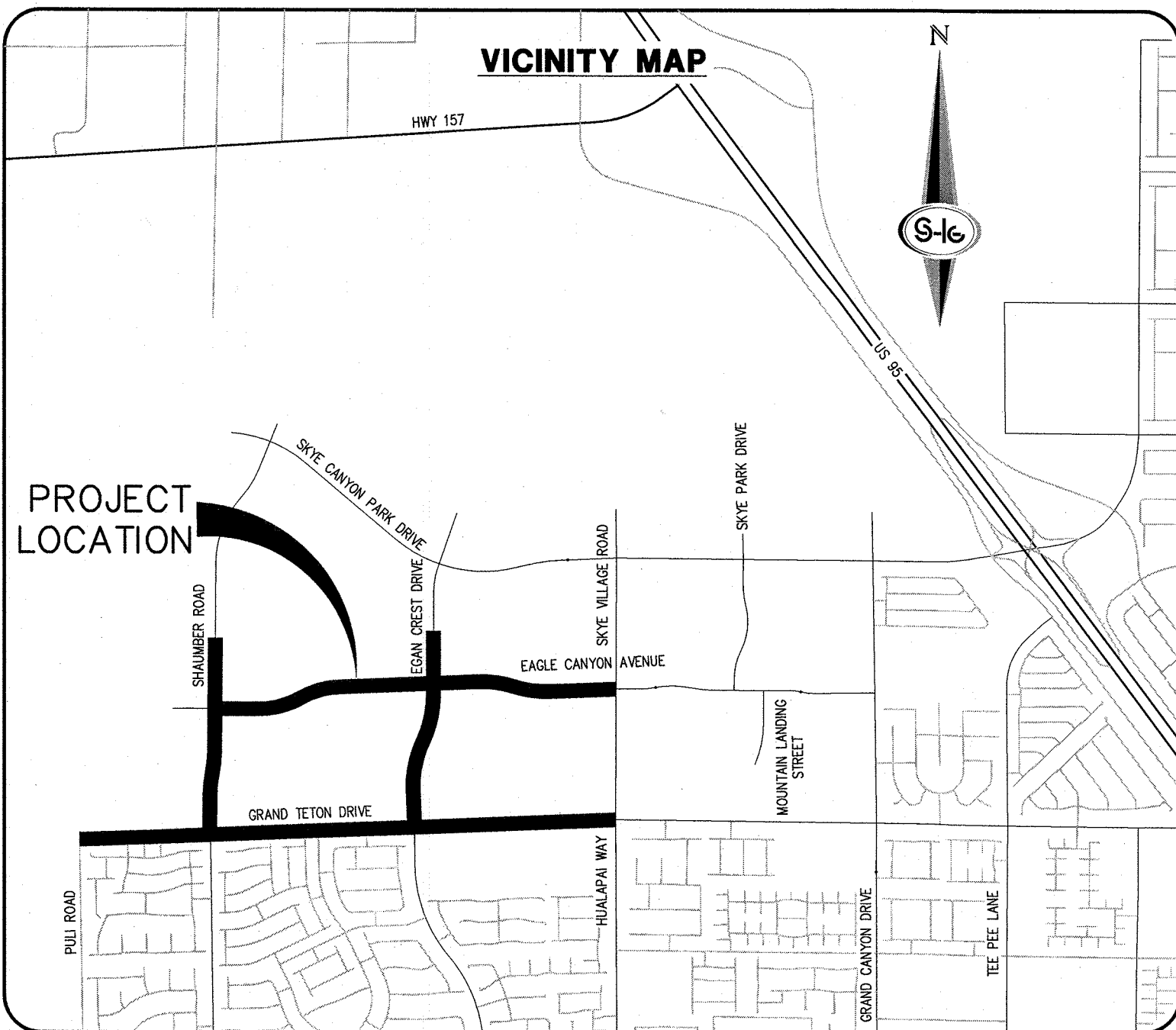


IMPROVEMENT PLANS FOR SKYE CANYON PHASE 2



BENCHMARK

MONUMENT ID: USDA (1934) 19

U.S. DEPARTMENT OF AGRICULTURE BRASS DISC AT SOUTHWEST CORNER OF U.S. 95 AND KYLE CANYON ROAD

ELEVATION = 2817.61 FEET, 858.810 METERS
NAVD 88 DATUM

PER THE CITY OF LAS VEGAS BENCHMARK BOOK -
2008 ADJUSTMENT (UPDATED 05/24/2010)

BASIS OF BEARING

SOUTH 00°22'12" WEST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER (NW1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN FILE 151, PAGE 14 OF SURVEYS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

OWNER

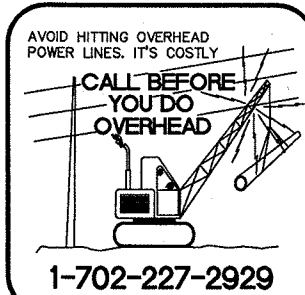
SECTION 12 LLC
% OLYMPIA COMPANIES LLC
11411 SOUTHERN HIGHLANDS
PARKWAY, SUITE 300
LAS VEGAS, NV 89141

DEVELOPER

NINETY-FIVE MANAGEMENT LLC
% OLYMPIA COMPANIES LLC
11411 SOUTHERN HIGHLANDS
PARKWAY, SUITE 300
LAS VEGAS, NV 89141
PH (702) 220-6566
FX (702) 220-6566

ENGINEER

SLATER HANIFAN GROUP
5740 S. ARVILLE STREET #216
LAS VEGAS, NV 89118
(702) 284-5300



APPROVALS

CITY ENGINEER-DAVID BOWER PE, PTOE #16736 DATE
APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED OF RIGHT-OF-WAY, AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FORM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.

CHRIS KNIGHT DATE
DIRECTOR, BUILDING AND SAFETY
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. XXXXXX DATE:
SHEETS: X

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LAS VEGAS VALLEY WATER DISTRICT.

LAS VEGAS FIRE AND RESCUE DATE

NV ENERGY DATE

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

CENTRAL TELEPHONE CO, DBA CENTURYLINK DATE

THE AFFIXED CENTRAL TELEPHONE CO, DBA CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

SOUTHWEST GAS DATE

COX COMMUNICATIONS LAS VEGAS, INC. DATE

INDEX OF DRAWINGS

SHT. NO.	DWG. NO.	DESCRIPTION
1	G-01	COVER SHEET
2	G-02	GENERAL NOTES
3	G-03	ABBREVIATIONS, KEY MAP, LEGEND AND QUANTITIES
4	SD-01	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 14+00.00 TO "GTD" 23+50.00
5	SD-02	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 23+50.00 TO "GTD" 33+00.00
6	SD-03	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 33+00.00 TO "GTD" 42+50.00
7	SD-04	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 42+50.00 TO "GTD" 52+00.00
8	SD-05	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 52+00.00 TO "GTD" 61+50.00
9	SD-06	GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE "GTD" 61+50.00 TO "GTD" 71+00.00
10	SD-07	SHAUMBER ROAD STORM DRAIN PLAN AND PROFILE "SR" 8+00.00 TO "SR" 16+50.00
11	SD-08	SHAUMBER ROAD STORM DRAIN PLAN AND PROFILE "SR" 16+50.00 TO "SR" 25+50.00
12	SD-09	SHAUMBER ROAD STORM DRAIN PLAN AND PROFILE "SR" 25+50.00 TO "SR" 30+00.00
13	SD-10	EGAN CREST DRIVE STORM DRAIN PLAN AND PROFILE "ECD" 8+00.00 TO "ECD" 15+50.00
14	SD-11	EGAN CREST DRIVE STORM DRAIN PLAN AND PROFILE "ECD" 15+50.00 TO "ECD" 21+00.00
15	SD-12	EGAN CREST DRIVE STORM DRAIN PLAN AND PROFILE "ECD" 21+00.00 TO "ECD" 28+50.00
16	SD-13	EGAN CREST DRIVE STORM DRAIN PLAN AND PROFILE "ECD" 28+50.00 TO "ECD" 34+00.00
17	SD-14	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 25+00.00 TO "ECA" 33+00.00
18	SD-15	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 33+00.00 TO "ECA" 39+00.00
19	SD-16	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 39+00.00 TO "ECA" 47+00.00
20	SD-17	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 47+00.00 TO "ECA" 56+00.00
21	SD-18	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 56+00.00 TO "ECA" 63+00.00
22	SD-19	EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE "ECA" 63+00.00 TO "ECA" 71+50.00
23	SD-20	STORM DRAIN LATERAL PROFILES
24	SD-21	STORM DRAIN LATERAL PROFILES
25	SD-22	STORM DRAIN LATERAL PROFILES
26	SD-23	STORM DRAIN LATERAL PROFILES
27	SD-24	STORM DRAIN LATERAL PROFILES
28	SD-25	ROADWAY SECTIONS
29	SD-26	STORM DRAIN DETAILS
30	SD-27	STORM DRAIN DETAILS
31	GR-01	GRADING PLAN 1
32	GR-02	GRADING PLAN 2
33	GR-03	GRADING PLAN 3

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
COVER SHEET

DATE: 11/19/15

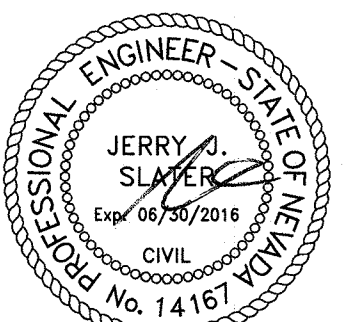
DRAFTER: JAS

DESIGNER: DAM

CHECKED: JSR

PROJECT NO.

OLY1501-001



G-01

SHEET 1 OF 33

AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE MANUALS.

CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.

IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.

SEWER PIPE SHALL MEET ASTM D-3034 SR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING TO A MINIMUM DEPTH OF TWELVE INCHES (12") ABOVE.

SEWER LINES EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. SEWER LINES TWELVE INCHES (12") OR ABOVE.

IN STREETS (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY SPECIFICATIONS.

IT WILL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN ALL CASES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING LINES.

ALL BE PROTECTED IN ACCORDANCE WITH LVMSD STANDARDS WHENEVER A SEWER MAIN IS EXCAVATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING LINES.

ALL WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.

INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS SHALL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS SPECIFICATIONS. THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.

STORMWATER MANAGEMENT NOTES

3. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES AND SHALL MAINTAIN ACCESS TO THE CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
4. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARD IN THE USDOCA AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
5. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE, AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. (SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NWR1000000, SECTION II.A.5.
6. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT, AND OTHER AREAS OF THE SITE. IF THERE ARE ANY CHANGES TO THE DISTURBED AREAS, INCHES OR MORE, THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS: (1) IF THE CONTRACTOR REFERS TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NWR 100000, SECTION II.A.12.
7. THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CLARK COUNTY AREA STANDARDS, ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE TYPE III SHEETING.

LVVWD PROJECT #XXXXXX

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVMD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVMD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVMD INSPECTION. **WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.**
2. ALL WORK SHALL CONFORM TO LVVMD STANDARD PLANS, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). **THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.**
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVMD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.2.2 OF THE 2010 EDITION OF THE UDACS
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVMD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVMD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVMD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVMD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVMD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVMD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE. ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION DECORATIVE SURFACE MATERIALS INSTALLED WITHIN THE TRUCK FOOT OF A STREET ADJACENT TO A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVMD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVMD WITH AN APPROPRIATELY SIZED PLAN FINISH CONCRETE PATCH. THE MATERIALS WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE REPAIR OF ANY ADJACENT PAVING SURFACE WITH THE STREET. THE LVVMD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE _____ LVVWD PROJECT # XXXXXX

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPLICABLE STANDARDS ISSUED BY THE CONTROLLING AGENCY, THE UNIFORM BUILDING CODE AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH DAMAGE TO REMAINING UTILITIES OR STRUCTURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMISSIONS FROM THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS; ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE 1/2" ABOVE UL' OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE LOCATION OF TRANSITIONS TO BE AS SHOWN ON PLANS, OR AS DESIGNATED IN THE FIELD BY CITY PROJECT REPRESENTATIVE.
12. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY PROJECT REPRESENTATIVE IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS ANY MONUMENTS DISTURBED SHALL BE REPLACED, AND SHALL BE DONE ONLY BY A NEVADA PROFESSIONAL LAND SURVEYOR IN ACCORDANCE WITH THE UNIFORM STANDARD DRAWINGS – CLARK COUNTY AREA. A RECORD-OF-SURVEY SHALL BE PREPARED FOR ALL SURVEY MONUMENTS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO RECORDING. THE RECORD-OF-SURVEY SHALL BE PREPARED IN ACCORDANCE WITH NEVADA REVISED STATUTES 625.350.
14. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE PLACED OUT OF THE WAY OF THE CONSTRUCTION. ANY DAMAGE TO EXISTING GUTTER UNLESS WRITTEN APPROVAL IS GRANTED BY THE AFFECTED UTILITY COMPANY AND THE CITY ENGINEER.
15. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS, NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE CLV BUILDING DEPARTMENT.
16. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHTS OF WAY.
17. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, SEWER CLEANOUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
18. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTION 100.01 AND CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
19. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
20. SANITARY SEWER AND STORM DRAIN FINAL LOCATION INFORMATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO ANY CONSTRUCTION. THE INFORMATION SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, AND THE CONNECTION OF SEWER SEWER LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SEWER LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATOR SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION INFORMATION MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIVE CERTANTIES OF 0.009 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION INFORMATION.
21. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADDITION.
22. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND ANY ADOPTED SPECIAL AREA STANDARDS.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF TRAFFIC ENGINEERING AND THE CITY ENGINEER.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. ALL STREET LIGHTING CONDUITS MUST HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRACER WIRE. WHEN "PULL BOXES" ARE COMPLETELY INSTALLED FROM PG. 11, THERE MUST BE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH END TAPED TO THE PULL BOX PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL HAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TEF0 PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH A NEW SERVICE COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTRAL BUSINESS DISTRICT OR OTHER SIGNIFICANT POINTS OF THE CIVIL PLANS.
8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES COMPANY AT NO COST TO THE CITY LAS VEGAS, BEFORE STREET LIGHT BARS ARE INSTALLED.
10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL REQUIREMENTS PRIOR TO PROJECT COMPLETION. REFERENCE TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHTS/ AND/OR SERVICE/S INSTALLED UNDER THIS PLAN DESIGN SHALL BE COMPLETED PRIOR TO PROJECT COMPLETION. ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEF0) AT (702) 229-6331.

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. AUTHORIZED FIRE HYDRANTS ARE AS FOLLOWS:
 - KENNEDY - GUARDIAN MODELS KB1A AND KB1D
 - MUELLER - SUPER CENTURION 250, MODEL A-423
 - CLOW - MEDALLION MODEL F-2546LVD
 - U.S.PIPE - METROFLOW/M-03
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR FIRE APPARATUS PIPING WORK SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [FC § 105.7.12]
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [FC § 331.0, § 331.2]
5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [FC § 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [FC § 106.3]

8. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IJC § 507.2.1, NFPA 24]
9. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IJC § 507]
9. PRIVATE HYDRANTS SHALL BE PAINTED RED. [IJC § 507.5.7.1]
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IJC § 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [IJC § C102]
 - RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
 - COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED.
12. WHERE THE WATER MAINS ARE INSTALLED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS WHERE NEW STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IJC § C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IJC § C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IJC § C102.4]
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IJC § C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IJC § C102.8]
18. (2) TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT AT LEAST TWO FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. [IJC § C104]
19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. [IJC § 503.2.3]
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IJC § 503.2.7, § 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IJC § 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. [IJC § 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES, NOT AT INTERVALS 52 FT WIDE AT FLOW-LINE TO FLOW-LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD, NOT LESS THAN 24 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE, FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. [IJC § 503.2.1.1]
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF A BUILDING OR SIGNAGE IS LOCATED WITHIN 10 FEET OF ANY FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [IJC § 503.1.1]
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT, COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [IJC § 503.1.2]
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [IJC § 503.2.5]
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS 52 FT WIDE AT FLOW-LINE TO FLOW-LINE. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE, SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL, THE CURB AND 24" OR MORE CONCRETE OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IJC § 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM, SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IJC § 503.6 AND IJC APPENDIX M.

UTILITY NOTES

NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS SHOWN FOR INFORMATIONAL PURPOSES ONLY. REFERENCE NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS DRAWINGS FOR CONSTRUCTION DETAILS. CONTRACTOR TO COORDINATE WITH UTILITIES FOR REMOVAL AND INSTALLATION OF FACILITIES.

ALL EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. THE DEPTH BELOW GRADE OF THE VARIOUS UTILITIES DEPICTED ON THE PLANS VARIES THROUGHOUT THE PROJECT AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHERE EXCAVATING AND GRADING THE SUBBASE IN THE VICINITY OF UTILITIES TO AVOID DAMAGE TO THE LATTER.

ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
5. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	<u>HORIZONTAL</u>	<u>VERTICAL</u>
A. PAVEMENT AREA SUBGRADE	0.1"±	+0.0' TO -0.1'
B. ENGINEERED FILL	0.5"±	+0.1' TO -0.1'
6. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
7. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
8. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
9. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

DEVIATION FROM STANDARDS

NONE

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS IN THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THE WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE VIP CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUIV. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. ALL TRAFFIC SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER. REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFE USE OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR MSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES ANY STOP SIGN. IF THERE IS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.

15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECTS OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING LANE MOVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISÉD 05/05/08

SLATER
HANIFAN
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CONSULTING ENGINEERS & PLANNERS
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[illegible][illegible]

NONE

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2

GENERAL NOTES

DATE: 11/19/15

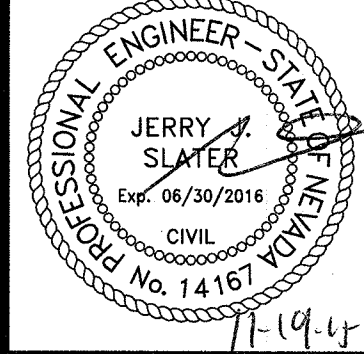
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DESIGNER: DAN

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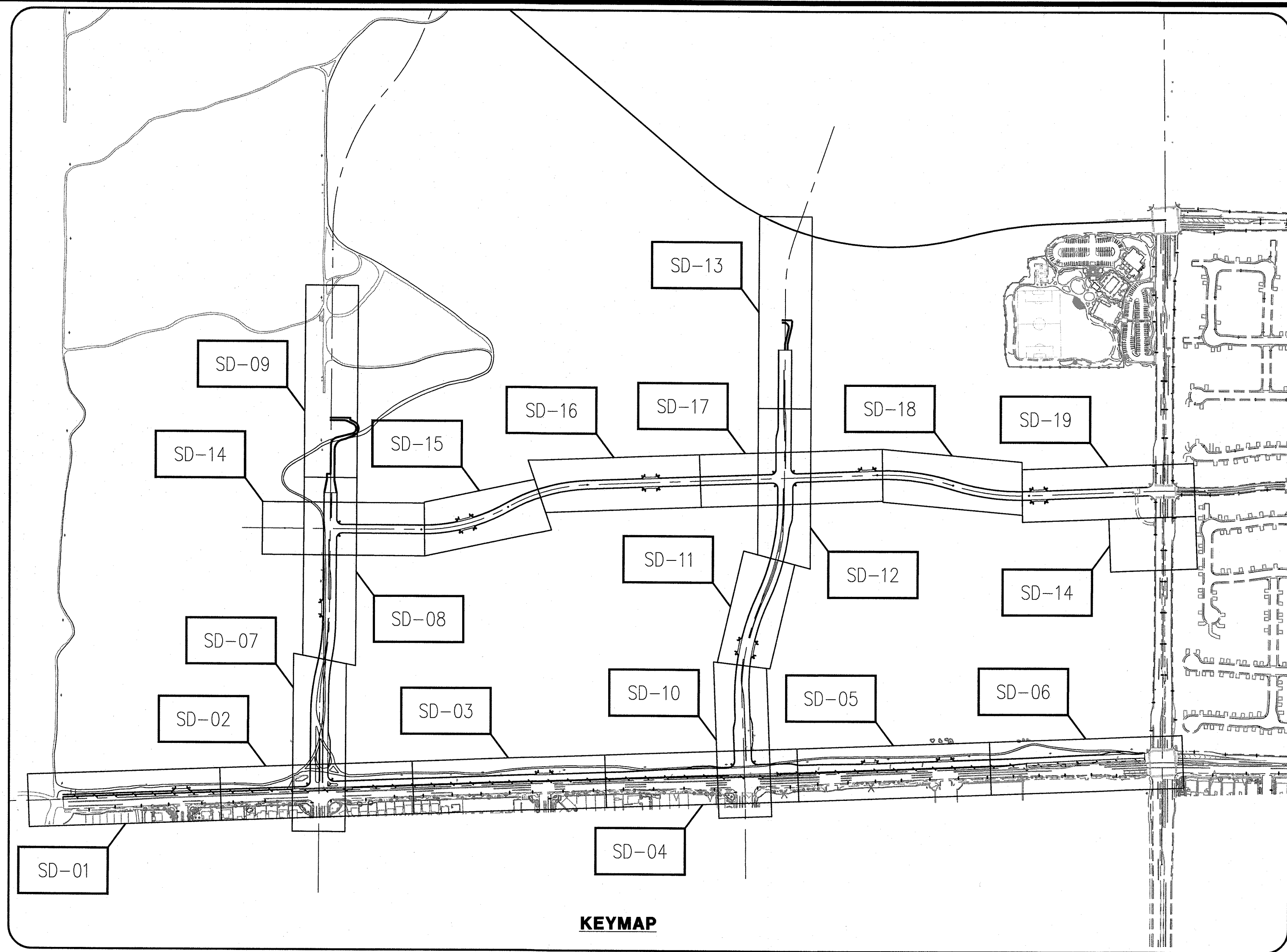
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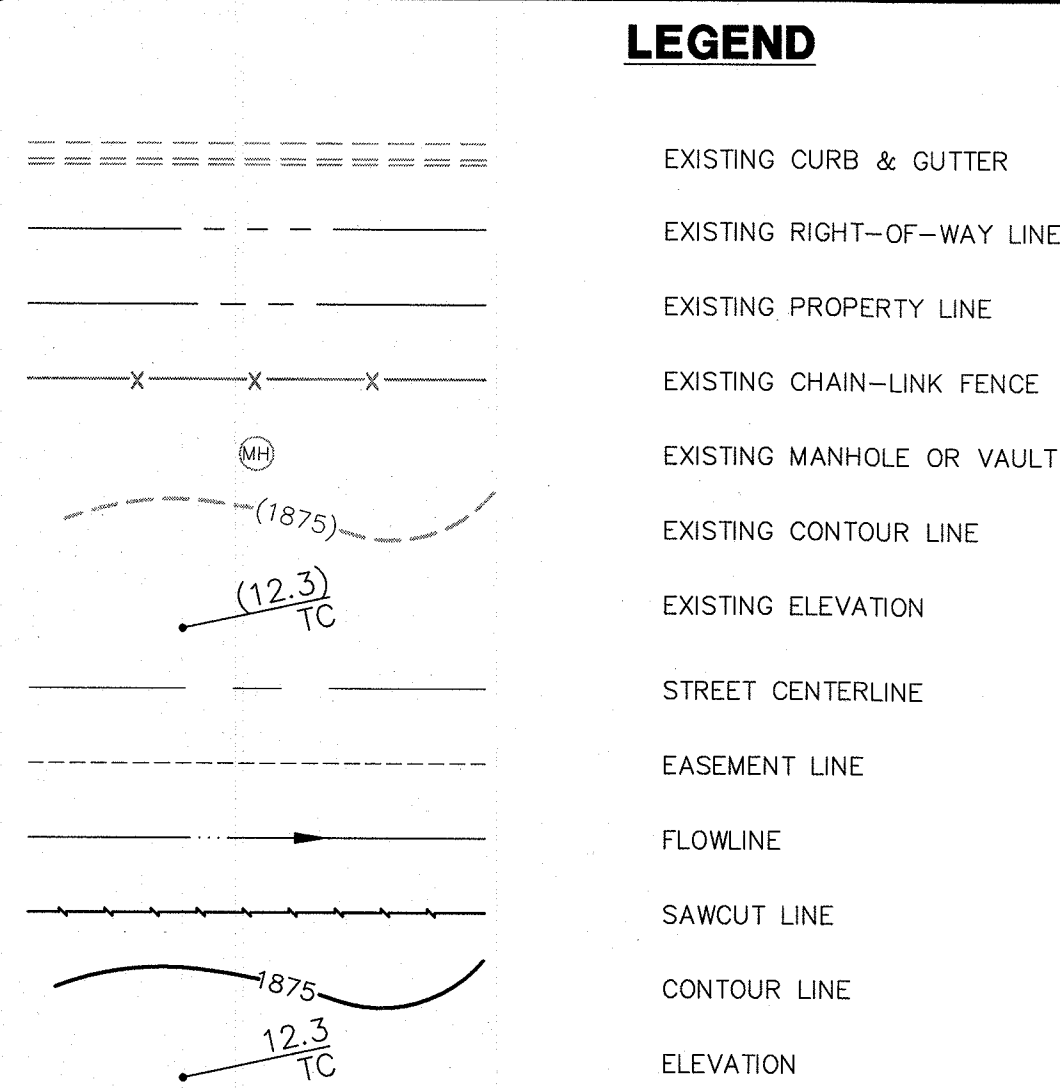


G-02

SHEET 2 OF 33



KEYMAP



LEGEND

QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
DROP INLET 5' TYPE CM	EA	3
DROP INLET 5' TYPE CM2	EA	19
DROP INLET 7.5' TYPE CM2	EA	7
DROP INLET 12.5' TYPE CM2	EA	1
DROP INLET 15' TYPE CM2	EA	8
DROP INLET 17.5' TYPE CM2	EA	2
DROP INLET 20' TYPE CM2	EA	4
STORM DRAIN MANHOLE - 60" TYPE I	EA	3
STORM DRAIN MANHOLE - 60" TYPE III	EA	23
STORM DRAIN MANHOLE - 60" TYPE III WITH TYPE 1A RISER	EA	9
STORM DRAIN MANHOLE - NDOT TYPE 4	EA	2
18" RCP	LF	800
24" RCP	LF	100
30" RCP	LF	125
36" RCP	LF	1,680
42" RCP	LF	600
48" RCP	LF	1,670
54" RCP	LF	300
66" RCP	LF	100
18" RCP END SECTION	EA	1
24" RCP END SECTION	EA	1
30" RCP END SECTION	EA	2
36" RCP END SECTION	EA	6
42" RCP END SECTION	EA	2
48" RCP END SECTION	EA	2
RIPRAP	SY	1040

ABUT	ABUTMENT	GND	GROUND	R/W	RIGHT-OF-WAY
AC	ALUMINUM CAP/ASPHALTIC CONCRETE	H	HEIGHT	RT	RIGHT
AEP	AUTHORIZATION TO ENTER PROPERTY	HGL	HYDRAULIC GRADE LINE	S	SOUTH
AP	ANGLE POINT	HORIZ	HORIZONTAL	SCH	SCHEDULE
APN	ASSESSORS PARCEL NUMBER	HWY	HIGHWAY	SD	STORM DRAIN
BC	BEGIN CURVE/BRASS CAP/BACK OF CURB	INV	INVERT	SDMH	STORM DRAIN MANHOLE
BCR	BEGIN CURB RETURN	ITS	INTELLIGENT TRANSPORTATION SYSTEM	SECT	SECTION
BLVD	BOULEVARD	JT	JOINT	SF	SQUARE FOOT/FEET
BM	BENCHMARK	LF	LINEAR (LINEAL) FEET	SHLDR	SHOULDER
BOT	BOTTOM	LIP	LIP OF GUTTER	SHT	SHEET
BRG	BEARING	LT	LEFT	SIM	SIMILAR
BSW	BACK OF SIDEWALK	LUMINAIRE	LAS VEGAS VALLEY WATER DISTRICT	SP	SERVICE POINT
BVCE	BEGIN VERTICAL CURVE ELEVATION	LVVWD	LAS VEGAS VALLEY WATER DISTRICT	SPA	SPACING
BVCS	BEGIN VERTICAL CURVE STATION	MAX	MAXIMUM	SQ	SQUARE
CATV	UNDERGROUND CABLE TV	MH	MANHOLE	SS	SANITARY SEWER
CG	CURB AND GUTTER	MIN	MINIMUM	SSMH	SANITARY SEWER MANHOLE
CCSD	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS	MLCP	MULTI-LAYERED COMPOSITE PIPE	STA	STATION
CKT	CIRCUIT	MOD	MODIFY/MODIFIED	STD	STANDARD
CLR	CLEAR/CLEARANCE	MON	MONUMENT	ST	STREET
CLBM	CITY OF LAS VEGAS BENCHMARK	MPH	MILES PER HOUR	STL	STEEL
CLV	CITY OF LAS VEGAS	N	NORTH	ST	STREET LIGHT
CMU	CONCRETE MASONRY UNIT	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	STRUCT	STRUCTURE
CONC	CONCRETE	NO	NUMBER	SW	SIDEWALK
C. C/L	CENTERLINE	NVE	NEVADA ENERGY	SNBORS	SOUTHERN NEVADA BUILDING OFFICIALS
COB	CENTER OF BOLLARD	NTS	NOT TO SCALE	SWG	SOUTHERN NEVADA BUILDING OFFICIALS
COL	COLUMN	OC	ON CENTER	T	TELEPHONE/TOP
CONST	CONSTRUCT/CONSTRUCTION	OHP	OVERHEAD POWER LINE	TAN	TANGENT
COORD	COORDINATE	PAT	PATENT	TC	TOP OF CURB
COR	CORNER	PB	PULL BOX	TEMP	TEMPORARY
CY	CUBIC YARD(S)	PBS	PLANTMIX BITUMINOUS SURFACE	TF	TOP OF FOOTING
Δ	DELTA	PC	POINT OF CURVE, PHOTO CELL	TG	TOP OF GRATE
DB	DIRECT BURY	PCC	POINT OF COMPOUND CURVE	TMH	TOP OF MANHOLE
DBL	DOUBLE	PD	PONDING DEPTH	TRANS	TRANSITION STRUCTURE
DI	DROP INLET	PE	PROJECT ENGINEER/POLYETHYLENE	TRW	TOP OF RETAINING WALL
DIA	DIAMETER	PED	PEDESTRIAN	TW	TOP OF WALL
DIST	DISTANCE	PGL	PROFILE GRADE (FG ON CONTROL LINE)	TS	TRAFFIC SIGNAL
DR	DRIVE	PH	POT HOLE	TYP	TYPICAL
DW	DRIVEWAY	PI	POINT OF INTERSECTION	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
DWG	DRAWING	PKWY	PARKWAY	USDCCA	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
ECR	END CURB RETURN	PL	PROPERTY LINE	UT	UNDERGROUND TELEPHONE
E	EAST	PMF	PAVEMENT MARKING FILM	VAR	VARIABLE/VARIES
EA	EACH	POB	POINT OF BEGINNING	VC	VERTICAL CURVE
ESMT	EASEMENT	PCC	POINT ON CURVE	VERT	VERTICAL
ECR	END CURB RETURN	POE	POINT OF ENDING	VG	VALLEY GUTTER
ELEC	ELECTRICAL	POT	POINT ON TANGENT	W	WEST
ELEV/EL	ELEVATION	PP	POWER POLE	WY	WAY
EP/EOP	EDGE OF PAVEMENT	PPCB	PORTABLE PRECAST CONCRETE BARRIER RAIL	WT	WEIGHT
EQUAL	EQUAL	PPM	POLYUREA PAVEMENT MARKINGS	XING	CROSSING
EST	ESTIMATED	PR	PROPOSED		
EVC	END VERTICAL CURVE	PRC	POINT OF REVERSE CURVE		
EX/EXIST	EXISTING	PRVC	POINT REVERSE VERTICAL CURVE		
EXP	EXPANSION JOINT	PSI	POUNDS PER SQUARE INCH		
EW	EACH WAY	PT	POINT OF TANGENCY		
FC	FACE OF CURB	PVI	POINT OF VERTICAL INTERSECTION		
FG	FINISH GRADE	PVMT	PAVEMENT		
FH	FIRE HYDRANT	R	RADIUS		
FL	FLOW LINE	RCB	REINFORCED CONCRETE BOX		
FO	FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE		
FS	FINISH SURFACE	RD	ROAD		
FT	FOOT/FEET	RDWY	ROADWAY		
FTG	FOOTING	REC	RECTANGULAR		
FW	FACE OF WALL	REIN	REINFORCED		
FYA	FLASHING YELLOW ARROW	REQD	REQUIRED		
G	GAUGE	RND	ROUND		
GA	GAUGE	RP	RADIUS POINT		
GB	GRADE BREAK	RPM	RAISED PAVEMENT MARKERS		

ABBREVIATIONS

RIGHT-OF-WAY	RIGHT
SCHEDULE	S
STORM DRAIN	SD
STORM DRAIN MANHOLE	SDMH
SECTION	SECT
SQUARE FOOT/FEET	SF
SHOULDER	SHLDR
SHEET	SHT
SIMILAR	SIM
SERVICE POINT	SP
SPACING	SPA
SQUARE	SQ
SANITARY SEWER	SS
SANITARY SEWER MANHOLE	SSMH
STATION	STA
STANDARD	STD
STREET	ST
STEEL	STL
STREET LIGHT	ST
STRUCTURE	STRUCT
SIDEWALK	SW
SOUTHERN NEVADA BUILDING OFFICIALS	SNBORS
REGIONAL STANDARDS	SWG
SOUTHWEST GAS	T
TELEPHONE/TOP	TAN
TANGENT	TC
TOP OF CURB	TEMP
TEMPORARY	TF
TOP OF FOOTING	TG
TOP OF GRATE	TMH
TOP OF MANHOLE	TRANS
TRANSITION STRUCTURE	TRW
TOP OF RETAINING WALL	TW
TOP OF WALL	TS
TRAFFIC SIGNAL	TYP
TYPICAL	UDACS
UNIFORM DESIGN AND CONSTRUCTION STANDARDS	USDCCA
FOR WATER DISTRIBUTION SYSTEMS	
UNIFORM STD. DRAWINGS FOR PUBLIC WORKS	
CONSTRUCTION OFF-SITE IMPROVEMENTS	
CLARK COUNTY AREA, NEVADA	
UNDERGROUND TELEPHONE	
VARIABLE/VARIES	
VERTICAL CURVE	
VERTICAL	
VALLEY GUTTER	
WEST	
WAY	
WEIGHT	
CROSSING	

ALIGNMENT ABBREVIATIONS

"ECA"	EAGLE CANYON AVENUE (SHAUMBER ROAD TO SKYE VILLAGE ROAD)
"SR"	SHAUMBER ROAD (GRAND TETON DRIVE TO EAGLE CANYON AVENUE)
"GTD"	GRAND TETON DRIVE (PULI ROAD TO SKYE VILLAGE ROAD)
"ECD"	EGAN CREST DRIVE (GRAND TETON DRIVE TO EAGLE CANYON AVENUE)
"SVR"	SKYE VILLAGE ROAD (GRAND TETON DRIVE TO EAGLE CANYON AVENUE)

DATE: 11/19/15

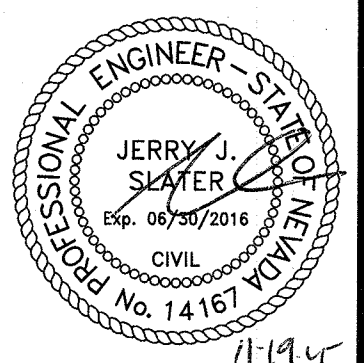
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DESIGNER: DAM

CHECKED: JSR

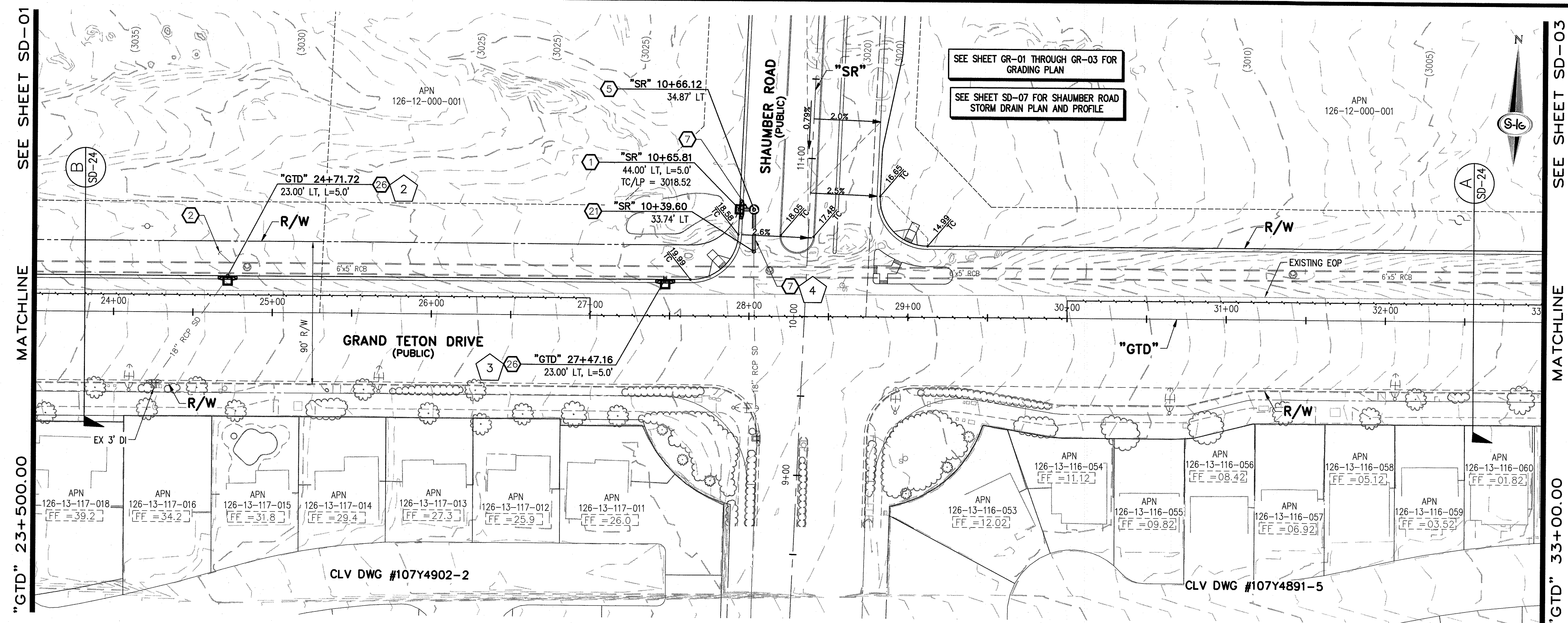
PROJECT NO.

OLY1501-001

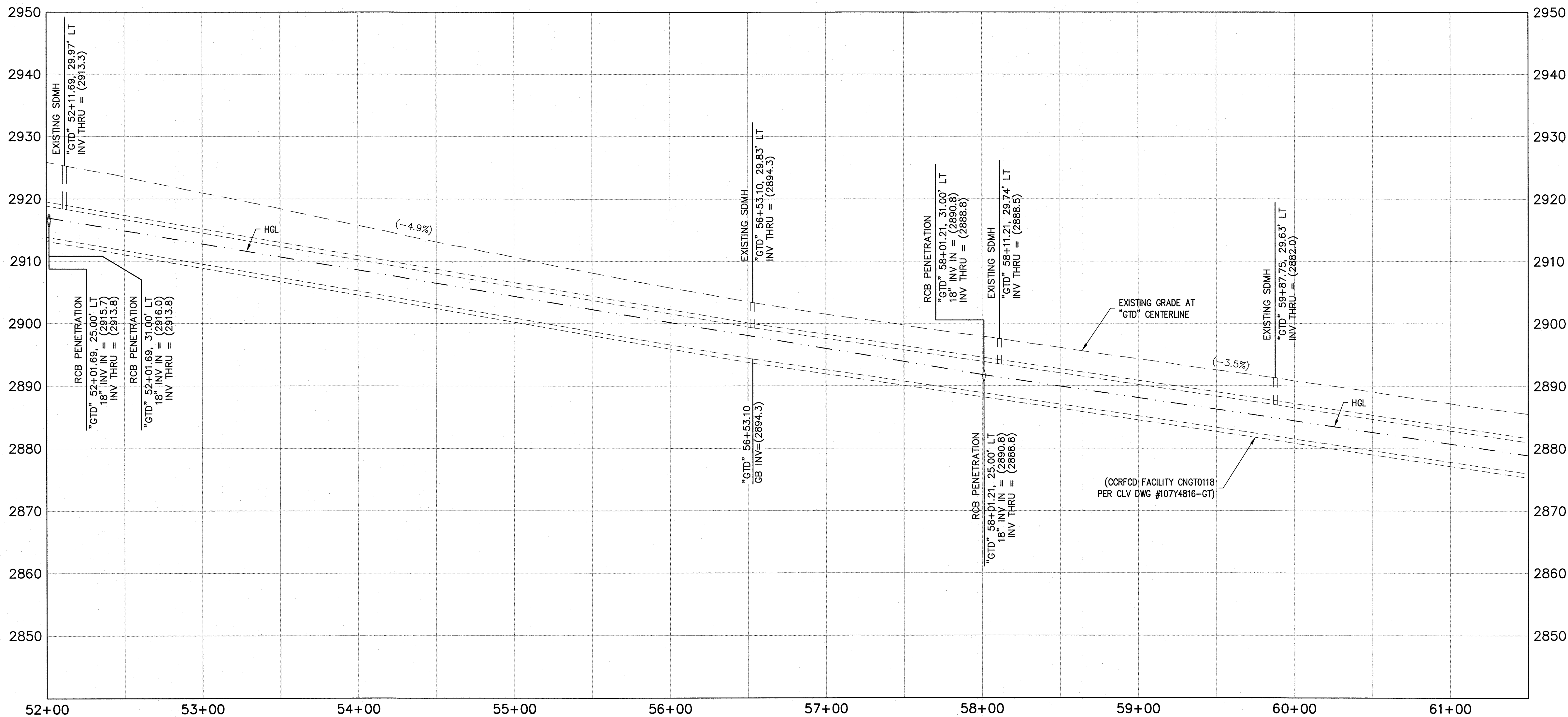
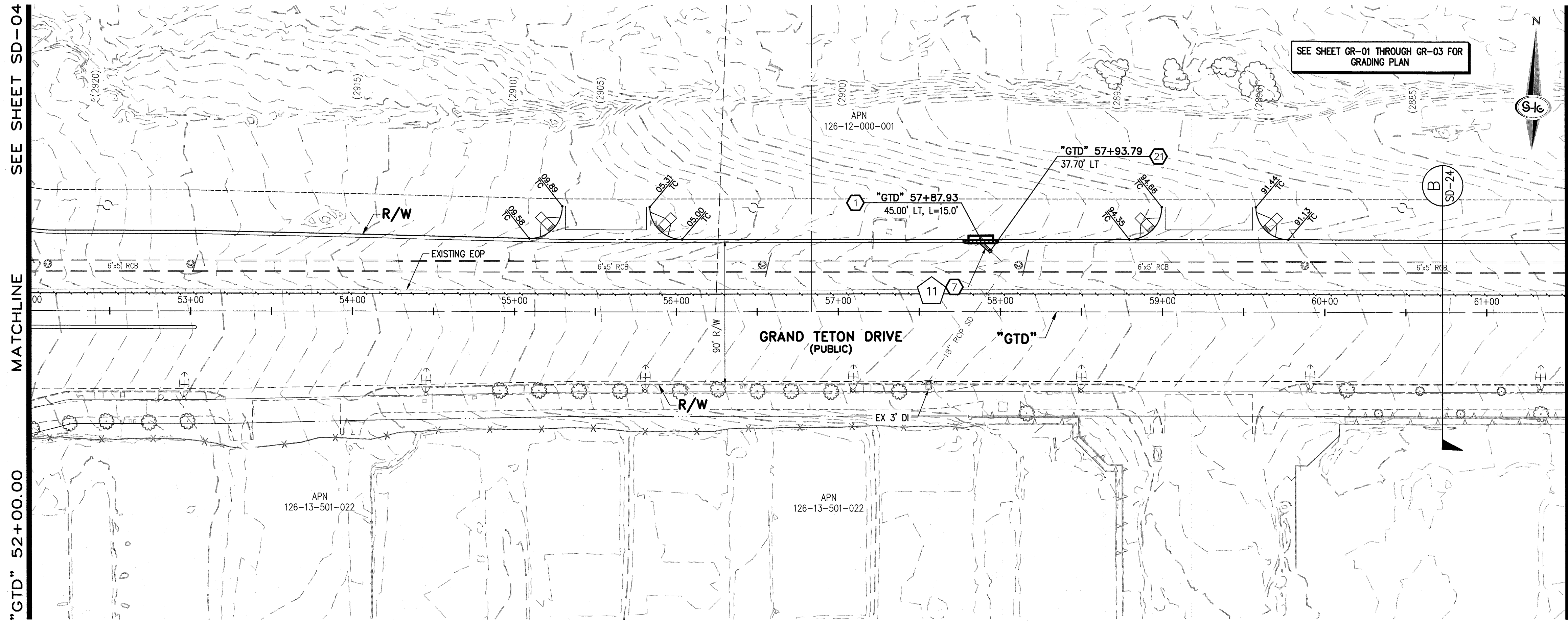


G-03

SHEET 3 OF 33



J:\OLY1501\01 Sky Canyon Phase 2 Infrastructure\Drawings\SD-04.ctb TO SD-06.dwg, SD-05, 11/19/2015 2:28:49 PM, jslater



- ### STORM DRAIN NOTES
1. CONSTRUCT TYPE "CM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
 2. REMOVE EXISTING LATERAL STUB AND CONSTRUCT RCB PLUG (SEE DETAIL 5, DRAWING SD-26)
 3. CONSTRUCT 60" TYPE I MANHOLE (USDCCA STD. DWG. NO. 403.1)
 4. CONSTRUCT 60" TYPE III MANHOLE (USDCCA STD. DWG. NO. 406.1)
 5. CONSTRUCT 60" TYPE III MANHOLE WITH TYPE IA RISER (USDCCA STD. DWG. NO. 404.1 AND 406.1)
 6. CONSTRUCT NDOT TYPE 4 MANHOLE (NDOT STD. PLAN R-4.3.2)
 7. INSTALL 18" RCP (USDCCA STD. DWG. NO. 503.2)
 8. INSTALL 24" RCP (USDCCA STD. DWG. NO. 503.2)
 9. INSTALL 30" RCP (USDCCA STD. DWG. NO. 503.2)
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 21. CONSTRUCT CONCRETE COLLAR (SEE DETAIL 2, DRAWING SD-26)
 22. CONSTRUCT BRICK AND MORTAR PLUG (SEE DETAIL 1, DRAWING SD-26)
 23. INSTALL 48" RCP (USDCCA STD. DWG. NO. 503.2)
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 25. INSTALL DRIVEWAY (USDCCA STD. DWG. NO. 224)
 26. CONSTRUCT TYPE "CM" DROP INLET (USDCCA STD. DWG. NO. 422)

- ### NOTES
1. ALL RCP SHALL BE CLASS III UNLESS OTHERWISE SHOWN.
 2. ALL PIPE LENGTHS ARE MEASURED ALONG PIPE CENTERLINE TO CENTER OF MANHOLE OR INSIDE EDGE OF DI OR RCB/RCA.
 3. ALL DROP INLETS SHALL INCLUDE STORM WATER MANAGEMENT STAMP AND DETAIL PER USDCCA STD. DWG. NO. 421.
 4. SEE STRUCTURAL PLANS FOR ADDITIONAL STRUCTURAL DETAILS AND CONNECTIONS.
 5. ALL PIPES ARE PUBLICLY MAINTAINED.
 6. ADD SPECIAL INSPECTION REQUIRED FOR PIPE SEGMENTS WITH SACRIFICIAL CONCRETE.

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE, CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS, BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

LEGEND

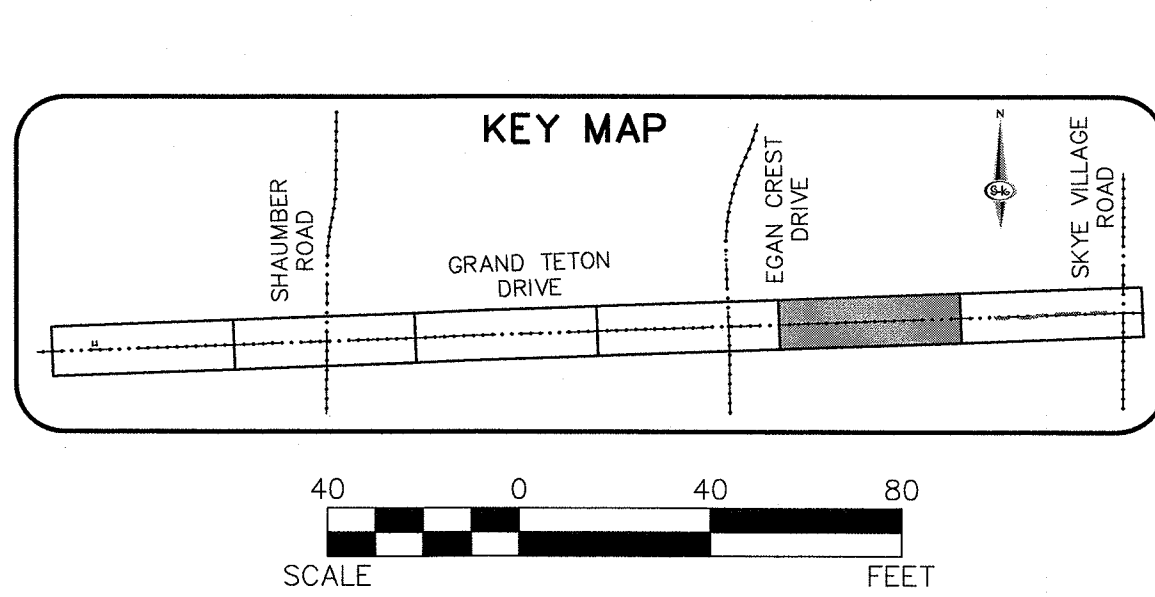
1 STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (OUTSIDE THE 500-YEAR FLOOD PLAIN) ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL:32003C1750E, DATED SEPTEMBER 27, 2002

NOTE:

PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.



AVOID HITTING OVERHEAD POWER LINES. USE CARE.

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SLATER HANIFAN GROUP

CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118

PHONE (702) 284-5300

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2

GRAND TETON DRIVE STORM DRAIN PLAN AND PROFILE

"GTD" 52+00.00 TO "GTD" 61+50.00

DATE: 11/19/15

DRAFTER: JAS

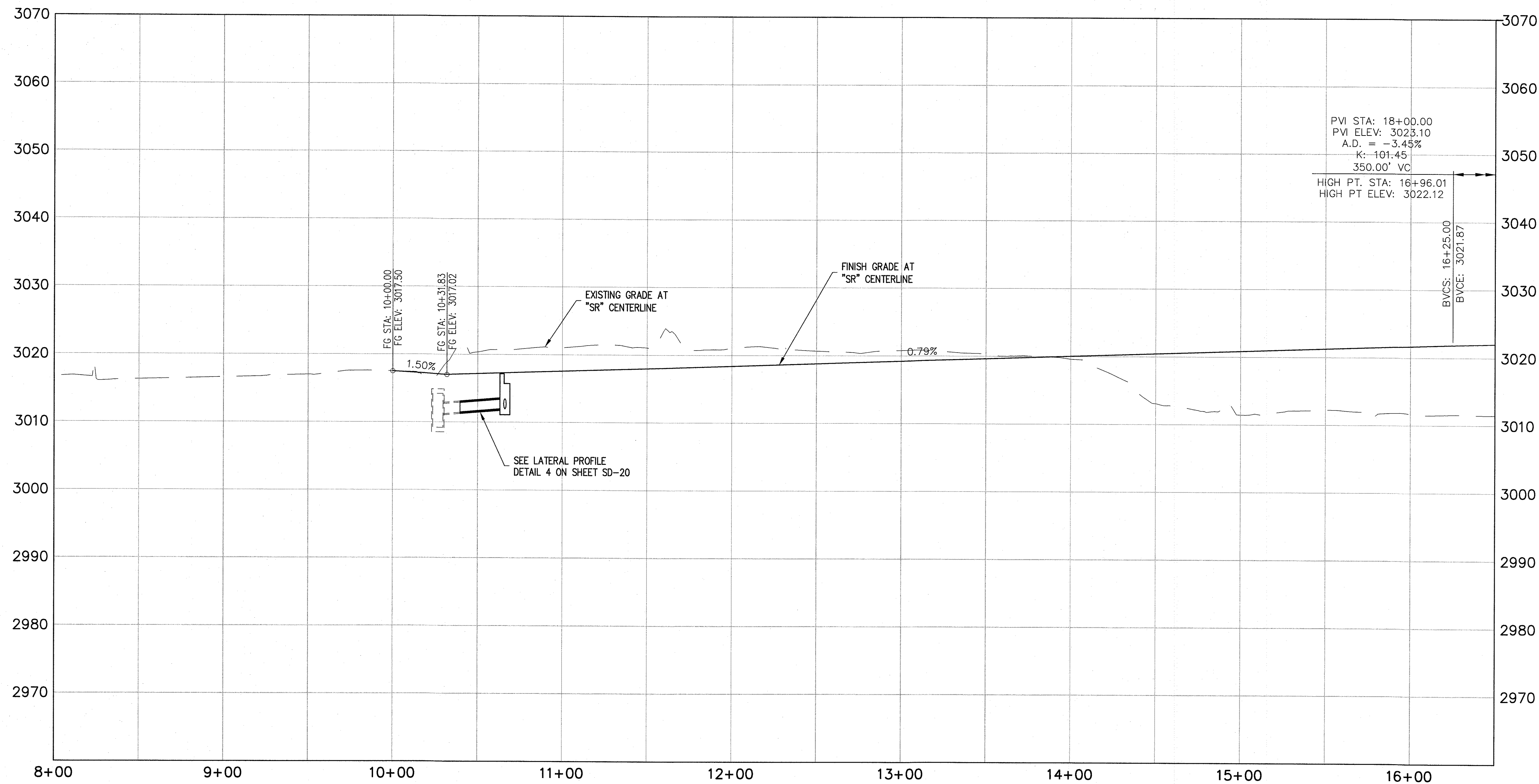
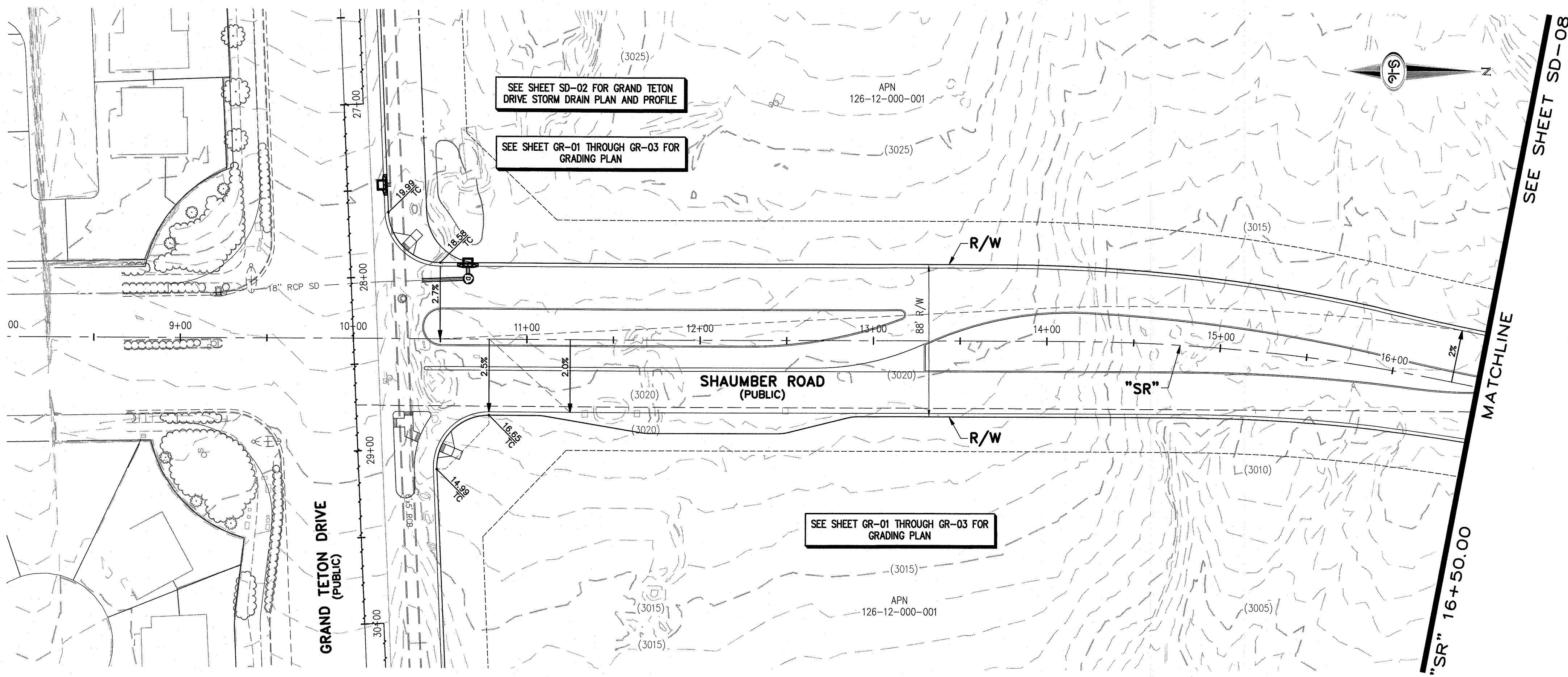
DESIGNER: DAM

CHECKED: JSR

PROJECT NO. **OLY1501-001**

SD-05

SHEET 8 OF 33



- STORM DRAIN NOTES**
1. CONSTRUCT TYPE "CM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
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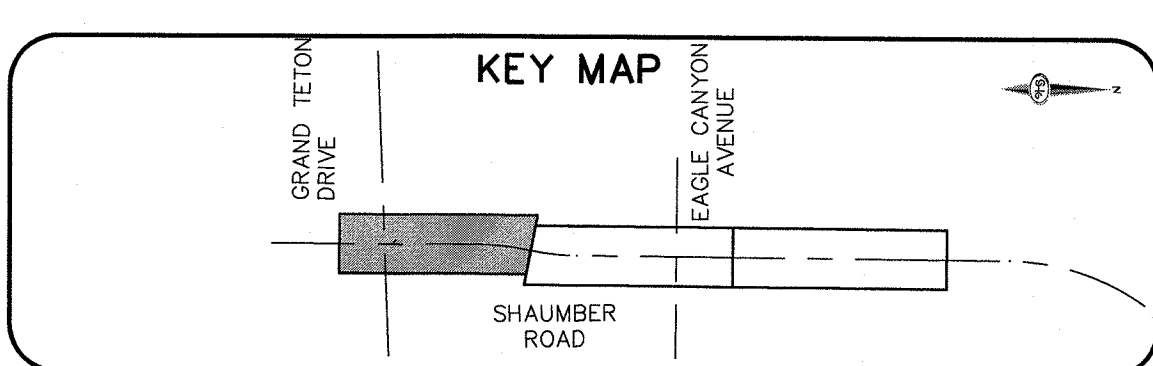
DROP INLET NOTE
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LEGEND
1 STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY 05-4735A ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT
JERRY SLATER, P.E. 14167 DATE

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (OUTSIDE THE 500-YEAR FLOOD PLAIN) ON THE FLOOD INSURANCE RATE MAP (FIRM) PANEL: 32003C1750E, DATED SEPTEMBER 27, 2002

NOTE:
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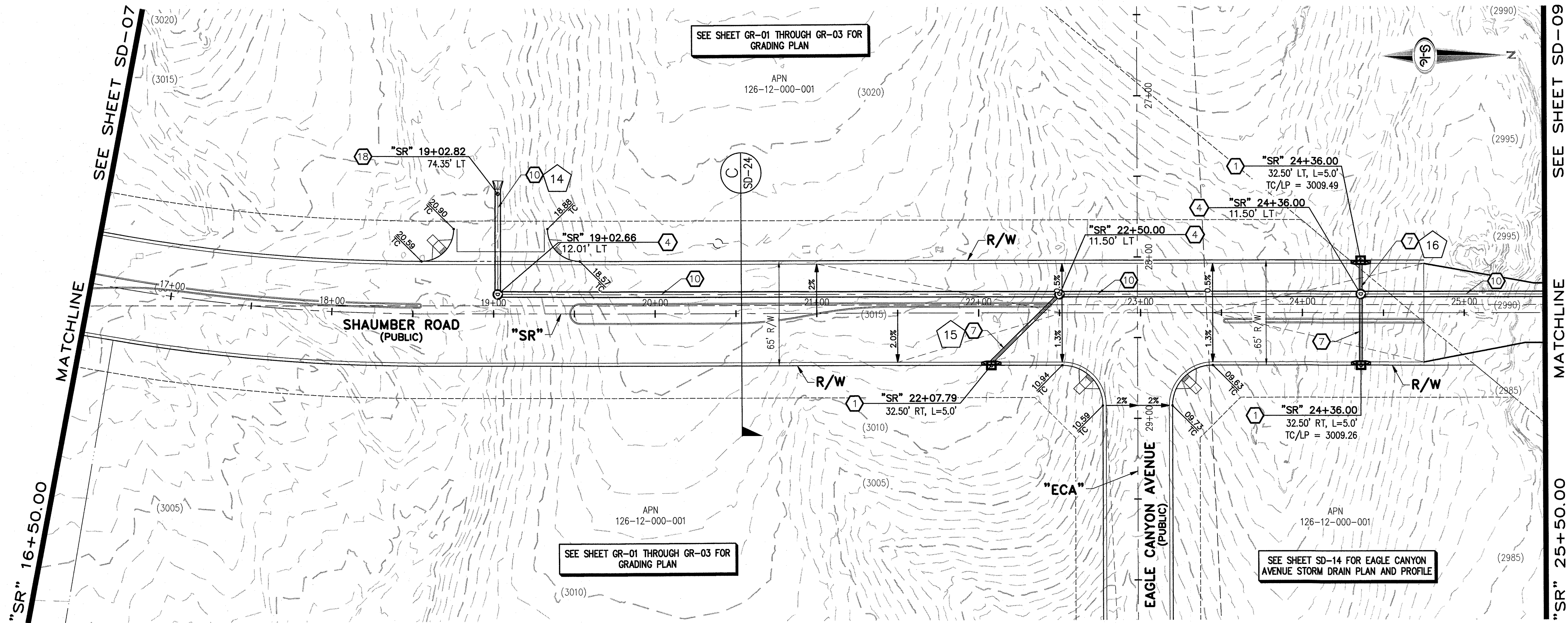
SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2
SHAUMBER ROAD STORM DRAIN PLAN AND PROFILE
"SR" 8+00.00 TO "SR" 16+50.00

DATE: 11/19/15
DRAFTER: JAS
DESIGNER: DAM
CHECKED: JSR
PROJECT NO.
OLY1501-001

SD-07
SHEET 10 OF 33



- ### STORM DRAIN NOTES
1. CONSTRUCT TYPE "CM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
 2. REMOVE EXISTING LATERAL STUB AND CONSTRUCT RCB PLUG (SEE DETAIL 5, DRAWING SD-26)
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LEGEND

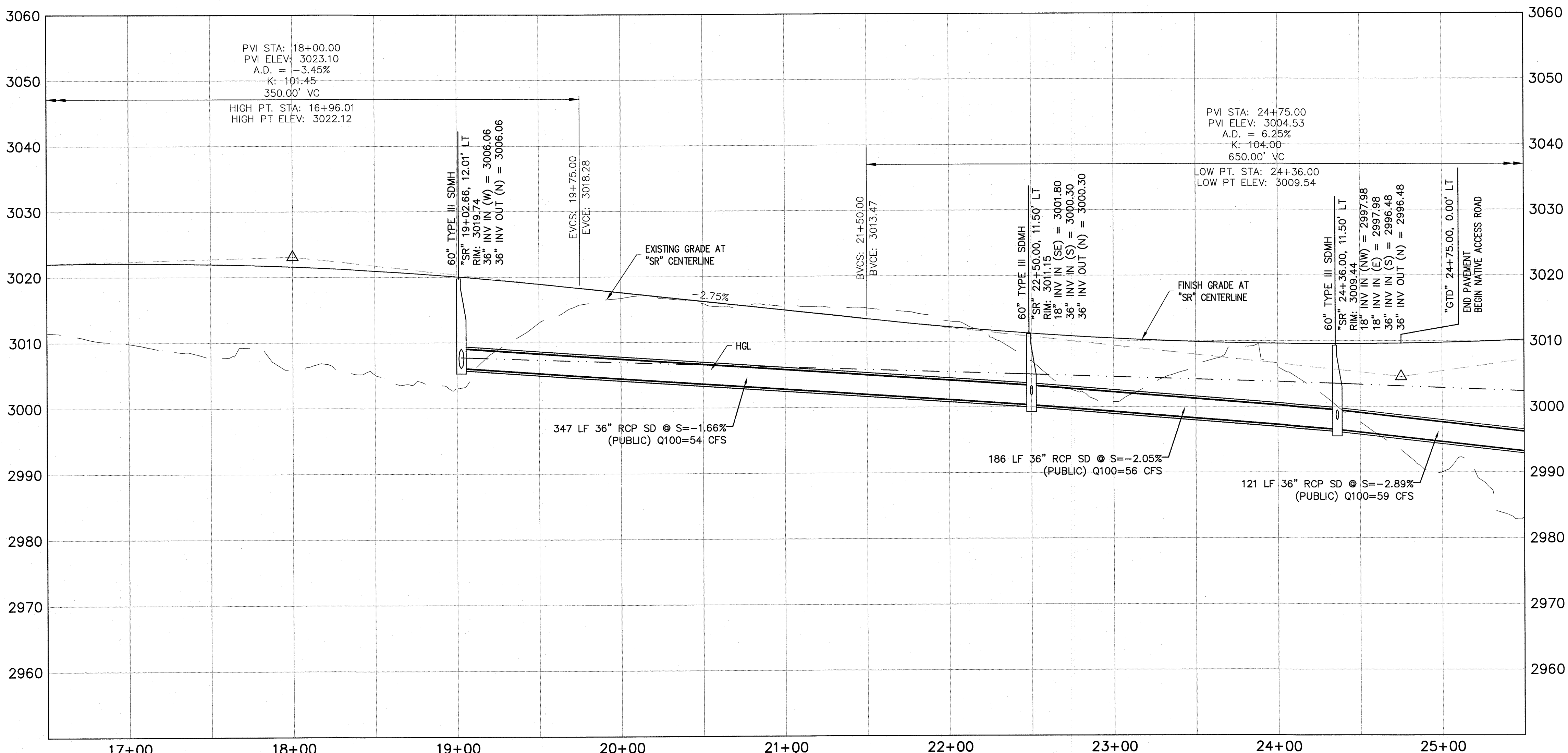
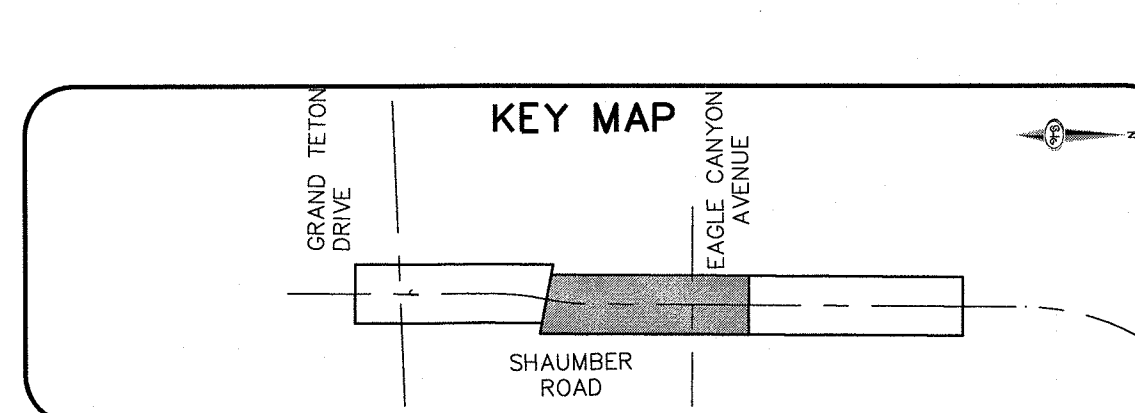
1. STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)

FLOOD ZONE

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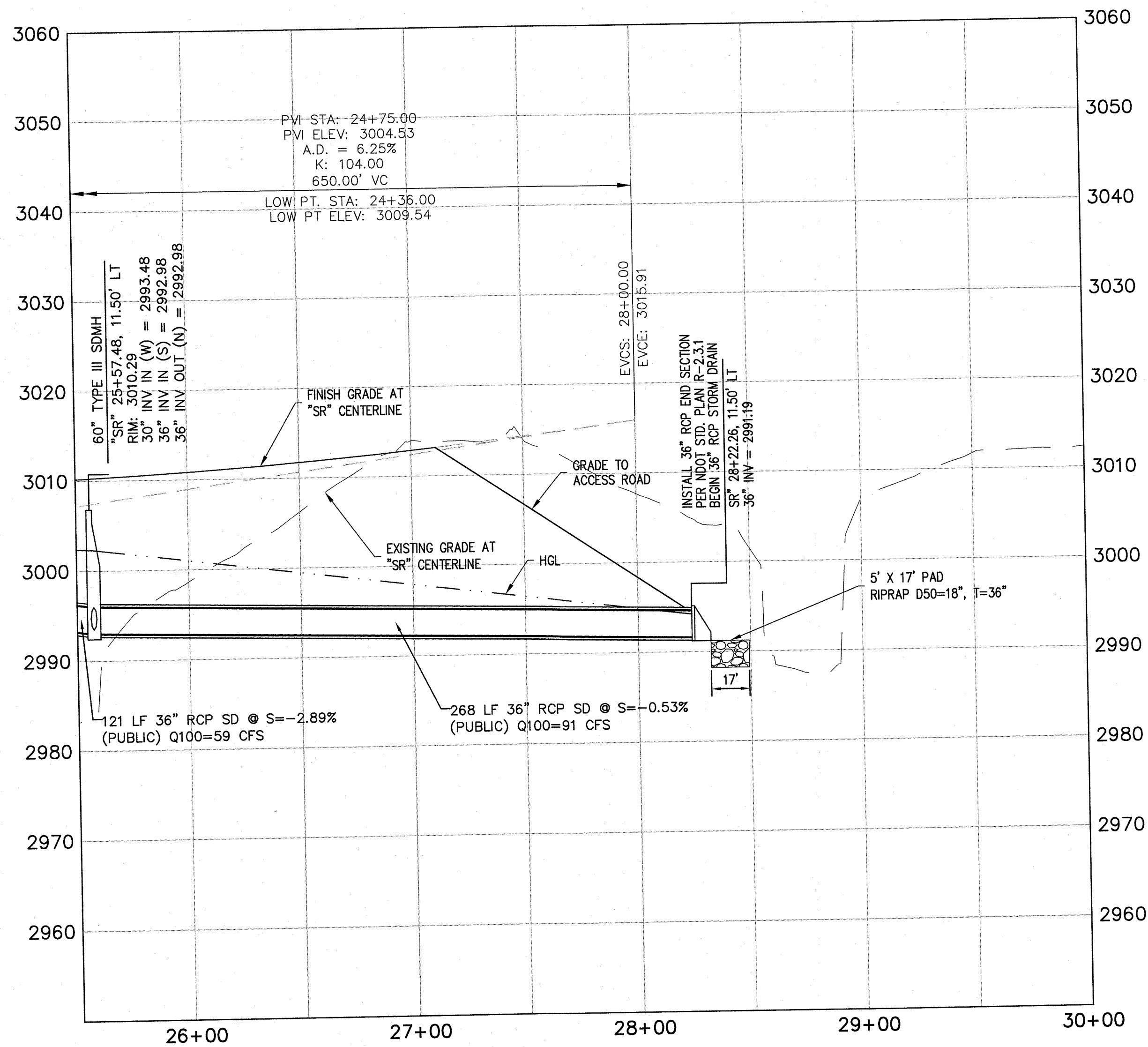
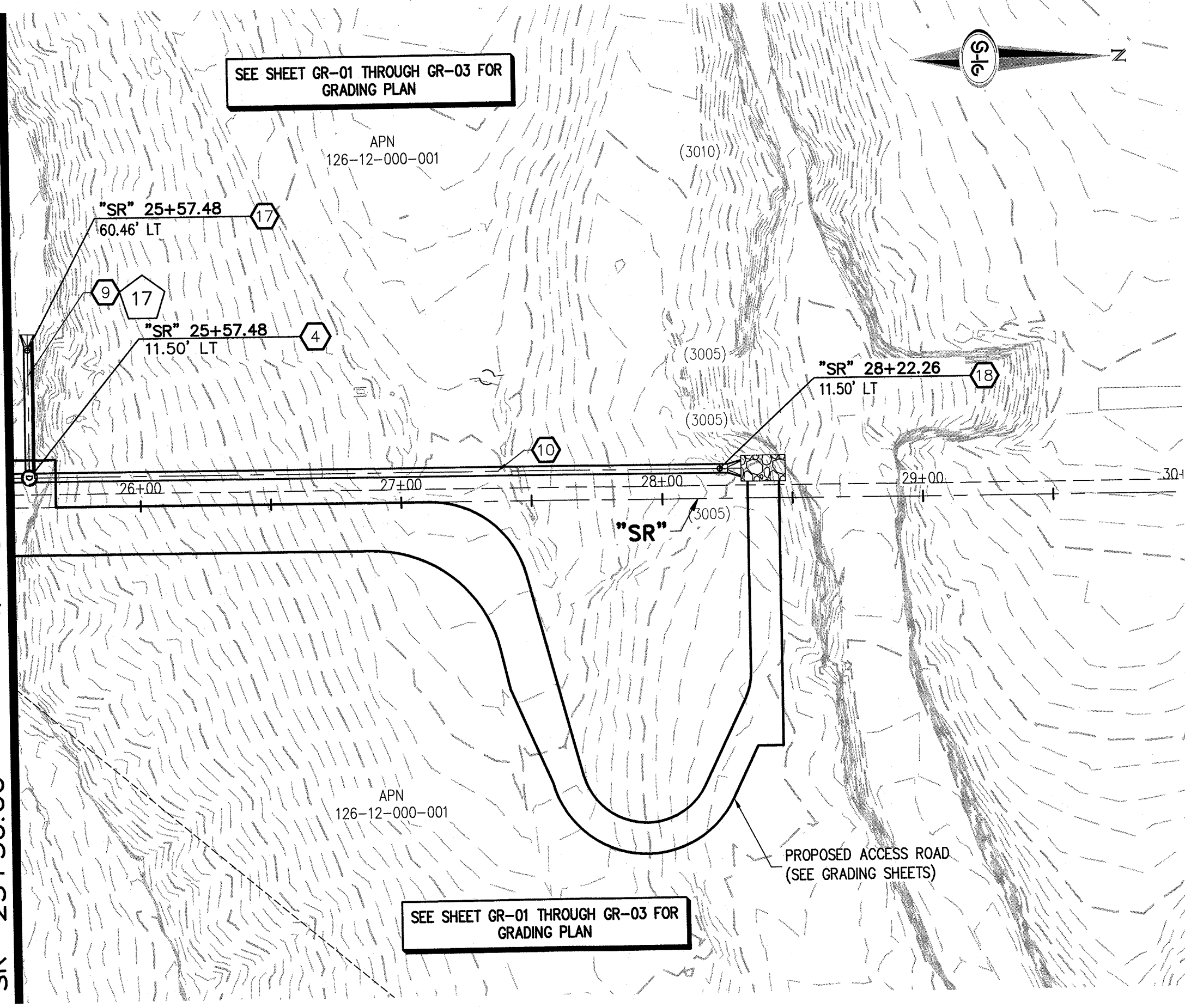


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CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

DATE: 11/19/15
DRAFTER: JAS
DESIGNER: DAM
CHECKED: JSR
PROJECT NO. OLY1501-001

SD-08
SHEET 11 OF 33

SEE SHEET SD-08
MATCHLINE
"SR" 25+50.00



STORM DRAIN NOTES

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LEGEND



STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-4739A ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

JERRY SLATER, P.E. 14167

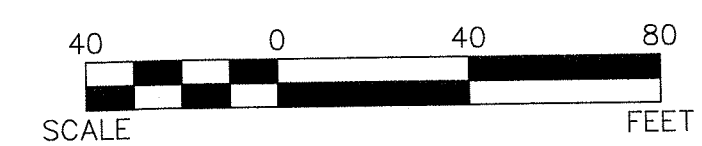
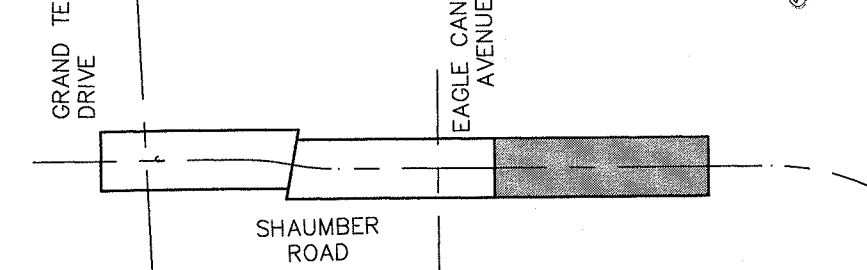
FLOOD ZONE

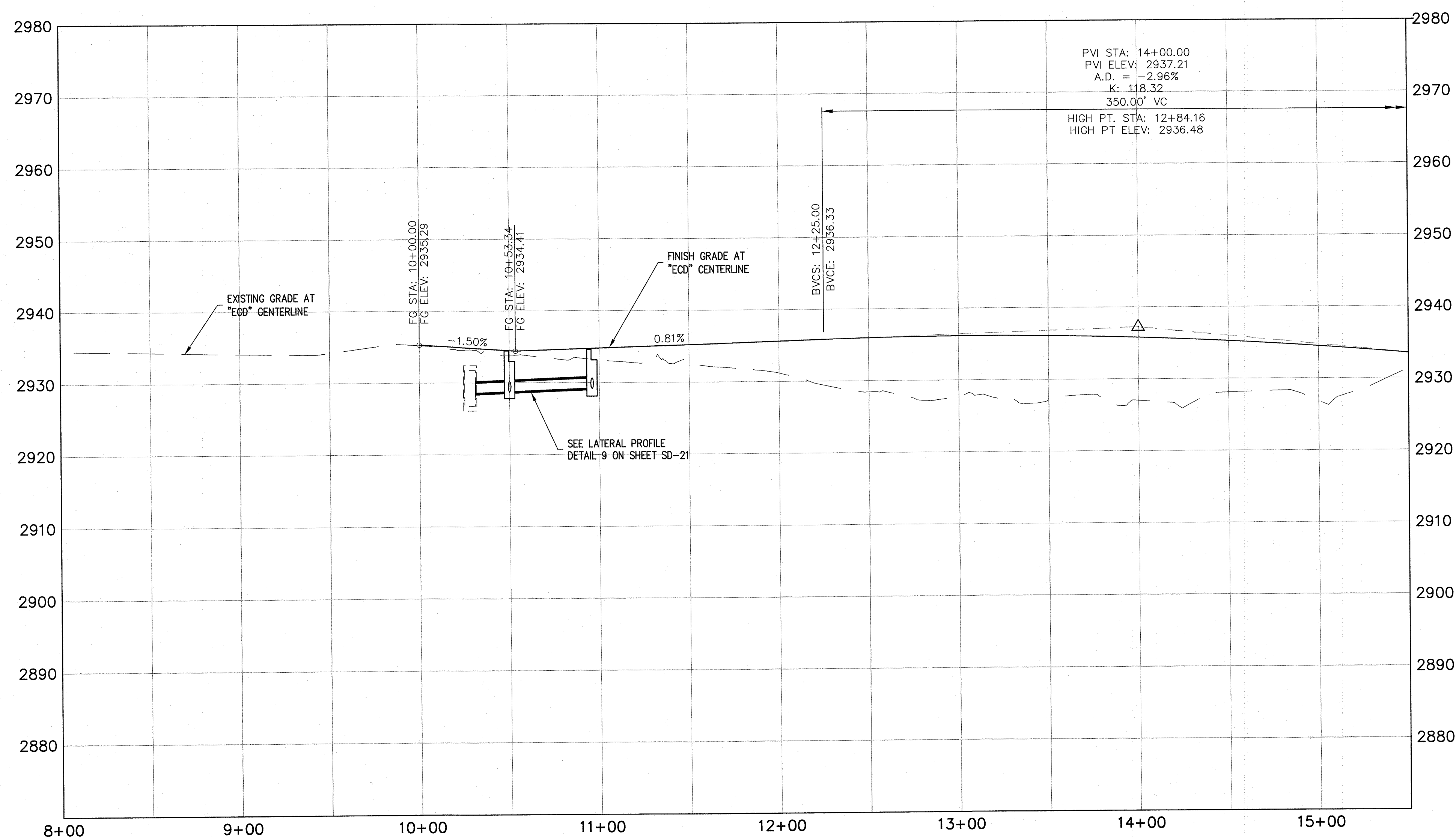
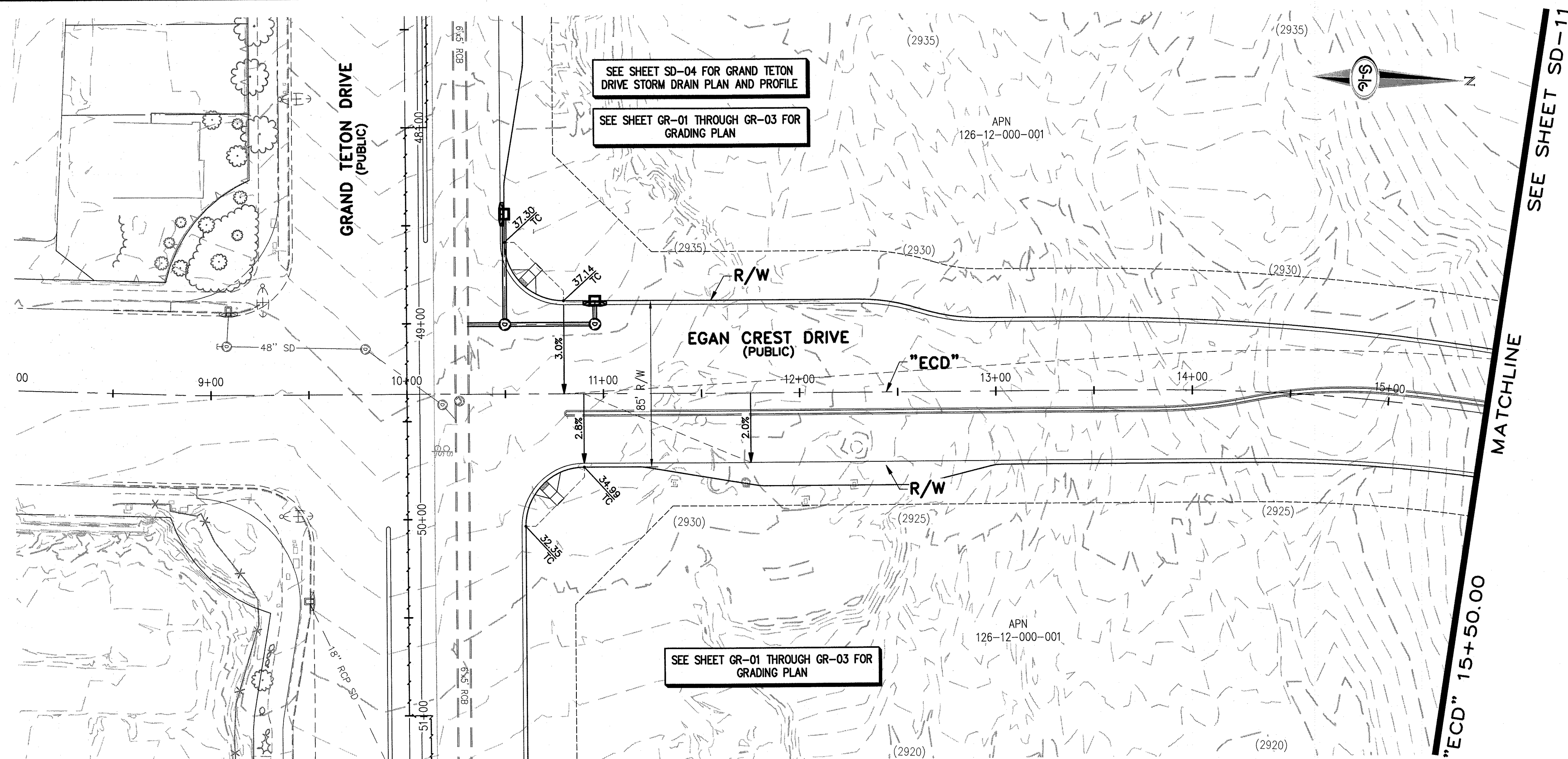
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KEY MAP





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- 1 CONSTRUCT TYPE "CM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
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(SEE DETAIL 5, DRAWING SD-28)
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 - 26 CONSTRUCT TYPE "CM" DROP INLET (USDCCA STD. DWG. NO. 422)

- ## NOTES
1. ALL RCP SHALL BE CLASS III UNLESS OTHERWISE SHOWN.
 2. ALL PIPE LENGTHS ARE MEASURED ALONG PIPE CENTERLINE TO CENTER OF MANHOLE OR INSIDE EDGE OF DI OR RCB/RCA.
 3. ALL DROP INLETS SHALL INCLUDE STORM WATER MANAGEMENT STAMP AND DETAIL PER USDOCA STD. DWG. NO. 421
 4. SEE STRUCTURAL PLANS FOR ADDITIONAL STRUCTURAL DETAILS AND CONNECTIONS.
 5. ALL PIPES ARE PUBLICLY MAINTAINED.
 6. ADD SPECIAL INSPECTION REQUIRED FOR PIPE SEGMENTS WITH SACRIFICIAL CONCRETE

DROP INLET NOTE

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LEGEND

	STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)
---	---

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-4739A ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT

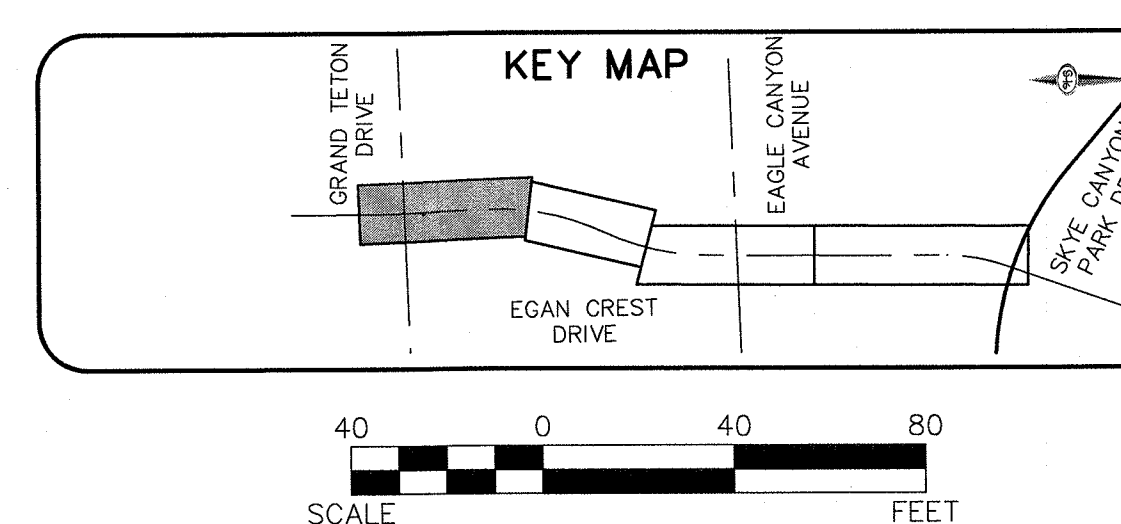
JERRY SLATER, P.E. 14167

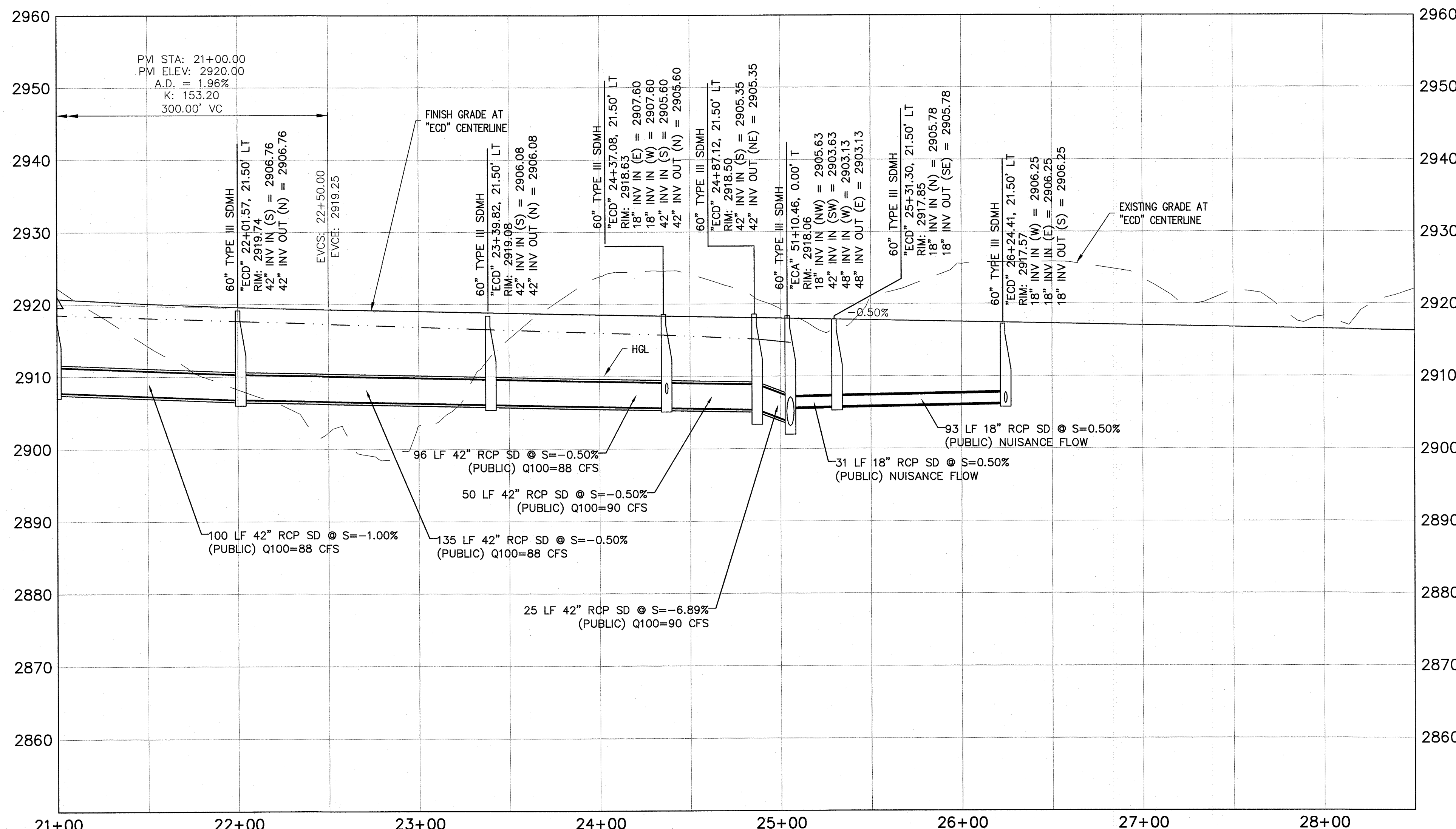
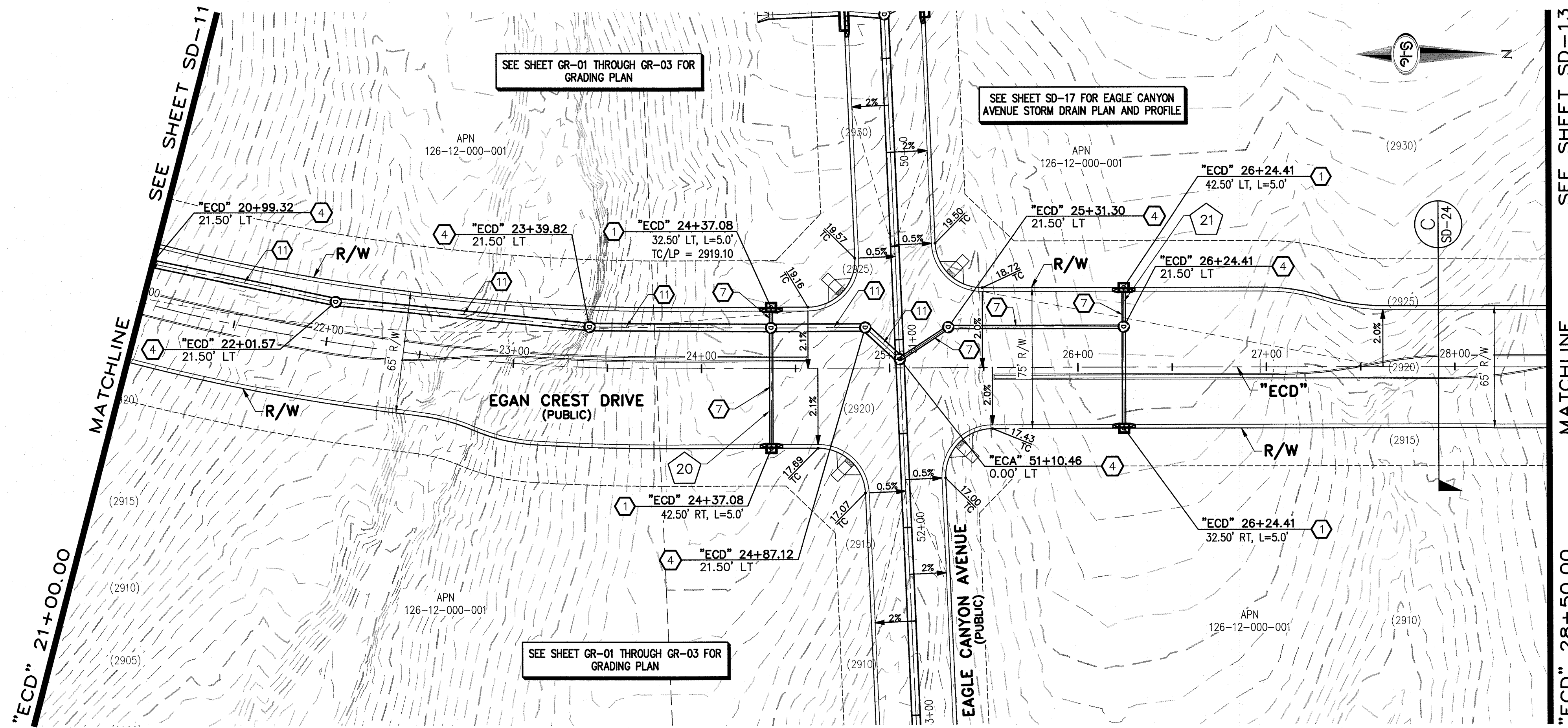
DATE

FLOOD ZONE
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NOTE:

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- ### STORM DRAIN NOTES
- CONSTRUCT TYPE "CM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
 - REMOVE EXISTING LATERAL STUB AND CONSTRUCT RCB PLUG (SEE DETAIL 5, DRAWING SD-26)
 - CONSTRUCT 60" TYPE I MANHOLE (USDCCA STD. DWG. NO. 403.1)
 - CONSTRUCT 60" TYPE III MANHOLE (USDCCA STD. DWG. NO. 406.1)
 - CONSTRUCT 60" TYPE III MANHOLE WITH TYPE IA RISER (USDCCA STD. DWG. NO. 404.1 AND 406.1)
 - CONSTRUCT NDOT TYPE 4 MANHOLE (NDOT STD. PLAN R-4.3.2)
 - INSTALL 18" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 24" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 30" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 36" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 42" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 54" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 60" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 66" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 18" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 - INSTALL 24" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 - INSTALL 30" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 - INSTALL 36" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 - INSTALL 42" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
 - PIPE PENETRATION (SEE DETAIL 4, DRAWING SD-26)
 - CONSTRUCT CONCRETE COLLAR (SEE DETAIL 2, DRAWING SD-26)
 - CONSTRUCT BRICK AND MORTAR PLUG (SEE DETAIL 1, DRAWING SD-26)
 - INSTALL 48" RCP (USDCCA STD. DWG. NO. 503.2)
 - INSTALL 48" RCP END SECTION (NDOT STD. PLAN R-2.3.1)
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DROP INLET NOTE

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LEGEND

1 STORM DRAIN LATERAL # (SEE SHEETS SD-20 THRU SD-24)

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-4739A ON FILE AT THE CITY OF LAS VEGAS FOR THE SUBJECT PROJECT

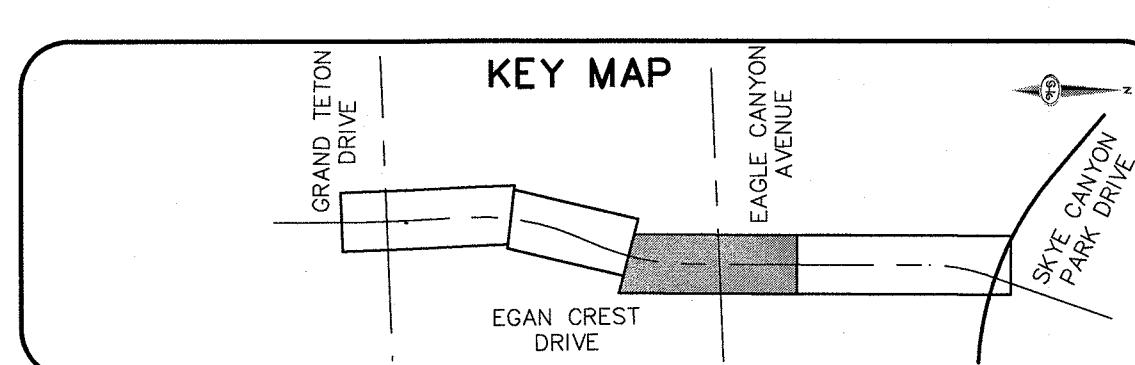
JERRY SLATER, P.E. 14167 DATE

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40 0 40 80
SCALE FEET

1-702-227-2929

FAST
Call before you Dig
1-702-432-5300

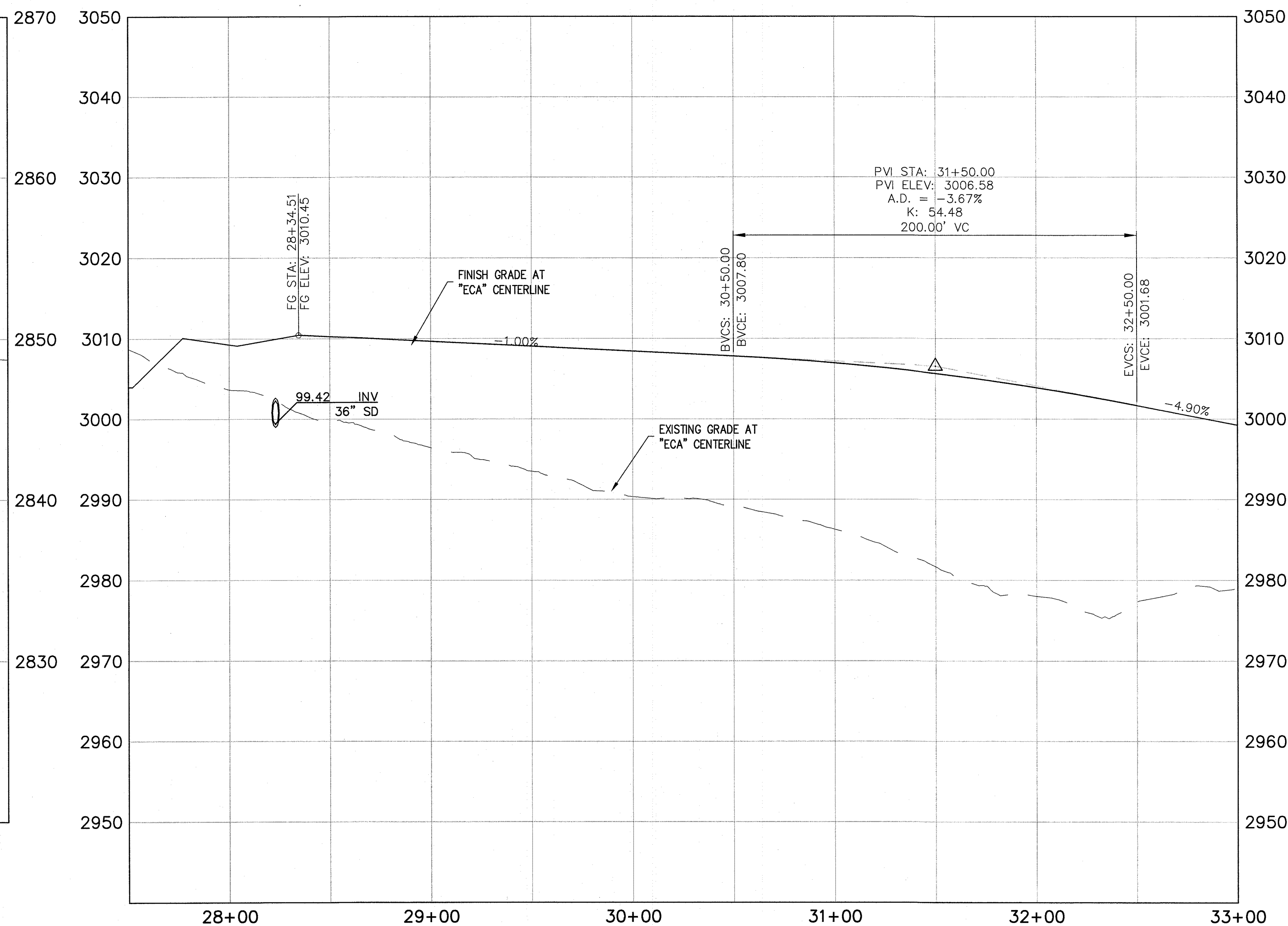
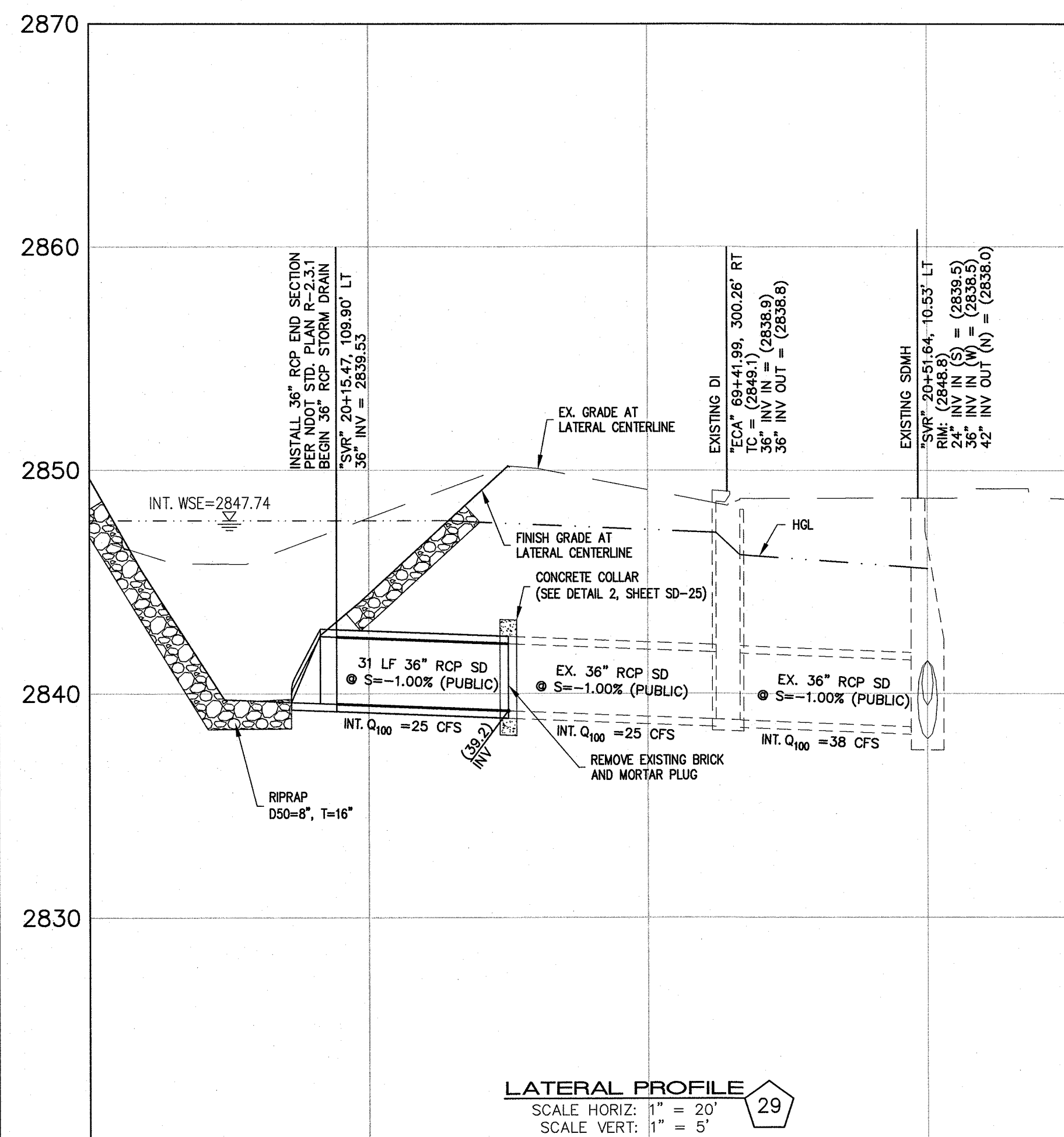
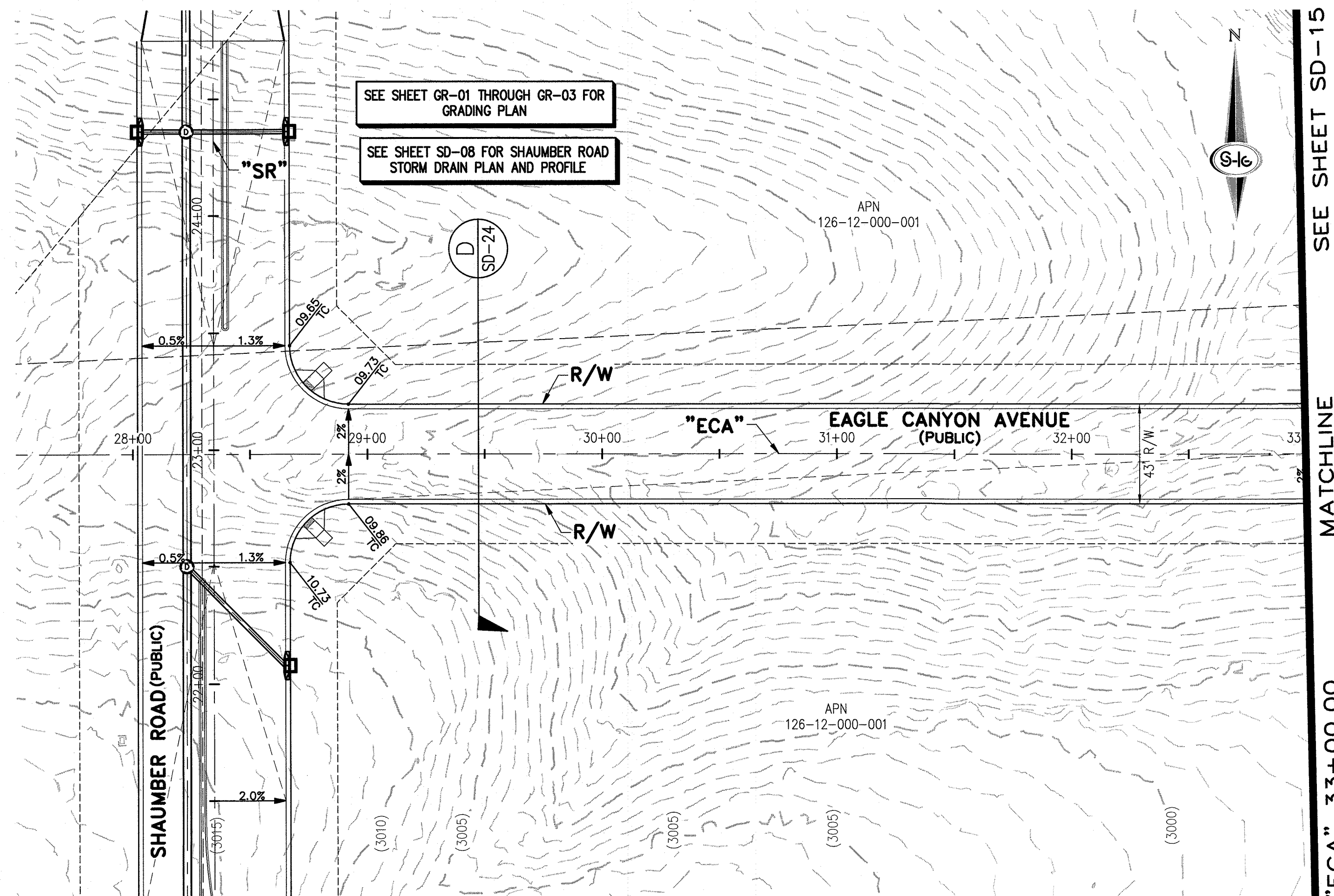
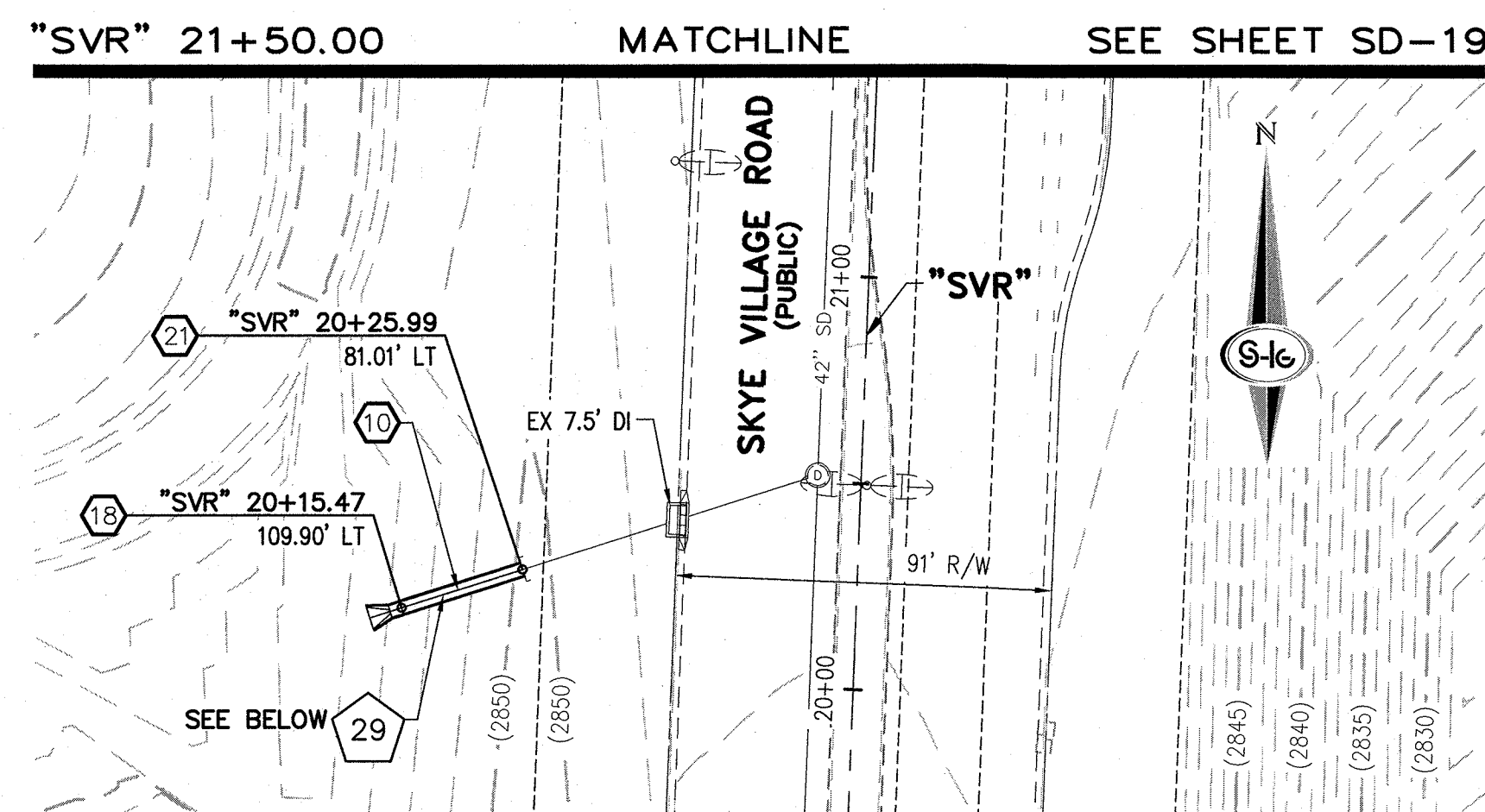
Call before you Dig
1-800-227-2800

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

DATE: 11/19/15
DRAFTER: JAS
DESIGNER: DAM
CHECKED: JSR
PROJECT NO.
OLY1501-001

SD-12
SHEET 15 OF 33

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
EGAN CREST STORM DRAIN PLAN AND PROFILE
"ECD" 21+00.00 TO "ECD" 28+50.00



STORM DRAIN NOTES

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2. REMOVE EXISTING LATERAL STUB AND CONSTRUCT RCB PLUG (SEE DETAIL 5, DRAWING SD-26)
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5. CONSTRUCT 60" TYPE III MANHOLE WITH TYPE IA RISER (USDCCA STD. DWG. NO. 404.1 AND 408.1)
6. CONSTRUCT NDOT TYPE 4 MANHOLE (NDOT STD. PLAN R-4.3.2)
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LEGEND

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FLOOD ZONE

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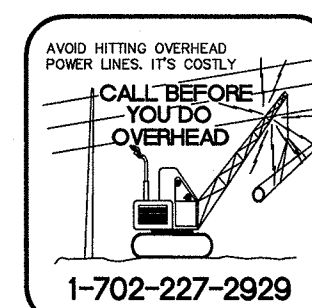
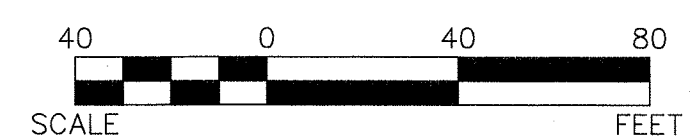
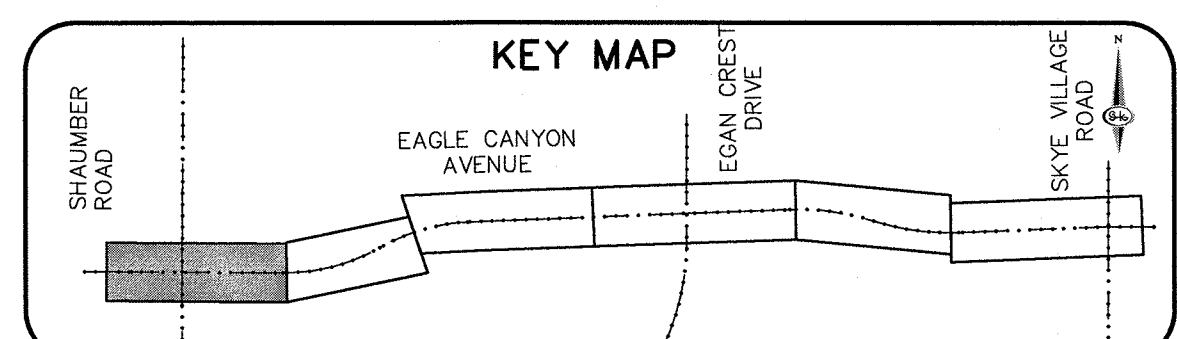
JERRY SLATER, P.E. 14167 DATE

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SLATER
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CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

[illegible]

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2
EAGLE CANYON AVENUE STORM DRAIN PLAN AND PROFILE
"ECA" 25+00.00 TO "ECA" 33+00.00

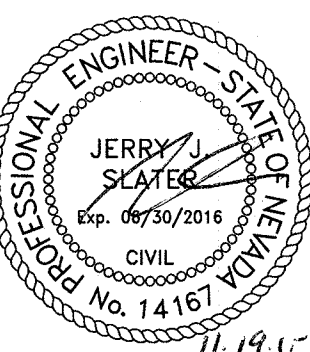
DATE: 11/19/15

DRAFTER: JAS

DESIGNER: DAM

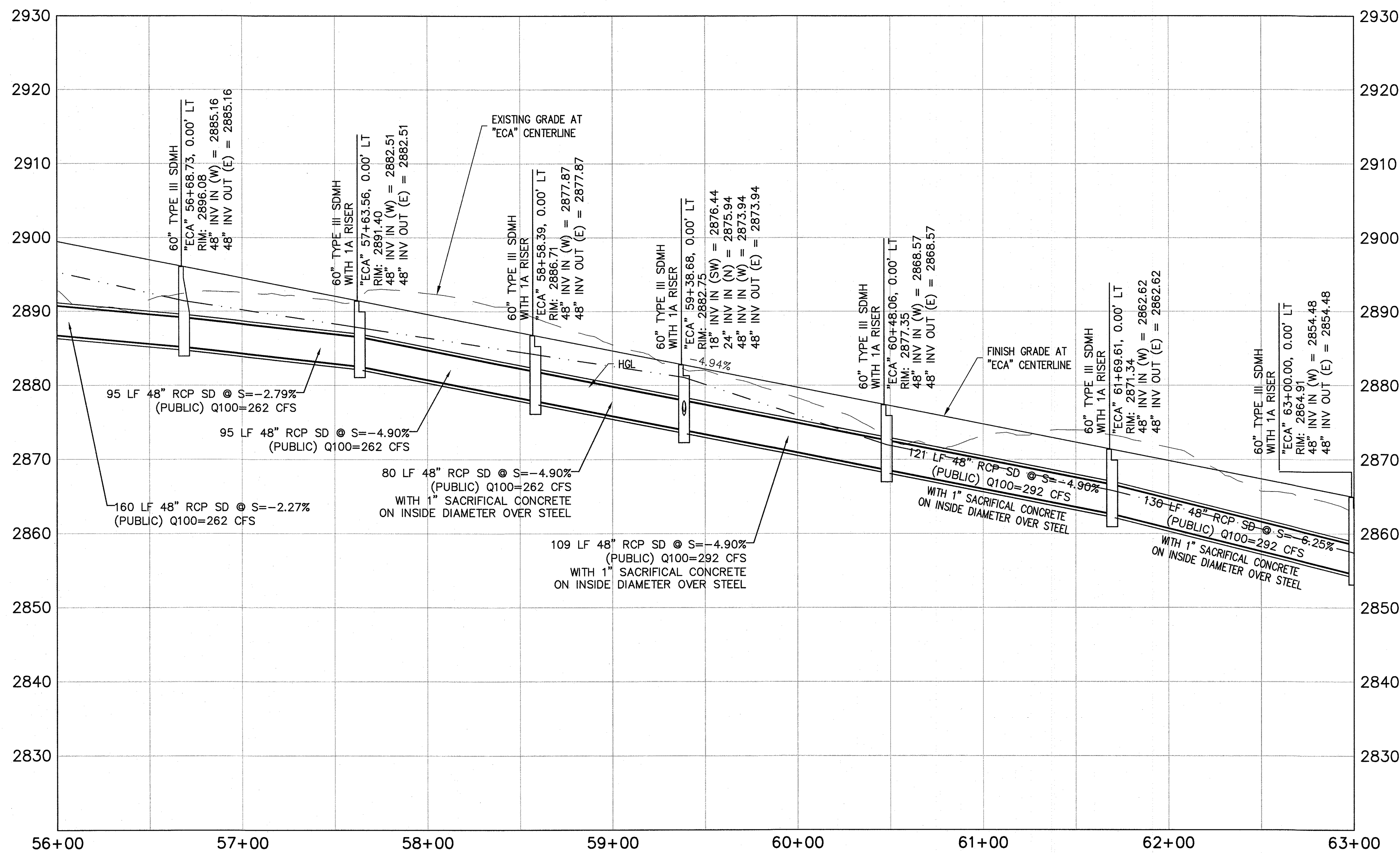
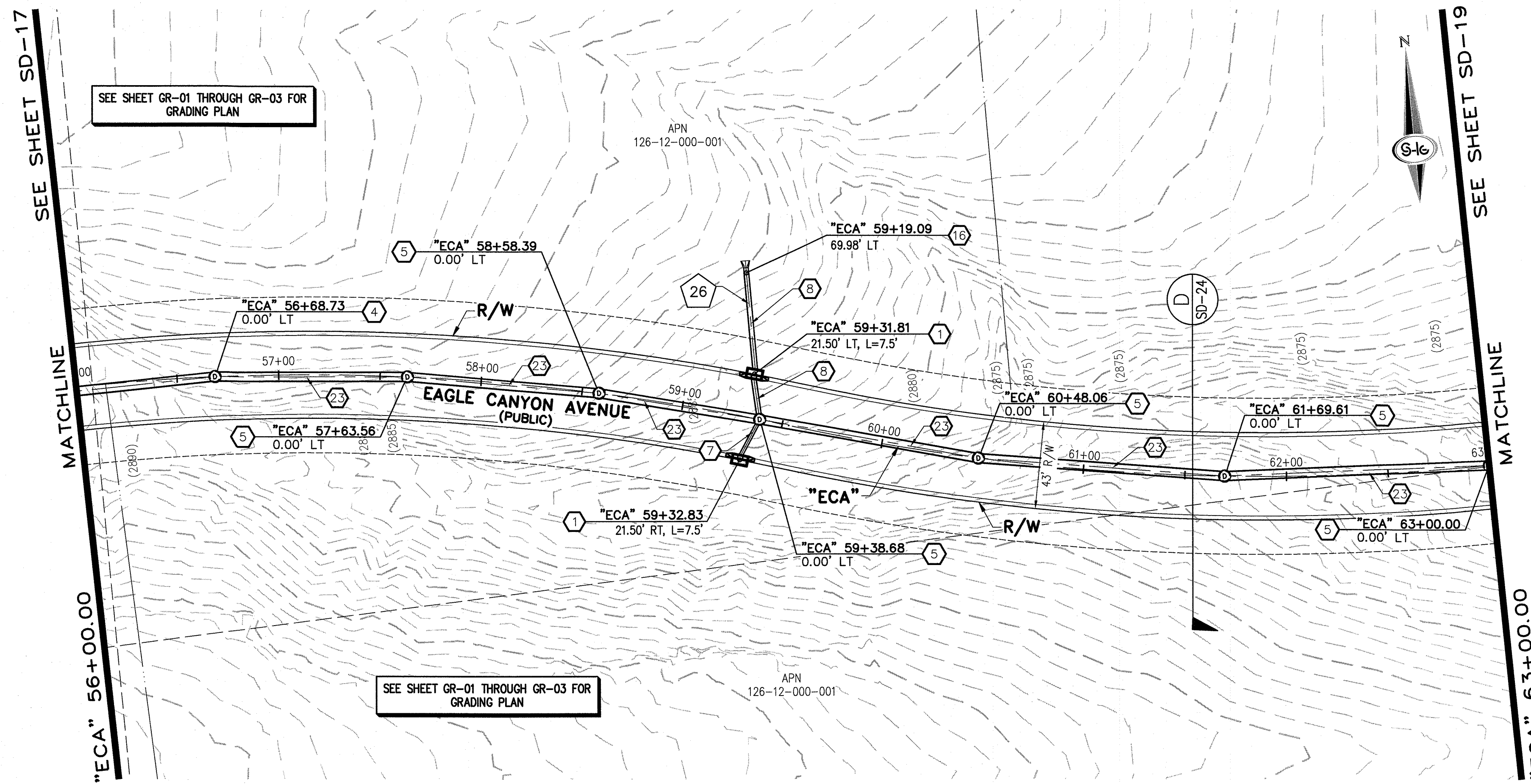
CHECKED: JSR

PROJECT NO.
OLY1501-001



SD-14

SHEET 17 OF 33



STORM DRAIN NOTES

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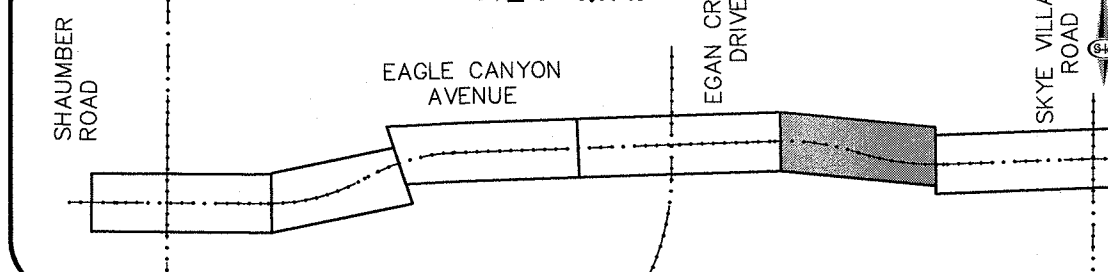
FLOOD ZONE

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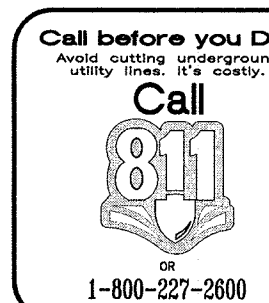
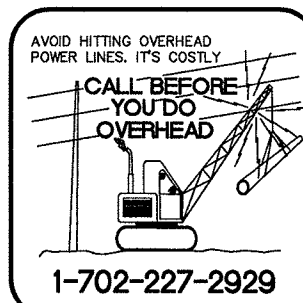
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KEY MAP



40 0 40 80
SCALE FEET



DATE: 11/19/15

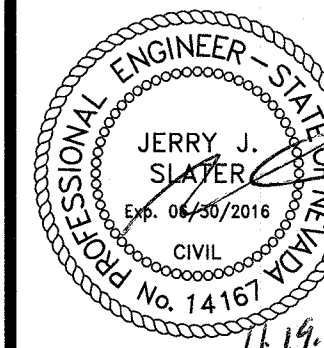
DRAFTER: JAS

DESIGNER: DAM

CHECKED: JSR

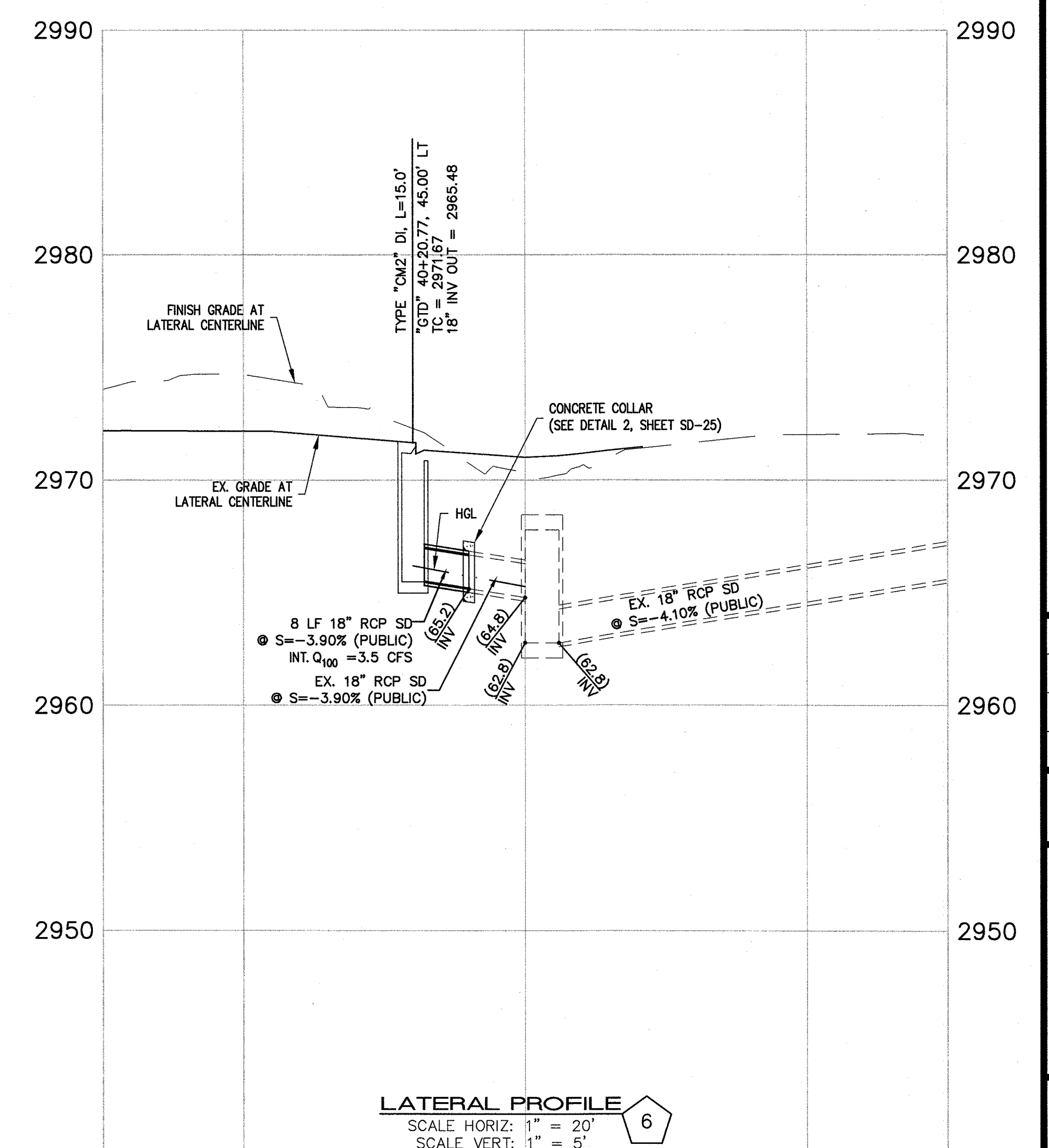
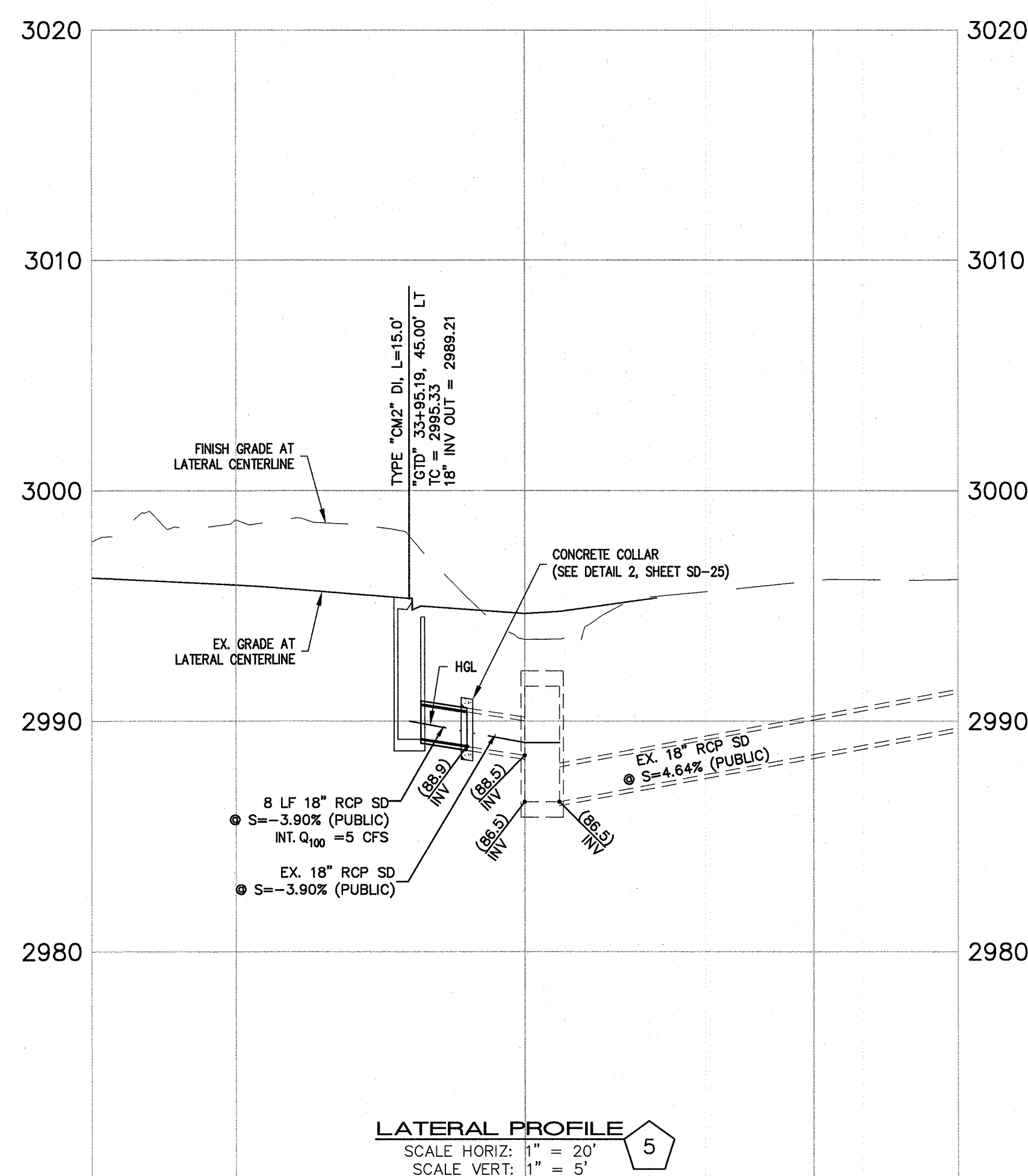
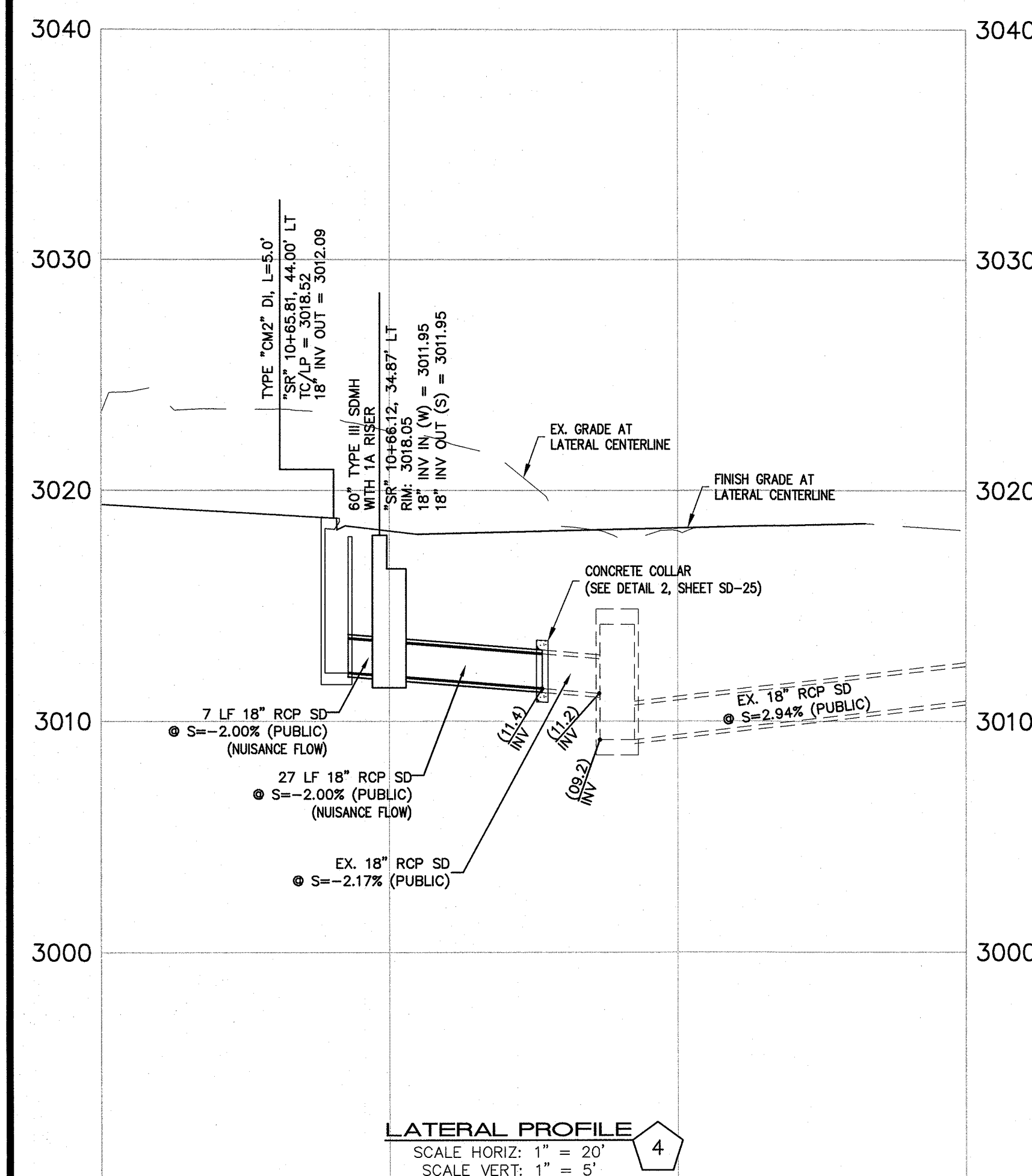
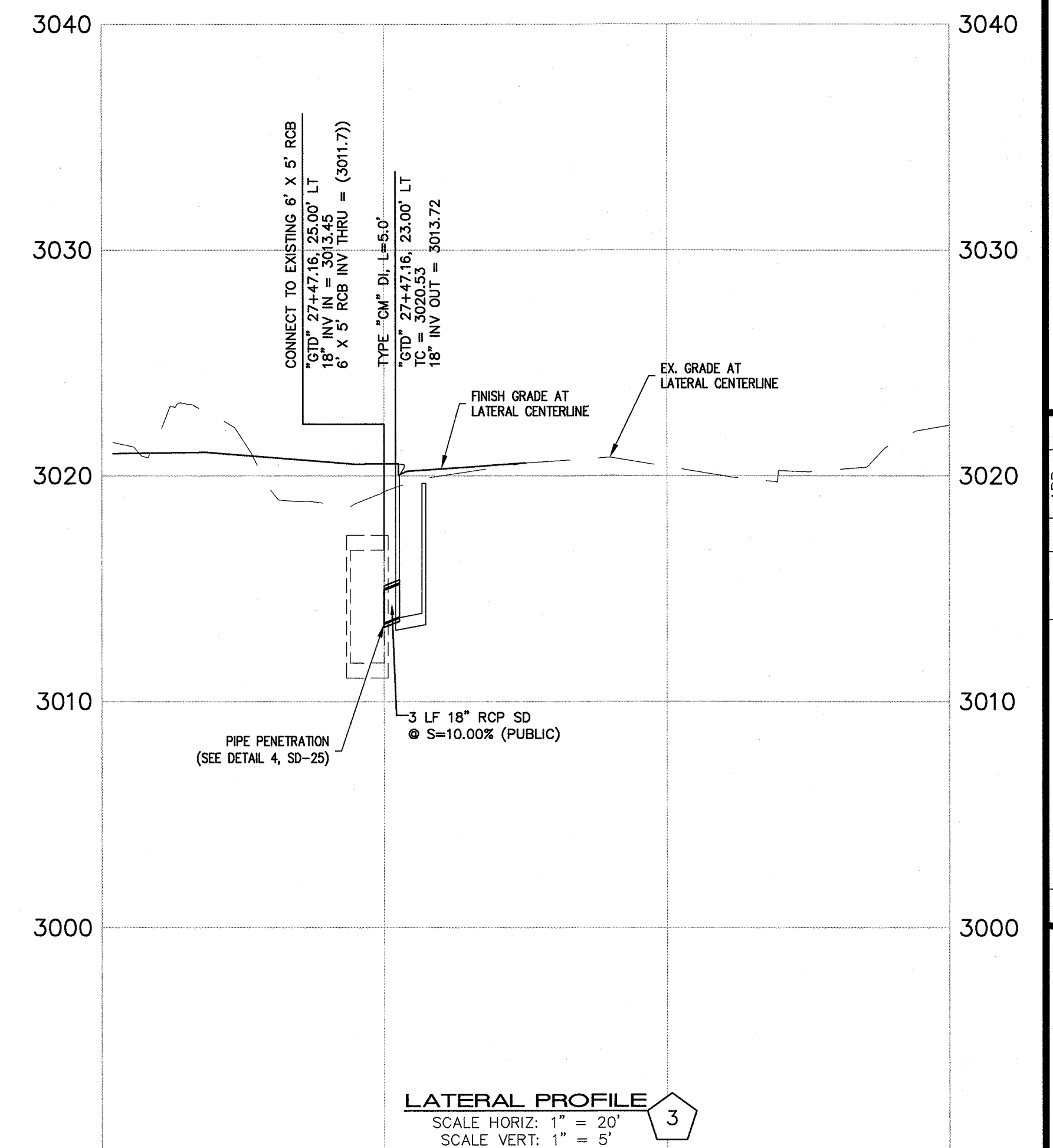
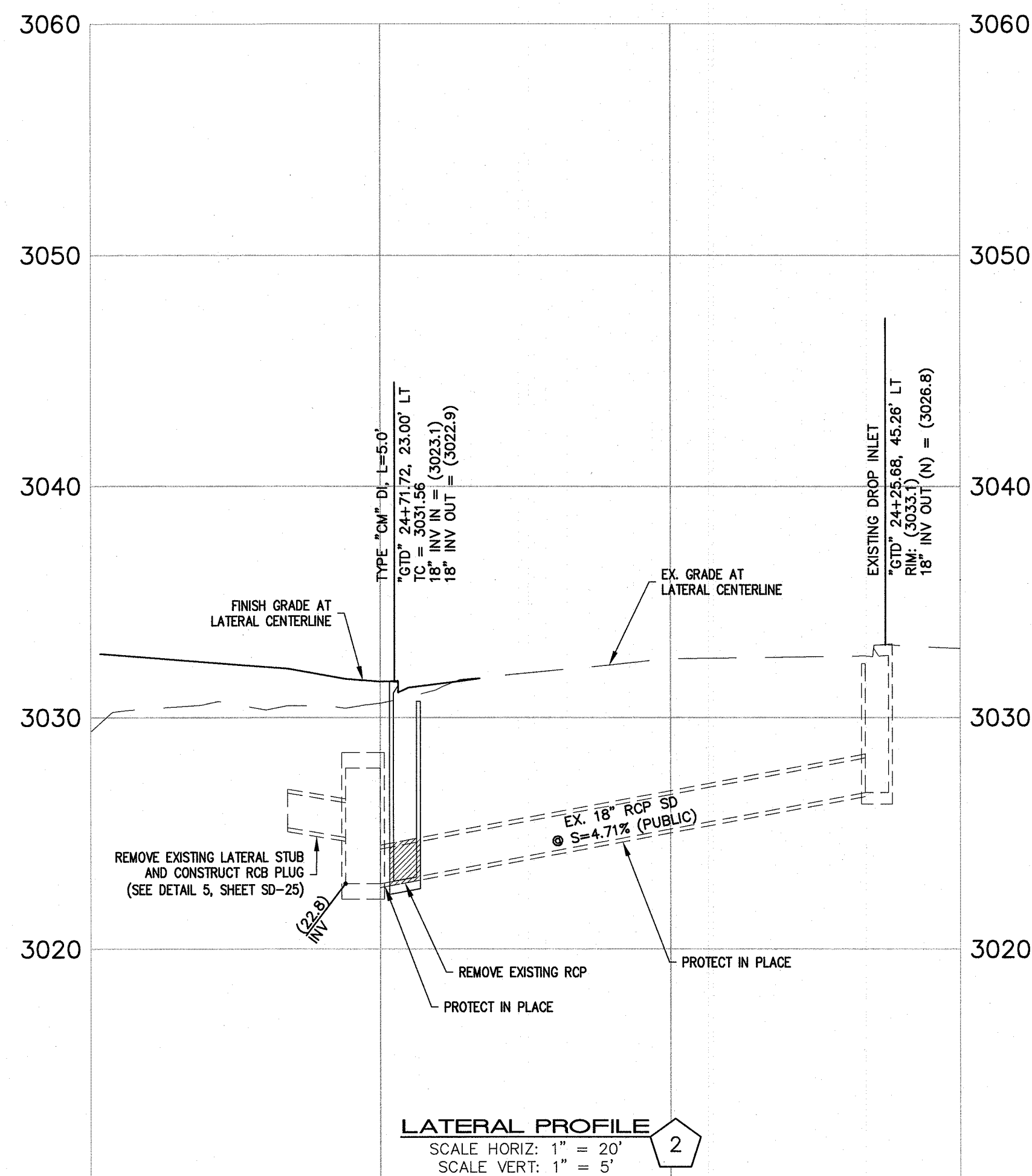
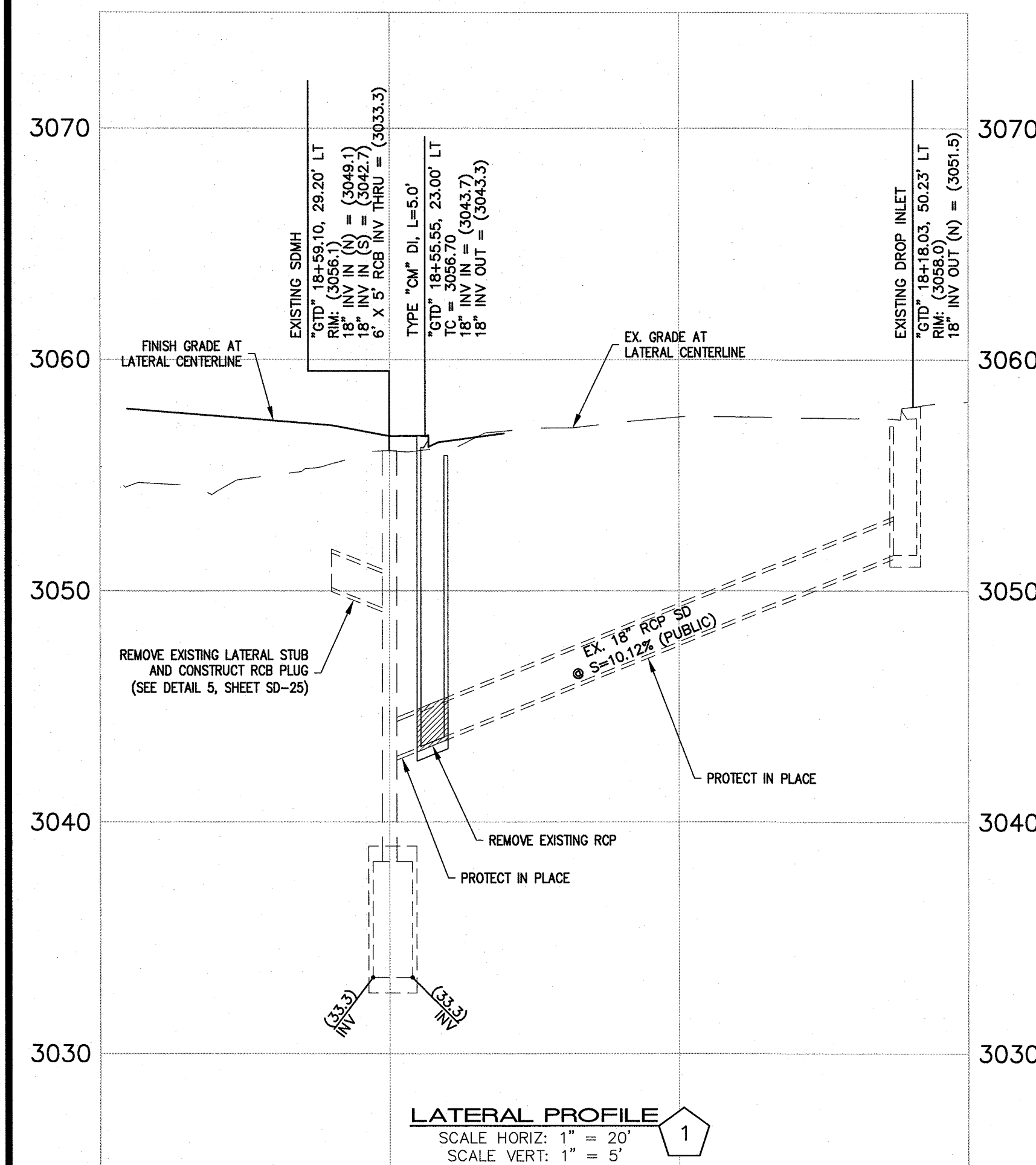
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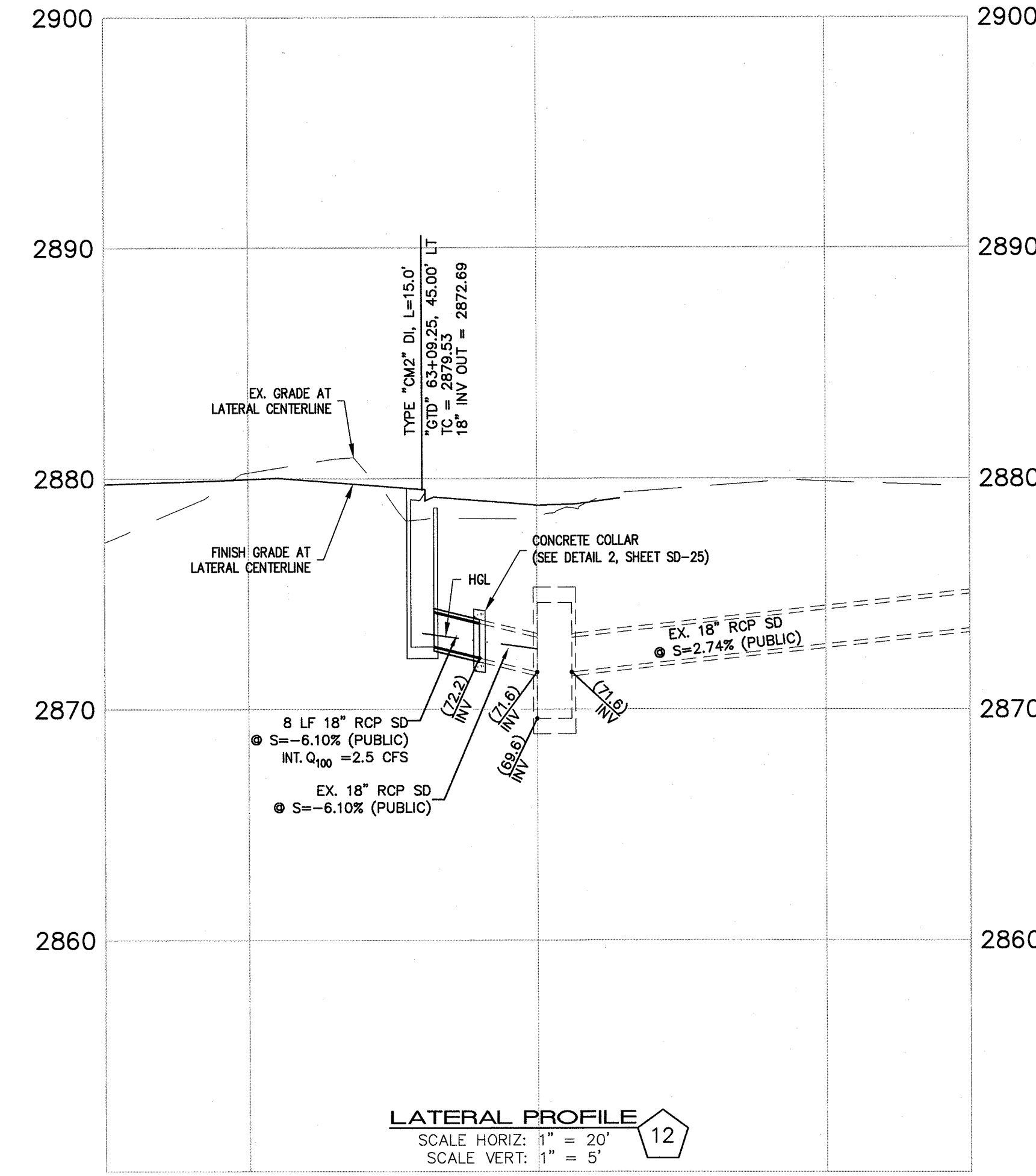
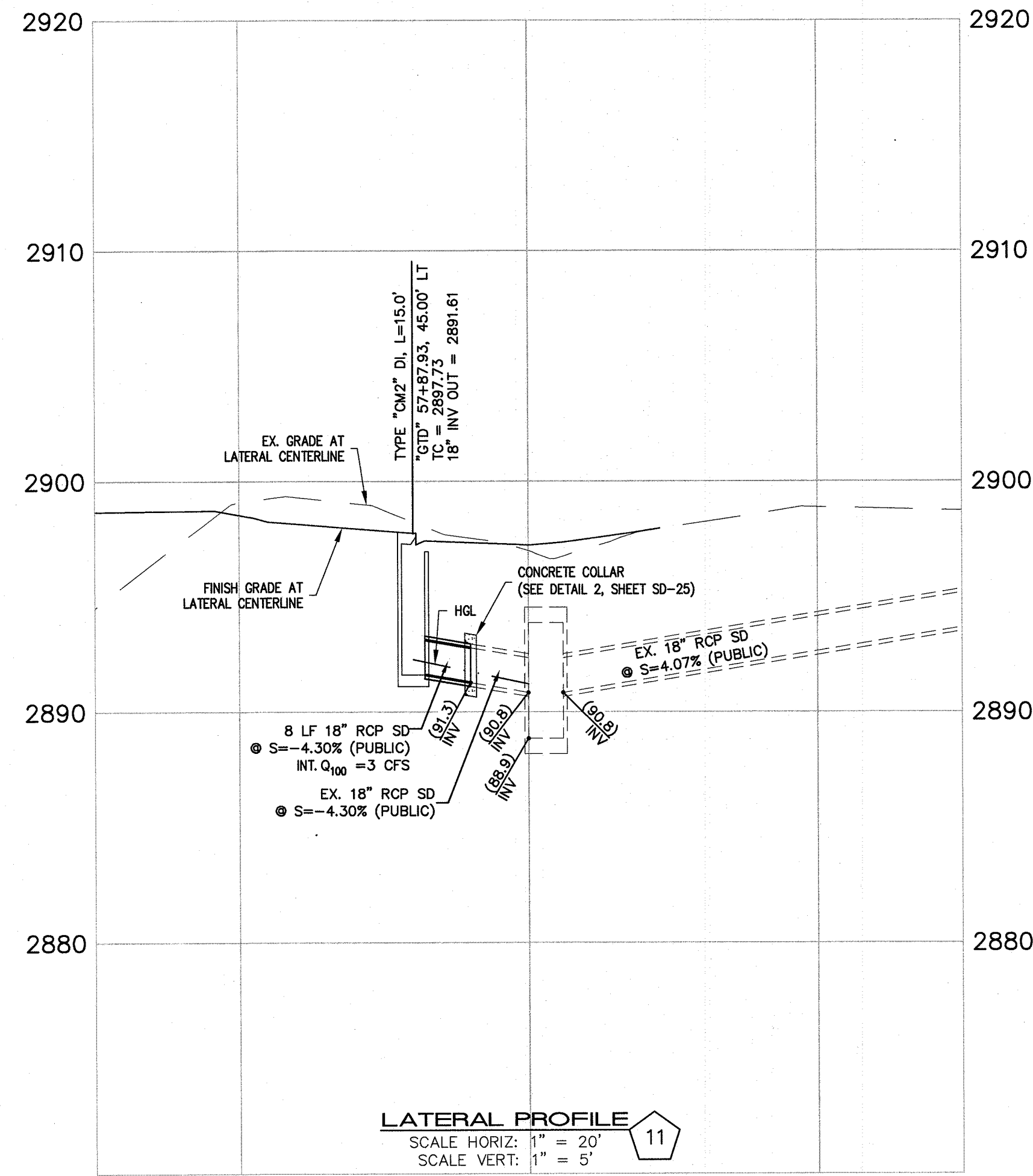
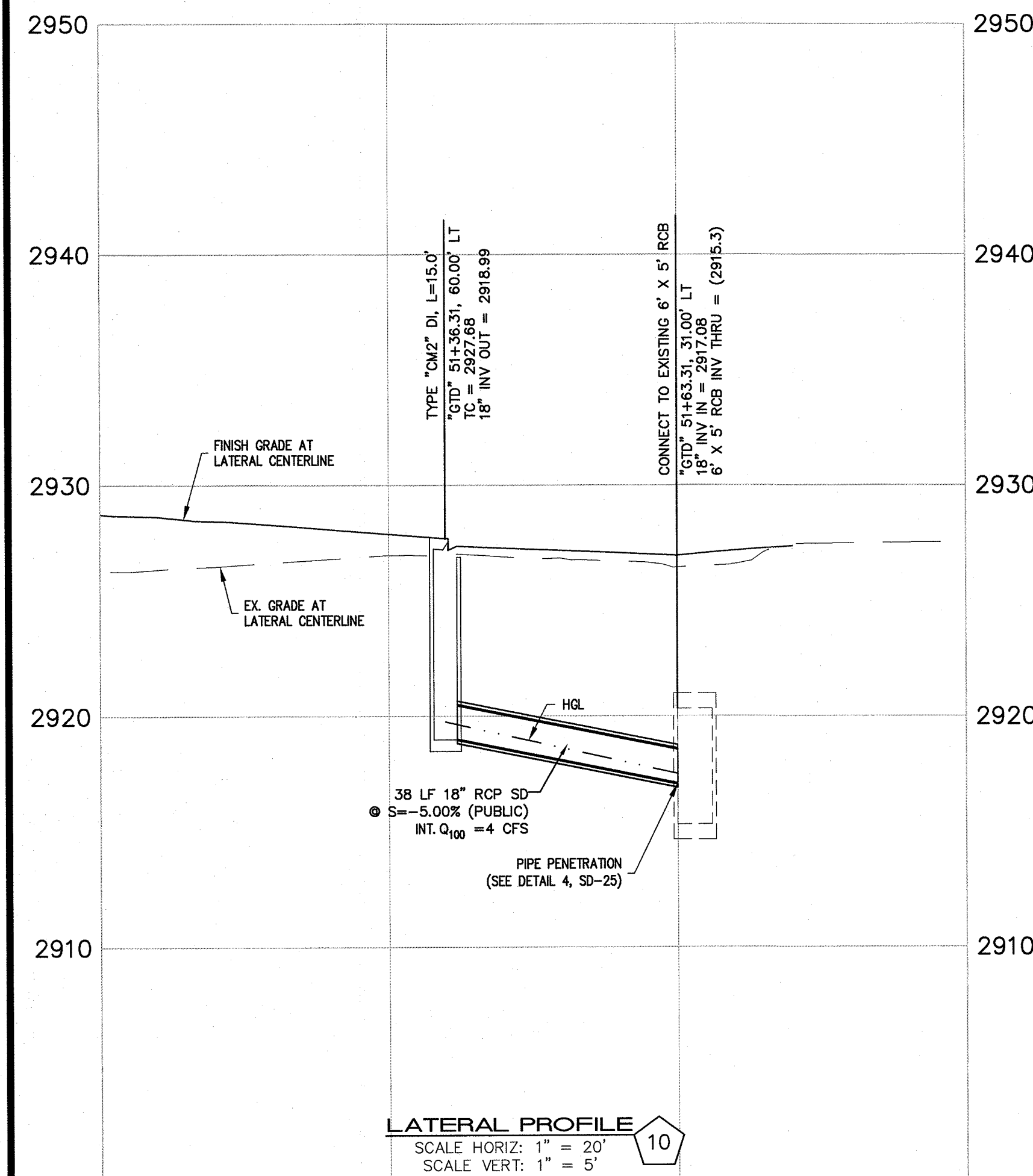
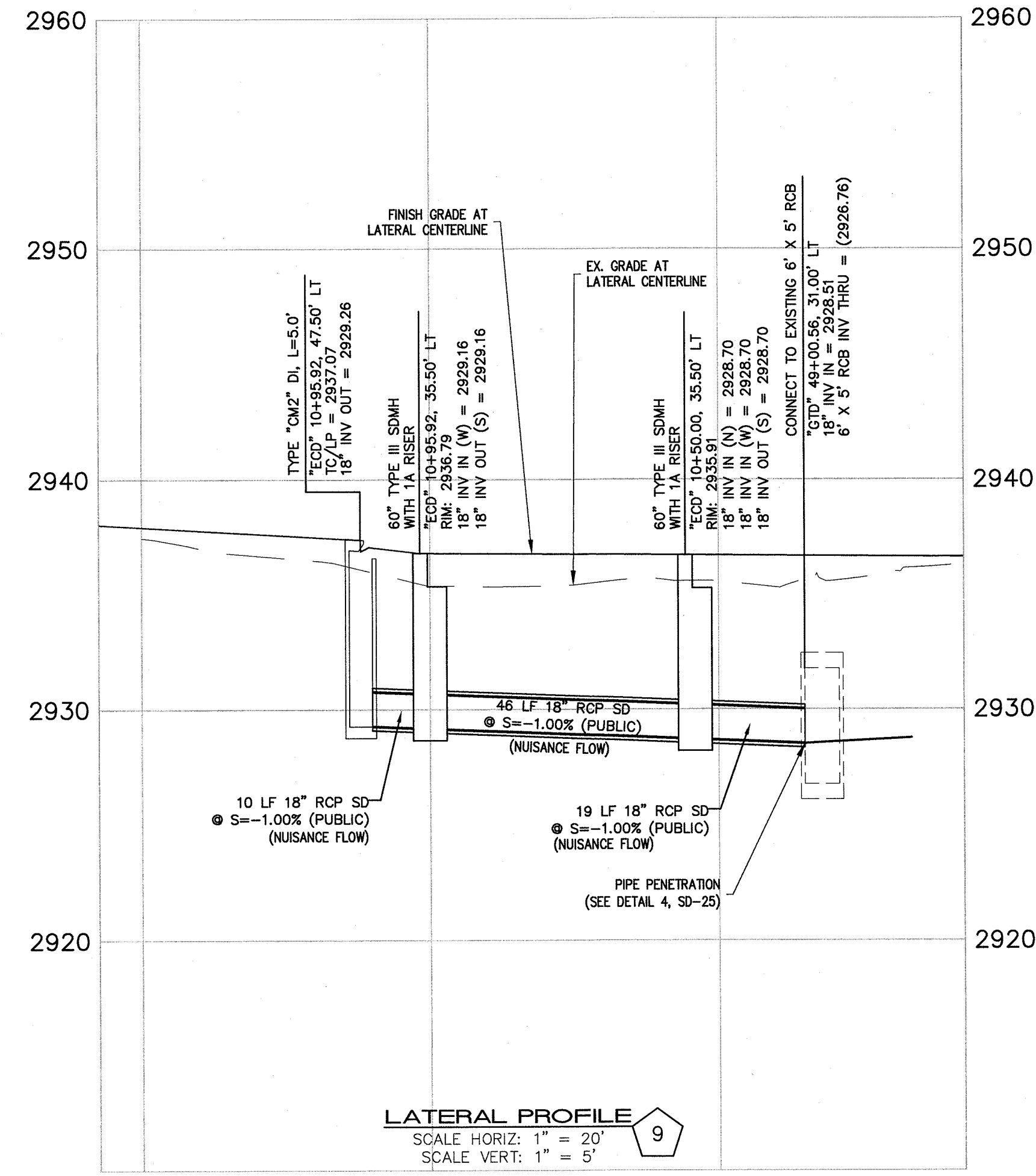
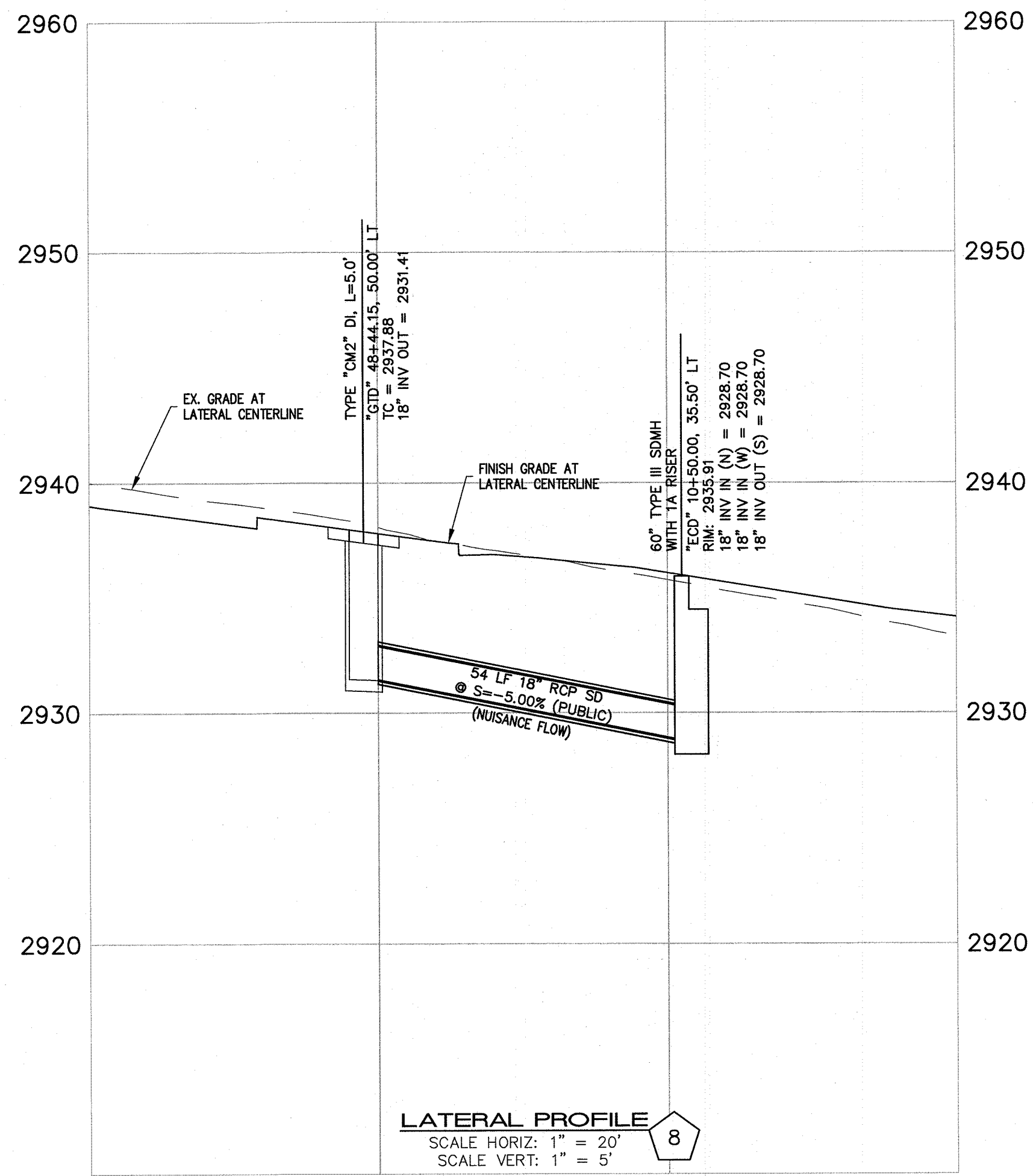
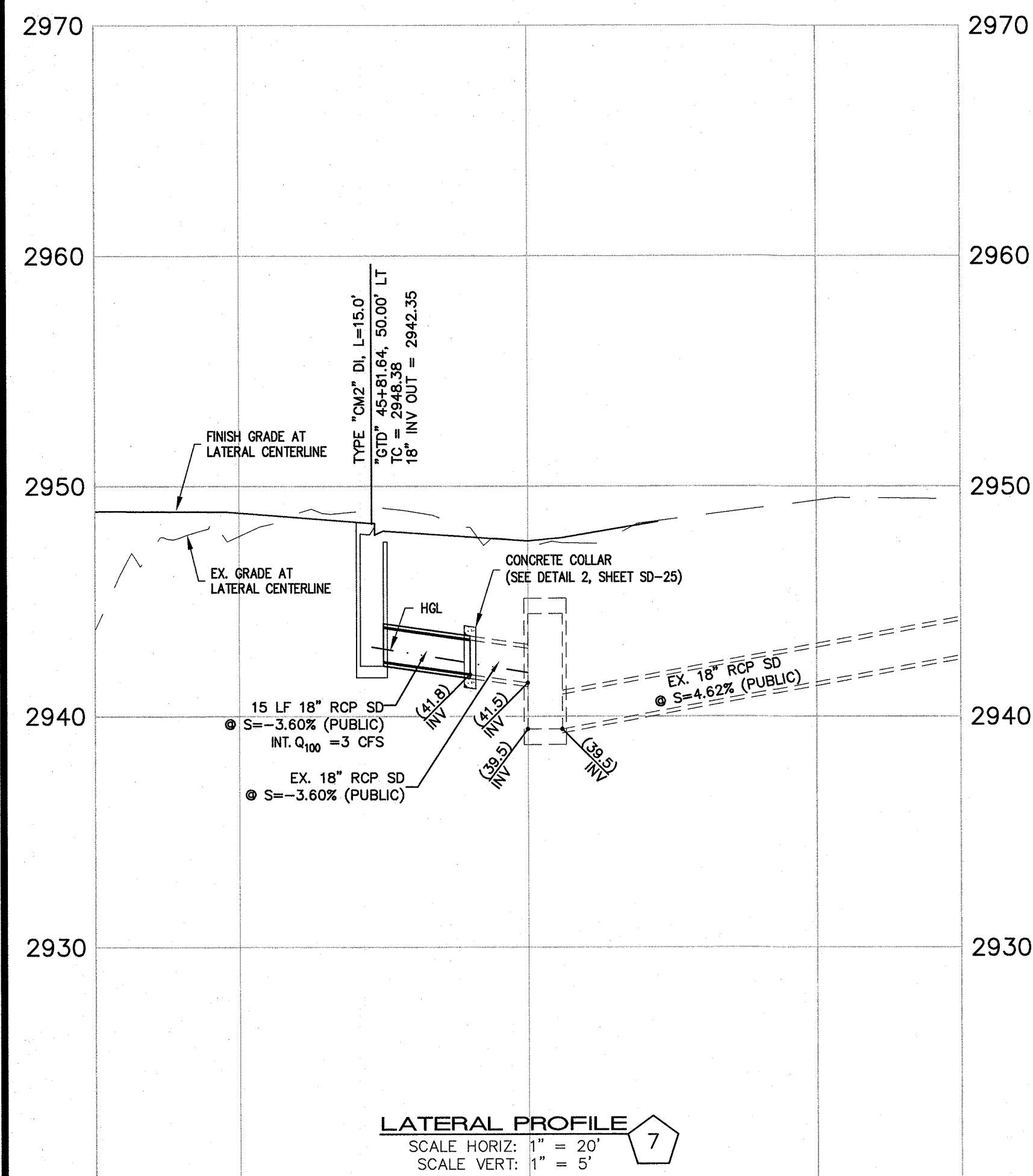
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SD-18

SHEET 21 OF 33

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SLATER
HANIFAN
GROUP

CONSULTING ENGINEERS & PLANNERS

5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118

PHONE (702) 284-5300

DATE: 11/19/15

DRAFTER: JAS

DESIGNER: DAM

CHECKED: JSR

PROJECT NO.
OLY1501-001

JERRY
SLATER
5% 04/04/2016
CIVIL
No. 1416

11/19/15

SD-21

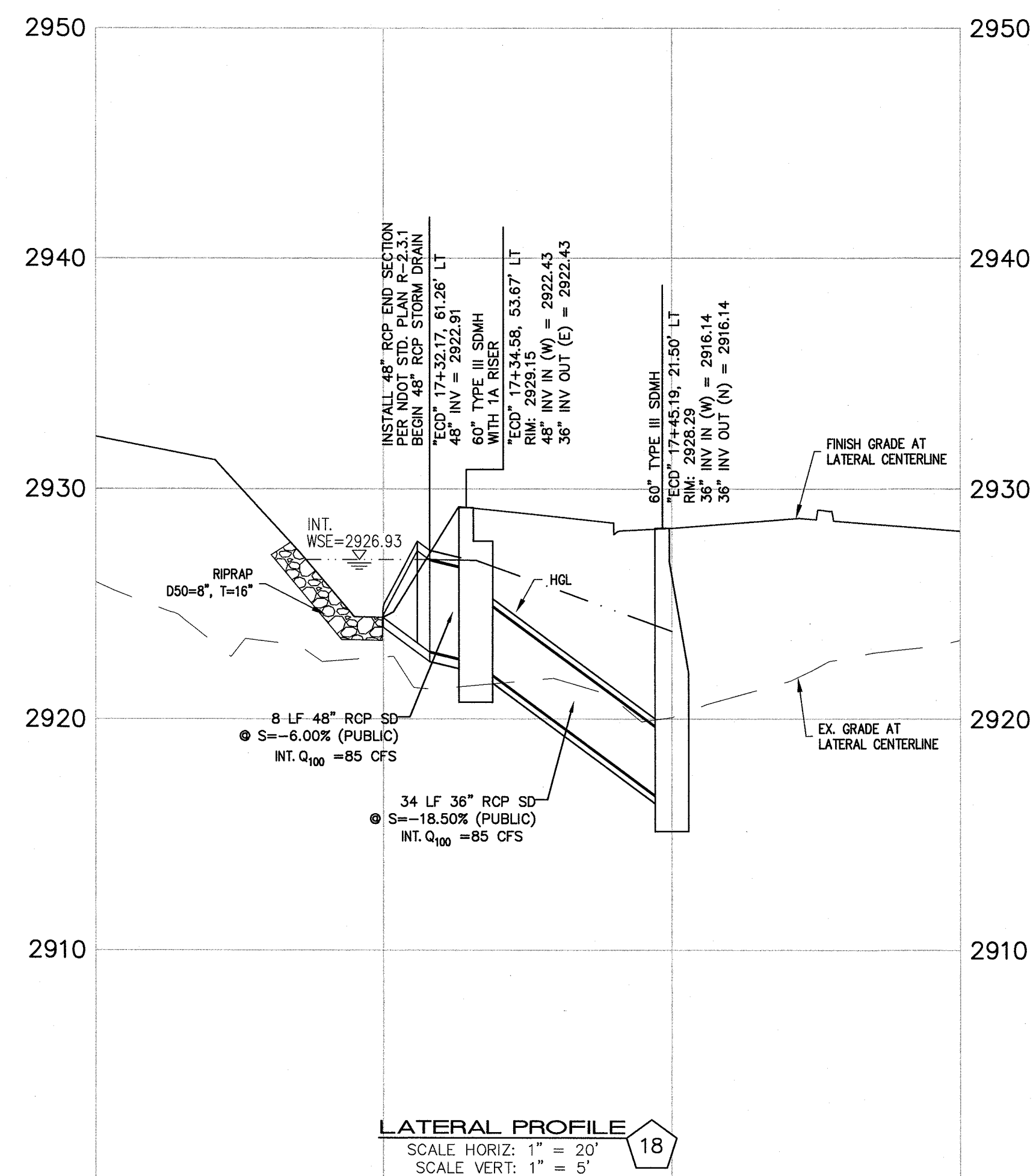
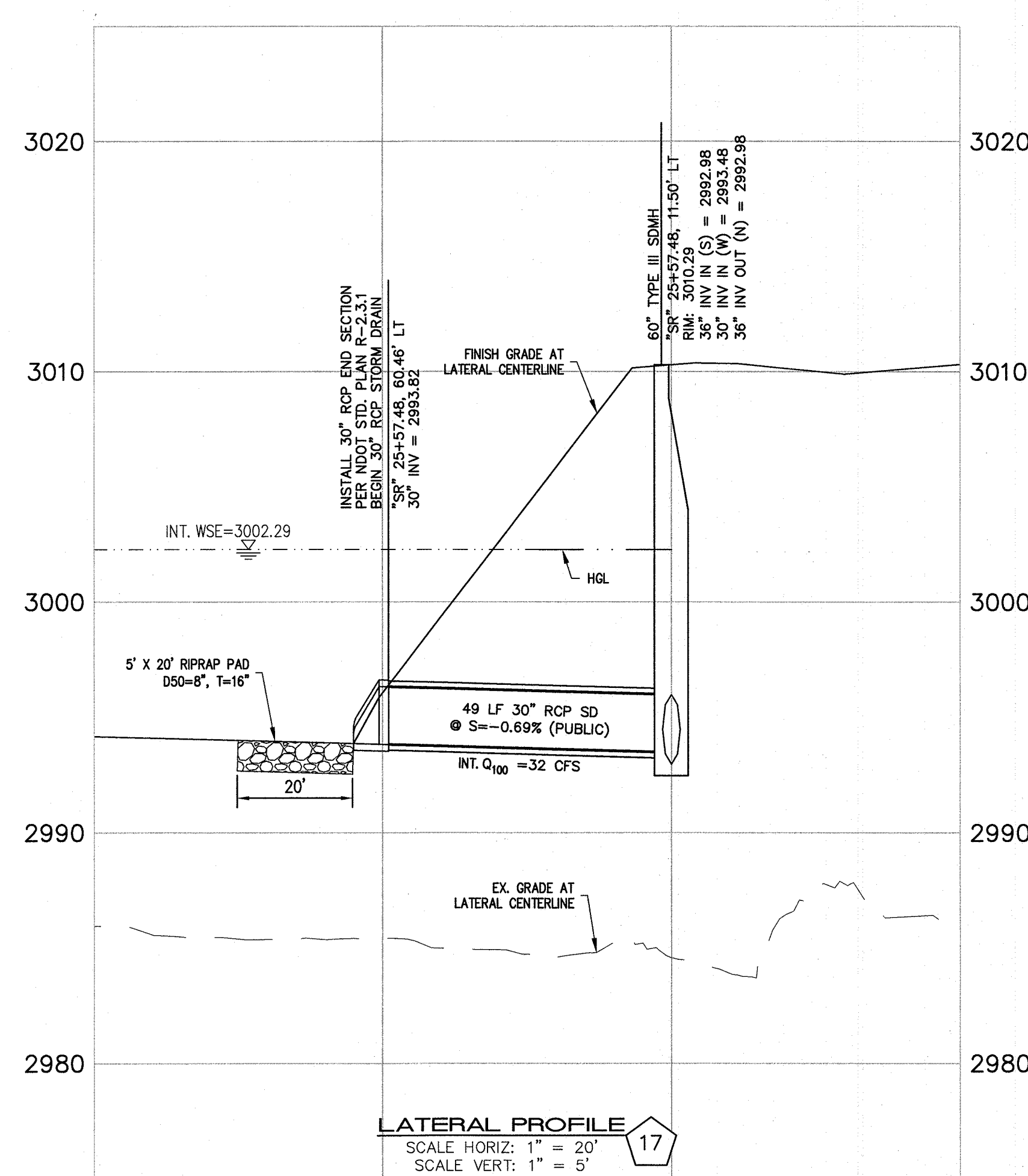
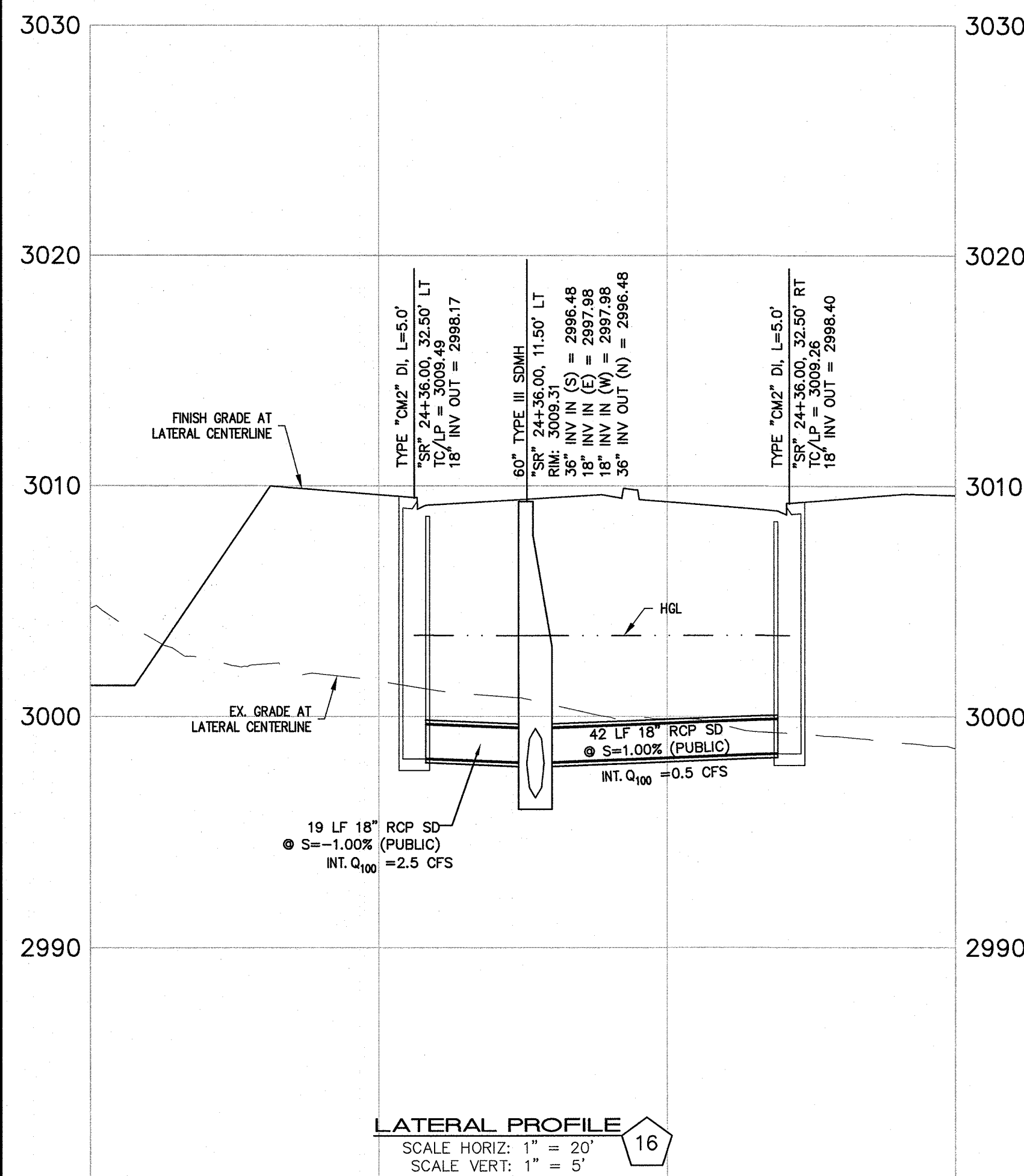
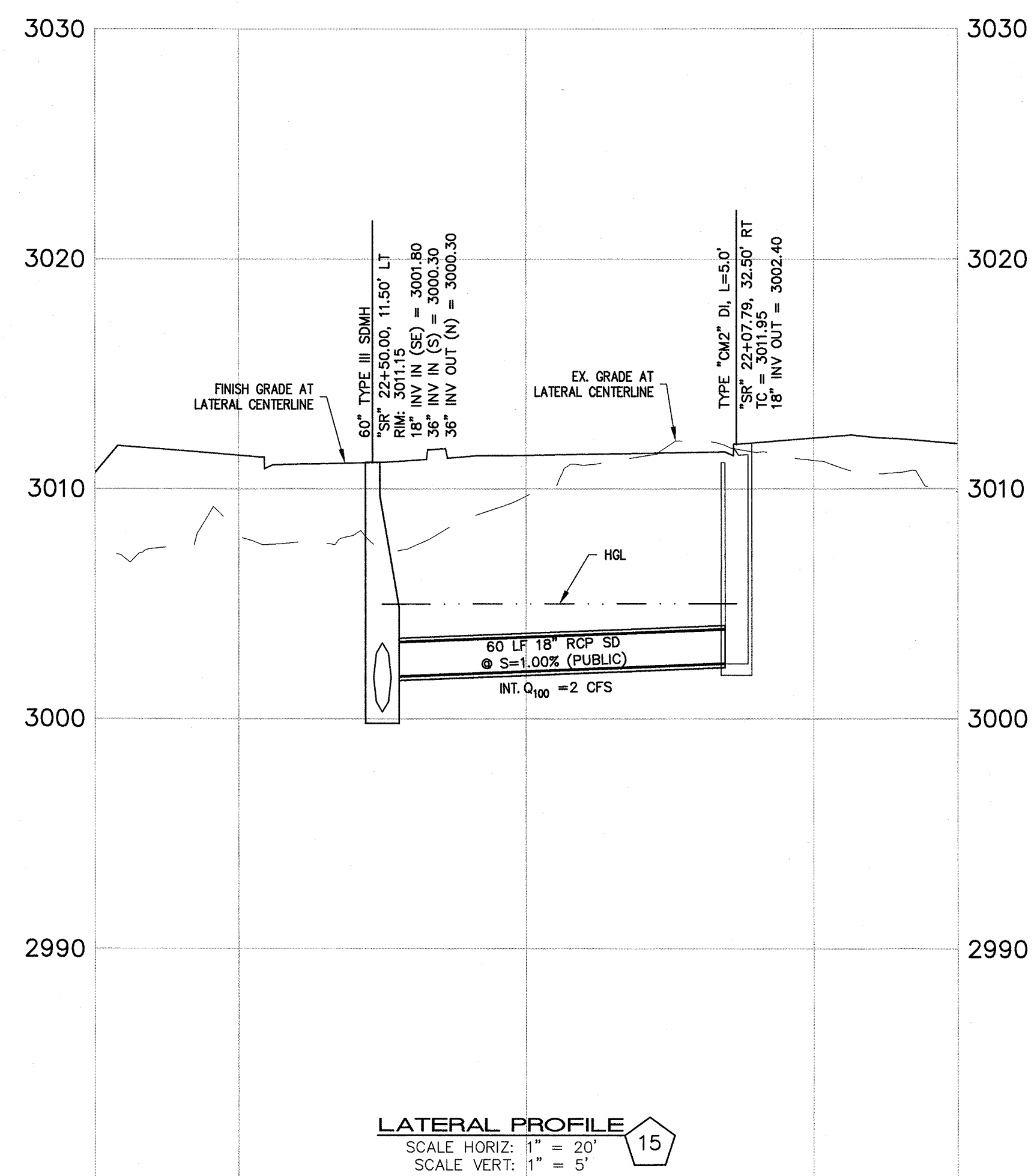
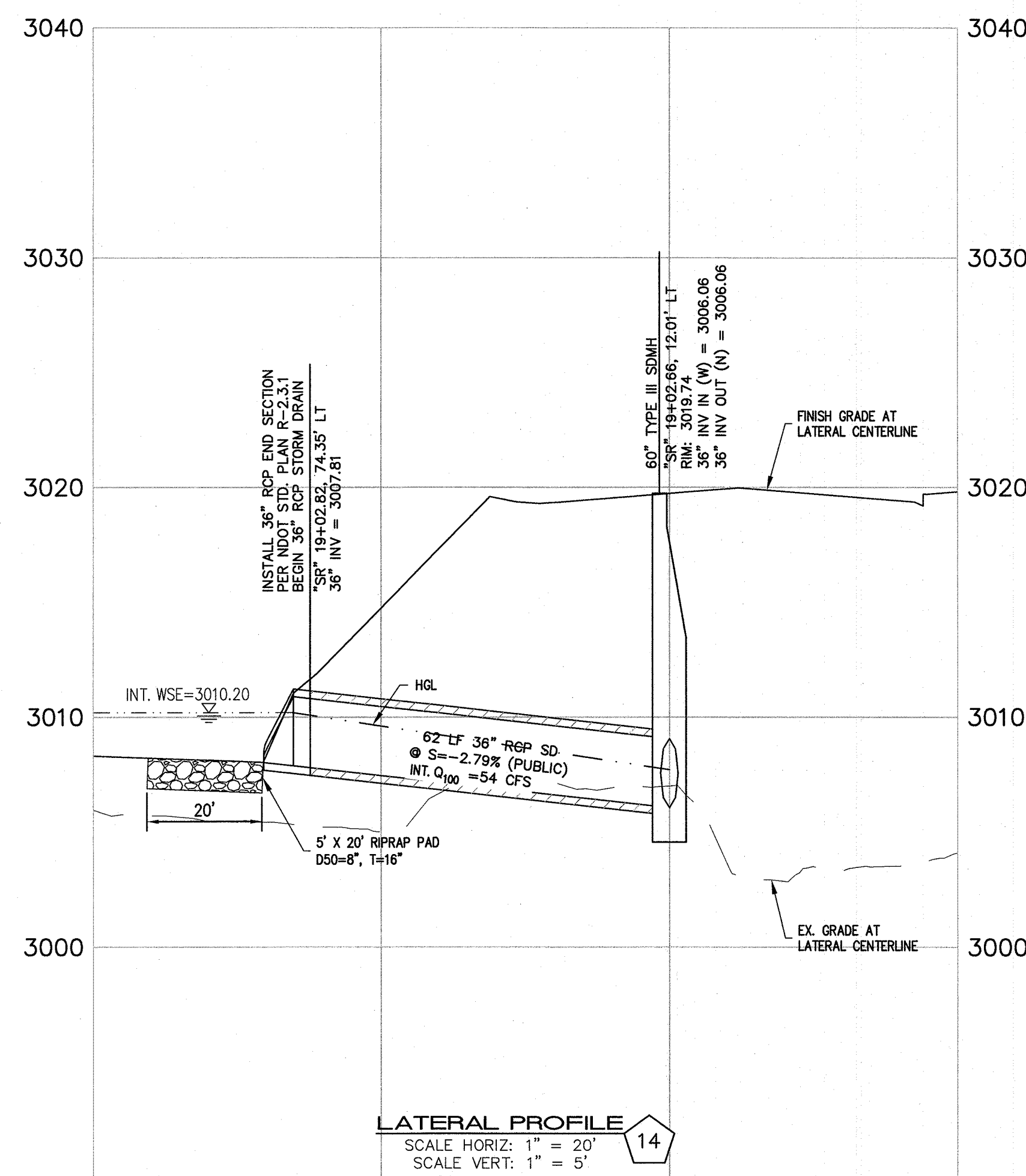
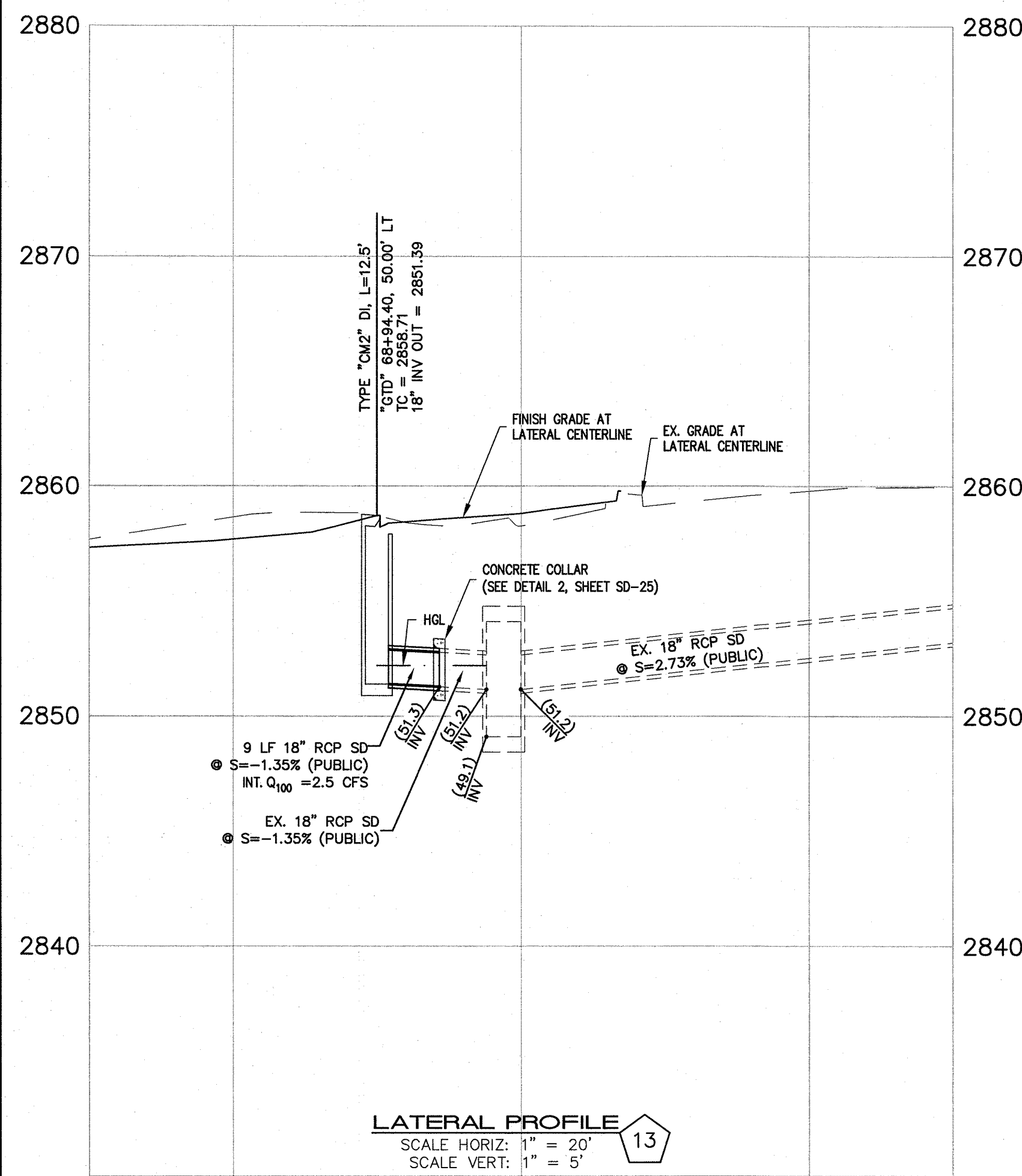
SHEET 24 OF 33

NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2

STORM DRAIN LATERAL PROFILES

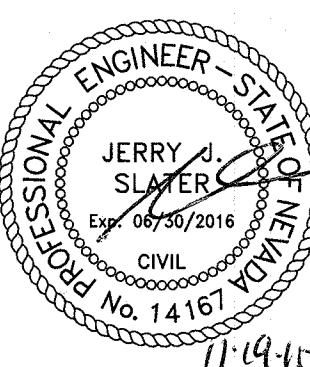
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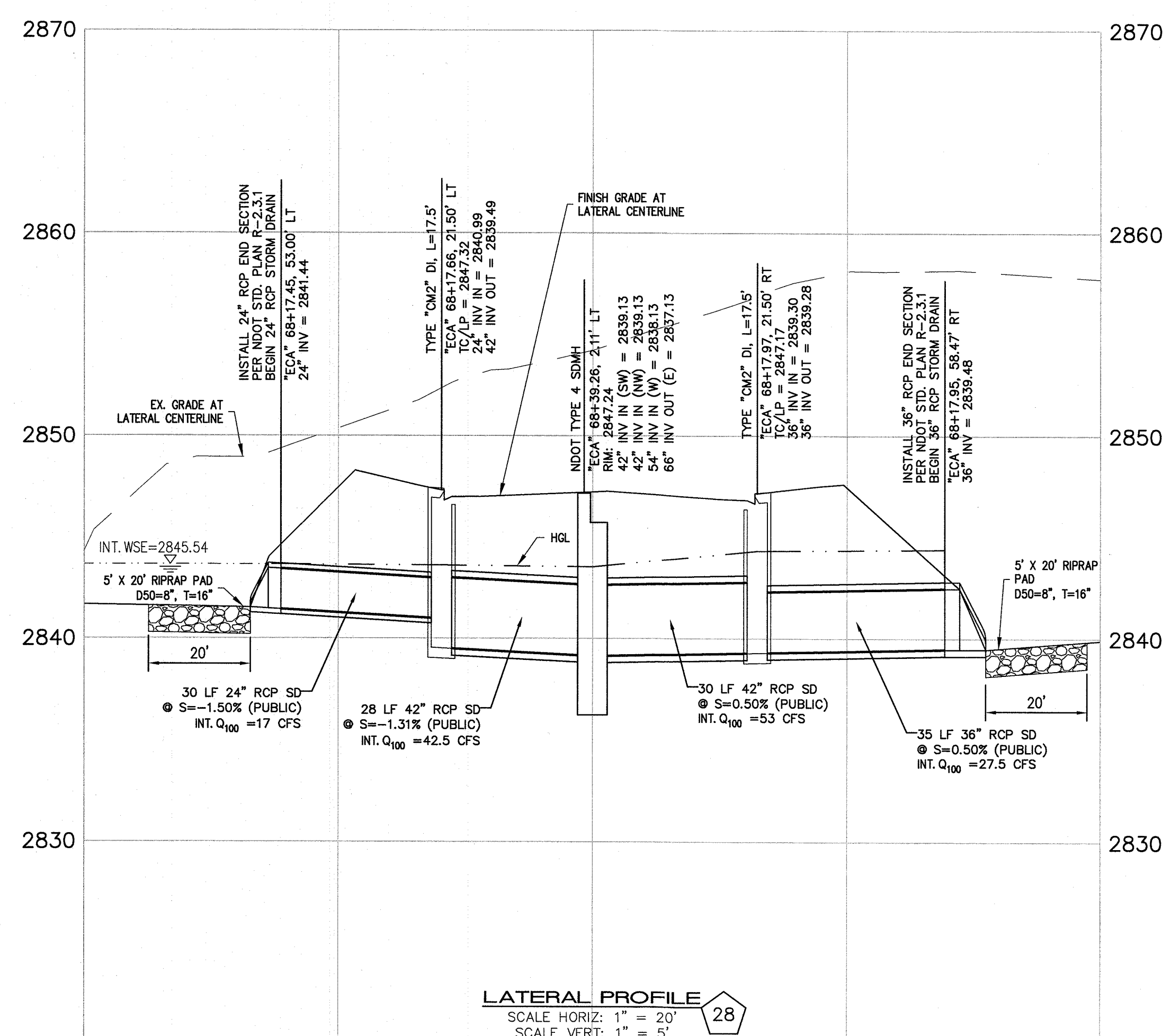
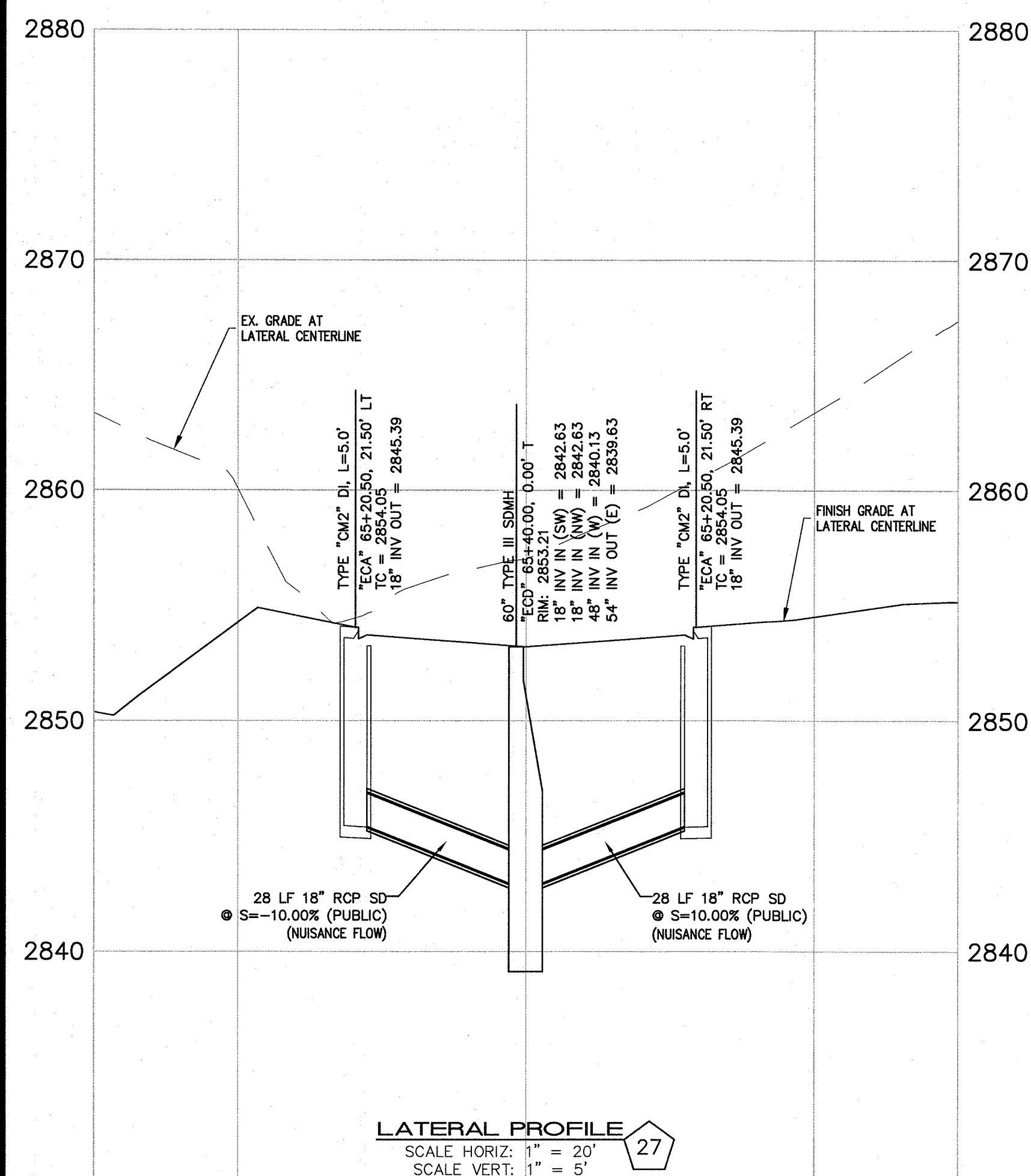
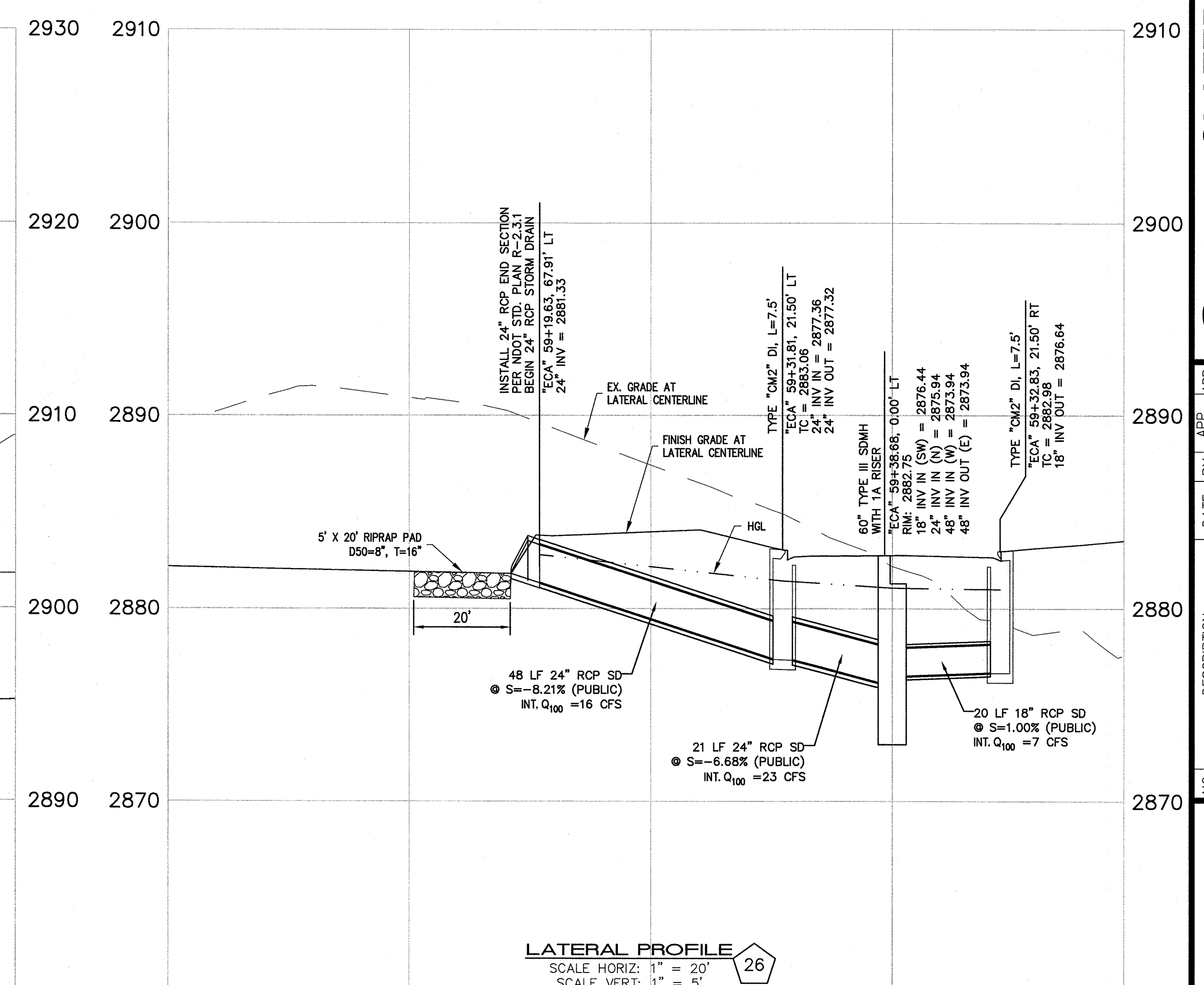
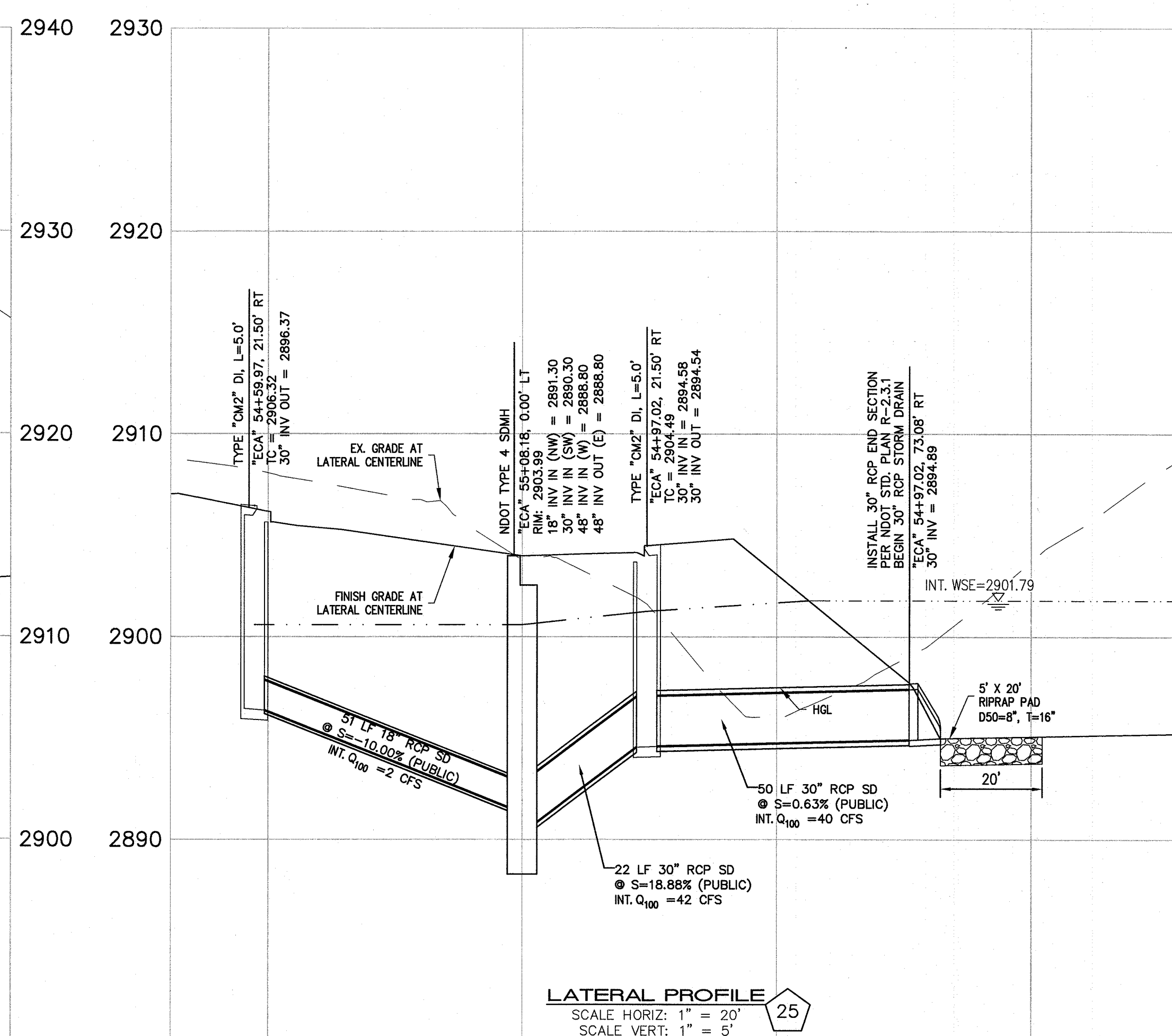
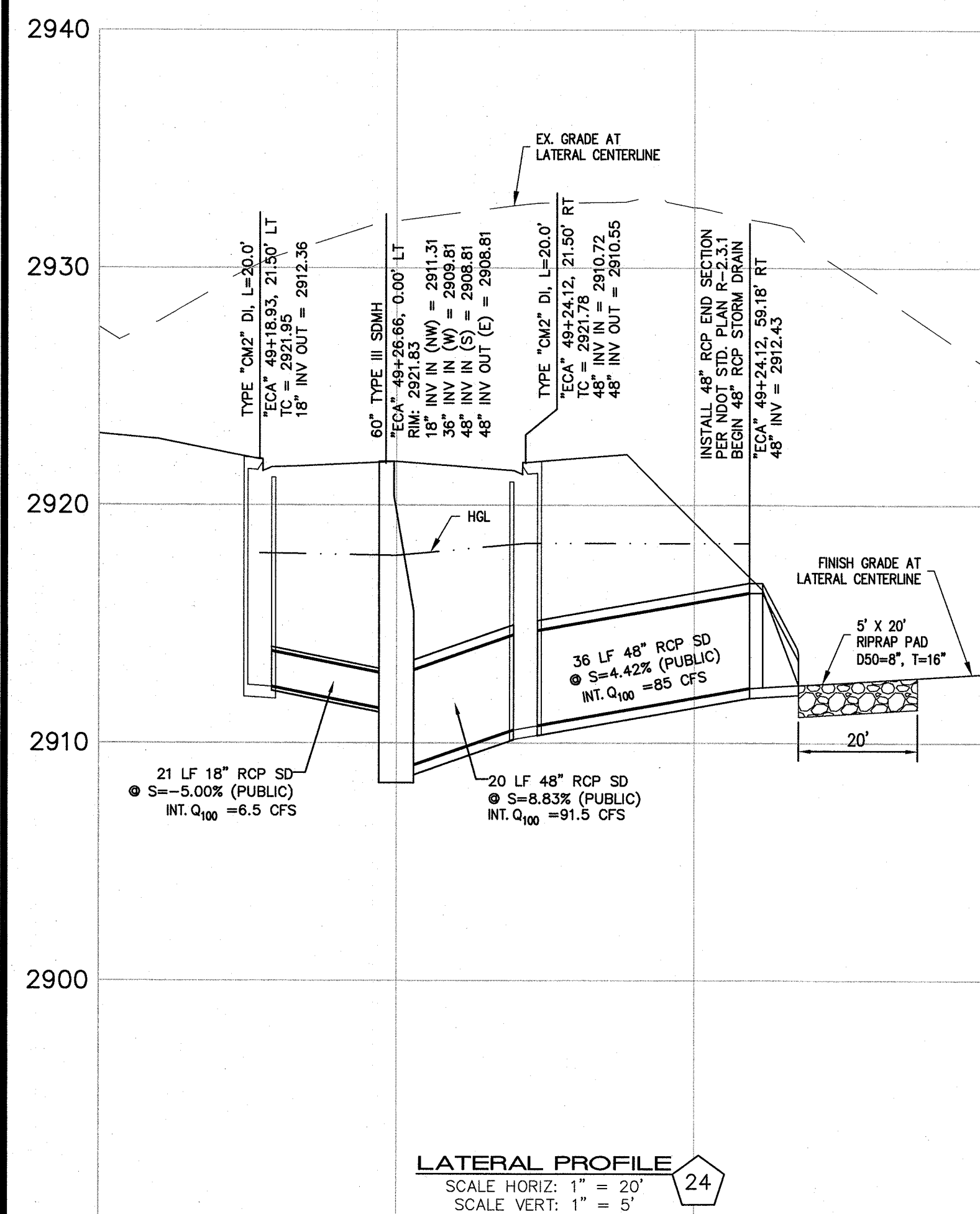


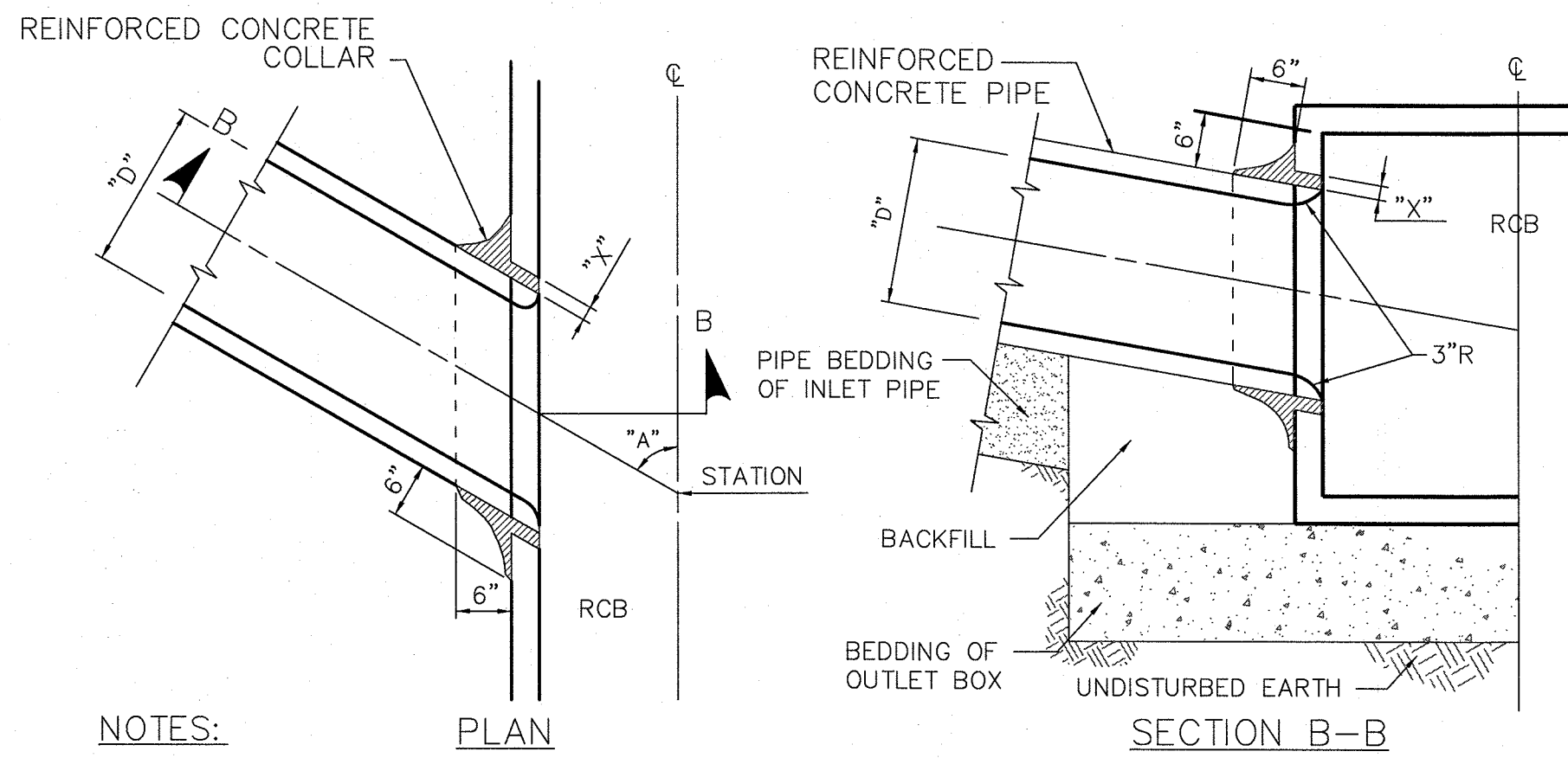
NO.	DESCRIPTION	DATE	BY	APP.

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
STORM DRAIN LATERAL PROFILES

DATE: 11/19/15
DRAFTER: JAS
DESIGNER: DAM
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PROJECT NO.
OLY1501-001







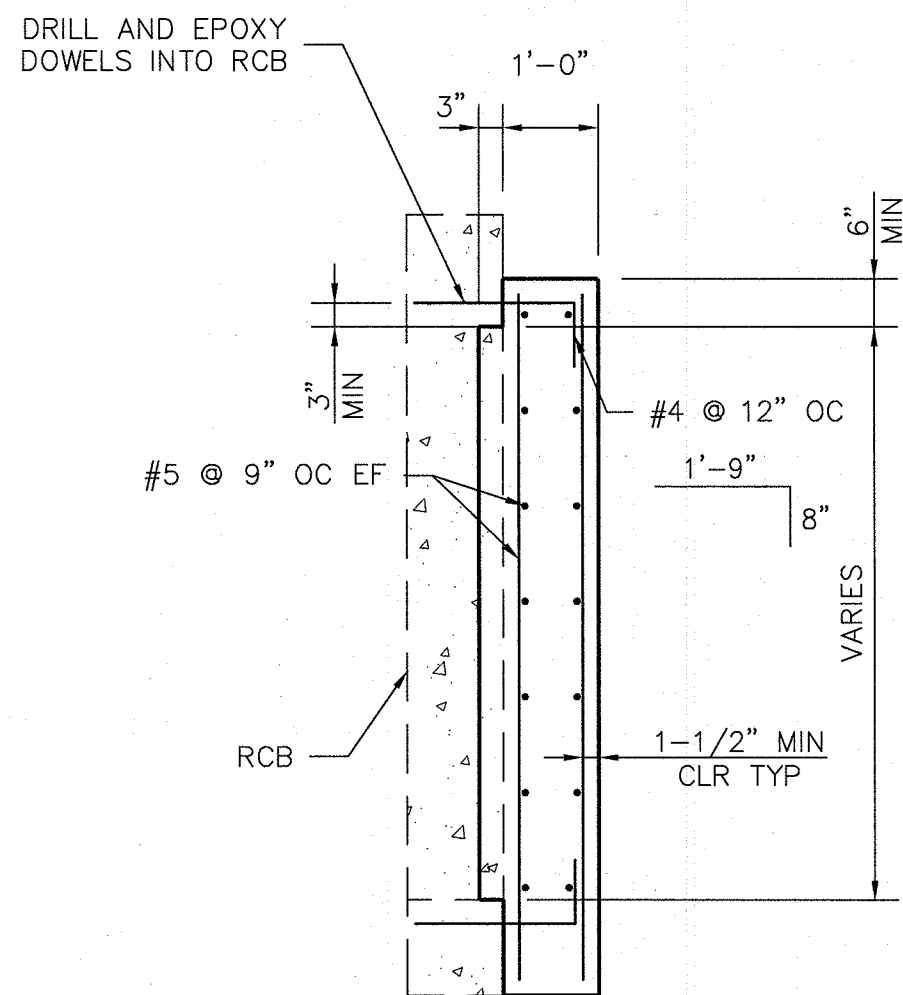
NOTES:

1. ANGLE "A" SHALL BE BETWEEN 45° AND 90°.
2. DIMENSION "D" SHALL BE EQUAL TO OR LESS THAN 1/2 THE INSIDE DIMENSION OF THE MAINLINE BOX.
3. DIMENSION "X" SHALL BE 1" MINIMUM AND 3" MAXIMUM.
4. BURN OR CHIP END OF INLET PIPE FLUSH WITH INNER SURFACE OF MAINLINE. ROUND EDGES OF MAINLINE AND INLET PIPE.

RCP TO RCB PIPE PENETRATION DETAIL
(TO BE STRUCTURALLY DESIGNED)

NOT TO SCALE

4
SD-26



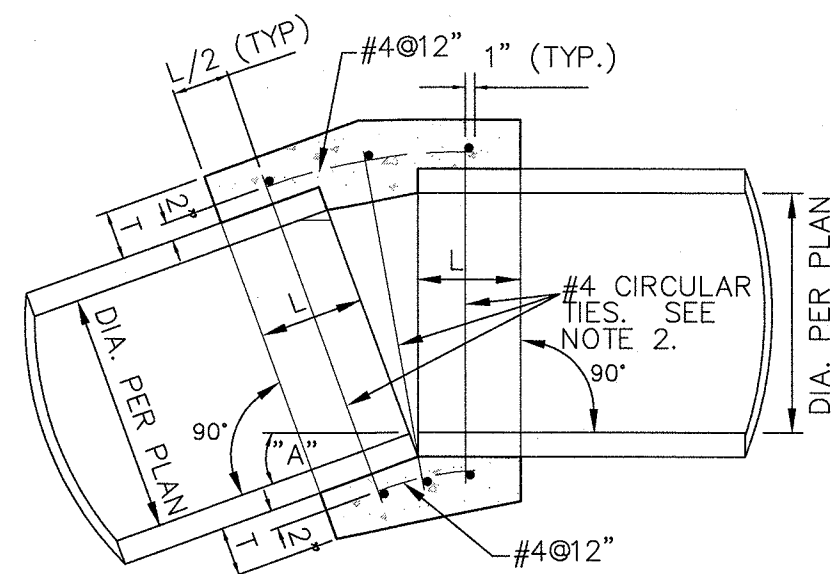
NOTES:

1. PRECAST RCB PLUG IS AN ACCEPTABLE ALTERNATIVE TO A CAST-IN-PLACE PLUG. PRECAST PLUG SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
2. EPOXY SHALL BE SIMPSON SET ANCHORING ADHESIVE PER ICC ESR-1772 OR EQUAL.

RCB PLUG

NOT TO SCALE

5
SD-26



PLAN

NOTES:

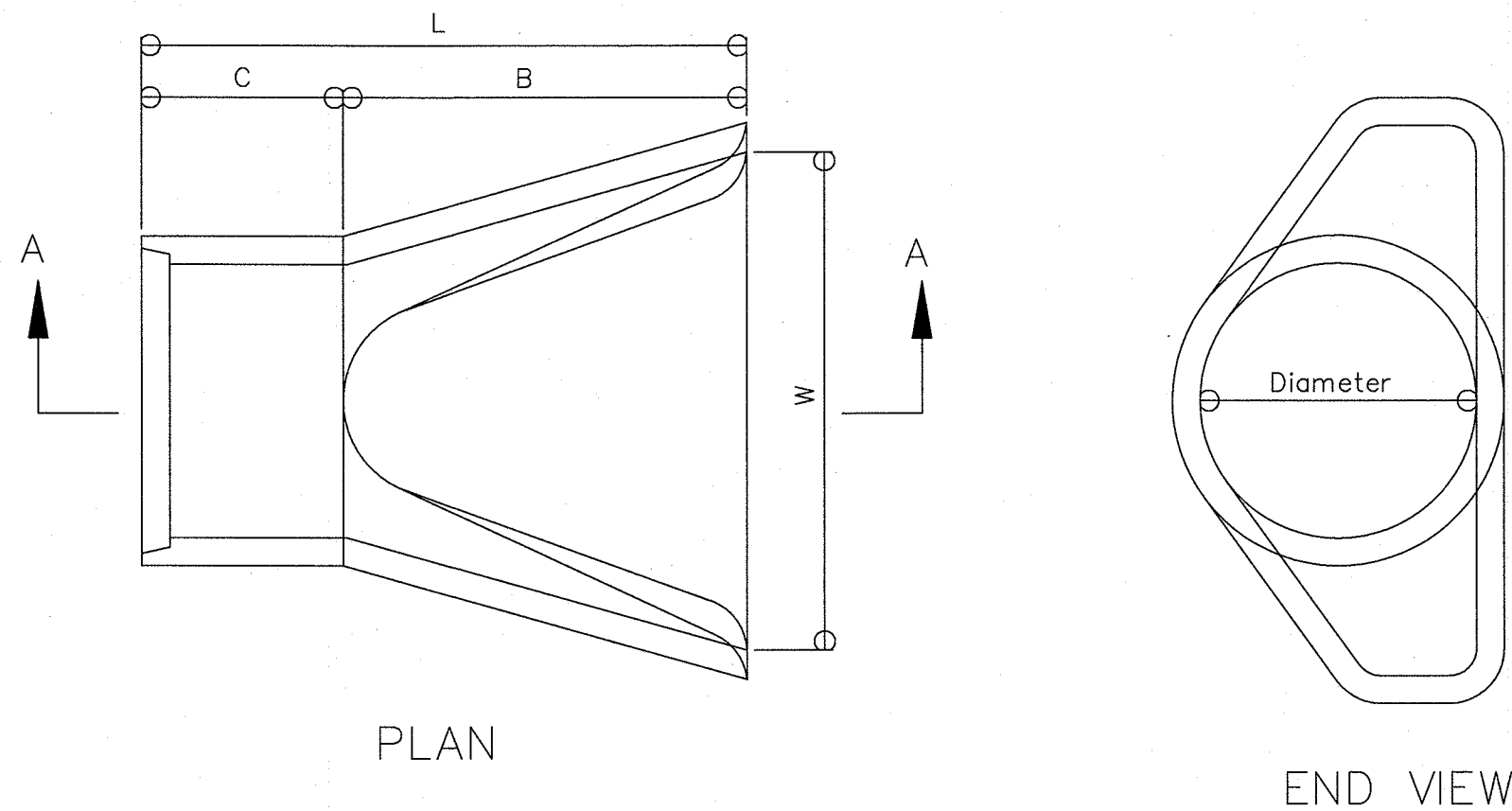
1. WHERE THE SLOPE OF THE UPSTREAM PIPE IS GREATER THAN THE SLOPE OF THE DOWNSTREAM PIPE, JOIN SOFFITS. WHERE THE SLOPE OF THE UPSTREAM PIPE IS LESS THAN THE SLOPE OF THE DOWNSTREAM PIPE, JOIN INVERTS.
2. WHERE THE SPACE BETWEEN THE PIPE EXTREMITIES EXCEEDS 2 1/2 INCHES, THE NUMBER OF CIRCULAR TIES SHALL BE INCREASED TO MAINTAIN A MAXIMUM SPACING OF 6 INCHES CENTER TO CENTER. CIRCULAR TIES SHALL HAVE A DIAMETER 5 INCHES GREATER THAN THE OUTSIDE DIAMETER OF THE LARGER PIPE.

CIRCULAR TIES

PIPE DIAMETER	SPACE BETWEEN PIPE EXTREMITIES	NO. OF CIRCULAR TIES	L	T
18"	2 1/2"	3	12"	5"
24"	2 1/2"	3	12"	6"
30"	2 1/2"	3	12"	7"
36"	2 1/2" or less	4	18"	9"
60"	2 1/2" or less	5	21"	11"

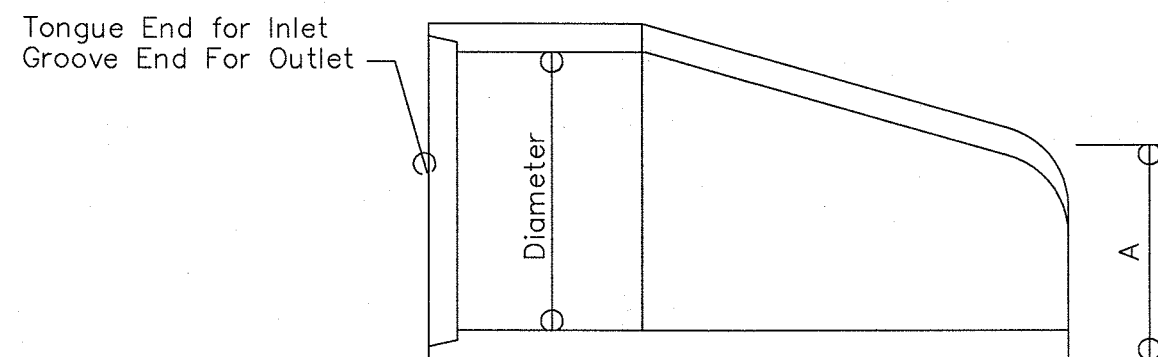
DIAMETER	WEIGHT	A	B	C *	L	W
18"	670	9"	2'-1"	2'-1"	4'-2"	3'
24"	1300	9 1/2"	3'-6"	2'-6"	6'	4'
30"	1850	1'	4'-5"	1'-8"	6'-1"	5'
36"	3500	1'-3"	5'-2"	2'-11"	8'-1"	6'
42"	4930	1'-9"	5'-3"	2'-11"	8'-2"	6'-2"
48"	6700	2'	6'	2'-2"	8'-2"	7'
54"	7150	2'-3"	5'-6"	2'-9"	8'-3"	6'-10"

* For Reference Only

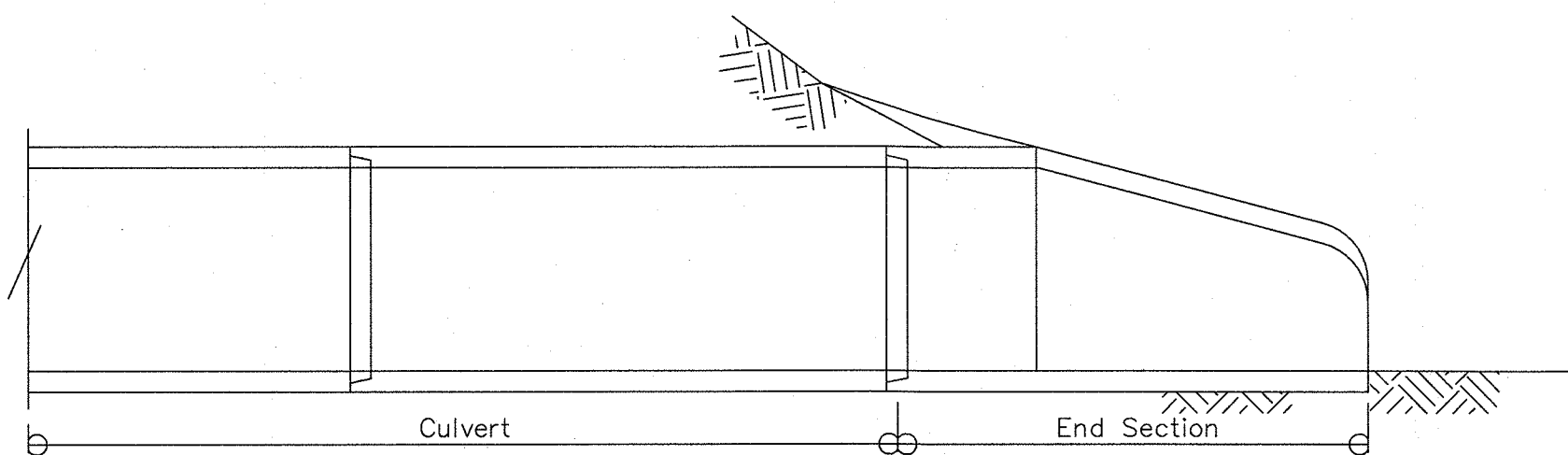


PLAN

END VIEW



SECTION A-A



CROSS SECTION VIEW
18" RCP TO 54" RCP

NDOT RCP END SECTION (NDOT R-2.3.1)

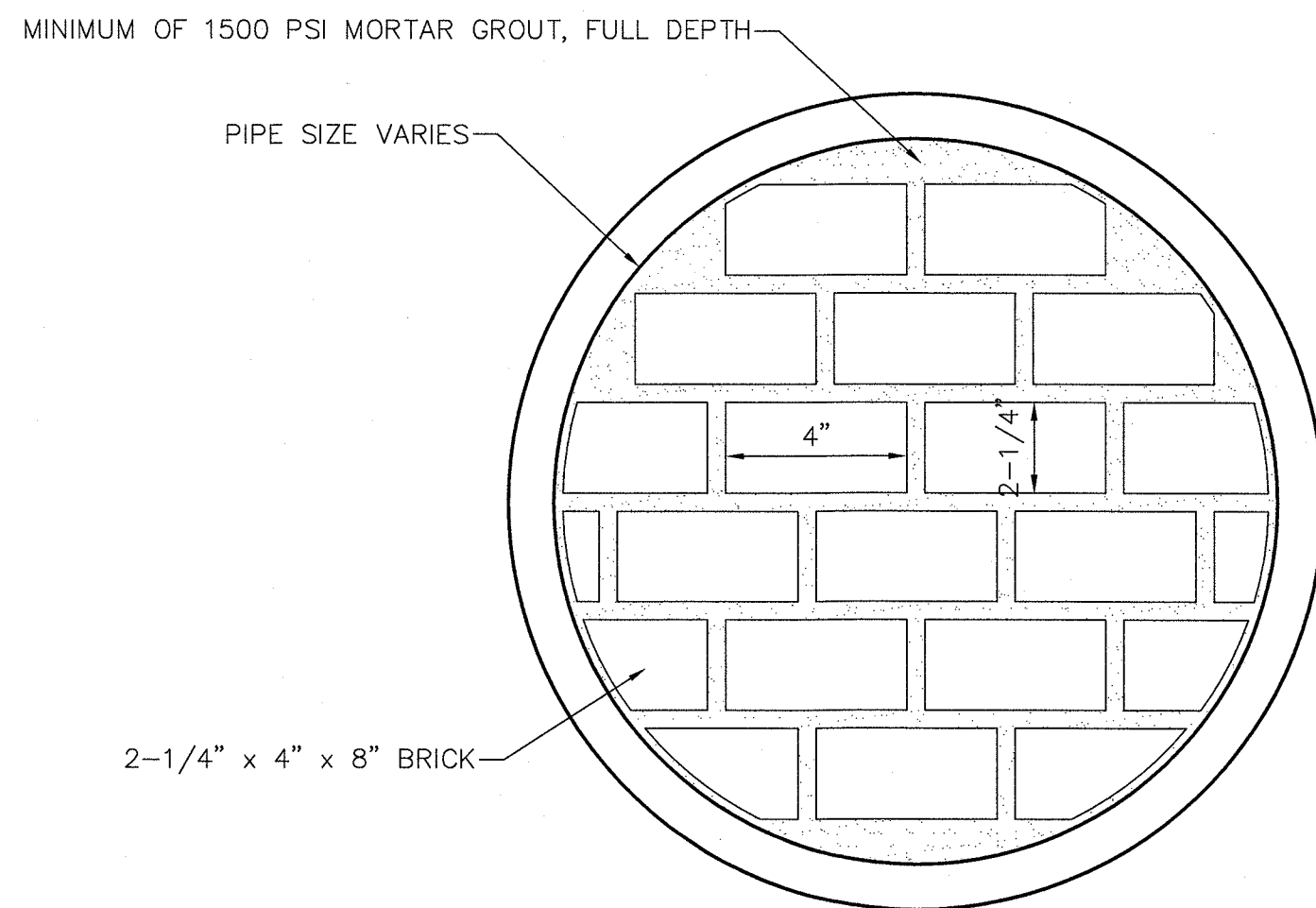
NOT TO SCALE

3
SD-26

CONCRETE COLLAR

NOT TO SCALE

2
SD-26



BRICK AND MORTAR PLUG

NOT TO SCALE

1
SD-26

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
STORM DRAIN DETAILS

DATE: 11/19/15
DRAFTER: JAS
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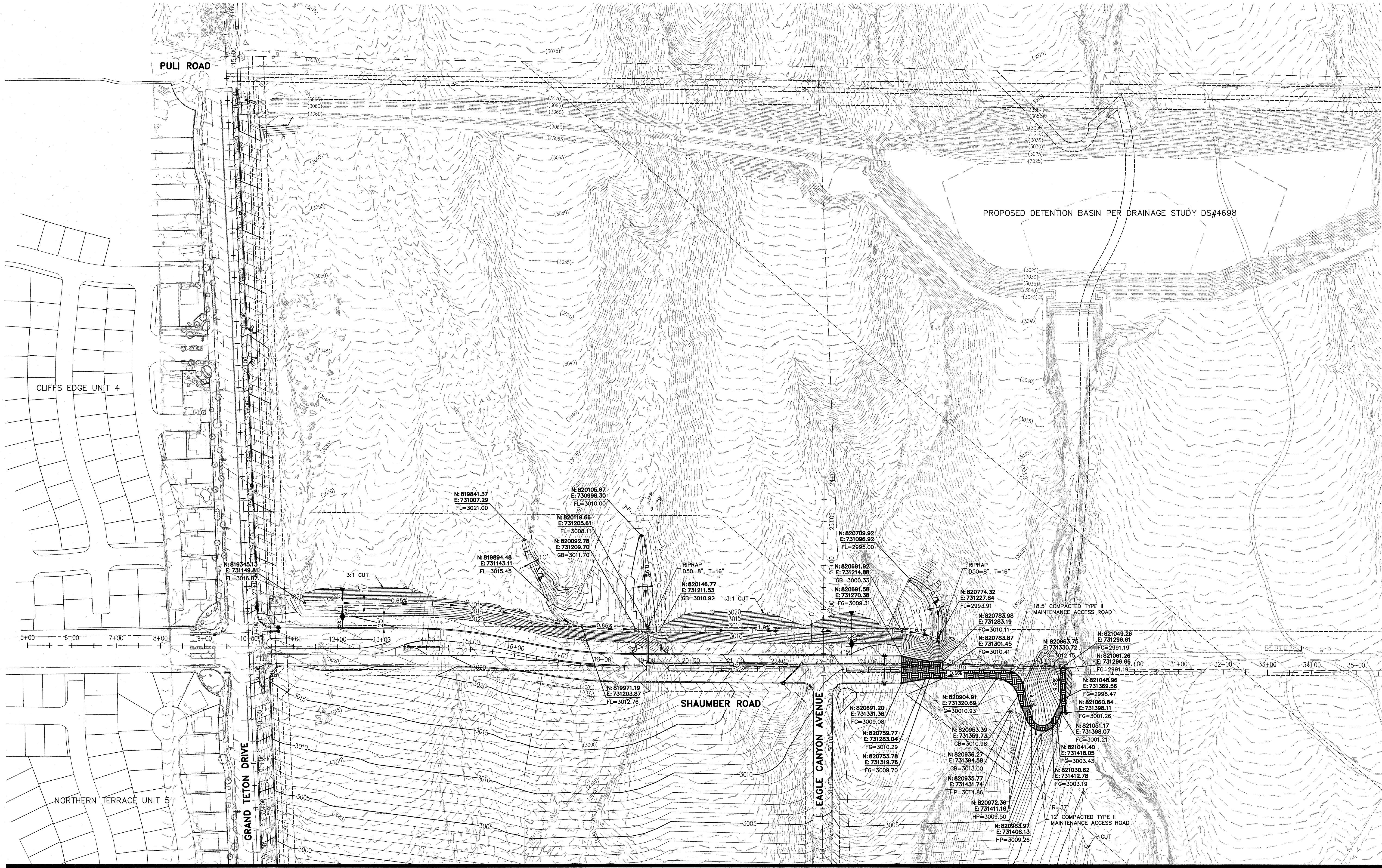
PROJECT NO.
OLY1501-001

PROFESSIONAL ENGINEER
JERRY J. SLATER
CIVIL
No. 14167
Exp. 06/30/2016

SD-26

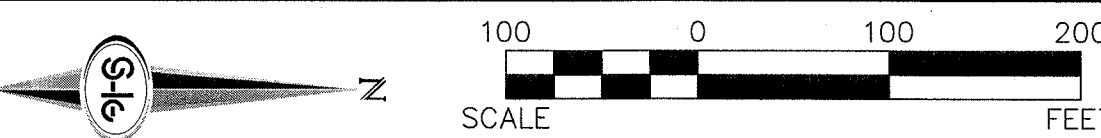
SHEET 29 OF 33

SLATER
HANIFAN
GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5398



MATCHLINE SEE SHEET GR-02

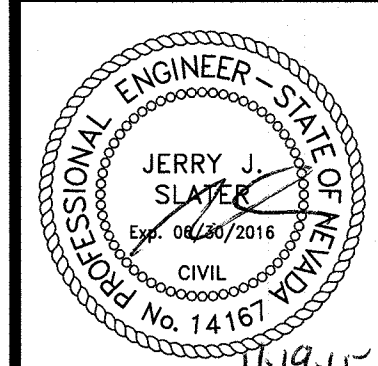
NOTE:
PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.

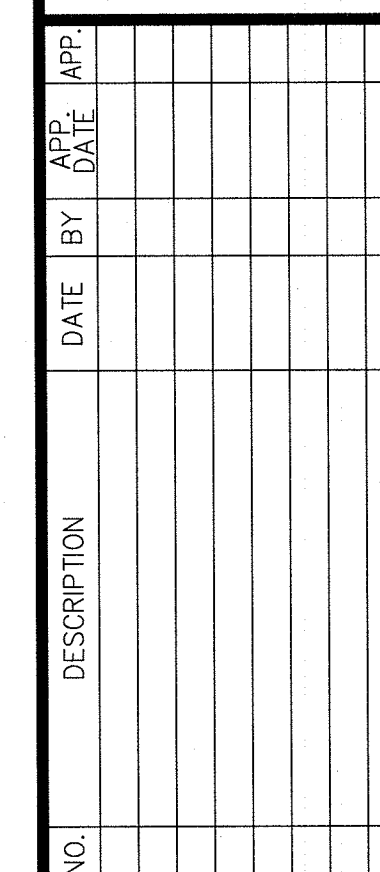


NO.	DESCRIPTION	DATE	BY	APP.	DATE

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
GRADING PLAN 1

DATE: 11/19/15
DRAFTER: JAS
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PROJECT NO.
OLY1501-001





NINETY-FIVE MANAGEMENT LLC

SKYE CANYON PHASE 2

GRADING PLAN 2

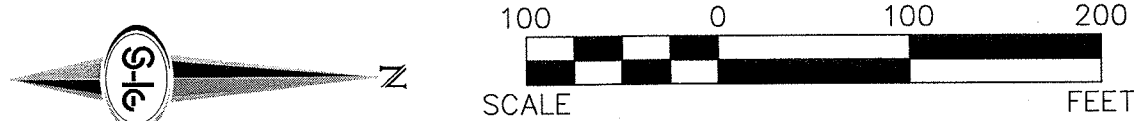
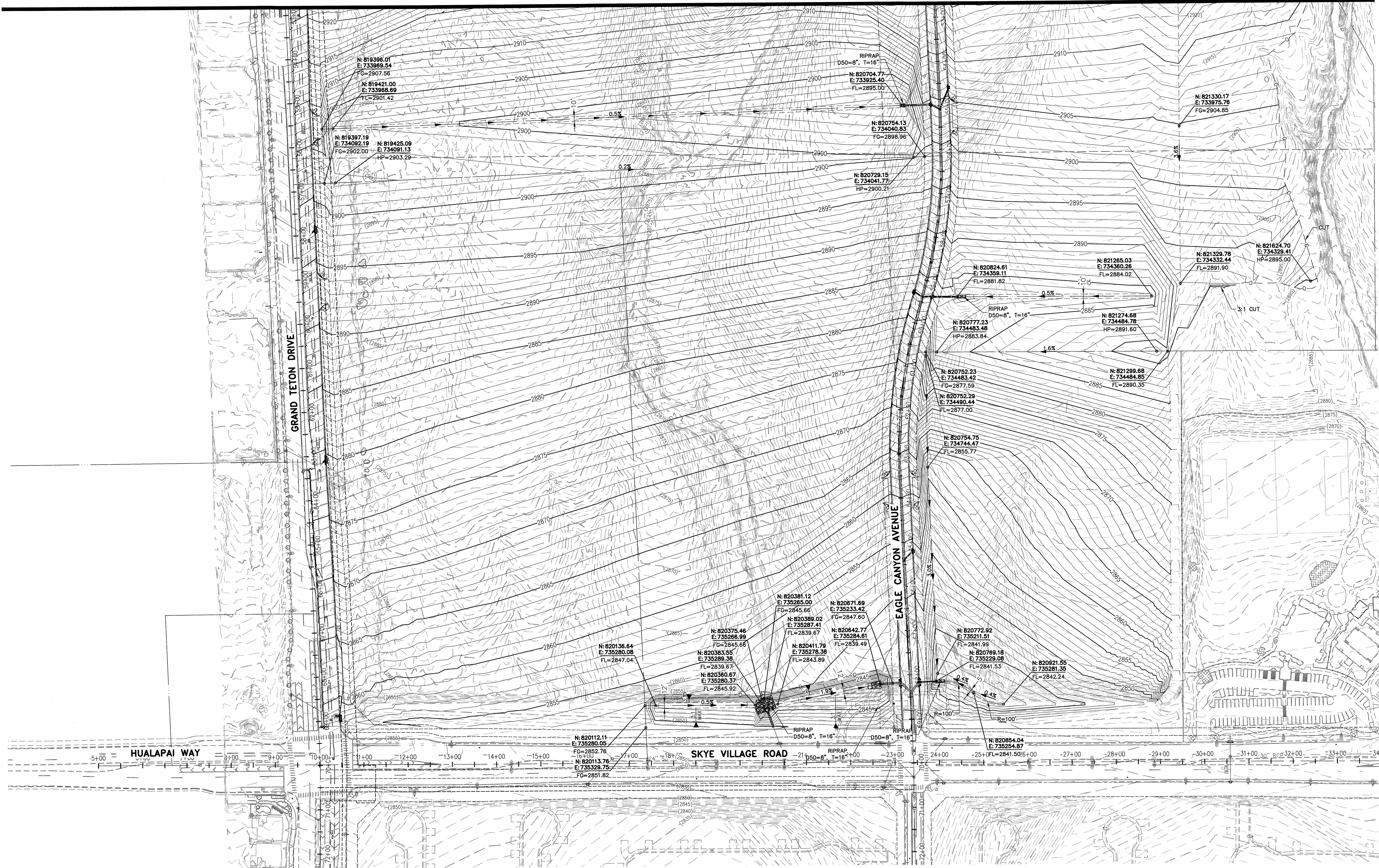
DATE:	11/19/15
DRAFTER:	JAS
DESIGNER:	DAM
CHECKED:	JSR
PROJECT NO.	OLY1501-001

GR-02
SHEET 32 OF 33

PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.



MATCHLINE SEE SHEET GR-02



NOTE:
PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES, SUCH AS BUT NOT LIMITED TO, THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF VEGETATION.

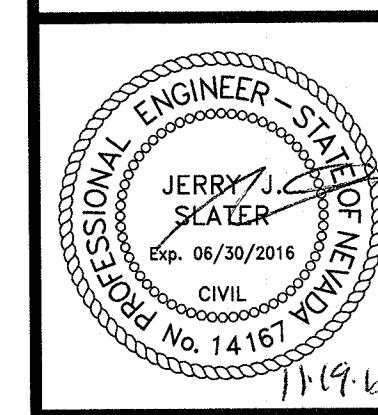


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PHONE (702) 284-5300 FAX (702) 284-5399

NO.	DESCRIPTION	DATE	BY	APP.

NINETY-FIVE MANAGEMENT LLC
SKYE CANYON PHASE 2
GRADING PLAN 3

DATE: 11/19/15
DRAFTER: JAS
DESIGNER: DAM
CHECKED: JSR
PROJECT NO.
OLY1501-001



GR-03
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