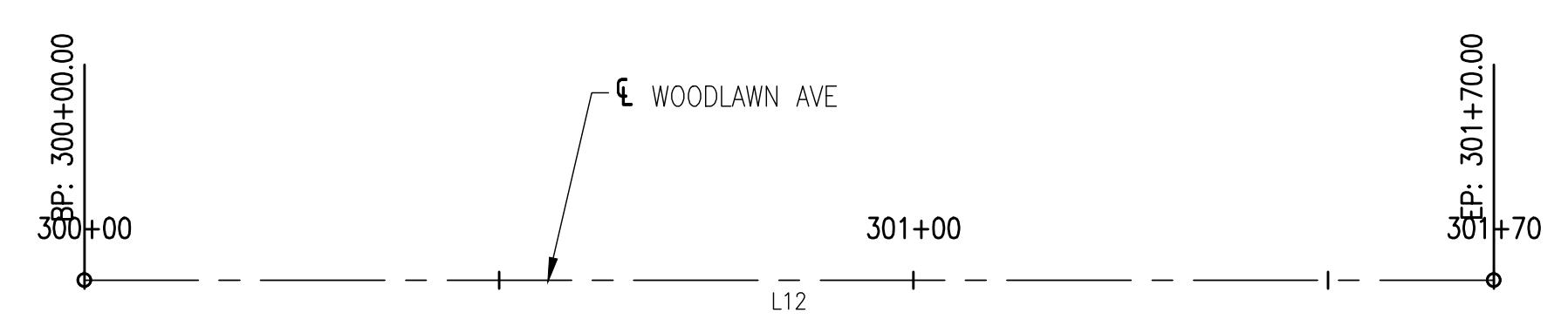
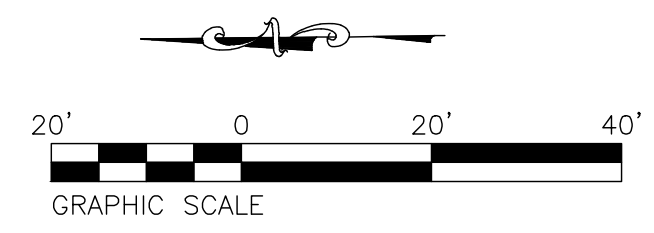
CURVE TABLE: ALIGNMENTS								
CURVE #	RADIUS	ARC LENGTH (FT)	CHORD BEARING	CHORD DISTANCE (FT)	RADIUS (FT)	EXTERNAL TANGENT (FT)	DELTA	ALIGNMENT NAME
C10	10.00	4.67	S54°02'02"E	4.63	10.00	2.38	26°45'48"	MEDIAN SIDEWALK
C11	20.00	7.61	S51°33'08"E	7.56	20.00	3.85	21°48'01"	MEDIAN SIDEWALK
C12	10.00	7.34	S83°28'31"E	7.17	10.00	3.84	42°02'45"	MEDIAN SIDEWALK
C13	15.00	11.15	S83°12'06"E	10.90	15.00	5.85	42°35'35"	MEDIAN SIDEWALK
C14	20.02	13.38	S42°44'56"E	13.13	20.02	6.95	38°17'47"	MEDIAN SIDEWALK
C15	20.02	13.54	S42°58'18"E	13.28	20.02	7.04	38°44'33"	MEDIAN SIDEWALK
C16	21.12	12.05	S79°04'43"E	11.89	21.12	6.20	32°41'51"	MEDIAN SIDEWALK
C17	21.16	11.83	S79°23'39"E	11.67	21.16	6.07	32°00'57"	MEDIAN SIDEWALK
C18	10.00	6.92	S43°11'00"E	6.78	10.00	3.60	39°38'20"	MEDIAN SIDEWALK
C19	10.00	6.95	S43°15'40"E	6.81	10.00	3.62	39°47'39"	MEDIAN SIDEWALK
C20	10.00	7.85	S85°39'29"E	7.65	10.00	4.14	45°00'00"	MEDIAN SIDEWALK
C21	10.00	7.85	S85°39'29"E	7.65	10.00	4.14	45°00'00"	MEDIAN SIDEWALK
C22	50.00	17.96	S53°02'19"E	17.87	50.00	9.08	20°35'04"	MEDIAN SIDEWALK
C23	100.00	34.51	S52°37'56"E	34.34	100.00	17.43	19°46'19"	MEDIAN SIDEWALK
C24	50.00	24.32	S76°27'06"E	24.08	50.00	12.40	27°52'00"	MEDIAN SIDEWALK
C25	50.00	27.38	S74°41'59"E	27.04	50.00	14.04	31°22'14"	MEDIAN SIDEWALK
C26	50.00	22.26	S46°15'35"E	22.08	50.00	11.32	25°30'35"	MEDIAN SIDEWALK
C27	50.00	16.49	S42°57'12"E	16.42	50.00	8.32	18°53'51"	MEDIAN SIDEWALK
C28	20.53	7.50	S41°48'39"E	7.46	20.53	3.79	20°56'13"	MEDIAN SIDEWALK
C29	20.74	6.34	S40°10'33"E	6.32	20.74	3.20	17°31'12"	MEDIAN SIDEWALK
C30	20.00	12.13	S66°26'42"E	11.94	20.00	6.26	34°44'27"	MEDIAN SIDEWALK
C31	20.00	11.17	S67°49'08"E	11.02	20.00	5.73	31°59'35"	MEDIAN SIDEWALK
C32	30.00	23.58	S29°18'33"E	22.97	30.00	12.43	45°01'35"	MEDIAN SIDEWALK
C33	20.00	10.40	S21°41'49"E	10.29	20.00	5.32	29°48'06"	MEDIAN SIDEWALK
C34	20.00	13.79	S56°20'57"E	13.52	20.00	7.18	39°30'10"	MEDIAN SIDEWALK
C35	20.00	13.86	S56°14'58"E	13.58	20.00	7.22	39°42'08"	MEDIAN SIDEWALK
C36	20.00	5.60	S28°22'35"E	5.58	20.00	2.82	16°02'38"	MEDIAN SIDEWALK
C37	20.00	7.14	S30°34'39"E	7.10	20.00	3.61	20°26'46"	MEDIAN SIDEWALK
C38	5.00	4.22	S65°00'08"E	4.10	5.00	2.25	48°24'12"	MEDIAN SIDEWALK
C39	5.00	4.40	S63°59'15"E	4.26	5.00	2.35	50°25'58"	MEDIAN SIDEWALK
C40	10.00	6.37	S20°30'56"E	6.27	10.00	3.30	36°30'40"	MEDIAN SIDEWALK
C41	50.00	14.74	S10°42'25"E	14.69	50.00	7.43	16°53'38"	MEDIAN SIDEWALK
C42	15.00	13.64	S45°12'17"E	13.18	15.00	7.33	52°06'07"	MEDIAN SIDEWALK
C43	10.00	9.51	S44°00'11"E	9.16	10.00	5.15	54°30'21"	MEDIAN SIDEWALK
C44	20.00	8.55	S4°30'36"E	8.48	20.00	4.34	24°28'50"	MEDIAN SIDEWALK
C45	60.00	36.34	S9°37'20"E	35.79	60.00	18.75	34°42'20"	MEDIAN SIDEWALK
C46	20.00	13.05	S49°47'02"E	12.82	20.00	6.76	37°22'17"	MEDIAN SIDEWALK
C47	20.19	26.73	S30°22'40"E	24.82	20.19	15.73	75°49'51"	MEDIAN SIDEWALK
C48	40.28	30.90	S16°50'20"E	30.15	40.28	16.25	43°56'56"	MEDIAN SIDEWALK
C49	5.00	4.90	S80°59'46"E	4.70	5.00	2.67	56°07'44"	MEDIAN SIDEWALK
C50	5.00	3.98	S86°16'44"E	3.87	5.00	2.10	45°33'49"	MEDIAN SIDEWALK
C51	229.87	11.84	S64°58'21"E	11.84	229.87	5.92	2°57'04"	MEDIAN SIDEWALK
C52	10.04	7.56	S44°50'52"E	7.38	10.04	3.97	43°06'44"	MEDIAN SIDEWALK
C53	10.00	7.95	S47°57'26"E	7.74	10.00	4.20	45°32'40"	MEDIAN SIDEWALK
C54	382.25	28.06	S72°49'57"E	28.05	382.25	14.04	4°12'21"	MEDIAN SIDEWALK
C55	30.00	12.25	S63°14'09"E	12.17	30.00	6.21	23°23'57"	MEDIAN SIDEWALK
C56	30.00	17.49	S68°14'26"E	17.25	30.00	9.00	33°24'28"	MEDIAN SIDEWALK

COORDINATE POINT DATA				
DESCRIPTION	STATION	NORTHING	EASTING	ALIGNMENT NAME
BEGIN POINT (BP)	100+00	1003780.117	848392.555	MEDIAN SIDEWALK
END POINT (EP)	116+87.23	1002784.160	849601.978	MEDIAN SIDEWALK



LINE TABLE: ALIGNMENTS			
LINE #	DISTANCE (FT)	BEARING	ALIGNMENT NAME
L12	170.00	S00°00'00"E	N WOODLAWN AVE

COORDINATE POINT DATA				
DESCRIPTION	STATION	NORTHING	EASTING	ALIGNMENT NAME
BEGIN POINT (BP)	300+00	1003353.452	849628.905	N WOODLAWN AVE
END POINT (EP)	301+71.12	1003182.337	849628.905	N WOODLAWN AVE



WOODLAWN AVENUE

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

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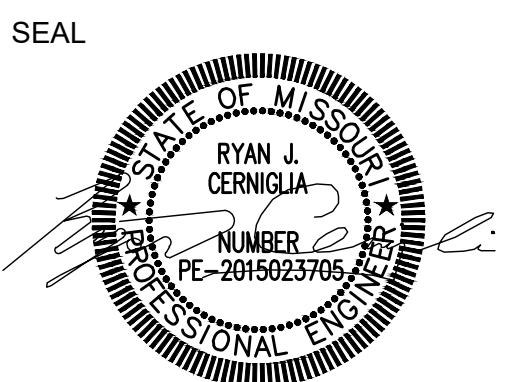


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PROF. LICENSE NUMBER
IL. PROF. DESIGN FIRM 184-001220
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IL. PROF. STR. ENGR. CORP. 81-005202
IL. PROF. LAND SURV. CORP. 048-000229
MO. PROF. ENGR. CORP. 001528
MO. LAND SURVEYING CORP. 000346
TN. PROF. ENGR. FIRM 8974



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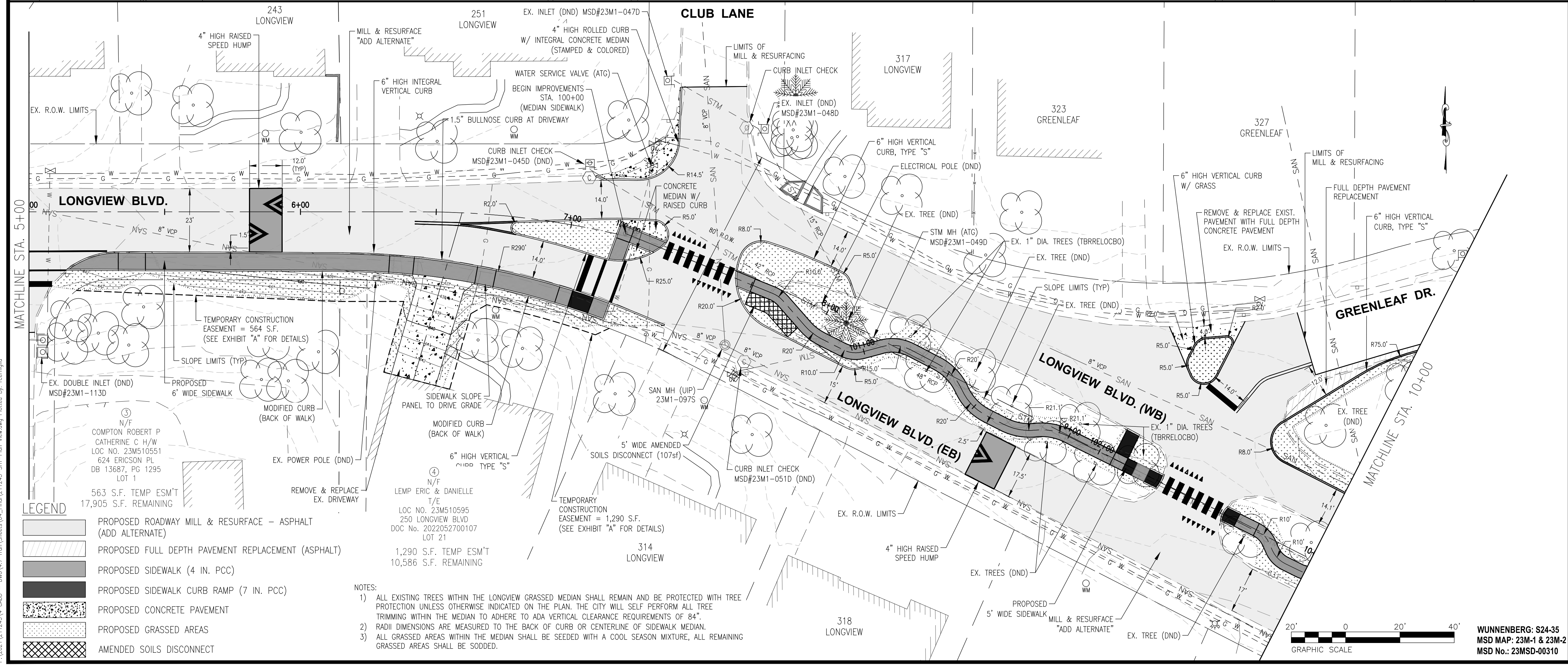
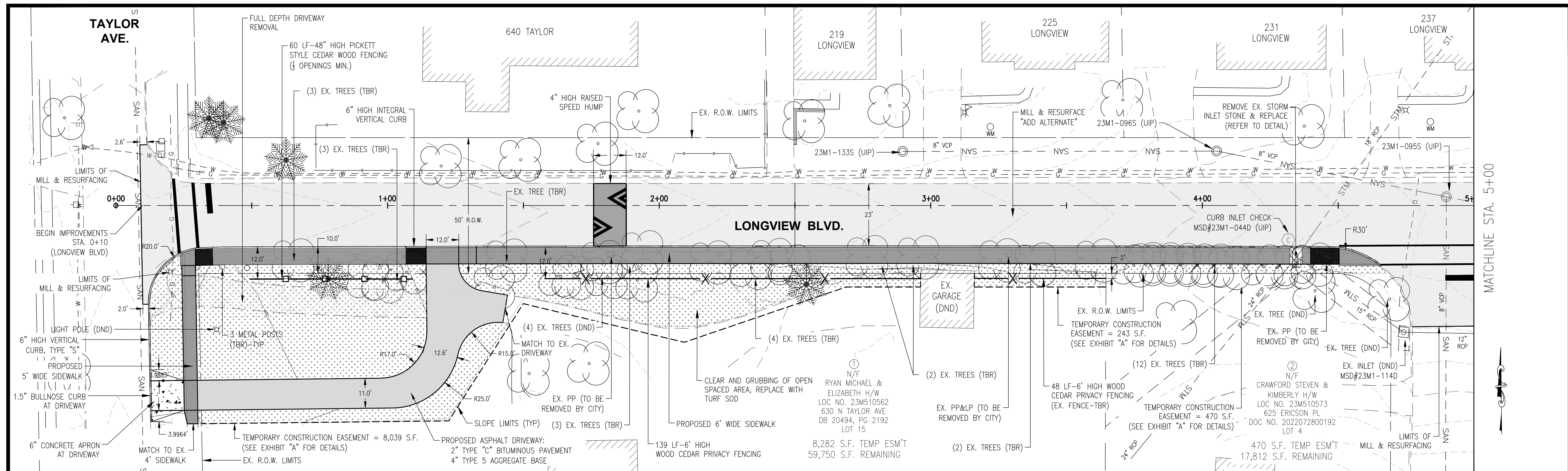
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DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PLAN LAYOUT

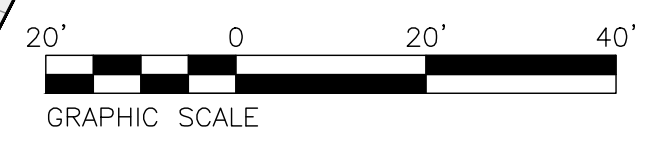
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LEGEND

[Pattern]	PROPOSED ROADWAY MILL & RESURFACE - ASPHALT (ADD ALTERNATE)
[Pattern]	PROPOSED FULL DEPTH PAVEMENT REPLACEMENT (ASPHALT)
[Pattern]	PROPOSED SIDEWALK (4 IN. PCC)
[Pattern]	PROPOSED SIDEWALK CURB RAMP (7 IN. PCC)
[Pattern]	PROPOSED CONCRETE PAVEMENT
[Pattern]	PROPOSED GRASSED AREAS
[Pattern]	AMENDED SOILS DISCONNECT



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MD-00310



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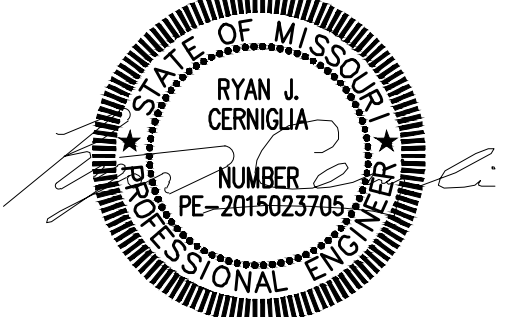
**THOUVENOT, WADE
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MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

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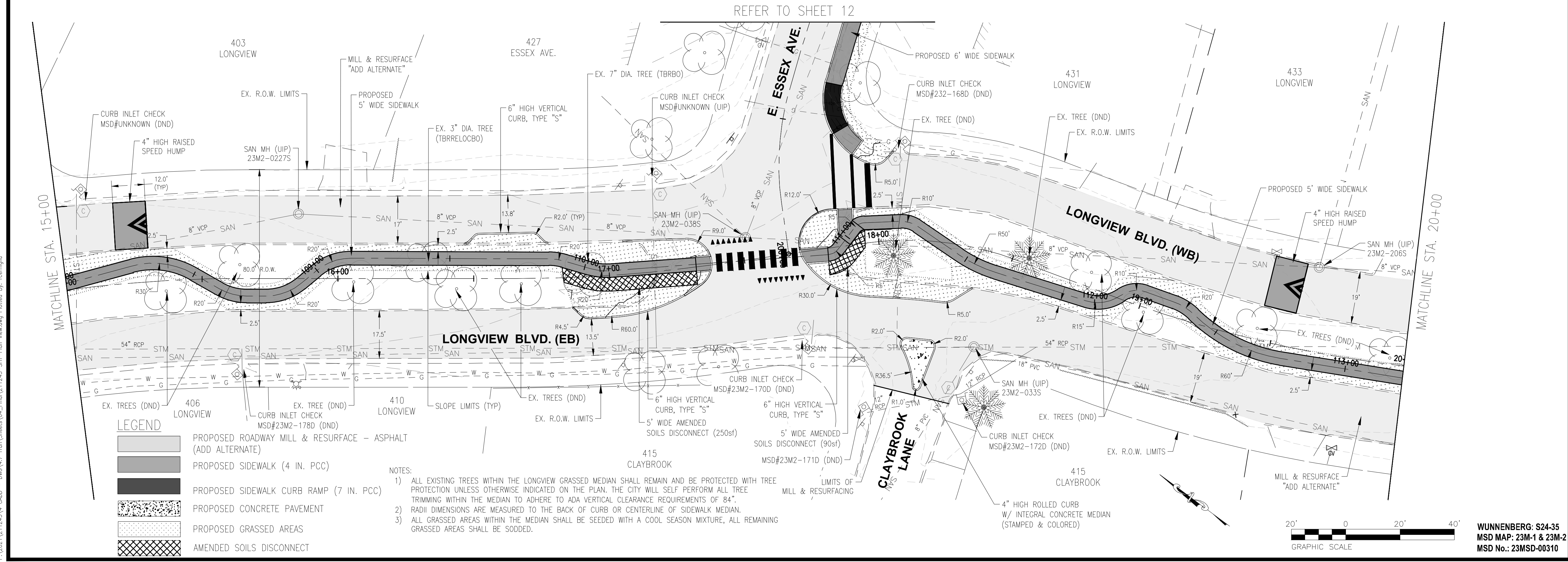
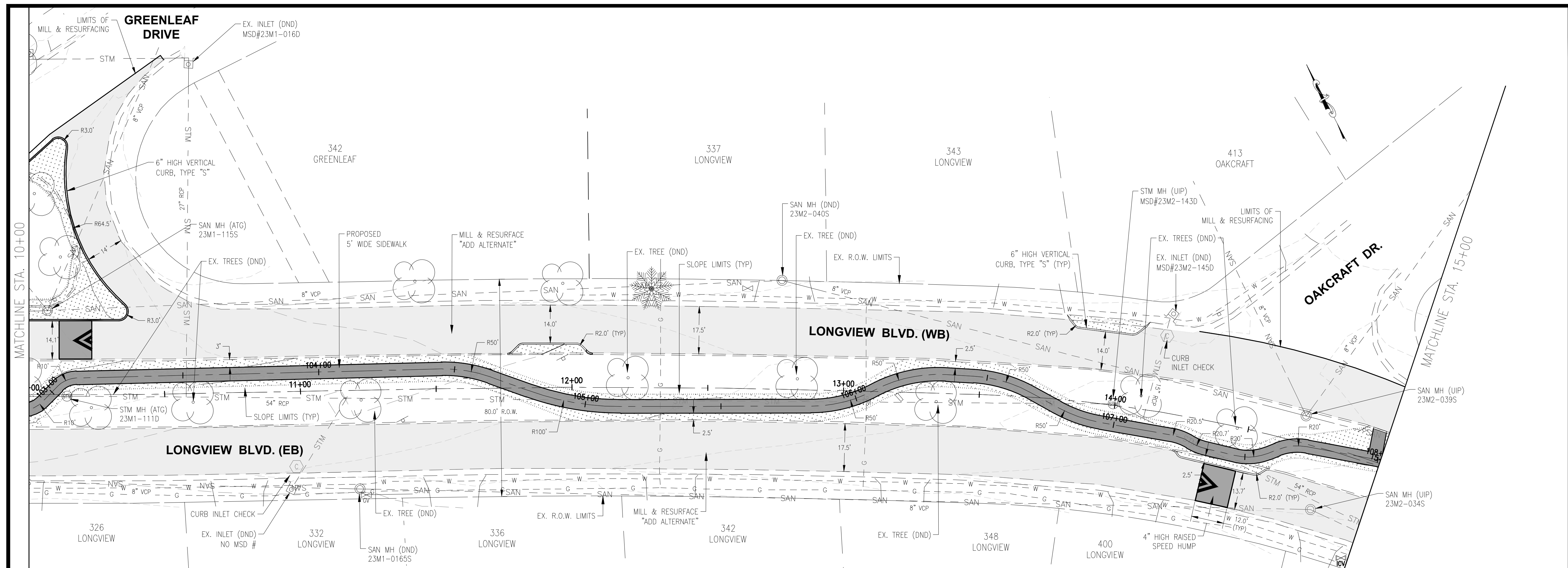
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PLAN LAYOUT

SHEET NO.
11

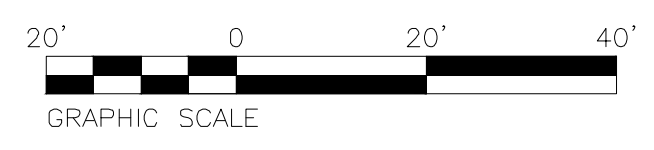


LEGEND

- PROPOSED ROADWAY MILL & RESURFACE - ASPHALT (ADD ALTERNATE)
- PROPOSED SIDEWALK (4 IN. PCC)
- PROPOSED SIDEWALK CURB RAMP (7 IN. PCC)
- PROPOSED CONCRETE PAVEMENT
- PROPOSED GRASSED AREAS
- AMENDED SOILS DISCONNECT

NOTES:

- ALL EXISTING TREES WITHIN THE LONGVIEW GRASSED MEDIAN SHALL REMAIN AND BE PROTECTED WITH TREE PROTECTION UNLESS OTHERWISE INDICATED ON THE PLAN. THE CITY WILL SELF PERFORM ALL TREE TRIMMING WITHIN THE MEDIAN TO ADHERE TO ADA VERTICAL CLEARANCE REQUIREMENTS OF 84".
- RADI DIMENSIONS ARE MEASURED TO THE BACK OF CURB OR CENTERLINE OF SIDEWALK MEDIAN.
- ALL GRASSED AREAS WITHIN THE MEDIAN SHALL BE SEEDED WITH A COOL SEASON MIXTURE, ALL REMAINING GRASSED AREAS SHALL BE SODDED.



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MD-00310

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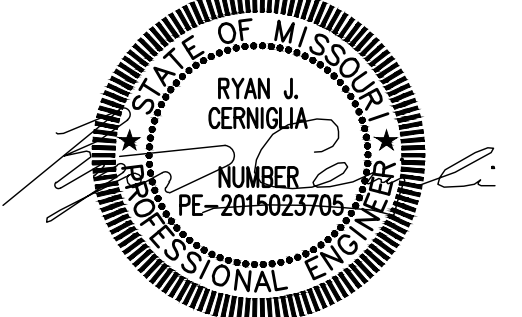
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TN. PROF. ENGR. FIRM	8974

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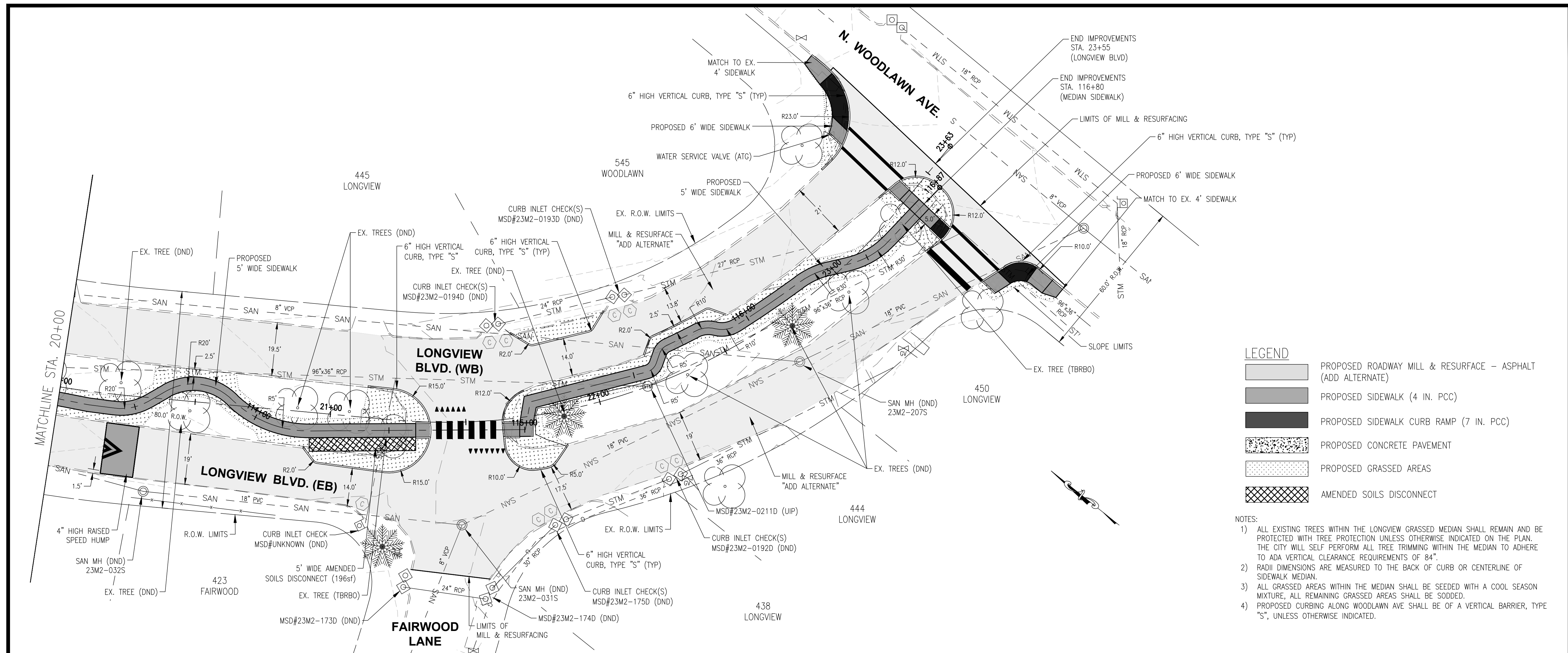
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 DESIGNED BY: RJC
 CHECKED BY: NMC
 APPROVED BY: JRL
 PROJECT NO: 211243

PROJECT:
 LONGVIEW BOULEVARD
 IMPROVEMENTS
 TAYLOR AVE. TO
 WOODLAWN AVE

TITLE:

PLAN LAYOUT

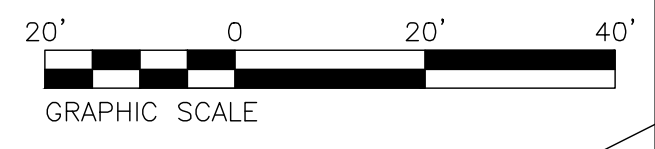
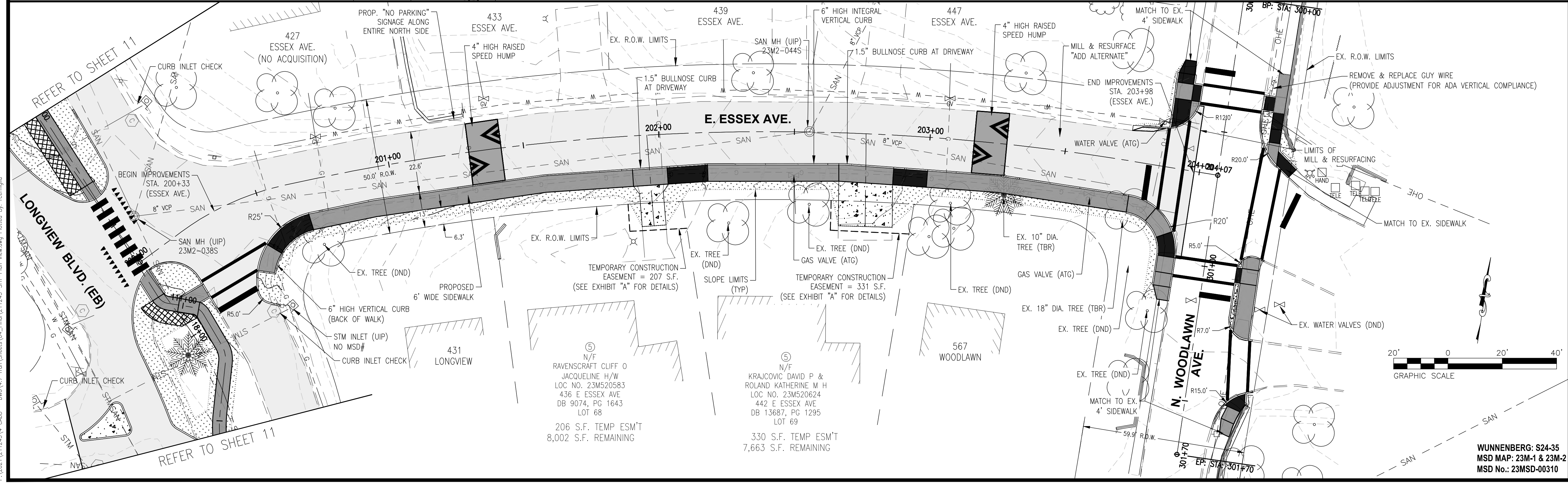
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LEGEND

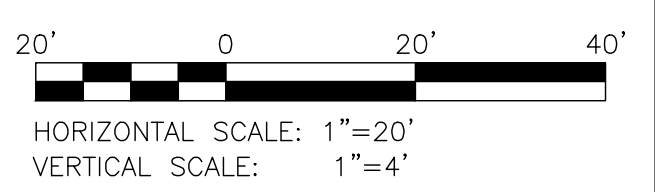
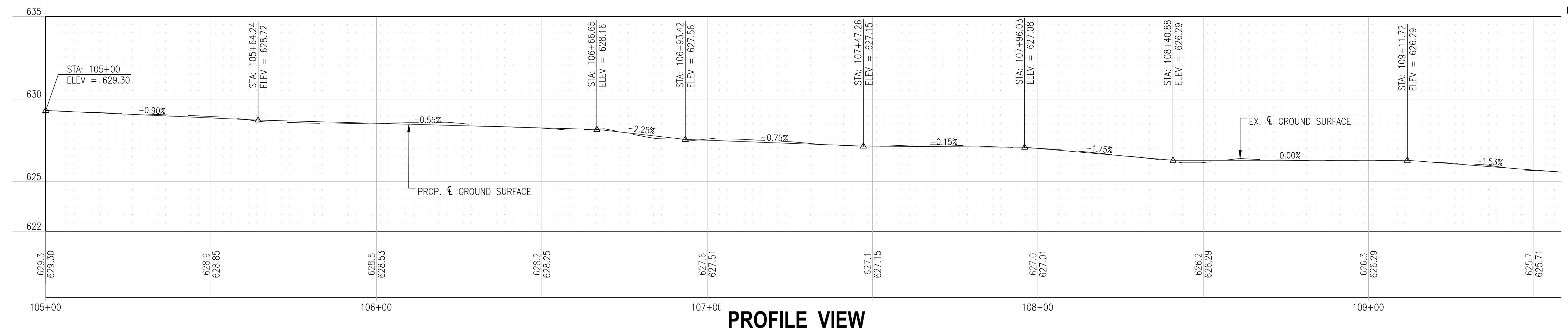
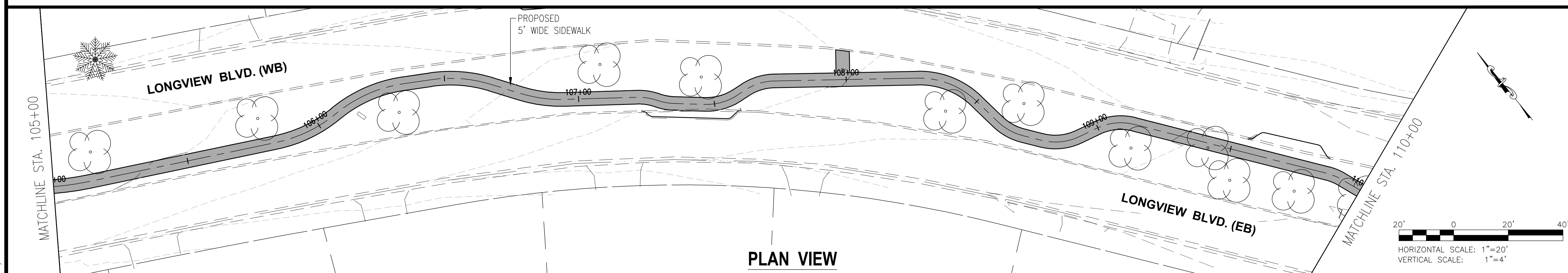
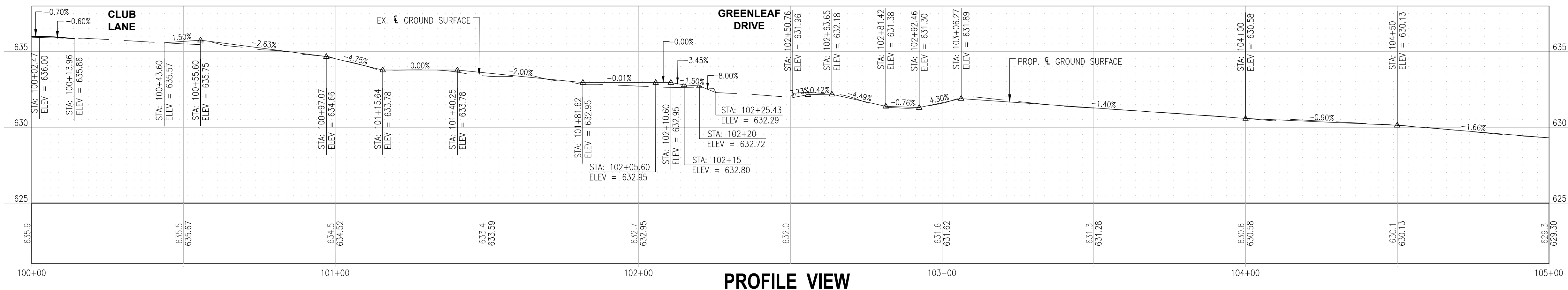
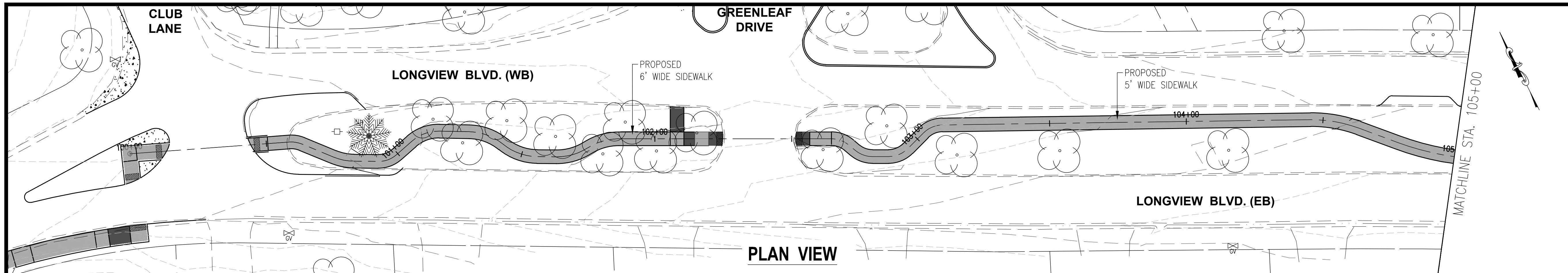
- PROPOSED ROADWAY MILL & RESURFACE - ASPHALT (ADD ALTERNATE)
- PROPOSED SIDEWALK (4 IN. PCC)
- PROPOSED SIDEWALK CURB RAMP (7 IN. PCC)
- PROPOSED CONCRETE PAVEMENT
- PROPOSED GRASSED AREAS
- AMENDED SOILS DISCONNECT

- NOTES:**
- ALL EXISTING TREES WITHIN THE LONGVIEW GRASSED MEDIAN SHALL REMAIN AND BE PROTECTED WITH TREE PROTECTION UNLESS OTHERWISE INDICATED ON THE PLAN. THE CITY WILL SELF PERFORM ALL TREE TRIMMING WITHIN THE MEDIAN TO ADHERE TO ADA VERTICAL CLEARANCE REQUIREMENTS OF 84".
 - RADI DIMENSIONS ARE MEASURED TO THE BACK OF CURB OR CENTERLINE OF SIDEWALK MEDIAN.
 - ALL GRASSED AREAS WITHIN THE MEDIAN SHALL BE SEEDED WITH A COOL SEASON MIXTURE, ALL REMAINING GRASSED AREAS SHALL BE SODDED.
 - PROPOSED CURBING ALONG WOODLAWN AVE SHALL BE OF A VERTICAL BARRIER, TYPE "S", UNLESS OTHERWISE INDICATED.



WUNNENBERG: S24-35
 MSD MAP: 23M-1 & 23M-2
 MSD No.: 23MSD-00310

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NOTES:
1) REFER TO PLAN LAYOUT SHEETS FOR CENTERLINE RADIAL DIMENSIONS AND CONSTRUCTION DETAIL LAYOUT.

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MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

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ISSUED FOR: FINAL ENGINEERING
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REV.	DATE	DESCRIPTION
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DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
SIDEWALK MEDIAN
PROFILE

SHEET NO.
13

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

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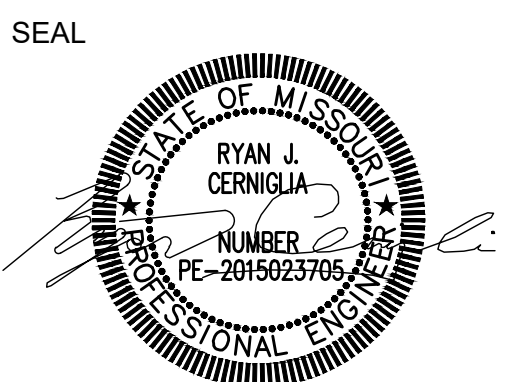
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ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

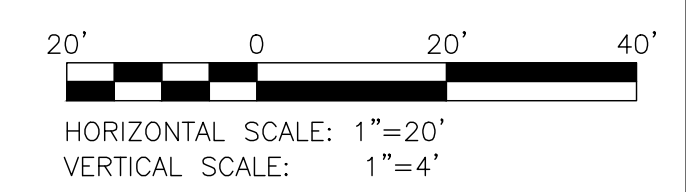
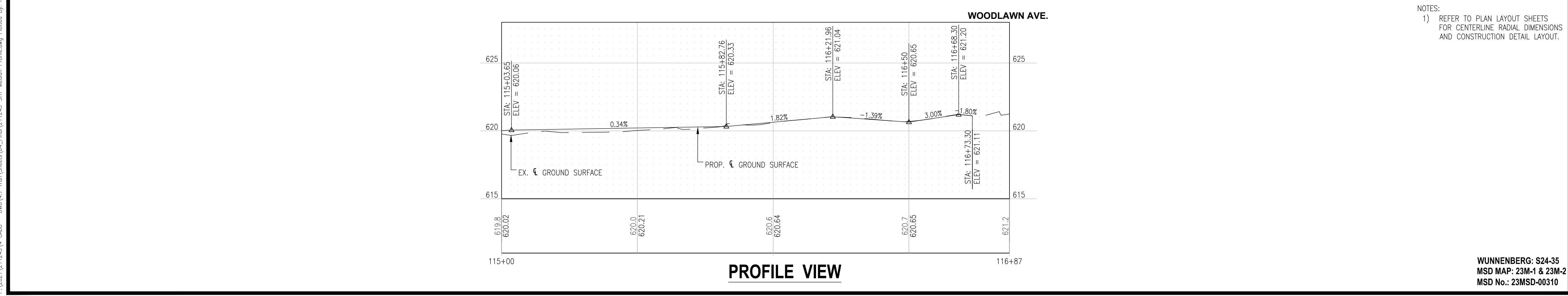
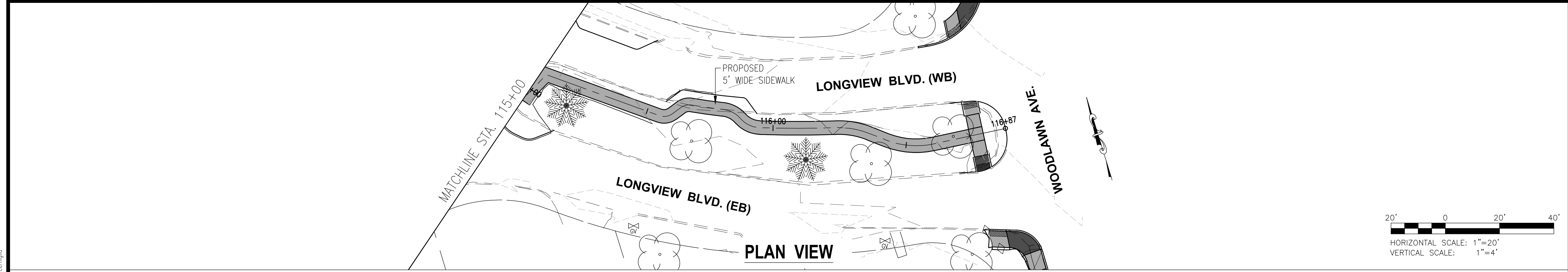
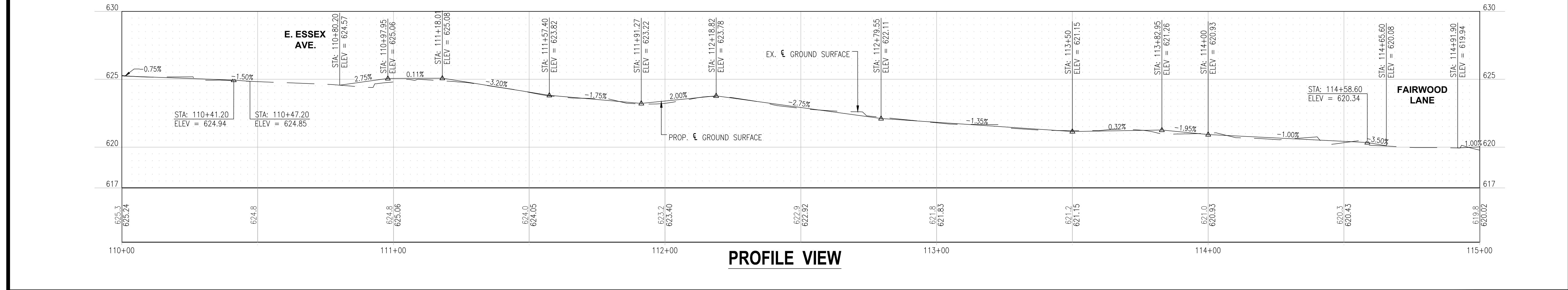
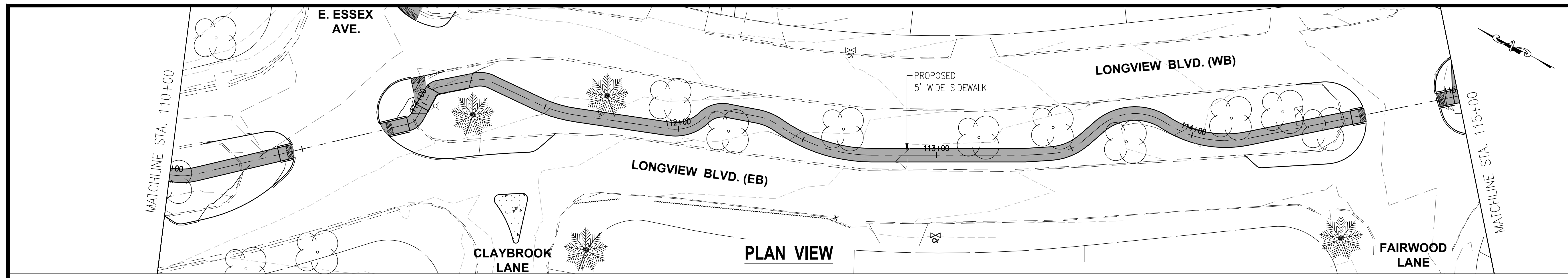
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
SIDEWALK MEDIAN
PROFILE

SHEET NO.
14



NOTES:
1) REFER TO PLAN LAYOUT SHEETS
FOR CENTERLINE RADIAL DIMENSIONS
AND CONSTRUCTION DETAIL LAYOUT.

P:\2021\211243\4 CAD - DWG\4.7 Tran\Sheets\04_Final\211243-SHF-Median Profile.dwg Plotted By: rcermiglia

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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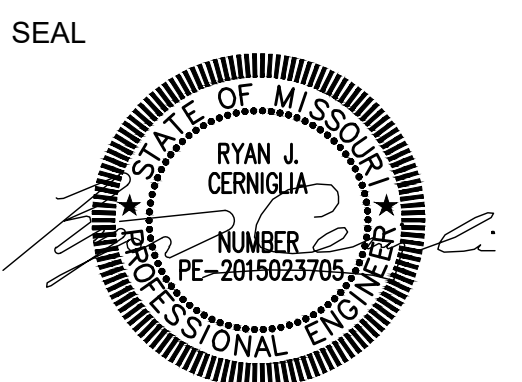
**THOUVENOT, WADE
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ST. LOUIS, MISSOURI

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(314) 241-6300

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MO CERTIFICATE OF AUTHORITY: 001528

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IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974



SIGNATURE:
DATE SIGNED:
LICENSE EXPIRATION:

ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

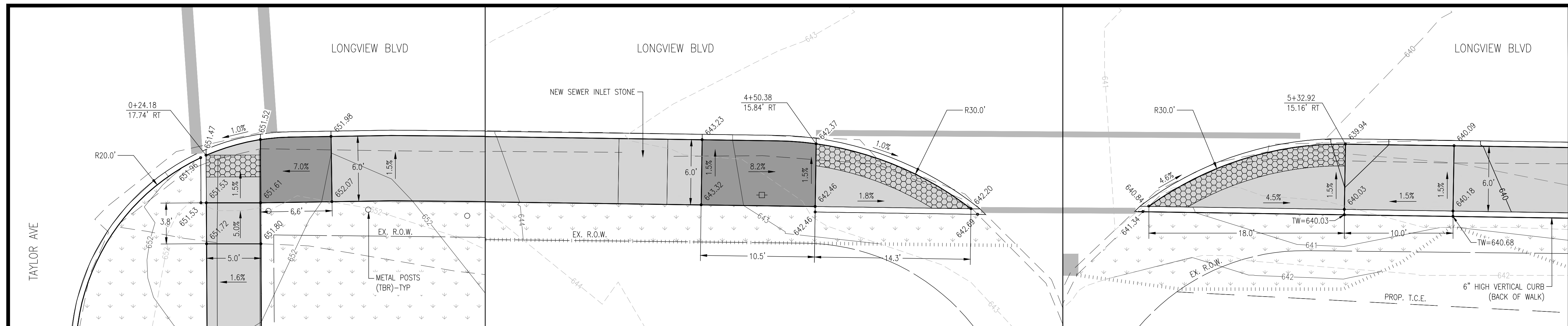
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CURB RAMPS
&
TRAFFIC CALMING

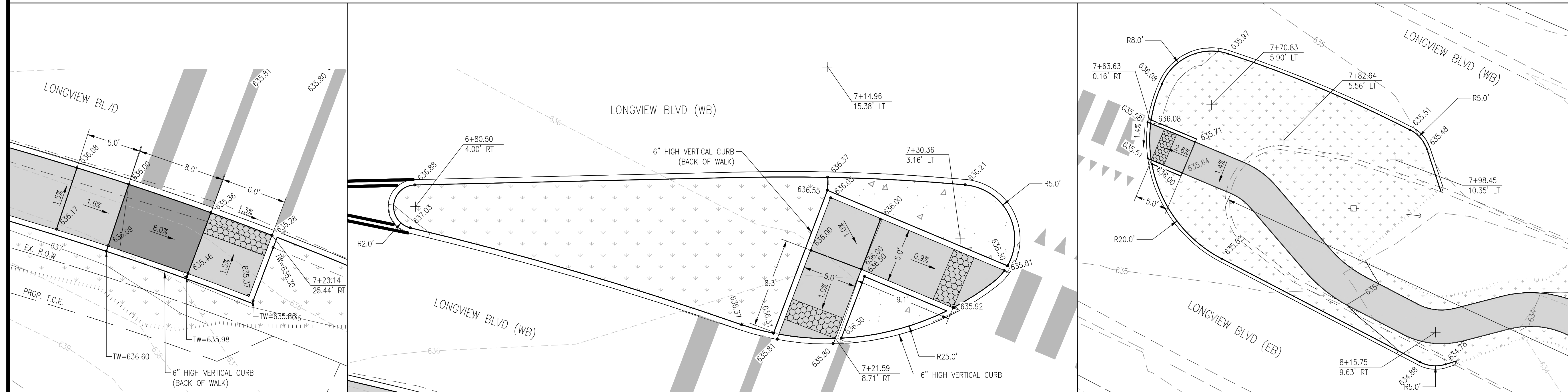
SHEET NO.
15



DETAIL 1
LONGVIEW BLVD. - STA. 0+24.18 RT

DETAIL 2
LONGVIEW BLVD. - STA. 4+50.38 RT

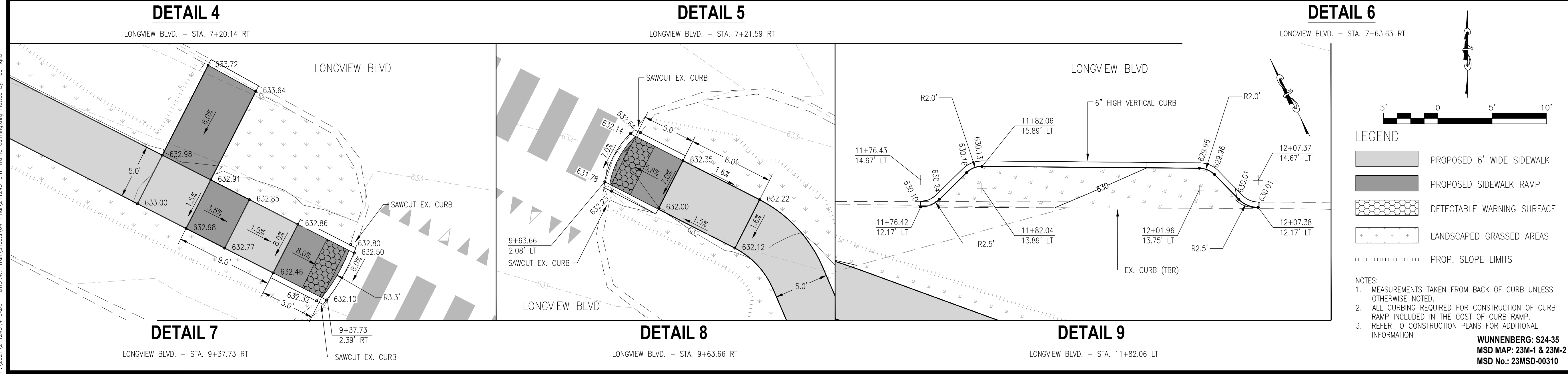
DETAIL 3
LONGVIEW BLVD. - STA. 5+32.92 RT



DETAIL 4
LONGVIEW BLVD. - STA. 7+20.14 RT

DETAIL 5
LONGVIEW BLVD. - STA. 7+21.59 RT

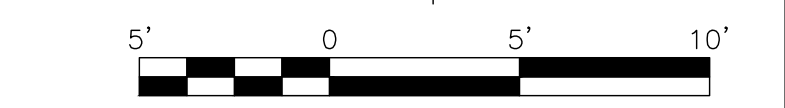
DETAIL 6
LONGVIEW BLVD. - STA. 7+63.63 RT



DETAIL 7
LONGVIEW BLVD. - STA. 9+37.73 RT

DETAIL 8
LONGVIEW BLVD. - STA. 9+63.66 RT

DETAIL 9
LONGVIEW BLVD. - STA. 11+82.06 LT



- LEGEND**
- PROPOSED 6' WIDE SIDEWALK
 - PROPOSED SIDEWALK RAMP
 - DETECTABLE WARNING SURFACE
 - LANDSCAPED GRASSED AREAS
 - PROP. SLOPE LIMITS

- NOTES:**
- MEASUREMENTS TAKEN FROM BACK OF CURB UNLESS OTHERWISE NOTED.
 - ALL CURBING REQUIRED FOR CONSTRUCTION OF CURB RAMP INCLUDED IN THE COST OF CURB RAMP.
 - REFER TO CONSTRUCTION PLANS FOR ADDITIONAL INFORMATION

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

PL:\2021\211243\4_CADD - DMC\4.7_Traffic\Sheets\04_Final\211243-SHT-Traffic_Calming.dwg Plotted By: reanmija



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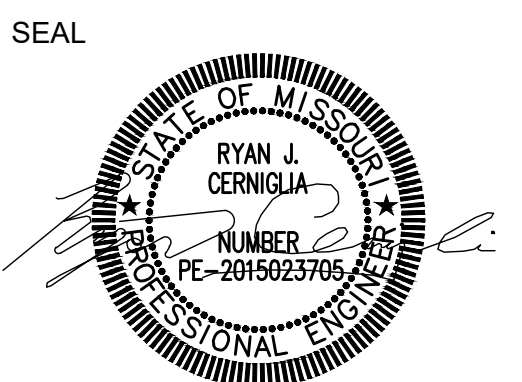
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MO. PROF. ENGR. CORP. 001528
MO. LAND SURVEYING CORP. 000346
TN. PROF. ENGR. FIRM 8974



SIGNATURE:
DATE SIGNED:
LICENSE EXPIRATION:

ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

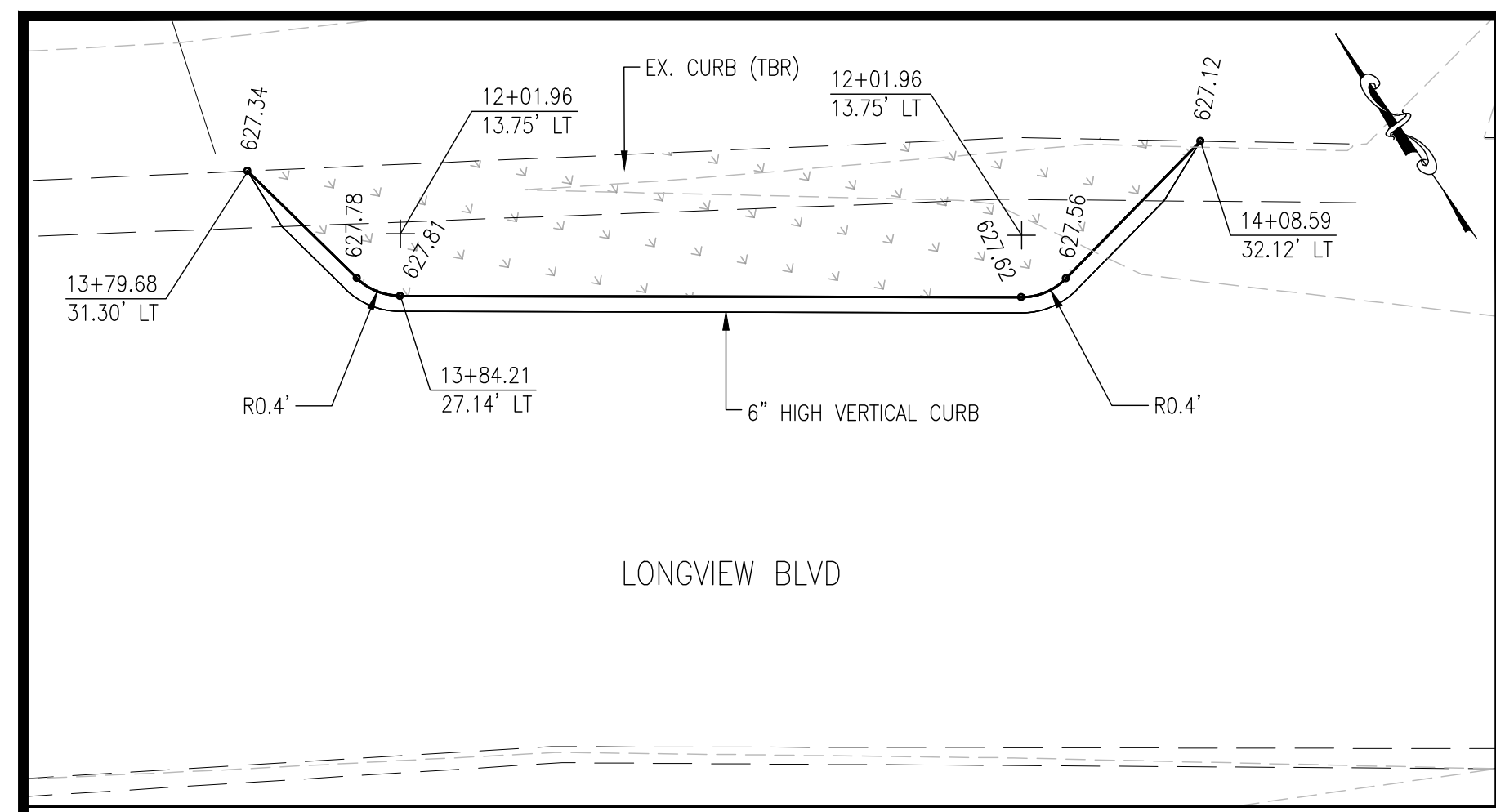
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

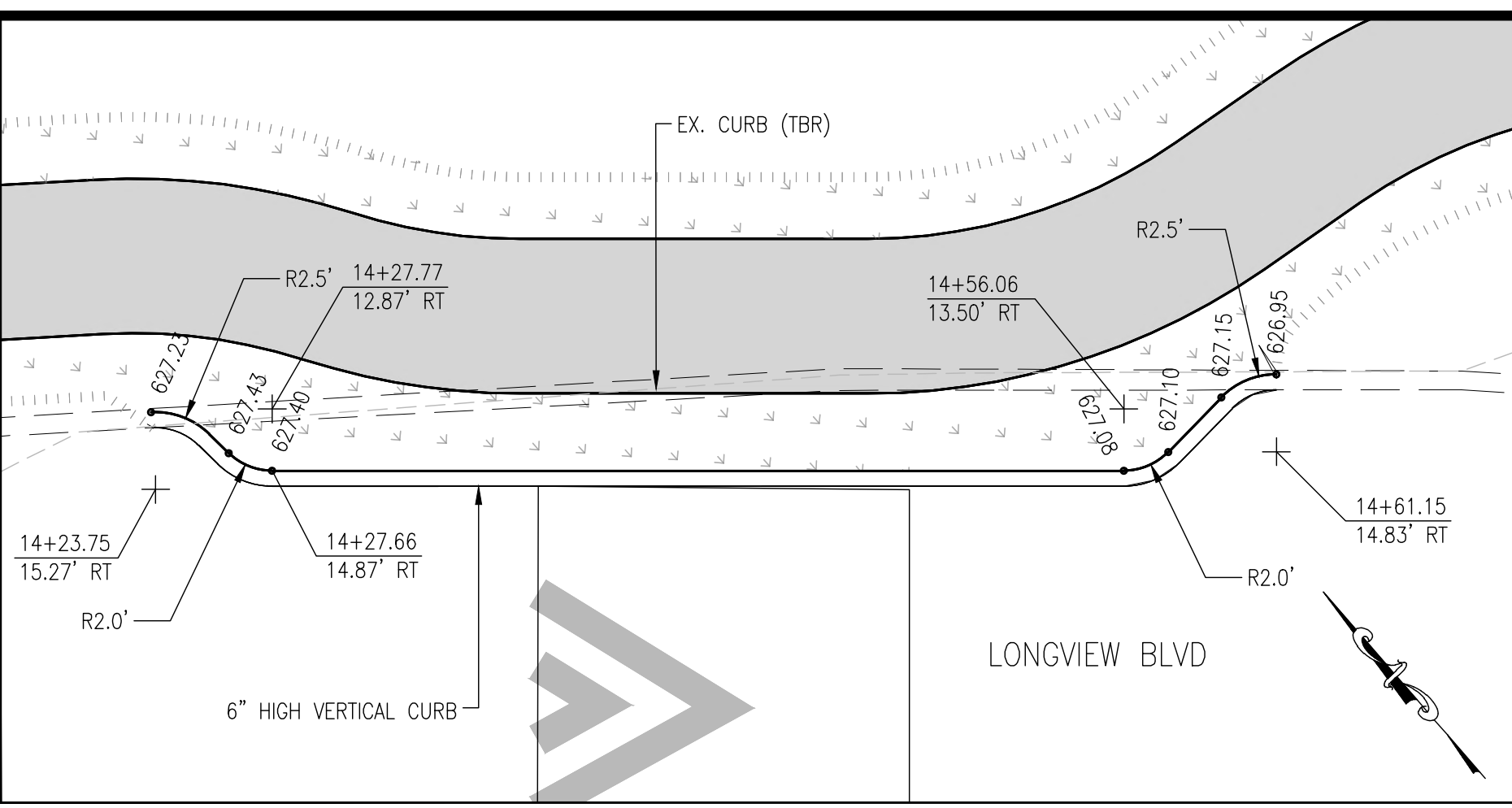
TITLE:
CURB RAMPS
&
TRAFFIC CALMING

SHEET NO.
16



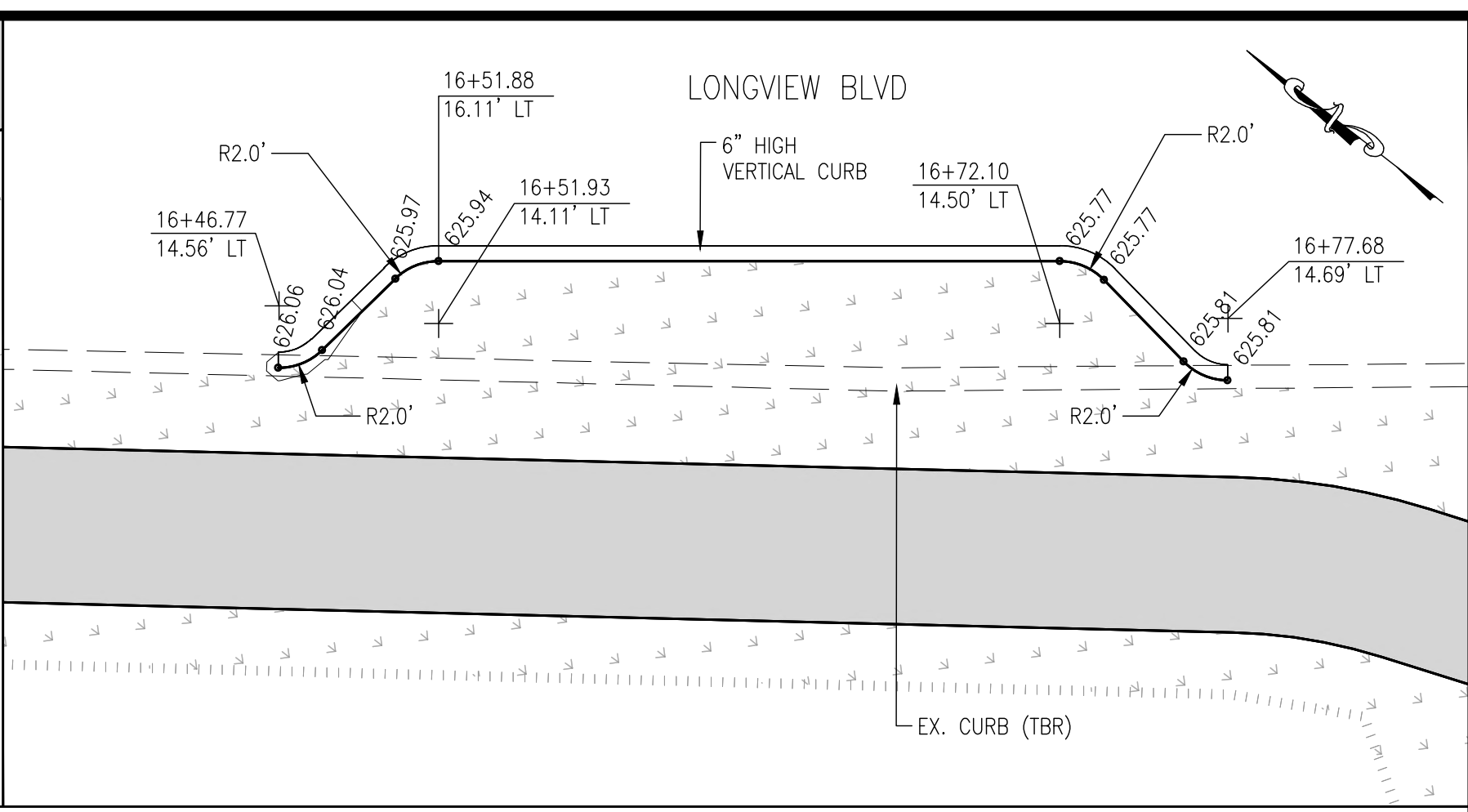
DETAIL 10

LONGVIEW BLVD. - STA. 13+84.21 LT



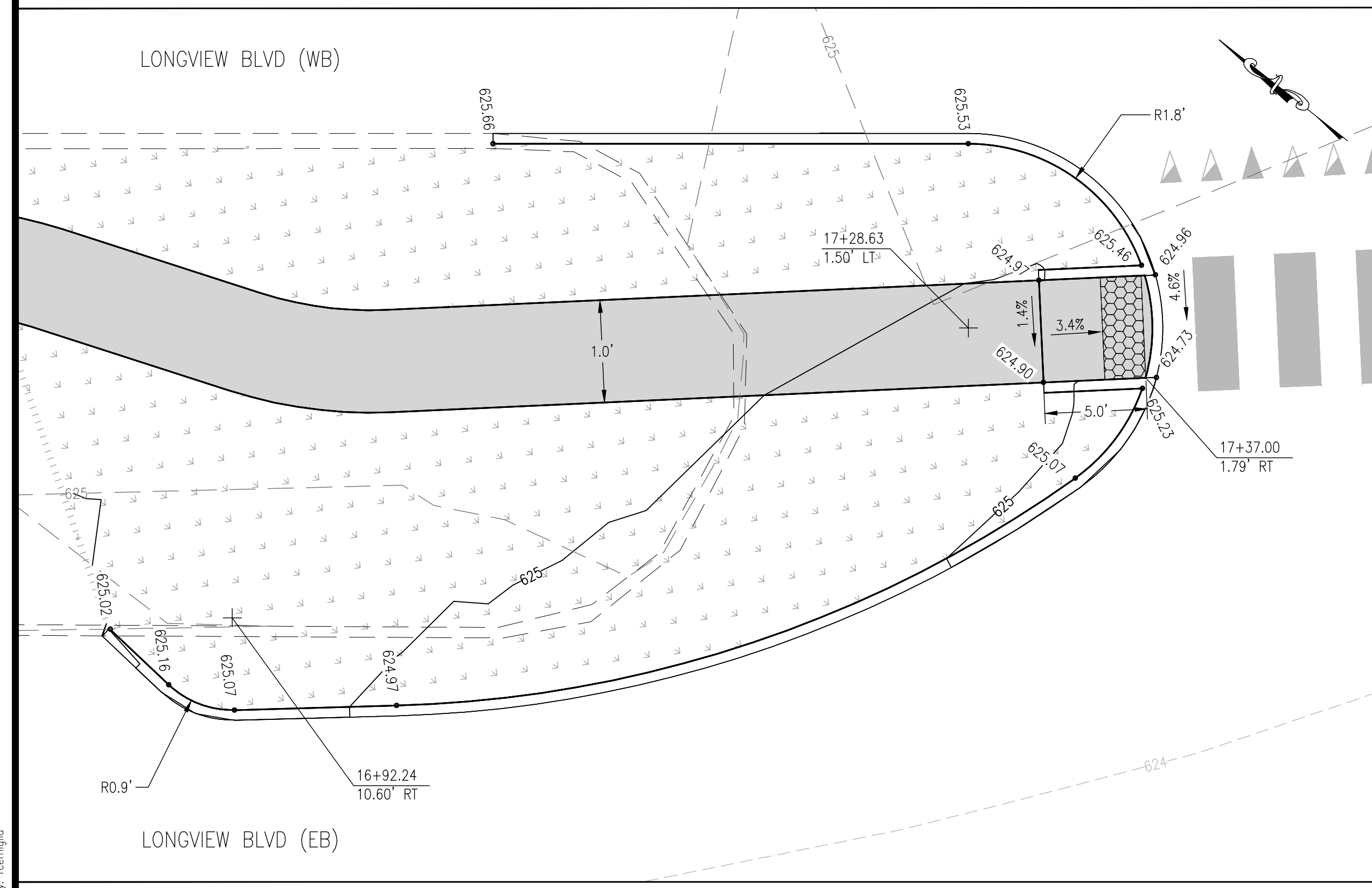
DETAIL 11

LONGVIEW BLVD. - STA. 14+27.66 RT



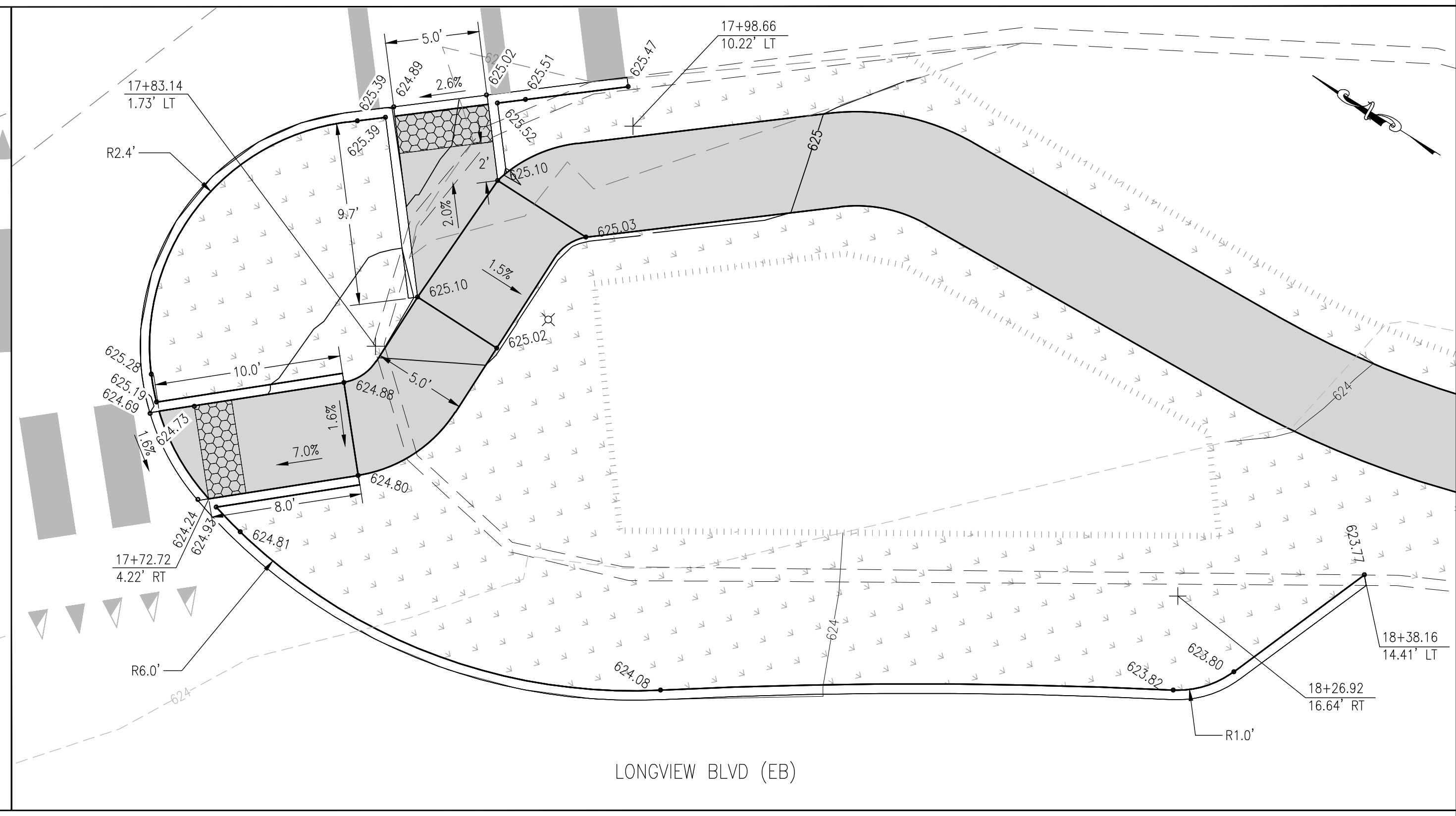
DETAIL 12

LONGVIEW BLVD. - STA. 16+51.88 LT



DETAIL 13

LONGVIEW BLVD. - STA. 17+37.00 RT



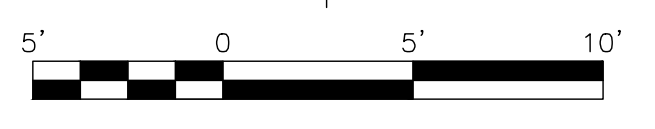
DETAIL 14

LONGVIEW BLVD. - STA. 17+72.72 RT

LEGEND

- PROPOSED 6' WIDE SIDEWALK
- PROPOSED SIDEWALK RAMP
- DETECTABLE WARNING SURFACE
- LANDSCAPED GRASSED AREAS
- PROP. SLOPE LIMITS

- NOTES:
- MEASUREMENTS TAKEN FROM BACK OF CURB UNLESS OTHERWISE NOTED.
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 - REFER TO CONSTRUCTION PLANS FOR ADDITIONAL INFORMATION



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

P:\2021\211243\4 CAD - DMC\4.7 Tran\Sheets\04_Final\211243-SHF-Traffic Calming.dwg Plotted By: reerniglia



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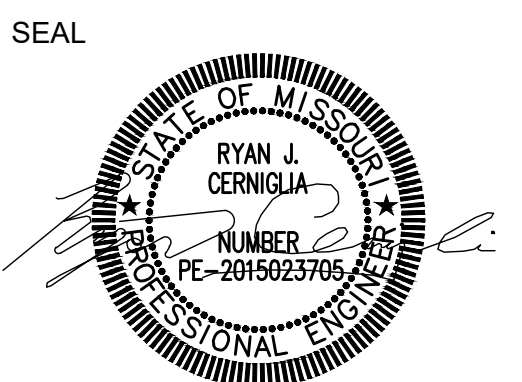
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TN. PROF. ENGR. FIRM	8974



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LICENSE EXPIRATION:

ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

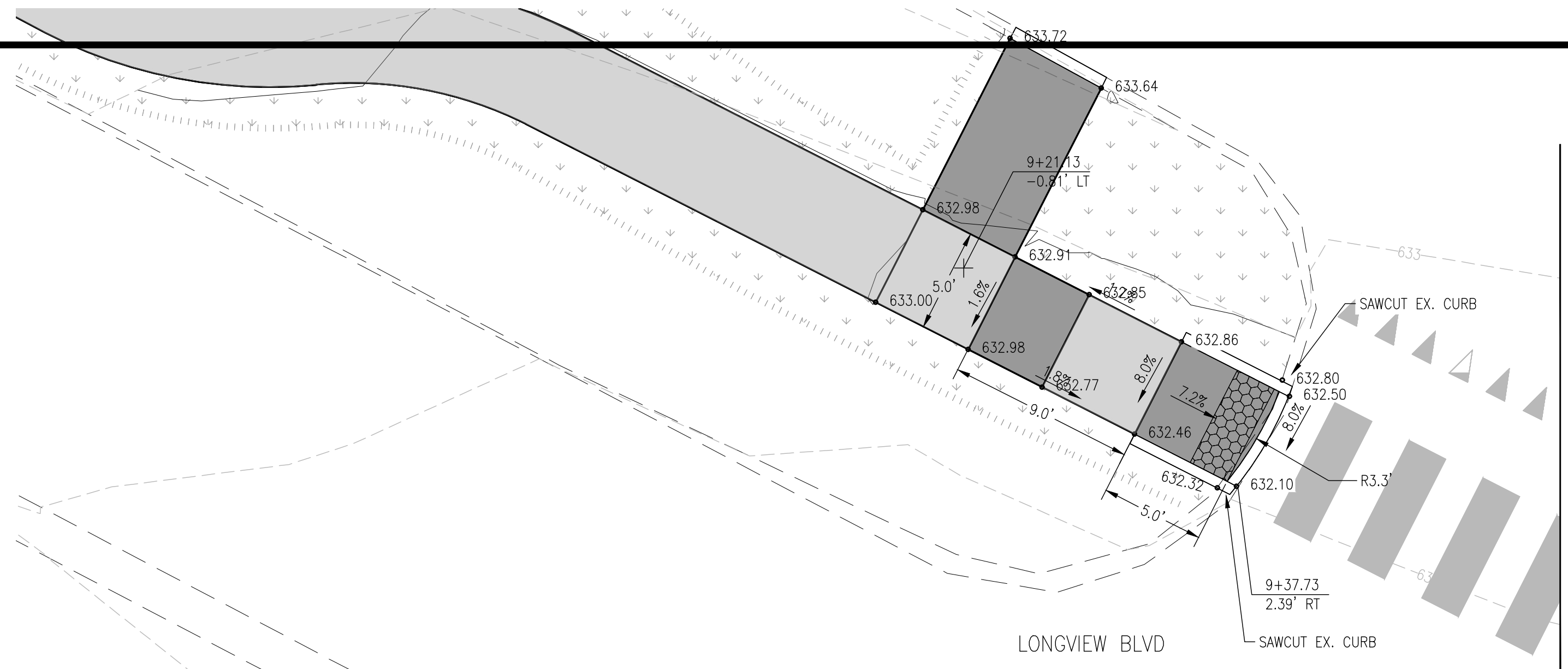
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

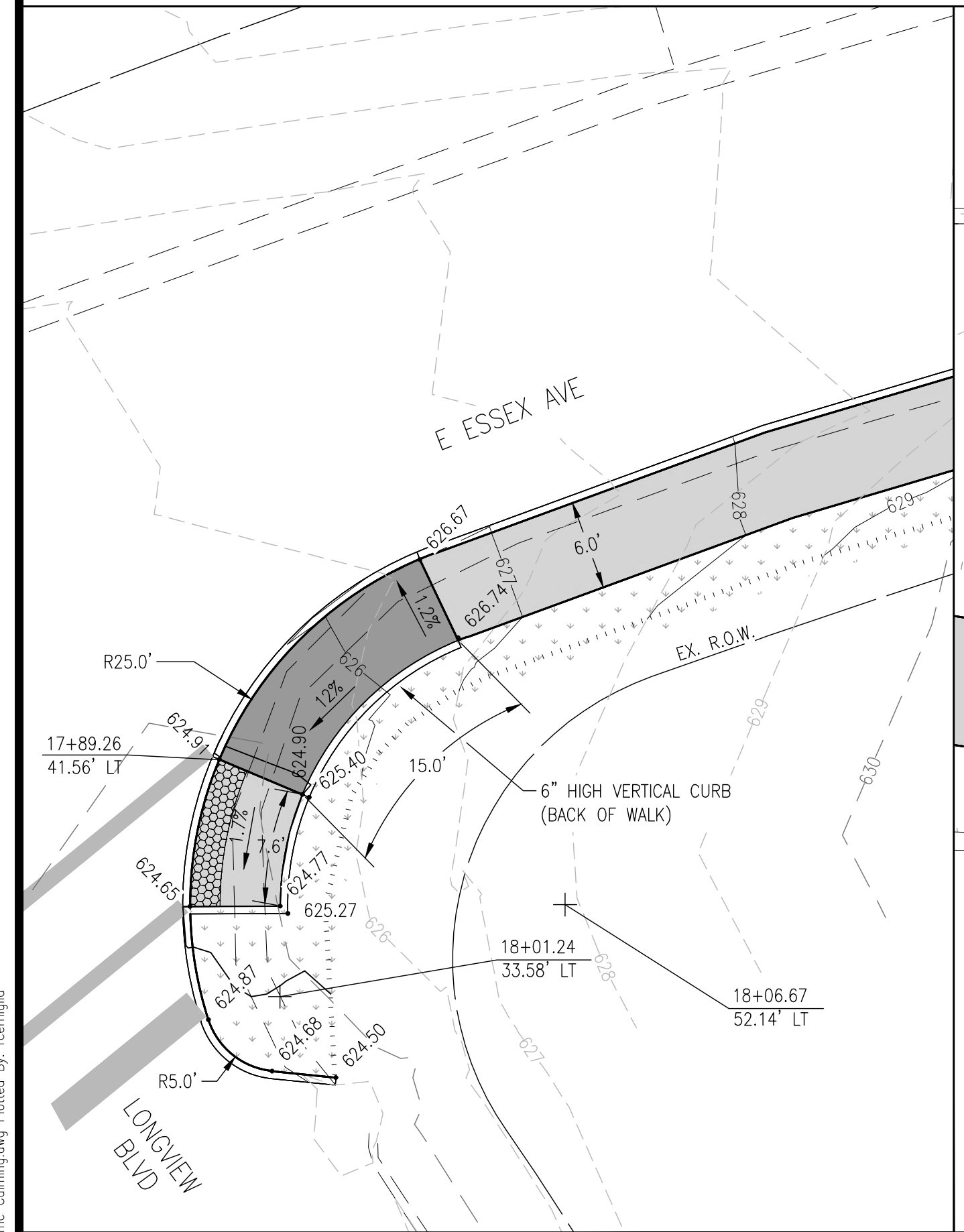
TITLE:
CURB RAMPS
&
TRAFFIC CALMING

SHEET NO.
17



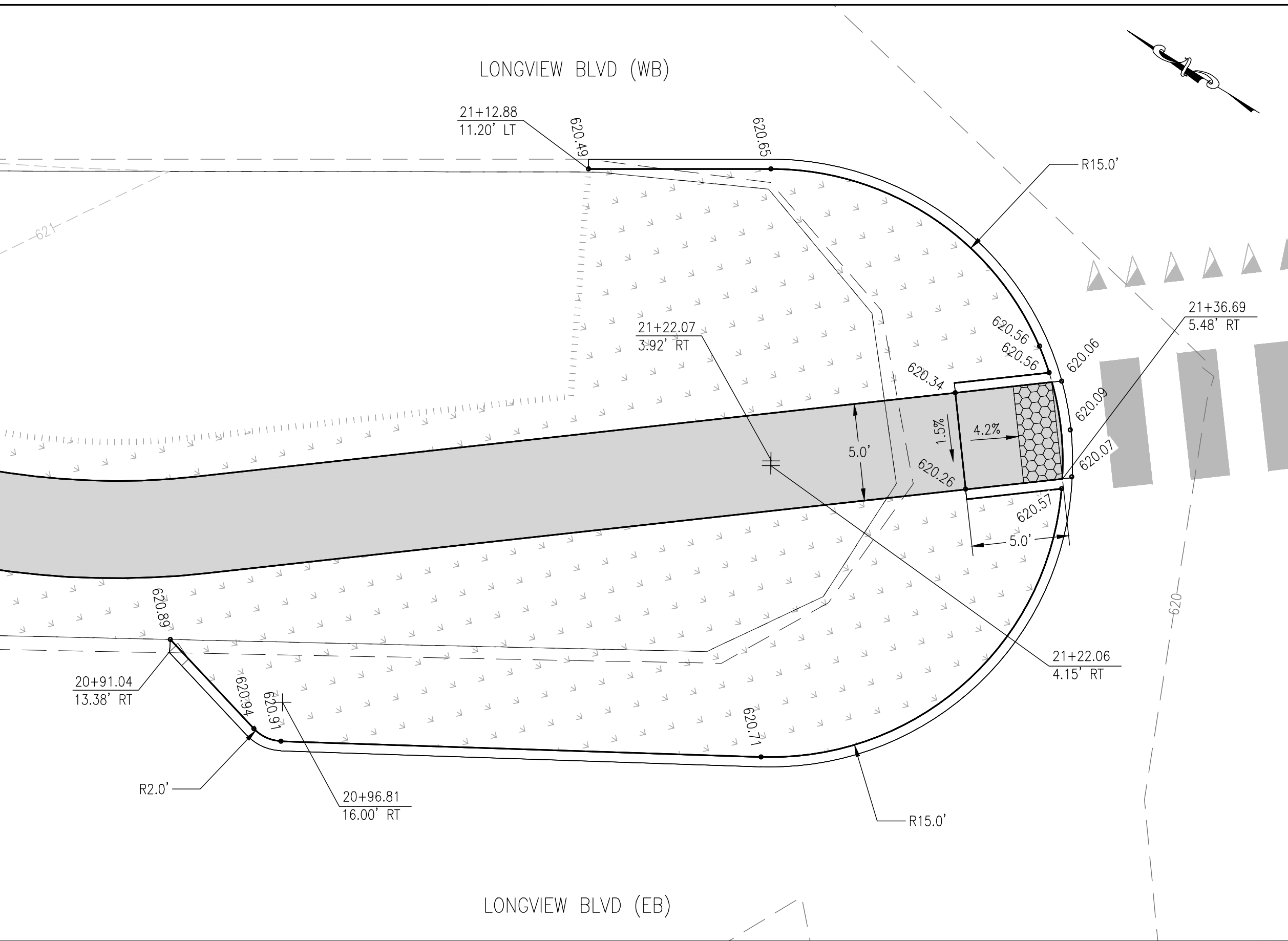
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LONGVIEW BLVD. - STA. 9+37.73 RT



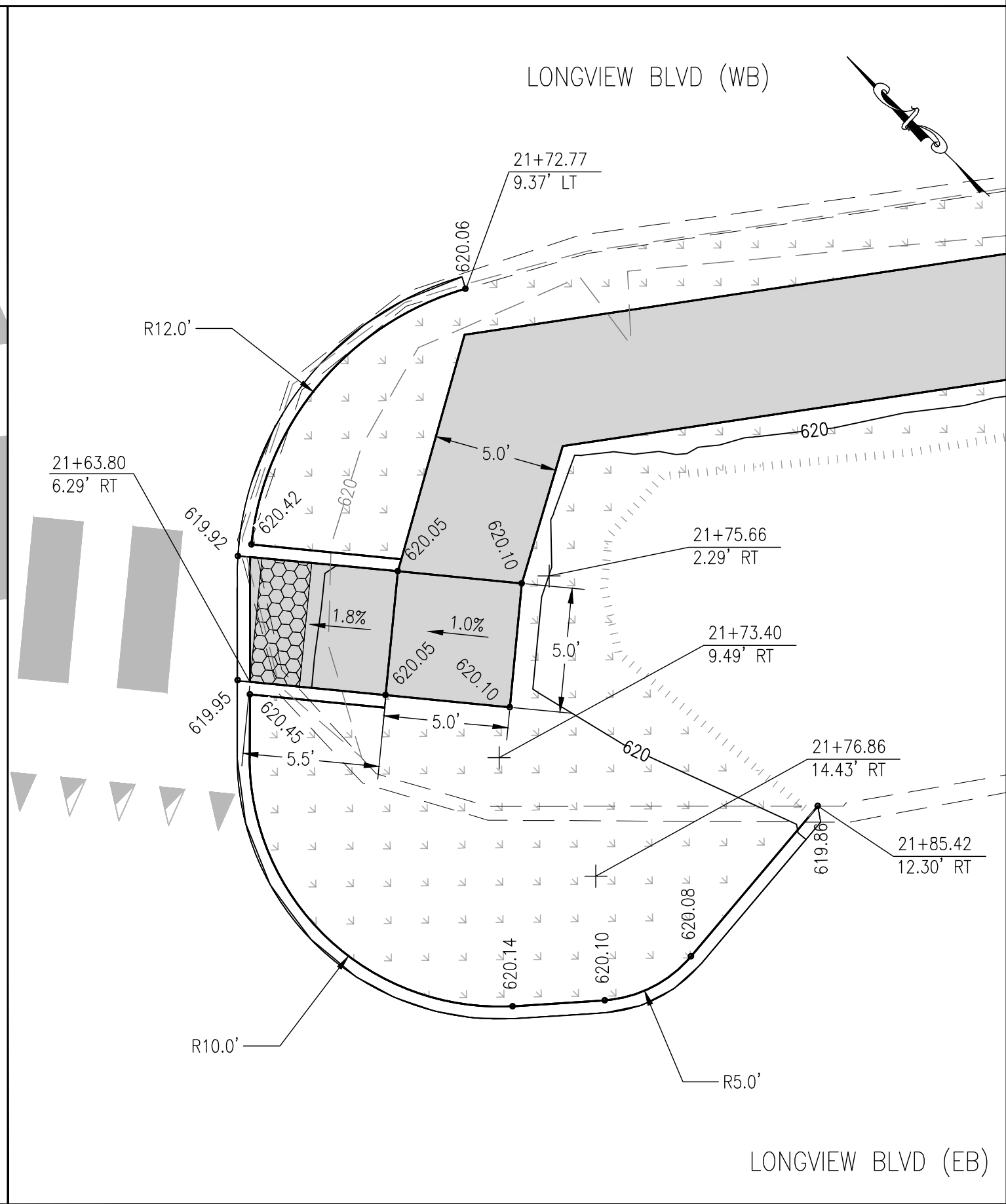
DETAIL 15

LONGVIEW BLVD. - STA. 17+89.26 LT



DETAIL 16

LONGVIEW BLVD. - STA. 21+36.69 RT



DETAIL 17

LONGVIEW BLVD. - STA. 21+63.80 RT

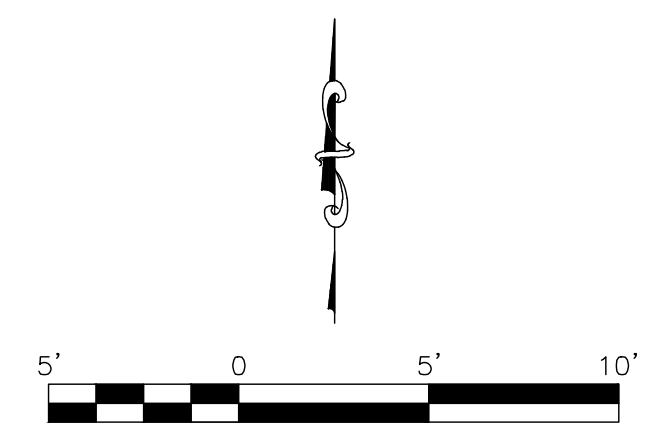
LEGEND

- PROPOSED 6' WIDE SIDEWALK
- PROPOSED SIDEWALK RAMP
- DETECTABLE WARNING SURFACE
- LANDSCAPED GRASSED AREAS
- PROP. SLOPE LIMITS

- NOTES:
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WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

P:\2021\211243\4_CADD - DMCA\4.7_Traffic_Calming.dwg Plotted By: rerniglia





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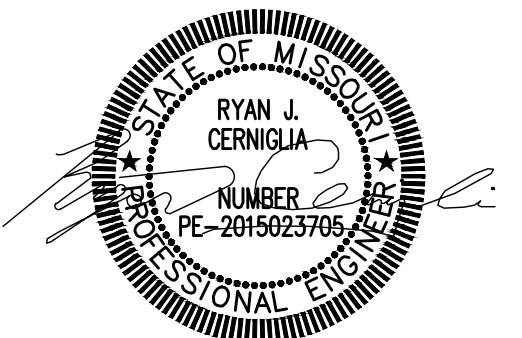
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(314) 241-6300
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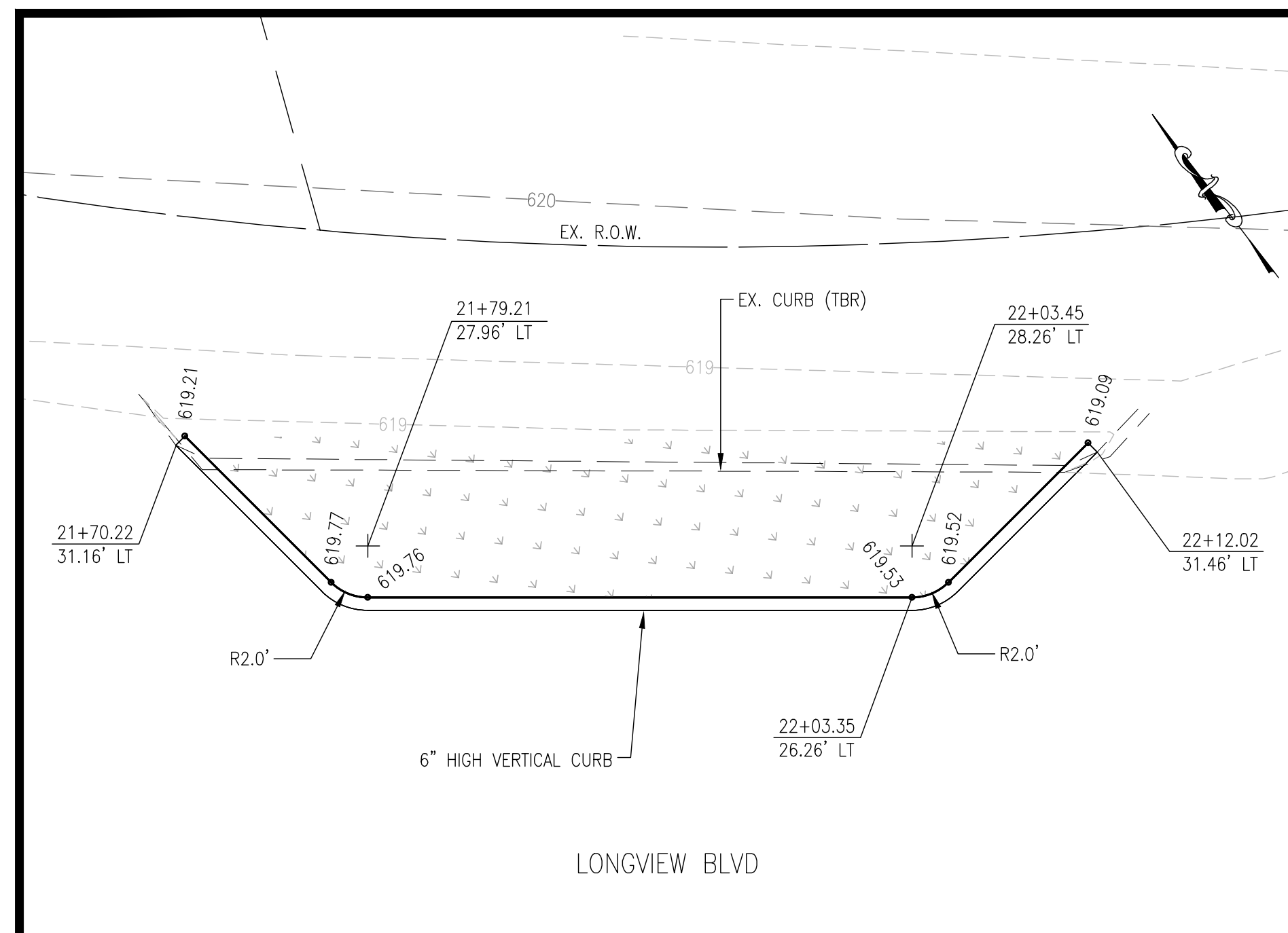
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

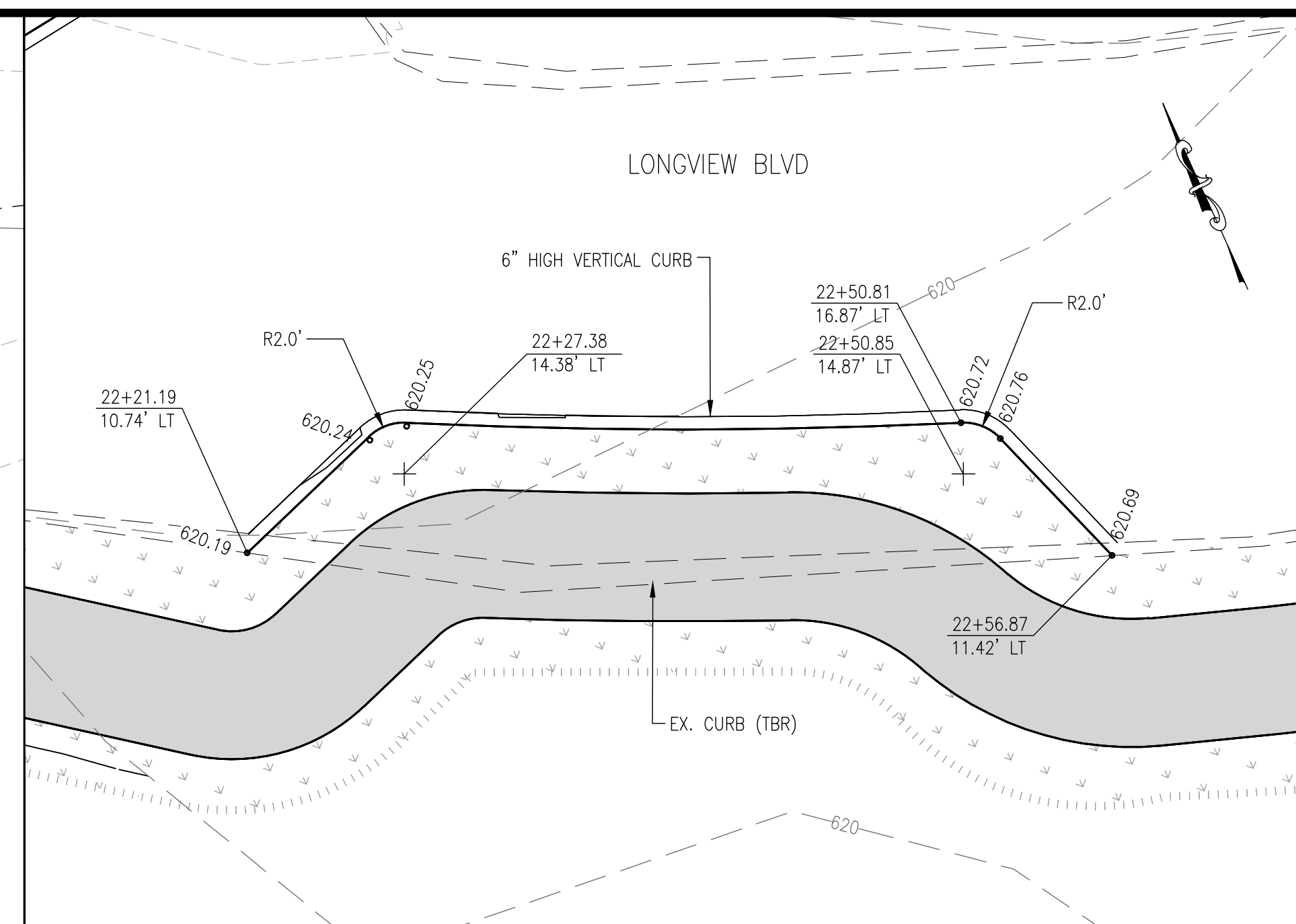
TITLE:
CURB RAMPS
&
TRAFFIC CALMING

SHEET NO.
18



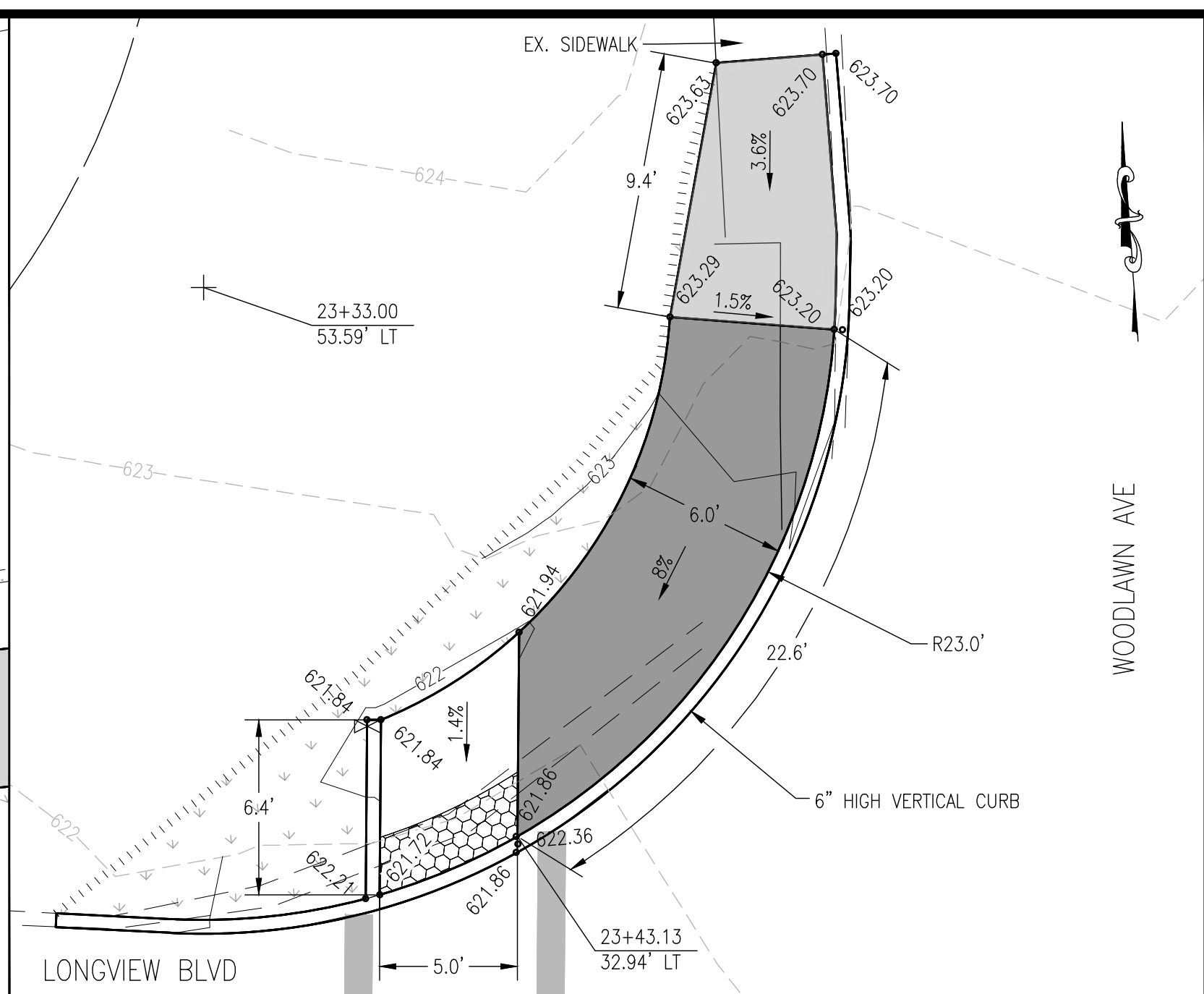
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LONGVIEW BLVD. - STA. 22+03.35 LT



DETAIL 19

LONGVIEW BLVD. - STA. 22+50.81 LT



DETAIL 20

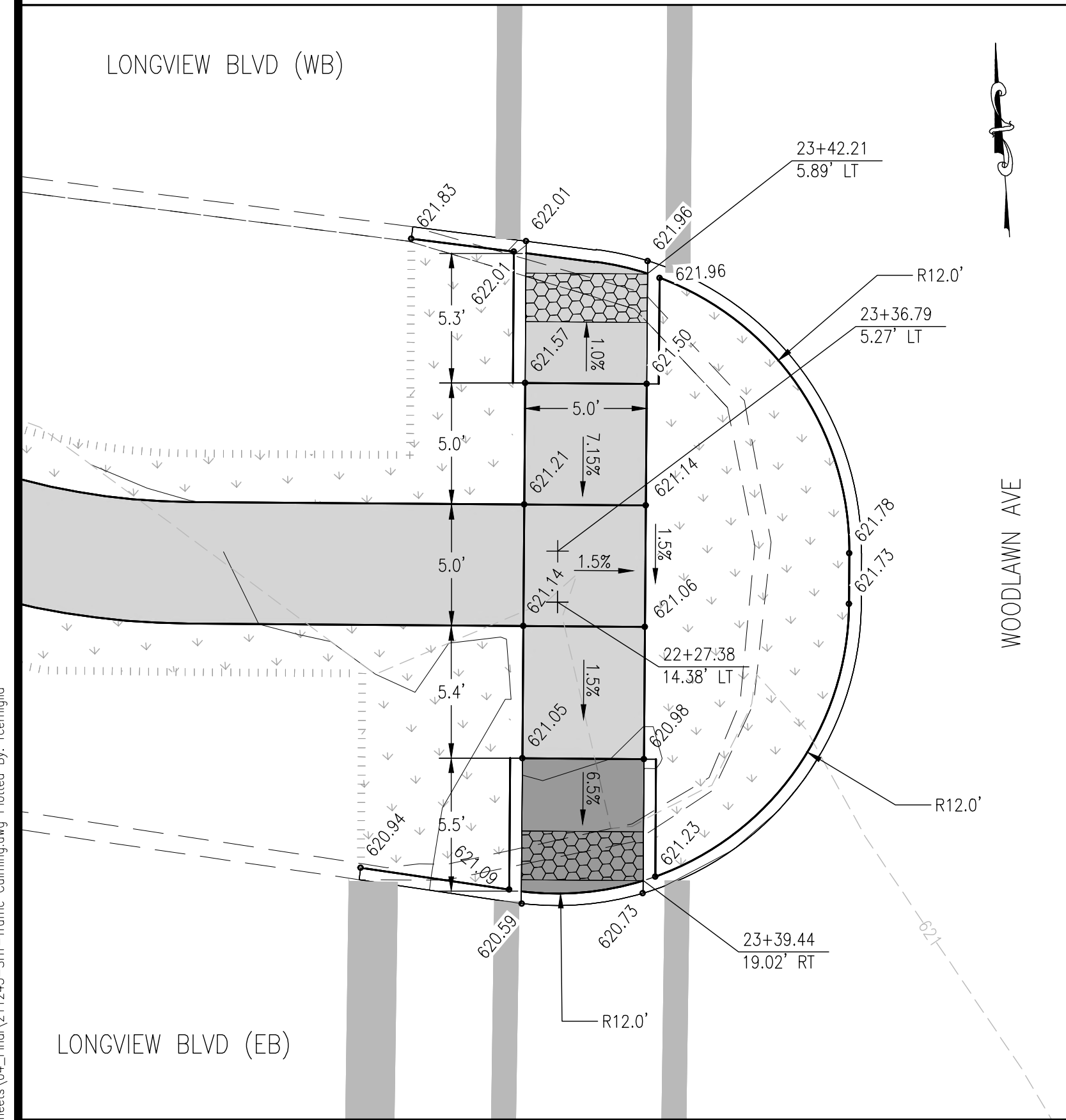
LONGVIEW BLVD. - STA. 23+43.13 LT

LEGEND

- PROPOSED 6' WIDE SIDEWALK
- PROPOSED SIDEWALK RAMP
- DETECTABLE WARNING SURFACE
- LANDSCAPED GRASSED AREAS
- PROP. SLOPE LIMITS

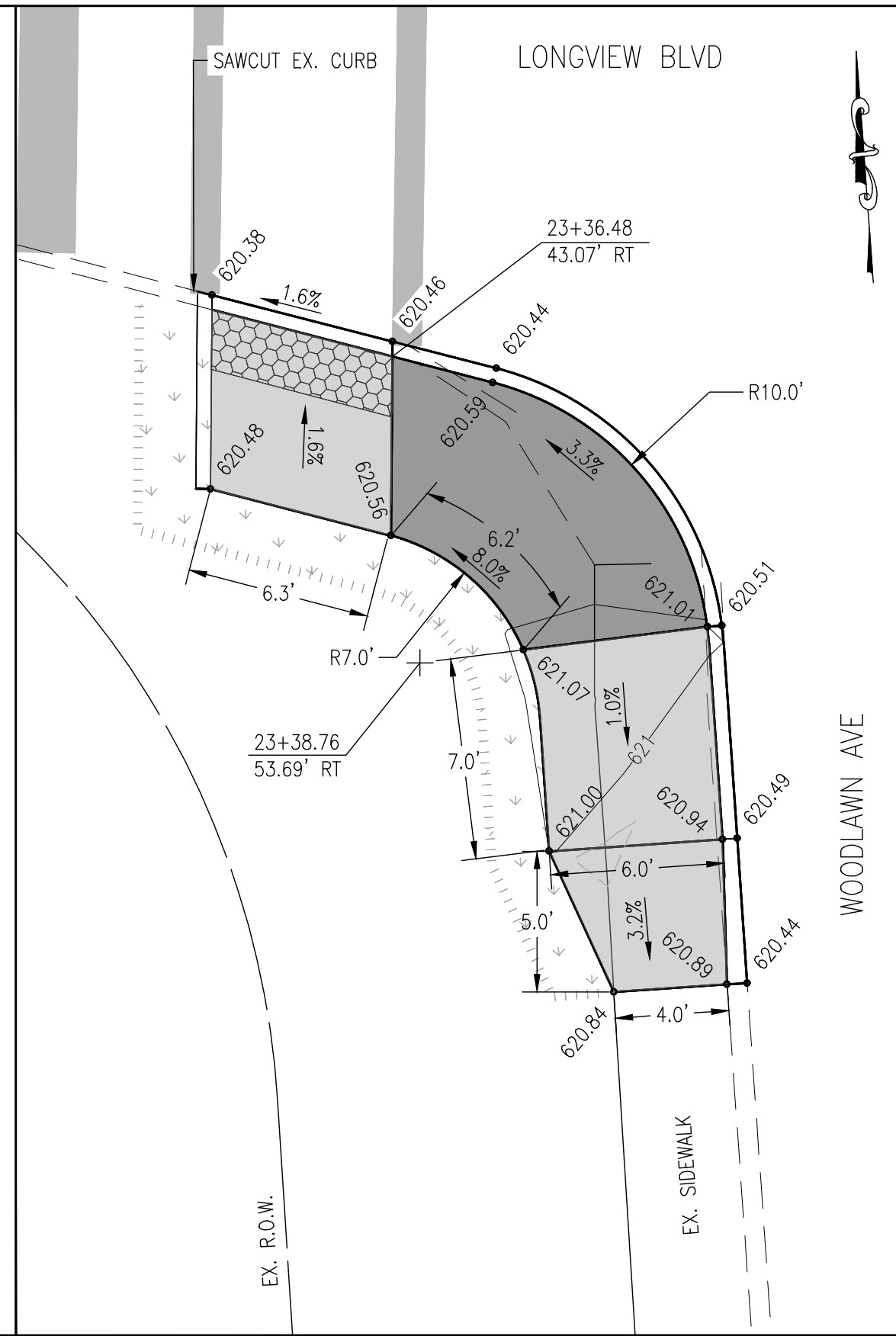


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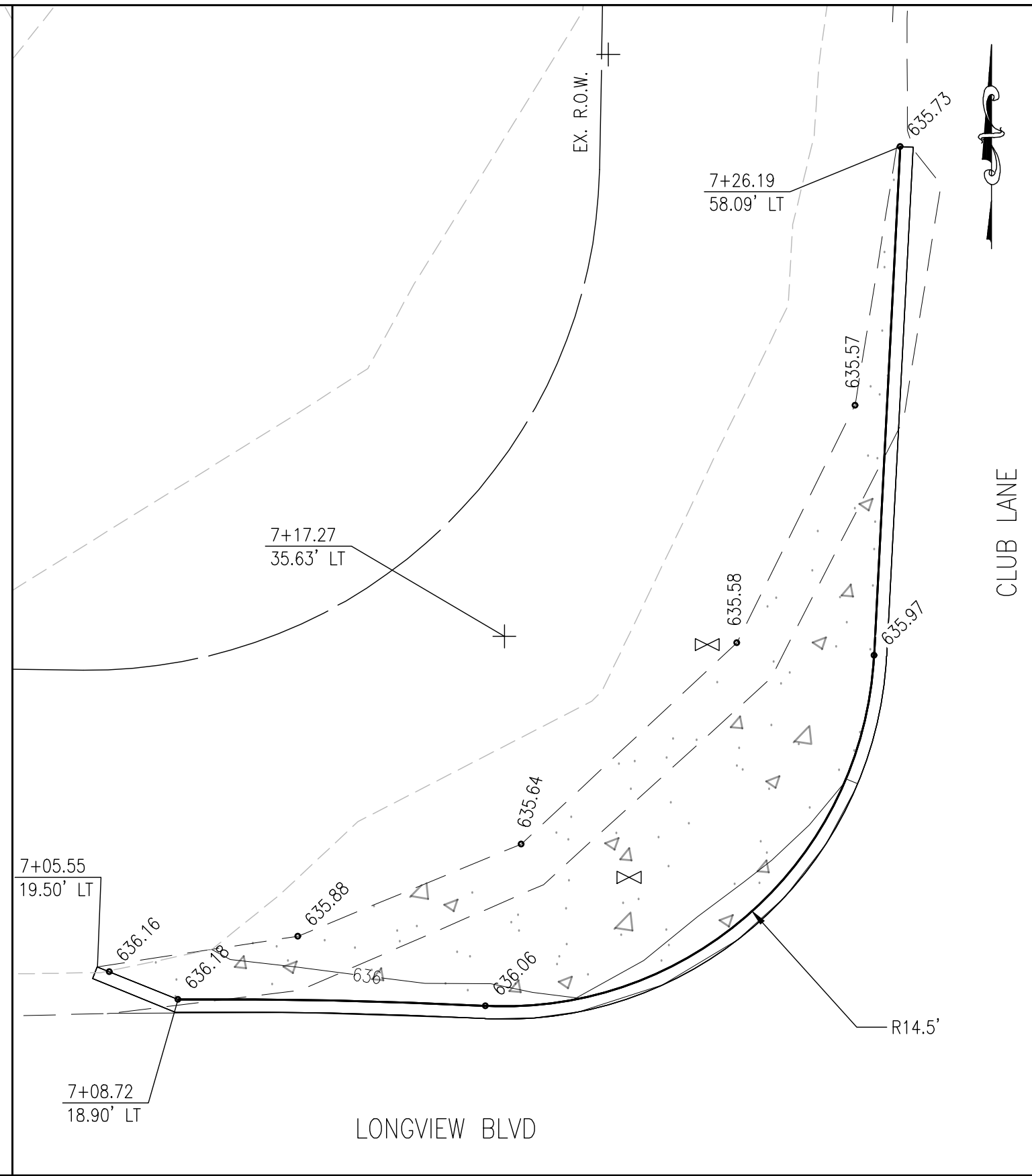
DETAIL 21

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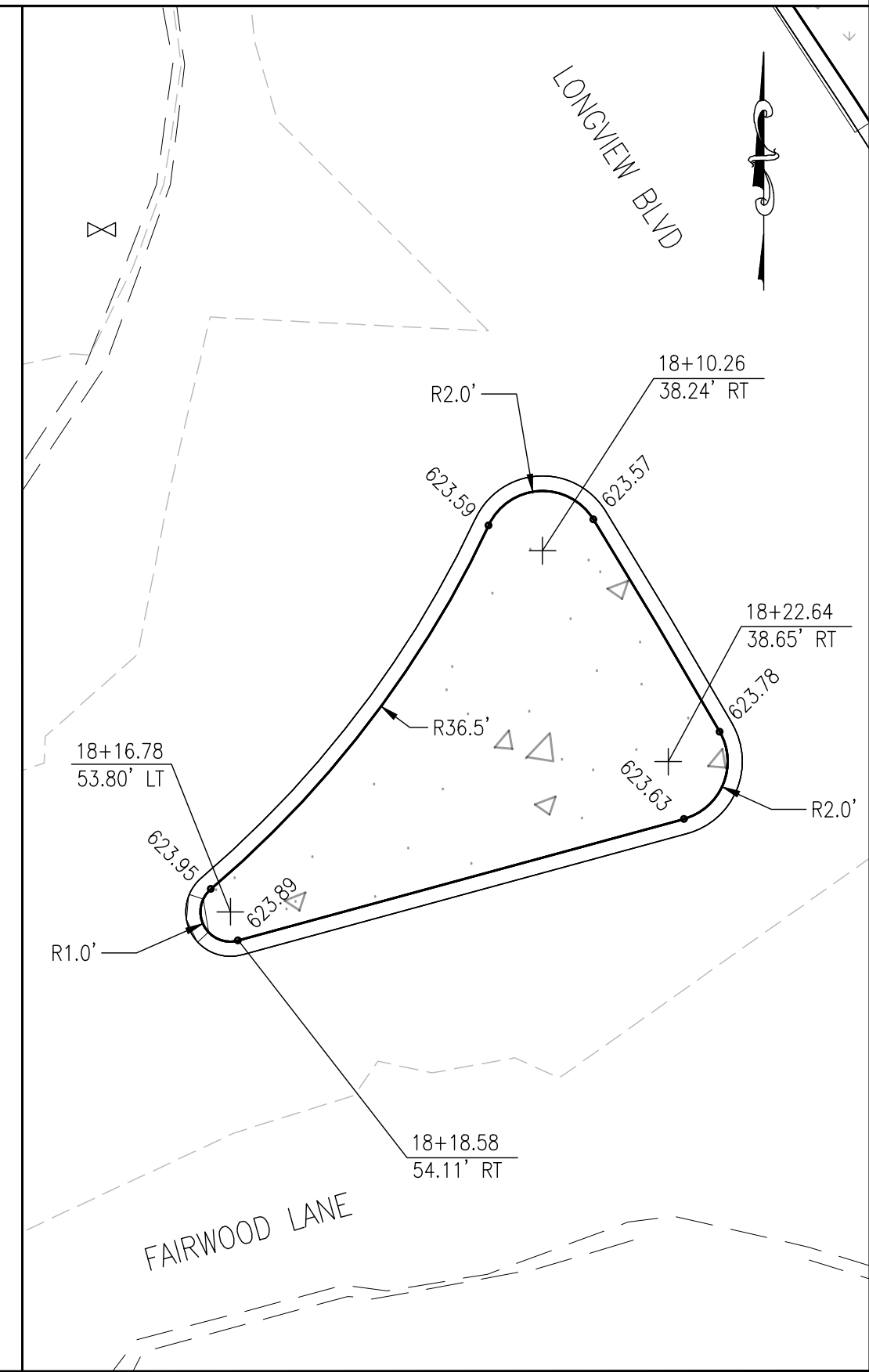
DETAIL 22

LONGVIEW BLVD. - STA. 23+38.48 RT



DETAIL 23

LONGVIEW BLVD. - STA. 7+08.72 LT



DETAIL 24

LONGVIEW BLVD. - STA. 18+18.58 RT

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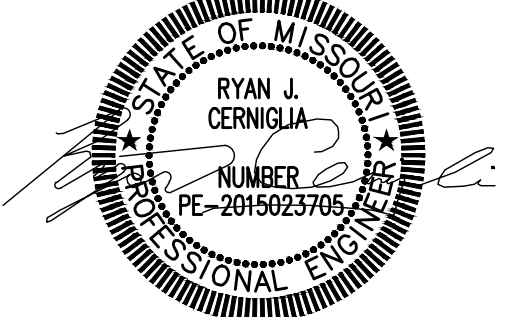
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3701 S. LINDBERGH BLVD. STE 100
ST. LOUIS, MISSOURI
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SEAL



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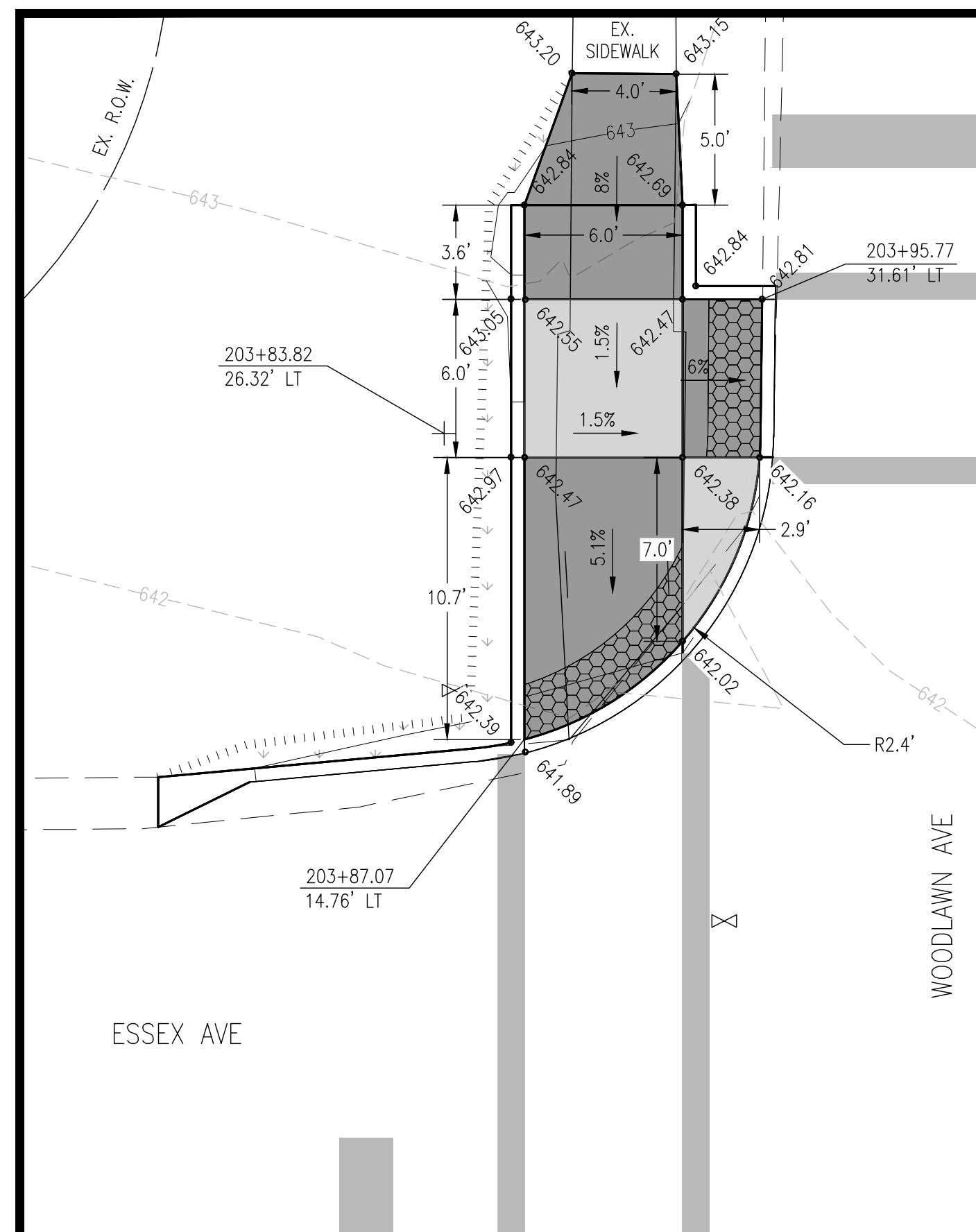
REV.	DATE	DESCRIPTION
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

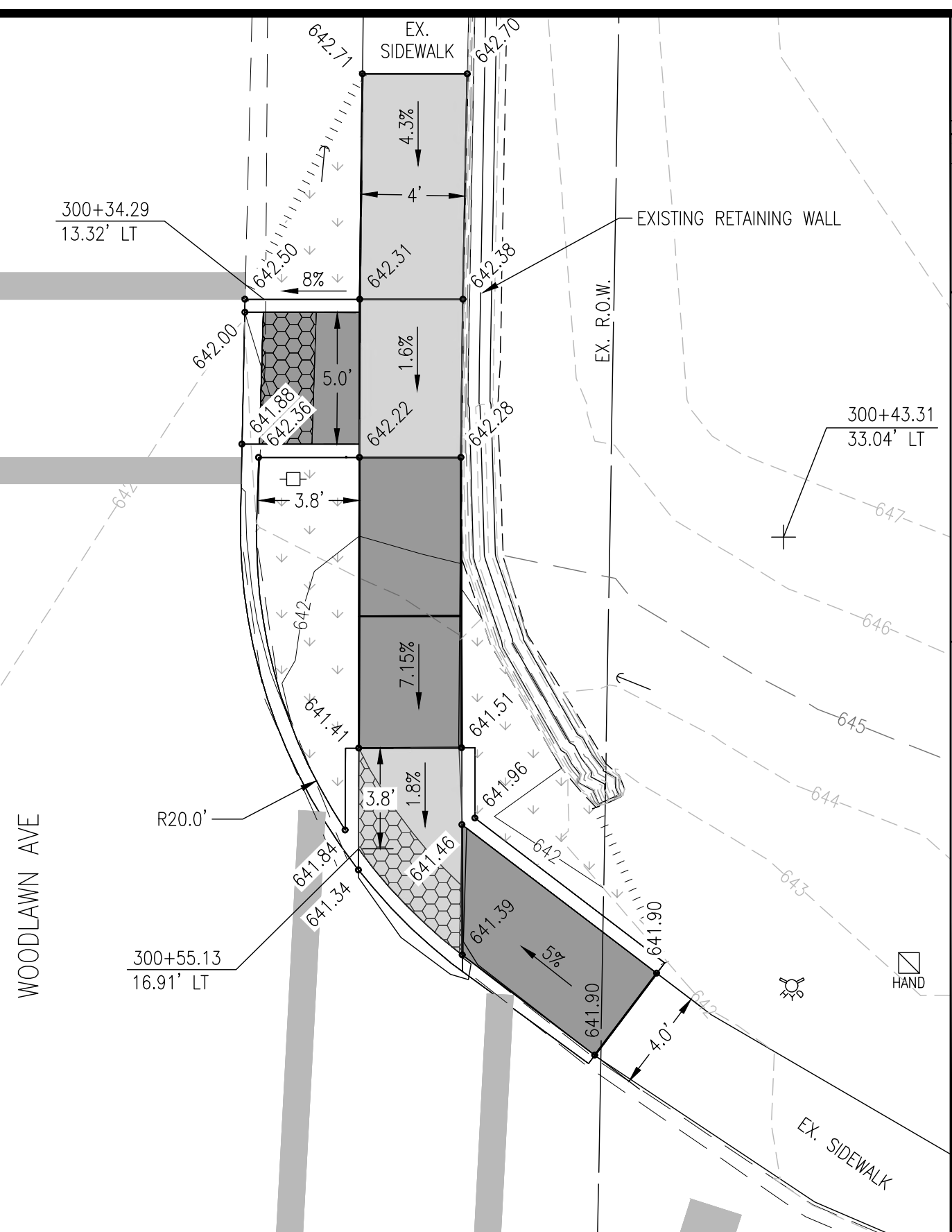
PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CURB RAMPS
&
TRAFFIC CALMING

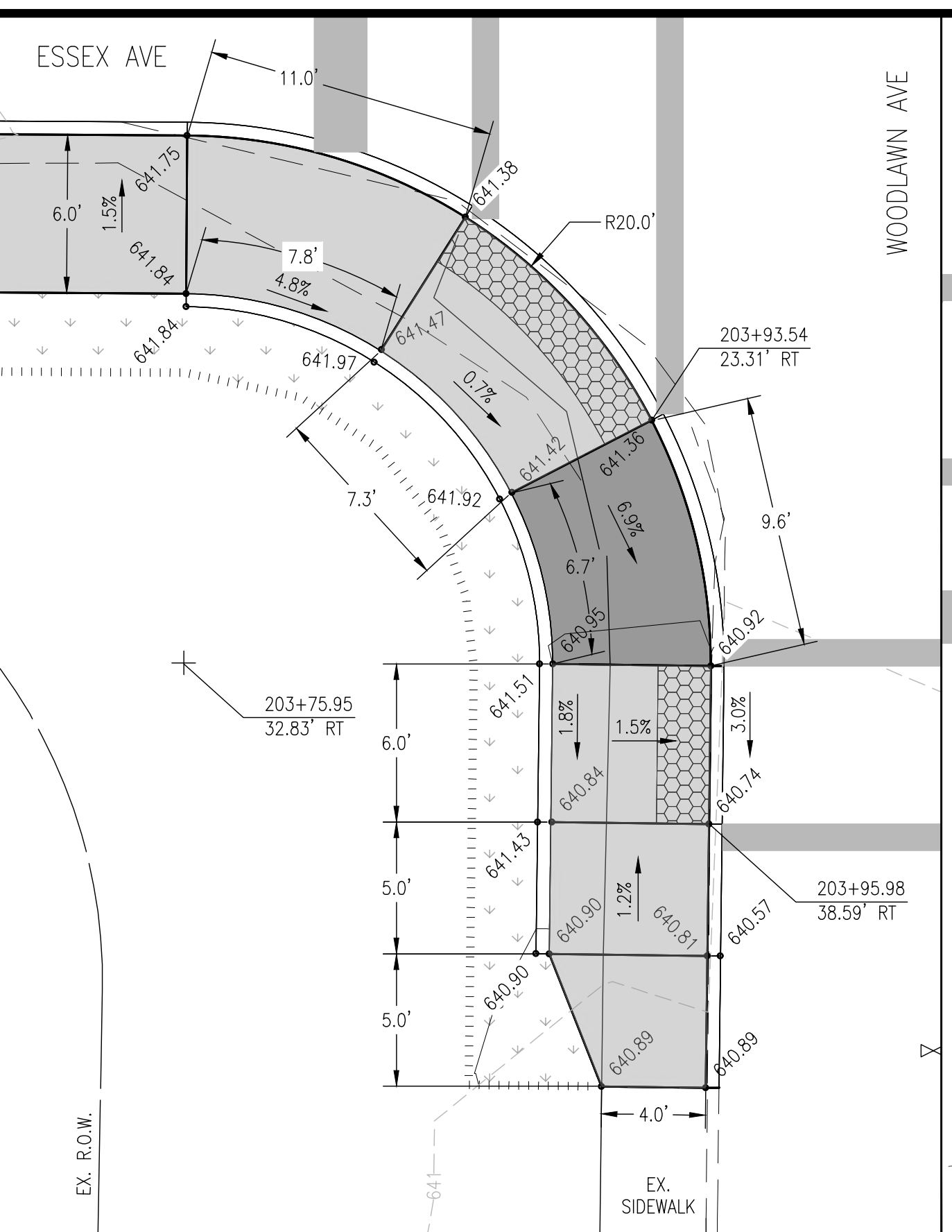
SHEET NO.
19



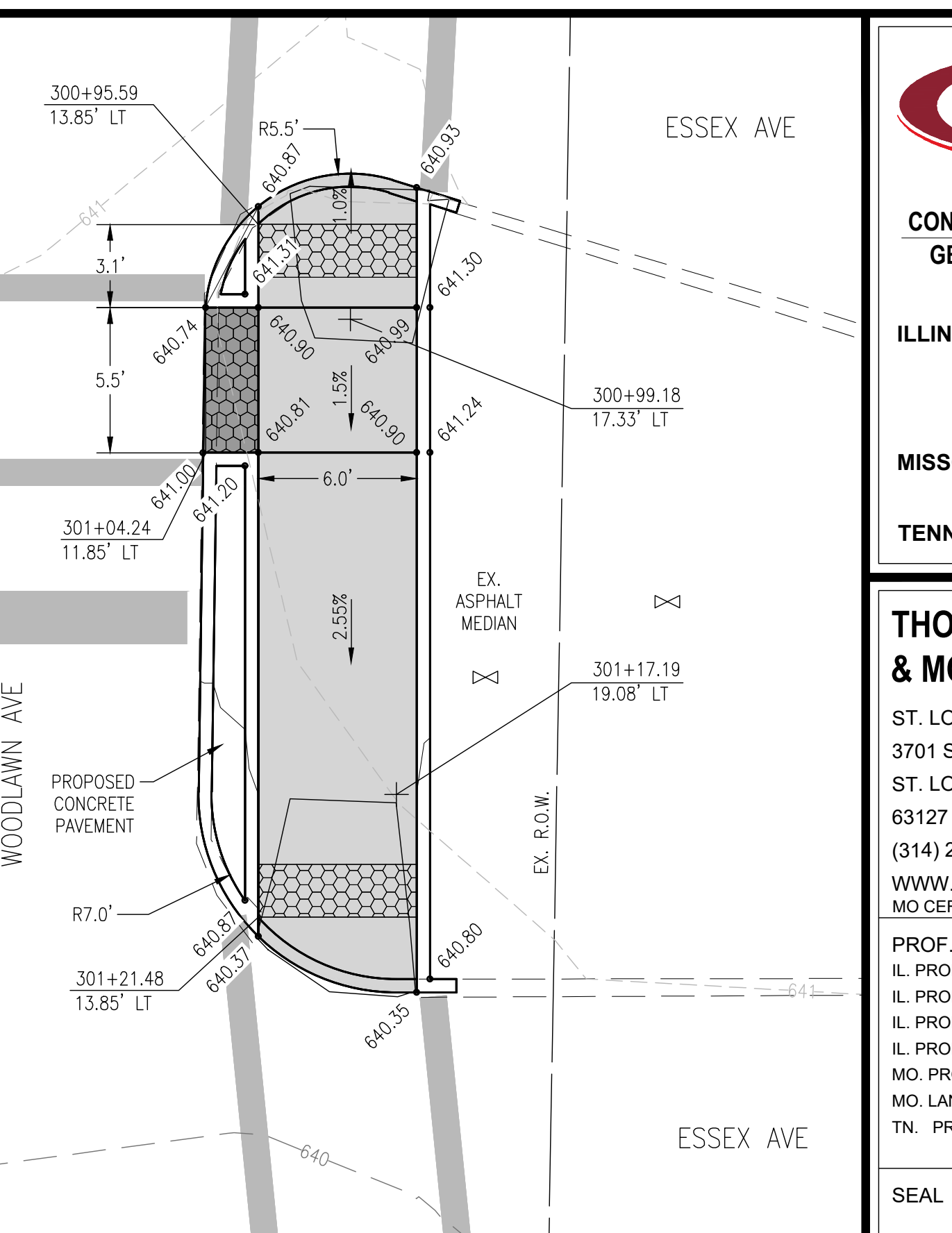
DETAIL 22
E. ESSEX AVE. - STA. 203+87.07 LT



DETAIL 23
WOODLAWN AVE. - STA. 300+55.13 LT



DETAIL 24
WOODLAWN AVE. - STA. 203+93.54 RT





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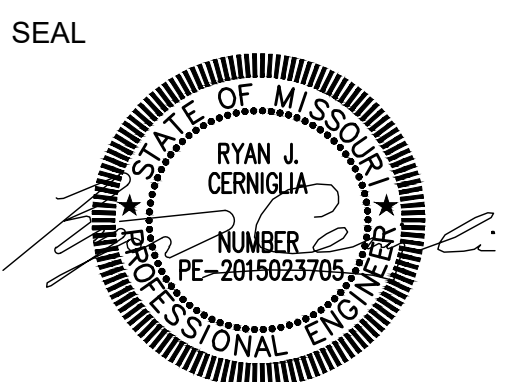
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ISSUED FOR: FINAL ENGINEERING
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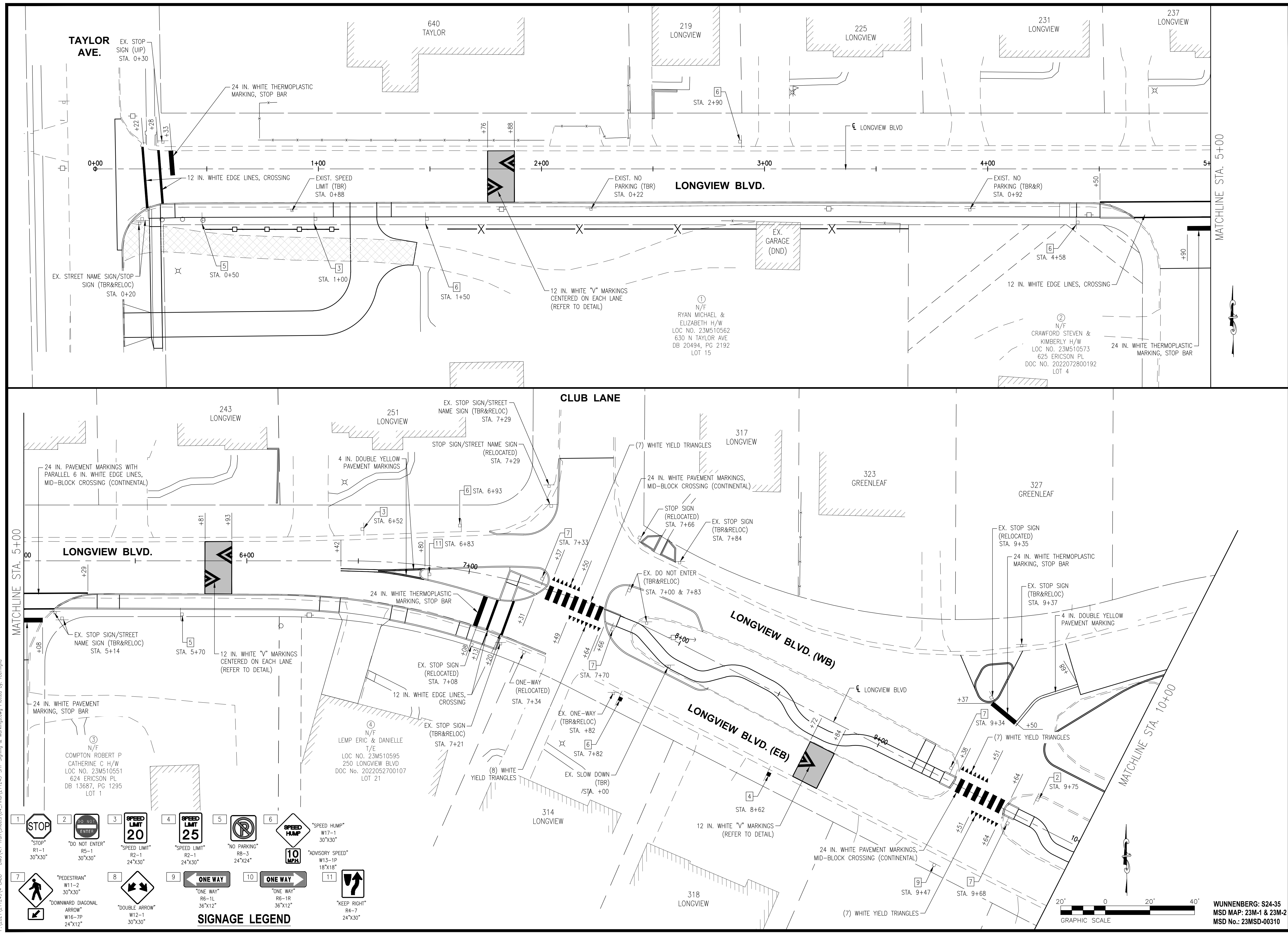
REV.	DATE	DESCRIPTION

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PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PAVEMENT MARKING
AND SIGNAGE

SHEET NO.
20



PROJECT: 211243, 4 CAD - DIMS, 4.7 Tran\Sheets\04_Final\211243-SHT - Signage & Markings.dwg Plotted By: rjcgernig

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



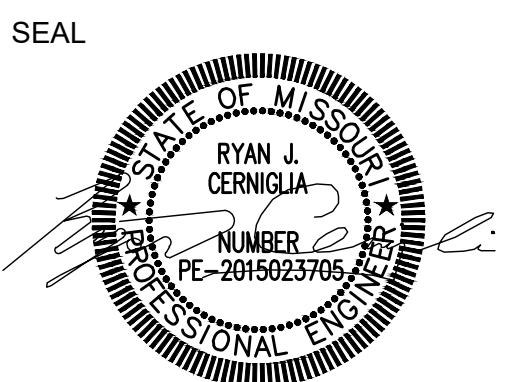
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MO CERTIFICATE OF AUTHORITY: 001528

PROF. LICENSE NUMBER
IL. PROF. DESIGN FIRM 184-001220
IL. PROF. ENGR. CORP. 62-035370
IL. PROF. STR. ENGR. CORP. 81-005202
IL. PROF. LAND SURV. CORP. 048-000029
MO. PROF. ENGR. CORP. 001528
MO. LAND SURVEYING CORP. 000346
TN. PROF. ENGR. FIRM 8974



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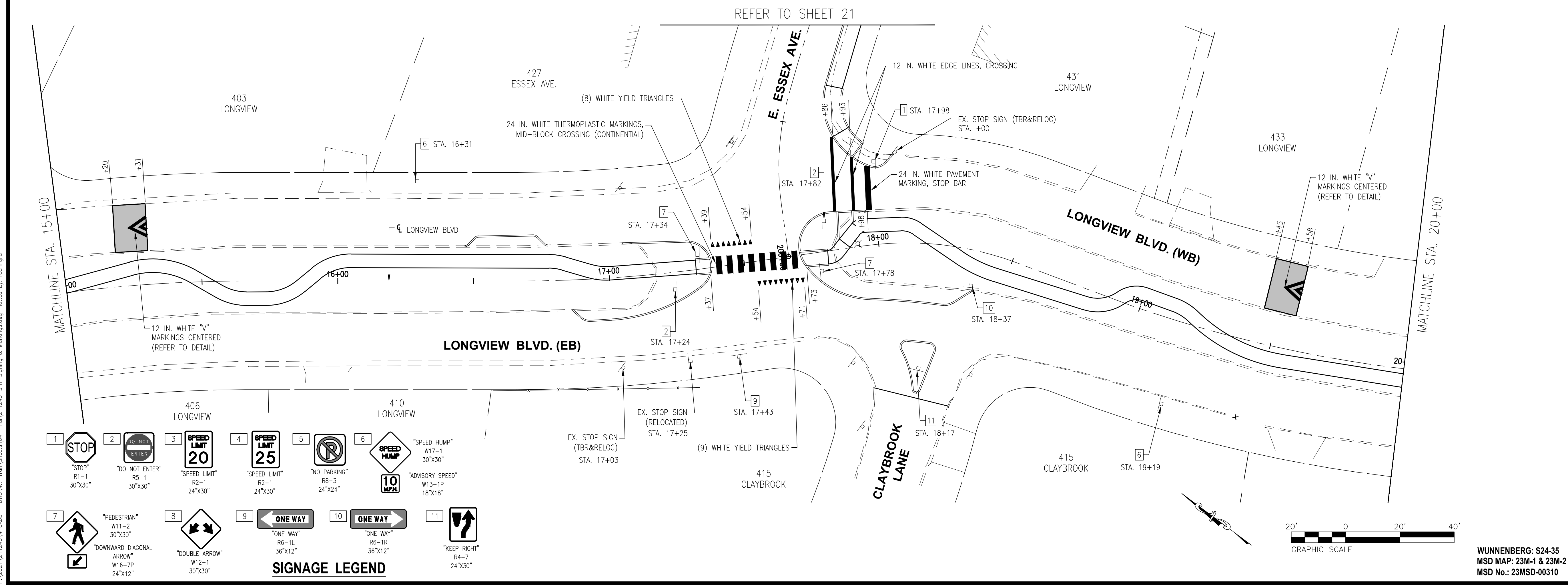
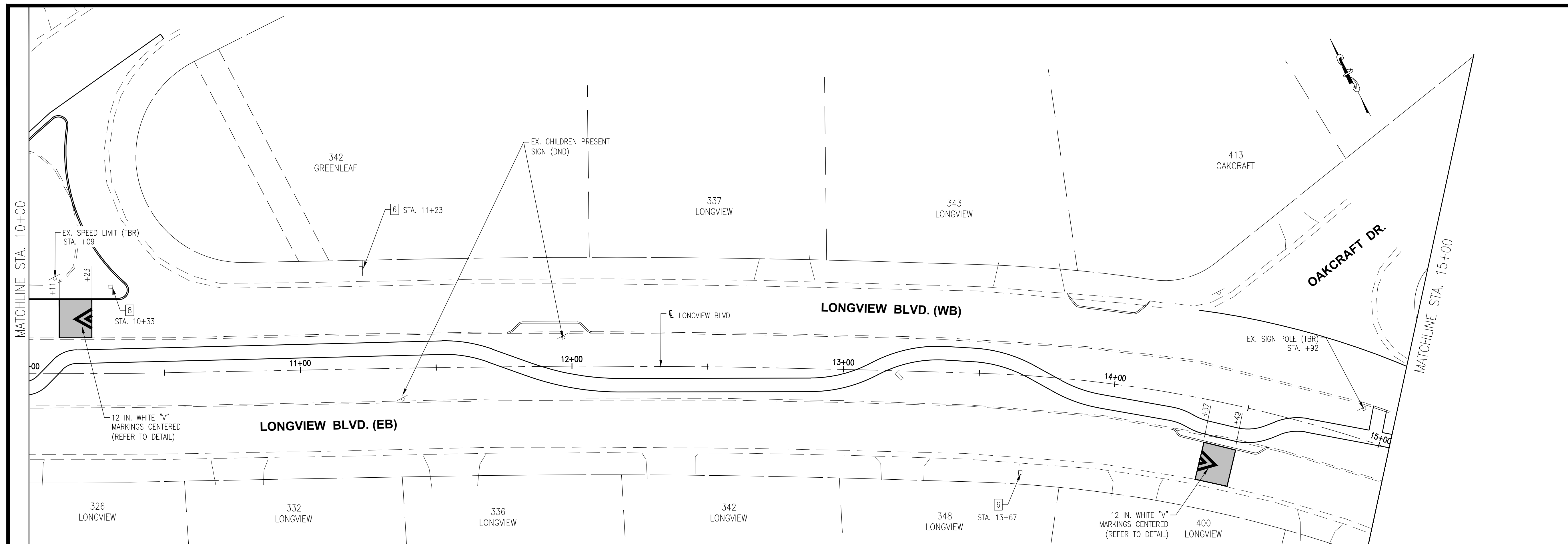
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APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PAVEMENT MARKING
AND SIGNAGE

SHEET NO.
21



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WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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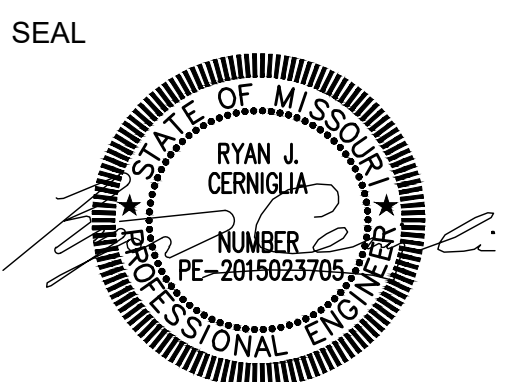
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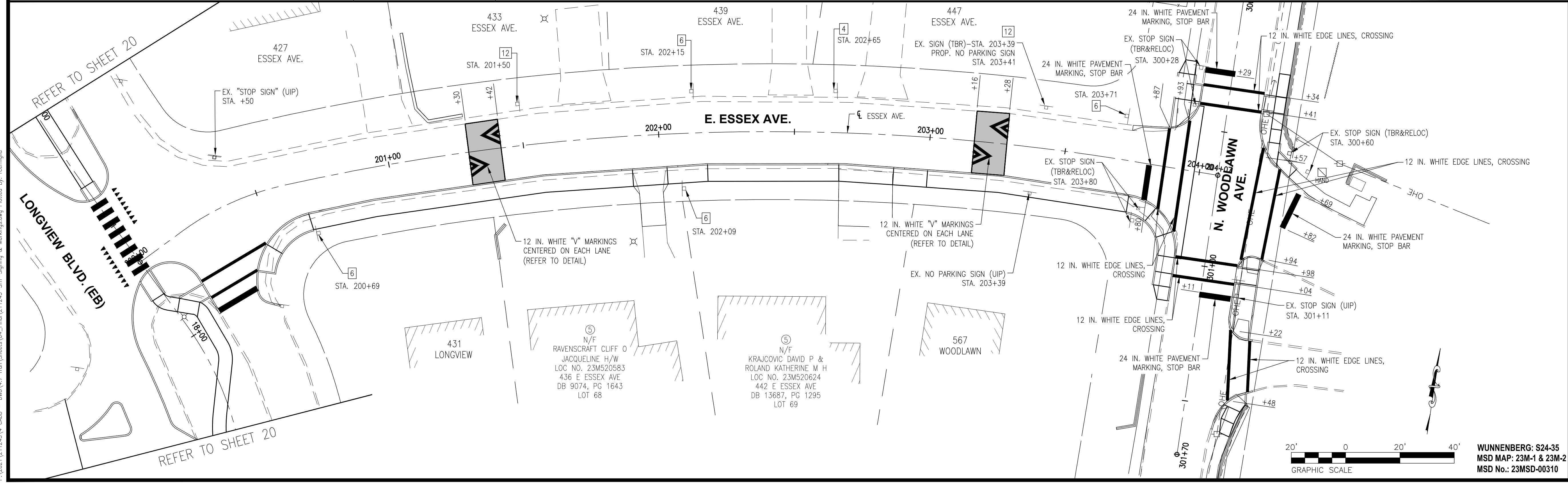
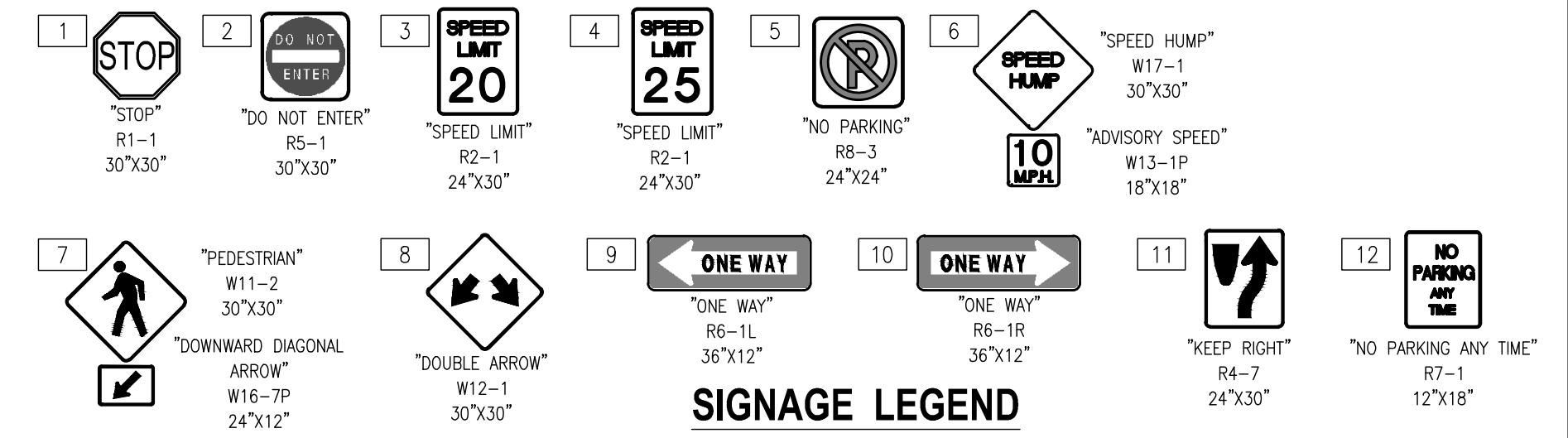
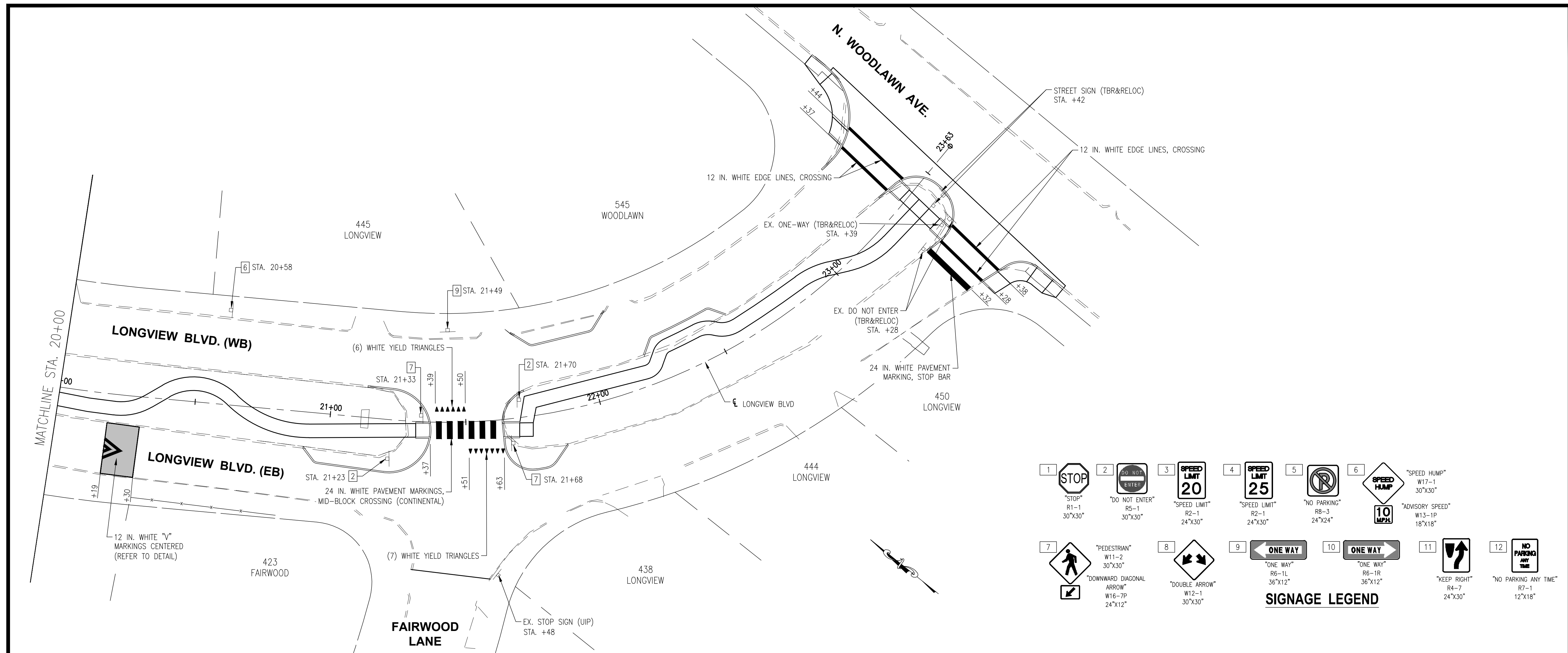
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PAVEMENT MARKING
AND SIGNAGE

SHEET NO.
22



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

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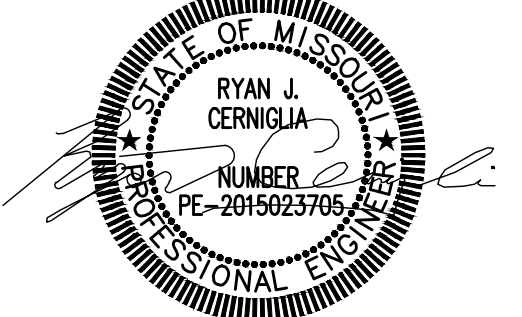
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
EXISTING DRAINAGE
AREA MAP

SHEET NO.
23

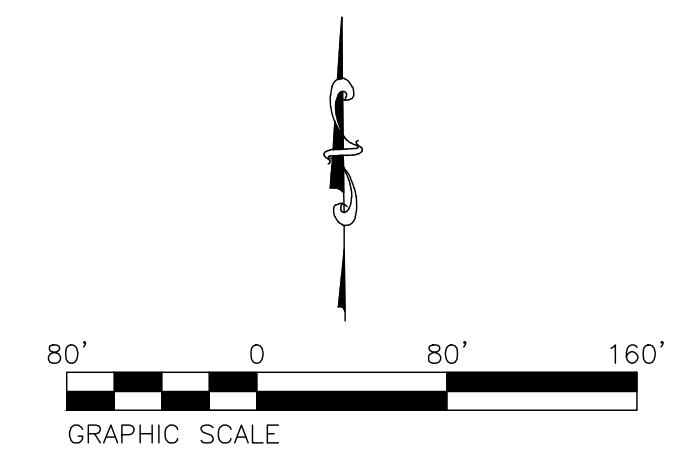


EXISTING DRAINAGE AREAS

EXISTING DRAINAGE AREAS						
EXIST. DRAINAGE AREA	TOTAL AREA (Ac.)	IMPERVIOUS AREA (Ac.)	% IMPERVIOUS	P.I. FACTOR (15yr-20min)	PEAK FLOW (cfs)	SEWER DESTINATION
1	0.94	0.49	52%	2.62	2.48	23M1-0450
2	2.47	1.16	47%	2.52	6.21	23M2-1450
3	1.47	0.69	47%	2.52	3.71	MSD# UNKNOWN
4	1.97	0.60	31%	2.20	4.33	MSD# UNKNOWN
5	1.17	0.58	50%	2.58	3.03	NO MSD #
6	1.25	0.60	48%	2.54	3.16	23M2-0194D
7	0.31	0.10	30%	2.20	0.69	23M2-0193D
8	0.13	0.07	50%	2.65	0.35	23M2-0192D
9	0.16	0.08	53%	2.63	0.42	23M2-175D
10	1.74	0.64	37%	2.32	4.04	MSD# UNKNOWN
11	0.67	0.26	39%	2.37	1.60	23M2-170D
12	1.79	0.75	42%	2.42	4.33	23M2-178D
13	2.34	0.73	31%	2.21	5.18	NO MSD #
14	1.06	0.35	33%	2.24	2.37	23M1-051D
15	1.46	0.43	30%	2.20	3.20	23M1-044D
TOTAL	18.94	7.55			45.10	

LEGEND

- EXIST. IMPERVIOUS AREA = 7.53 Ac.
- EXISTING DRAINAGE AREA
- EXISTING STORM SEWER
- EXISTING STORM STRUCTURE
- DRAINAGE AREA DESTINATION POINT



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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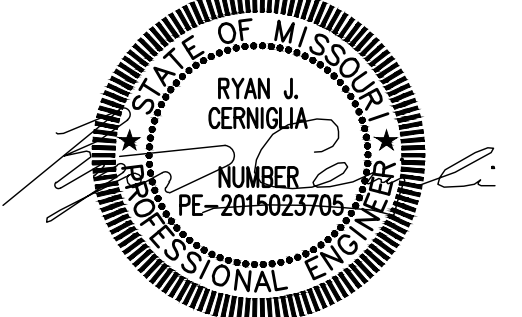
**THOUVENOT, WADE
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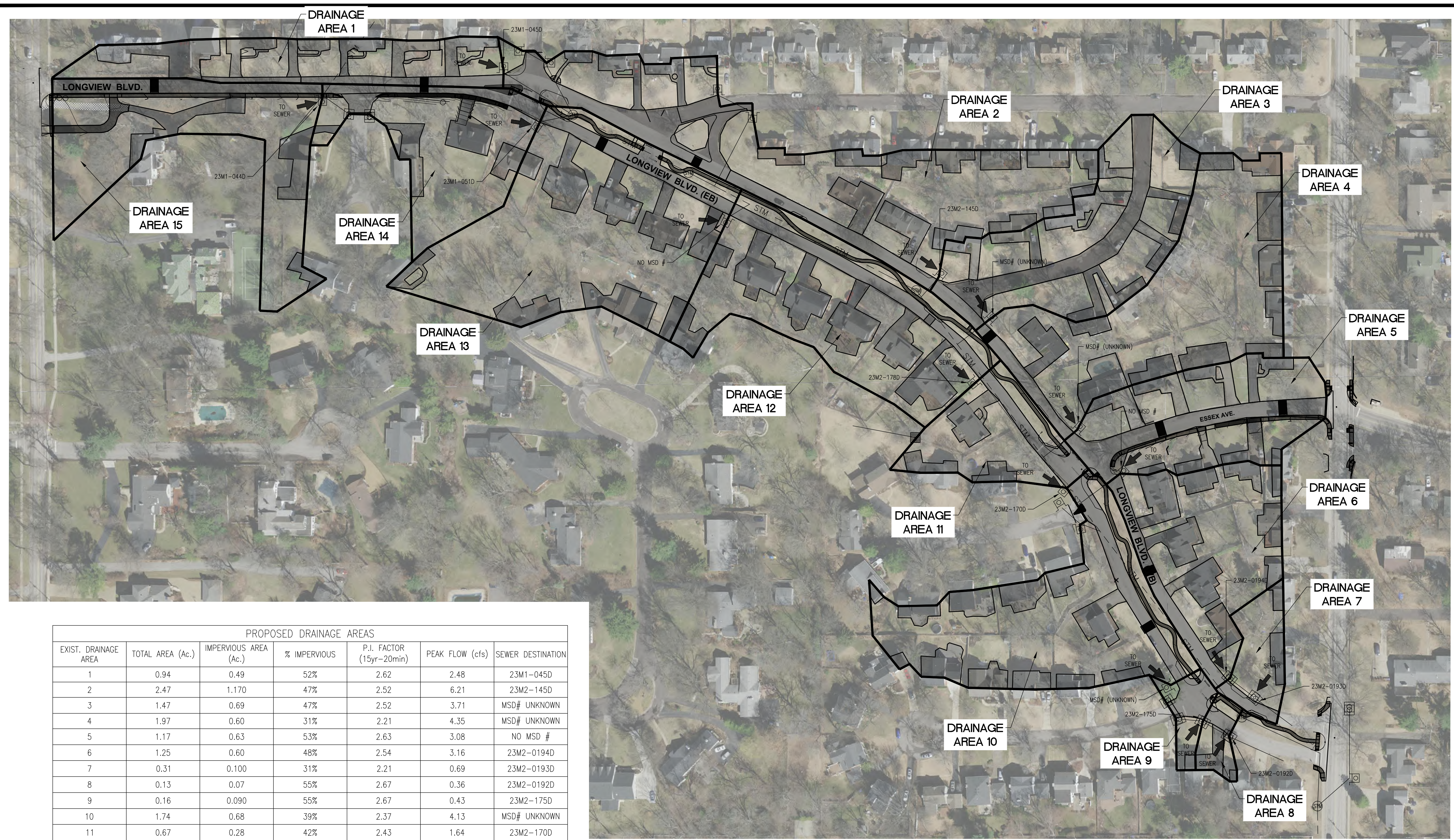
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
PROPOSED DRAINAGE
AREA MAP

SHEET NO.
24



PROPOSED DRAINAGE AREAS						
EXIST. DRAINAGE AREA	TOTAL AREA (Ac.)	IMPERVIOUS AREA (Ac.)	% IMPERVIOUS	P.I. FACTOR (15yr-20min)	PEAK FLOW (cfs)	SEWER DESTINATION
1	0.94	0.49	52%	2.62	2.48	23M1-045D
2	2.47	1.170	47%	2.52	6.21	23M2-145D
3	1.47	0.69	47%	2.52	3.71	MSD# UNKNOWN
4	1.97	0.60	31%	2.21	4.35	MSD# UNKNOWN
5	1.17	0.63	53%	2.63	3.08	NO MSD #
6	1.25	0.60	48%	2.54	3.16	23M2-0194D
7	0.31	0.100	31%	2.21	0.69	23M2-0193D
8	0.13	0.07	55%	2.67	0.36	23M2-0192D
9	0.16	0.090	55%	2.67	0.43	23M2-175D
10	1.74	0.68	39%	2.37	4.13	MSD# UNKNOWN
11	0.67	0.28	42%	2.43	1.64	23M2-170D
12	1.79	0.81	45%	2.48	4.45	23M2-178D
13	2.34	0.77	33%	2.24	5.24	NO MSD #
14	1.06	0.38	36%	2.30	2.43	23M1-051D
15	1.46	0.49	34%	2.26	3.29	23M1-044D
TOTAL	18.94	7.85			45.65	

PROPOSED DRAINAGE AREAS

SITE DIFFERENTIAL RUNOFF CALCULATION (AREA OF DISTURBANCE)				
DRAINAGE AREA	TOTAL AREA (AC.)	IMPERVIOUS AREA (AC.)	% IMPERVIOUS	PEAK FLOW (CFS)
PROPOSED	18.94	7.85	41%	45.65
EXISTING	18.94	7.55	40%	45.11

DIFFERENCE: 0.54 cfs (INCREASE)

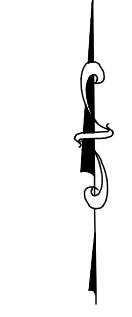
DRAINAGE AREA NOTES

AREA TO BE DISTURBED / L.O.C. = 0.98 ACRES
SITE DIFFERENTIAL RUNOFF (ON-SITE & OFF-SITE):
PRE-DEVELOPMENT PEAK RUNOFF = 45.11 cfs
POST-DEVELOPMENT PEAK RUNOFF = 45.65 cfs
DIFFERENTIAL RUNOFF (POST MINUS PRE DEVELOPMENT) = 0.54 cfs (INCREASE)

PRE-DEVELOPMENT AND POST-DEVELOPMENT IMPROVEMENTS FOR DISTURBED AREAS DOES NOT EXCEED 2 cfs REQUIREMENTS AS SET BY MSD, AND THUS THE IMPROVEMENTS WILL NOT TRIGGER STORMWATER QUANTITY MEASURES AS STATED IN THE MSD RULES AND REGULATIONS.
THE DISTURBED AREA DOES NOT EXCEED 1 ACRE AND AS SUCH, THE IMPROVEMENTS WILL NOT TRIGGER STORMWATER QUALITY MEASURES. BMP MEASURES OF AMENDED SOILS ARE PROPOSED AT THE CITY OF DISCRETION BUT NOT REQUIRED BY MSD. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
THE VALUES PROVIDED IN THE TABLE UTILIZE A 15 YEAR RAINFALL FREQUENCY AND 20 MINUTE TIME OF CONCENTRATION AS ESTABLISHED IN THE MSD RULES AND REGULATIONS.

LEGEND

- PROP. IMPERVIOUS AREA = 0.15 Ac.
- EX. IMPERVIOUS AREA = 7.74 Ac.
- AREA OF DISTURBANCE = 0.98 Ac.
- PROPOSED DRAINAGE AREAS
- DRAINAGE AREA DESTINATION POINT



WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

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EROSION NOTES

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE REGULATIONS AS SET FORTH IN THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION SEDIMENT AND EROSION CONTROL MANUAL, LATEST EDITION.

ADDITIONAL SILTATION CONTROL SHALL BE INSTALLED AS REQUIRED BY THE CITY OF KIRKWOOD.

ALL DISTURBED AREAS SHALL BE RESTORED AFTER CLEARING AND GRUBBING WHEN NO ACTIVITY WILL OCCUR WITHIN THIRTY (30) DAYS.

ALL DISTURBED AREAS SHALL BE SODDED, PLANTED, CONCRETED, PAVED OR OTHERWISE SURFACED WITHIN FOURTEEN (14) DAYS OF COMPLETION OF EACH PHASE OF WORK.

ALL DISTURBED AREAS SHALL BE RESTORED AS DIRECTED BY THE CITY OF KIRKWOOD.

ALL GRADING ACTIVITY SHALL BE CONDUCTED BETWEEN THE HOURS OF 7AM AND 7PM, MONDAY THROUGH SATURDAY.

ANY DISTURBED PROPERTY SHALL BE REPLACED, IN KIND, AT THE CONTRACTOR'S EXPENSE.

ALL MUD, DUST, DIRT, AND DEBRIS SHALL BE CONTAINED ON SITE AND KEPT OFF STREETS, CURBS, SIDEWALKS, OR ANY OTHER AREAS WITHIN RIGHT-OF-WAY. ANY INSTANCES WHERE THIS DOES NOT OCCUR SHALL BE RECTIFIED IMMEDIATELY.

ALL SILTATION CONTROL DEVICES AND SWPPP APPROVED BEST MANAGEMENT PRACTICES (BMP) SHALL BE INSPECTED BY A QUALIFIED INSPECTOR WHO IS CURRENTLY CERTIFIED AS A MAJOR LAND DISTURBANCE SPECIAL INSPECTOR WITH ST. LOUIS COUNTY ON A WEEKLY BASIS AND WITHIN TWENTY-FOUR (24) HOURS OF A RAINFALL EVENT OF HALF (1/2) INCH OR MORE.

A WRITTEN REPORT OF EACH INSPECTION AND THE CORRECTIVE ACTIONS TAKEN SHALL BE KEPT. THE REPORT SHALL INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTIONS, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE SILTATION CONTROL AND BMP'S, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE REPORT SHALL BE SIGNED BY THE INSPECTOR AND SUBMITTED TO THE CITY OF KIRKWOOD WITHIN FIVE (5) BUSINESS DAYS OF THE INSPECTION. REPORT FORMAT TO MEET COUNTY STANDARDS.

SILTATION CONTROL DEVICE AND BMP DEFICIENCIES SHALL BE CORRECTED WITHIN ONE (1) CALENDAR DAY IN EMERGENCY CONDITIONS AND FOUR (4) CALENDAR DAYS FOR ROUTINE MAINTENANCE. THE CITY OF KIRKWOOD, AT ITS SOLE DISCRETION, WILL MAKE THE DETERMINATION BETWEEN EMERGENCY AND ROUTINE MAINTENANCE CONDITIONS WHERE NEEDED.

THE CONTRACTOR SHALL SUBMIT A WRITTEN REPORT TO THE CITY OF KIRKWOOD'S PUBLIC WORKS DEPARTMENT AT LEAST FIVE (5) DAYS PRIOR TO THE USE OF ANY STREET IN THE CITY BY TRUCKS OR EQUIPMENT ENGAGED IN GRADING OR EXCAVATION ACTIVITIES. THE REPORT SHALL SPECIFY THE KIND AND DESCRIPTION OF TRUCKS OR EQUIPMENT, THE LOADED AND UNLOADED WEIGHT OF TRUCKS AND HAULING EQUIPMENT, THE NUMBER OF EACH, AND THE LENGTH OF TIME THEY WILL BE REQUIRED TO USE THE COUNTY STREETS.

THE CONTRACTOR SHALL PROVIDE THE CITY OF KIRKWOOD WITH HAUL ROUTE INFORMATION AT LEAST TWO (2) DAYS PRIOR TO COMMENCING WORK. HAUL ROUTES TO BE REVIEWED AND APPROVED BY THE CITY PRIOR TO START OF HAULING OPERATIONS.

THE CONTRACTOR WILL BE HELD LIABLE FOR UNUSUAL WEAR AND TEAR OR DAMAGE TO THE STREETS, CURBS, SIDEWALKS, OR ANY OTHER AREAS WITHIN RIGHT-OF-WAY RESULTING FROM SUCH USAGE. USE OF THE RIGHT-OF-WAY BY THE DEVELOPER OR THOSE UNDER THEIR DIRECTION SHALL CONSTITUTE AN AGREEMENT ON THEIR PART TO PAY THE REASONABLE COST OF RESTORING THE AREAS IN QUESTION TO THEIR ORIGINAL CONDITION.

CONSTRUCTION ENTRANCES, IF NECESSARY, WILL BE CONSTRUCTED IN ACCORDANCE WITH ST. LOUIS COUNTY STANDARDS.

NEW	REVISIONS
11/1/14	1/1/16

GENERAL NOTES

- LOCATION, DIAMETER AND LENGTH OF SOCK IS DEPENDENT ON THE INLET/GUTTER BEING PROTECTED (I.E. DOUBLE, TRIPLE INLET, ETC.).
- GRAVEL FILTER BAGS MAY BE SUBSTITUTED FOR FILTER SOCKS.
- SOME LOCATIONS WILL NOT HAVE SIDEWALK (AS SHOWN IN THIS DETAIL).
- IF THE AREA BEHIND THE INLET (AND SIDEWALK IS NOT STABILIZED, A BMP SHALL BE USED TO PREVENT POLLUTANTS FROM ENTERING THE INLET FROM BEHIND.
- WHEN A WATTLE IS USED TO PREVENT POLLUTANTS FROM ENTERING AN INLET FROM BEHIND, IT MUST BE PLACED TO A SIDEWALK TO MAINTAIN A MINIMUM 3 FOOT WALKING PATH. THE BMP SHALL BE MAINTAINED TO PREVENT SEDIMENT ACCUMULATION ON THE SIDEWALK.
- SOCKS / BAGS (BMP) SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITY ON EXISTING INLETS AND IMMEDIATELY AFTER INSTALLATION OF PROPOSED INLETS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED BEFORE IT REACHES ONE HALF THE DIAMETER OF THE SOCK OR BAG HEIGHT AT A MINIMUM OR ENDOACHES ONTO A TRAVEL LANE.
- SEE GRAVEL BAG, FILTER SOCK (WATTLE, FIBER ROLL) AND INLET PROTECTION SPECIFICATIONS IN THE SEDIMENT AND EROSION CONTROL MANUAL FOR ADDITIONAL INFORMATION. GRAVEL BAGS MUST BE LAYERED AND PACKED TIGHTLY SUCH THAT NO GAPS ARE EVIDENT.
- LEAVE ONE GRAVEL BAG GAP IN THE TOP LAYER TO PROVIDE A SPILLWAY FOR OVERFLOW.
- STRAW BALES MAY NOT BE USED AS A BMP. INSTALL A PAIR OF FILTER SOCKS, NEXT TO EACH OTHER PARALLEL TO THE CURB INLET IF DIRECTED BY THE COUNTY.
- BMP'S MUST BE INSTALLED TO ALLOW THE INLET / GUTTER TO FUNCTION WITHOUT COMPLETELY BLOCKING FLOW TO ELIMINATE LOCALIZED FLOODING. CHOOSE THE DIAMETER OF SOCK AND LAYERING OF BAGS SUITABLE TO THE INDIVIDUAL APPLICATION.
- INLET PROTECTION IS NOT A STAND ALONE BMP AND SHOULD BE USED IN CONJUNCTION WITH OTHER UP GRABMENT BMP'S.
- SOCKS NEED TO BE WEIGHTED FOR USE AROUND INLETS (INTERNAL ROLL WEIGHT OR BY PLACING A WEIGHT, SUCH AS A CONCRETE BLOCK, ON THE DOWN STREAM SIDE OF THE SOCK USE ALTERNATE BMP IF LOCALIZED FLOODING IS POSSIBLE.
- AT LOCATIONS WITHOUT CURBS, THE GUTTER PROTECTION MAY BE SHAPED INTO A HORSESHOE, WITH THE OPENING FACING OPPOSITE THE DIRECTION OF FLOW. GUTTER PROTECTION CAN HELP PRE-TREAT STORM WATER IF NEEDED.
- AT LOCATIONS WITHOUT CURBS, PLACE BMP'S OF CHOICE COMPLETELY AROUND THE INLET, OVERLAP ENDS IF NEEDED.

CURB AND GRATE INLET FILTER SOCK PROTECTION DETAIL

CURB INLET FILTER SOCK PROTECTION DETAIL

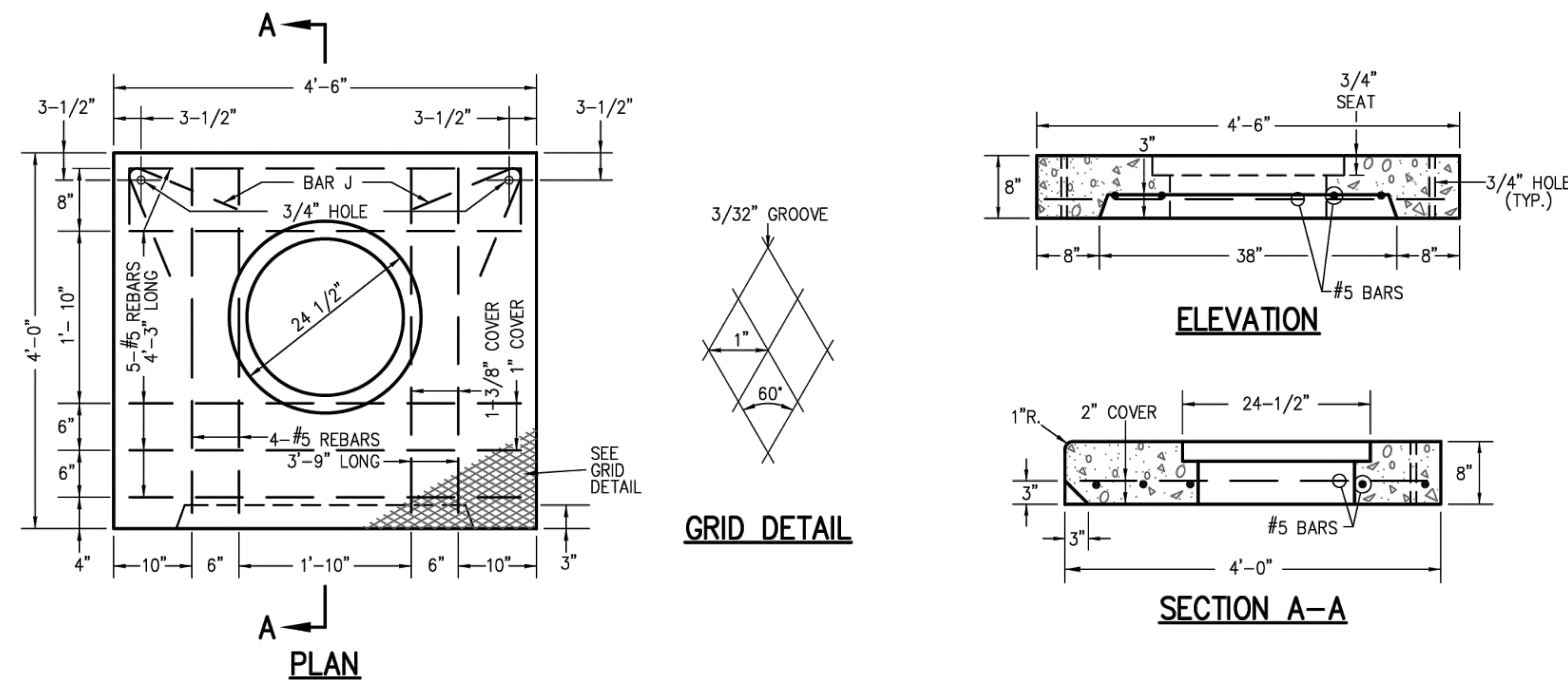
CURB INLET FILTER SOCK PROTECTION DETAIL

GUTTER FILTER SOCK PROTECTION DETAIL

TYPICAL BMP DETAIL
GRATED UNIT, INLET AND GUTTER PROTECTION FILTER SOCK AND GRAVEL FILTER BAG
 REVISION DATE: January 1, 2016
 DRAWING 806-45.08

INLET PROTECTION - FILTER SOCK

(NOT TO SCALE)



NOTES:
 DETAIL AS SHOWN IS MSD'S STANDARD DETAIL NO. 45 "HEAVY DUTY 8 INCH INLET STONE (ALTERNATE)". EXISTING INLET SHALL HAVE A NEW INLET STONE PROVIDE TO MATCH THE PROPOSED CONDITIONS OF THE NEW CURB LINE AND SIDEWALK WIDTHS.

A MODIFIED DETAIL IS PROVIDED TO THE RIGHT INDICATING THE DIMENSIONS TO MATCH THE PROPOSED CONDITIONS. ALL REBAR AND BAR SPACINGS / DIMENSIONS CALL COMPLY TO THE STANDARD DETAIL AS SHOWN.

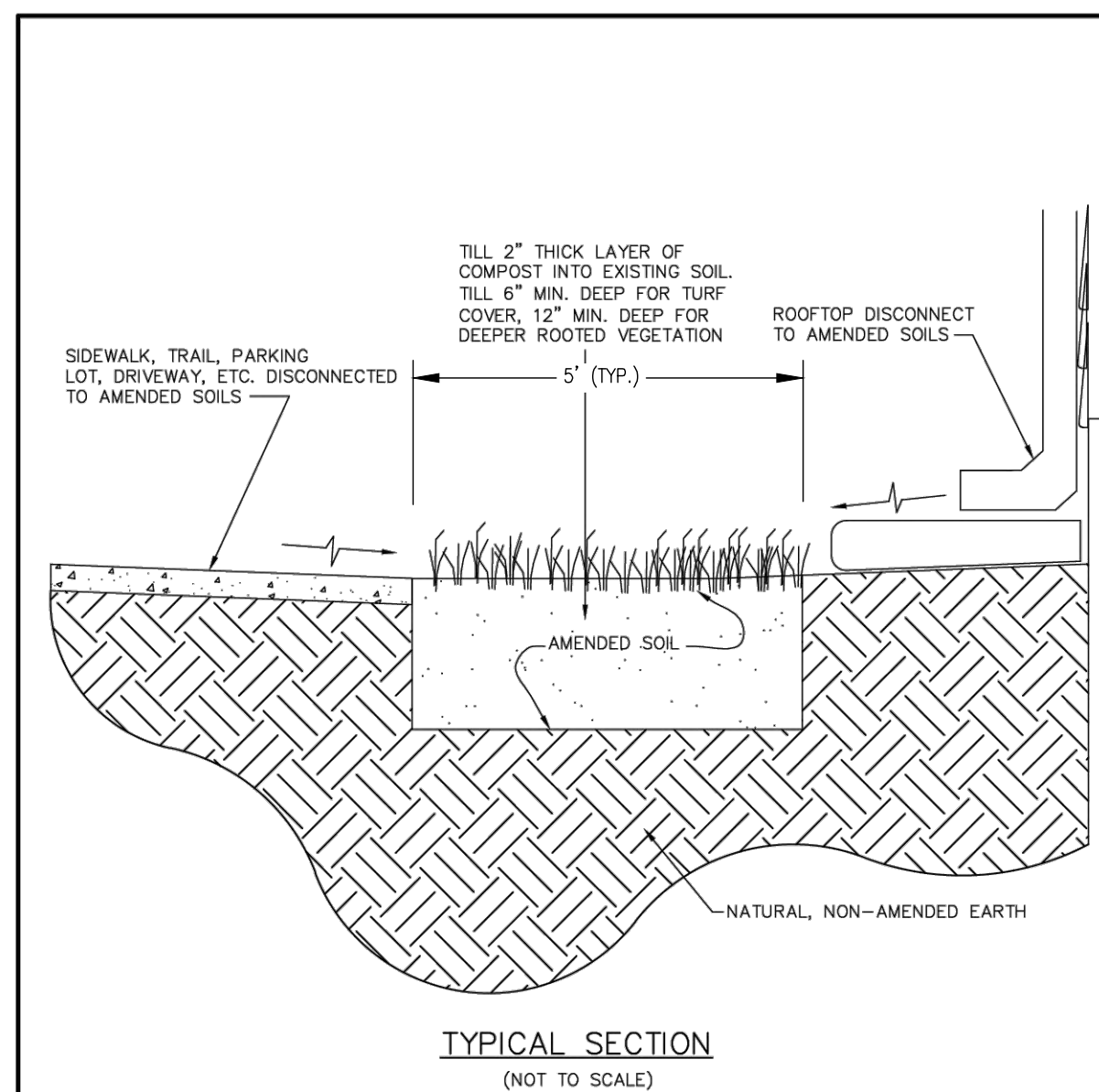
EXISTING INLET STRUCTURE SHALL REMAIN AS USED IN PLACE.

HEAVY DUTY INLET STONE (NON-STANDARD)

(NOT TO SCALE)

Table 1. Amended Soils Disconnection Design Criteria

Design Factor	Disconnection Criteria
Maximum impervious area treated	1,000 square feet
Minimum area of amended soils	Equal to area of impervious disconnect
Minimum width of amended soils	10 feet
Longest flow path of impervious area	50 feet
Disconnection length	Equal to the longest flow path of impervious area. No less than 20 feet for downspout disconnections.
Disconnection slope	5% maximum



- NOTES:
- SEE TABLE 1. AMENDED SOILS DISCONNECTION CRITERIA FOR DESIGN REQUIREMENTS
 - TILL SOIL SUBGRADE PRIOR TO COMPOST ADDITION, AND TILL AFTER COMPOST ADDITION
 - CLEAN ALL OBJECTS LARGER THAN 2" FROM AMENDED SOIL AREA
 - FOR TURF COVER, COMPLETE WITH FINE GRADING AND SODDING IN ACCORDANCE WITH MSD STANDARD SPECIFICATIONS
 - SEE COMPOST SPECIFICATION FOR COMPOST MATERIAL PROPERTIES AND TESTING REQUIREMENTS

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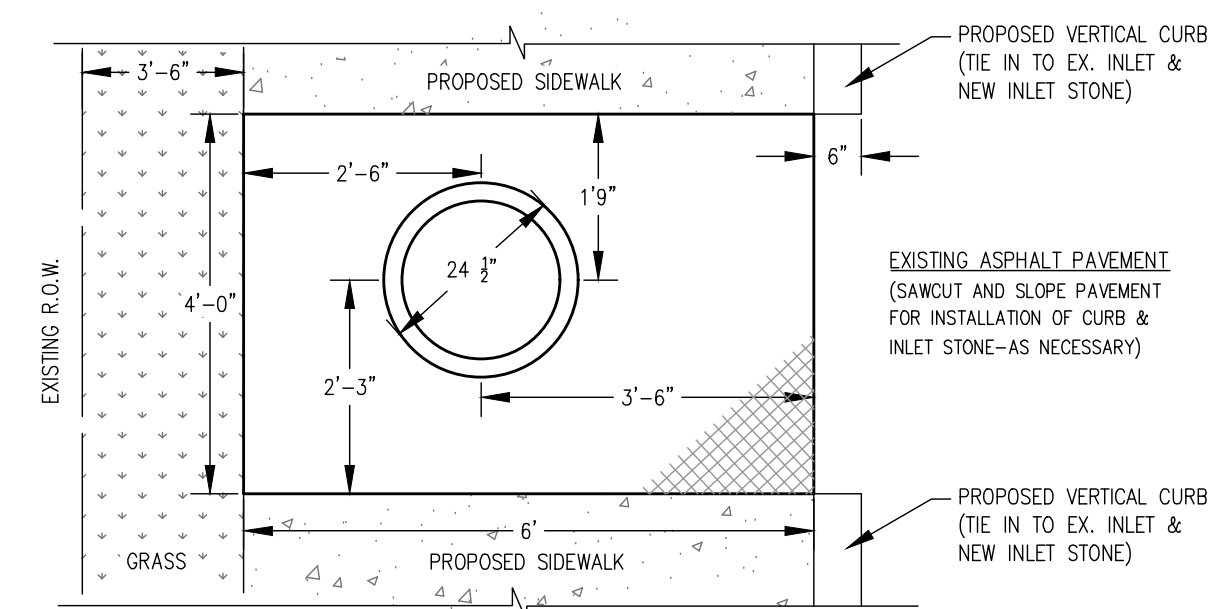
DESCRIPTION: ROOFTOP AND NON-ROOFTOP DISCONNECTION EXAMPLE

CATEGORY: BMP
 TITLE: AMENDED SOILS DISCONNECTION DETAIL
 DRAWN BY: JTP

AMENDED SOILS DISCONNECT

(NOT TO SCALE)

MODIFIED DETAIL AND DIMENSIONS TO COMPLY WITH PROPOSED CONDITIONS:



Parameter	Range	Testing Method
pH	5.0-8.5	TMECC 4.11A
Soluble Salt Concentration	<= 100g/m	TMECC 4.10-A
Moisture	30-60% wet weight basis	SMEWW 2540B
Organic Matter	30-65% dry weight basis	TMECC 5.07-A
Total Nitrogen (N)	<= 1.00% dry weight basis	TMECC 04.02-D
Phosphate (P ₂ O ₅)	>= 0.50% dry weight basis	TMECC 04.03-A
Potash (K ₂ O)	>= 0.10% dry weight basis	TMECC 04.04-A
Particle Size	95% pass through 5/8" screen or smaller	TMECC 2.02-B
Stability (Carbon Dioxide evolution rate)	>= 80% relative to positive control	TMECC 5.08-B
Maturity (Seed emergence and seedling vigor)	>= 80% relative to positive control	TMECC 5.05-A
Physical contaminants (man-made objects)	<= 1% dry weight basis	TMECC 3.08-A
Chemical contaminants	Meet or exceed US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3 levels:	
Arsenic	<= 41 ppm	TMECC 4.06-AS
Cadmium	<= 39 ppm	TMECC 4.06-CD
Copper	<= 1,500 ppm	TMECC 4.05-CU
Lead	<= 300 ppm	TMECC 4.06-PB
Mercury	<= 17 ppm	TMECC 4.06-HG
Molybdenum	<= 75 ppm	TMECC 4.05-MO
Nickel	<= 420 ppm	TMECC 4.06-NI
Selenium	<= 100 ppm	TMECC 4.06-SE
Zinc	<= 2,800 ppm	TMECC 4.06-ZN
Biological contaminants (pathogens)	Meet or exceed US EPA Class A standard, 40 CFR § 503.32(a) levels:	
Fecal coliform	<= 1,000 MPN per gram, dry weight basis	TMECC 7.01

TABLE 1: PHYSICAL REQUIREMENTS FOR COMPOST

COMPOST APPLICATION PROCEDURE

CLEAR SURFACE OF OBSTRUCTIONS AND PROPERLY DISPOSE. THE SOIL SURFACE SHALL BE REASONABLY FREE OF ALL OBJECTS, INCLUDING STONE AND RUBBLE, GREATER THAN 2 INCHES, AND OTHER MATERIAL WHICH WILL INTERFERE WITH PLANTING AND SUBSEQUENT SITE MAINTENANCE.

- ROTTOTILL TO A DEPTH OF 6-8" FOR TURF COVER AND A MINIMUM OF 12" FOR DEEP ROOTED VEGETATION. IF THE SOIL IS TOO DENSE FOR A ROTOTILLER, THE SOIL SHOULD FIRST BE BROKEN UP INTO LARGE AGGREGATES USING A SOIL RIPPER.
- IF OBSTRUCTIONS ARE UNEARTHED DURING TILLING, CLEAR OBSTRUCTIONS AND PROPERLY DISPOSE OF. THE SOIL SURFACE SHALL BE REASONABLY FREE OF ALL OBJECTS, INCLUDING STONE AND RUBBLE, GREATER THAN 2 INCHES, AND OTHER MATERIAL WHICH WILL INTERFERE WITH PLANTING AND SUBSEQUENT SITE MAINTENANCE.
- DISTRIBUTE COMPOST EVENLY TO A MINIMUM DEPTH OF 2 INCHES OVER THE SOIL SURFACE.
- REROTOTILL SEVERAL TIMES IN PERPENDICULAR DIRECTIONS TO INCORPORATE COMPOST AND OTHER SOIL AMENDMENTS.
- COMPLETE WITH FINE GRADING AND SODDING.
- WATER THOROUGHLY. ALLOW SOIL TO SETTLE FOR ONE WEEK.

COMPOST

COMPOST SHALL BE MATURE, STABLE, WEED FREE, AND PRODUCED BY AEROBIC DECOMPOSITION OF ORGANIC MATTER. COMPOST FEEDSTOCK MAY INCLUDE, BUT IS NOT LIMITED TO: AGRICULTURAL, FOOD OR INDUSTRIAL RESIDUALS; CLASS A BIOSOLIDS AS DEFINED IN THE EPA CFR TITLE 40, PART 503; YARD TRIMMINGS, OR SOURCE-SEPARATED MUNICIPAL SOLID WASTE. THE PRODUCT MUST NOT CONTAIN ANY VISIBLE REFUSE OR OTHER PHYSICAL CONTAMINANTS, SUBSTANCES TOXIC TO PLANTS, OR OVER 5% SAND, SILT, CLAY OR ROCK MATERIAL BY DRY WEIGHT. THE PRODUCT SHALL POSSESS NO OBJECTIONABLE ODORS. THE PRODUCT MUST MEET ALL APPLICABLE USEPA CFR, TITLE 40, PART 503 STANDARDS FOR CLASS A BIOSOLIDS. THE MOISTURE LEVEL SHALL BE SUCH THAT NO VISIBLE WATER OR DUST IS PRODUCED WHEN HANDLING THE MATERIAL.

TESTING. PRIOR TO DELIVERY OF ANY COMPOST TO THE SITE AND AS PART OF SHOP DRAWING REVIEW, THE FOLLOWING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR TO THE DISTRICT INSPECTOR:

- FEEDSTOCK PERCENTAGE IN THE FINAL COMPOST PRODUCT
- A STATEMENT THAT THE COMPOST MEETS FEDERAL AND STATE HEALTH AND SAFETY REGULATIONS
- A STATEMENT THAT THE COMPOSTING PROCESS HAS MET TIME AND TEMPERATURE REQUIREMENTS
- A COPY OF THE LAB ANALYSIS, LESS THAN FOUR MONTHS OLD, PERFORMED BY A SEAL OF TESTING ASSURANCE CERTIFIED LABORATORY VERIFYING THAT THE COMPOST MEETS THE PHYSICAL REQUIREMENTS AS DESCRIBED IN TABLE 1.

SOD

SOD. FERTILIZING, SODDING AND WATERING TO BE IN ACCORDANCE WITH STANDARD CONSTRUCTION SPECIFICATIONS PART 8 SECTION F.



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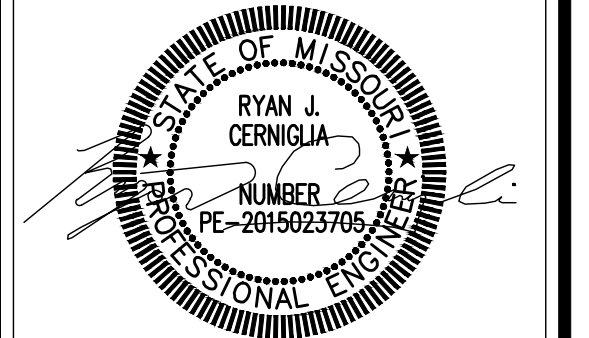
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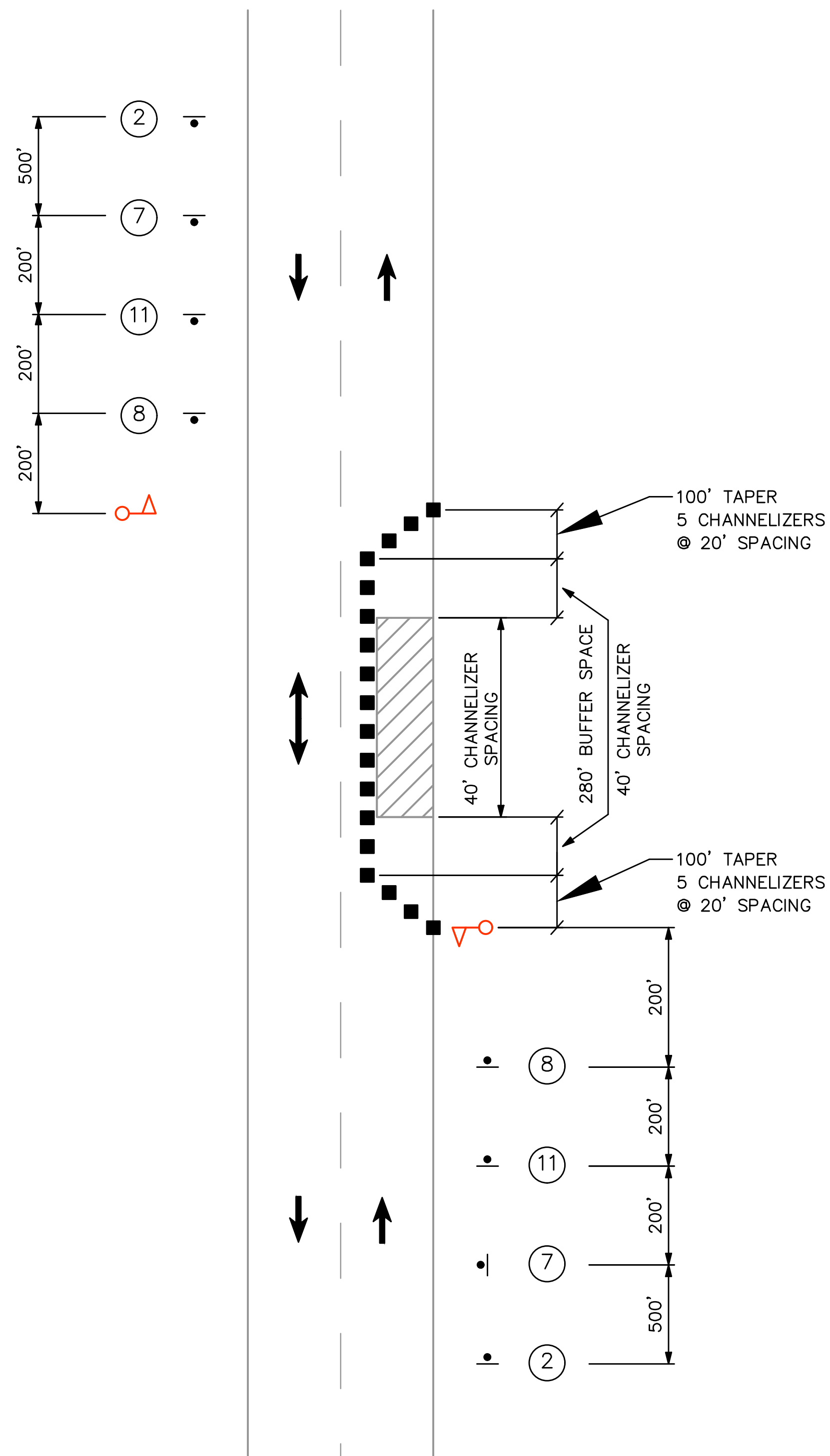
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 APPROVED BY: JRL
 PROJECT NO: 211243

PROJECT:
 LONGVIEW BOULEVARD
 IMPROVEMENTS
 TAYLOR AVE. TO
 WOODLAWN AVE

TITLE:
 CONSTRUCTION
 DETAILS

SHEET NO.
 25

WUNNENBERG: S24-35
 MSD MAP: 23M-1 & 23M-2
 MSD No.: 23MSD-00310



FLAGGER CONTROL FOR STATIONARY OPERATION
ONE-LANE TWO-WAY
(FOR USE WHEN TWO-WAY TRAFFIC
IS LESS THAN 18' WIDE)

NOTES:

CHANNELIZER SPACING WILL BE 40' INTERVALS THROUGH THE WORK AREA AND 20' INTERVALS THROUGH THE TAPERS.

ACTIVE LANE SHALL BE A MINIMUM OF 10' WIDE.

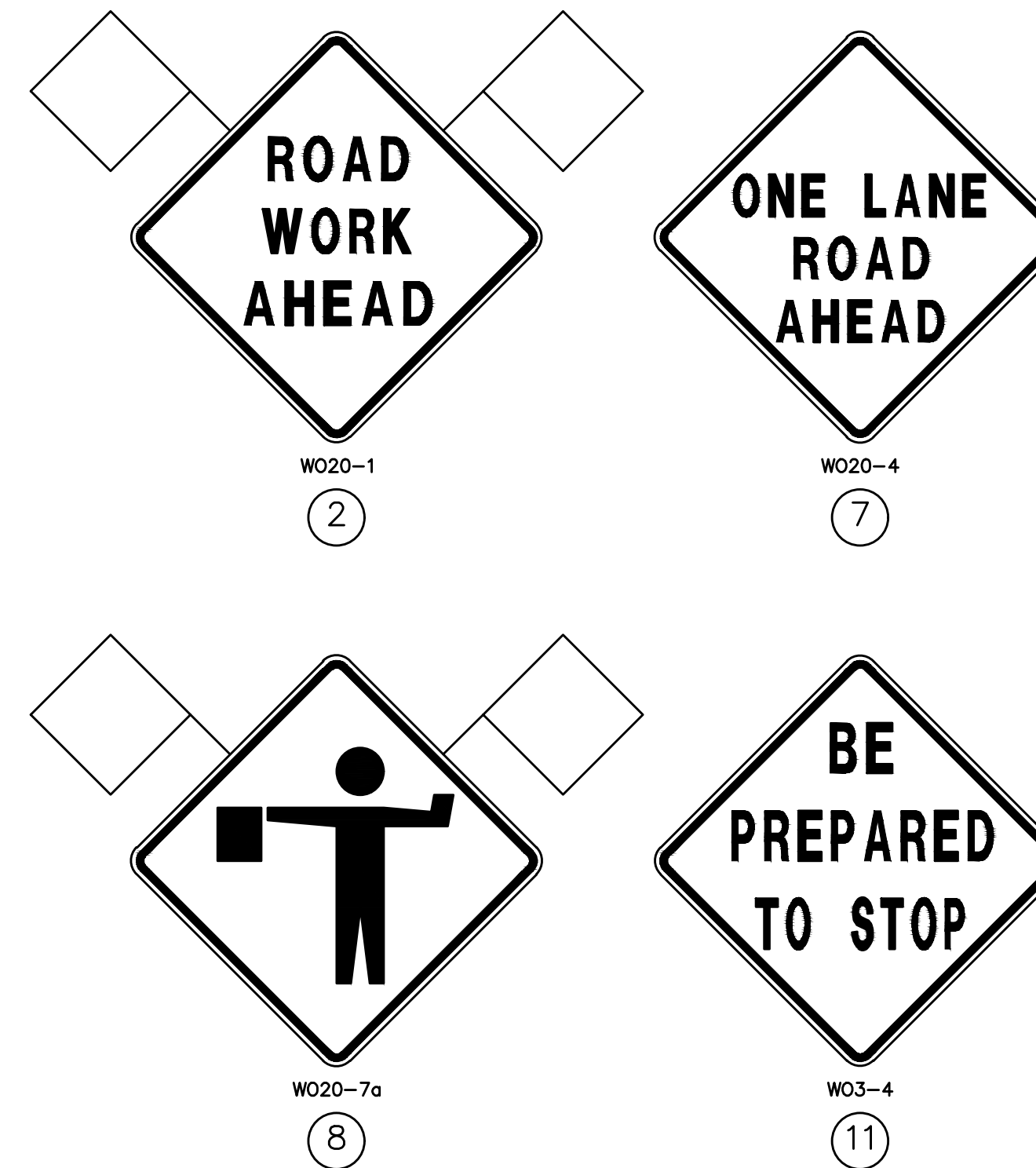
SIGN SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

ANY EXISTING SIGNS THAT CONFLICT WITH TRAFFIC CONTROL WILL BE COVERED OR REMOVED. DAYLIGHT FLAGGING OPERATIONS ONLY.

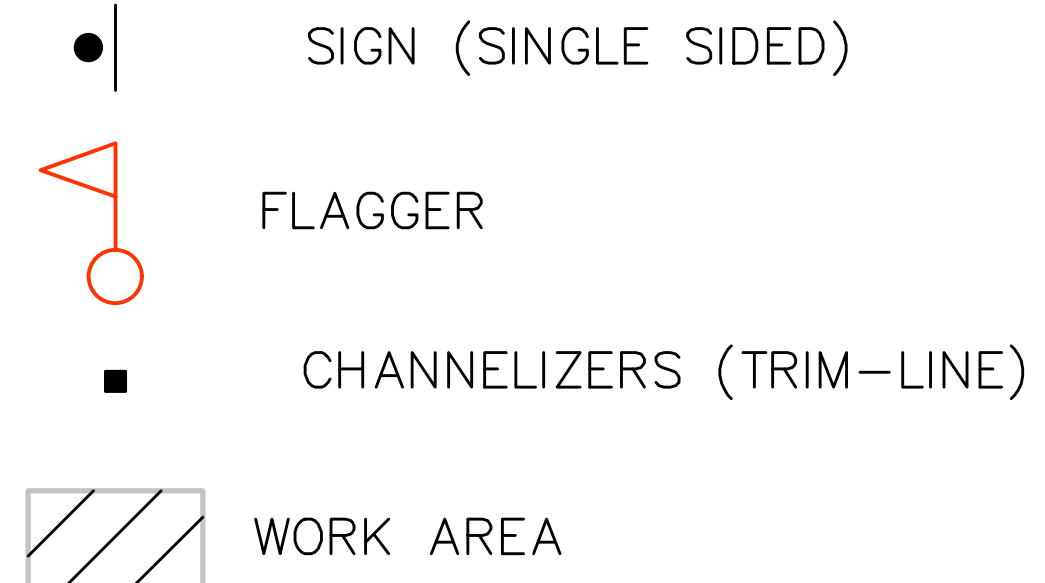
SIGN AND DEVICE LOCATION WILL BE FIELD VERIFIED AND APPROVED BY THE ENGINEER.

BUFFER SPACE IS OPTIONAL AND MAY BE OMITTED.

SIGNING LEGEND



TRAFFIC CONTROL LEGEND



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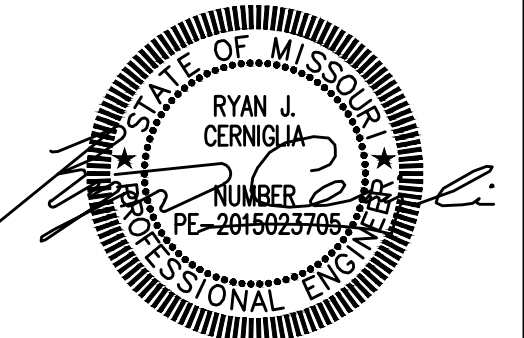
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APPROVED BY: JRL
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
TRAFFIC CONTROL SHEETS
STATIONARY OPERATION

SHEET NO.
27

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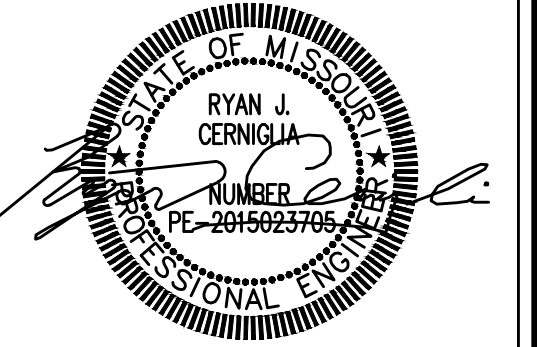
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PROJECT:

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IMPROVEMENTS

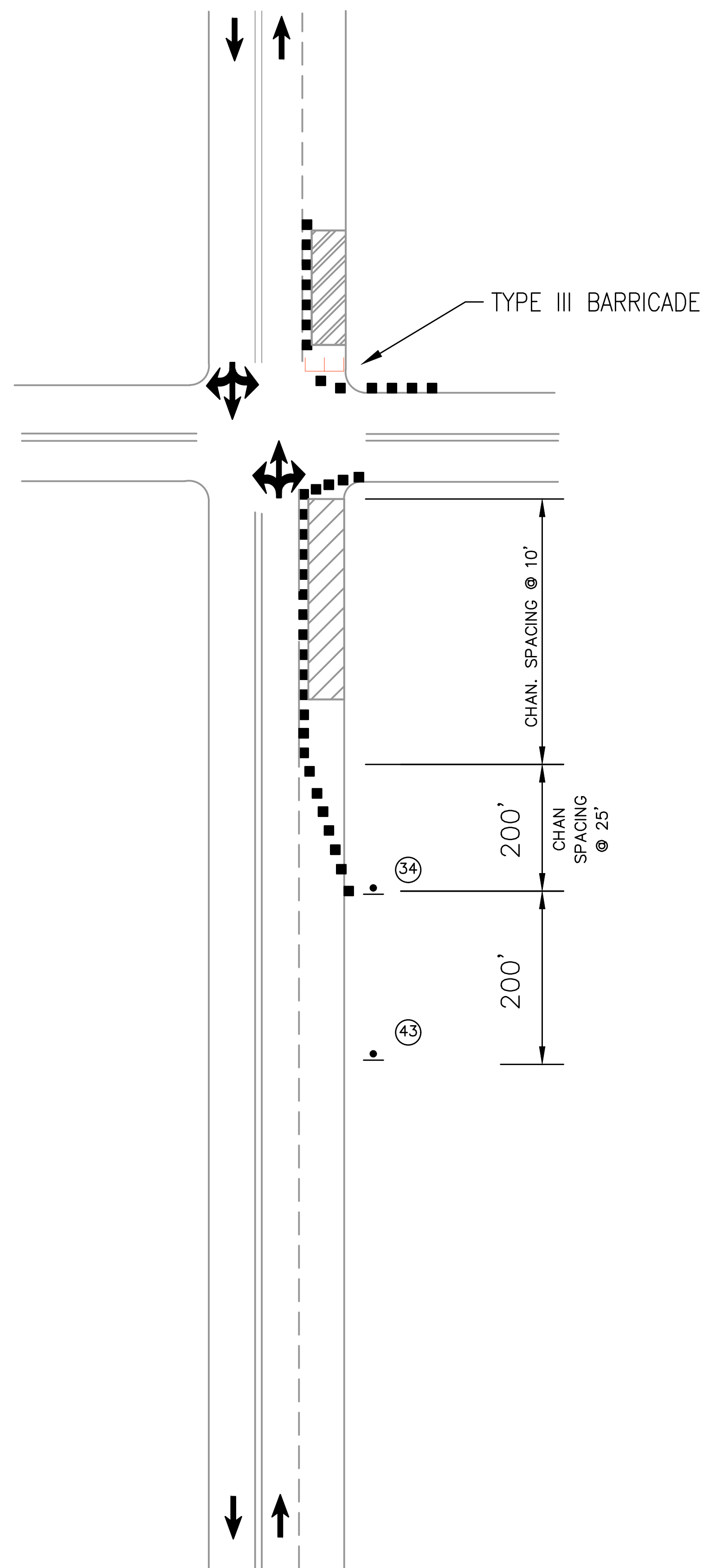
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WOODLAWN AVE

TITLE:

TRAFFIC CONTROL SHEETS

RIGHT LANE CLOSURE
AT INTERSECTION

SHEET NO.
28



RIGHT LANE CLOSURE AT INTERSECTION WORK ON
NEAR OR FAR SIDE

DRAWING NOT TO SCALE.



W05-5
34



W05-4
43

TRAFFIC CONTROL LEGEND

- | SIGN (SINGLE SIDED)
- TRIM-LINE CHANNELIZER
- ⌋ BARRICADE
- ⌋ CHANGEABLE MESSAGE SIGN
- ▨ WORK AREA

NOTES:

- ACCESS TO ENTRANCES MUST BE COORDINATED WITH PROPERTY OWNERS.
- ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
- ALL DISTANCES AND SPACINGS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE REVISED AS DIRECTED BY THE ENGINEER TO FIT FIELD CONDITIONS.
- NO DIRECT PAY WILL BE MADE FOR RELOCATION OF TCP SIGNS.

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WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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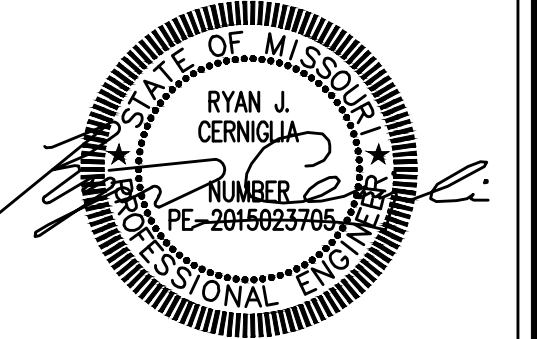
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IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

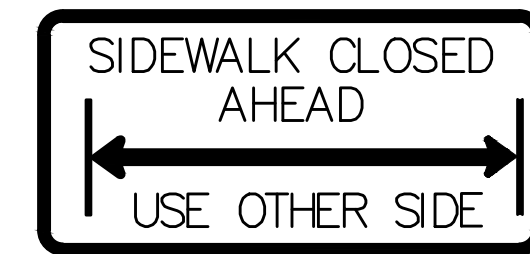
TITLE:
TRAFFIC CONTROL SHEETS
CROSSWALK CLOSURES AND
PEDESTRIAN DETOURS

SHEET NO.
29



W021-5

①



②



R9-11L

④

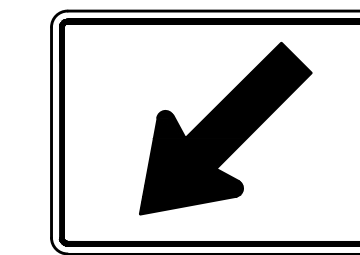


③



R9-9

⑤



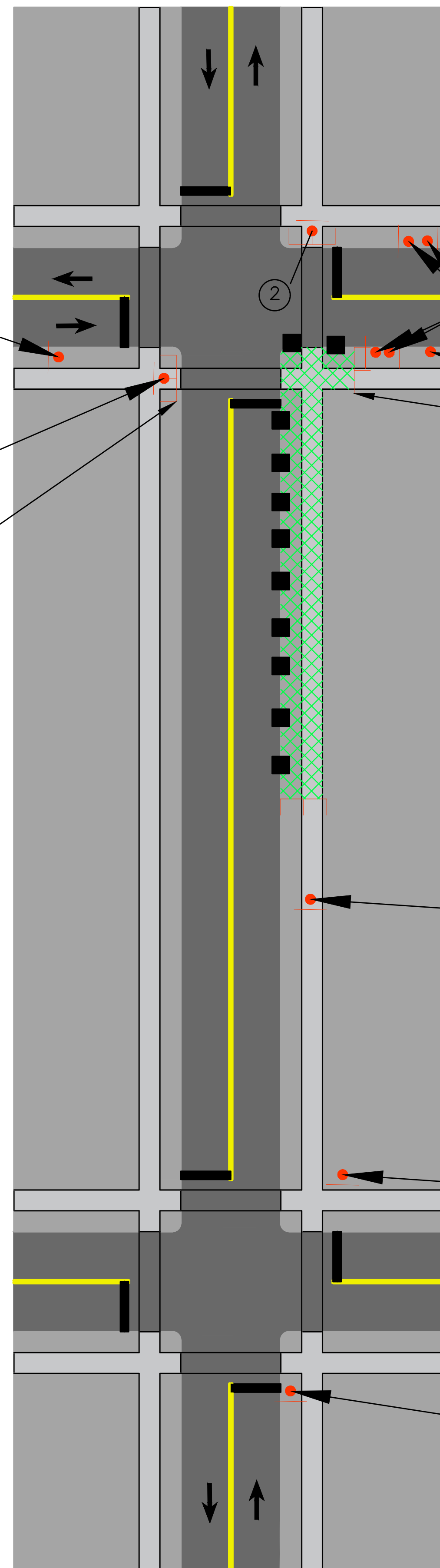
W16-7P

⑦



W11-2

⑥



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- TRIM-LINE CHANNELIZER
- ⌈ TYPE 3 BARRICADE
- ▨ WORK AREA

TYPE III BARRICADE

TYPE III BARRICADE

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FOLLOW DIMENSIONS.

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MSD MAP: 23M-1 & 23M-2
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NOTES:

WHERE SIDEWALKS EXIST, PROVISIONS SHOULD BE MADE FOR DISABLED PERSONS.

WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.

CURB PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FT. IN ADVANCE OF THE MID-BLOCK CROSSWALK.

PEDESTRIAN TRAFFIC SIGNAL DISPLAYS CONTROLLING CLOSED CROSSWALKS SHOULD BE COVERED OR DEACTIVATED.

ONLY THE TEMPORARY TRAFFIC CONTROL DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, MAY BE NECESSARY TO CONTROL TRAFFIC.

SIGNS MAY BE MOUNTED ON PORTABLE MOUNTS AT 1 FT. PROVIDED THEY DO NOT INTERFERE WITH PEDESTRIAN MOVEMENT OR BE OBSTRUCTED BY PARKING. OTHERWISE, SIGNS SHALL BE MOUNTED AT 7 FT.

OTHER APPROPRIATE SIGNS MAY BE USED IN LIEU OF THE "SHOULDER WORK AHEAD" SIGN.

AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.



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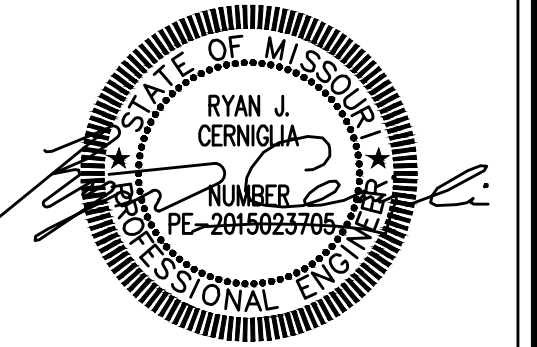
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
TRAFFIC CONTROL SHEETS
WORK ALONG
LONGVIEW BOULEVARD

SHEET NO.
30

TRAFFIC CONTROL LEGEND

● SIGN (SINGLE SIDED)

■ TRIM-LINE CHANNELIZER

▨ WORK AREA



W020-1

②



W021-5

②①



W05-5

③④



W05-4

④③

NOTES:

PROVIDE SIGNS ON LEFT AND RIGHT SIDES OF DIVIDED HIGHWAYS

ROAD WORK AHEAD SIGN NOT NEEDED IF SHOULDER WORK IS LOCATED WITHIN THE LIMITS OF AN ACTIVITY AREA WHERE ANOTHER ROAD WORK AHEAD SIGN IS ALREADY USED.

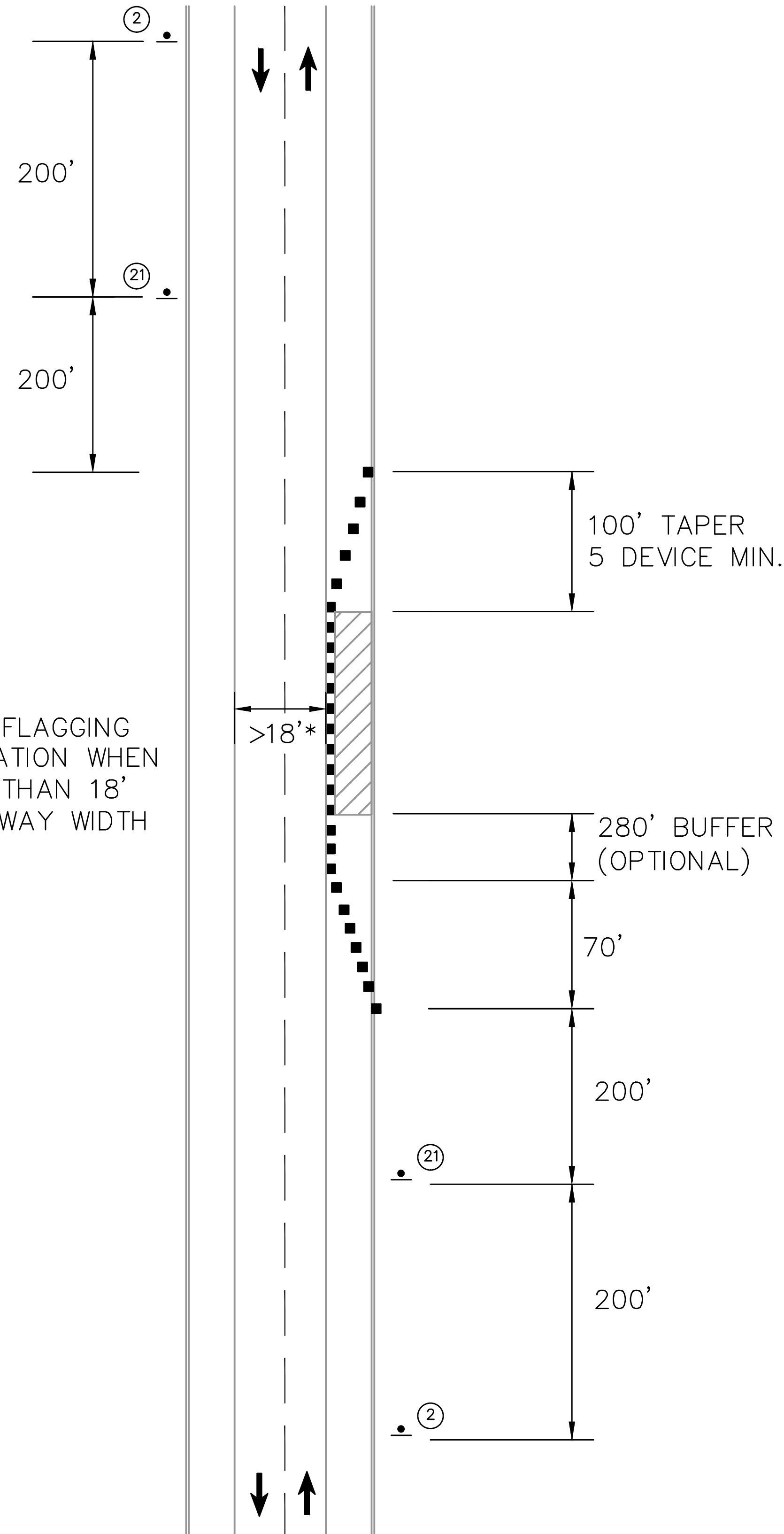
SEE MODOT EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S ROTATING LIGHTS OR STROBE LIGHTS.

WHEN PAVED SHOULDERS HAVING A WIDTH OF 8 FEET OR MORE ARE CLOSED. AT LEAST ONE ADVANCE WARNING SIGN SHALL BE USED. IN ADDITION, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK SPACE AND DIRECT VEHICULAR TRAFFIC TO REMAIN WITHIN THE TRAVELED WAY.

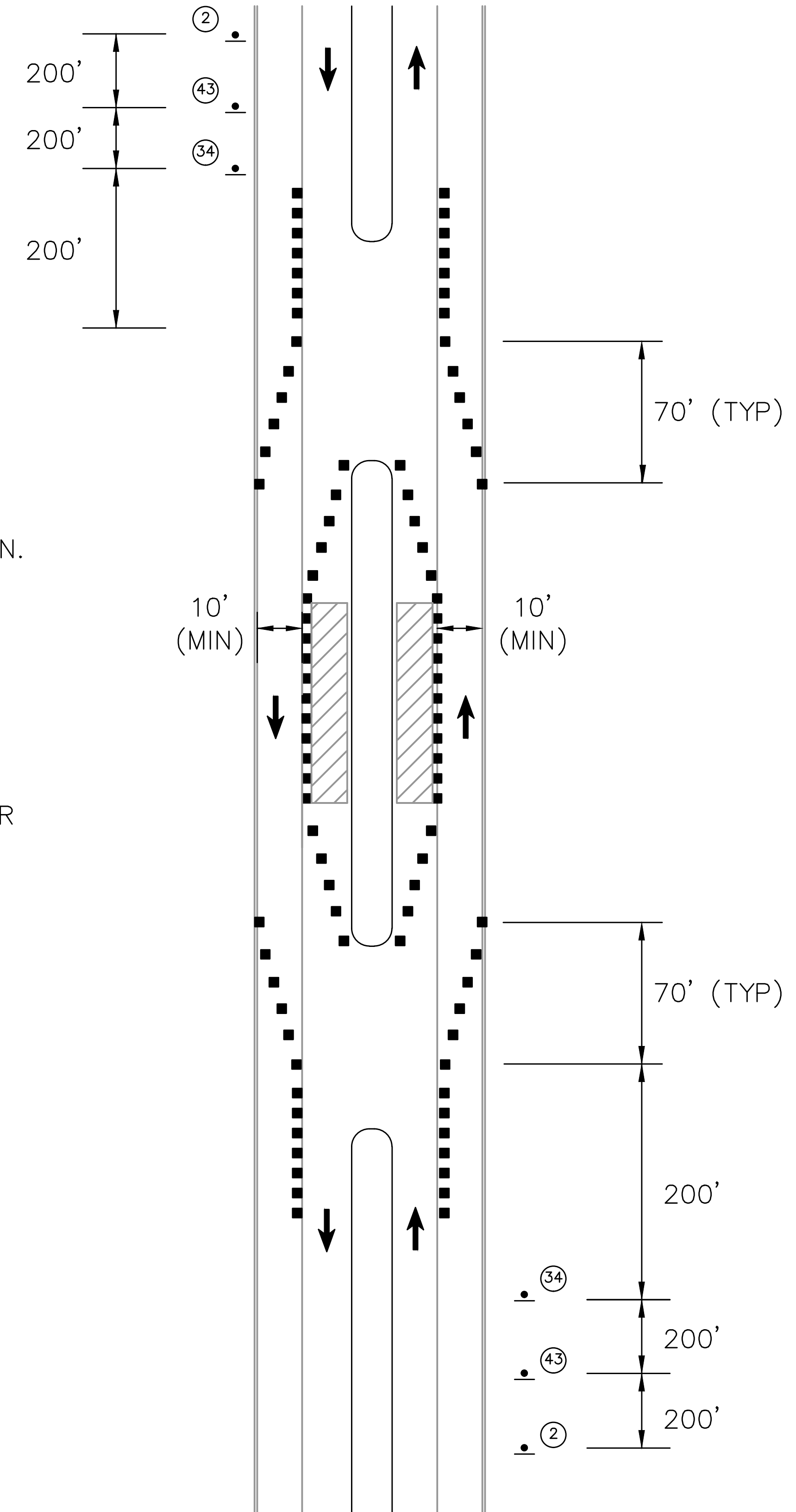
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LONGVIEW BOULEVARD (TYP.)

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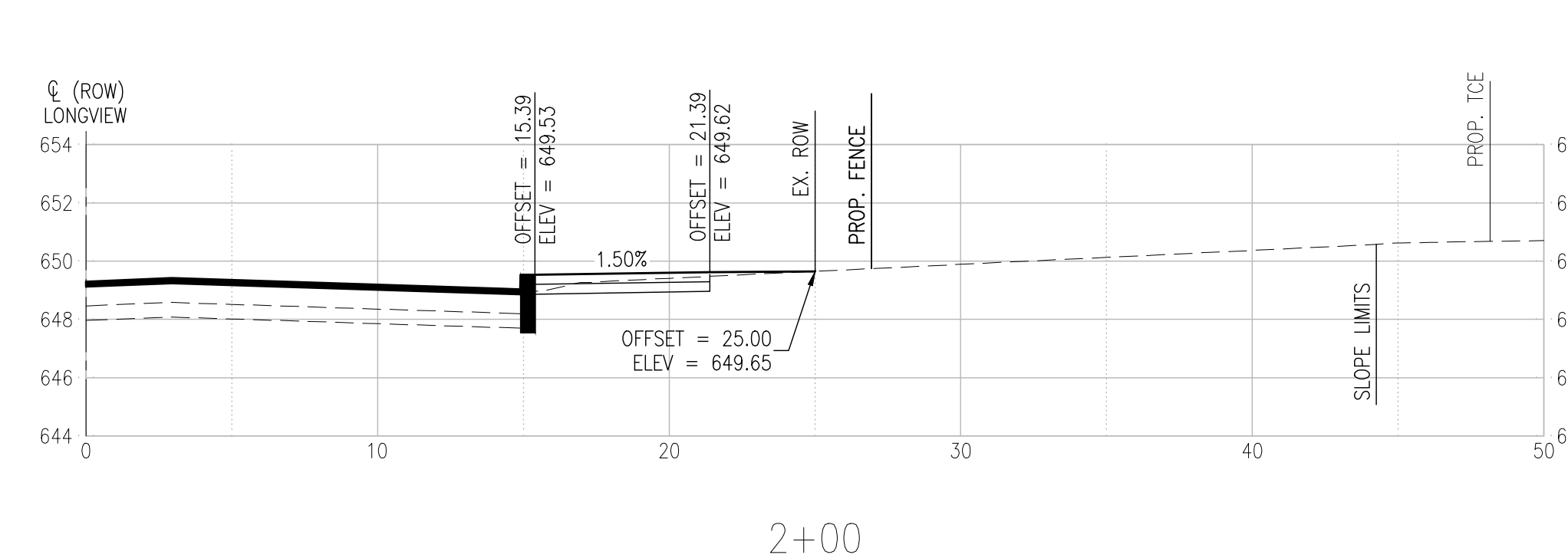
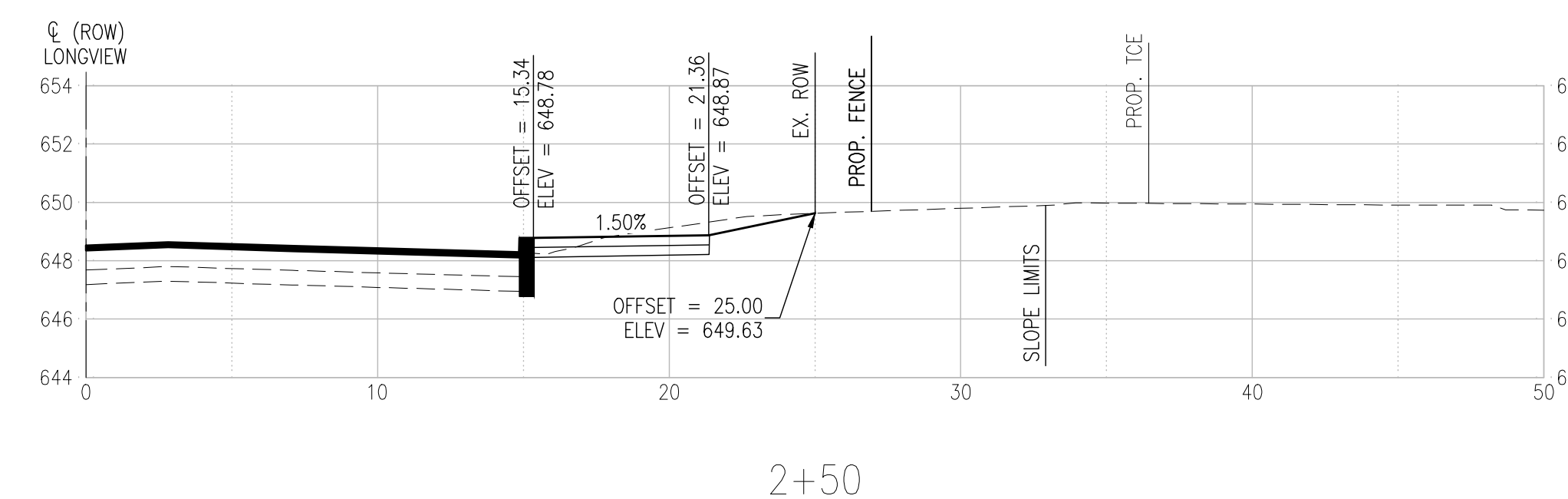
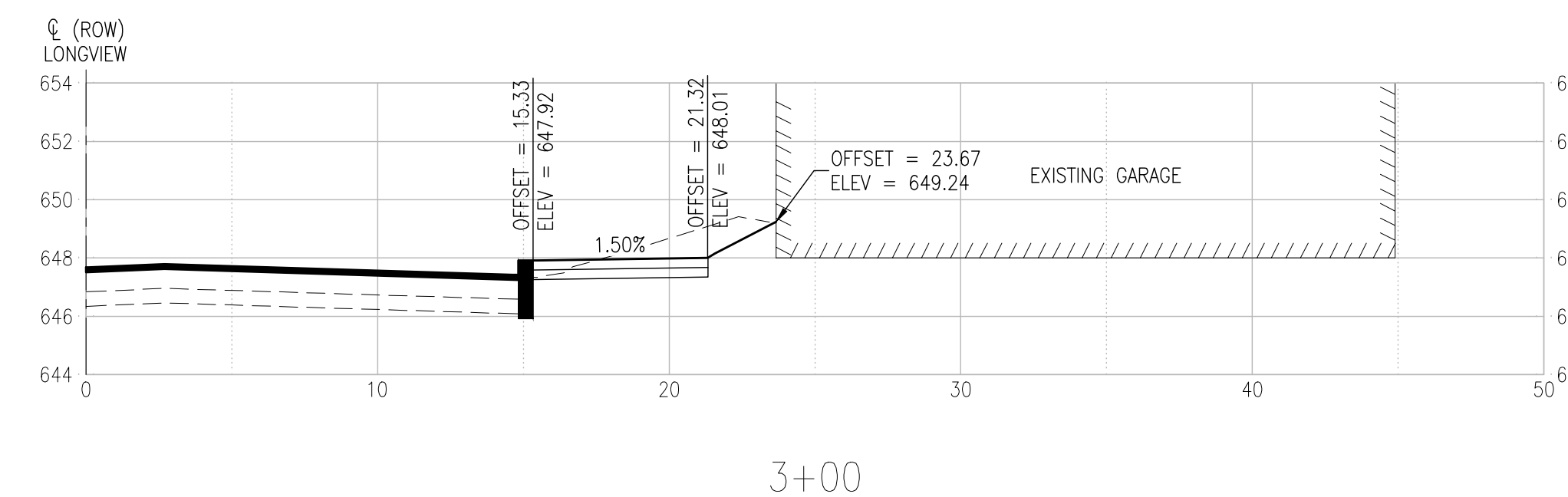
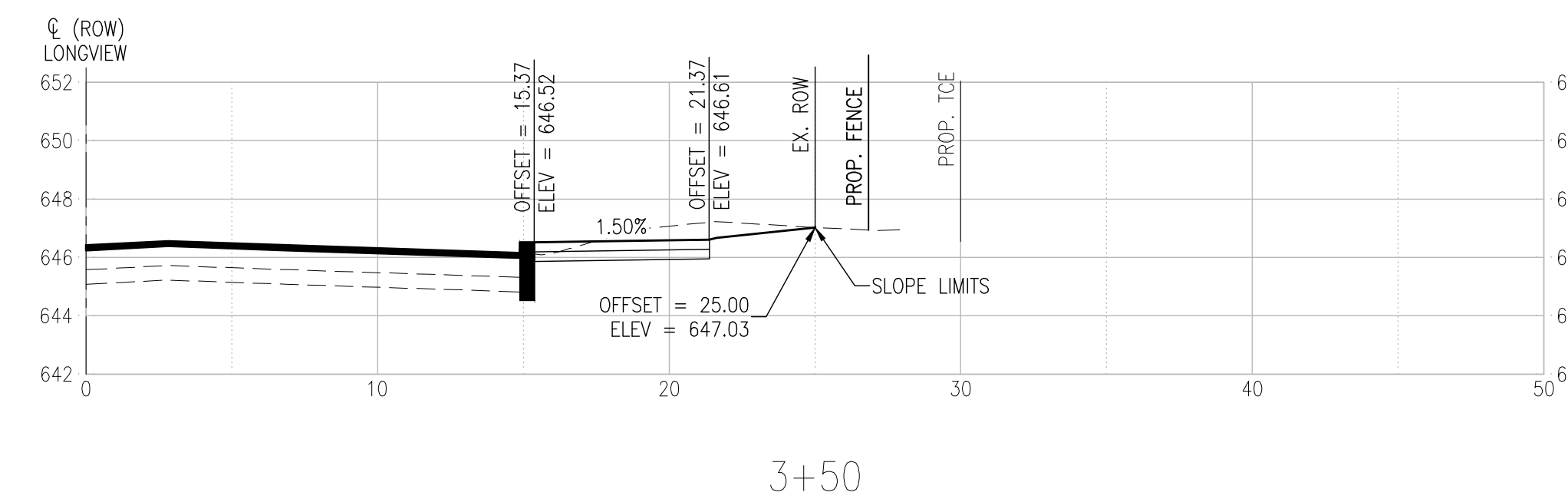
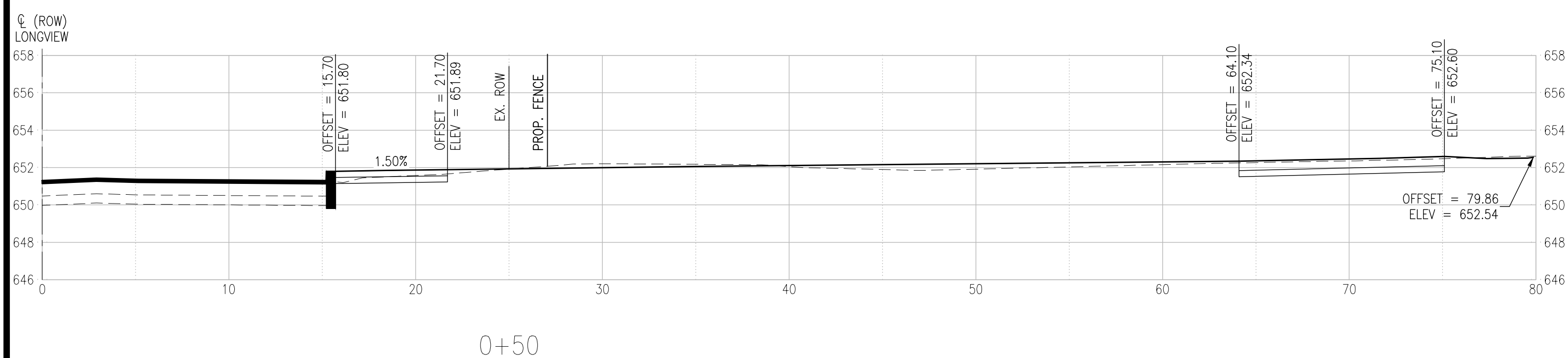
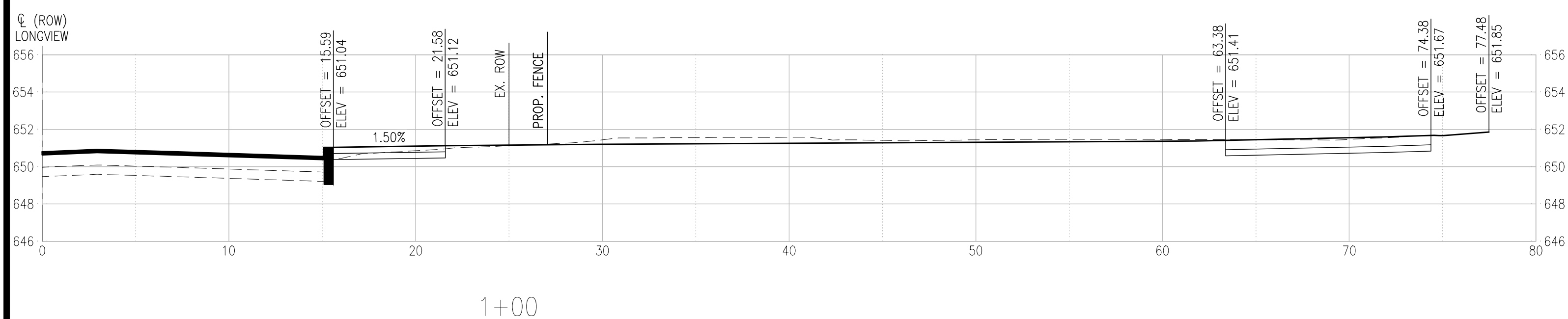
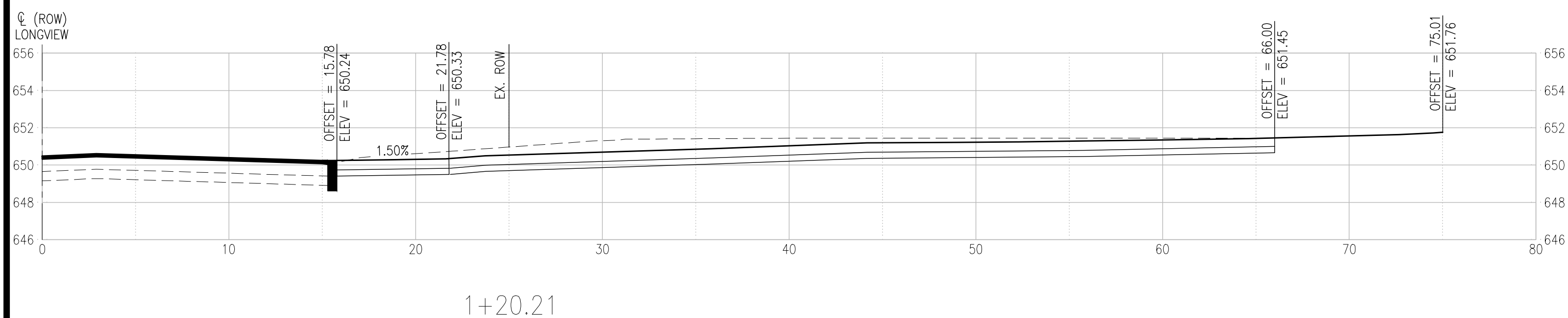
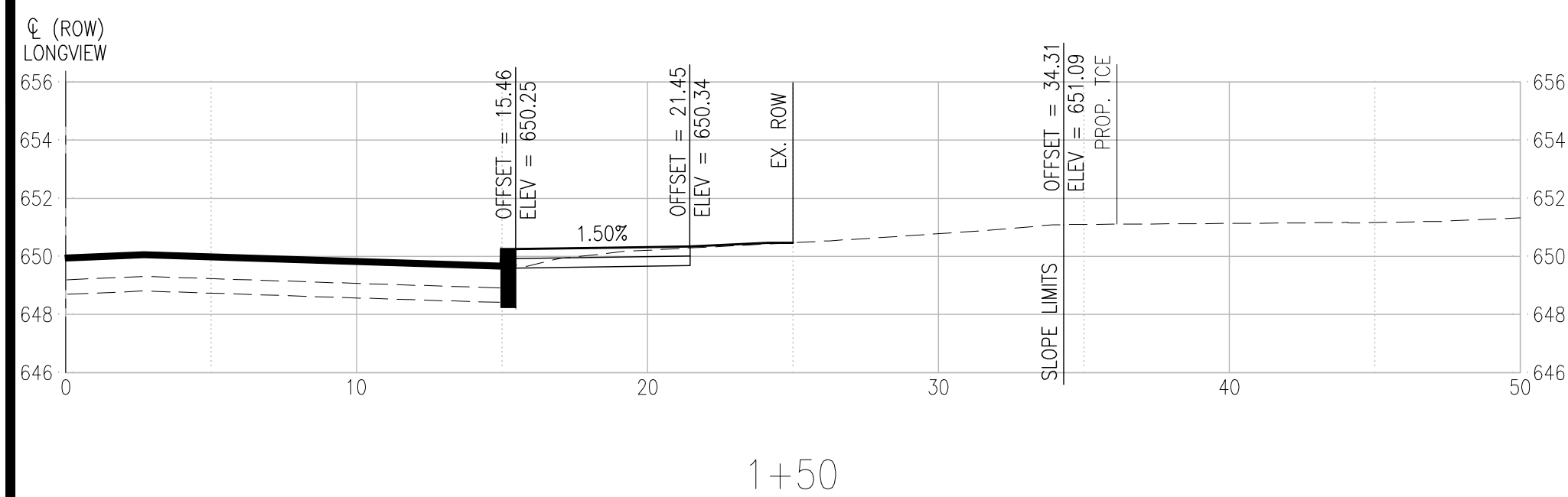
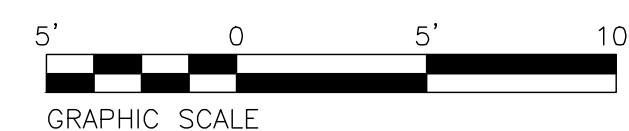
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MSD No.: 23MSD-00310

SECTIONS - LONGVIEW BOULEVARD

SCALE: 1"=5'



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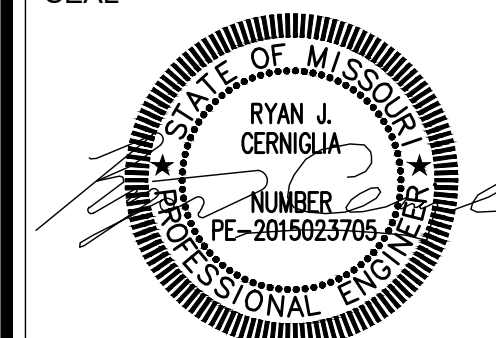
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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CROSS SECTIONS
(LONGVIEW BLVD)

SHEET NO.
31



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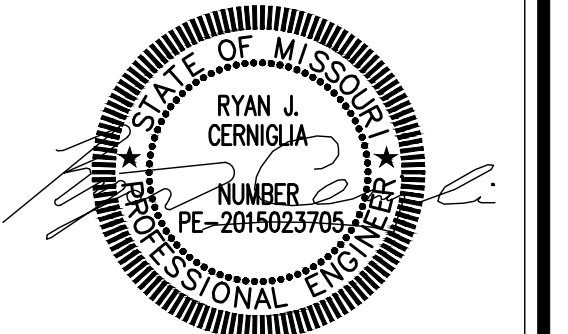
(314) 241-6300

WWW.TWM-INC.COM

MO CERTIFICATE OF AUTHORITY: 001528

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL



SIGNATURE:
DATE SIGNED:
LICENSE EXPIRATION:

ISSUED FOR: FINAL ENGINEERING
DATE OF ISSUANCE: 08/25/2023

REV.	DATE	DESCRIPTION
△		
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

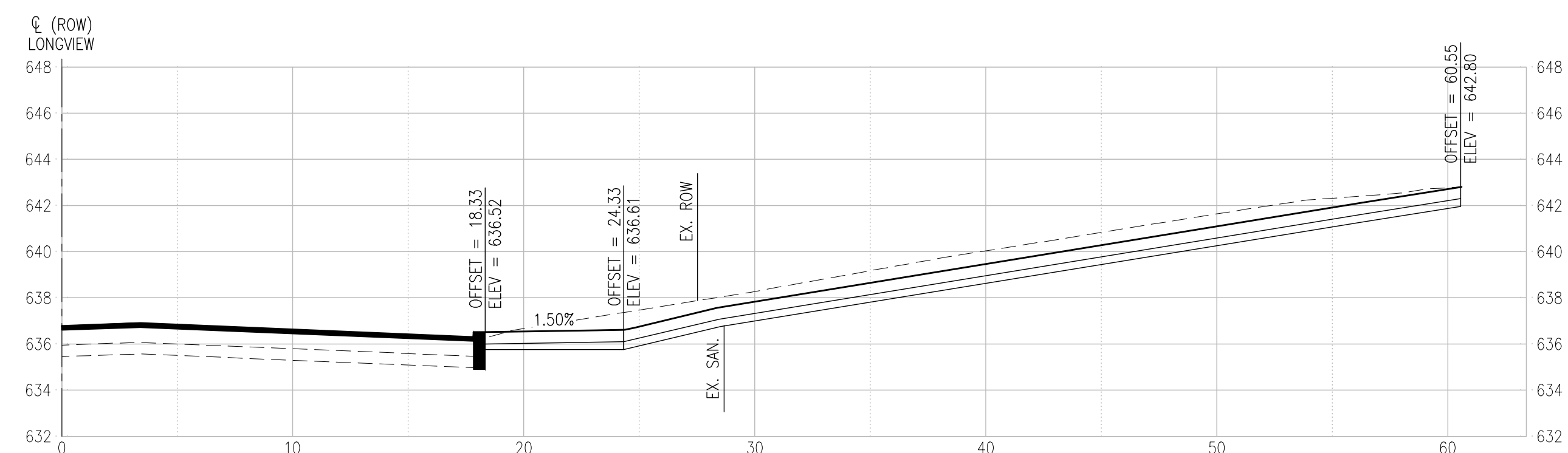
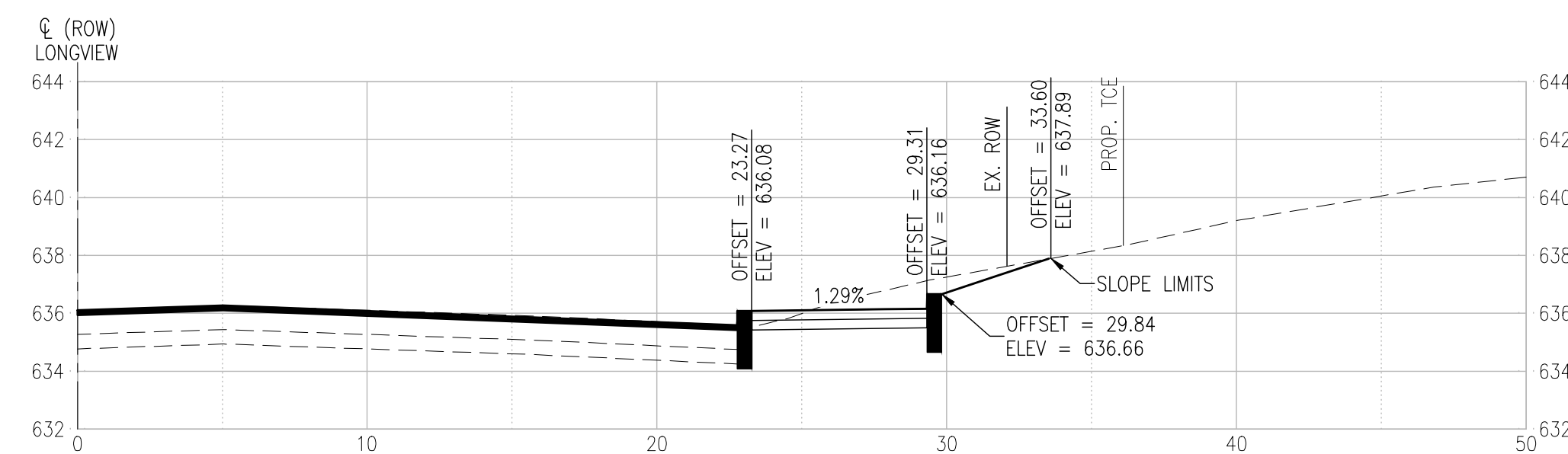
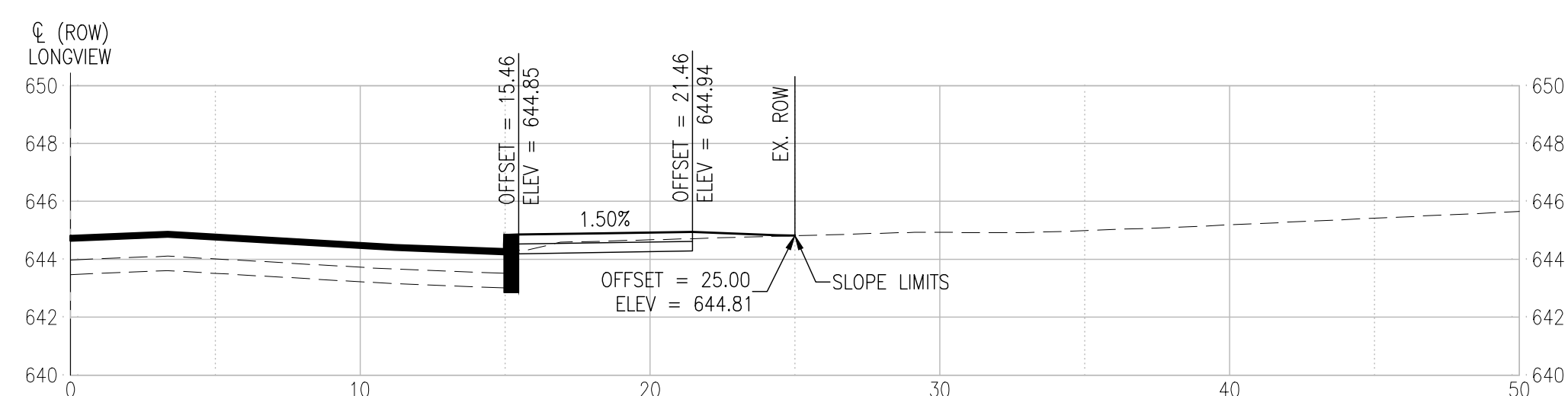
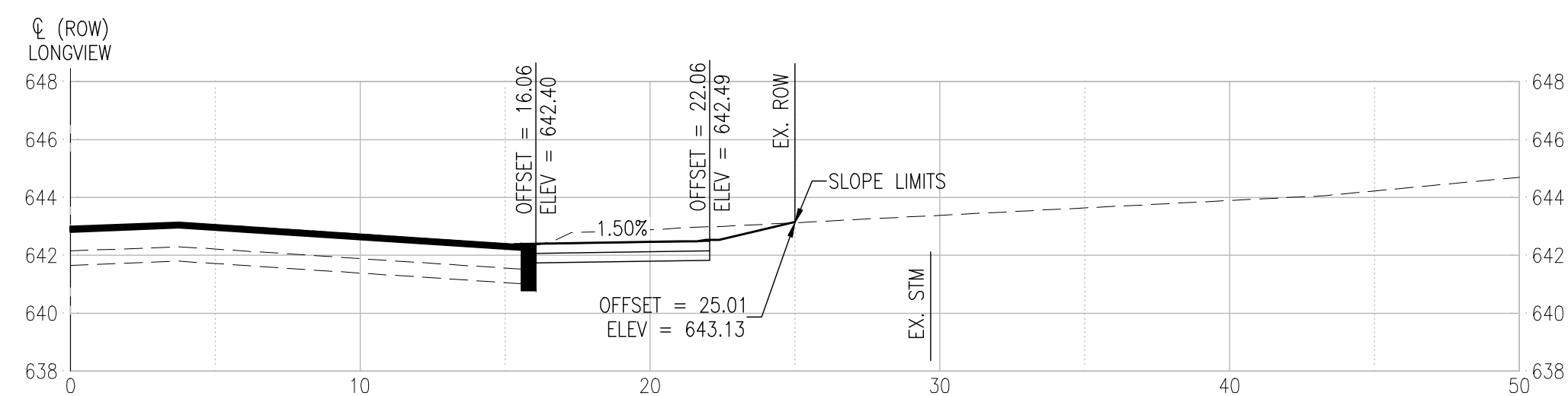
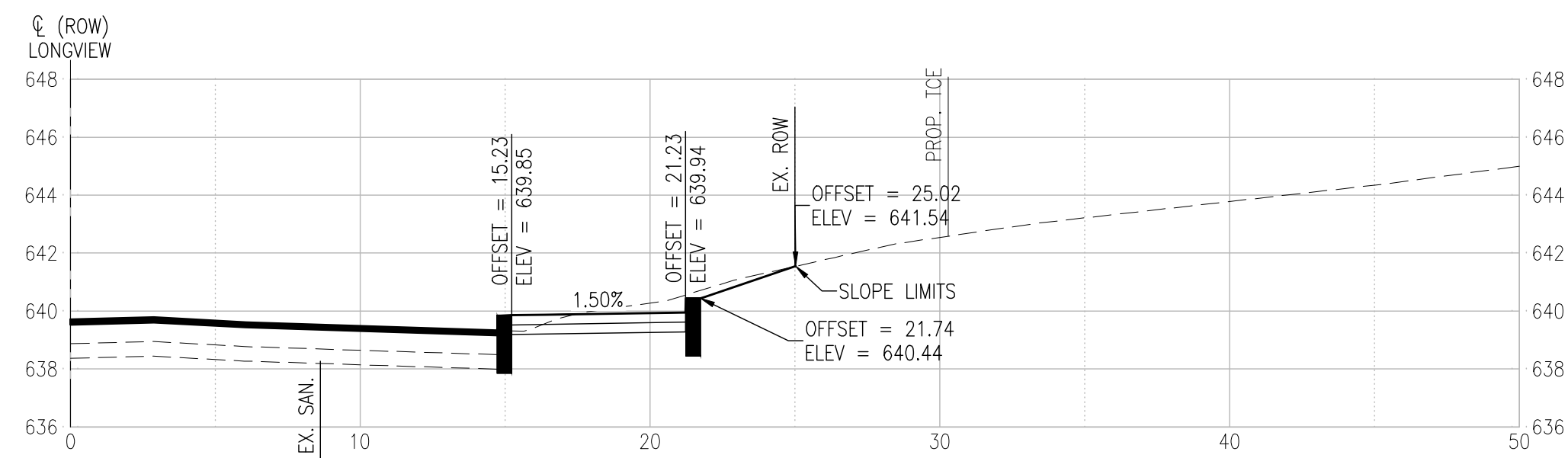
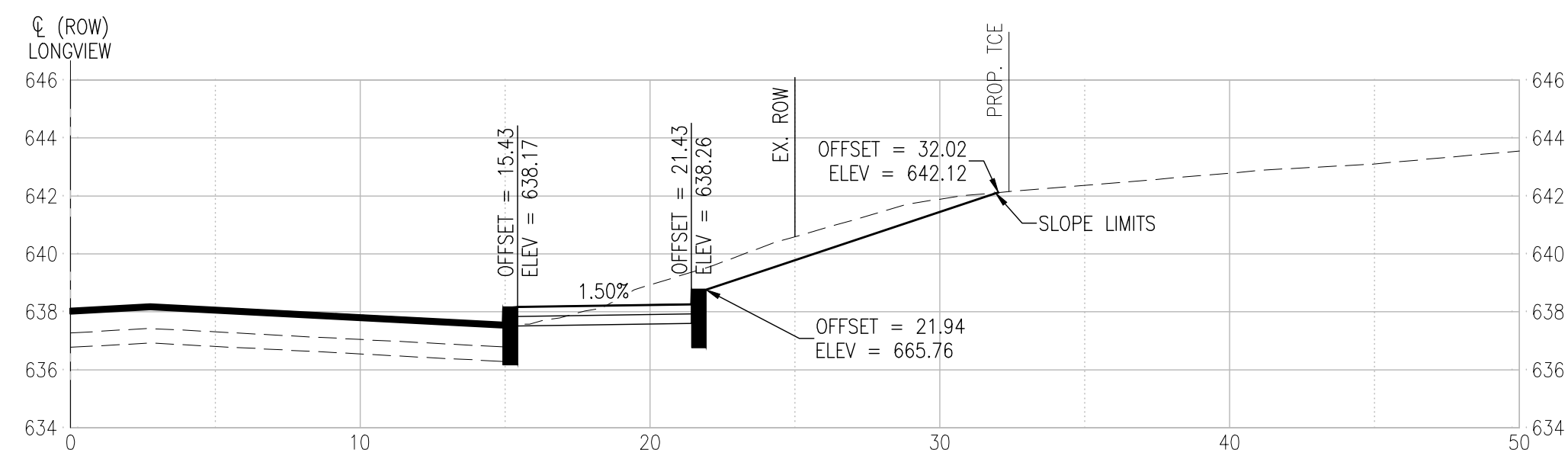
PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CROSS SECTIONS
(LONGVIEW BLVD)

SHEET NO.
32

SECTIONS - LONGVIEW BOULEVARD

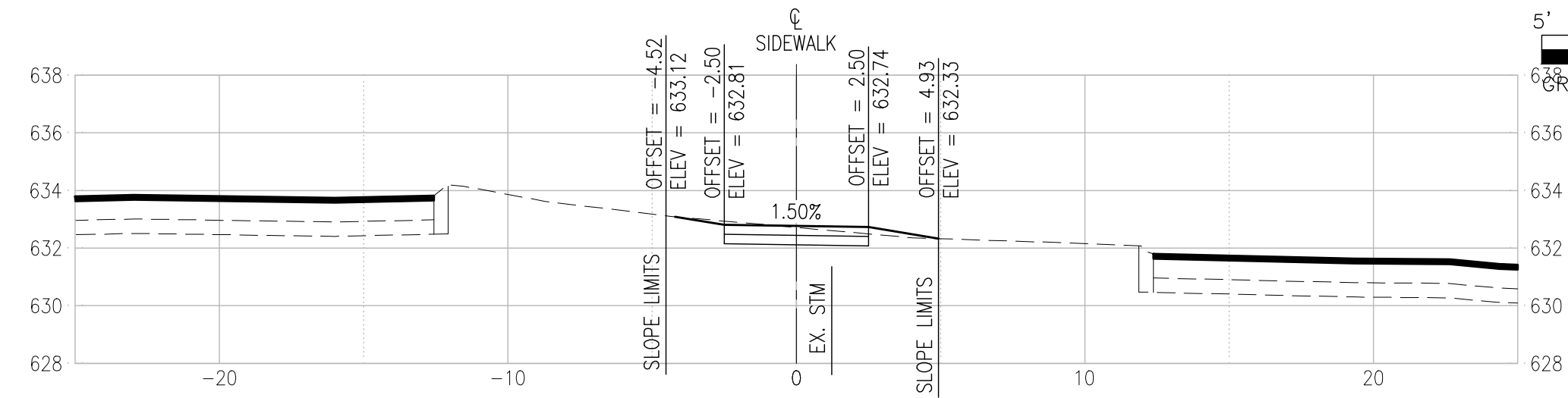
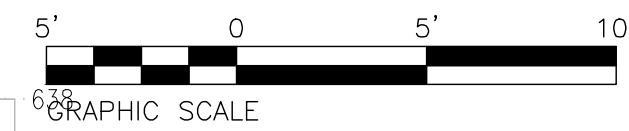
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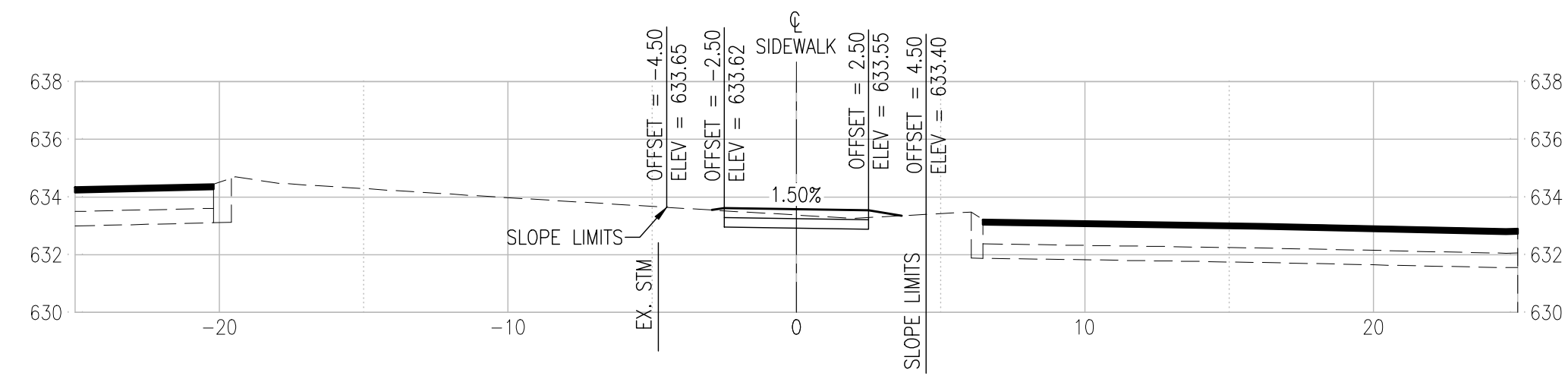
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SECTIONS - SIDEWALK MEDIAN

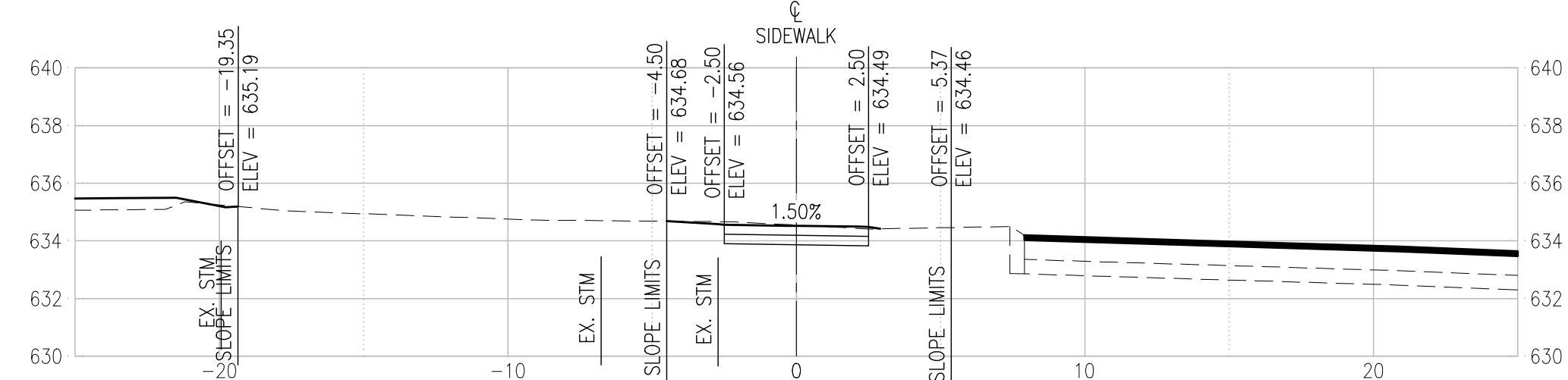
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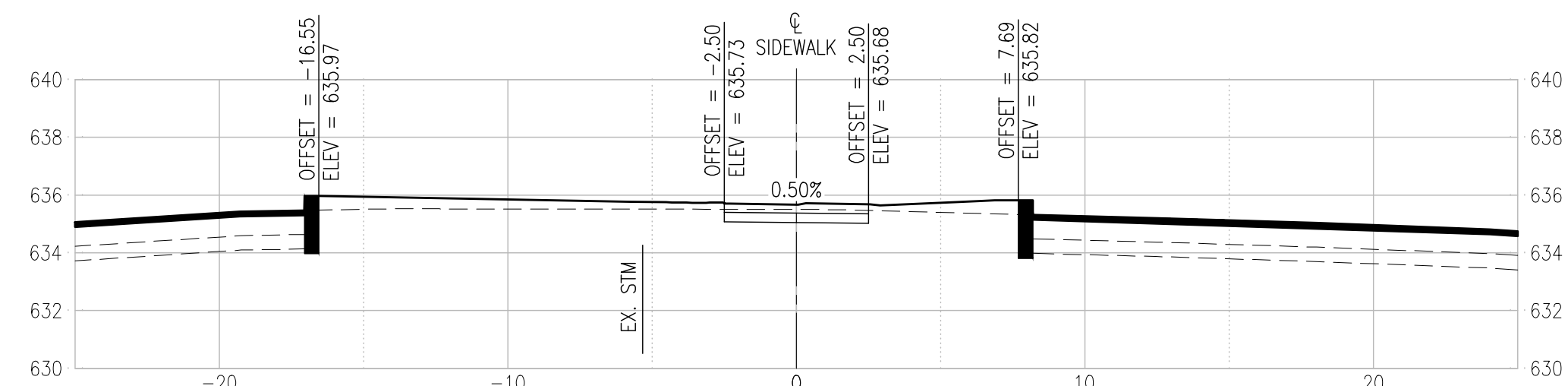
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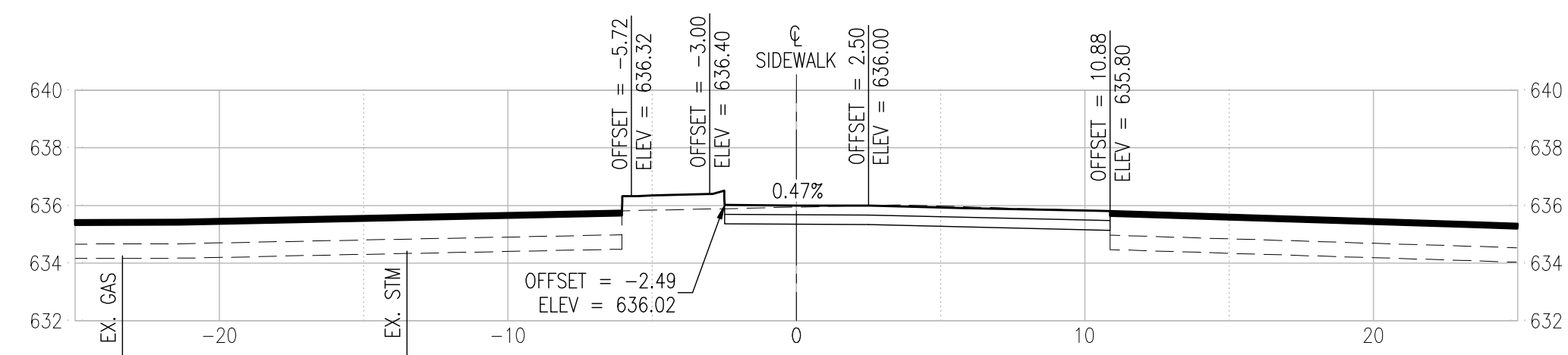
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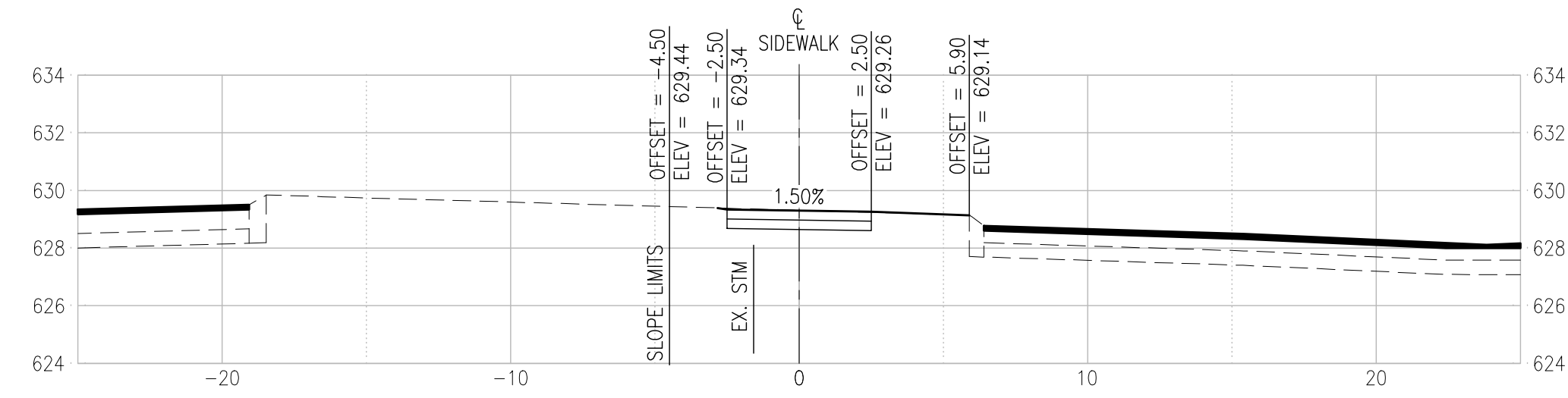
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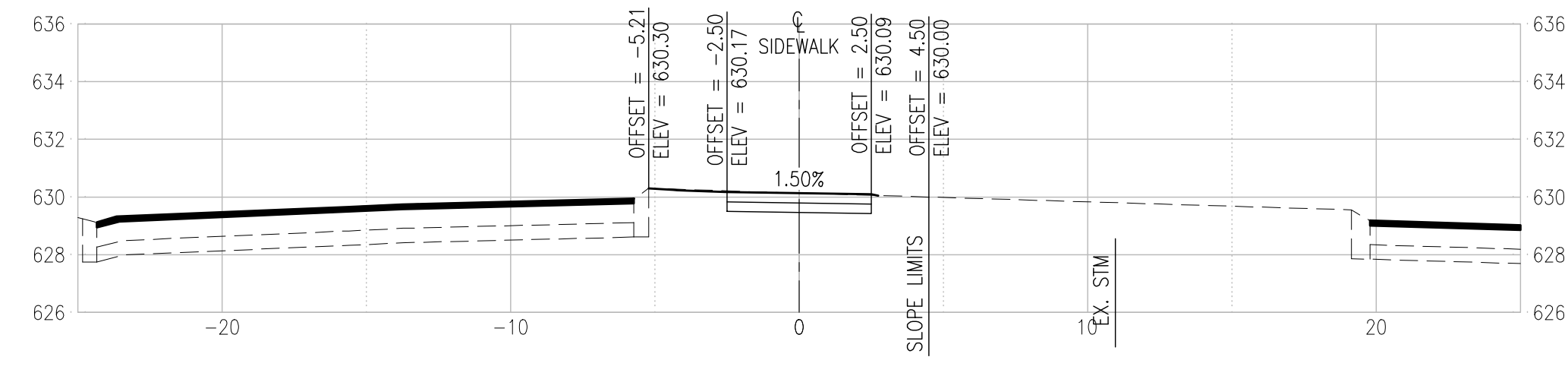
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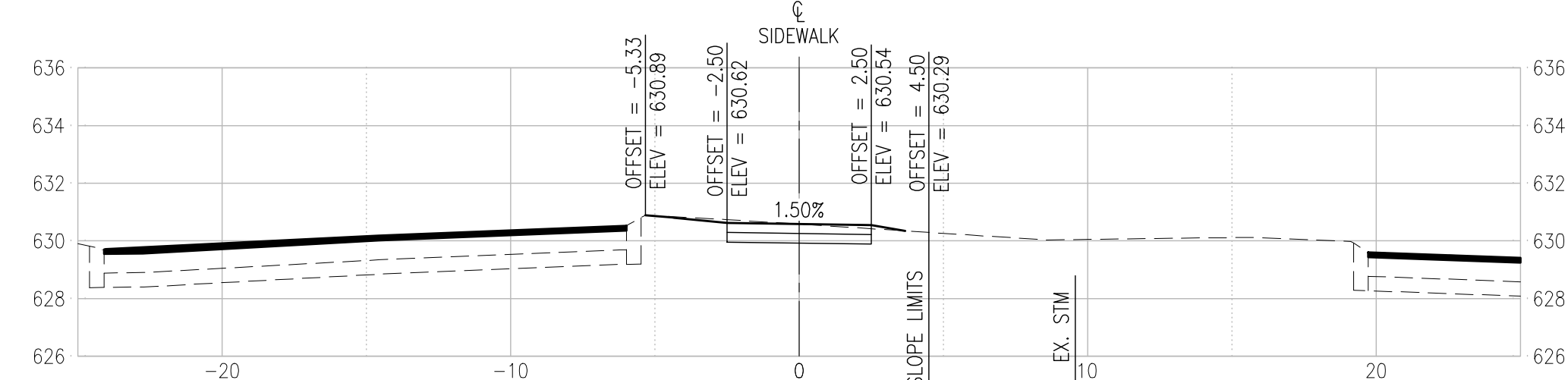
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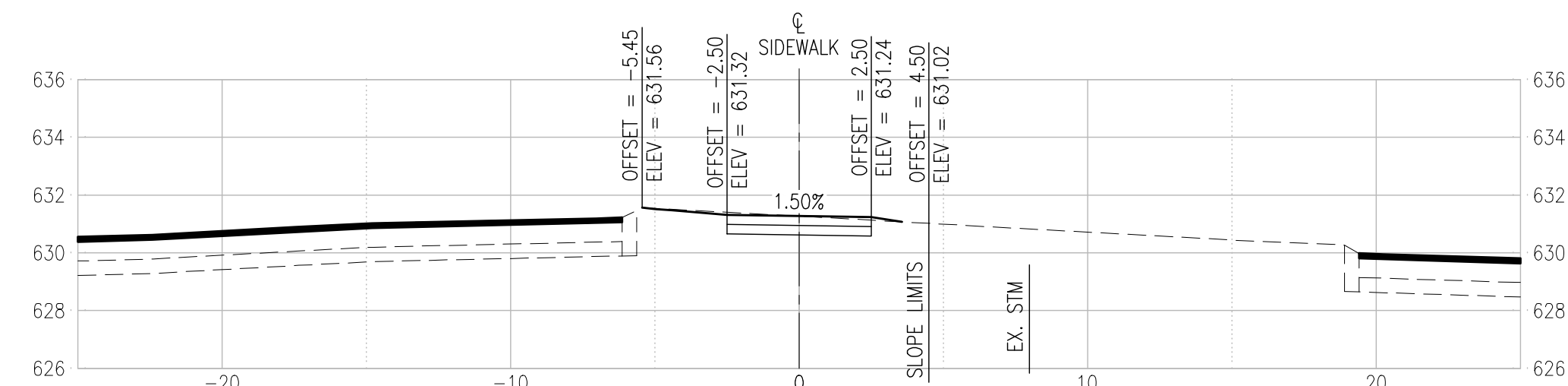
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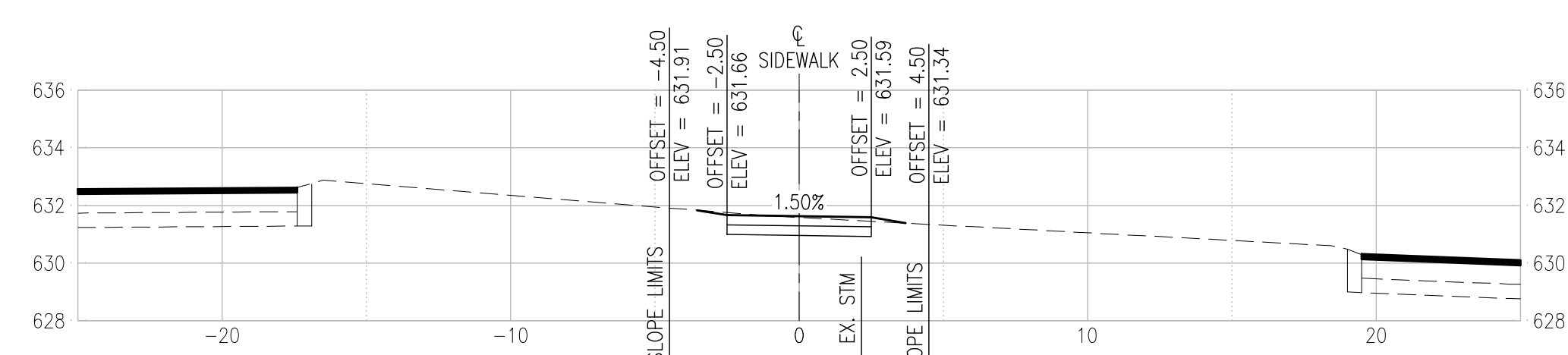
104+50



104+00



103+50



103+00



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THOUVENOT, WADE
& MOERCHEN, INC.

ST. LOUIS OFFICE
3701 S. LINDBERGH BLVD, STE 100
ST. LOUIS, MISSOURI
63127

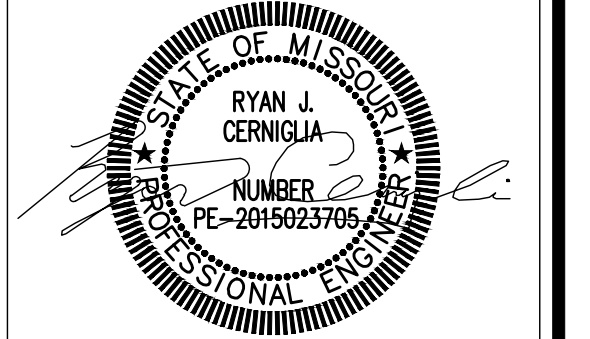
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MO CERTIFICATE OF AUTHORITY: 001528

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
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DRAWN BY: RJC
DESIGNED BY: RJC
CHECKED BY: NMC
APPROVED BY: JRL
PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CROSS SECTIONS
(SIDEWALK MEDIAN)

SHEET NO.
33

WUNNENBERG: S24-35
MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310



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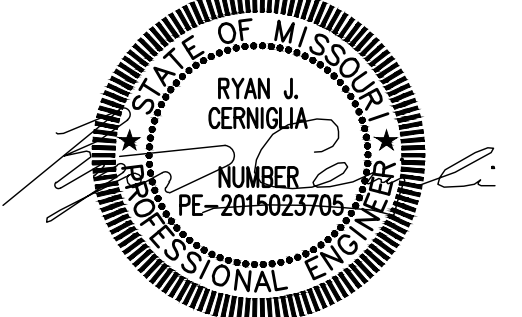
**THOUVENOT, WADE
& MOERCHEN, INC.**

ST. LOUIS OFFICE
3701 S. LINDBERGH BLVD, STE 100
ST. LOUIS, MISSOURI
63127
(314) 241-6300

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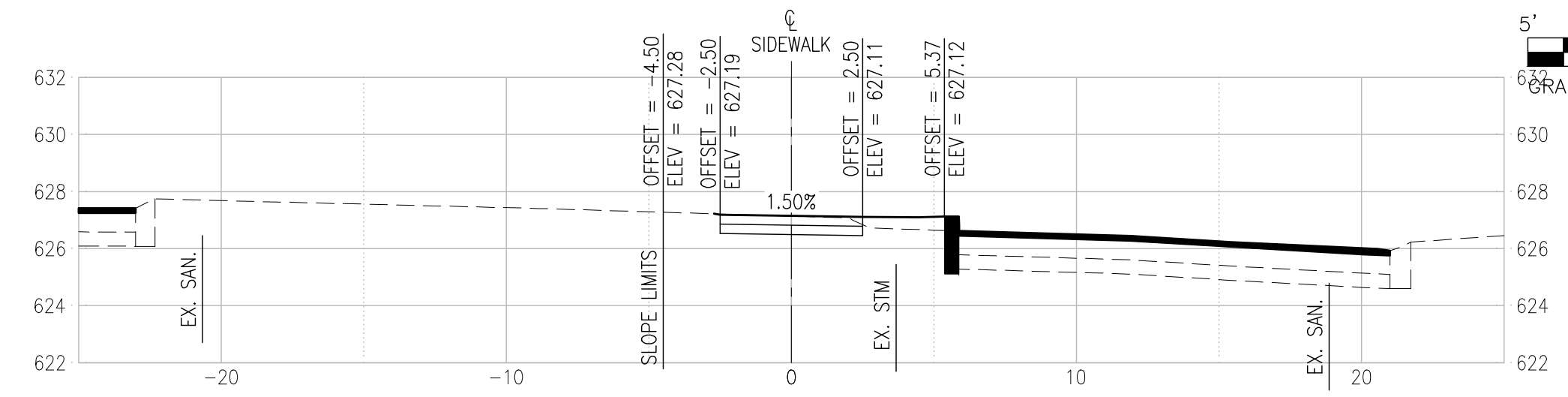
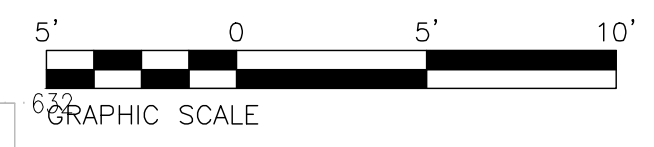
PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CROSS SECTIONS
(SIDEWALK MEDIAN)

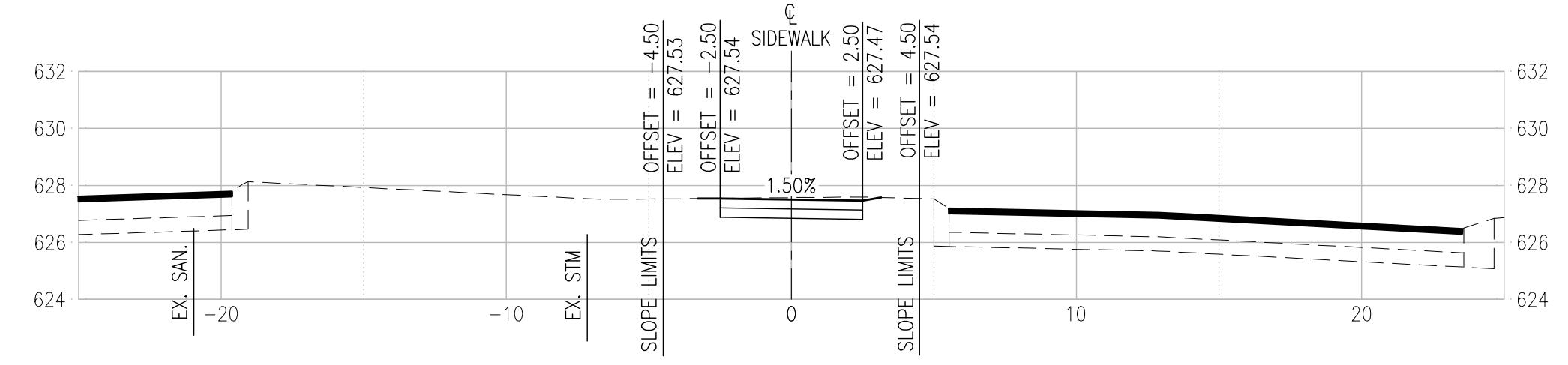
SHEET NO.
34

SECTIONS - SIDEWALK MEDIAN

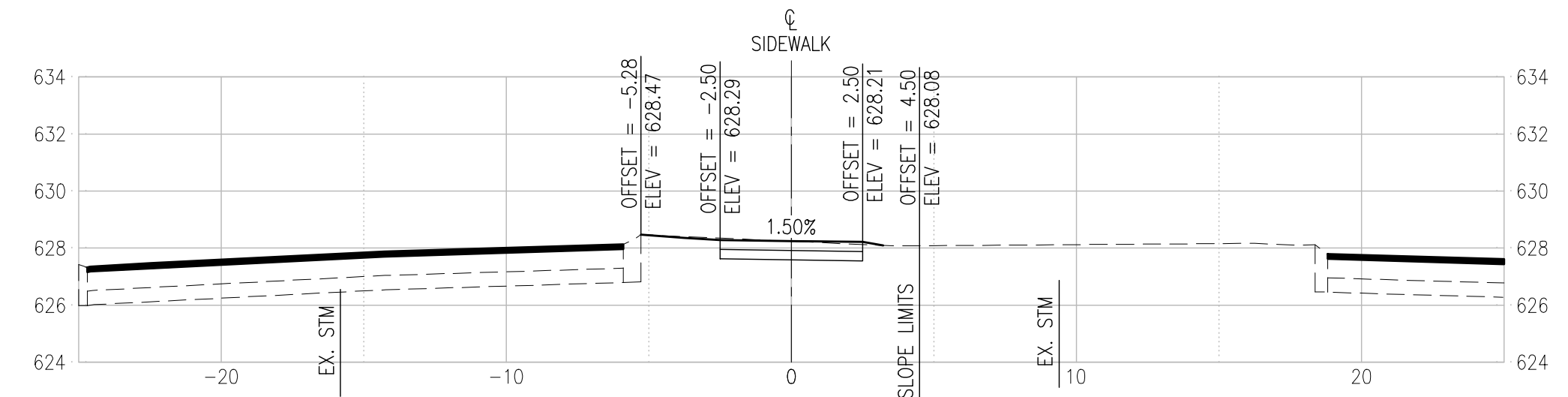
SCALE: 1"=5'



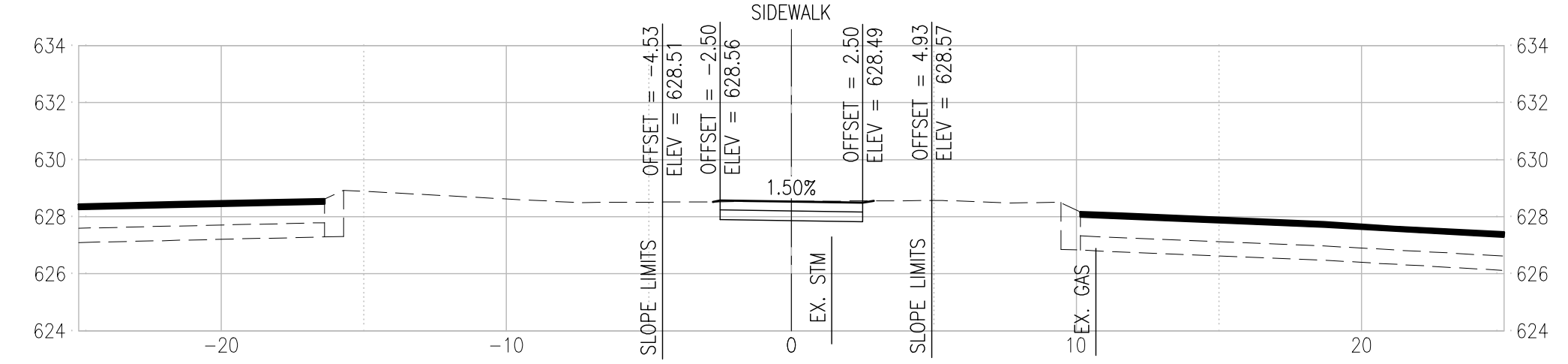
107+50



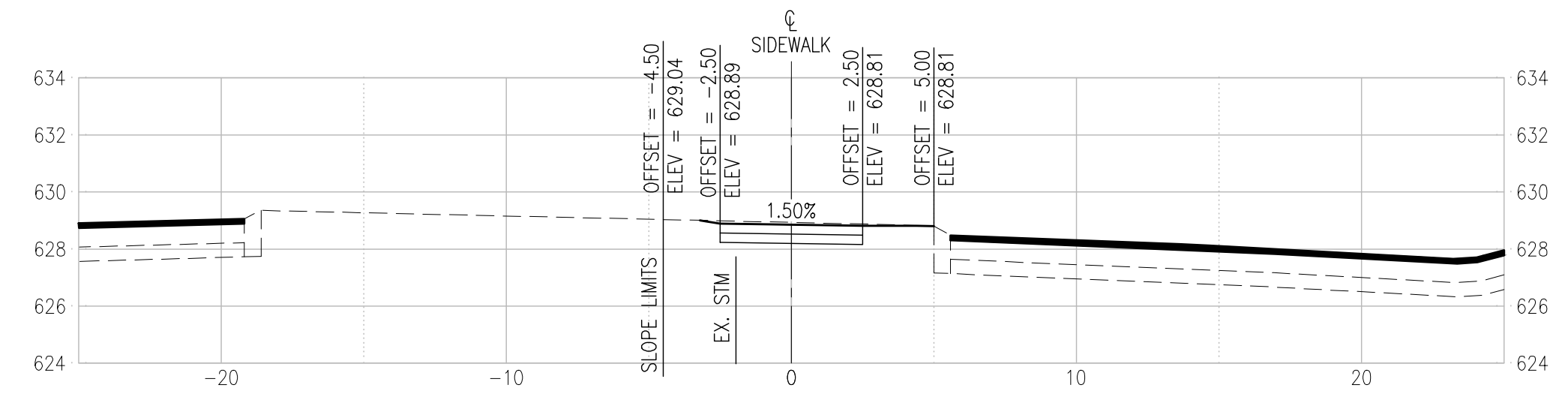
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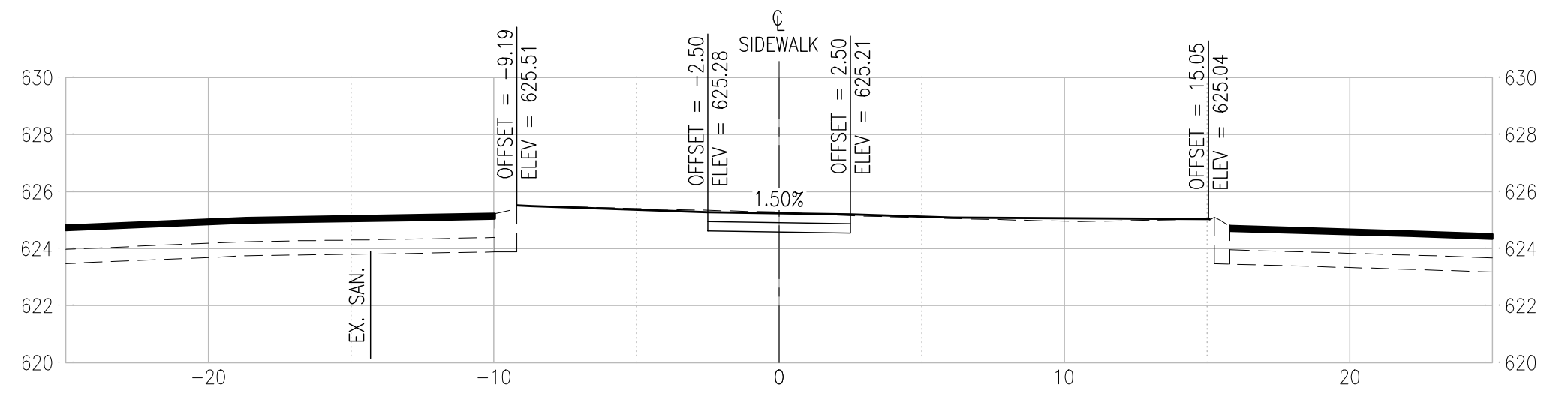
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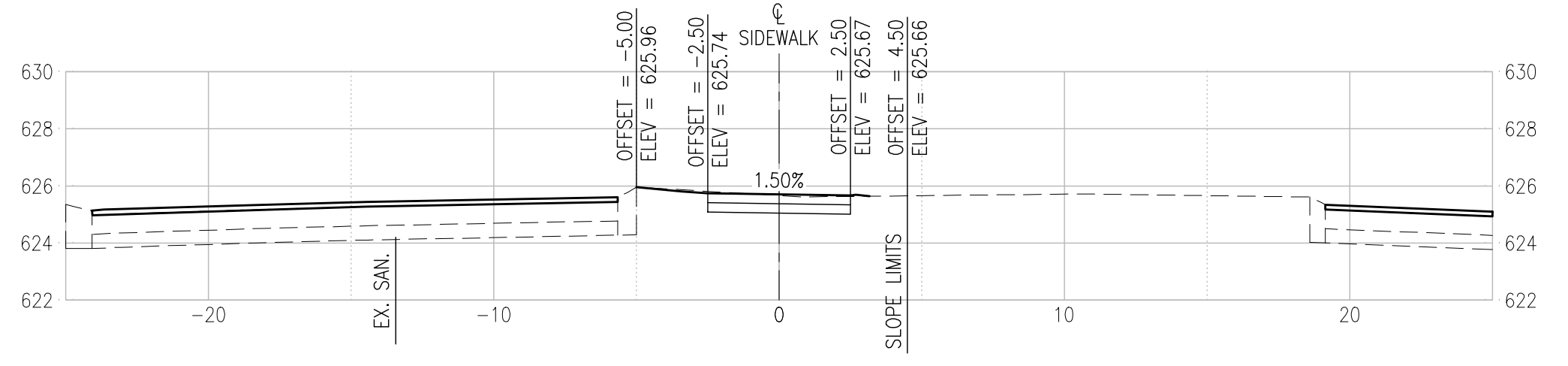
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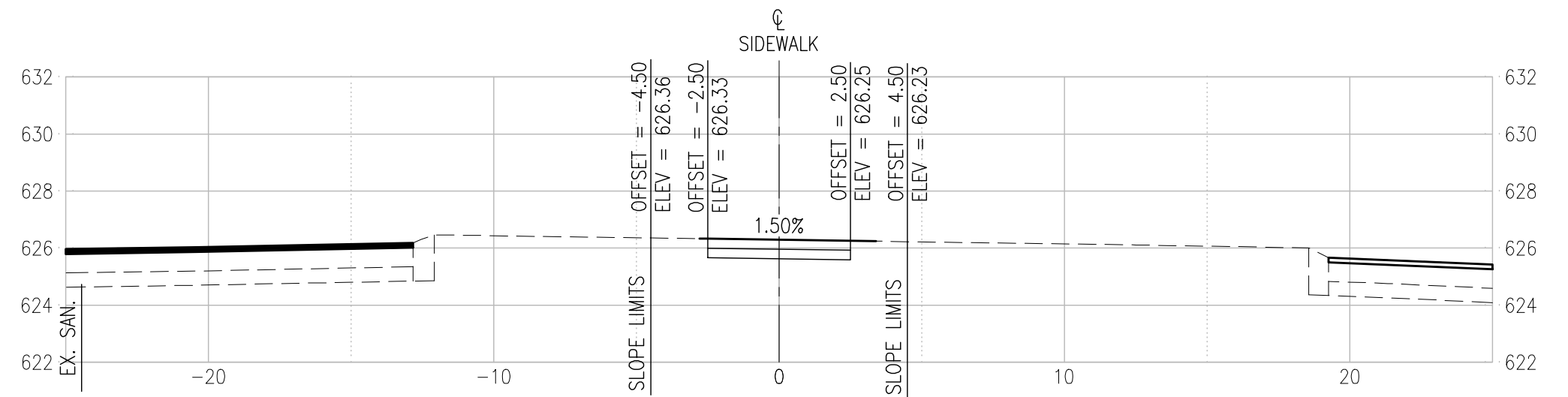
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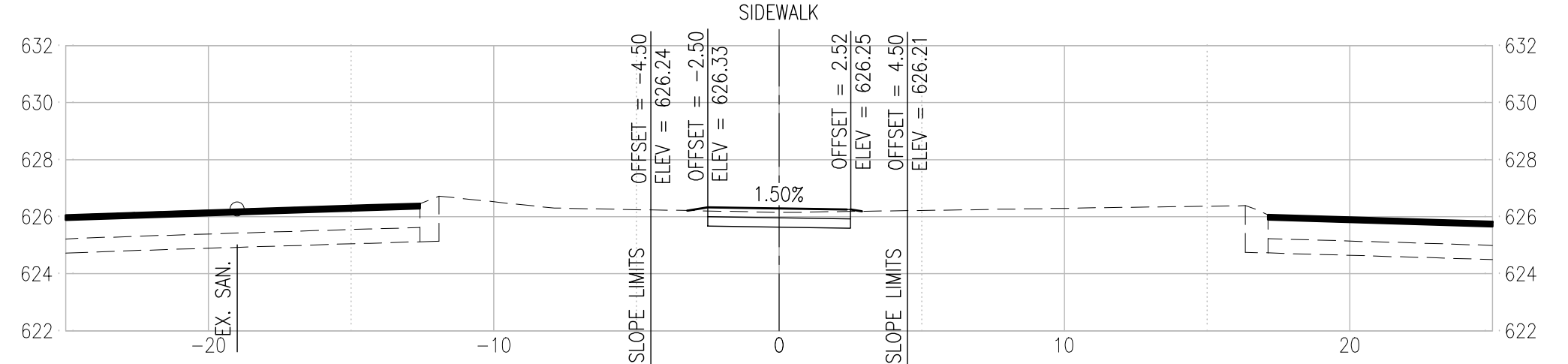
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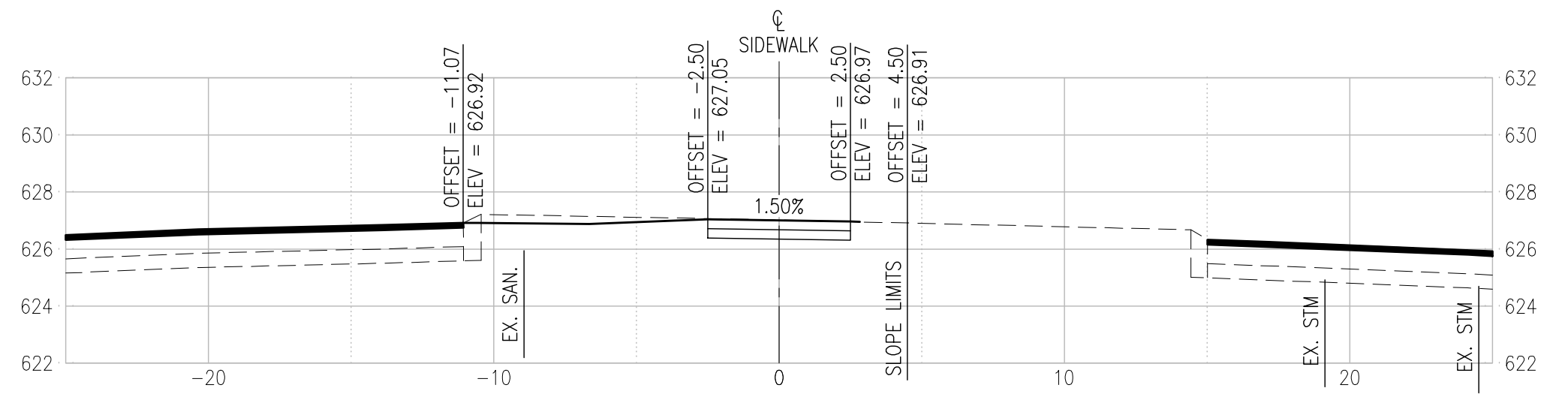
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109+00



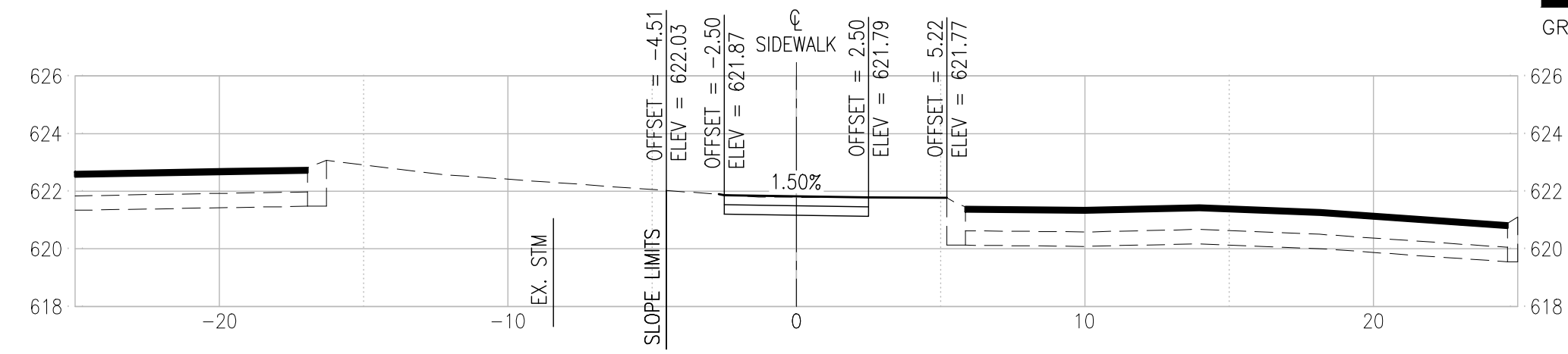
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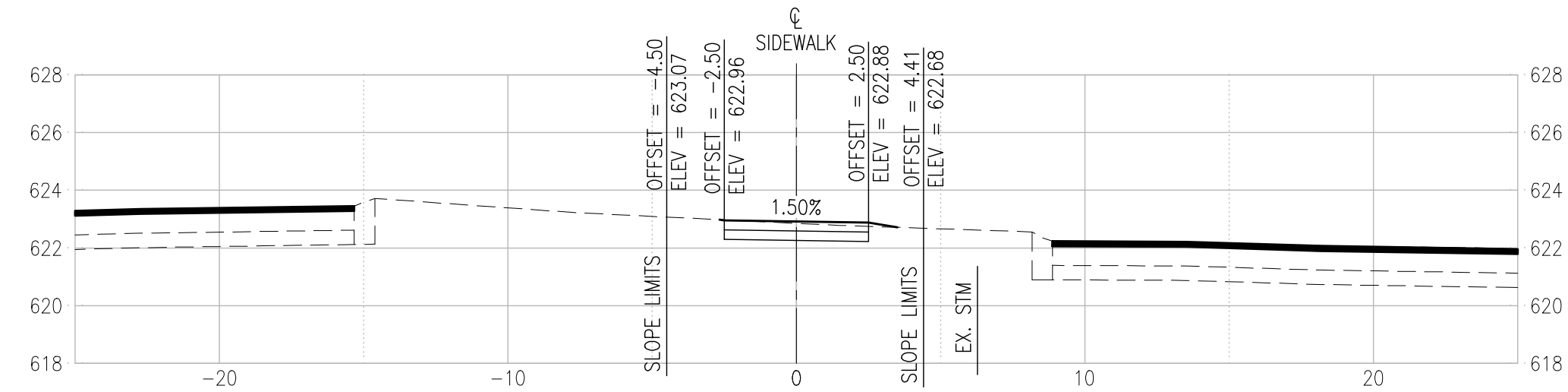
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SECTIONS - SIDEWALK MEDIAN

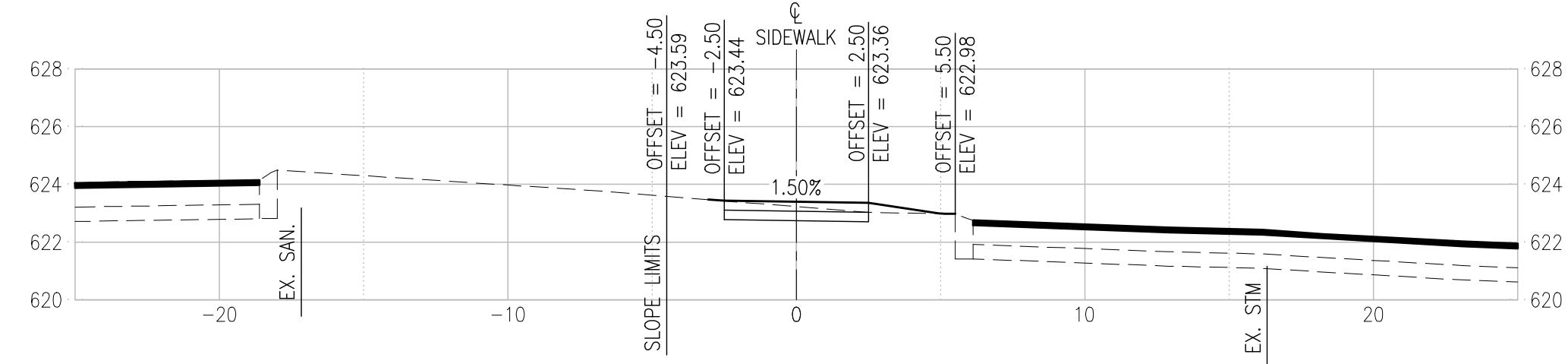
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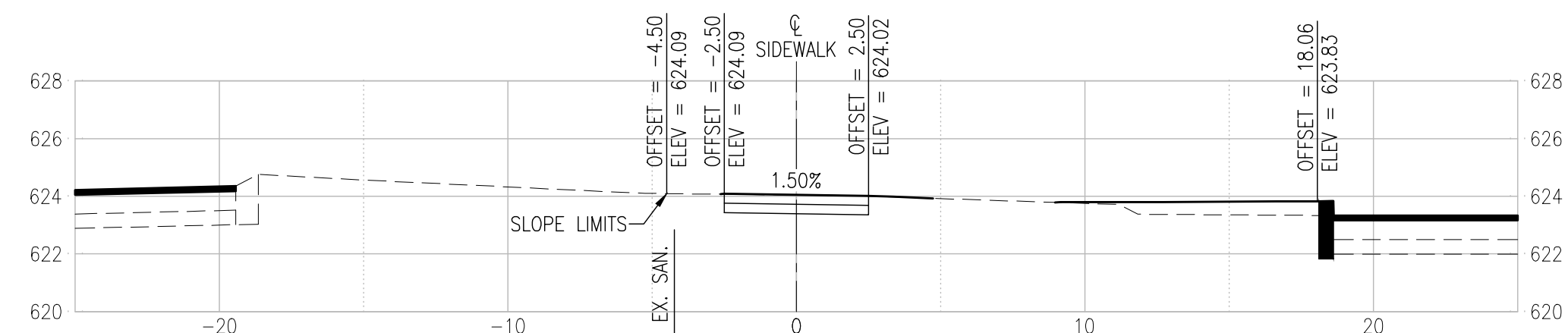
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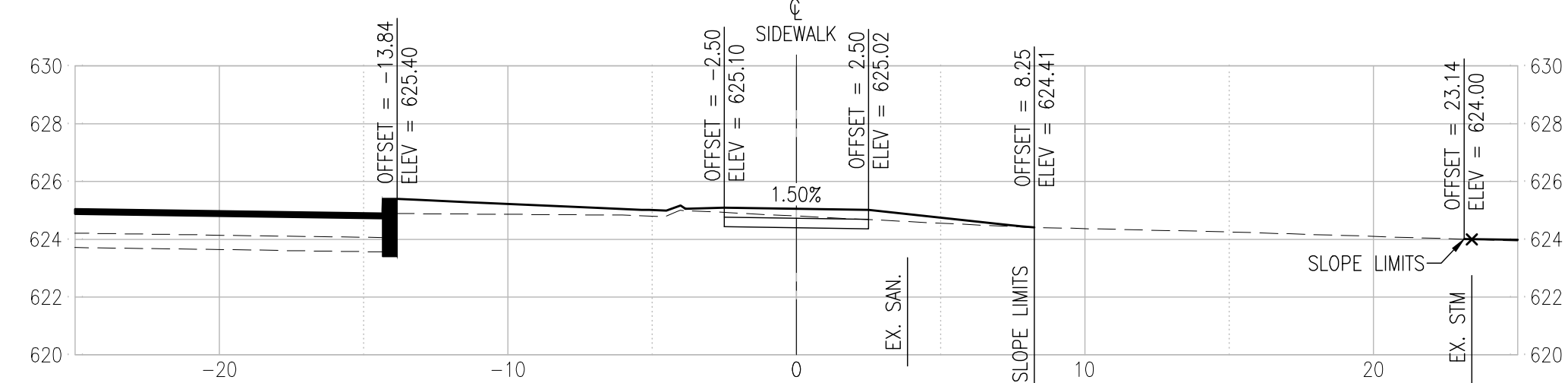
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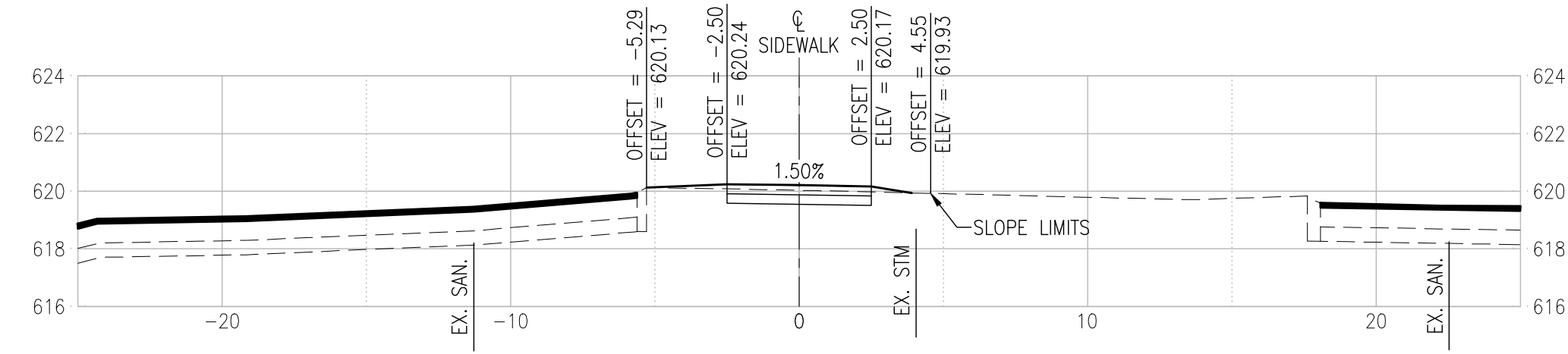
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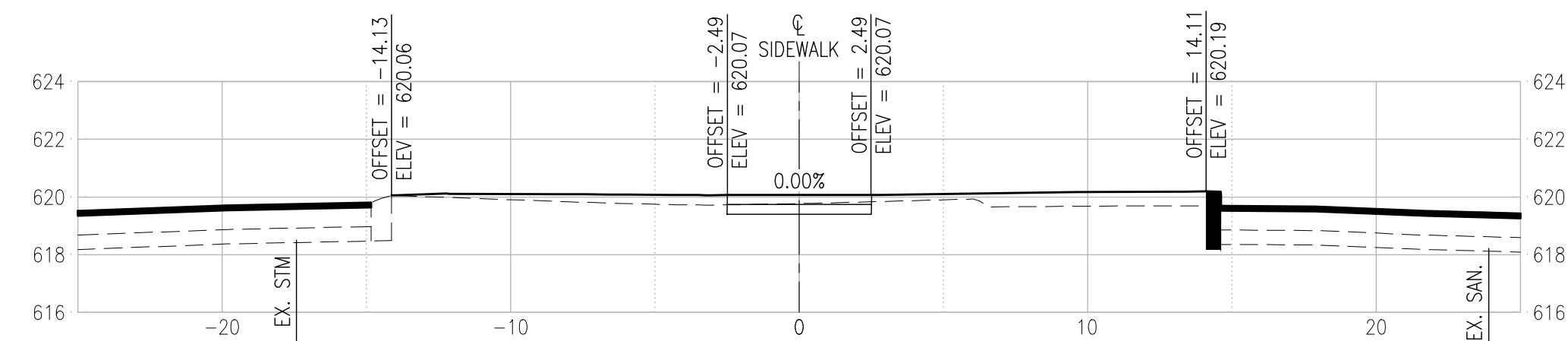
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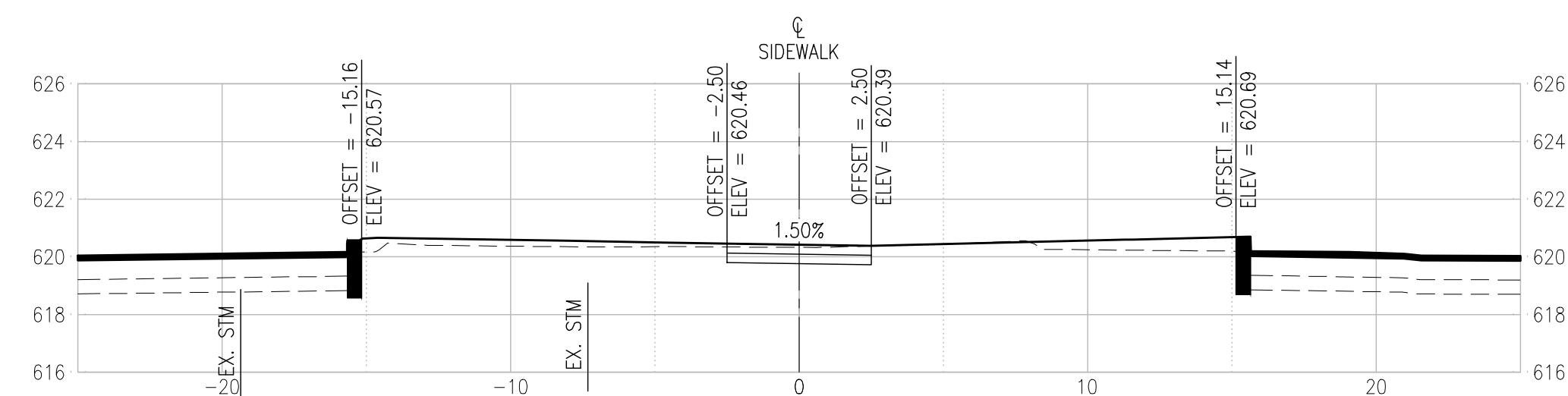
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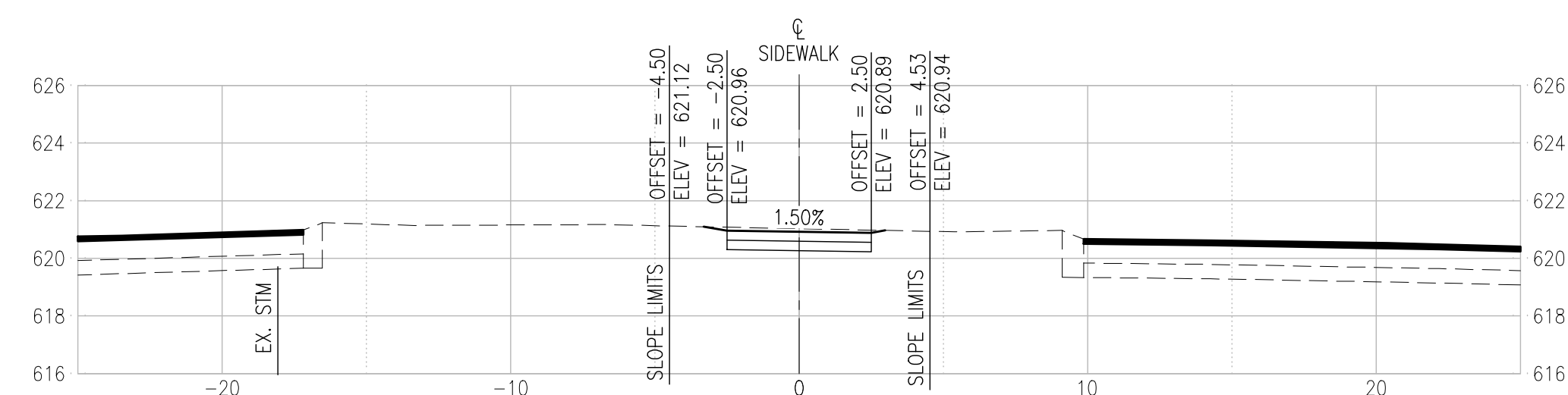
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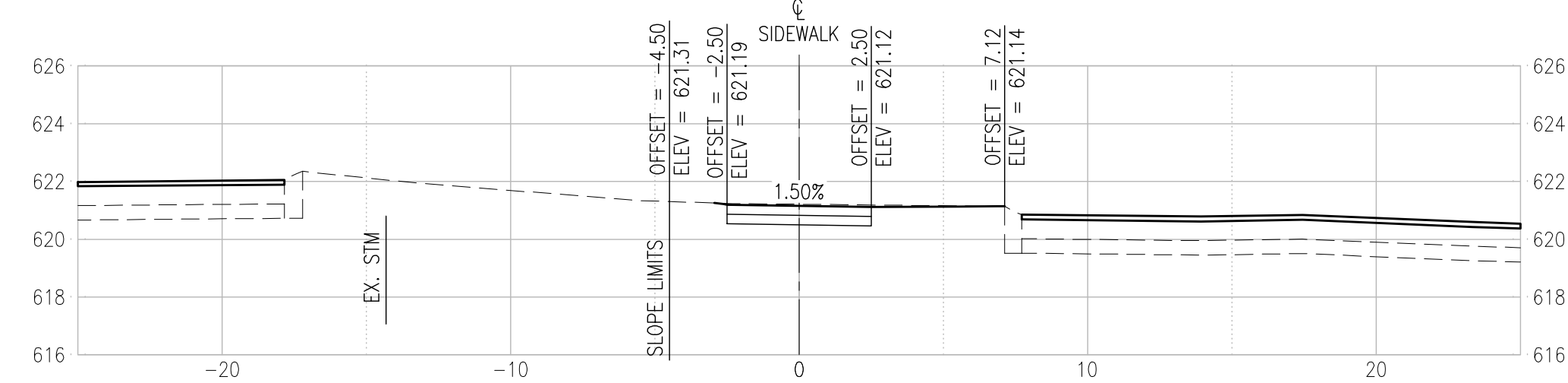
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114+50



114+00



113+50



CONSULTING ENGINEERING
 GEOSPATIAL SERVICES

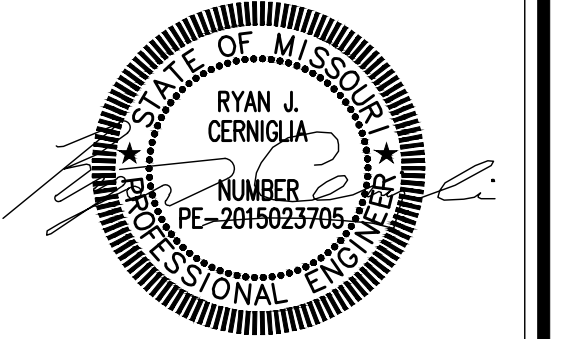
ILLINOIS | SWANSEA
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 PEORIA
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 TENNESSEE | NASHVILLE

THOUVENOT, WADE
 & MOERCHEN, INC.

ST. LOUIS OFFICE
 3701 S. LINDBERGH BLVD, STE 100
 ST. LOUIS, MISSOURI
 63127
 (314) 241-6300
 WWW.TWM-INC.COM
 MO CERTIFICATE OF AUTHORITY: 001528

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
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TN. PROF. ENGR. FIRM	8974

SEAL



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DRAWN BY: RJC
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 APPROVED BY: JRL
 PROJECT NO: 211243

PROJECT:
 LONGVIEW BOULEVARD
 IMPROVEMENTS
 TAYLOR AVE. TO
 WOODLAWN AVE

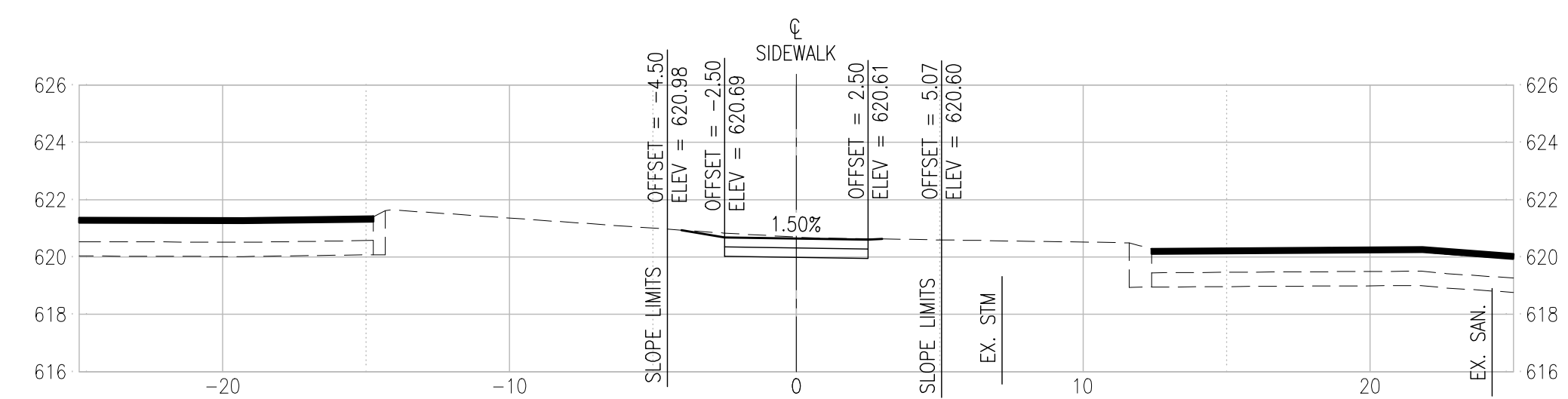
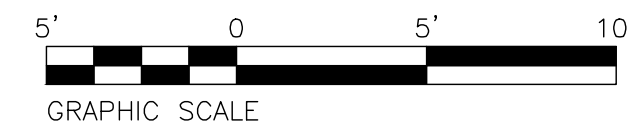
TITLE:
 CROSS SECTIONS
 (SIDEWALK MEDIAN)

SHEET NO.
 35

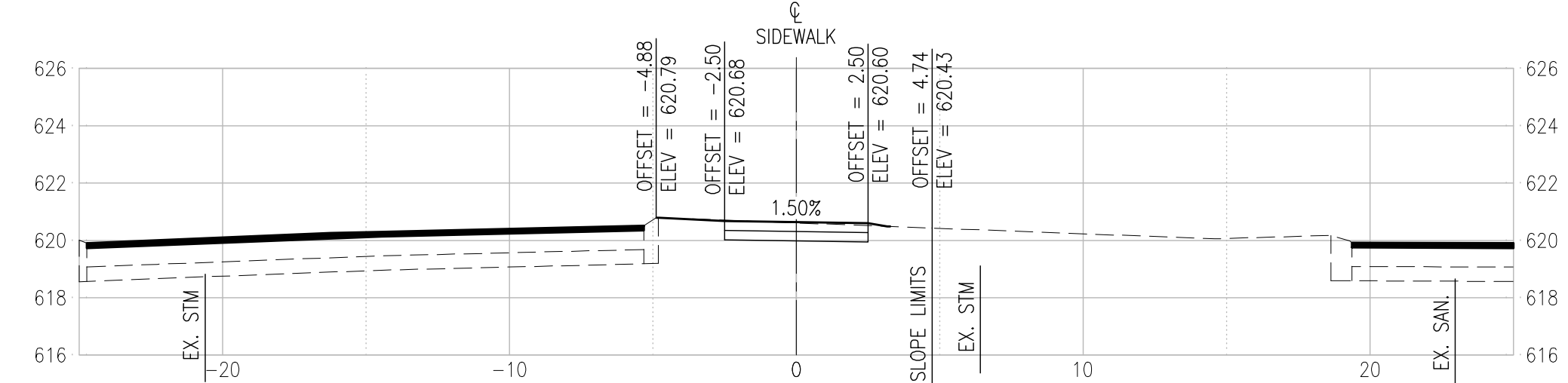
WUNNENBERG: S24-35
 MSD MAP: 23M-1 & 23M-2
 MSD No.: 23MSD-00310

SECTIONS - SIDEWALK MEDIAN

SCALE: 1"=5'



116+50



116+00



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ILLINOIS | SWANSEA
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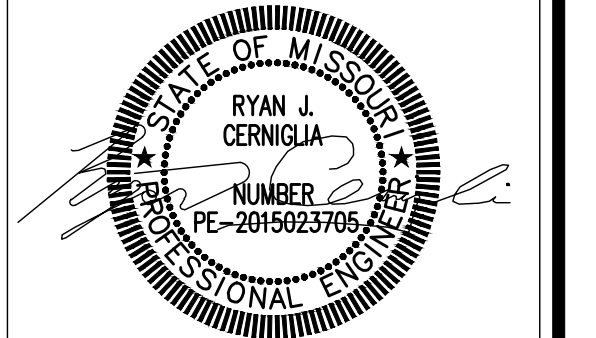
TENNESSEE | NASHVILLE

**THOUVENOT, WADE
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ST. LOUIS OFFICE
3701 S. LINDBERGH BLVD, STE 100
ST. LOUIS, MISSOURI
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PROJECT NO: 211243

PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

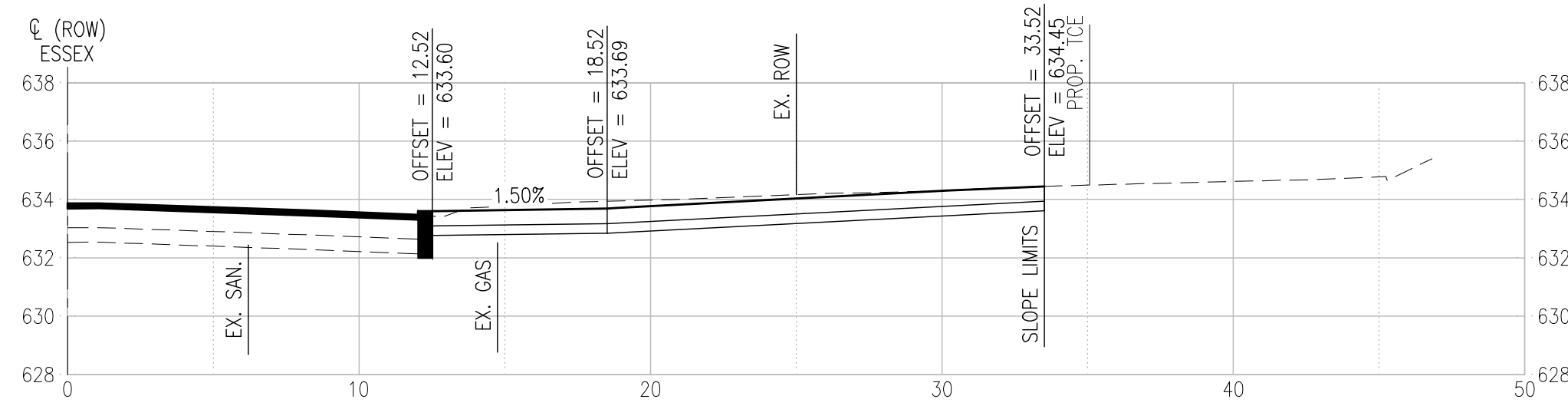
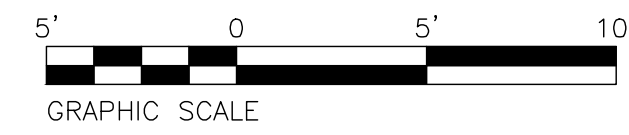
TITLE:
CROSS SECTIONS
(SIDEWALK MEDIAN)

SHEET NO.
36

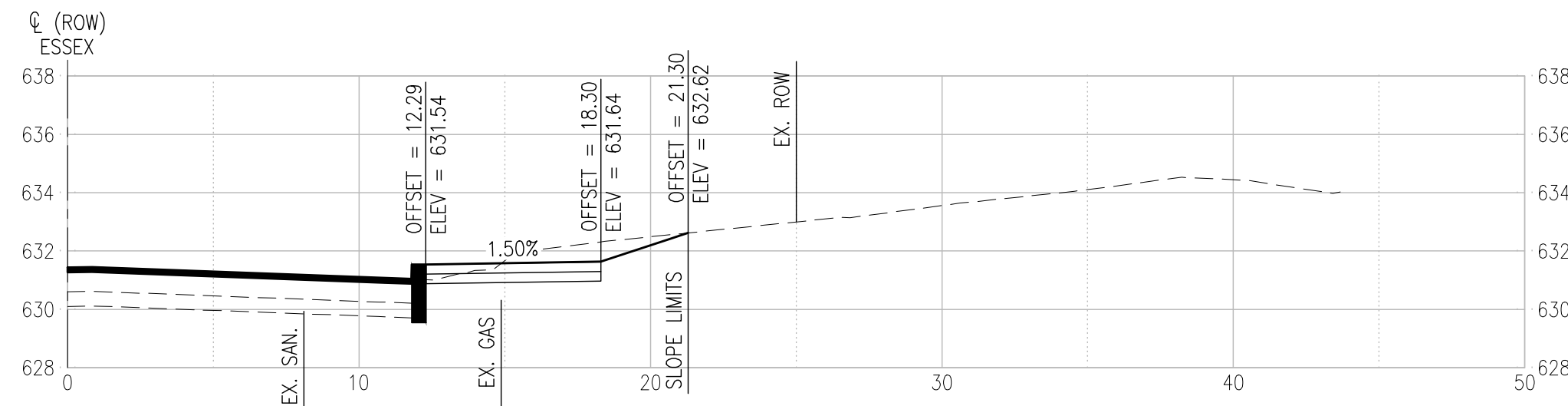
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MSD MAP: 23M-1 & 23M-2
MSD No.: 23MSD-00310

SECTIONS - ESSEX AVENUE

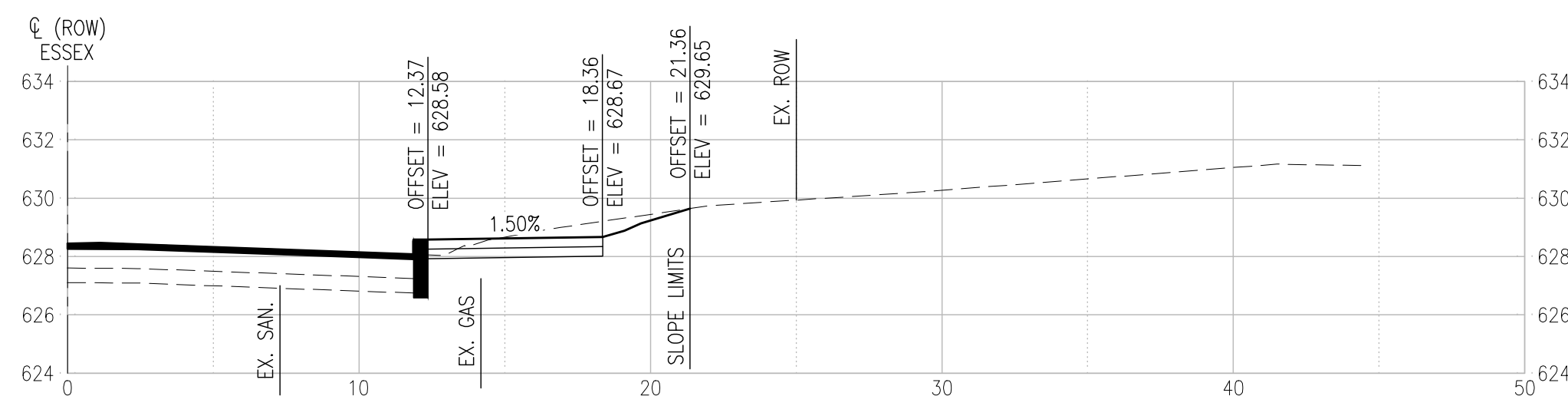
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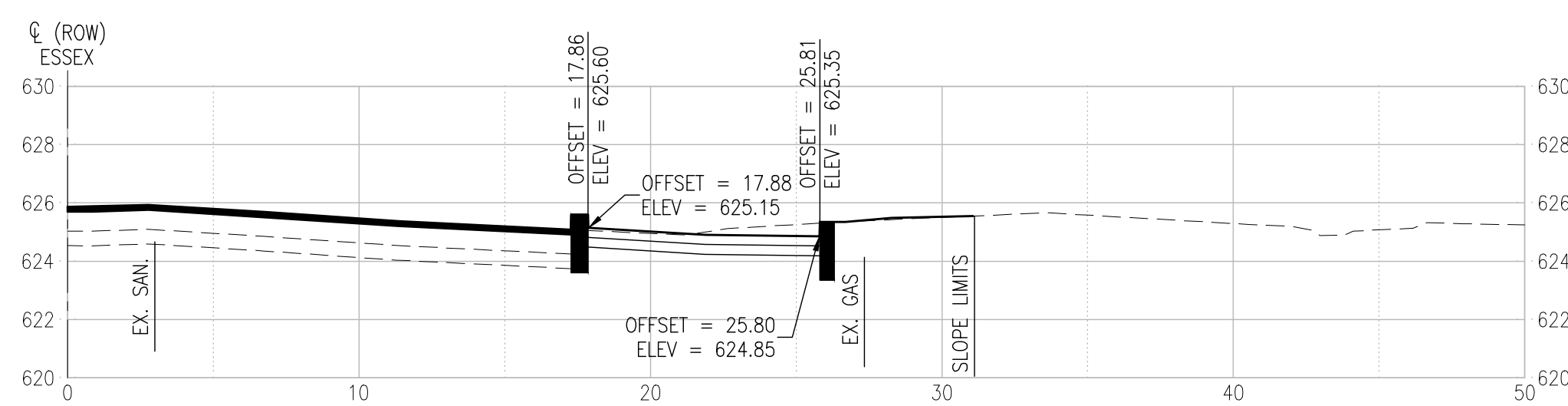
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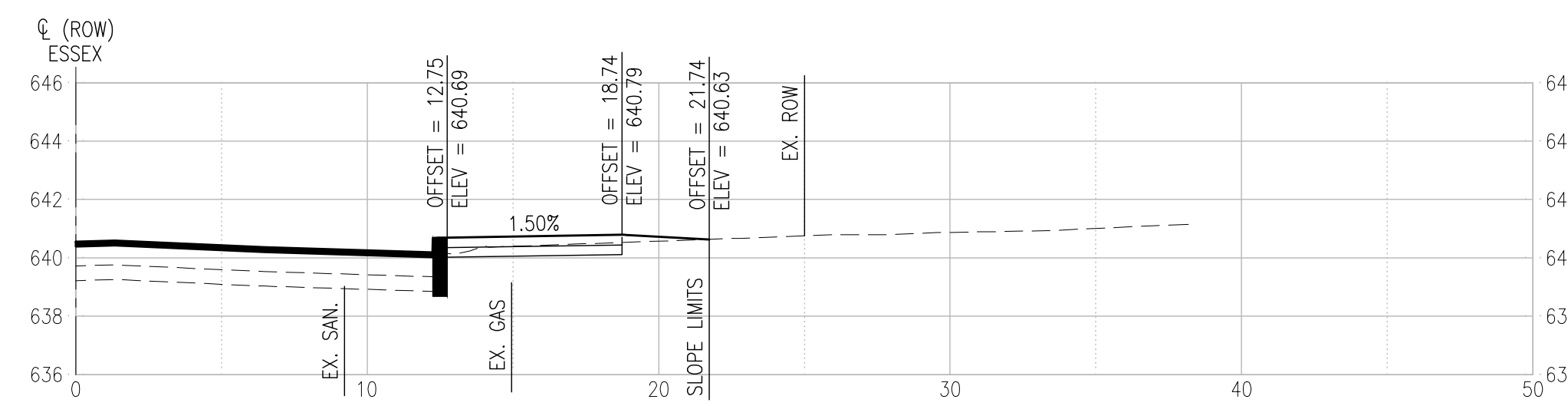
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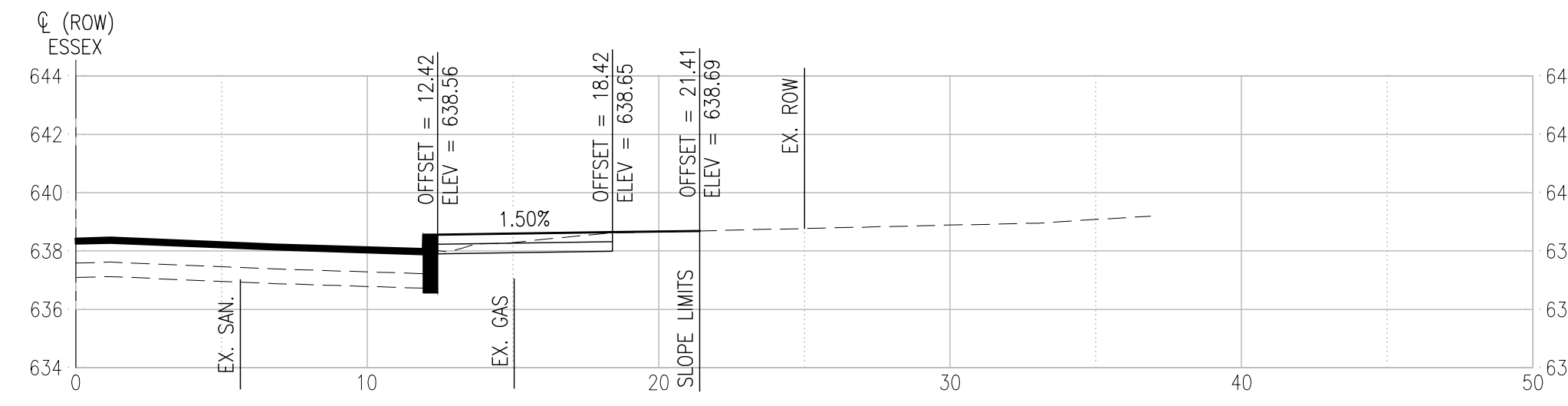
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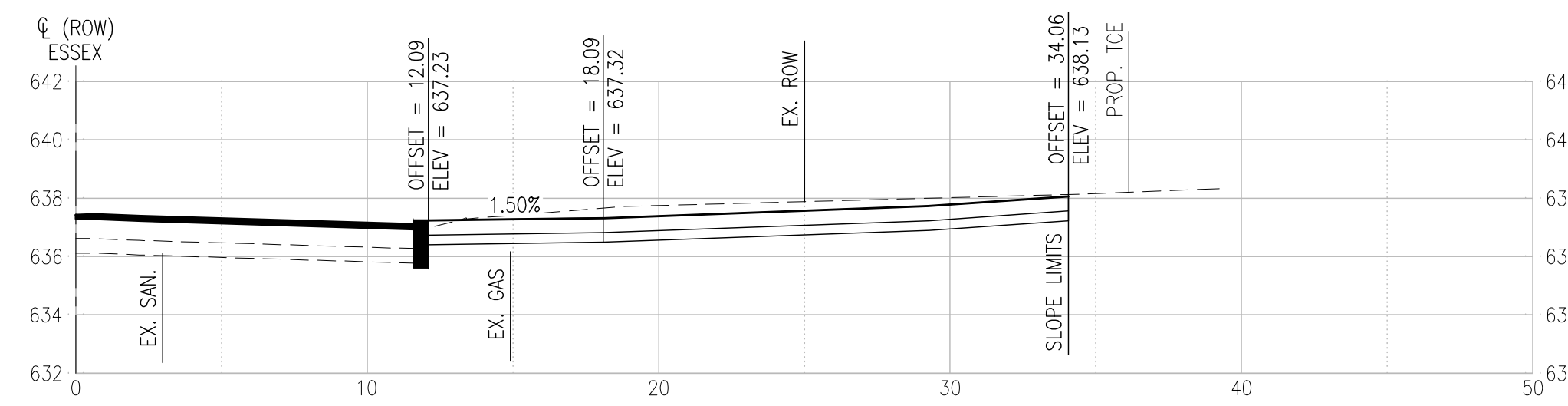
200+50



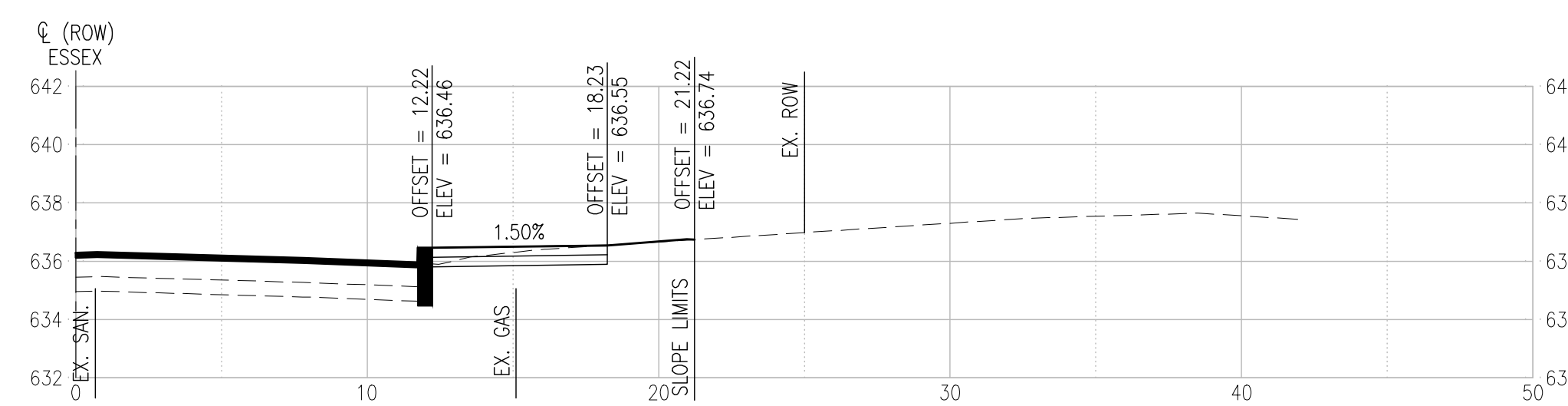
203+50



203+00



202+77.05



202+50



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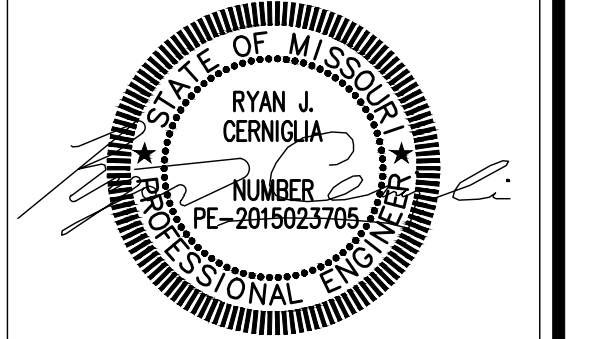
(314) 241-6300

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PROJECT:
LONGVIEW BOULEVARD
IMPROVEMENTS
TAYLOR AVE. TO
WOODLAWN AVE

TITLE:
CROSS SECTIONS
(ESSEX AVENUE)

SHEET NO.
37