

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA," LATEST EDITION, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA, NEVADA," LATEST REVISION, THE "UNIFORM STANDARD SPECIFICATIONS FOR WORK IN THE SUMMER AREA, AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY, THE "UNIFORM BUILDING CODE, AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
- AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE UP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
- CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
- SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (DESERT GEOTECHNICAL, INC., NO. DG-90-00, JULY 27, 2000 AND UPDATED MARCH 9, 2006 AND LAST UPDATED MARCH 19, 2015 BY FILE NO SET1502 BY SUNBELT ENGINEERING AND TESTING LLP.) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
- UTILITY COMPANY WATER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- WALL NOTES:
- ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
- CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
- MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF MDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
- WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
- AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLV OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
- CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADITION.
- A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # 136059

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD 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 VIDEO INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE PROVIDED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE I COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
- ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802. TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
- TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
- THE INSTALLATION OF LVVWD 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 LVVWD 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 OWNERS ASSOCIATION, OR THE INDIVIDUAL, PROPERTY OWNERS IF NO OWNERS ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ADJACENT TO A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD. WITH AN APPROPRIATELY SIZED PLAN FINISH CONCRETE PATCH, THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE REPLACEMENT OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.
- 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.

SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS, ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
- CHISEL "S" OR "V" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE. ALL MANHOLES PAVED IN STREETS (8'0" AND 6'0" FOOT RIM AND LARGER) SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80) FOOT RIM WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER, CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR LARGER.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL ENTER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAIN WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1') OF A FOOT FROM THE APPROVED CONSTRUCTION SATISFAT 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.
- INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-90 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

GRADING NOTES

- 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.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
- CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	HORIZONTAL	VERTICAL	COMPACTION
A. PAVEMENT AREA SUBGRADE	0.1" +	+0.0" TO -0.1"	SEE SOILS REPORT
B. ENGINEERED FILL	0.5" +	+0.1" TO 0.1"	SEE SOILS REPORT
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

TRAFFIC NOTES

- ALL CONSTRUCTION SIGNING, BARRICADEING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LINE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE WP CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREETNAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE SM SERIES 1140 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE SM SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
- WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5) FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR INSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
- WORK IN PUBLIC STREETS, ONCE BEGIN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL, FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
- ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS OTHERWISE DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECTS OFFSITE INSPECTION PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKING AND LOCATIONS THAT WILL BE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEFECTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

STREETLIGHT NOTES

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

STORMWATER RUNOFF MANAGEMENT

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

- 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 ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS 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.
- 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 CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
- 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 NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NW10000, SECTION II.B.5.
- 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 ACTUAL 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 NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NW10000, SECTION II.B.2.
- 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.

FIRE AND RESCUE GENERAL NOTES FOR HYDRANTS AND ACCESS

CLV ORDINANCE #8205

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6331 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
- ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICTS' APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
- A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. IFC 106.6.15
- 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 3010, 3012
- 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 307.5.7.3
- ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. IFC 106.3
- 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
- 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
- PRIVATE HYDRANTS SHALL BE PAINTED RED. IFC 507.5.7.1
- 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 307
- FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: IFC C102
• RESIDENTIAL - 500 FT UNSPRINKLERED, 500 FT SPRINKLERED.
• COMMERCIAL - 300 FT UNSPRINKLERED, 400 FT SPRINKLERED.
- WHERE THE WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS, WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. IFC C102.8
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. IFC C102.10
- 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
- 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 C102.7
- THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. IFC C102.6
- 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
- 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
- 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
- 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
- VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. IFC 503.2.1
- FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBTSTRUCTED 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
- 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
- APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 200 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT, CLV REGULATION AND MOU
- ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. CLV REGULATION.
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF NO CURB IS PROVIDED SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. IFC 503.3
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC 503.6
- WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION.

DEVIATIONS FROM STANDARDS

THERE ARE NO DEVIATIONS FROM APPLICABLE CLARK COUNTY STANDARDS, UNLESS STATED IN THE SPECIFICATIONS.

NOTICE TO CONTRACTORS

QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

ESTIMATED QUANTITIES

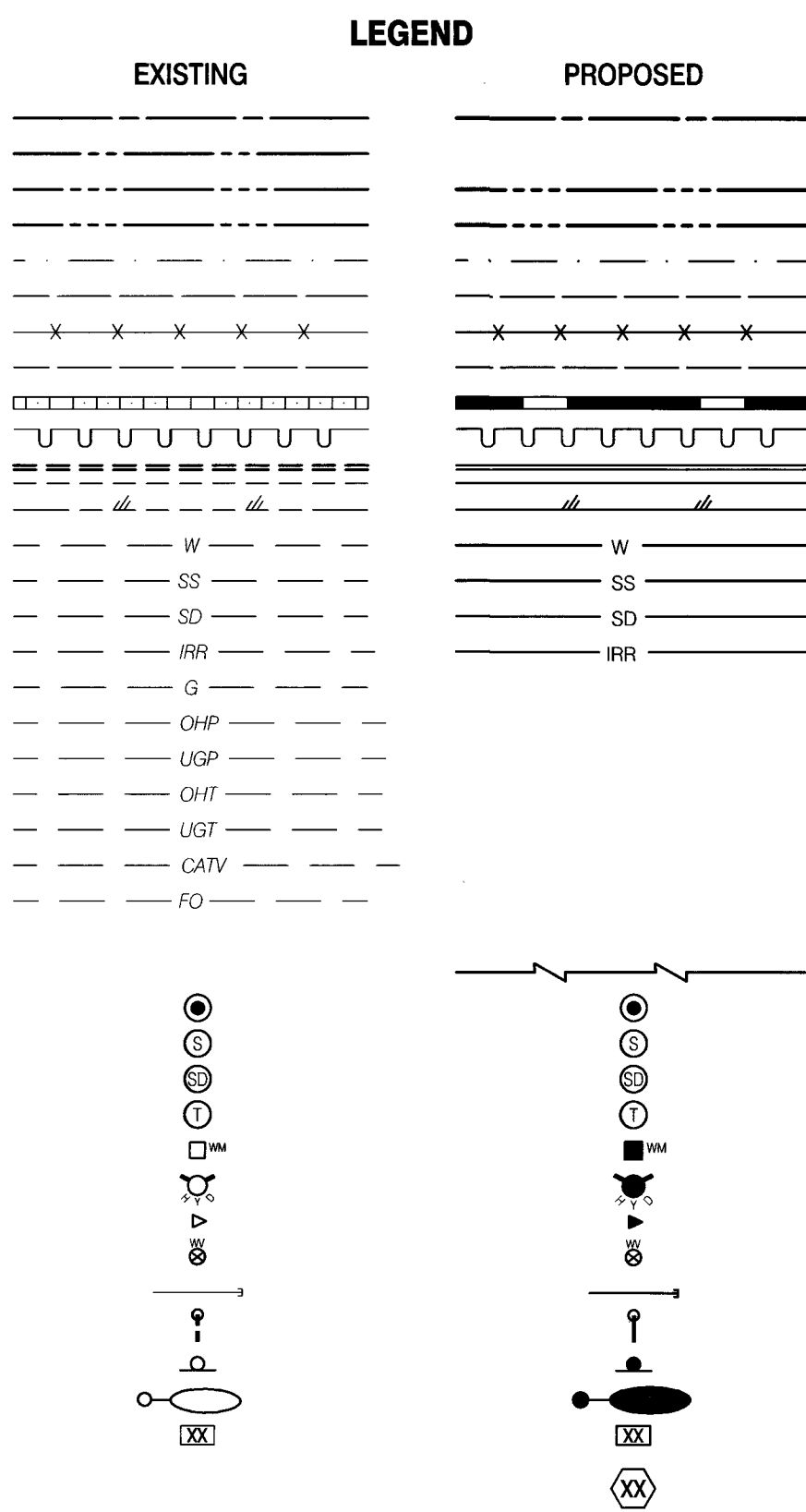
WATER SYSTEM		PRIVATE	PUBLIC
1. 8" PVC WATERLINE	LF	180	59
2. 6" PVC WATERLINE	LF	32	-
3. 1.5" DOMESTIC WATER METER (UDACS PLATE 4)	EA	-	1
4. 8" RPOA	EA	-	1
5. 8" GATE VALVE AND VALVE BOX	EA	-	2
6. 8" GATE VALVE AND VALVE BOX	EA	1	-
7. 1 1/2" RPPA (DOMESTIC USE ONLY), (PER UDACS PLATE 8)	EA	-	1
8. 8"WP REDUCER	EA	1	-
9. FIRE HYDRANT ASSEMBLY	EA	1	-
10. 1.5" PVC WATERLINE (DOMESTIC USE ONLY)	LF	136	-
11. 1.5" TYPE K COPPER WATERLINE (DOMESTIC USE ONLY)	LF	-	79
12. WATER MAIN TAP	EA	-	1

SEWER SYSTEM		PRIVATE	PUBLIC
1. SEWER CLEANOUT	EA	2	-
2. 4" SEWER LATERAL	LF	-	29
3. 6" SEWER LATERAL	LF	93	-
4. JENSEN PRECAST SAMPLE BOX MODEL 2432-NLV	EA	-	-
5. SEWER MAIN TAP	EA	-	1

STORM SYSTEM		PRIVATE	PUBLIC
1. SIDEWALK UNDERDRAIN	EA	-	-
2. RIP-RAP 12"-24" DEEP	SY	17	-

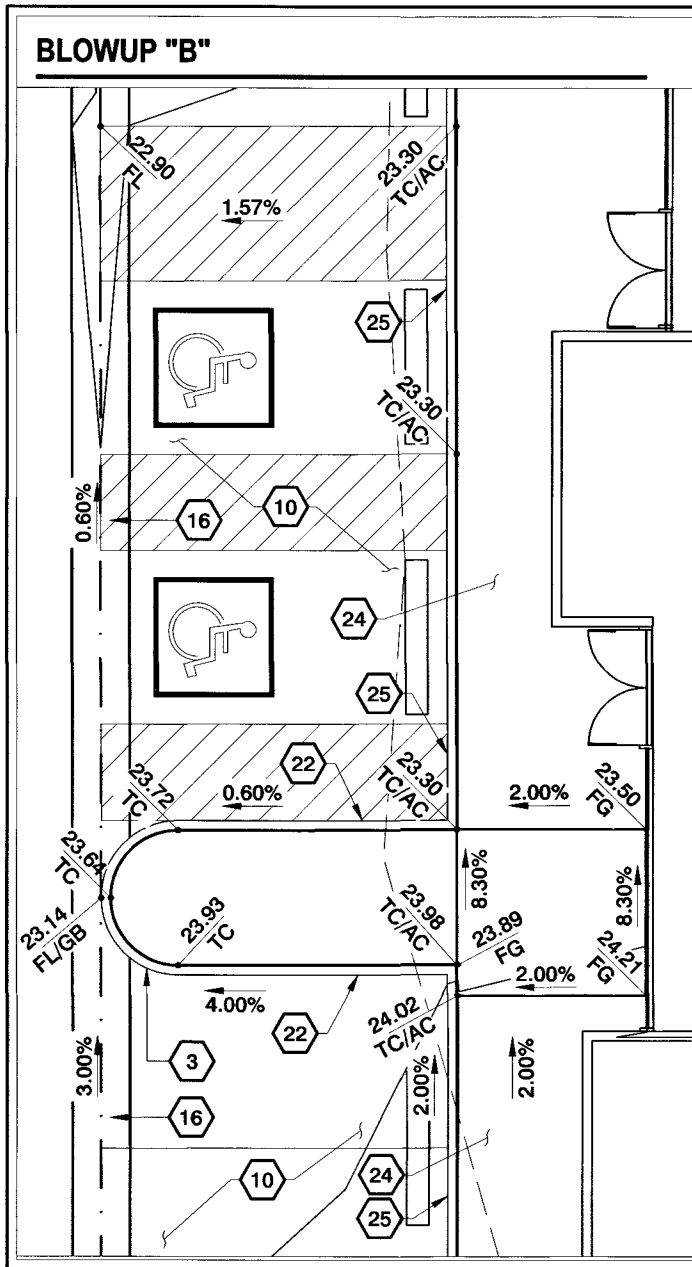
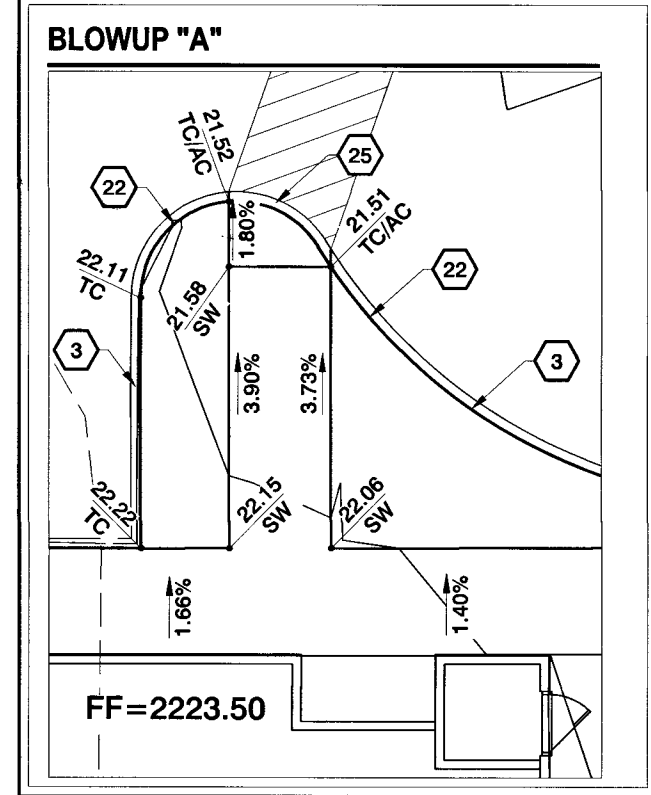
STREET IMPROVEMENTS		PRIVATE	PUBLIC
1. 2" A.C. PAVEMENT	SY	2,120	-
2. 4" A.C. PAVEMENT	SY	-	200
3. 6" A.C. PAVEMENT	SY	1,198	-
4. STANDARD 8" TYPE "I" CURB & GUTTER	LF	265	32
5. STANDARD 6" TYPE "K" CURB	LF	1,384	-
6. TYPE II GRAVEL	CY	369	33
7. 3" CONCRETE VALLEY GUTTER	LF	210	-
8. 4" SIDEWALK	SF	-	100

TRAFFIC IMPROVEMENTS		PRIVATE	PUBLIC
1. "STOP" SIGN RH-1	EA	2	-



TOPOGRAPHIC SYMBOLS AND LINETYPES

---	PROPERTY BOUNDARY
---	RIGHT-OF-WAY
---	PROPERTY LINE
---	CENTER LINE
---	EASEMENT
---	EXST "L" TYPE CURB
---	EXST "A" TYPE CURB
---	EXST MAJOR CONTOUR LINE
---	EXST MINOR CONTOUR LINE
---	EXST SCREEN WALL AS INDICATED
---	EXST EDGE OF PAVEMENT
---	EXST EDGE OF SIDEWALK
---	EXST UNDERGROUND POWER
---	EXST FIBER OPTICS
---	EXST GAS
---	EXST WATER LINE
---	EXST SEWER LINE
---	EXST STORM DRAIN
---	METER
---	FIRE HYDRANT
---	VALVE
---	BLOWOFF VALVE
---	AIR RELEASE VALVE
---	BACKFLOW PREVENTER
---	SWR MANHOLE
---	SEWER CLEANOUT
---	STORM MANHOLE
---	TELEPHONE BOX
---	TELEPHONE MANHOLE
---	FIBER BOX
---	CABLE TV BOX
---	ELECTRICAL MANHOLE
---	STREET LIGHT BOX
---	POWER POLE
---	SERVICE POLE
---	GUY WIRE
---	TRANSFORMER
---	STREET LIGHT CABINET
---	STREET LIGHT
---	TRAFFIC SIGNAL
---	TRAFFIC SIGNAL BOX
---	AREA LIGHT
---	"L" TYPE CURB
---	"A" TYPE CURB
---	EDGE OF SIDEWALK
---	CHAIN LINK FENCE
---	WROUGHT IRON FENCE
---	SWALE FLOW LINE
---	SAWCUT



FLOOD ZONE
THIS SITE IS LOCATED IN ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN, PER THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL 32003C2165E CLARK COUNTY, NEVADA DATED NOVEMBER 16, 2011.

BENCHMARK
MONUMENT ID 01V10154
RIVET AND ROUND ALUMINUM PLATE IN TOP OF CURB AT NE CORNER OF SAHARA & LINDELL
ELEVATION: 686.938 METERS, 2,253.73 FEET NAVD 1988

BASIS OF BEARING
NORTH 00°15'29" WEST BEING THE WEST LINE OF THE SOUTHEAST QUARTER (SE1/4) OF THE SOUTHEAST QUARTER (SE1/4) OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 60 EAST M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF IN FILE 185, PAGE 46 OF SURVEYS IN THE CLARK COUNTY RECORDERS OFFICE, CLARK COUNTY NEVADA.

DISCLAIMER NOTE:
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.

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

1-800-227-2600

FAST

Call before you Underground

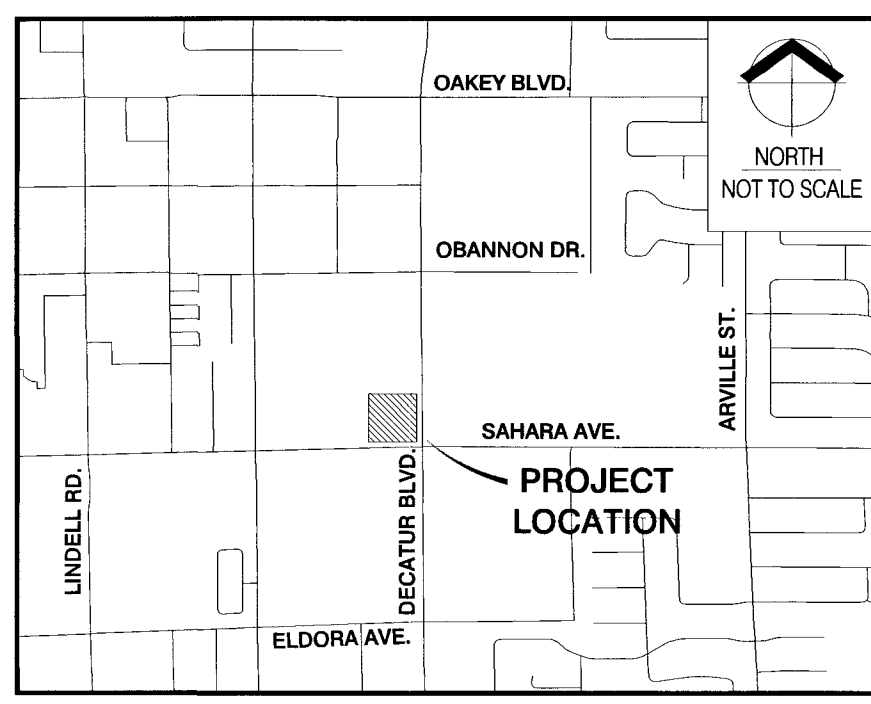
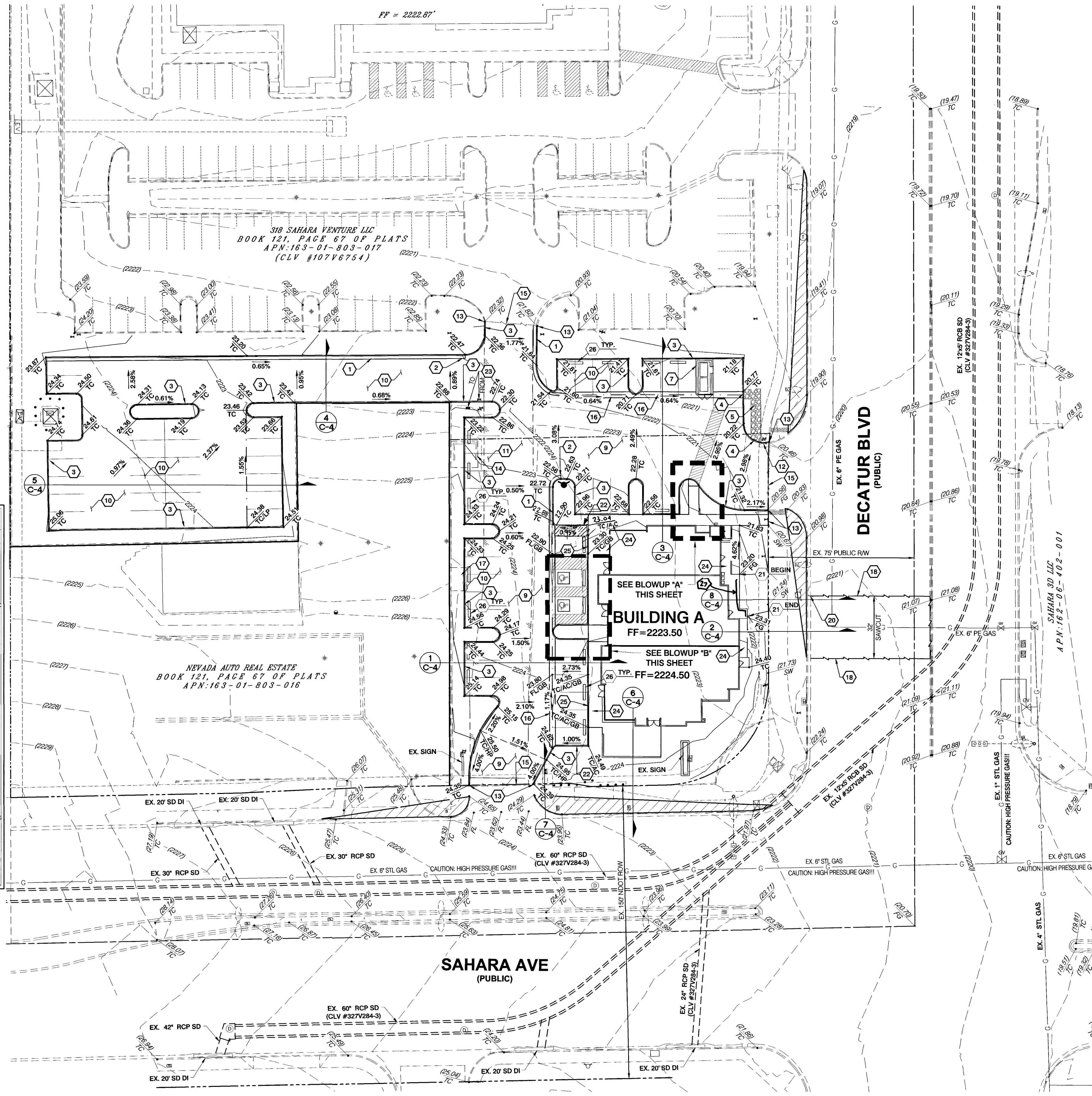
1-702-432-5300

FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

CAUTION: HIGH PRESSURE GAS!!
CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION

NOTES

- CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING STRUCTURES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED OR OBSOLETE DURING CONSTRUCTION.



LEGEND

EXISTING	PROPOSED
00.00 TC	00.00 TC
00.00 FG	00.00 FG
00.00 EP	00.00 EP
00.00 FL	00.00 FL
00.00 AC	00.00 AC
00.00 TRW	00.00 TRW
00.00 TF	00.00 TF
	00.00 HP
	00.00 GB

- GRADING**
- CONSTRUCT "L" CURB AND GUTTER PER CCAUSD #216
 - TURN OUT "L" CURB TO ENSURE POSITIVE DRAINAGE
 - CONSTRUCT "A" CURB AND GUTTER PER CCAUSD #219
 - INSTALL 2" CURB CUT PER DETAIL C, SHEET C4
 - CONSTRUCT BMP SWALE W/ 6" THICK 3" D50 LANDSCAPE ROCK PER DETAIL B, SHEET C4
 - CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIV.
 - INSTALL TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
 - CONSTRUCT FLOW LINE AS SHOWN
 - MAIN CORRIDOR (TRUCK ACCESS) INSTALL 3" AC OVER 5" TYPE II AGGREGATE BASE, PER APPROVED SOILS REPORT
 - AUTOMOBILE ROUTE (PARKING) INSTALL 2.5" AC OVER 4.5" TYPE II AGGREGATE BASE, PER APPROVED SOILS REPORT
 - REMOVE EXISTING ASPHALT
 - REMOVE EXISTING CURB & GUTTER
 - MATCH EXISTING IMPROVEMENTS
 - REMOVE EXISTING TRASH ENCLOSURE
 - SAWCUT CLEAN EDGE. MEET AND MATCH EXISTING ASPHALT
 - CONSTRUCT 3" VALLEY GUTTER, PER DETAIL A, SHEET C4
 - REMOVE EXISTING IMPROVEMENTS
 - SAWCUT AS SHOWN IN A CLEAR STRAIGHT LINE. AC RESTORATION PER CCAUSD #503, 500.1, 500.2, 500.4, 500.5 & 503 (DECATUR BOULEVARD)
 - REMOVE AND REPLACE EX. L-TYPE CURB & GUTTER TO NEAREST JOINT PER CCAUSD #219
 - REMOVE AND REPLACE EX. SIDEWALK TO NEAREST JOINT PER CCAUSD #224
 - CONSTRUCT SIDEWALK PER DETAIL "D", SHEET C4
 - CONSTRUCT CURB TRANSITION, SEE DETAIL E, SHEET C4
 - RELOCATE EXISTING IMPROVEMENTS AS SHOWN
 - CONSTRUCT 4" CONCRETE SIDEWALK, PER CCAUSD #234
 - INSTALL 10" FACE CURB
 - BUMPER BLOCK PER CCAUSD #238
 - Reinforce hand rail SEE Architectural Plans for details

SOUTHWEST GAS CORPORATION
APPROVED
[Signature] 3-18-19 DATE
BY: SOUTHWEST GAS CORPORATION

SITE DATA
APN No. 163-01-803-014 ACREAGE: 0.66 ZONING: C-2

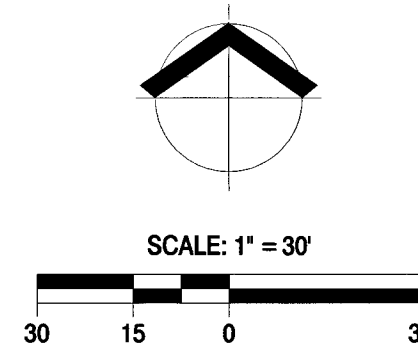
DATUM
THIS NOTE IS FOR ALL GRADING ELEVATIONS SHOWN HEREON WITH EXCEPTION TO CONTOUR ELEVATIONS, FINISHED FLOORS, AND PAD ELEVATIONS UNLESS OTHERWISE NOTED.
ADD 2200.00' TO ELEVATIONS SHOWN HEREON TO ADJUST THEM TO THE ASSOCIATED DATUM.

GEOTECHNICAL REPORT
PROJECT No. 163-GE0
DATED: AUGUST 16, 2018
AS PREPARED BY: AMERICAN SOILS ENGINEERING, LLC

EARTHWORKS
CUT= 750 CY
FILL= 190 CY
NET= 560 CY CUT

DRAINAGE CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY CLV D55050 FOR THIS SITE ON FILE AT CITY OF LAS VEGAS FOR THIS PROJECT.
[Signature] 3/7/19 DATE

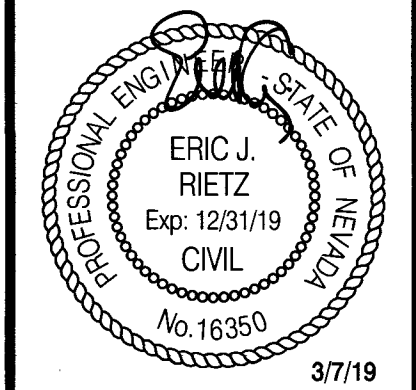
ERIC J. RIETZ, P.E. No. 16350



RIETZ CONSULTING INC.
3203 E. WARM SPRINGS RD., #400
LAS VEGAS, NEVADA 89120
PH: 702.521.3355
FX: 702.212.3963

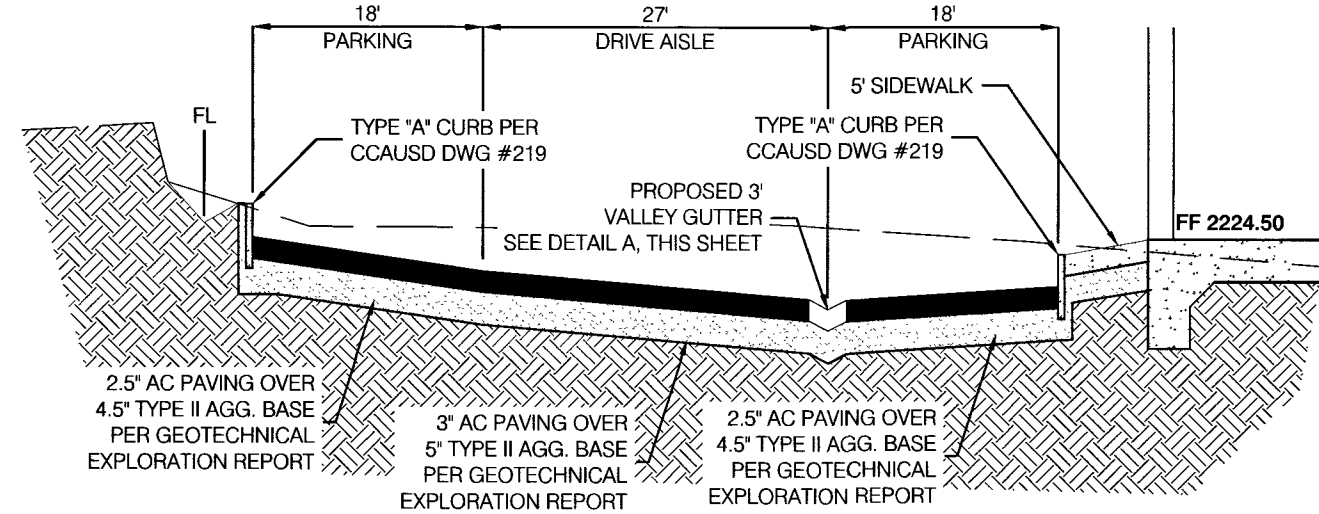
GRADING PLAN
SAHARA & DECATUR PAD
CITY OF LAS VEGAS, NEVADA
APN # 163-01-803-014

DATE:	3/7/19
DRAWN:	CS
CHECKED:	ER
SCALE:	1"=30'

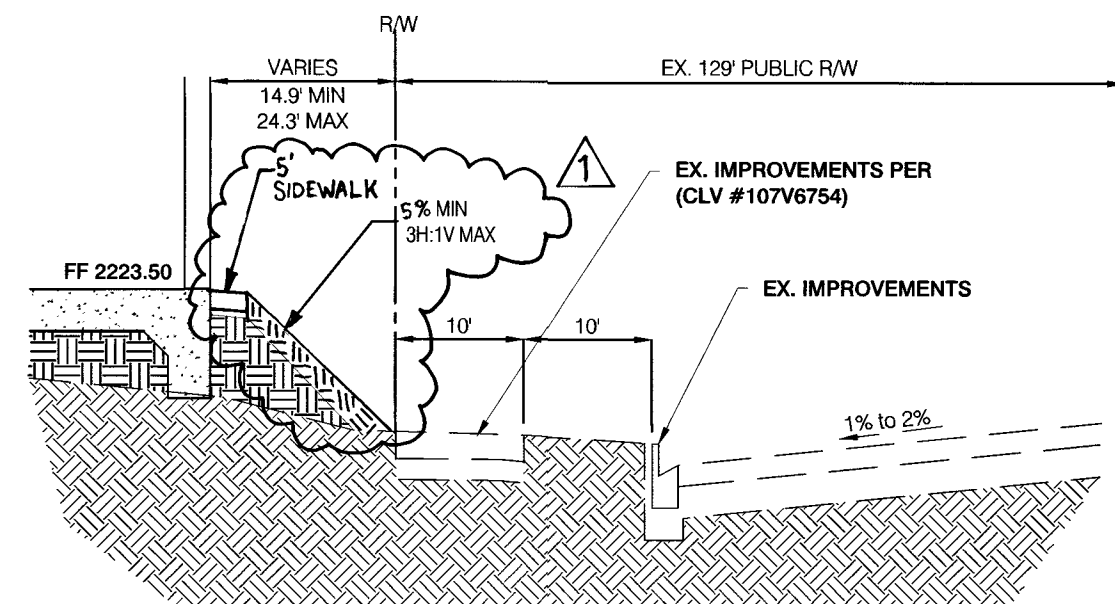


SHEET
C-3
SHEET 3 OF 7 SHEETS
16-02831
107V765

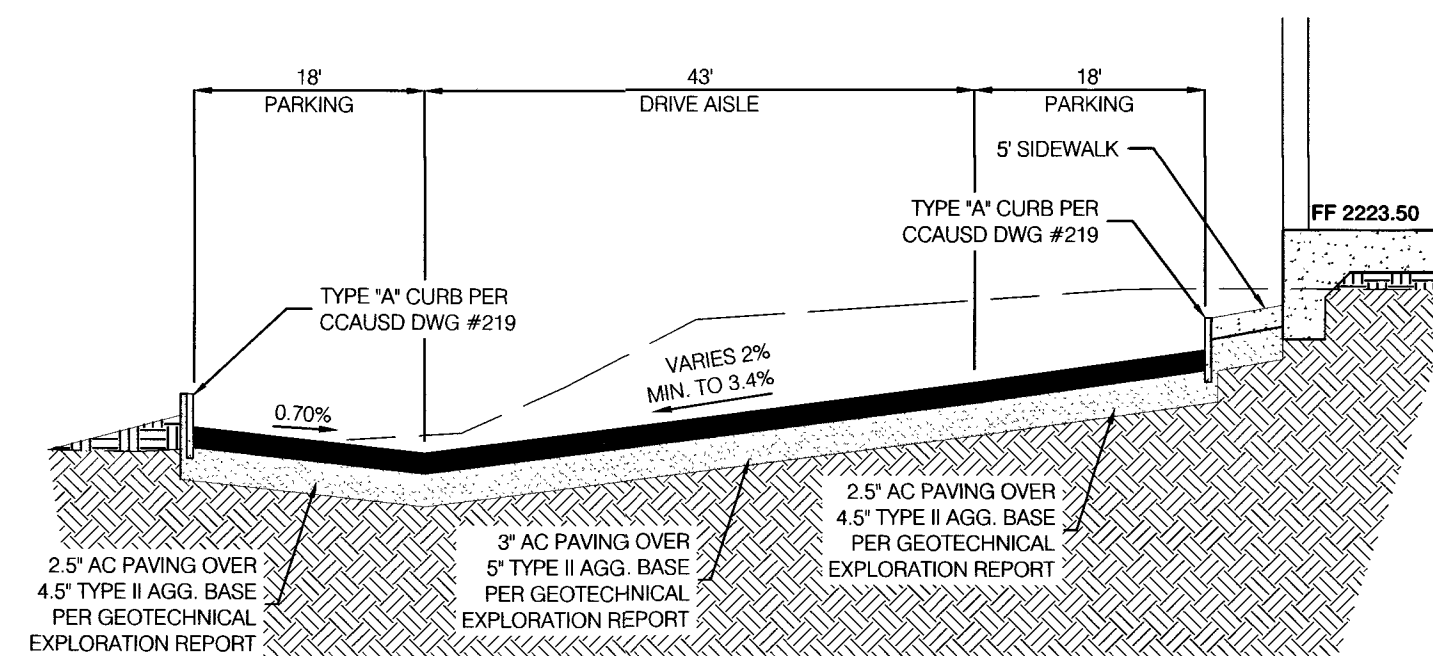
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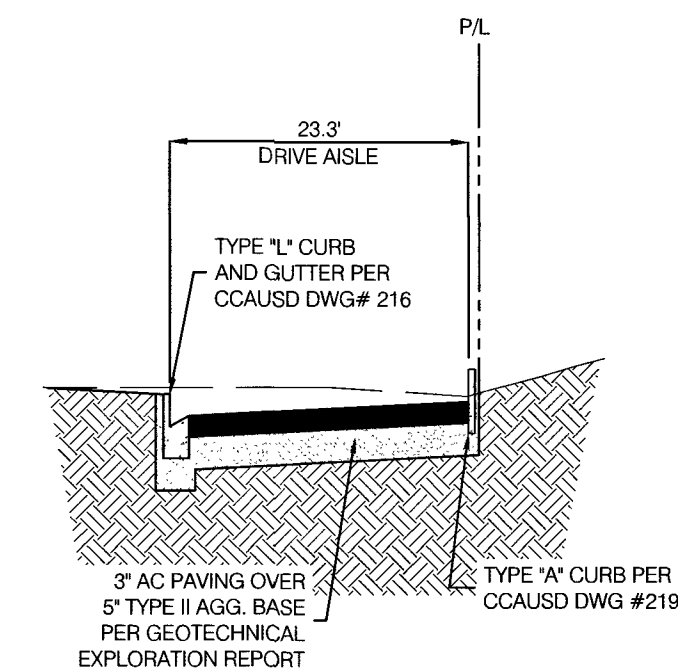
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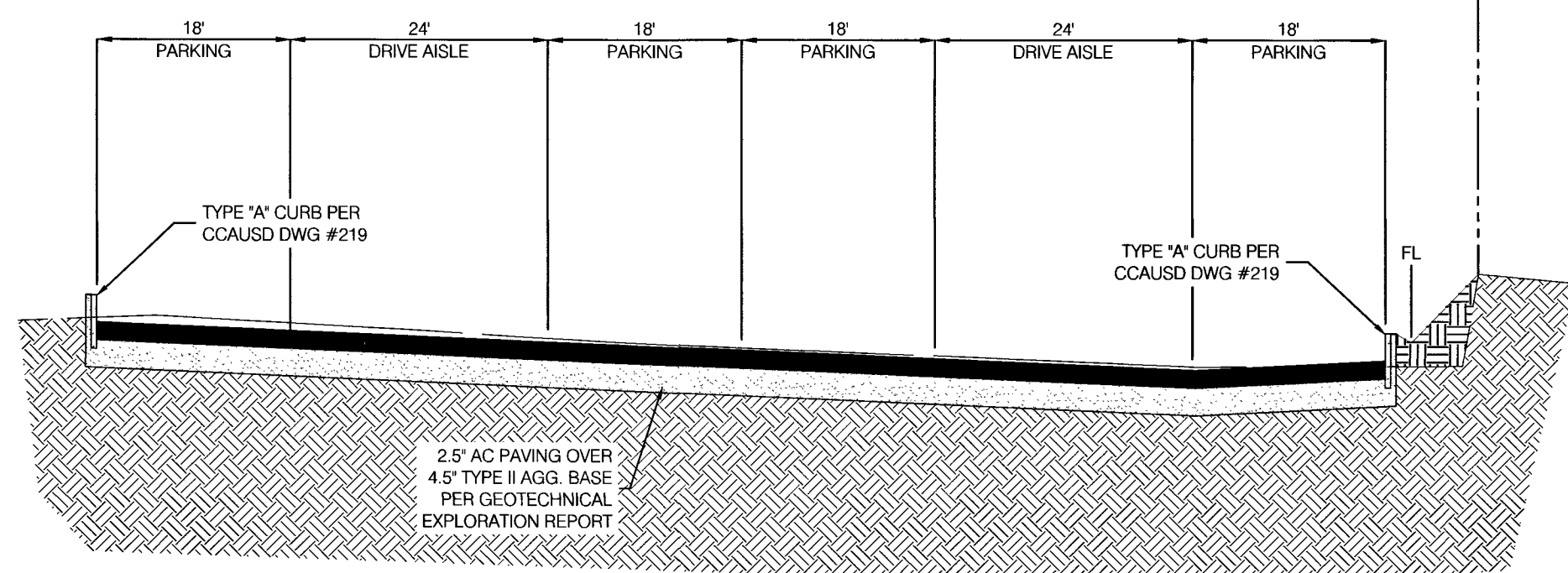
2 DECATUR R/W SECTION (NTS)



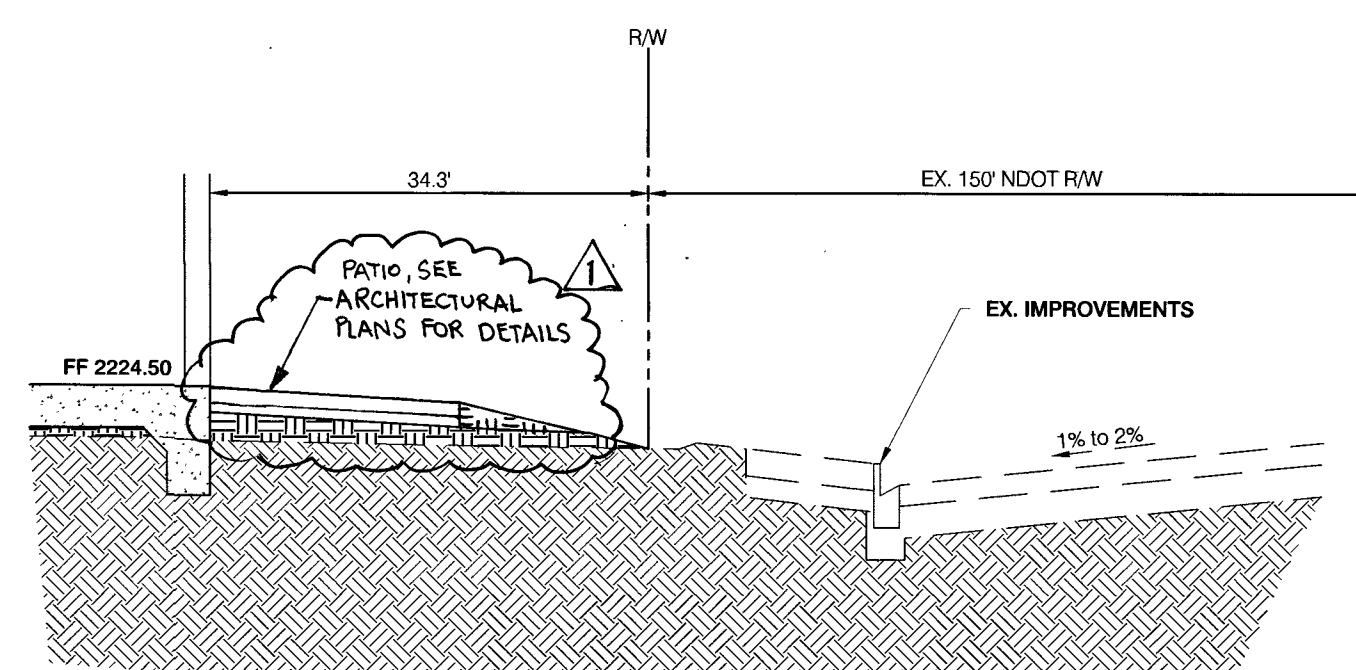
3 DRIVE AISLE SECTION (NTS)



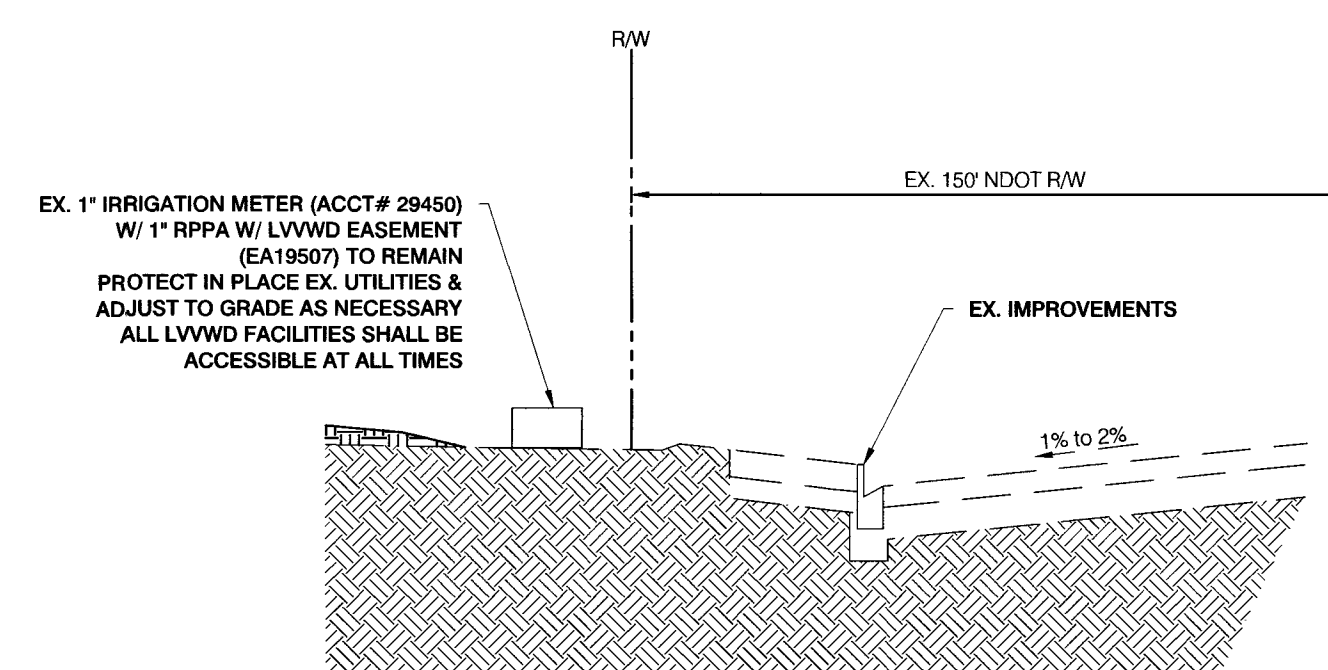
4 DRIVE AISLE SECTION (NTS)



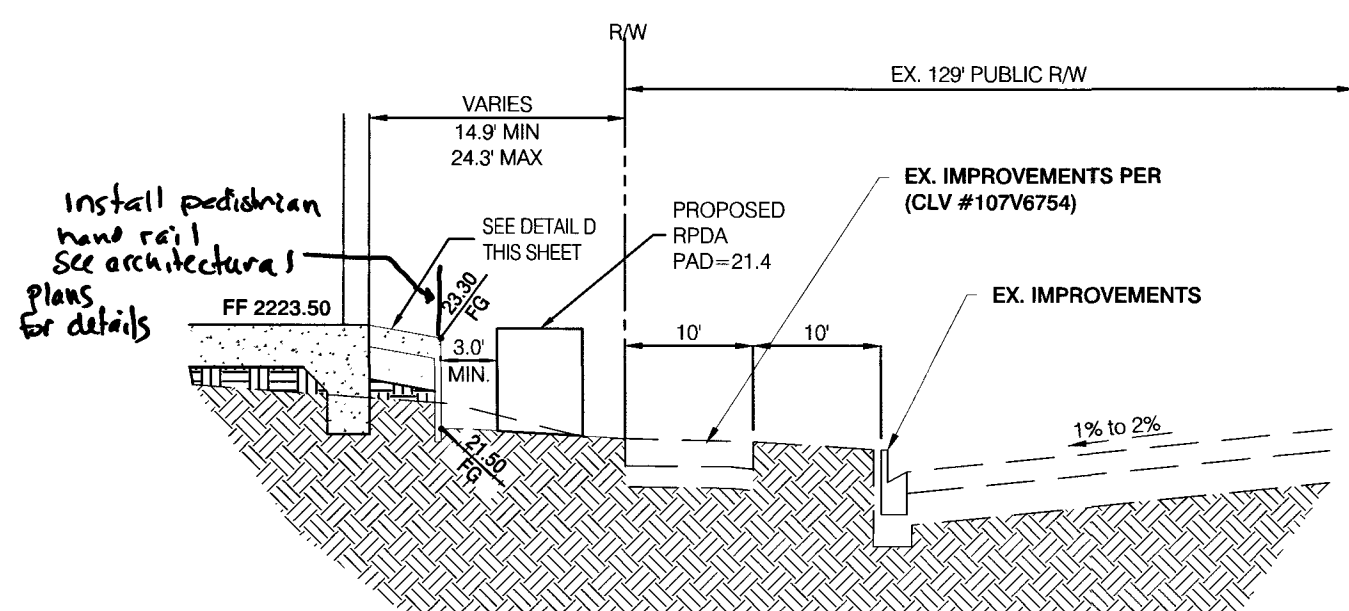
5 WEST PARKING SECTION (NTS)



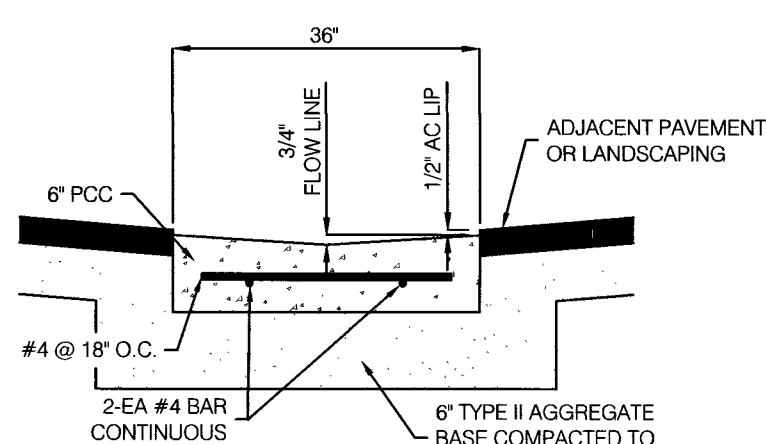
6 SAHARA R/W SECTION (NTS)



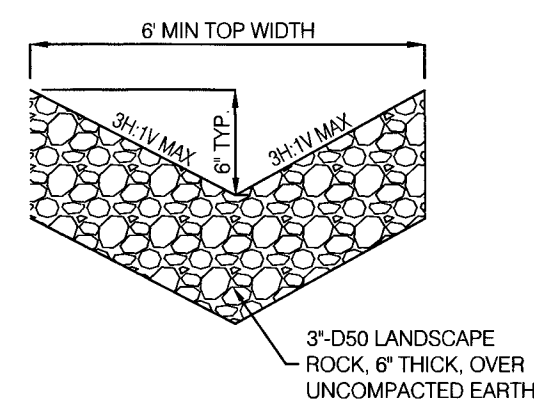
7 SAHARA R/W SECTION (NTS)



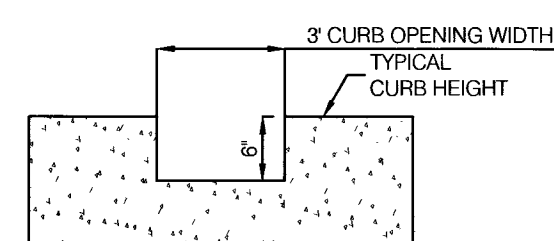
8 DECATUR R/W SECTION (NTS)



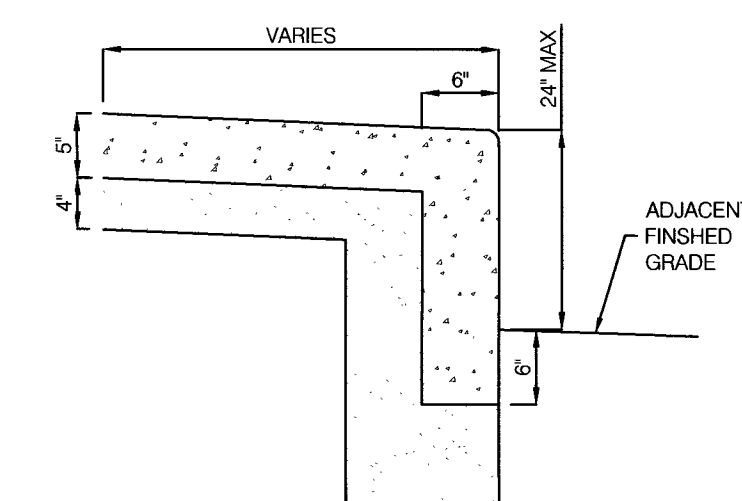
A VALLEY GUTTER



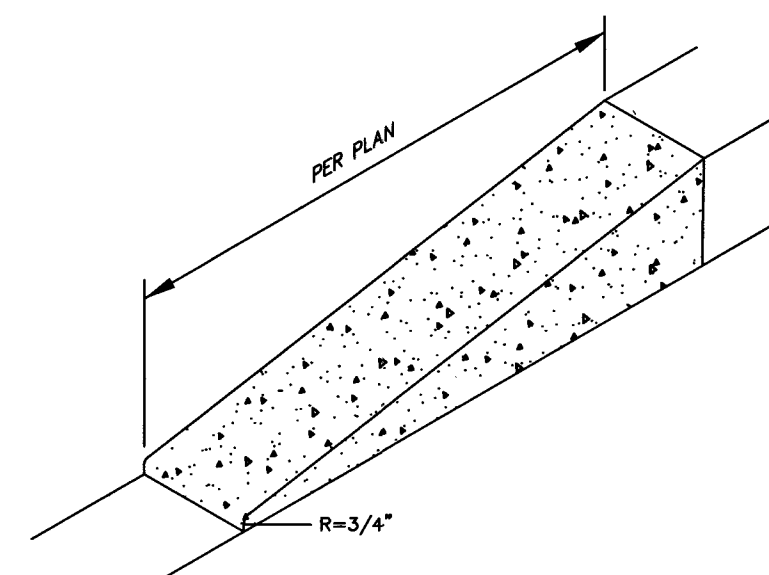
B BMP SWALE (NTS)



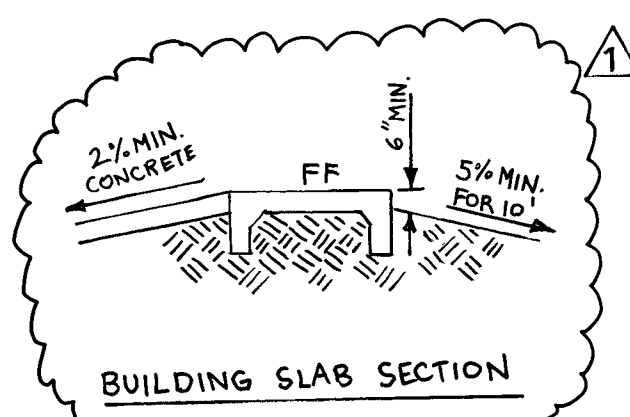
C CURB OPENING (NTS)



D SIDEWALK W/ TURN DOWN CURB (NTS)



E 0"- 6" CURB TRANSITION (NTS)



TO ENSURE LVVWD ACCESS WITHIN EASEMENT
ALL ABOVE GROUND OBSTRUCTIONS INCLUDING, BUT NOT LIMITED TO, LANDSCAPE BouldERS, FENCES W/ WALLS, AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT No. 136059 FIRST APPROVED DATE: 4-24-19

RIETZ CONSULTING INC.
3203 E. WARM SPRINGS RD., #400
LAS VEGAS, NEVADA 89120
PH: 702.521.3355
FX: 702.212.3963

SAHARA & DECATUR PAD
CITY OF LAS VEGAS, NEVADA
APN # 163-01-803-014

DATE: 3/7/19
DRAFTER: CS
CHECKED: ER
SCALE: N.T.S.

PROFESSIONAL ENGINEER
ERIC J. RIETZ
Exp: 12/31/19
CIVIL
No. 8350
STATE OF NEVADA
3/7/19

SHEET
C-4
SHEET 4 OF 7 SHEETS
118-02831
1076765

PROJ# 136059A QS: 63-01-SE

TOPOGRAPHIC SYMBOLS AND LINETYPES

PROPERTY BOUNDARY	EXISTING
RIGHT-OF-WAY	PROPOSED
PROPERTY LINE	
CENTER LINE	
EASEMENT	
EXST "L" TYPE CURB	
EXST "A" TYPE CURB	
EXST MAJOR CONTOUR LINE	
EXST MINOR CONTOUR LINE	
EXST SCREEN WALL AS INDICATED	
EXST EDGE OF PAVEMENT	
EXST EDGE OF SIDEWALK	
EXST UNDERGROUND POWER	
EXST FIBER OPTICS	
EXST GAS	
EXST WATER LINE	
EXST SEWER LINE	
EXST STORM DRAIN	
METER	
FIRE HYDRANT	
VALVE	
BLOWOFF VALVE	
AIR RELEASE VALVE	
BACKFLOW PREVENTER	
SWR MANHOLE	
SEWER CLEANOUT	
STORM MANHOLE	
TELEPHONE BOX	
TELEPHONE MANHOLE	
FIBER BOX	
CABLE TV BOX	
ELECTRICAL MANHOLE	
STREET LIGHT BOX	
POWER POLE	
SERVICE POLE	
GUY WIRE	
TRANSFORMER	
STREET LIGHT CABINET	
STREET LIGHT	
TRAFFIC SIGNAL	
TRAFFIC SIGNAL BOX	
AREA LIGHT	
"L" TYPE CURB	
"A" TYPE CURB	
EDGE OF SIDEWALK	
CHAIN LINK FENCE	
WROUGHT IRON FENCE	
SWALE FLOW LINE	
SAWCUT	

REDUCE PRESSURE DETECTOR ASSEMBLY (RPDA) (1) 8"

APPROVED REDUCE PRESSURE DETECTOR ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 56. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE DETECTOR ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION. LOW LOSS ASSEMBLY REQUIRED.

REDUCE PRESSURE PRINCIPLE ASSEMBLY (RPPA) (1) 1.5"

APPROVED REDUCE PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 56. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

FIRE WATER AT DOMESTIC WATER CROSSINGS

ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH "A" VERTICAL SEPARATION OF NO LESS THAN SIX INCHES. AND IN ACCORDANCE WITH UDACS 2.23.01, 2.04.03, 2.22.02.B1, AND 2.22.02.B2."

NOTE

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRVS ARE DEVELOPERS RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

BENCHMARK

13LV0025NINES
RIVET AND PLATE IN TOP OF CURB AT SW CORNER OF VEGAS DRIVE AND LAUREL HURST (ALSO STAMPED 06025AS)
ELEVATION: 676.017 METERS, 2217.90 FEET (NAVD88)

BASIS OF BEARING

NORTH 89° 36' 15" WEST BEING THE SOUTH LINE OF THE SOUTHEAST (SE1/4) OF THE SOUTHEAST (SE1/4) OF SECTION 24, TOWNSHIP 20 SOUTH, RANGE 60 EAST M.D.M. AS PARCEL MAP FILE 14 PAGE 52 CLARK COUNTY RECORDS.

DISCLAIMER NOTE:

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AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.



Call before you Dig

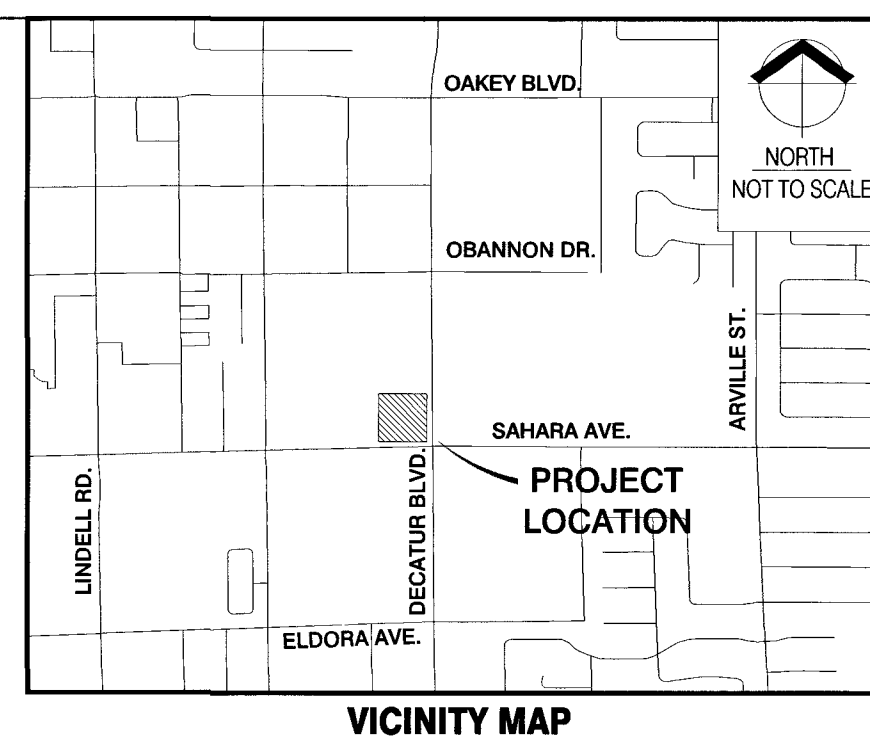
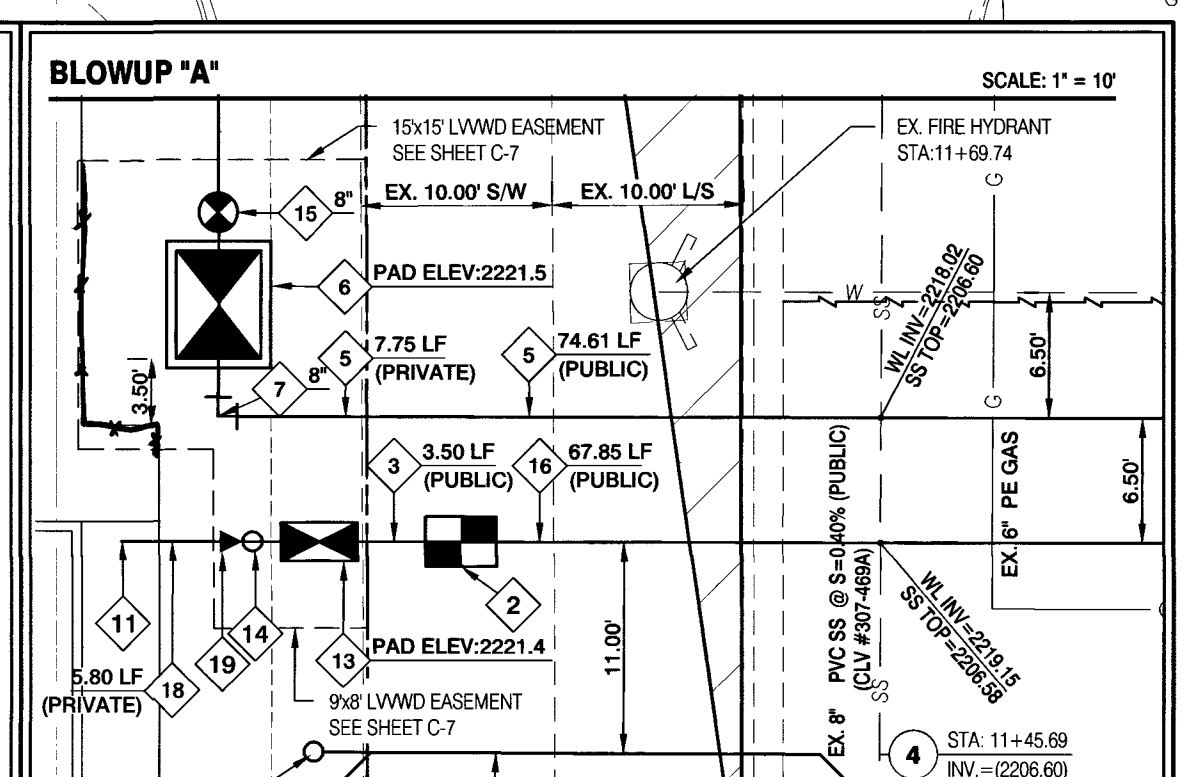
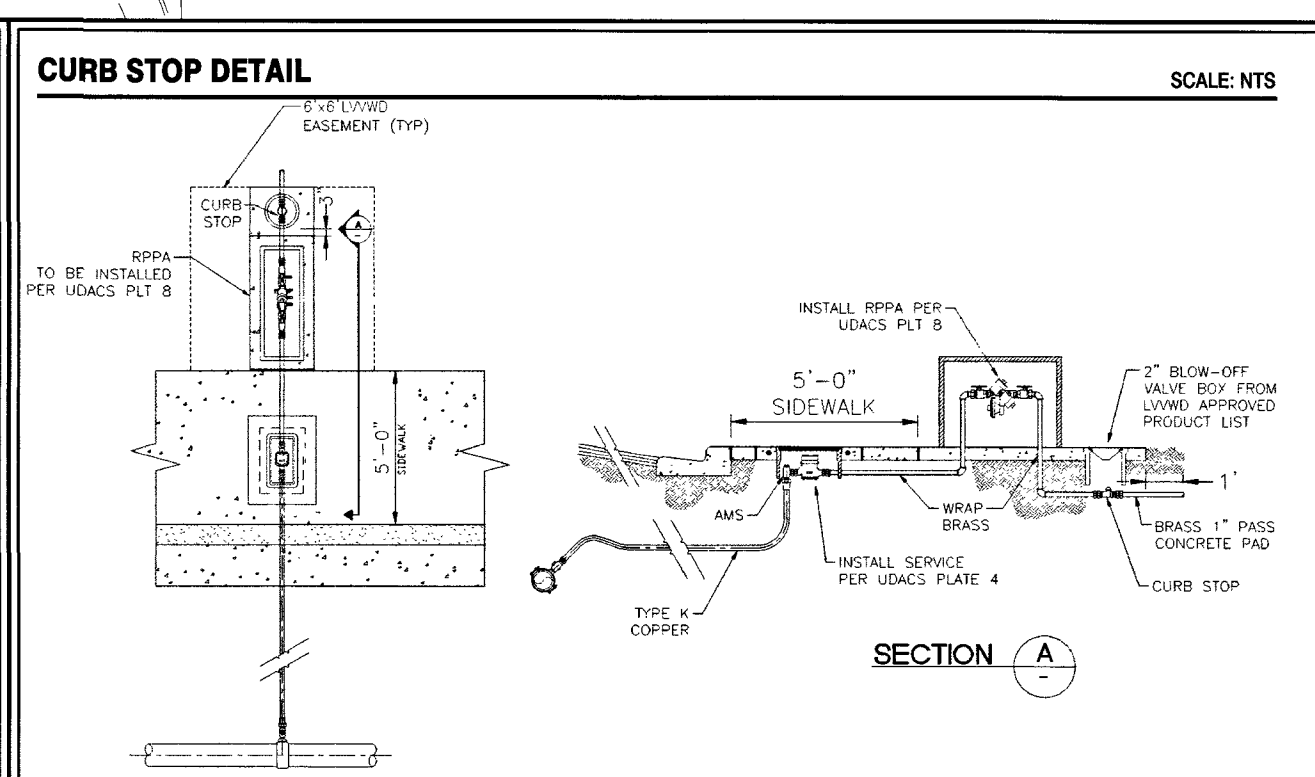
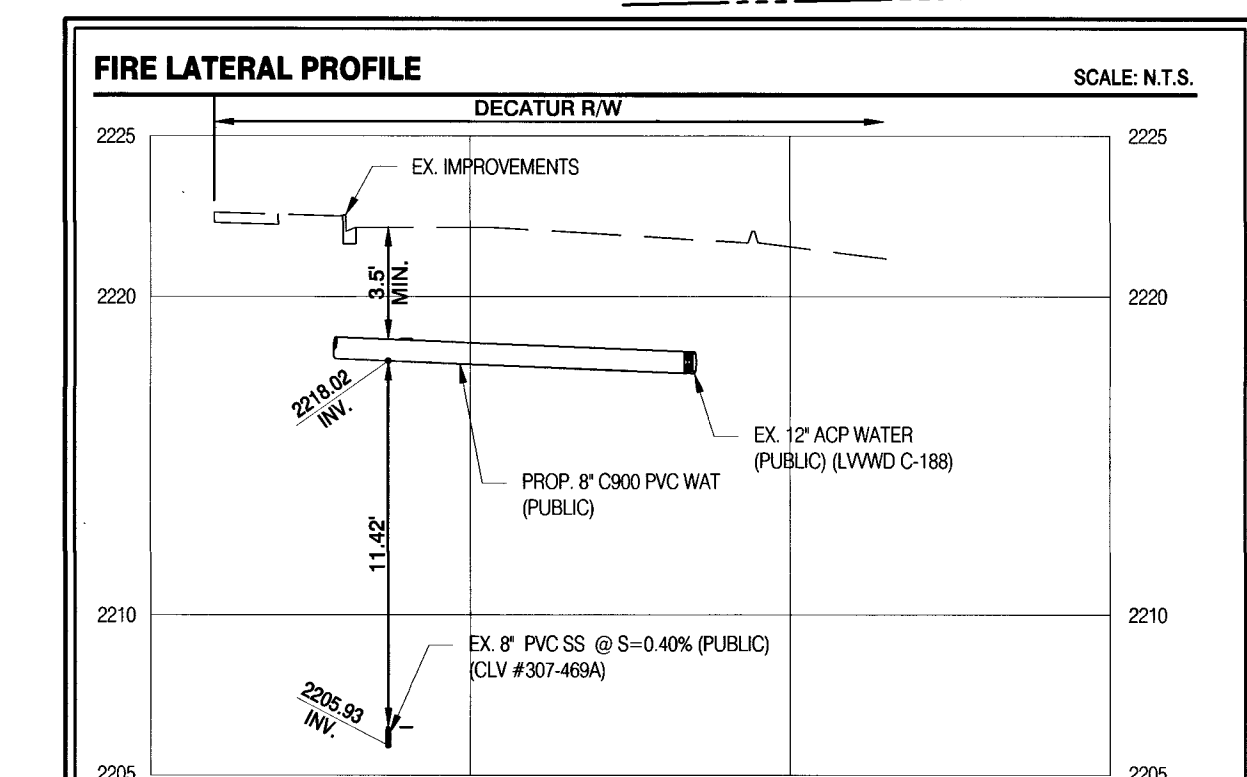
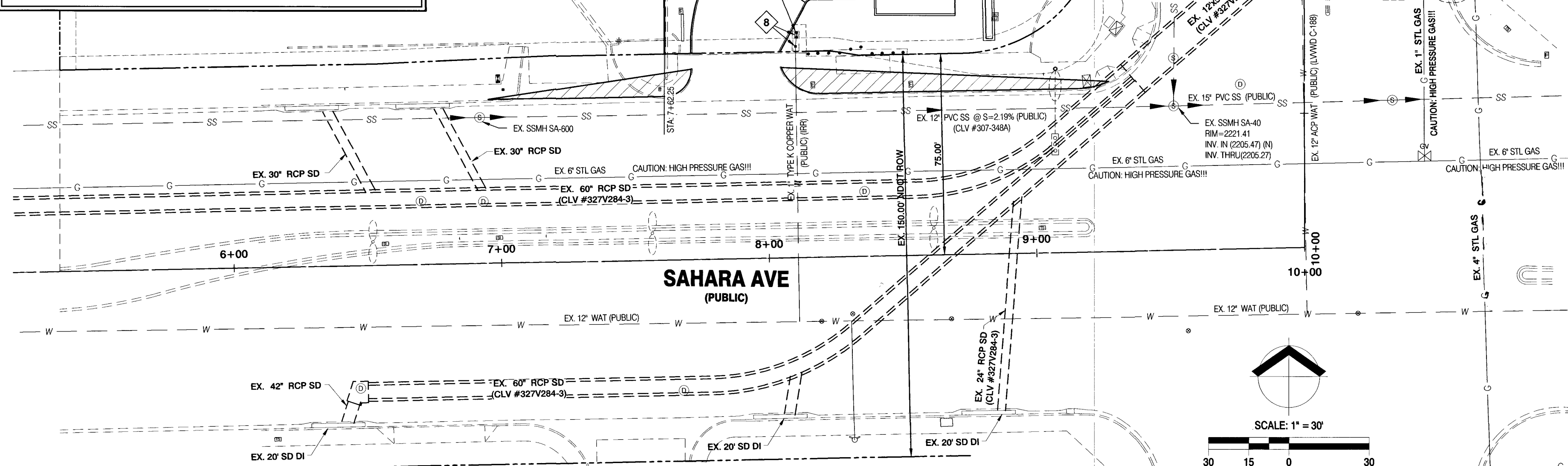


FAST



WARNING FIRE LINE (NON-POTABLE WATER)

ALL EXISTING, RELOCATED OR PROPOSED DCDA/RPDA INSTALLATIONS: TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, THE FIRE LINE, OR ANY OF ITS COMPONENTS, SHALL NOT BE USED FOR POTABLE DRINKING WATER AT ANY TIME



WATER CONSTRUCTION NOTES

- CONNECT TO EX. 12" WATER W/ 12"x8" TAPPING SLEEVE & 8" TAPPING VALVE PER U.D.A.C.S. PLATE NO. 34, 38 & 2.24.01 B
- INSTALL 1-1/2" (DOMESTIC) WATER SERVICE COMPLETE WITH 1-1/2" METER PER U.D.A.C.S. PLATE NO. 4
- INSTALL 1.5" TYPE K COPPER (DOMESTIC)
- INSTALL 8" C900 PVC WATER (FIRE)
- INSTALL 8" C900 PVC WATER (FIRE)
- INSTALL 8" RPDA PER U.D.A.C.S. PLATE NO. 56
- INSTALL 90° BEND, SIZE PER PLAN, WITH THRUST BLOCK PER UDACS PLATE NO. 31
- INSTALL 8" x 8" TEE WITH THRUST BLOCK PER UDACS PLATE NO. 31
- INSTALL FIRE HYDRANT ASSEMBLY PER U.D.A.C.S. PLATE NO. 40, CONDITION G
- INSTALL REDUCER, SIZE PER PLAN, WITH THRUST BLOCKS PER U.D.A.C.S. PLATE NO. 30
- SEE PLUMBING PLANS FOR CONTINUATION
- SEE FIRE SPRINKLER PLANS FOR CONTINUATION
- INSTALL 1-1/2" RPPA PER U.D.A.C.S. PLATE NO. 8
- INSTALL CURB STOP IN 2" BLOW OFF BOX PER DETAIL THIS SHEET
- INSTALL GATE VALVE & THRUST BLOCKS, SIZE PER PLAN, PER UDACS PLATE NO. 30 & 39
- INSTALL 1.5" TYPE K COPPER WATER (DOMESTIC)
- PROTECT IN PLACE EX. UTILITIES & ADJUST TO GRADE AS NECESSARY ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES
- INSTALL 2" C900 PVC WATER (DOMESTIC)
- INSTALL 1.5" x2" REDUCER

SEWER CONSTRUCTION NOTES

- INSTALL 8" SDR-35 PVC SEWER LATERAL PER DCSWCS SD-14, 15, 17, 22 & 25
- SEE PLUMBING PLANS FOR CONTINUATION
- INSTALL LATERAL CLEANOUT, PER D.C.S.W.C.S. NO. SD-26
- LATERAL CONNECTION PER DCSWCS #SD-22

TO ENSURE LVVWD ACCESS WITHIN EASEMENT

ALL ABOVE GROUND OBSTRUCTIONS INCLUDING, BUT NOT LIMITED TO, LANDSCAPE BOLDERS, FENCES W/ WALLS, AND SIGNS ARE STRICTLY PROHIBITED WITHIN EASEMENT.

CAUTION: HIGH PRESSURE GAS!

CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

FIRE FLOW CALCULATIONS:

BASED ON:	SQUARE FOOTAGE:	6,345
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:		N/A
BUILDING HEIGHT:		35
NUMBER OF STORIES:		1
TYPE OF CONSTRUCTION:		V-B
OCCUPANCY:		A2-M
FULL AUTOMATIC FIRE SPRINKLER SYSTEM:		YES
FIRE FLOW REQUIREMENT GPM AT 30 PSI RESIDUAL PRESSURE:		1,500

SOUTHWEST GAS CORPORATION

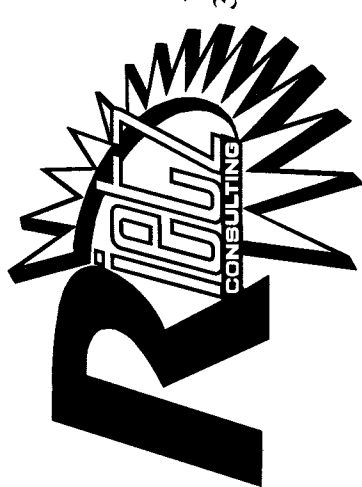
APPROVED
3-18-19
DATE
BY: SOUTHWEST GAS CORPORATION

LAS VEGAS FIRE AND RESCUE

APPROVED FOR CONSTRUCTION
3/10/19
DATE
LAS VEGAS FIRE AND RESCUE

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No.: 136059 FIRST APPROVED DATE: 4-24-19
LVVWD APPROVED FIRE FLOW: TOTAL 1,500 GPM/ONSITE 1,500 GPM

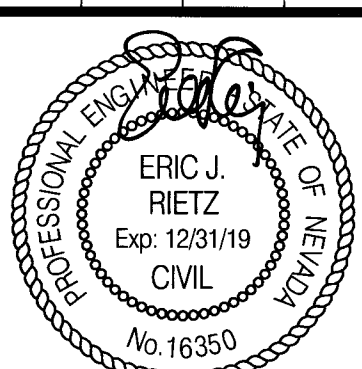
RIETZ CONSULTING INC.
3203 E. WARM SPRINGS RD., #400
LAS VEGAS, NEVADA 89120
PH: 702.521.3355
FX: 702.212.3963



UTILITY PLAN

SAHARA & DECATUR PAD
CITY OF LAS VEGAS, NEVADA
APN # 163-01-803-014

DATE:	3/7/19
DRAWN:	CS
CHECKED:	ER
SCALE:	1"=30'



SHEET
C-5
SHEET 5 OF 7 SHEETS
118-02831
107V1765

PROJ#:136059 QS:163-01-SE

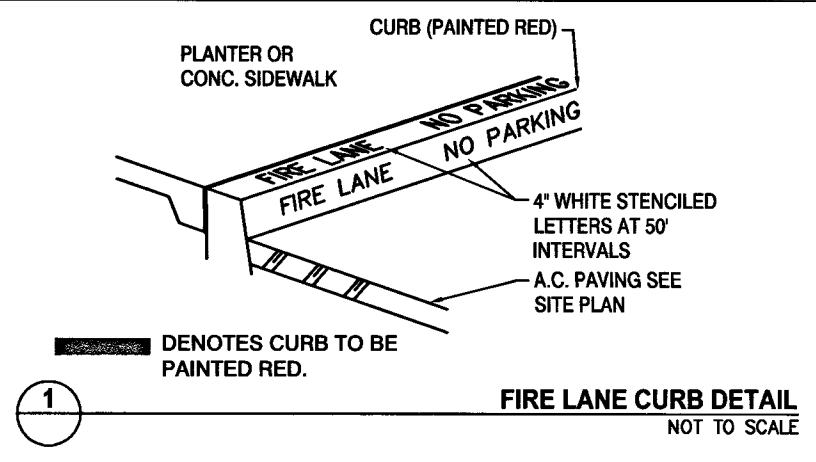
LEGEND

- PROPERTY BOUNDARY
ADJACENT LOT LINE
RIGHT-OF-WAY
CENTER LINE
EXST "L" TYPE CURB
EXST "A" TYPE CURB
"L" TYPE CURB
"A" TYPE CURB
EXST EDGE OF SIDEWALK
EDGE OF SIDEWALK
EDGE OF PAVEMENT

- FIRE ACCESS ROUTE
FIRE HYDRANT
TRAFFIC SIGNAL VAULT
STREET LIGHT PULL BOX
FIBER OPTIC VAULT
STLT SERVICE PEDESTAL
SIGN
TELEPHONE VAULT
CABLE T.V. BOX
ELECTRICAL VAULT
EXISTING STREET LIGHT
250W (LED) STREET LIGHT
FDC
SIGHT VISIBILITY ZONE (SVZ)
(SEE SHEET C13 FOR SVZ DIMENSIONS)

SIGN LEGEND

- STOP
R1-1
24" x 24"
TYPE B SIGN
ENTRANCE
WARNING
24"x18"



CONSTRUCTION NOTE

4. INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS, OR FIRE LANES:
- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE; EIGHT (8) FEET FROM THE FACE OF CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE; SIXTEEN (16) FEET FROM THE FACE OF CURB ON THE HYDRANT SIDE.

NOTE

CONTRACTOR SHALL EXERCISE CARE WITH ALL SALVAGED ITEMS AND SHALL ASSUME THAT ITEMS WILL BE RE-USED AGAIN BY CLARK COUNTY. ALL SALVAGE EQUIPMENT SHALL HAVE ALL COMPONENTS INCLUDED AND DISASSEMBLED FROM THEIR MAIN COMPONENTS. ANY ITEMS TO BE RETURNED TO CLARK COUNTY TRAFFIC OPERATIONS SHALL INCLUDE A TRANSMITTAL FORM WITH THE CONTRACTOR'S COMPANY LETTERHEAD. THE TRANSMITTAL FORM SHALL INCLUDE THE ASSOCIATED PROJECT NAME AND NUMBER, AND A LIST OF THE ITEMS AND THE QUANTITIES OF ITEMS BEING RETURNED. CONTRACTOR SHALL CALL (702) 455-6000 TO MAKE AN APPOINTMENT FOR DROPPING OFF SALVAGED ITEMS.

BENCHMARK

13LV0025NNE6
RIVET AND PLATE IN TOP OF CURB AT SW CORNER OF VEGAS DRIVE AND LAUREL HURST (ALSO STAMPED 06029AS)
ELEVATION: 678.017 METERS, 2217.90 FEET (NAVD88)

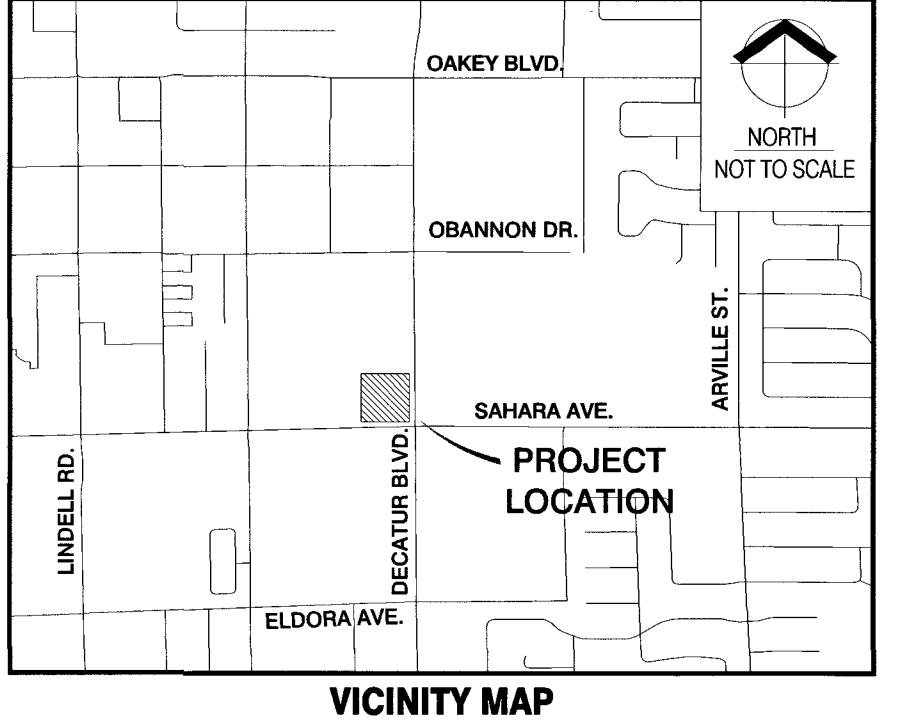
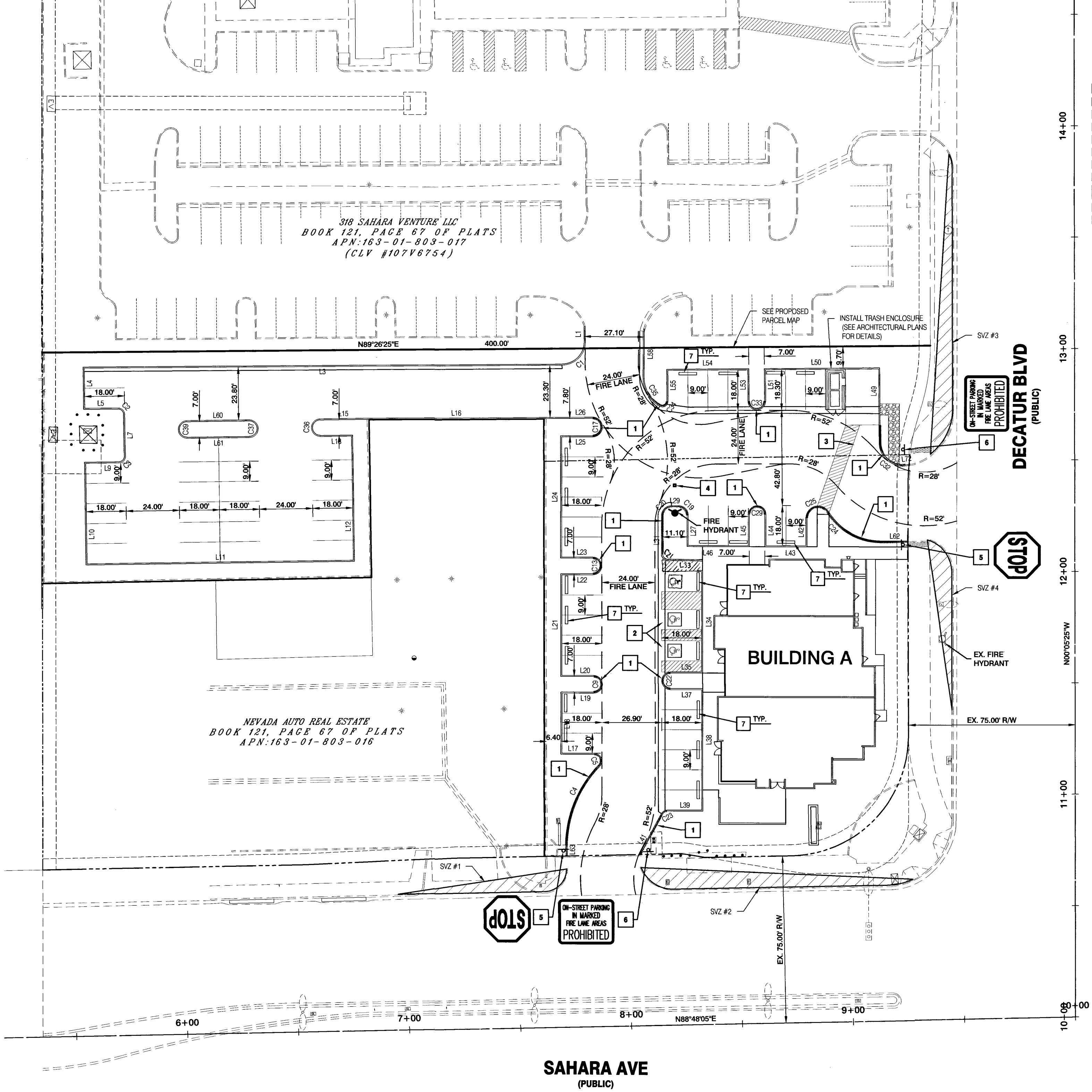
BASIS OF BEARING

NORTH 89° 36' 15" WEST BEING THE SOUTH LINE OF THE SOUTHEAST (SE1/4) OF THE SOUTHEAST (SE1/4) OF SECTION 24, TOWNSHIP 26 SOUTH, RANGE 60 EAST M.D.M. AS PARCEL MAP FILE 14 PAGE 52 CLARK COUNTY RECORDS.

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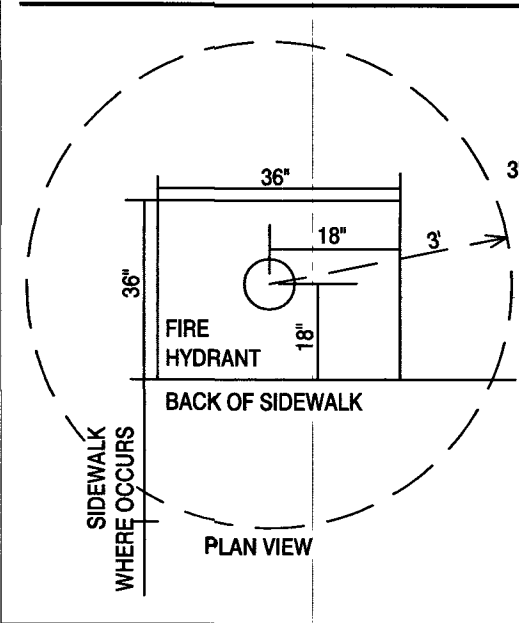
FAST
Call before you Dig
1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION



TRAFFIC & FIRE

1. PAINT CURB RED PER DETAIL 1, SEE THIS SHEET
2. HANDICAP PARKING (SEE ARCHITECTURAL PLANS FOR DETAILS)
3. STRIPED HANDICAP ACCESSIBLE ROUTE PER ADA REQUIREMENTS
4. BLUE REFLECTIVE MARKER
5. 36" R1-1 "STOP" SIGN, SEE SIGN LEGEND THIS SHEET (PRIVATELY MAINTAINED)
6. 24"x18" "ENTRANCE WARNING SIGN", SEE SIGN LEGEND THIS SHEET (PRIVATELY MAINTAINED)
7. BUMPER BLOCK PER CCAUSD #238

FIRE HYDRANT LOCATION DETAIL



FIRE FLOW CALCULATIONS:

FIRE FLOW REQUIREMENT IS AT 20 PSI RESIDUAL PRESSURE:	1,500	GALLONS PER MINUTE
BASED ON:	SQUARE FOOTAGE:	6,345 SQ FT
LARGEST FIRE AREA:	N/A	SQ FT
BUILDING HEIGHT:	35	FT
NUMBER OF STORIES:	1	FLOORS
TYPE OF CONSTRUCTION:	V-B	
OCCUPANCY:	A2-M	
FULL AUTOMATIC FIRE SPRINKLER SYSTEM:	Y	
REVIEWED BY:	DATE: 3/10/19	

LAS VEGAS FIRE AND RESCUE
3/10/19
SHEET 6 OF 7
115-02151
107V7765

TRAFFIC-FIRE-HORIZONTAL CONTROL PLAN

SAHARA & DECATUR PAD
CITY OF LAS VEGAS, NEVADA
APN # 163-01-803-014

DATE:	3/7/19	CS	ER	1"=30'
DRAWN:				
CHECKED:				
SCALE:				

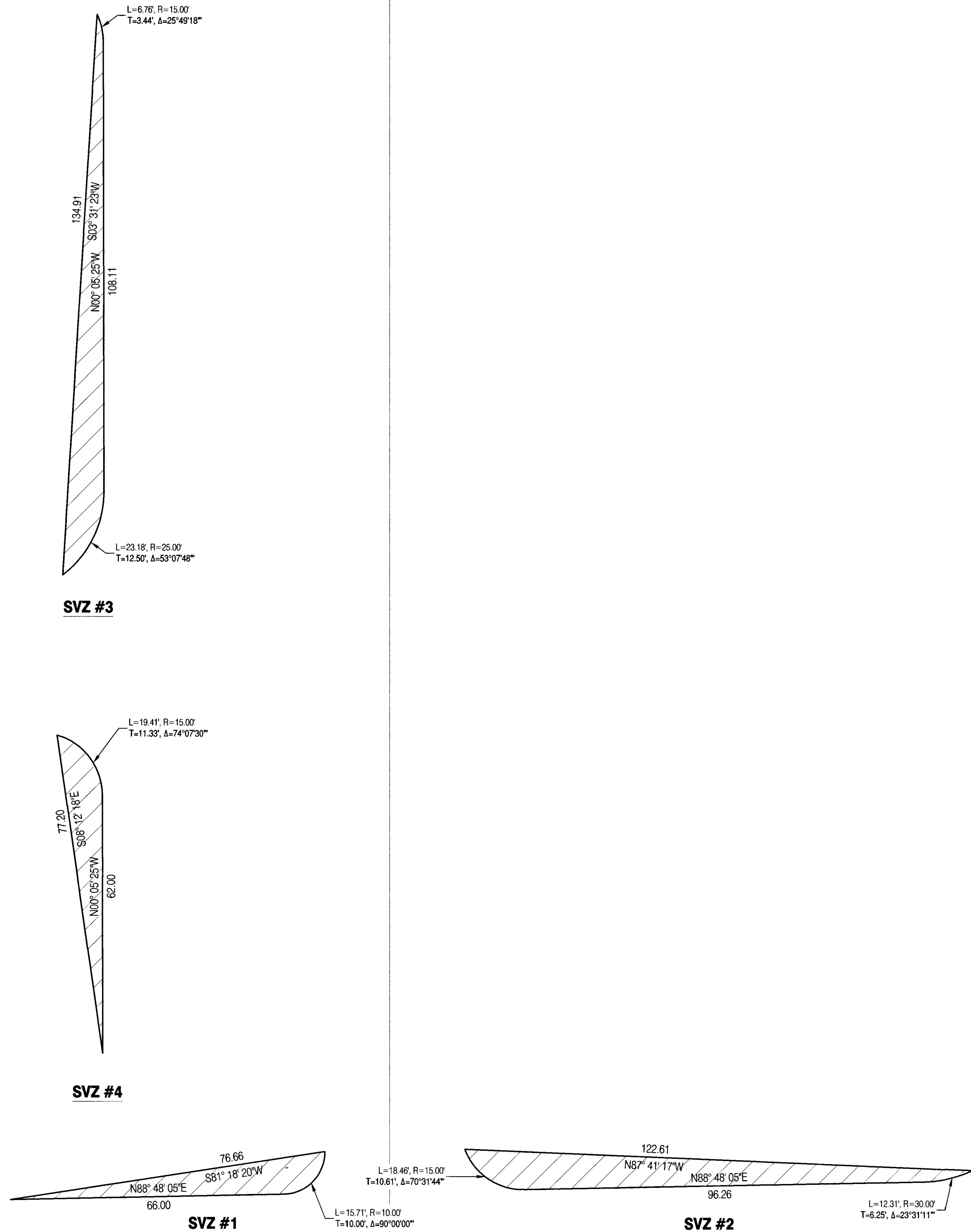
ERIC J. RIETZ
PROFESSIONAL ENGINEER
No. 16350
3/7/19
SHEET 6 OF 7
115-02151
107V7765

BACK OF CURB LINE TABLE		
Line #	Length	Direction
L1	6.89'	S0°16'54"W
L3	215.71'	S89°32'08"W
L4	19.00'	S0°52'06"E
L5	15.52'	N89°32'08"E
L7	18.66'	S0°51'52"E
L9	15.50'	S89°08'08"W
L10	46.00'	S0°52'06"E
L11	120.99'	N89°08'08"E
L12	56.56'	N0°52'06"W
L13	14.50'	S89°08'08"W
L15	21.12'	N89°08'08"E
L16	80.42'	S89°31'10"W
L17	15.00'	S89°56'17"W
L18	28.00'	N0°03'43"W
L19	14.69'	N89°56'17"E
L20	14.75'	S89°56'25"W
L21	46.00'	N0°03'43"W
L22	14.49'	N89°56'25"E
L23	14.49'	S89°56'25"W
L24	55.00'	N0°03'43"W
L25	14.46'	N89°56'17"E
L26	21.10'	S89°32'08"W
L27	14.00'	N0°03'43"W
L29	3.11'	S89°56'17"W
L31	17.61'	S0°03'38"E

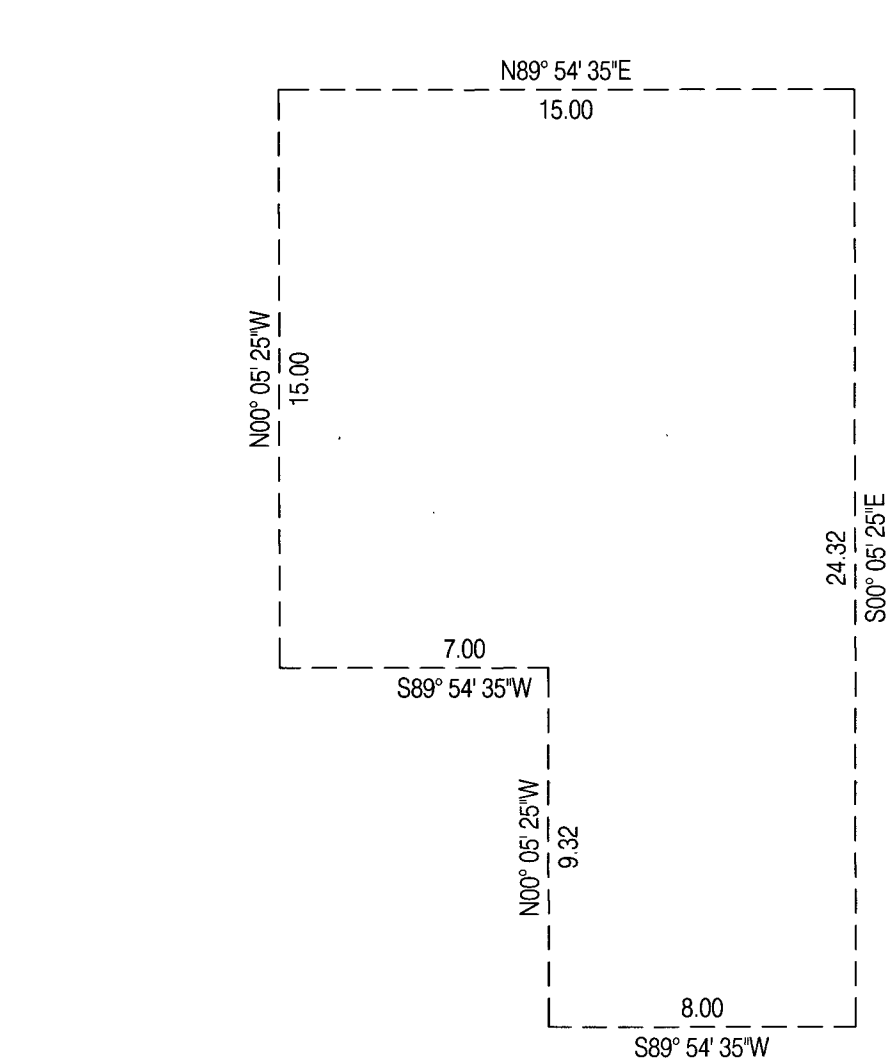
BACK OF CURB LINE TABLE		
Line #	Length	Direction
L33	16.00'	N89°56'17"E
L34	51.00'	S0°03'45"E
L35	14.50'	S89°56'25"W
L37	14.50'	N89°56'25"E
L38	55.00'	S0°03'45"E
L39	16.15'	S89°56'17"W
L41	20.63'	S28°26'45"W
L42	12.97'	S0°03'43"E
L43	19.00'	S89°56'17"W
L44	14.50'	N0°03'35"W
L45	14.50'	S0°03'35"E
L46	28.00'	S89°56'17"W
L49	33.57'	N0°31'07"W
L50	52.00'	S89°28'53"W
L51	14.50'	S0°30'00"E
L53	14.50'	N0°30'00"W
L54	37.00'	S89°28'53"W
L55	14.34'	S0°30'03"E
L58	20.41'	N0°24'35"E
L60	28.00'	S89°08'08"W
L61	28.00'	N89°08'08"E
L62	12.12'	N89°56'17"E
L63	3.91'	S0°03'43"E
L72	1.51'	S82°28'08"W

BACK OF CURB CURVE TABLE			
Curve #	Length	Radius	Delta
C1	15.58'	10.00'	89°15'14"
C2	3.91'	2.50'	89°36'00"
C3	3.93'	2.50'	90°00'00"
C4	40.42'	52.93'	43°45'18"
C5	7.02'	3.00'	134°07'57"
C9	11.06'	3.50'	181°00'49"
C13	11.00'	3.50'	180°00'00"
C17	12.41'	3.93'	180°49'47"
C19	6.28'	4.00'	90°00'00"
C20	6.28'	4.00'	89°59'55"
C21	3.14'	2.00'	90°00'05"
C22	11.00'	3.50'	180°00'00"
C23	2.68'	2.50'	61°27'37"
C24	28.91'	28.50'	58°07'41"
C25	12.93'	5.00'	148°07'41"
C29	11.00'	3.50'	180°00'00"
C32	16.93'	10.00'	97°00'45"
C33	11.00'	3.50'	180°00'00"
C34	4.18'	2.00'	119°48'47"
C35	15.46'	14.50'	61°05'52"
C36	11.00'	3.50'	180°00'00"
C37	11.00'	3.50'	180°00'00"
C39	11.00'	3.50'	180°00'00"

SIGHT VISIBILITY ZONES



LVVWD EASEMENTS



RIETZ CONSULTING INC.
3203 E. WARM SPRINGS RD., #400
LAS VEGAS, NEVADA 89120
PH: 702.521.3355
FX: 702.212.3963

SIGHT VISIBILITY ZONE & CURB DATA

SAHARA & DECATUR PAD
CITY OF LAS VEGAS, NEVADA
APN # 163-01-803-014

DATE:	3/7/19
DRAFTER:	CS
CHECKED:	ER
SCALE:	1"=30'

