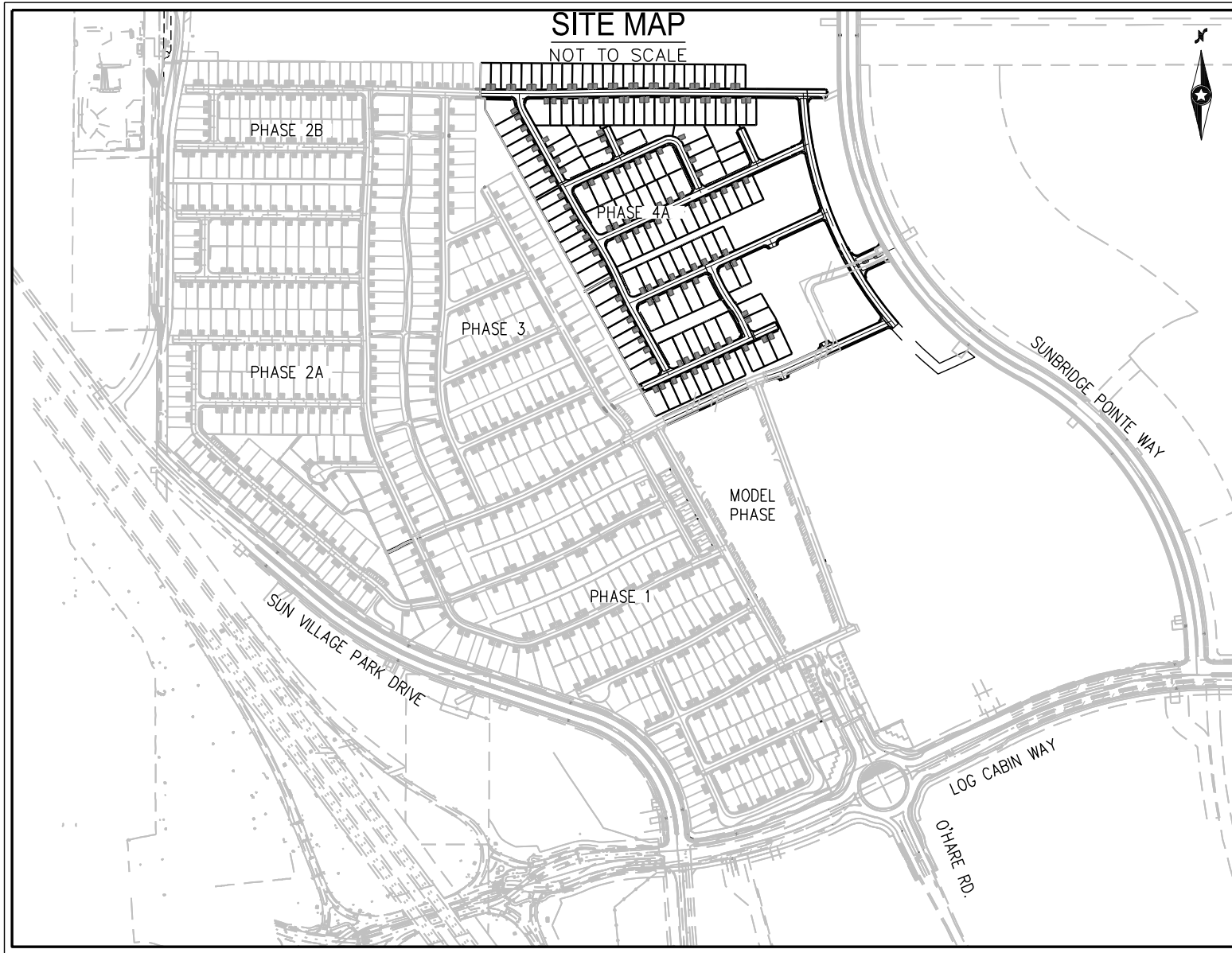


SHLP IMPROVEMENT PLANS FOR PARCEL 3 AT SUNSTONE PHASE 4A

CITY OF LAS VEGAS, NEVADA

RESIDENTIAL SUBDIVISION

APN: 125-06-211-017



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27	P-9	SAFFRON SPICE 9+50 TO 14+00
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29	P-11	BLOODSTONE 13+50 TO 17+50
30	P-12	BLOODSTONE 17+50 TO 21+00
31	P-13	EXISTING OFFSITE STORM DRAIN 9+50 TO 12+00

APPROVALS

CITY OF LAS VEGAS ENGINEERING OFFICE	
CLV FIRE & RESCUE	
CLV PLANNING DEPARTMENT	
CENTRAL TELEPHONE CO. DBA CENTURYLINK	DATE
THE AFFIXED 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.	
APPROVED FOR CONSTRUCTION	
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES PROJECT NO. ##### FIRST APPROVED DATE: _____ LVWMD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 20 GPM SHEETS: ADD FIELD	
NV ENERGY	
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.	
SOUTHWEST GAS CORPORATION	DATE
COX COMMUNICATIONS LAS VEGAS, INC.	DATE

LEGAL DESCRIPTION

BEING A PART OF PARCEL 3 OF THAT CERTAIN PARENT FINAL MAP ENTITLED "SUNSTONE" ON FILE IN BOOK 161, PAGE 40 OF PLATS, OFFICIAL RECORDS CLARK COUNTY, NEVADA, LYING WITHIN THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA

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 BEARINGS

NORTH 00°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) 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.

FEMA FLOOD ZONE INFORMATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (AREA OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), PER FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1735E, UPDATED SEPTEMBER 27, 2002.

PROJECT INFORMATION

ACREAGE (GROSS): = 24.84 AC
ACREAGE (NET): = 28.84 AC
DENSITY (LOTS/NET ACRE): = 6.0 DU/NET AC
ZONING: = SUNSTONE, R-1
TRILOGY SUNSTONE R-TM
TOTAL NO. OF RESIDENTIAL LOTS = 150
TOTAL NO. OF COMMON ELEMENTS = 6
MINIMUM LOT SIZE = 10,201 SF±
MAXIMUM LOT SIZE = 3,800 SF±
PROVIDED OPEN SPACE = 66949.32 SF±

EARTHWORK SUMMARY (UNADJUSTED)

CUT 70,007 CY.
FILL 193,847 CY.
NET 123,840 (FILL) CY.

GEOTECHNICAL ENGINEER

PREPARED BY: SOUTHWEST GEOTECHNICAL
ADDRESS: 5275 ARVILLE ST., #108
PHONE: 702-323-6000
PROJECT NO: 205210
DATED: 03/02/22
UPDATED PROJECT NO: 205210
DATED: 03/02/22

TOTAL DISTURBED AREA

55.71 ACRES

M.O.U. ITEMS

1. TMP-22-0039, 3/9/2022

DEVIATIONS FROM STANDARDS

NONE

SWPPP NOTE

NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL ALL STRIPPED SURFACE AREAS HAVE BEEN COVERED BY PAVING, BUILDING CONSTRUCTION OR PLANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE: <http://www.state.nv.us/dwpc/storm101.htm> PROJECTS THAT DISTURB MORE THAN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVR100000 ALONG WITH THE APPROPRIATE FILLING FEE.

OWNER

NORTHLAND, LLC
C/O NINETY FIVE MGT. LLC
ATTN: D HENSLEY
11411 SOUTHERN HIGHLANDS #300
LAS VEGAS, NV 89141

DEVELOPER

SH ACQ 2020, LLC
8800 N. GANEY CENTER DRIVE
SUITE 350
SCOTTSDALE, AZ 85258
CONTACT: ROB LEE
PHONE: (602)318-0539

ENGINEER

WESTWOOD PROFESSIONAL SERVICES
5725 BADURA AVENUE, SUITE 100
LAS VEGAS, NV 89118
PH: (702) 284-5300
FX: (702) 284-5399
CONTACT: DERICK YORO

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

COVER SHEET

Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

5/17/22

DATE: 5/17/22

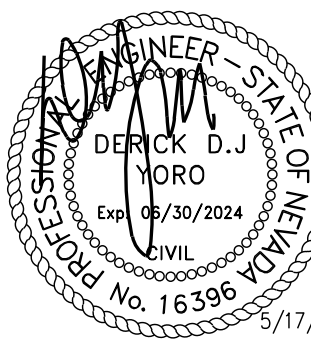
DRAFTER: GM

DESIGNER: BD

CHECKED: DY

PROJECT NO.

SHE1901-004



C-1

SHEET 1 OF 31

STORMWATER RUNOFF MANAGEMENT

1. STANDARD NOTE NO. 1: 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 THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. STANDARD NOTE NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER, AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE LVMC 14.18.130 AND CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICTS HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL, SECTION 1500 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. STANDARD NOTE NO. 3: 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 NVR100000, SECTION III.A.5.
4. STANDARD NOTE NO. 4: 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 LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 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 SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
5. STANDARD NOTE NO. 5: ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

REVISED JANUARY 2022

SOUTHERN NEVADA -
SOUTHWEST GAS CORPORATION GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020.
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND UTILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC, SHALL BE AT LEAST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS.
- A) ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES.
3. FOR VALVE ADJUSTMENT CONTACT 702-528-7855 14 DAYS PRIOR TO CONSTRUCTION.
4. FOR ADJUSTMENT OF CATHODIC PROTECTION TEST POINTS CONTACT 702-528-7873 14 DAYS PRIOR TO CONSTRUCTION.
5. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099.
6. FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES CONTACT 702-278-8451 48 HOURS PRIOR TO CONSTRUCTION.

REVISED 1/12/2022

LEGAL DESCRIPTION

BEGING ALL OF PARCEL 3 OF THAT CERTAIN PARENT FINAL MAP ENTITLED "SUNSTONE" ON FILE IN BOOK 161, PAGE 40 OF PLATS, OFFICIAL RECORDS CLARK COUNTY, NEVADA, LYING WITHIN THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

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NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) 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.

GRADING NOTES

1. INDICATED GRADES OTHER THAN T.C., F.G. & GUTTER F.L. ARE ROUGH GRADES.
2. THE ROUGH GRADING PLANS SHALL BE ON THE JOB SITE AT ALL TIMES. THE ROUGH GRADING SHALL BE FINISHED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE GRADING QUANTITIES ARE BASED ON THE ELEVATION AND DETAILS SHOWN ON THE PLANS. ANY DEVIATIONS FROM THE PLANS WILL RESULT IN QUANTITY CHANGES.
3. CARE SHALL BE EXERCISED IN GRADING CORNER LOTS.
4. ROUGH PAD ELEVATIONS SHALL BE GRADED TO WITHIN 0.1' OF THE PAD ELEVATIONS SHOWN ON THE PLANS. WHEN GRADING IS COMPLETE PER THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE LOTS CAN BE INSPECTED. AT THAT TIME THE ENGINEER SHALL ALSO DECODE IF ANY ADDITIONAL DITCHES OR BERMS ARE REQUIRED. THE CONTRACTOR IS REQUESTED NOT TO REMOVE ANY OF HIS ROUGH GRADING EQUIPMENT UNTIL HE RECEIVES GRADING APPROVAL FROM THE ENGINEER.
5. SOILS REPORT PREPARED BY SOUTHWEST GEOTECHNICAL, PROJECT NO. 205210, DATED 03/09/22.
6. EARTHWORK QUANTITIES (RAW):
-OUT = 70,007 CUBIC YARDS.
-FILL = 193,847 CUBIC YARDS
- A) THE ABOVE QUANTITIES DO NOT REFLECT LOSSES DUE TO SUBSIDENCE OR SHRINKAGE.
B) THE ABOVE QUANTITIES DO REFLECT USING NATIVE MATERIAL IN LIEU OF TYPE I GRAVEL BASE MATERIAL FOR STREET SECTIONS.
C) THE ABOVE QUANTITIES DO NOT REFLECT ANY EARTHWORK WHICH MAY BE REQUIRED BY THE ENGINEER TO CONSTRUCT ADDITIONAL PROTECTIVE DITCHES OR BERMS NOT SHOWN ON THESE DRAWINGS.

CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVNYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVMVD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.
11. SEWER SERVICES AS APPROVED ON THIS PLAN, ARE INTENDED SPECIFICALLY FOR THE LOT AND USE SHOWN, AND ARE NOT INTENDED TO SERVE ADDITIONAL PARCELS OR STRUCTURES WHICH MAY BE CREATED IN THE FUTURE. IN THE EVENT THAT THE PARCEL AND/OR LOTS SHOWN ON THIS PLAN ARE FURTHER DIVIDED TO CREATE ADDITIONAL PARCELS OR LOTS, THE OWNER IS REQUIRED TO PROVIDE SEPARATE SEWER SERVICES TO EACH.

REVISED 09/16/2020

LAS VEGAS VALLEY WATER DISTRICT (LVMVD) STANDARD NOTES

- ADD FIELD
LVMVD PROJECT # _____ (REVISED 10/18/2021)
1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVMVD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVMVD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVMVD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVMVD STANDARD PLATES, 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 STANDARD 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 LVMVD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVMVD 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 CROSSEINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVMVD 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 LVMVD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST AS BE LISTED ON THE LVMVD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE USA NORTH 811 "CALL BEFORE YOU DIG" AT "811" OR 1-800-642-2444.
14. THE INSTALLATION OF LVMVD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAWING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVMVD 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 PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVMVD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVMVD WITH AN APPROPRIATELY SIZED PLAN FINISH CONCRETE PATCH. THE LVMVD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVMVD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

15. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

16. PROTECT IN PLACE AND ADJUST LVMVD EXISTING FACILITIES TO FINISH GRADE PER UDACS PLATES. ALL LVMVD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

17. **DRY UTILITY NOTES:** MAINTAIN A MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSEINGS. MAINTAIN A MINIMUM 3' PARALLEL SEPARATION.

RTC FAST NOTES

1. CONTRACTOR IS TO MAINTAIN AND KEEP OPERATIONAL ALL EXISTING ITS INFRASTRUCTURE WITHIN THE CONSTRUCTION LIMITS. IF ANY EXISTING ITS INFRASTRUCTURE IS DAMAGED DUE TO CONSTRUCTION, WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT MR. LONNIE BROWN (810) FAST MANAGER TRAFFIC SYSTEMS MAINTENANCE) AT 702-290-1979 CELL OR 702-432-5300 GENERAL.
2. IF ANY EXISTING FIBER OPTIC CABLE IS TO BE CUT, SPLICED AND OR PULLED, ALONG OR ADJACENT TO THE PROJECT LIMITS, THE CONTRACTOR IS TO CONTACT MR. LONNIE BROWN TWO (2) WEEKS IN ADVANCE FOR SYSTEM SHUTDOWN COORDINATION.
3. CONTRACTOR MUST NOTIFY MR. LONNIE BROWN AT 702-290-1979 CELL, 702-432-5300 GENERAL, OR AT BROWN@RTCNV.COM, ONCE ALL PROJECT ITS FIBER OPTIC WORK IS COMPLETE.

REVISED 05/01/2020

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE (ORDINANCE # 863) FOR HYDRANT, SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICTS - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
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 UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. IF \$105.615
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND 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. IFC #5310, #5312
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. IFC #5307.3.3
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. IFC #106.3
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.I.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. IFC #507.2.1, NFPA 24
8. 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. IFC #507
9. PRIVATE HYDRANTS SHALL BE PAINTED RED. IFC #507.5.1
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. IFC #507
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: IFC #102
- RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
 - COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED.
12. WHERE THE WATER MAINS ARE EXTENDED 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 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. IFC #102.8
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. IFC #102.10
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. IFC #102.4
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. IFC #102.7
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. IFC #102.6
18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM FOR SYSTEMS REQUIRED TO HAVE TWO (2) SOURCES OF WATER SUPPLY. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR FIRE STRUCTURES GRADIENT CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. IFC #104
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. IFC #503.2.3
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE. PROVIDE 10% GRADE PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. IFC #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. IFC #503.2.4
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. IFC #503.2.1
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 33 FT WITH PARKING ON BOTH SIDES MEASURED TO FACE OF CURB. NOT LESS THAN 28 FT WIDE WITH PARKING RESTRICTED TO ONE SIDE MEASURED TO FACE OF CURB. NOT LESS THAN 24 FT WIDE WITH NO PARKING ON EITHER SIDE MEASURED TO FACE OF CURB. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. IFC #503.2.1
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. IFC #503.1.1
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 200 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD- ENDS OR A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT, CLV REGULATION AND MOU
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, CLV REGULATION
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 OF 100 FT ALONG THE DESIGNATED FIRE LANES. 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 ALONG OR ON THE PAVEMENT OR CURB (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. IFC #503.3
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. IFC #503.6
29. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS SHALL BE REQUIRED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION

CITY OF LAS VEGAS GRADING NOTES

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 COLLAPSE OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. 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.
6. 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:
- | | HORIZONTAL | VERTICAL | COMPACTION |
|--------------------------|------------|----------------|------------------|
| A.PAVEMENT AREA SUBGRADE | 0.1+ " | +0.0" TO -0.1" | SEE SOILS REPORT |
| B.ENGINEERED FILL | 0.5+ " | +0.1" TO -0.1" | SEE SOILS REPORT |
- COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
8. 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.
9. 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.
10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 04/15/10

UTILITY LOCATION NOTE TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREIN 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 EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS. CALL BEFORE YOU DIG: 1 (800) 227-2600; SOUTHWEST GAS CORPORATION: 702-278-8451 (STANDBY CONTACT NUMBER)

CITY OF LAS VEGAS GENERAL NOTES

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 REVISION EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED 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 ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES 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 IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND 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 DESIGNS TO BE APPROVED BY THE CITY, 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. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (3/8") ABOVE PL. OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
9. CURB AND GUTTER FLOW TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 2235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. 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 EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY ADD GED, REPORT ADD FIELD, ADD FIELD APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION requires RELOCATIONS.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN DRAWING. CONFORMANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APPROXS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- WALL NOTES:
16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL, AND SIGHT DISTANCE BY THE BUILDING DEPARTMENT. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF MDOOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO ONSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
21. AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLV OPEN-FRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERAL EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
- (MAY BE USED ONLY ON PROJECTS ASSOCIATED WITH A TENTATIVE MAP CONTAINING 5 OR MORE LOTS)
22. ~~CITY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE OWNER AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION OF THE MAP(S). THIS INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF THE PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE OBTAINED FROM THE NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAP(S) MUST BE SEALED AND SIGNED BY A NEVADA PROFESSIONAL (CIVIL) SURVEYOR TO HAVE POSITIONAL CERTAINITY OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATION ELECTRICITY COMPANY DELIVERABLE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO COMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).~~
22. 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.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

REVISED 06/04/2018

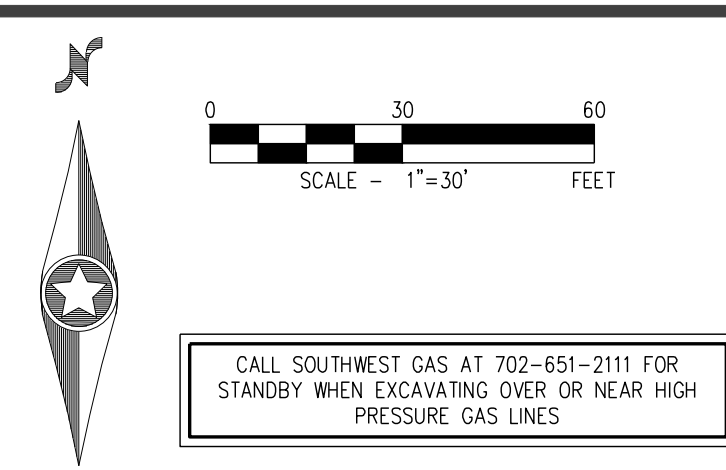
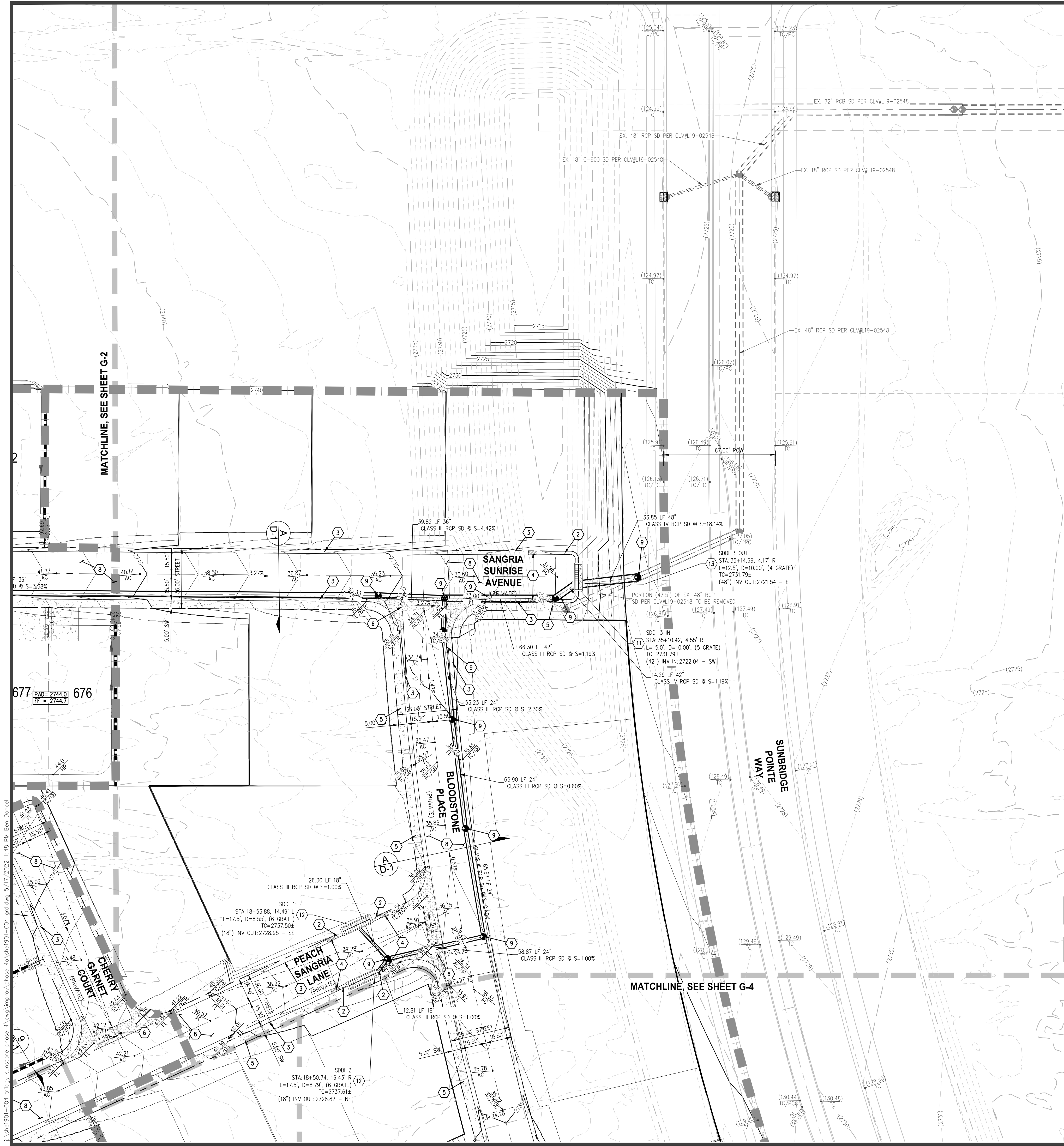
CITY OF LAS VEGAS TRAFFIC NOTES

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 FOR 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 THAT 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 OBSTRUCTION, 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 PUBLIC TRAFFIC SIGNS SHALL UTILIZE TYPE X RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CCAUSS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM THAT IS A MATCHING COMPLETION 10, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. 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 INTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED 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 SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA 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 REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA (BTC), IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS 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 PROJECT INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING OR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADJUSTING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED JUNE 4, 2018

CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA," LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
2. DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS, PRIOR TO ORDERING MATERIALS.
3. LUMINAIRES SHALL BE MARKED TO INDICATE INSTALLATION ORIENTATION, AND SHALL HAVE EXTERNAL LABELS PER ANSI C136 THAT INDICATE WATTAGE AND ARE CLEARLY VISIBLE FROM STREET LEVEL.
4. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUCITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC AND CITY ENGINEER. ANY DEVIATION FROM THE



SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSOLETE DURING CONSTRUCTION.

ELEVATION NOTE
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/02/21
UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/09/22
EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 70,007 CU YDS
FILL= 193,847 CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) 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 EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SLOPE LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED UP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES
1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
3. MAXIMUM MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLENISHING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

STORMWATER RUNOFF MANAGEMENT
1. STANDARD NOTE NO. 1: 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 THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. STANDARD NOTE NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE LVMC 14.18.130 AND CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT'S HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. STANDARD NOTE NO. 3: 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 NVR100000, SECTION III.A.5.
4. STANDARD NOTE NO. 4: 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 LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 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 SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
5. STANDARD NOTE NO. 5: ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.
REVISED JANUARY 2022

NOTE
ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.
ALL ON-SITE STORM DRAIN FACILITIES WITHIN THIS DEVELOPMENT SHALL BE PRIVATELY MAINTAINED BY THE H.O.A.
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CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call 811
OR
1-800-642-2444



GRADING NOTES

CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (E.UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)

1	CONSTRUCT CASE 1 SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
2	CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
3	CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.S1
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8	CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
9	CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
10	CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE), DEPTH PER PLAN
11	CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=15.0' (5 GRATE), DEPTH PER PLAN
12	CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN
13	CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=12.5' (4 GRATE), DEPTH PER PLAN
14	CONSTRUCT "A" TYPE CURB & GUTTER PER CCAUSD #219

QUANTITIES

	EA	PRIVATE
1. 48" TYPE II STORM DRAIN MANHOLE	EA	25
2. 5.0' TYPE "CM2" DROP INLET	EA	2
3. 12.5' TYPE "CM2" DROP INLET	EA	1
4. 15.0' TYPE "CM2" DROP INLET	EA	2
5. 17.5' TYPE "CM2" DROP INLET	EA	2
6. 8" WIDE CONCRETE VALLEY GUTTER	SF	6,266
7. SIDEWALK UNDERDRAIN	EA	5
8. GROUTED RIPRAP D50=12", THK=24"	SF	300
9. 18" RCP STORM DRAIN	LF	75
10. 24" RCP STORM DRAIN	LF	894
11. 30" RCP STORM DRAIN	LF	486
12. 36" RCP STORM DRAIN	LF	1,602
13. 42" RCP STORM DRAIN	LF	81
48" RCP STORM DRAIN	LF	34

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY ??????? ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
DERICK YORO, P.E. 16396 DATE:

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 BEARINGS
NORTH 00°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, W.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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1735E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

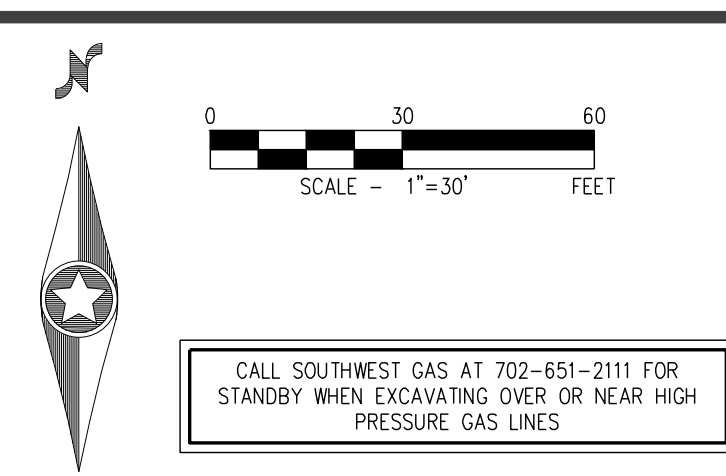
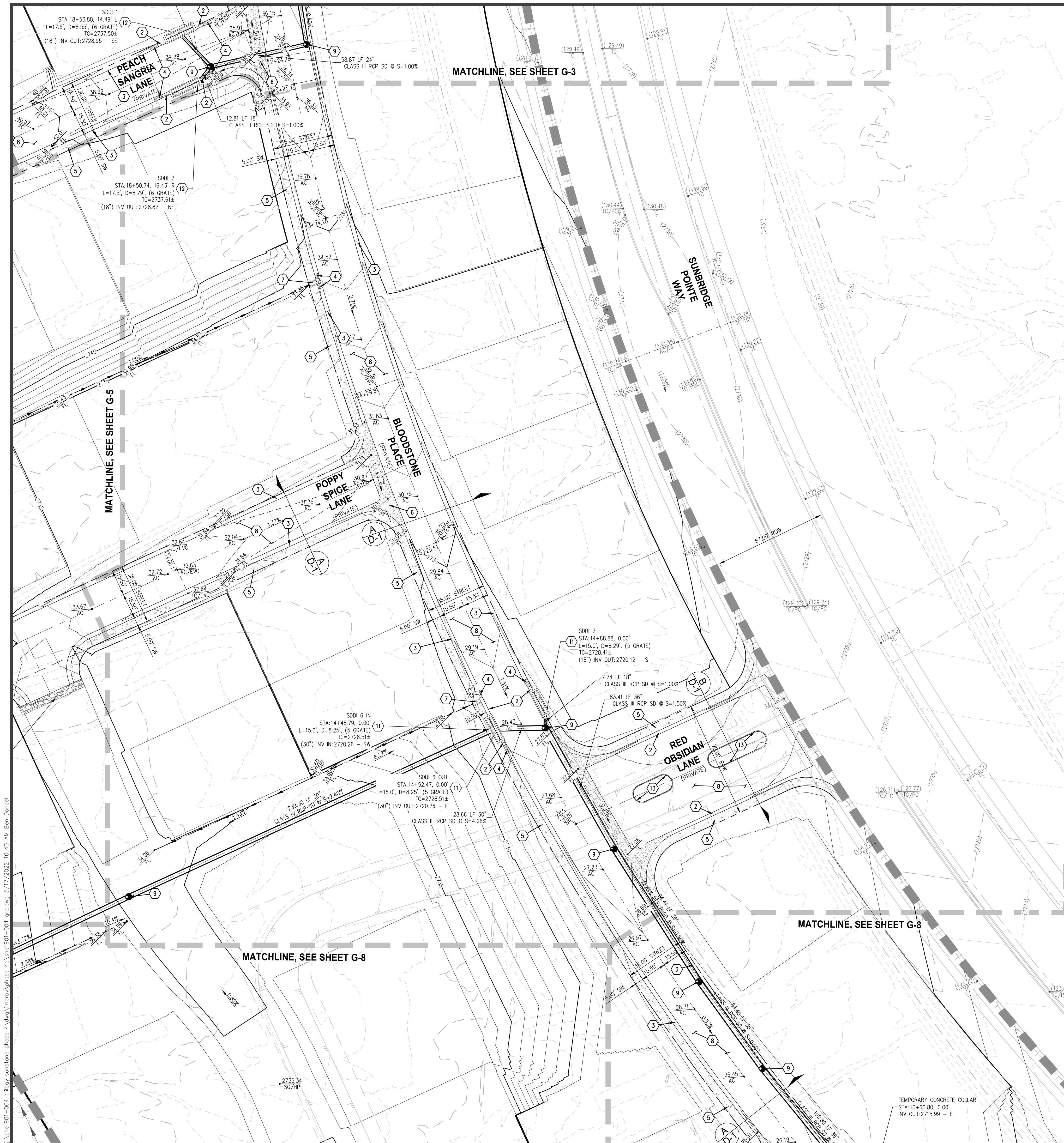
SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET III

DATE: 5/17/22
DRAFTER: GM
DESIGNER: BD
CHECKED: DY
PROJECT NO. SHE1901-004

G-3
SHEET 7 OF 31



SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

SOILS REPORT

SOILS REPORT BY SOUTHWEST GEOTECHNICAL

PROJECT NO. 205210 DATED 03/02/21

UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL

PROJECT NO. 205210 DATED 03/09/22

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CU1= 70,007 CU YDS
FILL= 193,847 CU YDS

EXPLORED MATERIAL TO BE DISPOSED OF AT AN APPROVED
LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED
AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE

- 1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE. CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL, ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER DOES NOT GUARANTEE THE LOCATION OF ANY UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
- 2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE SLOPES FROM EXISTING PAVEMENT SAWCUT LINE, TO PROPOSED NEW CURB RAMP TO SUBGRADE PREPARATION AND CONSTRUCTION MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS, NOTIFY THE ENGINEER.

GRADING NOTES

1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS OF THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED BY LAS VEGAS BUILDING DEPARTMENT.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING CURB AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. PLACING DURING CONSTRUCTION, ENGINEER/OWNER SHALL BE NOTIFIED EARLIEST PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DRAINAGE COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT SIGHT VISIBILITY ZONES).

STORMWATER RUNOFF MANAGEMENT

1. STANDARD NO. 1: THE OWNER, SITE DEVELOPER, CONTRACTOR SHALL EACH DAY REMOVE ALL SEDIMENT, WASH, CONTAMINANT POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED, PUBLIC RIGHTS OF WAY OF THE CITY OF LAS VEGAS AS A RESULT ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION, BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. STANDARD NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT SPECIFIED IN THE LCMC 1418130 AND CLARK COUNTY REGIONAL EROSION CONTROL CRITERIA AND THE CITY OF LAS VEGAS CITY VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. STANDARD NO. 3: TEMPORARY OR PERMANENT STABILIZATION ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. STANDARD NO. 4: AT A MINIMUM, THE CONTRACTOR OR DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS, EQUIPMENT, DISCHARGE, VEHICLE ENTRANCE AND EXIT LOGS AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCH, HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA LAND DISTURBANCE ACTIVITIES REFER TO THE NEVADA STORMWATER CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
5. STANDARD NO. 5: ACCUMULATED SEDIMENT IN BMP'S SHALL BE REMOVED PRIOR TO THE NEXT RAIN EVENT. PRIOR TO 72 HOURS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT RAIN EVENT, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT

WHICHEVER IS "EARLIER" SEDIMENT MUST BE REMOVED WHEN
REDUCED BY 50 PERCENT OR MORE.

NOTE

ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND
PRIVATELY MAINTAINED BY H.O.A.
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H.O.A.
POST-CONSTRUCTION BMPs (PCBMPs)/CONTROL MEASURES NOTED O
MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CON
INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY

FAST

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OF TRANSPORTATION (F.A.S.T.)



GRADING NOTES

- P CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS
 (UTILITY STRUCTURES, CURB & GUTTER) IN PLACE DURING
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 DEPTH PER PLAN
- 13 CONSTRUCT "A" TYPE CURB & GUTTER PER CCAUSD #219

QUANTITIES		PRIVATE
1. 48" TYPE "B" STORM DRAIN MANHOLE	EA	25
2. 5.0' TYPE "CM2" DROP INLET	EA	2
3. 15.0' TYPE "CM2" DROP INLET	EA	3
4. 17.5' TYPE "CM2" DROP INLET	EA	2
5. 8' WIDE CONCRETE VALLEY GUTTER	SF	6,266
6. SIDEWALK UNDERDRAIN	EA	5
7. GROUTED RIPRAP D50-12", THK= 24"	SF	300
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11. 36" RCP STORM DRAIN	LF	1,602
12. 42" RCP STORM DRAIN	LF	81
13. 48" RCP STORM DRAIN	LF	34

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE
APPROVED TECHNICAL DRAINAGE STUDY 22222222 ON FILE AT CITY
OF LAS VEGAS FOR THE SUBJECT PROJECT.

DERICK YORO, P.E. 16396 DATE

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 BEARINGS

NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) 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.

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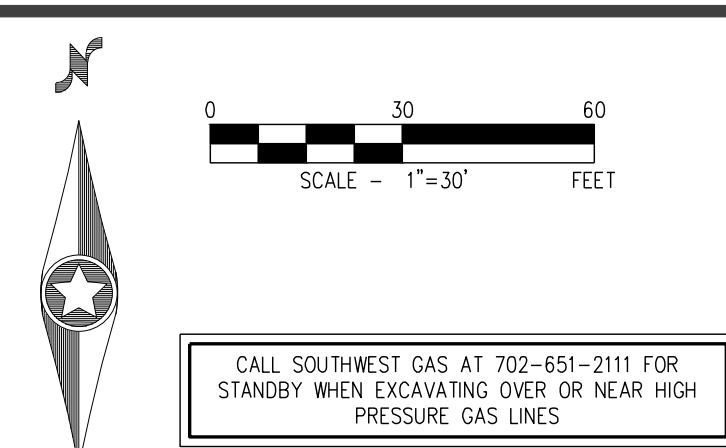
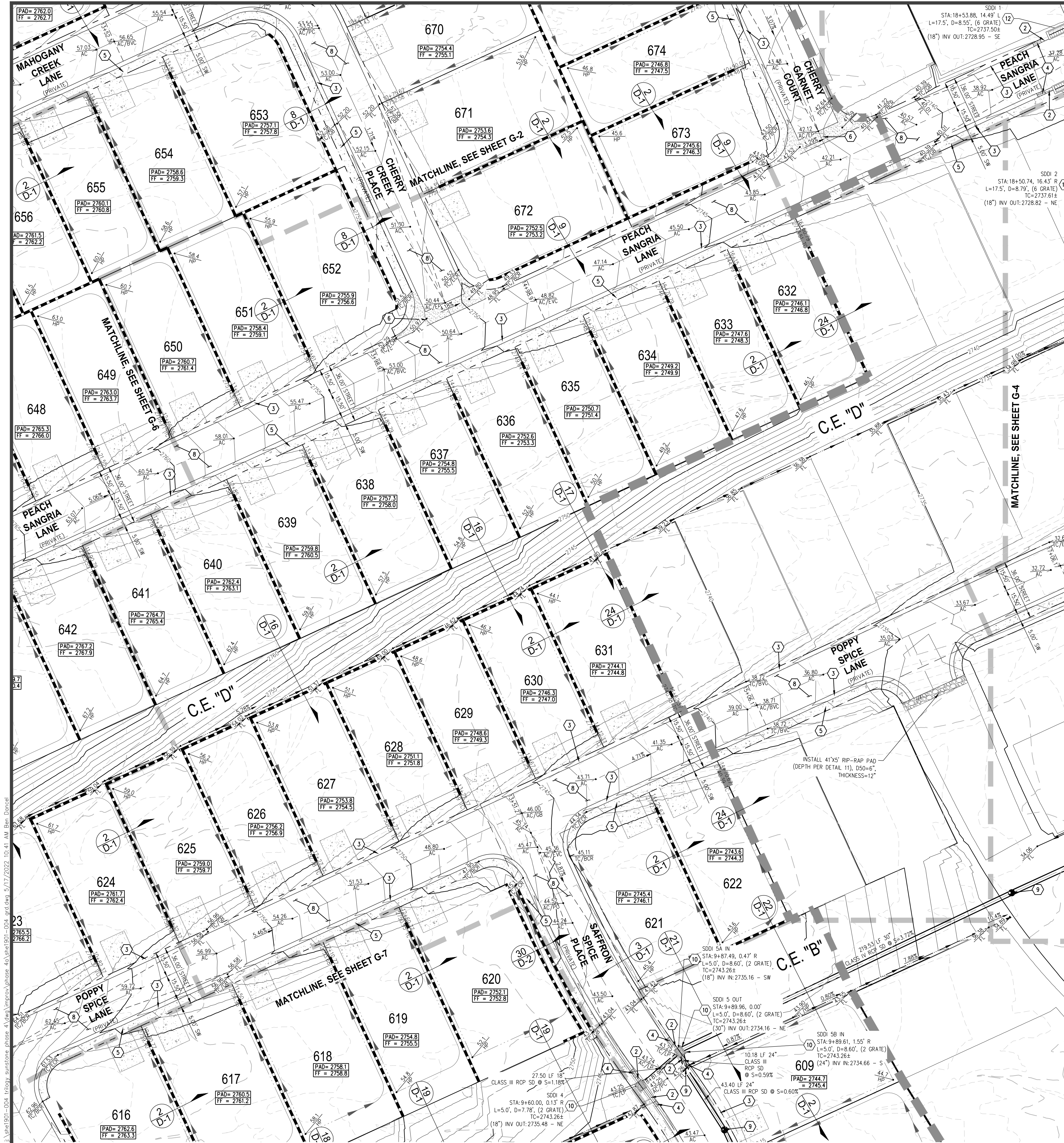
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811

OR

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SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/02/21
UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/09/22
EARTHWORKS
EARTHWORK QUANTITIES (RAW):
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2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED UP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

GRADING NOTES
1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SYMPP.
3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLENISHING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

STORMWATER RUNOFF MANAGEMENT
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OR
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GRADING NOTES
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3) CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216.
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8) CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2
9) CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
10) CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
11) CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE).
12) CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=15.0' (5 GRATES).
13) CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATES).
14) CONSTRUCT TYPE "A" TYPE CURB & GUTTER PER CCAUSD #219

QUANTITIES		PRIVATE
1. 48" TYPE II STORM DRAIN MANHOLE	EA	25
2. 5.0' TYPE "CM2" DROP INLET	EA	2
3. 15.0' TYPE "CM2" DROP INLET	EA	3
4. 17.5' TYPE "CM2" DROP INLET	EA	2
5. 8' WIDE CONCRETE VALLEY GUTTER	SF	6,266
6. SIDEWALK UNDERDRAIN	EA	5
7. GROUTED RIPRAP D50=12", THK=24"	SF	300
8. 18" RCP STORM DRAIN	LF	75
9. 24" RCP STORM DRAIN	LF	894
10. 30" RCP STORM DRAIN	LF	486
11. 36" RCP STORM DRAIN	LF	1,602
12. 42" RCP STORM DRAIN	LF	81
13. 48" RCP STORM DRAIN	LF	34

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY ???????? ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
DERICK YORO, P.E. 16396 DATE

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 BEARINGS
NORTH 000°15'0" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C7335E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

Westwood
5725 W. Baduria Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

DATE	BY	APP. DATE	DESCRIPTION
5/17/22	DERICK YORO		GRADING SHEET V

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET V

5/17/22
5/19/22
5/18/22

DATE: 5/17/22

DRAFTER: GM

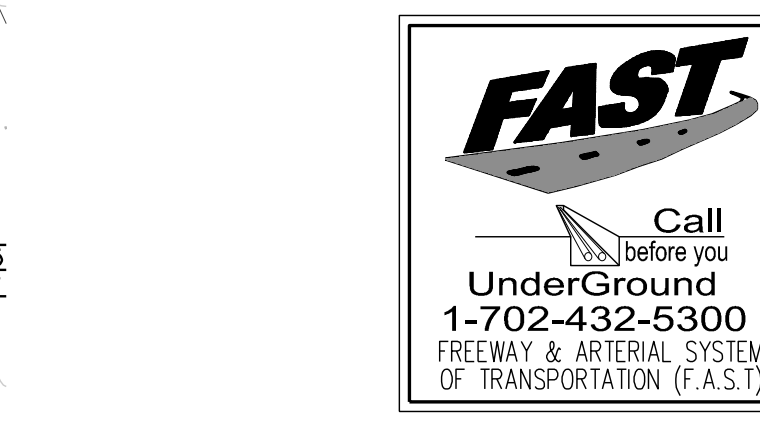
DESIGNER: BD

CHECKED: DY

PROJECT NO.
SHE1901-004

DERICK YORO
P.E. 16396
5/17/22

G-5
SHEET 9 OF 31





CALL SOUTHWEST GAS AT 702-651-2111 FOR
STANDBY WHEN EXCAVATING OVER OR NEAR HIGH
PRESSURE GAS LINES

ELEVATION NOTE
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 70,007 CU YDS
FILL= 193,847 CU YDS

EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED
LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED
AND ACTIVE GRADING PERMIT.

GRADING NOTES

1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE UTILITIES PRIOR TO CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLACING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

NOTE

ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.

ALL ONSITE STORM DRAIN FACILITIES WITHIN THIS DEVELOPMENT SHALL BE PRIVATELY MAINTAINED BY THE H.O.A.

POST-CONSTRUCTION BMPs (PCBMPs)/CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.



GRADING NOTES

- ⑤ CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (IE UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION - ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)
- ① CONSTRUCT CASE 1 SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
- ② CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
- ③ CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51
- ④ CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
- ⑤ CONSTRUCT 5' SIDEWALK PER CCAUSD #234
- ⑥ CONSTRUCT CROSS GUTTER PER CCAUSD #228
- ⑦ CONSTRUCT SIDEWALK UNDERPASS AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2.
- ⑧ CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOLS REPORTS
- ⑨ CONSTRUCT 48" TYPE II SDMI PER CCAUSD #401 & 405
- ⑩ CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE), DEPTH PER PLAN
- ⑪ CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=15.0' (5 GRATE), DEPTH PER PLAN
- ⑫ CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN
- ⑬ CONSTRUCT "AT" TYPE CURB & GUTTER PER CCAUSD #219

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY 2222222 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

DERICK YORO, P.E. 16396 _____ DATE _____

BASIS OF BEARINGS

NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) 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.

Call before you Dig
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY.

Call



OR

1-800-642-2444

[illegible]

CITY OF

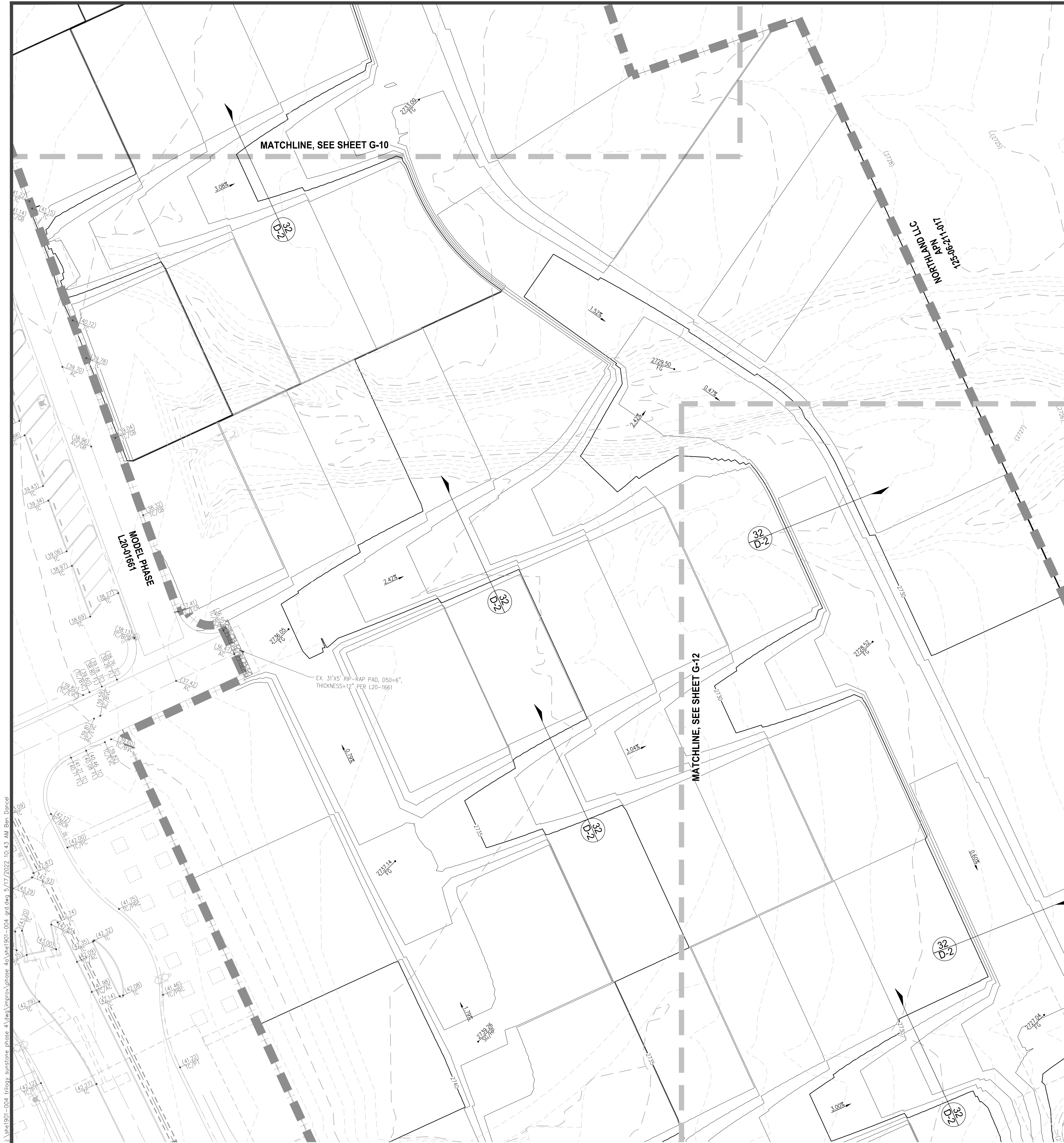
SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET X

DRAFTER: GM
DESIGNER: BD
CHECKED: DY
PROJECT NO. SHE1901-004

G-10
SHEET 14 OF 31



CALL SOUTHWEST GAS AT 702-651-2111 FOR
STANDBY WHEN EXCAVATING OVER OR NEAR HIGH
PRESSURE GAS LINES

SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS
SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED,
DISTURBED, DESTROYED, OR OBSERVED DURING CONSTRUCTION.

ELEVATION NOTE
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND
THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E.
01.00 REPRESENTS 2701.00)

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/02/21
UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/09/22
EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 70,007 CU YDS
FILL= 193,847 CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED
LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED
AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) 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 EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY
FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS
SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED
UP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF
MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL
NOTIFY THE ENGINEER.

GRADING NOTES
1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO
THE ENGINEER.
2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH
REPORT.
4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY
OF LAS VEGAS BUILDING DEPARTMENT.
7. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES
AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN
PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING
FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING
FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION
COMMENCING.
8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24)
INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE
SIGHT VISIBILITY ZONES.

STORMWATER RUNOFF MANAGEMENT
1. STANDARD NOTE NO. 1: 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 THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES
ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL
BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. STANDARD NOTE NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT
PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN
EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS
SPECIFIED IN THE LVMC 1418.130 AND CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT'S
HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500 AND THE LAS VEGAS
VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. STANDARD NOTE NO. 3: 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 NVRI00000, SECTION III.A.5.
4. STANDARD NOTE NO. 4: 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 LOCATIONS, AND ALL BMPs WEEKLY,
AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 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 SUSPENSION OF
LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR
CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
5. STANDARD NOTE NO. 5: ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN
DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT,
WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN
REDUCED BY 50 PERCENT OR MORE.
REVISED JANUARY 2022

NOTE
ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE
PRIVATELY MAINTAINED BY H.O.A.
ALL ON-SITE STORM DRAIN FACILITIES WITHIN THIS DEVELOPMENT SHALL BE PRIVATELY MAINTAINED BY THE
H.O.A.
POST-CONSTRUCTION BMPs (PCBMs)/CONTROL MEASURES NOTED ON THE GRADING PLANS ARE
MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBMs MUST BE
INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

FAST
Call before you
UnderGround
1-702-432-5300
FREEWAY & ARTERIAL SYSTEM
OF TRANSPORTATION (F.A.S.T.)

AVOID HITTING OVERHEAD
POWER LINES. IT'S
COSTLY.
CALL BEFORE
YOU DO
OVERHEAD
1-702-227-2929

Call before you Dig
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY.
Call
811
OR
1-800-642-2444



GRADING NOTES
1) CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS
(EUTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING
CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE
THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE
AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING
CONSTRUCTION SHALL BE REPLACED IN KIND.)
2) CONTRACT CASE I: SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOME
OR EQUIVALENT PER CCAUSD #235
3) CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
4) CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51
5) CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
6) CONSTRUCT 5' SIDEWALK PER CCAUSD #234
7) CONSTRUCT CROSS GUTTER PER CCAUSD #228
8) CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD
#236 AND DETAIL 27 ON SHEET D-2
9) CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
10) CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
11) CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE),
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QUANTITIES		PRIVATE
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9. 24" RCP STORM DRAIN	LF	894
10. 30" RCP STORM DRAIN	LF	486
11. 36" RCP STORM DRAIN	LF	1,602
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13. 48" RCP STORM DRAIN	LF	34

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE
APPROVED TECHNICAL DRAINAGE STUDY ??????? ON FILE AT CITY
OF LAS VEGAS FOR THE SUBJECT PROJECT.
DERICK YORO, P.E. 16396 DATE

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 BEARINGS
NORTH 00°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST
QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS
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SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA
DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET XI

DATE: 5/17/22

DRAWN BY: DERICK YORO

CHECKED BY: DERICK YORO

PROJECT NO. SHE1901-004

DATE: 5/17/22

DRAWN BY: DERICK YORO

CHECKED BY: DERICK YORO

PROJECT NO. SHE1901-004

G-11

SHEET 15 OF 31



03060

SCALE = 1"=30' FEET

CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSOLETE DURING CONSTRUCTION.

ELEVATION NOTE
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/02/21
UPDATED SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 205210 DATED 03/09/22
EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 70,007 CU YDS
FILL= 193,847 CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) 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 EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED EDGE OF PAVEMENT OR PROJECTED TOP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

- GRADING NOTES**
1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
 2. ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
 3. MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
 4. SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
 5. ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
 6. CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
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 8. NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

- STORMWATER RUNOFF MANAGEMENT**
1. STANDARD NOTE NO. 1: 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 THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
 2. STANDARD NOTE NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE LVMC 14.18.130 AND CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT'S HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
 3. STANDARD NOTE NO. 3: 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 NVRI00000, SECTION III.A.5.
 4. STANDARD NOTE NO. 4: 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 LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 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 SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
 5. STANDARD NOTE NO. 5: ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.
- REVISED JANUARY 2022

NOTE
ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.
ALL ON-SITE STORM DRAIN FACILITIES WITHIN THIS DEVELOPMENT SHALL BE PRIVATELY MAINTAINED BY THE H.O.A.
POST-CONSTRUCTION BMPs (PCBPs)/CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

FAST

Call before you UnderGround 1-702-432-5300 FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD 1-702-227-2929

Call before you Dig

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

Call 811 OR 1-800-642-2444



- GRADING NOTES**
1. CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (EXISTING UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)
 1. CONSTRUCT CASE 1 SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
 2. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
 3. CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51
 4. CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
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 8. CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
 9. CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
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 11. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=15.0' (5 GRATE), DEPTH PER PLAN
 12. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN
 13. CONSTRUCT "A" TYPE CURB & GUTTER PER CCAUSD #219

QUANTITIES		PRIVATE	
1. 48" TYPE II STORM DRAIN MANHOLE	EA	25	
2. 5.0' TYPE "CM2" DROP INLET	EA	2	
3. 15.0' TYPE "CM2" DROP INLET	EA	3	
4. 17.5' TYPE "CM2" DROP INLET	EA	2	
5. 8" WIDE CONCRETE VALLEY GUTTER	SF	6,266	
6. SIDEWALK UNDERDRAIN	EA	5	
7. GROUTED RIPRAP D50=12", THK=24"	SF	300	
8. 18" RCP STORM DRAIN	LF	75	
9. 24" RCP STORM DRAIN	LF	894	
10. 30" RCP STORM DRAIN	LF	486	
11. 36" RCP STORM DRAIN	LF	1,602	
12. 42" RCP STORM DRAIN	LF	81	
13. 48" RCP STORM DRAIN	LF	34	

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY ??????? ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
DERICK YORO, P.E. 16396 DATE

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 BEARINGS
NORTH 00°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 16, TOWNSHIP 19 SOUTH, RANGE 60 EAST, W.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.

FLOOD ZONE
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Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

CITY OF LAS VEGAS, NEVADA

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

GRADING SHEET XII

DATE: 5/17/22

DRAFTER: GM

DESIGNER: BD

CHECKED: DY

PROJECT NO. SHE1901-004

DERICK YORO
P.E. 16396
5/17/22

G-12

SHEET 16 OF 31



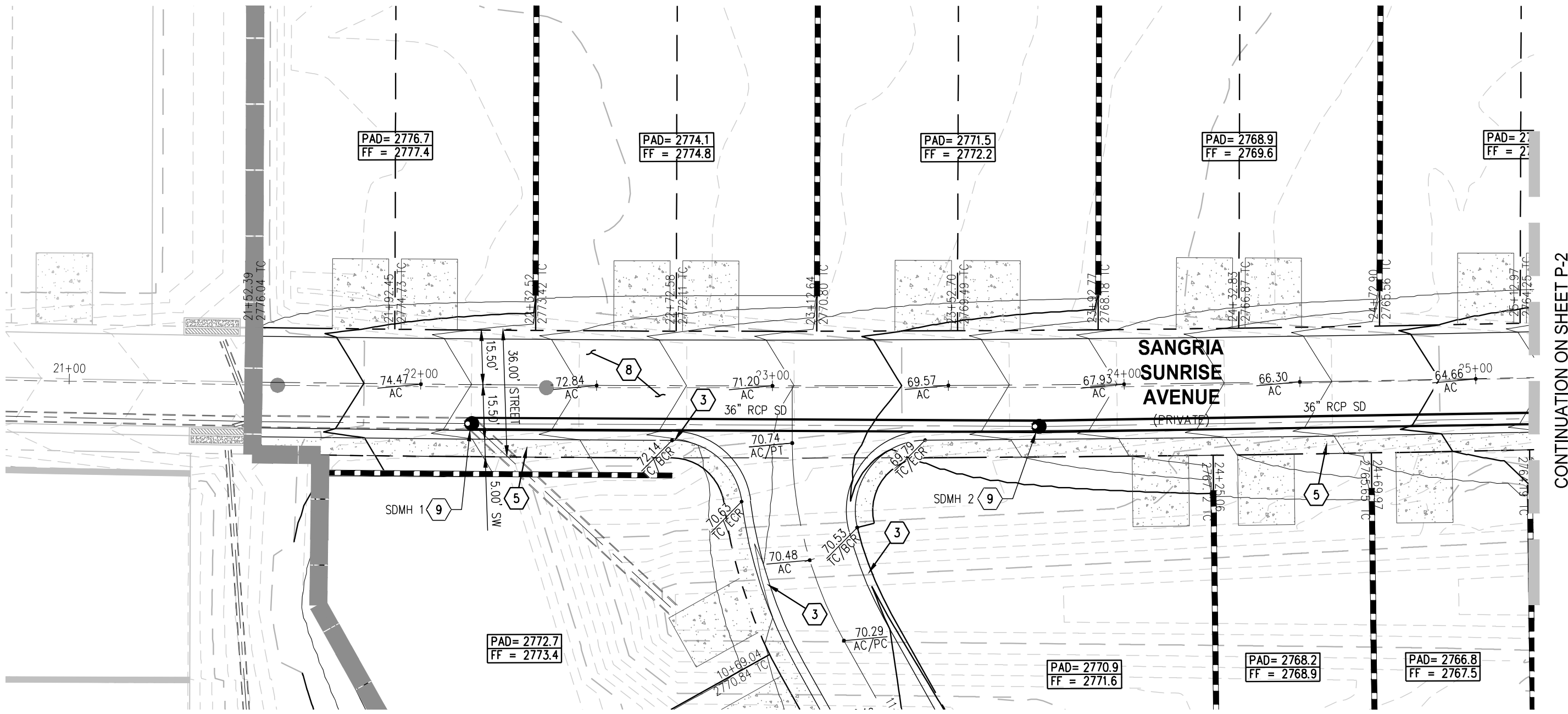
28. CONCRETE COLLAR



29. END LOT SECTION
NOT TO SCALE

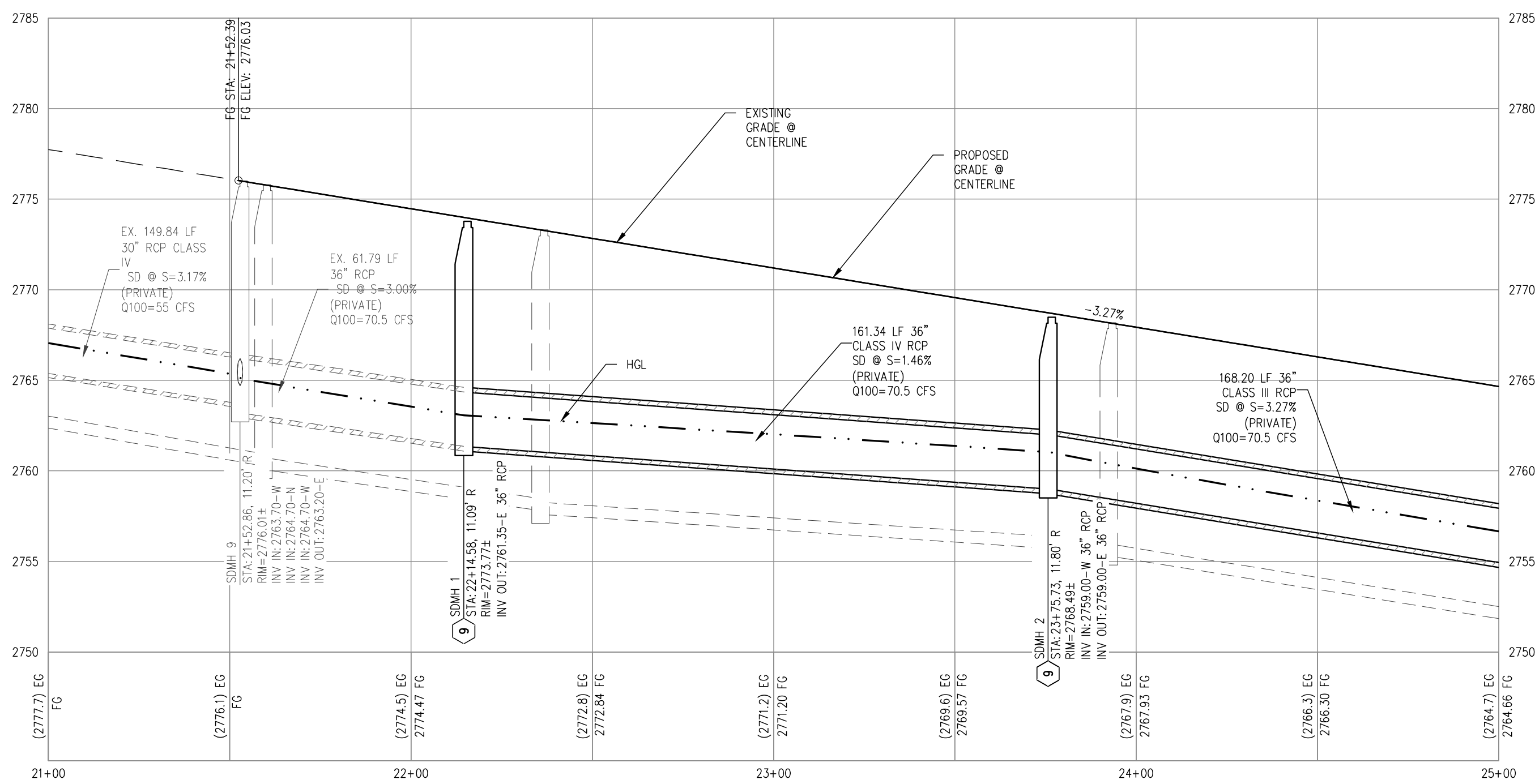
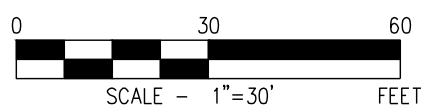


SHEET NO.	
	DATE: 5/17/22
	DRAFTER: GM
	DESIGNER: BD
	CHECKED: DY
PROJECT NO.	
SHE1901-004	
D-2	
SHEET 18 OF 31	



SANGRIA SUNRISE 21+00 TO 25+00 - PLAN VIEW

SCALE: 1"=30'



SANGRIA SUNRISE 21+00 TO 25+00 - PROFILE VIEW

HORIZ: 1" = 30'

VERT: 1" = 6'



WATER NOTES

1. INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
2. INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1 (TYPICAL FOR ROLL CURB SIDE)
3. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
4. FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
5. INSTALL 8"x8" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
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8. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40
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12. INSTALL CAP AND 2" BLOWOFF VALVE PER UDACS PLATE NO. 36
13. INSTALL 1" HORIZONTAL DEFLECTION PER UDACS SEC. 2.07
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19. WET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
20. FIELD VERIFY, REMOVE EX CAP & BLOW-OFF, AND CONNECT TO EXISTING WATERLINE

SEWER NOTES

1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH WATER TIGHT JOINTS PER DCSWCS SD-1, SD-3, AND SD-4, WITH SINGLE 24" LID
2. INSTALL 8" SD-35 PVC SANITARY SEWER PER DCSWCS SD-15 & SD-17
3. INSTALL 4" PVC SANITARY SEWER LATERAL PER DCSWCS SD-17, SD-20, SD-21 AND SD-23
4. CORE DRILL HOLE IN EXISTING MANHOLE AND CONNECT 8" PVC SANITARY SEWER PIPE PER DCSWCS SECTIONS 2.3.8 & 3.16.4

GRADING NOTES

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BENCHMARK

MONUMENT ID: USDA (1934) 19
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ELEVATION = 2817.61 FEET, 858.810 METERS
NAVD 88 DATUM
PER THE CITY OF LAS VEGAS BENCHMARK BOOK - 2008 ADJUSTMENT (UPDATED 05/24/2010)

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SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSOLETE DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2700 TO ALL SPOT GRABES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1735E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

DATE: _____

DESCRIPTION: _____

NO. _____

CITY OF LAS VEGAS, NEVADA

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

SANGRIA SUNRISE 21+00 TO 25+00

DATE: 5/17/22

DRAFTER: GM

DESIGNER: BD

CHECKED: DY

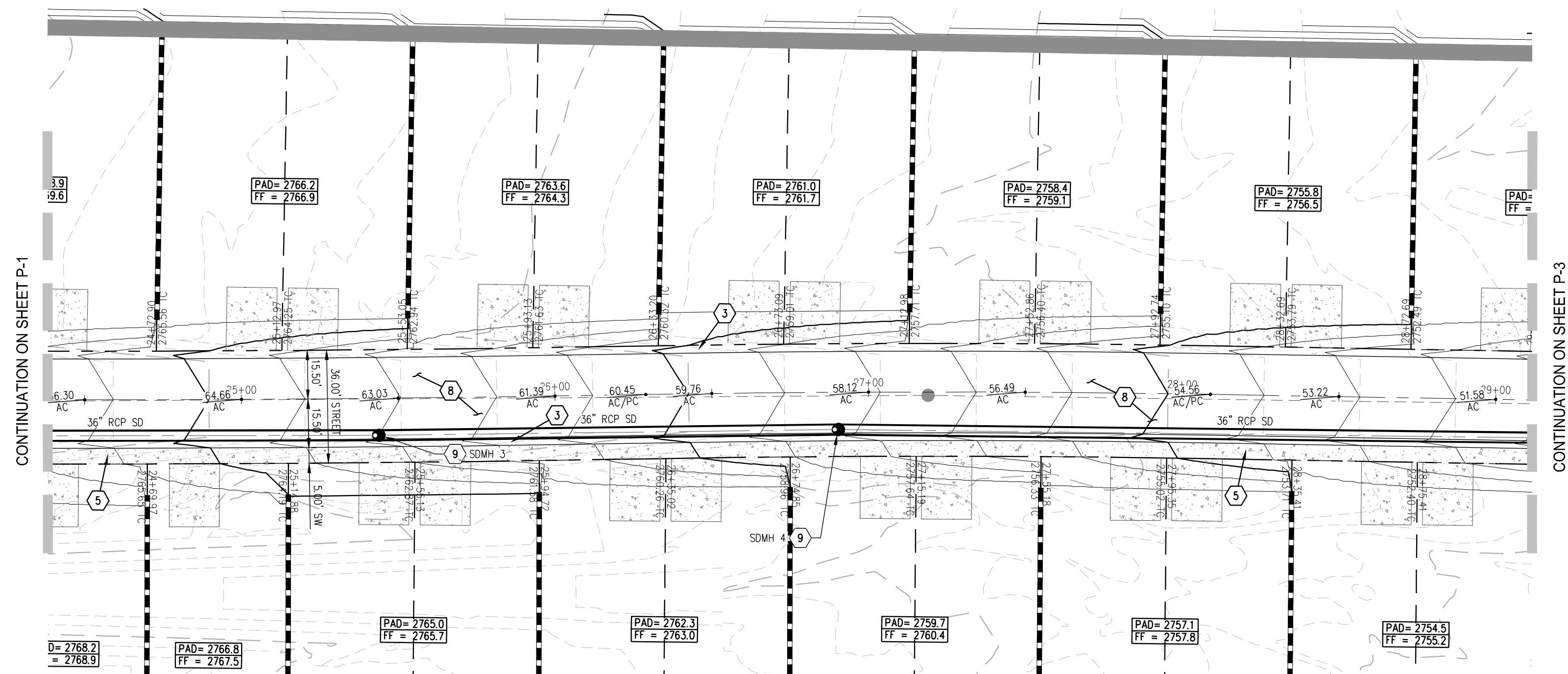
PROJECT NO.

SHE1901-004



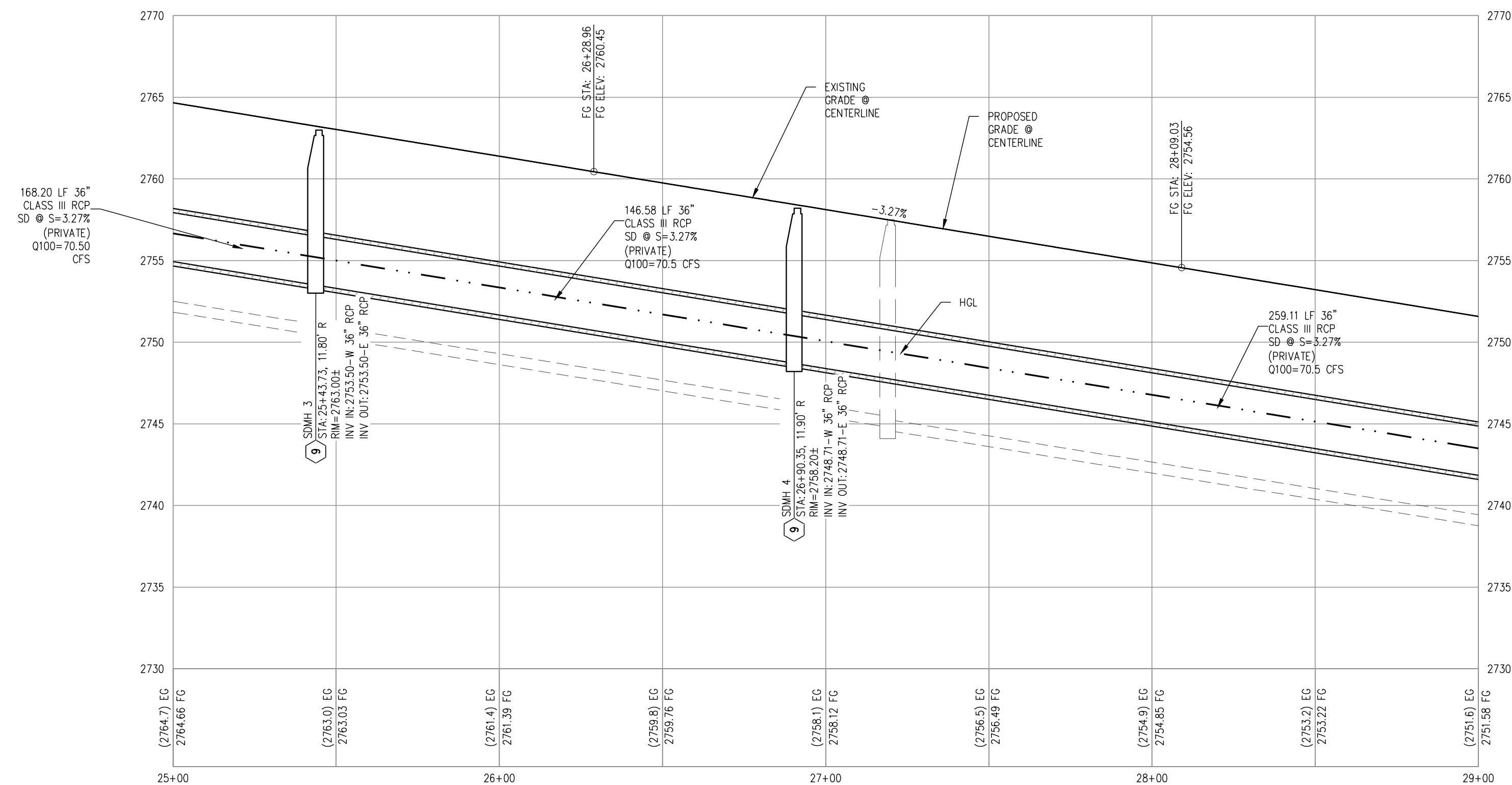
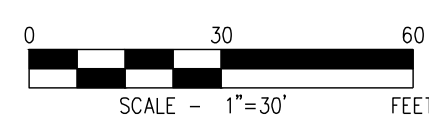
P-1

SHEET 19 OF 31



SANGRIA SUNRISE 25+00 TO 29+00 - PLAN VIEW

SCALE: 1"=30'



SANGRIA SUNRISE 25+00 TO 29+00 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



WATER NOTES

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- 18 WET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
- 19 FIELD VERIFY - REMOVE EX CAP & BLOW-OFF, AND
20 CONNECT TO EXISTING WATERLINE

GRADING NOTES

- | | |
|----|--|
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. ##### FIRST APPROVED DATE: _____

[illegible]

CITY OF LAS VEGAS, NEVADA

SHLP

PARCEL 3 AT SUNSTONE PHASE 4A
SANGRIA SUNRISE 25+00 TO 29+00

STR 6S
19S
60E

DATE: 5/17/22

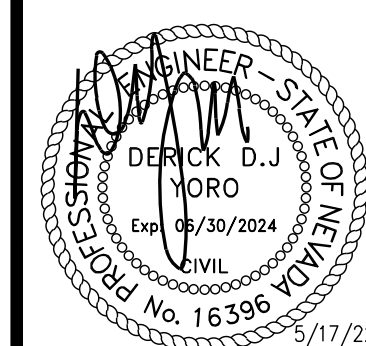
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DESIGNER: BD

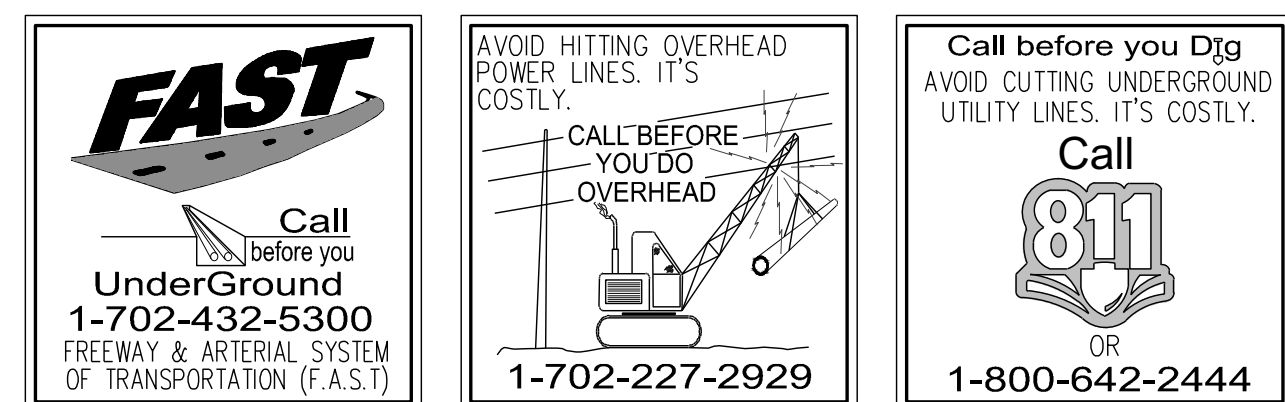
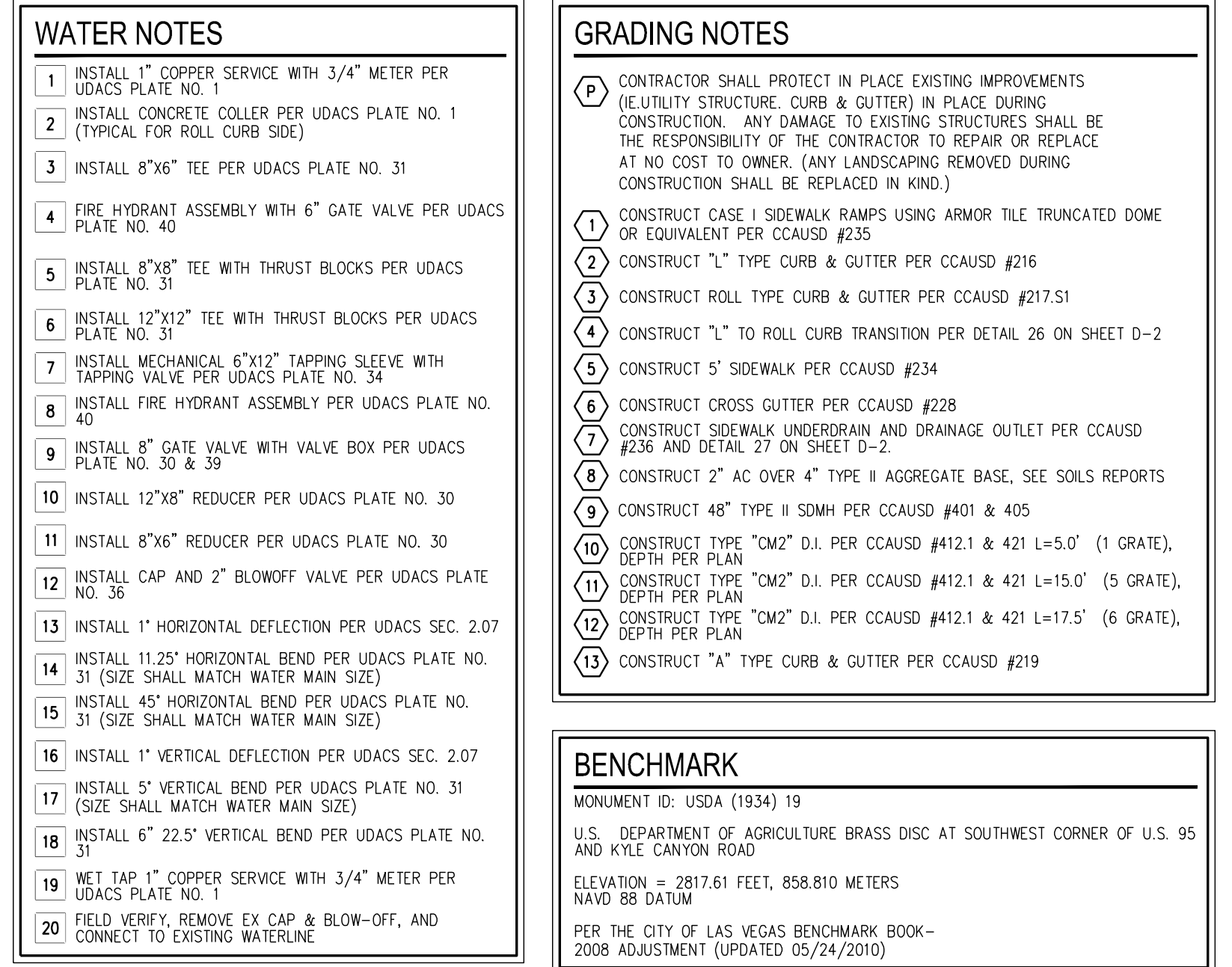
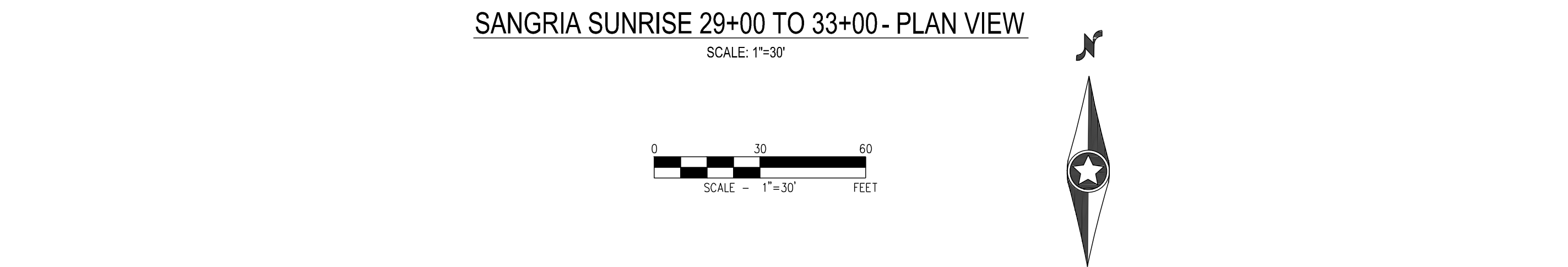
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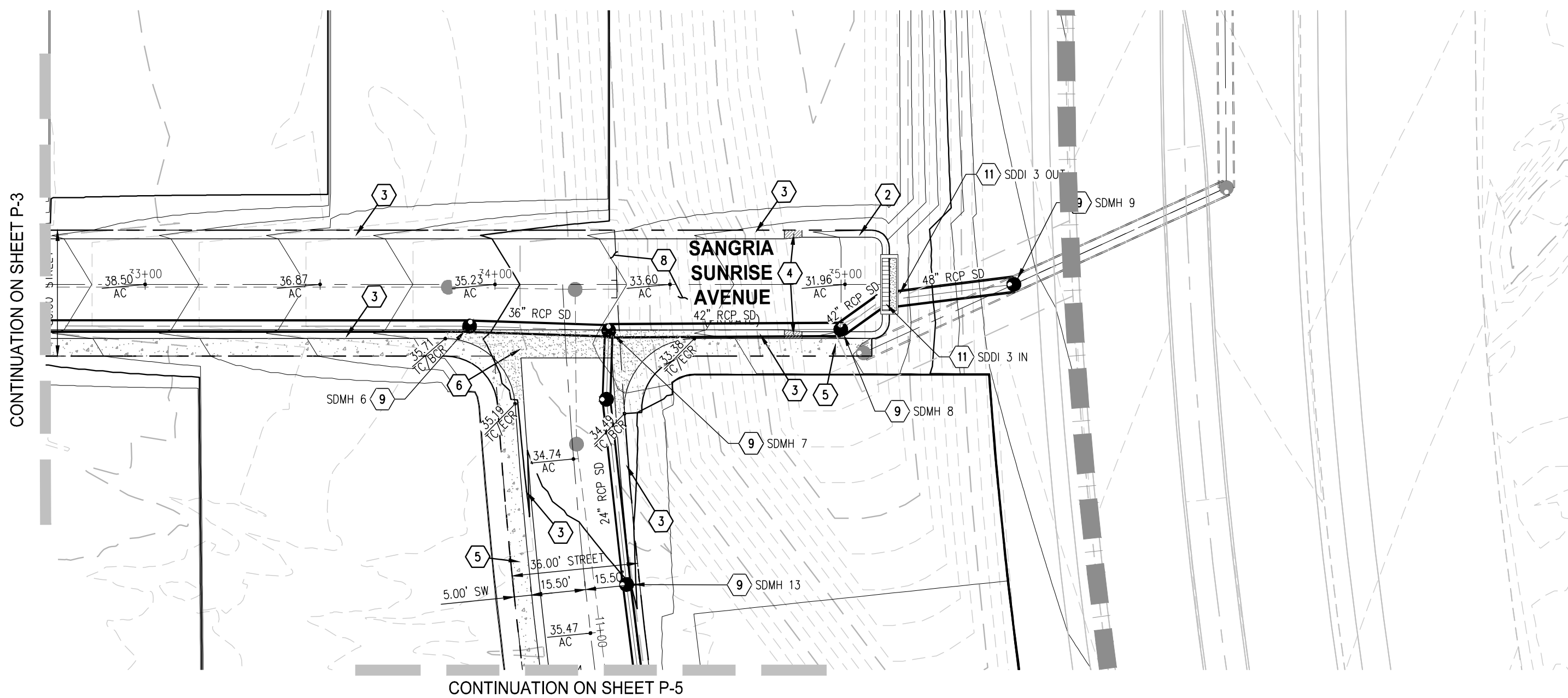
PROJECT NO.

SHE1901-004



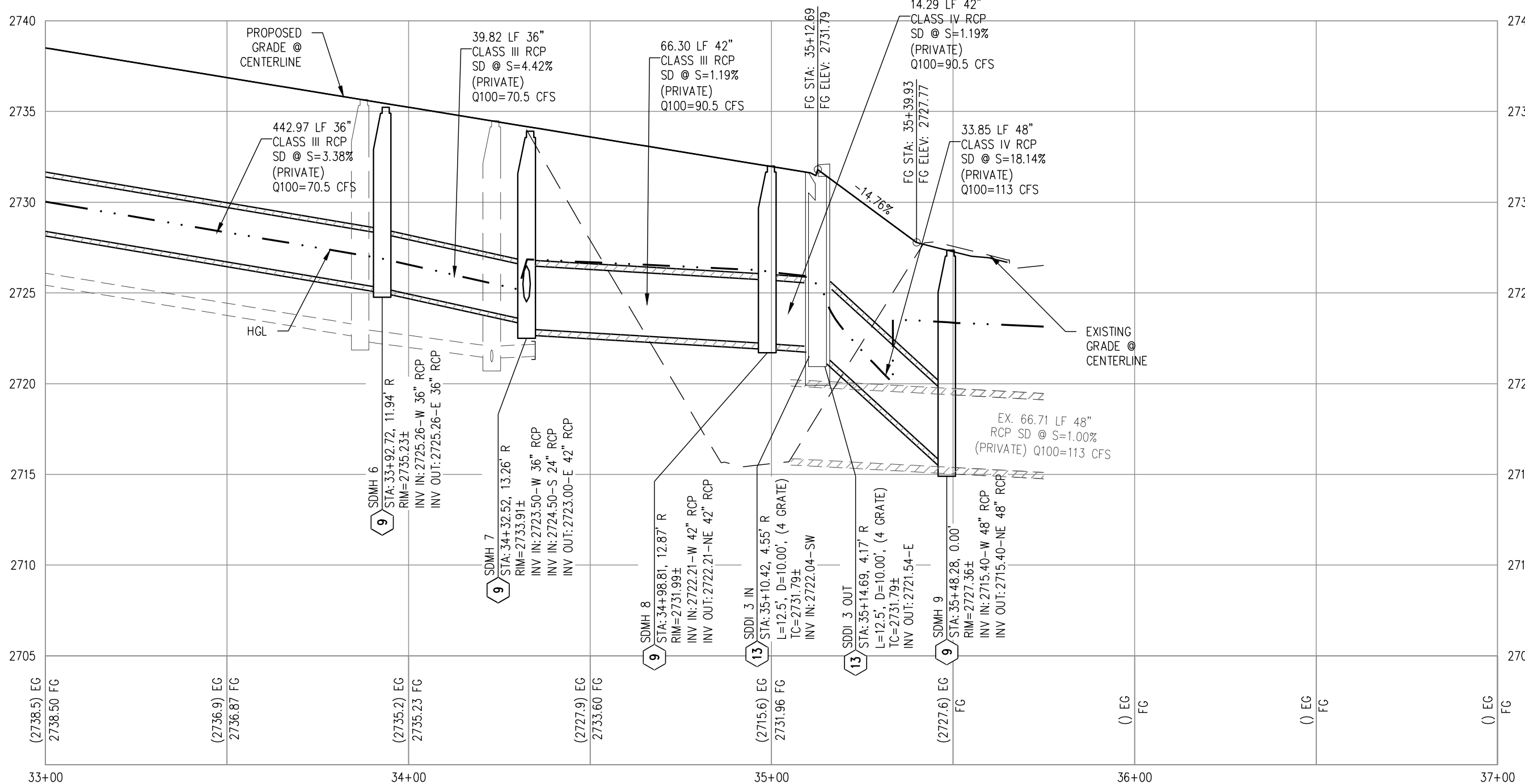
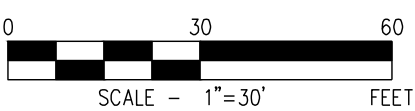
P-2
ET 20 OF 31





SANGRIA SUNRISE 33+00 TO 37+00 - PLAN VIEW

SCALE: 1"=30'



SANGRIA SUNRISE 33+00 TO 37+00 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



WATER NOTES

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4. CORE DRILL HOLE IN EXISTING MANHOLE AND CONNECT 8" PVC SANITARY SEWER PIPE PER DCSWCS SECTIONS 2.3.8 & 3.16.4

GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (E. UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)
2. CONSTRUCT CASE 1 SIDEWALK RAMPS USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
3. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #217.51
4. CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
5. CONSTRUCT 5' SIDEWALK PER CCAUSD #234
6. CONSTRUCT CROSS GUTTER PER CCAUSD #228
7. CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2
8. CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
9. CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
10. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE), DEPTH PER PLAN
11. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=15.0' (5 GRATE), DEPTH PER PLAN
12. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN
13. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=12.5' (4 GRATE), DEPTH PER PLAN
14. CONSTRUCT "A" TYPE CURB & GUTTER PER CCAUSD #219

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 BEARINGS

NORTH 000°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

SURVEY NOTE

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ELEVATION NOTE

ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1735C, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

DATE	BY	APP.

DESCRIPTION	NO.

CITY OF LAS VEGAS, NEVADA

SHLP
PARCEL 3 AT SUNSTONE PHASE 4A
SANGRIA SUNRISE 33+00 TO 37+00

DATE: 5/17/22
DRAFTER: GM
DESIGNER: BD
CHECKED: DY
PROJECT NO. SHE1901-004

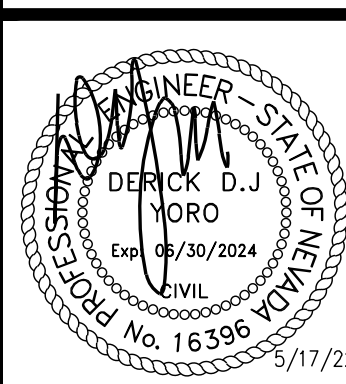
APPROVED FOR CONSTRUCTION

PROJECT NO. ##### FIRST APPROVED DATE: _____

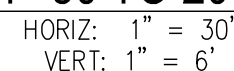
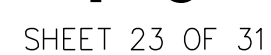
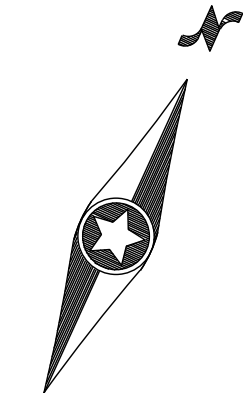
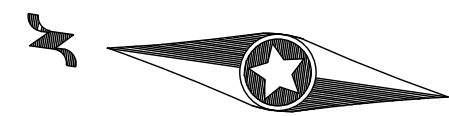
FAST
Call before you Dig UnderGround 1-702-432-5300
FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)

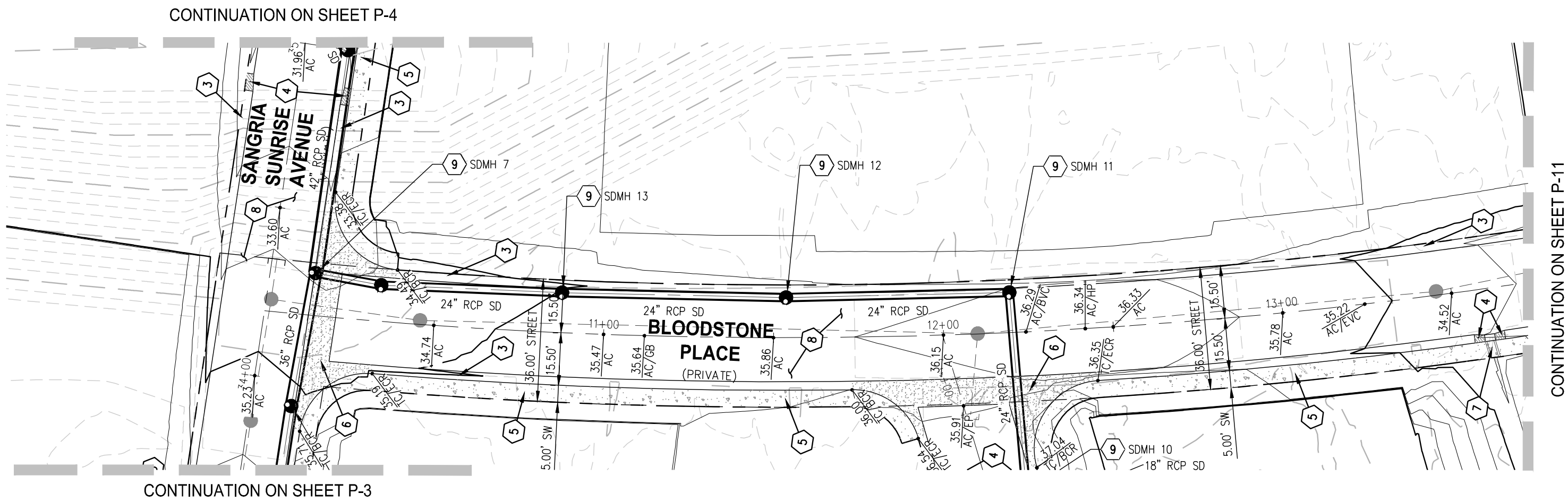
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY. CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444



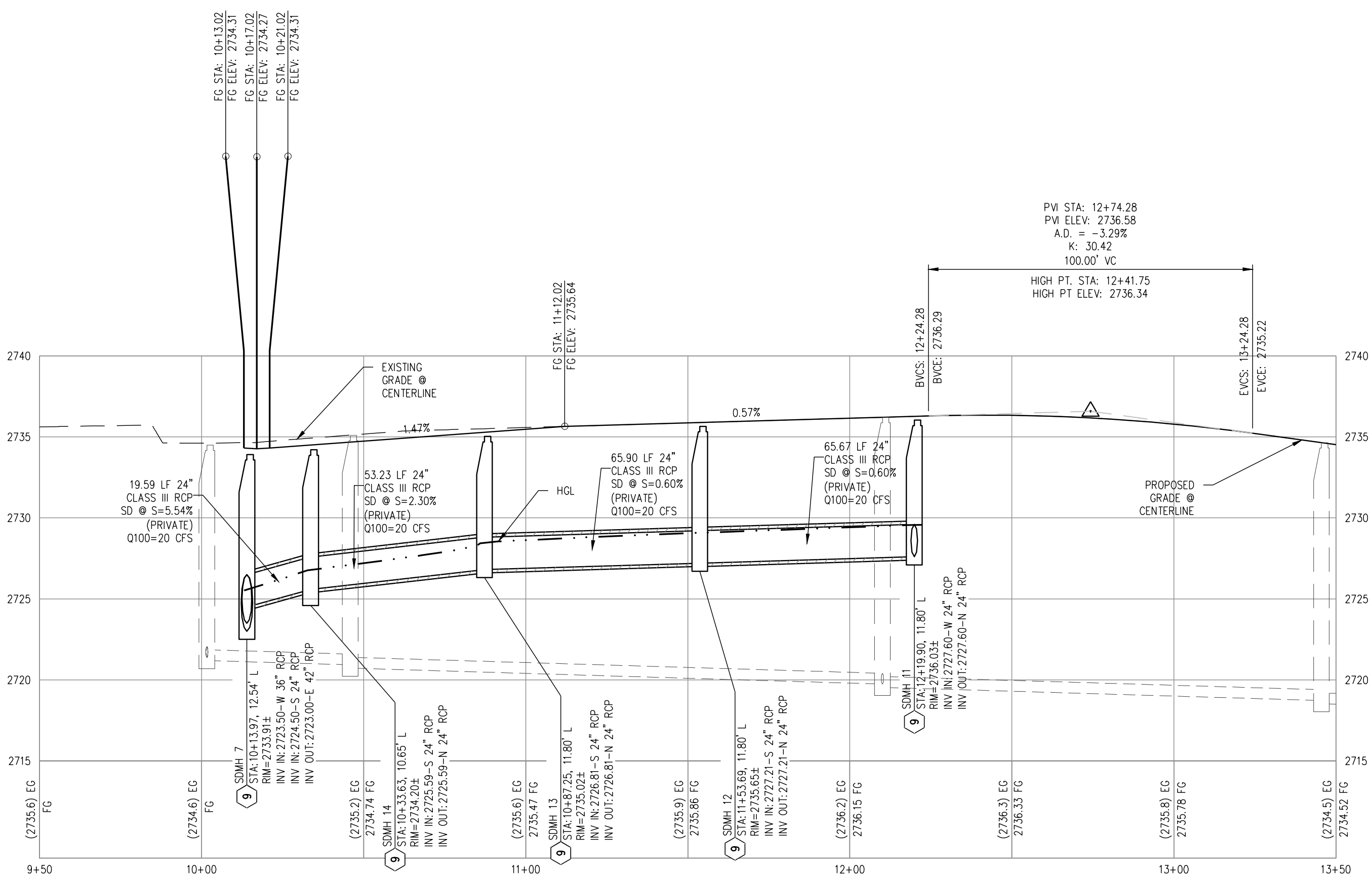
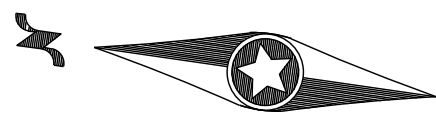
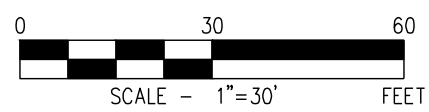
P-4
SHEET 22 OF 31





BLOODSTONE 9+50 TO 13+50 - PLAN VIEW

SCALE 1" = 30'



BLOODSTONE 9+50 TO 13+50 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



WATER NOTES

1. INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
2. INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1 (TYPICAL FOR ROLL CURB SIDE)
3. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
4. FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
5. INSTALL 8"x8" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
6. INSTALL 12"x12" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
7. INSTALL MECHANICAL 6"x12" TAPPING SLEEVE WITH TAPPING VALVE PER UDACS PLATE NO. 34
8. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40
9. INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
10. INSTALL 12"x8" REDUCER PER UDACS PLATE NO. 30
11. INSTALL 8"x6" REDUCER PER UDACS PLATE NO. 30
12. INSTALL CAP AND 2" BLOWOFF VALVE PER UDACS PLATE NO. 36
13. INSTALL 1" HORIZONTAL DEFLECTION PER UDACS SEC. 2.07
14. INSTALL 11.25" HORIZONTAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
15. INSTALL 45" HORIZONTAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
16. INSTALL 1" VERTICAL DEFLECTION PER UDACS SEC. 2.07
17. INSTALL 5" VERTICAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
18. INSTALL 6" 22.5" VERTICAL BEND PER UDACS PLATE NO. 31
19. WET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
20. FIELD VERIFY, REMOVE EX CAP & BLOW-OFF, AND CONNECT TO EXISTING WATERLINE

SEWER NOTES

1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH WATER-TIGHT JOINTS PER DCSWCS SD-1, SD-3, AND SD-4, WITH SINGLE 24" LID
2. INSTALL 8" SD-35 PVC SANITARY SEWER PER DCSWCS SD-15 & SD-17
3. INSTALL 4" PVC SANITARY SEWER LATERAL PER DCSWCS SD-17, SD-20, SD-21 AND SD-23
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2. CONSTRUCT CASE I SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
3. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
4. CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51
5. CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
6. CONSTRUCT 5' SIDEWALK PER CCAUSD #234
7. CONSTRUCT CROSS GUTTER PER CCAUSD #228
8. CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2
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11. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=5.0' (1 GRATE), DEPTH PER PLAN
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13. CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN
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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 BEARINGS

NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

SURVEY NOTE

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ELEVATION NOTE

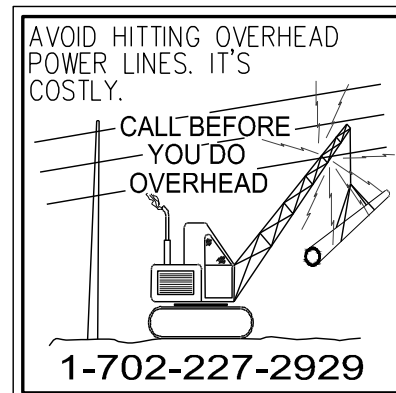
ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



SHLP

CITY OF LAS VEGAS, NEVADA

PARCEL 3 AT SUNSTONE PHASE 4A

BLOODSTONE 9+50 TO 13+50

DATE: 5/17/22

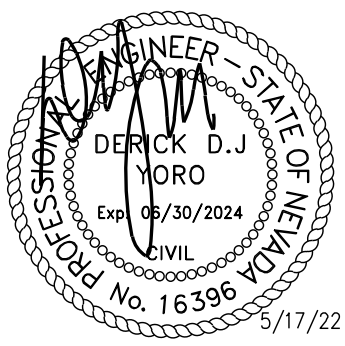
DRAFTER: GM

DESIGNER: BD

CHECKED: DY

PROJECT NO.

SHE1901-004



P-6

SHEET 24 OF 31

Westwood

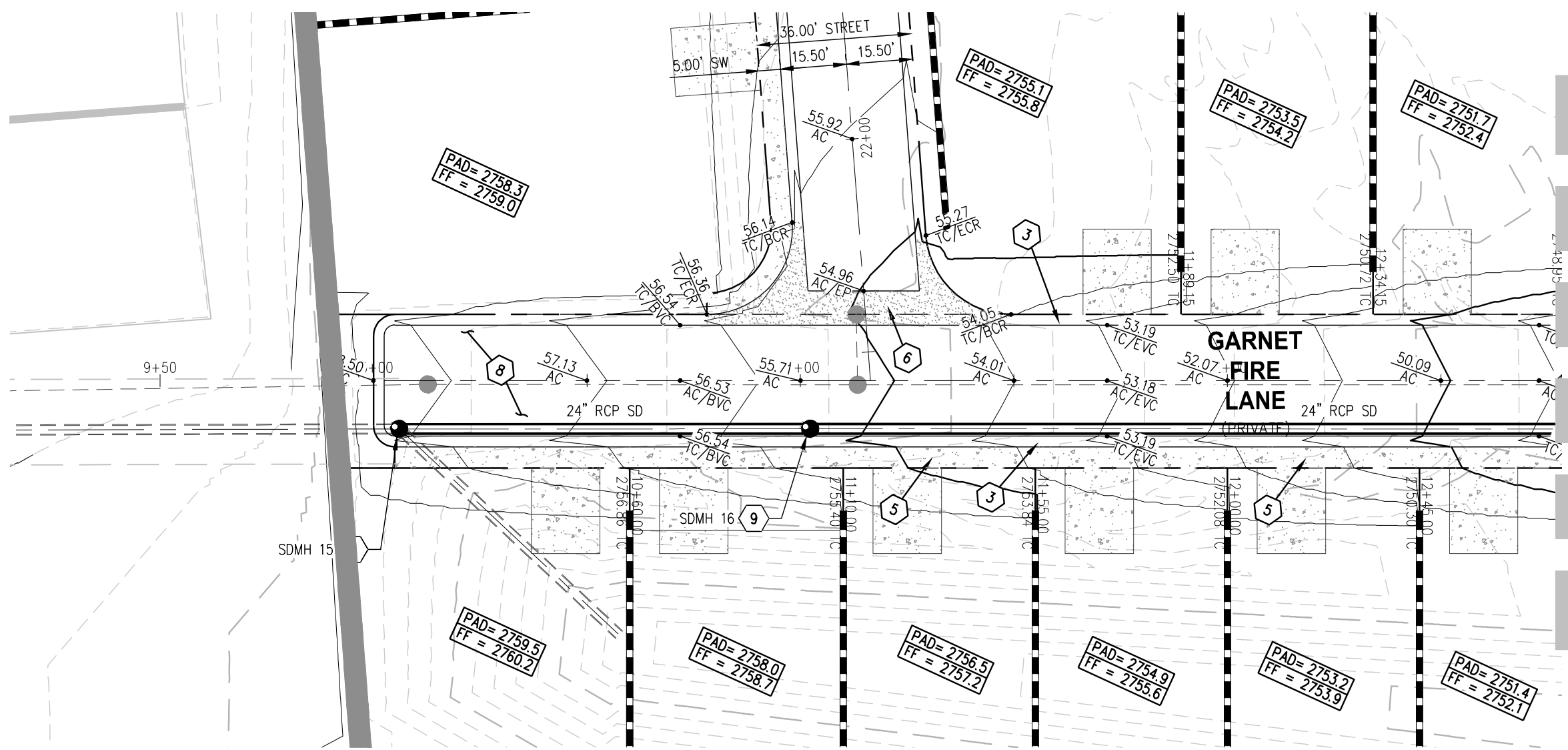
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118

Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

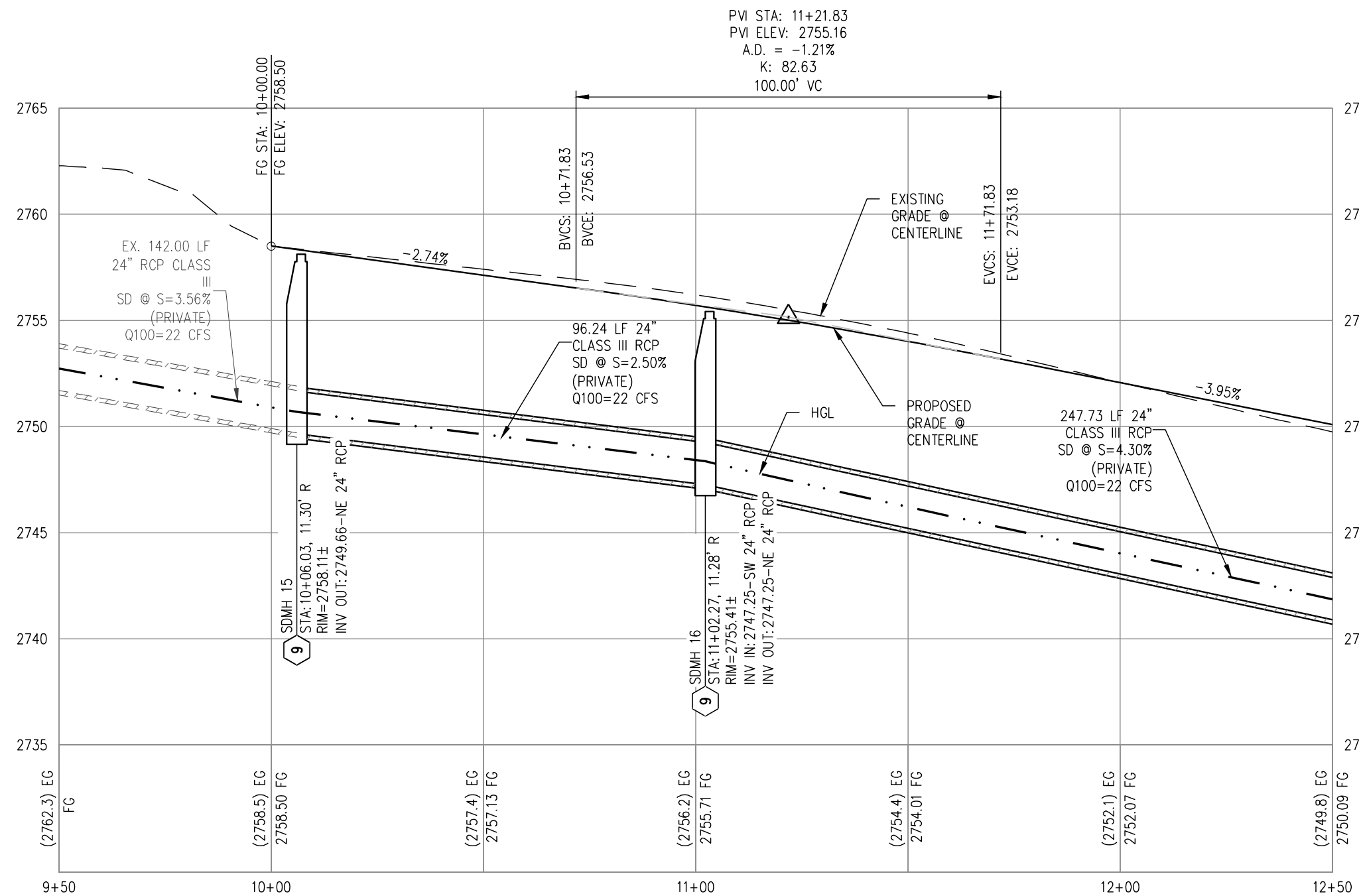
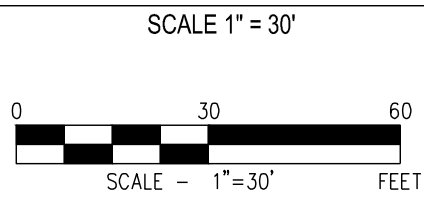
DATE: BY: APP: DATE:

DESCRIPTION

NO.



GARNET FIRE 9+50 TO 12+50 - PLAN VIEW



GARNET FIRE 9+50 TO 12+50 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'

CONTINUATION ON SHEET P-8



WATER NOTES

1. INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
2. INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1 (TYPICAL FOR ROLL CURB SIDE)
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18. INSTALL 6" 22.5' VERTICAL BEND PER UDACS PLATE NO. 31
19. NET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
20. FIELD VERIFY, REMOVE EX CAP & BLOW-OFF, AND CONNECT TO EXISTING WATERLINE

SEWER NOTES

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4. CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
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BENCHMARK

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



SHLP

CITY OF LAS VEGAS, NEVADA

NO.

DESCRIPTION

DATE BY APP. DATE

Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

PARCEL 3 AT SUNSTONE PHASE 4A

GARNET FIRE 9+50 TO 12+50

5/17/22

DATE: 5/17/22

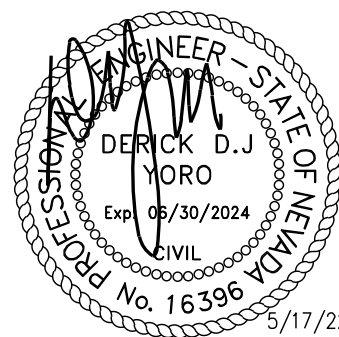
DRAFTER: GM

DESIGNER: BD

CHECKED: DY

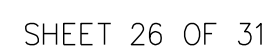
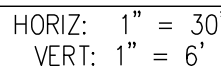
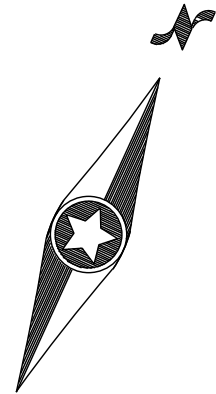
PROJECT NO.

SHE1901-004



P-7

SHEET 25 OF 31





WATER NOTES

- 1 INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
- 2 INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1
(TYPICAL FOR ROLL CURB SIDE)
- 3 INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
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- 5 INSTALL 12"x12" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
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- 18 WET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
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SEWER NOTES

1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH WATER-TIGHT JOINTS PER DCSWCS SD-1, SD-3, AND SD-4, WITH SINGLE 24" LID
2. INSTALL 8" SDR-35 PVC SANITARY SEWER PER DCSWCS SD-15 & SD-17
3. INSTALL 4" PVC SANITARY SEWER LATERAL PER DCSWCS SD-17, SD-20, SD-21 AND SD-23
4. CORE DRILL HOLE IN EXISTING MANHOLE AND CONNECT 8" PVC SANITARY SEWER PIPE PER DCSWCS SECTIONS 2.3.8 & 2.16.4

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| 13 | CONSTRUCT TYPE "CM2" D.I. PER CCAUSD #412.1 & 421 L=17.5' (6 GRATE), DEPTH PER PLAN |
| 14 | CONSTRUCT "AT" TYPE CURB & GUTTER PER CCAUSD #219 |

BENCHMARK

MONUMENT ID: USDA (1934) 19

U.S. DEPARTMENT OF AGRICULTURE BRASS DISC AT SOUTHWEST CORNER OF U.S. 9
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 BEARINGS

NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) 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.

SURVEY NOTE

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSCURED DURING CONSTRUCTION.

ELEVATION NOTE

ADD 2700 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE
OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2701.00)

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1735E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. ##### FIRST APPROVED DATE:



PARCEL 3 AT SUNSTONE PHASE 4A
SAFFRON SPICE 9+50 TO 14+00

CITY OF LAS VEGAS, NEVADA

DESCRIPTION

DATE	BY	APP. DATE	APP.
------	----	--------------	------

Westwood

iPhone (702) 284-5300
 5725 W. Badura Ave.
 Suite 100
 Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.

STR 619 SE

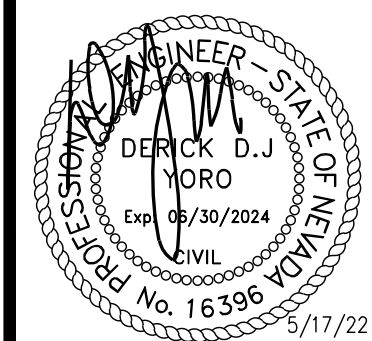
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DESIGNER: BD

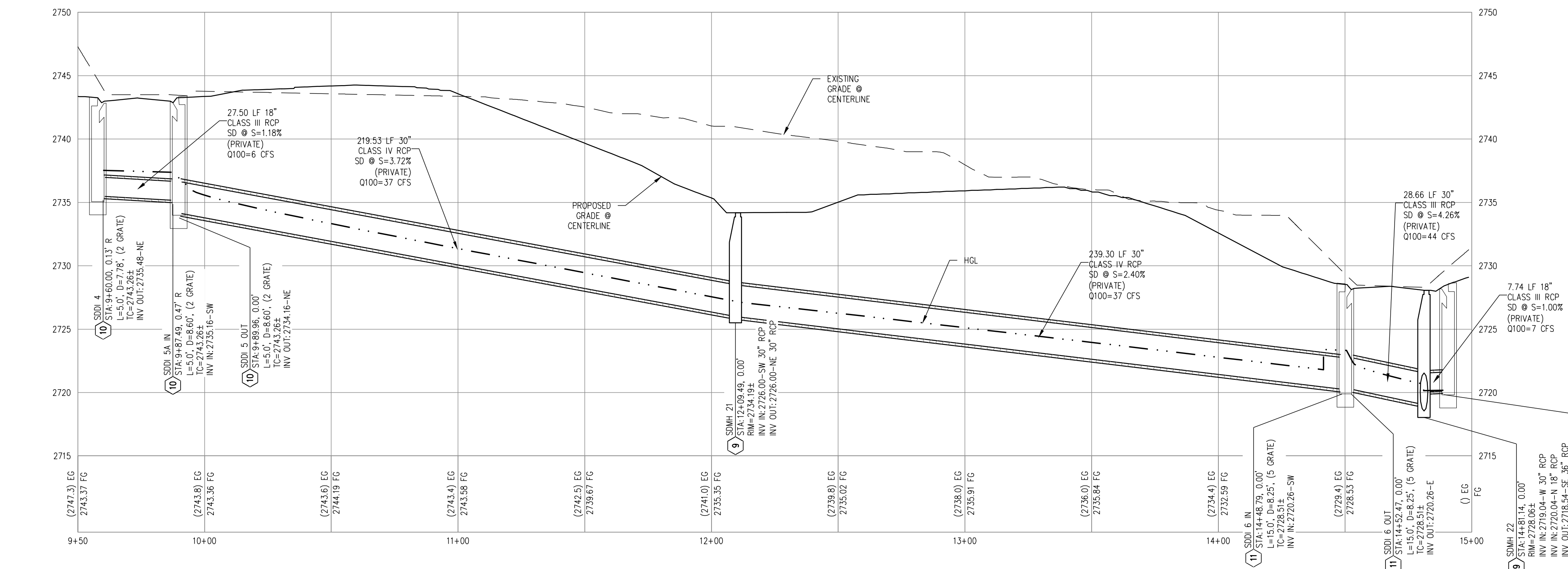
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PROJECT NO.
SHE1901-004

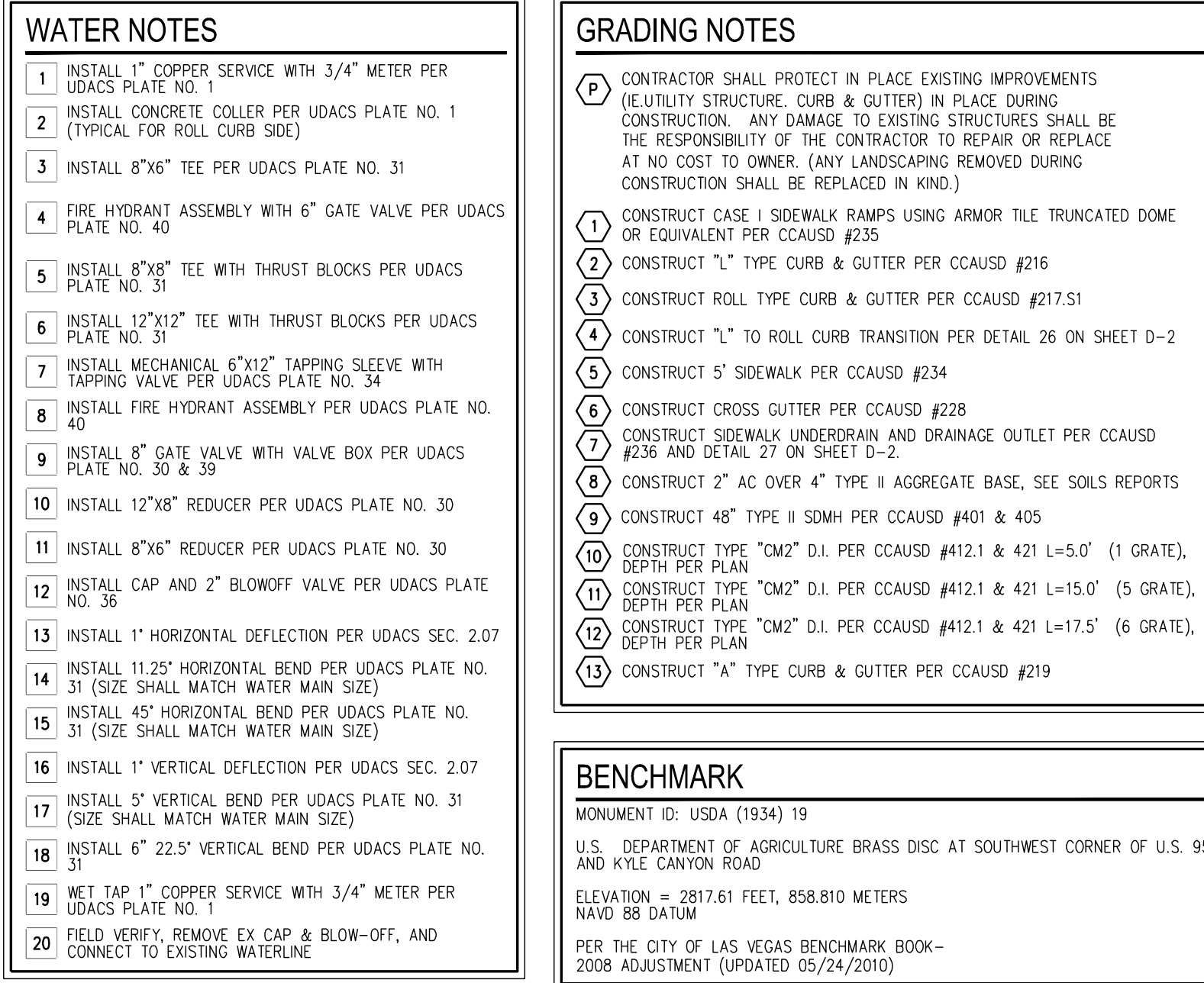


P-9

SHEET 27 OF 31



HORIZ: 1" = 30'
VERT: 1" = 6'

[illegible]

CITY OF LAS VEGAS, NEVADA

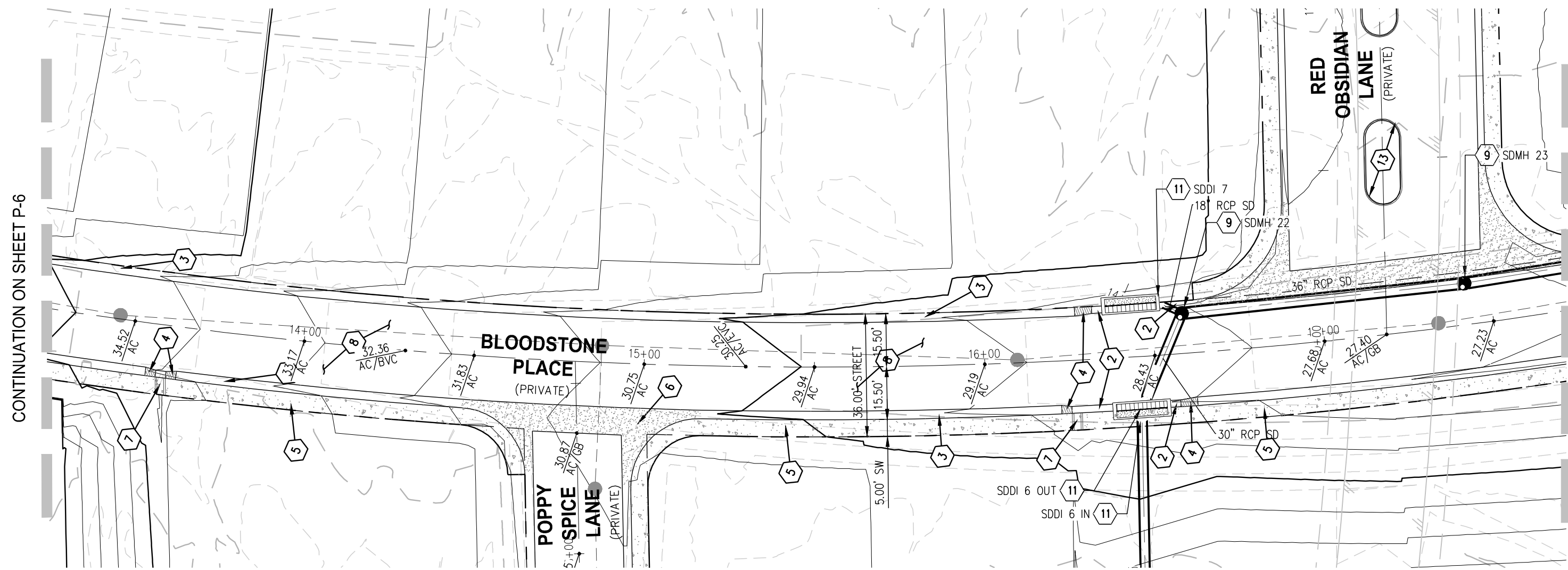
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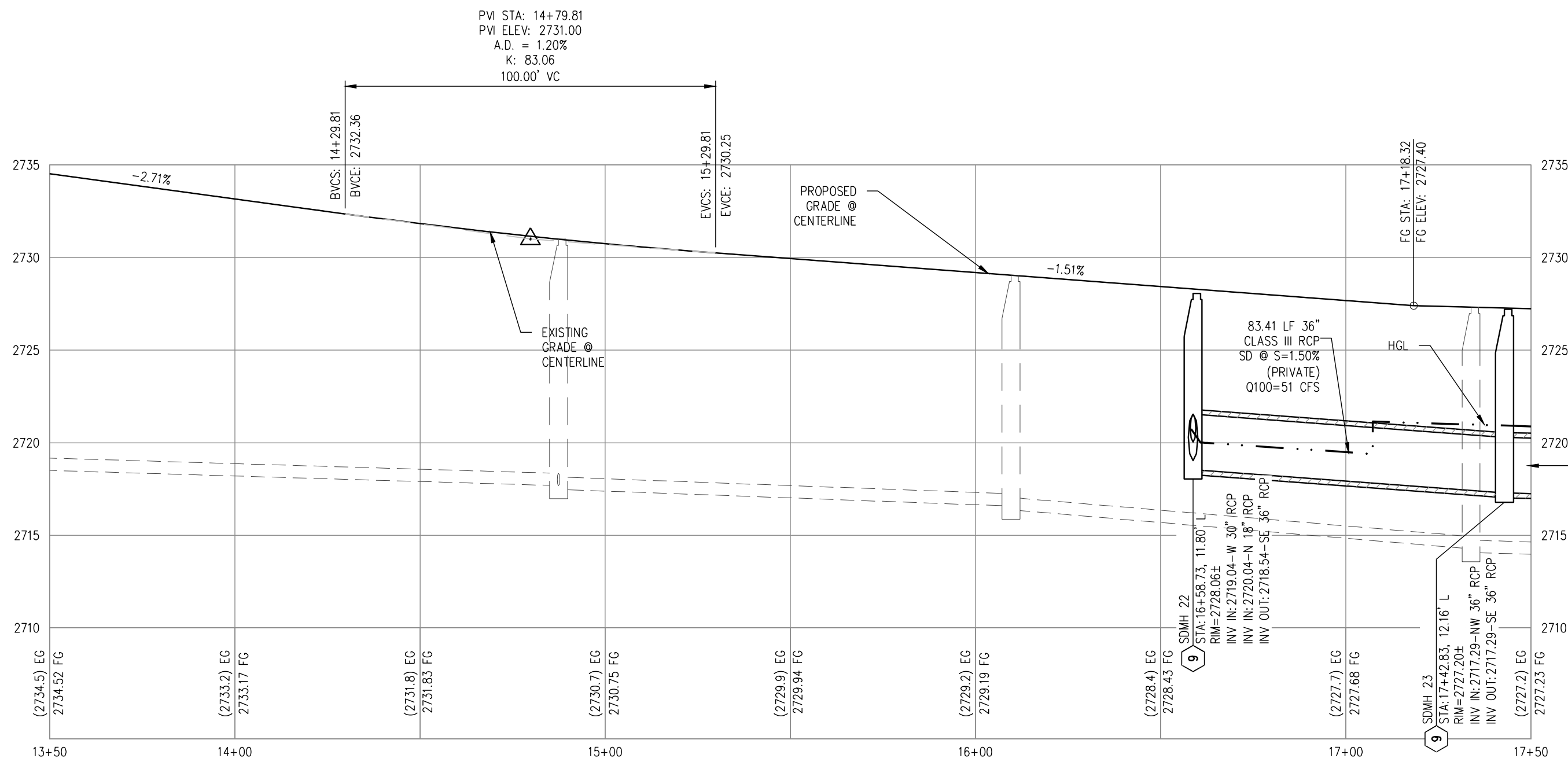
P-10
SHEET 28 OF 31



J:\shel901-004\trbony_sunstone phase 4\dwg\improv\phase 4a\shel901-004.dwg 5/17/2022 10:49 AM Ben Dancal



CONTINUATION ON SHEET P-12



WATER NOTES

1. INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
2. INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1 (TYPICAL FOR ROLL CURB SIDE)
3. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
4. FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE NO. 40
5. INSTALL 8"x8" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
6. INSTALL 12"x12" TEE WITH THRUST BLOCKS PER UDACS PLATE NO. 31
7. INSTALL MECHANICAL 6"x12" TAPPING SLEEVE WITH TAPPING VALVE PER UDACS PLATE NO. 34
8. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40
9. INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
10. INSTALL 12"x8" REDUCER PER UDACS PLATE NO. 30
11. INSTALL 8"x6" REDUCER PER UDACS PLATE NO. 30
12. INSTALL CAP AND 2" BLOWOFF VALVE PER UDACS PLATE NO. 36
13. INSTALL 1" HORIZONTAL DEFLECTION PER UDACS SEC. 2.07
14. INSTALL 11.25" HORIZONTAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
15. INSTALL 45" HORIZONTAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
16. INSTALL 1" VERTICAL DEFLECTION PER UDACS SEC. 2.07
17. INSTALL 5" VERTICAL BEND PER UDACS PLATE NO. 31 (SIZE SHALL MATCH WATER MAIN SIZE)
18. INSTALL 6" 22.5" VERTICAL BEND PER UDACS PLATE NO. 31
19. NET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
20. FIELD VERIFY, REMOVE EX CAP & BLOW-OFF, AND CONNECT TO EXISTING WATERLINE

SEWER NOTES

1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH WATER TIGHT JOINTS PER DCSWCS SD-1, SD-3, AND SD-4, WITH SINGLE 24" LID
2. INSTALL 8" SD-35 PVC SANITARY SEWER PER DCSWCS SD-15 & SD-17
3. INSTALL 4" PVC SANITARY SEWER LATERAL PER DCSWCS SD-17, SD-20, SD-21 AND SD-23
4. CORE DRILL HOLE IN EXISTING MANHOLE AND CONNECT 8" PVC SANITARY SEWER PIPE PER DCSWCS SECTIONS 2.3.8 & 3.16.4

GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE EXISTING IMPROVEMENTS (UTILITY STRUCTURE, CURB & GUTTER) IN PLACE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT NO COST TO OWNER. (ANY LANDSCAPING REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN KIND.)
2. CONSTRUCT CASE 1 SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOME OR EQUIVALENT PER CCAUSD #235
3. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD #216
4. CONSTRUCT ROLL TYPE CURB & GUTTER PER CCAUSD #217.51
5. CONSTRUCT "L" TO ROLL CURB TRANSITION PER DETAIL 26 ON SHEET D-2
6. CONSTRUCT 5' SIDEWALK PER CCAUSD #234
7. CONSTRUCT CROSS GUTTER PER CCAUSD #228
8. CONSTRUCT SIDEWALK UNDERDRAIN AND DRAINAGE OUTLET PER CCAUSD #236 AND DETAIL 27 ON SHEET D-2
9. CONSTRUCT 2" AC OVER 4" TYPE II AGGREGATE BASE, SEE SOILS REPORTS
10. CONSTRUCT 48" TYPE II SDMH PER CCAUSD #401 & 405
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14. CONSTRUCT "A" TYPE CURB & GUTTER PER CCAUSD #219

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 BEARINGS

NORTH 00°01'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

SURVEY NOTE

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ELEVATION NOTE

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FLOOD ZONE

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

DATE	BY	APP.	DATE

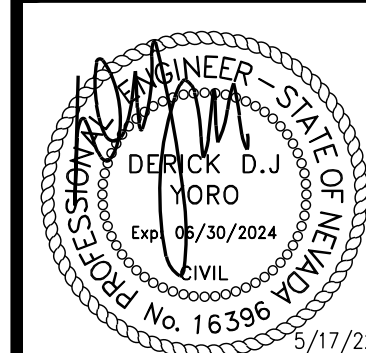
DESCRIPTION	NO.

CITY OF LAS VEGAS, NEVADA

SHLP
PARCEL 3 AT SUNSTONE PHASE 4A
BLOODSTONE 13+50 TO 17+50

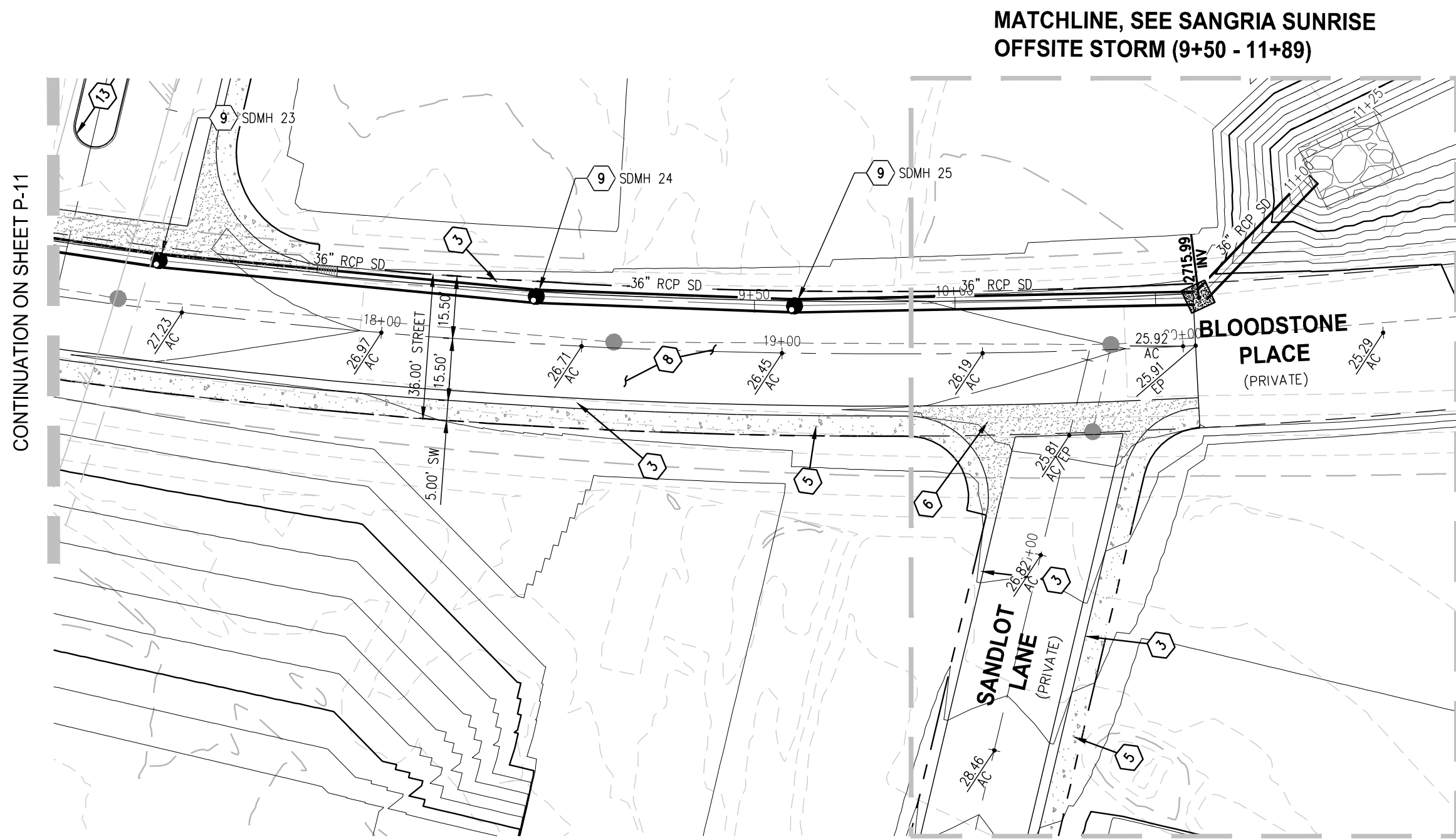
DATE: 5/17/22
DRAFTER: GM
DESIGNER: BD
CHECKED: DY

PROJECT NO.
SHE1901-004

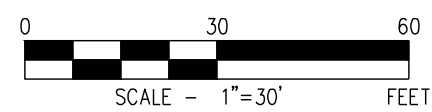


P-11
SHEET 29 OF 31

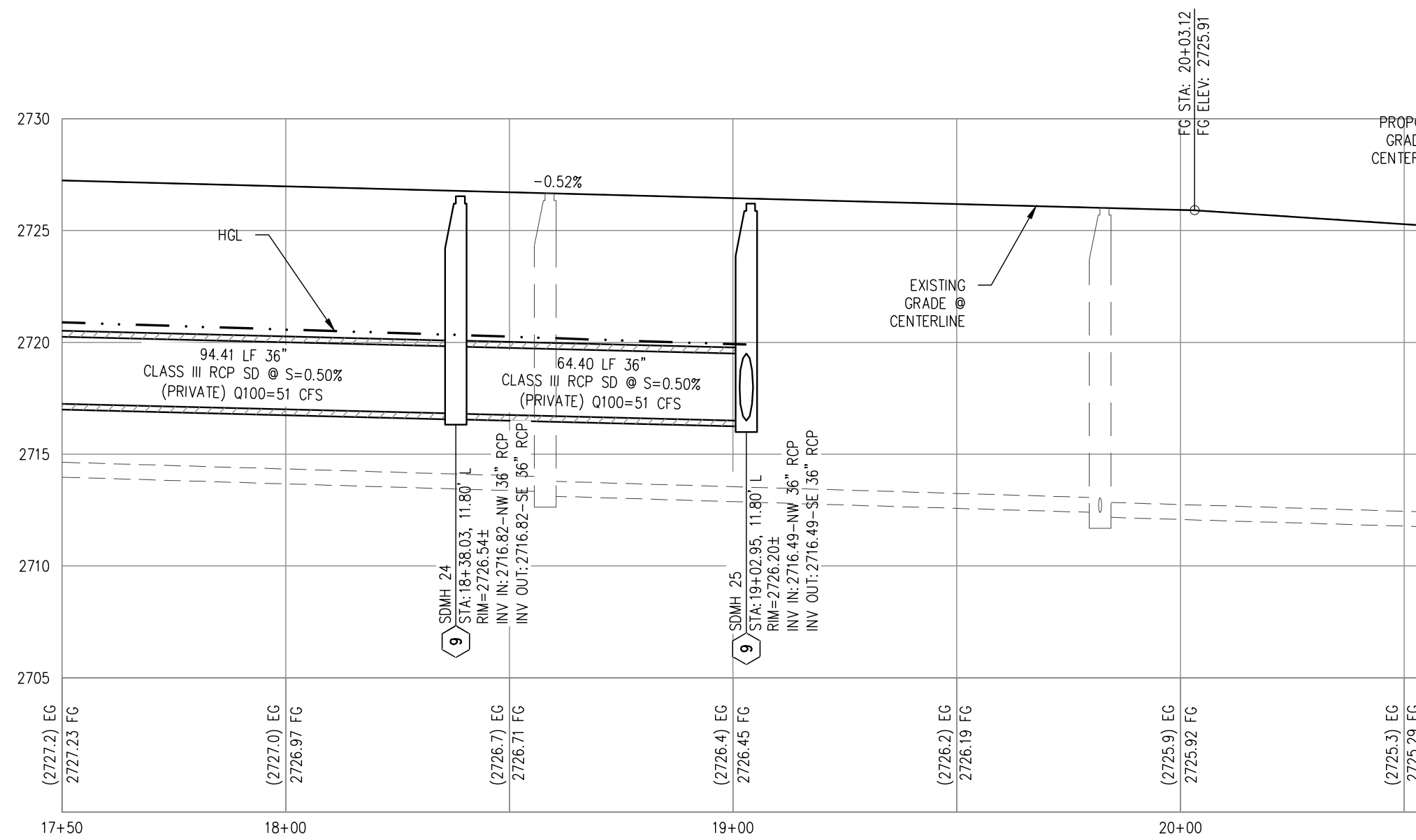
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BLOODSTONE 17+50 TO 21+00 - PLAN VIEW
SCALE 1" = 30'

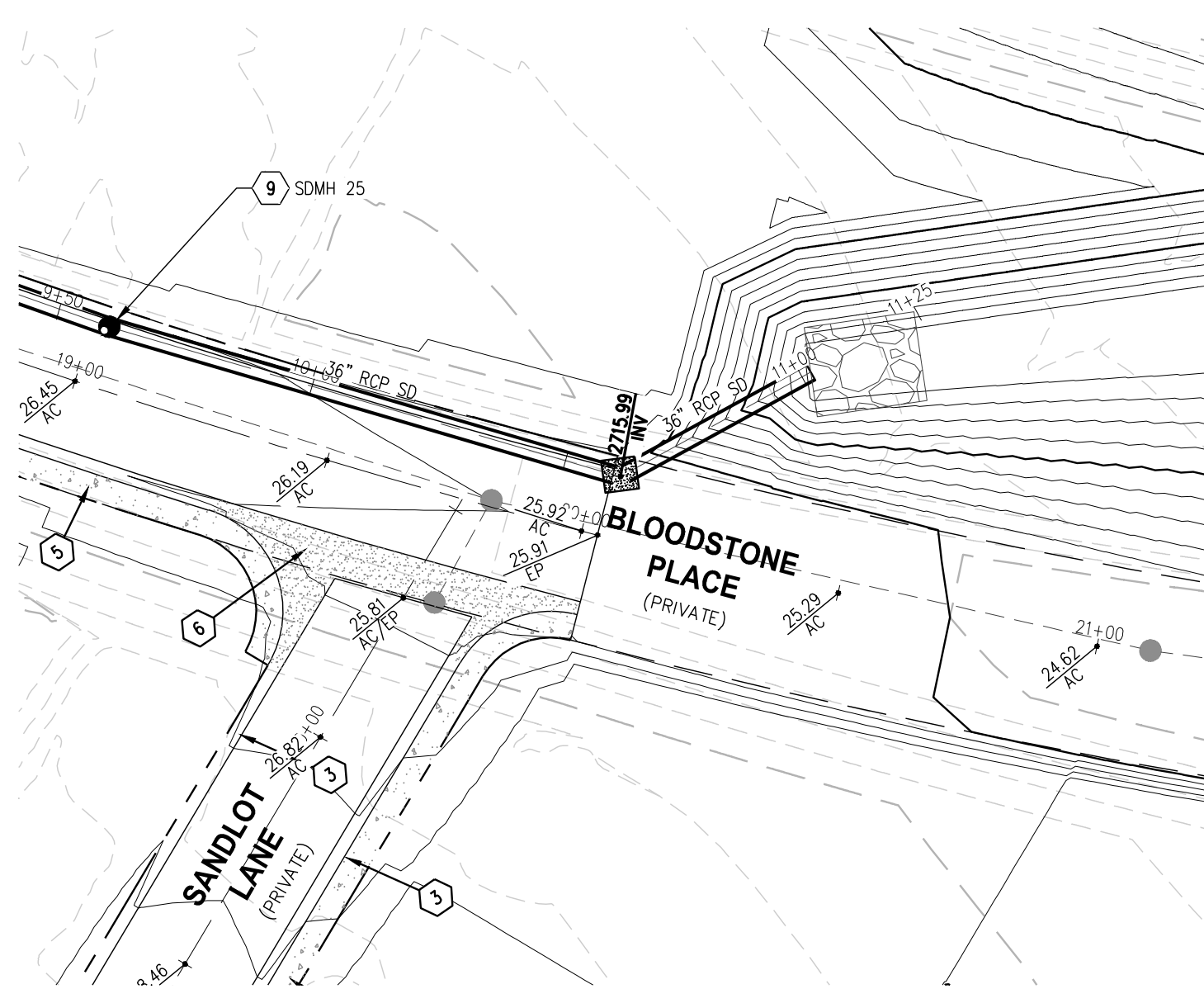


ALIGNMENT NOTE
THE BLOODSTONE PROFILE FOLLOWS THE STREET ALIGNMENT.



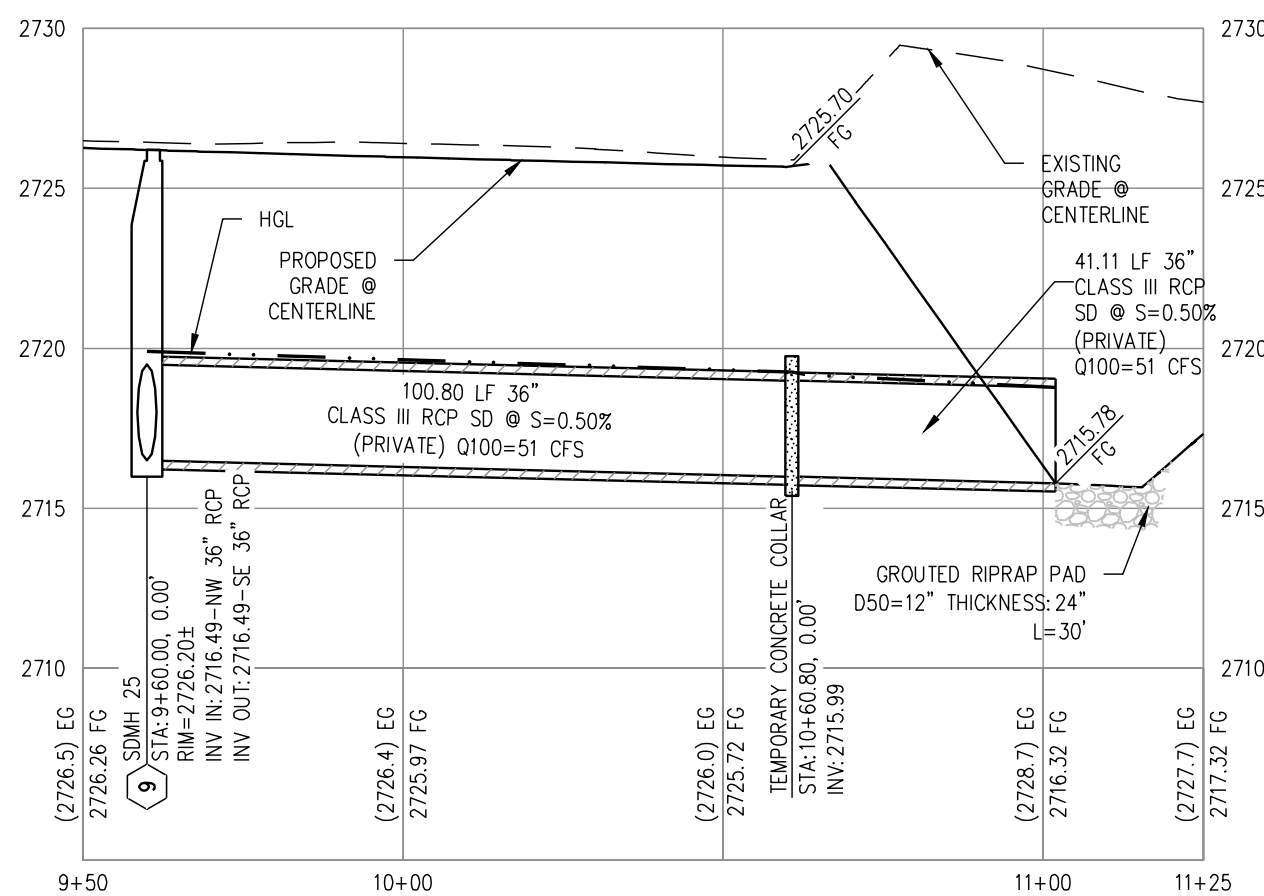
BLOODSTONE 17+50 TO 21+00 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



BLOODSTONE INTERIM CONDITION 9+50 TO 11+25 - PLAN VIEW
SCALE 1" = 30'

ALIGNMENT NOTE
THE BLOODSTONE INTERIM CONDITION PROFILE FOLLOWS THE STORM DRAIN ALIGNMENT.



BLOODSTONE INTERIM CONDITION 9+50 TO 11+25 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



WATER NOTES

1. INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
2. INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1 (TYPICAL FOR ROLL CURB SIDE)
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19. WET TAP 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
20. FIELD VERIFY, REMOVE EX CAP & BLOW-OFF, AND CONNECT TO EXISTING WATERLINE

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2. INSTALL 8" SD-35 PVC SANITARY SEWER PER DCSWCS SD-15 & SD-17
3. INSTALL 4" PVC SANITARY SEWER LATERAL PER DCSWCS SD-17, SD-20, SD-21 AND SD-23
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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 BEARINGS

NORTH 000°15'00" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 6, TOWNSHIP 19 SOUTH, RANGE 60 EAST, N.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.

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ELEVATION NOTE

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. ##### FIRST APPROVED DATE: _____



SHLP

CITY OF LAS VEGAS, NEVADA

DATE: _____ BY: _____ APP. DATE: _____

DESCRIPTION: _____ NO. _____

Westwood
Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.

5/17/22

DATE: 5/17/22

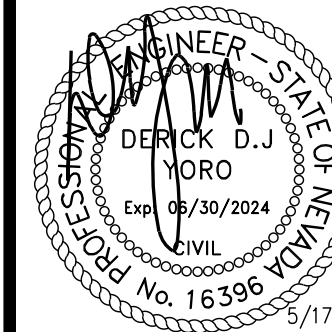
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DESIGNER: BD

CHECKED: DY

PROJECT NO.

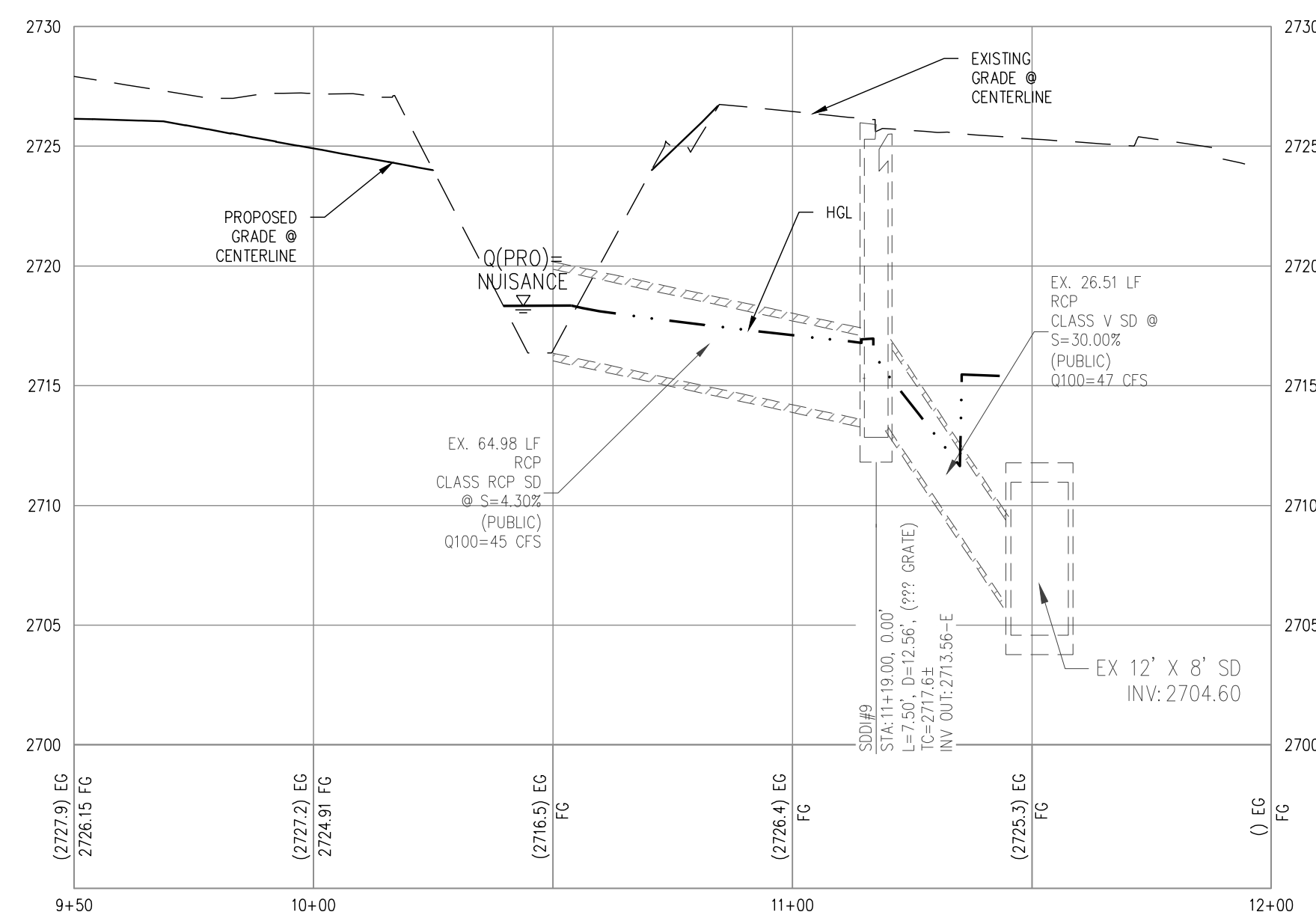
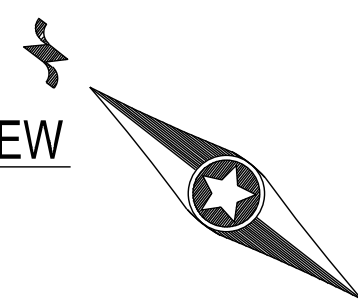
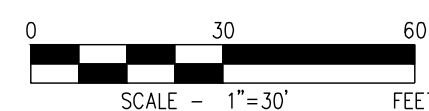
SHE1901-004



P-12

SHEET 30 OF 31

EXISTING OFFSITE STORM DRAIN 9+50 TO 12+00 - PLAN VIEW
SCALE 1" = 30'



EXISTING OFFSITE STORM DRAIN 9+50 TO 12+00 - PROFILE VIEW

HORIZ: 1" = 30'
VERT: 1" = 6'



WATER NOTES

- 1 INSTALL 1" COPPER SERVICE WITH 3/4" METER PER UDACS PLATE NO. 1
- 2 INSTALL CONCRETE COLLAR PER UDACS PLATE NO. 1
(TYPICAL FOR ROLL CURB SIDE)
- 3 INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
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- 20 FIELD VENTED REMOVE EX CAP & BLOW-OFF, AND
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GRADING NOTES

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BENCHMARK

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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 BEARINGS

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES

PROJECT NO. ##### FIRST APPROVED DATE: _____



SHLP

PARCEL 3 AT SUNSTONE PHASE 4A

EXISTING OFFSITE STORM DRAIN 9+50 TO 12+00

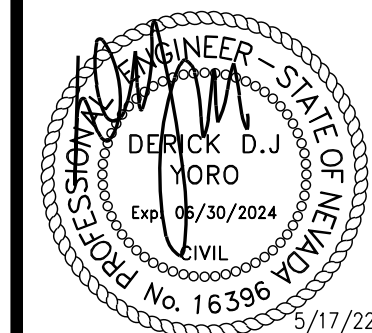
CITY OF LAS VEGAS, NEVADA

[illegible]

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