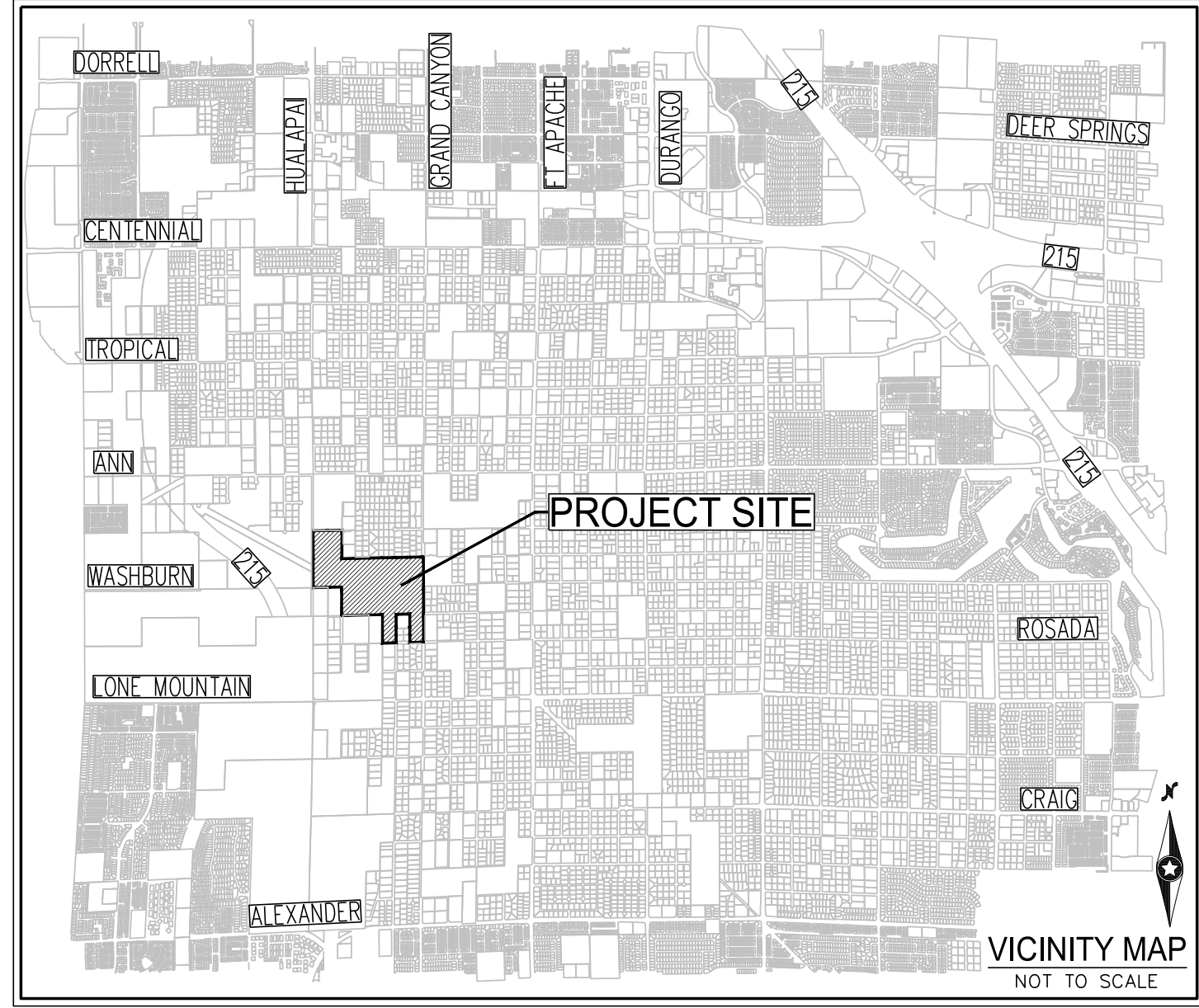
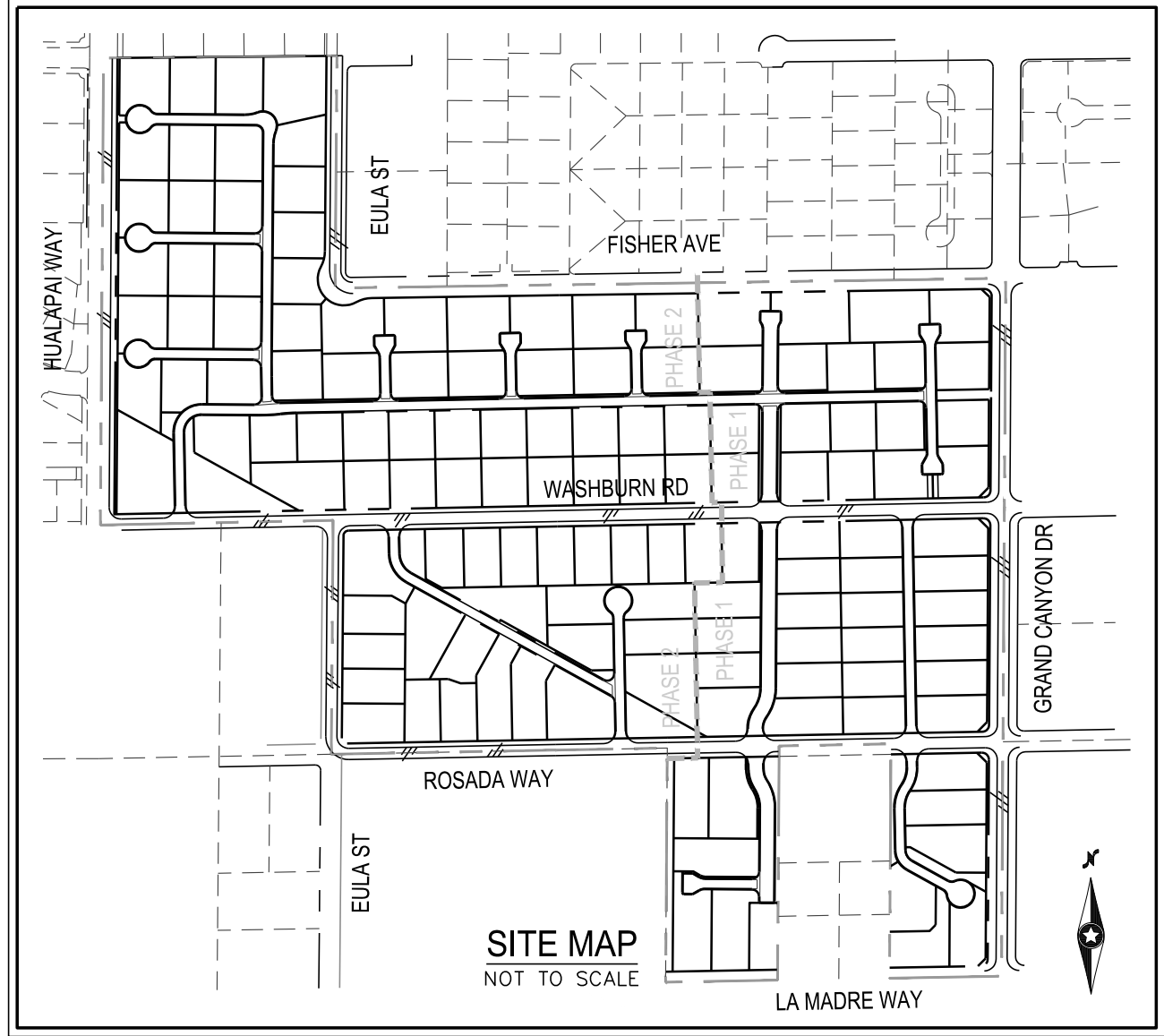




LENNAR®

IMPROVEMENT PLANS
FOR
GRAND CANYON & WASHBURN
PHASE 1

CITY OF LAS VEGAS, NEVADA
RESIDENTIAL SUBDIVISION
APN: 125-31-201-010 & 125-31-301-014



SHEET INDEX		
NO.	SHEET	TITLE
1	C-1	COVER SHEET
2	C-2	GENERAL NOTES
3	C-3	ABBREVIATIONS, LEGEND & QUANTITIES
4	G-1	GRADING PLAN I
5	G-2	GRADING PLAN II
6	G-3	GRADING PLAN III
7	G-4	GRADING PLAN IV
8	G-5	GRADING PLAN V
9	G-6	GRADING PLAN VI
10	G-7	GRADING PLAN VII
11	G-8	GRADING PLAN VIII
12	G-9	GRADING PLAN IX
13	G-10	GRADING PLAN X
14	G-11	GRADING PLAN XI
15	G-12	GRADING PLAN XII
16	G-13	GRADING PLAN XIII
17	G-14	GRADING PLAN XIV
18	G-15	GRADING PLAN XV
19	G-16	GRADING PLAN XVI
20	G-17	GRADING PLAN XVII
21	G-18	GRADING PLAN XVIII
22	G-19	GRADING PLAN XIX
23	G-20	GRADING PLAN XX
24	G-21	GRADING PLAN XXI
25	G-22	GRADING PLAN XXII
26	G-23	GRADING PLAN XXIII
27	G-24	GRADING PLAN XXIV
28	D-1	DETAIL SHEET I
29	D-2	DETAIL SHEET II

APPROVALS

CITY OF LAS VEGAS ENGINEERING

CLV FIRE & RESCUE

CLV DEPARTMENT OF COMMUNITY DEVELOPMENT | PLANNING DIVISION
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE DEPARTMENT OF PLANNING

CENTRAL TELEPHONE CO. DBA CENTURYLINK
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: _____
LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PS RESIDUAL
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 20 GPM
SHEETS: ###

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 SWG UID DATE
COX COMMUNICATIONS LAS VEGAS, INC. DATE

OWNER/DEVELOPER
GREYSTONE NEVADA, LLC
9725 W. RUSSELL RD., SUITE 400
LAS VEGAS, NV 89148
PH: (702)-821-4603
CONTACT: EFRAN BALZAN
EFRAN.BALZAN@LENNAR.COM

ENGINEER
WESTWOOD PROFESSIONAL SERVICES
5725 W. BADURA AVE., SUITE 100
LAS VEGAS, NV 89118
PH: (702) 284-5300
CONTACT: TRACY STRATTON
EMAIL: TRACY.STRATTON@WESTWOODPS.COM

LEGAL DESCRIPTION

THE SOUTHWEST QUARTER (SW ¼) OF THE SOUTHWEST QUARTER (SW ¼) OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA RECORDS

BENCHMARK

BENCHMARK NUMBER: 7LV9031N6
RIVET AND PLATE IN CONCRETE PAD (LVWD) ON THE EAST SIDE OF GRAND CANYON DRIVE, NORTH OF HAMMER LAKE (AT HARRISON COURT).
ELEVATION = 2627.58 FEET, 800.89 METERS
N.A.V.D. 88 DATUM, PER THE CITY OF LAS VEGAS VERTICAL CONTROL.

BASIS OF BEARING

SOUTH 00°23'29" WEST, BEING THE BEARING OF THE WEST LINE OF THE SOUTHWEST QUARTER (SW ¼) OF THE NORTHWEST QUARTER (NW ¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 164, PAGE 53 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

TOTAL DISTURBED AREA

95.8 ACRES

DEVIATIONS FROM STANDARDS

1. DRIVEWAY WIDTH - 57.0' WHERE 28.0' IS ALLOWED PER CCAUSD No. 222

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/BWPC/STORM01.HTM](http://WWW.STATE.NV.US/BWPC/STORM01.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.

FLOOD ZONE

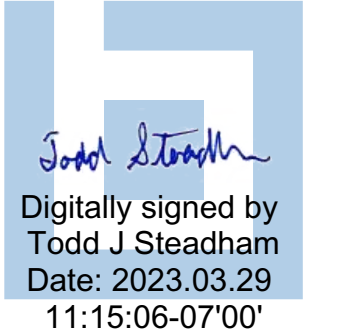
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

PROJECT INFORMATION

ACREAGE (GROSS): = 90.0 AC
ACREAGE (NET): = 79.6 AC
DENSITY (LOTS/NET ACRE): = 1.5 DU/NET AC
ZONING: = R-E
TOTAL NO. OF RESIDENTIAL LOTS = 136
TOTAL NO. OF COMMON ELEMENTS = 13
MINIMUM LOT SIZE = 18,000 SF±
MAXIMUM LOT SIZE = 33,926 SF±
EARTHWORK SUMMARY (UNADJUSTED)
CUT 118,713 CY.
FILL 332,280 CY.
NET 213,567 CY.

GEOTECHNICAL ENGINEER

PREPARED BY: SOUTHWEST GEOTECHNICAL
ADDRESS: 5275 ARVILLE ST., SUITE 108,
LAS VEGAS, NV 89118
PHONE: 702-323-6000
PROJECT NO. 221019
DATED: 11/12/2022



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, NV

LENNAR®

GRAND CANYON & WASHBURN PHASE 1
COVER SHEET

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO.
LENN2206-000

PROFESSIONAL ENGINEER
TODD J. STEADHAM
Exp. 06/30/2024
CIVIL
No. 15292
03/29/2023

C-1
SHEET 1 OF 29

3/28/2023 2:45 PM -- JCN GDL -- E:\LEN2206-000 GRAND CANYON & WASHBURN\IMPROV\PHASE 1\LEN2206-000 C&R-1.DWG

STORMWATER RUNOFF MANAGEMENT

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. 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 LVWC 1418130 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. 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 II.A.5.
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 II.A.5.
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 SEPTEMBER 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, 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 702-365-2359 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 1/13/2022

LEGAL DESCRIPTION

THE SOUTHWEST QUARTER (SW ¼) OF THE SOUTHWEST QUARTER (SW ¼) OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA RECORDS

BENCHMARK

BENCHMARK NUMBER: 7LV9031NG

RIVET AND PLATE IN CONCRETE PAD (LVVMD) ON THE EAST SIDE OF GRAND CANYON DRIVE, NORTH OF HAMMER LAKE (AT HARRISON COURT).

ELEVATION = 2627.58 FEET, 800.89 METERS
N.A.V.D. 88 DATUM, THE CITY OF LAS VEGAS VERTICAL CONTROL.

DEGREE OF BEARING

SOUTH 00°23'29" WEST, BEING THE BEARING OF THE WEST LINE OF THE SOUTHWEST QUARTER (SW ¼) OF THE NORTHEAST QUARTER (NE ¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 164, PAGE 93 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

GRADING NOTES

1. INDICATED GRADES OTHER THAN T.C., F.G. & CUTTER 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 DECIDE 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. 221019, DATED 11/12/2022.
6. EARTHWORK QUANTITIES (RAW):
 - CUT = 118,713 CUBIC YARDS
 - FILL = 332,280 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 LEU OF TYPE 1 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, LATEST REVISION (USS), 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. POLYVINYL (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 "T" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVMD 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 (LVVWD) STANDARD NOTES

- ADD FIELD
LVVMD PROJECT # _____ (REVISED 10/18/2021)
1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVMD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVMD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS 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 LVVMD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
 2. ALL WORK SHALL CONFORM TO LVVMD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM STANDARD SPECIFICATIONS 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 OFF-SITE IMPROVEMENT, CLARK COUNTY AREA.
 4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVMD.
 5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.
 6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
 7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
 8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS 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 LVVMD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
 11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVMD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
 12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVMD 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 LVVMD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVMD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVMD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVMD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVMD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVMD 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 LVVMD EXISTING FACILITIES TO FINISH GRADE PER UDACS PLATES. ALL LVVMD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
17. **DRY UTILITY NOTES:** MAINTAIN A MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSINGS. 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 (RTC/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 LBROWN@RTC5NV.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 # 8631 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 FOR 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. IFC §105.6.15
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW IFC §3310, §3312
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 §507.5.7.3
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CANTER 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.W.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 §507.5.7.1
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. IFC §507
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: IFC §C102
 - 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 COUNTRY OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACING AT 500 FT ON AN ALTERNATING BASIS. IFC §C102.8
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. IFC §C102.10
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 §C102.4
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. IFC §C102
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. IFC §C102.6
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 SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION FOR SYSTEMS PERMITTED TO HAVE ONE SOURCE OF WATER SUPPLY. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 3 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. IFC §C104
19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. IFC §503.2.3
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. 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 § 503.2.1.1
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 (ROOSTS) WITH DEAD-ENDS OR A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT. CITY REGULATION AND MOUNTAIN
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, CITY REGULATION
27. ALL FIRE APPARATUS ACCESS SIGNS 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 CEMENT (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 COUNTRY OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CITY 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 THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, 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 EXITS THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MANHOLES, STORM

ABBREVIATIONS

AC	ASPHALTIC CONCRETE OR ACRE	FH	FIRE HYDRANT	PI	POINT	POINT OF VERTICAL INTERSECTION
AGG	AGGREGATE BASE	FL	FLOWLINE	PM	QUANTITY	
APN	ASSESSORS PARCEL NUMBER	FT	FEET OR FOOT	R	RADIUS	
APPROX OR --	APPROXIMATE	FUT	FUTURE	RCA	REINFORCED CONCRETE ARCH	
AVE	AVENUE	GRD	GRADE OR GROUND	RCB	REINFORCED CONCRETE BOX	
Ø	AT	GB	GRADE BREAK OR GRADE CHANGE	RCP	REINFORCED CONCRETE PIPE	
Ø	BEGIN CURVE OR BACK OF CURB	GV	GATE VALVE	RD	ROAD	
BCK	BEGINNING OF CURB RETURN	HDP	HIGH DENSITY POLYETHYLENE	RDM	ROADWAY EASEMENT	
BHW	BOTTOM OF HEADWALL	HOA	HOME OWNERS ASSOCIATION	REQ	REQUIRED	
BLDG	BUILDING	HORZ	HORIZONTAL	REV	REVISION	
BOV	BOULEVARD	HP	HIGH POINT	RG	RIGHT GRADE	
BW	BENCH MARK	HML	HIGH WATER LEVEL	RH	RIGHT HAND	
BVC	BEGIN VERTICAL CURVE	HOWL	HEADWALL	RW, OR R	RIGHT OF WAY	
BWV	BACK WATER VALVE	HYD	HYDRAULIC OR HYDRANT	S	SLOPE	
CC	CLARK COUNTY	ID	INSIDE DIAMETER	SCH	SCHEDULE	
CCAU/SID	CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS	IN	INCH	SD	STORM DRAIN	
CCPW	CLARK COUNTY PUBLIC WORKS	INT	INTERSECTION	SDMI	STORM DRAIN DROP INLET	
CCRFCD	CLARK COUNTY REGIONAL FLOOD DISTRICT	INV	INVERT ELEVATION	SDDH	STORM DRAIN MANHOLE	
CCWCD	CLARK COUNTY WATER RECLAMATION DISTRICT	IP	IRON PIPE	SEC	SECTION	
CDMAE	CEDAR ELEMENT	IRG	IRON GUTTER	SEF	SQUARE FEET	
CLC/LC	CENTERLINE	IRF	IRON FEET	SHT	SHEET	
CLR	CLEAR OR CLEARANCE	LMC	LANDSCAPE MAINTENANCE CORPORATION	SLTC	SOUTH LIGHT & TRAFFIC CONTROL ESMIT	
CLSM	CONTROLLED LOW STRENGTH MATERIAL	LNP	LOW POINT	SNVA	SPECIAL NEVADA WATER AUTHORITY SPECIFICATIONS	
CLV	CITY LAS VEGAS	LET, OR L	LEFT	ST	STREET	
CMAC	CEMENT MORTAR LINER AND COATED	LVWMD	LAS VEGAS VALLEY WATER DISTRICT	STSM	SANITARY SEWER MANHOLE	
CMC	CONCRETE MASONRY UNIT	LWL	LOW WATER LEVEL	STA	STATION	
CNLY	CITY OF NORTH LAS VEGAS	MAK	MECHANICAL	STD	STANDARD	
COH	CITY OF HENDERSON	MECH	MECHANICAL	STD	STANDARD	
CONC	CONCRETE	MH	MANHOLE	STL	STEEL	
CT	COURT	MIN	MINIMUM	STL	STEEL	
CU	CURB	MISC	MISCELLANEOUS	SW	SIDEWALK	
CU, OR CU YD	DESIGN AND CONSTRUCTION FOR WASTEWATER COLLECTION SYSTEMS	MUN	MUNICIPAL UTILITY EASEMENT	SWG	SOUTHWEST GAS	
DE	DRAINAGE EASEMENT	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	SWR OR SS	SANITARY SEWER	
DET	DETAIL	NUS	NOT TO SCALE	SY	SQUARE YARD	
DI	DUCTILE IRON OR DRAIN INLET	NUE	NON EXCLUSIVE UTILITY EASEMENT	TAN	TANGENT	
DIA, Ø	DIAMETER	NVC	NO ENERGY	TC	TOP OF CURB	
DIP	DUCTILE IRON PIPE	ON	ON CENTER	TF	TOP OF FLOOR OR TOP OF FOOTING	
DR	DRIVE	OD	OVERSIDE DIAMETER OR OVERALL DIMENSION	TG	TOP OF GRADE	
DWG(S)	DRAWING	OFFST	OFFSET	THRU	THROUGH	
EA	DRIVEWAY	ORG	ORIGINAL	THW	TOP OF HEADWALL	
EAY	DRIVEWAY	PAE	PUBLIC OR PEDESTRIAN ACCESS EASEMENT	TP	TOP OF PIPE	
EW	EACH	PB	PULL BOX	TW	TOP OF WALL	
EGR	END CURB RETURN	PC	POINT OF CURVE	TR	TOP OF RETAINING WALL	
EG	EXISTING GROUND	PCC	POINT OF COMPOUND CURVE	TSP	TOP OF SCREEN WALL	
ELEV	ELEVATION	PDC	PUBLIC DRAINAGE EASEMENT	TYP	TYPICAL	
ESMT	EASEMENT	PRO	PROPERTY LINE	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS	
EP	EDGE OF PAVEMENT	PBC	POINT OF BEGINNING	UE	UTILITY EASEMENT	
EQ	EQUESTRIAN	POC	POINT OF CURVATURE	UT	UTILITY	
ERV	EQUIVALENT RESIDENTIAL UNIT	POE	POINT OF ENDING	VERT	VERTICAL CURVE	
EVC	END VERTICAL CURVE	PRC	POINT OF REVERSE CURVATURE	VERT	VERTICAL	
EX OR EXIST	EXISTING	PRELIM	PRELIMINARY	VQ	VALLEY CUTTER	
FC	FACE OF CURB	PROP	PROPOSED	WI	WROUGHT IRON	
FF	FINISHED FLOOR	PRV	PRESSURE REDUCING VALVE	WL	WATER LINE	
FG	FINISHED GRADE	PUE	PUBLIC UTILITY EASEMENT	WPR	WATER PRESSURE ZONE	
FGR	FINISHED GRADE, HIGH SIDE	PT	POINT OF TANGENT OR POINT	WZ	WEIGHT	
FGL	FINISHED GRADE, LOW SIDE	PVC	POLYVINYL CHLORIDE			

SPECIAL NOTE

IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED WHICH 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 OF LAS VEGAS DEPT. OF PUBLIC WORKS. TEMPORARY CONSTRUCTION ITEMS INCLUDE: PAVEMENT TRANSITIONS, PROTECTIVE DITCHES AND BERMS, ROAD SIGNS AND BARRICADES, ETC.

NOTICE 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:
1-800-642-2444

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		5' CONTOUR
		1' CONTOUR
		STRIPING
		SEWER MANHOLE
		CURB AND GUTTER
		SANITARY SEWER PIPE AND FLOW ARROW
		WATER PIPE
		WATER GATE VALVE
		FIRE HYDRANT
		WATER BLOW-OFF
		WATER LATERAL W/ METER
		SANITARY SEWER LATERAL
		STREETLIGHT
		EDGE OF PAVEMENT
		TRAFFIC SIGN
		PAD ELEVATION
		FINISHED FLOOR ELEVATION
		ELEVATION
		RETAINING WALL
		STORM DRAIN W/ MANHOLE
		EXISTING GAS GATE VALVE
		EXISTING UNKNOWN MANHOLE
		EXISTING GAS, SIZE PER PLAN
		EXISTING POWER POLE
		EXISTING TRAFFIC SIGNAL
		EXISTING WALL
		EXISTING WATER PIPE FITTING
		EXISTING WATER POINT OF CONNECTION
		EXISTING SEWER POINT OF CONNECTION
		EXISTING DAYLIGHT LINE
		EXISTING STREET CENTERLINE
		EXISTING RIGHT-OF-WAY
		EXISTING MATCHLINE
		EXISTING BOUNDARY LINE
		EXISTING PHASE LINE
		EXISTING PROPERTY LINE
		EXISTING FLOWLINE
		EXISTING SAWCUT
		EXISTING CUT/FILL TRANSITION LINE
		EXISTING SIDEWALK
		EXISTING EX STRIPING TO BE OBLITERATED
		EXISTING GRADE BREAK LINE
		EXISTING REFLECTIVE RAISED PAVEMENT MARKERS
		EXISTING BACK WATER VALVE
		EXISTING WROUGHT IRON FENCE
		EXISTING PONY WALL
		EXISTING DECORATIVE PERIMETER WALL
		EXISTING DECORATIVE PERIMETER RETAINING WALL
		EXISTING PROPOSED CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
		EXISTING EXISTING CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
		EXISTING FUTURE CURB AND GUTTER WITH RIGHT-OF-WAY AT BACK OF CURB
		EXISTING PROPOSED SCARP AREA
		EXISTING DRIVEWAY
		EXISTING PROPOSED RIP RAP
		EXISTING SIGHT VISIBILITY ZONE PER STD DWG NO. 201.2
		EXISTING HANDICAP RAMP

QUANTITIES

DRAINAGE			
1.	60" TYPE III STORM DRAIN MANHOLE	EA	--
2.	5.0' TYPE "CM2" DROP INLET	EA	--
3.	10.0' TYPE "CM2" DROP INLET	EA	--
4.	12.5' TYPE "CM2" DROP INLET	EA	--
5.	20.0' TYPE "CM2" DROP INLET	EA	--
6.	18" RCP CLASS IV STORM DRAIN	LF	--
7.	24" RCP CLASS IV STORM DRAIN	LF	--
8.	30" RCP CLASS IV STORM DRAIN	LF	--
9.	36" RCP CLASS IV STORM DRAIN	LF	--
10.	RIPRAP D50=8", THK=16"	SF	--
11.	8' WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	--
12.	SIDEWALK UNDER DRAIN	SF	--
13.			

SEWER SYSTEM

1.	4" PVC SEWER LATERAL (PRIVATE)	LF	-	-
2.	8" PVC SEWER PIPE (PUBLIC)	LF	-	-
3.	STANDARD 48" SEWER MANHOLE (PUBLIC)	EA	-	-
4.	8" SEWER PIPE CAP	EA	-	-
5.	BACK WATER VALVE	EA	-	-
6.	8" C-900 WATER QUALITY SEWER PIPE (PUBLIC)	EA	-	-
7.				

WATER SYSTEM

1.	FIRE HYDRANT ASSEMBLY W/6" GATE VALVE PER UDACS PLATE NO. 40	EA	-	-
2.	6" PVC WATER PIPE (CLASS 150)	LF	-	-
3.	8" PVC WATER PIPE (CLASS 150)	LF	-	-
4.	8" DIP WATER PIPE (CLASS 53)	LF	-	-
5.	8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39	EA	-	-
6.	8" X 6" TEE PER UDACS PLATE NO. 31	EA	-	-
7.	8" X 8" TEE PER UDACS PLATE NO. 31	EA	-	-
8.	8" 5 DEGREE BEND WITH RESTRAINED JOINTS	EA	-	-
9.	8" 11.25 DEGREE BEND PER UDACS PLATE NO. 31	EA	-	-
10.	8" 22.5 DEGREE BEND PER UDACS PLATE NO. 31	EA	-	-
11.	8" 45 DEGREE BEND PER UDACS PLATE NO. 31	EA	-	-
12.	8" 90 DEGREE BEND PER UDACS PLATE NO. 31	EA	-	-
13.	CAP AND 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE NO. 36	EA	-	-
14.	1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 3	EA	-	-
15.	1" COPPER SERVICE W/ 1" METER PER UDACS PLATE NO. 4	EA	-	-
16.	1" COPPER SERVICE W/ 3/4" METER & 1" RPPA PER UDACS PLATE NO. 4 & 8	EA	-	-

STREET IMPROVEMENTS

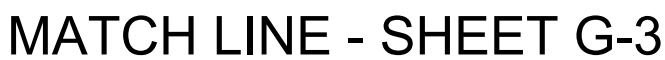
1.	2" A.C. PAVEMENT W/ 1/4" TYPE II OVER 6" TYPE I AGGREGATE BASE	SY	-	-
2.	STANDARD 18" TYPE "L" ISLAND CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	-	-
3.	STANDARD 8" TYPE "A" ISLAND CURB W/6" TYPE I AGGREGATE BASE	LF	-	-
4.	STANDARD 30" TYPE "ROLL" CURB & GUTTER W/6" TYPE I AGGREGATE BASE	LF	-	-
5.	4' WIDE CONCRETE SIDEWALK W/4" TYPE II AGGREGATE BASE	SF	-	-
6.				-
7.				

TRAFFIC SIGNALS

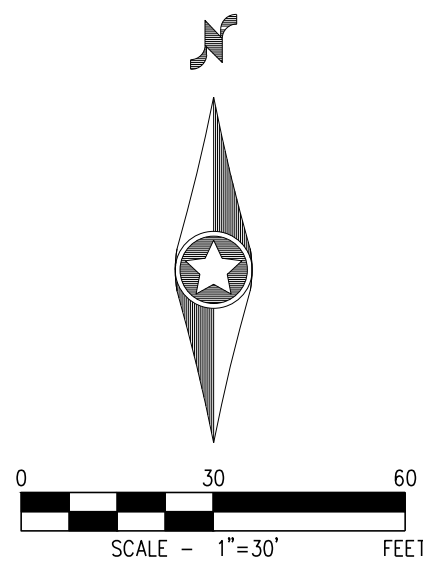
1.	30" STOP SIGN WITH POST (R1-1)	EA	-	-
2.	9" STREET NAME SIGN (D-3, BROWN W/ WHITE LETTERS)(6 POLES x 2 PER POLE=12)	EA	-	-
3.	BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKER	EA	-	-
4.	CROSSWALK MARKINGS	LF	-	-
5.				
6.				
7.				
8.				

DRY UTILITIES

1.	100W H.P.S. LUMINAIRE STREET LIGHT W/DECORATIVE POLE	EA	-	-
2.	1-1/4" PVC STREET LIGHT CONDUIT WITH (2) #4 AND (1) #8 CONDUCTORS	LF	-	-
3.	NO. 3-1/2 PULL BOX W/METAL COVER	EA	-	-
4.	125 AMP SERVICE PEDESTAL (RR)	EA	-	-
5.	200 AMP SERVICE PEDESTAL (SLT)	EA	-	-
6.				



MATCH LINE - SHEET G-2



CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBSCURED DURING CONSTRUCTION.

SOILS REPORT

SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP OF CURB PRIOR TO SURFACE 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/REPLENISH 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 RIGHT OF WAY ZONES.

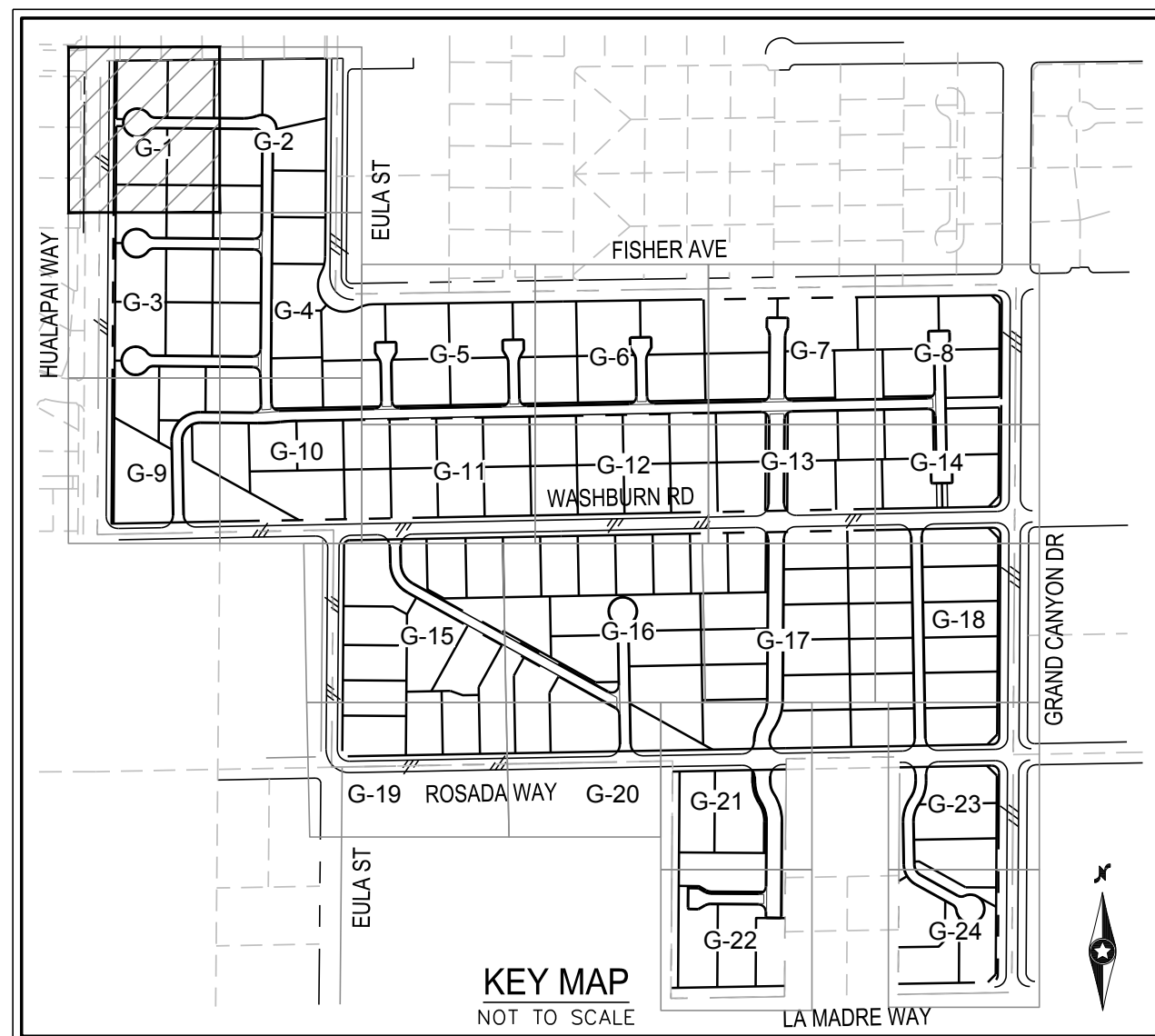
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DA REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED FROM THE PROJECT, AND PRESERVE ALL PUBLIC RIGHTS OF WAY. CLIENTS SHALL HAVE SUCH MATERIALS REMOVED FROM THE PROJECT AND STORED IN A CLEANLY MAINTAINED PROJECT. SUCH MATERIALS SHALL BE ACCUMULATED FROM ENTERING THE DEVELOPMENT CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE ACCUMULATED FROM ENTERING THE DEVELOPMENT CONSTRUCTION PROJECT.
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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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 AREA HAS BEEN COMPLETED. CONSTRUCTION ACTIVITY SHALL BE STOPPED IF SUCH EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI000000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USE 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 A RAIN EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING, MAINTENANCE, REPAIR, UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTION MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI000000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER EVENT. IF THE PROJECT SITE IS NOT VISITED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.



ELEVATION NOTE

ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

- 1 CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
- 2 CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
- 3 CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
- 4 CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
- 5 CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
- 6 CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
- 7 SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 501.3
- 8 CONSTRUCT 8' WIDE CROSS CURB PER CCAUSD NO. 228
- 9 CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
- 10 CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
- 11 CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
- 12 CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
- 13 INSTALL NODOT FIELD INLET AND CONCRETE APRON
- 14 INSTALL RIP RAP (350-6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILL FIBRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
- 15 CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
- 16 CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292

DATE _____

Westwood

Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118

Westwood Professional Services, Inc.
westwoodps.com

OF LAS VEGAS, NV

LENNAR®

GRAND CANYON & WASHBURN PHASE 1

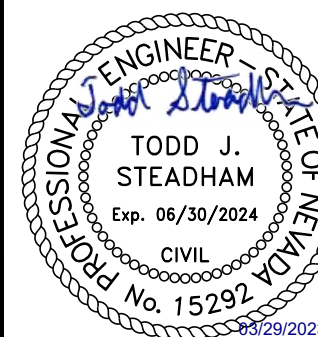
GRADING PLAN I

DATE: 3/28/23

DRAFTER: DJA

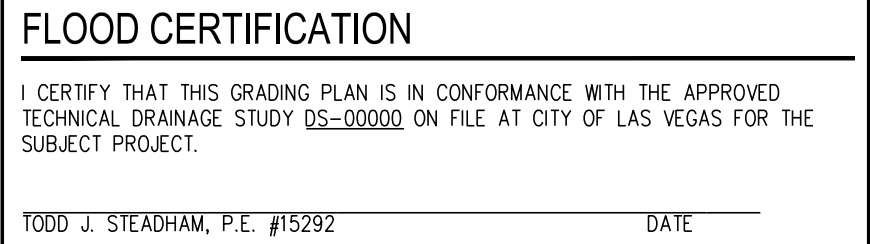
DESIGNER: JC

PROJECT NO.
LEN2206-000



G-1

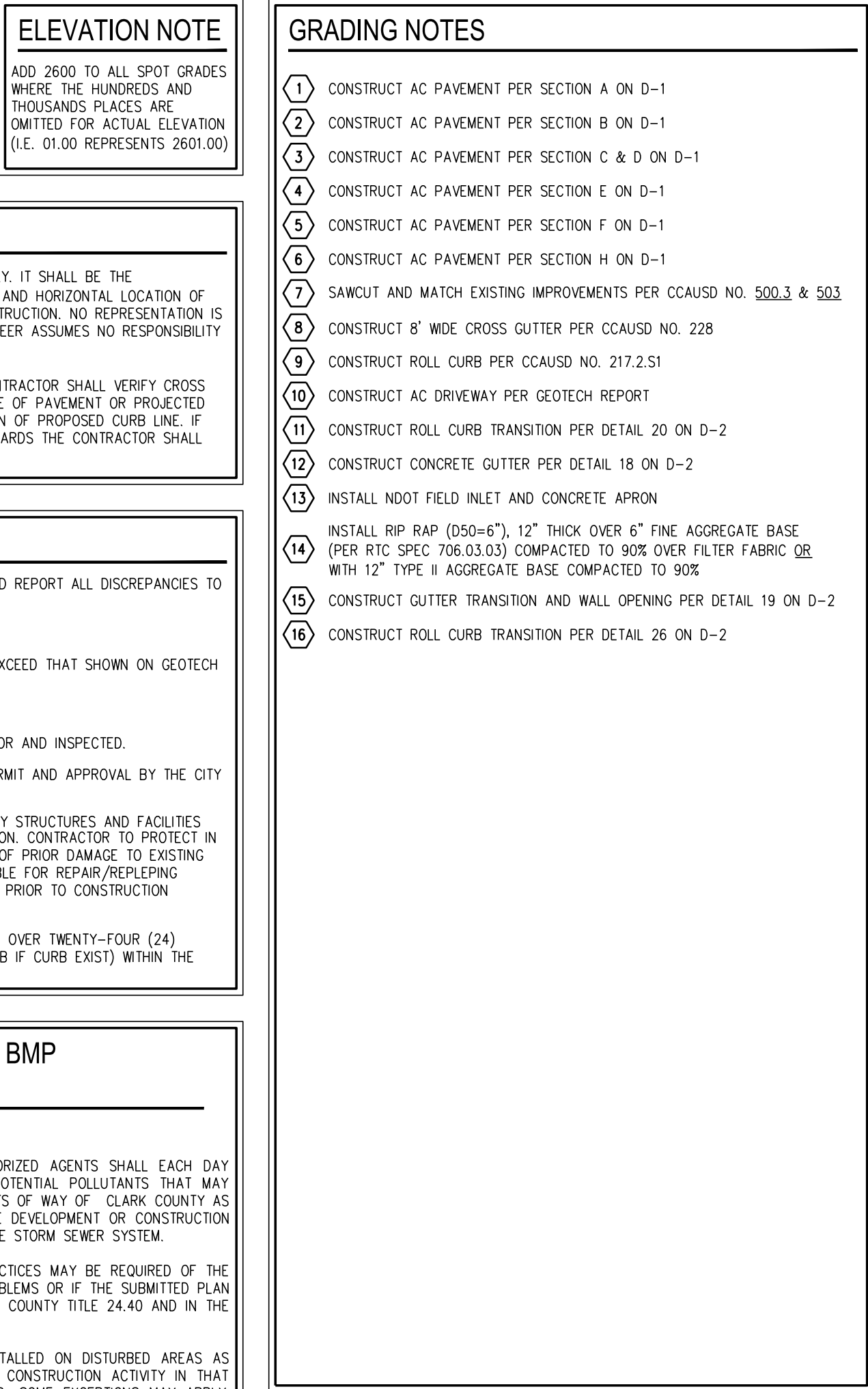
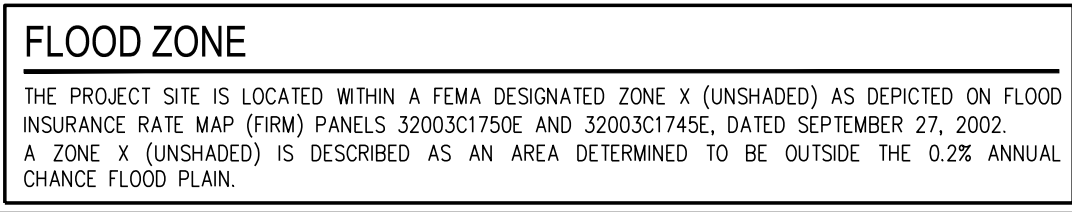
SHEET 4 OF 29



MATCH LINE - SHEET G-10



MATCH LINE - SHEET G-5



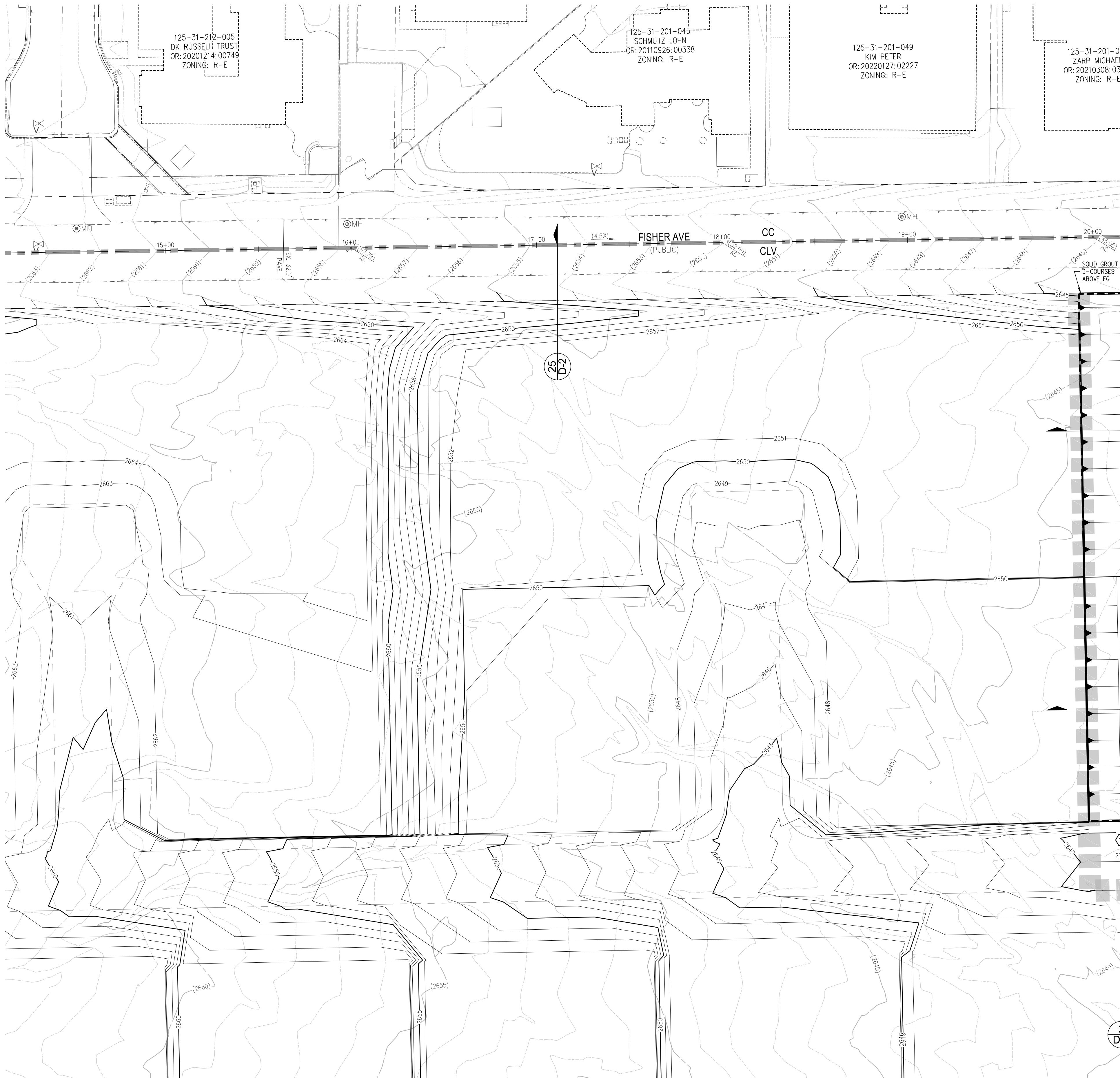
DATE:	3/28/23
DRAFTER:	DJA
DESIGNER:	JC
CHECKED:	STS
PROJECT NO.	
LEN2206-000	



G-4
SHEET 7 OF 29

I:\New2206-000 grand canyon & washburn\phase 1\new2206-000 gnd-1.dwg, 3/28/2023, 2:47 PM, Jon Cole

MATCH LINE - SHEET G-5



MATCH LINE - SHEET G-12

MATCH LINE - SHEET G-7

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
WET= 213,569 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 LIP 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 EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

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. 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 A 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.12.

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.

FLOOD ZONE

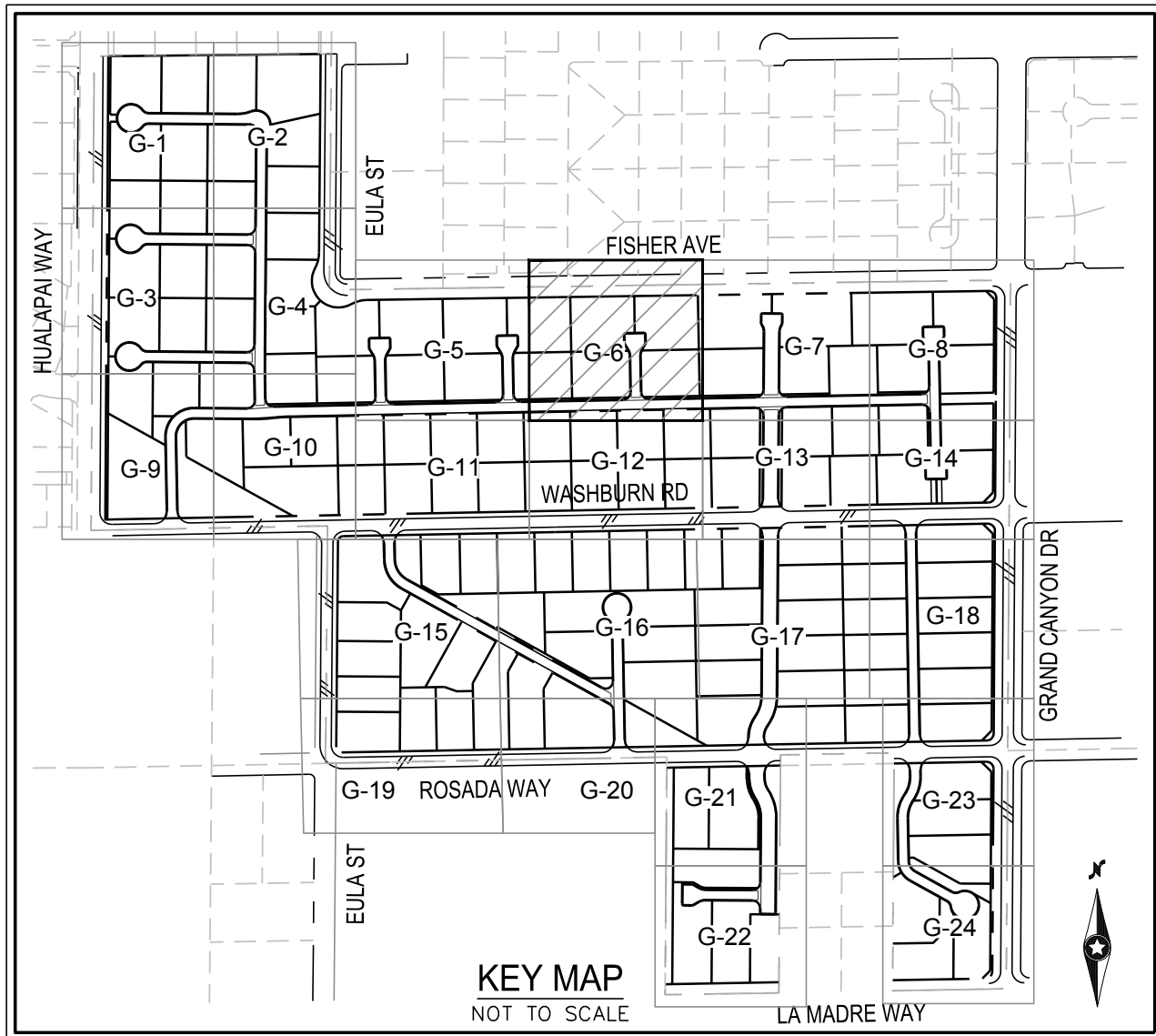
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1

2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1

3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1

4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1

5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1

6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1

7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503

8) CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228

9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1

10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT

11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2

12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2

13) INSTALL MDOT FIELD INLET AND CONCRETE APRON

14) INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%

15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2

16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292 DATE _____

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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN V1

9/29/23
R 60 E

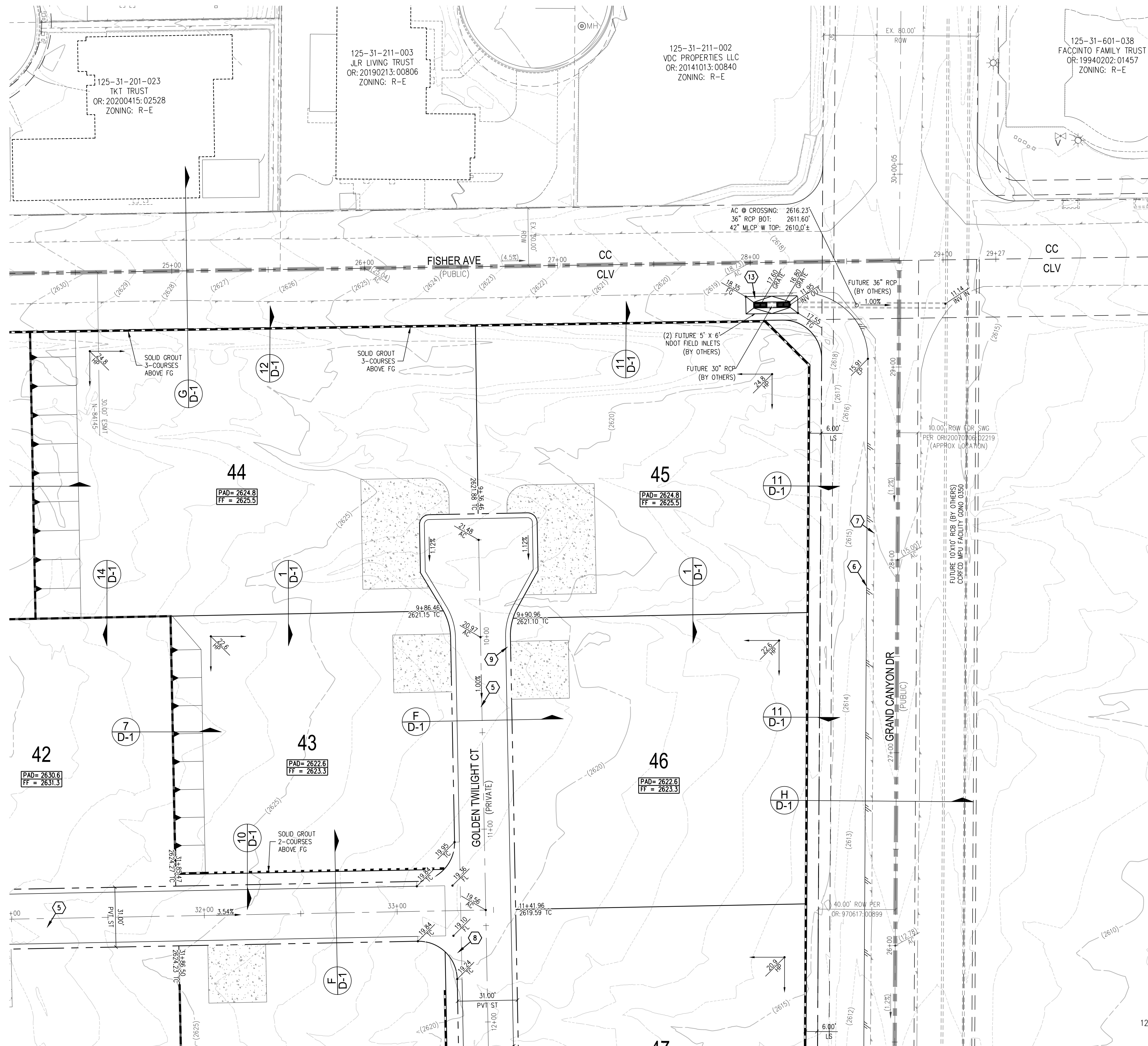
DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO.
LEN2206-000

TODD J. STEADHAM
Exp. 06/30/2024
CIVIL
No. 15292
06/26/2023

G-6
SHEET 9 OF 29

I:\New2206-000 grand canyon & washburn\phase 1\new2206-000 pad-1.dwg, 3/28/2023, 2:47 PM, Jon Cole

MATCH LINE - SHEET G-7



MATCH LINE - SHEET G-14

0 30 60
SCALE - 1"=30' FEET

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
WET= 213,567 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 LIP 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 EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

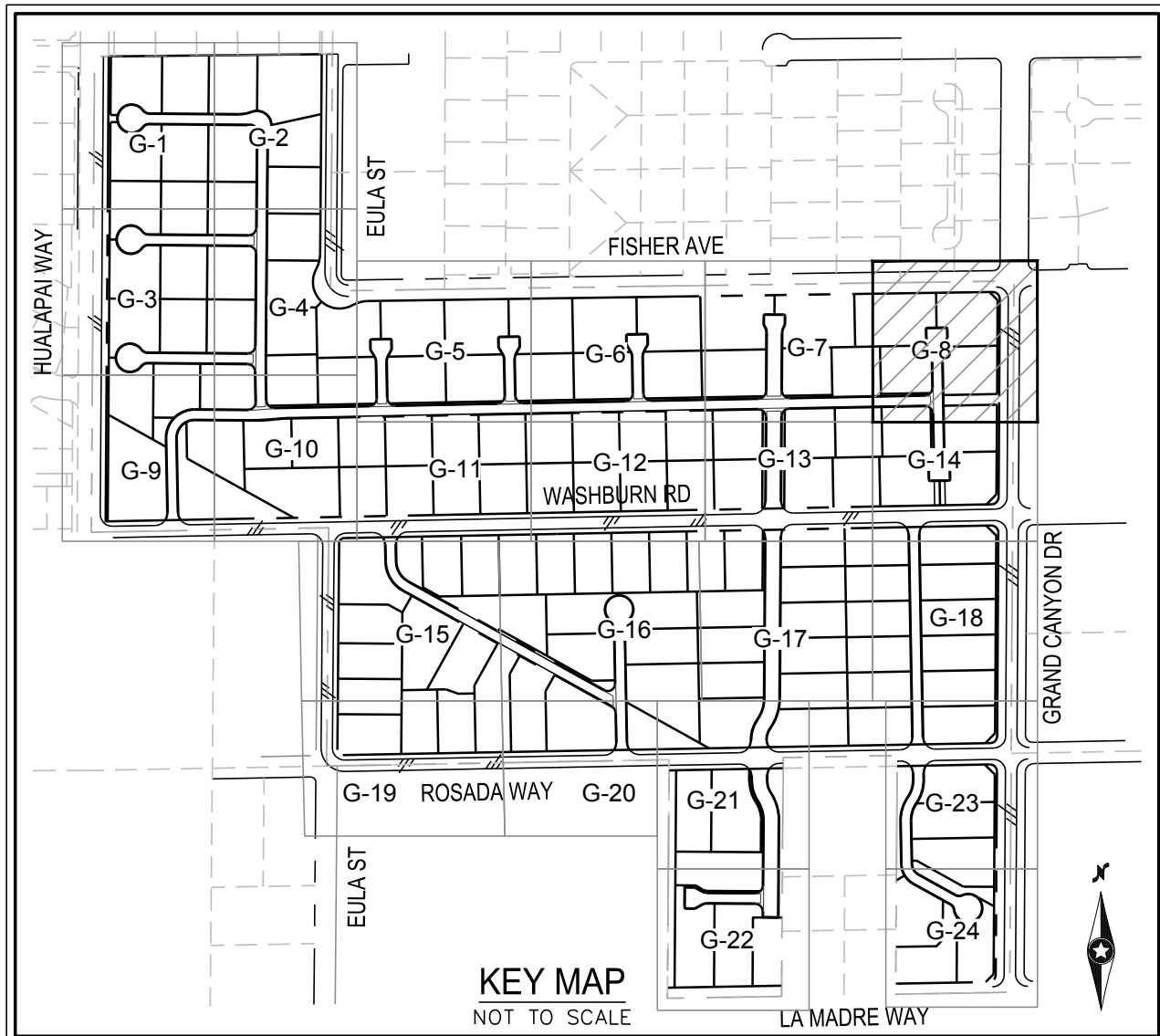
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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. 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 A 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.12.
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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

FAST
Call before you UnderGround
1-702-432-5300
FREEMAN & 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



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

1. CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2. CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3. CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4. CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5. CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6. CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7. SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8. CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228
9. CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10. CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11. CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12. CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13. INSTALL NDOT FIELD INLET AND CONCRETE APRON
14. INSTALL RIP RAP (050=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15. CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16. CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE

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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN V1

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000

TODD J. STEADHAM
PROFESSIONAL ENGINEER - STATE OF NEVADA
Exp. 06/30/2024
CIVIL
No. 15292 KVM/JC/03/28/2023

G-8
SHEET 9 OF 29

I:\New2206-000 grand canyon & washburn\phase 1\New2206-000.dwg 3/28/2023 2:47 PM Jon Cole



MATCH LINE - SHEET G-9

MATCH LINE - SHEET G-10

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTUSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES
1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8) CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228
9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13) INSTALL MDOT FIELD INLET AND CONCRETE APRON
14) INSTALL RIP RAP (050=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

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 EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))
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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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. 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 A 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.12.
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 EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

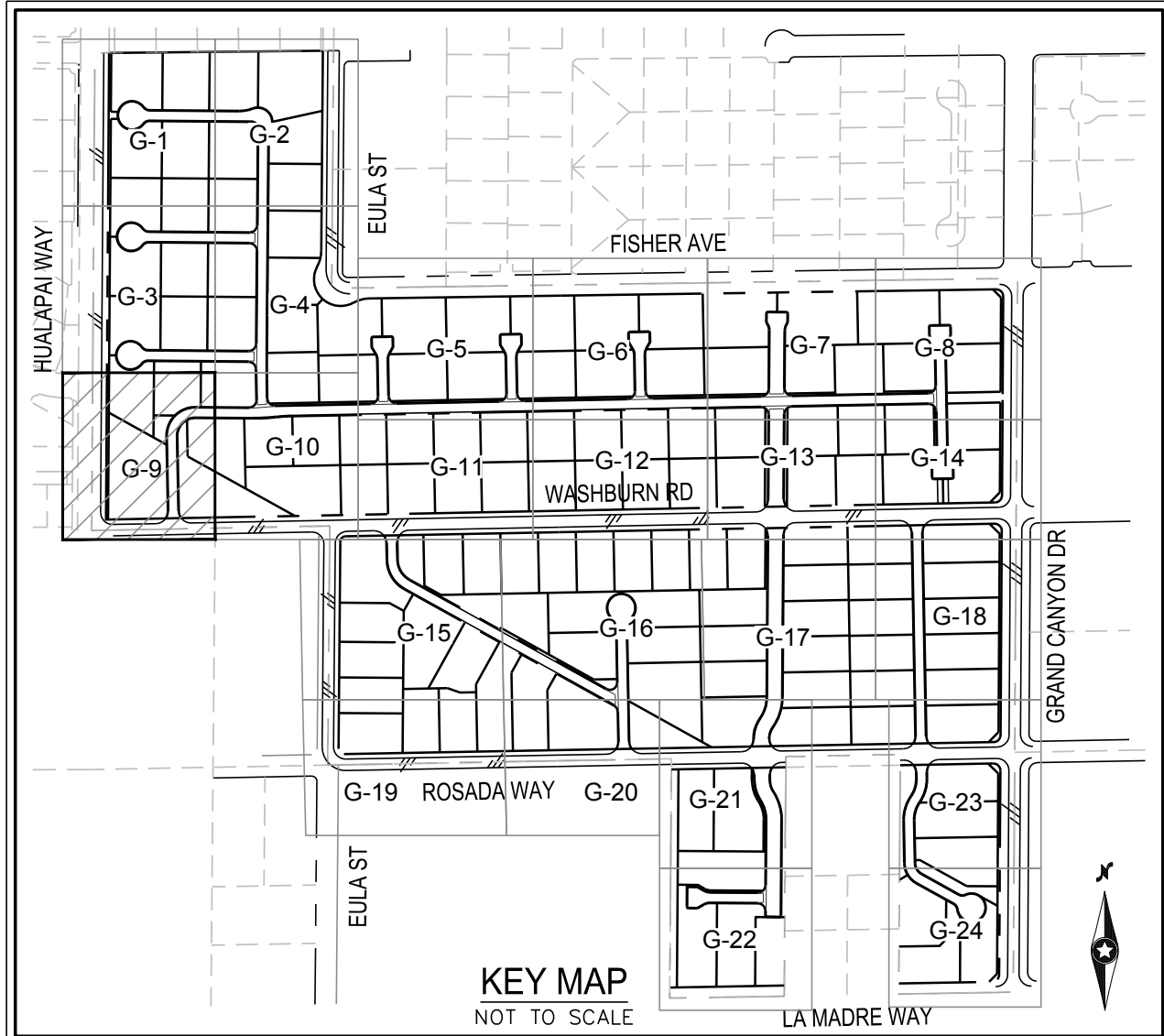
FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE _____

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



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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN VII

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000

TODD J. STEADHAM
P.E. #15292
Exp. 06/30/2024
CIVIL
Professional Engineer Seal

G-9
SHEET 10 OF 29

I:\New2206-000 grand canyon & washburn\Draws\1.dwg, 3/28/2023, 2:47 PM, Jon Cole

MATCH LINE - SHEET G-9



MATCH LINE - SHEET G-15

MATCH LINE - SHEET G-11

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTUSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

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.2.

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 A 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.2.

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 EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

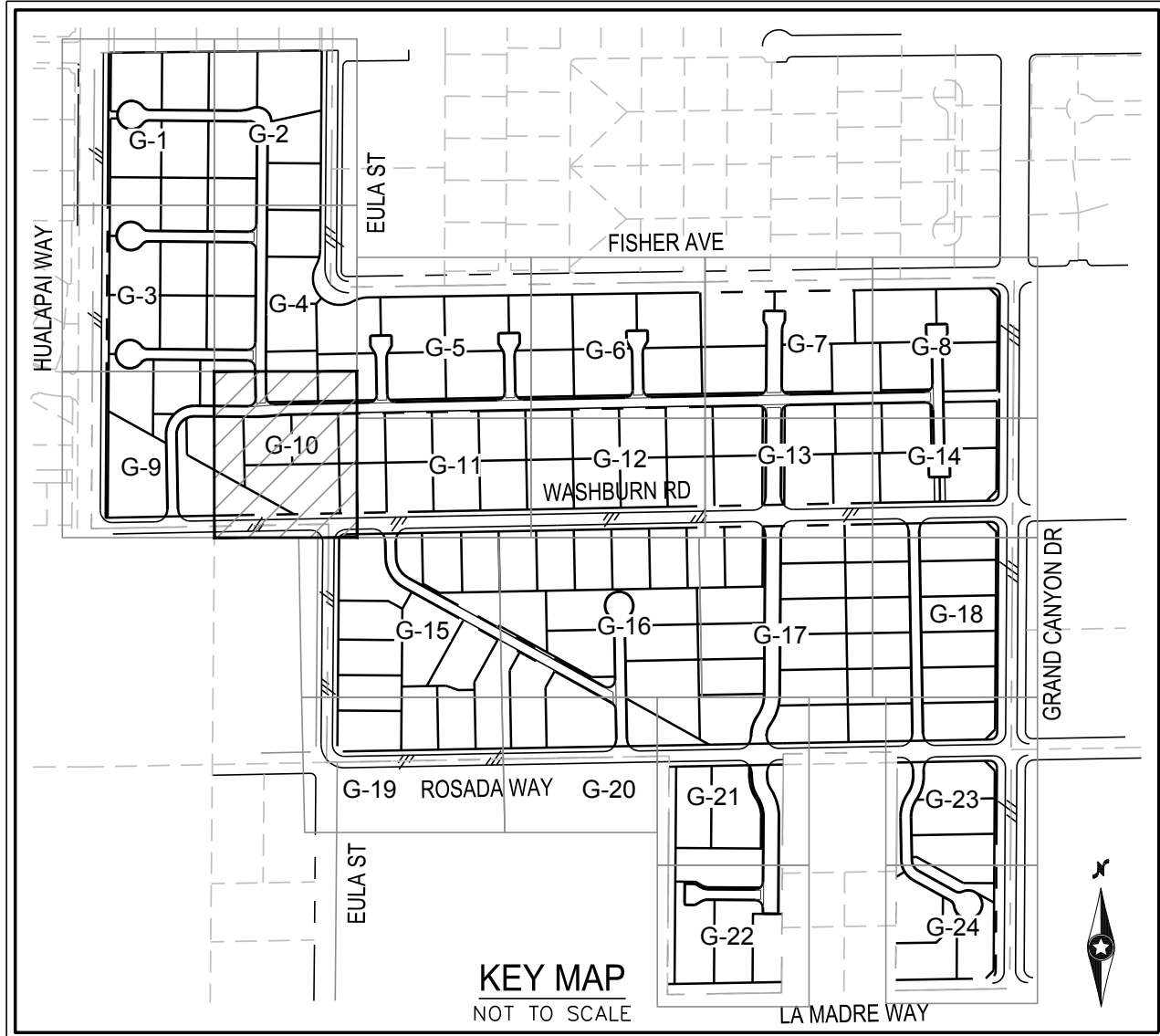
FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

1. CONSTRUCT AC PAVEMENT PER SECTION A ON D-1

2. CONSTRUCT AC PAVEMENT PER SECTION B ON D-1

3. CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1

4. CONSTRUCT AC PAVEMENT PER SECTION E ON D-1

5. CONSTRUCT AC PAVEMENT PER SECTION F ON D-1

6. CONSTRUCT AC PAVEMENT PER SECTION H ON D-1

7. SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAAD NO. 500.3 & 503

8. CONSTRUCT 8' WIDE CROSS GUTTER PER CCAAD NO. 228

9. CONSTRUCT ROLL CURB PER CCAAD NO. 217.2.S1

10. CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT

11. CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2

12. CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2

13. INSTALL NDOT FIELD INLET AND CONCRETE APRON

14. INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%

15. CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2

16. CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292 DATE

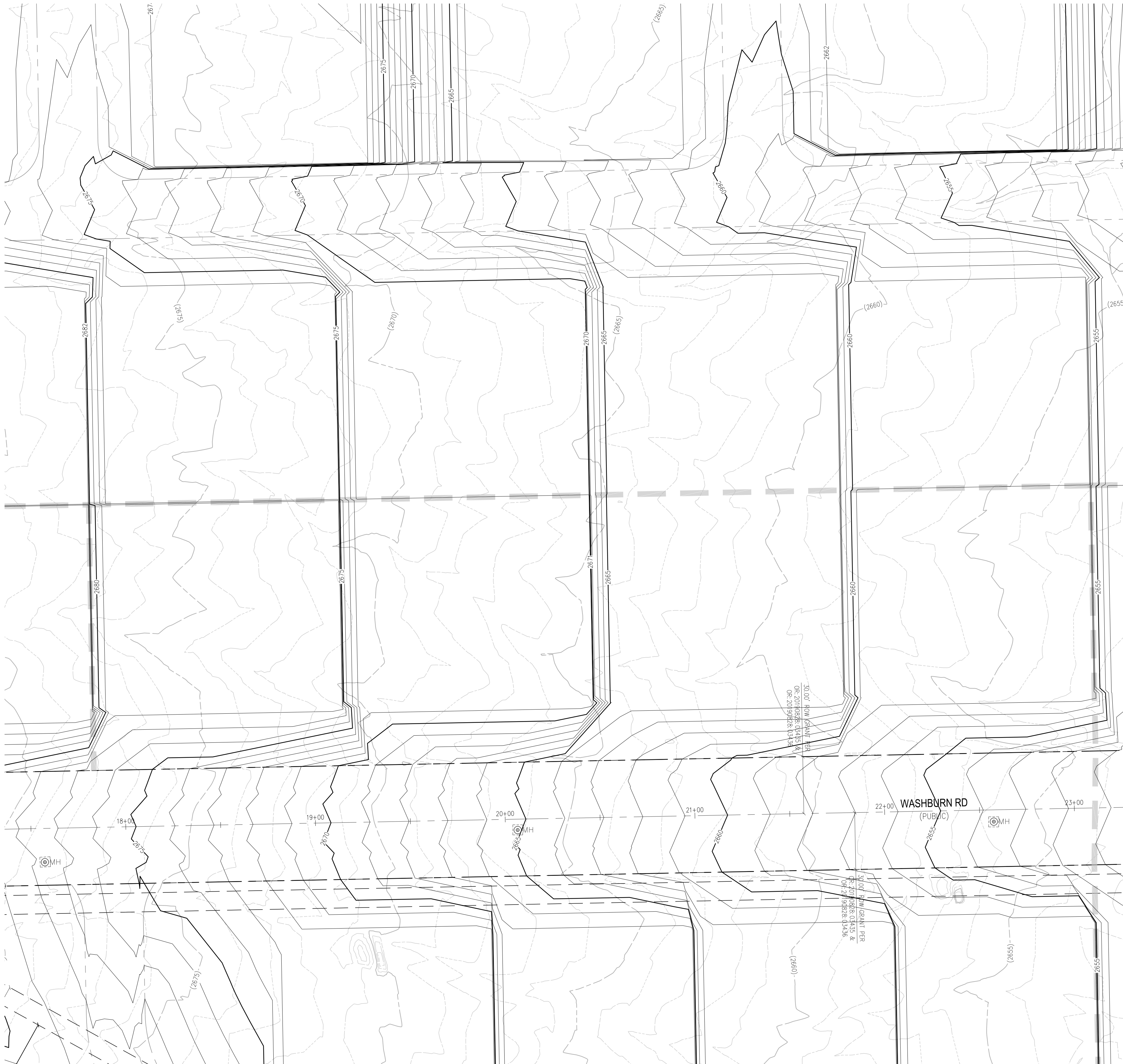
Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN VIII

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000
TODD J. STEADHAM
Exp. 06/30/2024
CIVIL
No. 15292
G-10
SHEET 11 OF 29

I:\New2206-000 grand canyon & washburn\dwg\impro\phase 1\New2206-000 grd-1.dwg, 3/28/2023, 2:47 PM, Jon Cole

MATCH LINE - SHEET G-10



MATCH LINE - SHEET G-15

MATCH LINE - SHEET G-12

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTUSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

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. 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 A 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.12.

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 EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

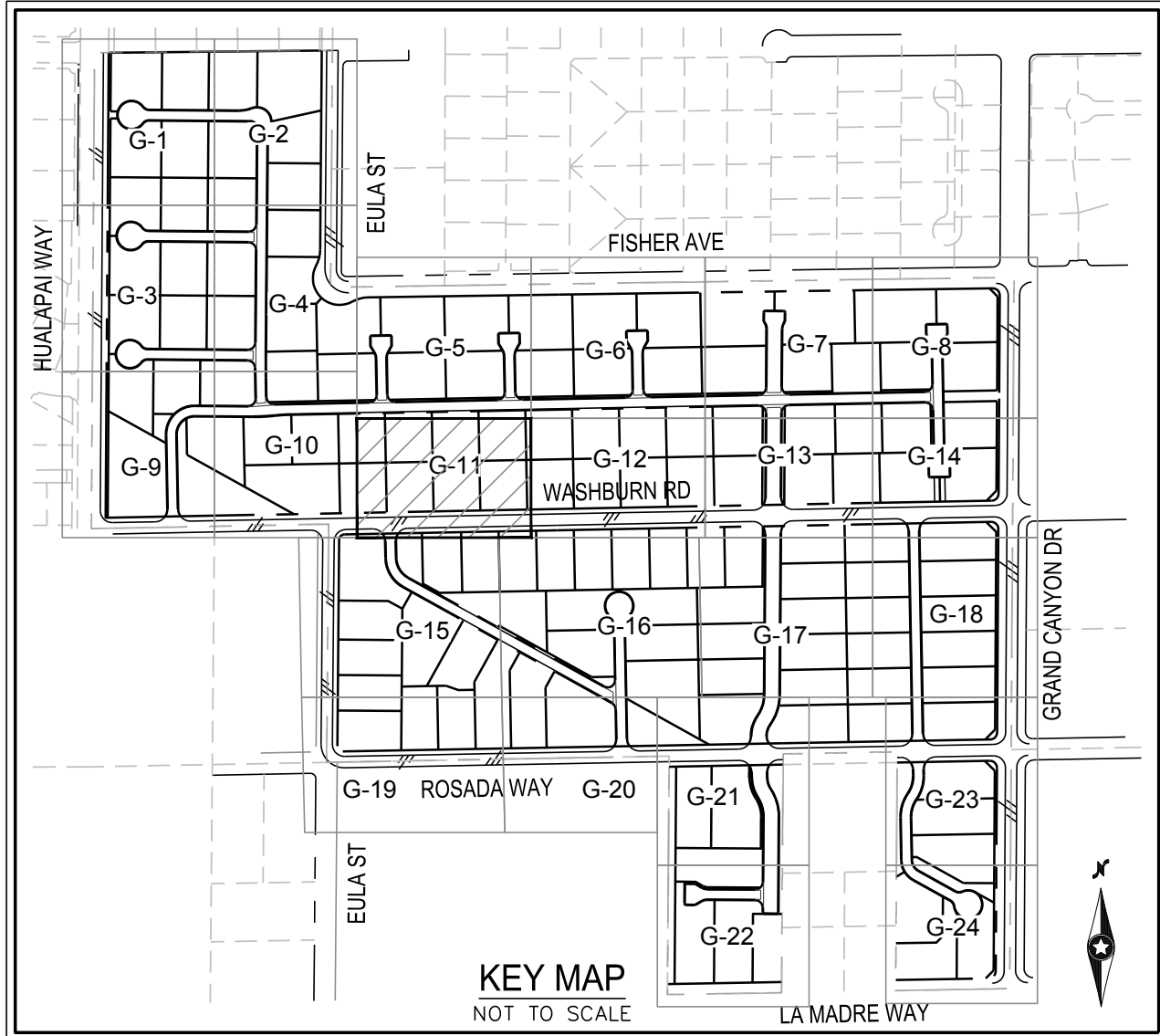
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.

A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1

2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1

3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1

4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1

5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1

6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1

7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503

8) CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228

9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1

10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT

11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2

12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2

13) INSTALL MDOT FIELD INLET AND CONCRETE APRON

14) INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%

15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2

16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292 DATE

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

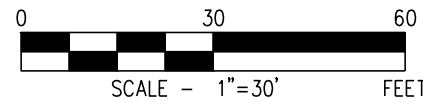
LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN X1

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000
TODD J. STEADHAM
Exp. 06/30/2024
CIVIL
No. 15292
G-11
SHEET 14 OF 29

MATCH LINE - SHEET G-16



MATCH LINE - SHEET G-13



CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN
EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBSCURED DURING CONSTRUCTION.

SOILS REPORT

SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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/REPLENISH 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 RIGHT OF WAY ZONES.

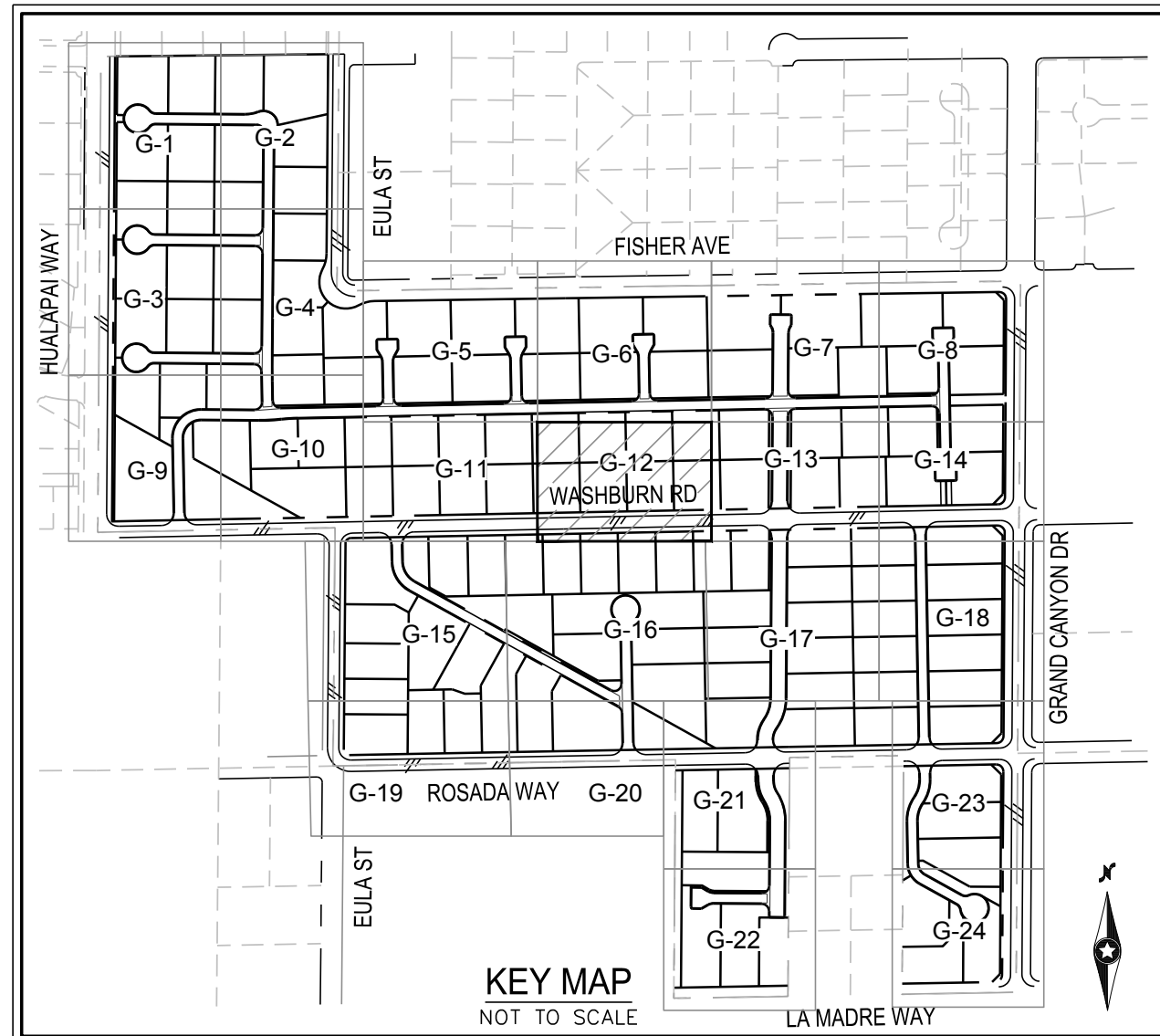
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DA REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED FROM THE PROJECT, AND PRESERVE ALL PUBLIC RIGHTS OF WAY. CLIENTS SHALL HAVE SUCH MATERIALS REMOVED FROM THE PROJECT AND STORED IN A CLEANLY MAINTAINED PROJECT. SUCH MATERIALS SHALL BE ACCUMULATED FROM ENTERING THE DEVELOPMENT CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE DEVELOPMENT CONSTRUCTION PROJECT.
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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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 AREA HAS BEEN COMPLETED. CONSTRUCTION ACTIVITY SHALL BE STOPPED IF SUCH EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI000000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USE 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 A RAIN EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING, MAINTENANCE, REPAIR, UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTION MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI000000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER EVENT. IF THE PROJECT SITE IS NOT VISITED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.



ELEVATION NOTE

ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

- | | |
|----|---|
| 1 | CONSTRUCT AC PAVEMENT PER SECTION A ON D-1 |
| 2 | CONSTRUCT AC PAVEMENT PER SECTION B ON D-1 |
| 3 | CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1 |
| 4 | CONSTRUCT AC PAVEMENT PER SECTION E ON D-1 |
| 5 | CONSTRUCT AC PAVEMENT PER SECTION F ON D-1 |
| 6 | CONSTRUCT AC PAVEMENT PER SECTION H ON D-1 |
| 7 | SAW CUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. <u>500.3 & 50.3</u> |
| 8 | CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228 |
| 9 | CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.51 |
| 10 | CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT |
| 11 | CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2 |
| 12 | CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2 |
| 13 | INSTALL NOOT FINE INLET AND CONCRETE ANCHOR |
| 14 | INSTALL RIG RAP (050+6"), 12" THICK OVER #6 FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILL FIBRIC <u>OR</u> WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90% |
| 15 | CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2 |
| 16 | CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2 |

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED
TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE
SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292

Westwood

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

OF LAS VEGAS, NV

Blue City®

GRAND CANYON & WASHBURN PHASE 1

GRADING PLAN XII

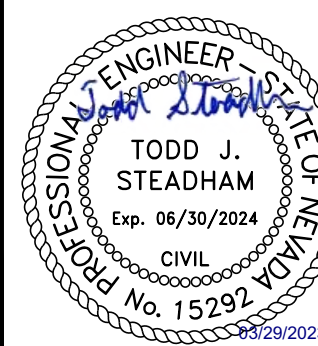
DATE: 3/28/23

DRAFTER: DJ

DESIGNER: JC

CHECKED: ST

PROJECT NO.
LEN2206-000

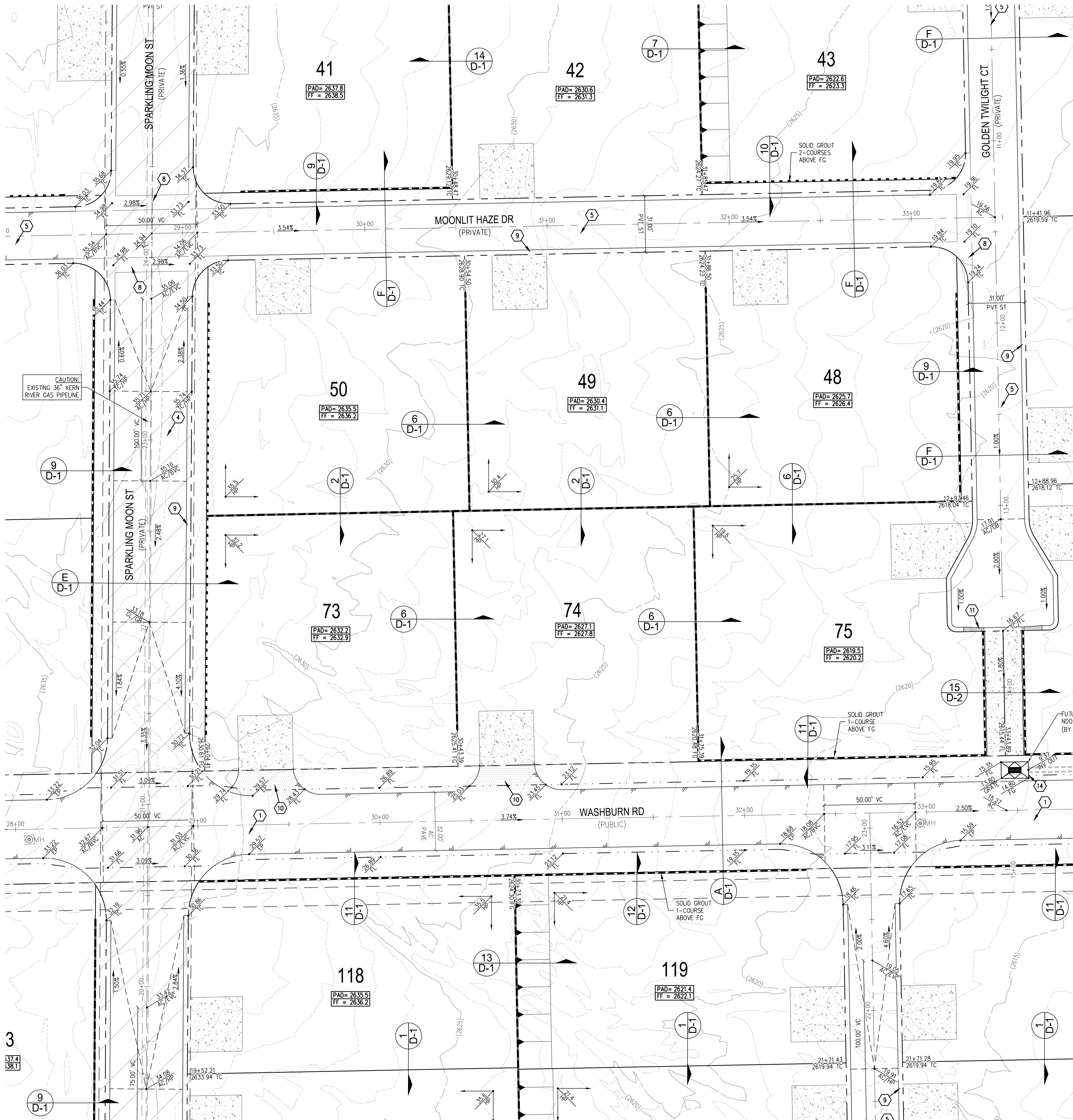


G-12

SHEET 15 OF 29

I:\New2206-000 grand canyon & washburn\Draws\Improvements\Phase 1\New2206-000.dwg - 1.dwg, 3/28/2023, 2:48 PM, Jon Cole

MATCH LINE - SHEET G-12



MATCH LINE - SHEET G-17

0 30 60
SCALE - 1"=30' FEET

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTAINED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

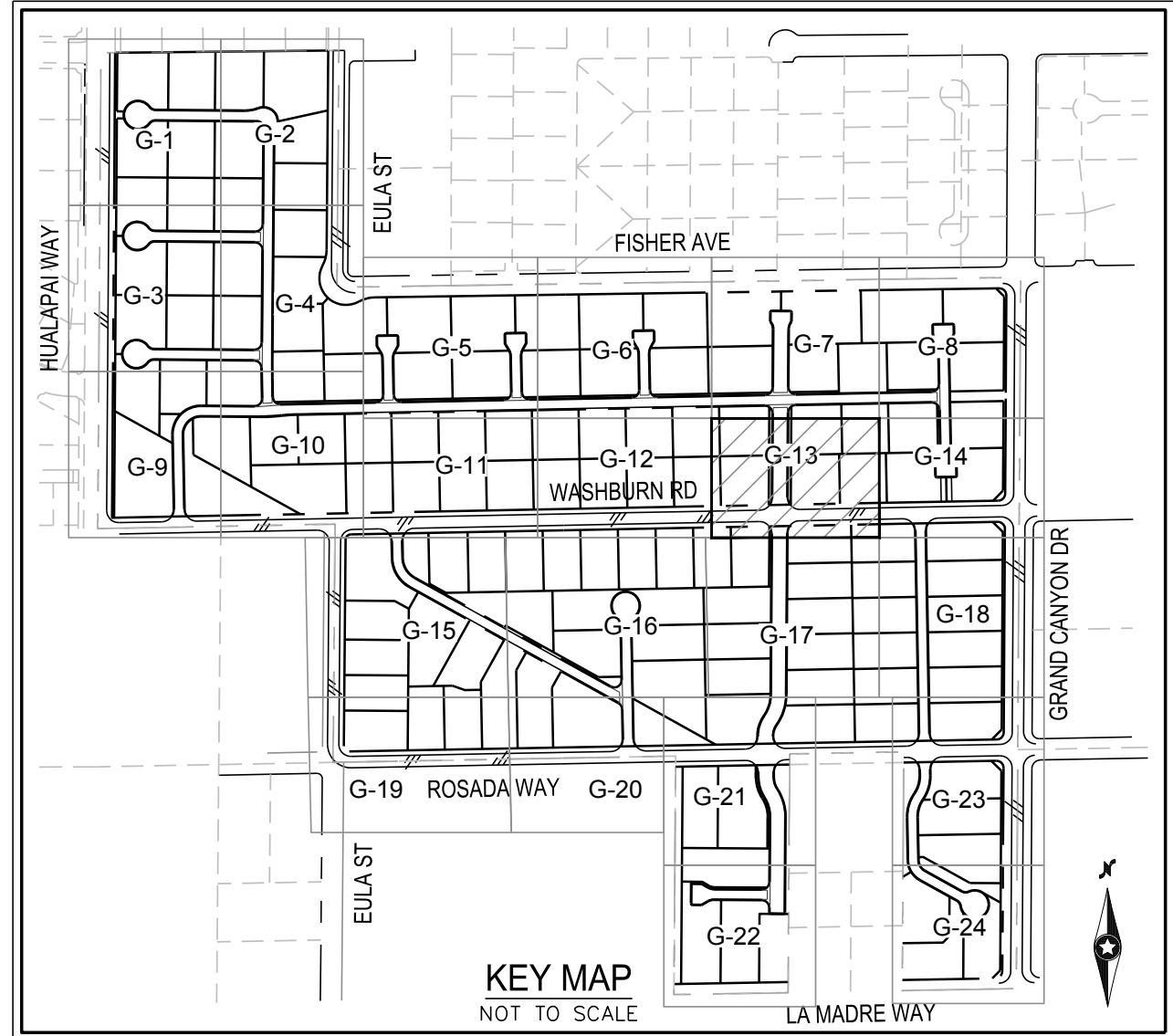
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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.2.
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 A 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.2.
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 EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
 - 2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
 - 3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
 - 4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
 - 5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
 - 6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
 - 7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAAD NO. 500.3 & 503
 - 8) CONSTRUCT 8" WIDE CROSS GUTTER PER CCAAD NO. 228
 - 9) CONSTRUCT ROLL CURB PER CCAAD NO. 217.2.S1
 - 10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
 - 11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
 - 12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
 - 13) INSTALL MDOT FIELD INLET AND CONCRETE APRON
 - 14) INSTALL RIP RAP (050=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
 - 15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
 - 16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE

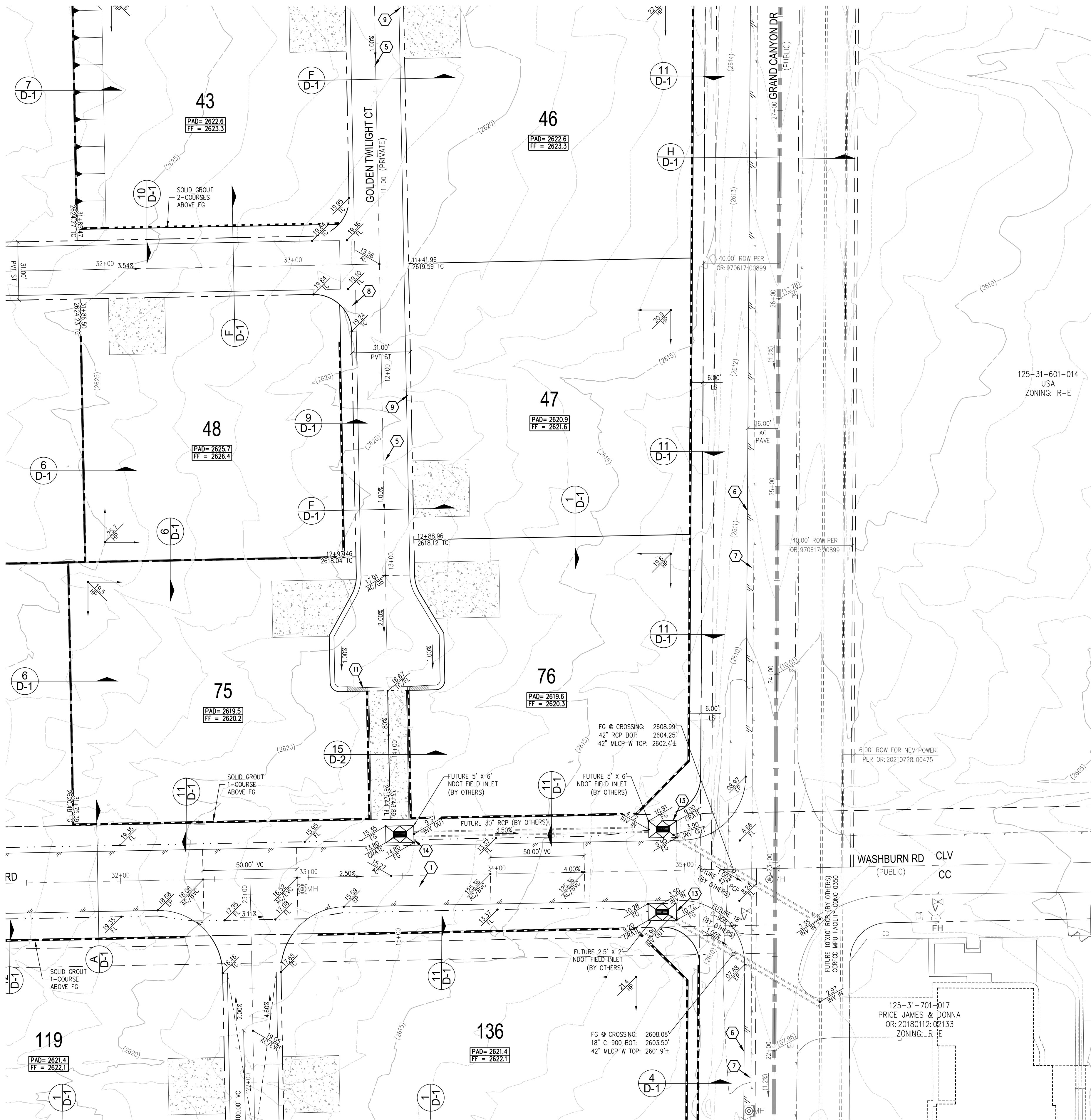
Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5500
westwoodps.com
Westwood Professional Services, Inc.

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN XIII

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000
TODD J. STEADHAM
PROFESSIONAL ENGINEER - STATE OF NEVADA
Exp. 06/30/2024
CIVIL
No. 15292-KV11-2023
G-13
SHEET 16 OF 29

MATCH LINE - SHEET G-8

MATCH LINE - SHEET G-13



MATCH LINE - SHEET G-18

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTAINED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

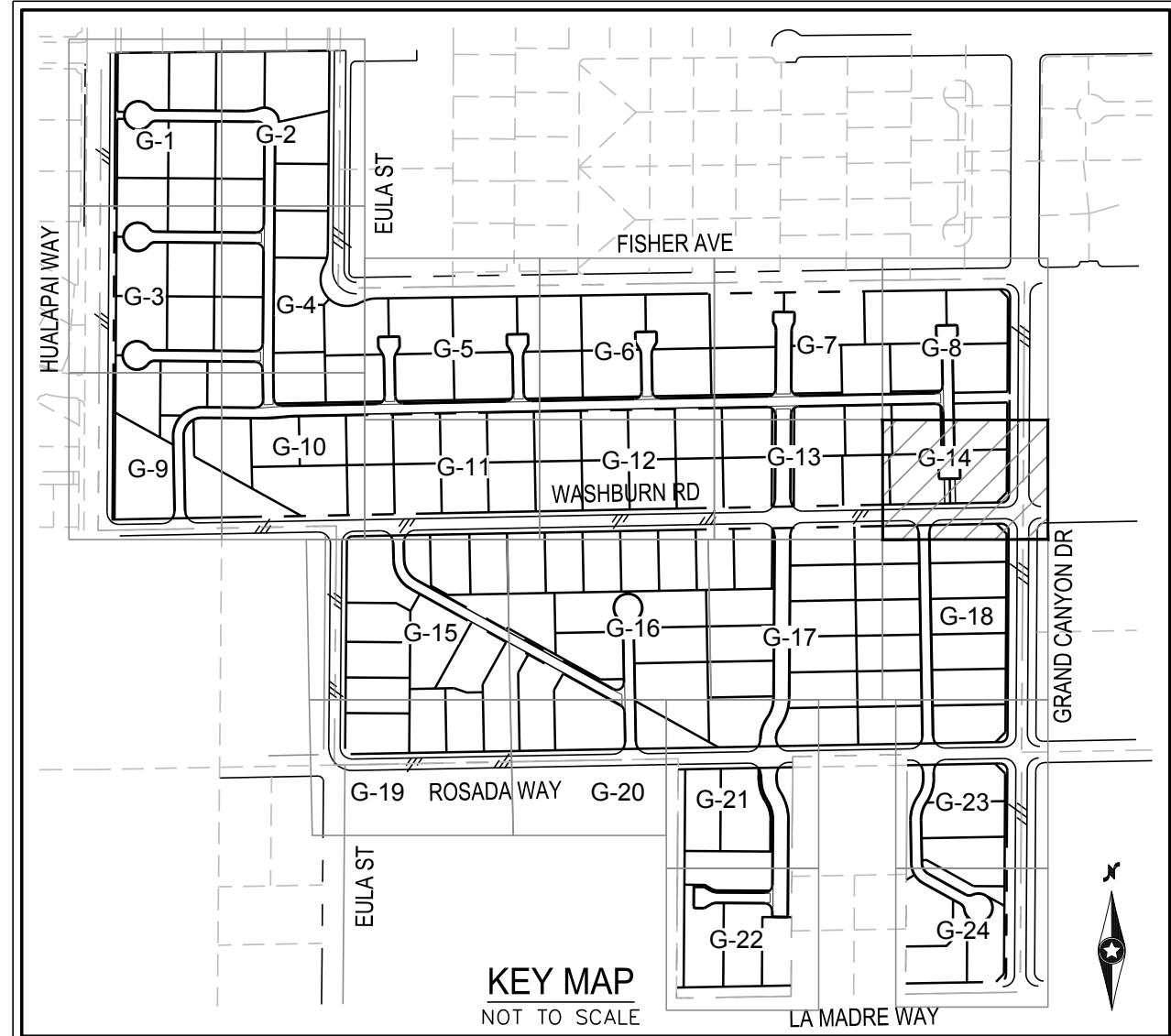
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.

4. 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 A 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.12.

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.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PARCELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1

2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1

3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1

4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1

5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1

6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1

7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUS NO. 500.3 & 503

8) CONSTRUCT 8" WIDE CROSS GUTTER PER CCAUS NO. 228

9) CONSTRUCT ROLL CURB PER CCAUS NO. 217.2.S1

10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT

11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2

12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2

13) INSTALL NDOT FIELD INLET AND CONCRETE APRON

14) INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%

15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2

16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292 DATE

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

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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN XIV

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000

TODD J. STEADHAM
Professional Engineer - State of Nevada
Exp. 06/30/2024
CIVIL
No. 15292

G-14
SHEET 17 OF 29

I:\New2206-000 grand canyon & washburn\phase 1\new2206-000 arcd-1.dwg, 3/28/2023, 2:48 PM, Jon Cole

MATCH LINE - SHEET G-15



MATCH LINE - SHEET G-12

MATCH LINE - SHEET G-20

MATCH LINE - SHEET G-17

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTUSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES
1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8) CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228
9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13) INSTALL MDOT FIELD INLET AND CONCRETE APRON
14) INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

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.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

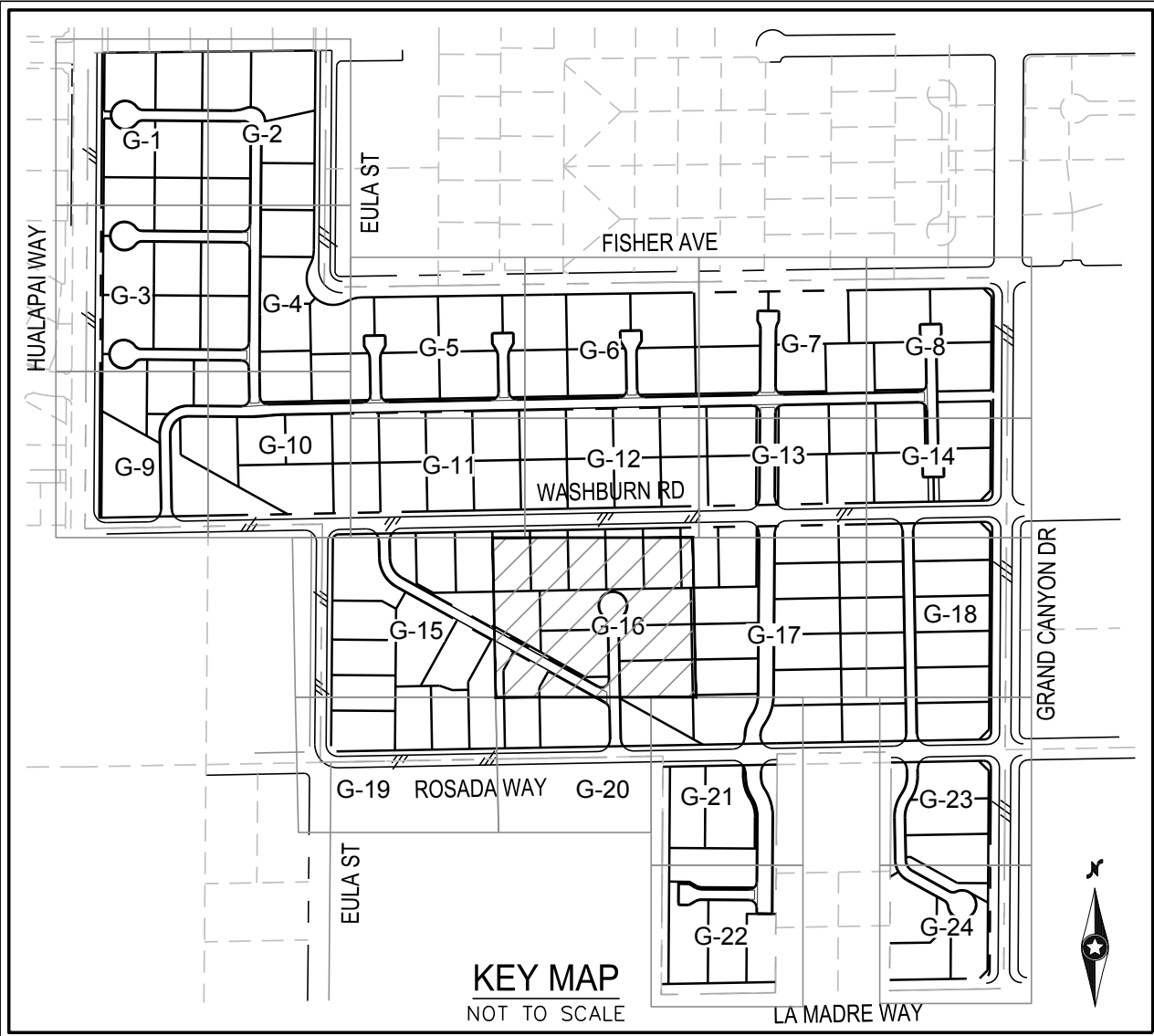
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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. 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 A 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.12.
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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8) CONSTRUCT 8' WIDE CROSS GUTTER PER CCAUSD NO. 228
9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13) INSTALL MDOT FIELD INLET AND CONCRETE APRON
14) INSTALL RIP RAP (D50=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE

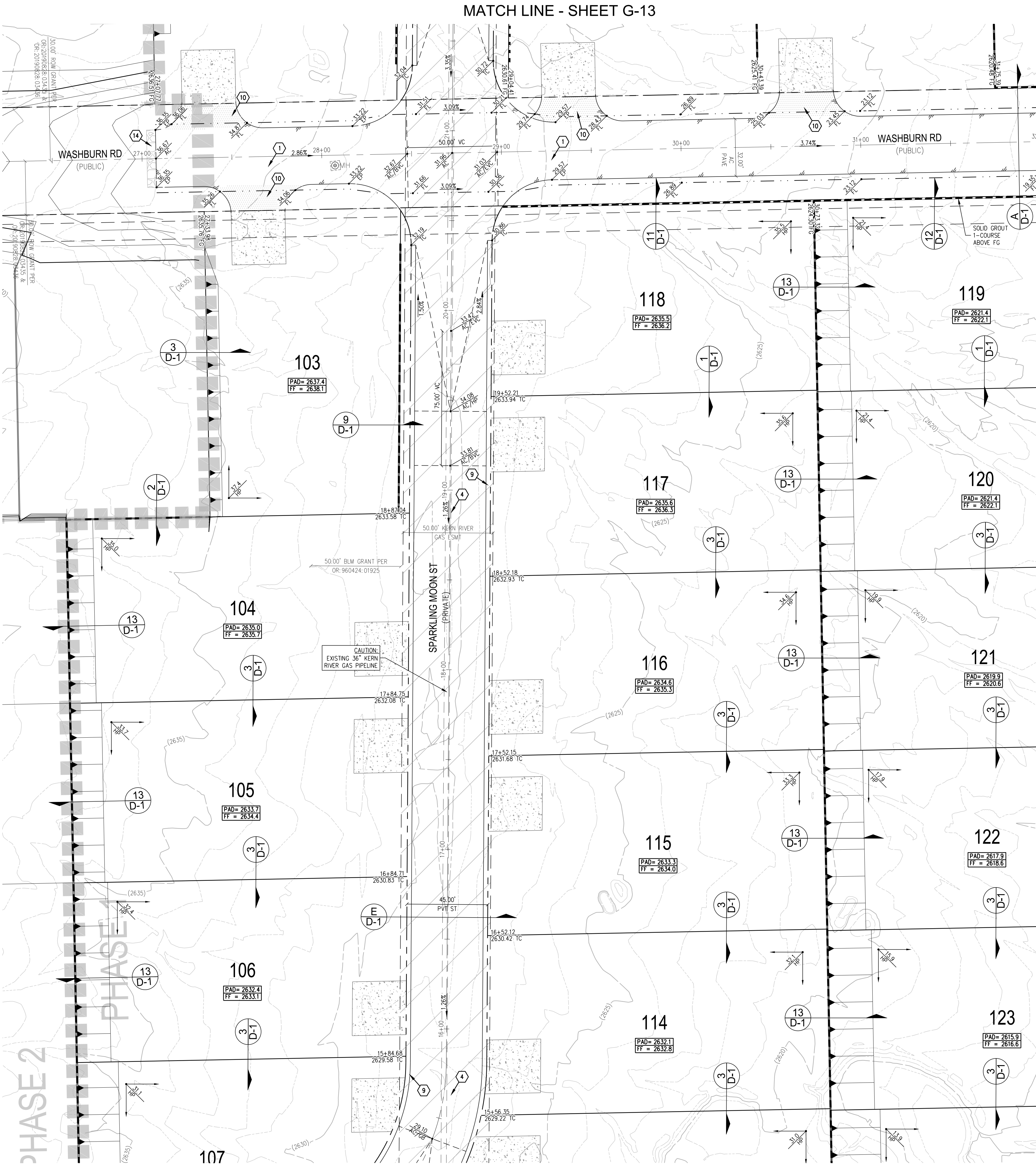
Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN XVI
SHEET 19 OF 29

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000
TODD J. STEADHAM
P.E. #15292
G-16
SHEET 19 OF 29

I:\New2206-000 grand canyon & washburn\phase 1\New2206-000.dwg 3/28/2023 2:48 PM Jon Cole

MATCH LINE - SHEET G-16



CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTAINED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

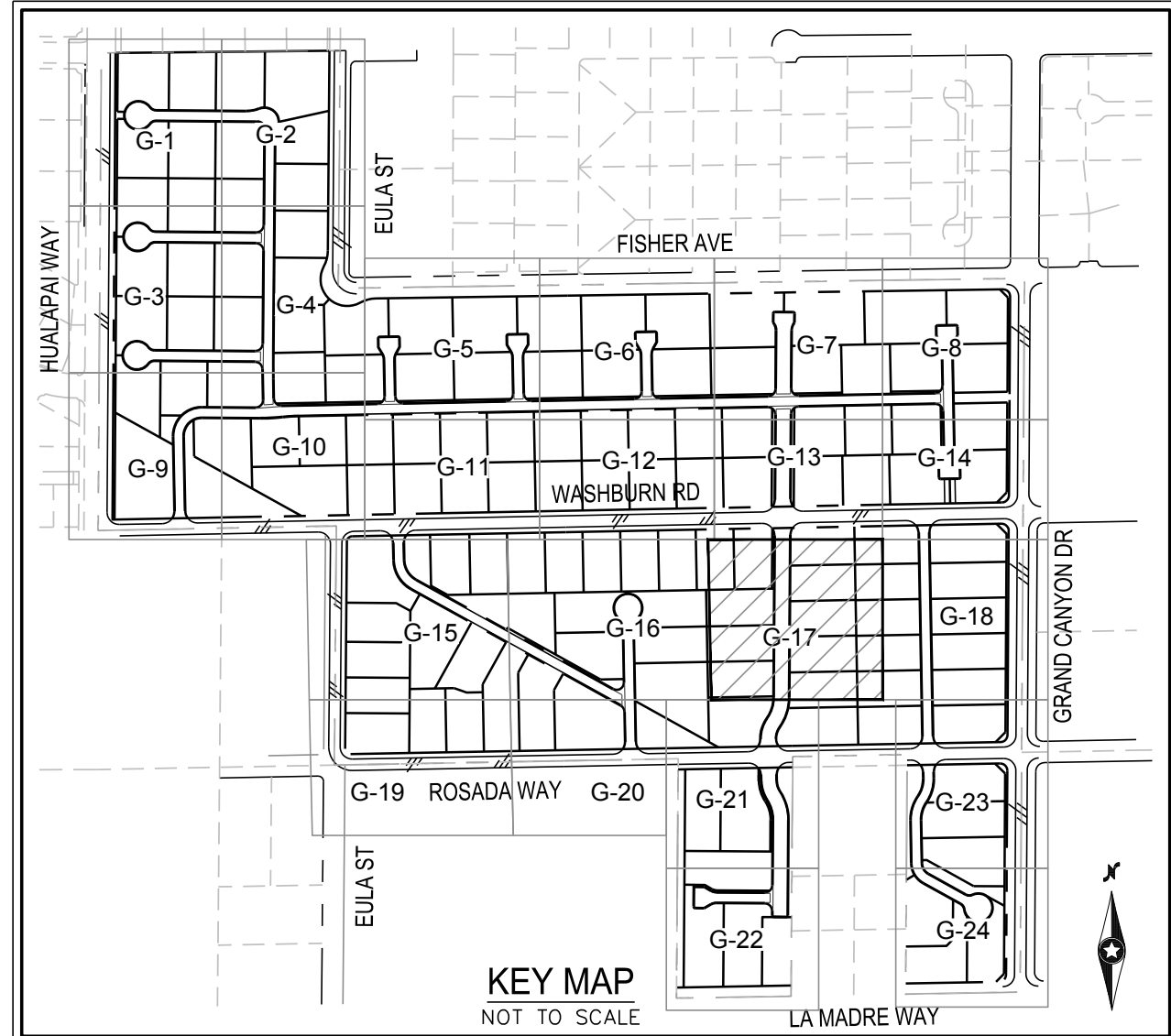
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))
1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR ACCUMULATED IN THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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. 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 A 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.12.
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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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



ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES
1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8) CONSTRUCT 8" WIDE CROSS GUTTER PER CCAUSD NO. 228
9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13) INSTALL NDOT FIELD INLET AND CONCRETE APRON
14) INSTALL RIP RAP (050=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE

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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN XVII

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000
TODD J. STEADHAM
PROFESSIONAL ENGINEER - STATE OF NEVADA
Exp. 06/30/2024
CIVIL
No. 15292 KVV19010203
G-17
SHEET 20 OF 29

I:\New2206-000 grand canyon & washburn\Draws\1.dwg, 3/28/2023, 2:48 PM, Jon Cole

MATCH LINE - SHEET G-17

MATCH LINE - SHEET G-14



MATCH LINE - SHEET G-23

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBTUSCURED DURING CONSTRUCTION.

SOILS REPORT
SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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.

ELEVATION NOTE
ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES
1) CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
2) CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
3) CONSTRUCT AC PAVEMENT PER SECTION C & D ON D-1
4) CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
5) CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
6) CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
7) SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
8) CONSTRUCT 8" WIDE CROSS GUTTER PER CCAUSD NO. 228
9) CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
10) CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
11) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
12) CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
13) INSTALL NDOT FIELD INLET AND CONCRETE APRON
14) INSTALL RIP RAP (050=6"), 12" THICK OVER 6" FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE II AGGREGATE BASE COMPACTED TO 90%
15) CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
16) CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

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.

LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))
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 CLARK COUNTY 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. 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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
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. 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 A 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.12.
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.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

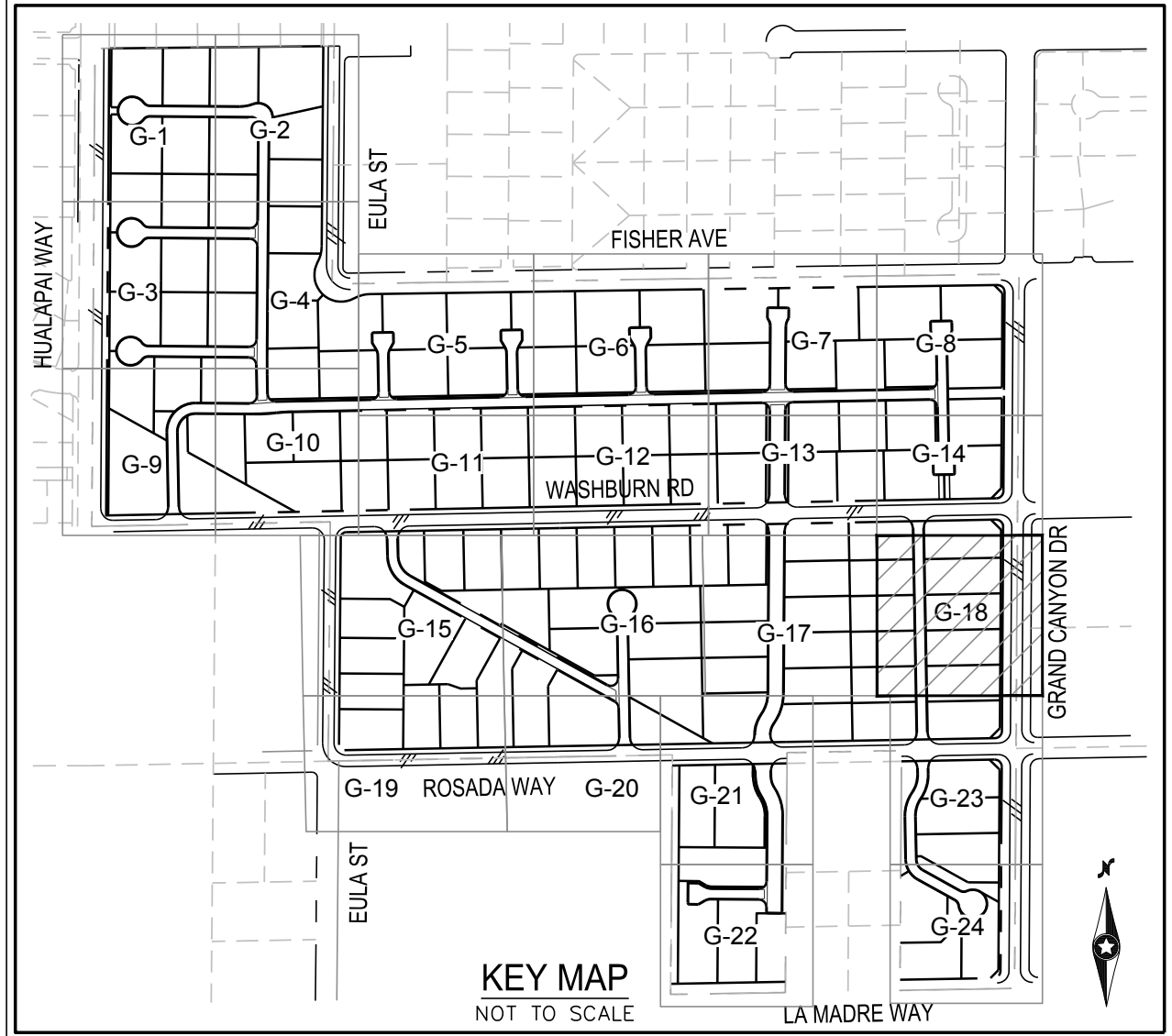
FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-000000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.
TODD J. STEADHAM, P.E. #15292 DATE _____

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.
A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

FAST
Call before you UnderGround
1-702-432-5300
FREEMAN & 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



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

LENNAR
CITY OF LAS VEGAS, NV
GRAND CANYON & WASHBURN PHASE 1
GRADING PLAN XVIII

DATE: 3/28/23
DRAFTER: DJA
DESIGNER: JC
CHECKED: STS
PROJECT NO. LEN2206-000

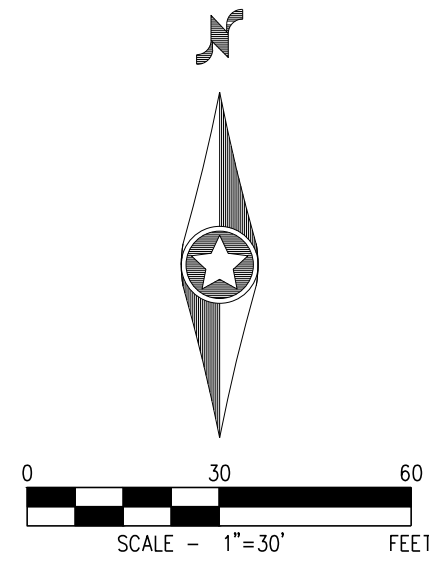
TODD J. STEADHAM
PROFESSIONAL ENGINEER - CIVIL
Exp. 06/30/2024
No. 15292 KVM/JC

G-18
SHEET 21 OF 29

MATCH LINE - SHEET G-15



MATCH LINE - SHEET G-20



CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING, INCLUDING SAWCUTTING OR PAVEMENT REMOVAL, 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 OBSCURED DURING CONSTRUCTION.

SOILS REPORT

SOILS REPORT BY SOUTHWEST GEOTECHNICAL
PROJECT NO. 221019 DATED 11/12/2022

EARTHWORKS

EARTHWORK QUANTITIES (RAW):
CUT= 118,713 CU YDS
FILL= 332,280 CU YDS
NET= 213,567 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 LIP 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 CURBS EXIST) WITHIN THE SIGHT VISIBILITY ZONES.

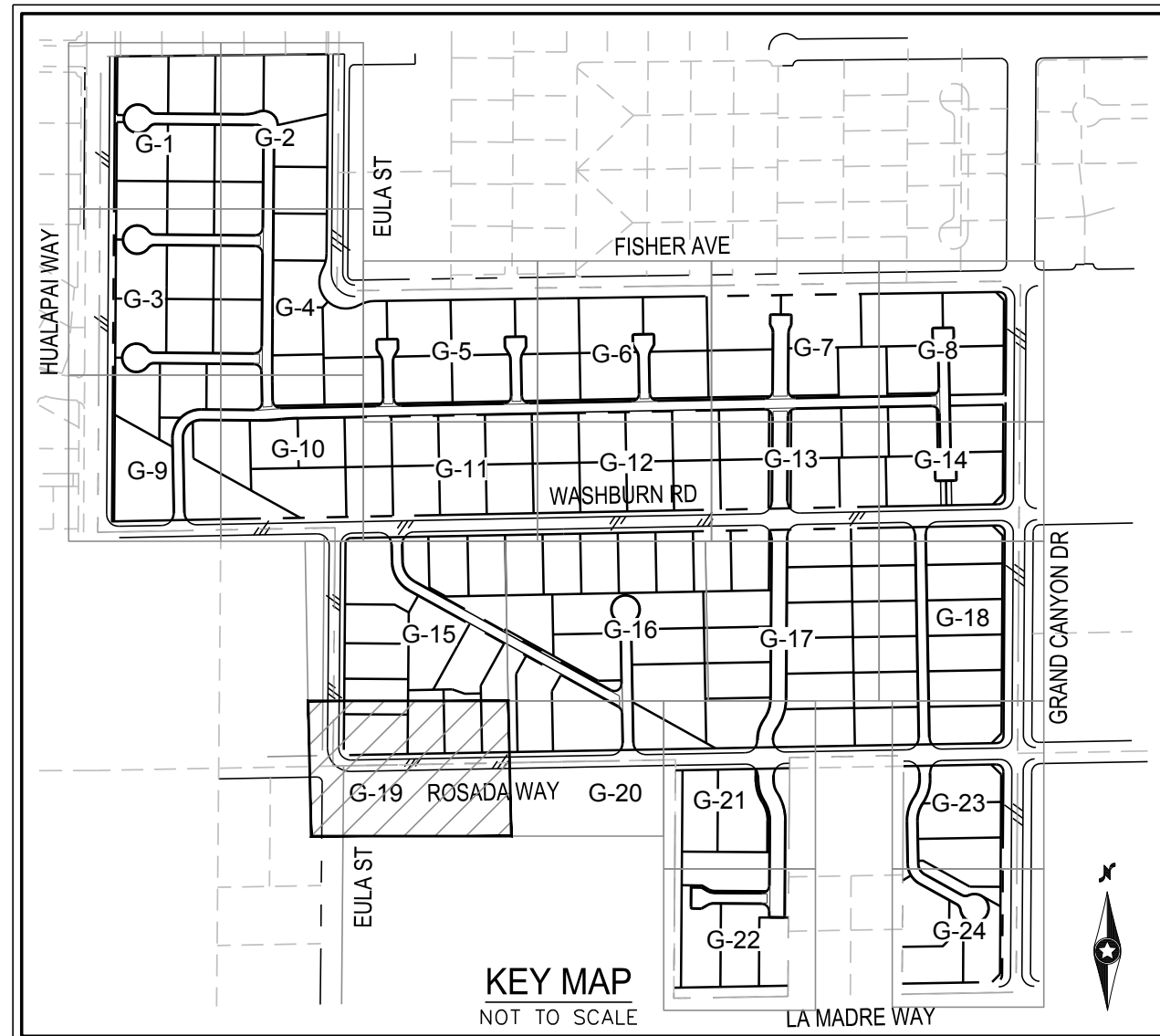
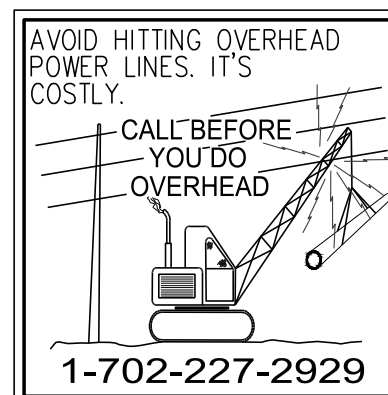
LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))

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, OR ACCUMULATED, IN THE RIGHT-OF-WAY OF ANY HIGHWAY OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
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 CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS FEASIBLE 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 NVRI0000000 SECTION II.A.5.
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, VEHICLES, OR EXITS TO THE SITE. INSPECTIONS SHALL BE CONDUCTED WITHIN 24 HOURS AFTER CLANK 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 NVRI0000000, SECTION II.A.12.
5. ACCUMULATED SEDIMENT IN BMP'S SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER EVENT OR TO THE EXTENT THAT THE CAPACITY OF THE BMP HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.



ELEVATION NOTE

ADD 2600 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 2601.00)

GRADING NOTES

- 1 CONSTRUCT AC PAVEMENT PER SECTION A ON D-1
- 2 CONSTRUCT AC PAVEMENT PER SECTION B ON D-1
- 3 CONSTRUCT AC PAVEMENT PER SECTION C & B ON D-1
- 4 CONSTRUCT AC PAVEMENT PER SECTION E ON D-1
- 5 CONSTRUCT AC PAVEMENT PER SECTION F ON D-1
- 6 CONSTRUCT AC PAVEMENT PER SECTION H ON D-1
- 7 SAWCUT AND MATCH EXISTING IMPROVEMENTS PER CCAUSD NO. 500.3 & 503
- 8 CONSTRUCT 8' WIDE CROSSLIP PER CCAUSD NO. 228
- 9 CONSTRUCT ROLL CURB PER CCAUSD NO. 217.2.S1
- 10 CONSTRUCT AC DRIVEWAY PER GEOTECH REPORT
- 11 CONSTRUCT ROLL CURB TRANSITION PER DETAIL 20 ON D-2
- 12 CONSTRUCT CONCRETE GUTTER PER DETAIL 18 ON D-2
- 13 INSTALL NOID FIELD INLET AND CONCRETE APRON
- 14 INSTALL RIP RAP (3050-6"), 12" THICK OVER FINE AGGREGATE BASE (PER RTC SPEC 706.03.03) COMPACTED TO 90% OVER FILTER FABRIC OR WITH 12" TYPE A AGGREGATE BASE COMPACTED TO 90%
- 15 CONSTRUCT GUTTER TRANSITION AND WALL OPENING PER DETAIL 19 ON D-2
- 16 CONSTRUCT ROLL CURB TRANSITION PER DETAIL 26 ON D-2

FLOOD CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY DS-00000 ON FILE AT CITY OF LAS VEGAS FOR THE SUBJECT PROJECT.

TODD J. STEADHAM, P.E. #15292

DATE _____

® CITY OF LAS VEGAS, NV

LENZAR®

GRAND CANYON & WASHBURN PHASE 1

GRADING PLAN XIX

DATE: 3/28/23

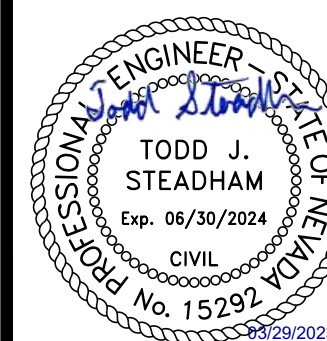
DRAFTER: DJA

DESIGNER: JC

CHECKED: STS

PROJECT NO.

LEN2206-000



G-19

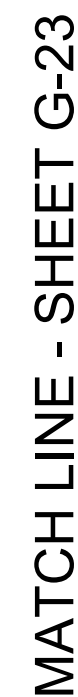
SHEET 22 OF 29

Westwood

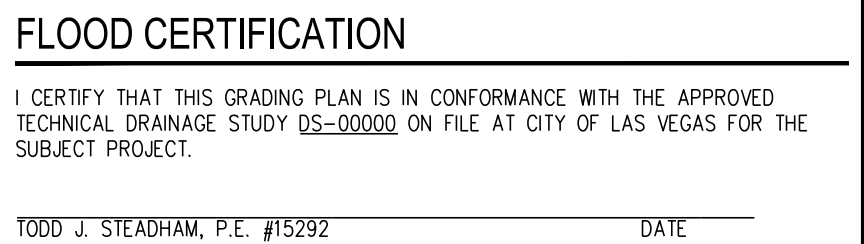
Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118

Westwood Professional Services, Inc.
westwoodps.com

MATCH LINE - SHEET G-22



MATCH LINE - SHEET G-24



FLOOD ZONE

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.

A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

FLOOD ZONE

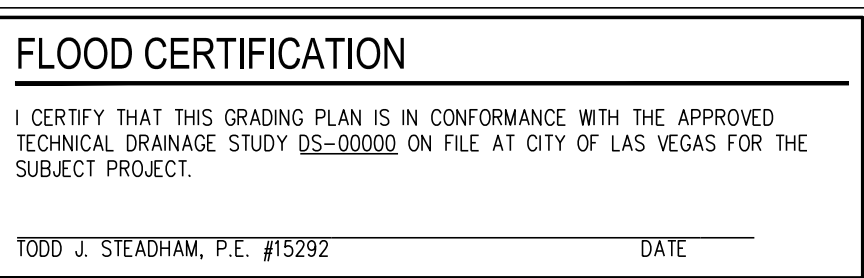
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANELS 32003C1750E AND 32003C1745E, DATED SEPTEMBER 27, 2002.

A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

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

 OR
1-800-642-2444

SHEET 26 OF 29



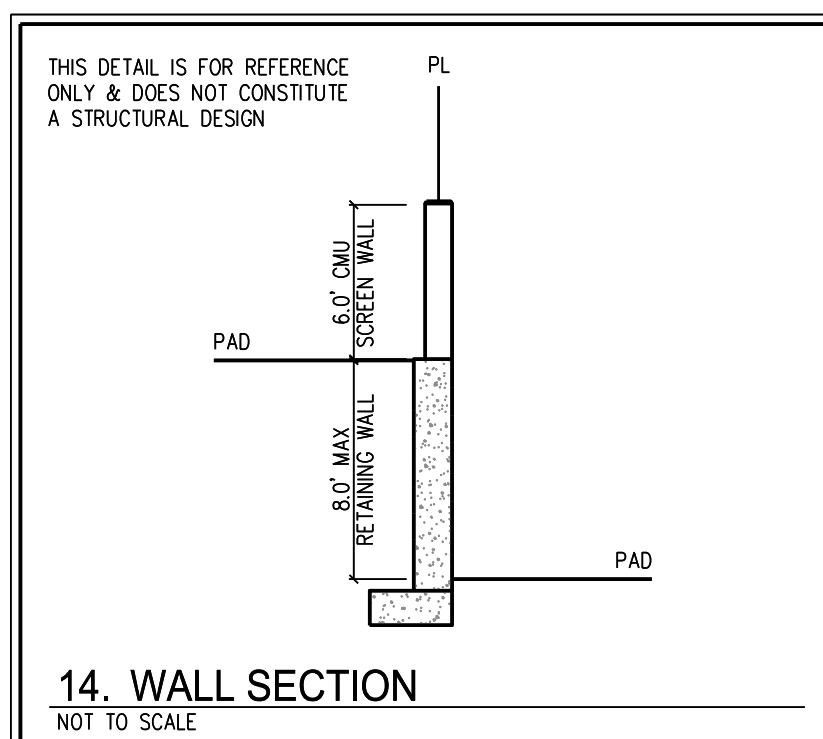
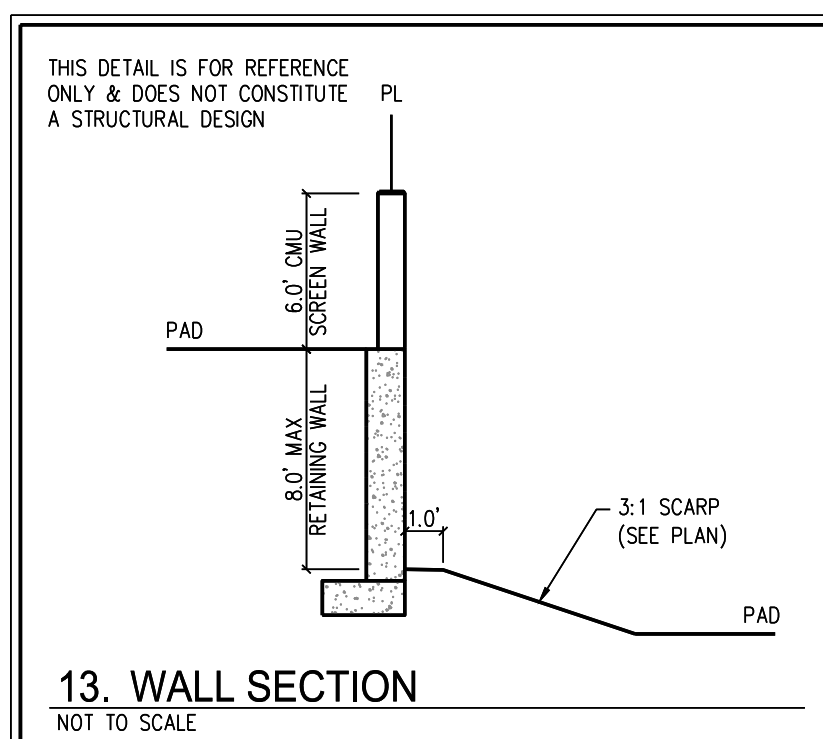
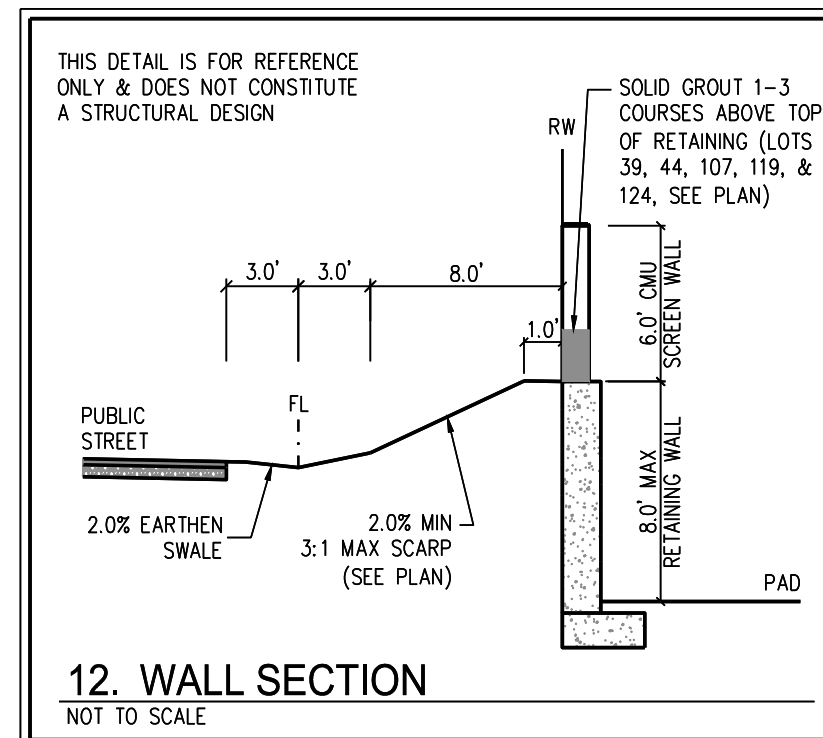
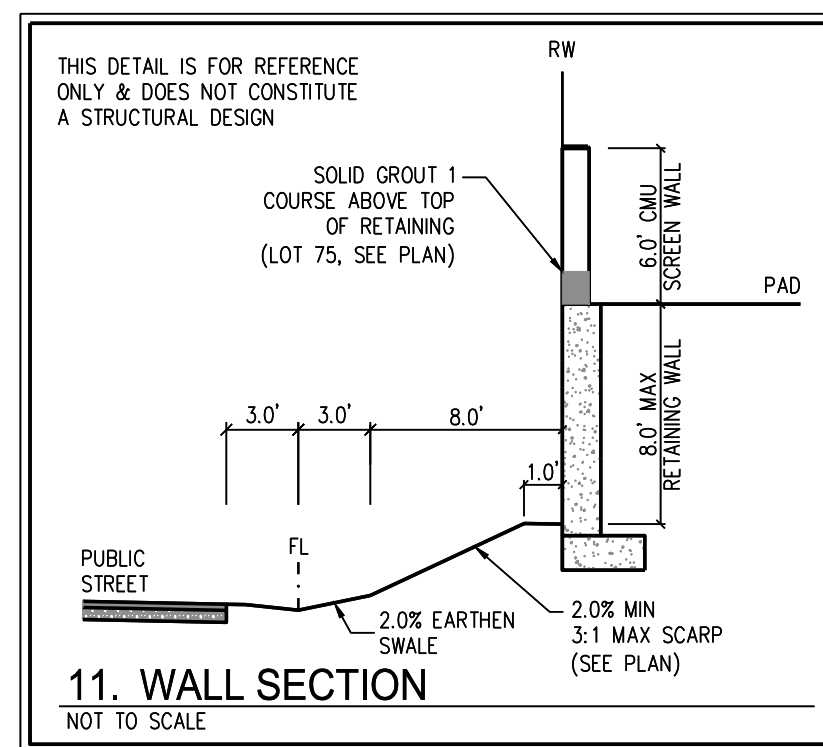
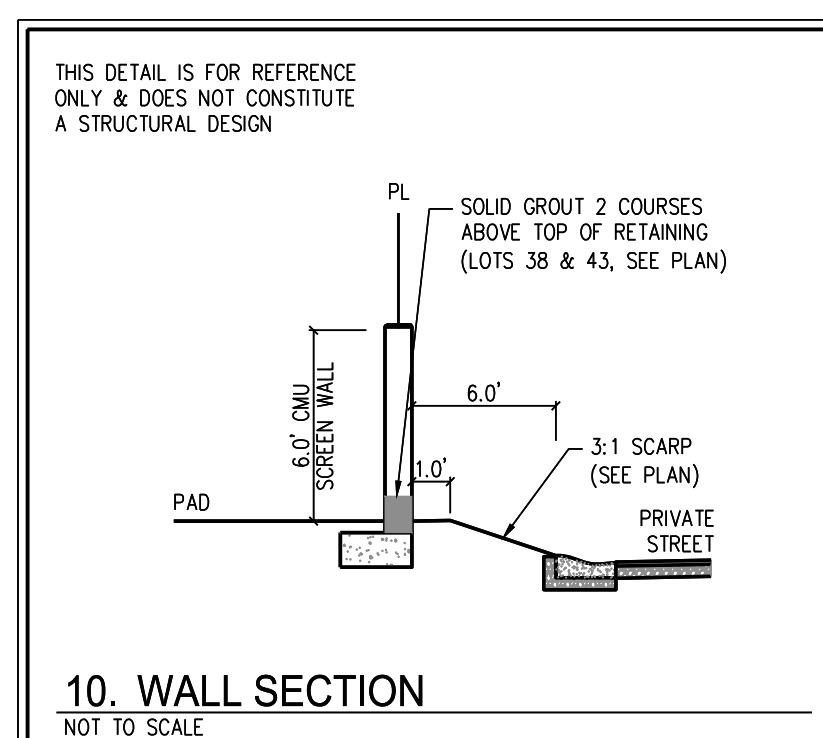
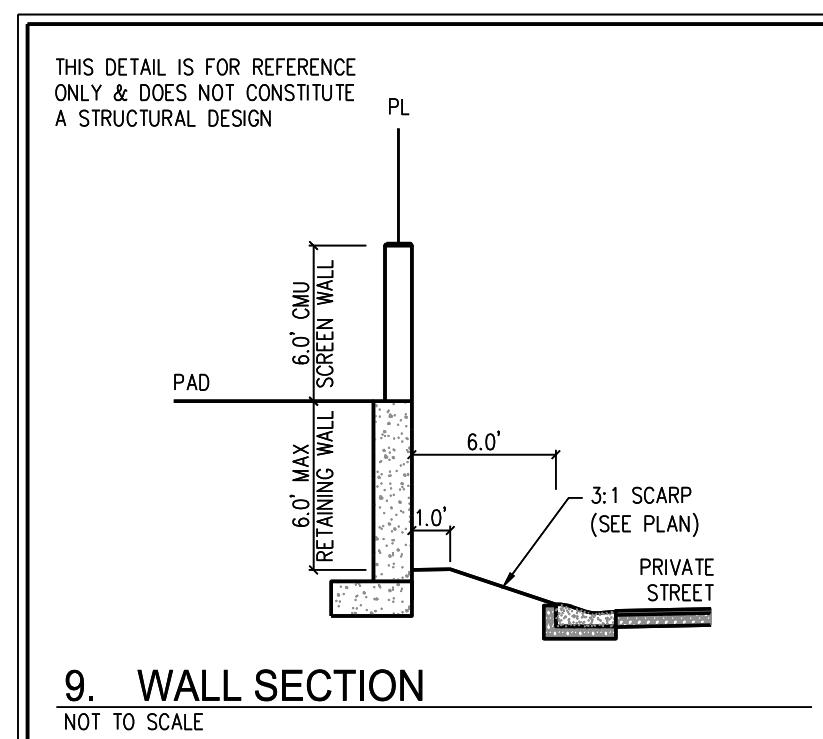
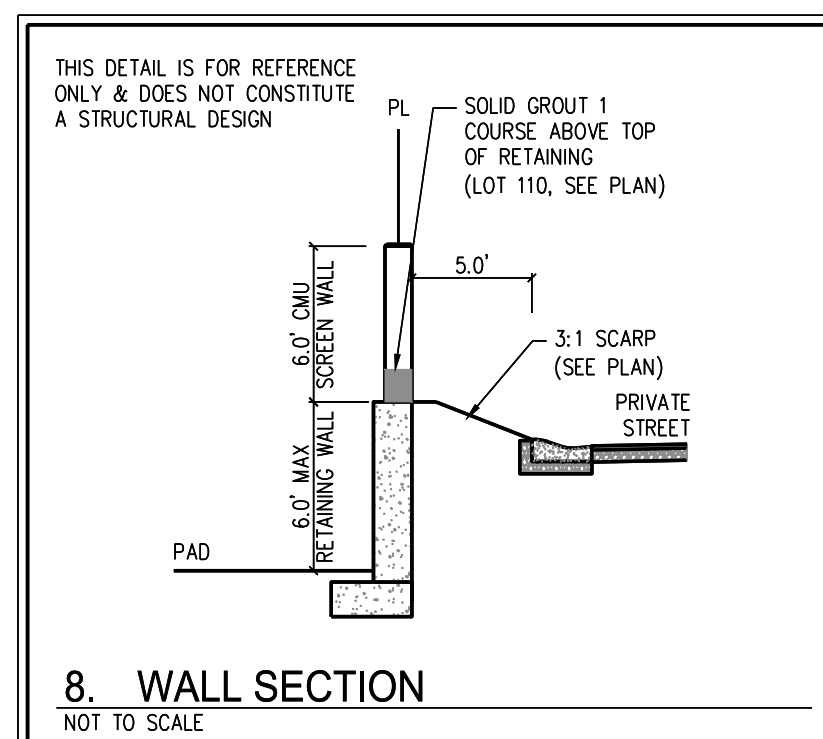
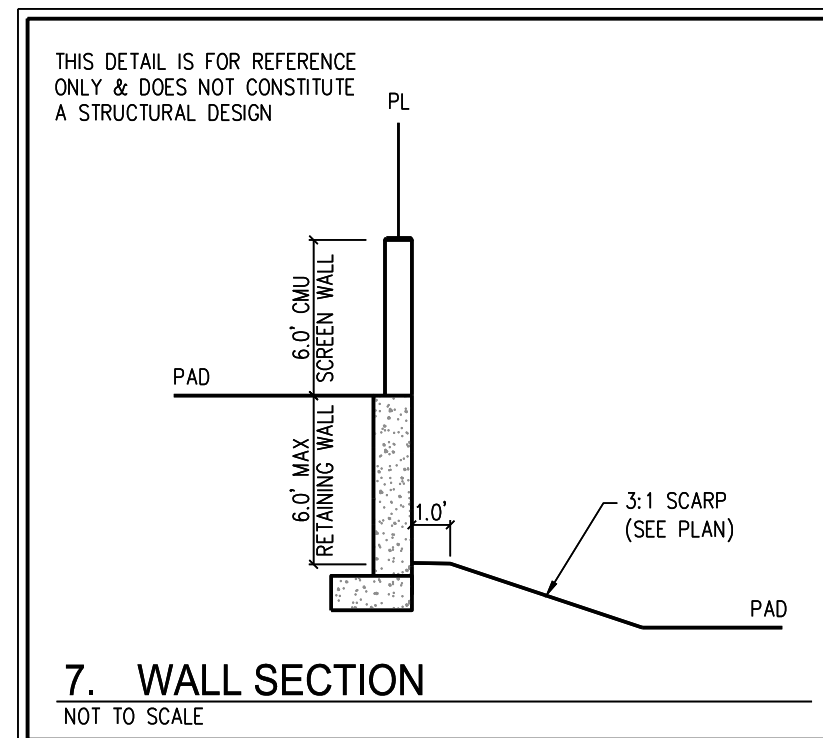
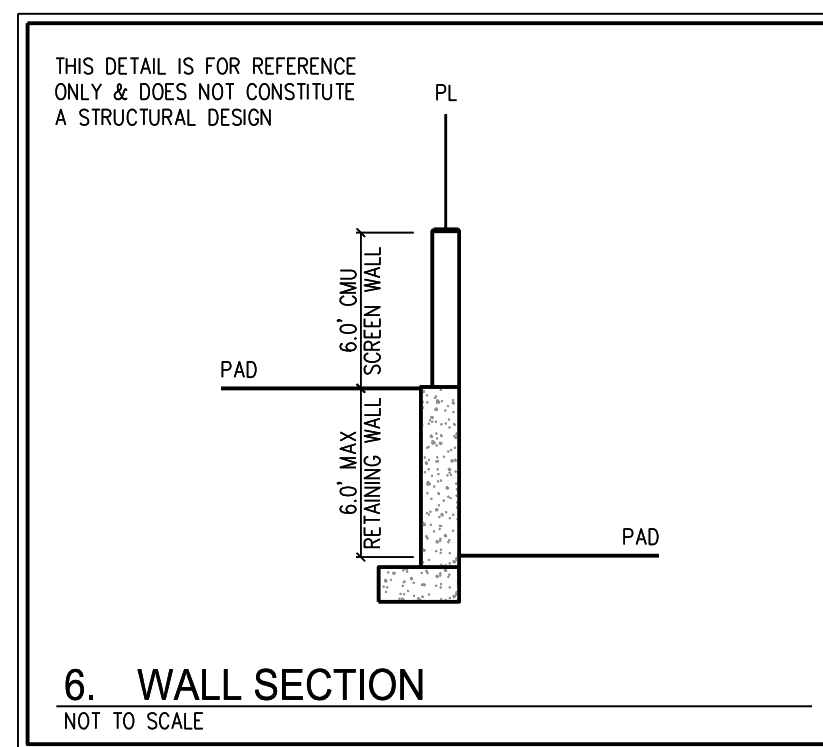
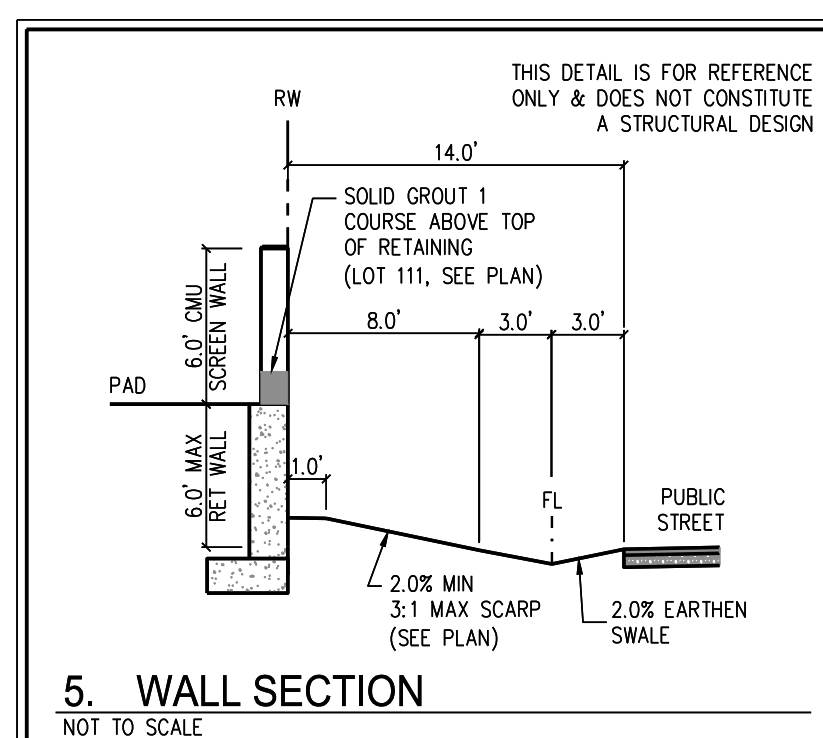
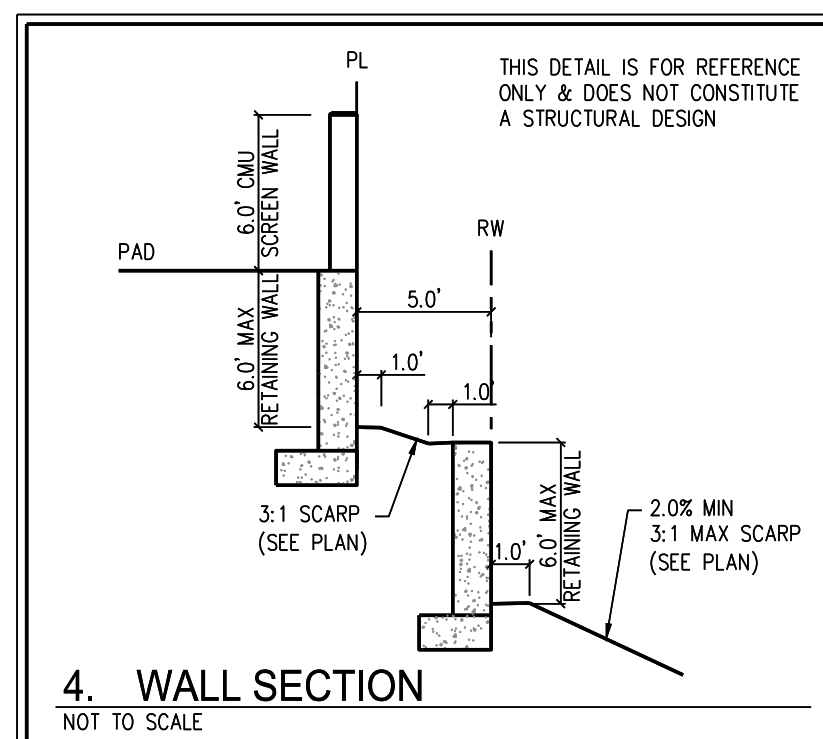
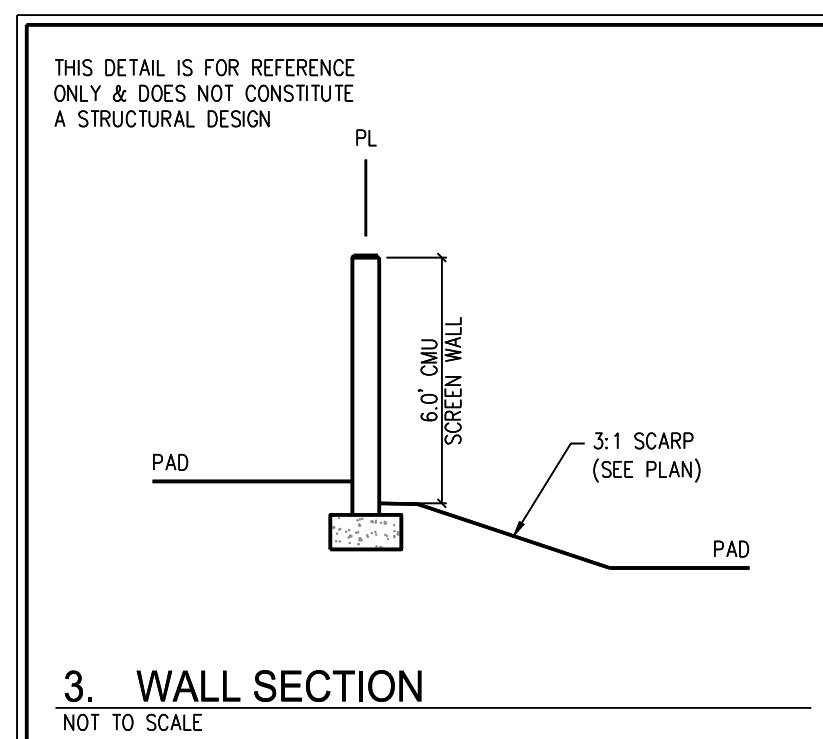
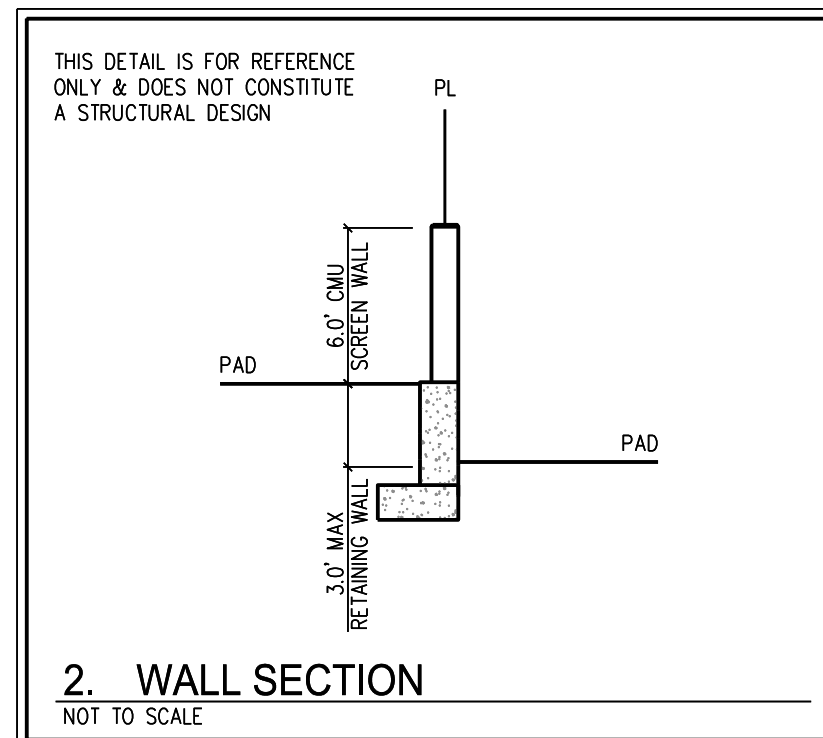
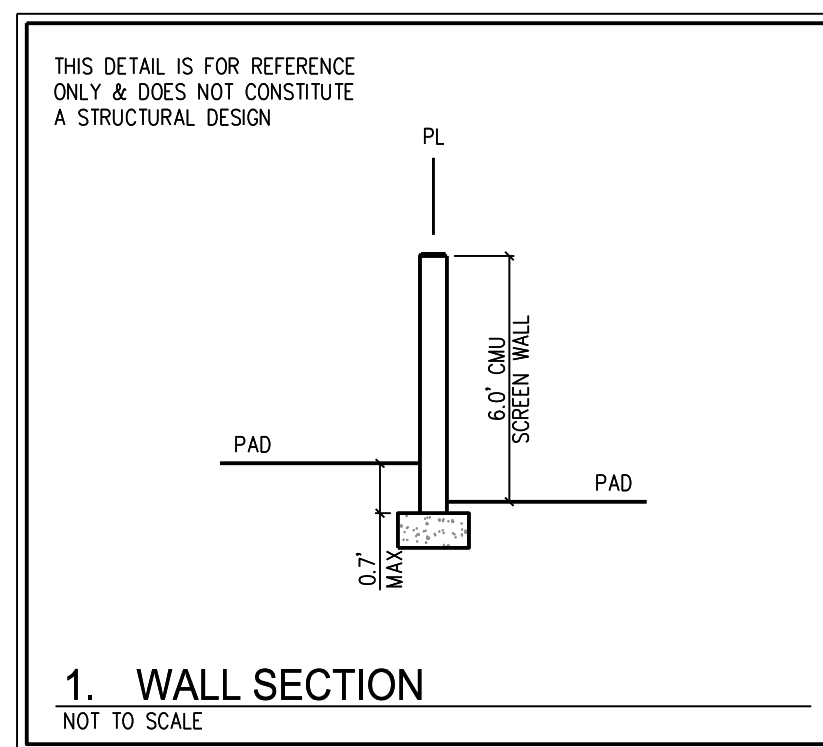
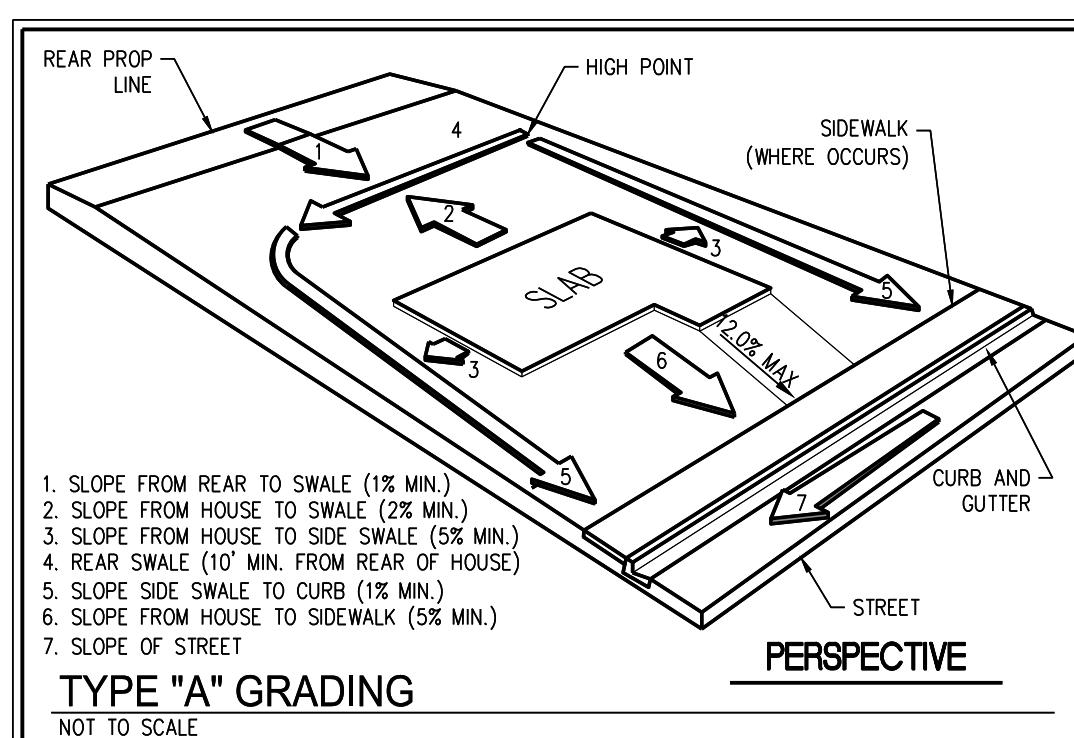
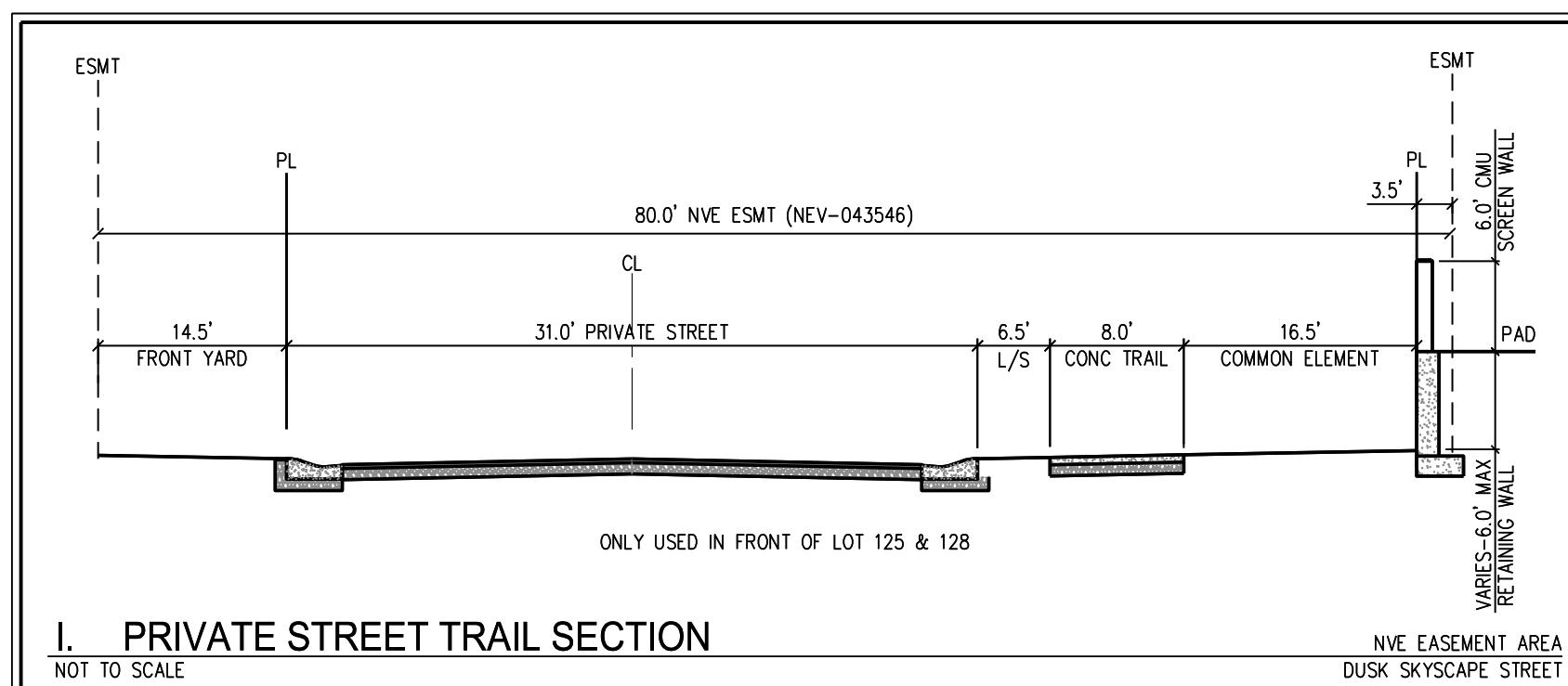
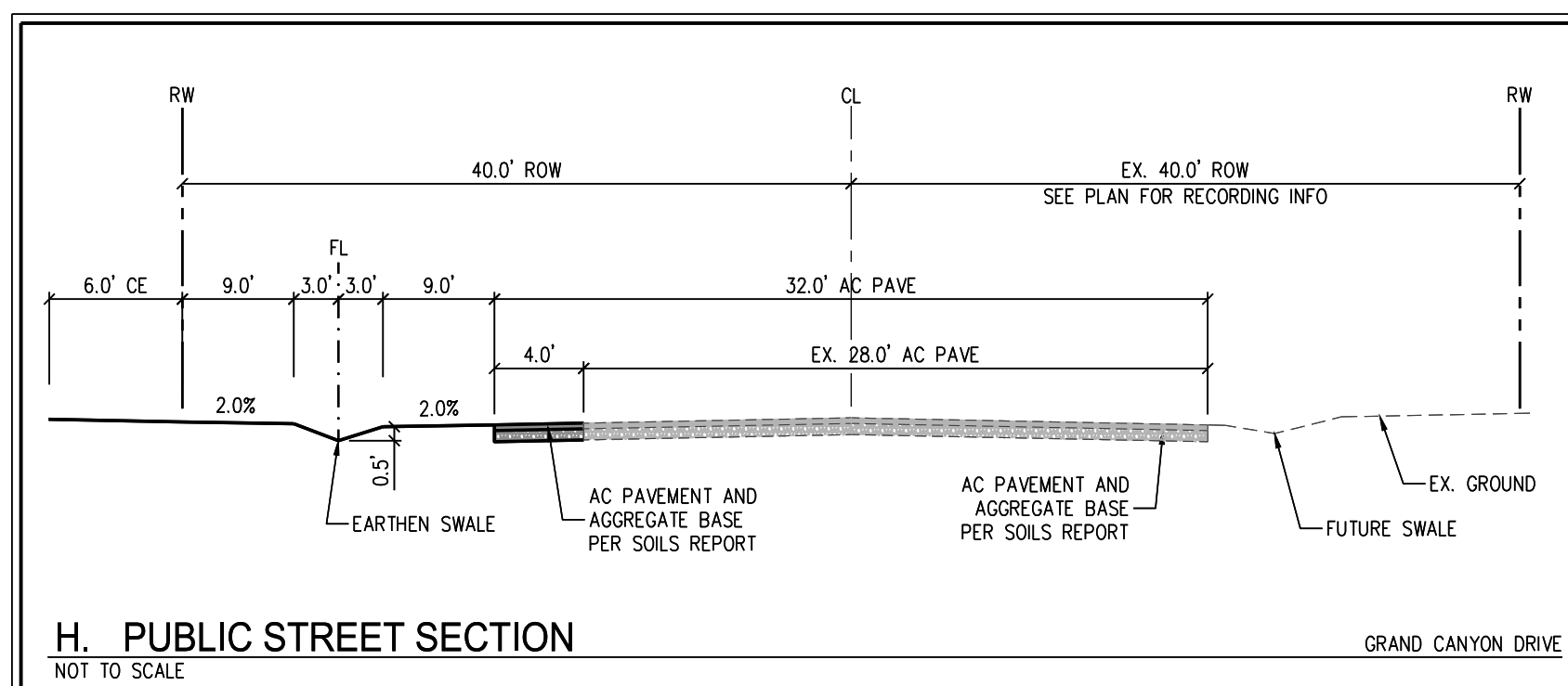
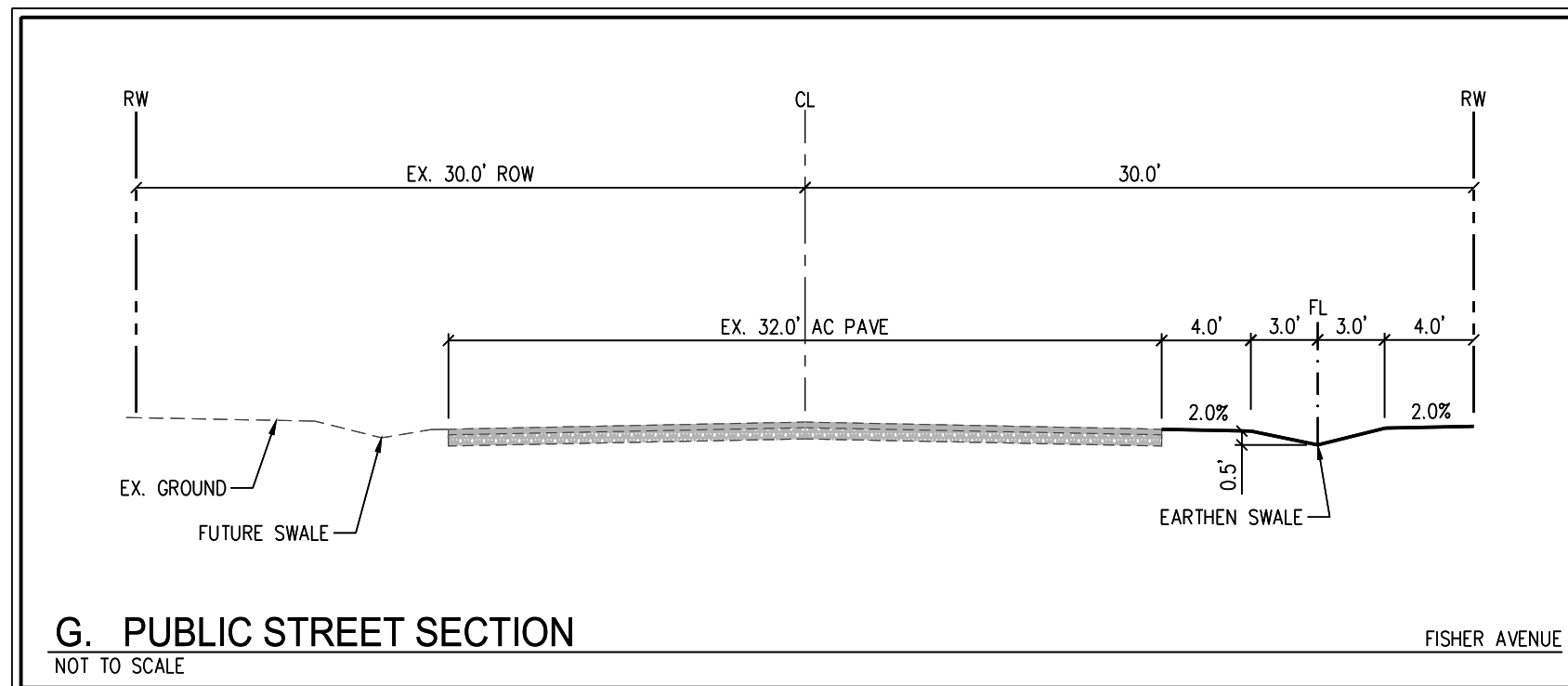
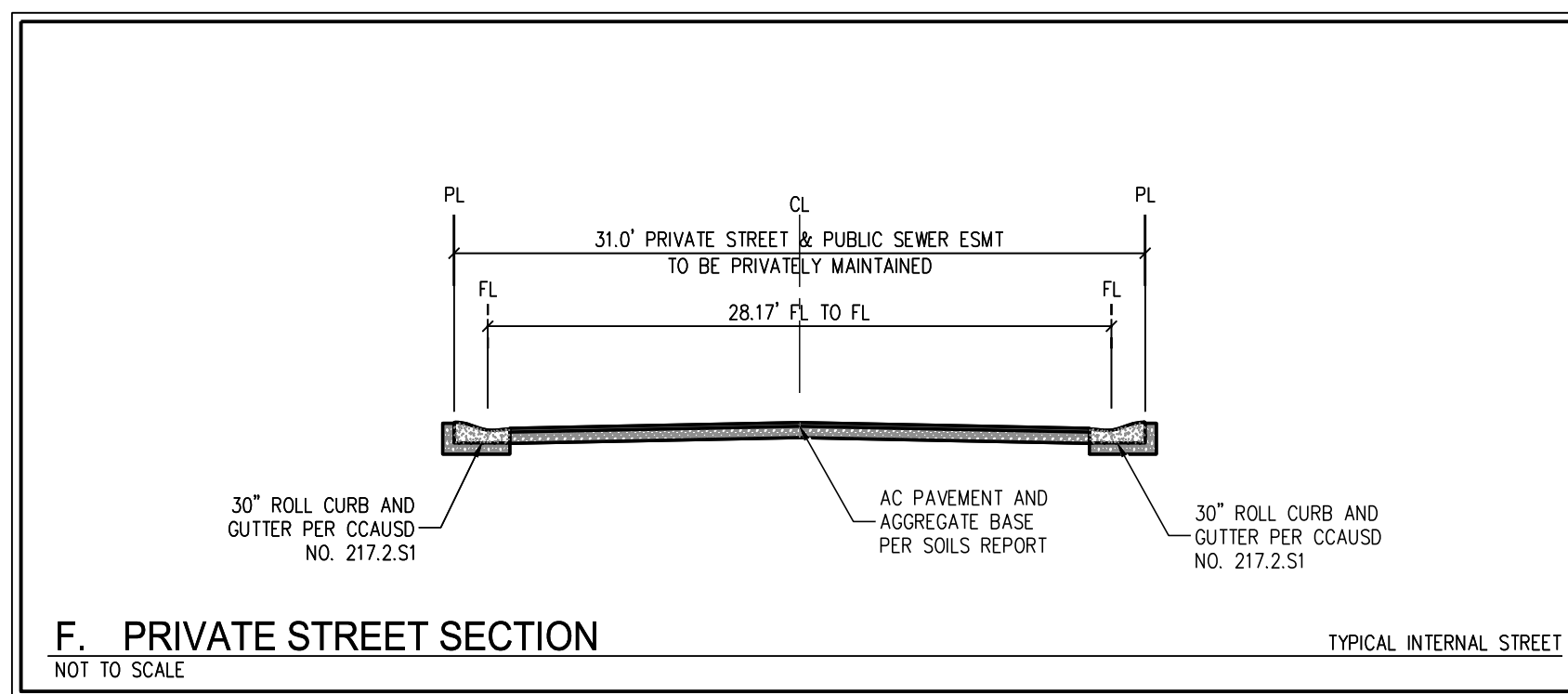
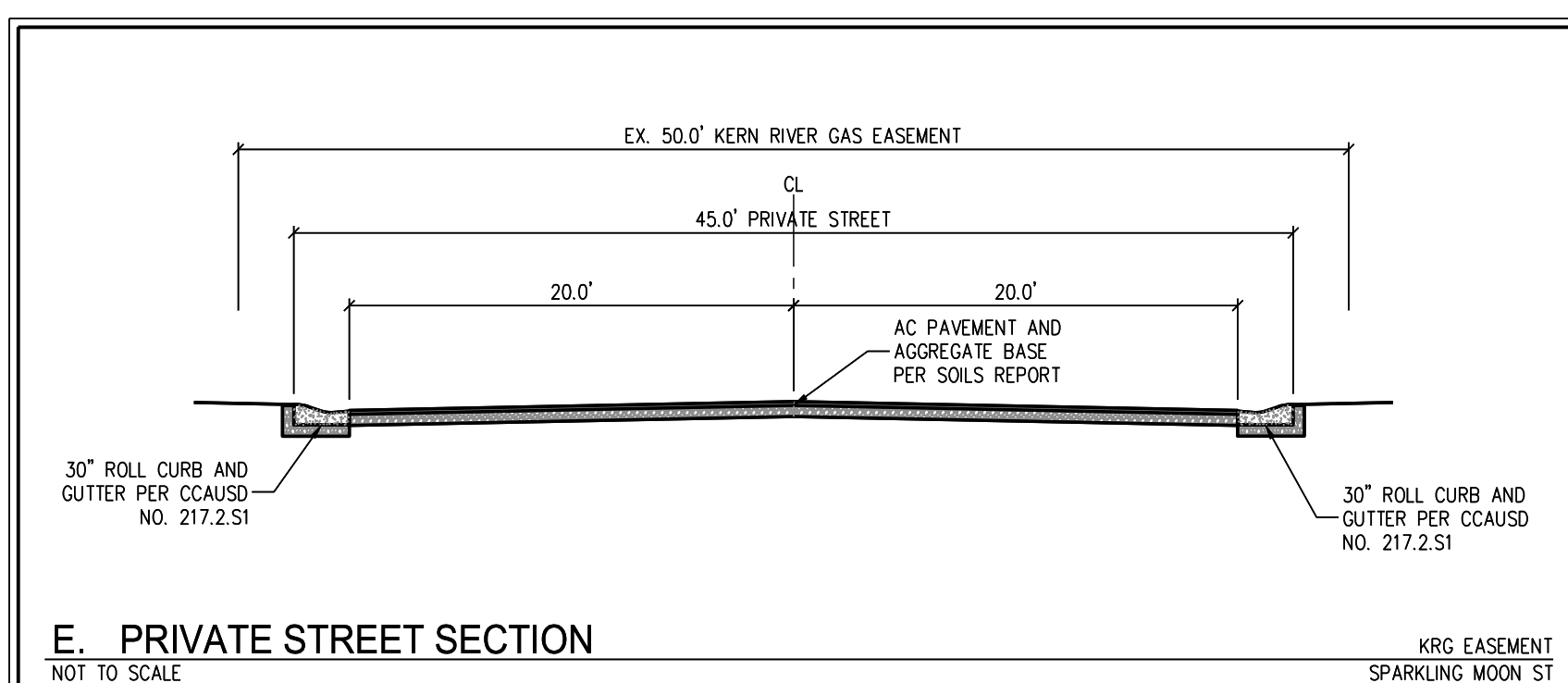
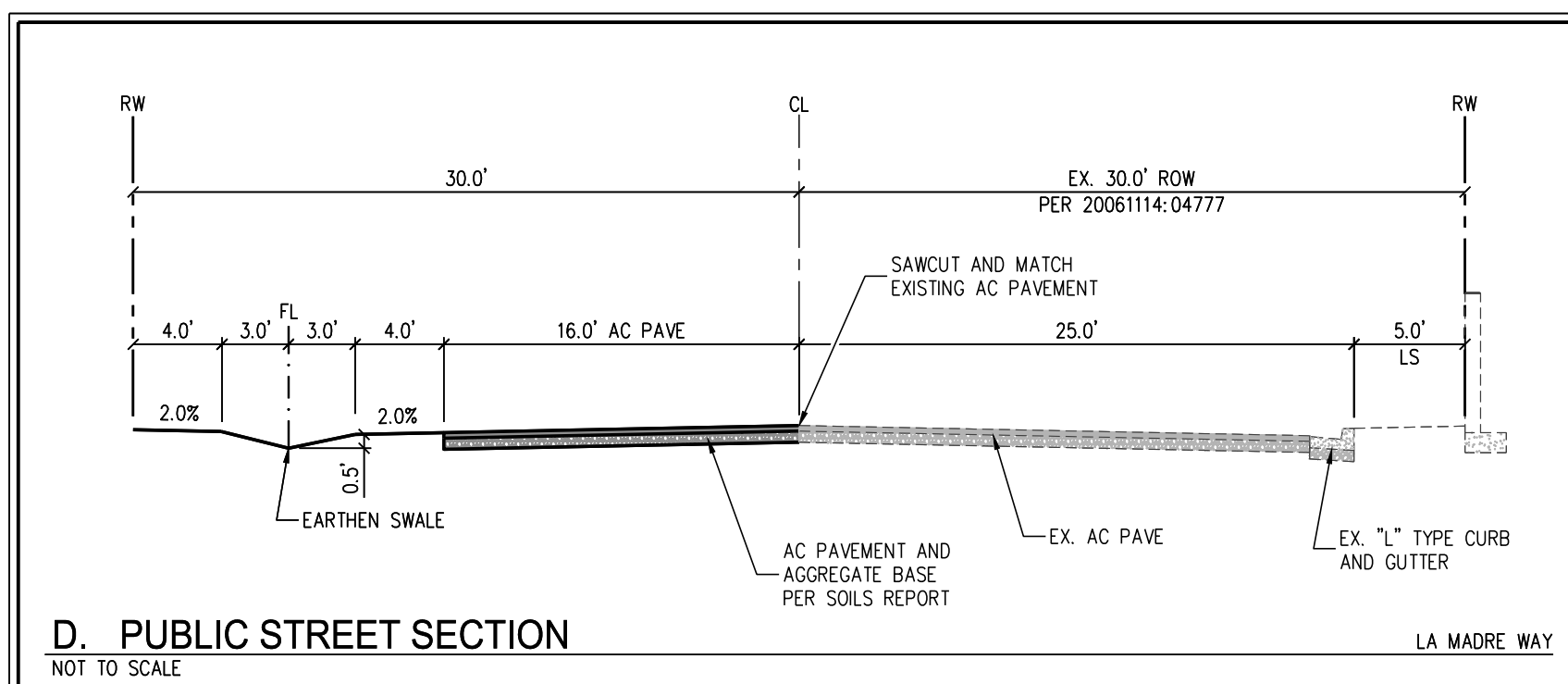
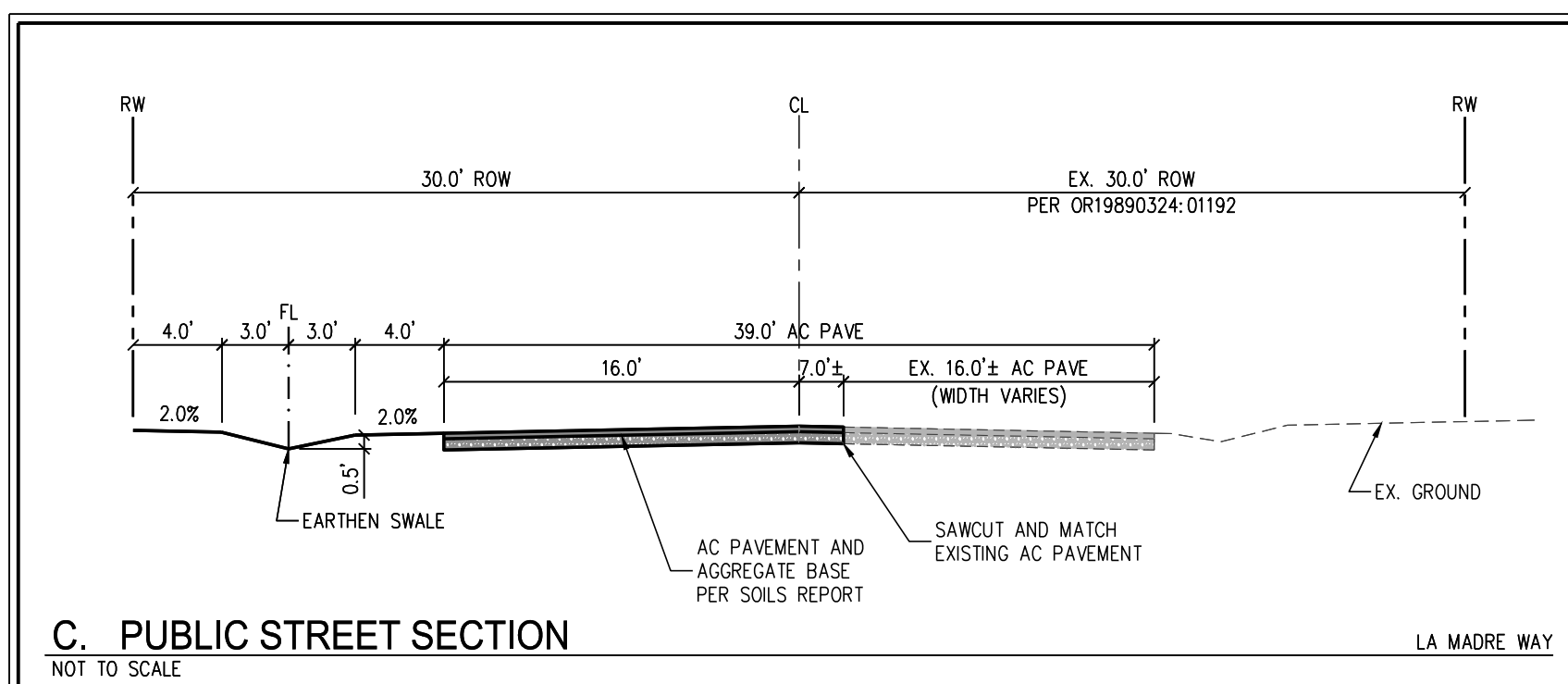
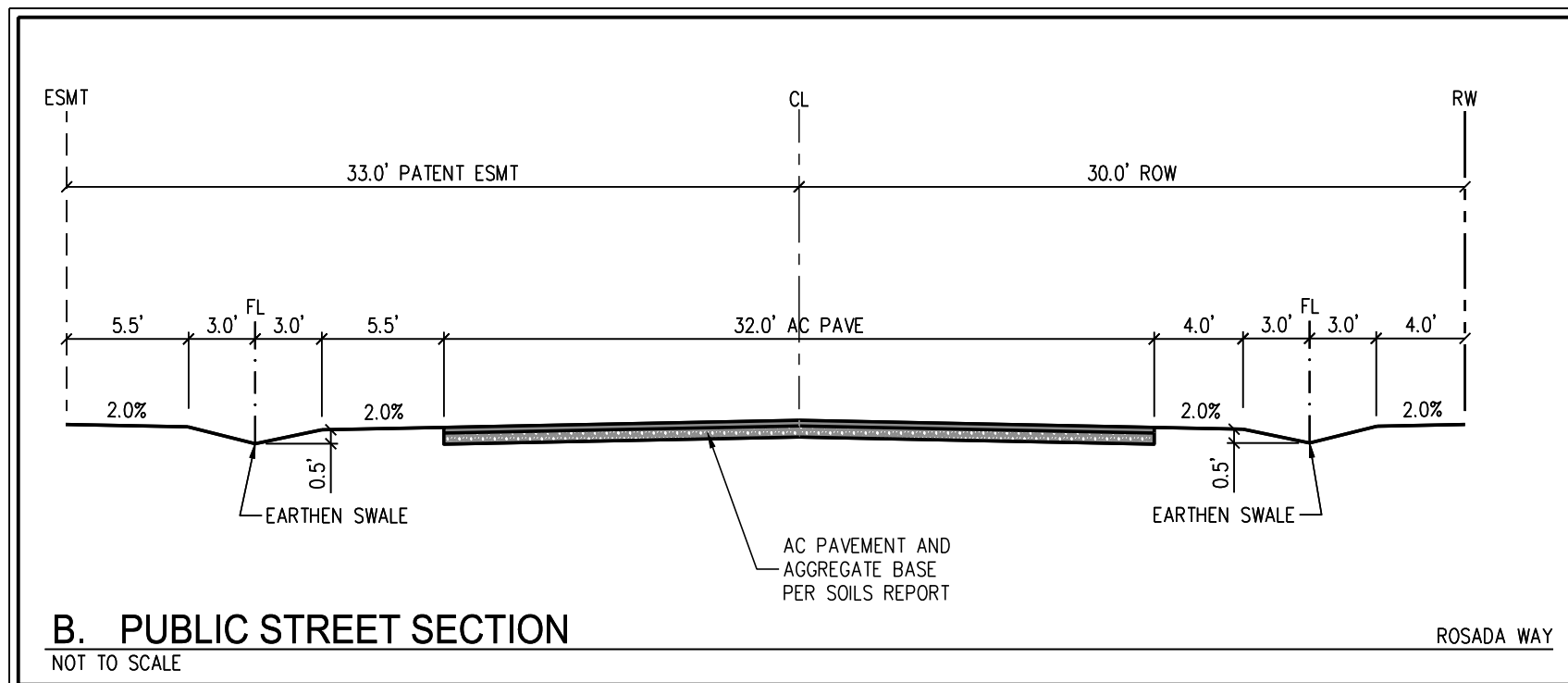
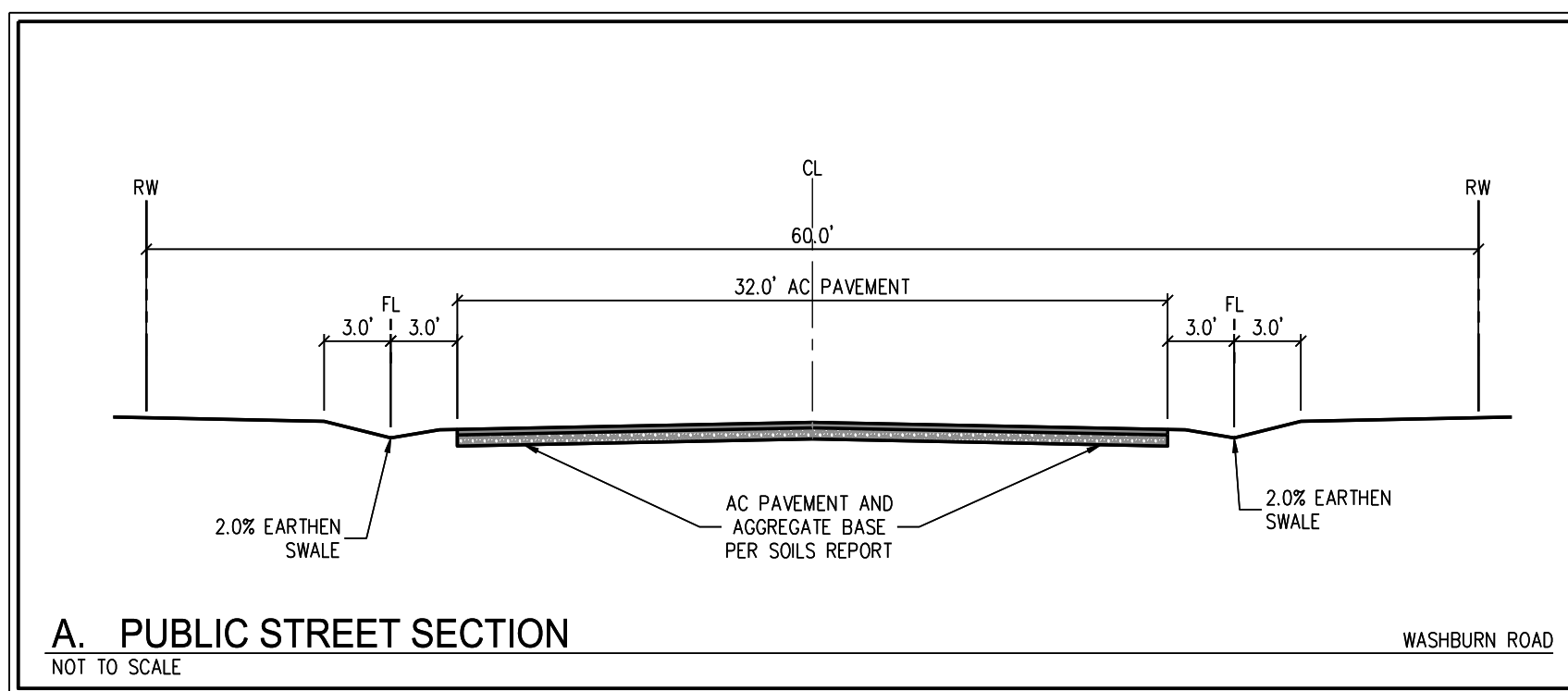


Diagram illustrating a cross-section of a drainage easement. The central area is labeled "10.0' PUBLIC DRAINAGE" and is flanked by "6.0' CMU SCREEN WALL" on both sides. Above the walls are "ESMT" labels. Below the walls are "LANDSCAPE" and "PAD" labels. The drainage area has a "FL" (flow line) and "2.0%" slopes on both sides. A "1.0' DRAIN" pipe is shown at the bottom center. The easement is noted as "10.0' PUBLIC DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED".

The drawing illustrates the installation of a gutter system on a roof. The plan view at the top shows the gutter layout with labels for '30" ROLL-CURB PER CCAUSD #217.1', '3" MIN. TRANSITION ZONE SEE DETAIL 21 ON SHEET D-2 (TYPICAL)', '24" L-TYPE CURB & GUTTER PER CCAUSD #216 (1.0 MIN LENGTH)', 'FLOWLINE PER PLAN', 'TYPICAL L-CURB OUTLINE', 'AC PAVEMENT', 'ROLL CURB FLOWLINE', and '30" ROLL-CURB PER CCAUSD #217.1'. The cross-section 'SECTION A' at the bottom shows the gutter's profile with dimensions: a 6.0" height, a 7.0" width at the top, a 24.0" width at the base, a 0.50" slope, and a 'MATCH VALLEY GUTTER ELEVATION'.

EX. GROUND

3.0'

FL

3.0'

1.5' MIN

5.0'

3.0'

VARIES 4.0' TO 4.5'

RIPRAP LINING
D₅₀=8", THK=16"

FUTURE PAV

23. TEMPORARY DRAINAGE SWALE

50.0' EX. ROW GRANT PER
OR: 20190828: 03435

HUALAPAI WAY
PROP. 40.0' ROW

EX. 14.0' AC PAVE

11.0' 3.0' 3.0' 9.0'

FL

2.0%

2.0% MIN SWALE

EX. ROW GRANT

15.0' CE

PL

EX. GROUND

FUTURE PAD

THIS DETAIL IS FOR REFERENCE ONLY & DOES NOT CONSTITUTE A STRUCTURAL DESIGN

24. TEMPORARY BERM

30" ROLL-CURB
PER CCAUSD #217.1

3" MIN.
TRANSITION ZONE
SEE DETAIL 21 ON
SHEET D-2
(TYPICAL)

24" L-TYPE CURB & GUTTER
PER CCAUSD #216
(1.0 MIN LENGTH)

FLOWLINE PER PLAN

AC PAVEMENT

TYPICAL L-CURB
OUTLINE

TYPICAL L-CURB
FLOWLINE

ROLL CURB
FLOWLINE

30" ROLL-CURB
PER CCAUSD #217.1

6.0"

0.50"

7.0"

2.0"

6.0"

24.0"

MATCH VALLEY
GUTTER ELEVATION

SECTION A

THIS DETAIL IS FOR REFERENCE
ONLY & DOES NOT CONSTITUTE
A STRUCTURAL DESIGN

28. TEMPORARY DRAINAGE SWALE